PACIFIC
ENVIRONMENTAL
GROUP, INC.

June 8, 1994
Project 330-006.25

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

Re: Quarterly Report - First 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 presents the results of the first 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 on March 28, 29, and 30, 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 March 28, 1994, indicate that groundwater elevations have increased in site groundwater monitoring wells an average of approximately 0.84 foot since December 28, 1993. 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 March 28, 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. Well MW-5 contained its lowest historical concentration

of benzene. TPH-g was detected at concentrations ranging from 120 to 4,700 parts per billion (ppb). Benzene was detected at concentrations ranging from 4.8 to 470 ppb. Wells MW-7, MW-9, MW-11, MW-13 through MW-19, and MW-21 through MW-26 had non-detectable levels of TPH-g and BTEX compounds. The concentration of 1,200 ppb benzene at Well MW-10 during the fourth quarter 1993 sampling event was verified as anomalous by the concentration of 470 ppb benzene in Well MW-10 this quarter. Separate-phase hydrocarbons (SPH) were not observed in any site well this quarter. **SPH have not been observed in any site well since March 1990.** Groundwater analytical data are presented in Table 2. A TPH-g and benzene concentration map is shown on Figure 2.

DOMESTIC IRRIGATION SUPPLY WELLS

The results of sampling this quarter for domestic irrigation wells indicate that TPH-g and benzene concentrations are within historical levels. **This quarter Wells 633 H, 634 H, 675 H, and 17371 VM were not sampled.** TPH-g was detected in Well 17349 VM at a concentration of 420 ppb. TPH-g was not detected in Wells 590 H, 642 H, 17197 VM, 17200 VM, 17203 VM, 17302 VM, 17348 VM, 17372 VM, and 17393 VM. Benzene was not detected in any domestic irrigation wells 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. The objectives of the remedial action 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 of the GWE system and a performance evaluation of the GWE system from December 21, 1993 through March 15, 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 1,000-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. As indicated by Figures 1 and 2, the GWE system is affecting the migration of the petroleum hydrocarbon plume by creating a groundwater depression at the extraction well. The groundwater depression extends approximately 30 feet radially from the GWE well.

How about contaminants outside of the 30-foot radius?

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 less than 0.1 pound of TPH-g and benzene from the impacted groundwater beneath the site. **To date, GWE has removed approximately 3.5 pounds (0.6 gallon) of TPH-g and 0.2 pound (0.03 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.

G.W. extraction is not a remedial measure. What alternative remedial measures will be implemented?

Analyte	Mass Removed 12/22/93 to 03/15/94 (lbs)	(gal)	Cumulative (lbs)	(gal)
TPH-g	<0.1	<0.02	3.5	0.6
Benzene	<0.1	<0.02	0.2	0.03

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

Groundwater Extraction System Operational Data

The GWE system was approximately 98 percent operational during the reporting period. The system experienced one automatic shut down due to high pressure at the bag filter which resulted in 2 days of downtime. During this quarter, the GWE system discharged treated groundwater at an average flow rate of approximately 1.9 gallons per minute for a period discharge of 230,684 gallons. The instantaneous groundwater system flow rate ranged from 1 to 2 gallons per minute.

Calculations based on 8 percent loading isotherm by weight indicate the primary carbon vessel is approximately 4.3 percent loaded. Treatment system analytical data are presented in Table 5.

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

Conclusions

Analytical data from 1993 indicate 190 ppb TPH-g and 4.8 ppb benzene concentrations at Well E1-A. However, groundwater samples from the GWE system influent have indicated non-detectable concentrations of TPH-g and benzene during the first quarter 1994. Therefore, PACIFIC will raise the well pump for better capture and extraction of the contaminated groundwater plume and report the results in the second quarter 1994 report.

SUMMARY OF WORK

Work Completed First Quarter 1994

- o Continued monitoring GWE system performance.
- o Preparation and submittal of fourth quarter 1993 groundwater monitoring and remedial system performance evaluation report.
- o Preparation and submittal of fourth quarter 1993 domestic irrigation well sampling results letters.
- o Preparation and submittal of authorization letters to homeowners for 1994 sampling and discontinue well use programs.
- o Continued domestic irrigation well owner reimbursement program with owners who have discontinued well use.
- o Sampled site groundwater monitoring and domestic irrigation wells for first quarter 1994 groundwater monitoring program.
- o Sampled domestic irrigation wells.

Work Anticipated Second Quarter 1994

- o Continue monitoring GWE system performance.
- o Preparation and submittal of first quarter 1994 groundwater monitoring and remedial system performance evaluation report.
- o Sample site groundwater monitoring and domestic irrigation wells for second quarter 1994 groundwater monitoring program.
- o Preparation of second quarter 1994 groundwater monitoring and remedial system performance evaluation report.
- o Preparation and submittal of domestic irrigation well sampling and reimbursement programs notification letter to Alameda County Health Care Agency (issued April 4, 1994).
- o Continue domestic irrigation well owner reimbursement program with owners who have discontinued well use.
- o Fate and transport modeling on and off site.
- o Optimize extraction pump location within Well E1-A to extract contaminated groundwater.

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

Sincerely,

Pacific Environmental Group, Inc.

Shaw Garakani
Project Engineer

Michael Hurd
Senior Geologist
RG 5319

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

cc: Ms. Susan Hugo, Alameda County Health Care Services
Ms. Juliet Shin, Alameda County Health Care Services
Mr. Richard Hiett, 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
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
MW-8	01/16/92	32.79	13.40	--	19.39
	02/19/92		11.26	--	21.53
	03/17/92		10.90	--	21.89
	04/15/92		11.35	--	21.44
	05/14/92		12.06	--	20.73

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.)	06/15/92		12.83	--	19.96
	07/14/92		12.75	--	20.04
	08/18/92		13.83	--	18.96
	09/15/92		14.17	--	18.62
	10/16/92		14.51	--	18.28
	11/18/92		14.15	--	18.64
	12/17/92		12.68	--	20.11
	01/19/93		9.79	--	23.00
	02/22/93		9.95	--	22.84
	03/15/93		10.31	--	22.48
	04/09/93		10.47	--	22.32
	05/13/93		11.18	--	21.61
	06/04/93		11.47	--	21.32
	06/15/93		11.62	--	21.17
	09/13/93		12.70	--	20.09
	12/28/93		12.23	--	20.56
	03/28/94		11.28	--	21.51
MW-9	01/16/92	32.11	12.45	--	19.66
	02/19/92		10.25	--	21.86
	03/17/92		10.01	--	22.10
	04/15/92		10.49	--	21.62
	05/14/92		11.19	--	20.92
	06/15/92		11.86	--	20.25
	07/14/92		12.28	--	19.83
	08/18/92		12.89	--	19.22
	09/15/92		13.28	--	18.83
	10/16/92		13.60	--	18.51
	11/18/92		13.24	--	18.87
	12/17/92		11.76	--	20.35
	01/19/93		8.99	--	23.12
	02/22/93		9.13	--	22.98
	03/15/93		9.48	--	22.63
	04/09/93		9.63	--	22.48
	05/13/93		10.35	--	21.76
	06/04/93		10.65	--	21.46
	06/15/93		10.81	--	21.30
	09/13/93		11.87	--	20.24
	12/28/93		11.61	--	20.50
	03/28/94		10.48	--	21.63

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-10	01/16/92	31.67	12.55	--	19.12
	02/19/92		10.50	--	21.17
	03/18/92		10.12	--	21.55
	04/15/92		10.59	--	21.08
	05/14/92		11.30	--	20.37
	06/15/92		11.93	--	19.74
	07/14/92		12.42	--	19.25
	08/18/92		13.03	--	18.64
	09/15/92		13.42	--	18.25
	10/16/92		13.74	--	17.93
	11/18/92		13.42	--	18.25
	12/17/92		11.94	--	19.73
	01/19/93		9.13	--	22.54
	02/22/93		9.22	--	22.45
	03/15/93		9.64	--	22.03
	04/09/93		9.75	--	21.92
	05/13/93		10.49	--	21.18
	06/04/93		10.78	--	20.89
	06/15/93		10.93	--	20.74
	09/13/93		12.01	--	19.66
	12/28/93		11.41	--	20.26
	03/28/94		10.60	--	21.07
MW-11	01/16/92	32.54	13.28	--	19.26
	02/19/92		11.29	--	21.25
	03/17/92		10.81	--	21.73
	04/15/92		11.23	--	21.31
	05/14/92		11.96	--	20.58
	06/15/92		12.64	--	19.90
	07/14/92		13.08	--	19.46
	08/18/92		13.72	--	18.82
	09/15/92		14.13	--	18.41
	10/16/92		14.45	--	18.09
	11/18/92		14.11	--	18.43
	12/17/92		12.69	--	19.85
	01/19/93		9.91	--	22.63
	02/22/93		9.95	--	22.59
	03/15/93		10.30	--	22.24
	04/09/93		10.42	--	22.12
	05/13/93		11.16	--	21.38
	06/04/93		11.44	--	21.10
	06/15/93		11.59	--	20.95

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.)	09/13/93		12.68	--	19.86
	12/28/93		12.05	--	20.49
	03/28/94		11.23	--	21.31
E-1A (MW-12)	01/16/92	33.06	23.68	--	9.38
	02/19/92		18.71	--	14.35
	03/17/92		23.10	--	9.96
	04/15/92		20.54	--	12.52
	05/14/92		23.09	--	9.97
	06/15/92		23.72	--	9.34
	07/14/92		13.25	--	19.81
	08/18/92		23.73	--	9.33
	09/15/92		23.62	--	9.44
	10/16/92		23.78	--	9.28
	11/18/92		23.80	--	9.26
	12/17/92		22.65	--	10.41
	01/19/93		23.65	--	9.41
	02/22/93		23.70	--	9.36
	03/15/93		22.92	--	10.14
	04/09/93		22.50	--	10.56
	05/13/93		20.40	--	12.66
	06/04/93		18.74	--	14.32
	06/15/93		20.00	--	13.06
	09/13/93		19.50	--	13.56
	12/28/93		20.35	--	12.71
	03/28/94		18.13	--	14.93
MW-13	01/16/92	35.42	15.70	--	19.72
	02/19/92		13.60	--	21.82
	03/17/92		13.20	--	22.22
	04/15/92		13.64	--	21.78
	05/14/92		14.34	--	21.08
	06/15/92		15.13	--	20.29
	07/14/92		15.45	--	19.97
	08/18/92		16.15	--	19.27
	09/15/92		16.51	--	18.91
	10/16/92		16.81	--	18.61
	11/18/92		16.50	--	18.92
	12/17/92		15.07	--	20.35
	01/19/93		12.40	--	23.02
	02/22/93		12.35	--	23.07
	03/15/93		12.69	--	22.73

Table 1 (continued)
Groundwater Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	Separate-Phase Hydrocarbon Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-13 (cont.)	04/09/93		12.85	--	22.57
	05/13/93		13.55	--	21.87
	06/04/93		13.83	--	21.59
	06/15/93		13.97	--	21.45
	09/13/93		15.09	--	20.33
	12/28/93		14.47	--	20.95
	03/28/94		13.64	--	21.78
MW-14	01/16/92	30.46	11.34	--	19.12
	02/19/92		9.32	--	21.14
	03/17/92		9.04	--	21.42
	06/15/92		10.83	--	19.63
	09/15/92		12.27	--	18.19
	12/17/92		10.69	--	19.77
	03/15/93		8.70	--	21.76
	06/15/93		9.90	--	20.56
	09/13/93		10.89	--	19.57
	12/28/93		10.24	--	20.22
	03/28/94		9.55	--	20.91
MW-15	01/16/92	31.41	12.80	--	18.61
	02/19/92		10.85	--	20.56
	03/18/92		10.41	--	21.00
	06/15/92		12.19	--	19.22
	09/15/92		13.69	--	17.72
	12/17/92		12.26	--	19.15
	03/15/93		10.05	--	21.36
	06/15/93		11.32	--	20.09
	09/13/93		12.35	--	19.06
	12/28/93		11.76	--	19.65
	03/28/94		10.95	--	20.46
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

Table 1 (continued)
Groundwater Elevation Data

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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-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
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
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
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 ----------			

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-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
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
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
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
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

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-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

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	09/17/93	1,400	230	<5.0	6.7	<5.0
(cont.)	12/29/93	690	38	2.1	2.7	3.8
	03/30/94	1,400	30	<5	<5	<5
MW-6	06/21/89	1,700	170	170	85	290
(E-1)	12/12/89	500	26	7	8	18
	03/29/90	130	14	9	4	11
	06/22/90	150	15	5	4	13
	07/18/90	---------- Well Destroyed ----------				
MW-7	04/13/90	<50	<0.3	<0.3	<0.3	<0.3
	06/22/90	<50	0.5	1	0.6	3
	09/19/90	<50	<0.3	<0.3	<0.3	<0.3
	12/27/90	69	<0.3	0.3	0.4	2
	03/21/91	<30	<0.3	<0.3	<0.3	<0.3
	06/26/91	<30	<0.3	<0.3	<0.3	<0.3
	09/24/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/17/92	<30	<0.3	<0.3	<0.3	<0.3
	06/17/92	<30	<0.3	<0.3	<0.3	<0.3
	09/16/92	<50	<0.5	<0.5	<0.5	<0.5
	12/21/92	<50	<0.5	<0.5	<0.5	<0.5
	03/17/93	<50	<0.5	<0.5	<0.5	<0.5
	06/15/93	<50	<0.5	<0.5	<0.5	<0.5
	09/14/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
	03/30/94	<50	<0.5	<0.5	<0.5	<0.5
MW-8	04/13/90	4,900	350	16	450	33
	06/22/90	3,700	370	12	330	28
	09/19/90	140	4	3	3	3
	12/27/90	1,200	7	0.3	53	<0.3
	03/21/91	540	8.8	<6.0	21	9.6
	06/26/91	2,100	290	<6.0	56	<6.0
	09/24/91	260	51	0.34	7.9	<0.3
	12/19/91	5,300	300	<3.0	21	4.8
	03/17/92	9,200	370	3.0	48	4.9
	06/17/92	3,300	460	2.7	63	6.9
	09/16/92	1,500	58	<0.5	6.1	4.5
	12/22/92	3,600	410	56	62	4.4
	03/18/93	3,800	61	<0.5	11	1.2
	06/17/93	2,400	430	<5	11	<5

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

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

Well Number	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
MW-8	09/14/93	1,900	36	1.4	32	8.6
(cont.)	12/29/93	2,100	50	0.65	2.9	4.7
	03/29/94	1,900	220	<10	<10	<10
MW-9	04/13/90	<50	<0.3	<0.3	<0.3	2
	06/22/90	12,000	200	3	250	180
	09/19/90	<50	<0.3	<0.3	<0.3	0.6
	12/27/90	<50	<0.3	<0.3	<0.3	<0.3
	03/21/91	<30	<0.3	<0.3	<0.3	<0.3
	06/26/91	<30	<0.3	<0.3	<0.3	<0.3
	09/24/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/17/92	<30	<0.3	<0.3	<0.3	<0.3
	06/16/92	<30	<0.3	<0.3	<0.3	<0.3
	09/16/92	<50	<0.5	<0.5	<0.5	<0.5
	12/21/92	75[c]	<0.5	<0.5	<0.5	<0.5
	03/16/93	<50	<0.5	<0.5	<0.5	<0.5
	06/15/93	<50	<0.5	<0.5	<0.5	<0.5
	09/14/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
MW-10	04/13/90	10,000	150	4	280	200
	06/22/90	9,700	28	<0.3	131	210
	09/19/90	1,800	<0.3	4	0.8	10
	12/27/90	5,700	7	3	95	61
	03/21/91	6,900	22	<15	92	33
	06/26/91	9,300	51	<0.3	59	34
	09/24/91	360	8.6	5.2	14	6.2
	12/19/91	3,300	9.2	8.4	11	17
	03/18/92	4,700	14	<6.0	29	10
	06/16/92	4,800	0.46	0.34	7.4	3.8
	09/16/92	2,000	8.3	3.0	3.3	5.5
	12/22/92	2,700[c]	6.2	<1.0	7.5	2.8
	03/16/93	4,100	340	2.4	58	54
	06/17/93	4,900	860	<10	540	92
	09/17/93	4,500	670	<10.0	240	7.2
	12/28/93	5,000	1,200[d]	12	46	31
	03/29/94	4,700	470	<10	29	45

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-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
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
MW-13	07/03/91	<30	<0.3	<0.3	<0.3	<0.3
	09/24/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/17/92	<30	<0.3	<0.3	<0.3	<0.3
	06/17/92	<30	<0.3	<0.3	<0.3	<0.3
	09/16/92	<50	<0.5	<0.5	<0.5	<0.5
	12/21/92	<50	<0.5	<0.5	<0.5	<0.5
	03/17/93	<50	<0.5	<0.5	<0.5	<0.5
	06/15/93	<50	<0.5	<0.5	<0.5	<0.5
	09/14/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
	03/30/94	<50	<0.5	<0.5	<0.5	<0.5
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

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-14 (cont.)	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
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
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
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

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-17	06/17/93	90	0.92	<0.5	2.7	2.4
(cont.)	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
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
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
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

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-21 (cont.)	06/15/92	<30	<0.3	<0.3	<0.3	<0.3
	09/15/92	<50	<0.5	<0.5	<0.5	<0.5
	12/22/92	<50	<0.5	<0.5	<0.5	<0.5
	03/17/93	<50	<0.5	<0.5	<0.5	<0.5
	06/16/93	<50	<0.5	<0.5	<0.5	<0.5
	09/16/93	<50	<0.5	<0.5	<0.5	<0.5
	12/28/93	<50	<0.5	<0.5	<0.5	<0.5
	03/28/94	<50	<0.5	<0.5	<0.5	<0.5
MW-22	10/04/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/17/92	<30	<0.3	<0.3	<0.3	<0.3
	06/15/92	<30	<0.3	<0.3	<0.3	<0.3
	09/15/92	<50	<0.5	<0.5	<0.5	<0.5
	12/22/92	<50	<0.5	<0.5	<0.5	<0.5
	03/17/93	<50	<0.5	<0.5	<0.5	<0.5
	06/16/93	<50	<0.5	<0.5	<0.5	<0.5
	09/16/93	<50	<0.5	<0.5	<0.5	<0.5
	12/28/93	<50	<0.5	<0.5	<0.5	<0.5
	03/28/94	<50	<0.5	<0.5	<0.5	<0.5
MW-23	10/04/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/17/92	<30	<0.3	<0.3	<0.3	<0.3
	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
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
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

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-25 (cont.)	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
MW-26	03/29/93	<50	<0.5	<0.5	<0.5	<0.5
	06/15/93	<50	<0.5	<0.5	<0.5	<0.5
	09/14/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5

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.
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
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
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
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
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

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

Hacienda Avenue and Via Magdalena
San Lorenzo, California

Well Address	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
675 H (cont.)	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
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
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
17203 VM	11/13/91	<30	<0.3	<0.3	<0.3	<0.3
	10/16/92[a]	NS	NS	NS	NS	NS
	12/21/92	<50	<0.5	<0.5	<0.5	1.3
	03/16/93	<50	<0.5	<0.5	<0.5	<0.5
	06/17/93	<50	<0.5	<0.5	<0.5	<0.5
	09/16/93	<50	<0.5	<0.5	<0.5	<0.5
	12/30/93	<50	<0.5	<0.5	<0.5	<0.5
	03/30/94	<50	<0.5	<0.5	<0.5	<0.5
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

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)
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
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	8.6
	03/16/93	1,100	16	4.2	1.8	1.8
	06/17/93	1,100	1.5	6.7	4.6	7.9
	09/16/93	1,200	13	21	8.0	10
	12/30/93[a]	NS	NS	NS	NS	NS
	03/30/94	120	<1	<1	<1	5.3
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
17372 VM	09/27/91	300	5.5	<0.60	1.3	0.72
	10/14/92	220	<1.0	<1.0	<1.0	<1.0
	12/18/92	290	3.8	0.88	0.99	1.2
	03/16/93	110*	<0.5	<0.5	<0.5	<0.5
	06/17/93	140	<0.5	1.3	0.63	1.1
	09/15/93	120	<0.5	1.1	0.62	1.2
	12/30/93	<50	<0.5	<0.5	<0.5	<0.5
	03/30/94	<50	<0.5	<0.5	<0.5	<0.5
17393 VM	11/13/91	31	<0.3	<0.3	<0.3	<0.3
	10/14/92[a]	NS	NS	NS	NS	NS
	12/18/92	<50	<0.5	<0.5	<0.5	<0.5
	03/16/93	<50	<0.5	<0.5	<0.5	<0.5
	06/17/93	<50	<0.5	<0.5	<0.5	<0.5

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 (cont.)	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

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.
NOTE: Homeowners are contacted one week prior to sampling event.

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

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

						TPH as Gasoline			Benzene			
Influent Sample Date	Hour Meter Reading (hours)	System Down Time (%)	Volume Reading (gallons)	Net Volume (gallons)	Average Flow (gpm)	Influent Concen-tration (µg/L)	Net Removed (pounds)	Removed To Date (pounds)	Influent Concen-tration (µg/L)	Net Removed (pounds)	Removed To Date (pounds)	Primary Carbon Loading (%)
09/25/91	0.0	NA	0	0	0.0	<50	NA	0.0	NA	0.00	0.0	0.0
09/26/91	NA	NA	1,144	1,144	NA	38	0.0	0.0	4.8	0.00	0.0	0.0
10/22/91	25.6	95.9	12,844	11,700	7.6	<50	NA	0.0	<0.30	0.00	0.0	0.0
11/22/91	76.6	93.1	52,532	39,688	13.0	<50	NA	0.0	0.52	0.00	0.0	0.0
12/19/91	322.0	62.1	122,540	70,008	4.8	<50	NA	0.0	<0.30	0.00	0.0	0.0
01/16/92	994.2	0.0	283,289	160,749	4.0	<50	NA	0.0	<0.30	0.00	0.0	0.0
02/19/92	1,808.6	0.2	485,200	201,911	4.1	370	0.3	0.3	14	0.01	0.0	0.4
03/17/92	2,461.7	0.0	662,847	177,647	4.5	160	0.4	0.7	18	0.02	0.0	0.9
04/15/92	3,150.3	1.1	851,100	188,253	4.6	200	0.3	1.0	11	0.02	0.1	1.2
05/14/92	3,849.1	0.0	1,030,086	178,986	4.3	45	0.2	1.2	1.4	0.01	0.1	1.5
06/19/92	4,712.1	0.1	1,229,960	199,874	3.9	<50	NA	1.2	<0.30	0.00	0.1	1.5
07/14/92	5,001.4	51.8	1,291,201	61,241	3.5	97	0.0	1.2	25.0	0.01	0.1	1.5
08/18/92	NA	NA	1,410,018	118,817	NA	<50	NA	1.2	<0.50	0.01	0.1	1.5
09/15/92	6,298.2	NA	1,535,640	125,622	3.1	<50	NA	1.2	<0.50	0.00	0.1	1.5
10/16/92	7,011.7	4.1	1,651,623	115,983	2.7	<50	NA	1.2	<0.50	0.00	0.1	1.5
11/18/92	7,808.5	0.0	1,768,076	116,453	2.4	<50	NA	1.2	<0.50	0.00	0.1	1.5
12/17/92	8,501.7	0.4	1,864,300	96,224	2.3	96	0.0	1.2	7.7	0.00	0.1	1.5
01/18/93	8,797.5	61.5	1,915,165	50,865	2.9	100	0.0	1.3	13	0.00	0.1	1.6
02/22/93	9,606.6	0.0	2,096,930	181,765	3.7	480	0.4	1.7	36	0.04	0.1	2.1
03/15/93	10,113.4	0.0	2,205,833	108,903	3.6	310	0.4	2.1	29	0.03	0.2	2.6
04/09/93	10,516.8	32.8	2,298,770	92,937	3.8	140	0.2	2.2	11	0.02	0.2	2.8
05/13/93	11,211.2	14.9	2,449,160	150,390	3.6	530	0.4	2.7	27	0.02	0.2	3.3
06/04/93	11,733.7	1.0	2,543,500	94,340	3.0	170	0.3	2.9	5.2	0.01	0.2	3.7
07/20/93	12,572.9	24.0	2,689,697	146,197	2.9	200	0.2	3.2	12	0.01	0.2	4.0
08/16/93	13,218.8	0.3	2,791,366	101,669	2.6	150	0.1	3.3	4.9	0.01	0.2	4.1
09/13/93	13,887.9	0.4	2,884,736	93,370	2.3	80	0.1	3.4	2.2	0.00	0.2	4.3
10/08/93	14,484.8	0.5	2,951,737	67,001	1.9	<50	0.0	3.4	<0.50	0.00	0.2	4.3
11/19/93	15,493.6	0.0	3,036,032	84,295	1.4	<50	0.0	3.4	<0.50	0.00	0.2	4.3
12/21/93	16,259.6	0.3	3,113,565	77,533	1.7	73	0.0	3.5	3.5	0.00	0.2	4.3
01/18/94	16,938.7	0.0	3,190,900	77,335	1.9	60	0.0	3.5	3.1	0.00	0.2	4.4
02/17/94	17,657.8	0.0	3,273,720	82,820	1.9	<50	0.0	3.5	2.5	0.00	0.2	4.4
03/15/94	18,235.0	7.5	3,344,249	70,529	2.0	<50	0.0	3.5	<0.50	0.00	0.2	4.4
AVERAGE PERCENT OF SYSTEM DOWN TIME SINCE START-UP						**18.4**						
TOTAL POUNDS REMOVED:								**3.5**			**0.2**	
TOTAL GALLONS REMOVED:								**0.6**			**0.0**	

gpm = Gallons per minute
µg/L = Micrograms per liter
NA = Not available or not applicable
1. Net dissolved TPH as gasoline removed data are approximate.
2. Density of Gasoline = 5.63 pounds per gallon.
3. Primary carbon loading is estimated using an isotherm of 8 percent by weight.

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

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

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

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

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) (continued)					
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
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
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

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)					
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

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

N

VIA MANZANAS

RESIDENTIAL

MW-20

POTRERO COURT

19.00

MW-19
(19.10)

VIA MAGDALENA

19.50

APARTMENTS

APARTMENTS

VIA ARRIBA

SHOPS

HESPERIAN BOULEVARD

RESTAURANT

21.50

CHURCH
AND SCHOOL

20.00

20.50

21.00

17200VM

MW-14
(20.91)

MW-24
(21.36)

RESIDENTIAL

MW-26
(21.41)

MW-18
(19.27)

17197VM

17203VM

MW-17
(20.10)

MW-21
(18.42)

VIA MEDIA

VIA FLORES

17302VM

17372VM

E-1A
(14.93)

MW-9
(21.63)

21.00

MW-25
(22.10)

MW-16
(19.93)

MW-10
(21.07)

MW-8
(21.51)

MW-5
(21.77)

MW-7
(22.08)

RESIDENTIAL

633H

MW-15
(20.46)

17349VM

17371VM

590H

ALLEY

MW-13
(21.78)

22.00

MW-22
(18.51)

17393VM

MW-11
(21.31)

RESIDENTIAL

VIA ENCINAS COURT

634H

642H

17348VM

SHOPS

MW-23
(19.13)

675H

RESIDENTIAL

VIA ALAMO

HACIENDA AVENUE

LEGEND

MW-7 — GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION

E-1A — GROUNDWATER EXTRACTION WELL LOCATION AND DESIGNATION

MW-20 — DESTROYED WELL LOCATION AND DESIGNATION

590H — DOMESTIC IRRIGATION WELL LOCATION AND DESIGNATION

(21.36) GROUNDWATER ELEVATION IN FEET - MSL, 3-28-94

21.00 GROUNDWATER ELEVATION CONTOUR IN FEET - MSL, 3-28-94

APPROXIMATE DIRECTION OF GROUNDWATER FLOW

APPROXIMATE GRADIENT = 0.008

PACIFIC ENVIRONMENTAL GROUP, INC.

APPROXIMATE SCALE

0 150 300 FEET

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

GROUNDWATER ELEVATION CONTOUR MAP

FIGURE: 1

PROJECT: 330-006.25

06/10/94

N

VIA MANZANAS

RESIDENTIAL

MW-20 ∅

POTRERO COURT

APARTMENTS

APARTMENTS

VIA ARRIBA

SHOPS

HESPERIAN BOULEVARD

RESTAURANT

MW-19 ND/ND

VIA MAGDALENA

CHURCH AND SCHOOL

ND/ND 17200VM

MW-14 ND/ND

MW-24 ND/ND

RESIDENTIAL

MW-21 ND/ND

VIA MEDIA

VIA FLORES

ND/ND MW-18 ND/ND

MW-17 ND/ND

MW-26 ND/ND

RESTAURANT

17197VM

17203VM ND/ND

MW-9 ND/ND

17302VM ND/ND

ND/ND 17372VM

120/4.8 E-1A

MW-25 ND/ND

MW-8 1,900/220

ALLEY

MW-5 1,400/30

MW-7 ND/ND

MW-16 ND/ND

NS 633H

MW-10 4,700/470

590H ND/ND

RESIDENTIAL

17349VM

420/ND

17371VM NS

MW-15 ND/ND

MW-11 ND/ND

MW-22 ND/ND

VIA ENCINAS COURT

17393VM

ND/ND

MW-13 ND/ND

SHOPS

ND/ND 17348VM

634H NS

642H ND/ND

HACIENDA AVENUE

RESIDENTIAL

MW-23 ND/ND

675H NS

VIA ALAMO

∅ – Wells that historically identified contaminants

✱ – Wells that insist on operating

LEGEND

MW-7 ◉ GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION

E-1A ✪ GROUNDWATER EXTRACTION WELL LOCATION AND DESIGNATION

MW-20 ∅ DESTROYED WELL LOCATION AND DESIGNATION

590H ■ DOMESTIC IRRIGATION WELL LOCATION AND DESIGNATION

120/48 TPH-g/BENZENE CONCENTRATION IN GROUNDWATER, IN PARTS PER BILLION, 3-28-94 to 3-30-94

ND NOT DETECTED

NS NOT SAMPLED

APPROXIMATE DIRECTION OF GROUNDWATER FLOW

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

06/10/94

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

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

Project: 330-006.25/0608, San Lorenzo

Enclosed are the results from 31 water samples received at Sequoia Analytical on March 31,1994. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
4CJ2401	Water, MW-5	3/30/94	EPA 5030/8015 Mod./8020
4CJ2402	Water, MW-7	3/30/94	EPA 5030/8015 Mod./8020
4CJ2403	Water, MW-8	3/29/94	EPA 5030/8015 Mod./8020
4CJ2404	Water, MW-9	3/29/94	EPA 5030/8015 Mod./8020
4CJ2405	Water, MW-10	3/29/94	EPA 5030/8015 Mod./8020
4CJ2406	Water, MW-11	3/29/94	EPA 5030/8015 Mod./8020
4CJ2407	Water, MW-13	3/30/94	EPA 5030/8015 Mod./8020
4CJ2408	Water, MW-14	3/29/94	EPA 5030/8015 Mod./8020
4CJ2409	Water, MW-15	3/29/94	EPA 5030/8015 Mod./8020
4CJ2410	Water, MW-16	3/28/94	EPA 5030/8015 Mod./8020
4CJ2411	Water, MW-17	3/29/94	EPA 5030/8015 Mod./8020
4CJ2412	Water, MW-18	3/28/94	EPA 5030/8015 Mod./8020
4CJ2413	Water, MW-19	3/28/94	EPA 5030/8015 Mod./8020
4CJ2414	Water, MW-21	3/28/94	EPA 5030/8015 Mod./8020
4CJ2415	Water, MW-22	3/28/94	EPA 5030/8015 Mod./8020
4CJ2416	Water, MW-23	3/28/94	EPA 5030/8015 Mod./8020
4CJ2417	Water, MW-24	3/29/94	EPA 5030/8015 Mod./8020
4CJ2418	Water, MW-25	3/29/94	EPA 5030/8015 Mod./8020
4CJ2419	Water, MW-26	3/29/94	EPA 5030/8015 Mod./8020
4CJ6901	Water, E1-A	3/28/94	EPA 5030/8015 Mod./8020
4CJ6902	Water, TB-1	3/28/94	EPA 5030/8015 Mod./8020

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SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
4CJ6903	Water, 590H	3/29/94	EPA 5030/8015 Mod./8020
4CJ6904	Water, 642H	3/30/94	EPA 5030/8015 Mod./8020
4CJ6905	Water, 17197VM	3/30/94	EPA 5030/8015 Mod./8020
4CJ6906	Water, 17200VM	3/29/94	EPA 5030/8015 Mod./8020
4CJ6907	Water, 17203VM	3/30/94	EPA 5030/8015 Mod./8020
4CJ6908	Water, 17302VM	3/30/94	EPA 5030/8015 Mod./8020
4CJ6909	Water, 17348VE	3/30/94	EPA 5030/8015 Mod./8020
4CJ6910	Water, 17349VM	3/30/94	EPA 5030/8015 Mod./8020
4CJ6911	Water, 17372VM	3/30/94	EPA 5030/8015 Mod./8020
4CJ6912	Water, 17393VM	3/30/94	EPA 5030/8015 Mod./8020

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

Very truly yours,

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Sequoia Analytical

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Pacific Environmental Group	Client Project ID:	330-006.25/0608, San Lorenzo	Sampled: Mar 29-30, 1994
2025 Gateway Place, Suite 440	Sample Matrix:	Water	Received: Mar 31, 1994
San Jose, CA 95110	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Apr 11, 1994
Attention: Maree Doden	First Sample #:	4CJ2401	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 4CJ2401 MW-5	Sample I.D. 4CJ2402 MW-7	Sample I.D. 4CJ2403 MW-8	Sample I.D. 4CJ2404 MW-9	Sample I.D. 4CJ2405 MW-10	Sample I.D. 4CJ2406 MW-11
Purgeable Hydrocarbons	50	1,400	N.D.	1,900	N.D.	4,700	N.D.
Benzene	0.50	30	N.D.	220	N.D.	470	N.D.
Toluene	0.50	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.50	N.D.	N.D.	N.D.	N.D.	29	N.D.
Total Xylenes	0.50	N.D.	N.D.	N.D.	N.D.	45	N.D.
Chromatogram Pattern:		Weathered gas	--	Gas	--	Gas	--

Quality Control Data

Report Limit Multiplication Factor:	10	1.0	20	1.0	20	1.0
Date Analyzed:	4/3/94	4/3/94	4/3/94	4/3/94	4/3/94	4/3/94
Instrument Identification:	GCHP-17	GCHP-3	GCHP-3	GCHP-3	GCHP-17	GCHP-3
Surrogate Recovery, %: (QC Limits = 70-130%)	87	81	77	82	101	83

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

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Sequoia Analytical

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Pacific Environmental Group	Client Project ID:	330-006.25/0608, San Lorenzo	Sampled: Mar 28-30, 1994
2025 Gateway Place, Suite 440	Sample Matrix:	Water	Received: Mar 31, 1994
San Jose, CA 95110	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Apr 11, 1994
Attention: Maree Doden	First Sample #:	4CJ2407	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 4CJ2407 MW-13	Sample I.D. 4CJ2408 MW-14	Sample I.D. 4CJ2409 MW-15	Sample I.D. 4CJ2410 MW-16	Sample I.D. 4CJ2411 MW-17	Sample I.D. 4CJ2412 MW-18
Purgeable Hydrocarbons	50	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Benzene	0.50	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Toluene	0.50	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.50	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Total Xylenes	0.50	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Chromatogram Pattern:		--	--	--	--	--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0	1.0
Date Analyzed:	4/3/94	4/3/94	4/3/94	4/3/94	4/3/94	4/3/94
Instrument Identification:	GCHP-3	GCHP-3	GCHP-2	GCHP-2	GCHP-2	GCHP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	82	81	85	91	83	85

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

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Sequoia Analytical

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

Pacific Environmental Group	Client Project ID:	330-006.25/0608, San Lorenzo	Sampled: Mar 28-29, 1994
2025 Gateway Place, Suite 440	Sample Matrix:	Water	Received: Mar 31, 1994
San Jose, CA 95110	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Apr 11, 1994
Attention: Maree Doden	First Sample #:	4CJ2413	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 4CJ2413 MW-19	Sample I.D. 4CJ2414 MW-21	Sample I.D. 4CJ2415 MW-22	Sample I.D. 4CJ2416 MW-23	Sample I.D. 4CJ2417 MW-24	Sample I.D. 4CJ2418 MW-25
Purgeable Hydrocarbons	50	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Benzene	0.50	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Toluene	0.50	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.50	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Total Xylenes	0.50	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Chromatogram Pattern:		--	--	--	--	--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0	1.0
Date Analyzed:	4/3/94	4/3/94	4/3/94	4/3/94	4/3/94	4/3/94
Instrument Identification:	GCHP-2	GCHP-2	GCHP-2	GCHP-2	GCHP-2	GCHP-17
Surrogate Recovery, %: (QC Limits = 70-130%)	94	78	87	86	83	98

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

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Sequoia Analytical

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

Pacific Environmental Group	Client Project ID:	330-006.25/0608, San Lorenzo
2025 Gateway Place, Suite 440	Sample Matrix:	Water
San Jose, CA 95110	Analysis Method:	EPA 5030/8015 Mod./8020
Attention: Maree Doden	First Sample #:	4CJ2419

Sampled: Mar 28-30, 1994
Received: Mar 31, 1994
Reported: Apr 11, 1994

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 4CJ2419 MW-26	Sample I.D. 4CJ6901 E1-A	Sample I.D. 4CJ6902 TB-1	Sample I.D. 4CJ6903 590H	Sample I.D. 4CJ6904 642H	Sample I.D. 4CJ6905 17197VM
Purgeable Hydrocarbons	50	N.D.	120	N.D.	N.D.	N.D.	N.D.
Benzene	0.50	N.D.	4.8	N.D.	N.D.	N.D.	N.D.
Toluene	0.50	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.50	N.D.	5.7	N.D.	N.D.	N.D.	N.D.
Total Xylenes	0.50	N.D.	4.1	N.D.	N.D.	N.D.	N.D.
Chromatogram Pattern:		--	Gas	--	--	--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0	1.0
Date Analyzed:	4/3/94	4/2/94	4/2/94	4/2/94	4/2/94	4/2/94
Instrument Identification:	GCHP-17	GCHP-2	GCHP-2	GCHP-2	GCHP-2	GCHP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	81	93	98	98	97	92

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

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

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	Client Project ID:	330-006.25/0608, San Lorenzo	Sampled: Mar 29-30, 1994
2025 Gateway Place, Suite 440	Sample Matrix:	Water	Received: Mar 31, 1994
San Jose, CA 95110	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Apr 11, 1994
Attention: Maree Doden	First Sample #:	4CJ6906	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 4CJ6906 17200VM	Sample I.D. 4CJ6907 17203VM	Sample I.D. 4CJ6908 17302VM	Sample I.D. 4CJ6909 17348VE	Sample I.D. 4CJ6910 17349VM	Sample I.D. 4CJ6911 17372VM
Purgeable Hydrocarbons	50	N.D.	N.D.	N.D.	N.D.	420	N.D.
Benzene	0.50	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Toluene	0.50	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.50	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Total Xylenes	0.50	N.D.	N.D.	N.D.	N.D.	5.3	N.D.
Chromatogram Pattern:		--	--	--	--	Gas	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	2.0	1.0
Date Analyzed:	4/2/94	4/2/94	4/3/94	4/3/94	4/3/94	4/3/94
Instrument Identification:	GCHP-2	GCHP-2	GCHP-3	GCHP-3	GCHP-17	GCHP-3
Surrogate Recovery, %: (QC Limits = 70-130%)	92	94	85	87	89	82

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

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Sequoia Analytical

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

Pacific Environmental Group	Client Project ID:	330-006.25/0608, San Lorenzo	Sampled: Mar 30, 1994
2025 Gateway Place, Suite 440	Sample Matrix:	Water	Received: Mar 31, 1994
San Jose, CA 95110	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Apr 11, 1994
Attention: Maree Doden	First Sample #:	4CJ6912	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 4CJ6912 17393VM
Purgeable Hydrocarbons	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Total Xylenes	0.50	N.D.
Chromatogram Pattern:		--

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Analyzed:	4/3/94
Instrument Identification:	GCHP-3
Surrogate Recovery, %: (QC Limits = 70-130%)	87

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

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

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: 330-006.25/0608, San Lorenzo
Matrix: Liquid
QC Sample Group: 4CJ2401-19, 4CJ6901-12

Reported: Apr 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#:	4CJ4303	4CJ4303	4CJ4303	4CJ4303
Date Prepared:	N.A.	N.A.	N.A.	N.A.
Date Analyzed:	4/2/94	4/2/94	4/2/94	4/2/94
Instrument I.D.#:	GCHP-2	GCHP-2	GCHP-2	GCHP-2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Matrix Spike % Recovery:	86	85	85	83
Matrix Spike Duplicate % Recovery:	94	92	92	93
Relative % Difference:	8.9	7.9	7.9	11
LCS Batch#:				
Date Prepared:				
Date Analyzed:				
Instrument I.D.#:				
LCS % Recovery:				
% Recovery Control Limits:	71-133	72-128	72-130	71-120

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

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.

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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
QC Sample Group: 4CJ2401-19, 4CJ6901-12
Reported: Apr 11, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab
MS/MSD Batch#:	4CJ6905	4CJ6905	4CJ6905	4CJ6905
Date Prepared:	-	-	-	-
Date Analyzed:	4/3/94	4/3/94	4/3/94	4/3/94
Instrument I.D.#:	GCHP-2	GCHP-2	GCHP-2	GCHP-2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Matrix Spike % Recovery:	96	96	96	93
Matrix Spike Duplicate % Recovery:	92	92	92	93
Relative % Difference:	4.3	4.3	4.3	0.0
LCS Batch#:				
Date Prepared:				
Date Analyzed:				
Instrument I.D.#:				
LCS % Recovery:				
% Recovery Control Limits:	71-133	72-128	72-130	71-120

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

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Please Note:
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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
QC Sample Group: 4CJ2401-19, 4CJ6901-12

Reported: Apr 11, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab
MS/MSD Batch#:	4CJ6906	4CJ6906	4CJ6906	4CJ6906
Date Prepared:	-	-	-	-
Date Analyzed:	4/3/94	4/3/94	4/3/94	4/3/94
Instrument I.D.#:	GCHP-3	GCHP-3	GCHP-3	GCHP-3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Matrix Spike % Recovery:	110	110	100	100
Matrix Spike Duplicate % Recovery:	110	100	100	103
Relative % Difference:	0.0	9.5	0.0	3.0

LCS Batch#:				
Date Prepared:				
Date Analyzed:				
Instrument I.D.#:				
LCS % Recovery:				
% Recovery Control Limits:	71-133	72-128	72-130	71-120

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

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Please Note:
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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
QC Sample Group: 4CJ2401-19, 4CJ6901-12
Reported: Apr 11, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab
MS/MSD Batch#:	4CJ6907	4CJ6907	4CJ6907	4CJ6907
Date Prepared:	-	-	-	-
Date Analyzed:	4/3/94	4/3/94	4/3/94	4/3/94
Instrument I.D.#:	GCHP-17	GCHP-17	GCHP-17	GCHP-17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Matrix Spike % Recovery:	89	89	90	90
Matrix Spike Duplicate % Recovery:	91	91	89	90
Relative % Difference:	2.2	2.2	1.1	0.0
LCS Batch#:				
Date Prepared:				
Date Analyzed:				
Instrument I.D.#:				
LCS % Recovery:				
% Recovery Control Limits:	71-133	72-128	72-130	71-120

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

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

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CLIENT NAME: Arco
REC. BY (PRINT): DW

MASTER LOG NO. / PAGE: 9403J24 9403J69
DATE OF LOG-IN: 4-1-94

CIRCLE THE APPROPRIATE RESPONSE

1. Custody Seal(s): Present / Absent — Intact / Broken*
2. Custody Seal Nos.:
3. Chain-of-Custody Records: Present / Absent*
4. Traffic Reports or Packing List: Present / Absent
5. Airbill: Airbill / Sticker — Present / Absent
6. Airbill No.:
7. Sample Tags: Present / Absent* — Sample Tag Nos.: Listed / Not Listed on Chain-of-Custody
8. Sample Condition: Intact/Broken*/Leaking*
9. Does information on custody reports, traffic reports and sample tags agree? Yes / No*
10. Proper Preservatives Used: Yes / No* 11.3°C
11. Date Rec. at Lab: 3/31/94
12. Time Rec. at Lab:

LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION (ETC)
			3-VOA	W	3/29	
01	A-L	MW-5	↓	↓	↓	
02		MW-7				
03		MW-8				
04		MW-9				
05		MW-10				
06		MW-11				
07		MW-13				
08		MW-14				
09		MW-15				
10		MW-16				
11		MW-17				
12		MW-18				
13		MW-19				
14		MW-21				
15		MW-22				
16		MW-23				
17		MW-24				
18		MW-25			↓	
19	↓	MW-26			3/28	
01		EB-1			3/28	
02	A-B	TB-1	↓	↓		

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

Form SC001

CLIENT NAME: Aco

REC. BY (PRINT): RW

MASTER LOG NO. / PAGE: 9403J24 and 9403J69

DATE OF LOG-IN: 4-1-94

CIRCLE THE APPROPRIATE RESPONSE

1. Custody Seal(s): Present / Absent; Intact / Broken*
2. Custody Seal Nos.:
3. Chain-of-Custody Records: Present / Absent*
4. Traffic Reports or Packing List: Present / Absent
5. Airbill: Airbill / Slicker; 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: 5/31/94
12. Time Rec. at Lab: 1120

LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION (ETC)
03	A-C	5904	3 VOA	W	5/27	
04		6428			5/30	
05		17197 VM			5/27	
06		17200 VM			5/27	
07		17203 VM			5/30	
08		17302 VM				
09		17345 VM				
10		17349 VM				
11		17372 VM				
12		17393 VM				

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

Page ___ of ___

Form SC001

Chain of Custody

ARCO Products Company ◆ 330-006.25
Division of AtlanticRichfieldCompany

Task Order No. 0608-93-5

ARCO Facility no. 0608	City (Facility) SAN LORENZO	Project manager (Consultant) KELLY BROWN	Laboratory name SEQUOIA
ARCO engineer CHUCK CARMEL	Telephone no. (ARCO)	Telephone no. (Consultant) 408-441-7500	Fax no. (Consultant) 408-441-7539	Contract number 07-073
Consultant name PACIFIC ENVIRONMENTAL GROUP INC	Address (Consultant) 2025 GATEWAY PL. Su. 440 S.J. CA. 95110		Method of shipment

Sample I.D.	Lab no.	Container no.	Matrix: Soil	Matrix: Water	Matrix: Other	Preservation: Ice	Preservation: Acid	Sampling date	Sampling time
MW-5		3		X		X	HCl	3-30-94	0800
MW-7								3-30-94	0885
MW-8								3-29-94	1500
MW-9									0830
MW-10									1410
MW-11									1430
MW-13								3-30-94	0910
MW-14								3-29-94	1335
MW-15								3-29-94	0910
MW-16								3-28-94	1540
MW-17								3-29-94	0945
MW-18								3-28-94	1511
MW-19									1440
MW-21									1350
MW-22									1322
MW-23		↓		↓		↓	↓	↓	1250

Sample I.D.	BTEX 602/EPA 8020	BTEX/TPH EPA M602/8020/8015	TPH Modified 8015 Gas ☐ Diesel ☐	Oil and Grease 413.1 ☐ 413.2 ☐	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Semi Metals ☐ VOA ☐ VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐		
MW-5		X											
MW-7		↓											
MW-23		↓											

Special detection Limit/reporting

Special QA/QC

Remarks

1 of 2

9403J69

Lab number 9403J24

Turnaround time

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

Condition of sample:

Temperature received:

	Date	Time
Relinquished by sampler	3-31-94	0915
Relinquished by	3/31/94	1000
Relinquished by	3/3	1120

Received by

Received by

Received by laboratory — Date 3/31/94 — Time 1120

ARCO Environmental Engineering: Pink copy — Consultant

ARCO Products Company Division of AtlanticRichfieldCompany — 330.006.25 Task Order No. 0608.98.5

Chain of Custody

ARCO Facility no. 0608	City (Facility) SAN LORENZO	Project manager (Consultant) KELLY BROWN	Laboratory name SEQUOIA
ARCO engineer CHUCK CARMEL	Telephone no. (ARCO)	Telephone no. (Consultant) 408 441 7500	Fax no. (Consultant) 408 441-7539
Consultant name PACIFIC ENVIRONMENTAL GROUP, INC.	Address (Consultant) 2025 GATEWAY PL Su. 440 S.J. CA 95110		Contract number

Sample I.D.	Lab no.	Container no.	Matrix: Soil	Matrix: Water	Matrix: Other	Preservation: Ice	Preservation: Acid	Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH Gas EPA M602/8020/8015	TPH Modified 8015 Gas ☐ Diesel ☐	Oil and Grease 413.1 ☐ 413.2 ☐	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals ☐ Semi VOA ☐ VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐		
MW-24		3		X		X	HCl	3/29/94	1110		X											
MW-25		↓		↓		↓	↓	↓	1210		↓											
MW-26		↓		↓		↓	↓	↓	1140		↓											
EI-A		↓		↓		↓	↓	3/28/94	1630		↓											
TB-1		2		↓		↓	↓	3/28/94	N.A.		↓											

Special detection Limit/reporting

Special QA/QC

Remarks

2 of 3

9403J69

Lab number 9403J24

Turnaround time

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

Condition of sample:

Temperature received:

	Date	Time		Date	Time
Relinquished by sampler	3-31-94	0915	Received by N Dodge	3/31/94	
Relinquished by N Dodge	3/31/94	1000	Received by C. Hunter	3/3/	1000
Relinquished by C. Hunter	3/3/	1120	Received by laboratory	3/31/94	1120

Copy to ARCO Environmental Engineering; Pink copy — Consultant

ARCO Products Company Division of AtlanticRichfieldCompany — 330-0062-5 — **Task Order No.** 0608-935

Chain of Custody

ARCO Facility no. 0608	City (Facility) SAN LORENZO	Project manager (Consultant) KELLY BROWN	Laboratory name SEQUOIA
ARCO engineer CHUCK CARMEL	Telephone no. (ARCO)	Telephone no. (Consultant) 408 441 7500	Fax no. (Consultant) 408 441 7539	Contract number 07-073
Consultant name PACIFIC ENVIRONMENTAL GROUP INC.	Address (Consultant) 7025 GATEWAY PL. STE 440 S.J CA. 95110		Method of shipment

Sample I.D.	Lab no.	Container no.	Matrix: Soil	Water	Other	Preservation: Ice	Acid	Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA M602/8020/8015 GAS	TPH Modified 8015 Gas ☐ Diesel ☐	Oil and Grease 413.1 ☐ 413.2 ☐	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals ☐ Semi VOA ☐ VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐
590H		3		X		X	HCl	3-29-94	1230		X									
642H								3-30-94	1325											
17197 VM								3-30-94	1130											
17200 VM								3-29-94	0945											
17203 VM								3-30-94	1150											
17302 VM									1205											
* 17348 VE									1115											
17349 VM									1220											
17372 VM									1300											
17373 VM									1240											

Special detection Limit/reporting

Special QA/QC

Remarks
* 17348 V.E.
3 of 3
9403J69

Lab number 9403524

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

Condition of sample:		Temperature received:	
Relinquished by sampler	Date 3-31-94 Time 0915	Received by	
Relinquished by	Date 3/3/94 Time 1000	Received by	
Relinquished by	Date 3/31 Time 1120	Received by laboratory	Date 3/31/94 Time 1120

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

ARCO Products Company

Division of AtlanticRichfieldCompany

330-606-25

Task Order No. 0608-93-5

Chain of Custody

ARCO Facility no. 0608	City (Facility) SAN LORENZO	Project manager (Consultant) KELLY BROWN	Laboratory name SEQUOIA
ARCO engineer CHUCK CARMEL	Telephone no. (ARCO)	Telephone no. (Consultant) 408-441-7500	Fax no. (Consultant) 408-441-7539
Consultant name PACIFIC ENVIRONMENTAL GROUP INC	Address (Consultant) 2025 GATEWAY PL. 911 440 S.J. CA. 95110		Contract number

Sample I.D.	Lab no.	Container no.	Matrix: Soil	Matrix: Water	Matrix: Other	Preservation: Ice	Preservation: Acid	Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA M602/8020/8015	TPH Modified 8015 Gas ☐ Diesel ☐	Oil and Grease 413.1 ☐ 413.2 ☐	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals ☐ Semi VOA ☐ VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐	
MW-5		3		X		X	HCl	3-30-94	0800		X										
MW-7								3-30-94	0835												
MW-8								3-29-94	1500												
MW-9									0830												
MW-10									1410												
MW-11									1430												
MW-13								3-30-94	0910												
MW-14								3-29-94	1335												
MW-15								3-29-94	0910												
MW-16								3-28-94	1540												
MW-17								3-29-94	0945												
MW-18								3-28-94	1511												
MW-19									1490												
MW-21									1350												
MW-22									1322												
MW-23									1250												

Method of shipment

Special detection Limit/reporting

Special QA/QC

Remarks

1 OF 3

Lab number

Turnaround time

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

Condition of sample:

Temperature received:

	Date	Time	Received by	Date	Time
Relinquished by sampler	3-31-94	0915			
Relinquished by	3/31/94	1000	Received by		
Relinquished by	Date	Time	Received by laboratory	Date	Time

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

ARCO Products Company ◆ Division of AtlanticRichfieldCompany — 330.006.25 **Task Order No.** 0608-93-5 — **Chain of Custody**

ARCO Facility no. 0608	City (Facility) SAN LORENZO	Project manager (Consultant) KELLY BROWN	Laboratory name SEQUOIA
ARCO engineer CHUCK CARMEL	Telephone no. (ARCO)	Telephone no. (Consultant) 408 441 7500	Fax no. (Consultant) 408 441-7539
Consultant name PACIFIC ENVIRONMENTAL GROUP, INC.	Address (Consultant) 2025 GATEWAY PL. Ste. 440 S.J. CA 95110		Contract number

Sample I.D.	Lab no.	Container no.	Matrix: Soil	Matrix: Water	Matrix: Other	Preservation: Ice	Preservation: Acid	Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA M602/8020/8015	TPH Modified 8015 Gas ☐ Diesel ☐	Oil and Grease 413.1 ☐ 413.2 ☐	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals ☐ VOA ☐ Semi VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐		
1 MW-24	✓	3		X		X	HCl	3-29-94	1110		X											
2 MW-25	✓	↓		↓		↓	↓	↓	1210		↓											
3 MW-26	✓	↓		↓		↓	↓	↓	1140		↓											
4 E1-A		↓		↓		↓	↓	3-29-94	1630		↓											
5 TB-1	✓	2		↓		↓	↓	3-29-94	N.A.		↓											

Special detection Limit/reporting

Special QA/QC

Remarks

2 of 3

Lab number

Turnaround time

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

Condition of sample:

Temperature received:

	Date	Time		Date	Time
Relinquished by sampler	3-31-94	0915	Received by	3/31/94	
Relinquished by	3/31/94	1000	Received by	3/31/94	1000
Relinquished by	Date	Time	Received by laboratory	Date	Time

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

ARCO Products Company Division of AtlanticRichfieldCompany — **Chain of Custody**

Task Order No. 0608-935

ARCO Facility no. 0608	City (Facility) SAN LORENZO	Project manager (Consultant) KELLY BROWN	Laboratory name SEQUOIA
ARCO engineer CHUCK CARMEL	Telephone no. (ARCO)	Telephone no. (Consultant) 408 4417500	Fax no. (Consultant) 408 4417539
Consultant name PACIFIC ENVIRONMENTAL GROUP		Address (Consultant) 2025 GATEWAY PL. SU. 440 S.J. CA. 95110	Contract number

Method of shipment

Special detection Limit/reporting

Special QA/QC

Remarks

*17348 V.E.

3 of 3

Lab number

Turnaround time

Priority Rush 1 Business Day ☐

Rush 2 Business Days ☐

Expedited 5 Business Days ☐

Standard 10 Business Days ☑

Sample I.D.	Lab no.	Container no.	Matrix: Soil	Matrix: Water	Matrix: Other	Preservation: Ice	Preservation: Acid	Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA M602/8020/8015	TPH Modified 8015 Gas ☐ Diesel ☐	Oil and Grease 413.1 ☐ 413.2 ☐	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals ☐ Semi VOA ☐ VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐
590H		3		X		X	HCl	3-29-94	1230		X									
642H								3-30-94	1325											
17197 VM								3-30-94	1130											
17200 VM								3-29-94	0945											
17203 VM								3-30-94	1150											
17302 VM									1205											
17345									1115											
17347 VM									1220											
17372 VM									1300											
17393 VM									1240											

Condition of sample:

Temperature received:

Relinquished by sampler	Date 3-31-94	Time 0915	Received by
Relinquished by	Date 3/31/94	Time 1000	Received by
Relinquished by	Date	Time	Received by laboratory — Date — Time

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

FILE COPY

WELL SAMPLING REQUEST

SITE INFORMATION FORM

Identification

Project # 330-006.25
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

Project Type

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

Ideal field date(s):

Prefield Contacts/Permits

- ☐ Cal Trans
- ☑ County 48 HRS. 510-670-5480
- ☐ City ARCO DIST. MGR.
- ☐ Private CALVARY LUTH. CHURCH 510-278-2555
- ☐ Multi-Consultant Scheduling
  Date(s):

Purge Water Containment:

- ☐ Drums
- ☑ Treatment System USE IN LINE FILTER
- ☐ Other Describe:

Field Tasks

- ☑ H_2O levels ALL WELLS
- ☑ H_2O Sampling MW-5, 7-11, 13-23
  EI-A (O&M INFL SAMPLE)
  MW-24 & MW-26, MW-25
- ☐ Well Development
- ☑ Other: GO TO CHURCH OFFICE FOR KEY FOR SCHOOL WELL

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

Site Safety

Wells	Concerns
OFFSITE WELLS	

- ☐ Flash Safety
- ☐ Flagman
- ☐ Cones
- ☐ Barricades
- ☐ No Turn/Lane Closed sign

Other:

Activities occuring on site
(ie; remedial system construction, ongoing projects, etc.)

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

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

590 - SAMPLED BY C.C. Per S.P. on 3/29/94 @ 1250
CHURCH WELL SAMPLED BY C.C. Per S.P. on 3/29/94 @ 0945
~½ hr. used to tfr. Purge water every 75 gals. ALSO on 3-30-94 C42, 17197, 17203, 17302, 17348, 17349, 17372, 17393 sampled by C Per S.P.

Budgeted hours:
Actual hours; On-Site: 19 + 3 hrs for Domestic wells
Mob-de-Mob: 7 + .5 for Domestic wells

☑ All Wells secured

Completed by: CC Date: 3-30-94

PACIFIC ENVIRONMENTAL GROUP, INC.

Checked by: PITS Update:

WELL SAMPLING REQUEST

SAMPLING PROTOCOL

Project No.	Project Name	Project Manager	Approval	Date/s	Prepared by:
330-006.25	HESPERIAN BLVD.	K.B.		Q3	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 / Health & Safety Concerns
MW-5				GAS/B.T.E.X.	DRY	14	4		
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 ½	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.L.

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 / Health & Safety Concerns
MW-17				GAS/BTEX	12	24	3		
MW-18					12	21½	3		
MW-19					14	21½	3		
MW-20					14	21½	3		
MW-21					14	22	3		
MW-22					13	21½	3		
MW-23					12	22	3		
E1-A						25	6		INFL. W/03M MONTHLY
MW-24						20	2		
MW-25						20½	2		
MW-26						20	2		

FIELD REPORT

EPTH TO WATER/SEPARATE-PHASE HYDROCARBON SURVEY

PROJECT No. : 330-006.25 LOCATION: 17601 HESPERIAN DATE: 3-28-94

CLIENT/STATION NO. : ARCO/0608 FIELD TECHNICIAN: [signature] DAY OF WEEK: MONDAY

PROBE TYPE/ID No.
- [X] Oil/Water IF/ ORS
- [ ] H_2O level indicator
- [ ] Other:

Dtw Order	Well ID	Time	Surface Seal	Lid Secure	Gasket	Lock	Expanding Cap	Total Depth (feet)	First Depth to Water (feet) TOB/TOC	Second Depth to Water (feet) TOB/TOC	SEPARATE-PHASE HYDROCARBONS (SPH): SPH Depth (feet) TOB/TOC	SPH Thickness (feet)	COLOR: Fresh	Weathered	Gas	Oil	VISCOSITY: Lite	Medium	Heavy	LIQUID REMOVED (gallons): SPH / H_2O
13	MW5	1110	✓	✓		✓	✓	14.05	12.22	12.22										
15	MW7	1120	✓	✓		✓	✓	18.98	12.32	12.32										
12	MW8	1105	✓	✓		✓	✓	21.78	11.28	11.28										
18	MW9	1140	✓	✓		✓	✓	18.77	10.48	10.48										
8	MW10	1040	✓	✓		✓	✓	23.11	10.60	10.60										
9	MW11	1045	✓	✓		✓	✓	19.26	11.23	11.23										
14	MW3	1115	✓	✓		✓	✓	23.49	13.64	13.64										
7	MW4	1035	✓	✓		✓	✓	23.21	9.55	9.55										
17	MW15	1135	✓	✓		✓	✓	23.65	10.95	10.95										

Comments:

FIELD REPORT

EPTH TO WATER/SEPARATE-PHASE HYDROCARBON SURVEY

PROJECT No.: 330-006.25 LOCATION: 1760 HESPERIAN BLVD DATE: 3-28-94

CLIENT/STATION NO.: ARCO/0608 FIELD TECHNICIAN: [illegible] DAY OF WEEK: MONDAY

PROBE TYPE/ID No.
- [X] Oil/Water IF/ 0125
- [ ] H_2O level indicator
- [ ] Other:

Dtw Order	Well ID	Time	Surface Seal	Lid Secure	Gasket	Lock	Expanding Cap	Total Depth (feet)	First Depth to Water (feet) TOB/TOC	Second Depth to Water (feet) TOB/TOC	SEPARATE-PHASE HYDROCARBONS (SPH): SPH Depth (feet) TOB/TOC	SPH Thickness (feet)	COLOR: Fresh	Weathered	Gas	Oil	VISCOSITY: Lite	Medium	Heavy	LIQUID REMOVED (gallons): SPH / H_2O
6	MW-16	1030	✓	✓		✓	✓	22.62	11.46	11.46										
19	MW-17	1147	✓	✓		✓	✓	23.65	12.33	12.33										
5	MW-18	1025	✓	✓		✓	✓	21.80	10.43	10.43										
4	MW-19	1030	✓	✓		✓	✓	21.68	9.92	9.92										
~	MW-20	~	~	~	~	~	~	~	~	~	~	~								
3	MW-21	1015	✓	✓		✓	✓	22.98	10.30	10.30										
2	MW-22	1010	✓	✓		✓	✓	21.79	10.78	10.78										
1	MW-23	1000	✓	✓		✓	✓	22.01	11.86	11.86										
16	EI-A	1125	✓	✓				/	18.13	18.13										

Comments: MW-20 IS ABANDONED

FIELD REPORT

EPTH TO WATER/SEPARATE-PHASE HYDROCARBON SURVEY

PROJECT No. : 330-006.25 LOCATION: 17601 HESPERIAN BLVD DATE: 3-28-94

CLIENT/STATION NO. : ARCO 0608 FIELD TECHNICIAN: CL DAY OF WEEK: MONDAY

PROBE TYPE/ID No.
- [X] Oil/Water IF/ ORS
- [ ] H_2O level indicator
- [ ] Other:

Dtw Order	Well ID	Time	Surface Seal	Lid Secure	Gasket	Lock	Expanding Cap	Total Depth (feet)	First Depth to Water (feet) TOB/TOC	Second Depth to Water (feet) TOB/TOC	SEPARATE-PHASE HYDROCARBONS (SPH) SPH Depth (feet) TOB/TOC	SPH Thickness (feet)	COLOR: Fresh	COLOR: Weathered	COLOR: Gas	COLOR: Oil	VISCOSITY: Lite	VISCOSITY: Medium	VISCOSITY: Heavy	LIQUID REMOVED (gallons) SPH / H_2O
10	mw24	1050	✓	✓	✓	✓	✓	19.99	13.02	13.02										
11	mw26	1100	✓	✓	✓	✓	✓	19.80	12.30	12.30										
20	CHURCH WELL	1150	✓	✓					12.14 (TOC)	12.14 (TOC)										
21	mw25	1200	✓	✓		✓	✓	21.45	12.02	12.02										

Comments: CURCH WELL SAMPLED AT 0945 3/29/94 CL per S.P.
590 SAMPLED @ 1230 3/29/94 CL per S.P.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 1760 HESPERIAN BLVD WELL ID #: MW-5

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

WELL INFORMATION

Depth to Liquid: / TOB / TOC
Depth to water: 12.22 TOB / TOC
Total depth: 14.05 TOB / TOC
Date: 3-28-94 Time (2400): 1110

Probe Type and I.D. #
- [x] Oil/Water interface ORS
- [ ] Electronic Indicator
- [ ] Other;

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

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

TD 14.05 - DTW 12.22 = 1.83 x Gal/Linear Foot 0.66 = 1.21 x Number of Casings 5 = Calculated Purge 6.05

DATE PURGED: 3-29-94 START: 1535 END (2400 hr): 1538 PURGED BY: CL

DATE SAMPLED: 3-30-94 START: 0750 END (2400 hr): 0810 SAMPLED BY: M

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
1538	1.25	6.74	1297	65.4	CLR.	TRC.	MOD.

Pumped dry (Yes) / No

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: 12.95 (TOB)/TOC 7.40 | 1467 | 66.3 | CLR. | TRC. | MOD.

PURGING EQUIPMENT/I.D. #
- [x] Bailer: PVC
- [ ] Airlift Pump:
- [ ] Centrifugal Pump:
- [ ] Dedicated:
- [ ] Other:

SAMPLING EQUIPMENT/I.D. #
- [x] Bailer: DSP
- [ ] Dedicated:
- [ ] Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-5	3-30-94	0800	3	40ml	VOA	HCl	GAS/BTEX

REMARKS:

SIGNATURE: Chris Clanton

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-7

CLIENT/STATION No.: ARCO / 0608 FIELD TECHNICIAN: [illegible]

WELL INFORMATION

Depth to Liquid: 6 TOB / TOC
Depth to water: 12.32 TOB / TOC
Total depth: 18.98 TOB / TOC
Date: 3.28.94 Time (2400): 1120

Probe Type and I.D. #
- [x] Oil/Water interface ORS
- [ ] Electronic indicator
- [ ] Other;

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

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

TD 18.98 - DTW 12.32 = 6.66 x Gal/Linear Foot 0.38 = 2.54 x Number of Casings 5 = Calculated Purge 12.70

DATE PURGED: 3-30-94 START: 0815 END (2400 hr): 0826 PURGED BY: [illegible]

DATE SAMPLED: " START: 0826 END (2400 hr): 0835 SAMPLED BY: "

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
0819	4.25	7.04	1,259	65.9	CLR.	TRC.	NONE
0822	8.5	7.01	1,115	65.4	"	"	"
0826	12.75	6.98	1,220	65.8	"	"	"

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

Pumped dry Yes (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: ____ TOB/TOC ____

PURGING EQUIPMENT/I.D. #
- [x] Bailer: PVC
- [ ] Airlift Pump:
- [ ] Centrifugal Pump:
- [ ] Dedicated:
- [ ] Other:

SAMPLING EQUIPMENT/I.D. #
- [x] Bailer: BT.
- [ ] Dedicated:
- [ ] Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-7	3-30-94	0835	3	40ml	VOA	HCl	GAS/BTEX

REMARKS:

SIGNATURE: [signature]

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA. WELL ID #: MW-8

CLIENT/STATION No.: ARCO / 0608 FIELD TECHNICIAN: [illegible]

WELL INFORMATION

Depth to Liquid: / TOB / TOC
Depth to water: 11.28 TOB / TOC
Total depth: 21.78 TOB / TOC
Date: 3-28-94 Time (2400):

Probe Type and I.D. #
- [x] Oil/Water interface ORS
- [ ] Electronic indicator
- [ ] Other;

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

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

TD 21.78 - DTW 11.28 = 10.5 x Gal/Linear Foot .038 = 3.99 x Number of Casings 5 = Calculated Purge 20

DATE PURGED: 3-29-94 START: 1440 END (2400 hr): 1455 PURGED BY: [illegible]

DATE SAMPLED: " START: 1455 END (2400 hr): 1500 SAMPLED BY: "

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
1445	6.75	6.92	956	64.8	CLR.	TRC	NONE
1450	13.5	6.90	898	65.0	"	"	"
1455	20	6.81	842	65.3	"	"	"

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

Pumped dry Yes / (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: TOB/TOC

PURGING EQUIPMENT/I.D. #
- [x] Bailer: PVC
- [ ] Airlift Pump:
- [ ] Centrifugal Pump:
- [ ] Dedicated:
- [ ] Other:

SAMPLING EQUIPMENT/I.D. #
- [x] Bailer: 13-60
- [ ] Dedicated:
- [ ] Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-8	3-29-94	1500	3	40ml	VOA	HCl	GAS/BTEX

REMARKS:

SIGNATURE: [illegible]

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-9

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

WELL INFORMATION

Depth to Liquid: / TOB / TOC
Depth to water: 10.48 TOB / TOC
Total depth: 18.77 TOB / TOC
Date: 3-28-94 Time (2400): 1140

Probe Type and I.D. #
- [x] Oil/Water interface ORS
- [ ] Electronic indicator
- [ ] Other;

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

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

TD 18.77 - DTW 10.48 = 8.29 x Gal/Linear Foot 0.38 = 3.14 x Number of Casings 5 = Calculated Purge 15.8

DATE PURGED: 3-29-94 START: 0850 END (2400 hr): 0818 PURGED BY: CO

DATE SAMPLED: " START: 0818 END (2400 hr): 0830 SAMPLED BY: U

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
0806	5.5	7.47	1,024	62.4	CLR	TRC	NONE
0812	11	7.25	1,054	64.1	"	"	"
0818	16	7.10	1073	64.6	"	"	"

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

Pumped dry Yes (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: ____ TOB/TOC

PURGING EQUIPMENT/I.D. #
- [x] Bailer: PVC
- [ ] Airlift Pump:
- [ ] Centrifugal Pump:
- [ ] Dedicated:
- [ ] Other:

SAMPLING EQUIPMENT/I.D. #
- [x] Bailer: 13-7
- [ ] Dedicated:
- [ ] Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-9	3-29-94	0830	3	40ml	VOA	HCl	GAS/BTEX

REMARKS:

SIGNATURE: Chris Wallin

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 1760 HESPERIAN BLVD SAN LORENZO CA. WELL ID #: MW-10

CLIENT/STATION No.: ARCO / 0608 FIELD TECHNICIAN: [illegible]

WELL INFORMATION

Depth to Liquid: / TOB / TOC
Depth to water: 10.60 TOB / TOC
Total depth: 23.11 TOB / TOC
Date: 3-28-94 Time (2400): 1040

Probe Type and I.D. #
- [x] Oil/Water interface ORS
- [ ] Electronic indicator
- [ ] Other;

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

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

TD 23.11 - DTW 10.60 = 12.51 x Gal/Linear Foot 0.38 = 4.76 x Number of Casings 5 = Calculated Purge 23.8

DATE PURGED: 3-29-94 START: 1342 END (2400 hr): 1400 PURGED BY: [illegible]

DATE SAMPLED: " START: 1400 END (2400 hr): 1410 SAMPLED BY: "

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
1348	9	7.11	605	64.1	CLR	TRC	NONE
1354	16	7.08	1,091	64.5	"	"	"
1400	24	7.02	1,110	64.4	"	"	"

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

Pumped dry Yes / (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: ____ TOB/TOC

PURGING EQUIPMENT/I.D. #
- [x] Bailer: PVC
- [ ] Airlift Pump:
- [ ] Centrifugal Pump:
- [ ] Dedicated:
- [ ] Other:

SAMPLING EQUIPMENT/I.D. #
- [x] Bailer: 13-2
- [ ] Dedicated:
- [ ] Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW10	3-29-94	1410	3	40ml	VOA	HCl	GAS/BTEX

REMARKS:

SIGNATURE: [illegible]

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-11

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

WELL INFORMATION

Depth to Liquid: / TOB / TOC
Depth to water: 11.23 TOB / TOC
Total depth: 19.26 TOB / TOC
Date: 3-28-94 Time (2400): 1045

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

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

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

TD 19.26 DTW 11.23 = 8.03 x Gal/Linear Foot 0.38 = 3.06 x Number of Casings 5 = Calculated Purge 15.3

DATE PURGED: 3-29-94 START: 1410 END (2400 hr): 1422 PURGED BY: CO

DATE SAMPLED: " START: 1422 END (2400 hr): 1430 SAMPLED BY: "

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
1414	5.25	6.87	958	64.5	CLR.	TRC.	NONE
1418	10.5	"	1000	64.2	"	"	"
1422	15.5	6.86	1003	64.1	"	"	"

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

Pumped dry Yes / (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: ____ TOB/TOC

PURGING EQUIPMENT/I.D. #
- [x] Bailer: PVC
- [ ] Airlift Pump:
- [ ] Centrifugal Pump:
- [ ] Dedicated:
- [ ] Other:

SAMPLING EQUIPMENT/I.D. #
- [x] Bailer: B-5
- [ ] Dedicated:
- [ ] Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-11	3-29-94	1430	3	40ml	VOA	HCl	GAS/BTEX

REMARKS:

SIGNATURE: Chris Chatham

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-13

CLIENT/STATION No.: ARCO / 0608 FIELD TECHNICIAN: [illegible]

WELL INFORMATION

Depth to Liquid: ____ TOB ____ TOC
Depth to water: 13.64 TOB ____ TOC
Total depth: 23.49 TOB ____ TOC
Date: 3-28-94 Time (2400): 1115

Probe Type and I.D. #
- [x] Oil/Water interface ORS
- [ ] Electronic indicator ____
- [ ] Other; ____

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

SAMPLE TYPE
- [x] Groundwater
- [ ] Duplicate
- [ ] Extraction well
- [ ] Trip blank
- [ ] Field blank
- [ ] Equipment blank
- [ ] Other; ____

TD 23.49 - DTW 13.64 = 9.85 x Gal/Linear Foot 0.38 = 3.75 x Number of Casings 5 = Calculated Purge 18.75

DATE PURGED: 3-30-94 START: 0845 END (2400 hr): 0901 PURGED BY: [illegible]

DATE SAMPLED: " START: 0900 END (2400 hr): 0910 SAMPLED BY: "

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
0855	6.25	7.01	1,314	66.2	CLR	TRC	NONE
~~0085~~ 0900	12.5	"	1,317	66.5	"	"	"
0901	18.75	7.03	1,319	66.6	"	"	"

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

Pumped dry Yes / (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: ____ TOB/TOC ____

PURGING EQUIPMENT/I.D. #
- [x] Bailer: PVC
- [ ] Airlift Pump: ____
- [ ] Centrifugal Pump: ____
- [ ] Dedicated: ____
- [ ] Other: ____

SAMPLING EQUIPMENT/I.D. #
- [x] Bailer: 13-8
- [ ] Dedicated: ____
- [ ] Other: ____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-13	3-30-94	0910	3	40ml	VOA	HCl	GAS/BTEX

REMARKS: ____

SIGNATURE: [signature]

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

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

CLIENT/STATION No.: ARCO/0608 FIELD TECHNICIAN: [illegible]

WELL INFORMATION

Depth to Liquid: / TOB / TOC
Depth to water: 9.55 TOB / TOC
Total depth: 23.21 TOB / TOC
Date: 3-26-94 Time (2400): 1035

Probe Type and I.D. #
- [x] Oil/Water interface ORS
- [ ] Electronic indicator
- [ ] Other;

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

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

TD 23.21 - DTW 9.55 = 13.66 x Gal/Linear Foot .038 = 5.2 x Number of Casings 5 = Calculated Purge 26

DATE PURGED: 3-29-94 START: 1310 END (2400 hr): 1324 PURGED BY: [illegible]

DATE SAMPLED: " START: 1324 END (2400 hr): 1335 SAMPLED BY: "

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
1316	8.75	6.90	627	66.3	CLR.	TRC.	NONE
1320	17.5	6.91	558	65.8	"	"	"
1324	26	"	505	65.3	CLDY	LT.	"

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

Pumped dry Yes / (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: ____ TOB/TOC ____

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

SAMPLING EQUIPMENT/I.D. #
- [x] Bailer: B-3
- [ ] Dedicated:
- [ ] Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-14	3-29-94	1335	3	40ml	VOA	HCl	GAS/BTEX

REMARKS:

SIGNATURE: [illegible]

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-15

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

WELL INFORMATION

Depth to Liquid: ____ TOB ____ TOC
Depth to water: 10.95 TOB ____ TOC
Total depth: 23.65 TOB ____ TOC
Date: 3-28-94 Time (2400): 1135

Probe Type and I.D. #
- [x] Oil/Water interface ORS
- [ ] Electronic indicator ____
- [ ] Other: ____

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

SAMPLE TYPE
- [x] Groundwater
- [ ] Duplicate
- [ ] Extraction well
- [ ] Trip blank
- [ ] Field blank
- [ ] Equipment blank
- [ ] Other: ____

TD 23.65 - DTW 10.95 = 12.7 x Gal/Linear Foot 038 = 4.83 x Number of Casings 5 = Calculated Purge 24.15

DATE PURGED: 3-29-94 START: 0845 END (2400 hr): 0905 PURGED BY: CQ

DATE SAMPLED: " START: 0905 END (2400 hr): 0910 SAMPLED BY: "

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
0852	8.25	6.96	1059	63.5	CLR	0	NONE
0858	16.5	6.93	1071	63.5	"	"	"
0905	24.25	6.90	1086	63.3	"	"	"

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

Pumped dry Yes / (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: ____ TOB/TOC ____

PURGING EQUIPMENT/I.D. #
- [x] Bailer: PVC
- [ ] Airlift Pump: ____
- [ ] Centrifugal Pump: ____
- [ ] Dedicated: ____
- [ ] Other: ____

SAMPLING EQUIPMENT/I.D. #
- [x] Bailer: 13-8
- [ ] Dedicated: ____
- [ ] Other: ____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-15	3-24-94	0910	3	40ml	VOA	HCl	GAS/BTEX

REMARKS: ____

SIGNATURE: Chris Charles

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 1760 HESPERIAN BLVD SAN LORENZO CA. WELL ID #: MW-16

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

WELL INFORMATION

Depth to Liquid: / TOB / TOC
Depth to water: 11.46 TOB / TOC
Total depth: 22.62 TOB / TOC
Date: 3-28-94 Time (2400): 1030

Probe Type and I.D. #
- [x] Oil/Water interface ORS
- [ ] Electronic indicator
- [ ] Other;

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

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

TD 22.62 - DTW 11.46 = 11.16 x Gal/Linear Foot 0.38 = 4.25 x Number of Casings 5 = Calculated Purge 21.25

DATE PURGED: 3-28-94 START: 1520 END (2400 hr): 1535 PURGED BY: CL

DATE SAMPLED: " START: 1535 END (2400 hr): 1540 SAMPLED BY: "

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
1525	7.25	7.17	1030	64.5	CLR	TRC	NONE
1530	14.5	7.06	1041	64.6	"	LT.	"
1535	21.25	7.08	1046	64.9	"	"	"

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

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: TOB/TOC

PURGING EQUIPMENT/I.D. #
- [x] Bailer: PVC
- [ ] Airlift Pump:
- [ ] Centrifugal Pump:
- [ ] Dedicated:
- [ ] Other:

SAMPLING EQUIPMENT/I.D. #
- [x] Bailer: B-6
- [ ] Dedicated:
- [ ] Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW16	3-28-94	1540	3	40ml	VOA	HCl	624/BTEX

REMARKS:

SIGNATURE:

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA. WELL ID #: MW-17

CLIENT/STATION No.: ARCO / 0608 FIELD TECHNICIAN: [illegible]

WELL INFORMATION

Depth to Liquid: / TOB / TOC
Depth to water: 12.33 TOB / TOC
Total depth: 23.65 TOB / TOC
Date: 3-28-94 Time (2400): 1147

Probe Type and I.D. #
- [x] Oil/Water interface ORS
- [ ] Electronic indicator
- [ ] Other;

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

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

TD 23.65 - DTW 12.33 = 11.32 x Gal/Linear Foot 0.38 = 4.31 x Number of Casings 5 = Calculated Purge 21.55

DATE PURGED: 3-29-94 START: 0920 END (2400 hr): 0937 PURGED BY: [illegible]

DATE SAMPLED: " START: 0937 END (2400 hr): 0945 SAMPLED BY: M

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
0926	7.25	6.86	992	60.3	CLR.	TRC.	NONE
0932	14.5	6.88	697	60.4	"	"	"
0937	21.75	"	623	60.7	"	"	"

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

Pumped dry Yes / (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: TOB/TOC

PURGING EQUIPMENT/I.D. #
- [x] Bailer: PVC
- [ ] Airlift Pump:
- [ ] Centrifugal Pump:
- [ ] Dedicated:
- [ ] Other:

SAMPLING EQUIPMENT/I.D. #
- [x] Bailer: B-9
- [ ] Dedicated:
- [ ] Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-17	3-29-94	0945	3	40ml	VOA	HCl	GAS/BTEX

REMARKS:

SIGNATURE: [signature]

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 1760 HESPERIAN BLVD SAN LORENZO CA. WELL ID #: MW-18

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

WELL INFORMATION

Depth to Liquid: / TOB / TOC
Depth to water: 10.43 TOB / TOC
Total depth: 21.80 TOB / TOC
Date: 3-28-94 Time (2400): 1025

Probe Type and I.D. #
- [x] Oil/Water interface ORS
- [ ] Electronic indicator
- [ ] Other;

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

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

TD 21.8 - DTW 10.43 = 11.37 x Gal/Linear Foot .38 = 4.33 x Number of Casings 5 = Calculated Purge 21.65

DATE PURGED: 3-28-94 START: 1450 END (2400 hr): 1506 PURGED BY: CL

DATE SAMPLED: " START: 1506 END (2400 hr): 1511 SAMPLED BY: "

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
1456	7.25	7.08	1094	65.1	CLR	TRC	None
1501	14.5	7.02	1021	"	"	"	"
1506	21.75	"	1019	65.0	"	"	"

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

Pumped dry Yes / (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: ____ TOB/TOC ____

PURGING EQUIPMENT/I.D. #
- [x] Bailer: PVC
- [ ] Airlift Pump:
- [ ] Centrifugal Pump:
- [ ] Dedicated:
- [ ] Other:

SAMPLING EQUIPMENT/I.D. #
- [x] Bailer: 13-5
- [ ] Dedicated:
- [ ] Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-18	3-28-94	1511	3	40ml	VOA	HCl	GAS/BTEX

REMARKS:

SIGNATURE:

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA. WELL ID #: MW-19

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

WELL INFORMATION

Depth to Liquid: / TOB / TOC
Depth to water: 9.92 TOB / TOC
Total depth: 21.68 TOB / TOC
Date: 3-28-94 Time (2400): 1020

Probe Type and I.D. #
- [x] Oil/Water interface ORS
- [ ] Electronic indicator
- [ ] Other;

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

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

TD 21.68 - DTW 9.92 = 11.76 x Gal/Linear Foot 0.38 = 4.47 x Number of Casings 5 = Calculated Purge 22.35

DATE PURGED: 3-28-94 START: 1420 END (2400 hr): 1435 PURGED BY: CW

DATE SAMPLED: 11 START: 1435 END (2400 hr): 1440 SAMPLED BY: 11

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
1425	7.5	7.18	1,130	67.3	CLR.	TRC.	NONE
1430	15	7.06	1,141	66.9	11	11	11
1435	22.5	7.00	1,151	66.3	11	11	11

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

Pumped dry Yes / (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: TOB/TOC

PURGING EQUIPMENT/I.D. #
- [x] Bailer: PVC
- [ ] Airlift Pump:
- [ ] Centrifugal Pump:
- [ ] Dedicated:
- [ ] Other:

SAMPLING EQUIPMENT/I.D. #
- [x] Bailer: 13-4
- [ ] Dedicated:
- [ ] Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-19	3-28-94	1440	3	40ml	VOA	HCl	624/BTEX

REMARKS:

SIGNATURE:

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 1760 HESPERIAN BLVD SAN LORENZO CA. WELL ID #: MW-20

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

WELL INFORMATION

Depth to Liquid: _____ TOB ____ TOC
Depth to water: _____ TOB ____ TOC
Total depth: _____ TOB ____ TOC
Date: 3-2-94 Time (2400): _____

Probe Type and I.D. #
- [x] Oil/Water interface ORS
- [ ] Electronic indicator _____
- [ ] Other; _____

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

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

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

DATE PURGED: 3-__-94 START: _____ END (2400 hr): _____ PURGED BY: CL

DATE SAMPLED: 11 START: _____ END (2400 hr): _____ SAMPLED BY: M

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

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

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

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

SAMPLING EQUIPMENT/I.D. #
- [x] Bailer: _____
- [ ] Dedicated: _____
- [ ] Other: _____

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

REMARKS: ABANDONED - NOT SAMPLED

SIGNATURE: Chris Claxton

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 1760 HESPERIAN BLVD SAN LORENZO CA. WELL ID #: MW-21

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

WELL INFORMATION

Depth to Liquid: / TOB / TOC
Depth to water: 10.3 TOB / TOC
Total depth: 21.98 TOB / TOC
Date: 3-28-94 Time (2400): 1015

Probe Type and I.D. #
- [x] Oil/Water interface ORS
- [ ] Electronic Indicator
- [ ] Other;

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

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

TD 21.98 - DTW 10.30 = 11.68 x Gal/Linear Foot 0.38 = 4.44 x Number of Casings 5 = Calculated Purge 22.2

DATE PURGED: 3-28-94 START: 1330 END (2400 hr): 1346 PURGED BY: CO

DATE SAMPLED: 11 START: 1346 END (2400 hr): 1350 SAMPLED BY: 11

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 2.5°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
1334	7.5	7.01	1036	67.7	CLR	TRC	NONE
1341	15	6.98	1059	67.1	11	11	11
1346	22.25	11	1109	66.8	11	11	11

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

Pumped dry Yes / (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: ____ TOB/TOC ____

PURGING EQUIPMENT/I.D. #
- [x] Bailer: PVC
- [ ] Airlift Pump:
- [ ] Centrifugal Pump:
- [ ] Dedicated:
- [ ] Other:

SAMPLING EQUIPMENT/I.D. #
- [x] Bailer: 13-3
- [ ] Dedicated:
- [ ] Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-21	3-28-94	1350	3	40ml	VOA	HCl	GAS/BTEX

REMARKS:

SIGNATURE: Chris Chatham

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-22

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

WELL INFORMATION

Depth to Liquid: / TOB / TOC
Depth to water: 10.78 TOB / TOC
Total depth: 21.79 TOB / TOC
Date: 3-28-94 Time (2400): 1010

Probe Type and I.D. #
- [x] Oil/Water interface ORS
- [ ] Electronic Indicator
- [ ] Other;

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

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

TD 21.79 - DTW 10.78 = 11.01 x Gal/Linear Foot 0.38 = 4.19 x Number of Casings 5 = Calculated Purge 20.95

DATE PURGED: 3-28-94 START: 1300 END (2400 hr): 1316 PURGED BY: CL

DATE SAMPLED: " START: 1316 END (2400 hr): 1322 SAMPLED BY: "

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
1306	7	6.98	993	68.3	CLR.	TRC.	NONE
1311	14	"	1,002	68.8	"	"	"
1316	21	7.00	1065	66.9	"	"	"

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

Pumped dry Yes / (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: ____ TOB/TOC

PURGING EQUIPMENT/I.D. #
- [x] Bailer: PVC
- [ ] Airlift Pump:
- [ ] Centrifugal Pump:
- [ ] Dedicated:
- [ ] Other:

SAMPLING EQUIPMENT/I.D. #
- [x] Bailer: 13-2
- [ ] Dedicated:
- [ ] Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-22	3-28-94	1322	3	40ml	VOA	HCl	GAS/BTEX

REMARKS:

SIGNATURE:

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA. WELL ID #: MW-23

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

WELL INFORMATION

Depth to Liquid: / TOB / TOC
Depth to water: 11.86 TOB / TOC
Total depth: 22.01 TOB / TOC
Date: 3-28-94 Time (2400): 1000

Probe Type and I.D. #
- [x] Oil/Water interface ORS
- [ ] Electronic indicator
- [ ] Other;

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

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

TD 22.01 DTW 11.86 = 10.15 x Gal/Linear Foot .038 = 3.86 x Number of Casings 5 = Calculated Purge 19.3

DATE PURGED: 3-28-94 START: 1230 END (2400 hr): 1245 PURGED BY: CC

DATE SAMPLED: " START: 1245 END (2400 hr): 1250 SAMPLED BY: "

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
1235	6.5	7.71	1,348	72.6	CLR.	TRC.	NONE
1240	13	6.99	1,249	70.1	"	"	"
1245	19.5	6.97	1,228	69.4	"	"	"

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

Pumped dry Yes (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: ____ TOB/TOC

PURGING EQUIPMENT/I.D. #
- [x] Bailer: PVC
- [ ] Airlift Pump:
- [ ] Centrifugal Pump:
- [ ] Dedicated:
- [ ] Other:

SAMPLING EQUIPMENT/I.D. #
- [x] Bailer: 13-1
- [ ] Dedicated:
- [ ] Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW23	3-28-94	1250	3	40ml	VOA	HCl	GAS/BTEX.

REMARKS:

SIGNATURE: [signature]

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-24

CLIENT/STATION No.: ARCO/0608 FIELD TECHNICIAN: [illegible]

WELL INFORMATION

Depth to Liquid: / TOB / TOC
Depth to water: 13.02 TOB / TOC
Total depth: 19.99 TOB / TOC
Date: 3-28-94 Time (2400): 1050

Probe Type and I.D. #
- [x] Oil/Water interface ORS
- [ ] Electronic indicator
- [ ] Other;

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

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

TD 19.99 - DTW 13.02 = 6.97 x Gal/Linear Foot 0.17 = 1.19 x Number of Casings 5 = Calculated Purge 5.95

DATE PURGED: 3-29-94 START: 1050 END (2400 hr): 1103 PURGED BY: [illegible]

DATE SAMPLED: " START: 1103 END (2400 hr): 1110 SAMPLED BY: "

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
1054	2	7.14	1,099	60.8	BRN.	MOD	NONE
1059	4	7.08	1,048	60.2	"	HVY.	"
1103	6	7.03	909	61.6	CLDY	LT.	"

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

Pumped dry Yes / (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: TOB/TOC

PURGING EQUIPMENT/I.D. #
- [x] Bailer: B-10
- [ ] Airlift Pump:
- [ ] Centrifugal Pump:
- [ ] Dedicated:
- [ ] Other:

SAMPLING EQUIPMENT/I.D. #
- [x] Bailer: B-10
- [ ] Dedicated:
- [ ] Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-24	3-29-94	1110	3	40ml	VOA	HCl	GAS/BTEX

REMARKS:

SIGNATURE: [signature]

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

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

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

WELL INFORMATION

Depth to Liquid: ____ TOB ____ TOC
Depth to water: 12.02 TOB ____ TOC
Total depth: 21.45 TOB ____ TOC
Date: 3-28-94 Time (2400): 1200

Probe Type and I.D. #
- [x] Oil/Water interface ORS
- [ ] Electronic indicator ____
- [ ] Other: ____

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

SAMPLE TYPE
- [x] Groundwater
- [ ] Duplicate
- [ ] Extraction well
- [ ] Trip blank
- [ ] Field blank
- [ ] Equipment blank
- [ ] Other: ____

TD 21.45 - DTW 12.02 = 9.43 x Gal/Linear Foot 0.17 = 1.61 x Number of Casings 5 = Calculated Purge 8.05

DATE PURGED: 3-29-94 START: 1150 END (2400 hr): 1202 PURGED BY: CW

DATE SAMPLED: 4 START: 1202 END (2400 hr): 1210 SAMPLED BY: 4

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
1154	2.75	7.01	1005	67.0	CLR	TRC	NONE
1158	5.5	6.98	1094	67.1	"	"	"
1202	8.25	6.99	1004	66.1	"	"	"

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

Pumped dry Yes / (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: ____ TOB/TOC ____

PURGING EQUIPMENT/I.D. #
- [x] Bailer: 13-2
- [ ] Airlift Pump: ____
- [ ] Centrifugal Pump: ____
- [ ] Dedicated: ____
- [ ] Other: ____

SAMPLING EQUIPMENT/I.D. #
- [x] Bailer: 13-2
- [ ] Dedicated: ____
- [ ] Other: ____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW25	3-29-94	1210	3	40ml	VOA	HCl	GAS/BTEX

REMARKS: ____

SIGNATURE: ____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 WELL ID #: MW-26

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

WELL INFORMATION

Depth to Liquid: / TOB / TOC
Depth to water: 12.30 TOB / TOC
Total depth: 19.80 TOB / TOC
Date: 3-28-94 Time (2400): 1100

Probe Type and I.D. #
- [x] Oil/Water interface ORS
- [ ] Electronic indicator
- [ ] Other;

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

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

TD 19.80 - DTW 12.30 = 7.5 x Gal/Linear Foot 0.17 = 1.28 x Number of Casings 5 = Calculated Purge 6.4

DATE PURGED: 3-29-94 START: 1120 END (2400 hr): 1132 PURGED BY: CO

DATE SAMPLED: " START: 1132 END (2400 hr): 1140 SAMPLED BY: CO

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
1124	2.25	6.93	1,048	67.2	BRN	HVY	NONE
1128	4.5	"	"	67.5	"	MOD	"
1132	6.5	6.92	1,043	67.7	"	"	"

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

Pumped dry Yes / (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: TOB/TOC

PURGING EQUIPMENT/I.D. #
- [x] Bailer: 13-1
- [ ] Airlift Pump:
- [ ] Centrifugal Pump:
- [ ] Dedicated:
- [ ] Other:

SAMPLING EQUIPMENT/I.D. #
- [x] Bailer: 13-1
- [ ] Dedicated:
- [ ] Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-26	3-29-94	1140	3	40ml	VOA	HCl	BTEX

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 #: E1-A

CLIENT/STATION No.: ARCO/ 0608 FIELD TECHNICIAN: [illegible]

WELL INFORMATION

Depth to Liquid: ____ TOB ____ TOC
Depth to water: 18.13 TOB ____ TOC
Total depth: ____ TOB ____ TOC
Date: 3-28-94 Time (2400): 1125

Probe Type and I.D. #
- [x] Oil/Water interface ORS
- [ ] Electronic indicator
- [ ] Other;

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

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

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

DATE PURGED: 3-28-94 START: ____ END (2400 hr): ____ PURGED BY: TREAT SYS PUMP

DATE SAMPLED: " START: 1625 END (2400 hr): 1640 SAMPLED BY: PORT "

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

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

Pumped dry Yes / (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW:	18.13 (TOB) TOC	7.01	1,147	70.1	CLR	TRC	NONE

PURGING EQUIPMENT/I.D. #
- [ ] Bailer:
- [ ] Airlift Pump:
- [ ] Centrifugal Pump:
- [x] Dedicated: PUMP
- [ ] Other:

SAMPLING EQUIPMENT/I.D. #
- [ ] Bailer:
- [x] Dedicated: SAMPLE PORT
- [ ] Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
E1-A	3-28-94	1630	3	40ml	VOA	HCl	GAS/BTEX

REMARKS:

SIGNATURE: [signature]

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD. WELL ID #: 1

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

WELL INFORMATION

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

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

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

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

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

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

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

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

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

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

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

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

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
TB-1	3-28-94	NA	2	40ml	VOA	HCl	6915/BTEX

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

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

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

WELL INFORMATION

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

Probe Type and I.D. #
- ☐ Oil/Water Interface _____
- ☐ Electronic Indicator _____
- ☐ Other: _____

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

SAMPLE TYPE
- ☒ Groundwater
- ☐ Duplicate
- ☐ Extraction well
- ☐ Trip blank
- ☐ Field blank
- ☐ Equipment blank
- ☐ Other: _____

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

DATE PURGED: 3-29-94 START: 1215 END (2400 hr): 1218 PURGED BY: CC

DATE SAMPLED: " START: 1218 END (2400 hr): 1230 SAMPLED BY: "

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

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

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC

PURGING EQUIPMENT/I.D.

- ☐ Bailer: _____
- ☐ Airlift Pump: _____
- ☐ Centrifugal Pump: _____
- ☒ Dedicated: PUMP
- ☐ Other: _____

SAMPLING EQUIPMENT/I.D.

- ☐ Bailer: _____
- ☒ Dedicated: PUMP / PORT
- ☐ Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
590H	3-29-94	1230	3	40ml	VOA	HCL	GAS / BTEX

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA WELL ID #: GA2H

CLIENT/STATION No.: BRC01 0608 FIELD TECHNICIAN: [illegible]

WELL INFORMATION

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

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

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

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

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

DATE PURGED: 3-30-94 START: 1315 END (2400 hr): 1320 PURGED BY: [illegible]

DATE SAMPLED: " START: 1320 END (2400 hr): 1325 SAMPLED BY: "

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

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

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____ _____ _____ _____ _____ _____

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

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

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
GA2H	3-30-94	1325	3	40ml	VOA	HCl	GAS/BTEX

REMARKS: _____

SIGNATURE: [signature]

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA WELL ID #: 17197 VM

CLIENT/STATION No.: VRC01 0608 FIELD TECHNICIAN: [illegible]

WELL INFORMATION

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

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

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

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

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

DATE PURGED: 3-30-94 START: 1120 END (2400 hr): 1125 PURGED BY: [illegible]

DATE SAMPLED: " START: 1125 END (2400 hr): 1130 SAMPLED BY: "

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

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

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC

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

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

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
17197 VM	3-30-94	1130	3	40ml	VOA	HCl	GAS/BTEX

REMARKS: _____

SIGNATURE: [signature]

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

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

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

WELL INFORMATION

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

Probe Type and I.D. #
- ☐ Oil/Water Interface _____
- ☐ Electronic Indicator _____
- ☐ Other: _____

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

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

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

DATE PURGED: 3-29-94 START: _____ END (2400 hr): _____ PURGED BY: CC

DATE SAMPLED: " START: 0940 END (2400 hr): 0945 SAMPLED BY: "

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

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

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

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

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

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
17200VM	3-29-94	0945	3	40ml	VOA	HCl	GAS/BTEX

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

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

CLIENT/STATION No.: VRC01 0608 FIELD TECHNICIAN: [illegible]

WELL INFORMATION

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

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

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

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

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

DATE PURGED: 33094 START: 1140 END (2400 hr): 1145 PURGED BY: [illegible]

DATE SAMPLED: " START: 1145 END (2400 hr): 1150 SAMPLED BY: "

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

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

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

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

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

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
17203VM	33094	1150	3	40ml	VOA	HCl	GAS/BTEX

REMARKS: _____

SIGNATURE: [signature]

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

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

CLIENT/STATION No.: BRC01 0608 FIELD TECHNICIAN: [signature]

WELL INFORMATION

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

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

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

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

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

DATE PURGED: 3-30-94 START: 1155 END (2400 hr): 1200 PURGED BY: [signature]

DATE SAMPLED: " START: 1200 END (2400 hr): 1205 SAMPLED BY: "

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

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____ _____ _____ _____ _____ _____

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

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

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
17302VM	3-30-94	1205	3	40ml	VOA	HCl	GAS/BTEX

REMARKS: _____

SIGNATURE: [signature]

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

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

CLIENT/STATION No.: ARCO 0608 FIELD TECHNICIAN:

WELL INFORMATION

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

Probe Type and I.D. #
- ☐ Oil/Water Interface _____
- ☐ Electronic Indicator _____
- ☐ Other: _____

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

SAMPLE TYPE
- ☒ Groundwater
- ☐ Duplicate
- ☐ Extraction well
- ☐ Trip blank
- ☐ Field blank
- ☐ Equipment blank
- ☐ Other: _____

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

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

DATE SAMPLED: 3-30-99 START: 1235 END (2400 hr): 1240 SAMPLED BY:

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

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

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

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

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

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
17393VM	3-30-99	1240	3	40ml	VOA	HCl	BTEX

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA WELL ID #: 633H

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

WELL INFORMATION

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

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

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

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

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

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

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

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

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

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____ _____ _____ _____ _____ _____

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

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

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
633H			3	40ml	VOA	HCl	BTEX

REMARKS: UNABLE TO GET PUMP IN WELL SO OPEN. COULD NOT GET BAILER PAST THE DOWNHOLE PIPING NOT SAMPLED

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA WELL ID #: 634H

CLIENT/STATION No.: ARCO 0608 FIELD TECHNICIAN: [illegible]

WELL INFORMATION

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

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

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

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

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

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

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

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

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

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. #
- ☐ Bailer: _____
- ☐ 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	3-94		3	40ml	VOA	HCl	GAS/BTEX

REMARKS: NOT SAMPLED - ~~PUMP BLOCKS ACCESS~~ WELL INACCESS
NO SAMPLE TAKEN DURING THIS EVENT

SIGNATURE: [signature]

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

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

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

WELL INFORMATION

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

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

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

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

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

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

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

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

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

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

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

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

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
675H			3	40ml	VOA	HCl	GAS / BTEX

REMARKS: WELL INACCESSABLE - NO SAMPLE TAKEN. DURING THIS EVENT

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIA BLVD SAN LORENZO CA WELL ID #: 17371VM

CLIENT/STATION No.: ARCO 0608 FIELD TECHNICIAN:

WELL INFORMATION

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

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

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

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

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

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

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

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

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

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE/AFTER RECHARGE:

DTW: _____ TOB/TOC

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

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

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
17371VM	/	/	/			/	GAS/BTEX

REMARKS: NOT SAMPLED - INACCESSABLE. HOMEOWNER INDICATED PRIOR TO @ EVENT THAT HE DOESN'T WANT PEOPLE AROUND HIS HOUSE. HE FEARS P.E.G. EMPLOYEE WOULD POSSIBLY INJURE THEMSELVES AND HE WOULD BE LIABLE.

SIGNATURE:

PACIFIC ENVIRONMENTAL GROUP, INC.

WELL SAMPLING REQUEST

FILE COPY

SITE INFORMATION FORM

Identification

ject # 330-038.17
Station # ARCO 4430
Site Address: 2995 MIDDLEFIELD ROAD @ MATADERO CRK. PALO ALTO
County: SANTA CLARA
Project Manager: K. BROWN
Requestor: K. BROWN
Client: ARCO
Client P.O.C.: ICO LE CHRISTIE
Date of request: 3/24/94

Project Type

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

Ideal field date(s): 3/31/94 = ASAP

Prefield Contacts/Permits

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

Purge Water Containment:

- ☐ Drums
- ☒ Treatment System into Sump after filtering
- ☐ Other Describe:

Field Tasks

- ☒ H_2O levels
- ☒ H_2O Sampling WELLS MW-3, MW-9, MW-10 MW-19

ANALYZE FOR TPH-g / BTEX
SPECIAL RESAMPLING.

- ☐ Well Development
- ☒ Other: Combo location treatment system compound is 4430

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

Site Safety

Wells	Concerns

- ☐ Flash Safety
- ☐ Flagman
- ☐ Cones
- ☐ Barricades
- ☐ No Turn/Lane Closed sign

Other:

Activities occuring on site
(ie; remedial system construction, ongoing projects, etc.)

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

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

- ☐ All Wells secured

Budgeted hours:
Actual hours; On-Site:
Mob-de-Mob:

Completed by: _____ Date: _____

PACIFIC ENVIRONMENTAL GROUP, INC. Checked by: PITS Update:

WELL SAMPLING REQUEST

SAMPLING PROTOCOL

Project No.	Project Name	Project Manager	Approval	Date/s	Prepared by:
330-038.17.	ARCO 4430 2995 Middlefield at Matadero, Palo Alto	Kelly Barr		3/31/94	3/25/94

Well No.	Ideal Sampling Order	Sample I.D. / Lab	Duplicate I.D. / Lab	Analyses	Approximate Gallons to be Evacuated	Screened Interval (ft.)	Casing Diameter (in.)	Does Well Go Dry?	Comments / Health & Safety Concerns
MW-3		MW-3 / Sequoia		TPH gas, BTEX	12	≥25'	2"		
MW-9		MW-9 / Sequoia			27	≥25'	3"		
MW-10		MW-10 / Sequoia			27	≥25'	3"		
MW-19		MW-19 / Sequoia			27	≥25'	2"		
Trip Blank		TB / Sequoia			—	—	—		

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-038.17 LOCATION: 2995 MIDDLEFIELD RD., PALO ALTO, CA. WELL ID #: MW-19

CLIENT/STATION No.: ARCO # 4430 FIELD TECHNICIAN: IAN GRAHAM

WELL INFORMATION

Depth to Liquid: — TOB NO TOC
Depth to water: — TOB 7.12 TOC
Total depth: — TOB 19.6 TOC
Date: 3-28-94 Time (2400): 0744

Probe Type and I.D. #
- ☐ Oil/Water interface
- ☒ Electronic indicator 20001
- ☐ Other:

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

SAMPLE TYPE
- ☒ Groundwater
- ☐ Duplicate
- ☐ Extraction well
- ☐ Trip blank
- ☐ Field blank
- ☐ Equipment blank
- ☐ Other:

TD 19.6 - DTW 7.12 = 12.48 x Gal/Linear Foot .17 = 2.12 x Number of Casings 4 = Calculated Purge 8.48

DATE PURGED: 3-28-94 START: 0745 END (2400 hr): 0800 PURGED BY: IG,

DATE SAMPLED: 3-28-94 START: 0805 END (2400 hr): 0805 SAMPLED BY: IG,

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
0750	3.0	7.06	1031	63.7	100+	>200	ND
0755	6.0	7.01	1028	63.1	↓	↓	↓
0800	9.0	7.00	1021	62.6	↓	↓	↓
					100+	>200	ND

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

Pumped dry Yes (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: ____ TOB/TOC ____

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

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

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-19	3-28-94	0805	2	40 ml	VOA	HCL	GAS / BTEX

REMARKS:

SIGNATURE:

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-038.17 LOCATION: 2995 MIDDLEFIELD RD., PALO ALTO, CA. WELL ID #: MW-10

CLIENT/STATION No.: ARCO # 4430 FIELD TECHNICIAN: IAN GRAHAM

WELL INFORMATION

Depth to Liquid: — TOB ND TOC
Depth to water: — TOB 8.80 TOC
Total depth: — TOB 20.5 TOC
Date: 3-28-94 Time (2400): 0818

Probe Type and I.D. #: ☐ Oil/Water interface ☒ Electronic indicator 20001 ☐ Other;

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

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

TD 20.5 - DTW 8.80 = 11.70 x Gal/Linear Foot .38 = 4.44 x Number of Casings 4 = Calculated Purge 17.76

DATE PURGED: 3-28-94 START: 0820 END (2400 hr): 0840 PURGED BY: IG.

DATE SAMPLED: 3-28-94 START: 0845 END (2400 hr): 0845 SAMPLED BY: IG.

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
0825	5.	7.15	1080	64.5	100+	>200	ND
0830	11.	7.15	1079	64.5	↓	↓	↓
0835	18.	7.15	1074	64.9	↓	↓	↓
					100+	>200	ND

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

Pumped dry Yes (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: ____ TOB/TOC ____

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

SAMPLING EQUIPMENT/I.D. #
☒ Bailer: 3
☐ Dedicated:
☐ Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-10	3-28-94	0845	2	40 ml	VOA	HCL	GAS / BTEX

REMARKS:

SIGNATURE:

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-038.17 LOCATION: 2995 MIDDLEFIELD RD., PALO ALTO, CA. WELL ID #: MW-9

CLIENT/STATION No.: ARCO # 4430 FIELD TECHNICIAN: IAN GRAHAM

WELL INFORMATION

Depth to Liquid: — TOB ND TOC
Depth to water: — TOB 9.00 TOC
Total depth: — TOB 24.7 TOC
Date: 3-28-94 Time (2400): 0858

Probe Type and I.D. #
- ☐ Oil/Water interface
- ☒ Electronic indicator 20001
- ☐ Other:

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

SAMPLE TYPE
- ☒ Groundwater
- ☐ Duplicate
- ☐ Extraction well
- ☐ Trip blank
- ☐ Field blank
- ☐ Equipment blank
- ☐ Other:

TD 24.7 - DTW 9.00 = 15.70 x Gal/Linear Foot .38 = 5.96 x Number of Casings 4 = Calculated Purge 23.84

DATE PURGED: 3-28-94 START: 0900 END (2400 hr): 0915 PURGED BY: IG,

DATE SAMPLED: 3-28-94 START: 0920 END (2400 hr): 0920 SAMPLED BY: IG,

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (µmhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
0905	8.0	7.05	1052	62.3	100+	>200	SLIGHT
0910	16.0	7.18	1042	63.1	↓	↓	↓
0915	24.0	7.16	1041	63.0	↓	↓	↓
					100+	>200	SLIGHT

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

Pumped dry Yes (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: ____ TOB/TOC ____

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

SAMPLING EQUIPMENT/I.D. #
- ☒ Bailer: 2
- ☐ Dedicated:
- ☐ Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-9	3-28-94	0920	2	40 ml	VOA	HCL	GAS / BTEX

REMARKS: PURGED SLOW, WELL STARTS TO DRY, BUT HAS A FAST RECHARGE ALWAYS HAD A LITTLE WATER IN THE WELL

SIGNATURE:

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-038.17 LOCATION: 2995 MIDDLEFIELD RD., PALO ALTO, CA. WELL ID #: MW-3

CLIENT/STATION No.: ARCO # 4430 FIELD TECHNICIAN: IAN GRAHAM

WELL INFORMATION

Depth to Liquid: ____ TOB NO TOC
Depth to water: ____ TOB 10.25 TOC
Total depth: ____ TOB 24.1 TOC
Date: 3-28-94 Time (2400): 0928

Probe Type and I.D. #: ☐ Oil/Water interface ____ ☒ Electronic indicator 20001 ☐ Other: ____

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

SAMPLE TYPE
☒ Groundwater
☐ Duplicate
☐ Extraction well
☐ Trip blank
☐ Field blank
☐ Equipment blank
☐ Other: ____

TD 24.1 - DTW 10.25 = 13.75 x Gal/Linear Foot .17 = 2.33 x Number of Casings 4 = Calculated Purge 9.32

DATE PURGED: 3-28-94 START: 0930 END (2400 hr): 0945 PURGED BY: IG

DATE SAMPLED: 3-28-94 START: 0950 END (2400 hr): 0950 SAMPLED BY: I.G.

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
0935	3.0	7.11	1080	62.2	100+	>200	STRONG
0940	6.0	7.11	1080	62.8			
0945	9.5	7.11	1079	63.2			
					100+	>200	STRONG

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

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: ____ TOB/TOC ____

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

SAMPLING EQUIPMENT/I.D. #
☒ Bailer: 8
☐ Dedicated: ____
☐ Other: ____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
MW-3	3-28-94	0950	2	40 ml	VOA	HCL	GAS / BTEX

REMARKS: HEAVY SHEEN ON PURGE WATER

SIGNATURE: ____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD REPORT

DEPTH TO WATER/SEPARATE-PHASE HYDROCARBON SURVEY

PROJECT No.: 330-038.17 LOCATION: 2995 MIDDLEFIELD PALO ALTO, CA DATE: 3-28-94

CLIENT/STATION NO.: ARCO FIELD TECHNICIAN: IAN GRAHAM DAY OF WEEK: MONDAY

PROBE TYPE/ID No.
- ☐ Oil/Water IF/ _____
- ☒ H_2O level indicator 20001
- ☐ Other: _____

Dtw Order	Well ID	Time	Surface Seal	Lid Secure	Gasket	Lock	Expanding Cap	T.O.C. Total Depth (feet)	First Depth to Water (feet) TOB/TOC	Second Depth to Water (feet) TOB/TOC	SEPARATE-PHASE HYDROCARBONS (SPH): SPH Depth (feet) TOB/TOC	SPH Thickness (feet)	COLOR: Fresh	Weathered	Gas	Oil	VISCOSITY: Lite	Medium	Heavy	LIQUID REMOVED (gallons): SPH	H_2O
	MW-3		X	G-S		4357	screw	24.1	10.25	10.25	ND	NR									
	MW-9		X	G-S		2357	slip	24.7	9.00	9.00											
	MW-10		X	G-S		2357	slip	20.5	8.80	8.80											
	MW-19		X	G-S		4357	X	19.6	7.12	7.12	▽	▽									

Comments:
MW-3 10.61 / 24.1
MW-9 9.49 / 25.7
MW-10 9.18 / 20.9
MW-19 7.68 / 20.3

ARCO Products Company
Division of AtlanticRichfieldCompany

Task Order No.

Chain of Cu

ARCO Facility no. 4430	City (Facility) PALO ALTO, CA.	Project manager (Consultant) K. BROWN	Laboratory name SEQ001
ARCO engineer KYLE CHRISTIE	Telephone no. (ARCO)	Telephone no. (Consultant) (408) 441-7500	Fax no. (Consultant) (408) 441-7539
Consultant name PACIFIC ENVIRONMENTAL GROUP	Address (Consultant) 2025 GATEWAY PL. STE, 440 SAN JOSE, CA,		Contract number

Sample I.D.	Lab no.	Container no.	Matrix: Soil	Matrix: Water	Matrix: Other	Preservation: Ice	Preservation: Acid	Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA M602/8020/8015	TPH Modified 8015 Gas ☐ Diesel ☐	Oil and Grease 413.1 ☐ 413.2 ☐	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals ☐ Semi VOA ☐ VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐		
MW-3		3		X		X	HCl	3/31/94	0950		X											
MW-9		3		↓		↓	↓	↓	0920		↓											
MW-10		3		↓		↓	↓	↓	0845		↓											
MW-19		3		↓		↓	↓	↓	0805		↓											
TB-1		2		↓		↓	↓	↓	1130		↓											

Method of shipme

Special detection Limit/reporting

Special QA/QC

Remarks

Lab number

Turnaround time

Priority Rush 1 Business Day

Rush 2 Business Days

Expedited 5 Business Days

Standard 10 Business Days

Condition of sample:

Temperature received:

Relinquished by sampler	Date 3/31/94 Time 1130	Received by
Relinquished by	Date Time	Received by
Relinquished by	Date Time	Received by laboratory / Date / Time

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

AF 292 (2-91)

FIELD REPORT

DEPTH TO WATER/SEPARATE-PHASE HYDROCARBON SURVEY

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN DATE: 3-28-94

CLIENT/STATION NO.: ARCO/0608 FIELD TECHNICIAN: [signature] DAY OF WEEK: MONDAY

PROBE TYPE/ID No.
- [X] Oil/Water IF/ ORS
- [ ] H_2O level indicator
- [ ] Other:

Dtw Order	Well ID	Time	Surface Seal	Lid Secure	Gasket	Lock	Expanding Cap	Total Depth (feet)	First Depth to Water (feet) TOB/TOC	Second Depth to Water (feet) TOB/TOC	SPH Depth (feet) TOB/TOC	SPH Thickness (feet)	SERARATE-PHASE HYDROCARBONS (SPH) COLOR: Fresh	Weathered	Gas	Oil	VISCOSITY: Lite	Medium	Heavy	LIQUID REMOVED (gallons) SPH	H_2O
13	MW5	1110	✓	✓		✓	✓	14.05	12.22	12.22											
15	MW7	1120	✓	✓		✓	✓	18.98	12.32	12.32											
12	MW8	1105	✓	✓		✓	✓	21.78	11.28	11.28											
18	MW9	1140	✓	✓		✓	✓	18.77	10.48	10.48											
8	MW10	1040	✓	✓		✓	✓	23.11	10.60	10.60											
9	MW11	1045	✓	✓		✓	✓	19.26	11.23	11.23											
14	MW13	1115	✓	✓		✓	✓	23.49	13.64	13.64											
7	MW14	1035	✓	✓		✓	✓	23.21	9.55	9.55											
17	MW15	1135	✓	✓		✓	✓	23.65	10.95	10.95											

Comments:

FIELD REPORT

DEPTH TO WATER/SEPARATE-PHASE HYDROCARBON SURVEY

PROJECT No.: 330-006.25 LOCATION: 1760 HESPERIAN BLVD. DATE: 3-28-94

CLIENT/STATION NO.: ARCO/0608 FIELD TECHNICIAN: CO DAY OF WEEK: MONDAY

PROBE TYPE/ID No.
- [X] Oil/Water IF/ ORS
- [ ] H_2O level indicator
- [ ] Other:

Dtw Order	Well ID	Time	Surface Seal	Lid Secure	Gasket	Lock	Expanding Cap	Total Depth (feet)	First Depth to Water (feet) TOB/TOC	Second Depth to Water (feet) TOB/TOC	SPH Depth (feet) TOB/TOC	SPH Thickness (feet)	SEPARATE-PHASE HYDROCARBONS (SPH) COLOR: Fresh	Weathered	Gas	Oil	VISCOSITY: Lite	Medium	Heavy	LIQUID REMOVED (gallons) SPH / H_2O
6	MW-16	1030	✓	✓		✓	✓	22.62	11.46	11.46										
19	MW-17	1147	✓	✓		✓	✓	23.65	12.33	12.33										
5	MW-18	1025	✓	✓		✓	✓	21.80	10.43	10.43										
4	MW-19	1030	✓	✓		✓	✓	21.68	9.92	9.92										
	MW-20																			
3	MW-21	1015	✓	✓		✓	✓	21.98	10.30	10.30										
2	MW-22	1010	✓	✓		✓	✓	21.79	10.78	10.78										
1	MW-23	1000	✓	✓		✓	✓	22.01	11.86	11.86										
16	EI-A	1125	✓	✓				/	18.13	18.13										

Comments: MW-20 IS ABANDONED

FIELD REPORT

DEPTH TO WATER/SEPARATE-PHASE HYDROCARBON SURVEY

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD DATE: 3-28-94

CLIENT/STATION NO.: ARCO/0608 FIELD TECHNICIAN: [illegible] DAY OF WEEK: MONDAY

PROBE TYPE/ID No.
- [X] Oil/Water IF/ ORS
- [ ] H_2O level indicator
- [ ] Other:

Dtw Order	Well ID	Time	Surface Seal	Lid Secure	Gasket	Lock	Expanding Cap	Total Depth (feet)	First Depth to Water (feet) TOB/TOC	Second Depth to Water (feet) TOB/TOC	SEPARATE-PHASE HYDROCARBONS (SPH) SPH Depth (feet) TOB/TOC	SPH Thickness (feet)	COLOR: Fresh	COLOR: Weathered	COLOR: Gas	COLOR: Oil	VISCOSITY: Lite	VISCOSITY: Medium	VISCOSITY: Heavy	LIQUID REMOVED (gallons) SPH	LIQUID REMOVED (gallons) H_2O
10	mw24	1050	✓	✓	✓	✓	✓	19.99	13.02	13.02											
11	mw26	1100	✓	✓	✓	✓	✓	19.80	12.30	12.30											
20	CHURCH WELL	1150	✓	✓					12.14 (TOC)	12.14 (TOC)											
21	mw25	1200	✓	✓		✓	✓	#21.45	12.02	12.02											

Comments: CURCH WELL SAMPLED AT 0945 3/29/94 [illegible] per S.P.
590 SAMPLED @ 0830 3/29/94 [illegible] per S.P.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

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

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

WELL INFORMATION

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

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

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

SAMPLE TYPE
- ☒ Groundwater
- ☐ Duplicate
- ☐ Extraction well
- ☐ Trip blank
- ☐ Field blank
- ☐ Equipment blank
- ☐ Other: _____

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

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

DATE SAMPLED: 330-94 START: 1110 END (2400 hr): 1115 SAMPLED BY: CC

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

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

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

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

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

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
17348 VE	33094	1115	3	40ml	VOA	HCl	GRO/BTEX

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

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

CLIENT/STATION No.: ARCO 0608 FIELD TECHNICIAN:

WELL INFORMATION

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

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

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

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

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

DATE PURGED: 3-30-99 START: 1210 END (2400 hr): 1215 PURGED BY:

DATE SAMPLED: 11 START: 1215 END (2400 hr): 1220 SAMPLED BY: JA

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

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

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

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

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
17349VM	3-30-99	1220	3	40ml	VOA	HCl	GAS/BTEX

REMARKS: _____

SIGNATURE: _____

PACIFIC ENVIRONMENTAL GROUP, INC.

FIELD DATA SHEET

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA WELL ID #: 1737-VM

CLIENT/STATION No.: BRC01 0608 FIELD TECHNICIAN:

WELL INFORMATION

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

Probe Type and I.D. #
- ☐ Oil/Water interface____
- ☐ Electronic indicator____
- ☐ Other:____

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

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

TD____ - DTW____ = ____ x Gal/Linear Foot____ = ____ x Number of Casings____ = Calculated Purge____

DATE PURGED: 3-30-09 START: 1250 END (2400 hr): 1255 PURGED BY:

DATE SAMPLED: 4 START: 1255 END (2400 hr): 1300 SAMPLED BY: M

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

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

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW:____ TOB/TOC

PURGING EQUIPMENT/I.D.

- ☐ Bailer:____
- ☐ Airlift Pump:____
- ☐ Centrifugal Pump:____
- ☒ Dedicated: PUMP
- ☐ Other:____

SAMPLING EQUIPMENT/I.D.

- ☐ Bailer:____
- ☑ Dedicated: PUMP/ PVC
- ☐ Other:____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
1737VM	33009	1300	3	40M	VOA	HCL	GRO BTEX

REMARKS:

SIGNATURE:

PACIFIC ENVIRONMENTAL GROUP, INC.

SEQUOIA ANALYTICAL

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

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

Project: 330-006.12/Arco 0608, San Leandro

Enclosed are the results from 2 water samples received at Sequoia Analytical on January 19,1994. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
4A91201	Water, Infl.	1/18/94	EPA 5030/8015 Mod./8020
4A91202	Water, Effl.	1/18/94	Chemical Oxy. Demand Total Suspended Solids EPA 5030/8015 Mod./8020

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

Very truly yours,

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

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

Pacific Environmental Group	Client Project ID:	330-006.12/Arco 0608, San Leandro	Sampled:	Jan 18, 1994
2025 Gateway Place, Suite 440	Sample Descript:	Water, Effl.	Received:	Jan 19, 1994
San Jose, CA 95110			Analyzed:	see below
Attention: Maree Doden	Lab Number:	4A91202	Reported:	Jan 27, 1994

LABORATORY ANALYSIS

Analyte	Date Analyzed	Detection Limit	Sample Result
Chemical Oxygen Demand, mg/L	1/21/94	20	N.D.
pH, pH Units	1/20/94	N.A.	6.7
Total Suspended Solids, mg/L	1/21/94	1.0	1.0

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

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

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

Pacific Environmental Group	Client Project ID:	330-006.12/Arco 0608, San Leandro	Sampled:	Jan 18, 1994
2025 Gateway Place, Suite 440	Sample Matrix:	Water	Received:	Jan 19, 1994
San Jose, CA 95110	Analysis Method:	EPA 5030/8015 Mod./8020	Reported:	Jan 27, 1994
Attention: Maree Doden	First Sample #:	4A91201		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 4A91201 Infl.	Sample I.D. 4A91202 Effl.	Sample I.D.	Sample I.D.	Sample I.D.	Sample I.D.
Purgeable Hydrocarbons	50	60	N.D.				
Benzene	0.50	3.1	N.D.				
Toluene	0.50	N.D.	N.D.				
Ethyl Benzene	0.50	3.2	N.D.				
Total Xylenes	0.50	4.3	N.D.				
Chromatogram Pattern:		Gas	--				

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0
Date Analyzed:	1/20/94	1/20/94
Instrument Identification:	GCHP-3	GCHP-3
Surrogate Recovery, %: (QC Limits = 70-130%)	95	107

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

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

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

Pacific Environmental Group	Client Project ID:	330-006.12/Arco 0608, San Leandro
2025 Gateway Place, Suite 440	Matrix:	Water
San Jose, CA 95110		
Attention: Maree Doden	QC Sample Group: 4A91202	Reported: Jan 27, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Chemical Oxygen Demand
Method:	EPA 410.4
Analyst:	J.D.
MS/MSD Batch#:	4A54001
Date Prepared:	1/21/94
Date Analyzed:	1/21/94
Instrument I.D.#:	N.A.
Conc. Spiked:	100 mg/L
Matrix Spike % Recovery:	92
Matrix Spike Duplicate % Recovery:	89
Relative % Difference:	3.3

LCS Batch#:	LCS012194
Date Prepared:	1/21/94
Date Analyzed:	1/21/94
Instrument I.D.#:	N.A.
LCS % Recovery:	100
% Recovery Control Limits:	70-130

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

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

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

SEQUOIA ANALYTICAL

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

Pacific Environmental Group	Client Project ID:	330-006.12/Arco 0608, San Leandro
2025 Gateway Place, Suite 440	Matrix:	Water
San Jose, CA 95110		
Attention: Maree Doden	QC Sample Group: 4A91201-02	Reported: Jan 27, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	M.Nipp	M.Nipp	M.Nipp	M.Nipp
MS/MSD Batch#:	4A75401	4A75401	4A75401	4A75401
Date Prepared:	N.A.	N.A.	N.A.	N.A.
Date Analyzed:	1/20/94	1/20/94	1/20/94	1/20/94
Instrument I.D.#:	GCHP-3	GCHP-3	GCHP-3	GCHP-3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Matrix Spike % Recovery:	95	94	94	93
Matrix Spike Duplicate % Recovery:	100	100	99	100
Relative % Difference:	5.1	6.2	5.2	7.3
LCS Batch#:				
Date Prepared:				
Date Analyzed:				
Instrument I.D.#:				
LCS % Recovery:				
% Recovery Control Limits:	71-133	72-128	72-130	71-120

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

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 • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	330-006.12/Arco 0608, San Leandro
2025 Gateway Place, Suite 440	Matrix:	Water
San Jose, CA 95110		
Attention: Maree Doden	QC Sample Group: 4A91202	Reported: Jan 27, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	pH	Total Suspended Solids
Method:	EPA 9040	EPA 160.2
Analyst:	Y.Arteaga	Y.Arteaga
Date Analyzed:	1/20/94	1/21/94
Sample #:	4A91202	4A93401
Sample Concentration:	6.7	N.D.
Sample Duplicate Concentration:	6.7	N.D.
% RPD:	0.0	0.0
% RPD: Control Limits:	0-30	0-30

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

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

ARCO Products Company — Division of AtlanticRichfieldCompany

330 · 006 · 12 Task Order No. 608 - 91 - 5

Chain of Cus

ARCO Facility no. 0608	City (Facility) San Lorenzo	Project manager (Consultant) Kelly Brown	Laboratory name Sequoia
ARCO engineer Mike Whelan	Telephone no. (ARCO)	Telephone no. (Consultant) 408 441-7500	Fax no. (Consultant) 408 441-7539	Contract number 07-073
Consultant name Pacific ENV.	Address (Consultant) 2025 Gateway Place #440 San Jose			Method of shipment

Sample I.D.	Lab no.	Container no.	Matrix: Soil	Matrix: Water	Matrix: Other	Preservation: Ice	Preservation: Acid	Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA M602/8020/8015	TPH Modified 8015 Gas ☐ Diesel ☐	Oil and Grease 413.1 ☐ 413.2 ☐	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals ☐ Semi VOA ☐ VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐	Δ	pH/TDS
INFL	01A-C	3		X		Y	HCL	1/18/94	1620		X											
EFFL	02A-C	↓		↓		↓	↓	↓	1630		X											
↓	2DE	2					H_2SO_4		↓												X	
↓	2F	1		↓		↓	N/P	↓	↓													X

Special detection Limit/reporting

Special QA/QC

Remarks

DEC 19 11

Lab number 9401912

Turnaround time

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

Condition of sample:

Temperature received:

	Date	Time		Date	Time
Relinquished by sampler	1/18/94	1755	Received by	1/19/94	
Relinquished by	1/19/94	11:00	Received by	1/19/94	11:00
Relinquished by	1/19/94	11:40	Received by laboratory	01-19-94	11:40

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

SEQUOIA ANALYTICAL — SAMPLE RECEIPT LOG

CLIENT NAME: Pacific Environmental
REC. BY (PRINT): D. Douglas

MASTER LOG NO. / PAGE: 9401912
DATE OF LOG-IN: 1-19-94

CIRCLE THE APPROPRIATE RESPONSE

1. Custody Seal(s): Present / (Absent) — Intact / Broken*
2. Custody Seal Nos.: —
3. Chain-of-Custody Records: (Present) / Absent*
4. Traffic Reports or Packing List: Present / (Absent)
5. Airbill: Airbill / Sticker — Present / (Absent)
6. Airbill No.: —
7. Sample Tags: (Present) / Absent* — Sample Tag Nos.: (Listed) / Not Listed on Chain-of-Custody
8. Sample Condition: (Intact) / Broken* / Leaking*
9. Does information on custody reports, traffic reports and sample tags agree? (Yes) / No*
10. Proper Preservatives Used: (Yes) / No*
11. Date Rec. at Lab: 01/19/94
12. Time Rec. at Lab: 11:40

LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION (ETC)
01	A-C	ENFL	(3) Voas	W	1/18	HCl
02	A-C	EFFL	(3) Voas	W	"	"
↓	DE	"	(2) Voas	"	"	H_2SO_4
	F		(1) 500ml Poly	"	"	

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

Sequoia Analytical

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

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

Project: 330-006.26/0608, San Lorenzo

Enclosed are the results from 2 water samples received at Sequoia Analytical on February 18,1994. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
4BC1201	Water, Infl	2/17/94	EPA 5030/8015 Mod./8020
4BC1202	Water, Effl	2/17/94	EPA 5030/8015 Mod./8020

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

Very truly yours,

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Sequoia Analytical

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

Pacific Environmental Group	Client Project ID:	330-006.26/0608, San Lorenzo	Sampled: Feb 17, 1994
2025 Gateway Place, Suite 440	Sample Matrix:	Water	Received: Feb 18, 1994
San Jose, CA 95110	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Feb 24, 1994
Attention: Maree Doden	First Sample #:	4BC1201	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 4BC1201 Infl	Sample I.D. 4BC1202 Effl
Purgeable Hydrocarbons	50	N.D.	N.D.
Benzene	0.50	2.5	N.D.
Toluene	0.50	N.D.	N.D.
Ethyl Benzene	0.50	2.1	N.D.
Total Xylenes	0.50	3.1	N.D.
Chromatogram Pattern:		Gas	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0
Date Analyzed:	2/22/94	2/22/94
Instrument Identification:	GCHP-2	GCHP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	86	96

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

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Sequoia Analytical

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

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

Client Project ID: 330-006.26/0608, San Lorenzo
Matrix: Liquid
QC Sample Group: 4BC1201-02
Reported: Feb 24, 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#:	G4B0301	G4B0301	G4B0301	G4B0301
Date Prepared:	N.A.	N.A.	N.A.	N.A.
Date Analyzed:	2/22/94	2/22/94	2/22/94	2/22/94
Instrument I.D.#:	GCHP-2	GCHP-2	GCHP-2	GCHP-2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Matrix Spike % Recovery:	130	100	100	103
Matrix Spike Duplicate % Recovery:	130	100	100	103
Relative % Difference:	0.0	0.0	0.0	0.0
LCS Batch#:				
Date Prepared:				
Date Analyzed:				
Instrument I.D.#:				
LCS % Recovery:				
% Recovery Control Limits:	71-133	72-128	72-130	71-120

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

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.

Chain of Custody

ARCO Products Company Division of AtlanticRichfieldCompany — 330-006.26 Task Order No. 608-91-5

ARCO Facility no. 0608	City (Facility) SAN LORENZO	Project manager (Consultant) KELLY BROWN	Laboratory name SEQUOIA
ARCO engineer MIKE WHELAN	Telephone no. (ARCO)	Telephone no. (Consultant) (408) 441-7500	Fax no. (Consultant) (408) 441-7539
Consultant name PACIFIC ENV. GROUP	Address (Consultant) 2025 GATEWAY PL #440 SAN JOSE		Contract number

Method of shipment

Sample I.D.	Lab no.	Container no.	Matrix: Soil	Matrix: Water	Matrix: Other	Preservation: Ice	Preservation: Acid	Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH Gas EPA M602/8020/8015	TPH Modified 8015 Gas ☐ Diesel ☐	Oil and Grease 413.1 ☐ 413.2 ☐	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals ☐ Semi VOA ☐ VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐		
INFL		3		X		X	HCl	2-17-94	1630		X											01
EFFL		↓		↓		↓	↓	↓	1640		↓											02

Special detection Limit/reporting

Special QA/QC

Remarks

FEB 22

Lab number 9402012

Turnaround time

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

Condition of sample:

Temperature received:

	Date	Time
Relinquished by sampler	2-18-94	0650
Received by	2/18/94	1420
Relinquished by	2/18/94	2:55
Received by	2/18/94	14:20
Received by laboratory	021894	1455

Environmental Engineering: Pink copy — Consultant

SEQUOIA ANALYTICAL — SAMPLE RECEIPT LOG

CLIENT NAME: PES (ARCO 330-006.22)
REC. BY (PRINT): KB

MASTER LOG NO. / PAGE: 9402012
DATE OF LOG-IN: 2-22-94

CIRCLE THE APPROPRIATE RESPONSE

1. Custody Seal(s): Present / Absent — Intact / Broken*
2. Custody Seal Nos.: /
3. Chain-of-Custody Records: Present / Absent*
4. Traffic Reports or Packing List: Present / Absent
5. Airbill: Airbill / Sticker — Present / Absent
6. Airbill No.: /
7. Sample Tags: Present / Absent* — Sample Tag Nos.: Listed / Not Listed on Chain-of-Custody
8. Sample Condition: Intact/Broken*/Leaking*
9. Does information on custody reports, traffic reports and sample tags agree? Yes / No*
10. Proper Preservatives Used: Yes / No*

Date Rec. at Lab: 022494
Time at Lab: 1455

LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION (ETC)
01	A-C	INFL	(3) VOA	W	02/17	
02	1	EFFL	1	1	1	

* Notify Project Manager and attach record of resolution

Page ___ of ___

Sequoia Analytical

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

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

Project: 330-006.26/0608, San Lorenzo

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

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
4C90301	Water, Infl	3/15/94	EPA 5030/8015 Mod./8020
4C90302	Water, Effl	3/15/94	pH Total Suspended Solids EPA 5030/8015 Mod./8020

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

Very truly yours,

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Sequoia Analytical

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

Pacific Environmental Group	Client Project ID:	330-006.26/0608, San Lorenzo	Sampled: Mar 15, 1994
2025 Gateway Place, Suite 440	Sample Matrix:	Water	Received: Mar 15, 1994
San Jose, CA 95110	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Mar 22, 1994
Attention: Maree Doden	First Sample #:	4C90301	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 4C90301 Infl	Sample I.D. 4C90302 Effl
Purgeable Hydrocarbons	50	N.D.	N.D.
Benzene	0.50	N.D.	N.D.
Toluene	0.50	N.D.	N.D.
Ethyl Benzene	0.50	N.D.	N.D.
Total Xylenes	0.50	N.D.	N.D.
Chromatogram Pattern:		--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0
Date Analyzed:	3/17/94	3/17/94
Instrument Identification:	GCHP-17	GCHP-17
Surrogate Recovery, %: (QC Limits = 70-130%)	93	91

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

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

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	Client Project ID:	330-006.26/0608, San Lorenzo	Sampled: Mar 15, 1994
2025 Gateway Place, Suite 440	Sample Descript:	Water, Effl	Received: Mar 15, 1994
San Jose, CA 95110			Analyzed: see below
Attention: Maree Doden	Lab Number:	4C90302	Reported: Mar 22, 1994

LABORATORY ANALYSIS

Analyte	Date Analyzed	Detection Limit	Sample Result
pH, pH units	3/16/94	N.A.	6.8
Total Suspended Solids, mg/L	3/18/94	1.0	2.4

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

SEQUOIA ANALYTICAL

Eileen A. 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 Project ID: 330-006.26/0608, San Lorenzo
Matrix: Liquid

QC Sample Group: 4C90301-02

Reported: Mar 22, 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#:	4C81704	4C81704	4C81704	4C81704
Date Prepared:	N.A.	N.A.	N.A.	N.A.
Date Analyzed:	3/16/94	3/16/94	3/16/94	3/16/94
Instrument I.D.#:	GCHP-17	GCHP-17	GCHP-17	GCHP-17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Matrix Spike % Recovery:	86	79	84	83
Matrix Spike Duplicate % Recovery:	86	79	84	83
Relative % Difference:	0.0	0.0	0.0	0.0
LCS Batch#:				
Date Prepared:				
Date Analyzed:				
Instrument I.D.#:				
LCS % Recovery:				
% Recovery Control Limits:	71-133	72-128	72-130	71-120

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

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, 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: 330-006.26/0608, San Lorenzo
Matrix: Liquid
QC Sample Group: 4C90302

Reported: Mar 22, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Total Suspended Solids	pH
Method:	EPA 160.2	EPA 9040
Analyst:	Y. Arteaga	Y. Arteaga
Date Analyzed:	3/18/94	3/16/94
Sample #:	4C97601	4C88804
Sample Concentration:	52	10.3
Sample Duplicate Concentration:	52	10.3
% RPD:	0.0	0.0
Control Limits:	0-30	0-30

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

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Chain of

ARCO Products Company Division of AtlanticRichfieldCompany — 330-006.26 **Task Order No.** 0608-91-5

ARCO Facility no. 0608	City (Facility) SAN LORENZO	Project manager (Consultant) KELLY BROWN	Laboratory name SEQUO
ARCO engineer MIKE WHELAN	Telephone no. (ARCO)	Telephone no. (Consultant) (408) 441-7500	Fax no. (Consultant) (408) 441-7539
Consultant name PACIFIC ENV. GROUP	Address (Consultant) 2025 GATEWAY PL. #440 SAN JOSE		Contract number 07-073

Method of shipment

Sample I.D.	Lab no.	Container no.	Matrix: Soil	Matrix: Water	Matrix: Other	Preservation: Ice	Preservation: Acid	Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA M602/8020/8015	TPH Modified 8015 Gas ☐ Diesel ☐	Oil and Grease 413.1 ☐ 413.2 ☐	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals ☐ Semi VOA ☐ VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐	pH	TSS
INFL		3		X		X	X	3-15-94			X			01								
EFFL		↓		↓		↓	↓	↓			↓			02							X	
						X																X
↓		↓		↓		↓		↓														

Special detection Limit/reporting

Special QA/QC

Page 4

Remarks

COD SAMPLE TO FOLLOW

Lab number 9403903

Turnaround time

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

Condition of sample:

Temperature received:

	Date	Time	
Relinquished by sampler	3-15-94	1145	Received by
Relinquished by	3/15/94	1342	Received by
Relinquished by	3/15	1622	Received by laboratory

Received by: 3/15/94

Received by: 3/15/94

Received by laboratory: Date 031594 Time 1622

SEQUOIA ANALYTICAL — SAMPLE RECEIPT LOG

CLIENT NAME: PES (Arco 530-006-26)
REC. BY (PRINT): KB

MASTER LOG NO. / PAGE: 9403903
DATE OF LOG-IN: 3-16-94

CIRCLE THE APPROPRIATE RESPONSE

1. Custody Seal(s): Present / Absent — Intact / Broken*
2. Custody Seal Nos.: /
3. Chain-of-Custody Records: Present / Absent*
4. Traffic Reports or Packing List: Present / Absent
5. Airbill: Airbill / Sticker — Present / Absent
6. Airbill No.: /
7. Sample Tags: Present / Absent* — Sample Tag Nos.: Listed / Not Listed on Chain-of-Custody
8. Sample Condition: Intact/Broken*/Leaking*
9. Does information on custody reports, traffic reports and sample tags agree? Yes / No*
10. Proper Preservatives Used: Yes / No*
11. Date Rec. at Lab: 031594
12. Time Rec. at Lab: 1622

LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION (ETC
01	A-C	INFL	(3) VOA	W	03/15	
02	A-C	EFFL	(3) VOA	"	"	
	D-E	"	(2) 1LP	"	"	

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

Sequoia Analytical

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

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

Project: 330-006.26/0608, San Lorenzo

Enclosed are the results from 1 water sample received at Sequoia Analytical on March 17,1994. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
4CA4801	Water, Effl	3/16/94	Chemical Oxygen Demand

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

Very truly yours,

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, 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	Client Project ID:	330-006.26/0608, San Lorenzo	Sampled: Mar 16, 1994
2025 Gateway Place, Suite 440	Sample Descript:	Water, Effl	Received: Mar 17, 1994
San Jose, CA 95110			Analyzed: see below
Attention: Maree Doden	Lab Number:	4CA4801	Reported: Mar 28, 1994

LABORATORY ANALYSIS

Analyte	Date Analyzed	Detection Limit mg/L	Sample Result mg/L
Chemical Oxygen Demand	3/24/94	20	N.D.

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

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Sequoia Analytical

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: 330-006.26/0608, San Lorenzo
Matrix: Liquid
QC Sample Group: 3CA4801

Reported: Mar 28, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Chemical Oxygen Demand
Method:	EPA 410.4
Analyst:	J. Dearth
MS/MSD Batch#:	4C88105
Date Prepared:	3/24/94
Date Analyzed:	3/24/94
Instrument I.D.#:	N.A.
Conc. Spiked:	100 mg/L
Matrix Spike % Recovery:	101
Matrix Spike Duplicate % Recovery:	104
Relative % Difference:	2.9
LCS Batch#:	LCS032494
Date Prepared:	3/24/94
Date Analyzed:	3/24/94
Instrument I.D.#:	N.A.
LCS % Recovery:	93
% Recovery Control Limits:	70-130

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

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

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

ARCO Products Company Division of AtlanticRichfieldCompany — 330-006.26 **Task Order No.** 0608-91-5 — **Chain of Custody**

ARCO Facility no. 0608	City (Facility) SAN LORENZO	Project manager (Consultant) KELLY BROWN	Laboratory name SEQUOIA
ARCO engineer MIKE WHELAN	Telephone no. (ARCO)	Telephone no. (Consultant) (408) 441-7500	Fax no. (Consultant) 441-7539
Consultant name PACIFIC ENV. GROUP	Address (Consultant) 2025 GATEWAY PL #440 SAN JOSE		Contract number

Sample I.D.	Lab no.	Container no.	Matrix: Soil	Matrix: Water	Matrix: Other	Preservation: Ice	Preservation: Acid	Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA M602/8020/8015	TPH Modified 8015 Gas ☐ Diesel ☐	Oil and Grease 413.1 ☐ 413.2 ☐	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals ☐ Semi VOA ☐ VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐	CAD
EFFL		4		X		X	H_2SO_4	3-16-94	0715												X

Method of shipment

Special detection Limit/reporting: 9403A48-0

Special QA/QC

Remarks

Lab number

Turnaround time

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

Condition of sample:

Temperature received:

	Date	Time		Date	Time
Relinquished by sampler	3-16-94	1325	Received by	3/16/94	1325
Relinquished by	3/17/94	0915	Received by	3/17/94	9:15
Relinquished by	3/17/94		Received by laboratory	031794	1123

White copy — Laboratory Canary copy — ARCO Environmental Engineering Pink copy — Consultant

SEQUOIA ANALYTICAL

CLIENT NAME: PEG (ARCO 330-0006-26)
REC. BY (PRINT): KG

MASTER LOG NO. / PAGE: 9403A48
DATE OF LOG-IN: 3-18-94

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION (ETC)
1. Custody Seal(s): Present / Absent Intact / Broken*	01	A-D	EFEL	(4) VOA	W	03/16	
2. Custody Seal Nos.:							
3. Chain-of-Custody Records: Present / Absent*							
4. Traffic Reports or Packing List: Present / Absent							
5. Airbill: Airbill / Sticker Present / Absent							
6. Airbill No.:							
7. Sample Tags: Present / Absent* Sample Tag Nos.: Listed / Not Listed on Chain-of-Custody							
8. Sample Condition: Intact/Broken*/Leaking*							
9. Does information on custody reports, traffic reports and sample tags agree? Yes / No*							
10. Proper Preservatives Used: Yes / No* 1.0							
11. Date Rec. at Lab: 03/17/94							
12. Time Rec. at Lab: 1123							

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

Form SC001

SITE INFORMATION FORM

Identification

ject # 330-006.26

Station # 0608

Site Address: 17601 Hesperian Blvd, San Lorenzo

County: Alameda

Project Manager: ShawG

Requestor: LesliM

Client: ARCO

Client P.O.C.: MikeWhelan

Date of request: 1/94

Project Type

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

Ideal field date(s): _____

Prefield Contacts/Permits

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

Site Safety Concerns

_____

_____

_____

Field Tasks

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

1). Sample system:

	INFL	EFFL	M = monthly
Gas / BTEX	M	M	Q = Quarterly 3, 6, 9, 12
COD		Q	
TSS		Q - NP	
pH		Q - NP	

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: ~~6~~ 2 Mob-de-Mob: ½

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

Quarterly Sampling completed

PACIFIC ENVIRONMENTAL GROUP, INC.

Completed by: [signature] Date: 3-15-94

Checked by: _____ PITS Update: _____

Groundwater Extraction System

ARCO Service Station 0608
17601 Hesperian Boulevard
San Lorenzo, California

Name: DAREN KITAJIMA Date/Time: 0645 / 3-15-94

Treatment System Readings			
System On Upon Arrival?	YES	Electric Meter (kw-hrs)	10369
Effluent Totalizer (gallons)	3,344,249	Bag Filter INFL Pressure (psi)	12.0
E-1A Flowrate (gpm)	2.0	Bag Filter EFFL Pressure (psi)	9.7
E-1A Hourmeter (hours)	18235.0	MID-1 Pressure (psi)	7.0
E-1A Throttle Valve Position	1/2	MID-2 Pressure (psi)	2.0
E-1A DTW (TOB feet)	23.29 ~ 23.74	EFFL Pressure (psi)	0
Enclosure Swept	NO	Does Sump Pump Work	NONE INSTALLED
Does the Autodialer Work? Batteries Replaced	YES	Number of Spare Filters On-Site	∅

PRESSURE E-1A: 12.1

Comments

PAD is flooded - needs a sump. Will pump out w/ jacuzzi on drive-by visit this week.

Did not change filter - was changed 1 week ago.

Distrubute a copy of this form to the project supervisor.
33000626/O&MDOC

January 21, 1994

[redacted] Products Company
Division of AtlanticRichfieldCompany

330-006.26 **Task Order No.** 0608-9T-5

ARCO Facility no. 0608	City (Facility) SAN LORENZO	Project manager (Consultant) KELLY BROWN	Laboratory name SEQUOIA
ARCO engineer MIKE WHELAN	Telephone no. (ARCO)	Telephone no. (Consultant) 408) 441-7500	Fax no. (Consultant) 441-7539
Consultant name PACIFIC ENV. GROUP	Address (Consultant) 2025 GATEWAY PL #440 SAN JOSE		Contract number

Sample I.D.	Lab no.	Container no.	Matrix: Soil	Matrix: Water	Matrix: Other	Preservation: Ice	Preservation: Acid	Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA M602/8020/8015	TPH Modified 8015 Gas ☐ Diesel ☐	Oil and Grease 413.1 ☐ 413.2 ☐	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals ☐ Semi VOA ☐ VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐	COD
FF2		4		X		X	H_2SO_4	3-16-94	0715												X

Special detection Limit/reporting

Special QA/QC

Remarks

Lab number

Turnaround time

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

Condition of sample:

	Date	Time
Relinquished by sampler	3-16-94	1325
Relinquished by	3/17/94	0915
Relinquished by	Date	Time

Temperature received:

	Date	Time
Received by	3/16/94	1325
Received by	3/17/94	9:15
Received by laboratory	Date	Time

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

Division of AtlanticRichfieldCompany — Task Order no. 330-006.26

Facility no. 0608	City (Facility) SAN LORENZO	Project manager (Consultant) KELLY BROWN	Laboratory name SEQUOIA
Consultant engineer MIKE WHELAN	Telephone no. (ARCO)	Telephone no. (Consultant) (408) 441-7500	Fax no. (Consultant) (408) 441-7539
Consultant name PACIFIC ENV. GROUP	Address (Consultant) 2025 GATEWAY PL. #440 SAN JOSE		Contract number

Sample I.D.	Lab no.	Container no.	Matrix: Soil	Matrix: Water	Matrix: Other	Preservation: Ice	Preservation: Acid	Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA M602/8020/8015	TPH Modified 8015 Gas ☐ Diesel ☐	Oil and Grease 413.1 ☐ 413.2 ☐	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals ☐ VOA ☐ Semi VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐	pH	TSS
NFL		3		X		X	X	3-15-94			X											
FFL		↓		↓		↓	↓	↓			↓										X	
		↓		↓		X																X
		↓		↓		↓																
								COD		1												

Remarks: COD SAMPLE TO FOLLOW

Special detection Limit/reporting

Special QA/QC

Method of shipment

Lab number

Turnaround time

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

Condition of sample:

Temperature received:

	Date	Time
Relinquished by sampler	3-15-94	1145
Relinquished by	3/15/94	1342
Relinquished by	Date	Time
Received by	3/15/94	
Received by	3/15/94	
Received by laboratory	Date	Time

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

SITE INFORMATION FORM

Identification

ject # 330-006.26
Station # 0608
Site Address: 17601 Hesperian Blvd, San Lorenzo
County: Alameda
Project Manager: ShawG
Requestor: Lesliem
Client: ARCO
Client P.O.C.: MikeWhelan
Date of request: 1/94

Project Type

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

Ideal field date(s):

Prefield Contacts/Permits

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

Site Safety Concerns

Field Tasks

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

1). Sample system:

	INFL	EFFL
Gas / BTEX	M	M
COD		Q
TSS		Q
pH		Q

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

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 Mob-de-Mob: 1

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

System down on arrival — see attached. Restarted, sampled — Samples Taken

PACIFIC ENVIRONMENTAL GROUP, INC.

Completed by: [signature] Date: 2-17-94
Checked by: PITS Update:

Groundwater Extraction System

ARCO Service Station 0608
17601 Hesperian Boulevard
San Lorenzo, California

Name: DAREN KITAJIMA Date/Time: 2-17-94 / 03 1500

Treatment System Readings			
System On Upon Arrival?	NO * see comments	Electric Meter (kw-hrs)	(10017) 00017
Effluent Totalizer (gallons)	03273720	Bag Filter INFL Pressure (psi)	7.9
E-1A Flowrate (gpm)	1.5	Bag Filter EFFL Pressure (psi)	6.2
E-1A Hourmeter (hours)	17657.8	MID-1 Pressure (psi)	6.2
E-1A Throttle Valve Position	45°	MID-2 Pressure (psi)	1.5
E-1A DTW (TOB feet)	15.49 (15.49)	EFFL Pressure (psi)	0
Enclosure Swept	NO	Does Sump Pump Work	NO SUMP PUMP
Does the Autodialer Work? Batteries Replaced	NO - SEE BELOW	Number of Spare Filters On-Site	0

Comments * Bag filter INFL press was ~ 18 psi on arrival. Containment pad flooded w/ 2" water. We did not receive a call from autodialer indicating system down. Checked autodialer - works ok manually, but does not activate when alarms are tripped. Batteries ok. changed bag filter.

Distrubute a copy of this form to the project supervisor.
33000626/O&MDOC

January 21, 1994

ARCO Products Company ◆ Division of AtlanticRichfieldCompany — 330-006.26 Task Order No. 608-91-5 — **Chain of Custody**

ARCO Facility no. 0608	City (Facility) SAN LORENZO	Project manager (Consultant) KELLY BROWN	Laboratory name SEQUOIA
ARCO engineer MIKE WHELAN	Telephone no. (ARCO)	Telephone no. (Consultant) (408) 441-7500	Fax no. (Consultant) (408) 441-7539	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: Soil	Water	Other	Preservation: Ice	Acid	Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH G/D EPA M8020/8015	TPH Modified 8015 Gas ☐ Diesel ☐	Oil and Grease 413.1 ☐ 413.2 ☐	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals ☐ VOA ☐ Semi VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐		
INFL		3		X		X	HCl	2-17-94	1630		X											
EFFL		↓		↓		↓	↓	↓	1640		↓											

Special detection Limit/reporting

Special QA/QC

Remarks

Lab number

Turnaround time

Priority Rush 1 Business Day ☐

Rush 2 Business Days ☐

Expedited 5 Business Days ☐

Standard 10 Business Days ☒

Condition of sample:

Temperature received:

	Date	Time		Date	Time
Relinquished by sampler	2-18-94	0650	Received by	2/18/94	
Relinquished by	2/18/94	1430	Received by	2/18/94	14:20
Relinquished by	Date	Time	Received by laboratory	Date	Time

FIELD SERVICES/O and M REQUEST

SITE INFORMATION FORM

FILE COPY

Identification

Project # 330-06.12

...on # 0608

...ite Address: 17601 Hesperian Blvd. San Lorenzo

County: Alameda

...roject Manager: Kelly Brown

Requestor: Roger Hoffmore

...lient: Arco

Client P.O.C.: Mike Whelan

Date of request: 9-93

Project Type

☐ 1st Time visi...

☐ Quarterly

☐ 1st ☐ 2nd ☐ 3rd ☐ 4th

☒ Monthly

☐ Semi-Monthly

☐ Weekly

☐ One time event

☐ Other: ______

Ideal field date(s): 2nd week of Month

Prefield Contacts/Permits

☐ Cal Trans

☐ County

☐ City

☐ Private

☐ Multi-Consultant Scheduling

Date(s):

Site Safety

Concerns

Field Tasks

☒ System Sampling ☐ System Start-up ☐ System Repair ☐ System Modification ☐ System Resample ☐ System Shut-down

☐ Tank Pull ☐ Soil Sampling ☐ Subcontractor Observation ☐ SPH Bailing

☐ Report required for: ______ ☐ Data summary required for: ______

1.) DTW in wells MW-5, 7, 8, 9, 10, 11, 13, 25, E-1A

.) Change Filter

.) Sample system (Monthly = M. Quarterly = Q)

	INFL	EFFL
Gas./BTEX	M	M
C.O.D. (H_2SO_4 Cool)		Q
TSS (1 liter)		Q
pH (plastic)		Q

Note: Quarterly O+M work occurs January, April, July, Octobe...

MID. samples will be taken whe... breakthrough is expected in the future.

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

Budgeted hours: 6

Actual hours; On-Site: ~~4.5~~ 2.5 Mob-de-Mob: ~~1.5~~ 1.5

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

Sampled system (Quarterly)

performed normal O+M visit

see attached

Completed by: [signature] Date: 1/18/94

FIELD REPORT

DEPTH TO WATER/SEPARATE-PHASE HYDROCARBON SURVEY

PROJECT No.: 330-006.12 LOCATION: Hesperian DATE: 1/18/94

CLIENT/STATION NO.: ARCO/0608 FIELD TECHNICIAN: TPW DAY OF WEEK: Tues

PROBE TYPE/ID No.
- ☐ Oil/Water IF/ _____
- ☒ H_2O level indicator #6
- ☐ Other: _____

Dtw Order	Well ID	Time	Surface Seal	Lid Secure	Gasket	Lock	Expanding Cap	Total Depth (feet)	First Depth to Water (feet) TOB/TOC	Second Depth to Water (feet) TOB/TOC	SEPARATE-PHASE HYDROCARBONS (SPH): SPH Depth (feet) TOB/TOC	SPH Thickness (feet)	COLOR: Fresh	Weathered	Gas	Oil	VISCOSITY: Lite	Medium	Heavy	LIQUID REMOVED (gallons): SPH / H_2O
1	MW-5	1546							13.25	→										
2	7	1549							13.17	→										
6	8	1601							12.20	→										
7	9	1605							11.47	→										
9	10	1611							12.51	→										
8	11	1608							12.17	→										
4	13	1554							14.52	→										
3	25	1551							13.00	→										
5	E-1A	1557							19.15	→										

Comments:

Groundwater Extraction System
San Lorenzo ARCO 608
17601 Hesperian Boulevard
San Lorenzo, California
330-06.12
Revised: October 12, 1992

Name: TRW Date/Time: 1-18-94 1646

Treatment System Readings

Effluent Totalizer (gallons)	03190900	Bag Filter INFL Pressure (psi)	10
Effluent Flowrate (gpm)	1-2	Carbon 1 INFL Pressure (psi)	8
E-1A Hourmeter (hours)	16938.7	MID-1 Pressure Pressure (psi)	6.5
Electric meter (kw-hrs)	19591	MID-2 Pressure (psi)	N/A
Sewer Level Overflowing?	NO	EFFL Pressure (psi)	< 1
E-1A DTW (TOB) (feet)	19.15	Spare Bag Filters On-site	none
Does Autodialer Call Office?	YES	Does Pressure Switch Work?	YES

Sample groundwater at E-1A, MID-1, and EFFL

Temperature (F)	E-1A	67.5 ~~65.6~~	MID-1	66.7	MID-2	N/A	EFFL 65.6
pH (units)	E-1A	~~8.05~~ 7.58	MID-1	7.71	MID-2	N/A	EFFL 8.05

1. Check all fittings and piping for leaks. (Initials) OK
2. Check control panel for discrepancies. (Initials) OK
3. Take DTW/DTL from all on-site wells. (Initials) OK
4. Inspect the condition of the secondary containment (Initials) OK

Comments

Distribute a copy of this form to the project supervisor.

[redacted] Division of AtlanticRichfieldCompany 330-006.12 Task Order No. [redacted]

ARCO Facility no.	0608
City (Facility)	San Lorenzo
Project manager (Consultant)	Kelly Brown
Laboratory name	SequoiA
ARCO engineer	Mike Whelen
Telephone no. (ARCO)	
Telephone no. (Consultant)	408 441-7500
Fax no. (Consultant)	408 441-7539
Contract number	
Consultant name	Pacific ENV.
Address (Consultant)	2025 GATeway Place #440 San Jose
Method of shipment	

Sample I.D.	Lab no.	Container no.	Matrix: Soil	Matrix: Water	Matrix: Other	Preservation: Ice	Preservation: Acid	Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA M602/8020/8015	TPH Modified 8015 Gas ☐ Diesel ☐	Oil and Grease 413.1 ☐ 413.2 ☐	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals ☐ VOA ☐ Semi VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐	COD	pH/TSS
INFL		3		X		Y	HCL	1/18/97	1620		X											
EFFL		↓		↓		↓	↓	↓	1630		X											
		2					H_2SO_4														X	
↓		1					NP															X

Special detection Limit/reporting

Special QA/QC

Remarks

Lab number

Condition of sample:

Temperature received:

Relinquished by sampler [signature]	Date 1/18/97	Time 1755	Received by
Relinquished by	Date	Time	Received by
Relinquished by	Date	Time	Received by laboratory / Date / Time

Turnaround time

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

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

APPC-3292 (2-91)