



PACIFIC
ENVIRONMENTAL
GROUP, INC.

ENVIRONMENTAL
PROTECTION

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April 25, 1995
Project 330-006.25

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

Re: **Quarterly Report - Fourth Quarter 1994**
Remedial System Performance Evaluation
ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Dear Mr. Whelan:

This letter, prepared by Pacific Environmental Group, Inc. (PACIFIC) on behalf of ARCO Products Company (ARCO), presents the results of the fourth quarter 1994 groundwater monitoring and remedial system performance evaluation at the site referenced above. In addition, a summary of work completed and anticipated at the site is included.

QUARTERLY GROUNDWATER MONITORING RESULTS

Groundwater samples were collected from site groundwater monitoring and domestic irrigation wells between December 19 and 21, 1994, and analyzed for the presence of total petroleum hydrocarbons calculated as gasoline (TPH-g), benzene, toluene, ethylbenzene, and xylenes (BTEX compounds). Field and laboratory procedures are presented as Attachment A.

Depth to water data collected on December 19, 1994 indicate that groundwater elevations have increased in site groundwater monitoring wells an average of approximately 1.72 feet since September 19, 1994. Groundwater flow was to the west with an approximate gradient of 0.003. Groundwater elevation data are presented in Table 1. A groundwater elevation contour map based on the December 19, 1994 data is shown on Figure 1.

The results of groundwater monitoring this quarter for site groundwater monitoring wells indicate that TPH-g and benzene concentrations are generally consistent with previous quarters. TPH-g was detected at concentrations ranging from 52 to 3,000 parts per billion (ppb). Benzene was detected at concentrations ranging from 2.4 to 150 ppb.

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Wells MW-7, MW-9, MW-11, MW-13 through MW-15, MW-18, MW-19, and MW-21 through MW-26 had non-detectable levels of TPH-g and BTEX compounds.

Separate-phase hydrocarbons (SPH) were not observed in any site well this quarter.

SPH have not been observed in any site well since March 27990. Groundwater analytical data are presented in Table 2. A TPH-g and benzene concentration map is shown on Figure 2.

DOMESTIC IRRIGATION SUPPLY WELLS

The results of sampling this quarter for domestic irrigation wells indicate that TPH-g and benzene concentrations are within historical levels. This quarter Wells 634 H, 642 H, 675 H, and 17371 VM were not sampled. Wells 634 H, 642 H, and 675 H were not sampled due to inoperable pumps and/or obstructions in the wells. Well 17371 VM was not sampled as access was denied by the owner. TPH-g was detected in only one domestic well (17349 VM) at 670 ppb. Benzene was not detected in any domestic well sampled. Certified analytical reports, chain-of-custody documentation, and field data sheets are presented as Attachment B. Groundwater analytical data for domestic irrigation wells are presented in Table 3.

REMEDIAL PERFORMANCE EVALUATION

Remedial action currently in progress at this site consists of groundwater extraction (GWE). The GWE system has been in operation since October 15, 1991. Remedial objectives at this site include: (1) migration control of the impacted groundwater plume, and (2) petroleum hydrocarbon mass reduction. In order to evaluate treatment system performance, PACIFIC monitored well water levels, instantaneous and average extracted water flow rates, and sampled the influent and effluent of the treatment system for TPH-g and BTEX compounds on a monthly basis. Treatment system effluent is also analyzed for chemical oxygen demand, total suspended solids, and pH as requested by the Oro Loma Sanitary District. A brief description and a performance evaluation of the GWE system from September 2 to December 5, 1994 are presented below.

Groundwater Extraction System Description

The GWE system is comprised of one extraction well (E-1A) containing an electric submersible pump. The treatment system includes three 1,200-pound granular activated carbon vessels to treat the influent groundwater stream before it is discharged into the sanitary sewer. The carbon vessels are arranged in series, with valving to permit bed order rotation. This allows for the primary vessel to become the secondary vessel after the carbon has been renewed. The third vessel serves as a polishing vessel. Sample ports are located at the treatment system influent, effluent, the mid-point between the carbon vessels, and at each individual well head. A sanitary sewer discharge permit was obtained from the Oro Loma Sanitary District on April 4, 1991. The updated permit is effective through April 4, 1995.

Migration Control

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

Mass Reduction

Progress toward meeting the mass reduction objective is determined by evaluating GWE system mass removal data and the TPH-g concentration trends in associated groundwater monitoring wells. GWE system operational data are collected monthly. The system flow and influent sample analysis data are used to estimate TPH-g mass removal values. During this quarter, GWE removed 0.1 pound (0.01 gallon) of TPH-g and less than 0.01 pound of benzene from the impacted groundwater beneath the site. To date, GWE has removed approximately 4.0 pounds (0.70 gallon) of TPH-g and 0.3 pound (0.04 gallon) of benzene from impacted groundwater beneath the site. Mass removal data for the GWE system are presented in Table 4. Treatment system certified analytical reports, chain-of-custody documentation, and field data sheets are presented as Attachment B. Progress toward site remediation is presented in the table below.

Analyte	Mass Removed			
	09/12/94 to 12/05/94 (lbs)	09/12/94 to 12/05/94 (gal)	Cumulative (lbs)	Cumulative (gal)
TPH-g	0.1	0.01	4.0	0.70
Benzene	<0.01	<0.01	0.3	0.04

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

Groundwater Extraction System Operational Data

The GWE system was approximately 96 percent operational during the reporting period. The down period was associated with automatic high pressure shut down at the bag filter.

During the reporting period, the GWE system discharged treated groundwater at an average operational flow rate of approximately 1.8 gallons per minute (gpm) for a period discharge of 204,920 gallons. The instantaneous groundwater system flow rate was 1.7 to 1.8 gpm. Calculations based on 8 percent loading isotherm by weight indicate the primary carbon vessel is approximately 5.0 percent loaded. Treatment system analytical data are presented in Table 5.

During this quarter, the GWE system was in compliance with all conditions stipulated in the discharge permit. Operation and maintenance field data sheets are presented as Attachment B.

Conclusions

Based on the performance of the GWE system during the fourth quarter 1994, operation through the first quarter 1995 will continue.

SUMMARY OF WORK

Work Completed Fourth Quarter 1994

- Continued monitoring GWE system performance.
- Prepared and submitted third quarter 1994 groundwater monitoring and remedial system performance evaluation report.
- Continued domestic irrigation well owner reimbursement program with owners who have discontinued well use.
- Sampled site groundwater monitoring and domestic irrigation wells for fourth quarter 1994 groundwater monitoring program.
- Attended meeting between Alameda County Health Care Services (ACHCS), Regional Water Quality Control Board, ARCO, and PACIFIC regarding remedial investigation/feasibility study (RI/FS) schedule.
- Replaced well pump, developed, and sampled domestic irrigation Well 633 H.
- Preparation and submittal of RI/FS to ACHCS.
- Preparation of well sampling authorization and discontinue wells use letters to homeowners.

Work Anticipated First Quarter 1995

- Continue monitoring GWE system performance.
- Preparation and submittal of fourth quarter 1994 groundwater monitoring and remedial system performance evaluation report.
- Sample site groundwater monitoring and domestic irrigation wells for first quarter 1995 groundwater monitoring program.
- Preparation of first quarter 1995 groundwater monitoring and remedial system performance evaluation report.

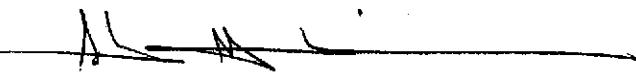
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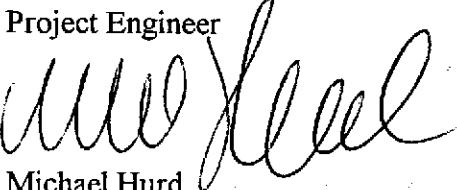
- Preparation and submittal of well sampling authorization and discontinue well use letter to homeowners.
- Continue domestic irrigation well owner reimbursement program with owners who have discontinued well use.
- Preparation and submittal of response letter to comments by ACHCS regarding the RI/FS.

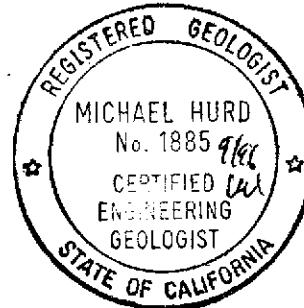
If there are any questions regarding the contents of this letter, please call.

Sincerely,

Pacific Environmental Group, Inc.


Shaw Garakani
Project Engineer


Michael Hurd
Senior Geologist
CEG 1885



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

cc: Ms. Susan Hugo, Alameda County Health Care Services
Ms. Juliet Shin, Alameda County Health Care Services
Mr. Kevin Graves, Regional Water Quality Control Board - S.F. Bay Region

Table 1
Groundwater Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	Separate-Phase Hydrocarbon Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-1	01/11/88	NA	NA	--	NA
	06/14/88			----- Well Destroyed -----	
MW-2	07/05/85	NA	NA	--	NA
	01/11/88	NA	NA	--	NA
	06/14/88			----- Well Destroyed -----	
MW-3	01/11/88	33.27	NA	--	NA
	03/07/89		11.96	--	21.31
	06/21/89		12.85	--	20.42
	12/12/89		13.46	--	19.81
	03/29/90		13.21	--	20.06
	05/08/90		13.23	--	20.04
	06/22/90		NA	--	NA
	07/18/90			----- Well Destroyed -----	
MW-4	01/11/88	32.43	NA	--	NA
	09/12/88		NA	--	NA
	03/07/89		10.76	--	21.67
	06/21/89		11.96	--	20.47
	12/12/89		NA	--	NA
	03/29/90		11.72	0.01	20.71
	05/08/90		12.19	--	20.24
	06/22/90		NA	--	NA
	07/18/90			----- Well Destroyed -----	
MW-5	01/16/92	33.99	Dry	--	NA
	02/19/92		13.5	--	20.49
	03/17/92		11.90	--	22.09
	04/15/92		12.18	--	21.81
	05/14/92		12.78	--	21.21
	06/15/92			----- Well Dry -----	
	07/14/92			----- Well Dry -----	
	08/18/92			----- Well Dry -----	
	09/15/92			----- Well Dry -----	
	10/16/92			----- Well Dry -----	
	11/18/92			----- Well Dry -----	
	12/17/92		12.74	--	21.25
	01/19/93		10.92	--	23.07
	02/22/93		11.10	--	22.89
	03/15/93		11.13	--	22.86
	04/09/93		11.46	--	22.53

Table 1 (continued)
Groundwater Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	Separate-Phase Hydrocarbon Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-5 (cont.)	05/13/93		12.19	--	21.80
	06/04/93		12.51	--	21.48
	06/15/93		12.59	--	21.40
	09/13/93		13.40	--	20.59
	12/28/93		13.25	--	20.74
	03/28/94		12.22	--	21.77
	06/13/94		12.54	--	21.45
	09/19/94		13.55	--	20.44
MW-6 (E-1)	12/19/94		12.43	--	21.56
MW-6 (E-1)	06/21/89	32.95	12.48	--	20.47
	12/12/89		13.16	--	13.16
	03/29/90		12.39	--	12.39
	05/08/90		12.93	--	12.93
	06/22/90		12.94	--	12.94
	07/18/90		----- Well Destroyed -----		
MW-7	01/16/92	34.40	13.33	--	21.83
	02/19/92		12.16	--	NA
	03/17/92		11.86	--	22.54
	04/15/92		12.30	--	22.10
	05/14/92		13.04	--	21.36
	06/15/92		13.78	--	20.62
	07/14/92		14.20	--	20.20
	08/18/92		14.79	--	19.61
	09/15/92		15.12	--	19.28
	10/16/92		15.38	--	19.02
	11/18/92		15.10	--	19.30
	12/17/92		13.69	--	20.71
	01/19/93		10.92	--	23.48
	02/22/93		10.91	--	23.49
	03/15/93		11.13	--	23.03
	04/09/93		11.46	--	22.94
	05/13/93		12.22	--	22.18
	06/04/93		12.51	--	21.89
	06/15/93		12.66	--	21.74
	09/13/93		13.78	--	20.62
	12/28/93		13.43	--	20.97
	03/28/94		12.32	--	22.08
	06/13/94		12.70	--	21.70
	09/19/94		14.16	--	20.24
	12/19/94		12.32	--	22.08
MW-8	01/16/92	32.79	13.40	--	19.39
	02/19/92		11.26	--	21.53

Table 1 (continued)
Groundwater Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	Separate-Phase Hydrocarbon Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-8 (cont.)	03/17/92		10.90	--	21.89
	04/15/92		11.35	--	21.44
	05/14/92		12.06	--	20.73
	06/15/92		12.83	--	19.96
	07/14/92		12.75	--	20.04
	08/18/92		13.83	--	18.96
	09/15/92		14.17	--	18.62
	10/16/92		14.51	--	18.28
	11/18/92		14.15	--	18.64
	12/17/92		12.68	--	20.11
	01/19/93		9.79	--	23.00
	02/22/93		9.95	--	22.84
	03/15/93		10.31	--	22.48
	04/09/93		10.47	--	22.32
	05/13/93		11.18	--	21.61
	06/04/93		11.47	--	21.32
	06/15/93		11.62	--	21.17
	09/13/93		12.70	--	20.09
	12/28/93		12.23	--	20.56
MW-9	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
	01/16/92	32.11	12.45	--	19.66
	02/19/92		10.25	--	21.86
	03/17/92		10.01	--	22.10
	04/15/92		10.49	--	21.62
	05/14/92		11.19	--	20.92
	06/15/92		11.86	--	20.25
	07/14/92		12.28	--	19.83
	08/18/92		12.89	--	19.22
	09/15/92		13.28	--	18.83
	10/16/92		13.60	--	18.51
	11/18/92		13.24	--	18.87
	12/17/92		11.76	--	20.35
	01/19/93		8.99	--	23.12
	02/22/93		9.13	--	22.98
	03/15/93		9.48	--	22.63
	04/09/93		9.63	--	22.48
	05/13/93		10.35	--	21.76
	06/04/93		10.65	--	21.46
	06/15/93		10.81	--	21.30
	09/13/93		11.87	--	20.24

Table 1 (continued)
Groundwater Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	Separate-Phase Hydrocarbon Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-9 (cont.)	12/28/93		11.61	--	20.50
	03/28/94		10.48	--	21.63
	06/13/94		10.80	--	21.31
	09/19/94		12.25	--	19.86
	12/19/94		10.40	--	21.71
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
MW-11	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
	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

Table 1 (continued)
Groundwater Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	Separate-Phase Hydrocarbon Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-11 (cont.)	03/15/93		10.30	--	22.24
	04/09/93		10.42	--	22.12
	05/13/93		11.16	--	21.38
	06/04/93		11.44	--	21.10
	06/15/93		11.59	--	20.95
	09/13/93		12.68	--	19.86
	12/28/93		12.05	--	20.49
	03/28/94		11.23	--	21.31
	06/13/94		11.62	--	20.92
	09/19/94		13.05	--	19.49
E-1A (MW-12)	12/19/94		11.45	--	21.09
	01/16/92	33.06	23.68	--	9.38
	02/19/92		18.71	--	14.35
	03/17/92		23.10	--	9.96
	04/15/92		20.54	--	12.52
	05/14/92		23.09	--	9.97
	06/15/92		23.72	--	9.34
	07/14/92		13.25	--	19.81
	08/18/92		23.73	--	9.33
	09/15/92		23.62	--	9.44
	10/16/92		23.78	--	9.28
	11/18/92		23.80	--	9.26
	12/17/92		22.65	--	10.41
	01/19/93		23.65	--	9.41
	02/22/93		23.70	--	9.36
	03/15/93		22.92	--	10.14
	04/09/93		22.50	--	10.56
	05/13/93		20.40	--	12.66
	06/04/93		18.74	--	14.32
	06/15/93		20.00	--	13.06
	09/13/93		19.50	--	13.56
	12/28/93		20.35	--	12.71
	03/28/94		18.13	--	14.93
	06/13/94		11.60	--	21.46
	09/19/94		19.61	--	13.45
	12/19/94		19.80	--	13.26
MW-13	01/16/92	35.42	15.70	--	19.72
	02/19/92		13.60	--	21.82
	03/17/92		13.20	--	22.22
	04/15/92		13.64	--	21.78
	05/14/92		14.34	--	21.08
	06/15/92		15.13	--	20.29
	07/14/92		15.45	--	19.97

Table 1 (continued)
Groundwater Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	Separate-Phase Hydrocarbon Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-13 (cont.)	08/18/92		16.15	--	19.27
	09/15/92		16.51	--	18.91
	10/16/92		16.81	--	18.61
	11/18/92		16.50	--	18.92
	12/17/92		15.07	--	20.35
	01/19/93		12.40	--	23.02
	02/22/93		12.35	--	23.07
	03/15/93		12.69	--	22.73
	04/09/93		12.85	--	22.57
	05/13/93		13.55	--	21.87
	06/04/93		13.83	--	21.59
	06/15/93		13.97	--	21.45
	09/13/93		15.09	--	20.33
	12/28/93		14.47	--	20.95
MW-14	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
	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
MW-15	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
	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

Table 1 (continued)
Groundwater Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	Separate-Phase Hydrocarbon Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-15 (cont.)	06/13/94		11.34	--	20.07
	09/19/94		12.68	--	18.73
	12/19/94		11.03	--	20.38
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
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
MW-18	03/18/92	29.70	9.73	--	19.97
	06/15/92		11.50	--	18.20
	09/15/92		12.90	--	16.80
	12/17/92		11.21	--	18.49
	03/15/93		9.62	--	20.08
	06/15/93		10.85	--	18.85
	09/13/93		11.75	--	17.95
	12/28/93		11.06	--	18.64
	03/28/94		10.43	--	19.27
	06/13/94		10.80	--	18.90
	09/19/94		12.03	--	17.67
	12/19/94		10.30	--	19.40

Table 1 (continued)
Groundwater Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	Separate-Phase Hydrocarbon Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-19	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
MW-20	03/18/92	29.54	9.49	--	20.05
	06/15/92		11.11	--	18.43
	09/15/92		12.50	--	17.04
	12/17/92		10.74	--	18.80
	03/15/93		9.44	--	20.10
	06/05/93		10.45	--	19.09
	10/11/93		Well Destroyed		
MW-21	03/18/92	28.72	9.55	--	19.17
	06/15/92		11.30	--	17.42
	09/15/92		12.78	--	15.94
	12/17/92		10.80	--	17.92
	03/15/93		9.59	--	19.13
	06/15/93		10.77	--	17.95
	09/13/93		11.63	--	17.09
	12/28/93		11.02	--	17.70
	03/28/94		10.30	--	18.42
	06/13/94		10.69	--	18.03
	09/19/94		11.89	--	16.83
	12/19/94		10.07	--	18.65
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

Table 1 (continued)
Groundwater Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	Separate-Phase Hydrocarbon Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-23	03/17/92	30.99	11.20	--	19.79
	06/15/92		12.94	--	18.05
	09/15/92		14.40	--	16.59
	12/17/92		13.01	--	17.98
	03/15/93		11.01	--	19.98
	06/15/93		12.26	--	18.73
	09/13/93		13.23	--	17.76
	12/28/93		12.57	--	18.42
	03/28/94		11.86	--	19.13
	06/13/94		12.26	--	18.73
	09/19/94		13.55	--	17.44
	12/19/94		11.81	--	19.18
MW-24	06/15/93	34.38	13.39	--	20.99
	09/13/93		14.38	--	20.00
	12/28/93		13.83	--	20.55
	03/28/94		13.02	--	21.36
	06/13/94		13.37	--	21.01
	09/19/94		14.72	--	19.66
	12/19/94		13.05	--	21.33
MW-25	04/09/93	34.12	11.18	--	22.94
	06/15/93		12.35	--	21.77
	09/13/93		13.45	--	20.67
	12/28/93		12.89	--	21.23
	03/28/94		12.02	--	22.10
	06/13/94		12.39	--	21.73
	09/19/94		13.82	--	20.30
	12/19/94		12.00	--	22.12
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
MSL = Mean sea level TOB = Top of box NA = Not available Well elevations are measured from set mark at top of vault box. For groundwater elevation data prior to January 1992, see previous groundwater monitoring reports.					

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

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

Well Number	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
MW-1	01/11/88	300	20	10	50	80
	06/14/88	-----	-----	-----	Well Destroyed	-----
MW-2	07/05/85	32,000	1,000	690	NA ^a	1,500 ^a
	01/11/88	3,300	804	115	168	166
	06/14/88	-----	-----	-----	Well Destroyed	-----
MW-3	01/11/88	1,800	20	20	80	60
	03/07/89	150,000	4,600	5,200	5,600	13,000
	06/21/89	63,000	2,700	5,800	3,300	12,000
	12/12/89	-----	-----	-----	Well Dry	-----
	03/29/90	1,100,000 ^b	13,000	60,000	17,000	91,000
	06/22/90	-----	-----	-----	Well Dry	-----
	07/18/90	-----	-----	-----	Well Destroyed	-----
MW-4	01/11/88	62,000	2,700	7,900	850	5,200
	09/12/88	-----	-----	Separate-Phase Hydrocarbon Sheen	-----	-----
	03/07/89	84,000	2,400	3,400	2,500	7,600
	06/21/89	31,000	400	800	200	1,500
	12/12/89	-----	-----	-----	Well Dry	-----
	03/29/90	-----	-----	0.01 foot of Separate-Phase Hydrocarbon	-----	-----
	06/22/90	-----	-----	-----	Well Dry	-----
	07/18/90	-----	-----	-----	Well Destroyed	-----
MW-5	01/11/88	31,000	4,000	2,700	3,800	5,500
	03/07/89	1,300	340	ND	140	50
	06/21/89	1,100	200	ND	130	40
	12/12/89	-----	-----	-----	Well Dry	-----
	03/29/90	-----	-----	-----	Well Dry	-----
	06/22/90	-----	-----	-----	Well Dry	-----
	09/19/90	-----	-----	-----	Well Dry	-----
	12/27/90	-----	-----	-----	Well Dry	-----
	03/21/91	-----	-----	-----	Well Dry	-----
	06/26/91	-----	-----	-----	Well Dry	-----
	09/24/91	-----	-----	-----	Well Dry	-----
	12/19/91	-----	-----	-----	Well Dry	-----
	03/18/92	11,000	110	2.0	410	150
	06/15/92	-----	-----	-----	Well Dry	-----
	09/16/92	-----	-----	-----	Well Dry	-----
	12/22/92	960	220	6.5	4.0	2.0
	03/17/93	2,600	180	1.4	28	1.2
	06/17/93	2,500	450	7.5	55	<5

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

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

Well Number	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
MW-5 (cont.)	09/17/93	1,400	230	<5.0	6.7	<5.0
	12/29/93	690	38	2.1	2.7	3.8
	03/30/94	1,400	30	<5	<5	<5
	06/14/94	1,700	42	<5	<5	<5
	09/20/94	500	18	<0.5	<0.5	0.52
	12/20/94	840	19	2.2	1.1	2.3
MW-6 (E-1)	06/21/89	1,700	170	170	85	290
	12/12/89	500	26	7	8	18
	03/29/90	130	14	9	4	11
	06/22/90	150	15	5	4	13
	07/18/90	Well Destroyed ---				
MW-7	04/13/90	<50	<0.3	<0.3	<0.3	<0.3
	06/22/90	<50	0.5	1	0.6	3
	09/19/90	<50	<0.3	<0.3	<0.3	<0.3
	12/27/90	69	<0.3	0.3	0.4	2
	03/21/91	<30	<0.3	<0.3	<0.3	<0.3
	06/26/91	<30	<0.3	<0.3	<0.3	<0.3
	09/24/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/17/92	<30	<0.3	<0.3	<0.3	<0.3
	06/17/92	<30	<0.3	<0.3	<0.3	<0.3
	09/16/92	<50	<0.5	<0.5	<0.5	<0.5
	12/21/92	<50	<0.5	<0.5	<0.5	<0.5
	03/17/93	<50	<0.5	<0.5	<0.5	<0.5
	06/15/93	<50	<0.5	<0.5	<0.5	<0.5
	09/14/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
	03/30/94	<50	<0.5	<0.5	<0.5	<0.5
	06/14/94	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	<50	<0.5	<0.5	<0.5	<0.5
MW-8	04/13/90	4,900	350	16	450	33
	06/22/90	3,700	370	12	330	28
	09/19/90	140	4	3	3	3
	12/27/90	1,200	7	0.3	53	<0.3
	03/21/91	540	8.8	<6.0	21	9.6
	06/26/91	2,100	290	<6.0	56	<6.0
	09/24/91	260	51	0.34	7.9	<0.3
	12/19/91	5,300	300	<3.0	21	4.8
	03/17/92	9,200	370	3.0	48	4.9

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

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

Well Number	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
MW-8 (cont.)	06/17/92	3,300	460	2.7	63	6.9
	09/16/92	1,500	58	<0.5	6.1	4.5
	12/22/92	3,600	410	56	62	4.4
	03/18/93	3,800	61	<0.5	11	1.2
	06/17/93	2,400	430	<5	11	<5
	09/14/93	1,900	36	1.4	32	8.6
	12/29/93	2,100	50	0.65	2.9	4.7
	03/29/94	1,900	220	<10	<10	<10
	06/14/94	2,800	340	<5	<5	<5
	09/20/94	2,100	46	<1.0	<1.0	<1.0
MW-9	12/20/94	1,800	120	<2.5	<2.5	<2.5
	04/13/90	<50	<0.3	<0.3	<0.3	2
	06/22/90	12,000	200	3	250	180
	09/19/90	<50	<0.3	<0.3	<0.3	0.6
	12/27/90	<50	<0.3	<0.3	<0.3	<0.3
	03/21/91	<30	<0.3	<0.3	<0.3	<0.3
	06/26/91	<30	<0.3	<0.3	<0.3	<0.3
	09/24/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/17/92	<30	<0.3	<0.3	<0.3	<0.3
	06/16/92	<30	<0.3	<0.3	<0.3	<0.3
	09/16/92	<50	<0.5	<0.5	<0.5	<0.5
	12/21/92	75 ^c	<0.5	<0.5	<0.5	<0.5
	03/16/93	<50	<0.5	<0.5	<0.5	<0.5
	06/15/93	<50	<0.5	<0.5	<0.5	<0.5
	09/14/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/14/94	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	<50	<0.5	<0.5	<0.5	<0.5
MW-10	04/13/90	10,000	150	4	280	200
	06/22/90	9,700	28	<0.3	131	210
	09/19/90	1,800	<0.3	4	0.8	10
	12/27/90	5,700	7	3	95	61
	03/21/91	6,900	22	<15	92	33
	06/26/91	9,300	51	<0.3	59	34
	09/24/91	360	8.6	5.2	14	6.2
	12/19/91	3,300	9.2	8.4	11	17
	03/18/92	4,700	14	<6.0	29	10
	06/16/92	4,800	0.46	0.34	7.4	3.8

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

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

Well Number	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
MW-10 (cont.)	09/16/92	2,000	8.3	3.0	3.3	5.5
	12/22/92	2,700 ^c	6.2	<1.0	7.5	2.8
	03/16/93	4,100	340	2.4	58	54
	06/17/93	4,900	860	<10	540	92
	09/17/93	4,500	670	<10.0	240	7.2
	12/28/93	5,000	1,200 ^d	12	46	31
	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
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
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
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

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

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

Well Number	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
MW-13 (cont.)	03/17/92	<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
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
MW-15	07/03/91	570	1.8	1.0	1.0	2.2
	09/24/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	360	<0.6	<0.6	0.64	<0.6
	03/18/92	730	0.74	0.98	1.8	0.68
	06/16/92	310	0.54	0.34	0.96	2.5
	09/16/92	100	1.0	<0.5	<0.5	<0.5
	12/22/92	130 ^c	<0.5	<0.5	<0.5	<0.5
	03/18/93	130 ^c	<0.5	<0.5	<0.5	<0.5
	06/17/93	<50	<0.5	<0.5	<0.5	<0.5
	09/17/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	52	<0.5	<0.5	<0.5	1.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	<50	<0.5	<0.5	<0.5	<0.5

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

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

Well Number	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
MW-16	07/03/91	2,700	31	6.9	4.6	3.1
	09/24/91	430	1.8	1.3	1.9	1.5
	12/19/91	75	<0.3	<0.3	<0.3	<0.3
	03/18/92	1,500	4.0	0.73	2.2	1.3
	06/16/92	80	<0.3	<0.3	<0.3	<0.3
	09/16/92	<50	<0.5	<0.5	<0.5	<0.5
	12/22/92	<50	<0.5	<0.5	<0.5	<0.5
	03/18/93	380 ^c	<0.5	<0.5	<0.5	<0.5
	06/17/93	<50	<0.5	<0.5	<0.5	<0.5
	09/17/93	<50	<0.5	<0.5	<0.5	<0.5
	12/28/93	<50	<0.5	<0.5	0.72	<0.5
	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
MW-17	07/03/91	1,200	12	1.9	28	40
	09/24/91	150	2.7	0.5	3.9	0.59
	12/19/91	370	2.6	<0.3	7.2	6.5
	03/18/92	470	3.1	<0.3	9.1	8.6
	06/16/92	310	1.7	0.56	12	9.6
	09/16/92	77	1.5	<0.5	1.2	1.0
	12/21/92	220	1.2	<0.5	9.8	9.4
	03/17/93	250	<0.5	<0.5	7.8	3.3
	06/17/93	90	0.92	<0.5	2.7	2.4
	09/16/93	140	<0.5	<0.5	5.4	3.9
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/15/94	62	<0.5	<0.5	1.2	<0.90
	09/19/94	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	77	<0.5	<0.5	1.6	0.67
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

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

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

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

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

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

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

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

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

Well Number	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
MW-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

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

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

Hacienda Avenue and Via Magdalena
San Lorenzo, California

Well Address	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
590 H	11/13/91	<30	<0.3	<0.3	<0.3	<0.3
	10/14/92	<50	<0.5	<0.5	<0.5	<0.5
	12/21/92	<50	<0.5	<0.5	<0.5	<0.5
	03/16/93	<50	<0.5	<0.5	<0.5	<0.5
	06/17/93	<50	<0.5	<0.5	<0.5	<0.5
	09/16/93	<50	<0.5	<0.5	<0.5	<0.5
	12/30/93 ^a	NS	NS	NS	NS	NS
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/16/94	<50	<0.5	<0.5	<0.5	<0.5
	09/21/94	<50	<0.5	<0.5	<0.5	<0.5
	12/21/94	<50	<0.5	<0.5	<0.5	<0.5
633 H	09/11/91 ^{b,d}	NS	NS	NS	NS	NS
	10/14/92 ^a	NS	NS	NS	NS	NS
	12/21/92	<50	<0.5	<0.5	<0.5	<0.5
	03/16/93	<50	<0.5	<0.5	<0.5	<0.5
	06/17/93	<50	<0.5	<0.5	<0.5	<0.5
	09/15/93 ^{b,d}	NS	NS	NS	NS	NS
	12/30/93 ^{b,d}	NS	NS	NS	NS	NS
	03/29/94 ^{b,d}	NS	NS	NS	NS	NS
	06/15/94 ^{b,d}	NS	NS	NS	NS	NS
	09/21/94 ^{b,d}	NS	NS	NS	NS	NS
	10/07/94	<50	<0.5	<0.5	<0.5	<0.5
	12/21/94	<50	<0.5	<0.5	<0.5	<0.5
634 H	09/11/91 ^{b,d}	NS	NS	NS	NS	NS
	10/14/92 ^a	NS	NS	NS	NS	NS
	12/21/92 ^{b,d}	NS	NS	NS	NS	NS
	03/16/93 ^{b,d}	NS	NS	NS	NS	NS
	06/17/93 ^{b,d}	NS	NS	NS	NS	NS
	09/15/93 ^a	NS	NS	NS	NS	NS
	12/30/93 ^{b,d}	NS	NS	NS	NS	NS
	03/29/94 ^{b,d}	NS	NS	NS	NS	NS
	06/15/94	NS	NS	NS	NS	NS
	09/21/94 ^{b,d}	NS	NS	NS	NS	NS
	12/21/94 ^{b,d}	NS	NS	NS	NS	NS
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

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

Hacienda Avenue and Vía Magdalena
San Lorenzo, California

Well Address	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
642 H (cont.)	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
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
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
17200 VM	11/13/91	440	2.7	<0.3	<0.3	12
	10/14/92 ^a	NS	NS	NS	NS	NS
	12/18/92	160	1.4	<0.5	<0.5	3.4
	03/16/93	<50	<0.5	<0.5	<0.5	<0.5
	06/16/93	<50	<0.5	<0.5	<0.5	<0.5
	09/15/93	<50	<0.5	<0.5	<0.5	<0.5
	12/30/93	<50	<0.5	<0.5	<0.5	<0.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/15/94	<50	<0.5	<0.5	<0.5	<0.5
	09/21/94	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	<50	<0.5	<0.5	<0.5	<0.5
17203 VM	11/13/91	<30	<0.3	<0.3	<0.3	<0.3
	10/16/92 ^a	NS	NS	NS	NS	NS
	12/21/92	<50	<0.5	<0.5	<0.5	1.3
	03/16/93	<50	<0.5	<0.5	<0.5	<0.5

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

Hacienda Avenue and
 Via Magdalena
 San Lorenzo, California

Well Address	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
17203 VM (cont.)	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
17302 VM	10/21/91	72	0.64	<0.3	0.44	<0.3
	10/14/92 ^a	NS	NS	NS	NS	NS
	12/21/92	<50	<0.5	<0.5	<0.5	<0.5
	03/16/93	<50	<0.5	<0.5	<0.5	<0.5
	06/17/93 ^{b,d}	NS	NS	NS	NS	NS
	09/16/93	66	<0.5	<0.5	<0.5	<0.5
	12/30/93	<50	<0.5	<0.5	<0.5	<0.5
	03/30/94	<50	<0.5	<0.5	<0.5	<0.5
	06/15/94	<50	<0.5	<0.5	<0.5	<0.5
	03/30/94	<50	<0.5	<0.5	<0.5	<0.5
	06/15/94	<50	<0.5	<0.5	<0.5	<0.5
	09/21/94 ^a	NS	NS	NS	NS	NS
17348 VM	11/13/91 ^{b,d}	NS	NS	NS	NS	NS
	10/14/92 ^a	NS	NS	NS	NS	NS
	12/21/92	<50	<0.5	<0.5	<0.5	<0.5
	03/16/93	<50	<0.5	<0.5	<0.5	<0.5
	06/16/93	<50	<0.5	<0.5	<0.5	<0.5
	09/15/93	<50	<0.5	<0.5	<0.5	<0.5
	12/30/93 ^{b,d}	NS	NS	NS	NS	NS
	03/30/94	<50	<0.5	<0.5	<0.5	<0.5
	06/15/94	<50	<0.5	<0.5	<0.5	<0.5
	09/21/94 ^a	NS	NS	NS	NS	NS
	12/21/94	<50	<0.5	<0.5	<0.5	<0.5
17349 VM	09/27/91	780	13	<3.0	<3.0	<3.0
	10/14/92	2,200	<50	<50	<50	110
	12/18/92	1,500	14	1.8	7.1	56
	03/16/93	1,100	16	4.2	1.8	1.8
	06/17/93	1,100	1.5	6.7	2.9	7.9
	09/16/93	1,200	13	21	3.0	10
	12/30/93 ^a	NS	NS	NS	NS	NS
	03/30/94	420	<1	<1	<1	5.3

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

Hacienda Avenue and
 Via Magdalena
 San Lorenzo, California

Well Address	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
17349 VM	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
17371 VM	11/13/91	870	9.0	1.0	2.1	4.5
	10/14/92	<50	<0.5	<0.5	<0.5	<0.5
	12/18/92	<50	<0.5	<0.5	<0.5	<0.5
	03/16/93	500	8.7	<0.5	3.9	3.1
	06/17/93 ^c	NS	NS	NS	NS	NS
	09/16/93 ^c	NS	NS	NS	NS	NS
	12/30/93 ^c	NS	NS	NS	NS	NS
	03/30/94 ^c	NS	NS	NS	NS	NS
	06/15/94 ^c	NS	NS	NS	NS	NS
	09/21/94 ^c	NS	NS	NS	NS	NS
17372 VM	12/21/94 ^c	NS	NS	NS	NS	NS
	09/27/91	300	5.5	<0.60	1.3	0.72
	10/14/92	220	<1.0	<1.0	<1.0	<1.0
	12/18/92	290	3.8	0.88	0.99	1.2
	03/16/93	110*	<0.5	<0.5	<0.5	<0.5
	06/17/93	140	<0.5	1.3	0.63	1.1
	09/15/93	120	<0.5	1.1	0.62	1.2
	12/30/93	<50	<0.5	<0.5	<0.5	<0.5
	03/30/94	<50	<0.5	<0.5	<0.5	<0.5
	06/15/94	110	<0.5	<0.5	<0.5	<0.5
	09/21/94	55	<0.5	<0.5	<0.5	<0.5
17393 VM	12/21/94	<50	<0.5	<0.5	<0.5	<0.5
	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

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

Hacienda Avenue and
 Via Magdalena
 San Lorenzo, California

Well Address	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
17393 VM	09/21/94 ^a	NS	NS	NS	NS	NS
(cont.)	12/21/94	<50	<0.5	<0.5	<0.5	<0.5

ppb = Parts per billion
 H = Hacienda Avenue
 VM = Via Magdalena
 < = Denotes laboratory detection limit
 NS = Not sampled
 * = Non-typical chromatogram pattern, did not sample.
 a. Owner not available to approve sampling access, well not sampled.
 b. Pump not functioning, well not sampled.
 c. Access denied by owner, well not sampled.
 d. Pumping equipment obstructing sampling access, well not sampled.
 Homeowners are contacted 1 week prior to sampling event.

Table 4
Groundwater Extraction System Performance Data

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

Influent Sample Date	Hour Meter Reading (hours)	System			TPH 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)	
09/25/91	0	N/A	0	0	0.0	ND	N/A	0.0	N/A	0.00	0.0
09/26/91	N/A	N/A	1,144	1,144	N/A	38	0.0	0.0	4.8	0.00	0.0
10/22/91	26	96	12,844	11,700	7.6	ND	N/A	0.0	ND	0.00	0.0
11/22/91	77	93	52,532	39,686	13.0	ND	N/A	0.0	6.62	0.00	0.0
12/19/91	322	62	122,540	70,008	4.8	ND	N/A	0.0	ND	0.00	0.0
01/16/92	954	0	283,269	160,749	4.0	ND	N/A	0.0	ND	0.00	0.0
02/19/92	1,809	0	485,200	201,911	4.1	370	0.3	0.3	14	0.01	0.0
03/17/92	2,462	0	662,547	177,647	4.5	160	0.4	0.7	18	0.02	0.0
04/15/92	3,150	1	851,100	188,253	4.6	200	0.3	1.0	11	0.02	0.1
05/14/92	3,849	0	1,030,086	178,986	4.3	45	0.2	1.2	14	0.01	0.1
06/19/92	4,712	0	1,229,960	199,874	3.9	ND	N/A	1.2	ND	0.00	0.1
07/14/92	5,001	52	1,291,201	61,241	3.5	97	0.0	1.2	25.0	0.01	0.1
08/18/92	N/A	N/A	1,410,018	118,817	N/A	ND	N/A	1.2	ND	0.01	0.1
09/15/92	6,298	N/A	1,535,640	125,622	3.1	ND	N/A	1.2	ND	0.00	0.1
10/16/92	7,012	4	1,651,623	115,983	2.7	ND	N/A	1.2	ND	0.00	0.1
11/18/92	7,669	0	1,766,076	116,453	2.4	ND	N/A	1.2	ND	0.00	0.1
12/17/92	8,502	0	1,864,300	96,224	2.3	96	0.0	1.2	7.7	0.00	0.1
01/16/93	8,798	61	1,915,165	50,865	2.9	100	0.0	1.3	13	0.00	0.1
02/22/93	9,607	0	2,096,930	181,765	3.7	480	0.4	1.7	36	0.04	0.1
03/15/93	10,113	0	2,205,833	108,903	3.6	310	0.4	2.1	29	0.03	0.2
04/09/93	10,517	33	2,298,770	92,937	3.8	140	0.2	2.2	11	0.02	0.2
05/13/93	11,211	15	2,449,160	150,390	3.6	530	0.4	2.7	27	0.02	0.2
06/04/93	11,734	1	2,543,500	94,340	3.0	170	0.3	2.9	5.2	0.01	0.2
07/20/93	12,573	24	2,689,697	146,197	2.9	200	0.2	3.2	12	0.01	0.2
08/16/93	13,219	0	2,791,366	101,669	2.6	150	0.1	3.3	4.9	0.01	0.2
09/13/93	13,888	0	2,884,736	93,370	2.3	80	0.1	3.4	2.2	0.00	0.2
10/08/93	14,485	1	2,951,737	67,001	1.9	ND	0.0	3.4	ND	0.00	0.2
11/19/93	15,494	0	3,036,032	84,295	1.4	ND	0.0	3.4	ND	0.00	0.2
12/21/93	16,260	0	3,113,565	77,533	1.7	73	0.0	3.5	3.5	0.00	0.2
01/18/94	16,939	0	3,190,900	77,335	1.9	60	0.0	3.5	3.1	0.00	0.2
02/17/94	17,658	0	3,273,720	82,820	1.9	ND	0.0	3.5	2.5	0.00	0.2
03/15/94	18,235	7	3,344,249	70,529	2.0	ND	0.0	3.5	ND	0.00	0.2
04/21/94	18,849	31	3,418,537	74,288	2.0	110	0.0	3.5	7.8	0.00	0.2
05/13/94	19,351	5	3,478,910	60,373	2.0	230	0.1	3.6	8.3	0.00	0.2
06/14/94	19,680	57	3,518,608 a	39,698	2.0	230	0.1	3.7	12	0.00	0.3
07/14/94	20,145	35	3,574,408 b	55,800	2.0	270	0.1	3.8	6.9	0.00	0.3
08/17/94	20,920	5	51,260 c	91,580	2.0	ND	0.1	3.9	1.8	0.00	0.3
09/12/94	21,549	0	120,910	69,650	1.8	ND	0.0	3.9	ND	0.00	0.3
10/18/94	22,408	1	211,880	90,970	1.8	ND	0.0	3.9	ND	0.00	0.3

Table 4 (continued)
Groundwater Extraction System Performance Data

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

Influent Sample Date	Hour Meter Reading	System Down Time (%)	Volume Reading (gallons)	TPH as Gasoline			Benzene			Primary Carbon Loading (%)		
				Net Volume (gallons)	Average Flow (gpm)	Influent Concentration ($\mu\text{g/L}$)	Net Removed (pounds)	Removed To Date (pounds)	Influent Concentration ($\mu\text{g/L}$)			
11/15/94	23,080	0	280,840	68,960	1.7	ND	0.0	3.9	0.66	0.00	0.3	4.9
12/05/94	23,499	15	325,830	44,990	1.6	470	0.1	4.0	32	0.01	0.3	5.0
REPORTING PERIOD: 9/12/94 - 12/05/94												
TOTAL GALLONS EXTRACTED: 3,940,658												
PERIOD GALLONS EXTRACTED: 204,920												
TOTAL POUNDS REMOVED: 4.0											0.3	
TOTAL GALLONS REMOVED: 0.7											0.04	
PERIOD POUNDS REMOVED: 0.1											0.01	
PERIOD GALLONS REMOVED: 0.01											0.00	
AVERAGE PERIOD FLOW RATE (gpm): 1.8												
AVERAGE PERCENT DOWNTIME SINCE START-UP: 16.1%												
PERIOD PERCENT OPERATIONAL: 83%												
gpm	= Gallons per minute										a. Totalizer broken; volume estimated from hourmeter and flow rate.	
$\mu\text{g/L}$	= Micrograms per liter										b. Volume estimated from hourmeter and instantaneous flow rate.	
N/A	= Not available or not applicable										c. Sewer totalizer replaced July 28, 1994; volume discharged estimated between July 14 and 28, 1994 at 2.0 gpm.	
ND	= Not detected above detection limit											
TPH	= Total petroleum hydrocarbons											
Densities: Gasoline = 6.1 lbs/gallon; Benzene = 7.34 lbs/gallon.											Primary carbon loading estimated using isotherm of 8 percent by weight.	
Equations: Net Dissolved TPH-g Removed [po] = 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 5
Treatment System Analytical Data
 Total Petroleum Hydrocarbons
 (TPH as Gasoline and BTEX Compounds)

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

Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethybenzene (ppb)	Xylenes (ppb)
INFL (influent to primary carbon)					
09/26/91	38	4.8	0.6	1.6	1.1
10/22/91	<30	<0.3	<0.3	<0.3	<0.3
11/22/91	<30	0.52	<0.3	<0.3	<0.3
12/19/91	<30	<0.3	<0.3	<0.3	<0.3
01/16/91	<30	<0.3	<0.3	<0.3	<0.3
02/19/92	370	14	0.34	14	2.4
03/17/92	160	18	0.32	0.56	1.6
04/15/92	200	11	<0.3	7.3	0.77
05/14/92	45	1.4	<0.3	<0.3	<0.3
06/19/92	<30	<0.3	<0.3	<0.3	<0.3
07/14/92	97	25	<0.5	8.5	<0.5
08/18/92	<50	<0.5	<0.5	<0.5	<0.5
09/15/92	<50	<0.5	<0.5	<0.5	<0.5
10/16/92	<50	<0.5	<0.5	<0.5	<0.5
11/18/92	<50	<0.5	<0.5	<0.5	<0.5
12/17/92	96	7.7	13	0.56	9.7
01/18/93	100	13	6.6	1.1	11
02/22/93	480	36	29	4.9	96
03/15/93	310	29	14	4.9	55
04/09/93	140	11	2.8	2.6	17
05/13/93	530	27	12	18	96
06/04/93	170	5.2	1.6	2.5	23
07/20/93	200	12	0.91	8.2	29
08/16/93	150	4.9	0.63	2.9	15
09/13/93	80	2.2	<0.5	<0.5	4.8
10/08/93	<50	<0.5	<0.5	<0.5	<0.5
11/19/93	<50	<0.5	<0.5	<0.5	<0.5
12/21/93	73	3.5	<0.5	1.9	8.4
01/18/94	60	3.1	<0.5	3.2	4.3
02/17/94	<50	2.5	<0.5	2.1	3.1
03/15/94	<50	<0.5	<0.5	<0.5	<0.5
04/21/94	110	7.8	<1.0	9.6	<1.0
05/13/94	230	8.3	<0.5	14	6.0
06/14/94	230	12	<0.5	16	1.5
07/14/94	270	6.9	<0.5	15	1.9
08/18/94	<50	1.8	<0.5	1.5	<0.5
09/12/94	<50	<0.5	<0.5	<0.5	<0.5
10/18/94	<50	<0.5	<0.5	<0.5	<0.5
11/05/94	<50	0.66	<0.5	2.6	<0.5
12/05/94	470	32	0.59	29	6.2

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

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

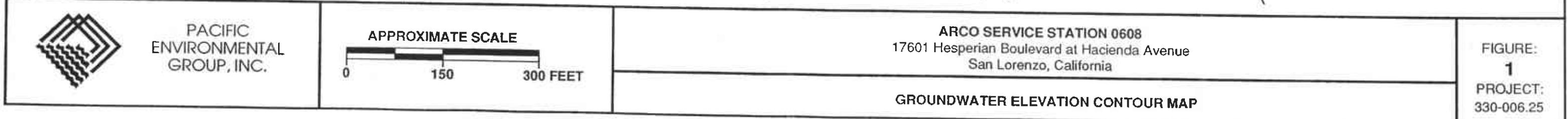
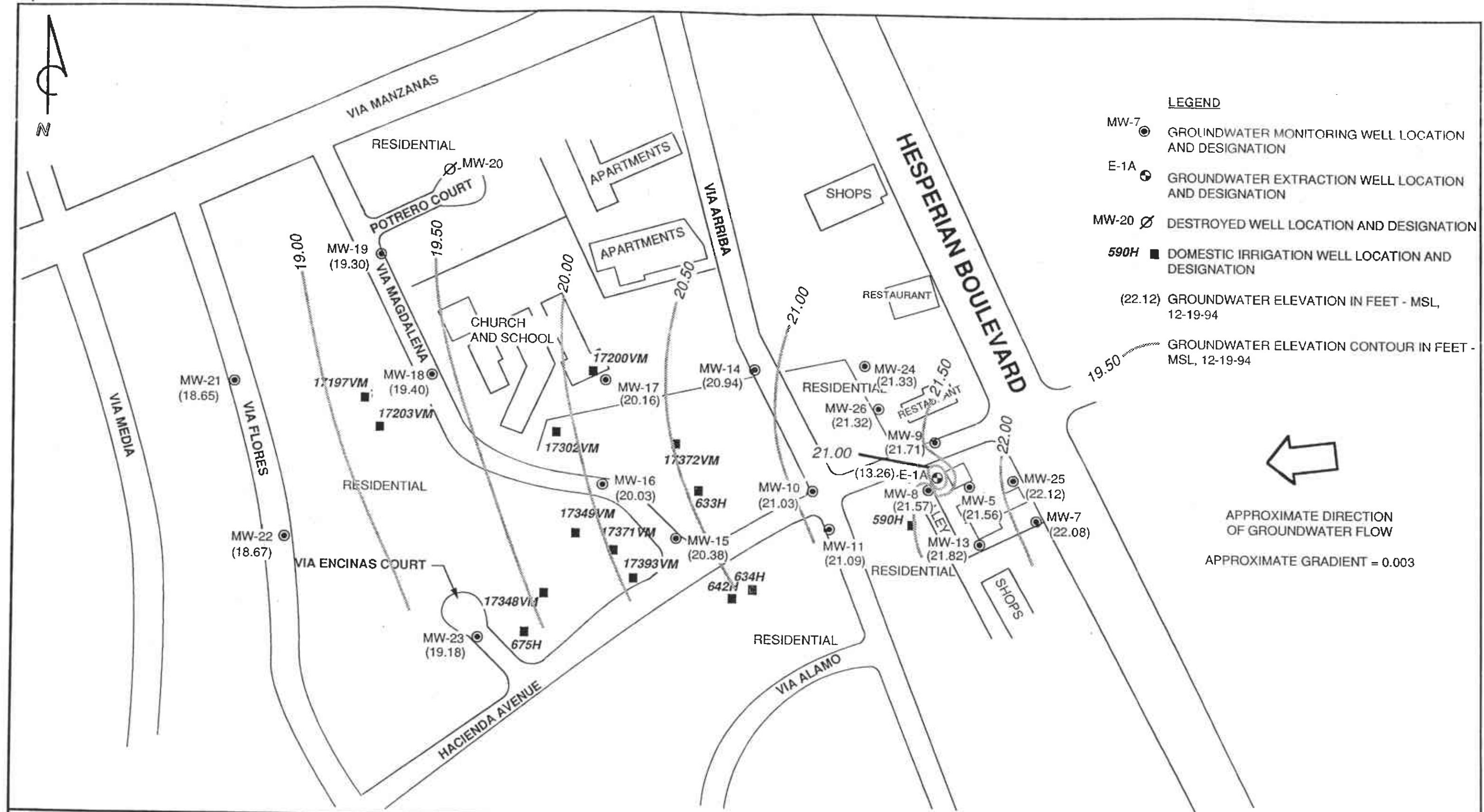
Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
MID-1 (between carbons)					
09/26/91	<30	<0.3	<0.3	<0.3	<0.3
10/22/91	<30	<0.3	<0.3	<0.3	<0.3
12/19/91	<30	<0.3	<0.3	<0.3	<0.3
01/16/91	<30	<0.3	<0.3	<0.3	<0.3
02/19/92	<30	<0.3	<0.3	<0.3	<0.3
03/17/92	<30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

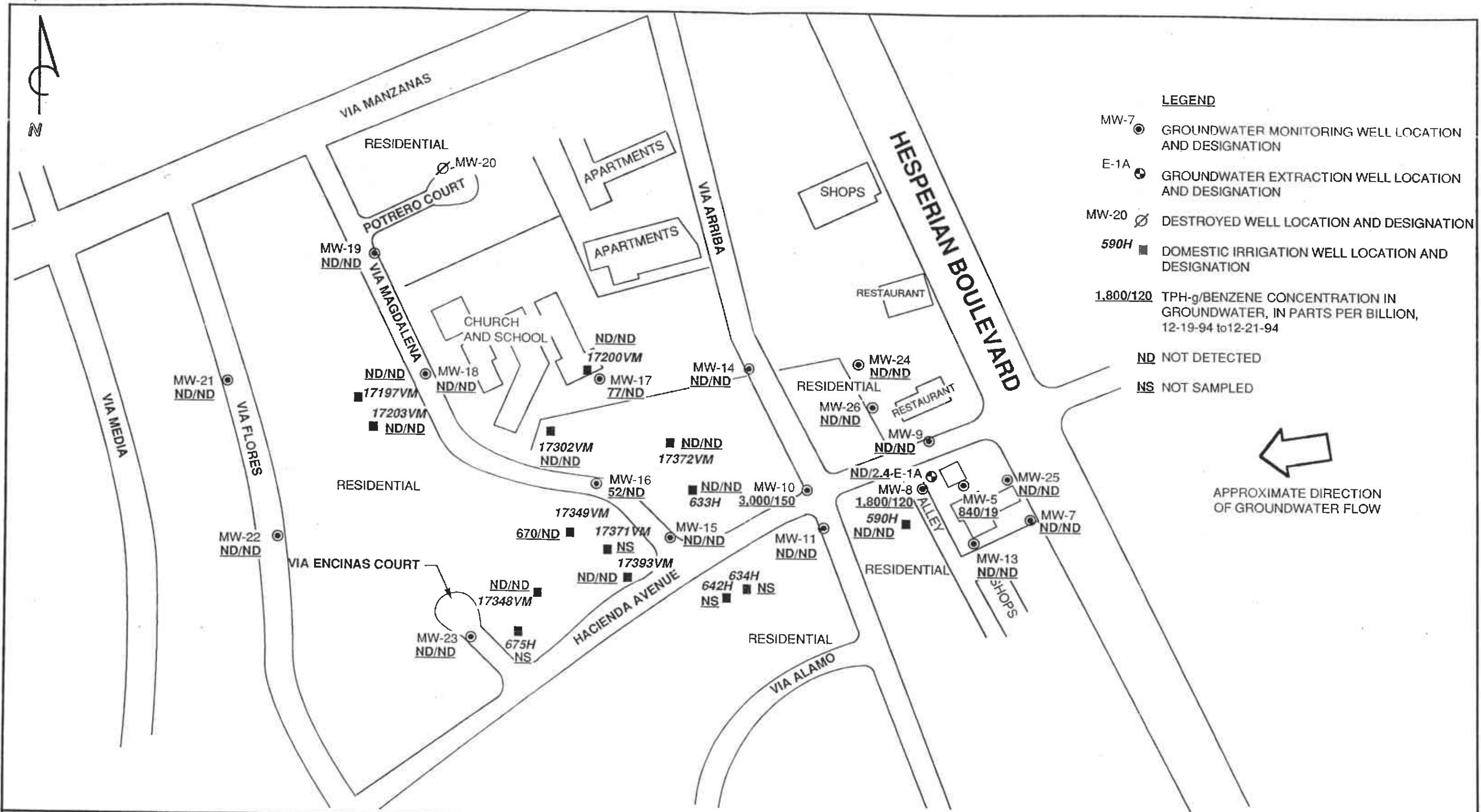
Table 5 (continued)
Treatment System Analytical Data
 Total Petroleum Hydrocarbons
 (TPH as Gasoline and BTEX Compounds)

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

Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
EFFL (effluent to sewer) (continued)					
01/18/93	<50	<0.5	<0.5	<0.5	<0.5
02/22/93	<50	<0.5	<0.5	<0.5	<0.5
03/15/93	<50	<0.5	<0.5	<0.5	<0.5
04/09/93	<50	<0.5	<0.5	<0.5	<0.5
05/13/93	<50	<0.5	<0.5	<0.5	<0.5
06/04/93	<50	<0.5	<0.5	<0.5	<0.5
07/20/93	<50	<0.5	<0.5	<0.5	<0.5
08/16/93	<50	<0.5	<0.5	<0.5	<0.5
09/13/93	<50	<0.5	<0.5	<0.5	<0.5
10/08/93	<50	<0.5	<0.5	<0.5	<0.5
11/19/93	<50	<0.5	<0.5	<0.5	<0.5
12/21/93	<50	<0.5	<0.5	<0.5	<0.5
01/18/94	<50	<0.5	<0.5	<0.5	<0.5
02/17/94	<50	<0.5	<0.5	<0.5	<0.5
03/15/94	<50	<0.5	<0.5	<0.5	<0.5
04/21/94	<50	<0.5	<0.5	<0.5	<0.5
05/13/94	<50	<0.5	<0.5	<0.5	<0.5
06/14/94	<50	<0.5	<0.5	<0.5	<0.5
07/14/94	<50	<0.5	<0.5	<0.5	<0.5
08/17/94	<50	<0.5	<0.5	<0.5	<0.5
09/12/94	<50	<0.5	<0.5	<0.5	<0.5
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

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





PACIFIC
ENVIRONMENTAL
GROUP, INC.

APPROXIMATE SCALE
0 150 300 FEET

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

TPH-g/BENZENE CONCENTRATION MAP

FIGURE:
2
PROJECT:
330-006.25

ATTACHMENT A

FIELD AND LABORATORY PROCEDURES

ATTACHMENT A

FIELD AND LABORATORY PROCEDURES

Sampling Procedures

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

Laboratory Procedures

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

ATTACHMENT B

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



Sequoia
Analytical

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

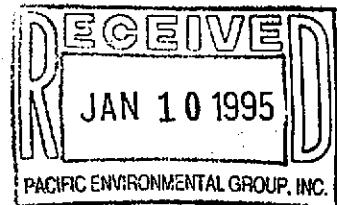
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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Maree Doden

Project: 330-006.25/0608, San Lorenzo



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

<u>SAMPLE #</u>	<u>SAMPLE DESCRIPTION</u>	<u>DATE COLLECTED</u>	<u>TEST METHOD</u>
9412F65 -01	LIQUID, MW-5	12/20/94	TPHGBW Purgeable TPH/BTEX
9412F65 -02	LIQUID, MW-7	12/20/94	TPHGBW Purgeable TPH/BTEX
9412F65 -03	LIQUID, MW-8	12/20/94	TPHGBW Purgeable TPH/BTEX
9412F65 -04	LIQUID, MW-9	12/20/94	TPHGBW Purgeable TPH/BTEX
9412F65 -05	LIQUID, MW-10	12/20/94	TPHGBW Purgeable TPH/BTEX
9412F65 -06	LIQUID, MW-11	12/20/94	TPHGBW Purgeable TPH/BTEX
9412F65 -07	LIQUID, MW-13	12/20/94	TPHGBW Purgeable TPH/BTEX
9412F65 -08	LIQUID, MW-14	12/20/94	TPHGBW Purgeable TPH/BTEX
9412F65 -09	LIQUID, MW-15	12/20/94	TPHGBW Purgeable TPH/BTEX
9412F65 -10	LIQUID, MW-16	12/20/94	TPHGBW Purgeable TPH/BTEX
9412F65 -11	LIQUID, MW-17	12/20/94	TPHGBW Purgeable TPH/BTEX
9412F65 -12	LIQUID, MW-18	12/20/94	TPHGBW Purgeable TPH/BTEX
9412F65 -13	LIQUID, MW-19	12/19/94	TPHGBW Purgeable TPH/BTEX
9412F65 -14	LIQUID, MW-21	12/19/94	TPHGBW Purgeable TPH/BTEX
9412F65 -15	LIQUID, MW-22	12/19/94	TPHGBW Purgeable TPH/BTEX
9412F65 -16	LIQUID, MW-23	12/19/94	TPHGBW Purgeable TPH/BTEX
9412F65 -17	LIQUID, MW-24	12/20/94	TPHGBW Purgeable TPH/BTEX
9412F65 -18	LIQUID, MW-25	12/20/94	TPHGBW Purgeable TPH/BTEX
9412F65 -19	LIQUID, MW-26	12/20/94	TPHGBW Purgeable TPH/BTEX



Sequoia Analytical

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Attention: Maree Doden

Project: 330-006.25/0608, San Lorenzo

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

<u>SAMPLE #</u>	<u>SAMPLE DESCRIPTION</u>	<u>DATE COLLECTED</u>	<u>TEST METHOD</u>
9412F66 -20	LIQUID, EA-1	12/20/94	TPHGBW Purgeable TPH/BTEX
9412F66 -21	LIQUID, 17200 VM	12/20/94	TPHGBW Purgeable TPH/BTEX
9412F66 -22	LIQUID, TB-1	12/19/94	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 this project.

Very truly yours,

SEQUOIA ANALYTICAL

Eileen Manning
Project Manager

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: 330-006.25/0608, San Lorenzo
Sample Descript: MW-5
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412F65-01

Sampled: 12/20/94
Received: 12/21/94
Analyzed: 12/28/94
Reported: 01/06/95

QC Batch Number: GC122894BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	100	840
Benzene	1.0	19
Toluene	1.0	2.2
Ethyl Benzene	1.0	1.1
Xylenes (Total)	1.0	2.3
Chromatogram Pattern: Weathered Gas		C6-C12
Surrogates		
Trifluorotoluene	70	130
	Control Limits %	% Recovery

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

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager



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

Client Proj. ID: 330-006.25/0608, San Lorenzo
Sample Descript: MW-7
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412F65-02

Sampled: 12/20/94
Received: 12/21/94
Analyzed: 12/28/94
Reported: 01/06/95

QC Batch Number: GC122894BTEX02A
Instrument ID: GCHP02

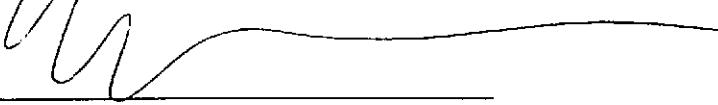
Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	109

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

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Eileen Manning
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Pacific Environmental Group
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San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.25/0608, San Lorenzo
Sample Descript: MW-8
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412F65-03

Sampled: 12/20/94
Received: 12/21/94

Analyzed: 12/28/94
Reported: 01/06/95

QC Batch Number: GC122894BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	.....	250
Benzene	.....	2.5
Toluene	.....	2.5
Ethyl Benzene	.....	2.5
Xylenes (Total)	.....	2.5
Chromatogram Pattern:		
Weathered Gas	.....	.....
Discrete Peak	.....	.....
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	96

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

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Eileen Manning
Project Manager



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Pacific Environmental Group
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San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.25/0608, San Lorenzo
Sample Descript: MW-9
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412F65-04

Sampled: 12/20/94
Received: 12/21/94

Analyzed: 12/28/94
Reported: 01/06/95

QC Batch Number: GC122894BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	116

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

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Eileen Manning
Project Manager



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Attention: Maree Doden

Client Proj. ID: 330-006.25/0608, San Lorenzo
Sample Descript: MW-10
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412F65-05

Sampled: 12/20/94
Received: 12/21/94

Analyzed: 12/28/94
Reported: 01/06/95

QC Batch Number: GC122894BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	500	3000
Benzene	5.0	150
Toluene	5.0	N.D.
Ethyl Benzene	5.0	N.D.
Xylenes (Total)	5.0	N.D.
Chromatogram Pattern:		
Weathered Gas		C7-C12
Discrete Peak		C6-C7
Surrogates		Control Limits %
Trifluorotoluene	70	130
		% Recovery
		106

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

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Eileen Manning
Project Manager



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Pacific Environmental Group
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Attention: Maree Doden

Client Proj. ID: 330-006.25/0608, San Lorenzo
Sample Descript: MW-11
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412F65-06

Sampled: 12/20/94
Received: 12/21/94
Analyzed: 12/28/94
Reported: 01/06/95

QC Batch Number: GC122894BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	110

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

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Eileen Manning
Project Manager

Page:

6



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Attention: Maree Doden

Client Proj. ID: 330-006.25/0608, San Lorenzo
Sample Descript: MW-13
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412F65-07

Sampled: 12/20/94
Received: 12/21/94
Analyzed: 12/28/94
Reported: 01/06/95

QC Batch Number: GC122894BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	107

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

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Eileen Manning
Project Manager



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Pacific Environmental Group
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Attention: Maree Doden

Client Proj. ID: 330-006.25/0608, San Lorenzo
Sample Descript: MW-14
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412F65-08

Sampled: 12/20/94
Received: 12/21/94
Analyzed: 12/28/94
Reported: 01/06/95

QC Batch Number: GC122894BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	104

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

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Eileen Manning
Project Manager



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Pacific Environmental Group
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Attention: Maree Doden

Client Proj. ID: 330-006.25/0608, San Lorenzo
Sample Descript: MW-15
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412F65-09

Sampled: 12/20/94
Received: 12/21/94
Analyzed: 12/28/94
Reported: 01/06/95

QC Batch Number: GC122894BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	108

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

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Eileen Manning
Project Manager

Page: 9



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Attention: Maree Doden

Client Proj. ID: 330-006.25/0608, San Lorenzo
Sample Descript: MW-16
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412F65-10

Sampled: 12/20/94
Received: 12/21/94
Analyzed: 12/29/94
Reported: 01/06/95

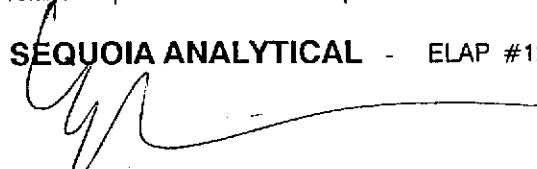
QC Batch Number: GC122894BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	52
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern: Weathered Gas		C6-C12
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	111

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

SEQUOIA ANALYTICAL - ELAP #1210


Eileen Manning
Project Manager

Page:

10



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Pacific Environmental Group
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Attention: Maree Doden

Client Proj. ID: 330-006.25/0608, San Lorenzo
Sample Descript: MW-17
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412F65-11

Sampled: 12/20/94
Received: 12/21/94
Analyzed: 12/29/94
Reported: 01/06/95

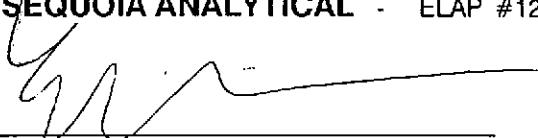
QC Batch Number: GC122894BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	77
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	1.6
Xylenes (Total)	0.50	0.67
Chromatogram Pattern:		Gas
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	110

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

SEQUOIA ANALYTICAL - ELAP #1210


Eileen Manning
Project Manager



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Pacific Environmental Group
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San Jose, CA 95110
Attention: Maree Doden

Client Proj. ID: 330-006.25/0608, San Lorenzo
Sample Descript: MW-18
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412F65-12

Sampled: 12/20/94
Received: 12/21/94
Analyzed: 12/29/94
Reported: 01/06/95

QC Batch Number: GC122894BTEX02A
Instrument ID: GCHP02

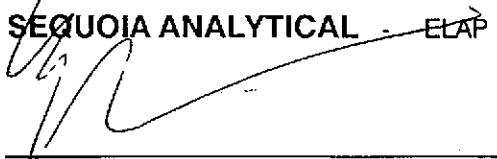
Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	111

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

SEQUOIA ANALYTICAL ELAP #1210


Eileen Manning
Project Manager



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San Jose, CA 95110

Attention: Maree Doden

Client Proj. ID: 330-006.25/0608, San Lorenzo
Sample Descript: MW-19
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412F65-13

Sampled: 12/19/94
Received: 12/21/94
Analyzed: 12/29/94
Reported: 01/06/95

QC Batch Number: GC122894BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	108

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

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager



**Sequoia
Analytical**

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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: 330-006.25/0608, San Lorenzo
Sample Descript: MW-21
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412F65-14

Sampled: 12/19/94
Received: 12/21/94
Analyzed: 12/29/94
Reported: 01/06/95

QC Batch Number: GC122894BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	108

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

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager



Sequoia
Analytical

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FAX (916) 921-0100

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

Attention: Maree Doden

Client Proj. ID: 330-006.25/0608, San Lorenzo
Sample Descript: MW-22
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412F65-15

Sampled: 12/19/94
Received: 12/21/94
Analyzed: 12/29/94
Reported: 01/06/95

QC Batch Number: GC122894BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	101

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

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Page:

15



**Sequoia
Analytical**

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FAX (916) 921-0100

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

Attention: Maree Doden

Client Proj. ID: 330-006.25/0608, San Lorenzo
Sample Descript: MW-23
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412F65-16

Sampled: 12/19/94
Received: 12/21/94

Analyzed: 12/28/94
Reported: 01/06/95

QC Batch Number: GC122894BTEX20A
Instrument ID: GCHP20

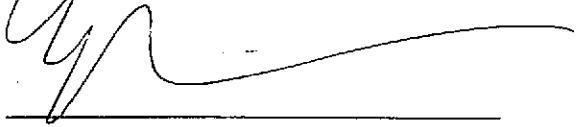
Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	110

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

SEQUOIA ANALYTICAL - ELAP #1210


Eileen Manning
Project Manager



**Sequoia
Analytical**

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

Attention: Maree Doden

Client Proj. ID: 330-006.25/0608, San Lorenzo
Sample Descript: MW-24
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412F65-17

Sampled: 12/20/94
Received: 12/21/94

Analyzed: 12/28/94
Reported: 01/06/95

QC Batch Number: GC122894BTEX20A
Instrument ID: GCHP20

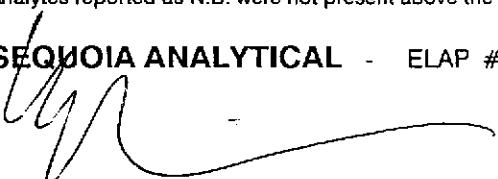
Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	112

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

SEQUOIA ANALYTICAL - ELAP #1210


Eileen Manning
Project Manager



**Sequoia
Analytical**

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600
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FAX (415) 364-9233
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FAX (916) 921-0100

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

Attention: Maree Doden

Client Proj. ID: 330-006.25/0608, San Lorenzo
Sample Descript: MW-25
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412F65-18

Sampled: 12/20/94
Received: 12/21/94
Analyzed: 12/28/94
Reported: 01/06/95

QC Batch Number: GC122894BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	98

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

SEQUOIA ANALYTICAL - ELAP #1210


Eileen Manning
Project Manager



Sequoia
Analytical

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

Client Proj. ID: 330-006.25/0608, San Lorenzo
Sample Descript: MW-26
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412F65-19

Sampled: 12/20/94
Received: 12/21/94
Analyzed: 12/28/94
Reported: 01/06/95

Attention: Maree Doden
QC Batch Number: GC122894BTEX20A
Instrument ID: GCHP20

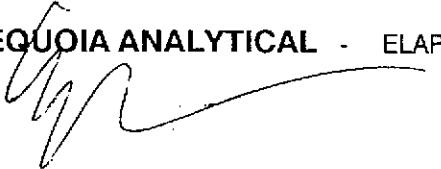
Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	100

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

SEQUOIA ANALYTICAL - ELAP #1210


Eileen Manning
Project Manager



**Sequoia
Analytical**

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

Attention: Maree Doden

Client Proj. ID: 330-006.25/0608, San Lorenzo
Sample Descript: EA-1
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412F66-20

Sampled: 12/20/94
Received: 12/21/94
Analyzed: 12/28/94
Reported: 01/06/95

QC Batch Number: GC122894BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	2.4
Toluene	0.50	N.D.
Ethyl Benzene	0.50	1.9
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	116

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

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager



Sequoia
Analytical

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Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110	Client Proj. ID: 330-006.25/0608, San Lorenzo Sample Descript: 17200 VM Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9412F66-21	Sampled: 12/20/94 Received: 12/21/94 Analyzed: 12/28/94 Reported: 01/09/95
Attention: Maree Doden		

QC Batch Number: GC122894BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	111

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

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager



Sequoia
Analytical

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

Attention: Maree Doden

Client Proj. ID: 330-006.25/0608, San Lorenzo
Sample Descript: TB-1
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412F66-22

Sampled: 12/19/94
Received: 12/21/94
Analyzed: 12/28/94
Reported: 01/06/95

QC Batch Number: GC122894BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	117

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

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Page:

3



**Sequoia
Analytical**

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

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

Work Order #: 9412F65 01, 03, 18

Reported: Jan 9, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC122894BTEX17A	GC122894BTEX17A	GC122894BTEX17A	GC122894BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	N.A.	N.A.	N.A.	N.A.

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	941297009	941297009	941297009	941297009
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	N.A.	N.A.	N.A.	N.A.
Analyzed Date:	12/28/94	12/28/94	12/28/94	12/28/94
Instrument I.D. #:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.4	9.4	9.6	28
MS % Recovery:	94	94	96	93
Dup. Result:	9.0	9.3	9.3	28
MSD % Recov.:	90	93	93	93
RPD:	4.3	1.1	3.2	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	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

Eileen A. Manning
Project Manager

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

9412F65.PPP <1>



**Sequoia
Analytical**

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

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

Work Order #: 9412F65 02, 04-15

Reported: Jan 9, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC122894BTEX02A	GC122894BTEX02A	GC122894BTEX02A	GC122894BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	N.A.	N.A.	N.A.	N.A.

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	941297009	941297009	941297009	941297009
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	N.A.	N.A.	N.A.	N.A.
Analyzed Date:	12/28/94	12/28/94	12/28/94	12/28/94
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	9.7	29
MS % Recovery:	97	97	97	97
Dup. Result:	9.7	9.6	9.7	29
MSD % Recov.:	97	96	97	97
RPD:	0.0	1.0	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	71-133	LCS	72-128	Control Limits	72-130	71-120
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Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Please Note:

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



**Sequoia
Analytical**

680 Chesapeake Drive 1900 Bates Avenue, Suite L 819 Striker Avenue, Suite 8	Redwood City, CA 94063 Concord, CA 94520 Sacramento, CA 95834	(415) 364-9600 (510) 686-9600 (916) 921-9600	FAX (415) 364-9233 FAX (510) 686-9689 FAX (916) 921-0100
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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Maree Doden

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

Work Order #: 9412F65 16, 17, 19

Reported: Jan 9, 1995

9412F66 20-22

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC122894BTEX20A	GC122894BTEX20A	GC122894BTEX20A	GC122894BTEX20A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	N.A.	N.A.	N.A.	N.A.

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	941297403	941297403	941297403	941297403
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	N.A.	N.A.	N.A.	N.A.
Analyzed Date:	12/28/94	12/28/94	12/28/94	12/28/94
Instrument I.D. #:	GCHP20	GCHP20	GCHP20	GCHP20
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.9	9.9	10	30
MS % Recovery:	99	99	100	100
Dup. Result:	10	10	10	31
MSD % Recov.:	100	100	100	103
RPD:	1.0	1.0	0.0	3.3
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
Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME:
REC. BY (PRINT):PEL
97WORKORDER:
DATE OF LOG-IN:9412 F65 ? F66
12/27/94

CIRCLE THE APPROPRIATE RESPONSE

1. Custody Seal(s)

Present / Absent

Intact / Broken*

2. Custody Seal Nos.:

Put in Remarks Section

3. Chain-of-Custody

Records:

Present / Absent*

4. Traffic Reports or

Packing List:

Present / Absent

5. Airbill:

Airbill / Sticker

Present / Absent

6. Airbill No.:

Present / Absent*

7. Sample Tags:

Sample Tag Nos.:

Listed / Not Listed

on Chain-of-Custody

8. Sample Condition:

Intact / Broken* / Leaking*

9. Does information on custody

reports, traffic reports and

sample tags agree?

Yes / No*

10. Proper preservatives

used:

Yes / No*

11. Date Rec. at Lab:

12.21.94

12. Temp. Rec. at Lab:

19°C

13. Time Rec. at Lab:

1300

	LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION(ETC.)
1.	21	A/C	17200VM	3VDA	44P	12.20	
2.	22	A/B	TB-1	2VDA	1	12.19	
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							

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

ARCO Products Company
Division of Atlantic Richfield Company

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

Chain of Custody

ARCO Facility no.	0608	City (Facility)	SAN LORENZO		Project manager (Consultant)	MARSH DODEN		Laboratory name	SEAVONA													
ARCO engineer	Mike Whelan		Telephone no. (ARCO)			Telephone no. (Consultant)	(408)441-2500	Fax no. (Consultant)	(408) 441-2539													
Consultant name	PACIFIC ENVIRONMENTAL GROUP		Address (Consultant)	2025 GATEWAY PLAZA, SAN JOSE, CA 95110				Contract number	07-673													
Sample I.D.	Lab no.	Container no.	Matrix		Preservation		Sampling date	Sampling time	BTEX 602/EPA 8020	BTEXTPH 915 EPA 418/1502/8015	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/SM450E	EPA 6016010	EPA 624/6240	EPA 625/B270	TCLP Semi Metals <input type="checkbox"/> VOA <input type="checkbox"/> VOA	Semi Metals EPA 601601000 TLC <input type="checkbox"/>	CAM Metals EPA 601601000 Lead Org/DHS <input type="checkbox"/>	Lead Org EPA 74207421 <input type="checkbox"/>	Method of shipment	
			Soil	Water	Other	Ice			Acid													
MW-5	3	X	X	HCl	12-20-94	1400	X		-01													Special detection Limit/reporting
MW-7						1305			-02													
MW-8						1205			-03													
MW-9						1140			-04													
MW-10						1010			-05													
MW-11						1030			-06													
MW-13						1330			-07													
MW-14						940			-08													
MW-15						925			-09													
MW-16						905			-10													
MW-17						820			-11													
MW-18						850			-12													
MW-19						12-19-94	1540		-13													
MW-21						1575			-14													
MW-22						1455			-15													
MW-23						1435			-16													
Condition of sample	intact					Temperature received:	9°C					Remarks	LAB RELEASE #0608-94-5									
Relinquished by sampler	Mike Whelan					Date 12-21-94 Time 818	Received by M. Doden	12/21/94					Lab number	9412F6576U								
Relinquished by	Mike Whelan					Date 12/21/94 Time 11:45	Received by B. Jones	12-21-94 MW					Turnaround time									
Relinquished by	Mike Whelan					Date 12-21-94 Time 1:06	Received by laboratory J. Gammie	12-21-94 1:00					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"/>									

ARCO Products Company

Division of Atlantic Richfield Company

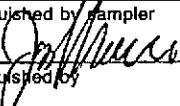
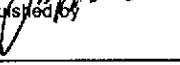
330-006.25

Task Order No.

0608-94-5

Chain of Custody

ARCO Facility no.	0608	City (Facility)	SAN LORENZO		Project manager (Consultant)	MARK COHEN		Laboratory name	SEAVORIA												
ARCO engineer	Mike Whelan		Telephone no. (ARCO)			Telephone no. (Consultant)	408/411-7500	Fax no. (Consultant)	(408)774-7539 9102												
Consultant name	PACIFIC ENVIRONMENTAL GROUP		Address (Consultant)	2025 GATEWAY PLACE #440, SAN JOSE, CA 95110				Contract number	07073												
Sample I.D.	Lab no.	Container no.	Matrix		Preservation		Sampling date	Sampling time	BTX 602/EPA 8020	BTX/TPH EPA 602/DOE 605	TPH Modified 80/5 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	TCP Metals <input type="checkbox"/> VOA <input type="checkbox"/> VOA <input type="checkbox"/>	CAM Metals EPA 601/8000 TLC <input type="checkbox"/> STLC <input type="checkbox"/>	Lead Org. DBS <input type="checkbox"/> Lead EPA 7420/7421 <input type="checkbox"/>	Method of shipment	
			Soil	Water	Other	Ice															Acid
MW-24	3	X	X	HCl	1/20-94	1115	X									-17	Special detection Limit/reporting				
MW-25						1240										-18					
MW-26						1050										-19					
EA-1						1420										-20	Special QA/QC				
17201VM	↓					825	↓									-21					
TB-1	2	↓	↓		12-19-94	NA	↓									-22					
Remarks LAB REFERENCE 1 0608-94-5																					
Lab number 9412F65 & F66																					
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: intact						Temperature received: 19°C															
Relinquished by sampler			Date 12-21-94	Time 818	Received by M. Dohle	12/21/94															
Relinquished by			Date 12/21/94	Time 11:45	Received by B. Smith	12-21-94															
Relinquished by			Date 12-21	Time 1100	Received by laboratory Managerial 2nd flr	Date 12-21-94	Time 1300														

ARCO Products Company  330-006.25 Task Order No. 060B-94-5								Chain of Custody											
ARCO Facility no. 060B			City (Facility) SAN LORENZO		Project manager (Consultant) MARSH DOREN				Laboratory name GEAOVIA										
ARCO engineer			Telephone no. (ARCO)		Telephone no. (Consultant) 408 441 2500				Fax no. (Consultant) 408 441 7539										
Consultant name PACIFIC ENVIRONMENTAL GROUP			Address (Consultant)		2025 GATEWAY PLATE, SAN JOSE, CA 95110				Contract number										
Sample I.D.	Lab no.	Container no.	Matrix		Preservation		Sampling date	Sampling time	BTEX 502/EPA 8020	BTEX/TPH EPA 1602/8020/8015	TPH Modified 8015 Gas	TPH EPA 41B/15M503E 413.1	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals	Semi VOCs	Method of shipment	
			Soil	Water	Other	Ice			Acid										
MW-5	3	X	X	H2O	12-20-94	1400		X											
MW-7						1305													
MW-8						1205													
MW-9						1140													
MW-10						1010													
MW-11						1030													
MW-13						1330													
MW-14						940													
MW-15						925													
MW-16						905													
MW-17						820													
MW-18						↓ 850													
MW-19						12-19-94	1540												
MW-21						↓ 1515													
MW-22						↓ 1455													
MW-23		↓	↓	↓	↓	↓ 1435		↓											
Condition of sample:								Temperature received:											
Relinquished by sampler 				Date 12-21-94	Time 818	Received by				Priority Rush 1 Business Day <input type="checkbox"/>									
Relinquished by 				Date	Time	Received by				Rush 2 Business Days <input type="checkbox"/>									
Relinquished by				Date	Time	Received by laboratory				Date	Time	Expedited 5 Business Days <input type="checkbox"/>							
												Standard 10 Business Days <input checked="" type="checkbox"/>							

ARCO Products Company

Division of Atlantic Richfield Company

330-006-25 Task Order No.

0608-94-5

Chain of Custody

ARCO Facility no.	0608	City (Facility)	SAN LORENZO		Project manager (Consultant)	MARK COHEN		Laboratory name												
ARCO engineer		Telephone no. (ARCO)			Telephone no. (Consultant)	408 441 7500	Fax no. (Consultant)	441 741 7539	Contract number											
Consultant name	PAAC ENVIRONMENTAL GROUP		Address (Consultant)	2025 GATEWAY PLACE #440 SAN JOSE, CA 95110																
Sample I.D.	Lab no.	Container no.	Matrix		Preservation		Sampling date	Sampling time	BTEX	BTEX/TPH	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"/>	TPH EPA 418.1/SHS520E	EPA 6016010	EPA 6248240	EPA 6258270	TCPL Metals <input type="checkbox"/> VOA <input type="checkbox"/> VOA	Semi CAN Metals EPA 60167000 TTLG <input type="checkbox"/> STLC <input type="checkbox"/>	Lead Org DHS <input type="checkbox"/> Lead EPA 74207421 <input type="checkbox"/>	Method of shipment
			Soil	Water	Other	Ice			Acid	EPA 6020/EPAP-8015											EPA 6020/EPAP-8015
MN-24	3	X	X	HCl	12-20-94	1115	X													
MW-25						1240														
MW-26						1050														
EA-1						1420														
17200 VM	↓	↓	↓	↓	↓	825														
TB-1	2	↓	↓	↓	↓	12-19-94	NA	↓												
Condition of sample:								Temperature received:												
Relinquished by sampler				Date	Time	Received by														
<i>J. M. Haas</i>				12-21-94	818															
Relinquished by				Date	Time	Received by														
Relinquished by				Date	Time	Received by laboratory					Date		Time							

ARCO Products Company		3300625	Task Order No.	0608-94-5	Chain of Custody																
Division of Atlantic Richfield Company																					
ARCO Facility no.	0608	City (Facility)	SAN LORENZO	Project manager (Consultant)	MARY E. DOOPEN																
ARCO engineer		Telephone no. (ARCO)		Telephone no. (Consultant)	415/4491700																
Consultant name	PACIFIC ENVIRONMENTAL GROUP	Address (Consultant)	2025 GATEWAY PLACE #490 SAN JOSE CA 95110	Fax no. (Consultant)	408 4417539																
Sample I.D.	Lab no.	Container no.	Matrix	Preservation	Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH 825 EPA M602/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 41B.1/MS503E	EPA 601/8010	EPA 624/8240	TCLP	Sample Metals <input type="checkbox"/> VOA <input type="checkbox"/> VOA	CAN Metals EPA 5010/7000 TLLC <input type="checkbox"/> STLC <input type="checkbox"/>	Lead OSHA <input type="checkbox"/>	Lead EPA 7420/7421 <input type="checkbox"/>	Method of shipment		
17372VM	3		X	X	HCl	12-24-94	1415	X												Special detection Limit/reporting	
17393VM	4																			Special QA/QC	
17203VM																					
17202VM																					
17348VE																					
590H																					
17197VM																					
633H																					
17349VM																					
TB-2	2		✓	✓	✓	✓	NA													Remarks LAB RELEASE #0608-94-5	
Condition of sample:											Temperature received:										
Relinquished by sampler			Date	12/22/94	Time	015	Received by														
Relinquished by			Date		Time		Received by														
Relinquished by			Date		Time		Received by laboratory					Date	Time								



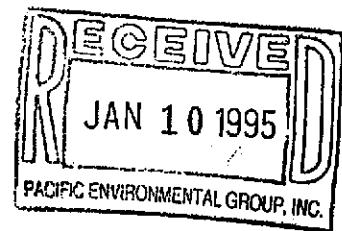
Sequoia
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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Maree Doden

Project: 330-006.25/0608, San Lorenzo

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

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
9412F0001	LIQUID, 17372VM	12/21/94	TPHGB Purgeable TPH/BTEX
9412F0002	LIQUID, 17393VM	12/21/94	TPHGB Purgeable TPH/BTEX
9412F0003	LIQUID, 17203VM	12/21/94	TPHGB Purgeable TPH/BTEX
9412F0004	LIQUID, 17302VM	12/21/94	TPHGB Purgeable TPH/BTEX
9412F0005	LIQUID, 17348VE	12/21/94	TPHGB Purgeable TPH/BTEX
9412F0006	LIQUID, 590H	12/21/94	TPHGB Purgeable TPH/BTEX
9412F0007	LIQUID, 17197VM	12/21/94	TPHGB Purgeable TPH/BTEX
9412F0008	LIQUID, 633H	12/21/94	TPHGB Purgeable TPH/BTEX
9412F0009	LIQUID, 17349VM	12/21/94	TPHGB Purgeable TPH/BTEX
9412F0010	LIQUID, TB-2	12/21/94	TPHGB Purgeable TPH/BTEX

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

Very truly yours,

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Cynthia Camber
Quality Assurance Department



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

Client Proj. ID: 330-006.25/0608 San Lorenzo
Sample Descript: 17372VM
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412F00-01

Sampled: 12/21/94
Received: 12/22/94
Analyzed: 12/31/94
Reported: 01/09/95

Attention: Maree Doden

QC Batch Number: GC123194BTEX20A
Instrument ID: GCHP20

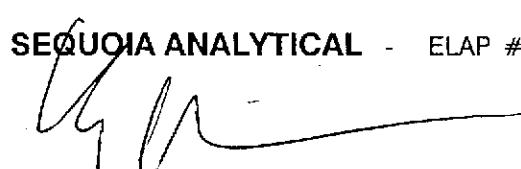
Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	86

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

SEQUOIA ANALYTICAL - ELAP #1210


Eileen Manning
Project Manager



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

Attention: Maree Doden

Client Proj. ID: 330-006.25/0608 San Lorenzo
Sample Descript: 17393VM
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412F00-02

Sampled: 12/21/94
Received: 12/22/94

Analyzed: 01/01/95
Reported: 01/09/95

QC Batch Number: GC010195BTEX17A
Instrument ID: GCHP17

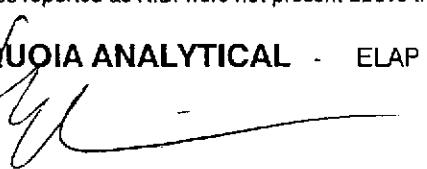
Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	96

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

SEQUOIA ANALYTICAL - ELAP #1210


Eileen Manning
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: 330-006.25/0608 San Lorenzo
Sample Descript: 17203VM
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412F00-03

Sampled: 12/21/94
Received: 12/22/94
Analyzed: 12/31/94
Reported: 01/09/95

QC Batch Number: GC123194BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	76

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

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
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: 330-006.25/0608 San Lorenzo
Sample Descript: 17302VM
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412F00-04

Sampled: 12/21/94
Received: 12/22/94
Analyzed: 01/01/95
Reported: 01/09/95

QC Batch Number: GC010195BTEX20A
Instrument ID: GCHP20

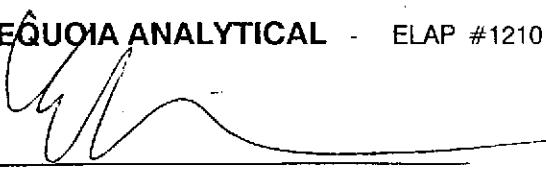
Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	94

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

SEQUOIA ANALYTICAL - ELAP #1210


Eileen Manning
Project Manager



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

Attention: Maree Doden

Client Proj. ID: 330-006.25/0608 San Lorenzo
Sample Descript: 17348VE
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412F00-05

Sampled: 12/21/94
Received: 12/22/94

Analyzed: 01/02/95
Reported: 01/09/95

QC Batch Number: GC010295BTEX17A
Instrument ID: GCHP17

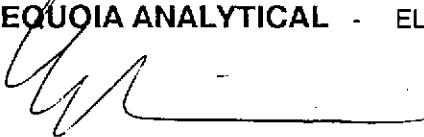
Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	99

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

SEQUOIA ANALYTICAL - ELAP #1210


Eileen Manning
Project Manager



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FAX (916) 921-0100

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

Client Proj. ID: 330-006.25/0608 San Lorenzo
Sample Descript: 590H
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412F00-06

Sampled: 12/21/94
Received: 12/22/94
Analyzed: 01/02/95
Reported: 01/09/95

QC Batch Number: GC010295BTEX17A
Instrument ID: GCHP17

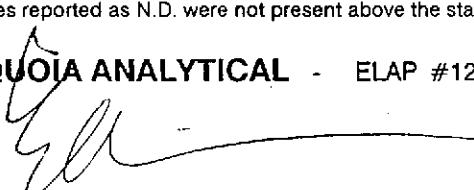
Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	101

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

SEQUOIA ANALYTICAL - ELAP #1210


Eileen Manning
Project Manager



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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: 330-006.25/0608 San Lorenzo Sample Descript: 17197VM Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9412F00-07	Sampled: 12/21/94 Received: 12/22/94 Analyzed: 01/02/95 Reported: 01/09/95
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QC Batch Number: GC010295BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	93

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

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager



Sequoia
Analytical

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

Client Proj. ID: 330-006.25/0608 San Lorenzo
Sample Descript: 633H
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412F00-08

Sampled: 12/21/94
Received: 12/22/94
Analyzed: 01/02/95
Reported: 01/09/95

QC Batch Number: GC010295BTEX17A
Instrument ID: GCHP17

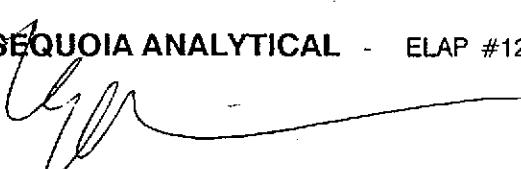
Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	101

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

SEQUOIA ANALYTICAL - ELAP #1210


Eileen Manning
Project Manager



Sequoia
Analytical

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 Proj. ID: 330-006.25/0608 San Lorenzo
Sample Descript: 17349VM
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412F00-09

Sampled: 12/21/94
Received: 12/22/94
Analyzed: 01/02/95
Reported: 01/09/95

QC Batch Number: GC010295BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	670
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	1.8
Chromatogram Pattern:		
Non Gas Mix		< C8
Weathered Gas		C8-C12
Surrogates		
Trifluorotoluene	Control Limits % 70 130	% Recovery 130

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

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager



**Sequoia
Analytical**

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

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

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

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

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

Attention: Maree Doden

Client Proj. ID: 330-006.25/0608 San Lorenzo
Sample Descript: TB-2
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412F00-10

Sampled: 12/21/94
Received: 12/22/94
Analyzed: 01/02/95
Reported: 01/09/95

QC Batch Number: GC010295BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates		
Trifluorotoluene	Control Limits % 70 130	% Recovery 96

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

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager



**Sequoia
Analytical**

680 Chesapeake Drive 1900 Bates Avenue, Suite L 819 Striker Avenue, Suite 8	Redwood City, CA 94063 Concord, CA 94520 Sacramento, CA 95834	(415) 364-9600 (510) 686-9600 (916) 921-9600	FAX (415) 364-9233 FAX (510) 686-9689 FAX (916) 921-0100
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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Maree Doden

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

Work Order #: 9412F00 01, 03

Reported: Jan 9, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC123194BTEX20A	GC123194BTEX20A	GC123194BTEX20A	GC123194BTEX20A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	N.A.	N.A.	N.A.	N.A.

Analyst:	R. Vincent	R. Vincent	R. Vincent	R. Vincent
MS/MSD #:	9412G1801	9412G1801	9412G1801	9412G1801
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	N.A.	N.A.	N.A.	N.A.
Analyzed Date:	12/31/94	12/31/94	12/31/94	12/31/94
Instrument I.D. #:	GCHP20	GCHP20	GCHP20	GCHP20
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.0	9.3	9.2	27
MS % Recovery:	90	93	92	90
Dup. Result:	9.3	9.6	9.4	28
MSD % Recov.:	93	96	94	93
RPD:	3.3	3.2	2.2	3.6
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

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

LCS Result:
LCS % Recov.:

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

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

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: 330-006.25/0608, San Lorenzo
Matrix: LIQUID

Work Order #: 9412F00 02

Reported: Jan 9, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC010195BTEX17A	GC010195BTEX17A	GC010195BTEX17A	GC010195BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	N.A.	N.A.	N.A.	N.A.

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	9412G2901	9412G2901	9412G2901	9412G2901
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	N.A.	N.A.	N.A.	N.A.
Analyzed Date:	1/1/95	1/1/95	1/1/95	1/1/95
Instrument I.D. #:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	10	9.9	10	30
MS % Recovery:	100	99	100	100
Dup. Result:	10	10	9.8	29
MSD % Recov.:	100	100	98	97
RPD:	0.0	1.0	2.0	3.4
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

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

LCS Result:
LCS % Recov.:

MS/MSD	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:

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SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

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

9412F00.PPP <2>



**Sequoia
Analytical**

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

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

Client Project ID: 330-006.25/0608, San Lorenzo
Matrix: LIQUID
Work Order #: 9412F00 04

Reported: Jan 9, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC010195BTEX20A	GC010195BTEX20A	GC010195BTEX20A	GC010195BTEX20A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	N.A.	N.A.	N.A.	N.A.

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	9412G2704	9412G2704	9412G2704	9412G2704
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	N.A.	N.A.	N.A.	N.A.
Analyzed Date:	1/1/95	1/1/95	1/1/95	1/1/95
Instrument I.D. #:	GCHP20	GCHP20	GCHP20	GCHP20
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	10	10	11	32
MS % Recovery:	100	100	110	107
Dup. Result:	10	10	10	31
MSD % Recov.:	100	100	100	103
RPD:	0.0	0.0	9.5	3.2
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

Eileen A. Manning
Project Manager

Please Note:

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



**Sequoia
Analytical**

680 Chesapeake Drive 1900 Bates Avenue, Suite L 819 Striker Avenue, Suite 8	Redwood City, CA 94063 Concord, CA 94520 Sacramento, CA 95834	(415) 364-9600 (510) 686-9600 (916) 921-9600	FAX (415) 364-9233 FAX (510) 686-9689 FAX (916) 921-0100
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Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Maree Doden	Client Project ID: 330-006.25/0608, San Lorenzo Matrix: LIQUID	Work Order #: 9412F00 05-10	Reported: Jan 9, 1995
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QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC010295BTEX17A	GC010295BTEX17A	GC010295BTEX17A	GC010295BTEX17A
Anal. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	N.A.	N.A.	N.A.	N.A.

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	9412G2901	9412G2901	9412G2901	9412G2901
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	N.A.	N.A.	N.A.	N.A.
Analyzed Date:	1/2/95	1/2/95	1/2/95	1/2/95
Instrument I.D. #:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.7	9.9	10	30
MS % Recovery:	97	99	100	100
Dup. Result:	10	11	10	30
MSD % Recov.:	100	110	100	100
RPD:	3.0	11	0.0	0.0
RPD Limit:	0-50	0-50	0-50	0-50

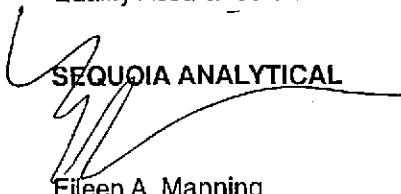
LCS #:

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


SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Please Note:

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

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME:
REC. BY (PRINT):PEA ARCO DBDB 94.5
81WORKORDER:
DATE OF LOG-IN:

9412 FOO

12/27/94

CIRCLE THE APPROPRIATE RESPONSE

1. Custody Seal(s): Present / Absent

Intact / Broken

2. Custody Seal Nos.: Put in Remarks Section

3. Chain-of-Custody

Records:

Present / Absent*

4. Traffic Reports or

Packing List:

Present / Absent

Airbill / Sticker

5. Airbill:

Present / Absent

6. Airbill No.:

7. Sample Tags:

Present / Absent*

Sample Tag Nos.:

Listed / Not Listed
on Chain-of-Custody

8. Sample Condition: Intact / Broken* / Leaking*

9. Does information on custody

reports, traffic reports and

sample tags agree?

Yes / No*

10. Proper preservatives

used:

Yes / No*

11. Date Rec. at Lab:

12-22-94

12. Temp. Rec. at Lab:

13C

13. Time Rec. at Lab:

1540

LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION(ETC.)
1	A-C	17372 VM	3VDA	lip	12-21	
2		17393 VM				
3		17203 VM				
4		17302 VM				
5		17348 VE				
6		590H				
7		17197 VM				
8		633H				
9	↓	17349 VM	+			
10	AIB	TB .2	2VDA	2	2	

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

ARCO Products Company ♦ 3300625

Division of Atlantic Richfield Company

Task Order No. 0608-94-5

Chain of Custody

ARCO Facility no.	0608	City (Facility)	SAN LORENZO		Project manager (Consultant)	MANNEFUDEN		Laboratory name	SEQUOIA													
ARCO engineer					Telephone no. (ARCO)	Telephone no. (Consultant)	(415) 461 7500	Fax no. (Consultant)	(415) 441 7735, 9102													
Consultant name	PACIFIC ENVIRONMENTAL GROUP		Address (Consultant)		2025 GATEWAY PLACE #440 SAN JOSE, CA 95114				Contract number	07-073												
Sample I.D.	Lab no.	Container no.	Matrix		Preservation		Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA Method 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/SN503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Meals <input type="checkbox"/> VOA <input type="checkbox"/> VOA	Semi VOCs <input type="checkbox"/>	CAN Method EPA 601/8010 TTC <input type="checkbox"/> STLC <input type="checkbox"/>	Lead Org DTS <input type="checkbox"/> Lead EPA <input type="checkbox"/> 7420/7421 <input type="checkbox"/>	Method of shipment	Special detection limit/reporting
			Soil	Water	Other	Ice											Acid					
17372VM	3	X	X	HCl	12/21/94	14:15	X										-01					
17393VM						11:15											-02					
17203VM						10:35											-03					
17202VM						14:40											-04					
17348VE						10:00											-05					
59044						9:50											-06					
17197VM						10:20											-07					
633H						13:45											-08					
17349VM		↓				10:55											-09					
TB-2	2	↓	↓	↓	↓	NA	↓										-10					
Condition of sample:	INTACT								Temperature received:	13°C												
Relinquished by sampler									Date	12/22/94	Time	0815	Received by	M. Doder 12/22/94 0815								
Relinquished by									Date	12/22/94	Time	11:45	Received by	M. Futterer								
Relinquished by									Date	12/22	Time	3:40	Received by laboratory	Jeannefwt	Date	12/22/94	Time	1540				



**Sequoia
Analytical**

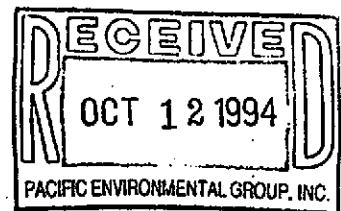
680 Chesapeake Drive
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819 Striker Avenue, Suite 8

Redwood City, CA 94063
Concord, CA 94520
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: 330-006.2C/0608, San Lorenzo

Enclosed are the results from samples received at Sequoia Analytical on October 7, 1994.
The requested analyses are listed below:

<u>SAMPLE #</u>	<u>SAMPLE DESCRIPTION</u>	<u>DATE COLLECTED</u>	<u>TEST METHOD</u>
9410432 -01	LIQUID, MW-633	10/07/94	TPHGB Purgeable TPH / BTEX

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

Very truly yours,

SEQUOIA ANALYTICAL

I Issuing FOR

Eileen Manning
Project Manager


Quality Assurance Department



**Sequoia
Analytical**

680 Chesapeake Drive 1900 Bates Avenue, Suite L 819 Striker Avenue, Suite 8	Redwood City, CA 94063 Concord, CA 94520 Sacramento, CA 95834	(415) 364-9600 (510) 686-9600 (916) 921-9600	FAX (415) 364-9233 FAX (510) 686-9689 FAX (916) 921-0100
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Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Maree Doden	Client Proj. ID: 330-006.2C/0608, San Lorenzo Sample Descript: MW-633 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9410432-01	Sampled: 10/07/94 Received: 10/07/94 Analyzed: 10/10/94 Reported: 10/11/94
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Instrument ID: GCHP3

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.
Surrogates		Control Limits %
Trifluorotoluene		70 130
		% Recovery
		95

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

SEQUOIA ANALYTICAL - ELAP #1210

I Manning FOR
Eileen Manning
Project Manager



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

Client Project ID: 330-006.2C/0608, San Lorenzo
Matrix: Liquid

QC Sample Group: 9410432 01

Reported: Oct 11, 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#:	9409H9503	9409H9503	9409H9503	9409H9503
Date Prepared:	N.A.	N.A.	N.A.	N.A.
Date Analyzed:	10/10/94	10/10/94	10/10/94	10/10/94
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Matrix Spike % Recovery:	110	100	100	107
Matrix Spike Duplicate % Recovery:	100	100	100	100
Relative % Difference:	9.5	0.0	0.0	6.7

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

E. Manning FOR
Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL SAMPLE REVIEW

CLIENT NAME:
REC. BY (PRINT):PEG(Argo 880-006.2C) B MASTER LOG NO. / PAGE:

DATE OF LOG-IN:

9410432
10/8/94

CIRCLE THE APPROPRIATE RESPONSE		LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION (ETC)
1. Custody Seal(s):	Present <input checked="" type="checkbox"/> Absent <input type="checkbox"/> Intact <input type="checkbox"/> Broken <input checked="" type="checkbox"/>	01	A	MW-608	3 vials	L	10/8/94	
2. Custody Seal Nos.:								
3. Chain-of-Custody Records:	Present <input checked="" type="checkbox"/> Absent <input type="checkbox"/>							
4. Traffic Reports or Packing List:	Present <input checked="" type="checkbox"/> Absent <input type="checkbox"/>							
5. Airbill:	Airbill / Sticker Present <input checked="" type="checkbox"/> Absent <input type="checkbox"/>							
6. Airbill No.:								
7. Sample Tags: Sample Tag Nos.:	Present <input checked="" type="checkbox"/> Absent <input type="checkbox"/> Listed <input type="checkbox"/> Not Listed <input type="checkbox"/> on Chain-of-Custody							09/8/94
8. Sample Condition:	Intact <input type="checkbox"/> Broken <input checked="" type="checkbox"/> /Leaking <input type="checkbox"/>							
9. Does information on custody reports, traffic reports and sample tags agree?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>							
10. Proper Preservatives Used:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>							
11. Date Rec. at Lab:	10/7/94							
12. Time Rec. at Lab:	1640							

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

ARCO Products Company

Division of Atlantic Richfield Company

Task Order No.

1608-94-5

Chain of Custody

ARCO Facility no.	City (Facility)	Project manager (Consultant)	Laboratory name												
ARCO engineer	Telephone no. (ARCO)	Telephone no. (Consultant)	Contract number												
Consultant name	Address (Consultant)	Fax no. (Consultant)													
Sample I.D.	Container no.	Matrix	Preservation	Sampling date	Sampling time	BTEX 602/EPA 8020	BTX/TPH 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"/>	TPH EPA 418.1/SM93E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals <input type="checkbox"/> VOC <input type="checkbox"/> VOA <input type="checkbox"/> CAM Metals EPA 8010/7000 TLC <input type="checkbox"/> STLC <input type="checkbox"/> Lead Org DRs <input type="checkbox"/> Lead EPA 7420/7421 <input type="checkbox"/>	Method of shipment
1608-94-5	3	X	YES HGL 10/7/94 1100	X	01A-C										Special detection Limit/reporting
															Special QA/QC
															Remarks
															12/4
															Lab number
															9410432
															Turnaround time
															Priority Rush 1 Business Day
															<input type="checkbox"/>
															Rush 2 Business Days
															<input checked="" type="checkbox"/>
															Expedited 5 Business Days
															<input type="checkbox"/>
															Standard 10 Business Days
															<input type="checkbox"/>

Condition of sample:

Relinquished by sampler

Date 10/7/94 Time 1057

Temperature received: 13°C

Received by

M. Doder 10/7/94

Relinquished by

Relinquished by

Date 10/7/94 Time 2:40

Received by

Ray Gauthier

Date 10/7/94 Time 4:40

Received by laboratory

Clerk 10/7/94 1640



**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 Proj. ID: 330-006.26/608, San Lorenzo
Sample Descript: Infl
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412294-01

Sampled: 12/05/94
Received: 12/06/94
Analyzed: 12/07/94
Reported: 12/19/94

QC Batch Number: GC120794BTEX06A
Instrument ID: GCHP6

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	470
Benzene	0.50	32
Toluene	0.50	0.59
Ethyl Benzene	0.50	29
Xylenes (Total)	0.50	6.2
Chromatogram Pattern:		
Weathered Gas		C6-C12+
Discrete Peak		C6
Surrogates		Control Limits %
Trifluorotoluene		70 130
		% Recovery
		106

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

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager



Sequoia
Analytical

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

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

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

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

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

Client Proj. ID: 330-006.26/608, San Lorenzo
Sample Descript: Effl
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9412294-02

Sampled: 12/05/94
Received: 12/06/94
Analyzed: 12/07/94
Reported: 12/19/94

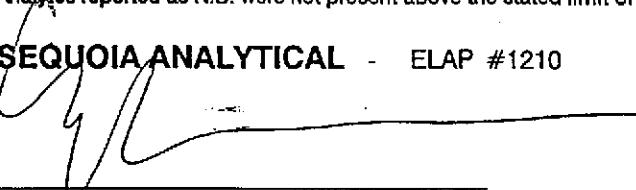
QC Batch Number: GC120794BTEX06A
Instrument ID: GCHP6

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70	130

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

SEQUOIA ANALYTICAL - ELAP #1210


Eileen Manning
Project Manager



**Sequoia
Analytical**

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
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
Matrix: Liquid

Work Order #: 9412294 02

Reported: Dec 20, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Total Suspended Solids	pH
QC Batch:	IN120794160200A	IN120794150100A
Analy. Method:	EPA 160.2	EPA 150.1
Prep Method:	N.A.	N.A.

Analyst: Y. Arteaga Y. Arteaga

Duplicate Sample #: 941229901 941239404

Prepared Date: 12/7/94 12/7/94
Analyzed Date: 12/7/94 12/7/94
Instrument I.D.#: MANUAL MANUAL

Sample Concentration: N.D. 8.2

Dup. Sample Concentration: N.D. 8.2

RPD: 0.0 0.0
RPD Limit: 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

** RPD = Relative % Difference

9412294.PPP <1>



Sequoia
Analytical

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

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

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

Work Order #: 9412294 02

Reported: Dec 20, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte: Chemical Oxygen Demand

QC Batch#: IN121294410400A

Analy. Method: EPA 410.4

Prep. Method: N.A.

Analyst: C. Hirotsu

MS/MSD #: 941240402

Sample Conc.: N.D.

Prepared Date: 12/12/94

Analyzed Date: 12/12/94

Instrument I.D.#: MANUAL

Conc. Spiked: 100 mg/L

Result: 150

MS % Recovery: 150

Dup. Result: 100

MSD % Recov.: 100

RPD: 40

RPD Limit: 0-30

LCS #: LCS121294

Prepared Date: 12/12/94

Analyzed Date: 12/12/94

Instrument I.D.#: MANUAL

Conc. Spiked: 100 mg/L

LCS Result: 110

LCS % Recov.: 110

MS/MSD 70-130

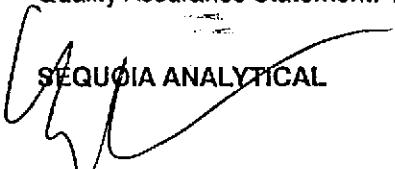
LCS 80-120

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

Eileen A. Manning
Project Manager



**Sequoia
Analytical**

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

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

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

Work Order #: 9412294 01-02

Reported: Dec 20, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC120794BTEX06A	GC120794BTEX06A	GC120794BTEX06A	GC120794BTEX06A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	N.A.	N.A.	N.A.	N.A.

Analyst:	G. Garcia	G. Garcia	G. Garcia	G. Garcia
MS/MSD #:	941215902	941215902	941215902	941215902
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	N.A.	N.A.	N.A.	N.A.
Analyzed Date:	12/7/94	12/7/94	12/7/94	12/7/94
Instrument I.D. #:	GCHP6	GCHP6	GCHP6	GCHP6
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.6	9.6	9.7	29
MS % Recovery:	96	96	97	97
Dup. Result:	8.6	8.6	8.8	26
MSD % Recov.:	86	86	88	87
RPD:	11	11	9.7	11
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.

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

9412294.PPP <3>

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME:
REC. BY (PRINT):

PEL ARCD
330.006.26

WORKORDER:
DATE OF LOG-IN:

04/22/94

12/6/94

CIRCLE THE APPROPRIATE RESPONSE		LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION(ETC.)
1. Custody Seal(s)	Present / Absent	01	AC	INFI	3VDA	NP	12-5	
2. Custody Seal Nos.:	Intact / Broken*	02	AC	EFF	3VDA			TPHGB
3. Chain-of-Custody Records:	Present / Absent*		DE		2-1LPAS			
4. Traffic Reports or Packing List:	Present / Absent		FT		3VDA			COD
5. Airbill:	Airbill / Sticker							
6. Airbill No.:	Present / Absent							
7. Sample Tags:	Present / Absent*							
Sample Tag Nos.:	Listed / Not Listed on Chain-of-Custody							
8. Sample Condition:	Intact / Broken* / Leaking*							
9. Does information on custody reports, traffic reports and sample tags agree?	Yes / No*							
10. Proper preservatives used:	Yes / No*							
11. Date Rec. at Lab:	12-6-94							
12. Temp. Rec. at Lab:	12°C							
13. Time Rec. at Lab:	1315							

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

ARCO Products Company

Division of Atlantic Richfield Company

530-006-26

Task Order No.

608-94-5

Chain of Custody

ARCO Facility no. #608			City (Facility) SAN LORAN ZO		Project manager (Consultant)		SHAW GARAKANI		Laboratory name Sequoia													
ARCO engineer Mike Whean			Telephone no. (ARCO)		Telephone no. (Consultant) 3411 7500		Fax no. (Consultant) 441 7539		Contract number 07-073													
Consultant name PACIFIC CIV. GROUP			Address (Consultant) 2025 Gate Way pl #440 SAN JOSE						Method of shipment													
Sample I.D.	Lab no.	Container no.	Matrix		Preservation		Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA M602/BG20/8015	TPH Modified 9015 Gas <input type="checkbox"/> Diesel <input checked="" type="checkbox"/>	Oil and Grease 413.1 <input type="checkbox"/> 413.2 <input checked="" type="checkbox"/>	TPH EPA 410.1/SH503E	EPA 601/8010	EPA 624/8240	EPA 624/8240	TCLP Semi Metals <input type="checkbox"/> VOCs <input type="checkbox"/> VOAs <input type="checkbox"/>	CAN Metals EPA 6010/7000 TTLIC <input type="checkbox"/> STLC <input type="checkbox"/>	Lead Org/DHS <input type="checkbox"/> Lead EPA 7420/7421 <input type="checkbox"/>	600	PH	Special detection Limit/reporting
			Soil	Water	Other	Ice																	Acid
JMFC	01ACB		X	X	HCl	12-5-94	1140	X														
EFFL	02AC03		X	X	HCl			X														
EFFL	1P	1	X	X	NP														X			
EFFL	E	1	X	X	NP														X			
EFFL	F-13		X	X	H2SO4														X			
Condition of sample: INTACT.						Temperature received: 12-C																
Relinquished by sampler J. Doden						Date 12-6-94	Time 7:00	Received by M. Doden	12/6/94 0715													
Relinquished by M. Doden						Date 12/6/94	Time 12:00	Received by J. Fulthee														
Relinquished by J. Fulthee						Date 12/6/94	Time 1:15	Received by laboratory G. Greenreford	Date 12-6-94	Time 1315												
Distribution: White copy — Laboratory; Canary copy — ARCO Environmental Engineering; Pink copy — Consultant																						
APC-3292 (2-91)																						



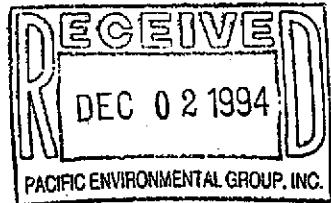
Sequoia
Analytical

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

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

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

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



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

Project: 330-006.26/608, San Lorenzo

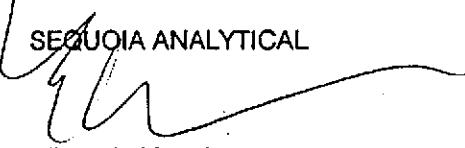
Enclosed are the results from samples received at Sequoia Analytical on November 16, 1994. The requested analyses are listed below:

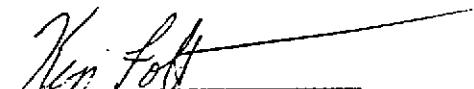
SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
9411B2001	LIQUID, Infl	11/15/94	TPHGB Purgeable TPH/BTEX
9411B2002	LIQUID, Effl	11/15/94	TPHGB Purgeable TPH/BTEX

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

Very truly yours,

SEQUOIA ANALYTICAL


Eileen A. Manning
Project Manager


Ken Folt
Quality Assurance Department



**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 Proj. ID: 330-006.26/608, San Lorenzo Sample Descript: Infl Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9411B20-01	Sampled: 11/15/94 Received: 11/16/94 Analyzed: 11/18/94 Reported: 11/21/94
--	--	---

QC Batch Number: GC111794BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	0.66
Toluene	0.50	N.D.
Ethyl Benzene	0.50	2.6
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	88

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

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager

Page: 1



Sequoia
Analytical

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

Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Maree Doden	Client Proj. ID: 330-006.26/608, San Lorenzo Sample Descript: Effl Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9411B20-02	Sampled: 11/15/94 Received: 11/16/94 Analyzed: 11/18/94 Reported: 11/21/94
--	--	---

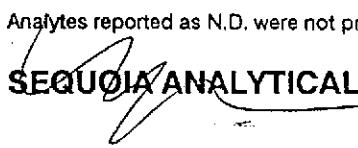
QC Batch Number: GC111794BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	80

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

 SEQUOIA ANALYTICAL ELAP #1210



**Sequoia
Analytical**

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

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

Attention: Maree Doden

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

Work Order #: 9411B20 01-02

Reported: Nov 28, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC111794BTEX20A	GC111794BTEX20A	GC111794BTEX20A	GC111794BTEX20A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	N.A.	N.A.	N.A.	N.A.

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	941180702	941180702	941180702	941180702
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	N.A.	N.A.	N.A.	N.A.
Analyzed Date:	11/17/94	11/17/94	11/17/94	11/17/94
Instrument I.D. #:	GCHP20	GCHP20	GCHP20	GCHP20
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	10	9.9	9.9	30
MS % Recovery:	100	99	99	100
Dup. Result:	9.9	9.9	10	30
MSD % Recov.:	99	99	100	100
RPD:	1.0	0.0	1.0	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	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

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME:
REC. BY (PRINT):PEG Arco 330.006.26
SLWORKORDER:
DATE OF LOG-IN:

9411 B20

11/17/94

CIRCLE THE APPROPRIATE RESPONSE		LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION(ETC.)
1. Custody Seal(s)	Present / <input checked="" type="checkbox"/> Absent	01	A C	INFL	3VCA	4Q	11-15	
2. Custody Seal Nos.:	Intact / Broken*	02	b	EFFI	1	1	1	
3. Chain-of-Custody Records:	Present / <input checked="" type="checkbox"/> Absent*							
4. Traffic Reports or Packing List:	Present / <input checked="" type="checkbox"/> Absent							
5. Airbill:	Airbill / Sticker							
6. Airbill No.:	Present / <input checked="" type="checkbox"/> Absent							
7. Sample Tags:	Present / <input checked="" type="checkbox"/> Absent*							
Sample Tag Nos.:	Listed / Not Listed							
	on Chain-of-Custody							
8. Sample Condition:	Intact / Broken* / Leaking*							
9. Does information on custody reports, traffic reports and sample tags agree?	Yes / <input checked="" type="checkbox"/> No*							
10. Proper preservatives used:	Yes / <input checked="" type="checkbox"/> No*							
11. Date Rec. at Lab:	11-16-94							
12. Temp. Rec. at Lab:	13°C							
13. Time Rec. at Lab:	1150							

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

ARCO Products Company

Division of AtlanticRichfield Company

330-006,26 Task Order No. 608 - 94-5

Chain of Custody

ARCO Facility no.		608		City (Facility)		SAN LORENZO		Project manager (Consultant)		SHAW GATAKANI		Laboratory name									
ARCO engineer		Mike Whelan		Telephone no. (ARCO)		408 441 7500		Telephone no. (Consultant)		Fax no. (Consultant)		SEQUOIA									
Consultant name		PACIFIC Env Group		Address (Consultant)		2025 GATEWAY PL #440 SAN JOSE						Contract number									
Sample I.D.	Lab no.	Container no.	Matrix		Preservation		Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/T _{TH} EPA M602/802/02/01/95	TPH EPA 416.1/JSMS03E	EPA 601/8010	EPA 624/8240	TCLP EPA 625/8270	TCLP Metals <input type="checkbox"/> VOA <input type="checkbox"/> VOA <input type="checkbox"/>	CAN Metals EPA 601/07/000 TTLIC <input type="checkbox"/> STLC <input type="checkbox"/>	Lead Org DRS <input type="checkbox"/> Lead EPA 7420/7421 <input type="checkbox"/>			Method of shipment	
			Soil	Water	Other	Ice			Acid		TPH Modified 8015 Gas <input type="checkbox"/> Diesel <input type="checkbox"/>	Oil and Grease 4131 <input type="checkbox"/> 4132 <input type="checkbox"/>									
INF1	6A.C3		X	X	HCl	11-15-94		X												Special detection Limit/reporting	
TEFFL	D-1	3	X	X	HCl	11-15-94		X												Special QA/QC	
																		Remarks			
																		Lab number			
																		Turnaround time			
																		Priority Rush 1 Business Day			
																		Rush 2 Business Days			
																		Expedited 6 Business Days			
																		Standard 10 Business Days			

Condition of sample: intact

Temperature received: 13°C

Relinquished by sampler

Date 11-16-94 Time 7:00
Received by

11/16/94

Relinquished by

Date 11/16/94 Time 10:53
Received by

11-16-94 10:55

Relinquished by

Date 11-16-94 Time 11:50
Received by laboratory

11-16-94 1150



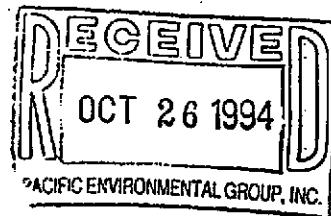
Sequoia
Analytical

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

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

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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 samples received at Sequoia Analytical on October 19, 1994. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
9410C6401	LIQUID, Infl	10/18/94	TPHGB Purgeable TPH/BTEX
9410C6402	LIQUID, Effl	10/18/94	TPHGB Purgeable TPH/BTEX

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

Very truly yours,

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Quality Assurance Department



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 Proj. ID: 330-006.26/608, San Lorenzo
Sample Descript: Infl
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9410C64-01

Sampled: 10/18/94
Received: 10/19/94
Analyzed: 09/21/94
Reported: 10/24/94

QC Batch Number: GC102194BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	96

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

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager



Sequoia
Analytical

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 Proj. ID: 330-006.26/608, San Lorenzo
Sample Descript: Effl
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9410C64-02

Sampled: 10/18/94
Received: 10/19/94
Analyzed: 10/21/94
Reported: 10/24/94

QC Batch Number: GC102194BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	92

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

SEQUOIA ANALYTICAL - ELAP #1210

Eileen Manning
Project Manager



**Sequoia
Analytical**

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
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
Matrix: Liquid

Work Order #: 9410C64 01

Reported: Oct 25, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC102194BTEX02A	GC102194BTEX02A	GC102194BTEX02A	GC102194BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	N.A.	N.A.	N.A.	N.A.

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	9410A3812	9410A3812	9410A3812	9410A3812
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	N.A.	N.A.	N.A.	N.A.
Analyzed Date:	10/21/94	10/21/94	10/21/94	10/21/94
Instrument I.D. #:	GCHP2	GCHP2	GCHP2	GCHP2
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	11	33
MSD % Recov.:	110	110	110	110
RPD:	0.0	0.0	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.

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**

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

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

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

Work Order #: 9410C64 02

Reported: Oct 25, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC102194BTEX03A	GC102194BTEX03A	GC102194BTEX03A	GC102194BTEX03A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	N.A.	N.A.	N.A.	N.A.

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	9410A3814	9410A3814	9410A3814	9410A3814
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	N.A.	N.A.	N.A.	N.A.
Analyzed Date:	10/21/94	10/21/94	10/21/94	10/21/94
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	9.4	28
MS % Recovery:	95	93	94	10
Dup. Result:	9.9	9.9	10	30
MSD % Recov.:	99	99	100	100
RPD:	4.1	6.3	6.2	6.9
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

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

LCS Result:
LCS % Recov.:

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

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

Please Note:

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

SEQUOIA ANALYTICAL
Eileen A. Manning
Project Manager

ARCO Products Company

Division of Atlantic Richfield Company

330-006-26

Task Order No.

608-94-5

Chain of Custody

ARCO Facility no.	608	City (Facility)	SAN LUIS OBISPO		Project manager (Consultant)	Shaw Garakawi		Laboratory name																
ARCO engineer	Mike Whelan		Telephone no. (ARCO)	4417500		Fax no. (Consultant)	4417539	Contract number																
Consultant name	PACIFIC ENV GROUP		Address (Consultant)	2025 GATEWAY PL #440 SAN JOSE				Method of shipment																
Sample I.D.	Lab no.	Container no.	Matrix		Preservation	Sampling date	Sampling time	BTEX	BTEX/TPH	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/SM50/E	EPA 601/6010	EPA 924/9240	EPA 925/9270	TCLP	Semi	Special detection Limit/reporting				
			Soil	Water	Other			Ice	Acid												Metals <input type="checkbox"/>	VOA <input type="checkbox"/>	VOA <input type="checkbox"/>	CAN Metals EPA 601/60100 TLTC <input type="checkbox"/>
TRC 1AC	3	X			HCl	10-18-94	X																	
EFFC 2AC	3	X			HCl	10-18-94	X																	
																								Special QA/QC
																								Remarks
																								Lab number
																								9410664
																								Turnaround time
																								<input type="checkbox"/> Priority Rush 1 Business Day
																								<input type="checkbox"/> Rush 2 Business Days
																								<input type="checkbox"/> Expedited 1.5 Business Days
																								<input checked="" type="checkbox"/> Standard 10 Business Days
Condition of sample:												Temperature received:												
Relinquished by sampler				Date	Time	Received by		10/18/94 1500																
<i>Jay Doden</i>				10-18-94	15:00	<i>Jay Doden</i>		<i>Jay Doden</i> 10/18/94 1500																
Relinquished by				Date	Time	Received by		10/19/94 12:00																
<i>Jay Doden</i>				10/19/94	12:00	<i>Jay Doden</i>		<i>Jay Doden</i> 10/19/94 12:00																
Relinquished by				Date	Time	Received by laboratory		Date	Time															
<i>Jay Doden</i>				10/19/94 100		<i>Nordus</i>		10/19	1:00															

WELL SAMPLING REQUEST

SITE INFORMATION FORM

Identification

Project # 330-WD6.25

Station # 0608

Site Address: ARCO

17601 HESPERIAN

SAN LORENZO, CA

County: ALAMEDA

Project Manager: K.B.

Requestor: C.C.

Client: ARCO

?

Client P.O.C.:

Date of request: 3-28-94

Field Tasks

H₂O levels ALL WELLS

H₂O Sampling MW-5, 7-11, 13-23
EI-A (0+M INFIL SAMPLE) MW-
24, 25, 26

Well Development

Other: GO TO CHURCH OFFICE
FOR KEY FOR SCHOOL WELL

Describe task (i.e. Well groups and analytical params):

Activities occurring on site

(i.e. remedial system construction, ongoing projects, etc.)

(Please attach: Site Map, Well Information Data, Site Safety Plan, Well logs as appropriate)

Budgeted hours:

Actual hours; On-Site: 16.5

Mob-de-Mob: 8 HOURS

Project Type

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

Other: CALL BY 10th

OF EACH MONTH

Ideal field date(s): SAMPLE

BY 16th, 17th, 18th

FILE COPY

Prefield Contacts/Permits

Cal Trans _____

County 48 HRS. 510-670-5481

ARCO DIST. MGR.

City _____

Private CALVARY LUTHERAN CHURCH
510-278-2555

Multi-Consultant Scheduling
 Date(s): _____

Purge Water Containment:

- Drums
- Treatment System USE IN LINE FILTER
- Other: Describe: _____

Site Safety

Wells

Concerns

OFFSITES WELLS

Initials Date

FIS CG 12/22

Copy/Disc AV 12/21/94

Flash Safety

Flagman

Cones

Barricades

No Turn/Lane Closed sign

Other:

Comments, remarks, etc. from Field Staff

(include problems encountered and out-of-scope work)

* = 215 GALLONS ADDED TO TREATMENT
SYSTEM FROM PURGEWATER

* INSTALLED NEW BAG FILTER
AFTER ENTERING PURGEWATER

All Wells secured

Completed by: J. Monahan Date: 12-22-94

WELL SAMPLING REQUEST

SAMPLING PROTOCOL									
Project No.	Project Name	Project Manager	Approval	Date/s	Q3	Prepared by:			
330-006.25	HESPERIAN BLVD. K.B.					C.C.			
Well No.	Ideal Sampling Order	Sample I.D. Lab	Duplicate I.D. Lab	Analyses	Approximate Gallons to be Evacuated	Screened Interval (ft.) (DEPTH)	Casing Diameter (in.)	Does Well Go Dry?	Comments
MW-5				GAS/B.T.E.X. DRY	14	4			Health & Safety Concerns
MW-7					6	19	3	N	
MW-8					12	22	3		
MW-9					9	19	3		
MW-10					15	23	3		
MW-11					7	20	3		
MW-13					9	24	3		
MW-14					15	23	3		
MW-15					15	23 1/2	3		
MW-16				✓	12	23	3	✓	

WELL SAMPLING REQUEST

SAMPLING PROTOCOL									
Project No.	Project Name			Project Manager	Approval	Date/s	Prepared by		
330-006.15	HESPERIAN BLVD.			K.B.		Q3	C.C.		
Well No.	Ideal Sampling Order	Sample ID.	Duplicate ID.	Analyses	Approximate Gallons to be Evacuated	Screened Interval (ft.)	Casing Diameter (in.)	Does Well Go Dry?	Comments
		Lab	Lab			(DEPTH)			Health & Safety Concerns
MW-17				BAS/B.TEX	12	24	3		
MW-18					12	21 $\frac{1}{2}$	3		
MW-19					14	21 $\frac{1}{2}$	3		
MW-20					14	21 $\frac{1}{2}$	3		
MW-21					14	22	3		
MW-22					13	21 $\frac{1}{2}$	3		
MW-23					12	22	3		
E1-A						25	6		INF. W/O 3M MONTHLY

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

CALL AT LEAST ONE WEEK IN ADVANCE OF EVENT EACH QUARTER

Document with copy of this log in project file

DOCUMENT EVENT WITH A SAMPLING FORM FROM ALL HOMES WHETHER SAMPLED OR NOT!!!!!!

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

FIELD REPORT

DEPTH TO WATER/SEPARATE-PHASE HYDROCARBONS SURVEY

PROJECT NO.: 330-006.25

LOCATION: 17001 HESPERIAN

DATE: 12/19/94

CLIENT/STATION NO.: ARCO/0608

FIELD TECHNICIAN: J. Mariner

DAY OF WEEK: Monday

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	TOB	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	Lite	Medium	Heavy	
													COLOR						SPH	H ₂ O	
MW5	1339	✓	✓	✓	✓	✓	✓	✓	402	12.43	12.43	12.43	—	—	—	—	—	—	—	—	—
MW7	1345	✓	✓	✓	✓	✓	✓	✓	19.00	12.32	12.32	12.32	—	—	—	—	—	—	—	—	—
MW8	1354	✓	✓	✓	✓	✓	✓	✓	21.76	11.22	11.22	11.22	—	—	—	—	—	—	—	—	—
MW9	1331	✓	✓	✓	✓	✓	✓	✓	18.77	10.40	10.40	10.40	—	—	—	—	—	—	—	—	—
MW10	1308	✓	✓	✓	✓	✓	✓	✓	23.04	10.64	10.64	10.64	—	—	—	—	—	—	—	—	—
MW11	1311	✓	✓	✓	✓	✓	✓	✓	19.27	11.45	11.45	11.45	—	—	—	—	—	—	—	—	—
MW13	1351	✓	✓	✓	✓	✓	✓	✓	23.66	13.60	13.60	13.60	—	—	—	—	—	—	—	—	—
MW14	1304	✓	✓	✓	✓	✓	✓	✓	23.10	9.52	9.52	9.52	—	—	—	—	—	—	—	—	—
MW15	1300	✓	✓	✓	✓	✓	✓	✓	23.67	11.03	11.03	11.03	—	—	—	—	—	—	—	—	—

Comments:

FIELD REPORT

DEPTH TO WATER/SEPARATE-PHASE HYDROCARBON SURVEY

PROJECT No.: 330-006.25LOCATION: 17601 HESPERIAN BLVD. DATE: 12-19-91CLIENT/STATION NO.: ARCO/10608FIELD TECHNICIAN: J. Murray DAY OF WEEK: Murray

PROBE TYPE/ID No.:

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

Drw Order	Well ID	Time	Surface Seal	Lid Secure	Gasket	Lock*	Expanding Cap	TUB	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)	SPH	H ₂ O		
													Fresh	Weathered	Gas	Oil	VISCOSITY	Lite	Medium	Heavy	
MW-16	1408	✓	✓	-	/	-	/	22.60	11.36	11.36	-	-									
MW-17	1251	✓	✓	-	/	-	/	23.65	12.27	12.27	-	-									
MW-18								21.4	10.30	10.30	-	-									
MW-19	1246	-	-	-	/	-	/	21.66	9.72	9.72	-	-									
MW-20								ABANDONED													
MW-21	1243	✓	✓	-	/	-	/	22.00	10.07	10.07	-	-									
MW-22	1239	✓	✓	-	/	-	/	21.77	10.62	10.62	-	-									
MW-23	1234	✓	✓	✗	/	-	/	22.00	11.91	11.91	-	-									
EIA	1400	✓	✓					-	19.70 to 19.90	→	-	-									

Comments:

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-5CLIENT/STATION No.: ARCO1 0608FIELD TECHNICIAN: J. M. Thomas

WELL INFORMATION

Depth to Liquid: — TOB — TOC
 Depth to water: 12.43 TOB — TOC
 Total depth: 14.02 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 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: _____ |

$$\text{TD } 1402 - \text{ DTW } 12.43 = 1.59 \quad \text{Gal/Linear} \\ \times \text{Foot } 0.66 = 1.05 \quad \text{Number of Casings } 3 \quad \text{Calculated } 3.15 \\ = \text{Purge } 3$$

DATE PURGED: 12-26-94 START: 1340 END (2400 hr): 1353 PURGED BY: AMDATE SAMPLED: 12-20-94 START: 1354 END (2400 hr): 1402 SAMPLED BY: AM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. ($\mu\text{mhos/cm}$ @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1344</u>	<u>1.0</u>	<u>7.11</u>	<u>525</u>	<u>59.6</u>	<u>clr</u>	<u>TC</u>	<u>FRESH</u>
<u>1347</u>	<u>2.0</u>	<u>7.16</u>	<u>515</u>	<u>59.7</u>	<u>"</u>	<u>"</u>	<u>"</u>
<u>1350</u>	<u>3.0</u>	<u>7.12</u>	<u>571</u>	<u>60.0</u>	<u>"</u>	<u>"</u>	<u>"</u>

Pumped dry Yes / No /Cobalt 0-100
Clear
Cloudy
Yellow
BrownNTU 0-200
Heavy
Moderate
Light
TraceStrong
Moderate
Faint
None

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: — TOB/TOC —

PURGING EQUIPMENT/I.D.

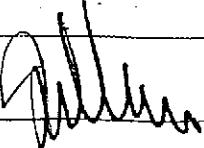
Bailer: 13.5 Airlift Pump: _____
 Centrifugal Pump: _____ Dedicated: _____
 Other: _____

SAMPLING EQUIPMENT/I.D.

Bailer: 13.5 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-5</u>	<u>12-24-94</u>	<u>1400</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/BTEX</u>

REMARKS: _____

SIGNATURE: PACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

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

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

WELL INFORMATION

Depth to Liquid: - TOB - TOC
 Depth to water: 1.32 TOB - TOC
 Total depth: 7.00 TOB - TOC

Date: _____ Time (2400): _____

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

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

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

$$\text{TD } \underline{19.00} - \text{DTW } \underline{12.32} = \underline{6.68} \quad \text{Cal/Linear} \quad \text{Number of Casings } \underline{3} \\ \times \text{Foot } \underline{0.38} = \underline{2.54} \quad \text{Calculated} \\ = \text{Purge } \underline{7.62}$$

DATE PURGED: 12-20-94 START: 1247 END (2400 hr): 1259 PURGED BY: AM

DATE SAMPLED: 12-20-94 START: 1300 END (2400 hr): 1306 SAMPLED BY: AM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1250</u>	<u>3.0</u>	<u>7.06</u>	<u>624</u>	<u>59.4</u>	<u>BRN</u>	<u>MOD</u>	<u>none</u>
<u>1253</u>	<u>6.0</u>	<u>7.01</u>	<u>664</u>	<u>60.4</u>	<u>W</u>	<u>LT</u>	<u>"</u>
<u>1257</u>	<u>9.0</u>	<u>6.98</u>	<u>654</u>	<u>61.0</u>	<u>"</u>	<u>"</u>	<u>"</u>

Pumped dry Yes No

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: TOB/TOC

PURGING EQUIPMENT/I.D.

Bailer: _____ 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-7 12-20-94 1305 3 40ml VAA HCl GAS/BTEX

REMARKS: _____

SIGNATURE: J. M. MINNIERPACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 380-006-25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-8
SAN LORENZO CA.

CLIENT/STATION No.: ARCO / 0608FIELD TECHNICIAN: J. MonnierWELL INFORMATION

Depth to Liquid: — TOB — TOC
 Depth to water: 11.22 TOB — TOC
 Total depth: 21.76 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: _____

$$\text{TD } 21.76 - \text{ DTW } 11.22 = 10.54 \text{ Gal/Linear Foot} \times 0.38 = 4.01 \text{ Number of Casings } 3 \text{ Calculated } 12.02 \\ = \text{Purge}$$

DATE PURGED: 12-20-99 START: 1147 END (2400 hr): 1159 PURGED BY: AMDATE SAMPLED: 12-20-99 START: 1200 END (2400 hr): 1205 SAMPLED BY: AM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE °F	COLOR	TURBIDITY	ODOR
<u>1150</u>	<u>4.0</u>	<u>7.02</u>	<u>649</u>	<u>60.0</u>	<u>BAN</u>	<u>GT</u>	<u>NOSE</u>
<u>1153</u>	<u>8.0</u>	<u>6.96</u>	<u>663</u>	<u>61.1</u>	<u>6</u>	<u>11</u>	<u>MOP</u>
<u>1157</u>	<u>12.0</u>	<u>6.97</u>	<u>673</u>	<u>61.2</u>	<u>4</u>	<u>"</u>	<u>"</u>

Pumped dry Yes 1 No

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: — TOB/TOC — —PURGING EQUIPMENT/I.D. #

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

SAMPLING EQUIPMENT/I.D. #

Bailer: DISP
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-8</u>	<u>12-20-99</u>	<u>1205</u>	<u>3</u>	<u>40ml</u>	<u>VQA</u>	<u>HCl</u>	<u>GAS/B.TEX</u>

REMARKS: _____

SIGNATURE: John J. MorrisPACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 380-006-25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-9
SAN LORENZO CA.

CLIENT/STATION No.: ARCO/0608FIELD TECHNICIAN: J. MoningerWELL INFORMATION

Depth to Liquid: — TOB — TOC
 Depth to water: 10.40 TOB — TOC
 Total depth: 18.77 TOB — TOC
 Date: _____ Time (2400): _____

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

DIAMETER	GAL/LINEAR FT.	CASING
		GAL
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: _____

$$\text{TD } 18.77 - \text{ DTW } 10.40 = 8.37 \quad \text{Gal/Linear Foot } 0.38 = 3.18 \quad \text{Number of Casings } 3 \quad \text{Calculated Purge } 9.54$$

DATE PURGED: 12-20-94 START: 1123 END (2400 hr): 1136 PURGED BY: MM

DATE SAMPLED: 12-20-94 START: 1137 END (2400 hr): 1142 SAMPLED BY: MM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25°C)	TEMPERATURE °F	COLOR	TURBIDITY	ODOR
<u>1126</u>	<u>3.5</u>	<u>7.06</u>	<u>642</u>	<u>60.5</u>	<u>BRN</u>	<u>PHD</u>	<u>MW</u>
<u>1130</u>	<u>7.0</u>	<u>708</u>	<u>673</u>	<u>61.2</u>	<u>"</u>	<u>LT</u>	<u>"</u>
<u>1134</u>	<u>10.5</u>	<u>708</u>	<u>680</u>	<u>61.2</u>	<u>"</u>	<u>"</u>	<u>"</u>

Pumped dry Yes No

Cobalt 0-100 Clear Cloudy Yellow Brown	NTU 0-200 Heavy Moderate Light Trace	Strong Moderate Faint None
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FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: — TOB/TOC: —PURGING EQUIPMENT/I.D. #

Bailer:
 Centrifugal Pump: #3
 Other: _____

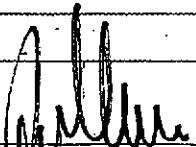
Airlift Pump:
 Dedicated:
 Other: _____

SAMPLING EQUIPMENT/I.D. #

Bailer: DISP
 Dedicated:
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-9</u>	<u>12-20-94</u>	<u>1140</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/B.TEX</u>

REMARKS: _____

SIGNATURE: PACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-10
SAN LORENZO CA.

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

WELL INFORMATION

Depth to Liquid: — TOB — TOC
 Depth to water: 10.64 TOB — TOC
 Total depth: 2304 TOB — TOC
 Date: _____ Time (2400): _____

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

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

$$\text{TD } 2304 - \text{ DTW } 10.64 = 22.4 \quad \text{Cal/Linear} \times \text{Foot } 0.38 = 8.4 \quad \text{Number of Casings } 3 \quad \text{Calculated} \\ = \text{Purge } 14.14$$

DATE PURGED: 12-20-94 START: 9:40 END (2400 hr): 10:03 PURGED BY: AM

DATE SAMPLED: 12-20-94 START: 10:05 END (2400 hr): 10:10 SAMPLED BY: AM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>9:52</u>	<u>5.0</u>	<u>7.06</u>	<u>716</u>	<u>60.4</u>	<u>BRN</u>	<u>MUD</u>	<u>None</u>
<u>9:50</u>	<u>10.0</u>	<u>7.00</u>	<u>762</u>	<u>61.1</u>	<u>Li</u>	<u>LT</u>	<u>Faint</u>
<u>10:05</u>	<u>15.0</u>	<u>7.02</u>	<u>744</u>	<u>61.4</u>	<u>II</u>	<u>U.</u>	<u>"</u>

Pumped dry Yes No

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC: _____

PURGING EQUIPMENT/I.D.

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

SAMPLING EQUIPMENT/I.D.

Bailer: 13-3 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-10</u>	<u>12-20-94</u>	<u>10:10</u>	<u>3</u>	<u>40ml</u>	<u>Voa</u>	<u>HCl</u>	<u>GAS/B.TEX.</u>

REMARKS: _____

SIGNATURE: J. M. Maru

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 1760 HESPERIAN BLVD SAN LORENZO CA. WELL ID #: MW-11

CLIENT/STATION No.: ARCO/0608

FIELD TECHNICIAN: J. Monksiver

WELL INFORMATION

Depth to Liquid: — TOB — TOC
 Depth to water: 11.45 TOB — TOC
 Total depth: 19.27 TOB — TOC
 Date: _____ Time (2400): _____

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

CASING	GAL/	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	

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

$$\text{TD } 19.27 - \text{ DTW } 11.45 = 7.82 \text{ Gal/Linear Foot } 0.38 = 2.97 \times \text{ Casings } 3 = \text{ Calculated } 8.91 = \text{ Purge }$$

DATE PURGED: 12-20-94 START: 1015 END (2400 hr): 1027 PURGED BY: M
 DATE SAMPLED: 12-20-94 START: 1028 END (2400 hr): 1031 SAMPLED BY: M

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1018</u>	<u>3.0</u>	<u>7.11</u>	<u>740</u>	<u>60.8</u>	<u>Brown</u>	<u>MUD</u>	<u>FAINT</u>
<u>1021</u>	<u>6.0</u>	<u>7.02</u>	<u>723</u>	<u>61.4</u>	<u>"</u>	<u>LT</u>	<u>"</u>
<u>1025</u>	<u>9.0</u>	<u>6.94</u>	<u>720</u>	<u>61.4</u>	<u>"</u>	<u>"</u>	<u>"</u>

Pumped dry Yes No

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: TOB/TOC

PURGING EQUIPMENT/I.D.

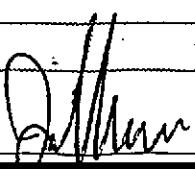
Bailer: _____ Airlift Pump: _____
 Centrifugal Pump: #3 Dedicated: _____
 Other: _____

SAMPLING EQUIPMENT/I.D.

Bailer: 17-14 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-11</u>	<u>12-20-94</u>	<u>1030</u>	<u>3</u>	<u>40ml</u>	<u>VQA</u>	<u>HCl</u>	<u>GAS/B.TEX.</u>

REMARKS: _____

SIGNATURE: 

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 380-006-25

LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-13
SAN LORENZO CA.

CLIENT/STATION No.: ARCO/0608

FIELD TECHNICIAN: J. MINNAR

WELL INFORMATION

Depth to Liquid: — TOB — TOC
 Depth to water: 13.60 TOB — TOC
 Total depth: 23.60 TOB — TOC
 Date: Time (2400):

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

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

$$\text{TD } 23.60 - \text{ DTW } 13.60 = 10 \quad \text{Gal/Linear} \quad \times \text{Foot } 0.38 = 3.8 \quad \text{Number of Casings } 3 \quad \text{Calculated Purge } 11.4$$

DATE PURGED: 12-20-94 START: 1312 END (2400 hr): 1325 PURGED BY: DM

DATE SAMPLED: 12-20-94 START: 1326 END (2400 hr): 1332 SAMPLED BY: DM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
1315	4.0	7.08	651	60.1	Brown	LT	None
1318	8.0	7.10	666	59.8	"	"	Faint
1322	52.0	7.04	656	59.8	"	"	"

Pumped dry Yes /

Cobalt 0-100
Clear
Cloudy
Yellow
Brown

NTU 0-200
Heavy
Moderate
Light
Trace

Strong
Moderate
Faint
None

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: TOB/TOC

PURGING EQUIPMENT/I.D.

Bailer:
 Centrifugal Pump: #3
 Other:

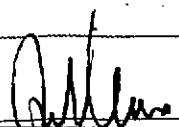
Airlift Pump:
 Dedicated:

SAMPLING EQUIPMENT/I.D.

Bailer: 15-7
 Dedicated:
 Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-13	12-20-94	1330	3	40ml	VQA	HCl	GAS/B.TEX.

REMARKS:

SIGNATURE: PACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-14
SAN LORENZO CA.

CLIENT/STATION No.: ARCO/0608FIELD TECHNICIAN: J. M. WILKERWELL INFORMATIONDepth to Liquid: — TOB — TOCDepth to water: 9.52 TOB — TOCTotal depth: 2310 TOB — TOCDate: Time (2400):

Probe Type
and
I.D. #

Oil/Water interface
 Electronic indicator #3
 Other:

CASINGGALDIAMETERLINEAR FT.SAMPLE TYPE

<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:

$$\text{TD } 2310 - \text{ DTW } 9.52 = 2300.48 \text{ ft} \quad \text{Gal/Linear Foot } 0.38 = 850.48 \text{ Gal} \quad \text{Number of Casings } 3 \quad \text{Calculated Purge } 154.8$$

DATE PURGED: 12-20-94 START: 923 END (2400 hr): 935 PURGED BY: mDATE SAMPLED: 12-20-94 START: 937 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
927	5.5	7.0	595	60.1	Brown	LT	NONE
930	11.0	6.96	620	60.1	"	"	"
933	16.5	6.96	650	60.4	"	TOE	"

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: TOB/TOC: PURGING EQUIPMENT/I.D. #

Bailor: Airlift Pump:
 Centrifugal Pump: #3 Dedicated:
 Other:

SAMPLING EQUIPMENT/I.D. #

Bailor: DISP
 Dedicated:
 Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-14	12-20-94	940	3	40ml	VQA	HCl	GAS/B.TEX.

REMARKS: SIGNATURE: J. M. WilkerPACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-15
SAN LORENZO CA.

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

$$\text{TD } 23.67 - \text{ DTW } 1103 = 12.64 \quad \text{Gal/Linear Foot } 0.38 = 4.60 \quad \text{Number of Casings } 3 \quad \text{Calculated } = \text{Purge } 14.4$$

DATE PURGED: 12-20-94 START: 907 END (2400 hr): 919 PURGED BY: MDATE SAMPLED: 12-20-94 START: 921 END (2400 hr): 926 SAMPLED BY: M

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE °F	COLOR	TURBIDITY	ODOR
910	5.0	7.14	653	59.6	Brown	LT	NONE
913	10.0	7.12	711	60.1	II	II	1K
917	15.0	7.02	7.31	60.1	II	II	6

Pumped dry Yes / No

Cobalt 0-100 Clear Cloudy Yellow Brown	NTU 0-200 Heavy Moderate Light Trace	Strong Moderate Faint None
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FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: — TOB/TOC: —PURGING EQUIPMENT/I.D. #

Bailer:
 Centrifugal Pump: #3
 Other: _____

Airlift Pump:
 Dedicated:
 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-15</u>	<u>12-20-94</u>	<u>925</u>	<u>3</u>	<u>40ml</u>	<u>VQA</u>	<u>HCl</u>	<u>GAS/B.TEX</u>

REMARKS: _____

SIGNATURE: D. JohnsonPACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-16
SAN LORENZO CA.

CLIENT/STATION No.: ARCO/0608FIELD TECHNICIAN: J. MonnierWELL INFORMATION

Depth to Liquid: TOB — TOC
 Depth to water: 11.36 TOB — TOC
 Total depth: 22.60 TOB — TOC
 Date: _____ Time (2400): _____

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

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

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

$$\text{TD } 22.60 - \text{ DTW } 11.36 = 11.24 \quad \text{Gal/Linear Foot } 0.38 = 4.27 \quad \text{Number of Casings } 3 \quad \text{Calculated Purge } 12.81$$

DATE PURGED: 12-20-94 START: 850 END (2400 hr): 902 PURGED BY: IMDATE SAMPLED: 12-20-94 START: 903 END (2400 hr): 907 SAMPLED BY: IM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>854</u>	<u>4.5</u>	<u>7.06</u>	<u>640</u>	<u>50.4</u>	<u>Brown</u>	<u>H/H</u>	<u>NOK</u>
<u>857</u>	<u>9.0</u>	<u>7.02</u>	<u>698</u>	<u>58.6</u>	"	<u>MOD</u>	"
<u>901</u>	<u>13.5</u>	<u>6.94</u>	<u>680</u>	<u>59.0</u>	"	<u>LSF</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: TOB/TOCPURGING EQUIPMENT/I.D. #

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

SAMPLING EQUIPMENT/I.D. #

Bailer: 13-5
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-16</u>	<u>12-20-94</u>	<u>905</u>	<u>3</u>	<u>40ml</u>	<u>VQA</u>	<u>HCl</u>	<u>GAS/B.TEX</u>

REMARKS: _____

SIGNATURE: PACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25

LOCATION: 1760 HESPERIAN BLVD WELL ID #: MW-17
SAN LORENZO CA.

CLIENT/STATION No.: ARCO / 0608

FIELD TECHNICIAN: J. MUNIEN

WELL INFORMATION

Depth to Liquid: — TOB — TOC
 Depth to water: 12.27 TOB — TOC
 Total depth: 23.65 TOB — TOC
 Date: Time (2400):

Probe Type and I.D. #
 Oil/Water interface
 Electronic indicator 13
 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

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

$$\text{TD } 23.65 - \text{ DTW } 12.27 = 11.38 \quad \text{Gal/Linear Foot} \quad 0.38 = 4.32 \quad \text{Number of Casings} \quad 3 \quad \text{Calculated Purge} \quad 12.97$$

DATE PURGED: 12-20-91 START: 804 END (2400 hr): 815 PURGED BY: JM

DATE SAMPLED: 12-20-91 START: 817 END (2400 hr): 821 SAMPLED BY: JM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
809	4.5	7.15	699	57.4	BROWN	MOD	NUK
811	9.0	7.08	761	58.1	"	LT	"
814	13.5	7.06	772	58.9	OLDY	CLR	"

Pumped dry Yes No

Cobalt 0-100
Clear
Cloudy
Yellow
Brown

NTU 0-200
Heavy
Moderate
Light
Trace

Strong
Moderate
Faint
None

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: — TOB/TOC —

PURGING EQUIPMENT/I.D.

Bailer:
 Centrifugal Pump: 13
 Other:

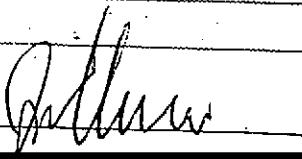
Airlift Pump:
 Dedicated:

SAMPLING EQUIPMENT/I.D.

Bailer: 13-2
 Dedicated:
 Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-17	12-20-91	820	3	40ml	VQA	HCl	GAS/B.TEX

REMARKS:

SIGNATURE: PACIFIC
ENVIRONMENTAL
GROUP INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-18
SAN LORENZO CA.

CLIENT/STATION No.: ARCO/0608

FIELD TECHNICIAN: J. Morris

WELL INFORMATION

Depth to Liquid: 103 TOB - TOC
 Depth to water: 21.80 103 TOB - TOC
 Total depth: 21.80 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	<u>0.17</u>
<input checked="" type="checkbox"/> 3	<u>0.38</u>
<input type="checkbox"/> 4	<u>0.66</u>
<input type="checkbox"/> 4.5	<u>0.83</u>
<input type="checkbox"/> 5	<u>1.02</u>
<input type="checkbox"/> 6	<u>1.5</u>
<input type="checkbox"/> 8	<u>2.6</u>

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

$$\text{TD } 21.80 - \text{ DTW } 10.30 = 11.5 \quad \text{Gal/Linear} \times \text{Foot } 0.38 = 4.37 \quad \text{Number of Casings } 3 \quad \text{Calculated Purge } 13.11$$

DATE PURGED: <u>12-20-84</u>	START: <u>836</u>	END (2400 hr): <u>847</u>	PURGED BY: <u>M</u>
DATE SAMPLED: <u>12-20-84</u>	START: <u>848</u>	END (2400 hr): <u>852</u>	SAMPLED BY: <u>M</u>

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. ($\mu\text{mhos/cm}$ @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>839</u>	<u>4.5</u>	<u>7.6</u>	<u>619</u>	<u>58.6</u>	<u>BRN</u>	<u>LT</u>	<u>NONE</u>
<u>842</u>	<u>9.0</u>	<u>7.0</u>	<u>654</u>	<u>59.6</u>	<u>CLR</u>	<u>LT</u>	<u>"</u>
<u>845</u>	<u>13.5</u>	<u>7.2</u>	<u>700</u>	<u>59.9</u>	<u>11</u>	<u>11</u>	<u>"</u>

Pumped dry Yes / No

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC: _____

PURGING EQUIPMENT/I.D. #

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

SAMPLING EQUIPMENT/I.D. #

Bailer: 13-7
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-18</u>	<u>12-20-84</u>	<u>850</u>	<u>3</u>	<u>40ml</u>	<u>VQA</u>	<u>HCl</u>	<u>GAS/B.TEX.</u>

REMARKS: _____

SIGNATURE: D. Morris



PACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-25LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-19
SAN LORENZO CA.CLIENT/STATION No.: ARCO/0608FIELD TECHNICIAN: J. MoningerWELL INFORMATION

Depth to Liquid: — TOB — TOC
 Depth to water: 9.72 TOB — TOC
 Total depth: 21.66 TOB — TOC
 Date: _____ Time (2400): _____

Probe Type: Oil/Water interface
 and Electronic Indicator #3
 I.D. # 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; _____ |

$$\text{TD } 21.66 - \text{ DTW } 9.72 = 11.94 \quad \text{Gal/Linear Foot } 0.38 = 4.53 \quad \text{Number of Casings } 3 \quad \text{Calculated } 19.61 \\ = \text{Purge }$$

DATE PURGED: 12-19-94 START: 1517 END (2400 hr): 1533 PURGED BY: DMDATE SAMPLED: 12-19-94 START: 1536 END (2400 hr): 1541 SAMPLED BY: DM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1511</u>	<u>4.5</u>	<u>7.07</u>	<u>750</u>	<u>63.6</u>	<u>CLR</u>	<u>LT</u>	<u>NONE</u>
<u>1524</u>	<u>9.0</u>	<u>7.02</u>	<u>747</u>	<u>63.8</u>	<u>"</u>	<u>"</u>	<u>"</u>
<u>1530</u>	<u>13.5</u>	<u>6.94</u>	<u>758</u>	<u>63.6</u>	<u>"</u>	<u>"</u>	<u>"</u>

Pumped dry Yes / No

Cobalt 0-100 Clear Cloudy Yellow Brown	NTU 0-200 Heavy Moderate Light Trace	Strong Moderate Faint None
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FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: TOB/TOC

PURGING EQUIPMENT/I.D.

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

SAMPLING EQUIPMENT/I.D.

Bailer: 13-5 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-19</u>	<u>12-19-94</u>	<u>1540</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/B.TEX</u>

REMARKS: _____

SIGNATURE: J. MoningerPACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

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

CLIENT/STATION No.: ARCO/0608

FIELD TECHNICIAN: J. M. Marinaro

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
 I.D. # Other: _____

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

$$\text{TD} \quad - \quad \text{DTW} \quad = \quad \text{_____} \quad \times \text{Foot } 0.38 \quad = \quad \text{Number of Casings } 5 \quad \text{Calculated Purge} \quad \text{_____}$$

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. ($\mu\text{mhos/cm at } 25^\circ\text{C}$)	TEMPERATURE (° F)	COLOR	TURBIDITY	ODOR
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: TOB/TOC

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

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>VQA</u>	<u>HCl</u>	<u>GAS/BTEX</u>
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

REMARKS: _____

SIGNATURE: J. M. Marinaro



PACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD, SAN LORENZO CA. WELL ID #: MW-71

CLIENT/STATION No.: ARCO/0608

FIELD TECHNICIAN: J. Mounher

WELL INFORMATION

Depth to Liquid: — TOB — TOC
 Depth to water: 10.07 TOB — TOC
 Total depth: 22.00 TOB — TOC
 Date: _____ Time (2400): _____

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

CASING	GAL/LINEAR FT.
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: _____

$$\text{TD } 22.00 - \text{ DTW } 1007 = 11.93 \quad \text{Gal/Linear Foot } 0.38 = 4.53 \quad \text{Number of Casings } 3 \quad \text{Calculated} \\ = \text{Purge } 13.60$$

DATE PURGED: 12-19-94 START: 1500 END (2400 hr): 1512 PURGED BY: AM

DATE SAMPLED: 12-19-94 START: 1513 END (2400 hr): 1517 SAMPLED BY: AM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1503</u>	<u>4.5</u>	<u>6.48</u>	<u>710</u>	<u>63.5</u>	<u>BRN</u>	<u>NUD</u>	<u>NONE</u>
<u>1608</u>	<u>9.0</u>	<u>702</u>	<u>790</u>	<u>63.7</u>	<u>CLR</u>	<u>LT</u>	<u>NONE</u>
<u>1511</u>	<u>13.5</u>	<u>706</u>	<u>787</u>	<u>63.7</u>	<u>II</u>	<u>TUE</u>	<u>"</u>

Pumped dry Yes

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC: _____

PURGING EQUIPMENT/I.D.

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

SAMPLING EQUIPMENT/I.D.

Bailer: 13-6 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-71</u>	<u>12-19-94</u>	<u>1515</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/BTEX</u>

REMARKS: _____

SIGNATURE: John Mounher



PACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 380-006-25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-22
SAN LORENZO CA

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

WELL INFORMATION

Depth to Liquid: TOB TOC
 Depth to water: 10.62 TOB TOC
 Total depth: 21.77 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	<u>0.17</u>
<input checked="" type="checkbox"/> 3	<u>0.38</u>
<input type="checkbox"/> 4	<u>0.66</u>
<input type="checkbox"/> 4.5	<u>0.83</u>
<input type="checkbox"/> 5	<u>1.02</u>
<input type="checkbox"/> 6	<u>1.5</u>
<input type="checkbox"/> 8	<u>2.6</u>

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

$$\text{TD } 21.77 - \text{ DTW } 10.62 = 11.15 \quad \text{Gal/Linear Foot } 0.38 = 4.24 \times \text{ Number of Casings } 3 = \text{ Calculated Purge } 12.71$$

DATE PURGED: 12-19-94 START: 1440 END (2400 hr): 1452 PURGED BY: m

DATE SAMPLED: 12-19-94 START: 1453 END (2400 hr): 1458 SAMPLED BY: m

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1443</u>	<u>4.5</u>	<u>7.03</u>	<u>835</u>	<u>64.0</u>	<u>BRN</u>	<u>LT</u>	<u>NONE</u>
<u>1446</u>	<u>9.0</u>	<u>7.04</u>	<u>820</u>	<u>63.8</u>	<u>"</u>	<u>TCE</u>	<u>NONE</u>
<u>1450</u>	<u>13.5</u>	<u>7.00</u>	<u>772</u>	<u>63.7</u>	<u>"</u>	<u>TCE</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: TOB/TOC

PURGING EQUIPMENT/I.D.

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

SAMPLING EQUIPMENT/I.D.

Bailer: 13-1
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-22</u>	<u>12-19-94</u>	<u>1455</u>	<u>3</u>	<u>40ml</u>	<u>VQA</u>	<u>HCl</u>	<u>GAS/B.TEX.</u>

REMARKS: _____

SIGNATURE: PACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-23
SAN LORENZO CA.

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

WELL INFORMATION

Depth to Liquid: — TOB — TOC
 Depth to water: 11.81 TOB — TOC
 Total depth: 22.00 TOB — TOC
 Date: _____ Time (2400): _____

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

CASING	GAL/LINEAR FT.
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: _____ |

$$\text{TD } 22.00 - \text{ DTW } 11.81 = 10.19 \quad \text{Gal/Linear} \quad \text{Number of Casings } 3 \quad \text{Calculated} \\ = \text{Purge } 11.62$$

DATE PURGED: 12-19-94 START: 1420 END (2400 hr): 1433 PURGED BY: m
 DATE SAMPLED: 12-19-94 START: 1434 END (2400 hr): 1436 SAMPLED BY: m

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1424</u>	<u>4.0</u>	<u>7.09</u>	<u>1180</u>	<u>64.1</u>	<u>BWN</u>	<u>MOD</u>	<u>none</u>
<u>1428</u>	<u>8.0</u>	<u>7.03</u>	<u>1146</u>	<u>64.0</u>	<u>BWN</u>	<u>LT</u>	<u>"</u>
<u>1431</u>	<u>12.0</u>	<u>7.00</u>	<u>1130</u>	<u>63.4</u>	<u>CIR</u>	<u>CIR</u>	<u>"</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: — TOB/TOC: —

PURGING EQUIPMENT/I.D.

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

SAMPLING EQUIPMENT/I.D.

Bailer: #3-2
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-23</u>	<u>12-19-94</u>	<u>1435</u>	<u>3</u>	<u>40ml</u>	<u>VQA</u>	<u>HCl</u>	<u>GAS/B.TEX</u>

REMARKS: _____

SIGNATURE: Justus

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 380-006-25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-24
SAN LORENZO CA.

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

WELL INFORMATION

Depth to Liquid: — TOB — TOC
 Depth to water: 13.08 TOB — TOC
 Total depth: 19.90 TOB — TOC
 Date: _____ Time (2400): _____

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

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

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

$$\text{TD } 19.90 - \text{ DTW } 1305 = 6.85 \quad \text{Gal/Linear Foot } \frac{0.38}{0.17} = 1.16 \quad \text{Number of Casings } 3 \quad \text{Calculated Purge } 3.49$$

DATE PURGED: 12-20-94 START: 1057 END (2400 hr): 1108 PURGED BY: JM

DATE SAMPLED: 12-20-94 START: 1112 END (2400 hr): 1117 SAMPLED BY: JM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1100</u>	<u>1.5</u>	<u>7.18</u>	<u>695</u>	<u>60.0</u>	<u>BRN</u>	<u>MD</u>	<u>WTY</u>
<u>1103</u>	<u>3.0</u>	<u>7.16</u>	<u>696</u>	<u>60.4</u>	<u>"</u>	<u>LT</u>	<u>"</u>
<u>1107</u>	<u>4.5</u>	<u>7.09</u>	<u>712</u>	<u>60.5</u>	<u>"</u>	<u>LT</u>	<u>"</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: TOB/TOC:

PURGING EQUIPMENT/I.D.

Bailer: 13-6 Airlift Pump:
 Centrifugal Pump: 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>MW-24</u>	<u>12-20-94</u>	<u>1115</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/BTEX</u>

REMARKS: SIGNATURE: J. MonnierPACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 380-006-25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-25
SAN LORENZO CA.

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

WELL INFORMATION

Depth to Liquid: — TOB — TOC
 Depth to water: 17.00 TOB — TOC
 Total depth: 22.42 TOB — TOC
 Date: _____ Time (2400): _____

Probe Type and I.D. #
 Oil/Water interface
 Electronic Indicator H3
 Other: _____

CASING	GAL
DIAMETER	LINEAR FT.
<input checked="" 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: _____

$$\text{TD } 22.42 - \text{ DTW } 12.00 = 10.42 \times \frac{\text{Gal/Linear Foot}}{0.38} = 1.77 \times \frac{\text{Number of Casings}}{3} = \text{Calculated Purge } 5.31$$

DATE PURGED: 12-21-94 START: 1225 END (2400 hr): 1237 PURGED BY: DMDATE SAMPLED: 12-21-94 START: 1238 END (2400 hr): 1242 SAMPLED BY: DM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1228</u>	<u>2.0</u>	<u>7.20</u>	<u>576</u>	<u>59.9</u>	<u>CUK</u>	<u>LT</u>	<u>NONE</u>
<u>1239</u>	<u>4.0</u>	<u>7.14</u>	<u>648</u>	<u>60.6</u>	<u>"</u>	<u>"</u>	<u>"</u>
<u>1235</u>	<u>6.0</u>	<u>7.10</u>	<u>650</u>	<u>60.4</u>	<u>"</u>	<u>"</u>	<u>"</u>

Pumped dry Yes 1 No

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

 Strong
Moderate
Faint
None

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: — TOB/TOC —

PURGING EQUIPMENT/I.D.

Bailer: 13-1 Airlift Pump: _____
 Centrifugal Pump: _____ Dedicated: _____
 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-25</u>	<u>12-21-94</u>	<u>1240</u>	<u>3</u>	<u>40ml</u>	<u>VQA</u>	<u>HCl</u>	<u>GAS/BTEX</u>

REMARKS: _____

SIGNATURE: J. MonnierPACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-25LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-26
SAN LORENZO CA.CLIENT/STATION No.: ARCO / 0608FIELD TECHNICIAN: J. MINNIEK

WELL INFORMATION

Depth to Liquid: — TOB — TOCDepth to water: 12.37 TOB — TOCTotal depth: 19.73 TOB — TOC

Date: _____ Time (2400): _____

Probe Type
and
I.D. #

Oil/Water interface
 Electronic indicator #3
 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

SAMPLE TYPE

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

$$\text{TD } 1973 - \text{ DTW } 12.37 = 7.34 \quad \text{Gal/Linear} \quad \text{x Foot } 0.38 = 1.25 \quad \text{Number of Casings } 3 \quad \text{Calculated Purge } 3.74$$

DATE PURGED: 12-20-94 START: 1036 END (2400 hr): 1047 PURGED BY: J.M.DATE SAMPLED: 12-20-94 START: 1048 END (2400 hr): 1052 SAMPLED BY: J.M.

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR PRN	TURBIDITY MOD	ODOR None
<u>1039</u>	<u>1.5</u>	<u>7.6</u>	<u>725</u>	<u>61.1</u>	<u>PRN</u>	<u>MOD</u>	<u>None</u>
<u>1042</u>	<u>3.0</u>	<u>7.6</u>	<u>711</u>	<u>61.4</u>	<u>"</u>	<u>LT</u>	<u>"</u>
<u>1045</u>	<u>4.5</u>	<u>7.8</u>	<u>700</u>	<u>61.4</u>	<u>"</u>	<u>LT</u>	<u>"</u>

Pumped dry Yes 1

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: #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-26</u>	<u>12-20-94</u>	<u>1050</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/B.TEX</u>

REMARKS: _____

SIGNATURE: D. Miller

PACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330 006.25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: E1-ACLIENT/STATION No.: ARCO/ 0608FIELD TECHNICIAN: J. MonnierWELL INFORMATION

Depth to Liquid: — TOB — TOC
 Depth to water: 19.86 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 type="checkbox"/> Groundwater
<input type="checkbox"/> 3	0.38	<input type="checkbox"/> Duplicate
<input type="checkbox"/> 4	0.66	<input checked="" 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: _____

$$\text{TD} \quad \text{DTW} = \frac{\text{Gal/Linear}}{\text{x Foot}} = \frac{\text{Number of}}{\text{x Casings}} = \frac{\text{Calculated}}{\text{= Purge}}$$

DATE PURGED: 17 START: 1415 END (2400 hr): _____ PURGED BY: _____DATE SAMPLED: 12-20-94 START: 1415 END (2400 hr): 1425 SAMPLED BY: DM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. ($\mu\text{mhos/cm}$ @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

Pumped dry Yes NoCobalt 0-100
Clear
Cloudy
Yellow
BrownNTU 0-200
Heavy
Moderate
Light
TraceStrong
Moderate
Faint
None

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: 19.86 TOB TOC 7.11 765 61.4

CLR TCE MME

PURGING EQUIPMENT/I.D.

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

SAMPLING EQUIPMENT/I.D.

Bailer: _____
 Dedicated: SAMPLE PORT
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
E1-A	12-20-94	1420	3	40ml	VOL	HCl	GAS/TEX
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

REMARKS: _____

AT SAMPLE TIME
 TOTALIZER: 0367360
 GPM: 2.1 GPM
 HOURS: 23849.0

1330pm 12-21-94
 AFTER PROCEDURE
 TOTALIZER: 0370163
 GPM: 2.0 GPM
 HOURS: 23870.8

SIGNATURE: John MonnierPACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25LOCATION: 17601 HESPERIAN BLVD WELL ID #: 590H
SAN LORENZO CA.CLIENT/STATION No.: ARCO/0608FIELD TECHNICIAN: J. M. Name

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/
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 type="checkbox"/> 6	1.5
<input type="checkbox"/> 8	2.6

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

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

DATE PURGED: 12-21-94 START: 940 END (2400 hr): 945 PURGED BY: MDATE SAMPLED: 12-21-94 START: 945 END (2400 hr): 955 SAMPLED BY: M

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. ($\mu\text{mhos/cm}$ @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>PURGED ≈ 15 GALLONS BEFORE SAMPLE</u> <u>SAMPLED FROM HOSE OF HOMEOWNER</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: — TOB/TOC 6.90 640 54.6 CLR TCE WINE

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>590H</u>	<u>12-21-94</u>	<u>950</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/B.TEX</u>

REMARKS: OWNER ASSISTED IN SETTING UP PUMPSIGNATURE: D. M. NamePACIFIC
ENVIRONMENTAL
GROUP INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: 63SH
SAN LORENZO CA.

CLIENT/STATION No.: ARCO/0608FIELD TECHNICIAN: J. MonroeWELL INFORMATION

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

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

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

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

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

DATE PURGED: 1/21/94 START: 1330 END (2400 hr): 1340 PURGED BY: DM

DATE SAMPLED: 1/21/94 START: 1340 END (2400 hr): 1350 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 SAMPLE

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 7.10 383 56.3 CLR TCE NONE

PURGING EQUIPMENT/I.D. #

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

SAMPLING EQUIPMENT/I.D. #

Bailer:
 Dedicated: Pump
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>63H</u>	<u>1/21/94</u>	<u>1345</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/BTEX</u>
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

REMARKS: FIRST 5 GALLONS WERE BLACK IN COLOR IN BUCKET
NEXT 10 CLEAR

SIGNATURE: J. Monroe



PACIFIC
ENVIRONMENTAL
GROUP INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330 086.25

LOCATION: 17601 HESPERIAN

WELL ID #: 634H

CLIENT/STATION No.: 0608-AHd

FIELD TECHNICIAN: J. M. M.

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

TD _____ - DTW _____ = Gal/Linear
 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. ($\mu\text{mhos/cm}$ @ 25°C)	TEMPERATURE (°F)	COLORED	COLOR	TURBIDITY	ODOR
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

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: _____ 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	40ml	Voa	HCl	TAN/DRX

REMARKS:

SIGNATURE: 



PACIFIC
ENVIRONMENTAL

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 93000625 LOCATION: 17601 NESSEMAN WELL ID #: 642H

CLIENT/STATION No.: AKO/06B

FIELD TECHNICIAN: J. Monroe

WELL INFORMATION

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

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

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

- Groundwater
- Duplicate
- Extraction well
- Trip blank
- Field blank
- Equipment blank
- 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. (mho/cm @ 25°C)	TEMPERATURE (° F)	COLOR	TURBIDITY	ODOR
_____	_____	ACCS	NO RECHARGE	NO SAMPLE	NO	NO	NO
_____	_____	ACCS	NO RECHARGE	NO SAMPLE	NO	NO	NO
_____	_____	ACCS	NO RECHARGE	NO SAMPLE	NO	NO	NO
_____	_____	ACCS	NO RECHARGE	NO SAMPLE	NO	NO	NO

Pumped dry Yes / No

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC: _____

PURGING EQUIPMENT/I.D.

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

SAMPLING EQUIPMENT/I.D.

Bailer: _____
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
642H	_____	_____	3	40ml	Vial	HCl	TIA, /WAX
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

REMARKS: _____

SIGNATURE: J. Monroe

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330006.25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: 675H

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

CASING	GAL/
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 type="checkbox"/> 6	1.5
<input type="checkbox"/> 8	2.6

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

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

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

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

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.

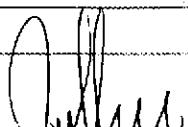
Bailer: _____ Airlift Pump: _____
 Centrifugal Pump: _____ Dedicated: _____
 Other: _____

SAMPLING EQUIPMENT/I.D.

Bailer: _____
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>675H</u>	_____	_____	<u>3</u>	<u>40ml</u>	<u>VOR</u>	<u>HCl</u>	<u>TPH, BTEX</u>
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

REMARKS: _____

SIGNATURE: 



PACIFIC
ENVIRONMENTAL
GROUP INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 380-006.25

LOCATION: 17601 HESPERIAN BLVD WELL ID #: 17348VE
SAN LORENZO CA.

CLIENT/STATION No.: ARCO/ 0608

FIELD TECHNICIAN: J. Morris

WELL INFORMATION

Depth to Liquid: TOB TOC

Depth to water: TOB TOC

Total depth: TOB TOC

Date: Time (2400):

Probe Type
and
I.D. #

Oil/Water interface
 Electronic indicator
 Other:

CASINGDIAMETERGAL/LINEAR FT.

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

SAMPLE TYPE

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

$$\text{TD} \quad - \quad \text{DTW} \quad = \quad \text{Gal/Linear} \quad \times \text{Foot} \quad = \quad \text{Number of Casings} \quad \times \quad \text{Calculated Purge}$$

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

DATE SAMPLED: 12-21-94 START: 955 END (2400 hr): 1005 SAMPLED BY: DM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. ($\mu\text{mhos/cm}$ @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
GRAB SAMPLE							

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: TOB/TOC 7.08 856 54.8 CLR TCE NONE

PURGING EQUIPMENT/I.D.

Bailer: 13-2 Airlift Pump:
 Centrifugal Pump: Dedicated:
 Other:

SAMPLING EQUIPMENT/I.D.

Bailer: 13-2 Dedicated:
 Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
17348VE	12-21-94	1000	3	40ml	VQA	HCl	GAS/BTEX

REMARKS: DOOR OPEN BUT NO ANSWER. WENT AHEAD AND SAMPLED

SIGNATURE: *J. Morris*PACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: 17197V61
SAN LORENZO CA.

CLIENT/STATION No.: ARCO/0608FIELD TECHNICIAN: SD 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
 Other; _____

CASING	GAL/	LINER 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	

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

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

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

DATE SAMPLED: 12-21-94 START: 1015 END (2400 hr): 1025 SAMPLED BY: JM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. ($\mu\text{mhos/cm}$ @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

*PURGED ≈ 30 GALLONS BEFORE TAKING SAMPLE (OWNER SAID TANK WAS A HOLDING TANK)
 OWNER SAID TANK WAS A HOLDING TANK
 20 GALLON TANK*

Pumped dry Yes No

Cobalt 6-100
 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 716 899 571 CUR TUE *NINE

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

17197V61 12-21-94 1020 3 40ml VQA HCl GAS/BTEX

REMARKS: INITIAL WATER HAD A SULPHUR SMELL BUT BY THE END OF THE PURGE - WENT AWAY

SIGNATURE: John M. Monahan

PACIFIC
 ENVIRONMENTAL
 GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: 17200VM
SAN LORENZO CA.

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

WELL INFORMATION

Depth to Liquid: — TOB — TOC
 Depth to water: 12.00 TOB — TOC
 Total depth: 26.10 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 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 checked="" type="checkbox"/> 6	1.5	<input type="checkbox"/> Equipment blank
<input type="checkbox"/> 8	2.6	<input type="checkbox"/> Other; _____

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

DATE PURGED: _____ START: _____ END (2400 hr): _____ PURGED BY: _____
 DATE SAMPLED: 12-20-94 START: 823 END (2400 hr): 827 SAMPLED BY: m

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: — TOB/TOC 710 610 60.0 CLK TCE NONE

PURGING EQUIPMENT/I.D.

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

SAMPLING EQUIPMENT/I.D.

Bailer: 13-1
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>17200VM</u>	<u>12-20-94</u>	<u>825</u>	<u>3</u>	<u>40ml</u>	<u>VAA</u>	<u>HCl</u>	<u>GAS/B.TEX</u>
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

REMARKS: _____

SIGNATURE: D. MillerPACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006-25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: 17203VM
SAN LORENZO CA.

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

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/
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 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: _____ |

$$TD \underline{\hspace{2cm}} - DTW \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \times \frac{\text{Gal/Linear}}{\text{Foot}} \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \times \frac{\text{Number of}}{\text{x Casings}} \underline{\hspace{2cm}} = \frac{\text{Calculated}}{\text{Purge}}$$

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

DATE SAMPLED: 12-21-94 START: 1030 END (2400 hr): 1040 SAMPLED BY: AM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	PURGED CD <u>≈ 20</u>	_____	_____	_____	_____
_____	_____	_____	GALLONS <u>AMOUNT</u>	_____	_____	_____	_____
_____	_____	_____	BESTOKES <u>AMOUNT</u>	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: TOB/TOC 7.20 986 56.8 CLK TOB None

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: _____
 Other: _____

SAMPLING EQUIPMENT/I.D.

Bailer: _____
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>17203VM</u>	<u>12-21-94</u>	<u>1035</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/B.TEX</u>
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

REMARKS: _____

SIGNATURE: D. M.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: 17302 VM
SAN LORENZO CA.

CLIENT/STATION No.: ARCO/ 0608

FIELD TECHNICIAN: J. Monnier

WELL INFORMATION

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

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

CASING DIAMETER	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

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

$$\text{TD} \quad \text{DTW} = \text{Gal/Linear} \times \text{Foot} = \text{Number of Casings} \times \text{Calculated Purge}$$

DATE PURGED: START: 1430 END (2400 hr): 1435 PURGED BY:

DATE SAMPLED: 12-21-94 START: 1040 END (2400 hr): 1045 SAMPLED BY: M

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. ($\mu\text{mhos}/\text{cm} @ 25^\circ\text{C}$)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	10 GALLON	_____	_____	_____	_____
_____	_____	_____	PURGE 10 GALLON	_____	_____	_____	_____
_____	_____	_____	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: TOB/TOC 706 587 56.6 CCR TCE MVAE

PURGING EQUIPMENT/I.D.

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

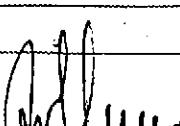
SAMPLING EQUIPMENT/I.D.

Bailer: _____
 Dedicated: PUMP
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
17302 VM	12-21-94	1040	3	40ml	VIAL	HCl	GAS/BTEX

REMARKS: 12-21-94: 1040: NO ANSWER

12-21-94: 1425 ANSHAGED DIORBEA

SIGNATURE: PACIRC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 380-006-25 LOCATION: 17601 HESPERIAN BLVD. WELL ID #: 17349 VM
SAN LORENZO CA.

CLIENT/STATION No.: ARCO/0608

FIELD TECHNICIAN: _____

WELL INFORMATION

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

Probe Type
and
I.D. #

Oil/Water interface
 Electronic indicator
 Other: _____

CASING	GAL/
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 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: 12-21-94 START: 1045 END (2400 hr): 1052 PURGED BY: M

DATE SAMPLED: 12-21-94 START: 1050 END (2400 hr): 1100 SAMPLED BY: M

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. ($\mu\text{mhos/cm}$ @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

*PURGED ≈ 15 GALLONS
BEFORE SAMPLE*

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC 7.16 1014 56.9 CIR ETRRC Faint

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>17349 VM</u>	<u>12-21-94</u>	<u>1055</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/B.TEX</u>
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

REMARKS: _____

SIGNATURE: QMAPACIFIC
ENVIRONMENTAL
GROUP INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 3300625LOCATION: 17601 HESPERIANWELL ID #: 17371VMCLIENT/STATION No.: Ak60 / 0608FIELD TECHNICIAN: J. MonnierSAMMORNZOWELL 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: _____

CASINGDIAMETERGAL/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

SAMPLE TYPE

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

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

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

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

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. ($\mu\text{mhos/cm}$ @ 25°C)	TEMPERATURE (° F)	COLOR	TURBIDITY	ODOR
_____	_____	_____	NOT ALLOWED	_____	_____	_____	_____
_____	_____	_____	ACCESS	_____	_____	_____	_____
_____	_____	_____	NO 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: TOB/TOCPURGING 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>17371VM</u>			<u>3</u>	<u>40ml</u>	<u>VOL</u>	<u>H2O</u>	<u>TPHg/BTEX</u>

REMARKS: _____

SIGNATURE: John Monnier

PACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 380-006-25

LOCATION: 17601 HESPERIAN BLVD WELL ID #: 17372 VM
SAN LORENZO CA.

CLIENT/STATION No.: ARCO/ 0608

FIELD TECHNICIAN: J. MONNIER

WELL INFORMATION

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

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

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

DATE PURGED: 12-21-94 START: 1400 END (2400 hr): 1410 PURGED BY: PM

DATE SAMPLED: 12-21-94 START: 1410 END (2400 hr): 1420 SAMPLED BY: PM

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

Pumped dry Yes

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: TOB/TOC 7.1 560 59.1 CLK TOC NW/S

PURGING EQUIPMENT/I.D.

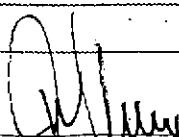
Bailer: Airlift Pump:
 Centrifugal Pump: Dedicated: pump
 Other:

SAMPLING EQUIPMENT/I.D.

Bailer:
 Dedicated: pump
 Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
17372 VM	(12-21-94)	1415	3	40ml	VVA	HCl	GAS/B.TEX.

REMARKS:

SIGNATURE: 

PACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 380-006.25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: 17393 VM
SAN LORENZO CA.

CLIENT/STATION No.: ARCO/0608FIELD TECHNICIAN: J. MoningerWELL 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: 12/21/94 START: _____ END (2400 hr): _____ PURGED BY: _____DATE SAMPLED: 12/21/94 START: 1110 END (2400 hr): 1120 SAMPLED BY: DM

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. ($\mu\text{mhos/cm}$ @ 25°C)	TEMPERATURE, ($^{\circ}\text{F}$)	COLOR	TURBIDITY	ODOR
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

GRAB SAMPLE

Pumped dry Yes / No

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: TOB/TOC 7.11 986 56.8 CR TCE None

PURGING EQUIPMENT/I.D.

Bailer: 13-6 Airlift Pump: _____
 Centrifugal Pump: _____ Dedicated: _____
 Other: _____

SAMPLING EQUIPMENT/I.D.

Bailer: 13-6 Dedicated: _____
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>17393 VM</u>	<u>12/21/94</u>	<u>1115</u>	<u>3</u>	<u>40ml</u>	<u>VQA</u>	<u>HCl</u>	<u>GAS/BTEX</u>
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

REMARKS: _____

SIGNATURE: J. MoningerPACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-000025 LOCATION: 17(00) HESPERIAN BLVD. WELL ID #: 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
 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 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

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

$$\text{TD} \quad - \quad \text{DTW} \quad = \quad \text{Gal/Linear Foot} \quad = \quad \text{Number of Casings} \quad = \quad \text{Calculated Purge}$$

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

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

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. ($\mu\text{mhos/cm}$ @ 25°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>TB-1</u>	<u>12-19-94</u>	<u>NA</u>	<u>2</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/BTEX</u>
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

REMARKS: _____

SIGNATURE: J. Monnier

PACIFIC
ENVIRONMENTAL
GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006025 LOCATION: 17601 HESPERIAN BLVD. WELL ID #: /

CLIENT/STATION No.: ARCO/0608

FIELD TECHNICIAN: J. Morris

WELL INFORMATION

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

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

CASING DIAMETER	GAL/ LINEAR FT.	
	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; _____

$$\text{TD} \quad - \quad \text{DTW} \quad = \quad \text{Gal/Linear} \quad \times \text{Foot} \quad = \quad \text{Number of} \quad \times \text{Casings} \quad = \quad \text{Calculated} \quad = \quad \text{Purge}$$

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

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

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. ($\mu\text{mhos/cm}$ @ 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>TB-2</u>	<u>12-21-94</u>	<u>NA</u>	<u>2</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/IBTEX</u>

REMARKS: _____

SIGNATURE: R. Morris



PACIFIC
ENVIRONMENTAL
GROUP INC.

FIELD SERVICES/O and M REQUEST

2601 RY

SITE INFORMATION FORM

IdentificationProject # 330-006.26
on # 0608Site Address: 17601 Hesperian Blvd, San LorenzoCounty: AlamedaProject Manager: ShawRequestor: Requester AnyikahClient: ARCOClient P.O.C.: Mike WhelanDate of request: 1/94Project Type

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

Ideal field date(s): _____

Prefield Contacts/Permits

	Initials	Date
Trans		
Ca		
Count	<u>G/S</u>	<u>PL 12/1/93</u>
City		
Private		

 Multi-Consultant Scheduling
Date(s): _____Site SafetyConcerns

Field Tasks

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

1). sample system :

		INFL	EFFL	
	Gas / BTEX	M	M	m = monthly
H2SO4	COD		Q	Q = Quarterly (3,6,9,12)
HP	TSS		Q	
PH	pH		Q	

2) DTW in E-1A

3) Change filter

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

Budgeted hours: _____ Actual hours; On-Site: 2.5 Mob-de-Mob: 1

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

Sampled Sy, he

Groundwater Extraction System

ARCO Service Station 0608
17601 Hesperian Boulevard
San Lorenzo, California

Name: 5V

Date/Time: 12-5-94

Treatment System Readings			
System On Upon Arrival?	<u>NO High Bag Filter</u>	Electric Meter (kw-hrs)	<u>13517</u>
Effluent Totalizer (gallons)	<u>0325830</u>	Bag Filter INFL Pressure (psi)	<u>10</u>
E-1A Flowrate (gpm)	<u>2</u>	Bag Filter EFFL Pressure (psi)	<u>8</u>
E-1A Hourmeter (hours)	<u>24189</u>	MID-1 Pressure (psi)	<u>6</u>
E-1A Throttle Valve Position	<u>100% OPEN</u>	MID-2 Pressure (psi)	<u>8</u>
E-1A DTW (TOB feet)	<u>1890</u>	EFFL Pressure (psi)	<u>0</u>
Enclosure Swept	<u>Yes</u>	Does Sump Pump Work	<u>U/A</u>
Does the Autodialer Work? Batteries Replaced	<u>Yes</u>	Number of Spare Filters On-Site	<u>2</u>

Comments _____

ARCO

Products Company

Division of Atlantic Richfield Company

330 006-26

Task Order No.

608-94-5

Chain of Custody

ARCO Facility no.	608	City (Facility)	SAN LUIS RIO	Project manager (Consultant)	SHAW GARAFFE	Laboratory name	
ARCO engineer	Mike Whelan	Telephone no. (ARCO)		Telephone no. (Consultant)	441 7500	Fax no. (Consultant)	441 7539
Consultant name	PALEO CIV GROUP	Address (Consultant)	2025 Gate Way P/ #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 605/2/8020/8015	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"/>	TPH EPA 418.1/SM403E	EPA 601/8010	EPA 624/8240	TPH EPA 602/8020/8015	TOLP EPA 602/8020/8015	Toluene EPA 602/8020/8015	Lead Organics EPA 7420/7441	Lead EPA 7420/7441	PCP EPA 602/8020/8015	P
			Soil	Water	Other	Ice																
TEFC	3	X		X	HCl	X	12-5-97	11:40	X	X												
TEFL	3	X		X	HCl	X			X	X												
TEFL	1	X		X	NP	X											X					
TEFL	1	X		X	NP	X															X	
TEFL	3	X		X	H2SO4	X															X	

Condition of sample:

Relinquished by sampler

Relinquished by

Relinquished by

Temperature received:

Date 12-6-97 Time 7:00 Received by

Date Received by

Received by laboratory Date Time

Turnaround time

Priority Rush
1 Business DayRush
2 Business DaysExpedited
5 Business DaysStandard
10 Business Days

FIELD SERVICES / O&M REQUEST

Work Order # 3433

SITE INFORMATION FORM

Identification

Project # 330-006-26

Station # 0608

Site Address 17601 Hwy 101
Project ID

City / ZIP CODE 20201

County LOS ANGELES

Project Manager SHAW G.

Requestor ERIC W.

Client APCO

Client P.O.C. MIKE WHELAN

Date of request 12/2/94

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

Ideal field date(s):

MONDAY DEC 5

Prefield Contacts/Permits Cal Trans

Initials

Date

 County City Private Multi-Copy/Instant Scheduling

date(s):

 Copy Dist

By

2 h k4

12/7/94

Check Appropriate Category

Budget Hrs.

Actual Hrs.

Mob de Mob

Field Tasks: For General Description

TURN SYSTEM ON

IDENTIFY THE CAUSE OF SHUTDOWN AND CORRECT
SEE IF COMPUND IS FILLED WITH RAINWATERIF YOU HAVE ANY QUESTIONS, GIVE A CALL
EXT 301Comments, remarks, etc. from Field Staff (include problems encountered and out-of-scope work)System down due to High Bag psi.
Changed bag filter and re-started systemNO water in compound valve in berm is
open

Completed by: JV

Date: 12-5-94

Checked by: _____

FIELD SERVICES/O and M REQUEST

2541

SITE INFORMATION FORM

IdentificationProject # 330-006,26on # 0608Site Address: 17601 Hesperian Blvd, San LorenzoCounty: AlamedaProject Manager: Shaw GRequestor: nestor Anjikait.Client: ARCOClient P.O.C.: Mike WhelanDate of request: 1/94Project Type

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

Ideal field date(s): _____

Prefield Contacts/Permits

<input type="checkbox"/> Cal Trans	Initials	Date
<input type="checkbox"/> County		
<input type="checkbox"/> City FS	RY	<u>1/17/94</u>
<input type="checkbox"/> Private		Copy Date <u>Jan 18</u>
<input type="checkbox"/> Multi-Consultant Scheduling		

Date(s): _____

Site SafetyConcernsField Tasks

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

1) sample system:

INFL EFFL

m = monthly

Gas / BTEX

M M

Q = Quarterly (3,6,9,12)

H2SO4 COD

Q

UP TSS

Q

UP pH

Q

2) DTW in E-1A

3) Change filter

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

Budgeted hours: _____

Actual hours; On-Site: 2.5 Mob-de-Mob: 1

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

Sampled System

Completed by: JVDate: 11-15-94

ARCO Products Company

Division of Atlantic Richfield Company

330 COG-26

Task Order No.

608-94-5

Chain of Custody

ARCO Facility no.	608	City (Facility)	San Lorenzo		Project manager (Consultant)	Shaw Garatani		Laboratory name											
ARCO engineer	Mike Whelan	Telephone no. (ARCO)			Telephone no. (Consultant)	408 441 7500	Fax no. (Consultant)	408 441 7539											
Consultant name	Pacific Env Group		Address (Consultant)	2025 GATE-WAY PL #440 SAN JOSE				Contract number											
Sample I.D.	Lab no.	Container no.	Matrix		Preservation		Sampling date	Sampling time	BTEX	BTEX/TPH	TPH Modified 80/15 Gas	Oil and Grease 413.1	TPH EPA 418.1(SM50E)	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals	Semi VOA	Special detection Limit/reporting
			Soil	Water	Other	Ice			Acid	602/EPA 8020							EPA MS02/8020/8015	Gas Diesel		413.2	EPA 801/7000	STLC	Lead Org/DHS	Lead EPA 7420/7421
INF	3	X	X	HCl	11-15-94		X												
EFFL	3	X	X	HCl	11-15-94		X												
Condition of sample:							Temperature received:												
Relinquished by sampler				Date	Time	Received by													
<i>Jay Von</i>				11-15-94	700														
Relinquished by				Date	Time	Received by													
Relinquished by				Date	Time	Received by laboratory	Date	Time											



FIELD SERVICES/O and M REQUEST

Work Order #

00542

Initials BAM

SITE INFORMATION FORM

IdentificationProject # 330-006.26Station # 608Site Address: 11001 Hesperian Blvd.San LeandroCounty: AlamedaProject Manager: K BrownRequestor: K BrownClient: AeroClient P.O.C.: Mike WhelanDate of request: 9/16/94Project Type

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

Ideal field date(s): next monthlyField Tasks: For General Description

1). cut branches covering treatment sys. compound
 - make sure that the branches are not
 going into sys piping or GAC vessels

2). transport to dump.

3). Branches are 1" - 2" diameter.

Take a saw and pruners, lube, boom.

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

Cut Branches down and
 Took to the dump

PACIFIC ENVIRONMENTAL GROUP, INC.

Completed by: JV Date: 10-18-94

Checked by: _____

FIELD SERVICES/O and M REQUEST

2434

SITE INFORMATION FORM

Identification

Project # 330-006.26
 Job # 0608
 Site Address: 17601 Hesperian Blvd, San Lorenzo
 County: Alameda
 Project Manager: Shaw G
 Requestor: resisterra Anyikah
 Client: ARCO
 Client P.O.C.: Mike Whelan
 Date of request: 1/94

Project Type

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

Ideal field date(s): _____

Prefield Contacts/Permits

<input type="checkbox"/> CalTrans	<u>Initials</u> <u>Date</u>
<input type="checkbox"/> County	<u>CG</u> <u>10/18</u>
<input checked="" type="checkbox"/> City	<u>CG</u> <u>10/21</u>
<input type="checkbox"/> Private	<u>CG</u> <u>10/21</u>
<input type="checkbox"/> Copy/Disc	
<input type="checkbox"/> Multi-Consultant Scheduling	

Date(s): _____

Site SafetyConcernsField Tasks

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

1) sample system:

		<u>INFL</u>	<u>EFFL</u>	<u>m = monthly</u>
	<u>GAS / BTEX</u>	<u>M</u>	<u>M</u>	<u>Q = Quarterly (3,6,9,12)</u>
<u>H2SO4</u>	<u>COD</u>		<u>Q</u>	
<u>H2P</u>	<u>TSS</u>		<u>Q</u>	
<u>H2P</u>	<u>pH</u>		<u>Q</u>	

2) DTW in E-1A

3) Change filter

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

Budgeted hours: _____ Actual hours; On-Site: 2.5 Mob-de-Mob: 1

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

MONTH COMPLETED

Completed by: JV Date: 10-18-94

Groundwater Extraction System

ARCO Service Station 0608
17601 Hesperian Boulevard
San Lorenzo, California

Name: SV

Date/Time: 18-18-94

Treatment System Readings			
System On Upon Arrival?	Yes	Electric Meter (kw-hrs)	12859
Effluent Totalizer (gallons)	0211880	Bag Filter INFL Pressure (psi)	10
E-1A Flowrate (gpm)	18 1.8	Bag Filter EFL Pressure (psi)	8
E-1A Hourmeter (hours)	22408.3	MID-1 Pressure (psi)	7
E-1A Throttle Valve Position	100% open	MID-2 Pressure (psi)	6 6.2
E-1A DTW (TOB feet)	1948	EFL Pressure (psi)	0
Enclosure Swept	Yes	Does Sump Pump Work	No Sump *
Does the Autodialer Work? Batteries Replaced	Yes	Number of Spare Filters On-Site	2

Comments Check To See if There were float switches in pad no switches were found pad had drain hole but no sump or pump

ARCO Pro
Div.cts Company
A Atlantic Richfield Company

330 006-26 Task Order No. 6 8 - 94-5

Chain Custody

ARCO Facility no.	608	City (Facility) SAN LORENZO		Project manager (Consultant)		Shaw Garakawi		Laboratory name <u>SEQUOIA</u>												
ARCO engineer	Mike Whelan	Telephone no. (ARCO)		Telephone no. (Consultant)		4417500 408	Fax no. (Consultant)	4417539												
Consultant name	PACIFIC ENV Group	Address (Consultant)		2025 GATE WAY PI #440 SAN JOSE		Contract number														
Sample I.D.	Lab no.	Container no.	Matrix		Preservation		Sampling date	Sampling time	ETEX 602/EPA 8020	ETEX/TPH EPA M602/8020/8015	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"/>	TPH EPA 418.1/MS303E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals <input type="checkbox"/> VOC <input type="checkbox"/> NOA <input type="checkbox"/>	Semi Metals <input type="checkbox"/> VOC <input type="checkbox"/> NOA <input type="checkbox"/>	Method of shipment	
			Soil	Water	Other	Ice														Acid
INR	3	X		HCl	10-18-94		X													
EFFL	3	X		HCl	10-18-94		X													
Condition of sample:								Temperature received:												
Relinquished by sampler				Date	10-18-94	Time	15:00	Received by				Priority Rush 1 Business Day <input type="checkbox"/>								
Relinquished by				Date		Time		Received by				Rush 2 Business Days <input type="checkbox"/>								
Relinquished by				Date		Time		Received by laboratory				Date	Time	Expedited 5 Business Days <input type="checkbox"/>						
														Standard 10 Business Days <input checked="" type="checkbox"/>						

FIELD SERVICES/O and M REQUEST

Work Order # 00435

OG 1435

SITE INFORMATION FORM

Identification

Project # 330-006-2C
 Station # ARCC 0608

Site Address: PACIFIC ENVIRONMENTAL GROUP
1411 16TH ST. BLDG.

County: ALAMEDA

Project Manager: KW

Requestor: KW

Client: ARCC

Client P.O.C.: M. LUIKELAN

Date of request: 9/11/94

Project Type

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

Ideal field date(s): ASAP

Initials

10/12
 Circle Appropriate Category

CA Check appropriate category

I = In Budget Site Visit da Budget Hrs. 20

O = Out of Budget Site Visit da Actual Hrs. _____

S = In Budget Site Visit da Mob de Mob _____

Site SafetyConcerns

D
ARRIVED = 9:30
DEPART = 4:00

86-119

Field Tasks: For General Description

(1) CALL PLASTER AND MISS DAHMANN @ 510-776-5860 - 633 HACKERDA
 NE TO SCHEDULE WELL DEVELOPMENT FRIDAY 8:30

(2) REFERENCED 1000
 DRAWS PUMP WATER THROUGH SYSTEM AT STATION

DIGGING SILT USING INTEGRATED WASTE MANAGEMENT

COLLECT SOIL SAMPLE

ANALYZE EPA METHOD 8010 ? 8015 MODIFIED FOR
 TPH-C AND OXY - LEADET DETECTION LIMITS

STATION PUMP 48 hr.

X (3) DRAWD DUST FROM PUMPS - TAKE NOTES, MAKE ETC.
 FOR REPAIRS OR REPLACEMT?

(4) COLLECT AND RELEASING PUMP THERMOCOUPLE

(5) DRAWD DUST CONTROLS FOR PUMP REPLACEMENT

(6) SEE STATION WELLS CONTROLS PUMP 1 & 2 FOR REPAIR

(7) DRAWD DUST CONTROLS FOR PUMP 1 & 2 FOR REPAIR

Comments, remarks, etc. from Field Staff (include problems encountered and out-of-scope work) MG 9/12 = 2 hr.

* REMIXED LOTS OF SAND @ FIRST 1/3 OF PUMP, TD AFTER
 DRAWD = 32'. G PUMP INTAKE ORIGINALLY 10' TD 12' TD NEW
 INTAKE @ 10' TD; Down well piping 0.12" 15' vertical,
 TESTED PUMP OPERATION WITH HOME OWNER, EVERYTHING WORKS
 GOOD, ADJUSTED PRESSURE SWITCH/FK.

* LABELED SAMPLE

* DRIED SHAW BEFORE DEPART. MW-633

Completed by: JTS Date: 10/17/94
 Checked by: _____

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 3300 Blk LOCATION: San Lorenzo WELL ID #: MW-1633CLIENT/STATION No.: 0608FIELD TECHNICIAN: MG

WELL INFORMATION

Depth to Liquid: TOB TOC
 Depth to water: 14.45 TOB 14.45 TOC
 Total depth: TOB 32.0 TOC
 Date: 10/15/94 Time (2400): 10:04

Probe Type
and
I.D. #

Oil/Water interface
 Electronic indicator
 Other;

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

- | |
|---|
| <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; |

$$TD \underline{32} - DTW \underline{14.45} = \underline{17.55} \text{ Gal/Linear Foot} \times \underline{16} = \underline{11.58} \text{ Number of Casings } \underline{5} \text{ Calculated Purge } \underline{58}$$

DATE PURGED: 10/15/94 START: 10:20 END (2400 hr): 10:40 PURGED BY: MG

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
<u>10:28</u>	<u>79</u>	<u>7.64</u>	<u>1141</u>	<u>63.8</u>	<u>CLEAR</u>		<u>NOTE</u>
<u>10:35</u>	<u>39</u>	<u>7.18</u>	<u>1127</u>	<u>63.8</u>	<u>"</u>		<u>"</u>
<u>10:40</u>	<u>58</u>	<u>7.05</u>	<u>1134</u>	<u>64.0</u>	<u>"</u>		<u>"</u>

Pumped dry Yes / No

Cobalt 0-100 Clear Cloudy Yellow Brown	NTU 0-200 Heavy Moderate Light Trace	Strong Moderate Faint None
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FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D.

Bailer:
 Centrifugal Pump:
 Other:

Airlift Pump:
 Dedicated:

SAMPLING EQUIPMENT/I.D.

Bailer:
 Dedicated:
 Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-633</u>	<u>10/15/94</u>	<u>10:50</u>	<u>3</u>	<u>40ml</u>	<u>16oz</u>	<u>pk</u>	<u>Gas/BTEX</u>

REMARKS: _____

SIGNATURE: MGPACIFIC
ENVIRONMENTAL
GROUP, INC.