



PACIFIC  
ENVIRONMENTAL  
GROUP, INC.

91 MAY 28 AM 11:46

May 22, 1991  
Project 330-06.05

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

Re: Quarterly Monitoring Results  
January to March 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. Groundwater samples were collected on March 21, 1991 and analyzed for total petroleum hydrocarbons (calculated as gasoline), and benzene, toluene, ethylbenzene, and xylenes (BTEX compounds). Well MW-5 was dry and therefore was not sampled. 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 contained concentrations of dissolved gasoline ranging from non-detectable levels in Wells MW-7, MW-9, MW-11 and E-1A to 6,900 parts per billion (ppb) in Well MW-10. Separate-phase hydrocarbons were not observed in any site well this quarter. A gasoline and benzene concentration map is presented in Figure 1. Current and historical analytical data is presented in Table 1.

Depth to water data indicated that groundwater flow was consistently to the west with an approximate gradient of 0.003. A groundwater contour map based on the March data is shown on Figure 2.

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

Sincerely,

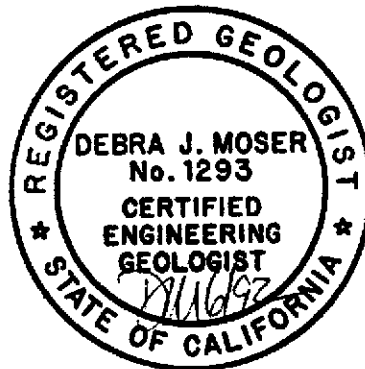
**Pacific Environmental Group, Inc.**



John Cavanaugh  
Staff Geologist



Debra J. Moser  
Senior Geologist  
CEG 1293



Attachments: Table 1 - Quarterly Groundwater Monitoring Results  
Figure 1 - Gasoline and Benzene Concentration Map  
Figure 2 - Groundwater Contour Map  
Attachment A - Groundwater Sampling and Analytical Procedures  
Certified Analytical Report  
Chain-of-Custody Documentation  
Field Data Sheets

cc: Chris Winsor, ARCO Products Company  
Pamela Evans, Alameda County Health Agency-Hazardous Materials  
Division  
Steve Ritchie, Regional Water Quality Control Board

Table 1  
Summary of Groundwater Analytical Results

ARCO Service Station 0608  
Low-Boiling Hydrocarbons

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 (33.27)	01/11/88	NA	1,800	20	20	80	60	
	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 (32.43)	01/11/88	NA	62,000	2,700	7,900	850	5,200	
	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 (33.99)	01/11/88	NA	31,000	4,000	2,700	3,800	5,500	
	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 -----					
MW-6 (E-1) (32.95)	06/21/89	20.47	1,700	170	170	85	290	
	12/12/89	19.79	500	26	7	8	18	
	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 -----					
E-1A (NA)	09/19/90	18.75	<50	7	0.9	1	2	
	12/27/90	19.09	<50	3	0.5	1	1	
	03/21/91	20.95	<30	4.2	<0.30	1.1	0.89	

Table 1 (Continued)  
**Summary of Groundwater Analytical Results**

ARCO Service Station 0608  
 Low-Boiling Hydrocarbons

Well Number (Elev)	Sample Date	Groundwater Elevation (feet, MSL)	Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
MW-7 (34.40)	04/13/90	NA	<50	<0.3	<0.3	<0.3	<0.3
	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
MW-8 (32.79)	04/13/90	NA	4,900	350	16	450	33
	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	<del>840</del>	<del>84</del>	<6.0	21	9.6
MW-9 (32.11)	04/13/90	NA	<50	<0.3	<0.3	<0.3	2
	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
MW-10 (31.67)	04/13/90	NA	10,000	150	4	280	200
	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	<del>6,300</del>	<del>22</del>	<15	92	33
MW-11 (32.54)	04/13/90	NA	<50	<0.3	<0.3	<0.3	<0.3
	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

NA = Data not available  
 ppb = Parts per billion  
 NS = Not sampled

\* = Ethylbenzene and xylenes given as a combined value.

\*\* = Well contained slight product sheen.

MW-1 and MW-2 destroyed prior to 3/7/89 sampling event.  
 MW-3, MW-4 and MW-6 (E-1) destroyed 7/18/90.



RESIDENTIAL

RESIDENTIAL

RESTAURANT

~~540/8.8~~  
**6.900/22**

● MW-9  
ND/ND

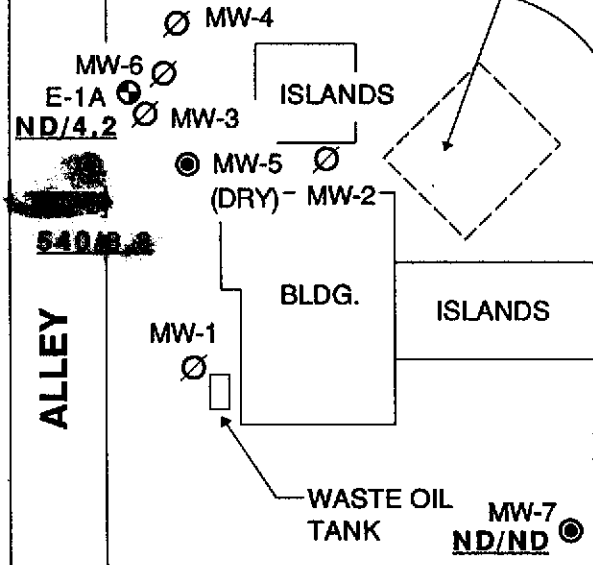
**HACIENDA AVENUE**

UNDERGROUND STORAGE TANKS

RESIDENTIAL

● MW-11  
ND/ND

RESIDENTIAL



**HESPERIAN BOULEVARD**

**LEGEND**

- MW-3 ● GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- E-1A ● GROUNDWATER EXTRACTION WELL LOCATION AND DESIGNATION
- MW-1 ○ DESTROYED MONITORING WELL LOCATION AND DESIGNATION

**540/8.8** GASOLINE/BENZENE CONCENTRATION IN PARTS PER BILLION, 3-21-91

**ND** NON-DETECTABLE LEVELS



APPROXIMATE DIRECTION OF GROUNDWATER FLOW

**SCALE**



PACIFIC ENVIRONMENTAL GROUP, INC.

**ARCO SERVICE STATION #608**

17601 Hesperian Boulevard  
San Lorenzo, California

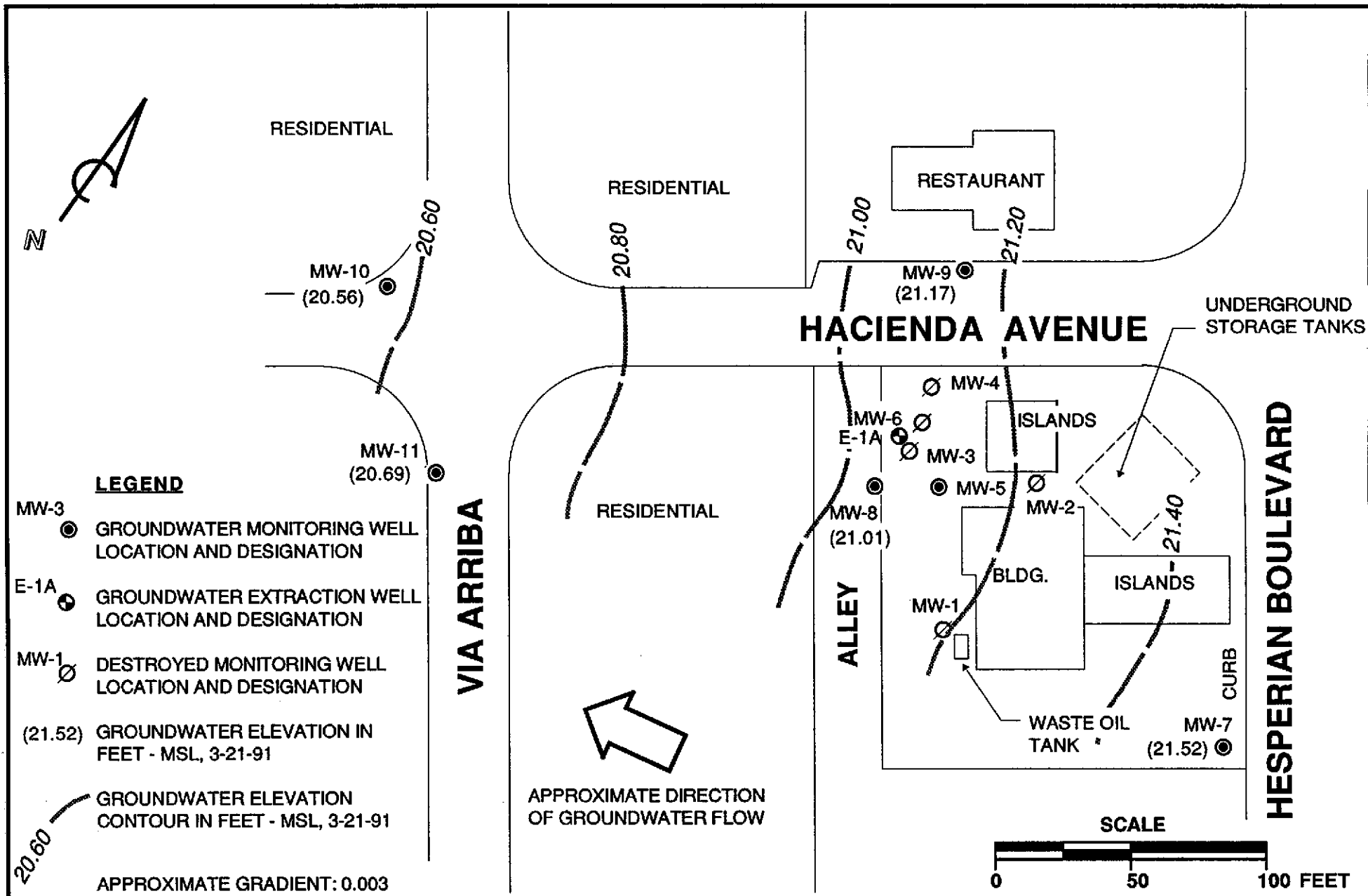
**DISSOLVED GASOLINE AND BENZENE CONCENTRATION MAP**

FIGURE:

**1**

PROJECT:

330-06.05



PACIFIC ENVIRONMENTAL GROUP, INC.

ARCO SERVICE STATION #608  
17601 Hesperian Boulevard  
San Lorenzo, California

GROUNDWATER CONTOUR MAP

FIGURE:

2

PROJECT:

330-06.05

**ATTACHMENT A**  
**GROUNDWATER SAMPLING AND ANALYTICAL PROCEDURES**

## **ATTACHMENT A**

### **GROUNDWATER SAMPLING AND ANALYTICAL PROCEDURES**

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#### **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), and 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	Client Project ID: #330-06.05, Arco 0608, San Lorenzo	Sampled: Mar 21, 1991
1601 Civic Center Drive, Suite 202	Matrix Descript: Water	Received: Mar 22, 1991
Santa Clara, CA 95050	Analysis Method: EPA 5030/8015/8020	Analyzed: Mar 28, 1991
Attention: John Cavanaugh	First Sample #: 103-3281 A-B	Reported: Apr 3, 1991

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

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons	Benzene	Toluene	Ethyl Benzene	Xylenes
		$\mu\text{g/L}$ (ppb)	$\mu\text{g/L}$ (ppb)	$\mu\text{g/L}$ (ppb)	$\mu\text{g/L}$ (ppb)	$\mu\text{g/L}$ (ppb)
1033281 A-B	Travel Blank	N.D.	N.D.	N.D.	N.D.	N.D.
1033282 A-C	E-1A	N.D.	4.2	N.D.	1.1	0.89
1033283 A-C	MW-7	N.D.	N.D.	N.D.	N.D.	N.D.
1033285 A-C	MW-9	N.D.	N.D.	N.D.	N.D.	N.D.
1033287 A-C	MW-11	N.D.	N.D.	N.D.	N.D.	N.D.

Detection Limits:	30	0.30	0.30	0.30	0.30
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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

1033281.PPP <1>



# SEQUOIA ANALYTICAL

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Pacific Environmental Group	Client Project ID: #330-06.05, Arco 0608, San Lorenzo	Sampled: Mar 21, 1991
1601 Civic Center Drive, Suite 202	Sample Descript.: Water, MW-8	Received: Mar 22, 1991
Santa Clara, CA 95050	Analysis Method: EPA 5030/ 8015/8020	Analyzed: Mar 28, 1991
Attention: John Cavanaugh	Lab Number: 103-3284 A-C	Reported: Apr 3, 1991

## 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	500	540
Benzene	6.0	6.8
Toluene	6.0	N.D.
Ethyl Benzene	6.0	21
Xylenes	6.0	9.6

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

*V. 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: #330-06.05, Arco 0608, San Lorenzo	Sampled: Mar 21, 1991
1601 Civic Center Drive, Suite 202	Sample Descript.: Water, MW-10	Received: Mar 22, 1991
Santa Clara, CA 95050	Analysis Method: EPA 5030/ 8015/8020	Analyzed: Mar 28, 1991
Attention: John Cavanaugh	Lab Number: 103-3286 A-C	Reported: Apr 3, 1991

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

Analyte	Detection Limit $\mu\text{g/L}$ (ppb)	Sample Results $\mu\text{g/L}$ (ppb)
Low to Medium Boiling Point Hydrocarbons	1,500	6,900
Benzene	15	22
Toluene	15	N.D.
Ethyl Benzene	15	92
Xylenes	15	33

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



# Monitoring Well Field Sheet

Client: Arco Sampler: Scott Pisk  
 Project No.: 330-06.05 Field Dates: 3-21-91  
 Location: San Lorenzo Well I.D.: E1-A

### Well Information

Total Depth: 25 Diameter: 2" 3" 4" 5" 6"  
 Depth to Water: TOC 1200 TOB Product:  Yes  No  
 Depth to Liquid: TOC TOB Thickness (feet): \_\_\_\_\_  
 Date: 3-21-91 Color: \_\_\_\_\_  
 Time: \_\_\_\_\_ Comments: \_\_\_\_\_

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

### Purge Information

Date Purged: 3-21-91 Purge Method:  Bailor  Positive Displacement  
 Calculated Purge: 75.5 (gal)  Centrifugal  Dedicated  Gas Displacement  
 Actual Purge: 75.5 (gal)  Other \_\_\_\_\_

Vol (gal)	Time	pH (std. units)	EC (µmhos)	Temp (°F)	Color	Odor
25	12:14	6.95	1144	63.1	Clear	NO
50	12:26	6.92	1141	63.8	Brown	↓
75.5	12:40	6.92	1134	63.7	Brown	↓

Comments:

### Sample Information

Sampler: Scott Pisk  
 Sample I.D.: E1-A  
 Date Sampled: 3-21-91  
 Time Sampled: 13:00

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

Sample Method:

Bailor  Positive Displacement  
 Dedicated  Other \_\_\_\_\_

Comments:

# Monitoring Well Field Sheet

Client: Arco Sampler: Scott Pisk  
 Project No.: 330-06.05 Field Dates: 3-21-91  
 Location: San Lorenzo Well I.D.: MW-5

### Well Information

Total Depth: 14 Diameter: 2" 3" 4" 5" 6"  
 Depth to Water: TOC 13.00 TOB Product:  Yes  No  
 Depth to Liquid: TOC TOB Thickness (feet): \_\_\_\_\_  
 Date: 3- -91 Color: \_\_\_\_\_  
 Time: \_\_\_\_\_ Comments: \_\_\_\_\_

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

### Purge Information

Date Purged: 3-21-91 Purge Method:  Bailer  Positive Displacement  
 Calculated Purge: 2.6 (gal)  Centrifugal  Dedicated  Gas Displacement  
 Actual Purge: \_\_\_\_\_ (gal)  Other \_\_\_\_\_

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

**Comments:** Tried bailing this well. However well was not recharging the 1 foot of H<sub>2</sub>O. This well has been a dry well in the past.

### Sample Information

Sampler: Scott Pisk  
 Sample I.D.: \_\_\_\_\_  
 Date Sampled: 3- -91  
 Time Sampled: \_\_\_\_\_

No. Containers	Size/Type	Pres.	Analysis
3	<u>40m VOA</u>	<u>HCl</u>	<u>Gas/BTEX</u>

Sample Method:  
 Bailer  Positive Displacement  
 Dedicated  Other \_\_\_\_\_

**Comments:** \_\_\_\_\_

# Monitoring Well Field Sheet

Client: Arco Sampler: Scott Pisk  
 Project No.: 330-06.05 Field Dates: 3-21-91  
 Location: San Lorenzo Well I.D.: MW-7

## Well Information

Total Depth: 19 Diameter: 2" 3" 4" 5" 6" \_\_\_\_\_  
 Depth to Water: TOC 12.88 TOB Product:  Yes  No  
 Depth to Liquid: TOC TOB Thickness (feet): \_\_\_\_\_  
 Date: 3-21-91 Color: \_\_\_\_\_  
 Time: \_\_\_\_\_ Comments: \_\_\_\_\_

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

## Purge Information

Date Purged: 3-21-91 Purge Method:  Bailer  Positive Displacement  
 Calculated Purge: 9 (gal)  Centrifugal  Dedicated  Gas Displacement  
 Actual Purge: 9 (gal)  Other \_\_\_\_\_

Vol (gal)	Time	pH (std. units)	EC (µmhos)	Temp (°F)	Color	Odor
<u>3</u>	<u>11:06</u>	<u>7.05</u>	<u>1020</u>	<u>60.4</u>	<u>Cloudy</u>	<u>NO</u>
<u>6</u>	<u>11:10</u>	<u>7.03</u>	<u>1161</u>	<u>60.5</u>	<u>↓</u>	<u>↓</u>
<u>9</u>	<u>11:15</u>	<u>7.02</u>	<u>1157</u>	<u>61.1</u>	<u>↓</u>	<u>↓</u>

**Comments:** \_\_\_\_\_

## Sample Information

Sampler: Scott Pisk  
 Sample I.D.: MW-7  
 Date Sampled: 3-21-91  
 Time Sampled: 11:20

No. Containers	Size/Type	Pres.	Analysis
<u>3</u>	<u>40ml vial</u>	<u>HCl</u>	<u>Gas/BTEX</u>

Sample Method:  
 Bailer  Positive Displacement  
 Dedicated  Other \_\_\_\_\_

**Comments:** \_\_\_\_\_

# Monitoring Well Field Sheet

Client: Arco Sampler: Scott Pisk  
 Project No.: 330-06.05 Field Dates: 3-21-91  
 Location: San Lorenzo Well I.D.: MW-8

### Well Information

Total Depth: 22 Diameter: 2"  3" 4" 5" 6" \_\_\_\_\_  
 Depth to Water: TOC/11.78 TOB Product:  Yes  No  
 Depth to Liquid: TOC TOB Thickness (feet): \_\_\_\_\_  
 Date: 3-21-91 Color: \_\_\_\_\_  
 Time: \_\_\_\_\_ Comments: \_\_\_\_\_

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

### Purge Information

Date Purged: 3-21-91 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 (umhos)	Temp (°F)	Color	Odor
5	11:36	6.74	1123	62.2	Brown	slight
10	11:41	6.96	1199	63.1	↓	↓
15	11:44	6.98	1240	63.4	↓	↓

Comments:

### Sample Information

Sampler: Scott Pisk  
 Sample I.D.: MW-8  
 Date Sampled: 3-21-91  
 Time Sampled: 12:00

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

Sample Method:  
 Bailer  Positive Displacement  
 Dedicated  Other \_\_\_\_\_

Comments:



# Monitoring Well Field Sheet

Client: Arco Sampler: Scott Pisk  
 Project No.: 330-06.05 Field Dates: 3-21-91  
 Location: San Lorenzo Well I.D.: MW-9

## Well Information

Total Depth: 19 Diameter: 2" 3" 4" 5" 6"       
 Depth to Water: TOC/0.94 TOB Product:  Yes  No  
 Depth to Liquid: TOC TOB Thickness (feet):       
 Date: 3-21-91 Color:       
 Time:      Comments:     

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

## Purge Information

Date Purged: 3-21-91 Purge Method:  Bailer  Positive Displacement  
 Calculated Purge: 12 (gal)  Centrifugal  Dedicated  Gas Displacement  
 Actual Purge: 12 (gal)  Other     

Vol (gal)	Time	pH (std. units)	EC (µmhos)	Temp (°F)	Color	Odor
4	13:13	7.00	1182	62.2	clear	None.
8	13:20	6.98	1415	63.8	↓	↓
12	13:24	6.95	1456	62.5	↓	↓

Comments:     

## Sample Information

Sampler: Scott Pisk  
 Sample I.D.: MW-9  
 Date Sampled: 3-21-91  
 Time Sampled: 13:30

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

Sample Method:  
 Bailer  Positive Displacement  
 Dedicated  Other     

Comments:

# Monitoring Well Field Sheet

Client: Arco Sampler: Scott Pisk  
 Project No.: 330-06.05 Field Dates: 3-21-91  
 Location: San Lorenzo Well I.D.: MW-10

## Well Information

Total Depth: 23 Diameter: 2"  3" 4" 5" 6"   
 Depth to Water: TOC/11/1 TOB Product:  Yes  No  
 Depth to Liquid: TOC TOB Thickness (feet): \_\_\_\_\_  
 Date: 3-21-91 Color: \_\_\_\_\_  
 Time: \_\_\_\_\_ Comments: \_\_\_\_\_

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

## Purge Information

Date Purged: 3-21-91 Purge Method:  Bailer  Positive Displacement  
 Calculated Purge: 18 (gal)  Centrifugal  Dedicated  Gas Displacement  
 Actual Purge: 18 (gal)  Other \_\_\_\_\_

Vol (gal)	Time	pH (std. units)	EC (µmhos)	Temp (°F)	Color	Odor
<u>6</u>	<u>14:39</u>	<u>6.77</u>	<u>1171</u>	<u>60.6</u>	<u>Brown</u>	<u>Strong</u>
<u>12</u>	<u>14:48</u>	<u>6.91</u>	<u>1316</u>	<u>61.1</u>	↓	↓
<u>18</u>	<u>14:55</u>	<u>6.93</u>	<u>1380</u>	<u>62.0</u>	↓	↓

Comments:

## Sample Information

Sampler: Scott Pisk  
 Sample I.D.: MW-10  
 Date Sampled: 3-21-91  
 Time Sampled: 15:10

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

Sample Method:  
 Bailer  Positive Displacement  
 Dedicated  Other \_\_\_\_\_

Comments: