PACIFIC
ENVIRONMENTAL
GROUP, INC.

92 FEB 14 PM 1:37

February 13, 1992
Project 330-06.05

Mr. Kyle Christie
ARCO Products Company
P.O. Box 5811
San Mateo, California 94402

Re: Quarterly Monitoring Results
and Performance Evaluation
October to December 1991
ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Dear Mr. Christie:

This report presents the results of groundwater monitoring performed by Pacific Environmental Group, Inc. (PACIFIC) at the site referenced above. Included in this report is a performance evaluation of the remedial groundwater system. Groundwater samples were collected on December 19 and 20, 1991, and analyzed for total petroleum hydrocarbons calculated as gasoline (TPH-g), and benzene, toluene, ethylbenzene, and xylenes (BTEX compounds). Groundwater monitoring procedures are documented in Attachment A.

RESULTS

The results of groundwater monitoring this quarter are generally consistent with previous quarters. Groundwater samples collected from the site wells contained non-detectable levels of TPH-g, with the exception of Wells MW-8, MW-10, and MW-15 through MW-17. TPH-g concentrations in these wells ranged between 75 and 5,300 parts per billion (ppb). Benzene was detected only in samples from Wells MW-8, MW-10, and MW-17 at concentrations ranging between 2.6 and 300 ppb. Well MW-5 was dry and therefore was not sampled. Separate-phase hydrocarbons were not observed in any site well this quarter. A

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dissolved gasoline and benzene concentration map is presented as Figure 1. Current and historical analytical data is presented in Table 1.

Depth to water data indicated that groundwater flow was consistently to the southwest with an approximate gradient of 0.002. The December groundwater elevation from Well MW-8 was not used in contouring as it produced an anomalous high, which has not occurred historically. As discussed below, a groundwater depression has developed as a result of pumping Extraction Well E-1A. A groundwater elevation contour map based on the December 1991 data is presented as Figure 2.

REMEDIAL PERFORMANCE EVALUATION

Groundwater Treatment System

The data presented in this section covers the period from September 25, 1991 when initial adjusting and testing of the groundwater treatment system began, through December 19, 1991. The system was in full time operation by October 15, 1991. Details of the treatment system start-up were discussed in our December 16, 1991 Site Assessment and Quarterly Monitoring Report.

In order to evaluate treatment system performance, PACIFIC monitored water levels, instantaneous and average flow rates, and sampled the influent, effluent, and mid-point of the treatment system for TPH-g and BTEX compounds.

Table 2 presents the volume of groundwater extracted by the treatment system and the average flow rates between monitoring periods. Influent concentrations of TPH-g have ranged from non-detectable (less than 30 ppb) to 38 ppb while effluent concentrations have been non-detectable. Analytical results for the treatment system are summarized in Table 3. Certified analytical reports and chain-of-custody documentation are found in Attachment A.

The average flow rate for the system was 1.0 gallons per minute (gpm) for the period. Currently, the system is operating at a flow rate of 3 to 3.5 gpm. A total of 680,930 gallons of groundwater have been extracted during the period of operation. The treatment system has had no significant down time or mechanical failures since full time operation was initiated.

Groundwater elevation data indicates the groundwater extraction system has hydraulic control of the on-site dissolved hydrocarbon plume and extends 100 feet downgradient of the site (Figure 2).

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

Sincerely,

Pacific Environmental Group, Inc.

for Brian Frus
Staff Engineer

Debra J. Moser
Senior Geologist
CEG 1293

REGISTERED GEOLOGIST
DEBRA J. MOSER
No. 1293
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

Attachments: Table 1 - Summary of Groundwater Analytical Results
Table 2 - Treatment System Metered Volume
Table 3 - Treatment System Analytical Results
Figure 1 - Dissolved Gasoline and Benzene Concentration Map
Figure 2 - Groundwater Elevation Contour Map
Attachment A - Groundwater Sampling and Analytical Procedures
Certified Analytical Reports
Chain-of-Custody Documentation
Field Data Sheets

cc: Mr. Chris Winsor, ARCO Products Company
Mr. Pamela Evans, Alameda County, Environmental Health
Mr. Richard Hiett, Regional Water Quality Control Board -
San Francisco Bay Region

Table 1
Summary of Groundwater Analytical Results

Low-Boiling Hydrocarbons

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

Well Number (Elev.)	Sample Date	Groundwater Elevation (feet, MSL)	Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
MW-1	01/11/88	NA	300	20	10	50	80
			---------- Well Destroyed ----------				
MW-2	07/05/85	NA	32,000	1,000	690	NA*	1,500*
	01/11/88	NA	3,300	804	115	168	166
			---------- Well Destroyed ----------				
MW-3	01/11/88	NA	1,800	20	20	80	60
(33.27)	03/07/89	21.31	150,000	4,600	5,200	5,600	13,000
	06/21/89	20.42	63,000	2,700	5,800	3,300	12,000
	12/12/89	19.81	---------- Not Sampled--Insufficient Water Volume ----------				
	03/29/90	20.06	1,100,000**	13,000	60,000	17,000	91,000
	05/08/90	20.04	NS	NS	NS	NS	NS
	06/22/90	NA	---------- Not Sampled--Insufficient Water Volume ----------				
	07/18/90		---------- Well Destroyed ----------				
MW-4	01/11/88	NA	62,000	2,700	7,900	850	5,200
(32.43)	09/12/88	NA	---------- Not Sampled--Separate-Phase Hydrocarbon ----------				
	03/07/89	21.67	84,000	2,400	3,400	2,500	7,600
	06/21/89	20.47	31,000	400	800	200	1,500
	12/12/89	NA	---------- Not Sampled--Well Dry ----------				
	03/29/90	20.71	---------- Not Sampled-0.01 foot Separate-Phase Hydrocarbon ----------				
	05/08/90	20.24	NS	NS	NS	NS	NS
	06/22/90	NA	---------- Not Sampled--Well Dry ----------				
	07/18/90	NA	---------- Well Destroyed ----------				
MW-5	01/11/88	NA	31,000	4,000	2,700	3,800	5,500
(33.99)	03/07/89	21.25	1,300	340	ND	140	50
	06/21/89	20.73	1,100	200	ND	130	40
	12/12/89	NA	---------- Not Sampled--Well Dry ----------				
	03/29/90	20.69	---------- Not Sampled--Insufficient Water Volume ----------				
	05/08/90	NA	NS	NS	NS	NS	NS
	06/22/90	20.47	---------- Not Sampled--Insufficient Water Volume ----------				
	09/19/90	20.00	---------- Not Sampled--Well Dry ----------				
	12/27/90	NA	---------- Not Sampled--Well Dry ----------				
	03/21/91	20.99	---------- Not Sampled--Well Dry ----------				
	06/26/91	20.74	---------- Not Sampled--Well Dry ----------				
	07/03/91	20.66	NS	NS	NS	NS	NS
	09/24/91	NA	---------- Not Sampled--Well Dry ----------				
	10/04/91	NA	---------- Not Sampled--Well Dry ----------				
	12/19/91	NA	---------- Not Sampled--Well Dry ----------				

Table 1 (continued)
Summary of Groundwater Analytical Results

Low-Boiling Hydrocarbons

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

Well Number (Elev)	Sample Date	Groundwater Elevation (feet, MSL)	Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
MW-6	06/21/89	20.47	1,700	170	170	85	290
(E-1)	12/12/89	19.79	500	26	7	8	18
(32.95)	03/29/90	20.56	130	14	9	4	11
	05/08/90	20.02	NS	NS	NS	NS	NS
	06/22/90	20.01	150	15	5	4	13
	07/18/90		---------- Well Destroyed ----------				
MW-7	04/13/90	NA	<50	<0.3	<0.3	<0.3	<0.3
(34.40)	05/08/90	20.42	NS	NS	NS	NS	NS
	06/22/90	20.49	<50	0.5	1	0.6	3
	09/19/90	19.31	<50	<0.3	<0.3	<0.3	<0.3
	12/27/90	19.73	69	<0.3	0.3	0.4	2
	03/21/91	21.52	<30	<0.30	<0.30	<0.30	<0.30
	06/26/91	20.55	<30	<0.30	<0.30	<0.30	<0.30
	07/03/91	20.45	NS	NS	NS	NS	NS
	09/24/91	18.86	<30	<0.30	<0.30	<0.30	<0.30
	10/04/91	18.80	NS	NS	NS	NS	NS
	12/19/91	**18.70**	**<30**	**<0.30**	**<0.30**	**<0.30**	**<0.30**
MW-8	04/13/90	NA	4,900	350	16	450	33
(32.79)	05/08/90	20.02	ND	NS	NS	NS	NS
	06/22/90	20.06	3,700	370	12	330	28
	09/19/90	18.84	140	4	3	3	3
	12/27/90	19.23	1,200	7	0.3	53	<0.3
	03/21/91	21.01	540	8.8	<6.0	21	9.6
	06/26/91	20.13	2,100	290	<6.0	56	<6.0
	07/03/91	20.04	NS	NS	NS	NS	NS
	09/24/91	18.82	260	51	0.34	7.9	<0.30
	10/04/91	18.78	NS	NS	NS	NS	NS
	12/19/91	**19.44**	**5,300**	**300**	**<3.0**	**21**	**4.8**
MW-9	04/13/90	NA	<50	<0.3	<0.3	<0.3	2
(32.11)	05/08/90	20.09	NS	NS	NS	NS	NS
	06/22/90	20.18	12,000	200	3	250	180
	09/19/90	18.93	<50	<0.3	<0.3	<0.3	0.6
	12/27/90	19.34	<50	<0.3	<0.3	<0.3	<0.3
	03/21/91	21.17	<30	<0.30	<0.30	<0.30	<0.30
	06/26/91	20.19	<30	<0.30	<0.30	<0.30	<0.30
	07/03/91	20.09	NS	NS	NS	NS	NS
	09/24/91	18.84	<30	<0.30	<0.30	<0.30	<0.30
	10/04/91	18.82	NS	NS	NS	NS	NS
	12/19/91	**18.69**	**<30**	**<0.30**	**<0.30**	**<0.30**	**<0.30**

Table 1 (continued)
Summary of Groundwater Analytical Results

Low-Boiling Hydrocarbons

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

Well Number (Elev)	Sample Date	Groundwater Elevation (feet, MSL)	Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
MW-10	04/13/90	NA	10,000	150	4	280	200
(31.67)	05/08/90	19.51	NS	NS	NS	NS	NS
	06/22/90	19.57	9,700	28	<0.3	131	210
	09/19/90	18.26	1,800	<0.3	4	0.8	10
	12/27/90	18.00	5,700	7	3	95	61
	03/21/91	20.56	6,900	22	<15	92	33
	06/26/91	19.67	9,300	51	<0.30	59	34
	07/03/91	19.51	NS	NS	NS	NS	NS
	09/24/91	18.27	360	8.6	5.2	14	6.2
	10/04/91	18.17	NS	NS	NS	NS	NS
	12/19/91	18.10	3,300	9.2	8.4	11	17
MW-11	04/13/90	NA	<50	<0.3	<0.3	<0.3	<0.3
(32.54)	05/08/90	19.70	NS	NS	NS	NS	NS
	06/22/90	19.72	63	0.4	0.9	0.7	3
	09/19/90	18.45	<50	<0.3	<0.3	<0.3	<0.3
	12/27/90	18.88	<50	<0.3	<0.3	<0.3	<0.3
	03/21/91	20.69	<30	<0.30	<0.30	<0.30	<0.30
	06/26/91	19.85	<30	<0.30	<0.30	<0.30	<0.30
	07/03/91	19.73	NS	NS	NS	NS	NS
	09/24/91	18.51	<30	<0.30	<0.30	<0.30	<0.30
	10/04/91	18.36	NS	NS	NS	NS	NS
	12/19/91	18.25	<30	<0.30	<0.30	<0.30	<0.30
E-1A	09/19/90	18.75	<50	7	0.9	1	2
(MW-12)	12/27/90	19.09	<50	3	0.5	1	1
(33.06)	03/21/91	20.95	<30	4.2	<0.30	1.1	0.89
	06/26/91	20.16	41	6.3	<0.30	1.2	0.59
	07/03/91	20.06	NS	NS	NS	NS	NS
	09/24/91	10.59	NS	NS	NS	NS	NS
MW-13	07/03/91	20.23	<30	<0.30	<0.30	<0.30	<0.30
(35.42)	09/24/91	18.97	<30	<0.30	<0.30	<0.30	<0.30
	12/19/91	18.76	<30	<0.30	<0.30	<0.30	<0.30
MW-14	07/03/91	19.41	<30	<0.30	<0.30	<0.30	<0.30
(30.46)	09/24/91	18.16	<30	<0.30	<0.30	<0.30	<0.30
	10/04/91	18.08	NS	NS	NS	NS	NS
	12/19/91	18.07	<30	<0.30	<0.30	<0.30	<0.30
MW-15	07/03/91	18.98	570	1.8	1.0	1.0	2.2
(31.41)	09/24/91	17.72	<30	<0.30	<0.30	<0.30	<0.30
	10/04/91	17.61	NS	NS	NS	NS	NS
	12/19/91	17.63	360	<0.60	<0.60	0.64	<0.60

Table 1 (continued)
Summary of Groundwater Analytical Results

Low-Boiling Hydrocarbons

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

Well Number (Elev)	Sample Date	Groundwater Elevation (feet, MSL)	Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
MW-16	07/03/91	18.47	2,700	31	6.9	4.6	3.1
(31.39)	09/24/91	17.29	430	1.8	1.3	1.9	1.5
	10/04/91	17.19	NS	NS	NS	NS	NS
	12/19/91	**17.25**	**75**	**<0.30**	**<0.30**	**<0.30**	**<0.30**
MW-17	07/03/91	18.68	1,200	12	1.9	28	40
(32.43)	09/24/91	17.45	150	2.7	0.50	3.9	0.59
	10/04/91	17.23	NS	NS	NS	NS	NS
	12/19/91	**17.41**	**370**	**2.6**	**<0.30**	**7.2**	**6.5**
MW-18	10/04/91	16.70	<30	<0.30	<0.30	<0.30	<0.30
(29.70)	12/19/91	16.79	<30	<0.30	<0.30	<0.30	<0.30
MW-19	10/04/91	16.59	<30	<0.30	<0.30	<0.30	<0.30
(29.02)	12/19/91	16.71	<30	<0.30	<0.30	<0.30	<0.30
MW-20	10/04/91	16.98	<30	<0.30	<0.30	<0.30	<0.30
(29.54)	12/19/91	17.06	<30	<0.30	<0.30	<0.30	<0.30
MW-21	10/04/91	15.84	<30	<0.30	<0.30	<0.30	<0.30
(28.72)	12/19/91	16.04	<30	<0.30	<0.30	<0.30	<0.30
MW-22	10/04/91	15.92	<30	<0.30	<0.30	<0.30	<0.30
(29.29)	12/19/91	16.10	<30	<0.30	<0.30	<0.30	<0.30
MW-23	10/04/91	16.49	<30	<0.30	<0.30	<0.30	<0.30
(30.99)	12/19/91	16.61	<30	<0.30	<0.30	<0.30	<0.30

NA = Not available
ppb = Parts per billion
NS = Not sampled
< = Denotes laboratory detection limits. See attached analytical reports.
* = Ethylbenzene and xylenes given as a combined value.
** = Well contained slight product sheen.

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 2
Treatment System Metered Volume

ARCO Service Station 0608
17601 Hesperian Boulevard
San Lorenzo, California

Meter Reading Date	Meter Reading (gallons)	Volume Since Previous Reading (gallons)	Volume Since Start-up (gallons)	Approximate Flow Rate (gpm)
09/25/91	0	0	0	NA*
09/26/91	1,144	1,144	1,144	0.8
10/15/91	5,146	4,002	5,146	0.1
10/22/91	12,844	7,698	12,844	0.9
11/22/91	52,532	39,688	52,532	0.6
12/11/91	78,842	26,310	78,842	1.0
12/19/91	122,540	43,698	122,540	3.8

gpm = Gallons per minute
* = Start-up

Table 3
Treatment System Analytical Results

ARCO Service Station 0608
17601 Hesperian Boulevard
San Lorenzo, California

Sample Date	Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
INFL (influent to primary carbon)					
09/26/91	38	4.8	0.60	1.6	1.1
10/22/91	<30	<0.30	<0.30	<0.30	<0.30
11/22/91	<30	0.52	<0.30	<0.30	<0.30
12/19/91	<30	<0.30	<0.30	<0.30	<0.30
MID-1 (between carbons)					
09/26/91	<30	<0.30	<0.30	<0.30	<0.30
10/22/91	<30	<0.30	<0.30	<0.30	<0.30
12/19/91	<30	<0.30	<0.30	<0.30	<0.30
EFFL (effluent to sewer)					
09/26/91	<30	<0.30	<0.30	<0.30	<0.30
10/22/91	<30	<0.30	<0.30	<0.30	<0.30
11/22/91	<30	<0.30	<0.30	<0.30	<0.30
12/19/91	<30	<0.30	<0.30	<0.30	<0.30

ppb = Parts per billion
"<" = Analyte was not present above the stated detection limit.

N

VIA MANZANAS

RESIDENTIAL

MW-20
ND/ND

POTRERO COURT

APARTMENTS

APARTMENTS

VIA ARRIBA

SHOPS

HESPERIAN BOULEVARD

MW-19
ND/ND

VIA MAGDALENA

RESTAURANT

CHURCH
AND SCHOOL

MW-18
ND/ND

MW-17
370/2.6

MW-14
ND/ND

RESIDENTIAL

RESTAURANT

MW-9
ND/ND

E-1A

MW-21
ND/ND

VIA MEDIA

VIA FLORES

RESIDENTIAL

MW-16
75/ND

MW-10
3,300/9.2

MW-5
(DRY)

MW-8
5,300/300

ALLEY

MW-7
ND/ND

MW-15
360/ND

MW-11
ND/ND

MW-22
ND/ND

VIA ENCINAS COURT

RESIDENTIAL

MW-13
ND/ND

SHOPS

HACIENDA AVENUE

MW-23
ND/ND

RESIDENTIAL

VIA ALAMO

APPROXIMATE DIRECTION
OF GROUNDWATER FLOW

LEGEND

MW-7 — GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION

E-1A — GROUNDWATER EXTRACTION WELL LOCATION AND DESIGNATION

370/2.6 — DISSOLVED GASOLINE/BENZENE CONCENTRATION IN GROUNDWATER, IN PARTS PER BILLION, 12-19-91 and 12-20-91

ND — NON-DETECTABLE LEVELS

(DRY) — WELL DRY ON SAMPLING DATE

PACIFIC ENVIRONMENTAL GROUP, INC.

APPROXIMATE SCALE
0 150 300 FEET

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

DISSOLVED GASOLINE AND BENZENE CONCENTRATION MAP

FIGURE:
1
PROJECT:
330-06.05

2/12/92

N

VIA MANZANAS

17.00

MW-20 (17.06)

POTRERO COURT

16.50

MW-19 (16.71)

VIA MAGDALENA

17.50

APARTMENTS

APARTMENTS

VIA ARRIBA

18.00

SHOPS

HESPERIAN BOULEVARD

RESTAURANT

CHURCH AND SCHOOL

MW-18 (16.79)

MW-17 (17.41)

MW-14 (18.07)

RESIDENTIAL

RESTAURANT

18.50

MW-9 (18.69)

VIA MEDIA

MW-21 (16.04)

VIA FLORES

RESIDENTIAL

MW-16 (17.25)

MW-10 (18.10)

E-1A (10.59)

MW-5 (DRY)

* MW-8 (19.44)

ALLEY

18.50

MW-7 (18.70)

MW-15 (17.63)

MW-11 (18.25)

18.00

MW-22 (16.10)

VIA ENCINAS COURT

MW-13 (18.76)

RESIDENTIAL

SHOPS

HACIENDA AVENUE

MW-23 (16.61)

RESIDENTIAL

VIA ALAMO

LEGEND

MW-7 — GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION

E-1A — GROUNDWATER EXTRACTION WELL LOCATION AND DESIGNATION

(18.70) GROUNDWATER ELEVATION IN FEET - MSL, 12-19-91

18.00 — GROUNDWATER ELEVATION CONTOUR IN FEET - MSL, 12-19-91

(DRY) WELL DRY ON SAMPLING DATE

* DATA NOT USED IN CONTOURING

APPROXIMATE DIRECTION OF GROUNDWATER FLOW

APPROXIMATE GRADIENT = 0.002

PACIFIC ENVIRONMENTAL GROUP, INC.

APPROXIMATE SCALE

0 150 300 FEET

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

GROUNDWATER ELEVATION CONTOUR MAP

FIGURE: 2

PROJECT: 330-06.05

2/12/92

ATTACHMENT A

GROUNDWATER SAMPLING AND ANALYTICAL PROCEDURES

ATTACHMENT A
GROUNDWATER SAMPLING AND ANALYTICAL 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 using either an electronic indicator and a clear Teflon bailer or an oil-water interface probe. Wells not containing separate-phase hydrocarbons are then purged of approximately four casing volumes (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 Analysis

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

SEQUOIA ANALYTICAL

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

Pacific Environmental Group
1601 Civic Center Drive, Suite 202
Santa Clara, CA 95050
Attention: Kelly Brown

Project: 330-06.05, Arco 608, San Lorenzo

Enclosed are the results from 17 water samples received at Sequoia Analytical on December 20,1991. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
1123852	Water, MW-7	Dec 19-20, 1991	EPA 5030/8015/8020
1123853	Water, MW-8	Dec 19-20, 1991	EPA 5030/ 8015/8020
1123854	Water, MW-9	Dec 19-20, 1991	EPA 5030/8015/8020
1123855	Water, MW-10	Dec 19-20, 1991	EPA 5030/8015/8020
1123856	Water, MW-11	Dec 19-20, 1991	EPA 5030/8015/8020
1123857	Water, MW-13	Dec 19-20, 1991	EPA 5030/8015/8020
1123858	Water, MW-14	Dec 19-20, 1991	EPA 5030/8015/8020
1123859	Water, MW-15	Dec 19-20, 1991	EPA 5030/ 8015/8020
1123860	Water, MW-16	Dec 19-20, 1991	EPA 5030/8015/8020
1123861	Water, MW-17	Dec 19-20, 1991	EPA 5030/8015/8020
1123862	Water, MW-18	Dec 19-20, 1991	EPA 5030/8015/8020
1123863	Water, MW-19	Dec 19-20, 1991	EPA 5030/8015/8020
1123864	Water, MW-20	Dec 19-20, 1991	EPA 5030/8015/8020
1123865	Water, MW-21	Dec 19-20, 1991	EPA 5030/8015/8020
1123866	Water, MW-22	Dec 19-20, 1991	EPA 5030/8015/8020
1123867	Water, MW-23	Dec 19-20, 1991	EPA 5030/8015/8020
1123868	Water, TB-1	Dec 19-20, 1991	EPA 5030/8015/8020

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

VMTague

Vickie Tague
Project Manager

SEQUOIA ANALYTICAL

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

Pacific Environmental Group	Client Project ID:	330-06.05, Arco 608, San Lorenzo	Sampled: Dec 19-20, 1991
1601 Civic Center Drive, Suite 202	Matrix Descript:	Water	Received: Dec 20, 1991
Santa Clara, CA 95050	Analysis Method:	EPA 5030/8015/8020	Analyzed: 2/26/91-1/2/92
Attention: Kelly Brown	First Sample #:	112-3852	Reported: Jan 7, 1992

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons µg/L (ppb)	Benzene µg/L (ppb)	Toluene µg/L (ppb)	Ethyl Benzene µg/L (ppb)	Xylenes µg/L (ppb)
112-3852	MW-7	N.D.	N.D.	N.D.	N.D.	N.D.
112-3854	MW-9	N.D.	N.D.	N.D.	N.D.	N.D.
112-3855	MW-10	3,300	9.2	8.4	11	17
112-3856	MW-11	N.D.	N.D.	N.D.	N.D.	N.D.
112-3857	MW-13	N.D.	N.D.	N.D.	N.D.	N.D.
112-3858	MW-14	N.D.	N.D.	N.D.	N.D.	N.D.
112-3860	MW-16	75	N.D.	N.D.	N.D.	N.D.
Detection Limits:		**30**	**0.30**	**0.30**	**0.30**	**0.30**

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

SEQUOIA ANALYTICAL

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(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	330-06.05, Arco 608, San Lorenzo	Sampled:	Dec 19-20, 1991
1601 Civic Center Drive, Suite 202	Sample Descript.:	Water, MW-8	Received:	Dec 20, 1991
Santa Clara, CA 95050	Analysis Method:	EPA 5030/ 8015/8020	Analyzed:	Jan 2, 1992
Attention: Kelly Brown	Lab Number:	112-3853	Reported:	Jan 7, 1992

TOTAL PETROLEUM FUEL HYDROCARBONS WITH BTEX DISTINCTION (EPA 8015/8020)

Analyte	Detection Limit µg/L (ppb)	Sample Results µg/L (ppb)
Low to Medium Boiling Point Hydrocarbons	300	5,300
Benzene	3.0	300
Toluene	3.0	N.D.
Ethyl Benzene	3.0	21
Xylenes	3.0	4.8

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

SEQUOIA ANALYTICAL

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

Pacific Environmental Group	Client Project ID:	330-06.05, Arco 608, San Lorenzo	Sampled:	Dec 19-20, 1991
1601 Civic Center Drive, Suite 202	Sample Descript.:	Water, MW-15	Received:	Dec 20, 1991
Santa Clara, CA 95050	Analysis Method:	EPA 5030/ 8015/8020	Analyzed:	Dec 27, 1991
Attention: Kelly Brown	Lab Number:	112-3859	Reported:	Jan 7, 1992

TOTAL PETROLEUM FUEL HYDROCARBONS WITH BTEX DISTINCTION (EPA 8015/8020)

Analyte	Detection Limit µg/L (ppb)	Sample Results µg/L (ppb)
Low to Medium Boiling Point Hydrocarbons	60	360
Benzene	0.60	N.D.
Toluene	0.60	N.D.
Ethyl Benzene	0.60	0.64
Xylenes	0.60	N.D.

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

SEQUOIA ANALYTICAL

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

Pacific Environmental Group	Client Project ID:	330-06.05, Arco 608, San Lorenzo	Sampled: Dec 19-20, 1991
1601 Civic Center Drive, Suite 202	Matrix Descript:	Water	Received: Dec 20, 1991
Santa Clara, CA 95050	Analysis Method:	EPA 5030/8015/8020	Analyzed: Dec 26-27, 1991
Attention: Kelly Brown	First Sample #:	112-3861	Reported: Jan 7, 1992

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons µg/L (ppb)	Benzene µg/L (ppb)	Toluene µg/L (ppb)	Ethyl Benzene µg/L (ppb)	Xylenes µg/L (ppb)
112-3861	MW-17	370	2.6	N.D.	7.2	6.5
112-3862	MW-18	N.D.	N.D.	N.D.	N.D.	N.D.
112-3863	MW-19	N.D.	N.D.	N.D.	N.D.	N.D.
112-3864	MW-20	N.D.	N.D.	N.D.	N.D.	N.D.
112-3865	MW-21	N.D.	N.D.	N.D.	N.D.	N.D.
112-3866	MW-22	N.D.	N.D.	N.D.	N.D.	N.D.
112-3867	MW-23	N.D.	N.D.	N.D.	N.D.	N.D.
112-3868	TB-1	N.D.	N.D.	N.D.	N.D.	N.D.
Detection Limits:		**30**	**0.30**	**0.30**	**0.30**	**0.30**

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

SEQUOIA ANALYTICAL

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

Pacific Environmental Group
1601 Civic Center Drive, Suite 202
Santa Clara, CA 95050
Attention: Kelly Brown

Client Project ID: 330-06.05, Arco 608, San Lorenzo

QC Sample Group: 1123852, 54-57, 61, 63-68

Reported: Jan 7, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	L. Laikhtman	L. Laikhtman	L. Laikhtman	L. Laikhtman
Reporting Units:	µg/L	µg/L	µg/L	µg/L
Date Analyzed:	Dec 26, 1992	Dec 26, 1992	Dec 26, 1992	Dec 26, 1992
QC Sample #:	GBLK122691	GBLK122691	GBLK122691	GBLK122691
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	10	10	10	30
Conc. Matrix Spike:	10	11	9.8	30
Matrix Spike % Recovery:	100	110	98	100
Conc. Matrix Spike Dup.:	10	10	10	30
Matrix Spike Duplicate % Recovery:	100	100	100	100
Relative % Difference:	0.0	9.5	2.0	0.0

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

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

% Recovery:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

SEQUOIA ANALYTICAL

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

Pacific Environmental Group
1601 Civic Center Drive, Suite 202
Santa Clara, CA 95050
Attention: Kelly Brown

Client Project ID: 330-06.05, Arco 608, San Lorenzo
QC Sample Group: 112-3853
Reported: Jan 7, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	L. Laikhtman	L. Laikhtman	L. Laikhtman	L. Laikhtman
Reporting Units:	µg/L	µg/L	µg/L	µg/L
Date Analyzed:	Jan 2, 1992	Jan 2, 1992	Jan 2, 1992	Jan 2, 1992
QC Sample #:	GBLK010292	GBLK010292	GBLK010292	GBLK010292
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	10	10	10	30
Conc. Matrix Spike:	9.4	10	9.2	29
Matrix Spike % Recovery:	94	100	92	97
Conc. Matrix Spike Dup.:	9.9	10	10	30
Matrix Spike Duplicate % Recovery:	99	100	100	100
Relative % Difference:	5.2	0.0	8.3	3.4

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

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

% Recovery:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

SEQUOIA ANALYTICAL

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

Pacific Environmental Group
1601 Civic Center Drive, Suite 202
Santa Clara, CA 95050
Attention: Kelly Brown

Client Project ID: 330-06.05, Arco 608, San Lorenzo

QC Sample Group: 1123858-60, 62

Reported: Jan 7, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	J. Villar	J. Villar	J. Villar	J. Villar
Reporting Units:	µg/L	µg/L	µg/L	µg/L
Date Analyzed:	Dec 27, 1991	Dec 27, 1991	Dec 27, 1991	Dec 27, 1991
QC Sample #:	GBLK122791-C	GBLK122791-C	BLK122791-C	BLK122791-C
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	10	10	10	30
Conc. Matrix Spike:	10	10	10	30
Matrix Spike % Recovery:	100	100	100	100
Conc. Matrix Spike Dup.:	11	11	11	32
Matrix Spike Duplicate % Recovery:	110	110	110	107
Relative % Difference:	9.5	9.5	9.5	6.5

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

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

% Recovery:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

ARCO Products Company Division of AtlanticRichfieldCompany — 330-06.05 Task Order No. 601-91-5A — **Chain of Custody**

ARCO Facility no. #00608	City (Facility) San Lorenzo	Project manager (Consultant) Kelly Brown	Laboratory name Sequoia
ARCO engineer Chuck Carmel	Telephone no. (ARCO)	Telephone no. (Consultant) 408-984-6536	Fax no. (Consultant) 408-243-3911	Contract number 07-073
Consultant name Pacific Env. Group.	Address (Consultant) 1601 Civic Center Dr. #202 Santa Clara 95050		Method of shipment Sequoia Courier

Sample I.D.	Lab no.	Container no.	Matrix: Soil	Water	Other	Preservation: Ice	Acid	Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA M602/8020/8015	TPH Modified 8015 Gas ☐ Diesel ☐	Oil and Grease 413.1 ☐ 413.2 ☐	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Semi Metals ☐ VOA ☐ VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐
TB-1		2**		X		X	HCl	12-19-91	—		X									
MW-7		3						12-20-91	11:45											
MW-8									12:25											
MW-9									11:55											
MW-10									10:30											
MW-11									10:45											
MW-13									11:30											
MW-14									10:15											
MW-15									08:50											
MW-16								↓	09:15											
MW-17								12-19-91	13:35											
MW-18								12-19-91	13:10											
MW-19								12-20 91	08:35											
MW-20								12-19-91	12:45											
MW-21								12-19-91	11:15											
MW-22		↓		↓		↓	↓	12 19-91	11:50		↓				↓					

Special detection Limit/reporting

Special QA/QC Trip Blank from Sequoia Dated 12-13-91 10 a.m.

Remarks

Lab number 1123868

Turnaround time

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

Condition of sample: good — Temperature received: cool

Relinquished by sampler	Date	Time	Received by
	12-20-91	2:40	
Relinquished by	Date	Time	Received by
	12-20 91	15:41	
Relinquished by	Date	Time	Received by laboratory — Date — Time
			12-20 — 1518

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

ARCO 3302 (2-91)

ARCO Products Company ◆ 330-06.05 Task Order No. 601-91-5A — **Chain of Custody**

Division of AtlanticRichfieldCompany

ARCO Facility no. 0608	City (Facility) San Lorenzo	Project manager (Consultant) Kelly Brown	Laboratory name Sequoia.
ARCO engineer Chuck Carmel	Telephone no. (ARCO)	Telephone no. (Consultant) 408-984-6536	Fax no. (Consultant) 408-243-3911	Contract number 07-0773
Consultant name Pacific Env. Group	Address (Consultant) 1601 Civic Center Dr. #202 Santa Clara 95050		Method of shipment Sequoia courier

Sample I.D.	Lab no.	Container no.	Matrix: Soil	Matrix: Water	Matrix: Other	Preservation: Ice	Preservation: Acid	Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA M602/8020/8015	TPH Modified 8015 Gas ☐ Diesel ☐	Oil and Grease 413.1 ☐ 413.2 ☐	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals ☐ VOA ☐ Semi VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐	
MW23		3		X		X	HCl	12/9/91	10:10		X			1112	8260						

Special detection Limit/reporting

Special QA/QC

Remarks

Lab number 112358168

Turnaround time

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

Condition of sample: Good		Temperature received: Cool	
Relinquished by sampler:	Date 12-20-91	Time 2:40	Received by
Relinquished by	Date 12-20-91	Time 1545	Received by
Relinquished by	Date	Time	Received by laboratory — Date 12-20 — Time 1545

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

ARCO Products Company ◆ Division of AtlanticRichfieldCompany

330-06.05 **Task Order No.** 601-91-5A

Chain of Custody

ARCO Facility no. #0608 | City (Facility) San Lorenzo | Project manager (Consultant) Kelly Brown

ARCO engineer Chuck Carmel | Telephone no. (ARCO) | Telephone no. (Consultant) 408-984-6536 | Fax no. (Consultant) 408-243-3911

Consultant name Pacific Env. Group. | Address (Consultant) 1601 Civic Center Dr. #202 Santa Clara 95050

Laboratory name: Sequoia

Contract number: 07-073

Method of shipment: Sequoia Courier

Sample I.D.	Lab no.	Container no.	Matrix: Soil	Matrix: Water	Matrix: Other	Preservation: Ice	Preservation: Acid	Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA M602/8020/8015	TPH Modified 8015 Gas ☐ Diesel ☐	Oil and Grease 413.1 ☐ 413.2 ☐	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals ☐ Semi VOA ☐ VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐		
TB-1		2		X		X	HCl	12-14-91	—		X				11							
MW-7		3						12-20-91	11:45													
MW-8									12:25													
MW-9									11:55													
MW-10									10:30													
MW-11									10:45													
MW-13									11:30													
MW-14									10:15													
MW-15									08:50													
MW-16								↓	09:15													
MW-17								12-19-91	13:35													
MW-18								12-19-91	13:10													
MW-19								12-20-91	09:35													
MW-20								12-19-91	12:45													
MW-21								12-19-91	11:15													
MW-22		↓		↓		↓	↓	12-19-91	11:50		↓				↓							

Special detection Limit/reporting

Special QA/QC: Trip Blank from Sequoia, Dated, 12-13-91 10 am.

Remarks

Lab number: 1123868

Turnaround time

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

Condition of sample: good

Temperature received: cool

Relinquished by sampler	Date	Time	Received by
[signature]	12-20-91	2:40	[signature]
Relinquished by [signature]	Date 12-20-91	Time	Received by [signature]
Relinquished by	Date	Time	Received by laboratory [signature] Date 12-20 Time 1548

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

SEQUOIA ANALYTICAL

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

Pacific Environmental Group
1601 Civic Center Drive, Suite 202
Santa Clara, CA 95050
Attention: Dan Landry

Project: #330-06.12, Arco 0608, San Lorenzo

Enclosed are the results from 4 water samples received at Sequoia Analytical on September 26,1991. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
1094396	Water, Influent	9/29/91	Miscellaneous Metals Cyanide EPA 5030/8015/8020 pH Phenols
1094397	Water, Effluent	9/29/91	Miscellaneous Metals Cyanide EPA 5030/8015/8020 pH Phenols
1094398	Water, Tank	9/29/91	Miscellaneous Metals Cyanide EPA 5030/8015/8020 pH Phenols
1094399	Water, Mid 1	9/26/91	EPA 5030/8015/8020

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

Vickie Tague
Project Manager

SEQUOIA ANALYTICAL

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

Pacific Environmental Group	Client Project ID:	#330-06.12, Arco 0608, San Lorenzo	Sampled:	Sep 26, 1991
1601 Civic Center Drive, Suite 202	Sample Descript:	Water	Received:	Sep 26, 1991
Santa Clara, CA 95050	Analysis for:	pH		
Attention: Dan Landry	First Sample #:	109-4396	Analyzed:	Sep 27, 1991
			Reported:	Sep 30, 1991

LABORATORY ANALYSIS FOR: pH

Sample Number	Sample Description	Detection Limit mg/L	Sample Result mg/L
109-4396	Influent	N.A.	7.0
109-4397	Effluent	N.A.	8.8
109-4398	Tank	N.A.	8.9

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

SEQUOIA ANALYTICAL

VM Tague

Vickie Tague
Project Manager

SEQUOIA ANALYTICAL

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

Pacific Environmental Group	Client Project ID:	#330-06.12, Arco 0608, San Lorenzo	Sampled:	Sep 26, 1991
1601 Civic Center Drive, Suite 202	Sample Descript:	Water	Received:	Sep 26, 1991
Santa Clara, CA 95050	Analysis for:	Phenols	Extracted:	Sep 27, 1991
Attention: Dan Landry	First Sample #:	109-4396	Analyzed:	Sep 27, 1991
			Reported:	Sep 30, 1991

LABORATORY ANALYSIS FOR: Phenols

Sample Number	Sample Description	Detection Limit mg/L	Sample Result mg/L
109-4396	Influent	0.050	N.D.
109-4397	Effluent	0.050	N.D.
109-4398	Tank	0.050	N.D.

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

SEQUOIA ANALYTICAL

VM Tague

Vickie Tague
Project Manager

SEQUOIA ANALYTICAL

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

Pacific Environmental Group	Client Project ID:	#330-06.12, Arco 0608, San Lorenzo	Sampled:	Sep 26, 1991
1601 Civic Center Drive, Suite 202	Sample Descript:	Water	Received:	Sep 26, 1991
Santa Clara, CA 95050	Analysis for:	Cyanide	Extracted:	Sep 27, 1991
Attention: Dan Landry	First Sample #:	109-4396	Analyzed:	Sep 27, 1991
			Reported:	Sep 30, 1991

LABORATORY ANALYSIS FOR: Cyanide

Sample Number	Sample Description	Detection Limit mg/L	Sample Result mg/L
109-4396	Influent	0.020	N.D.
109-4397	Effluent	0.020	N.D.
109-4398	Tank	0.020	N.D.

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

SEQUOIA ANALYTICAL

VM Tague

Vickie Tague
Project Manager

SEQUOIA ANALYTICAL

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

Pacific Environmental Group	Client Project ID:	#330-06.12, Arco 0608, San Lorenzo	Sampled:	Sep 26, 1991
1601 Civic Center Drive, Suite 202	Matrix Descript:	Water	Received:	Sep 26, 1991
Santa Clara, CA 95050	Analysis Method:	EPA 5030/8015/8020	Analyzed:	Sep 27, 1991
Attention: Dan Landry	First Sample #:	109-4396	Reported:	Sep 30, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons µg/L (ppb)	Benzene µg/L (ppb)	Toluene µg/L (ppb)	Ethyl Benzene µg/L (ppb)	Xylenes µg/L (ppb)
109-4396	Influent	38	4.8	0.60	1.6	1.1
109-4397	Effluent	N.D.	N.D.	N.D.	N.D.	N.D.
109-4398	Tank	63	N.D.	0.89	N.D.	2.3
109-4399	Mid 1	N.D.	N.D.	N.D.	N.D.	N.D.
Detection Limits:		30	0.30	0.30	0.30	0.30

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

SEQUOIA ANALYTICAL

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

Pacific Environmental Group	Client Project ID:	#330-06.12, Arco 0608, San Lorenzo	Sampled:	Sep 26, 1991
1601 Civic Center Drive, Suite 202	Sample Descript:	Water, Influent	Received:	Sep 26, 1991
Santa Clara, CA 95050			Analyzed:	Sep 27-30, 1991
Attention: Dan Landry	Lab Number:	109-4396	Reported:	Sep 30, 1991

LABORATORY ANALYSIS

Analyte	Detection Limit mg/L	Sample Results mg/L
Arsenic	0.050	N.D.
Cadmium	0.010	N.D.
Chromium	0.010	N.D.
Copper	0.010	N.D.
Lead	0.0050	N.D.
Mercury	0.00020	N.D.
Nickel	0.050	N.D.
Silver	0.010	N.D.
Zinc	**0.010**	**0.033**

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

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

Please Note:
Amended report dated: 9/30/91

SEQUOIA ANALYTICAL

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

Pacific Environmental Group	Client Project ID:	#330-06.12, Arco 0608, San Lorenzo	Sampled: Sep 26, 1991
1601 Civic Center Drive, Suite 202	Sample Descript:	Water, Effluent	Received: Sep 26, 1991
Santa Clara, CA 95050			Analyzed: Sep 27-30, 1991
Attention: Dan Landry	Lab Number:	109-4397	Reported: Sep 30, 1991

LABORATORY ANALYSIS

Analyte	Detection Limit mg/L	Sample Results mg/L
Arsenic	0.050	0.29
Cadmium	0.010	N.D.
Chromium	0.010	N.D.
Copper	0.010	N.D.
Lead	0.0050	N.D.
Mercury	0.00020	N.D.
Nickel	0.050	N.D.
Silver	0.010	N.D.
Zinc	0.010	0.022

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

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

Please Note:
Amended report dated: 9/30/91

SEQUOIA ANALYTICAL

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

Pacific Environmental Group	Client Project ID:	#330-06.12, Arco 0608, San Lorenzo	Sampled:	Sep 26, 1991
1601 Civic Center Drive, Suite 202	Sample Descript:	Water, Tank	Received:	Sep 26, 1991
Santa Clara, CA 95050			Analyzed:	Sep 27-30, 1991
Attention: Dan Landry	Lab Number:	109-4398	Reported:	Sep 30, 1991

LABORATORY ANALYSIS

Analyte	Detection Limit mg/L	Sample Results mg/L
Arsenic	0.050	N.D.
Cadmium	0.010	N.D.
Chromium	0.010	N.D.
Copper	0.010	N.D.
Lead	**0.0050**	**0.0067**
Mercury	0.00020	N.D..
Nickel	0.050	N.D.
Silver	0.010	N.D.
Zinc	**0.010**	**0.047**

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

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

SEQUOIA ANALYTICAL

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

Pacific Environmental Group
1601 Civic Center Drive, Suite 202
Santa Clara, CA 95050
Attention: Dan Landry

Client Project ID: #330-06.12, Arco 0608, San Lorenzo

QC Sample Group: 1094396-98

Reported: Sep 30, 1991

QUALITY CONTROL DATA REPORT

ANALYTE	Phenol	pH
Method:	EPA 420.1	EPA 9040
Analyst:	P. Penner	J. Martinez
Reporting Units:	mg/L	N.A.
Date Analyzed:	Sep 27, 1991	Sep 27, 1991
QC Sample #:	109-4398	109-4398
Sample Conc.:	N.D.	8.9
Spike Conc. Added:	0.50	N.A.
Conc. Matrix Spike:	0.49	N.A.
Matrix Spike % Recovery:	98	N.A.
Conc. Matrix Spike Dup.:	0.47	8.9
Matrix Spike Duplicate % Recovery:	94	N.A.
Relative % Difference:	4.2	0.0

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

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

% Recovery:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

SEQUOIA ANALYTICAL

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

Pacific Environmental Group
1601 Civic Center Drive, Suite 202
Santa Clara, CA 95050
Attention: Dan Landry

Client Project ID: #330-06.12, Arco 0608, San Lorenzo

QC Sample Group: 1094396-99

Reported: Sep 30, 1991

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	L. Laikhtman	L. Laikhtman	L. Laikhtman	L. Laikhtman
Reporting Units:	µg/L	µg/L	µg/L	µg/L
Date Analyzed:	Sep 27, 1991	Sep 27, 1991	Sep 27, 1991	Sep 27, 1991
QC Sample #:	GBLK092791	GBLK092791	GBLK092791	GBLK092791
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	10	10	10	30
Conc. Matrix Spike:	8.9	9.0	9.2	27
Matrix Spike % Recovery:	89	90	92	89
Conc. Matrix Spike Dup.:	9.6	9.7	9.7	29
Matrix Spike Duplicate % Recovery:	96	97	97	95
Relative % Difference:	7.6	7.5	5.3	6.9

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

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

% Recovery:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: Pacific Environ **MASTER LOG NO. / PAGE:** X
REC. BY (PRINT): KC **DATE OF LOG-IN:** 9/26/91

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION (ETC)
1. Custody Seal(s): Present / (Absent) Intact / Broken*	1094396	A-C	influent	VOAs	W	9/26	
2. Custody Seal Nos.: X		D		Cyanide			
		E		metals			
		F		liter pl.			
3. Chain-of-Custody Records: (Present) / Absent*		G		phenol			
	1094399	A-C	mid-1	VOAs			
4. Traffic Reports or Packing List: Present / (Absent)							
	1094397	A-G	Effluent	same as influent			
5. Airbill: Airbill / Sticker Present / (Absent)							
	1094398	A-G	Tank	same as influent			
6. Airbill No.: X							
7. Sample Tags: (Present) / Absent* Sample Tag Nos.: (Listed) / Not Listed on Chain-of-Custody							
8. Sample Condition: (Intact)/Broken*/Leaking*							
9. Does information on custody reports, traffic reports and sample tags agree? (Yes) / No*							
10. Proper Preservatives Used: (Yes) / No*							
11. Date Rec. at Lab: 9/26/91							
12. Time Rec. at Lab: 1330							

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

ARCO Products Company Division of AtlanticRichfieldCompany — 330-06,12 — Task Order No. TBD — **Chain of Custody**

ARCO Facility no. 0608	City (Facility) 17601 Hesperian Blvd SAN LORENZO	Project manager (Consultant) Dan Landey	Laboratory name Sequoia
ARCO engineer Kyle Christie	Telephone no. (ARCO)	Telephone no. (Consultant) 408 984 6536	Fax no. (Consultant) 243-3911	Contract number 07-053
Consultant name Pacific Environmental Group, Inc	Address (Consultant) 1601 Civic Center Dr. Santa Clara 95051		Method of shipment

Sample I.D.	Lab no.	Container no.	Matrix: Soil	Matrix: Water	Matrix: Other	Preservation: Ice	Preservation: Acid	Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA M602/8020/8015	TPH Modified 8015 Gas ☐ Diesel ☐	Oil and Grease 413.1 ☐ 413.2 ☐	TPH EPA 418.1/SM503E	~~metals~~ * EPA 6010/7000	EPA 624/8240	~~EPA 8270/625~~ pH	TCLP Metals ☐ Semi VOA ☐ VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐	Phenol	Cyanide
INFL		7		X		X		9.26.91	1140	SM	✓				✓		✓				✓	✓
Mid 1		3		X		X		9.26.91	1145	SM	✓											
EFFL		7		X		X		9.26.91	1150	SM	✓				✓		✓				✓	✓
TANK		7		X		X		9.26.91	1155	SM	✓				✓		✓				✓	✓

Special detection Limit/reporting: 1094396 / 4399 / 4397 / 4398

Special QA/QC

Remarks: * As, Cd, Cu, Pb, Hg, Ni, Ag, Cu, Zn

Lab number: 1094396

Turnaround time

- Priority Rush 1 Business Day if possible — X
- Rush 2 Business Days — ☐
- Expedited 5 Business Days — ☐
- Standard 10 Business Days — ☐

Condition of sample: good		Temperature received: Cool	
Relinquished by sampler	Date / Time	Received by	
Relinquished by	Date / Time	Received by	
Relinquished by: T. Walsh 1133	Date: 9.26.91 Time: 1330	Received by laboratory: K. Dallas	Date: 9/26 Time: 1330

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

APPC-3292 (2-91)

SEQUOIA ANALYTICAL

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

Pacific Environmental Group
1601 Civic Center Drive, Suite 202
Santa Clara, CA 95050
Attention: Dan Landry

Project: 330-06.12, Arco 0608, San Lorenzo

Enclosed are the results from 3 water samples received at Sequoia Analytical on October 22,1991. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
1104074	Water, Influent	10/22/91	EPA 5030/8015/8020
1104075	Water, Mid - 1	10/22/91	EPA 5030/8015/8020
1104076	Water, Effluent	10/22/91	EPA 5030/8015/8020

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

Vickie Tague
Project Manager

SEQUOIA ANALYTICAL

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

Pacific Environmental Group	Client Project ID:	330-06.12, Arco 0608, San Lorenzo	Sampled:	Oct 22, 1991
1601 Civic Center Drive, Suite 202	Matrix Descript:	Water	Received:	Oct 22, 1991
Santa Clara, CA 95050	Analysis Method:	EPA 5030/8015/8020	Analyzed:	Oct 24, 1991
Attention: Dan Landry	First Sample #:	110-4074	Reported:	Nov 5, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons µg/L (ppb)	Benzene µg/L (ppb)	Toluene µg/L (ppb)	Ethyl Benzene µg/L (ppb)	Xylenes µg/L (ppb)
110-4074	Influent	N.D.	N.D.	N.D.	N.D.	N.D.
110-4075	Mid - 1	N.D.	N.D.	N.D.	N.D.	N.D.
110-4076	Effluent	N.D.	N.D.	N.D.	N.D.	N.D.
Detection Limits:		**30**	**0.30**	**0.30**	**0.30**	**0.30**

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

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

Pacific Environmental Group
1601 Civic Center Drive, Suite 202
Santa Clara, CA 95050
Attention: Dan Landry

Client Project ID: 330-06.12, Arco 0608, San Lorenzo
QC Sample Group: 1104074-76
Reported: Nov 5, 1991

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	J. Jencks	J. Jencks	J. Jencks	J. Jencks
Reporting Units:	µg/L	µg/L	µg/L	µg/L
Date Analyzed:	Oct 24, 1991	Oct 24, 1991	Oct 24, 1991	Oct 24, 1991
QC Sample #:	BLK102491	BLK102491	BLK102491	BLK102491
Sample Conc.:	N.D.	N.D.	N..D	N.D.
Spike Conc. Added:	10	10	10	30
Conc. Matrix Spike:	9.6	9.7	9.7	29
Matrix Spike % Recovery:	96	97	97	97
Conc. Matrix Spike Dup.:	10	10	10	31
Matrix Spike Duplicate % Recovery:	100	100	100	103
Relative % Difference:	4.1	3.1	3.1	6.7

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

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

% Recovery:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

CLIENT NAME: PEC

REC. BY (PRINT): KC

MASTER LOG NO. / PAGE: X

DATE OF LOG-IN: 10/23/91

CIRCLE THE APPROPRIATE RESPONSE

1. Custody Seal(s): Present / (Absent)
   Intact / Broken*
2. Custody Seal Nos.: X
3. Chain-of-Custody Records: (Present) / Absent*
4. Traffic Reports or Packing List: Present / (Absent)
5. Airbill: Airbill / Sticker
   Present / (Absent)
6. Airbill No.: X
7. Sample Tags: (Present) / Absent*
   Sample Tag Nos.: (Listed) / Not Listed on Chain-of-Custody
8. Sample Condition: (Intact)/Broken*/Leaking*
9. Does information on custody reports, traffic reports and sample tags agree? (Yes) / No*
10. Proper Preservatives Used: (Yes) / No*
11. Date Rec. at Lab: 10/23/91
12. Time Rec. at Lab: 5:30pm

LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION (ETC)
110704	A-C	INFLUENT	VOAS	W	10/23	
405		MW-1				
406		EA-1				

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

ARCO Products Company
Division of AtlanticRichfieldCompany

330-06.12 Task Order No. 608-91-2B

Chain of Custody

ARCO Facility no. 0608	City (Facility) San Lorenzo	Project manager (Consultant) Dan Londry	Laboratory name Sequoia
ARCO engineer Chuck Carmel	Telephone no. (ARCO)	Telephone no. (Consultant) 984-6536	Fax no. (Consultant) 243-3911	Contract number 07-073
Consultant name Pacific Environmental	Address (Consultant) 1601 Civic Center SC 95051		Method of shipment Sequoia courier

Sample I.D.	Lab no.	Container no.	Matrix: Soil	Matrix: Water	Matrix: Other	Preservation: Ice	Preservation: Acid	Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH Gas EPA M602/8020/8015	TPH Modified 8015 Gas ☐ Diesel ☐	Oil and Grease 413.1 ☐ 413.2 ☐	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals ☐ Semi VOA ☐ VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐		
TNFL		3		X		X	HCL	10-22-91			X				1104074							
TTD-1		3		X		X	↓	↓			↓				1104075							
TFFL		3		X		X	↓	↓			↓				1104076							

Special detection Limit/reporting

Special QA/QC

Remarks

Mark Gubrud

Lab number 1104074

Turnaround time

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

Condition of sample: good		Temperature received COOL	
Relinquished by sampler	Date 10/22/91	Time 15:57	Received by Ben Follett
Relinquished by Ben Follett	Date 10/27/91	Time 16:45	Received by
Relinquished by	Date	Time	Received by laboratory L. Walker

Date 10/28 Time 330

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

SEQUOIA ANALYTICAL

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

Pacific Environmental Group
1601 Civic Center Drive, Suite 202
Santa Clara, CA 95050
Attention: Dan Landry

Project: 330-06.12, Arco 0608, San Lorenzo

Enclosed are the results from 4 water samples received at Sequoia Analytical on December 20, 1991. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
1123578	Water, Influent	12/19/91	EPA 5030/8015/8020
1123579	Water, Mid-1	12/19/91	EPA 5030/8015/8020
1123580	Water, Effluent	12/19/91	Suspended Solids EPA 5030/8015/8020 Chemical Oxygen Demand
1123581	Water, TB-1	12/19/91	EPA 5030/8015/8020

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

Vickie Tague
Project Manager

SEQUOIA ANALYTICAL

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

Pacific Environmental Group	Client Project ID:	330-06.12, Arco 0608, San Lorenzo	Sampled:	Dec 19, 1991
1601 Civic Center Drive, Suite 202	Matrix Descript:	Water	Received:	Dec 20, 1991
Santa Clara, CA 95050	Analysis Method:	EPA 5030/8015/8020	Analyzed:	Dec 27, 1991
Attention: Dan Landry	First Sample #:	112-3578	Reported:	Jan 7, 1992

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons µg/L (ppb)	Benzene µg/L (ppb)	Toluene µg/L (ppb)	Ethyl Benzene µg/L (ppb)	Xylenes µg/L (ppb)
112-3578	Influent	N.D.	N.D.	N.D.	N.D.	N.D.
112-3579	Mid-1	N.D.	N.D.	N.D.	N.D.	N.D.
112-3580	Effluent	N.D.	N.D.	N.D.	N.D.	N.D.
112-3581	TB-1	N.D.	N.D.	N.D.	N.D.	N.D.
Detection Limits:		30	0.30	0.30	0.30	0.30

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

CLIENT NAME: PEG

REC. BY (PRINT): AN

MASTER LOG NO. / PAGE:

DATE OF LOG-IN: 12/20

CIRCLE THE APPROPRIATE RESPONSE		LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION (ETC)
1. Custody Seal(s):	Present / (Absent)	123578	A-C	INFL	VOA	W	12/9	
2. Custody Seal Nos.:	Intact / Broken* x	79	A-C	MID-1	↓	↓	↓	
3. Chain-of-Custody Records:	(Present) / Absent*	80	A-C	EFF	↓			
			D-F	↓	VOA Cap			
			G-H	↓	Amber			
4. Traffic Reports or Packing List:	Present / (Absent)	↓ 81	AB	TB1	VOA	↓	↓	
5. Airbill:	Airbill / Sticker Present / (Absent)							
6. Airbill No.:	x							
7. Sample Tags:	(Present) / Absent*							
Sample Tag Nos.:	(Listed) / Not Listed on Chain-of-Custody							
8. Sample Condition:	(Intact)/Broken*/Leaking*							
9. Does information on custody reports, traffic reports and sample tags agree?	(Yes) / No*							
10. Proper Preservatives Used:	(Yes) / No*							
11. Date Rec. at Lab:	12/20							
12. Time Rec. at Lab:	1545							

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

ARCO Products Company ◆ Division of AtlanticRichfieldCompany

330-0612 Task Order No. 608-91-2B

Chain of Custody

ARCO Facility no. 608	City (Facility) San Lorenzo	Project manager (Consultant) Dan Landry	Laboratory name Sequoia
ARCO engineer Kyle Christie	Telephone no. (ARCO)	Telephone no. (Consultant) 984-6536	Fax no. (Consultant) 243-9311	Contract number 07-073
Consultant name Pacific Env. Group	Address (Consultant) 1601 Civic Center Dr. #202 Santa Clara, CA		Method of shipment Sequoia Courier

Sample I.D.	Lab no.	Container no.	Matrix: Soil	Water	Other	Preservation: Ice	Acid	Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH Gas EPA M602/8020/8015	TPH Modified 8015 Gas ☐ Diesel ☐	Oil and Grease 413.1 ☐ 413.2 ☐	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals ☐ Semi VOA ☐ VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐	COD	TSS
IN-L		3		X		X	HCl	12/19/91	11:40		X											
MW-1		3							11:44													
MW-2		3							11:49													
MW-3		3					H_2SO_4														X	
EFFL		2					NP															X
TB-1		2					HCl				X											

Condition of sample: (MP) good		Temperature received: cool	
Relinquished by sampler: Mark Ankcorn	Date 12/20/91	Time 2:35	Received by: Ann Toll
Relinquished by: Ann Toll	Date 12/20/91	Time 1525	Received by: C. Nance
Relinquished by	Date	Time	Received by laboratory	Date	Time

Special detection Limit/reporting

Special QA/QC

Remarks

Lab number 112358

Turnaround time

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

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APPC-3292 (2-91)

SEQUOIA ANALYTICAL

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

Pacific Environmental Group	Client Project ID:	330-06.12, Arco 0608, San Lorenzo	Sampled:	Dec 19, 1991
1601 Civic Center Drive, Suite 202	Sample Descript:	Effluent	Received:	Dec 20, 1991
Santa Clara, CA 95050			Analyzed:	Dec 30-31, 1991
Attention: Dan Landry	Lab Number:	112-3580	Reported:	Jan 7, 1992

LABORATORY ANALYSIS

Analyte	Detection Limit mg/L	Sample Results mg/L
Suspended Solids	1.0	N.D.
Chemical Oxygen Demand	20	N.D.

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

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

Please Note:
Amended report dated: 1/14/92

1123578.PPP <2>

SEQUOIA ANALYTICAL

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

Pacific Environmental Group
1601 Civic Center Drive, Suite 202
Santa Clara, CA 95050
Attention: Dan Landry

Client Project ID: 330-06.12, Arco 0608, San Lorenzo

QC Sample Group: 1123578-81

Reported: Jan 7, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	J. Villar	J. Villar	J. Villar	J. Villar
Reporting Units:	µg/L	µg/L	µg/L	µg/L
Date Analyzed:	Dec 27, 1991	Dec 27, 1991	Dec 27, 1991	Dec 27, 1991
QC Sample #:	GBLK122791-C	GBLK122791-C	BLK122791-C	BLK122791-C
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	10	10	10	30
Conc. Matrix Spike:	10	10	10	30
Matrix Spike % Recovery:	100	100	100	100
Conc. Matrix Spike Dup.:	11	11	11	32
Matrix Spike Duplicate % Recovery:	110	110	110	107
Relative % Difference:	9.5	9.5	9.5	6.5

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

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

% Recovery:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

SEQUOIA ANALYTICAL

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

Pacific Environmental Group
1601 Civic Center Drive, Suite 202
Santa Clara, CA 95050
Attention: Dan Landry

Client Project ID: 330-06.12, Arco 0608, San Lorenzo
QC Sample Group: 112-3580
Reported: Jan 7, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	Chemical Oxygen Demand	Suspended Solids
Method:	EPA 411.0	EPA 160.3
Analyst:	Y. Arteaga	Y. Arteaga
Reporting Units:	mg/L	mg/L
Date Analyzed:	Dec 30, 1991	Dec 21, 1991
QC Sample #:	112-3160	112-3561
Sample Conc.:	N.D.	110
Spike Conc. Added:	75	N.A.
Conc. Matrix Spike:	82	N.A.
Matrix Spike % Recovery:	109	N.A.
Conc. Matrix Spike Dup.:	82	110
Matrix Spike Duplicate % Recovery:	109	N.A.
Relative % Difference:	0.0	0.0

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

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

% Recovery:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

ARCO Products Company — Division of AtlanticRichfieldCompany — 330-06.12 Task Order No. 608-41-2B — **Chain of Custody**

ARCO Facility no. 608	City (Facility) San Lorenzo	Project manager (Consultant) Dan Landry	Laboratory name Sequoia
ARCO engineer Kyle & Christie	Telephone no. (ARCO)	Telephone no. (Consultant) 984-6536	Fax no. (Consultant) 243-9311	Contract number 07-073
Consultant name Pacific Env. Group	Address (Consultant) 1601 Civic Center Dr. #202 Santa Clara, CA		Method of shipment Sequoia Courier

Sample I.D.	Lab no.	Container no.	Matrix: Soil	Water	Other	Preservation: Ice	Acid	Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA M602/8020/8015 GCS	TPH Modified 8015 Gas ☐ Diesel ☐	Oil and Grease 413.1 ☐ 413.2 ☐	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals ☐ Semi VOA ☐ VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐	COD	TSS
INFL		3		X		X	HCl	12/19/91	11:40		X			112		78						
Mid-1		3							11:44							79						
EFFL		3							11:49							80						
EFFL		3					H_2SO_4														X	
EFFL		2					NP															X
TB-1		2					HCl				X					81						

Special detection Limit/reporting

Special QA/QC

Remarks

Lab number 112358

Turnaround time

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

Condition of sample: (NP) good		Temperature received: cool	
Relinquished by sampler: Mark L Ashto	Date 12/20/91	Time 2:35	Received by:
Relinquished by:	Date 12/20/91	Time 15:45	Received by:
Relinquished by:	Date	Time	Received by laboratory:	Date	Time

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

APPC-3292 (2-91)

SEQUOIA ANALYTICAL

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

Pacific Environmental Group
1601 Civic Center Drive, Suite 202
Santa Clara, CA 95050
Attention: Dan Landry

Project: 330-06.12 ARCO 0608

Enclosed are the results from 2 water samples received at Sequoia Analytical on November 25,1991. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
1115122	Water, Influent	11/22/91	EPA 5030/8015/8020
1115123	Water, Effluent	11/22/91	Chemical Oxygen Demand pH Suspended Solids Arsenic EPA 5030/8015/8020

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

Vickie Tague
Project Manager

SEQUOIA ANALYTICAL

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

Pacific Environmental Group	Client Project ID:	330-06.12 ARCO 0608	Sampled:	Nov 22, 1991
1601 Civic Center Drive, Suite 202	Sample Descript:	Water, Effluent	Received:	Nov 25, 1991
Santa Clara, CA 95050			Analyzed:	11/25 - 12/4/91
Attention: Dan Landry	Lab Number:	111-5123	Reported:	Dec 10, 1991

LABORATORY ANALYSIS

Analyte	Detection Limit mg/L	Sample Results mg/L
Chemical Oxygen Demand	20	39
pH, units	N.A.	7.4
Suspended Solids	1.0	2.0
Arsenic	0.0050	0.0063

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

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

SEQUOIA ANALYTICAL

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

Pacific Environmental Group	Client Project ID:	330-06.12 ARCO 0608	Sampled:	Nov 22, 1991
1601 Civic Center Drive, Suite 202	Matrix Descript:	Water	Received:	Nov 25, 1991
Santa Clara, CA 95050	Analysis Method:	EPA 5030/8015/8020	Analyzed:	Dec 5, 1991
Attention: Dan Landry	First Sample #:	111-5122	Reported:	Dec 10, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons µg/L (ppb)	Benzene µg/L (ppb)	Toluene µg/L (ppb)	Ethyl Benzene µg/L (ppb)	Xylenes µg/L (ppb)
111-5122	Influent	N.D.	0.52	N.D.	N.D.	N.D.
111-5123	Effluent	N.D.	N.D.	N.D.	N.D.	N.D.
Detection Limits:		**30**	**0.30**	**0.30**	**0.30**	**0.30**

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline fuel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

SEQUOIA ANALYTICAL

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

Pacific Environmental Group
1601 Civic Center Drive, Suite 202
Santa Clara, CA 95050
Attention: Dan Landry

Client Project ID: 330-06.12 ARCO 0608
QC Sample Group: 111-5123
Reported: Dec 10, 1991

QUALITY CONTROL DATA REPORT

ANALYTE	pH	Suspended Solids	Chemical Oxygen Demand	Arsenic
Method:	EPA 9040	EPA 160.2	EPA 410.4	EPA 206.2
Analyst:	J. Martinez	J. Martinez	J. Martinez	F. Contreras
Reporting Units:	N.A.	mg/L	mg/L	mg/L
Date Analyzed:	Nov 25, 1991	Dec 2, 1991	Dec 4, 1991	Dec 3, 1991
QC Sample #:	111-5150	111-5760	111-4386	111-4260
Sample Conc.:	8.5	130	N.D.	0.0055
Spike Conc. Added:	N.A.	N.A.	75	0.10
Conc. Matrix Spike:	N.A.	N.A.	79	0.11
Matrix Spike % Recovery:	N.A.	N.A.	105	105
Conc. Matrix Spike Dup.:	8.5	130	79	0.11
Matrix Spike Duplicate % Recovery:	N.A.	N.A.	105	105
Relative % Difference:	0.0	0.0	0.0	0.0

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

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

% Recovery:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

SEQUOIA ANALYTICAL

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

Pacific Environmental Group
1601 Civic Center Drive, Suite 202
Santa Clara, CA 95050
Attention: Dan Landry

Client Project ID: 330-06.12 ARCO 0608
QC Sample Group: 1115122-23
Reported: Dec 10, 1991

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	A. Maralit	A. Maralit	A. Maralit	A. Maralit
Reporting Units:	µg/L	µg/L	µg/L	µg/L
Date Analyzed:	Dec 5, 1991	Dec 5, 1991	Dec 5, 1991	Dec 5, 1991
QC Sample #:	GBLK120591	GBLK120591	GBLK120591	GBLK120591
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	10	10	10	30
Conc. Matrix Spike:	10	10	10	30
Matrix Spike % Recovery:	100	100	100	100
Conc. Matrix Spike Dup.:	10	10	10	30
Matrix Spike Duplicate % Recovery:	100	100	100	100
Relative % Difference:	0.0	0.0	0.0	0.0

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

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

% Recovery:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: PEG
REC. BY (PRINT): SP
MASTER LOG NO. / PAGE:
DATE OF LOG-IN: 11-25

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION (ETC)
1. Custody Seal(s): Present / Absent; Intact / Broken*	115122	A-C	INFLUENT	3 VOAS	W	11-22	
2. Custody Seal Nos.:	115123	A-F	EFFLUENT	6 VOAS			
		G		1L. PLASTIC			
		H		1/2 POLY			
3. Chain-of-Custody Records: Present / Absent*	↓	I	↓	1L. PLASTIC	↓	↓	
4. Traffic Reports or Packing List: Present / Absent							
5. Airbill: Airbill / Sticker Present / Absent							
6. Airbill No.:							
7. Sample Tags: Present / Absent*							
Sample Tag Nos.: Listed / Not Listed on Chain-of-Custody							
8. Sample Condition: Intact/Broken*/Leaking*							
9. Does information on custody reports, traffic reports and sample tags agree? Yes / No*							
10. Proper Preservatives Used: Yes / No*							
11. Date Rec. at Lab: 11-25							
12. Time Rec. at Lab: 12:00							

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

Form SC001

ARCO Products Company
Division of AtlanticRichfieldCompany

330 0612 Task Order No. 6608-91-2B

Chain of Custody

ARCO Facility no. 6608	City (Facility) San Lorenzo	Project manager (Consultant) Dan Landry	Laboratory name SEQUOIA
ARCO engineer Kyle Christie	Telephone no. (ARCO)	Telephone no. (Consultant) 984-6536	Fax no. (Consultant) 243-3911
Consultant name Pacific Environmental	Address (Consultant) 1601 Civic Center		Contract number 07-073

Method of shipment: Sequoia courier

Sample I.D.	Lab no.	Container no.	Matrix: Soil	Matrix: Water	Matrix: Other	Preservation: Ice	Preservation: Acid	Sampling date	Sampling time	BTEX 602/EPA 8020 ☐	BTEX/TPH EPA M602/8020/8015 ☐	TPH Modified 8015 Gas ☐ Diesel ☐	Oil and Grease 413.1 ☐ 413.2 ☐	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals ☐ Semi VOA ☐ VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐	Arsenic	S.S.
EFFL		1		X		X	HNO3	11-22-91	11:07					111512			(H)				X	
EFFL		1		X		X	NP	11-22-91	11:07						↓		(T)					X

Remarks: attn: Lab
Arsenic = Total

Mark Gubrud

Lab number: 111512

Turnaround time

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

Special detection Limit/reporting

Special QA/QC

Condition of sample: GOOD

Temperature received: cool

	Date	Time	
Relinquished by/sampler	11/25/91	11:30	Received by: Keri Follett
Relinquished by: Keri Follett	11/25/91	12:00	Received by
Relinquished by	Date	Time	Received by laboratory: Josephine Patiz — Date 11-25 — Time 12:00

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

APPC-3292 (2-91)

ARCO Products Company
Division of AtlanticRichfieldCompany

330062 Task Order No. 6608-91-2B

Chain of Custody

ARCO Facility no. 06608	City (Facility) San Lorenzo	Project manager (Consultant) Dan Landry	Laboratory name Sequoia
ARCO engineer Kyle Christie	Telephone no. (ARCO)	Telephone no. (Consultant) 9846536	Fax no. (Consultant) 243 3911
Consultant name Pacific Environmental	Address (Consultant) 1601 Civic Center Dr. 95051		Contract number 07-073

Sample I.D.	Lab no.	Container no.	Matrix: Soil	Matrix: Water	Matrix: Other	Preservation: Ice	Preservation: Acid	Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH Gas EPA M602/8020/8015	TPH Modified 8015 Gas ☐ Diesel ☐	Oil and Grease 413.1 ☐ 413.2 ☐	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals ☐ Semi VOA ☐ VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐	C.O.D.	P.H.
INFL				X		X	HCl	11-22-91	11:03		X			111	5	2						
EFFL				X		X	HCl		11:07		X			111	5	2		(A-C)				
EFFL		3		X		X	H_2SO_4											(D-F)			X	
EFFL		1		X		X	NP											(G)				X

Sample I.D. — Lab no. — Container no. — Matrix: Soil / Water / Other — Preservation: Ice / Acid — Sampling date — Sampling time — BTEX 602/EPA 8020 — BTEX/TPH Gas EPA M602/8020/8015 — TPH Modified 8015 Gas ☐ Diesel ☐ — Oil and Grease 413.1 ☐ 413.2 ☐ — TPH EPA 418.1/SM503E — EPA 601/8010 — EPA 624/8240 — EPA 625/8270 — TCLP Metals ☐ Semi VOA ☐ VOA ☐ — CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐ — Lead Org./DHS ☐ Lead EPA 7420/7421 ☐ — C.O.D. — P.H.

Special detection Limit/reporting

Special QA/QC

Remarks

Mark Gubuzi

Lab number 111522

Turnaround time

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

Method of shipment: Sequoia Courier

Condition of sample: GOOD		Temperature received: COOL	
Relinquished by sampler	Date 11/25/91	Time 11:30	Received by
Relinquished by	Date 11/25/91	Time 1200	Received by
Relinquished by	Date	Time	Received by laboratory — Date 11-25 — Time 2100

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

APPC-3292 (2-91)

Water/Product Depth Field Sheet

Client: ARCO

Project No.: 330-06.05

Location: San Lorenzo

Field Dates: 12-19-91

Sampler: SP

Probe Type:
- ☐ Oil/Water Interface
- ☒ Electronic Indicator
- ☐ Bell Sounder
- ☐ Other _____

Well ID	Date	Time	TD	TOB DTL	TOB DTW	TOC DTL	TOC DTW	SPH/Liquid Removed (gallons)	Comments (i.e. SPH thickness after bailing)
MW-5	12-19	08:30	14.1		Dry				
MW-7		08:27	18.9		15.29				
MW-8		08:19	21.6		13.35				
MW-9		08:30	18.7		13.42				
MW-10		08:10	23		13.57				
MW-11		08:15	19.2		14.29				
MW-13		08:23	23.5		16.66				
MW-14		08:07	23		12.39				
MW-15		08:03	23.7		13.78				
MW-16		08:00	23		14.14				
MW-17		07:57	23.6		15.02				
MW-18		07:50	21.7		12.91				
MW-19	↓	07:52	21.6		12.31				

Water/Product Depth Field Sheet

Client: Arco

Project No.: 330-06.05

Location: San Lorenzo

Field Dates: 12-19-91

Sampler: SP

Probe Type:
- ☐ Oil/Water Interface
- ☒ Electronic Indicator
- ☐ Bell Sounder
- ☐ Other _____

Well ID	Date	Time	TD	TOB DTL	TOB DTW	TOC DTL	TOC DTW	SPH/Liquid Removed (gallons)	Comments (i.e. SPH thickness after bailing)
MW-20	12-19	07:47	21.7		12.48				
MW-21	↓	07:43	22		12.68				
MW-22		07:40	21.75		13.19				
MW-23		07:35	22		14.38				
=-1A		10:21			2247				

Pacific Environmental Group, Inc.

Monitoring Well Field Sheet

Client: Arco Sampler: SP

Project No.: 330-06.05 Field Dates: 12-19 12-20

Location: San Lorenzo Well I.D.: TB-1

Well Information

Total Depth: _____ Diameter: 2" 3" 4" 5" 6" ___

Depth to Water: _____ TOC TOB Product: ☐ Yes ☐ No

Depth to Liquid: _____ TOC TOB Thickness (feet): _____

Date: _____ Color: _____

Time: _____ Comments:

Probe Type: ☐ Oil/Water Interface ☐ Other ☐ Electronic Indicator ☐ Bell Sounder

Purge Information

Date Purged: _____ Purge Method: ☐ Bailer ☐ Positive Displacement

Calculated Purge: _____ (gal) ☐ Centrifugal ☐ Dedicated ☐ Gas Displacement

Actual Purge: _____ (gal) ☐ Other _____

Vol (gal)	Time	pH (std. units)	EC (µmhos)	Temp (°F)	Color	Odor

Comments:

Sample Information

Sampler: SP

Sample I.D: TB-1

Date Sampled: 12-19-91

Time Sampled: (12-13-91 10 a.m.)

Sample Method:

☐ Bailer ☐ Positive Displacement

☐ Dedicated ☐ Other _____

No. Containers	Size/Type	Pres.	Analysis
2	40ml VOA	HCl	Gas/BTEX

Comments: Trip Blank from Sequoia Lab.

Monitoring Well Field Sheet

Client: ARCO Sampler: SP
Project No.: 330-06.05 Field Dates: 12-19 12-20
Location: San Lorenzo Well I.D.: MW-7

Well Information

Total Depth: 18.9 Diameter: 2" (3") 4" 5" 6" ___
Depth to Water: — TOC 15.29 TOB Product: ☐ Yes ☒ No
Depth to Liquid: — TOC — TOB Thickness (feet): ___
Date: 12-19-91 Color: ___
Time: 08:27 Comments:

Probe Type: ☐ Oil/Water Interface ☐ Other ☒ Electronic Indicator ☐ Bell Sounder

Purge Information

Date Purged: 12-20-91 Purge Method: ☐ Bailer ☐ Positive Displacement
Calculated Purge: 5.5 (gal) ☐ Centrifugal ☐ Dedicated ☐ Gas Displacement
Actual Purge: 5.5 (gal) ☐ Other ___

Vol (gal)	Time	pH (std. units)	EC (µmhos)	Temp (°F)	Color	Odor
2	11:35	6.96	1072	62.5	Cloudy	NO
4	11:37	6.95	1110	62.9	"	"
5.5	11:40	6.96	1121	62.9	"	"

Comments:

Sample Information

Sampler: SP
Sample I.D.: MW-7
Date Sampled: 12-20-91
Time Sampled: 11:45

Sample Method:
☒ Bailer ☐ Positive Displacement
☐ Dedicated ☐ Other ___
Comments:

No. Containers	Size/Type	Pres.	Analysis
3	40ml VOA	HCl	Gas/BTEX

Monitoring Well Field Sheet

Client: ARCO Sampler: SP
Project No.: 330-06.05 Field Dates: 12-19 12-20
Location: San Lorenzo Well I.D.: MW-8

Well Information

Total Depth: 21.6 Diameter: 2" (3") 4" 5" 6" ___
Depth to Water: — TOC 13.35 TOB Product: ☐ Yes ☒ No
Depth to Liquid: — TOC — TOB Thickness (feet): ___
Date: 12-19-91 Color: ___
Time: 8:19 Comments:

Probe Type: ☐ Oil/Water Interface ☐ Other ☑ Electronic Indicator ☐ Bell Sounder

Purge Information

Date Purged: 12-20-91 Purge Method: ☒ Bailer ☐ Positive Displacement
Calculated Purge: 12.5 (gal) ☐ Centrifugal ☐ Dedicated ☐ Gas Displacement
Actual Purge: 12.5 (gal) ☐ Other ___

Vol (gal)	Time	pH (std. units)	EC (µmhos)	Temp (°F)	Color	Odor
4	12:10	6.94	1114	62.8	cloudy	Slight
8	12:15	6.99	1156	63.4	↓	↓
12.5	12:20	6.94	1161	63.1	↓	↓

Comments:

Sample Information

Sampler: SP
Sample I.D: MW-8
Date Sampled: 12-20-91
Time Sampled: 12:25

Sample Method:
☒ Bailer ☐ Positive Displacement
☐ Dedicated ☐ Other ___
Comments:

No. Containers	Size/Type	Pres.	Analysis
3	40 ml VOA	HCl	Gas/BTEX

Monitoring Well Field Sheet

Client: Arco Sampler: SP
Project No.: 330-06.05 Field Dates: 12-19 12-20
Location: San Lorenzo Well I.D.: MW-9

Well Information

Total Depth: 18.7 Diameter: 2" (3") 4" 5" 6" ___
Depth to Water: — TOC 13.42 TOB Product: ☐ Yes ☒ No
Depth to Liquid: — TOC — TOB Thickness (feet): ___
Date: 12-19-91 Color: ___
Time: 0532 Comments:

Probe Type: ☐ Oil/Water Interface ☐ Other ☒ Electronic Indicator ☐ Bail Sounder

Purge Information

Date Purged: 12-20-91 Purge Method: ☒ Bailer ☐ Positive Displacement
Calculated Purge: 8 (gal) ☐ Centrifugal ☐ Dedicated ☐ Gas Displacement
Actual Purge: 8 (gal) ☐ Other ___

Vol (gal)	Time	pH (std. units)	EC (µmhos)	Temp (°F)	Color	Odor
2.5	11:43	6.92	1063	60.9	cloudy	NO
5.5	11:46	6.99	1086	62.3	↓	↓
8	11:50	7.01	1100	62.5	↓	↓

Comments:

Sample Information

Sampler: SP
Sample I.D.: MW-9
Date Sampled: 12-20-91
Time Sampled: 11:55

Sample Method:
☒ Bailer ☐ Positive Displacement
☐ Dedicated ☐ Other ___
Comments:

No. Containers	Size/Type	Pres.	Analysis
3	40 ml VOA	HCl	Gas / BTEX

Monitoring Well Field Sheet

Client: Arco Sampler: SP
Project No.: 330-06.05 Field Dates: 12-19 12-20
Location: San Lorenzo Well I.D.: MW-10

Well Information

Total Depth: 23 Diameter: 2" (3") 4" 5" 6" ___
Depth to Water: — TOC 13.57 TOB Product: ☐ Yes ☒ No
Depth to Liquid: — TOC — TOB Thickness (feet): ___
Date: 12-19-91 Color: ___
Time: 05:10 Comments:

Probe Type: ☐ Oil/Water Interface ☐ Other ☒ Electronic Indicator ☐ Bell Sounder

Purge Information

Date Purged: 12-20-91 Purge Method: ☐ Bailer ☐ Positive Displacement
Calculated Purge: 14 (gal) ☒ Centrifugal ☐ Dedicated ☐ Gas Displacement
Actual Purge: 14 (gal) ☐ Other ___

Vol (gal)	Time	pH (std. units)	EC (µmhos)	Temp (°F)	Color	Odor
5	10:19	7.05	1076	61.5	clear	Strong
10	10:20	6.95	1108	63.5	"	"
14	10:21	6.90	1117	64.1	"	"

Comments:

Sample Information

Sampler: SP
Sample I.D.: MW-10
Date Sampled: 12-20-91
Time Sampled: 10:30

Sample Method:
☒ Bailer ☐ Positive Displacement
☐ Dedicated ☐ Other ___
Comments:

No. Containers	Size/Type	Pres.	Analysis
3	40ml VOA	HCl	Gas/BTEX

Monitoring Well Field Sheet

Client: ARCO Sampler: SP
Project No.: 330-06.05 Field Dates: 12-19/12-20
Location: San Lorenzo Well I.D.: MW-11

Well Information

Total Depth: 19.2 Diameter: 2" (3") 4" 5" 6" ___
Depth to Water: ~ TOC 14.29 TOB Product: ☐ Yes ☒ No
Depth to Liquid: ~ TOC ~ TOB Thickness (feet): ~
Date: 12-20-91 Color: ~
Time: 08:15 Comments:

Probe Type: ☐ Oil/Water Interface ☐ Other ☒ Electronic Indicator ☐ Bell Sounder

Purge Information

Date Purged: 12-20-91 Purge Method: ☒ Bailer ☐ Positive Displacement
Calculated Purge: 7.5 (gal) ☐ Centrifugal ☐ Dedicated ☐ Gas Displacement
Actual Purge: 7.5 (gal) ☐ Other ___

Vol (gal)	Time	pH (std. units)	EC (µmhos)	Temp (°F)	Color	Odor
2.5	10:35	6.85	1061	60.3	cloudy	NO
5	10:38	6.91	1102	61.6	"	"
7.5	10:42	6.93	1115	62.1	"	"

Comments:

Sample Information

Sampler: SP
Sample I.D: ~~SP 12-20-91~~ MW11
Date Sampled: 12-20-91
Time Sampled: 10:45

Sample Method:
☒ Bailer ☐ Positive Displacement
☐ Dedicated ☐ Other ___
Comments:

No. Containers	Size/Type	Pres.	Analysis
3	40ml VOA	HCl	Gas/BTEX

Pacific Environmental Group, Inc.

Monitoring Well Field Sheet

Client: ARCO Sampler: SP
Project No.: 330-06.05 Field Dates: 12-19 / 12-20
Location: San Lorenzo Well I.D.: MW-13

Well Information

Total Depth: 23.5 Diameter: 2" (3") 4" 5" 6" ___
Depth to Water: ~~TOC~~ 16.66 ~~TOB~~ Product: ☐ Yes ☒ No
Depth to Liquid: ~~TOC~~ ~~TOB~~ Thickness (feet): ___
Date: 12-19-91 Color: ___
Time: 09:23 Comments:

Probe Type: ☐ Oil/Water Interface ☐ Other ☒ Electronic Indicator ☐ Bell Sounder

Purge Information

Date Purged: 12-20-91 Purge Method: ☒ Bailer ☐ Positive Displacement
Calculated Purge: 10.5 (gal) ☐ Centrifugal ☐ Dedicated ☐ Gas Displacement
Actual Purge: 10.5 (gal) ☐ Other ___

Vol (gal)	Time	pH (std. units)	EC (µmhos)	Temp (°F)	Color	Odor
3.5	11:16	6.96	1075	61.1	Cloudy	ND
7	4:20	6.94	1102	62.9	↓	↓
10.5	11:24	6.94	1136	63.1	↓	↓

Comments:

Sample Information

Sampler: SP
Sample I.D.: MW-13
Date Sampled: 12-20-91
Time Sampled: 11:30

Sample Method:
☒ Bailer ☐ Positive Displacement
☐ Dedicated ☐ Other ___
Comments:

No. Containers	Size/Type	Pres.	Analysis
3	40ml VOA	HCl	Gas/BTEX

Monitoring Well Field Sheet

Client: Arco Sampler: SP
Project No.: 330-06.05 Field Dates: 12-19 12-20
Location: San Lorenzo Well I.D.: MW-14

Well Information

Total Depth: 23 Diameter: 2" (3") 4" 5" 6" ___
Depth to Water: — TOC 12.39 TOB Product: ☐ Yes ☐ No
Depth to Liquid: — TOC — TOB Thickness (feet): ___
Date: 12-19-91 Color: ___
Time: 08:07 Comments:

Probe Type: ☐ Oil/Water Interface ☐ Other ☑ Electronic Indicator ☐ Bell Sounder

Purge Information

Date Purged: 12-20-91 Purge Method: ☐ Bailer ☐ Positive Displacement
Calculated Purge: 16 (gal) ☑ Centrifugal ☐ Dedicated ☐ Gas Displacement
Actual Purge: 14 (gal) ☐ Other ___

Vol (gal)	Time	pH (std. units)	EC (µmhos)	Temp (°F)	Color	Odor
5.5	9:51	7.07	953	60.3	Cloudy	NO
11	9:53	7.09	1009	62.4	↓	↓
14	9:54	7.07	1006	62.4	↓	↓

Comments: Well dry at 14 gallons.

Sample Information

Sampler: SP
Sample I.D.: MW-14
Date Sampled: 12-20-91
Time Sampled: 10:15

Sample Method:
☑ Bailer ☐ Positive Displacement
☐ Dedicated ☐ Other ___
Comments:

No. Containers	Size/Type	Pres.	Analysis
3	40 ml VOA	HCl	Gas / BTEX

Monitoring Well Field Sheet

Client: Arco Sampler: SP
Project No.: 330-06.05 Field Dates: 12-19/12-20
Location: San Lorenzo Well I.D.: MW-15

Well Information

Total Depth: 23.7 Diameter: 2" (3") 4" 5" 6" ___
Depth to Water: TOC 13.78 TOB Product: ☐ Yes ☒ No
Depth to Liquid: TOC TOB Thickness (feet): ___
Date: 12-19-91 Color: ___
Time: 0810 Comments:

Probe Type: ☐ Oil/Water Interface ☐ Other ☒ Electronic Indicator ☐ Bell Sounder

Purge Information

Date Purged: 12-20-91 Purge Method: ☐ Bailer ☐ Positive Displacement
Calculated Purge: 15 (gal) ☒ Centrifugal ☐ Dedicated ☐ Gas Displacement
Actual Purge: 15 (gal) ☐ Other ___

Vol (gal)	Time	pH (std. units)	EC (µmhos)	Temp (°F)	Color	Odor
5	8:40	7.1	1075	58.1	cloudy	Moderate
10	8:41	7.2	1130	60.1	↓	"
15	8:42	7.17	1150	60.7	↓	"

Comments:

Sample Information

Sampler: SP
Sample I.D.: MW-15
Date Sampled: 12-20-91
Time Sampled: 8:50

Sample Method:
☒ Bailer ☐ Positive Displacement
☐ Dedicated ☐ Other ___
Comments:

No. Containers	Size/Type	Pres.	Analysis
3	40 ml VOA	HCl	Gas/BTEX

Pacific Environmental Group, Inc.

Monitoring Well Field Sheet

Client: ARCO Sampler: SP
Project No.: 330-06.05 Field Dates: 12-19-91
Location: San Lorenzo Well I.D.: MW-16

Well Information

Total Depth: 23 Diameter: 2" (3") 4" 5" 6" ___
Depth to Water: — TOC 14.14 TOB Product: ☐ Yes ☒ No
Depth to Liquid: — TOC — TOB Thickness (feet): —
Date: 12-19-91 Color: —
Time: 23 Comments: —

Probe Type: ☐ Oil/Water Interface ☐ Other ☒ Electronic Indicator ☐ Bell Sounder

Purge Information

Date Purged: 12-20-91 Purge Method: ☐ Bailer ☐ Positive Displacement
Calculated Purge: 13.5 (gal) ☒ Centrifugal ☐ Dedicated ☐ Gas Displacement
Actual Purge: 7.5 (gal) ☐ Other ___

Vol (gal)	Time	pH (std. units)	EC (µmhos)	Temp (°F)	Color	Odor
4.5	9:03	6.96	1033	59.2	Brown	NO
7.5	9:05	7.01	1058	60.8	Brown	NO

Comments: well dry at 7.5 gal

Sample Information

Sampler: SP
Sample I.D.: MW-16
Date Sampled: 12-20-91
Time Sampled: 9:15

Sample Method:
☒ Bailer ☐ Positive Displacement
☐ Dedicated ☐ Other ___
Comments:

No. Containers	Size/Type	Pres.	Analysis
3	40 VOA	HCl	Gas/BTEX

Monitoring Well Field Sheet

Client: ARCO Sampler: SP
Project No.: 330-06.05 Field Dates: 12-19-91
Location: San Lorenzo Well I.D.: MW-17

Well Information

Total Depth: 23.6 Diameter: 2" (3") 4" 5" 6" ___
Depth to Water: — TOC 15.07 TOB Product: ☐ Yes ☒ No
Depth to Liquid: — TOC — TOB Thickness (feet): —
Date: 12-19-91 Color: —
Time: 07:57 Comments:

Probe Type: ☐ Oil/Water Interface ☐ Other ☒ Electronic Indicator ☐ Bell Sounder

Purge Information

Date Purged: 12-19-91 Purge Method: ☐ Bailer ☐ Positive Displacement
Calculated Purge: 13 (gal) ☒ Centrifugal ☐ Dedicated ☐ Gas Displacement
Actual Purge: 13 (gal) ☐ Other ___

Vol (gal)	Time	pH (std. units)	EC (µmhos)	Temp (°F)	Color	Odor
4.5	13:27	6.99	996	59.2	Tan	Slight
9	13:29	7.05	1034	61.2	cloudy	↓
13	13:31	7.02	1030	60.8	clear	↓

Comments:

Sample Information

Sampler: SP
Sample I.D.: MW-17
Date Sampled: 12-19-91
Time Sampled: 13:35

No. Containers	Size/Type	Pres.	Analysis
3	40 ml VOA	HCl	Gas/BTEX

Sample Method:
☒ Bailer ☐ Positive Displacement
☐ Dedicated ☐ Other ___
Comments:

Monitoring Well Field Sheet

Client: ARCO Sampler: SP
Project No.: 330-06.05 Field Dates: 12-19-91
Location: San Lorenzo Well I.D.: MW-18

Well Information

Total Depth: 21.7 Diameter: 2" (3") 4" 5" 6" ___
Depth to Water: ___ TOC 12.91 TOB Product: ☐ Yes ☒ No
Depth to Liquid: ___ TOC ___ TOB Thickness (feet): ___
Date: 12-19-91 Color: ___
Time: 07:50 Comments:

Probe Type: ☐ Oil/Water Interface ☐ Other ☒ Electronic Indicator ☐ Bell Sounder

Purge Information #6

Date Purged: 12-19-91 Purge Method: ☒ Bailer ☐ Positive Displacement
Calculated Purge: 13 (gal) ☐ Centrifugal ☐ Dedicated ☐ Gas Displacement
Actual Purge: 13 (gal) ☐ Other ___

Vol (gal)	Time	pH (std. units)	EC (µmhos)	Temp (°F)	Color	Odor
4.5	12:58	6.80	1059	60.3	cloudy	NO
9	13:03	7.09	1083	61.5	"	"
13	13:08	7.08	1076	61.0	"	"

Comments:

Sample Information

Sampler: SP
Sample I.D.: MW-18
Date Sampled: 12-19-91
Time Sampled: 13:10

#6 Sample Method:
☒ Bailer ☐ Positive Displacement
☐ Dedicated ☐ Other ___
Comments:

No. Containers	Size/Type	Pres.	Analysis
3	40ml VOA	HCl	Gas/BTEX

Monitoring Well Field Sheet

Client: Arco | Sampler: SP
Project No.: 330-06.05 | Field Dates: 12-19 12-20
Location: San Lorenzo | Well I.D.: MW-19

Well Information

Total Depth: 21.6 | Diameter: 2" (3") 4" 5" 6" ___
Depth to Water: ~~TOC~~ 12.31 TOB | Product: ☐ Yes ☒ No
Depth to Liquid: ~~TOC~~ ~~TOB~~ | Thickness (feet): ___
Date: 12-19-91 | Color: ___
Time: 07:52 | Comments:

Probe Type: ☐ Oil/Water Interface ☐ Other ☒ Electronic Indicator ☐ Bell Sounder

Purge Information

Date Purged: 12-20-91 | Purge Method: ☐ Bailer ☐ Positive Displacement
Calculated Purge: 14 (gal) | ☒ Centrifugal ☐ Dedicated ☐ Gas Displacement
Actual Purge: 14 (gal) | ☐ Other ___

Vol (gal)	Time	pH (std. units)	EC (µmhos)	Temp (°F)	Color	Odor
5	9:27	6.91	1051	58.6	Brown	NO
10	9:28	6.92	1095	60.7	↓	↓
14	9:29	6.96	1102	61.0	↓	↓

Comments:

Sample Information

Sampler: SP
Sample I.D.: MW-19
Date Sampled: 12-20-91
Time Sampled: 9:35

Sample Method:
☒ Bailer ☐ Positive Displacement
☐ Dedicated ☐ Other ___
Comments:

No. Containers	Size/Type	Pres.	Analysis
3	40ml VOA	HCl	Gas/BTEX

Monitoring Well Field Sheet

Client: ARCO Sampler: SP
Project No.: 330-06.05 Field Dates: 12-19-91
Location: San Lorenzo Well I.D.: MW-20

Well Information

Total Depth: 21.7 Diameter: 2" (3") 4" 5" 6" ___
Depth to Water: — TOC 12.48 TOB Product: ☐ Yes ☒ No
Depth to Liquid: — TOC — TOB Thickness (feet): —
Date: 12-19-91 Color: —
Time: 07:47 Comments: —

Probe Type: ☐ Oil/Water Interface ☐ Other ☒ Electronic Indicator ☐ Bell Sounder

Purge Information

Date Purged: 12-19-91 Purge Method: ☒ Bailer #5 ☐ Positive Displacement
Calculated Purge: 14 (gal) ☐ Centrifugal ☐ Dedicated ☐ Gas Displacement
Actual Purge: 14 (gal) ☐ Other ___

Vol (gal)	Time	pH (std. units)	EC (µmhos)	Temp (°F)	Color	Odor
5	12:30	7.10	1003	61.2	Cloudy	NO
10	12:36	7.03	1017	60.7	↓	↓
14	12:41	7.03	1030	60.7	↓	↓

Comments:

Sample Information

Sampler: SP
Sample I.D: ~~SP 12-19-91~~ MW-20
Date Sampled: 12-19-91
Time Sampled: 12:45

Sample Method:
#5 ☒ Bailer ☐ Positive Displacement
☐ Dedicated ☐ Other ___
Comments:

No. Containers	Size/Type	Pres.	Analysis
3	40 ml VOA	HCl	8015/BTEX

Monitoring Well Field Sheet

Client: Arco Sampler: SP
Project No.: 330-06.05 Field Dates: 12-19-91
Location: San Lorenzo Well I.D.: MW-21

Well Information

Total Depth: 22 Diameter: 2" (3") 4" 5" 6" ___
Depth to Water: ~ TOC 12.68 TOB Product: ☐ Yes ☒ No
Depth to Liquid: — TOC — TOB Thickness (feet): ___
Date: 12-19-91 Color: —
Time: 07:43 Comments: —

Probe Type: ☐ Oil/Water Interface ☐ Other ☒ Electronic Indicator ☐ Bell Sounder

Purge Information

#3

Date Purged: 12-19-91 Purge Method: ☒ Bailer ☐ Positive Displacement
Calculated Purge: 14 (gal) ☐ Centrifugal ☐ Dedicated ☐ Gas Displacement
Actual Purge: 14 (gal) ☐ Other ___

Vol (gal)	Time	pH (std. units)	EC (µmhos)	Temp (°F)	Color	Odor
5	11:00	6.81	1087	61.0	cloudy	NO
10	11:05	6.66	1084	60.6	"	"
14	11:11	6.68	1091	60.9	"	"

Comments:

Sample Information

Sampler: SP
Sample I.D.: MW-21
Date Sampled: 12-19-91
Time Sampled: 11:15

#2 #30 Sample Method:
☒ Bailer ☐ Positive Displacement
☐ Dedicated ☐ Other ___
Comments:

No. Containers	Size/Type	Pres.	Analysis
3	40 ml VOA	HCl	Gas / BTEX

Monitoring Well Field Sheet

Client: ARCO Sampler: SP
Project No.: 330-06.05 Field Dates: 12-19-91
Location: San Lorenzo Well I.D.: MW-22

Well Information

Total Depth: 21.75 Diameter: 2" (3") 4" 5" 6" ___
Depth to Water: — TOC 13.19 TOB Product: ☐ Yes ☒ No
Depth to Liquid: — TOC — TOB Thickness (feet): —
Date: 12-19-91 Color: —
Time: 07:40 Comments:

Probe Type: ☐ Oil/Water Interface ☐ Other ☒ Electronic Indicator ☐ Bell Sounder

Purge Information

Date Purged: 12-19-91 Purge Method: ☒ Bailer #4 ☐ Positive Displacement
Calculated Purge: 13 (gal) ☐ Centrifugal ☐ Dedicated ☐ Gas Displacement
Actual Purge: 13 (gal) ☐ Other ___

Vol (gal)	Time	pH (std. units)	EC (µmhos)	Temp (°F)	Color	Odor
4.5	11:35	6.92	1047	57.7	cloudy	NO
9	11:39	6.92	1064	59.1	"	"
13.5	11:46	6.90	1079	60.6	"	"

Comments:

Sample Information

Sampler: SP
Sample I.D.: MW-22
Date Sampled: 12-19-91
Time Sampled: 11:50

Sample Method:
☒ Bailer ☐ Positive Displacement
☐ Dedicated ☐ Other ___
Comments:

No. Containers	Size/Type	Pres.	Analysis
3	40 ml VOA	HCl	Gas/BTEX

Monitoring Well Field Sheet

Client: ARCO Sampler: SP
Project No.: 330-06.05 Field Dates: 12-19-91
Location: San Lorenzo Well I.D.: MW-23

Well Information

Total Depth: 22 Diameter: 2" (3") 4" 5" 6" ___
Depth to Water: — TOC 14.38 TOB Product: ☐ Yes ☒ No
Depth to Liquid: — TOC — TOB Thickness (feet): ___
Date: 12-19-91 Color: ___
Time: 07:35 Comments:

Probe Type: ☐ Oil/Water Interface ☐ Other ☒ Electronic Indicator ☐ Bell Sounder

Purge Information

Date Purged: 12-19-91 Purge Method: ☒ Bailer #2 ☐ Positive Displacement
Calculated Purge: 11.5 (gal) ☐ Centrifugal ☐ Dedicated ☐ Gas Displacement
Actual Purge: 11.5 (gal) ☐ Other ___

Vol (gal)	Time	pH (std. units)	EC (µmhos)	Temp (°F)	Color	Odor
4	09:45		1313	58.1	Brown	NO
8	09:50		1366	60.8	↓	↓
11.5	10:05		1274	59.7	↓	↓

Comments:

Sample Information

Sampler: SP
Sample I.D.: MW-23
Date Sampled: 12-19-91
Time Sampled: 10:10

Sample Method:
☒ Bailer ☐ Positive Displacement
☐ Dedicated ☐ Other ___
Comments:

No. Containers	Size/Type	Pres.	Analysis
3	40 mL VOA	HCl	Gas/BTEX

Pacific Environmental Group, Inc.