



PACIFIC
ENVIRONMENTAL
GROUP, INC.

9/7/94
- Keep an eye eye on wells. Appears to be concerning
in the shallow depth - going dry. However,
surrounding wells 25, 7, & 13 are concerned properly
& are adequately indicating extent of plume.
- Consider to check back w/ the residents at
17372 Van Duzer, 17371 Van Duzer, & 642 Hesperian
to determine whether they are using their wells.
- Do Prof look into monitoring Well # 33 Hesperian

August 15, 1994
Project 330-006.25

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

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

91 AUG 19 PM 3:33
HACIENDA

Dear Mr. Whelan:

This letter, prepared by Pacific Environmental Group, Inc. (PACIFIC) on behalf of ARCO Products Company (ARCO) presents the results of the second quarter 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 June 13 through 15, 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 June 13, 1994 indicate that groundwater elevations have decreased in site groundwater monitoring wells an average of approximately 0.37 foot since March 28, 1994. Groundwater flow was to the west with an approximate gradient of 0.003. Groundwater elevation data are presented in Table 1. A groundwater elevation contour map based on the June 13, 1994 data is shown on Figure 1.

The results of groundwater monitoring this quarter for site groundwater monitoring wells indicate that TPH-g and benzene concentrations are generally consistent with previous quarters. TPH-g was detected at concentrations ranging from 62 to

3,700 parts per billion (ppb). Benzene was detected at concentrations ranging from 42 to 370 ppb. Wells MW-7, MW-9, MW-11, MW-13 through MW-16, MW-18, MW-19, and MW-21 through MW-26 had non-detectable levels of TPH-g and BTEX compounds. Separate-phase hydrocarbons (SPH) were not observed in any site well this quarter. SPH have not been observed in any site well since March 1990. Groundwater analytical data are presented in Table 2. A TPH-g and benzene concentration map is shown on Figure 2.

DOMESTIC IRRIGATION SUPPLY WELLS

The results of sampling this quarter for domestic irrigation wells indicate that TPH-g and benzene concentrations are within historical levels. This quarter Wells 633 H, 634 H, 642 H, 675 H, and 17371 VM were not sampled. TPH-g was detected in Wells 17349 VM and 17372 VM at 460 and 110 ppb. TPH-g was not detected in Wells 590 H, 642 H, 17197 VM, 17200 VM, 17203 VM, 17302 VM, 17348 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. Remedial objectives at this site include: (1) migration control of the impacted groundwater plume, and (2) petroleum hydrocarbon mass reduction. In order to evaluate treatment system performance, PACIFIC monitored well water levels, instantaneous and average extracted water flow rates, and sampled the influent and effluent of the treatment system for TPH-g and BTEX compounds on a monthly basis. Treatment system effluent is also analyzed for chemical oxygen demand, total suspended solids, and pH as requested by the Oro Loma Sanitary District. A brief description and a performance evaluation of the GWE system from March 15 to June 14, 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. During the quarterly groundwater monitoring event, the GWE system was not operational due to an automatic safety shutdown. Therefore, current groundwater contour map (Figure 1) does not indicate a groundwater depression resulting from the operation of the GWE system. However, groundwater elevation contour map from the previous quarter indicated a groundwater depression extending approximately 30 feet radially from the GWE well. As indicated by Figure 2, TPH-g and benzene concentrations in all downgradient monitoring wells, except for Well MW-17, remained non-detectable. TPH-g and benzene concentrations at Well MW-17 were 62 ppb and non-detectable, respectively.

Mass Reduction

→ MW10?

Progress toward meeting the mass reduction objective is determined by evaluating GWE system mass removal data and the TPH-g concentration trends in associated groundwater monitoring wells. GWE system operational data are collected monthly. The system flow and influent sample analysis data are used to estimate TPH-g mass removal values. During this quarter, GWE removed 0.2 pound (0.03 gallon) of TPH-g and less than 0.01 pound of benzene from the impacted groundwater beneath the site. To date, GWE has removed approximately 3.7 pounds (0.6 gallon) of TPH-g and 0.3 pound (0.04 gallon) of benzene from impacted groundwater beneath the site. Mass removal data for the GWE system are presented in Table 4. Treatment system certified analytical reports, chain-of-custody documentation, and field data sheets are presented as Attachment B. Progress toward site remediation is presented in the table below.

Analyte	Mass Removed			
	03/15/94 to 06/14/94		Cumulative	
	(lbs)	(gal)	(lbs)	(gal)
TPH-g	0.2	0.03	3.7	0.6
Benzene	<0.01	<0.01	0.3	0.04

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

Groundwater Extraction System Operational Data

The GWE system was approximately 67 percent operational during the reporting period. The system experienced two automatic shutdowns due to high pressure at the bag filter which resulted in 29 days of downtime. The shutdowns were not reported by the autodialer system (AS). The autodialer has been tested and appears to function properly. **Additionally, the system was shut down 1 day to raise the pump in the extraction well (approximately 4 feet); to evaluate changes in the groundwater extraction systems ability to capture the contaminated groundwater plume.**

During this quarter, the GWE system discharged treated groundwater at an average operational flow rate of approximately 2.0 gallons per minute (gpm) for a period discharge of 174,280 gallons. The instantaneous groundwater system flow rate was 2 gpm. Calculations based on 8 percent loading isotherm by weight indicate the primary carbon vessel is approximately 4.6 percent loaded. Treatment system analytical data are presented in Table 5.

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

Conclusions

Based on the performance of the GWE system, continued operation through the third quarter 1994 is recommended.

SUMMARY OF WORK

Work Completed Second Quarter 1994

- o Continued monitoring GWE system performance.
- o Preparation and submittal of first quarter 1994 groundwater monitoring and remedial system performance evaluation report.
- o Continued domestic irrigation well owner reimbursement program with owners who have discontinued well use.
- o Sampled site groundwater monitoring and domestic irrigation wells for second quarter 1994 groundwater monitoring program.
- o Preparation and submittal of domestic irrigation well sampling and reimbursement programs notification letter to Alameda County Health Care Agency (ACHCA) (issued April 4, 1994).
- o Fate and transport modeling on and off site.

- o Changed extraction pump elevation within Well E1-A to optimize hydrocarbon removal extraction rates.

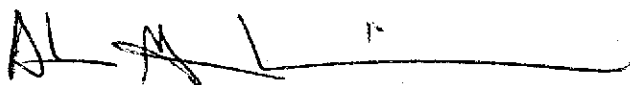
Work Anticipated Third Quarter 1994

- o Continue monitoring GWE system performance.
- o Preparation and submittal of second quarter 1994 groundwater monitoring and remedial system performance evaluation report.
- o Sample site groundwater monitoring and domestic irrigation wells for third quarter 1994 groundwater monitoring program.
- o Preparation of third quarter 1994 groundwater monitoring and remedial system performance evaluation report.
- o Continue domestic irrigation well owner reimbursement program with owners who have discontinued well use.
- o Attend meeting between the ACHCA, Regional Water Quality Control Board, ARCO, and PACIFIC regarding remedial investigation/feasibility study schedule.
- o Replace system flow totalizer.
- o Install rotometer.

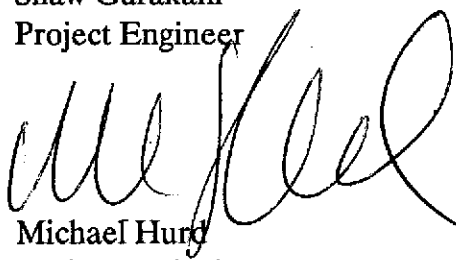
If there are any questions regarding the contents of this letter, please call.

Sincerely,

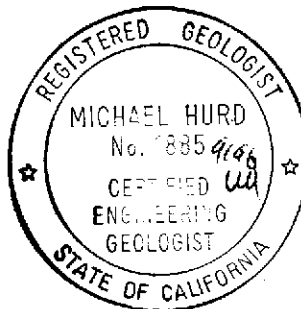
Pacific Environmental Group, Inc.



Shaw Garakani
Project Engineer



Michael Hurd
Senior Geologist
CEG 1885



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

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

Table 1
Groundwater Elevation Data

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

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

Table 1 (continued)
Groundwater Elevation Data

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

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

Table 1 (continued)
Groundwater Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	Separate-Phase Hydrocarbon Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-8 (cont.)	03/17/92		10.90	--	21.89
	04/15/92		11.35	--	21.44
	05/14/92		12.06	--	20.73
	06/15/92		12.83	--	19.96
	07/14/92		12.75	--	20.04
	08/18/92		13.83	--	18.96
	09/15/92		14.17	--	18.62
	10/16/92		14.51	--	18.28
	11/18/92		14.15	--	18.64
	12/17/92		12.68	--	20.11
	01/19/93		9.79	--	23.00
	02/22/93		9.95	--	22.84
	03/15/93		10.31	--	22.48
	04/09/93		10.47	--	22.32
	05/13/93		11.18	--	21.61
	06/04/93		11.47	--	21.32
	06/15/93		11.62	--	21.17
	09/13/93		12.70	--	20.09
	12/28/93		12.23	--	20.56
	03/28/94		11.28	--	21.51
06/13/94		11.60	--	21.19	
MW-9	01/16/92	32.11	12.45	--	19.66
	02/19/92		10.25	--	21.86
	03/17/92		10.01	--	22.10
	04/15/92		10.49	--	21.62
	05/14/92		11.19	--	20.92
	06/15/92		11.86	--	20.25
	07/14/92		12.28	--	19.83
	08/18/92		12.89	--	19.22
	09/15/92		13.28	--	18.83
	10/16/92		13.60	--	18.51
	11/18/92		13.24	--	18.87
	12/17/92		11.76	--	20.35
	01/19/93		8.99	--	23.12
	02/22/93		9.13	--	22.98
	03/15/93		9.48	--	22.63
	04/09/93		9.63	--	22.48
	05/13/93		10.35	--	21.76
06/04/93		10.65	--	21.46	
06/15/93		10.81	--	21.30	
09/13/93		11.87	--	20.24	

Table 1 (continued)
Groundwater Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	Separate-Phase Hydrocarbon Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-9 (cont.)	12/28/93		11.61	--	20.50
	03/28/94		10.48	--	21.63
	06/13/94		10.80	--	21.31
MW-10	01/16/92	31.67	12.55	--	19.12
	02/19/92		10.50	--	21.17
	03/18/92		10.12	--	21.55
	04/15/92		10.59	--	21.08
	05/14/92		11.30	--	20.37
	06/15/92		11.93	--	19.74
	07/14/92		12.42	--	19.25
	08/18/92		13.03	--	18.64
	09/15/92		13.42	--	18.25
	10/16/92		13.74	--	17.93
	11/18/92		13.42	--	18.25
	12/17/92		11.94	--	19.73
	01/19/93		9.13	--	22.54
	02/22/93		9.22	--	22.45
	03/15/93		9.64	--	22.03
	04/09/93		9.75	--	21.92
	05/13/93		10.49	--	21.18
	06/04/93		10.78	--	20.89
	06/15/93		10.93	--	20.74
	09/13/93		12.01	--	19.66
12/28/93		11.41	--	20.26	
03/28/94		10.60	--	21.07	
06/13/94		10.95	--	20.72	
MW-11	01/16/92	32.54	13.28	--	19.26
	02/19/92		11.29	--	21.25
	03/17/92		10.81	--	21.73
	04/15/92		11.23	--	21.31
	05/14/92		11.96	--	20.58
	06/15/92		12.64	--	19.90
	07/14/92		13.08	--	19.46
	08/18/92		13.72	--	18.82
	09/15/92		14.13	--	18.41
	10/16/92		14.45	--	18.09
	11/18/92		14.11	--	18.43
	12/17/92		12.69	--	19.85
	01/19/93		9.91	--	22.63
02/22/93		9.95	--	22.59	

Table 1 (continued)
Groundwater Elevation Data

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

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

Table 1 (continued)
Groundwater Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	Separate-Phase Hydrocarbon Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-13 (cont.)	08/18/92		16.15	--	19.27
	09/15/92		16.51	--	18.91
	10/16/92		16.81	--	18.61
	11/18/92		16.50	--	18.92
	12/17/92		15.07	--	20.35
	01/19/93		12.40	--	23.02
	02/22/93		12.35	--	23.07
	03/15/93		12.69	--	22.73
	04/09/93		12.85	--	22.57
	05/13/93		13.55	--	21.87
	06/04/93		13.83	--	21.59
	06/15/93		13.97	--	21.45
	09/13/93		15.09	--	20.33
	12/28/93		14.47	--	20.95
	03/28/94		13.64	--	21.78
06/13/94		13.98	--	21.44	
MW-14	01/16/92	30.46	11.34	--	19.12
	02/19/92		9.32	--	21.14
	03/17/92		9.04	--	21.42
	06/15/92		10.83	--	19.63
	09/15/92		12.27	--	18.19
	12/17/92		10.69	--	19.77
	03/15/93		8.70	--	21.76
	06/15/93		9.90	--	20.56
	09/13/93		10.89	--	19.57
	12/28/93		10.24	--	20.22
	03/28/94		9.55	--	20.91
06/13/94		9.92	--	20.54	
MW-15	01/16/92	31.41	12.80	--	18.61
	02/19/92		10.85	--	20.56
	03/18/92		10.41	--	21.00
	06/15/92		12.19	--	19.22
	09/15/92		13.69	--	17.72
	12/17/92		12.26	--	19.15
	03/15/93		10.05	--	21.36
	06/15/93		11.32	--	20.09
	09/13/93		12.35	--	19.06
	12/28/93		11.76	--	19.65
	03/28/94		10.95	--	20.46
06/13/94		11.34	--	20.07	

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-16	01/16/92	31.39	13.09	--	18.30
	02/19/92		10.99	--	20.40
	03/18/92		10.85	--	20.54
	06/15/92		12.64	--	18.75
	09/15/92		14.07	--	17.32
	12/17/92		12.56	--	18.83
	03/15/93		10.60	--	20.79
	06/15/93		11.86	--	19.53
	09/13/93		12.83	--	18.56
	12/28/93		12.14	--	19.25
	03/28/94		11.46	--	19.93
06/13/94	11.87	--	19.52		
MW-17	01/16/92	32.43	13.92	--	18.51
	02/19/92		11.65	--	20.78
	03/18/92		11.71	--	20.72
	06/15/92		13.50	--	18.93
	09/15/92		14.95	--	17.48
	12/17/92		13.34	--	19.09
	03/15/93		11.47	--	20.96
	06/15/93		12.69	--	19.74
	09/13/93		13.66	--	18.77
	12/28/93		12.96	--	19.47
	03/28/94		12.33	--	20.10
06/13/94	12.71	--	19.72		
MW-18	03/18/92	29.70	9.73	--	19.97
	06/15/92		11.50	--	18.20
	09/15/92		12.90	--	16.80
	12/17/92		11.21	--	18.49
	03/15/93		9.62	--	20.08
	06/15/93		10.85	--	18.85
	09/13/93		11.75	--	17.95
	12/28/93		11.06	--	18.64
	03/28/94		10.43	--	19.27
06/13/94	10.80	--	18.90		
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

Table 1 (continued)
Groundwater Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	Separate-Phase Hydrocarbon Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-19 (cont.)	06/15/93		10.28	--	18.74
	09/13/93		11.16	--	17.86
	12/28/93		10.58	--	18.44
	03/28/94		9.92	--	19.10
	06/13/94		10.26	--	18.76
MW-20	03/18/92	29.54	9.49	--	20.05
	06/15/92		11.11	--	18.43
	09/15/92		12.50	--	17.04
	12/17/92		10.74	--	18.80
	03/15/93		9.44	--	20.10
	06/05/93		10.45	--	19.09
	10/11/93			Well Destroyed	
MW-21	03/18/92	28.72	9.55	--	19.17
	06/15/92		11.30	--	17.42
	09/15/92		12.78	--	15.94
	12/17/92		10.80	--	17.92
	03/15/93		9.59	--	19.13
	06/15/93		10.77	--	17.95
	09/13/93		11.63	--	17.09
	12/28/93		11.02	--	17.70
	03/28/94		10.30	--	18.42
	06/13/94		10.69	--	18.03
MW-22	03/17/92	29.29	10.05	--	19.24
	06/15/92		11.84	--	17.45
	09/15/92		13.27	--	16.02
	12/17/92		11.58	--	17.71
	03/15/93		10.03	--	19.26
	06/15/93		11.22	--	18.07
	09/13/93		12.17	--	17.12
	12/28/93		11.34	--	17.95
	03/28/94		10.78	--	18.51
	06/13/94		11.24	--	18.05
MW-23	03/17/92	30.99	11.20	--	19.79
	06/15/92		12.94	--	18.05
	09/15/92		14.40	--	16.59
	12/17/92		13.01	--	17.98
	03/15/93		11.01	--	19.98
	06/15/93		12.26	--	18.73

Table 1 (continued)
Groundwater Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	Separate-Phase Hydrocarbon Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-23 (cont.)	09/13/93		13.23	--	17.76
	12/28/93		12.57	--	18.42
	03/28/94		11.86	--	19.13
	06/13/94		12.26	--	18.73
MW-24	06/15/93	34.38	13.39	--	20.99
	09/13/93		14.38	--	20.00
	12/28/93		13.83	--	20.55
	03/28/94		13.02	--	21.36
	06/13/94		13.37	--	21.01
MW-25	04/09/93	34.12	11.18	--	22.94
	06/15/93		12.35	--	21.77
	09/13/93		13.45	--	20.67
	12/28/93		12.89	--	21.23
	03/28/94		12.02	--	22.10
	06/13/94		12.39	--	21.73
MW-26	06/15/93	33.71	12.66	--	21.05
	09/13/93		13.70	--	20.01
	12/28/93		13.06	--	20.65
	03/28/94		12.30	--	21.41
	06/13/94		12.65	--	21.06

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					
MW-4	01/11/88	62,000	2,700	7,900	850	5,200	
	09/12/88	Separate-Phase Hydrocarbon Sheen					
	03/07/89	84,000	2,400	3,400	2,500	7,600	
	06/21/89	31,000	400	800	200	1,500	
	12/12/89	Well Dry					
	03/29/90	0.01 foot of Separate-Phase Hydrocarbon					
	06/22/90	Well Dry					
MW-5	01/11/88	31,000	4,000	2,700	3,800	5,500	
	03/07/89	1,300	340	ND	140	50	
	06/21/89	1,100	200	ND	130	40	
	12/12/89	Well Dry					
	03/29/90	Well Dry					
	06/22/90	Well Dry					
	09/19/90	Well Dry					
	12/27/90	Well Dry					
	03/21/91	Well Dry					
	06/26/91	Well Dry					
	09/24/91	Well Dry					
	12/19/91	Well Dry					
	03/18/92	11,000	110	2.0	410	150	
	06/15/92	Well Dry					
	09/16/92	Well Dry					
12/22/92	960	220	6.5	4.0	2.0		
03/17/93	2,600	180	1.4	28	1.2		
06/17/93	2,500	450	7.5	55	<5		

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

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

Well Number	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
MW-5 (cont.)	09/17/93	1,400	230	<5.0	6.7	<5.0
	12/29/93	690	38	2.1	2.7	3.8
	03/30/94	1,400	30	<5	<5	<5
	06/14/94	1,700	42	<5	<5	<5
MW-6 (E-1)	06/21/89	1,700	170	170	85	290
	12/12/89	500	26	7	8	18
	03/29/90	130	14	9	4	11
	06/22/90	150	15	5	4	13
	07/18/90	Well Destroyed				
MW-7	04/13/90	<50	<0.3	<0.3	<0.3	<0.3
	06/22/90	<50	0.5	1	0.6	3
	09/19/90	<50	<0.3	<0.3	<0.3	<0.3
	12/27/90	69	<0.3	0.3	0.4	2
	03/21/91	<30	<0.3	<0.3	<0.3	<0.3
	06/26/91	<30	<0.3	<0.3	<0.3	<0.3
	09/24/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/17/92	<30	<0.3	<0.3	<0.3	<0.3
	06/17/92	<30	<0.3	<0.3	<0.3	<0.3
	09/16/92	<50	<0.5	<0.5	<0.5	<0.5
	12/21/92	<50	<0.5	<0.5	<0.5	<0.5
	03/17/93	<50	<0.5	<0.5	<0.5	<0.5
	06/15/93	<50	<0.5	<0.5	<0.5	<0.5
	09/14/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
03/30/94	<50	<0.5	<0.5	<0.5	<0.5	
06/14/94	<50	<0.5	<0.5	<0.5	<0.5	
MW-8	04/13/90	4,900	350	16	450	33
	06/22/90	3,700	370	12	330	28
	09/19/90	140	4	3	3	3
	12/27/90	1,200	7	0.3	53	<0.3
	03/21/91	540	8.8	<6.0	21	9.6
	06/26/91	2,100	290	<6.0	56	<6.0
	09/24/91	260	51	0.34	7.9	<0.3
	12/19/91	5,300	300	<3.0	21	4.8
	03/17/92	9,200	370	3.0	48	4.9
	06/17/92	3,300	460	2.7	63	6.9
	09/16/92	1,500	58	<0.5	6.1	4.5
12/22/92	3,600	410	56	62	4.4	

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

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

Well Number	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
MW-8 (cont.)	03/18/93	3,800	61	<0.5	11	1.2
	06/17/93	2,400	430	<5	11	<5
	09/14/93	1,900	36	1.4	32	8.6
	12/29/93	2,100	50	0.65	2.9	4.7
	03/29/94	1,900	220	<10	<10	<10
	06/14/94	2,800	340	<5	<5	<5
MW-9	04/13/90	<50	<0.3	<0.3	<0.3	2
	06/22/90	12,000	200	3	250	180
	09/19/90	<50	<0.3	<0.3	<0.3	0.6
	12/27/90	<50	<0.3	<0.3	<0.3	<0.3
	03/21/91	<30	<0.3	<0.3	<0.3	<0.3
	06/26/91	<30	<0.3	<0.3	<0.3	<0.3
	09/24/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/17/92	<30	<0.3	<0.3	<0.3	<0.3
	06/16/92	<30	<0.3	<0.3	<0.3	<0.3
	09/16/92	<50	<0.5	<0.5	<0.5	<0.5
	12/21/92	75 ^c	<0.5	<0.5	<0.5	<0.5
	03/16/93	<50	<0.5	<0.5	<0.5	<0.5
	06/15/93	<50	<0.5	<0.5	<0.5	<0.5
	09/14/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
03/29/94	<50	<0.5	<0.5	<0.5	<0.5	
06/14/94	<50	<0.5	<0.5	<0.5	<0.5	
MW-10	04/13/90	10,000	150	4	280	200
	06/22/90	9,700	28	<0.3	131	210
	09/19/90	1,800	<0.3	4	0.8	10
	12/27/90	5,700	7	3	95	61
	03/21/91	6,900	22	<15	92	33
	06/26/91	9,300	51	<0.3	59	34
	09/24/91	360	8.6	5.2	14	6.2
	12/19/91	3,300	9.2	8.4	11	17
	03/18/92	4,700	14	<6.0	29	10
	06/16/92	4,800	0.46	0.34	7.4	3.8
	09/16/92	2,000	8.3	3.0	3.3	5.5
	12/22/92	2,700 ^c	6.2	<1.0	7.5	2.8
	03/16/93	4,100	340	2.4	58	54
	06/17/93	4,900	860	<10	540	92
	09/17/93	4,500	670	<10.0	240	7.2
12/28/93	5,000	1,200 ^d	12	46	31	

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

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

Well Number	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	
MW-10 (cont.)	03/29/94	4,700	470	<10	29	45	
	06/14/94	3,700	370	<1.0	<1.0	<1.0	
MW-11	04/13/90	<50	<0.3	<0.3	<0.3	<0.3	
	06/22/90	63	0.4	0.9	0.7	3	
	09/19/90	<50	<0.3	<0.3	<0.3	<0.3	
	12/27/90	<50	<0.3	<0.3	<0.3	<0.3	
	03/21/91	<30	<0.3	<0.3	<0.3	<0.3	
	06/26/91	<30	<0.3	<0.3	<0.3	<0.3	
	09/24/91	<30	<0.3	<0.3	<0.3	<0.3	
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3	
	03/17/92	<30	<0.3	<0.3	<0.3	<0.3	
	06/16/92	<30	<0.3	<0.3	<0.3	<0.3	
	09/16/92	<50	<0.5	<0.5	<0.5	<0.5	
	12/22/92	<50	<0.5	<0.5	<0.5	<0.5	
	03/16/93	<50	<0.5	<0.5	<0.5	<0.5	
	06/16/93	<50	<0.5	<0.5	<0.5	<0.5	
	09/14/93	<50	<0.5	<0.5	<0.5	<0.5	
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5	
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5	
06/13/94	<50	<0.5	<0.5	<0.5	<0.5		
E-1A (MW-12)	09/19/90	<50	7	0.9	1	2	
	12/27/90	<50	3	0.5	1	1	
	03/21/91	<30	4.2	<0.3	1.1	0.89	
	06/26/91	41	6.3	<0.3	1.2	0.59	
	----- Converted to Extraction Well 8/91 -----						
	03/28/94	120	4.8	<0.50	5.7	4.1	
06/14/94*	230	12	<0.5	16	1.5		
MW-13	07/03/91	<30	<0.3	<0.3	<0.3	<0.3	
	09/24/91	<30	<0.3	<0.3	<0.3	<0.3	
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3	
	03/17/92	<30	<0.3	<0.3	<0.3	<0.3	
	06/17/92	<30	<0.3	<0.3	<0.3	<0.3	
	09/16/92	<50	<0.5	<0.5	<0.5	<0.5	
	12/21/92	<50	<0.5	<0.5	<0.5	<0.5	
	03/17/93	<50	<0.5	<0.5	<0.5	<0.5	
	06/15/93	<50	<0.5	<0.5	<0.5	<0.5	
	09/14/93	<50	<0.5	<0.5	<0.5	<0.5	
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5	
	03/30/94	<50	<0.5	<0.5	<0.5	<0.5	
06/14/94	<50	<0.5	<0.5	<0.5	<0.5		

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	07/03/91	<30	<0.3	<0.3	<0.3	<0.3
	09/24/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/17/92	<30	<0.3	<0.3	<0.3	<0.3
	06/16/92	<30	<0.3	<0.3	<0.3	<0.3
	09/16/92	<50	<0.5	<0.5	<0.5	<0.5
	12/22/92	<50	<0.5	<0.5	<0.5	<0.5
	03/16/93	<50	<0.5	<0.5	<0.5	<0.5
	06/15/93	<50	<0.5	<0.5	<0.5	<0.5
	09/15/93	<50	<0.5	<0.5	<0.5	<0.5
	12/28/93	<50	<0.5	<0.5	<0.5	<0.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
MW-15	07/03/91	570	1.8	1.0	1.0	2.2
	09/24/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	360	<0.6	<0.6	0.64	<0.6
	03/18/92	730	0.74	0.98	1.8	0.68
	06/16/92	310	0.54	0.34	0.96	2.5
	09/16/92	100	1.0	<0.5	<0.5	<0.5
	12/22/92	130 ^c	<0.5	<0.5	<0.5	<0.5
	03/18/93	130 ^c	<0.5	<0.5	<0.5	<0.5
	06/17/93	<50	<0.5	<0.5	<0.5	<0.5
	09/17/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	52	<0.5	<0.5	<0.5	1.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
MW-16	07/03/91	2,700	31	6.9	4.6	3.1
	09/24/91	430	1.8	1.3	1.9	1.5
	12/19/91	75	<0.3	<0.3	<0.3	<0.3
	03/18/92	1,500	4.0	0.73	2.2	1.3
	06/16/92	80	<0.3	<0.3	<0.3	<0.3
	09/16/92	<50	<0.5	<0.5	<0.5	<0.5
	12/22/92	<50	<0.5	<0.5	<0.5	<0.5
	03/18/93	380 ^c	<0.5	<0.5	<0.5	<0.5
	06/17/93	<50	<0.5	<0.5	<0.5	<0.5
	09/17/93	<50	<0.5	<0.5	<0.5	<0.5
	12/28/93	<50	<0.5	<0.5	0.72	<0.5
	03/28/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5

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	07/03/91	1,200	12	1.9	28	40
	09/24/91	150	2.7	0.5	3.9	0.59
	12/19/91	370	2.6	<0.3	7.2	6.5
	03/18/92	470	3.1	<0.3	9.1	8.6
	06/16/92	310	1.7	0.56	12	9.6
	09/16/92	77	1.5	<0.5	1.2	1.0
	12/21/92	220	1.2	<0.5	9.8	9.4
	03/17/93	250	<0.5	<0.5	7.8	3.3
	06/17/93	90	0.92	<0.5	2.7	2.4
	09/16/93	140	<0.5	<0.5	5.4	3.9
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/15/94	62	<0.5	<0.5	1.2	<0.90
MW-18	10/04/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/18/92	<30	<0.3	<0.3	<0.3	<0.3
	06/15/92	<30	<0.3	<0.3	<0.3	<0.3
	09/15/92	<50	<0.5	<0.5	<0.5	<0.5
	12/21/92	<50	<0.5	<0.5	<0.5	<0.5
	03/17/93	<50	<0.5	<0.5	<0.5	<0.5
	06/16/93	<50	<0.5	<0.5	<0.5	<0.5
	09/16/93	<50	<0.5	<0.5	<0.5	<0.5
	12/28/93	<50	<0.5	<0.5	<0.5	<0.5
	03/28/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
MW-19	10/04/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/18/92	<30	<0.3	<0.3	<0.3	<0.3
	06/15/92	<30	<0.3	<0.3	<0.3	<0.3
	09/15/92	<50	<0.5	<0.5	<0.5	<0.5
	12/21/92	<50	<0.5	<0.5	<0.5	<0.5
	03/17/93	<50	<0.5	<0.5	<0.5	<0.5
	06/16/93	<50	<0.5	<0.5	<0.5	<0.5
	09/16/93	<50	<0.5	<0.5	<0.5	<0.5
	12/28/93	<50	<0.5	<0.5	<0.5	<0.5
	03/28/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
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

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-20 (cont.)	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					<0.5
MW-21	10/04/91	<30	<0.3	<0.3	<0.3	<0.3	
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3	
	03/18/92	<30	<0.3	<0.3	<0.3	<0.3	
	06/15/92	<30	<0.3	<0.3	<0.3	<0.3	
	09/15/92	<50	<0.5	<0.5	<0.5	<0.5	
	12/22/92	<50	<0.5	<0.5	<0.5	<0.5	
	03/17/93	<50	<0.5	<0.5	<0.5	<0.5	
	06/16/93	<50	<0.5	<0.5	<0.5	<0.5	
	09/16/93	<50	<0.5	<0.5	<0.5	<0.5	
	12/28/93	<50	<0.5	<0.5	<0.5	<0.5	
	03/28/94	<50	<0.5	<0.5	<0.5	<0.5	
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5	
MW-22	10/04/91	<30	<0.3	<0.3	<0.3	<0.3	
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3	
	03/17/92	<30	<0.3	<0.3	<0.3	<0.3	
	06/15/92	<30	<0.3	<0.3	<0.3	<0.3	
	09/15/92	<50	<0.5	<0.5	<0.5	<0.5	
	12/22/92	<50	<0.5	<0.5	<0.5	<0.5	
	03/17/93	<50	<0.5	<0.5	<0.5	<0.5	
	06/16/93	<50	<0.5	<0.5	<0.5	<0.5	
	09/16/93	<50	<0.5	<0.5	<0.5	<0.5	
	12/28/93	<50	<0.5	<0.5	<0.5	<0.5	
	03/28/94	<50	<0.5	<0.5	<0.5	<0.5	
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5	
MW-23	10/04/91	<30	<0.3	<0.3	<0.3	<0.3	
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3	
	03/17/92	<30	<0.3	<0.3	<0.3	<0.3	
	06/15/92	<30	<0.3	<0.3	<0.3	<0.3	
	09/15/92	<50	<0.5	<0.5	<0.5	<0.5	
	12/22/92	<50	<0.5	<0.5	<0.5	<0.5	
	03/16/93	<50	<0.5	<0.5	<0.5	<0.5	
	06/16/93	<50	<0.5	<0.5	<0.5	<0.5	

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

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

Well Number	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
MW-23 (cont.)	09/15/93	<50	<0.5	<0.5	<0.5	<0.5
	12/28/93	<50	<0.5	<0.5	<0.5	<0.5
	03/28/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
MW-24	03/29/93	<50	<0.5	<0.5	<0.5	<0.5
	06/15/93	<50	<0.5	<0.5	<0.5	<0.5
	09/14/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
MW-25	03/29/93	<50	0.69	<0.5	<0.5	<0.5
	06/15/93	<50	<0.5	<0.5	<0.5	<0.5
	09/14/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
MW-26	03/29/93	<50	<0.5	<0.5	<0.5	<0.5
	06/15/93	<50	<0.5	<0.5	<0.5	<0.5
	09/14/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5

ppb = Parts per billion

NA = Not available

a. Ethylbenzene and xylenes given as a combined value.

b. Well contained slight product sheen.

c. Non-typical gasoline chromatograph pattern.

d. Anomalous data point.

< = Denotes minimum laboratory detection limits. See attached certified analytical reports.

* = Value taken from system influent sampling.

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

MW-3, MW-4, and MW-6 (E-1) destroyed June 18, 1990.

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

Hacienda Avenue and Via Magdalena
San Lorenzo, California

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

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

Hacienda Avenue and Via Magdalena
 San Lorenzo, California

Well Address	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
675 H	09/11/91 ^{b,d}	NS	NS	NS	NS	NS
	10/14/92 ^a	NS	NS	NS	NS	NS
	12/21/92 ^{b,d}	NS	NS	NS	NS	NS
	03/16/93 ^{b,d}	NS	NS	NS	NS	NS
	06/17/93 ^{b,d}	NS	NS	NS	NS	NS
	09/15/93 ^a	NS	NS	NS	NS	NS
	12/30/93 ^a	NS	NS	NS	NS	NS
	03/29/94 ^a	NS	NS	NS	NS	NS
	06/15/94 ^a	NS	NS	NS	NS	NS
17197 VM	11/13/91	<30	<0.3	<0.3	<0.3	<0.3
	10/14/92	<50	<0.5	<0.5	<0.5	<0.5
	12/21/92	<50	<0.5	<0.5	<0.5	<0.5
	03/16/93	<50	<0.5	<0.5	<0.5	<0.5
	06/17/93	<50	<0.5	<0.5	<0.5	<0.5
	09/16/93	<50	<0.5	<0.5	<0.5	<0.5
	12/30/93	<50	<0.5	<0.5	<0.5	<0.5
	03/30/94	<50	<0.5	<0.5	<0.5	<0.5
	06/15/94	<50	<0.5	<0.5	<0.5	<0.5
17200 VM	11/13/91	440	2.7	<0.3	<0.3	12
	10/14/92 ^a	NS	NS	NS	NS	NS
	12/18/92	160	1.4	<0.5	<0.5	3.4
	03/16/93	<50	<0.5	<0.5	<0.5	<0.5
	06/16/93	<50	<0.5	<0.5	<0.5	<0.5
	09/15/93	<50	<0.5	<0.5	<0.5	<0.5
	12/30/93	<50	<0.5	<0.5	<0.5	<0.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/15/94	<50	<0.5	<0.5	<0.5	<0.5
17203 VM	11/13/91	<30	<0.3	<0.3	<0.3	<0.3
	10/16/92 ^a	NS	NS	NS	NS	NS
	12/21/92	<50	<0.5	<0.5	<0.5	1.3
	03/16/93	<50	<0.5	<0.5	<0.5	<0.5
	06/17/93	<50	<0.5	<0.5	<0.5	<0.5
	09/16/93	<50	<0.5	<0.5	<0.5	<0.5
	12/30/93	<50	<0.5	<0.5	<0.5	<0.5
	03/30/94	<50	<0.5	<0.5	<0.5	<0.5
	06/15/94	<50	<0.5	<0.5	<0.5	<0.5

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)
17302 VM	10/21/91	72	0.64	<0.3	0.44	<0.3
	10/14/92a	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
	06/17/93b,d	NS	NS	NS	NS	NS
	09/16/93	66	<0.5	<0.5	<0.5	<0.5
	12/30/93	<50	<0.5	<0.5	<0.5	<0.5
	03/30/94	<50	<0.5	<0.5	<0.5	<0.5
	06/15/94	<50	<0.5	<0.5	<0.5	<0.5
	03/30/94	<50	<0.5	<0.5	<0.5	<0.5
06/15/94	<50	<0.5	<0.5	<0.5	<0.5	
17348 VM	11/13/91b,d	NS	NS	NS	NS	NS
	10/14/92a	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
	12/30/93b,d	NS	NS	NS	NS	NS
	03/30/94	<50	<0.5	<0.5	<0.5	<0.5
	06/15/94	<50	<0.5	<0.5	<0.5	<0.5
17349 VM	09/27/91	780	13	<3.0	<3.0	<3.0
	10/14/92	2,200	<50	<50	<50	110
	12/18/92	1,500	14	1.8	7.1	56
	03/16/93	1,100	16	4.2	1.8	1.8
	06/17/93	1,100	1.5	6.7	2.9	7.9
	09/16/93	1,200	13	21	3.0	10
	12/30/93a	NS	NS	NS	NS	NS
	03/30/94	420	<1	<1	<1	5.3
	06/15/94	460	<0.5	<0.5	<0.5	1.8
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
	06/17/93c	NS	NS	NS	NS	NS
	09/16/93c	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)
17371 VM (cont.)	12/30/93 ^c	NS	NS	NS	NS	NS
	03/30/94 ^c	NS	NS	NS	NS	NS
	06/15/94 ^c	NS	NS	NS	NS	NS
17372 VM	09/27/91	300	5.5	<0.60	1.3	0.72
	10/14/92	220	<1.0	<1.0	<1.0	<1.0
	12/18/92	290	3.8	0.88	0.99	1.2
	03/16/93	110*	<0.5	<0.5	<0.5	<0.5
	06/17/93	140	<0.5	1.3	0.63	1.1
	09/15/93	120	<0.5	1.1	0.62	1.2
	12/30/93	<50	<0.5	<0.5	<0.5	<0.5
	03/30/94	<50	<0.5	<0.5	<0.5	<0.5
	06/15/94	110	<0.5	<0.5	<0.5	<0.5
17393 VM	11/13/91	31	<0.3	<0.3	<0.3	<0.3
	10/14/92 ^a	NS	NS	NS	NS	NS
	12/18/92	<50	<0.5	<0.5	<0.5	<0.5
	03/16/93	<50	<0.5	<0.5	<0.5	<0.5
	06/17/93	<50	<0.5	<0.5	<0.5	<0.5
	09/15/93	<50	<0.5	<0.5	<0.5	<0.5
	12/30/93 ^a	NS	NS	NS	NS	NS
	12/30/93	<50	<0.5	<0.5	<0.5	<0.5
	03/30/94	50	<0.5	<0.5	<0.5	<0.5
06/15/94	<50	<0.5	<0.5	<0.5	<0.5	
<p>ppb = Parts per billion H = Hacienda Avenue VM = Via Magdalena < = Denotes laboratory detection limit NS = Not sampled * = Non-typical chromatogram pattern, did not sample. a. Owner not available to approve sampling access, well not sampled. b. Pump not functioning, well not sampled. c. Access denied by owner, well not sampled. d. Pumping equipment obstructing sampling access, well not sampled. Homeowners are contacted 1 week prior to sampling event.</p>						

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

Influent Sample Date	Hour Meter Reading (hours)	System Down Time (%)	Volume Reading (gallons)	Net Volume (gallons)	Average Flow (gpm)	TPH as Gasoline			Benzene			Primary Carbon Loading (%)
						Influent Concentration (µg/L)	Net Removed (pounds)	Removed To Date (pounds)	Influent Concentration (µg/L)	Net Removed (pounds)	Removed To Date (pounds)	
09/25/91	0.0	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
10/18/92	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	19	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	17,657.6	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
04/21/94	18,849.4	30.8	3,418,597	74,288	2.0	110	0.0	3.5	7.8	0.00	0.2	4.4
05/13/94	19,350.5	5.1	3,478,910	60,373	2.0	230	0.1	3.6	8.3	0.00	0.2	4.5
06/14/94	19,680.0	57.1	3,518,608 a	39,698	2.0	230	0.1	3.7	12	0.00	0.3	4.6

REPORTING PERIOD: 3/15/94 - 6/14/94												
TOTAL GALLONS EXTRACTED:			3,518,608									
PERIOD GALLONS EXTRACTED:			174,359									
TOTAL POUNDS REMOVED:								3.7		0.3		
TOTAL GALLONS REMOVED:								0.6		0.03		
PERIOD POUNDS REMOVED:								0.2		0.0		
PERIOD GALLONS REMOVED:								0.03		0.0		
AVERAGE PERIOD FLOW RATE (gpm):					2.0							
AVERAGE PERCENT DOWNTIME SINCE START-UP:					17.4%							
PERCENT OPERATIONAL:					67%							

gpm = Gallons per minute
 µg/L = Micrograms per liter
 NA = Not available or not applicable

a. Totalizer broken; estimated volume reading based on hourmeter reading and instantaneous flow rate.
 Net dissolved TPH as gasoline removed data are approximate.
 Density of gasoline = 6.1 pounds per gallon; density of benzene = 7.34 pounds per gallon
 Primary carbon loading is estimated using an isotherm of 8 percent by weight.

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

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

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

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

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

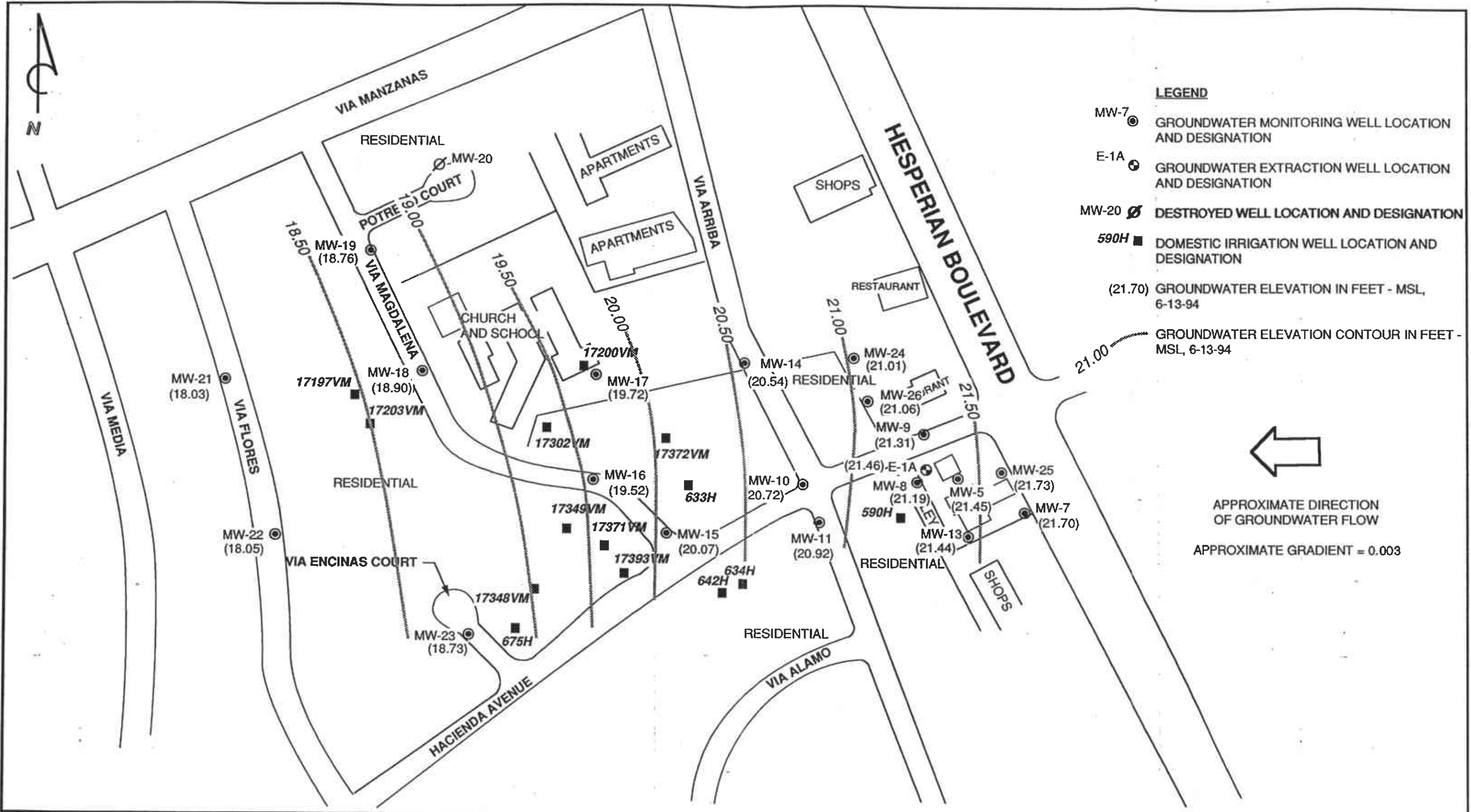
ARCO Service Station 0608
 17601 Hesperian Boulevard at Hacienda Avenue
 San Lorenzo, California

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

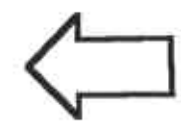
Table 5 (continued)
Treatment System Analytical Data
Total Petroleum Hydrocarbons
(TPH as Gasoline and BTEX Compounds)

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)					
06/04/93	<50	<0.5	<0.5	<0.5	<0.5
07/20/93	<50	<0.5	<0.5	<0.5	<0.5
08/16/93	<50	<0.5	<0.5	<0.5	<0.5
09/13/93	<50	<0.5	<0.5	<0.5	<0.5
10/08/93	<50	<0.5	<0.5	<0.5	<0.5
11/19/93	<50	<0.5	<0.5	<0.5	<0.5
12/21/93	<50	<0.5	<0.5	<0.5	<0.5
01/18/94	<50	<0.5	<0.5	<0.5	<0.5
02/17/94	<50	<0.5	<0.5	<0.5	<0.5
03/15/94	<50	<0.5	<0.5	<0.5	<0.5
04/21/94	<50	<0.5	<0.5	<0.5	<0.5
05/13/94	<50	<0.5	<0.5	<0.5	<0.5
06/14/94	<50	<0.5	<0.5	<0.5	<0.5
ppb = Parts per billion < = Denotes minimum laboratory detection limit. NS = Not sampled					



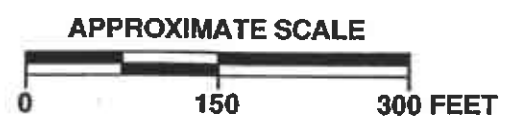
- LEGEND**
- MW-7 ● GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
 - E-1A ● GROUNDWATER EXTRACTION WELL LOCATION AND DESIGNATION
 - MW-20 ⊗ DESTROYED WELL LOCATION AND DESIGNATION
 - 590H ■ DOMESTIC IRRIGATION WELL LOCATION AND DESIGNATION
 - (21.70) GROUNDWATER ELEVATION IN FEET - MSL, 6-13-94
 - 21.00 GROUNDWATER ELEVATION CONTOUR IN FEET - MSL, 6-13-94



APPROXIMATE DIRECTION OF GROUNDWATER FLOW
 APPROXIMATE GRADIENT = 0.003



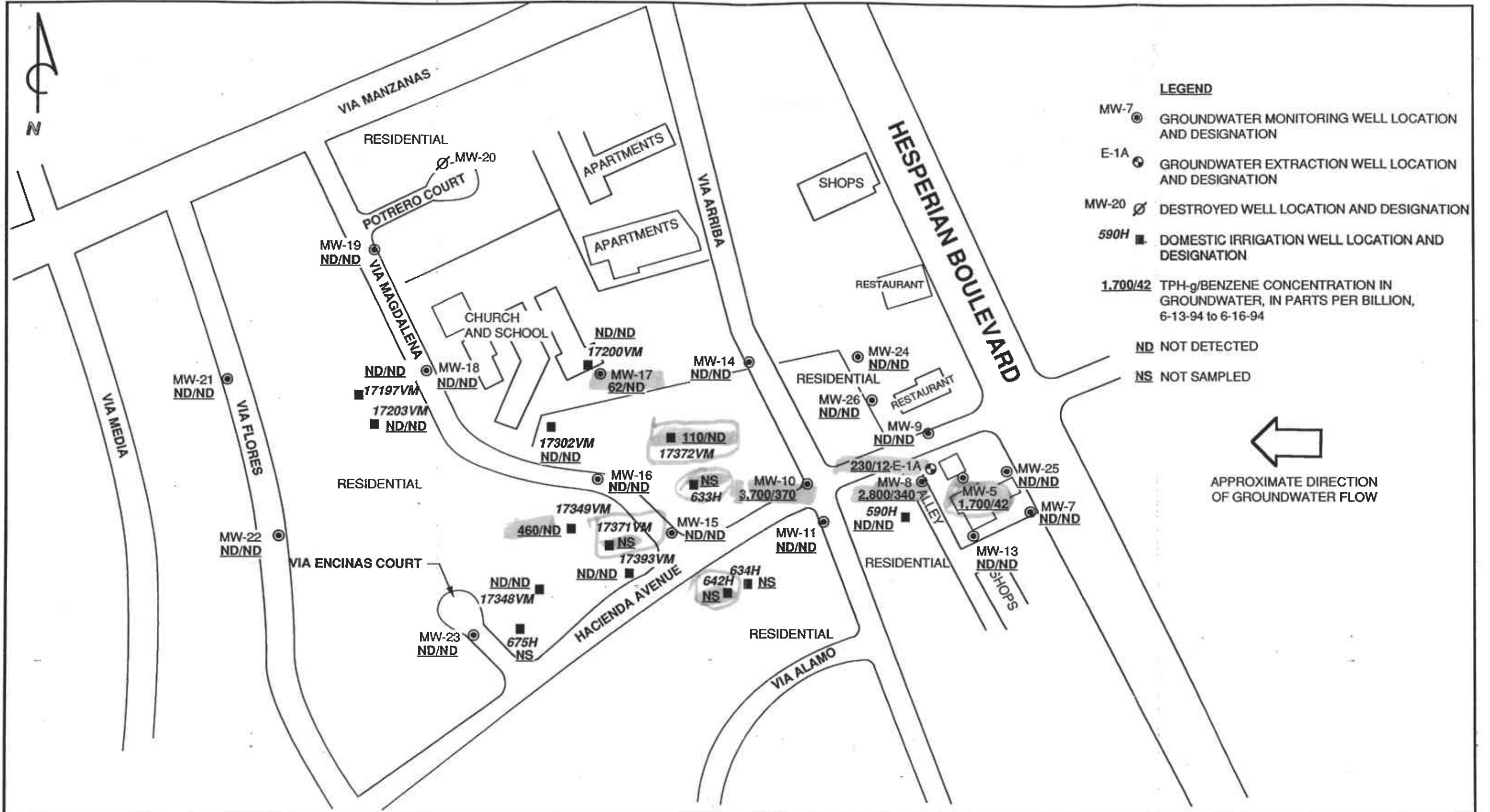
PACIFIC ENVIRONMENTAL GROUP, INC.



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

GROUNDWATER ELEVATION CONTOUR MAP

FIGURE: 1
 PROJECT: 330-006.25



PACIFIC ENVIRONMENTAL GROUP, INC.



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

TPH-g/BENZENE CONCENTRATION MAP

FIGURE: 2

PROJECT: 330-006.25

ATTACHMENT A
FIELD AND LABORATORY PROCEDURES

ATTACHMENT A
FIELD AND LABORATORY PROCEDURES

Sampling Procedures

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

Laboratory Procedures

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

ATTACHMENT B

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



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Maree Doden	Client Project ID:	330-006.18/0608, San Lorenzo	Sampled:	Jun 16, 1994
	Sample Matrix:	Water	Received:	Jun 17, 1994
	Analysis Method:	EPA 5030/8015 Mod./8020	Reported:	Jun 28, 1994
	First Sample #:	4FB2301		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 4FB2301 590H	Sample I.D. 4FB2302 TB-4
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:	6/21/94	6/21/94
Instrument Identification:	GCHP-2	GCHP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	96	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



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Maree Doden	Client Project ID: 330-006.18/0608, San Lorenzo Matrix: Liquid QC Sample Group: 4FB2301-02	Reported: Jun 28, 1994
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QUALITY CONTROL DATA REPORT

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

MS/MSD				
Batch#:	4FA2104	4FA2104	4FA2104	4FA2104
Date Prepared:	N.A.	N.A.	N.A.	N.A.
Date Analyzed:	6/21/94	6/21/94	6/21/94	6/21/94
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:	93	100	110	100
Matrix Spike Duplicate % Recovery:	97	100	110	103
Relative % Difference:	4.2	0.0	0.0	3.0

LCS Batch#:

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

LCS % Recovery:

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

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

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Please Note:

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

ARCO Facility no. 0608	City (Facility) San Lorenzo	Project manager (Consultant) Kelly Brown	Laboratory name Sgironi
ARCO engineer CC	Telephone no. (ARCO)	Telephone no. (Consultant) 408 441 7500	Contract number 07-073
Consultant name Pacific Environmental Group	Address (Consultant) 2025 Gateway Place #440 SJ CA		

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX EPA 802	BTEX/TPH/Gas EPA 802/803/8015	TPH Modified 8015 Gas Diesel	Oil and Grease 413.1 413.2	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 824/8240	EPA 825/8270	TCMP Metals VOC/VOC/VOC	Semi Metals EPA 601/7000	TCLC STLC	Lead Org. OHS Lead EPA 7420/7421	Method of shipment
			Soil	Water	Other	Ice	Acid															
590H		3	X			X	X	6-16-94	1300		X											01A-C
TB-4		2	X			X	X	6-16-94	—		X											02A/B

Special detection Limit/reporting

Special QA/QC

Remarks

Lab number 9406 B23

Turnaround time

Priority Rush 1 Business Day

Rush 2 Business Days

Expedited 5 Business Days

Standard 10 Business Days

Condition of sample:	Temperature received:
Relinquished by sampler [Signature]	Received by [Signature]
Date 6-16-94 Time 17:00	Date 6/17/94 Time 0730
Relinquished by [Signature]	Received by [Signature]
Date 6/17/94 Time 2:10	Date 6-17-94 Time 2:10
Relinquished by [Signature]	Received by laboratory [Signature]
Date 6/17-94	Date 6/17/94 Time 1553

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME:
REC. BY (PRINT):

REG (Area)
SW

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

9406 B23
6-20-94

CIRCLE THE APPROPRIATE RESPONSE		LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION (ETC)
1. Custody Seal(s):	Present / <u>Absent</u> Intact / Broken*	1	Ac	570 H	5 vcs	w	6/16	
2. Custody Seal Nos.:		2	41B	TB-4	2 vcs	L	↓	
3. Chain-of-Custody Records:	<u>Present</u> / Absent*							
4. Traffic Reports or Packing List:	Present / <u>Absent</u>							
5. Airbill:	Airbill / Sticker Present / <u>Absent</u>							
6. Airbill No.:								
7. Sample Tags: Sample Tag Nos.:	<u>Present</u> / Absent* <u>Listed</u> / Not Listed on Chain-of-Custody							
8. Sample Condition:	<u>Intact</u> / Broken* / Leaking*							
9. Does Information on custody reports, traffic reports and sample tags agree?	<u>Yes</u> / No*							
10. Proper Preservatives Used:	<u>Yes</u> / No*							
11. Date Rec. at Lab:	<u>6/17/94</u>							
12. Time Rec. at Lab:	<u>1553</u>							

Circled, contact Project Manager and attach record of resolution



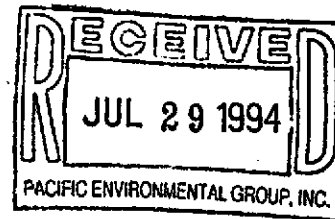
**Sequoia
Analytical**

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

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

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

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



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

Project: 330-006.25/0608, San Lorenzo

Enclosed are the results from 10 water samples received at Sequoia Analytical on June 16, 1994. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
4FA2801	Water, MW-17	6/15/94	EPA 5030/8015 Mod./8020
4FA2802	Water, 17348 VE	6/15/94	EPA 5030/8015 Mod./8020
4FA2803	Water, 17197 VM	6/15/94	EPA 5030/8015 Mod./8020
4FA2804	Water, 17200 VM	6/15/94	EPA 5030/8015 Mod./8020
4FA2805	Water, 17203 VM	6/15/94	EPA 5030/8015 Mod./8020
4FA2806	Water, 17302 VM	6/15/94	EPA 5030/8015 Mod./8020
4FA2807	Water, 17349 VM	6/15/94	EPA 5030/8015 Mod./8020
4FA2808	Water, 17372 VM	6/15/94	EPA 5030/8015 Mod./8020
4FA2809	Water, 17393 VM	6/15/94	EPA 5030/8015 Mod./8020
4FA2810	Water, TB-3	6/15/94	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



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Maree Doden	Client Project ID: 330-006.25/0608, San Lorenzo Sample Matrix: Water Analysis Method: EPA 5030/8015 Mod./8020 First Sample #: 4FA2801	Sampled: Jun 15, 1994 Received: Jun 16, 1994 Reported: Jun 24, 1994
--	--	---

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 4FA2801 MW-17	Sample I.D. 4FA2802 17348 VE	Sample I.D. 4FA2803 17197 VM	Sample I.D. 4FA2804 17200 VM	Sample I.D. 4FA2805 17203 VM	Sample I.D. 4FA2806 17302 VM
Purgeable Hydrocarbons	50	62	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	1.2	N.D.	N.D.	N.D.	N.D.	N.D.
Total Xylenes	0.50	0.90	N.D.	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:	6/17/94	6/17/94	6/17/94	6/18/94	6/18/94	6/18/94
Instrument Identification:	GCHP-17	GCHP-17	GCHP-17	GCHP-17	GCHP-17	GCHP-17
Surrogate Recovery, %: (QC Limits = 70-130%)	107	112	108	113	106	109

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

Please Note:
Revised report: 6/27/94



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Maree Doden	Client Project ID: 330-006.25/0608, San Lorenzo Sample Matrix: Water Analysis Method: EPA 5030/8015 Mod./8020 First Sample #: 4FA2807	Sampled: Jun 15, 1994 Received: Jun 16, 1994 Reported: Jun 24, 1994
--	--	---

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 4FA2807 17349 VM	Sample I.D. 4FA2808 17372 VM	Sample I.D. 4FA2809 17393 VM	Sample I.D. 4FA2810 TB-3
Purgeable Hydrocarbons	50	460	110	N.D.	N.D.
Benzene	0.50	N.D.	N.D.	N.D.	N.D.
Toluene	0.50	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.50	N.D.	N.D.	N.D.	N.D.
Total Xylenes	0.50	1.8	N.D.	N.D.	N.D.
Chromatogram Pattern:		Gas + Non-gas mix C6 - C12	Gas	--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0
Date Analyzed:	6/19/94	6/18/94	6/18/94	6/18/94
Instrument Identification:	GCHP-17	GCHP-2	GCHP-17	GCHP-17
Surrogate Recovery, %: (QC Limits = 70-130%)	112	100	107	109

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



Pacific Environmental Group Client Project ID: 330-006.25/0608, San Lorenzo
2025 Gateway Place, Suite 440 Matrnx: Liquid
San Jose, CA 95110
Attention: Maree Doden QC Sample Group: 4FA2801-03 Reported: Jun 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#:	4F88711	4F88711	4F88711	4F88711
Date Prepared:	N.A.	N.A.	N.A.	N.A.
Date Analyzed:	6/17/94	6/17/94	6/17/94	6/17/94
Instrument I.D.#:	GCHP-17	GCHP-17	GCHP-17	GCHP-17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Matrix Spike % Recovery:	98	100	99	100
Matrix Spike Duplicate % Recovery:	95	97	95	97
Relative % Difference:	3.1	3.0	4.1	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:

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



Pacific Environmental Group
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: 4FA2804-07, 09-10

Reported: Jun 24, 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#: 4FA2102 4FA2102 4FA2102 4FA2102

Date Prepared: - - - -
Date Analyzed: 6/18/94 6/18/94 6/18/94 6/18/94
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: 94 94 93 93

Matrix Spike Duplicate % Recovery: 94 94 94 93

Relative % Difference: 0.0 0.0 1.1 0.0

LCS Batch#:

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

LCS % Recovery:

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

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

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

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager



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

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

QC Sample Group: 4FA2808

Reported: Jun 24, 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#: 4FA2102 4FA2102 4FA2102 4FA2102

Date Prepared:

Date Analyzed: 6/18/94 6/18/94 6/18/94 6/18/94

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: 90 89 89 87

Matrix Spike Duplicate %

Recovery: 100 100 100 100

Relative %

Difference: 11 12 12 14

LCS Batch#:

Date Prepared:

Date Analyzed:

Instrument I.D.#:

LCS %

Recovery:

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

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

SEQUOIA ANALYTICAL

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.

Eileen A. Manning
Project Manager

ARCO Facility no. 0608

City (Facility) San Lorenzo

Project manager (Consultant) Kelly Brown

Laboratory name Sequoia

ARCO engineer CC

Telephone no. (ARCO)

Telephone no. (Consultant) (408) 441-7500

Fax no. (Consultant)

Contract number

Consultant name Pacific Environmental Group

Address (Consultant) 2025 Gateway Place #440 San Jose, CA

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH/Gas EPA 1602/8020/9015	TPH Modified 8015 Gas <input type="checkbox"/> Diesel <input type="checkbox"/>	Oil and Grease 413.1 <input type="checkbox"/> 413.2 <input type="checkbox"/>	TPH EPA 418.1/SM4503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCUP Metals <input type="checkbox"/> VOA <input type="checkbox"/> VOA <input type="checkbox"/>	Semi Metals <input type="checkbox"/> VOA <input type="checkbox"/> VOA <input type="checkbox"/>	CAM Metals EPA 6010/7000 TLC <input type="checkbox"/> STLC <input type="checkbox"/>	Lead Org./DHS <input type="checkbox"/> Lead EPA 7420/7421 <input type="checkbox"/>				
			Soil	Water	Other	Ice	Acid																		
✓ MW-17		3		X		X	X	6-15-94	1235		X														01
✓ 17348 VE		↓							1025																02
✓ 17197 VM		↓							1055																03
✓ 17200 VM		↓							1200																04
✓ 17203 VM		↓							1050																05
✓ 17302 VM		↓							1040																06
✓ 17349 VM		↓							1110																07
✓ 17372 VM		↓							1010																08
✓ 17373 VM		↓							1120																09
✓ TB-3		2							—																10

Method of shipment

Special detection Limit/reporting

Special QA/QC

Remarks Lab Release # 608-94-5

Lab number 9406A28

Turnaround time

Priority Rush 1 Business Day

Rush 2 Business Days

Expedited 5 Business Days

Standard 10 Business Days

Condition of sample:

Temperature received:

Relinquished by sampler *[Signature]*

Date 6-15-94 Time 17:00

Received by *[Signature]* 6/15/94 17:00

Relinquished by *[Signature]*

Date 6/16/94 Time 11:30

Received by *[Signature]* 6-16-94 11:30

Relinquished by *[Signature]*

Date 6-16-94 Time 12:20

Received by laboratory *[Signature]*

Date 6/16/94 Time 12:24pm

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME:
REC. BY (PRINT):

Pacific Environmental Group
CB

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

9406 A 256
6/17/94

CIRCLE THE APPROPRIATE RESPONSE		LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION (ETC)
1. Custody Seal(s):	Present <input checked="" type="radio"/> Absent	1	AL	MW-17	3V022	W	6/15	
	Intact / Broken*	2		17348 VE				
2. Custody Seal Nos.:	—	3		17197 # VM				
		4		17200 VM				
3. Chain-of-Custody Records:	<input checked="" type="radio"/> Present / Absent*	5		17208 VM				
		6		17302 VM				
		7		17349 VM				
4. Traffic Reports or Packing List:	Present <input checked="" type="radio"/> Absent	8		17372 VM				
		9		17393 VM				
		10	ALB	TB-3	2V025			
5. Airbill:	Airbill / Slicker							
	Present <input checked="" type="radio"/> Absent							
6. Airbill No.:	—							
7. Sample Tags:	<input checked="" type="radio"/> Present / Absent*							
Sample Tag Nos.:	<input checked="" type="radio"/> Listed / Not Listed							
	on Chain-of-Custody							
8. Sample Condition:	<input checked="" type="radio"/> Intact / Broken* / Leaking*							
9. Does information on custody reports, traffic reports and sample tags agree?	<input checked="" type="radio"/> Yes / No*							
10. Proper Preservatives Used:	<input checked="" type="radio"/> Yes / No*							
11. Date Rec. at Lab:	<u>6/16/94</u>							
12. Time Rec. at Lab:	<u>12:24 pm</u>							

Circled, contact Project Manager and attach record of resolution



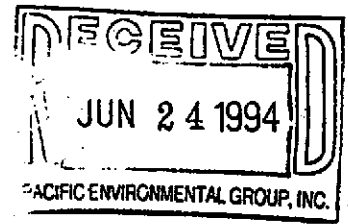
Sequoia Analytical

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

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

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

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



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

Project: 330-006.25/0608, San Lorenzo

Enclosed are the results from 19 water samples received at Sequoia Analytical on June 15, 1994. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
4F88701	Water, MW-11	6/13/94	EPA 5030/8015 Mod./8020
4F88702	Water, MW-14	6/13/94	EPA 5030/8015 Mod./8020
4F88703	Water, MW-15	6/13/94	EPA 5030/8015 Mod./8020
4F88704	Water, MW-16	6/13/94	EPA 5030/8015 Mod./8020
4F88705	Water, MW-18	6/13/94	EPA 5030/8015 Mod./8020
4F88706	Water, MW-19	6/13/94	EPA 5030/8015 Mod./8020
4F88707	Water, MW-21	6/13/94	EPA 5030/8015 Mod./8020
4F88708	Water, MW-22	6/13/94	EPA 5030/8015 Mod./8020
4F88709	Water, MW-23	6/13/94	EPA 5030/8015 Mod./8020
4F88710	Water, MW-24	6/13/94	EPA 5030/8015 Mod./8020
4F88711	Water, MW-26	6/13/94	EPA 5030/8015 Mod./8020
4F88712	Water, TB-1	6/13/94	EPA 5030/8015 Mod./8020
4F88713	Water, MW-5	6/14/94	EPA 5030/8015 Mod./8020
4F88714	Water, MW-7	6/14/94	EPA 5030/8015 Mod./8020
4F88715	Water, MW-8	6/14/94	EPA 5030/8015 Mod./8020
4F88716	Water, MW-9	6/14/94	EPA 5030/8015 Mod./8020
4F88717	Water, MW-10	6/14/94	EPA 5030/8015 Mod./8020
4F88718	Water, MW-13	6/14/94	EPA 5030/8015 Mod./8020
4F88719	Water, MW-25	6/14/94	EPA 5030/8015 Mod./8020



**Sequoia
Analytical**

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

Redwood City, CA 94063
Concord, CA 94520
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Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

SEQUOIA ANALYTICAL



Eileen A. Manning
Project Manager



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Maree Doden	Client Project ID: 330-006.25/0608, San Lorenzo Sample Matrix: Water Analysis Method: EPA 5030/8015 Mod./8020 First Sample #: 4F88701	Sampled: Jun 13, 1994 Received: Jun 15, 1994 Reported: Jun 23, 1994
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TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 4F88701 MW-11	Sample I.D. 4F88702 MW-14	Sample I.D. 4F88703 MW-15	Sample I.D. 4F88704 MW-16	Sample I.D. 4F88705 MW-18	Sample I.D. 4F88706 MW-19
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:	6/16/94	6/16/94	6/16/94	6/16/94	6/16/94	6/16/94
Instrument Identification:	GCHP-3	GCHP-3	GCHP-3	GCHP-3	GCHP-3	GCHP-3
Surrogate Recovery, %: (QC Limits = 70-130%)	99	96	98	98	99	99

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



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Maree Doden	Client Project ID: 330-006.25/0608, San Lorenzo Sample Matrix: Water Analysis Method: EPA 5030/8015 Mod./8020 First Sample #: 4F88707	Sampled: Jun 13, 1994 Received: Jun 15, 1994 Reported: Jun 23, 1994
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TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 4F88707 MW-21	Sample I.D. 4F88708 MW-22	Sample I.D. 4F88709 MW-23	Sample I.D. 4F88710 MW-24	Sample I.D. 4F88711 MW-26	Sample I.D. 4F88712 TB-1
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:	6/16/94	6/16/94	6/16/94	6/16/94	6/16/94	6/16/94
Instrument Identification:	GCHP-3	GCHP-3	GCHP-17	GCHP-17	GCHP-17	GCHP-17
Surrogate Recovery, %: (QC Limits = 70-130%)	98	96	92	91	92	90

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



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Maree Doden	Client Project ID: 330-006.25/0608, San Lorenzo Sample Matrix: Water Analysis Method: EPA 5030/8015 Mod./8020 First Sample #: 4F88713	Sampled: Jun 14, 1994 Received: Jun 15, 1994 Reported: Jun 23, 1994
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TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 4F88713 MW-5	Sample I.D. 4F88714 MW-7	Sample I.D. 4F88715 MW-8	Sample I.D. 4F88716 MW-9	Sample I.D. 4F88717 MW-10	Sample I.D. 4F88718 MW-13
Purgeable Hydrocarbons	50	1,700	N.D.	2,800	N.D.	3,700	N.D.
Benzene	0.50	42	N.D.	340	N.D.	370	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:		Weathered gas	--	Weathered gas	--	Gas	--

Quality Control Data

Report Limit Multiplication Factor:	10	1.0	10	1.0	2.0	1.0
Date Analyzed:	6/16/94	6/16/94	6/16/94	6/16/94	6/16/94	6/16/94
Instrument Identification:	GCHP-17	GCHP-17	GCHP-17	GCHP-17	GCHP-2	GCHP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	88	97	94	87	93	90

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
Eileen A. Manning
Project Manager



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Maree Doden	Client Project ID: 330-006.25/0608, San Lorenzo Sample Matrix: Water Analysis Method: EPA 5030/8015 Mod./8020 First Sample #: 4F88719	Sampled: Jun 14, 1994 Received: Jun 15, 1994 Reported: Jun 23, 1994
--	--	---

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 4F88719 MW-25
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:	6/16/94
Instrument Identification:	GCHP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	88

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



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

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

QC Sample Group: 4F88717-19

Reported: Jun 23, 1994

QUALITY CONTROL DATA REPORT

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

MS/MSD	Benzene	Toluene	Ethyl Benzene	Xylenes
Batch#:	4F86702	4F86702	4F86702	4F86702
Date Prepared:	N.A.	N.A.	N.A.	N.A.
Date Analyzed:	6/16/94	6/16/94	6/16/94	6/16/94
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:	110	100	110	107
Matrix Spike Duplicate % Recovery:	110	100	110	107
Relative % Difference:	0.0	0.0	0.0	0.0

LCS Batch#:

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

LCS %
Recovery:

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

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

SEQUOIA ANALYTICAL

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.

Eileen A. Manning
Project Manager



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

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

QC Sample Group: 4F88701-08

Reported: Jun 23, 1994

QUALITY CONTROL DATA REPORT

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

MS/MSD	Benzene	Toluene	Ethyl Benzene	Xylenes
Batch#:	4F86903	4F86903	4F86903	4F86903
Date Prepared:	N.A.	N.A.	N.A.	N.A.
Date Analyzed:	6/16/94	6/16/94	6/16/94	6/16/94
Instrument I.D.#:	GCHP-3	GCHP-3	GCHP-3	GCHP-3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Matrix Spike % Recovery:	100	100	100	103
Matrix Spike Duplicate % Recovery:	110	110	110	110
Relative % Difference:	9.5	9.5	9.5	6.6

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.



Pacific Environmental Group Client Project ID: 330-006.25/0608, San Lorenzo
2025 Gateway Place, Suite 440 Matrix: Liquid
San Jose, CA 95110
Attention: Maree Doden QC Sample Group: 4F88709-16 Reported: Jun 23, 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#:	4F86903	4F86903	4F86903	4F86903
Date Prepared:	N.A.	N.A.	N.A.	N.A.
Date Analyzed:	6/16/94	6/16/94	6/16/94	6/16/94
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:	100	110	110	107
Matrix Spike Duplicate % Recovery:	100	110	100	103
Relative % Difference:	0.0	9.5	9.5	3.8

LCS Batch#:

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

LCS % Recovery:

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

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

Please Note:

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

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME:
REC. BY (PRINT):

Pacific Environmental Group
CP

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

7406887
06/15/94

CIRCLE THE APPROPRIATE RESPONSE		LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION (ETC)
1. Custody Seal(s):	Present / <input checked="" type="radio"/> Absent Intact / Broken*	03		MW5	3V022	W	6/13	
2. Custody Seal Nos.:		14		MW-7	3V022	↓	↓	
		15		MW-8	3V022	↓	↓	
3. Chain-of-Custody Records:	<input checked="" type="radio"/> Present / Absent*	16		MW-9	3V022	↓	↓	
		17		MW-10	3V022	↓	↓	
		18		MW-13	3V022	↓	↓	
		19		MW-25	3V022	↓	↓	
4. Traffic Reports or Packing List:	Present / <input checked="" type="radio"/> Absent	20		E1-A	3V022	↓	↓	
		21		TB2	2V022	↓	↓	
5. Airbill:	Airbill / Sticker Present / <input checked="" type="radio"/> Absent							
6. Airbill No.:								
7. Sample Tags:	<input checked="" type="radio"/> Present / Absent*							
Sample Tag Nos.:	<input checked="" type="radio"/> Listed / Not Listed on Chain-of-Custody							
8. Sample Condition:	<input checked="" type="radio"/> Intact / Broken* / Leaking*							
9. Does information on custody reports, traffic reports and sample tags agree?	<input checked="" type="radio"/> Yes / No*							
10. Proper Preservatives Used:	<input checked="" type="radio"/> Yes / No*							
11. Date Rec. at Lab:	<u>6/15/94</u>							
12. Time Rec. at Lab:	<u>10:15</u>							

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

ARCO Facility no. **0608** City (Facility) **San Lorenzo** Project manager (Consultant) **Kelly Brown**
 ARCO engineer **C.C.** Telephone no. (ARCO) **(408) 441 7500** Telephone no. (Consultant) **(408) 441-9102** Fax no. (Consultant) **(408) 441-9102**
 Consultant name **Pacific Environmental Group** Address (Consultant) **2025 Gateway #440, San Jose CA**

Laboratory name **Sequoia**
 Contract number **0**

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH/Gas EPA 1602/8020/8015	TPH Modified 8015 Gas <input type="checkbox"/> Diesel <input type="checkbox"/>	Oil and Grease 413.1 <input type="checkbox"/> 413.2 <input type="checkbox"/>	TPH EPA 418.1/SIMS/GE	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCMP Metals <input type="checkbox"/> VOA <input type="checkbox"/> VOA <input type="checkbox"/>	Semi Metals <input type="checkbox"/> VOA <input type="checkbox"/> VOA <input type="checkbox"/>	CAM Metals EPA 8010/7000 TTLC <input type="checkbox"/> STLC <input type="checkbox"/>	Lead Org./DHS <input type="checkbox"/> Lead EPA 7420/7421 <input type="checkbox"/>	Special detection Limit/reporting	
			Soil	Water	Other	Ice	Acid																
MW-5		3		X		X	X	6-14-94	1200		X												9406887-13
MW-7									845														-14
MW-8									1000														-15
MW-9									10 ⁴⁰														-16
MW-10									1105														-17
MW-13									820														-18
MW-25									910														-19
EI-A		V		V		V	V		1145		V												9406890-20
TB-2		2		X		X	X		-		X												-21

Method of shipment

Special detection
Limit/reporting

Special QA/QC

Remarks
page 2 of 2

Lab number Release #
0608-94-5

Turnaround time

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

Condition of sample: _____ Temperature received: _____

Retrieved by sampler **Robert J. ...** Date **6-14-94** Time **1405** Received by **M. Dodder** **6/15/94**

Retrieved by **M. Dodder** Date **6/15/94** Time **10:15** Received by **Amey G. ...** **6-15-94** **10:15**

Retrieved by **Amey G. ...** Date **6/15/94** Time **11:05** Received by laboratory **Clara** Date **6/15** Time **10:15**

ARCO Facility no. **0608** City (Facility) **San Lorenzo** Project manager (Consultant) **Kelly Brown**
 ARCO engineer **CE** Telephone no. (ARCO) Telephone no. (Consultant) **(408) 441-7500** Fax no. (Consultant) **(408) 441-9102**
 Consultant name **Pacific Environmental Group** Address (Consultant) **2025 Gateway Place, #440, San Jose CA**

Laboratory name **Sequoia**
Contract number

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX EPA 802	BTEX/TPH/Gas EPA 802/802/8015	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	TCMP Metals VOA VOA	Semi Metals VOA VOA	CMM Metals EPA 6010/7000 TLC STLC	Lead Org./DHS Lead EPA 7420/7421	Method of shipment	
			Soil	Water	Other	Ice	Acid																
MW-11		3		X		X	X	6-13-94	1455		X												Courier
MW-14									13 ¹⁵														
MW-15									11 ⁴⁵														
MW-16									12 ¹⁰														
MW-18									12 ³⁰														
MW-19									12 ⁵⁵														
MW-21									13 ¹⁵														
MW-22									13 ³⁰														
MW-23									14 ⁰⁰														
MW-24									15 ⁴⁰														
MW-26									15 ⁵⁵														
TB-1		2							—														

Method of shipment
Courier

Special detection Limit/reporting
9406887-01

Special QA/QC
-02
-03
-04
-05
-06

Remarks
page 1 of 2

Lab-number Release #
0608-94-5

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

Condition of sample: _____ Temperature received: _____
 Relinquished by sample **Richard A. Ignatowicz** Date **6-14-94** Time **6:45** Received by **M. J. Dodder** **6/15/94**
 Relinquished by **M. J. Dodder** Date **6/15/94** Time **10:15** Received by **Jim F. ...** **6-15-94 10:15**
 Relinquished by **Jim F. ...** Date **6-15-94** Time **11:05** Received by laboratory **...** Date **6/15/94** Time **10:15**



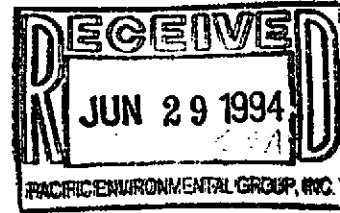
Sequoia Analytical

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

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

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

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



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

Project: 330-006.26/608, San Lorenzo

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

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

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

Very truly yours,

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager





Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Maree Doden	Client Project ID: 330-006.26/608, San Lorenzo Sample Matrix: Water Analysis Method: EPA 5030/8015 Mod./8020 First Sample #: 4F89701	Sampled: Jun 14, 1994 Received: Jun 15, 1994 Reported: Jun 28, 1994
--	---	---

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

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

Quality Control Data

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

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

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager



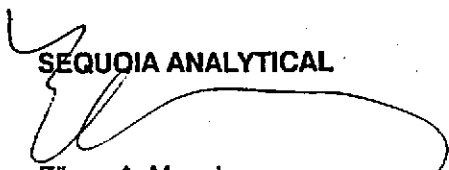
Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Maree Doden	Client Project ID: 330-006.26/608, San Lorenzo Sample Descript: Water, EFFL Lab Number: 4F89702	Sampled: Jun 14, 1994 Received: Jun 15, 1994 Analyzed: see below Reported: Jun 28, 1994
--	---	--

LABORATORY ANALYSIS

Analyte	Date Analyzed	Detection Limit	Sample Result
Chemical Oxygen Demand, mg/L...	6/17/94	20	N.D.
pH, pH units	6/15/94	N/A	6.5
Total Suspended Solids, mg/L.....	6/16/94	1.0	N.D.

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

SEQUOIA ANALYTICAL



Eileen A. Manning
Project Manager





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

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

QC Sample Group: 4F89701-02

Reported: Jun 28, 1994

QUALITY CONTROL DATA REPORT

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

MS/MSD Batch#:	4F79202	4F79202	4F79202	4F79202
Date Prepared:	N.A.	N.A.	N.A.	N.A.
Date Analyzed:	6/15/94	6/15/94	6/15/94	6/15/94
Instrument I.D.#:	GCHP-3	GCHP-3	GCHP-3	GCHP-3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Matrix Spike % Recovery:	100	100	110	107
Matrix Spike Duplicate % Recovery:	110	110	110	113
Relative % Difference:	9.5	9.5	0.0	5.5

LCS Batch#:

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

LCS % Recovery:

% Recovery Control Limits:	71-133	72-128	72-130	71-120
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Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

Please Note:

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

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager



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

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

QC Sample Group: 4F89702

Reported: Jun 28, 1994

QUALITY CONTROL DATA REPORT

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

MS/MSD
Batch#: 4F89702

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

Matrix Spike % Recovery: 101

Matrix Spike Duplicate % Recovery: 95

Relative % Difference: 6.1

LCS Batch#:

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

LCS % Recovery:

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

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

Please Note:

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

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager



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

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

QC Sample Group: 4F89702

Reported: Jun 28, 1994

QUALITY CONTROL DATA REPORT

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

Date Analyzed:	6/15/94	6/16/94
Sample #:	4F83301	4F89401
Sample Concentration:	6.7	50
Sample Duplicate Concentration:	6.7	50
% RPD:	0.0	0.0
Control Limits:	0-30	0-30

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

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

ARCO Products Company
Division of AtlanticRichfieldCompany

330-00626 Task Order No. 608-94-5

Chain of Custody

ARCO Facility no. 608 City (Facility) SAN LORENZO Project manager (Consultant) SHAW GAIRAKAWI
 ARCO engineer MIKE WHELAN Telephone no. (ARCO) _____ Telephone no. 408 441 7500 Fax no. 408 441 7539 (Consultant)
 Consultant name PACIFIC ENV GROUP Address (Consultant) 2025 Gateway Pl. SE 440, S.J. CA 95110

Laboratory name Sequoia
Contract number _____

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX EPA 802/EPA 802D	BTEX/TPH EPA 802D/802D/8015	TPH Modified 8015 Gas <input type="checkbox"/> Diesel <input type="checkbox"/>	Oil and Grease 413.1 <input type="checkbox"/> 413.2 <input type="checkbox"/>	TPH EPA 418.1/SM609E	EPA 801/8010	EPA 824/8240	PH	TCLP Metals <input type="checkbox"/> VOA <input type="checkbox"/> VOA <input type="checkbox"/>	CMM Metals EPA 801/7000 TLC <input type="checkbox"/> STL <input type="checkbox"/>	Lead Org./DHS <input type="checkbox"/> Lead EPA 7420/7421 <input type="checkbox"/>	COD	TSS	
			Soil	Water	Other	Ice	Acid																
INFL		3		X		X	HCL	6-14-94	1030		X												
EFFL		3					↓				X												
EFFL		3					H2SO4															X	
EFFL		1					NP																
EFFL		1					↓										X						X

Method of shipment 9406897

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 Joe Vaylank Date 6-14-94 Time 1300 Received by M D Dodder 6/14/94
 Relinquished by M Dodder Date 6/15/94 Time _____ Received by Mary Gauthier 6-15-94 10:05
 Relinquished by Mary Gauthier Date 6-15-94 Time 11:05 Received by laboratory and white Date 6/15/94 Time 1105

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

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

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

9406897
6-15-94

CIRCLE THE APPROPRIATE RESPONSE		LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION (ETC)
1. Custody Seal(s):	Present / <u>Absent</u> Intact / Broken*	1	A-C	INFL	5 vcs	W	6/14	
2. Custody Seal Nos.:		2	A-H	EPPI	3 vcs			
		↓	↓	↓	3vcs - COO			
					2-200ml P-Platy			
3. Chain-of-Custody Records:	<u>Present</u> / Absent*							
4. Traffic Reports or Packing List:	Present / <u>Absent</u>							
5. Airbill:	Airbill / Sticker Present / <u>Absent</u>							
6. Airbill No.:								
7. Sample Tags:	<u>Present</u> / Absent*							
Sample Tag Nos.:	<u>Listed</u> / Not Listed on Chain-of-Custody							
8. Sample Condition:	<u>Intact</u> / Broken* / Leaking*							
9. Does Information on custody reports, traffic reports and sample tags agree?	<u>Yes</u> / No*							
10. Proper Preservatives Used:	<u>Yes</u> / No*							
11. Date Rec. at Lab:	<u>6/15/94</u>							
12. Time Rec. at Lab:	<u>1105</u>							

Circled, contact Project Manager and attach record of resolution



Sequoia Analytical

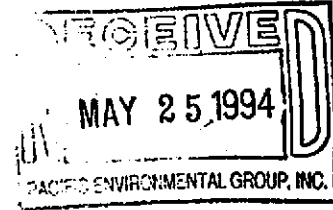
680 Chesapeake Drive
1900 Bates Avenue, Suite L
819 Striker Avenue, Suite 8

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

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

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

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



Project: 330-006.26/0608, San Lorenzo

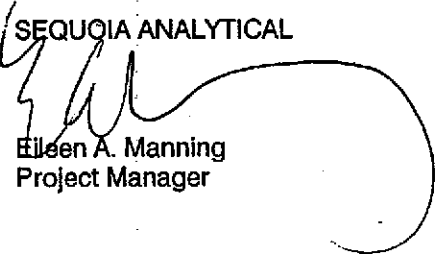
Enclosed are the results from 2 water samples received at Sequoia Analytical on May 13, 1994. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
4E87701	Water, Infl	5/13/94	EPA 5030/8015 Mod./8020
4E87702	Water, Effl	5/13/94	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



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Maree Doden	Client Project ID: 330-006.26/0608, San Lorenzo Sample Matrix: Water Analysis Method: EPA 5030/8015 Mod./8020 First Sample #: 4E87701	Sampled: May 13, 1994 Received: May 13, 1994 Reported: May 24, 1994
--	--	---

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 4E87701 Infl	Sample I.D. 4E87702 Eff
Purgeable Hydrocarbons	50	230	N.D.
Benzene	0.50	8.3	N.D.
Toluene	0.50	N.D.	N.D.
Ethyl Benzene	0.50	14	N.D.
Total Xylenes	0.50	6.0	N.D.
Chromatogram Pattern:		Gas	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0
Date Analyzed:	5/21/94	5/21/94
Instrument Identification:	GCHP-17	GCHP-17
Surrogate Recovery, %: (QC Limits = 70-130%)	87	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
(Signature)
Eileen A. Manning
Project Manager



Pacific Environmental Group Client Project ID: 330-006.26/0608, San Lorenzo
2025 Gateway Place, Suite 440 Matrix: Liquid
San Jose, CA 95110
Attention: Maree Doden QC Sample Group: 4E87701-02 Reported: May 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#:	4E85713	4E85713	4E85713	4E85713
Date Prepared:	N.A.	N.A.	N.A.	N.A.
Date Analyzed:	5/20/94	5/20/94	5/20/94	5/20/94
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:	90	89	89	90
Matrix Spike Duplicate % Recovery:	97	96	90	97
Relative % Difference:	7.5	7.6	1.1	7.5

LCS Batch#:

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

LCS % Recovery:

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

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

Please Note:

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

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

ARCO Products Company 33000626

Task Order No. 0608-91-5

Chain of Custody

ARCO Facility no. 0608 City (Facility) SAN LORENZO

Project manager (Consultant) RE LESUEMULLS

Laboratory name BERDIA

ARCO engineer MIKE WHELAN

Telephone no. (ARCO)

Telephone no. (Consultant) (408) 441-7500

Fax no. (Consultant) 441-7539

Contract number

Consultant name PACIFIC ENVIRONMENTAL GROUP

Address (Consultant)

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA 8629/8020/8015	TPH Modified 8015 Gas <input type="checkbox"/> Diesel <input type="checkbox"/>	Oil and Grease 413.1 <input type="checkbox"/> 413.2 <input type="checkbox"/>	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCUP Metals <input type="checkbox"/> VOA <input type="checkbox"/> YOA <input type="checkbox"/>	Cadm Metals EPA 6010/7000 TLCL <input type="checkbox"/> STLC <input type="checkbox"/>	Lead Org./DHS <input type="checkbox"/> Lead EPA 7420/7421 <input type="checkbox"/>				
			Soil	Water	Other	Ice	Acid																	
INFL		3		X		X	HCL	5-12-94	840															
EFFL		3		X		X	HCL	5-13-94	850															

Method of shipment

Special detection Limit/reporting
-01
-02

Special QA/QC

Remarks

1994 4

Lab number 9405877

Turnaround time

Priority Rush 1 Business Day

Rush 2 Business Days

Expedited 5 Business Days

Standard 10 Business Days

Condition of sample:

Temperature received:

Relinquished by sampler [Signature] Date 5-13-94 Time 1330

Received by [Signature] Date 5/13/94 Time 1330

Relinquished by [Signature] Date 5/13/94 Time 3:20

Received by [Signature] Date 5/13/94 Time 3:20

Relinquished by [Signature] Date 5/13/94 Time 4:07

Received by laboratory [Signature] Date 051394 Time 1605

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME:
REC. BY (PRINT):

Page (Arco 330 000 26)
kes

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

2405877
5/14/99

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION (ETC)
1. Custody Seal(s): Present / <u>Absent</u> Intact / Broken*	1	1-2	INFL	(3) red	W	05/13	
	2	↓	EPA	+	+	+	
2. Custody Seal Nos.:							
3. Chain-of-Custody Records: Present / Absent*							
4. Traffic Reports or Packing List: Present / <u>Absent</u>							
5. Airbill: Airbill / Slicker Present / <u>Absent</u>							
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? <u>Yes</u> / No*							
10. Proper Preservatives Used: <u>Yes</u> / No*							
11. Date Rec. at Lab: <u>05/31/99</u>							
Time Rec. at Lab: <u>1605</u>							

If needed, contact Project Manager and attach record of resolution



Sequoia Analytical

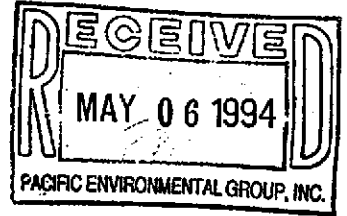
680 Chesapeake Drive
1900 Bates Avenue, Suite L
819 Striker Avenue, Suite 8

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

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

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

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



Project: 330-006.26/0608, San Lorenzo

Enclosed are the results from 2 water samples received at Sequoia Analytical on April 25, 1994. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
4DE2701	Water, Infl	4/21/94	EPA 5030/8015 Mod./8020
4DE2702	Water, Effl	4/21/94	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





Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Maree Doden	Client Project ID: 330-006.26/0608, San Lorenzo Sample Matrix: Water Analysis Method: EPA 5030/8015 Mod./8020 First Sample #: 4DE2701	Sampled: Apr 21, 1994 Received: Apr 25, 1994 Reported: May 4, 1994
--	--	--

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 4DE2701 Infl	Sample I.D. 4DE2702 Effl
Purgeable Hydrocarbons	50	110	N.D.
Benzene	0.50	7.8	N.D.
Toluene	0.50	N.D.	N.D.
Ethyl Benzene	0.50	9.6	N.D.
Total Xylenes	0.50	N.D.	N.D.
Chromatogram Pattern:		Gas	--

Quality Control Data

Report Limit Multiplication Factor:	2.0	1.0
Date Analyzed:	4/29/94	4/29/94
Instrument Identification:	GCHP-17	GCHP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	74	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





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: 4DE2701	Reported: May 4, 1994
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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#:	4DD3805	4DD3805	4DD3805	4DD3805
Date Prepared:	N.A.	N.A.	N.A.	N.A.
Date Analyzed:	4/29/94	4/29/94	4/29/94	4/29/94
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:	91	91	91	90
Matrix Spike Duplicate % Recovery:	98	100	100	100
Relative % Difference:	7.4	9.4	9.4	11

LCS Batch#:

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

LCS %
Recovery:

% Recovery Control Limits:	71-133	72-128	72-130	71-120
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Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

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.



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: 4DE2702

Reported: May 4, 1994

QUALITY CONTROL DATA REPORT

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

MS/MSD Batch#:	4DE0402	4DE0402	4DE0402	4DE0402
Date Prepared:	N.A.	N.A.	N.A.	N.A.
Date Analyzed:	4/28/94	4/28/94	4/28/94	4/28/94
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:	100	100	100	100
Matrix Spike Duplicate % Recovery:	99	99	100	100
Relative % Difference:	1.0	1.0	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.

ARCO Facility no. *0608* City (Facility) *SAN LORENZO* Project manager (Consultant) *KELLY BROWN*
 ARCO engineer *MIKE WHELAN* Telephone no. (ARCO) Telephone no. (Consultant) *(408) 441-7502* Fax no. (Consultant) *441-7539*
 Consultant name *PACIFIC ENVIRONMENTAL* (Consultant) Address *2025 GATEWAY BL #440 SAN JOSE*

Laboratory name
SEQUOIA
Contract number
07-073

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA 8620/8020/8015	TPH Modified 8015 Gas <input type="checkbox"/> Diesel <input type="checkbox"/>	Oil and Grease 413.1 <input type="checkbox"/> 413.2 <input type="checkbox"/>	TPH EPA 418.1/SM508E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCMP Metals <input type="checkbox"/> VOA <input type="checkbox"/> VOA <input type="checkbox"/>	Semi Metals EPA 601/7000 TLC <input type="checkbox"/> STLC <input type="checkbox"/>	Lead Org./DHS Lead EPA 7420/7421 <input type="checkbox"/>			
			Soil	Water	Other	Ice	Acid																
<i>INFL</i>	<i>3</i>			<i>X</i>				<i>4-21-94</i>	<i>13:45</i>	<i>X</i>												<i>7404 E27</i>	<i>-01</i>
<i>EFPL</i>	<i>↓</i>			<i>↓</i>				<i>↓</i>	<i>1400</i>	<i>↓</i>													<i>-02</i>

Method of shipment

Special detection Limit/reporting

Special QA/QC

Remarks

Lab number

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

Condition of sample: _____ Temperature received:
 Relinquished by sampler *[Signature]* Date *4-22-94* Time *1430* Received by *N. DODD* *4/22/94 1430*
 Relinquished by *[Signature]* Date *4/25/94* Time *10:05* Received by *Mary Gutierrez* *4-25-94 10:05*
 Relinquished by *[Signature]* Date *4-25-94* Time *11:35* Received by laboratory *[Signature]* Date *012514* Time *1135*

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME:
REC. BY (PRINT):

REC (Acco 330-00626)
KED

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

9404E27
4/25/94

CIRCLE THE APPROPRIATE RESPONSE		LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION (ETC)
1. Custody Seal(s):	Present / <u>Absent</u> Intact / Broken*	01	A/C	INF	(S) 102	W	4/21	
2. Custody Seal Nos.:		02	dk	EFFL	+	+	+	
3. Chain-of-Custody Records:	<u>Present</u> / Absent*							
4. Traffic Reports or Packing List:	Present / <u>Absent</u>							
5. Airbill:	Airbill / Sticker Present / <u>Absent</u>							
6. Airbill No.:								
7. Sample Tags: Sample Tag Nos.:	<u>Present</u> / Absent* <u>Listed</u> / Not Listed on Chain-of-Custody							
8. Sample Condition:	<u>Intact</u> / Broken* / Leaking*							
9. Does information on custody reports, traffic reports and sample tags agree?	<u>Yes</u> / No*							
10. Proper Preservatives Used:	<u>Yes</u> / No*							
11. Date Rec. at Lab:	<u>04/25/94</u>							
12. Time Rec. at Lab:	<u>1135</u>							

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

Identification

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

Project Type

- 1st Time visit
 - Quarterly
 - 1st 2nd 3rd 4th
 - Monthly
 - Semi-Monthly
 - Weekly
 - One time event
 - Other: _____
- Ideal field date(s): _____

Prefield Contacts/Permits

- FILE COPY**
- County _____
 - City _____
 - Private _____
 - Multi-Consultant Scheduling
Date(s): _____

Site Safety

Concerns

Field Tasks

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

1) Sample system:

	Gas / BTEX	INFL	EFFL	
HLS14	COD	M	M	M = monthly
H2	TSS		Q	Q = Quarterly (3, 6, 9, 12)
H2	pH		Q	

2) DTW in E-1A

3) Change filter

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

Budgeted hours: _____ Actual hours; On-Site: 2.0 Mob-dē-Mob: 1.0

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

Sampled System

See Att Sheets

Completed by: JV Date: 0-14-94

Checked by: _____ PITS Update: _____

Groundwater Extraction System

ARCO Service Station 0608
17601 Hesperian Boulevard
San Lorenzo, California

Name: JV

Date/Time: 6-14-94 9:30

Treatment System Readings			
System On Upon Arrival?	NO *	Electric Meter (kw-hrs)	11246
Effluent Totalizer (gallons)	2478900 Broken	Bag Filter INFL Pressure (psi)	22 / 10
E-1A Flowrate (gpm)	< 25gpm	Bag Filter EFFL Pressure (psi)	8 / 8
E-1A Hourmeter (hours)	19680	MID-1 Pressure (psi)	6
E-1A Throttle Valve Position	1/2 open	MID-2 Pressure (psi)	< 1
E-1A DTW (TOB feet)	1738	EFFL Pressure (psi)	0
Enclosure Swept	yes	Does Sump Pump Work	NO Sump pump on site
Does the Autodialer Work? Batteries Replaced	yes	Number of Spare Filters On-Site	1

Comments * High Bag Filter pressure
Changed Bag Filter & started system

Checked Auto-Printer to see if it calls out. and it called

ARCO Facility no. 608	City (Facility) SAN LORENZO	Project manager (Consultant) SHAW GAIRAKANI	Laboratory name SEGOLIA
ARCO engineer MIKE WHELAN	Telephone no. (ARCO)	Telephone no. (Consultant) 408 441 7500	Contract number
Consultant name PACIFIC ENV GROUP		Address (Consultant)	Method of shipment

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX EPA 802	BTEX/TPH EPA 1602/1602/16015	TPH Modified 8015 Gas <input type="checkbox"/> Diesel <input type="checkbox"/>	Oil and Grease 413.1 <input type="checkbox"/> 413.2 <input type="checkbox"/>	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	PH	TCLP Metals <input type="checkbox"/> VOA <input type="checkbox"/>	Semi Metals <input type="checkbox"/> VOA <input type="checkbox"/>	CMM Metals EPA 601/6700 TTLCL <input type="checkbox"/> STLCL <input type="checkbox"/>	Lead Org./DHS <input type="checkbox"/> Lead EPA 7420/7421 <input type="checkbox"/>	COD	TSS	Special detection Limit/reporting	Special QA/QC	Remarks	Lab number	Turnaround time					
			Soil	Water	Other	Ice	Acid																										
INFL		3		X		X	HCL	6-14-94	1030		X																						
EFFL		3					↓			X																							
EFFL		3					H2SO4																										
EFFL		1					MP																										
EFFL		1		↓			↓																										

Condition of sample:	Temperature received:
Relinquished by sampler <i>Joe V...</i>	Date 6-14-94 Time 1300
Relinquished by	Date Time Received by
Relinquished by	Date Time Received by laboratory

SITE INFORMATION FORM

FILE COPY

Identification

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

Project Type

- 1st Time visit
 - Quarterly
 - 1st 2nd 3rd 4th
 - Monthly
 - Semi-Monthly
 - Weekly
 - One time event
 - Other: _____
- Ideal field date(s): _____

Prefield Contacts/Permits

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

Site Safety

Concerns _____

Field Tasks

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

1) sample system:

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

2) DTW in E-1A

3) Change filter

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

Budgeted hours: _____ Actual hours; On-Site: 1.5 Mob-de-Mob: 1.5

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

< UNIT OFF ON ARRIVAL (HAP TO REINSTALL PUMP/ROLLER YET TO BE DONE)
= RESTARTED GWE
- WIPPLED ONE HOUR AND TOOK 12 PIPES
SAMPLES TAKEN (MONTHLY)

PACIFIC ENVIRONMENTAL GROUP, INC.

Inventory / Materials Form

Page 1

EQUIPMENT

Description/Unit	Units	Days	Unit Cost	Total
Barricades w/o lights			5.00/ea./day	
Cones	5	1/2	2.00/ea./day	6.00
Road Signs			10.00/ea./day	
Photo Ionization Detector			100.00/day	
Flame Ionization Detector			150.00/day	
Measuring Wheel			5.00/day	
Water Level Indicator	1	1/2	10.00/day	5.00
LEL Meter			100.00/day	
Turbidity Meter			25.00/day	
Surge Block			10.00/day	
Cover Plates			5.00/ea./day	
Stainless Steel Auger			10.00/day	
Soil Sleeve Sampler			10.00/day	
Dissolved Oxygen Meter			25.00/test	
Bailers			6.50/well	
Auto-Bailer			50.00/month	
Data Logger and Transducer			150.00/day	
Data Logger			100/day	
Soil-Gas Probes			15.00/ea.	
60 CFH Blower, Magnehelics, Flow Meter			150.00/day	
120 CFM Blower, Magnehelics, Flow Meter			250.00/day	
Pipe Cutter/Threader			10.00/day	
Submersible Electric Pump			80.00/day	
pH/EC/Temp Meter			20.00/day	
Positive Displacement Pump with Air Compressor			80.00/day	
			25.00/day	

Project # 33000626

Client SPILL

Field Dates 8-13-99

Name P. Moniz

Serts # _____

Oil/Water Interface Probe			50.00/day	
Gas Displacement Pump with Air Compressor			50.00/day	
Steam Cleaner with Generator			40.00/day	
Generator			25.00/day	
Gas Chromatograph with Support Equipment			500.00/day	
Field Phone			40.00/day	
500' Sounder			20.00/day	
Vacuum Test Hose & Ptg.			50.00/day	
Vapor Phase Carbon			300.00/day	
Air Sampling Pump			25.00/day	
Water wagon			100.00/day	
Anemometer			50.00/day	
Equipment Total				11.00

SAFETY EQUIPMENT

Description/Unit	Days	People	Unit Cost	Total
Level D:	1/2	1	40.00	20.00
Level C:			75.00	
Tyvek Suit (additional)			12.00	
Gloves (additional) Neoprene			4.00	
Respirator w/cartridge			23.00/day	
Safety Equipment Total				20.00

ARCO Facility no. *0608* City (Facility) *SAN LORENZO* Project manager (Consultant) *RE LESLIE MILLS*
 ARCO engineer *MIKE WHELAN* Telephone no. (ARCO) Telephone no. (Consultant) *(408) 441-7500* Fax no. (Consultant) *441-7539*
 Consultant name *PACIFIC ENVIRONMENTAL GROUP* Address (Consultant)

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX EPA 8020	BTEX/TPH EPA 14622/8020/8015	TPH Modified 8015 Gas <input type="checkbox"/> Diesel <input type="checkbox"/>	Oil and Grease 413.1 <input type="checkbox"/> 413.2 <input type="checkbox"/>	TPH EPA 418.1/SM503E	EPA 801/8010	EPA 824/8240	EPA 825/8270	TCLP Metals VOA <input type="checkbox"/> VOA <input type="checkbox"/>	Semi Metals EPA 8010/7000 TLUG <input type="checkbox"/> STLC <input type="checkbox"/>	Lead Org./OHS Lead EPA 7420/7421 <input type="checkbox"/>	
			Soil	Water	Other	Ice	Acid														
<i>INFL</i>		<i>3</i>		<i>X</i>		<i>X</i>	<i>HCL</i>	<i>5-18-94</i>	<i>840</i>		<i>X</i>										
<i>EFFL</i>		<i>3</i>		<i>X</i>		<i>X</i>	<i>HCL</i>	<i>5-13-94</i>	<i>850</i>		<i>X</i>										

Laboratory name
SEAUDIA
Contract number

Method of shipment

Special detection Limit/reporting

Special QA/QC

Remarks

Lab number

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

Condition of sample: Temperature received:
 Relinquished by *[Signature]* Date *5-13-94* Time *1330* Received by
 Relinquished by Date Time Received by
 Relinquished by Date Time Received by laboratory Date Time

FILE COPY

SITE INFORMATION FORM

Identification

Project Type

Project # 330-006.26

Station # 0608

Site Address: 17601 W. ...
County: ...

Project Manager: Shrub

Requestor: Leslie

Client: ARCO

Client P.O.C.: M. Whelan

Date of request: 5/4/94

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

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

Check Appropriate Category
 Budget Hrs. 2
 Actual Hrs. 4.5
 Mob de Mob 20

Ideal field date(s): next field visit

Site Safety

Concerns

Field Tasks: For General Description

- 1) Pull E-1A well pump verify depth from TOB to pump inlet. Call Leslie (x279) or Shrub (x2284) with depth. APPROX on depth (existing) of pump TOB will raise it approx. 2 to 3 feet. 17601 W. ...
 - 2) Allow to approximate ~ 1 hr after reinstallation when MUST do sampling.
 - 3) Pad has drain where? Draw quick sketch of drain pump plumbing. GIVE ON UPON ARRIVAL.
- UTW BEFORE SHUTTING OFF PUMP.

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

- 1) PULLING PUMP REQUIRED 7 PEOPLE (2 1/2" SCHED HARD PIPE TO PUMP)
 - 2) REMOVED ~ 4 FEET OF PIPE TO RAISE PUMP TO PROPER LEVEL
 - 3) COMPLETED MONTHLY AFTER TASK COMPLETS
- GIVE UNIT ON UPON DEPARTURE

Completed by: JANE MONNIE Date: 5-13-94

Checked by:

FIELD DATA SHEET

Client: <u>ARCO</u>	Date: <u>5-12-94</u>
Job Address: <u>17601 HESPERIAN BLVD</u> <u>SAN LORENZO</u>	Project No.: <u>33000626</u>
Weather Conditions: <u>OVERCAST - COOL</u>	Time Arrived: <u>845</u>
Equipment at Site: <u>GWE</u>	Time Departed: _____
Personnel at Site: <u>J. MANNING</u>	

FIELD NOTES

- GWE ON UPON ARRIVAL:
- ① - DTW BEFORE SHUTTING OFF PUMP - 20.30 FT. TO B
19.20 FT TO C
- DTW AFTER PUMP OFF FOR 1 HOUR: 11.47 (TO B)
PUMP IS \approx 22.71 FT TO TOC OR \approx 23.91 TO TOB
- AFTER \approx 4 FT REMOVED ^{PUMP IS} \approx 18.95 (TOC) TO INTAKE
OR \approx 20.05 FT FROM TOB
- LEFT SYSTEM DOWN UNTIL I COULD GET HELP REINSTALL.
- HOURS: 19349 TOTALIZER: 03478800
- ③ PAD DRAIN: THERE IS A VALVE (1 INCH) THAT IS AT GRADE LEVEL ~~IN~~ THAT GOES FROM INSIDE THE PAD TO THE OUTSIDE. I HOOK UP MY HOSE TO THE VALVE TO MY JACUZZI PUMP. ANOTHER HOSE IS THEN HOOKED TO A FITTING INSIDE E-1A. I THEN PUMP THE WATER INTO THE INFLUENT LINE (DRAWING ON NEXT PAGE)

J. Manning

Signature

FIELD DATA SHEET

Client: ARCO

Date: 5/12/94

Job Address: 17601 HESPERIAN BLVD
ANALOGNO

Project No.: 33000626

Time Arrived: 845/1300

Time Departed: 1500/1540

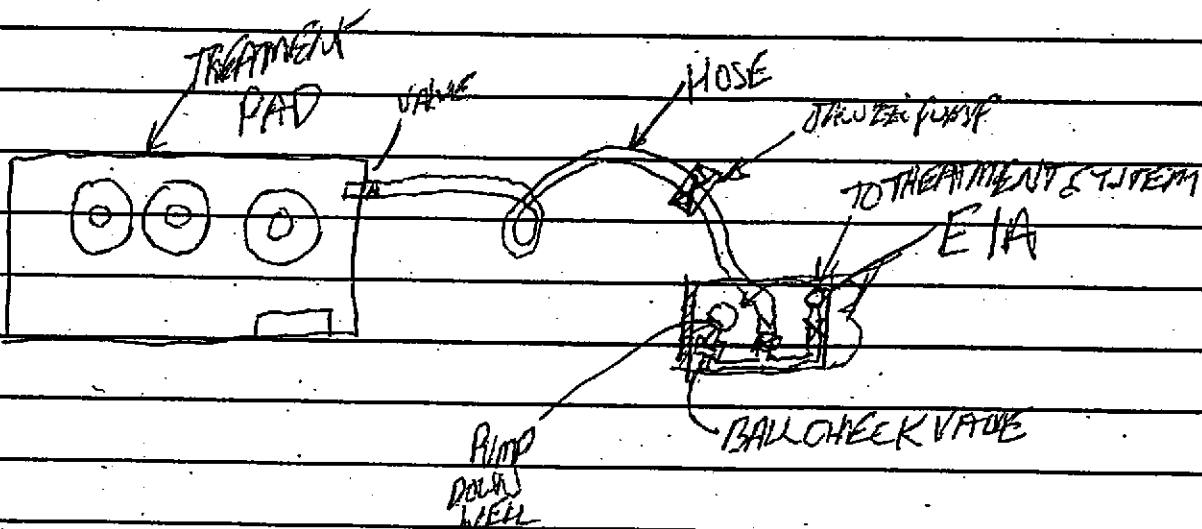
Weather Conditions: OVERCAST - COOL

Equipment at Site: GWE

Personnel at Site: J. Monnier

ARRIVE / DEPART

FIELD NOTES



UNIT LEFT OFF ON 5-12-94 AND RESTARTED A.M.
5-13-94.

J. Monnier

Signature

FIELD DATA SHEET

Client: ARCO

Date: 5-13-94

Site Address: 17601 HESPERIAN BLVD

Project No.: 33000626

(AN LORENZO)

Time Arrived: 6:45

Time Departed: 9:30

Weather Conditions: CLEAR-COOL

Equipment at Site: GWE

Personnel at Site: J. MANNAR, P. KAPASIMIA

FIELD NOTES

5-13-94

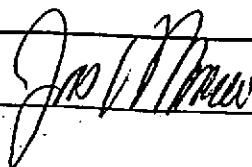
- ARRIVED 6:45 - SYSTEM DOWN SINCE ABOUT 11AM (5-12-94)

- REINSTALLED PUMP WITH HELP FROM DAREN (VERY HEAVY)

- DTW IS AT 11.43 (TOB)

- SYSTEM RESTARTED AND ALLOWED TO RUN FOR 1 HOUR

- TOOK SAMPLES (MONTANA)



Signature

Serts # _____

EQUIPMENT

Description/Unit	Units	Days	Unit Cost	Total
Barricades w/o lights			5.00/ea./day	
Cones	4	1	2.00/ea./day	8.00
Road Signs			10.00/ea./day	
Photo Ionization Detector			100.00/day	
Flame Ionization Detector			150.00/day	
Measuring Wheel			5.00/day	
Water Level Indicator	1	1	10.00/day	10.00
LEL Meter			100.00/day	
Turbidity Meter			25.00/day	
Surge Block			10.00/day	
Cover Plates			5.00/ea./day	
Stainless Steel Auger			10.00/day	
Soil Sleeve Sampler			10.00/day	
Dissolved Oxygen Meter			25.00/test	
Ballers			6.50/well	
Auto-Bailer			50.00/month	
Data Logger and Transducer			150.00/day	
Data Logger			100/day	
Soil-Gas Probes			15.00/ea.	
60 CFH Blower, Magnehelics, Flow Meter			150.00/day	
120 CFM Blower, Magnehelics, Flow Meter			250.00/day	
Pipe Cutter/Threader			10.00/day	
Submersible Electric Pump			80.00/day	
pH / EC / Temp Meter			20.00/day	
Positive Displacement Pump with Air Compressor			80.00/day	
..... Air Compressor			25.00/day	

Oil/Water Interface Probe			50.00/day	
Gas Displacement Pump with Air Compressor			50.00/day	
Steam Cleaner with Generator			40.00/day	
Generator			25.00/day	
Gas Chromatograph with Support Equipment			500.00/day	
Field Phone			40.00/day	
500' Sounder			20.00/day	
Vacuum Test Hose & Pigs.			50.00/day	
Vapor Phase Carbon			300.00/day	
Air Sampling Pump			25.00/day	
Water wagon			100.00/day	
Anemometer			50.00/day	
Equipment Total				800

SAFETY EQUIPMENT

Description/Unit	Days	People	Unit Cost	Total
Level D:	1	1	40.00	40.00
Level C:			75.00	
Tyvek Suit (additional)			12.00	
Gloves (additional) Neoprene			4.00	
Respirator w/cartridge			23.00/day	
Safety Equipment Total				400

SITE INFORMATION FORM

Identification

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

Project Type

- 1st Time visit
 Quarterly
 1st 2nd 3rd 4th
 Monthly
 Semi-Monthly
 Weekly
 One time event
 Other: _____
 Ideal field date(s): _____

Prefield Contacts/Permits

- Local 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	M = monthly
COD		Q	Q = Quarterly (3, 6, 9, 12)
TSS		Q	
pH		Q	

2) DTU in E-1A

3) Change filter

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

Budgeted hours: _____ Actual hours; On-Site: 2.0-1.5 Mob-de-Mob: 1

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

Monthly completed
Samples taken

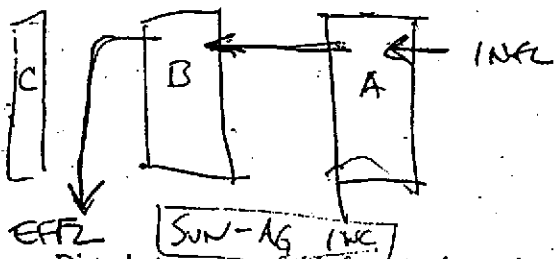
Groundwater Extraction System

ARCO Service Station 0608
17601 Hesperian Boulevard
San Lorenzo, California

Name: DAREN KHAKIMA Date/Time: 4-21-94 / 1245

Treatment System Readings			
System On Upon Arrival?	NO	Electric Meter (kw-hrs)	10755
Effluent Totalizer (gallons)	3,18,537	Bag Filter INFL Pressure (psi)	10.0
E-1A Flowrate (gpm)	20	Bag Filter EFFL Pressure (psi)	7.5
E-1A Hourmeter (hours)	18849.4	MID-1 Pressure (psi)	5.5
E-1A Throttle Valve Position	$\frac{1}{2}$	MID-2 Pressure (psi)	2.0
E-1A DTW (TOB feet)	19.25	EFFL Pressure (psi)	Ø
Enclosure Swept	YES	Does Sump Pump Work	N/A
Does the Autodialer Work? Batteries Replaced	YES	Number of Spare Filters On-Site	Ø

Comments Changed bag filter & restarted.



Distribute a copy of this form to the project supervisor.
33000626/O&MDOC

January 21, 1994

ARCO Facility no. 0608	City (Facility) SAN LORENZO	Project manager (Consultant) KELLY BROWN
ARCO engineer MIKE WHELAN	Telephone no. (ARCO)	Telephone no. (Consultant) (408) 441-7500
Consultant name PACIFIC ENVIRONMENTAL GROUP	Address (Consultant) 2025 GATEWAY BL #440	Fax no. (Consultant) 441-7539

Laboratory name **SEQUOIA**
Contract number

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA 1632/8020/8015	TPH Modified 8015 Gas <input type="checkbox"/> Diesel <input type="checkbox"/>	Oil and Grease 413.1 <input type="checkbox"/> 413.2 <input type="checkbox"/>	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCUP Metals <input type="checkbox"/> VOA <input type="checkbox"/> VOA <input type="checkbox"/>	Semi Metals <input type="checkbox"/> VOA <input type="checkbox"/> VOA <input type="checkbox"/>	CMM Metals EPA 601/17000 TLC <input type="checkbox"/> STLC <input type="checkbox"/>	Lead Org./DHS <input type="checkbox"/> Lead EPA 7420/7421 <input type="checkbox"/>		
			Soil	Water	Other	Ice	Acid HCL																
INFL		3		X		X	X	4-21-94	1345		X												
EFFL		↓		↓		↓	↓		1400		↓												

Method of shipment

Special detection Limit/reporting

Special QA/QC

Remarks

Lab number

Turnaround time

Priority Rush
1 Business Day

Rush
2 Business Days

Expedited
5 Business Days

Standard
10 Business Days

Condition of sample:		Temperature received:	
Relinquished by sampler	Date 4-22-94 Time 1420	Received by	
Relinquished by	Date	Time	Received by
Relinquished by	Date	Time	Received by laboratory
			Date
			Time

WELL SAMPLING REQUEST

SITE INFORMATION FORM

Identification

Object # 330006.18
Station # 608
Site Address: 17601 Hesperian
San Lorenzo
County: Alameda
Project Manager: _____
Requestor: Kelly Brown
Client: _____
Client P.O.C.: _____
Date of request: _____

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 ALL HOMEOWNERS
1 WK NOTICE
5 WORKING DAYS
 Multi-Consultant Scheduling
Date(s): _____

Purge Water Containment:

- Drums
 Treatment System
 Other Describe: _____

Field Tasks

- H₂O levels _____
 H₂O Sampling SAMPLE 14 DOMESTIC
WATER SUPPLY WELLS
GAS / BTEX - ALL WELLS
 Well Development _____
 Other: USE ADDRESS (NUMBER)
AS SAMPLE ID.
+ LETTER OF STREET NAME
(i.e. U75H = 657 HACIENDA DR.)

Site Safety

Wells	Concerns
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

- Flash Safety
 Flagman
 Cones
 Barricades
 No Turn/Lane Closed sign
Other: _____

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

#20 has been abandoned
Domestic wells not sampled:
✓ 590 H } Sampled: 6-16-94
633 H } Homeowners not home
675 H }
634 H }
642 H } Well Blocked / Not authorized
1737/VM }

Describe task (ie: Well groups and analytical params):

Activities occurring on site
(ie: remedial system construction, ongoing projects, etc.)

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

Budgeted hours: _____
Actual hours; On-Site: 15.5 17
Mob-de-Mob: 9

All Wells secured

Completed by: RA Date: 6/15/94

Checked by: _____ PITS Update: _____

WELL SAMPLING REQUEST

SITE INFORMATION FORM

Identification

I ct # 330-006.75
 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: CALL 3410th
OF EACH MONTH
Ideal field date(s): SAMPLE
By 16th, 17th, 18th

Prefield Contacts/Permits

- Cal Trans _____
 - County 48 HRS. 510-670-5481
ARCO DIST. MGR.
 - City _____
 - 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

- H₂O levels ALL WELLS
- H₂O Sampling MW-5, 7-11, 13-23
E1-A (O&M INFL SAMPLE) MW-
24, 25, 26

Well Development _____

Other: GO TO CHURCH OFFICE
FOR KEY FOR SCHOOL WELL

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

Activities occurring on site

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

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

Scheduled hours: _____
 Actual hours; On-Site: _____
 Mob-de-Mob: _____

Site Safety

Wells	Concerns
<u>OFFSITE WELLS</u>	
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

- Flash Safety
 - Flagman
 - Cones
 - Barricades
 - No Turn/Lane Closed sign
- Other: _____

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

All Wells secured

ARCO Facility no. 0608	City (Facility) San Jose	Project manager (Consultant) Kelly Brown	Laboratory name Sequoia
ARCO engineer CC	Telephone no. (ARCO)	Telephone no. (Consultant) (408) 448-7500	Contract number
Consultant name Pacific Environmental Group		Address (Consultant) 2025 Gateway Place, #440, San Jose CA	

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX EPA 8020	BTEX/TPH/Gas EPA 1631/601/8015	TPH Modified 8015 Gas Diesel	Oil and Gases 413.1 413.2	TPH EPA 418.1/SM60E	EPA 601/8010	EPA 624/8240	EPA 625/8270	Sent Metals TCAP VOA VMA	Sent Metals EPA 801/7000 TLC STLC	Lead Org. JHS Lead EPA 7420/7421	
			Soil	Water	Other	Ice	Acid														
MW-11		3		X		X	X	6-13-94	1455		X										
MW-14									1315												
MW-15									1145												
MW-16									1210												
MW-18									1230												
MW-19									1255												
MW-21									1315												
MW-22									1330												
MW-23									1400												
MW-24									1540												
MW-26									1555												
TB-1		2							-												

Method of shipment
Courier

Special detection Limit/reporting

Special QA/QC

Remarks
page 1 of 1

Lab number Release #
0608-92-5

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

Condition of sample:		Temperature received:	
Relinquished by sample <i>[Signature]</i>	Date 6-14-94	Time 6:45	Received by <i>[Signature]</i>
Relinquished by <i>[Signature]</i>	Date 6/15/94	Time 10:15	Received by <i>[Signature]</i>
Relinquished by <i>[Signature]</i>	Date 6-15-94	Time	Received by laboratory
			Date
			Time

ARCO Facility no. **0608** City (Facility) **San Lorenzo** Project manager (Consultant) **Kelly Brown**
 ARCO engineer **PC** Telephone no. (ARCO) **(408) 441 7500** Telephone no. (Consultant) **(408) 441 7500** Fax no. (Consultant) **441 9102**

Laboratory name **Seguvia**
Contract number

Consultant name **Pacific Environmental Group** Address (Consultant) **2025 Gateway #440, San Jose, CA**

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH/Gas EPA 8020/8020/8015	TPH Modified 8015 Gas Diesel	Oil and Grease 413.1 413.2	TPH EPA 418.1/SM/803E	EPA 601/8010	EPA 624/8240	EPA 825/8270	TCLP Metals VOC VOA	Semi Metals VOC VOA	CAN Metals EPA 8010/7000 TTLC STLC	Lead Org./DHS Lead EPA 7420/7421	
			Soil	Water	Other	Ice	Acid															
MW-5		3		X		X	X	6-14-94	1200		X											
MW-7									845													
MW-8									1000													
MW-9									1040													
MW-10									1105													
MW-13									820													
MW-25									910													
EI-A		V		V		V	V		1145		V											
TB-2		2		X		X	X		-		X											

Method of shipment

Special detection Limit/reporting

Special QA/QC

Remarks
page 2

Lab. number Release #
0608-94-5

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

Condition of sample: _____
 Relinquished by sampler **Robert J. ...** Date **6-14-94** Time **1405**
 Relinquished by **M. Doder** Date **6/15/94** Time **10:15**
 Relinquished by _____ Date _____ Time _____

Temperature received:
 Received by **M. Doder** Date **6/15/94**
 Received by **Angela ...** Date **6-15-94** Time **10:15**
 Received by laboratory _____ Date _____ Time _____

ARCO Facility no. 0608 City (Facility) San Lorenzo Project manager (Consultant) Celley Brown Laboratory name Sguvia

ARCO engineer CC Telephone no. (ARCO) Telephone no. (Consultant) 408 441 7500 Fax no. (Consultant) Contract number

Consultant name Pacific Environmental Group Address (Consultant) 2025 Gateway Place #440 SJ CA

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX EPA 802	BTEX/TPH/600 EPA 1602/1620/6015	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 VOA	Semi Metals VOA VOA	CAN Metals EPA 601/7000 TRLC STLC	Lead Org. CHS Lead EPA 7420/7421	Method of shipment	Special detection Limit/reporting	Special QA/QC	Remarks	Lab number	Turnaround time		
			Soil	Water	Other	Ice	Acid																						
590H		3		X		X	X	6-16-94	1300		X																		
TB-4		2		X		X	X	6-16-94	—		X																		

Condition of sample: Temperature received:

Relinquished by sampler [Signature] Date 6-16-94 Time 17:00 Received by [Signature] Date 6-17-94 Time 0730

Relinquished by [Signature] Date 6-17-94 Time 2:10 Received by [Signature] Date 6-17-94 Time 2:10

Relinquished by _____ Date _____ Time _____ Received by laboratory Date _____ Time _____

Priority Rush 1 Business Day

Rush 2 Business Days

Expedited 5 Business Days

Standard 10 Business Days

ARCO Facility no. 0608	City (Facility) San Lorenzo	Project manager (Consultant) Kelly Brown	Laboratory name Sequoia
ARCO engineer CC	Telephone no. (ARCO)	Telephone no. (Consultant) (408) 441-7500	Contract number
Consultant name Pacific Environmental Group		Address (Consultant) 2025 Gateway Place #440 San Jose, CA.	Method of shipment

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX EPA 802	ETX/TPH/Gas EPA 1602/820/8015	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 VOC <input type="checkbox"/> VOA <input type="checkbox"/>	Semi Metals EPA 601/7000 TTLG <input type="checkbox"/> STLG <input type="checkbox"/>	Lead Org./DHS Lead EPA 7420/7421 <input type="checkbox"/>	
			Soil	Water	Other	Ice	Acid														
MW-17		3		X		X	X	6-15-94	1235		X										
17348 VE									1025												
17197 VM									1055												
17200 VM									1200												
17203 VM									1050												
17302 VM									1040												
17349 VM									1110												
17372 VM									1010												
17393 VM									1120												
TB-3		2																			

Special detection Limit/reporting

Special QA/QC

Remarks
Lab Release #
608-94-5

Lab number

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

Condition of sample:		Temperature received:	
Relinquished by sampler <i>[Signature]</i>	Date 6-15-94	Time 17:00	Received by <i>[Signature]</i> 6/15/94 17:00
Relinquished by <i>[Signature]</i>	Date 6/16/94	Time 11:30	Received by <i>[Signature]</i> 6-16-94 11:30
Relinquished by	Date	Time	Received by laboratory Date Time

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

CALL AT LEAST ONE WEEK IN ADVANCE OF EVENT EACH QUARTER
Document with copy of this log in project file

June / Wed / 15th

Address	Contact Name Phone #	Date Contacted	Well Assessment	Notes
★ 590 Hacienda	Mr. & Mrs. Silva (510) 276-1534	<i>1st message 6/7/94 12:20</i>	operational	Sampled from tap for irrigation hose.
★ 633 Hacienda	Mr. Dahmann (510) 276-3860	<i>no answer 6/7/94, 6/10/94</i>	non-operational	Disassembly simple.
✓ 634 Hacienda	Mrs. Albright (510) 278-8094	Don't Call Well Blocked	non-operational	Disassembly moderate.
✓ 642 Hacienda	Ms. Corregedor (510) 481-1063	Don't Call Not authorized	operational	Sampled from tap for irrigation hose.
★ 675 Hacienda	Mr. & Mrs. Roberts (510) 276-7389	<i>Don't call message 6/7/94</i>	non-operational	Disassembly difficult. May require removal of well shed.
✓ 17348 Via Encinas	Mr. Luehrs (510) 278-9059	<i>1st message 6/7/94</i>	non-operational	Resident reports well not functioning for a long time. Disassembly moderate.
✓ 17197 Via Magdalena	Mr. Scrag (510) 278-1904	<i>ok 6/7/94 anytime</i>	unknown	Resident out of town (back 10/20). <i>pipe runs along railing of patch</i> Would not allow access until return.
✓ 17200 Via Magdalena	✓ Cavalry Church (510) 278-2555	<i>ok 6/7/94 anytime</i>	non-operational	Well no longer in use for irrigation. Old pump already disassembled.
✓ 17203 Via Magdalena	✓ Mrs. Toles (510) 276-6797	<i>ok 6/7/94 anytime</i>	operational	Sampled from Irrigation hose.
✓ 17302 Via Magdalena	✓ Mr. & Mrs. Johanson (510) 278-5987	<i>ok 6/7/94 anytime</i>	unknown	Homeowner would not permit access for PACIFIC staff to assess or sample.
✓ 17349 Via Magdalena	✓ Mr. Kast (510) 278-1263	<i>ok 6/7/94 anytime</i>	operational	Sampled from tap for irrigation hose. <i>well has plywood shed built over it - in backyard enter backyard if no one home</i>
✓ 17371 Via Magdalena	✓ Mr. Manry (510) 317-9724	Don't Call Not authorized	operational	Sampled from tap for irrigation hose.
✓ 17372 Via Magdalena	✓ Mr. Pimental (510) 278-2204	<i>1st message 6/7/94</i>	operational	Sampled from tap for irrigation hose.
✓ 17393 Via Magdalena	Mr. Hull (510) 278-2204	<i>ok 6/7/94 prefers morning 1st message 6/7/94</i>	non-operational	Disassembly simple. New property owner may install new pump.

WELL SAMPLING REQUEST

SAMPLING PROTOCOL					
Project No. 330-006.25	Project Name HESPERIAN BLVD.	Project Manager K.B.	Approval	Date/s Q3	Prepared by: C.C.

Well No.	Ideal Sampling Order	Sample I.D.	Duplicate I.D.	Analyses	Approximate Gallons to be Evacuated	Screened Interval (ft.) (DEPTH)	Casing Diameter (in.)	Does Well Go Dry?	Comments Health & Safety Concerns
		Lab	Lab						
MW-5				GAS/B.T.E.X.	14	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 1/2	3		
MW-16				✓	12	23	3	↓	

WELL SAMPLING REQUEST

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

Well No.	Ideal Sampling Order	Sample I.D.		Analyzes	Approximate Gallons to be Evacuated	Screened Interval (ft.) (DEPTH)	Casing Diameter (in.)	Does Well Go Dry?	Comments	
		Lab	Duplicate I.D. Lab						Health & Safety Concerns	
MW-17				GAS/BTEX	12	24	3			
MW-18				↓	12	21½	3			
MW-19					14	21½	3			
MW-20					14	21½	3			
MW-21					14	22	3			
MW-22					13	21½	3			
MW-23					12	22	3			
E1-A							25	6		INFL. w/0.3m MONTHLY
					✓					

FIELD REPORT

DEPTH TO WATER/SEPARATE-PHASE HYDROCARBON SURVEY

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN DATE: 6/13/94
 CLIENT/STATION NO.: ARCO/0608 FIELD TECHNICIAN: RT DAY OF WEEK: Mon

PROBE TYPE/ID No. _____
 Oil/Water IF/ _____
 H₂O 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	Second Depth to Water (feet) TOB	SEPARATE-PHASE HYDROCARBONS (SPH)									
											SPH Depth (feet) TOB/TOC	SPH Thickness (feet)	Fresh	Weathered	Gas	Oil	VISCOSITY			LIQUID REMOVED (gallons) SPH / H ₂ O
																	Light	Medium	Heavy	
	MW-5	10 ²⁴						13.95	10.34	→	-	-								
	MW-7	10 ²³						18.90	12.70	→	-	-								
	MW-8	10 ⁴²						21.70	11.60	→	-	-								
	MW-9	10 ¹⁴						18.70	10.80	→	-	-								
	MW-10	9/10 ⁵¹						23.00	10.95	→	-	-								
	MW-11	9 ⁵⁴						19.20	11.62	→	-	-								
	MW-13	10 ²⁸						23.40	13.98	→	-	-								
	MW-14	9 ⁵⁸						23.00	9.92	→	-	-								
	MW-15	9 ¹¹						23.70	11.34	→	-	-								

Comments: _____

FIELD REPORT

DEPTH TO WATER/SEPARATE-PHASE HYDROCARBON SURVEY

PROJECT No.: 330-00625 LOCATION: 17601 HESPERIAN BLVD DATE: 6/13/94

CLIENT/STATION NO.: ARCO/0608 FIELD TECHNICIAN: RE DAY OF WEEK: Mon

PROBE TYPE/ID No.
 Oil/Water IF/
 H₂O level
 Indicator _____
 Other: _____

D/w Order	Well ID	Time	Surface Seal	Lid Secure	Gasket	Lock	Expanding Cap	Total Depth (feet)	First Depth to Water (feet) <u>(TOB/TOC)</u>	Second Depth to Water (feet) <u>(TOB/TOC)</u>	SEPARATE-PHASE HYDROCARBONS (SPH)													
											SPH Depth (feet) TOB/TOC	SPH Thickness (feet)	Fresh	Weathered	Gas	Oil	VISCOSITY			LIQUID REMOVED (gallons) SPH / H ₂ O				
																	Light	Medium	Heavy					
	MW-16	915						22.60	11.87	→	-	-												
	MW-17	928						23.60	12.71	→	-	-												
	MW-18	932						21.70	10.80	→	-	-												
	MW-19	935						21.60	10.26	→	-	-												
	MW-20	A	ABANDONED																					
	MW-21	940						21.90	10.69	→	-	-												
	MW-22	943						21.75	11.24	→	-	-												
	MW-23	948						21.90	12.26	→	-	-												
	E1-A	1048	✓	✓				-	11.60	→	-	-												

Comments: _____

FIELD REPORT

DEPTH TO WATER/SEPARATE-PHASE HYDROCARBON SURVEY

PROJECT No. : 330-006.25 LOCATION: 17601 Hesperium Blvd DATE: 6/13/94
 CLIENT/STATION NO. : ARCO 10008 FIELD TECHNICIAN: RI DAY OF WEEK: Mon

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

D/w 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)							LIQUID REMOVED (gallons)						
											SPH Depth (feet) TOB/TOC	SPH Thickness (feet)	Fresh	Weathered	Gas	Oil	VISCOSITY			SPH	H ₂ O			
																	Light	Medium	Heavy					
												COLOR												
FD	MW-24	10 ⁰⁵						19.95	13.37 →															
FD	MW-25	10 ²⁰						21.40	12.39 →															
FD	MW-26	10 ⁰⁹						19.70	12.65 →															
	Churchy Well	923	✓	✓				19.70	12.52 ^{TOC} →															

Comments: _____

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-15

CLIENT/STATION No.: ARCO 10608 FIELD TECHNICIAN: RT

WELL INFORMATION

Depth to Liquid: ✓ TOB — TOC
 Depth to water: 12.54 TOB — TOC
 Total depth: 13.95 TOB — TOC
 Date: 6-13-94 Time (2400): 1034

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 13.95 DTW 12.54 = 1.41 Gal/Linear x Foot 0.66 = .93 x Casings 5 = Purge 5

DATE PURGED: 6-14-94 START: 920 END (2400 hr): 930 PURGED BY: RT
 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
<u>928</u>	<u>2</u>	<u>7.84</u>	<u>895</u>	<u>65.1</u>	<u>flw</u>	<u>light</u>	<u>moderate</u>
	<u>3.5</u>						
	<u>5</u>						

Pumped dry (Yes) / No

FIELD MEASUREMENTS AT TIME OF SAMPLE; AFTER RECHARGE:

DTW: 13.05 TOB/TOC 8.45 942 68.5 clear trace slight

PURGING EQUIPMENT/I.D. #

Bailer: 4" PVC Bailer Airlift Pump: _____
 Centrifugal Pump: _____ Dedicated: _____
 Other: _____

SAMPLING EQUIPMENT/I.D. #

Bailer: 4" PVC Bailer Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW 5</u>	<u>6-14-94</u>	<u>1200</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/BTEX</u>

REMARKS:

SIGNATURE: RT

WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD, WELL ID #: MW-7
SAN LORENZO CA.

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

WELL INFORMATION

Depth to Liquid: TOB TOC
 Depth to water: 12.70 TOB TOC
 Total depth: 18.90 TOB TOC
 Date: 6-13-94 Time (2400): 10²³

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

CASING

DIAMETER **GAL/LINEAR FT.**

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

SAMPLE TYPE

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

TD 18.90 - DTW 12.70 = 6.2 Gal/Linear x Foot 0.38 = 2.4 Number of Casings 5 Calculated = Purge 11.8

DATE PURGED: 6-14-94 START: 8²⁵ END (2400 hr): 8³⁵ PURGED BY: RT
 DATE SAMPLED: ↓ START: 8³⁵ END (2400 hr): 8⁴⁵ SAMPLED BY: ↓

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>8³⁰</u>	<u>4</u>	<u>7.43</u>	<u>703</u>	<u>64.5</u>	<u>tan</u>	<u>light</u>	<u>Ø</u>
<u>8³²</u>	<u>8</u>	<u>7.43</u>	<u>693</u>	<u>65.2</u>	<u>"</u>	<u>"</u>	<u>"</u>
<u>8³⁴</u>	<u>12</u>	<u>7.37</u>	<u>728</u>	<u>65.6</u>	<u>"</u>	<u>"</u>	<u>"</u>

Pumped dry Yes / No

Cobalt 0-100
 Clear
 Cloudy
 Yellow
 Brown

NTU 0-200
 Heavy
 Moderate
 Light
 Trace

Strong
 Moderate
 Faint
 None

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: TOB/TOC

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

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

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-7</u>	<u>6-14-94</u>	<u>8⁴⁵</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/BTEX</u>

REMARKS:

SIGNATURE: RT



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: RI

WELL INFORMATION

Depth to Liquid: TOB — TOC —
 Depth to water: 11.60 TOB — TOC —
 Total depth: 21.70 TOB — TOC —
 Date: 6-13-94 Time (2400): 1042

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

CASING

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

SAMPLE TYPE

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

TD 21.70 DTW 11.60 = 10.1 Gal/Linear Foot 0.38 = 3.8 Number of Casings 5 Calculated Purge 19.2

DATE PURGED: 6-14-94 START: 940 END (2400 hr): 952 PURGED BY: RI
 DATE SAMPLED: START: 952 END (2400 hr): 1005 SAMPLED BY:

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>946</u>	<u>6</u>	<u>7.27</u>	<u>756</u>	<u>67.8</u>	<u>clear</u>	<u>trace</u>	<u>moderate</u>
<u>949</u>	<u>12</u>	<u>7.20</u>	<u>763</u>	<u>68.3</u>	<u>"</u>	<u>"</u>	<u>"</u>
<u>952</u>	<u>19.2</u>	<u>7.17</u>	<u>768</u>	<u>68.7</u>	<u>"</u>	<u>"</u>	<u>"</u>

Pumped dry Yes / (No)

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: TOB/TOC

PURGING EQUIPMENT/I.D. #

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

SAMPLING EQUIPMENT/I.D. #

Bailer:
 Dedicated:
 Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-8</u>	<u>6-14-94</u>	<u>1000</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCL</u>	<u>GAS/BTEX</u>

REMARKS:

SIGNATURE: RI



WATER SAMPLE FIELD DATA SHEET

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

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

WELL INFORMATION

Depth to Liquid: TOB TOC
 Depth to water: 10.80 TOB TOC
 Total depth: 18.70 TOB TOC
 Date: 6-13-94 Time (2400): 1014

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

CASING

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

SAMPLE TYPE

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

TD 18.70 - DTW 10.80 = 7.9 Gal/Linear x Foot 0.38 = 3 x Casings 5 = Purge 15

DATE PURGED: 6-14-94 START: 1014 END (2400 hr): 10²⁷ PURGED BY: RT
 DATE SAMPLED: START: 10²⁷ END (2400 hr): 10⁴⁰ SAMPLED BY:

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>10²³</u>	<u>5</u>	<u>7.57</u>	<u>775</u>	<u>66.7</u>	<u>low</u>	<u>light</u>	<u> </u>
<u>10²⁵</u>	<u>10</u>	<u>7.59</u>	<u>794</u>	<u>67.1</u>	<u>clear</u>	<u>trace</u>	<u> </u>
<u>10²⁷</u>	<u>15</u>	<u>7.58</u>	<u>796</u>	<u>67.4</u>	<u> </u>	<u> </u>	<u> </u>

Pumped dry Yes No

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: TOB/TOC

PURGING EQUIPMENT/I.D. #

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

SAMPLING EQUIPMENT/I.D. #

Bailer:
 Dedicated:
 Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-9</u>	<u>6-14-94</u>	<u>10⁴⁰</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCL</u>	<u>GAS/BTEX</u>

REMARKS:

SIGNATURE: RT



WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD, WELL ID #: MW-10
SAN LORENZO CA.

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

WELL INFORMATION

Depth to Liquid: TOB: TOC
 Depth to water: 10.95 TOB: TOC
 Total depth: 23.00 TOB: TOC
 Date: 6-13-94 Time (2400): 1054

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

CASING

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

SAMPLE TYPE

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

TD 23.00 DTW 10.95 = 12.05 Gal/Linear x Foot 0.38 = 4.6 Number of Casings 5 Calculated Purge 22.9

DATE PURGED: 6-14-94 START: 1045 END (2400 hr): 1053 PURGED BY: RI
 DATE SAMPLED: START: 1053 END (2400 hr): 1105 SAMPLED BY:

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1049</u>	<u>7</u>	<u>9.17</u>	<u>896</u>	<u>68.0</u>	<u>Clear</u>	<u>light</u>	<u>strong</u>
<u>1051</u>	<u>14</u>	<u>9.14</u>	<u>908</u>	<u>67.8</u>	<u>"</u>	<u>"</u>	<u>"</u>
<u>1053</u>	<u>22.9</u>	<u>9.01</u>	<u>762</u>	<u>67.1</u>	<u>"</u>	<u>trace</u>	<u>"</u>

Pumped dry Yes No

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: TOB/TOC

PURGING EQUIPMENT/I.D. #

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

SAMPLING EQUIPMENT/I.D. #

Bailer:
 Dedicated:
 Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-10</u>	<u>6-14-94</u>	<u>1105</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCL</u>	<u>GAS/BTEX</u>

REMARKS:

SIGNATURE: RI



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: RT

WELL INFORMATION

Depth to Liquid: TOB TOC
 Depth to water: 11.62 TOB TOC
 Total depth: 19.20 TOB TOC
 Date: 6-13-94 Time (2400): 954

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

CASING

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

SAMPLE TYPE

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

TD 19.20 - DTW 11.62 = 7.58 Gal/Linear x Foot 0.38 = 2.9 Number of Casings 5 = Calculated Purge 14.4

DATE PURGED: 6-13-94 START: 1430 END (2400 hr): 1445 PURGED BY: RT
 DATE SAMPLED: START: 1445 END (2400 hr): 1455 SAMPLED BY:

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1441</u>	<u>5</u>	<u>6.91</u>	<u>777</u>	<u>65.4</u>	<u>tan</u>	<u>moderate</u>	<u> </u>
<u>1443</u>	<u>10</u>	<u>6.90</u>	<u>777</u>	<u>65.1</u>	<u>"</u>	<u>"</u>	<u>"</u>
<u>1445</u>	<u>14.4</u>	<u>6.98</u>	<u>775</u>	<u>64.8</u>	<u>"</u>	<u>"</u>	<u>"</u>

Pumped dry Yes No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: TOB/TOC

PURGING EQUIPMENT/I.D. #

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

SAMPLING EQUIPMENT/I.D. #

Bailer: PVC
 Dedicated:
 Other:

Cobalt 0-100
 Clear
 Cloudy
 Yellow
 Brown

NTU 0-200
 Heavy
 Moderate
 Light
 Trace

Strong
 Moderate
 Faint
 None

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-11</u>	<u>6-13-94</u>	<u>1455</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCL</u>	<u>GAS/BTEX</u>

REMARKS:

SIGNATURE: RT

WATER SAMPLE FIELD DATA SHEET

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

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

WELL INFORMATION

Depth to Liquid: _____ TOB _____ TOC _____
 Depth to water: 13.98 TOB _____ TOC _____
 Total depth: 23.70 TOB _____ TOC _____
 Date: 6-13-94 Time (2400): 020

CASING DIAMETER GAL/LINEAR FT.

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

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

Probe Type and I.D. #

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

TD 23.40 - DTW 13.98 = 9.42 Gal/Linear x Foot 0.38 = 3.6 x Casings 5 = Purge 17.9

DATE PURGED: 6-14-94 START: 745 END (2400 hr): 810 PURGED BY: RI
 DATE SAMPLED: ↓ START: 810 END (2400 hr): 820 SAMPLED BY: ↓

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>803</u>	<u>6</u>	<u>7.32</u>	<u>789</u>	<u>68.5</u>	<u>tan</u>	<u>Light</u>	<u>Ø</u>
<u>806</u>	<u>12</u>	<u>7.46</u>	<u>809</u>	<u>69.1</u>	<u>Clear</u>	<u>Trace</u>	<u>Ø</u>
<u>809</u>	<u>18</u>	<u>7.42</u>	<u>793</u>	<u>68.0</u>	<u>"</u>	<u>"</u>	<u>Ø</u>

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. #

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

SAMPLING EQUIPMENT/I.D. #

- Bailer: 5-5
- Dedicated: _____
- Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-13</u>	<u>6-14-94</u>	<u>820</u>	<u>3</u>	<u>40ml</u>	<u>VGA</u>	<u>HCl</u>	<u>GAS/BTEX</u>

REMARKS: _____

SIGNATURE: RI



WATER SAMPLE FIELD DATA SHEET

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

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

WELL INFORMATION

CASING DIAMETER

GAL/ LINEAR FT.

SAMPLE TYPE

Depth to Liquid: TOB TOC
 Depth to water: 992 TOB TOC
 Total depth: 65.00 TOB TOC
 Date: 6-13-94 Time (2400): 958

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

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

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

TD 23,00 - DTW 9.92 = 13.08 Gal/Linear x Foot 0.38 = 5 Number of x Casings 5 = Calculated Purge 25

DATE PURGED: 6-13-94 START: 13⁰⁰ END (2400 hr): 13⁰⁰ PURGED BY: RT
 DATE SAMPLED: START: 13⁰⁰ END (2400 hr): 13¹⁵ SAMPLED BY:

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
1501	8	6.91	772	68.4	clear	slight	0
1503	16	6.92	785	68.8	"	"	0
1306	25	6.91	791	68.6	"	"	0

Pumped dry Yes / No

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. #

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

SAMPLING EQUIPMENT/I.D. #

- Bailer: No #, old
- Dedicated: _____
- Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-14</u>	<u>6-13-94</u>	<u>13¹⁵</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCL</u>	<u>GAS/BTEX</u>

REMARKS: _____

SIGNATURE: RT



WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-15
SAN LORENZO CA.

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

WELL INFORMATION
 Depth to Liquid: _____ TOB _____ TOC _____
 Depth to water: 11.34 TOB _____ TOC _____
 Total depth: 23.70 TOB 11.34 TOC _____
 Date: 6-13-94 Time (2400): 9¹¹

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

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

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

TD 23.70 - DTW 11.34 = 12.36 Gal/Linear x Foot 0.38 = 4.7 Number of x Casings 5 = Calculated Purge 23.5

DATE PURGED: 6-13-94 START: 11¹⁰ END (2400 hr): 11³⁶ PURGED BY: RT
 DATE SAMPLED: 6-13-94 START: 11³⁶ END (2400 hr): 11⁴⁵ SAMPLED BY: RT

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>11²⁵</u>	<u>8</u>	<u>6.81</u>	<u>851</u>	<u>72.6</u>	<u>clear</u>	<u>trace</u>	<u>∅</u>
<u>11³³</u>	<u>16</u>	<u>6.77</u>	<u>829</u>	<u>71.9</u>	"	"	"
<u>11³⁶</u>	<u>23.5</u>	<u>6.75</u>	<u>832</u>	<u>71.7</u>	"	"	"

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

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

PURGING EQUIPMENT/I.D. #

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

SAMPLING EQUIPMENT/I.D. #

Bailer: New 1
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-15</u>	<u>6-13-94</u>	<u>11⁴⁵</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>Gas/BTEX</u>

REMARKS:

SIGNATURE: _____ 



WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-11
SAN LORENZO CA.

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

WELL INFORMATION

Depth to Liquid: TOB TOC
Depth to water: 11.87 TOB TOC
Total depth: 22.60 TOB TOC
Date: 6-13-94 Time (2400): 9:5

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

CASING

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

SAMPLE TYPE

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

TD 22.60 - DTW 11.87 = 10.73 Gal/Linear Foot 0.38 = 4 x Casings 5 = Purge 20

DATE PURGED: 6-13-94 START: 1150 END (2400 hr): 1157 PURGED BY: RT
DATE SAMPLED: 6-13-94 START: 1157 END (2400 hr): 1210 SAMPLED BY: RT

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1153</u>	<u>7</u>	<u>6.92</u>	<u>67.94</u>	<u>69.7</u>	<u>tan</u>	<u>moderate</u>	<u>Ø</u>
<u>1155</u>	<u>14</u>	<u>6.96</u>	<u>810</u>	<u>69.4</u>	<u>"</u>	<u>"</u>	<u>"</u>
<u>1157</u>	<u>20</u>	<u>6.99</u>	<u>814</u>	<u>70.1</u>	<u> </u>	<u> </u>	<u> </u>

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: TOB/TOC

PURGING EQUIPMENT/I.D. #

Bailer; Airlift Pump; Centrifugal Pump: 13 Dedicated; Other;

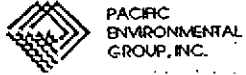
SAMPLING EQUIPMENT/I.D. #

Bailer: New ✓ Dedicated; Other;

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-16</u>	<u>6-13-94</u>	<u>1210</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>Gas/BTEX</u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

REMARKS: 23

SIGNATURE: RT



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: RI

WELL INFORMATION

Depth to Liquid: TOB TOC
 Depth to water: 12.70 TOB TOC
 Total depth: 23.60 TOB TOC
 Date: 6-15-94 Time (2400): -1205

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 23.60 - DTW 12.70 = 10.90 Gal/Linear Foot 0.38 = 4.1 Number of Casings 5 Calculated Purge 20.5

DATE PURGED: 6-15-94 START: 1205 END (2400 hr): 1222 PURGED BY: RI
 DATE SAMPLED: START: 1222 END (2400 hr): 1235 SAMPLED BY:

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
1214	7	7.34	713	63.7	tan	light	φ
1218	14	7.35	735 706	62.8	"	"	Slight
1222	20.5	7.36	708	62.6	"	"	Slight

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: TOB/TOC

PURGING EQUIPMENT/I.D. #

Bailer: PVC Airlift Pump:
 Centrifugal Pump: 13 Dedicated:
 Other:

SAMPLING EQUIPMENT/I.D. #

Bailer: PVC
 Dedicated:
 Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-17</u>	<u>6-15-94</u>	<u>1235</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCL</u>	<u>GAS/BTEX</u>

REMARKS:

SIGNATURE: RI



WATER SAMPLE FIELD DATA SHEET

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

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

WELL INFORMATION

Depth to Liquid: TOB TOC
 Depth to water: 10.80 TOB TOC
 Total depth: 21.70 TOB TOC
 Date: 6-13-94 Time (2400): 9:32

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

CASING

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

SAMPLE TYPE

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

TD 21.70 - DTW 10.80 = 10.9 Gal/Linear 0.38 = 4 x Casings 5 = Calculated Purge 20

DATE PURGED: 6-13-94 START: 12:10 END (2400 hr): 12:22 PURGED BY: RT

DATE SAMPLED: 6-13-94 START: 12:22 END (2400 hr): 12:30 SAMPLED BY: RT

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>12:17</u>	<u>7</u>	<u>6.92</u>	<u>826</u>	<u>69.5</u>	<u>Clear</u>	<u>Trace</u>	<u>B</u>
<u>12:19</u>	<u>14</u>	<u>6.94</u>	<u>822</u>	<u>68.6</u>	<u>"</u>	<u>"</u>	<u>"</u>
<u>12:22</u>	<u>20</u>	<u>6.90</u>	<u>816</u>	<u>68.0</u>	<u>"</u>	<u>"</u>	<u>"</u>

Pumped dry Yes / No

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. #

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

SAMPLING EQUIPMENT/I.D. #

Bailer: New-3
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-18</u>	<u>6-13-94</u>	<u>12:30</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCL</u>	<u>GA5/BTEX</u>

REMARKS: _____

SIGNATURE: RT



WATER SAMPLE FIELD DATA SHEET

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

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

WELL INFORMATION		CASING	GAL/	SAMPLE TYPE
Depth to Liquid: _____ TOB _____ TOC _____		DIAMETER	LINEAR FT.	
Depth to water: <u>10.26</u> TOB _____ TOC _____		<input type="checkbox"/> 2 _____ 0.17	<input checked="" type="checkbox"/> Groundwater	
Total depth: <u>21.60</u> TOB _____ TOC _____		<input checked="" type="checkbox"/> 3 _____ 0.38	<input type="checkbox"/> Duplicate	
Date: <u>6-13-94</u> Time (2400): <u>935</u>		<input type="checkbox"/> 4 _____ 0.66	<input type="checkbox"/> Extraction well	
Probe Type and I.D. #	<input type="checkbox"/> Oil/Water interface _____	<input type="checkbox"/> 4.5 _____ 0.83	<input type="checkbox"/> Trip blank	
	<input checked="" type="checkbox"/> Electronic indicator _____	<input type="checkbox"/> 5 _____ 1.02	<input type="checkbox"/> Field blank	
	<input type="checkbox"/> Other: _____	<input type="checkbox"/> 6 _____ 1.5	<input type="checkbox"/> Equipment blank	
		<input type="checkbox"/> 8 _____ 2.6	<input type="checkbox"/> Other: _____	

TD 21.60 - DTW 10.26 = 11.34 x Gal/Linear Foot 0.38 = 4.3 x Casings 5 = Purge 21.5

DATE PURGED: 6-13-94 START: 12³⁵ END (2400 hr): 12⁴³ PURGED BY: RJ
 DATE SAMPLED: ↓ START: 12⁴⁰ END (2400 hr): 12⁵⁵ SAMPLED BY: ↓

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>12³⁵</u>	<u>7</u>	<u>6.98</u>	<u>8.70</u>	<u>68.4</u>	<u>clear</u>	<u>free</u>	<u>0</u>
<u>12⁴⁰</u>	<u>14</u>	<u>6.96</u>	<u>8.75</u>	<u>69.2</u>	<u>"</u>	<u>"</u>	<u>"</u>
<u>12⁴³</u>	<u>21.5</u>	<u>6.95</u>	<u>8.84</u>	<u>70.1</u>	<u>"</u>	<u>"</u>	<u>"</u>

Pumped dry: Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:
 DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. #	SAMPLING EQUIPMENT/I.D. #
<input type="checkbox"/> Bailer: _____	<input checked="" type="checkbox"/> Bailer: <u>4-3</u>
<input checked="" type="checkbox"/> Centrifugal Pump: <u>13</u>	<input type="checkbox"/> Dedicated: _____
<input type="checkbox"/> Other: _____	<input type="checkbox"/> Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-19</u>	<u>6-13-94</u>	<u>12⁵⁵</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GPAS/BTEX</u>

REMARKS: _____

SIGNATURE: RJ



WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: MW-21
SAN LORENZO CA.

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

WELL INFORMATION

Depth to Liquid: - TOB - TOC -
 Depth to water: 10.69 TOB - TOC -
 Total depth: 21.90 TOB - TOC -
 Date: 6-13-94 Time (2400): 940

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

CASING

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

SAMPLE TYPE

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

TD 21.90 - DTW 10.69 = 11.21 Gal/Linear x Foot 0.38 = 4.3 Number of Casings 5 Calculated = Purge 213

DATE PURGED: 6-13-94 START: 1255 END (2400 hr): 1355 PURGED BY: RI
 DATE SAMPLED: 6-13-94 START: 1305 END (2400 hr): 1315 SAMPLED BY: RI

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1258</u>	<u>7.1</u>	<u>6.95</u>	<u>859</u>	<u>71.6</u>	<u>Clear</u>	<u>Trace</u>	<u>None</u>
<u>1300</u>	<u>14.2</u>	<u>6.97</u>	<u>855</u>	<u>69.4</u>	<u>"</u>	<u>"</u>	<u>"</u>
<u>1304</u>	<u>21.3</u>	<u>6.98</u>	<u>844</u>	<u>68.9</u>	<u>"</u>	<u>"</u>	<u>"</u>

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

PURGING EQUIPMENT/I.D. #
 Bailer: _____
 Centrifugal Pump: 13
 Other: _____
 Airlift Pump: _____
 Dedicated: _____

SAMPLING EQUIPMENT/I.D. #
 Bailer: New-4
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-21</u>	<u>6-13-94</u>	<u>1315</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/BTEX</u>

REMARKS: _____

SIGNATURE: RI



WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.75 LOCATION: 17601 HESPERIAN BLVD, WELL ID #: MW-22
SAN LORENZO CA.

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

WELL INFORMATION

CASING

GAL/

SAMPLE TYPE

Depth to Liquid: TOB TOC
 Depth to water: 11.24 TOB TOC
 Total depth: 21.75 TOB TOC
 Date: 6-13-94 Time (2400): 943

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

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

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

TD 21.75 - DTW 11.24 = 10.51 Gal/Linear 0.38 x Foot = 4 Number of Casings 6 = Purge 20

DATE PURGED: 6-13-94 START: 13¹⁵ END (2400 hr): 13²³ PURGED BY: RJ
 DATE SAMPLED: START: 13²⁷ END (2400 hr): 13³⁵ SAMPLED BY:

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
13 ¹⁹	7	6.93	807	65.5	Clear	Light	None
13 ²¹	14	6.94	804	65.3	"	"	"
13 ²³	20	6.90	800	65.1	"	"	"

Pumped dry: Yes No

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: TOB/TOC

PURGING EQUIPMENT/I.D. #

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

SAMPLING EQUIPMENT/I.D. #

Bailer: 4-6
 Dedicated;
 Other;

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-22</u>	<u>6-13-94</u>	<u>13³⁰</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCL</u>	<u>GAS/BTEX</u>

REMARKS:

SIGNATURE: RJ



WATER SAMPLE FIELD DATA SHEET

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

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

WELL INFORMATION

Depth to Liquid: TOB TOC
 Depth to water: 12.26 TOB TOC
 Total depth: 21.90 TOB TOC
 Date: 6-13-94 Time (2400): 948

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

CASING

DIAMETER

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

GAL/

LINEAR FT.

SAMPLE TYPE

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

TD 21.90 - DTW 12.26 = 9.64 Gal/Linear x Foot 0.38 = 3.7 x Casings 5 = Purge 18.3

DATE PURGED: 6-13-94 START: 1337 END (2400 hr): 1350 PURGED BY: RI
 DATE SAMPLED: START: 1400 END (2400 hr): 1400 SAMPLED BY:

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1342</u>	<u>6</u>	<u>7.01</u>	<u>856</u>	<u>67.5</u>	<u>tan</u>	<u>moderate</u>	<u>Ø</u>
<u>1345</u>	<u>12</u>	<u>7.08</u>	<u>851</u>	<u>66.7</u>	<u>"</u>	<u>"</u>	<u>Ø</u>
<u>1350</u>	<u>18.3</u>	<u>7.09</u>	<u>853</u>	<u>67.0</u>	<u>"</u>	<u>"</u>	<u>Ø</u>

Pumped dry Yes / (No)

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: TOB/TOC

PURGING EQUIPMENT/I.D. #

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

SAMPLING EQUIPMENT/I.D. #

Bailer: PVC
 Dedicated:
 Other:

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

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-23</u>	<u>6-13-94</u>	<u>1400</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCL</u>	<u>GA5/BTEX</u>

REMARKS:

SIGNATURE: RI



WATER SAMPLE FIELD DATA SHEET

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

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

WELL INFORMATION

Depth to Liquid: TOB TOC
 Depth to water: 12.5 TOB TOC
 Total depth: 19.95 TOB TOC
 Date: 6-13-94 Time (2400): 10:05

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

CASING

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

SAMPLE TYPE

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

TD 19.95 DTW 13.37 = 6.58 Gal/Linear Foot 0.38 = 1.1 x Casings 5 = Purge 5.5

DATE PURGED: 6-13-94 START: 15:20 END (2400 hr): 15:27 PURGED BY: RJ
 DATE SAMPLED: START: 15:29 END (2400 hr): 15:40 SAMPLED BY:

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>15:25</u>	<u>2.2</u>	<u>6.73</u>	<u>802</u>	<u>68.3</u>	<u>tan</u>	<u>moderate</u>	<u> </u>
<u>13:27</u>	<u>3.8</u>	<u>6.75</u>	<u>811</u>	<u>68.8</u>	<u> </u>	<u> </u>	<u> </u>
<u>15:29</u>	<u>5.5</u>	<u>6.79</u>	<u>813</u>	<u>69.0</u>	<u> </u>	<u> </u>	<u> </u>

Pumped dry Yes / No

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: TOB/TOC

PURGING EQUIPMENT/I.D. #

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

SAMPLING EQUIPMENT/I.D. #

Bailer: 4-4
 Dedicated:
 Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-24</u>	<u>6-13-94</u>	<u>15:40</u>	<u>3</u>	<u>40ml</u>	<u>VQA</u>	<u>HCL</u>	<u>GAS/BTEX</u>

REMARKS:

SIGNATURE: RJ



WATER SAMPLE FIELD DATA SHEET

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

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

WELL INFORMATION

Depth to Liquid: TOB TOC
 Depth to water: 12.39 TOB TOC
 Total depth: 21.40 TOB TOC
 Date: 6-13-94 Time (2400): 1020

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

CASING

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

SAMPLE TYPE

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

TD 21.40 - DTW 12.39 = 9.01 Gal/Linear ¹⁷ 0.38 x Foot = 1.5 x Casings 5 = Calculated Purge 7.7

DATE PURGED: 6-14-94 START: 8⁵⁰ END (2400 hr): 8⁵⁹ PURGED BY: RT
 DATE SAMPLED: START: 9⁰⁰ END (2400 hr): 9¹⁰ SAMPLED BY:

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>8⁵⁹</u>	<u>3</u>	<u>7.52</u>	<u>772</u>	<u>65.1</u>	<u>clear</u>	<u>light</u>	<u>Ø</u>
<u>8⁵⁷</u>	<u>5.5</u>	<u>7.45</u>	<u>784</u>	<u>65.4</u>	<u>tan</u>	<u>light</u>	<u>Ø</u>
<u>8⁵⁹</u>	<u>7.7</u>	<u>7.49</u>	<u>791</u>	<u>65.4</u>	<u>"</u>	<u>"</u>	<u>"</u>

Pumped dry: Yes / No

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: TOB/TOC

PURGING EQUIPMENT/I.D. #

Bailer: 1-5 Airlift Pump:
 Centrifugal Pump: Dedicated:
 Other:

SAMPLING EQUIPMENT/I.D. #

Bailer: 4-5
 Dedicated:
 Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-25</u>	<u>6-14-94</u>	<u>9¹⁰</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCL</u>	<u>GAS/BTEX</u>

REMARKS:

SIGNATURE: RT



WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD SAN LORENZO CA. WELL ID #: MW-26
 CLIENT/STATION No.: ARCO/0608 FIELD TECHNICIAN: RT

WELL INFORMATION

Depth to Liquid: TOB TOC
 Depth to water: 12.65 TOB TOC
 Total depth: 19.70 TOB TOC
 Date: 6-13-94 Time (2400): 10⁰⁹

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

CASING DIAMETER GAL/LINEAR FT.

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

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

TD 19.70 - DTW 12.65 = 7.05 Gal/Linear 0.38 x Foot 1.2 = 1.2 Number of Casings 5 = Purge L

DATE PURGED: 6-13-94 START: 1540 END (2400 hr): 1511 PURGED BY: RT
 DATE SAMPLED: 6-13-94 START: 1547 END (2400 hr): 1555 SAMPLED BY: U

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
<u>1543</u>	<u>2.4</u>	<u>6.81</u>	<u>803</u>	<u>68.8</u>	<u>Fan</u>	<u>Moderate</u>	<u>P</u>
<u>1545</u>	<u>4</u>	<u>6.76</u>	<u>506</u>	<u>68.3</u>	<u>"</u>	<u>"</u>	<u>"</u>
<u>1547</u>	<u>6</u>	<u>6.90</u>	<u>799</u>	<u>69.3</u>	<u>"</u>	<u>M</u>	<u>"</u>

Pumped dry Yes / No

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

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: TOB/TOC

PURGING EQUIPMENT/I.D. #

- Bailer: No # old
- Centrifugal Pump:
- Other:
- Airlift Pump:
- Dedicated:

SAMPLING EQUIPMENT/I.D. #

- Bailer: No #, old
- Dedicated:
- Other:

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>MW-26</u>	<u>6-13-94</u>	<u>1555</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCL</u>	<u>GAS/BTEX</u>

REMARKS:

SIGNATURE: RT



WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330 006.75 LOCATION: 17601 HESPERIAN BLVD WELL ID #: E1-A

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

WELL INFORMATION

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

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

CASING DIAMETER **GAL/LINEAR FT.**

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

SAMPLE TYPE

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

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

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

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

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC 11.01 837 73.2 clear trace Ø

Cobalt 0-100
 Clear
 Cloudy
 Yellow
 Brown

NTU 0-200
 Heavy
 Moderate
 Light
 Trace

Strong
 Moderate
 Faint
 None

PURGING EQUIPMENT/I.D. #

SAMPLING EQUIPMENT/I.D. #

Bailer: _____
 Centrifugal Pump: _____
 Other: _____

Airlift Pump: _____
 Dedicated: PUMP

Bailer: _____
 Dedicated: SAMPLE PORT
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>E1-A</u>	<u>6-14-94</u>	<u>11⁴⁵</u>	<u>3</u>	<u>40ml</u>	<u>VDA</u>	<u>HCl</u>	<u>GAS/BTEX</u>

REMARKS: _____

SIGNATURE: RI



WATER SAMPLE FIELD DATA SHEET

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

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

TD _____ - DTW _____ = _____ x Foot 0.38 = _____ x Casings 5 = Calculated Purge _____

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

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

Pumped dry Yes / No _____

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

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

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>DTW 590H</u>	<u>6-16-94</u>	<u>1300</u>	<u>3</u>	<u>40ml</u>	<u>VQA</u>	<u>HCL</u>	<u>GAS/BTEX</u>

REMARKS: Home owner not home, will try week
at 20th 6/15/94
Talked w/ Mr. Silva 6/14/95 on site & said
he'd be there.
6/14/94 - purged well prior to sample.

SIGNATURE: RT



WATER SAMPLE FIELD DATA SHEET

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

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

WELL INFORMATION

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

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

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

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

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

DATE PURGED: _____ START: _____ END (2400 hr): _____ PURGED BY: _____							
DATE SAMPLED: _____ START: _____ END (2400 hr): _____ SAMPLED BY: _____							
TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR	TURBIDITY	ODOR
Pumped dry Yes / No _____					Cobalt 0-100 Clear Cloudy Yellow Brown	NTU 0-200 Heavy Moderate Light Trace	Strong Moderate Faint None
FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:							
DTW: _____ TOB/TOC _____							
PURGING EQUIPMENT/I.D. #				SAMPLING EQUIPMENT/I.D. #			
<input type="checkbox"/> Bailer: _____	<input type="checkbox"/> Centrifugal Pump: _____	<input type="checkbox"/> Other: _____	<input type="checkbox"/> Airlift Pump: _____	<input type="checkbox"/> Dedicated: _____	<input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Bailer: _____	<input type="checkbox"/> Dedicated: _____
<input type="checkbox"/> Other: _____	<input type="checkbox"/> Other: _____	<input type="checkbox"/> Other: _____	<input type="checkbox"/> Other: _____	<input type="checkbox"/> Other: _____	<input type="checkbox"/> Other: _____	<input type="checkbox"/> Other: _____	<input type="checkbox"/> Other: _____

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

REMARKS: Home owner not home 6/15/94.
Called on 6/7 & 6/10/94 - no answer, no answer
machine
Homeowner not home 6-16-94 13:15.

SIGNATURE: RT



WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD, WELL ID #: ~~ARC0~~ 6.75H
SAN LORENZO CA.

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

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

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

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

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

Pumped dry Yes / No _____

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

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

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>ARC0-675H</u>			<u>3</u>	<u>40ml</u>	<u>VQA</u>	<u>HCL</u>	<u>GAS/BTEX</u>

REMARKS: Home owner not home. Dog in backyard. 6/15/94 10:00.
12:45

Called on 6/7/94. I talked w/ daughter of Mrs Roberts for sampling well on 6/15/94.

SIGNATURE: RI Homeowner not home 6-16-94 Dog in yard.



WATER SAMPLE FIELD DATA SHEET

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

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

GAL/

LINEAR FT.

SAMPLE TYPE

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

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

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

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

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

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. #

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

SAMPLING EQUIPMENT/I.D. #

Bailer: _____
 Dedicated: _____
 Other: _____

SAMP. CNTRL # DATE TIME (2400) No. of Cont. SIZE CONTAINER PRESERVE ANALYTICAL PARAMETER

<u>ARC</u>	<u>6-15-94</u>	<u>1025</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>Gas/BTEX</u>
<u>17348 VE</u>							

REMARKS: Sampled w/ disposable bailer, no purge possible

SIGNATURE: _____

RT



WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: 17197
SAN LORENZO CA. CLIENT/STATION No.: ARCO/0608 FIELD TECHNICIAN: RT 17197 VM

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

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

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

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

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

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

SAMPLING EQUIPMENT/I.D. #
 Bailer; _____
 Dedicated; _____
 Other; _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>17197 VM</u>	<u>6/15/94</u>	<u>1055</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCL</u>	<u>GAS/BTEX</u>

REMARKS: purge H2O from tap prior to sample

SIGNATURE: RT



WATER SAMPLE FIELD DATA SHEET

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

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

WELL INFORMATION

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

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

CASING

DIAMETER **GAL/LINEAR FT.**

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

SAMPLE TYPE

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

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

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

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

Pumped dry Yes / No

Cobalt 0-100
 Clear
 Cloudy
 Yellow
 Brown

NTU 0-200
 Heavy
 Moderate
 Light
 Trace

Strong
 Moderate
 Faint
 None

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

PURGING EQUIPMENT/I.D. #

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

SAMPLING EQUIPMENT/I.D. #

Bailer: _____
 Dedicated: _____
 Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>17200VM</u>	<u>6-15-94</u>	<u>1200</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCL</u>	<u>GA5/BTEX</u>

REMARKS: used disposable bailer, no purge possible

SIGNATURE: RT



WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: 17203
SAN LORENZO CA. 17203 VM
 CLIENT/STATION No.: ARCO/0608 FIELD TECHNICIAN: REI

WELL INFORMATION

CASING

GAL/

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

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

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

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

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

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

TIME (2400 hr)	VOLUME (gal.)	pH (units)	E.C. (μ mhos/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
<u>ATW</u>	<u>6/15/94</u>	<u>1050</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCL</u>	<u>GAS/BTEX</u>
<u>17203 VM</u>	<u>6/15/94</u>	<u>1050</u>					

REMARKS: purge H2O from tap prior to sample

SIGNATURE: REI



WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD, SAN LORENZO CA. WELL ID #: AWW
 CLIENT/STATION No.: ARCO/0608 FIELD TECHNICIAN: RJ 17302 VM

WELL INFORMATION

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

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

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

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

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

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

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

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

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

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

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>AWW</u>	<u>6-15-94</u>	<u>1040</u>	<u>3</u>	<u>40ml</u>	<u>VQA</u>	<u>HCL</u>	<u>GAS/BTEX</u>
<u>17302 VM</u>	<u>6-15-94</u>	<u>1040</u>					

REMARKS: Purged H2O from tap prior to sample

SIGNATURE: RJ



WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD, SAN LORENZO CA. WELL ID #: 17349
 CLIENT/STATION No.: ARCO/0608 FIELD TECHNICIAN: RI 17349UM

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

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

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

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

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

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

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>ARCO</u>	<u>6/15/94</u>	<u>11:10</u>	<u>3</u>	<u>40ml</u>	<u>VQA</u>	<u>HCL</u>	<u>GAS/BTEX</u>
<u>17349 UM</u>							

REMARKS: purge H₂O from tap prior to sample

SIGNATURE: RI



WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-006.25 LOCATION: 17601 HESPERIAN BLVD WELL ID #: ARCO
SAN LORENZO CA. CLIENT/STATION No.: ARCO/0608 FIELD TECHNICIAN: RT 17372 VM

WELL INFORMATION

CASING

GAL/

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

DIAMETER

LINEAR FT.

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

SAMPLE TYPE

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

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

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

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

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

Pumped dry Yes / No

FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:

DTW: _____ TOB/TOC _____

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

PURGING EQUIPMENT/I.D. #

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

SAMPLING EQUIPMENT/I.D. #

- Bailor: _____
- Dedicated: _____
- Other: _____

SAMP. CNTRL #	DATE	TIME (2400)	No. of Cont.	SIZE	CONTAINER	PRESERVE	ANALYTICAL PARAMETER
<u>ARCO</u> <u>17372 VM</u>	<u>6/15/94</u>	<u>1010</u>	<u>3</u>	<u>40ml</u>	<u>VOA</u>	<u>HCl</u>	<u>GAS/BTEX</u>

REMARKS: purged from top prior to sample

SIGNATURE: RT



WATER SAMPLE FIELD DATA SHEET

PROJECT No.: 330-00025 LOCATION: 17601 HESPERIAN BLVD WELL ID #: _____

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): _____

CASING

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

SAMPLE TYPE

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

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

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

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

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

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

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	6-13-94	—	2	40ml	VOA	HCl	GAS/BTEX

REMARKS: _____

SIGNATURE: RT

