

ENVIRONMENTAL  
PROTECTION

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**RESULTS OF QUARTERLY  
GROUNDWATER MONITORING  
NOVEMBER 1996  
FORMER PENSKE TRUCK  
LEASING CO. FACILITY  
725 JULIE ANN WAY  
OAKLAND, CALIFORNIA**

January 1997

Prepared by

Geraghty & Miller, Inc.  
1050 Marina Way South  
Richmond, CA 94804  
(510) 233-3200

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January 23, 1997  
Project No. RC0019.010

Mr. Barney Chan  
Division of Hazardous Materials  
Department of Environmental Health  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway, Room 250  
Alameda, CA 94502

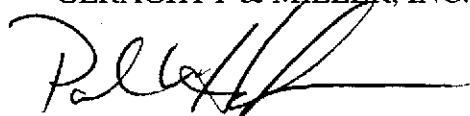
**SUBJECT:** Results of Quarterly Groundwater Monitoring, November 1996  
Former Penske Truck Leasing Facility  
725 Julie Ann Way, Oakland, California.

Dear Mr. Chan:

The above referenced report is being forwarded to you at the request of Penske Truck Leasing Co. The report details the results of the quarterly groundwater monitoring well sampling for November 1996 at the former Penske Truck Leasing Facility at 725 Julie Ann Way, Oakland. The quarterly sampling has been completed in response to the requirements for groundwater sampling contained in the Alameda County Health Care Services, Department of Environmental Health (ACHCSA) letter to Penske dated October 24, 1989.

If you have any questions, please do not hesitate to call.

Sincerely,  
**GERAGHTY & MILLER, INC.**



Paul V. Hehn  
Project Geologist/Project Manager

Attachment: Results of Quarterly Groundwater Monitoring, August 1996

cc: Mr. Richard G. Saut  
Penske Truck Leasing Co.



**PENSKE**

**Truck Leasing**

**Via Facsimile (510) 233-3204**

January 21, 1997

Mr. Paul Hehn  
Geraghty & Miller, Inc.  
1050 Marina Way South  
Richmond, CA 94804

Re: Quarterly Groundwater Monitoring Report  
Former Penske Truck Leasing Facility  
725 Julie Ann Way  
Oakland, CA

Dear Paul:

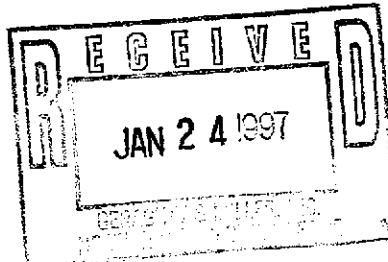
I have reviewed and approve the above referenced report. Please forward the appropriate number of copies to the required regulatory agencies. Please provide two copies for my file with a copy of your report transmittal letters to the agencies. If you have questions or need assistance, please call my office at (610) 775-6010.

Sincerely,



Richard G. Saut  
Environmental Project Manager

- 1) Add analytes DO, ox-red ppt, NO<sub>3</sub>, SO<sub>4</sub> & Fe\*\*.
- 2) Continue to monitor MW-8
- 3) OK install of obs. wells.



January 15, 1997  
Project No. RC0019.010

Mr. Richard G. Saut  
Environmental Project Manager  
Penske Truck Leasing Co., L.P.  
Route 10, Green Hills  
P.O. Box 7635  
Reading, PA 19603-7635

**SUBJECT:** Results of Quarterly Groundwater Monitoring  
November 1996  
Former Penske Truck Leasing Facility  
725 Julie Ann Way, Oakland, California.

Dear Mr. Saut:

This report presents the results of the quarterly groundwater monitoring performed on November 21, 1996, at the former Penske Truck Leasing Co. (Penske) facility referenced above (Figure 1). The scope of work for this project was presented to Penske in a Geraghty & Miller, Inc. (Geraghty & Miller) letter dated January 25, 1996. The scope of work for groundwater monitoring and sampling consists of collecting depth-to-water measurements, total-well-depth measurements, and water samples from selected wells at this former site. The scope of work also includes the preparation of quarterly groundwater sampling and monitoring reports based on the data and groundwater samples collected. This quarterly groundwater sampling and monitoring program is related to the containment zone (CZ) concept remedial approach approved by the Alameda County Health Care Services Agency (ACHCSA) and the California Regional Water Quality Control Board – San Francisco Bay Region (RWQCB) in its letter to Penske dated March 25, 1994.

#### **NEW DEVELOPMENTS DURING THE PREVIOUS QUARTER**

During the previous quarter, telephone conversations and written correspondence took place between Penske, the ACHCSA, and Geraghty & Miller about groundwater sampling and monitoring at this site. The ACHCSA stated in a letter to Penske that the current



compliance concentrations for benzene in groundwater at 21 micrograms per liter ( $\mu\text{g}/\text{L}$ ) was too low. The ACHCSA referred to a recent study by the RWQCB at the San Francisco Airport in which an estuary compliance concentration for benzene of 71  $\mu\text{g}/\text{L}$  was deemed to be a more appropriate concentration for groundwater near estuaries similar to this former Penske site. After discussions with Penske, the ACHCSA, and Geraghty & Miller, it was agreed that the compliance concentration for benzene in groundwater at this site would be increased from the current 21  $\mu\text{g}/\text{L}$  to the ACHCSA-recommended 71  $\mu\text{g}/\text{L}$ . It was further agreed between Penske and the ACHCSA that when the new compliance concentration of 71  $\mu\text{g}/\text{L}$  was exceeded in the guard wells (Wells MW-3 or MW-7), the corresponding downgradient compliance wells (Well MW-6 downgradient from Guard Well MW-3, and Well MW-8 downgradient from Guard Well MW-7) would be sampled during the next quarterly sampling event. During the current quarter, Compliance Well MW-8 was sampled at the request of the ACHCSA.

### **FIELD PROCEDURES**

The quarterly groundwater monitoring was performed on November 21, 1996. In accordance with the CZ remedial approach monitoring and sampling plan referenced above, monitoring was completed and groundwater samples were collected from Monitoring Wells MW-1 through MW-5, and MW-7. Compliance Well MW-8 was also monitored and sampled during this quarter at the request of the ACHCSA. The monitoring-well locations are shown in Figure 2.

Prior to sampling, depth-to-water measurements were obtained from all onsite wells. Additionally, the wells were checked for the presence of liquid-phase hydrocarbons. No liquid-phase hydrocarbons with a measurable thickness of greater than 0.01 foot were observed in any of the monitoring wells during this monitoring event. Each well sampled was purged of at least four casing volumes of water. At Penske's request, additional purging was performed to remove dissolved-phase petroleum hydrocarbons from the groundwater. The exact volume of water removed during the extra purging is unknown but exceeded the minimum of four casing volumes. Prior to sampling each well, all equipment that entered the well was washed in a solution of nonphosphate detergent and water and then triple rinsed in deionized water. Purged water was monitored for pH, temperature, and specific conductance. A summary of the field data is presented in Table 1. Following purging, groundwater samples were collected using a new disposable polyethylene bailer for each well. The purged water was removed by a Penske-contracted vacuum truck for proper disposal.



A trip blank, consisting of a sample vial containing laboratory-grade water, accompanied the sample vials from the laboratory to the site and back to the laboratory, and was also submitted for analysis. The purpose of the trip blank is to assess whether any of the compounds analyzed for may have been imparted to the samples by air in the vicinity of the sample bottles during shipping, by the sample container, by the preservative, or by other exogenous sources.

Groundwater samples were put into the appropriate USEPA-approved containers, placed on ice, and transported to Sequoia Analytical (Sequoia), in Walnut Creek, California, along with appropriate chain-of-custody documentation. The water samples were analyzed for total petroleum hydrocarbons (TPH) as gasoline (USEPA Method 8015, modified), for TPH as diesel (USEPA Method 8015, modified), for benzene, toluene, ethylbenzene, and total xylenes (BTEX) (USEPA Method 8020), and for total dissolved solids (TDS) (USEPA Method 160.1).

## RESULTS

### **SHALLOW GROUNDWATER FLOW**

A summary of the depth-to-water data is presented in Table 1. Depth to water ranged from 5.44 feet (Monitoring Well MW-5) to 7.90 feet (Monitoring Well MW-4) below the ground surface. A contour map based on the groundwater elevation data collected November 21, 1996, is presented in Figure 2. The historic shallow groundwater flow is toward the west; however, there are local variations in flow directions at the facility, as indicated by the groundwater contours from the data collected during November 1996.

The difference in the elevation of the groundwater surface between Wells MW-2 and MW-1 is 0.45 feet, producing a hydraulic gradient (slope of the groundwater surface) of approximately 0.0049 foot/foot in a westerly direction.

### **GROUNDWATER ANALYTICAL RESULTS**

A summary of the groundwater analytical results is presented in Table 2. Copies of the certified laboratory reports and chain-of-custody documentation are included in Attachment 1. TPH as gasoline was detected in the groundwater samples from Monitoring Wells MW-1 (65 µg/L), MW-4 (52,000 µg/L), MW-7 (3,800 µg/L), and MW-8 (400 µg/L).



TPH as diesel was detected in the groundwater samples collected from Monitoring Wells MW-1 (1,500 µg/L), MW-2 (1,800 µg/L), MW-4 (40,000 µg/L), MW-5 (610 µg/L), MW-7 (780,000 µg/L), and MW-8 (2,200 µg/L). Benzene was detected in the groundwater samples collected from Monitoring Wells MW-1 (3.3 µg/L), MW-3 (0.82 µg/L), MW-4 (130 µg/L), MW-7 (130 µg/L), and MW-8 (4.6 µg/L). All other BTEX constituent results are presented in Table 2. TPH as gasoline and BTEX were not detected in the trip blank. Analysis of TDS in the groundwater samples detected concentrations ranging from 720 milligrams per liter (mg/L) in Monitoring Well MW-2 to 5,400 mg/L in Monitoring Well MW-4 (Table 2).

## FIELD PARAMETERS

As in all previous quarterly sampling events at this facility, the specific conductance measurements for the groundwater purged during the sampling continue to be high (Table 1). High concentrations of total dissolved solids were detected in the groundwater laboratory samples (Table 2).

## COMPLIANCE WITH CONTAINMENT ZONE APPROACH

Benzene was not detected at concentrations exceeding the new compliance concentration of 71 µg/L in the shallow groundwater samples collected from designated CZ-concept Guard Wells MW-3 (0.82 µg/L) and MW-5 (Non-detect [ND]). The concentration for benzene exceeded the compliance concentration in the groundwater sample collected from Guard Well MW-7 (130 µg/L). At the request of the ACHCSA, Compliance Well MW-8 was sampled during this quarterly event. The benzene concentration detected in the groundwater sample collected from Compliance Well MW-8 (4.6 µg/L) was below the compliance concentration for benzene.

During this quarterly groundwater sampling event, the concentrations of TPH as gasoline decreased in the groundwater samples from Wells MW-1 (from 11,000 µg/L to 65 µg/L), MW-4 (from 70,000 µg/L to 52,000 µg/L), and MW-7 (from 59,000 µg/L to 3,800 µg/L). The concentrations of TPH as diesel decreased in the groundwater samples from Wells MW-1 (from 56,000 µg/L to 1,500 µg/L), MW-3 (from 1,200 µg/L to ND), MW-4 (from 1,300,000 µg/L to 40,000 µg/L), and MW-5 (from 1,000 µg/L to 610 µg/L). The concentrations of TPH as diesel increased in the groundwater samples collected from Wells MW-2 (from 680 µg/L to 1,800 µg/L) and MW-7 (from 640,000 µg/L to 780,000 µg/L). The concentrations of benzene decreased in the groundwater samples collected from Wells MW-1 (from 110 µg/L to 3.3 µg/L) and MW-4 (from 340 µg/L to 130 µg/L). The concentration of

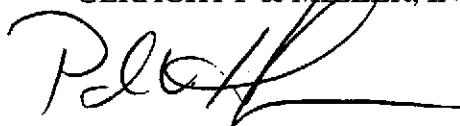


benzene increased in the groundwater sample collected from Well MW-3 (from ND to 0.82 µg/L). The increase or decrease in the concentration of benzene in the groundwater sample collected from Well MW-7 cannot be determined due to the higher detection limit (200 µg/L) utilized during last quarter's sampling event.

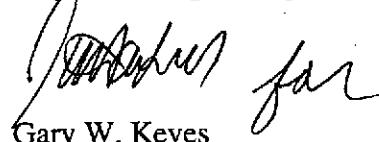
At the request of Penske, additional groundwater purging will be continued during future quarterly events. The additional purging will help remove petroleum hydrocarbons from the groundwater downgradient from the former tank excavation.

Geraghty & Miller appreciates the opportunity to be of service to Penske. If you have any questions regarding this report, please do not hesitate to call us.

Sincerely,  
GERAGHTY & MILLER, INC.



Paul V. Hehn, R.G.  
Project Geologist/Project Manager



Gary W. Keyes  
Principal Engineer/Associate  
Richmond, California Office Manager



Attachments: References

- |              |  |
|--------------|--|
| Table 1      | Summary of Field Sampling, Depth-to-Water, and Casing Elevation Data       |
| Table 2      | Summary of Groundwater Analytical Results – Monthly and Quarterly Sampling |
| Figure 1     | Site Location Map  |
| Figure 2     | Shallow Groundwater Contours - November 1996                               |
| Figure 3     | Benzene Concentrations - November 1996                                     |
| Attachment 1 | Copies of Certified Laboratory Reports and Chain-of-Custody Documentation  |



REFERENCES

- Geraghty & Miller, Inc. November 15, 1990. Results of Initial Soil and Ground-Water Assessment Activities, Former Penske Truck Leasing Co. Facility, 725 Julie Ann Way, Oakland, California.
- \_\_\_\_\_. February 7, 1991. Scope of Work and Project Budget Estimate for Ground-Water Monitoring Activities for the Period February 1991 through February 1992, Former Penske Truck Leasing Co. Facility, 725 Julie Ann Way, Oakland, California.
- \_\_\_\_\_. January 25, 1995. Work Plan and Budget Cost Estimate for Groundwater Sampling Coordination, Quarterly Report Preparation, and Purge Water Disposal Assistance, Former Penske Truck Leasing Co. Facility, 725 Julie Ann Way, Oakland, California.
- \_\_\_\_\_. January 25, 1996. Work Plan and Budget Cost Estimate for Groundwater Sampling Coordination, Quarterly Report Preparation, and Purge Water Disposal Assistance, Former Penske Truck Leasing Co. Facility, 725 Julie Ann Way, Oakland, California.



**Table 1: Summary of Field Sampling, Depth-to-Water, and Casing Elevation Data**

Former Penske Truck Leasing Facility,  
725 Julie Ann Way, Oakland, California.

Well	Date	Depth to Water (a)	Top of Casing Elevation	Top of Water Elevation	Measured Depth of Well (a)	Calculated Purge Volume (b)	Actual Purge Volume (gallons)	Field Measurements			Casing Diameter
		(feet)	(feet)	(feet)	(feet)	(gallons)	(gallons)	pH	Temp. (°F)	SC (µS/cm)	(inches)
MW-1	2-Oct-90	9.76	5.42	-4.34	37.28	58.56	47	6.71	87.5	5,280	4
	28-Feb-91	8.54		-3.12	33.58	65.00	70	6.30	66.0	9,700	
	25-Mar-91	7.35		-1.93	33.50	71.00	75	6.50	64.0	7,200	
	1-May-91	7.91		-2.49	33.70	67.00	51	6.20	65.0	3,500	
	5-Aug-91	8.63		-3.21	NM	51.00	68	NM	63.6	7,690	
	23-Oct-91	9.00		-3.58	33.77	67.00	67	9.40	64.2	7,470	
	6-Jan-92	8.52		-3.10	33.87	65.00	69	9.40	63.2	6,640	
	20-Jul-92	7.94		-2.52	33.95	65.02	66	7.20	65.7	6,410	
	23-Oct-92	8.62		-3.20	33.57	64.80	60	7.50	69.8	1,930	
	4-Feb-93	6.55	5.43 (c)	-1.12	33.84	70.96	71	8.02	65.0	9,520	
	8-Apr-93	6.37		-0.94	33.80	71.32	65	6.60	66.7	>2,000	
	6-Aug-93	7.39		-1.96	33.88	68.67	69	7.22	68.1	5,890	
	28-Oct-93	7.85		-2.42	33.80	67.48	68	7.00	68.3	5,910	
	1-Feb-94	7.25		-1.82	33.99	69.52	70	7.63	63.2	7,610	
	12-Sep-94	6.75		-1.32	33.95	70.72	70	6.90	75.8	7,950	
	23-Nov-94	6.13		-0.70	33.93	72.28	73	6.10	66.2	>2,000	
	21-Feb-95	6.00		-0.57	34.00	55.44	56	7.36	70	890	
	23-May-95	6.04		-0.61	34.00	54.52	56	7.11	66.2	5,920	
	16-Aug-95	6.03		-0.60	34.00	55.94	56	7.27	69.3	5,510	
	21-Nov-95	6.90		-1.47	34.00	52.85	54	7.19	67.8	5,720	
	13-Feb-96	5.18		0.25	33.87	74.59	>75	7	71.2	6,070	
	13-May-96	6.10		-0.67	NM	72.20 (f)	>73	6.5	76.4	14,370	
	28-Aug-96	6.17		-0.74	33.85	71.96	>72	7	85.5	4,820	
	21-Nov-96	6.09		-0.66	33.92	72.43	>73	6.5	77.8	7,890	



**Table 1: Summary of Field Sampling, Depth-to-Water, and Casing Elevation Data**

Former Penske Truck Leasing Facility,  
725 Julie Ann Way, Oakland, California.

Well	Date	Depth to Water (a)	Top of Casing Elevation	Top of Water Elevation	Measured Depth of Well (a)	Calculated Purge Volume (b)	Actual Purge Volume (gallons)	Field Measurements			Casing Diameter
		(feet)	(feet)	(feet)	(feet)	(gallons)	(gallons)	pH	Temp. (°F)	SC (µS/cm)	(inches)
MW-2	2-Oct-90	10.38	6.21	-4.17	32.97	48.07	47	6.92	86.4	5,460	4
	28-Feb-91	9.19		-2.98	29.39	53.00	55	6.60	64.0	9,000	
	25-Mar-91	7.95		-1.74	29.39	57.00	70	6.60	63.0	6,400	
	1-May-91	8.58		-2.37	29.60	55.00	50	6.20	64.0	3,000	
	5-Aug-91	9.33		-3.12	NM	40.00	54	NM	65.1	5,680	
	23-Oct-91	9.57		-3.36	29.35	52.00	53	7.60	65.4	7,970	
	6-Jan-92	9.08		-2.87	29.50	53.00	53	9.18	62.8	6,990	
	20-Jul-92	8.60		-2.39	29.45	54.21	55	6.50	65.2	6,690	
	23-Oct-92	9.33		-3.12	29.18	51.60	55	7.20	69.8	1,900	
	4-Feb-93	7.17	6.20 (c)	-0.97	29.37	57.72	55	8.25	64.0	10,310	
	8-Apr-93	6.95		-0.75	29.32	58.16	60	6.90	66.7	>2,000	
	6-Aug-93	8.05		-1.85	29.33	55.33	66.5	7.26	66.4	6,250	
	28-Oct-93	8.50		-2.30	29.43	54.40	55	7.08	71.2	6,780	
	1-Feb-94	7.87		-1.67	29.54	56.32	57	8.35	62.4	8,250	
	12-Sep-94	7.42		-1.22	29.45	57.24	66	(e)	69.9	8,130	
	22-Nov-94	6.75		-0.55	29.50	59.15	60	6.8	67.6	>2,000	
	21-Feb-95	6.20		0.00	30.00	47.12	48	6.97	64	1,050	
	23-May-95	6.10		0.10	30.00	46.60	48	7.18	70.3	7,710	
	16-Aug-95	6.69		-0.49	30.00	46.62	46	7.42	65	6,790	
	21-Nov-95	7.62		-1.42	30.00	43.64	45	7.30	67.6	7,250	
	13-Feb-96	5.81		0.39	29.47	61.51	>62	7	71.8	2,890	
	13-May-96	6.40		-0.20	NM	59.98 (f)	>60	5.5	74.4	860	
	28-Aug-96	7.11		-0.91	29.42	58.00	>58	6	83.5	590	
	21-Nov-96	6.41		-0.21	29.43	59.85	>60	6.5	76.3	4,160	



**Table 1: Summary of Field Sampling, Depth-to-Water, and Casing Elevation Data**

Former Penske Truck Leasing Facility,  
725 Julie Ann Way, Oakland, California.

Well	Date	Depth to	Top of Casing	Top of Water	Measured Depth	Calculated	Actual Purge	Field Measurements			Casing
		Water (a) (feet)	Elevation (feet)	Elevation (feet)	of Well (a) (feet)	Purge Volume (b) (gallons)	Volume (gallons)	pH	Temp. (°F)	SC (µS/cm)	Diameter (inches)
MW-3	2-Oct-90	10.38	6.10	-4.28	37.08	56.82	54	6.89	88.4	639	4
	28-Feb-91	9.45		-3.35	31.61	58.00	60	6.10	66.0	1,020	
	25-Mar-91	7.98		-1.88	31.60	70.00	75	6.40	65.0	8,200	
	1-May-91	8.58		-2.48	33.70	65.00	50	6.40	67.0	4,100	
	5-Aug-91	9.26		-3.16	NM	50.00	67	NM	64.1	6,190	
	23-Oct-91	9.60		-3.50	33.48	66.00	66	7.30	67.3	8,430	
	6-Jan-92	9.08		-2.98	33.66	64.00	64	9.98	61.7	7,010	
	20-Jul-92	8.59		-2.49	33.76	65.44	66	6.80	66.0	7,540	
	23-Oct-92	9.30		-3.20	33.47	63.40	65	7.50	71.6	1,800	
	4-Feb-93	7.19	6.10 (c)	-1.09	33.65	68.79	65	8.29	64.0	10,290	
	8-Apr-93	6.98		-0.88	33.55	69.08	72	6.90	68.2	>2,000	
	6-Aug-93	8.01		-1.91	33.55	66.40	56 (d)	7.43	67.3	6,490	
	28-Oct-93	8.45		-2.35	33.60	65.40	66	7.02	72.0	6,590	
	1-Feb-94	8.03		-1.93	33.74	66.84	67	8.32	63.3	8,400	
	12-Sep-94	7.39		-1.29	33.70	68.40	70	7.73	68.7	8,030	
	22-Nov-94	6.76		-0.66	33.75	70.17	70	6.60	65.8	>2,000	
	21-Feb-95	6.36		-0.26	33.50	53.74	54	6.99	85.4	880	
	23-May-95	6.48		-0.38	33.50	52.69	54	7.25	68.7	6,060	
	16-Aug-95	6.63		-0.53	33.50	53.74	54	7.53	66.1	5,390	
	21-Nov-95	7.51		-1.41	33.50	50.68	52	7.34	67.4	5,730	
	13-Feb-96	5.91		0.19	33.69	72.24	>73	7	71.5	6,790	
	13-May-96	6.36		-0.26	NM	71.06 (f)	>72	6.5	76.7	14,360	
	28-Aug-96	7.15		-1.05	33.52	68.56	>69	8	79.2	2,930	
	21-Nov-96	6.64		-0.54	33.54	69.94	>70	6.5	77.0	7,500	



**Table 1: Summary of Field Sampling, Depth-to-Water, and Casing Elevation Data**

Former Penske Truck Leasing Facility,  
725 Julie Ann Way, Oakland, California.

Well	Date	Depth to Water (a)	Top of Casing Elevation (feet)	Top of Water Elevation (feet)	Measured Depth of Well (a)	Calculated Purge Volume (b) (gallons)	Actual Purge Volume (gallons)	Field Measurements			Casing Diameter
		(feet)	(feet)	(feet)	(feet)	(gallons)	(gallons)	pH	Temp. (°F)	SC (µS/cm)	(inches)
MW-4	4-Feb-93	6.68	5.18 (c)	-1.50	32.70	64.38	60 (d)	NM	63.5	14,100	4
	8-Apr-93	6.21		-1.03	33.04	69.76	70	6.80	69.1	>2,000	
	6-Aug-93	7.20		-2.02	32.92	66.87	60 (d)	7.44	68.9	13,900	
	28-Oct-93	7.64		-2.46	32.98	65.88	66	6.79	72.1	11,940	
	1-Feb-94	7.26		-2.08	33.31	67.72	68	8.65	63.6	18,110	
	12-Sep-94	6.55		-1.37	33.41	69.84	60 (d)	6.03	77.5	16,710	
	23-Nov-94	6.08		-0.90	33.35	70.90	55 (d)	5.60	66.7	>2,000	
	21-Feb-95	5.36		-0.18	33.50	55.71	48 (d)	6.83	80.2	880	
	23-May-95	5.05		0.13	33.50	55.48	59	6.71	66.5	12,090	
	16-Aug-95	5.63		-0.45	33.50	55.74	33 (d)	7.34	69.8	8,670	
	21-Nov-95	6.63		-1.45	33.50	52.39	34 (d)	7.03	68.2	10,380	
	13-Feb-96	5.14		0.04	33.25	73.08	>74	7	75.3	6,090	
	13-May-96	5.75		-0.57	NM	71.50 (f)	>72	7	76.1	>20,000	
	28-Aug-96	6.04		-0.86	33.20	70.61	>71	7.4	83.9	2,600	
	21-Nov-96	7.90		-2.72	33.17	65.70	>66	6.5	75.9	8,940	



**Table 1: Summary of Field Sampling, Depth-to-Water, and Casing Elevation Data**

Former Penske Truck Leasing Facility,  
725 Julie Ann Way, Oakland, California.

Well	Date	Depth to Water (a)	Top of Casing Elevation (feet)	Top of Water Elevation (feet)	Measured Depth of Well (a)	Calculated Purge Volume (b) (gallons)	Actual Purge Volume (gallons)	Field Measurements			Casing Diameter (inches)
		(feet)	(feet)	(feet)	(feet)	(gallons)	(gallons)	pH	Temp. (°F)	SC (µS/cm)	(inches)
MW-5	4-Feb-93	8.94	4.71 (c)	-4.23	31.40	61.65	40 (d)	8.43	63.2	16,870	4
	8-Apr-93	5.43		-0.72	31.36	67.42	68	7.20	68.0	>2,000	
	6-Aug-93	6.19		-1.48	31.30	65.29	68	7.47	63.6	5,180	
	28-Oct-93	6.86		-2.15	31.43	62.72	48 (d)	7.12	70.6	4,980	
	1-Feb-94	6.48		-1.77	31.43	64.84	49 (d)	(e)	63.1	6,120	
	12-Sep-94	5.89		-1.18	31.43	66.40	39 (d)	(e)	69.4	5,020	
	22-Nov-94	5.66		-0.95	31.44	67.02	58 (d)	6.80	68.4	>2,000	
	21-Feb-95	4.90		-0.19	31.00	51.68	45 (d)	7.30	82.5	880	
	23-May-95	4.86		-0.15	31.00	50.97	52	7.03	66.5	4,320	
	16-Aug-95	4.97		-0.26	31.00	52.06	36 (d)	7.48	67.5	3,900	
	21-Nov-95	5.82		-1.11	31.00	49.10	32 (d)	7.26	67.0	4,110	
	13-Feb-96	4.86		-0.15	31.41	69.03	>69	7	68.3	5,950	
	13-May-96	5.06		-0.35	NM	68.51 (f)	>69	6.5	71.9	9,830	
	28-Aug-96	5.29		-0.58	31.34	67.73	>68	7.9	79.6	2,590	
	21-Nov-96	<b>5.44</b>		<b>-0.73</b>	<b>31.33</b>	<b>67.31</b>	<b>&gt;67</b>	<b>6.5</b>	<b>76.0</b>	<b>7,260</b>	
MW-6	12-Sep-94	6.56	5.37	-1.19	24.85	47.55	41 (d)	(e)	71.2	12,970	4
	22-Nov-94	6.04		-0.67	24.88	48.98	50	6.70	66.4	>2,000	
	21-Feb-95	NS		NS	NS	NS	NS	NS	NS	NS	
	23-May-95	5.32		0.05	24.70	NS	NS	NS	NS	NS	
	16-Aug-95	5.97		-0.60	24.70	NS	NS	NS	NS	NS	
	21-Nov-95	6.78		-1.41	24.70	NS	NS	NS	NS	NS	
	13-Feb-96	5.14		0.23	24.71	NS	NS	NS	NS	NS	
	13-May-96	5.64		-0.27	NM	NS	NS	NS	NS	NS	
	28-Aug-96	6.15		-0.78	24.67	NS	NS	NS	NS	NS	
	21-Nov-96	<b>5.71</b>		<b>-0.34</b>	<b>24.65</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	



**Table 1: Summary of Field Sampling, Depth-to-Water, and Casing Elevation Data**

Former Penske Truck Leasing Facility,  
725 Julie Ann Way, Oakland, California.

Well	Date	Depth to Water (a)	Top of Casing Elevation (feet)	Top of Water Elevation (feet)	Measured Depth of Well (a)	Calculated Purge Volume (b)	Actual Purge Volume (gallons)	Field Measurements			Casing Diameter
		(feet)	(feet)	(feet)	(feet)	(gallons)	(gallons)	pH	Temp. (°F)	SC (µS/cm)	(inches)
MW-7	12-Sep-94	6.16	5.38	-0.78	28.51	58.08	60	6.65	73.5	7,920	4
	23-Nov-94	5.61		-0.23	28.46	59.40	60	6.00	64.6	>2,000	
	21-Feb-95	5.25		0.13	28.30	45.64	46	7.46	69.5	910	
	23-May-95	5.10		0.28	28.30	45.24	46	7.21	65.0	5,740	
	16-Aug-95	5.42		-0.04	28.30	45.76	46	7.36	66.8	5,560	
	21-Nov-95	6.28		-0.90	28.30	42.99	44	7.29	65.9	5,650	
	13-Feb-96	4.64		0.74	28.39	61.75	>62	7	70.1	7,050	
	13-May-96	5.36		0.02	NM	59.88 (f)	>60	6.5	76.6	15,030	
	28-Aug-96	6.20		-0.82	28.30	57.46	>58	7.4	76.4	3,980	
	21-Nov-96	6.12		-0.74	28.30	57.66	>58	6.5	75.2	8,400	
MW-8	12-Sep-94	6.46	5.44	-1.02	25.15	48.56	55	(e)	(e)	11,400	4
	23-Nov-94	6.01		-0.57	25.66	78.60	75	5.60	61.5	>2,000	
	21-Feb-95	NS		NS	NS	NS	NS	NS	NS	NS	
	23-May-95	5.53		-0.09	25.40	NS	NS	NS	NS	NS	
	16-Aug-95	5.68		-0.24	25.40	NS	NS	NS	NS	NS	
	21-Nov-95	6.37		-0.93	25.40	NS	NS	NS	NS	NS	
	13-Feb-96	5.36		0.08	25.54	NS	NS	NS	NS	NS	
	13-May-96	5.62		-0.18	NM	NS	NS	NS	NS	NS	
	28-Aug-96	6.17		-0.73	25.52	NS	NS	NS	NS	NS	
	21-Nov-96	5.74		-0.30	25.45	51.24	>52	6.5	73.6	9,300	

Notes appear on the following page.



**Table 1: Summary of Field Sampling, Depth-to-Water, and Casing Elevation Data**

Former Penske Truck Leasing Facility,  
725 Julie Ann Way, Oakland, California.

Well	Date	Depth to Water (a) (feet)	Top of Casing Elevation (feet)	Top of Water Elevation (feet)	Measured Depth of Well (a) (feet)	Calculated Purge Volume (b) (gallons)	Actual Purge Volume (gallons)	Field Measurements	Casing Diameter
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(a) Measured from top of PVC casing.

(b) Based on four casing volumes.

(c) All well elevations resurveyed to site benchmark on February 10, 1993.

(d) Well went dry during purging.

(e) No reading - instrument malfunction.

(f) Purge volume estimated using well depth-to-bottom measurements from previous quarter.

SC Specific Conductance

(µS/cm) Microsiemens per centimeter

NM Not measured

NS Well not sampled or monitored during this quarterly event.

All elevations are measured relative to a site benchmark (elevation 6.62') based on the City of Oakland datum which is 3 feet higher than mean sea level.



**Table 2: Summary of Groundwater Analytical Results - Monthly and Quarterly Sampling**

Former Penske Truck Leasing Facility,  
725 Julie Ann Way, Oakland, California.

Well	Date	TPH		TPH		Ethyl-benzene (b)		Total Dissolved Solids (c) (mg/L)
		Gasoline (a) ( $\mu\text{g}/\text{L}$ )	Diesel (a) ( $\mu\text{g}/\text{L}$ )	Benzene (b) ( $\mu\text{g}/\text{L}$ )	Toluene (b) ( $\mu\text{g}/\text{L}$ )	Xylenes (b) ( $\mu\text{g}/\text{L}$ )		
MW-1	2-Oct-90	170	2,900	20	18	1.9	5.7	--
	28-Feb-91	260	550	43	1	7	1	--
	25-Mar-91	73	160	10	ND(<0.3)	0.5	ND(<0.3)	--
	1-May-91	ND(<50)	(d)	2.2	ND(<0.3)	ND(<0.3)	ND(<0.3)	--
	5-Aug-91	310	330	22	5.5	9.5	23	--
	23-Oct-91	440	1,800	23	21	6.2	35	--
	6-Jan-92	430	1,600	56	8.4	18	22	--
	20-Jul-92	ND(<50)	25,000	0.4	0.8	1	2.1	--
	23-Oct-92	280	6,500	9.3	13	8.2	15	--
	4-Feb-93	68 (f)	320	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)	--
	8-Apr-93	180	7,800	0.5	2.1	0.8	13	--
	6-Aug-93	740	17,000	75	100	25	130	3,500
	28-Oct-93	140	7,600	4.7	1.9	3.2	5.4	3,500
	1-Feb-94	430	10,000	8.2	1.1	3.5	4.8	3,800
	12-Sep-94	230	22,000	0.7	1.7	2.0	3.7	4,000
	23-Nov-94	ND(<50)	1,700	ND(<0.5)	ND(<0.5)	ND(<0.5)	0.6	3,600
	21-Feb-95	ND(<50)	4,200	ND(<0.5)	ND(<0.5)	0.8	0.6	4,200
	23-May-95	ND(<50)	300	ND(<0.5)	ND(<0.5)	2.1	2.0	3,800
	16-Aug-95	ND(<50)	740	ND(<0.5)	ND(<0.5)	1.4	1.4	3,800
	21-Nov-95	ND(<50)	410	ND(<0.5)	ND(<0.5)	0.7	0.8	4,100
	13-Feb-96	ND(<50)	400	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	3,600
	13-May-96	310 (k)	12,000	13	14	2.4	11	3,500
	28-Aug-96	11,000 (k)	56,000	110	ND(<50)	ND(<50)	ND(<50)	3,300
	21-Nov-96	65 (k)	1,500	3.3	0.51	0.59	0.84	3,400



**Table 2: Summary of Groundwater Analytical Results - Monthly and Quarterly Sampling**

Former Penske Truck Leasing Facility,  
725 Julie Ann Way, Oakland, California.

Well	Date	TPH	TPH	Ethyl-			Total Dissolved Solids (c) (mg/L)	
		Gasoline (a) ( $\mu\text{g}/\text{L}$ )	Diesel (a) ( $\mu\text{g}/\text{L}$ )	Benzene (b) ( $\mu\text{g}/\text{L}$ )	Toluene (b) ( $\mu\text{g}/\text{L}$ )	benzene (b) ( $\mu\text{g}/\text{L}$ )		
MW-2	2-Oct-90	ND(<50)		80	0.4	ND(<0.3)	ND(<0.3)	0.5
	28-Feb-91	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)	--
	25-Mar-91	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)	--
	1-May-91	ND(<50)		(d)	ND(<0.3)	ND(<0.3)	ND(<0.3)	--
	5-Aug-91	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)	--
	23-Oct-91	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)	--
	6-Jan-92	11,000		1200 (e)	ND(<0.3)	83	82	940
	20-Jul-92			73	120	1.7	3.3	9.6
	23-Oct-92	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	0.5	--
	4-Feb-93	ND(<50)		330 (e)	ND(<0.3)	ND(<0.3)	ND(<0.3)	--
	8-Apr-93			150	74 (h)	1	2.1	13.0
	6-Aug-93	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.9)	990
	28-Oct-93	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.9)	1,500
	1-Feb-94	ND(<50)	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	2,000
	12-Sep-94	ND(<50)	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	2,100
	22-Nov-94	ND(<50)		51 (h)	ND(<0.5)	ND(<0.5)	ND(<0.5)	2,400
	21-Feb-95	ND(<50)	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	5,700
	23-May-95	ND(<50)	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	5,100
	16-Aug-95	ND(<50)		190	ND(<0.5)	ND(<0.5)	ND(<0.5)	5,400
	21-Nov-95	ND(<50)		180	ND(<0.5)	ND(<0.5)	ND(<0.5)	5,800
	13-Feb-96	ND(<50)		1,500	ND(<0.5)	ND(<0.5)	8.7	1,100
	13-May-96	ND(<50)		25,000 (l)	ND(<0.5)	ND(<0.5)	ND(<0.5)	150
	28-Aug-96	ND(<50)		680	ND(<0.5)	ND(<0.5)	ND(<0.5)	410
	21-Nov-96	ND(<50)		1,800 (n)	ND(<0.5)	ND(<0.5)	ND(<0.5)	720



**Table 2: Summary of Groundwater Analytical Results - Monthly and Quarterly Sampling**

Former Penske Truck Leasing Facility,  
725 Julie Ann Way, Oakland, California.

Well	Date	TPH		TPH		Ethyl-		Total Dissolved Solids (c) (mg/L)
		Gasoline (a) ( $\mu\text{g}/\text{L}$ )	Diesel (a) ( $\mu\text{g}/\text{L}$ )	Benzene (b) ( $\mu\text{g}/\text{L}$ )	Toluene (b) ( $\mu\text{g}/\text{L}$ )	benzene (b) ( $\mu\text{g}/\text{L}$ )	Xylenes (b) ( $\mu\text{g}/\text{L}$ )	
MW-3	2-Oct-90	ND(<50)		90	28	3.1	0.6	1.5
	28-Feb-91	ND(<50)	ND(<50)		6	ND(<0.3)	ND(<0.3)	ND(<0.3)
	25-Mar-91	ND(<50)	ND(<50)		0.6	ND(<0.3)	ND(<0.3)	ND(<0.3)
	1-May-91	ND(<50)		(d)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)
	5-Aug-91	ND(<50)	ND(<50)		1.7	ND(<0.3)	ND(<0.3)	ND(<0.3)
	23-Oct-91	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)
	6-Jan-92	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)
	20-Jul-92	66	ND(<50)		1.1	2.2	0.7	6.4
	23-Oct-92	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)
	4-Feb-93	270	ND(<100)(g)		9.8	4.6	4.5	8.7
	8-Apr-93	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.9)	ND(<0.9)
	6-Aug-93	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.9)	3,400
	28-Oct-93	ND(<50)	ND(<50)	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.9)	2,700
	1-Feb-94	ND(<50)	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	3,400
	12-Sep-94	ND(<50)	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	3,500
	22-Nov-94	ND(<50)	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	3,400
	21-Feb-95	ND(<50)	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	4,200
	23-May-95	ND(<50)	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	4,100
	16-Aug-95	ND(<50)		240	ND(<0.5)	ND(<0.5)	ND(<0.5)	4,100
	21-Nov-95	ND(<50)	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	4,200
	13-Feb-96	ND(<50)		72	16	ND(<0.5)	ND(<0.5)	0.73
	13-May-96	ND(<50)		250 (m)	1.7	ND(<0.5)	ND(<0.5)	ND(<0.5)
	28-Aug-96	ND(<50)		1,200	ND(<0.5)	ND(<0.5)	ND(<0.5)	2,200
	21-Nov-96	ND(<50)	ND(<50)		0.82	ND(<0.5)	ND(<0.5)	3,500



**Table 2: Summary of Groundwater Analytical Results - Monthly and Quarterly Sampling**

Former Penske Truck Leasing Facility,  
725 Julie Ann Way, Oakland, California.

Well	Date	TPH		Ethyl-		Total Dissolved Solids (c) (mg/L)
		Gasoline (a) (µg/L)	Diesel (a) (µg/L)	Benzene (b) (µg/L)	Toluene (b) (µg/L)	
MW-4	4-Feb-93	58 (f)	450	ND(<0.3)	ND(<0.3)	ND(<0.3)
	8-Apr-93	74	220	19	0.4	ND(<0.9)
	6-Aug-93	95	ND(<50)	68	0.9	ND(<0.9)
	28-Oct-93	160	600	46	0.7	1.2
	1-Feb-94	320	160	290	0.6	6,200
	12-Sep-94	390	95	120	3.9	14.0
	23-Nov-94	100	1,800	9.9	0.7	3.8
	21-Feb-95	91	680	23	ND(<0.5)	7,100
	23-May-95	ND(<50)	270	5.3	ND(<0.5)	ND(<0.5)
	16-Aug-95	ND(<50)	610	4.1	ND(<0.5)	ND(<0.5)
	21-Nov-95	ND(<50)	280	1.0	ND(<0.5)	ND(<0.5)
	13-Feb-96	980 (i)	7,500	570	ND(<0.5)	13
	13-May-96	150 (k)	1,200	45	ND(<1.0)	1.5
	28-Aug-96	70,000 (k)	1,300,000	340	ND(<200)	ND(<200)
	21-Nov-96	52,000 (i)	40,000	130	ND(<100)	ND(<100)



**Table 2: Summary of Groundwater Analytical Results - Monthly and Quarterly Sampling**

Former Penske Truck Leasing Facility,  
725 Julie Ann Way, Oakland, California.

Well	Date	TPH	TPH	Ethyl-			Total Dissolved Solids (c) (mg/L)	
		Gasoline (a) ( $\mu$ g/L)	Diesel (a) ( $\mu$ g/L)	Benzene (b) ( $\mu$ g/L)	Toluene (b) ( $\mu$ g/L)	benzene (b) ( $\mu$ g/L)		
MW-5	4-Feb-93	ND(<50)		240	ND(<0.3)	ND(<0.3)	ND(<0.3)	--
	8-Apr-93	ND(<50)		480	ND(<0.3)	ND(<0.3)	ND(<0.9)	--
	6-Aug-93	ND(<50)		120	0.8	ND(<0.3)	ND(<0.3)	ND(<0.9)
	28-Oct-93	ND(<50)		370	ND(<0.3)	ND(<0.3)	ND(<0.3)	2,800
	1-Feb-94	ND(<50)	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	2,500
	12-Sep-94	ND(<50)	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	2,600
	22-Nov-94	ND(<50)		160	ND(<0.5)	ND(<0.5)	ND(<0.5)	2,600
	21-Feb-95	ND(<50)		170	ND(<0.5)	ND(<0.5)	ND(<0.5)	3,800
	23-May-95	ND(<50)	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	4,100
	16-Aug-95	ND(<50)		590	ND(<0.5)	ND(<0.5)	ND(<0.5)	2,800
	21-Nov-95	ND(<50)		500	ND(<0.5)	ND(<0.5)	ND(<0.5)	2,800
	13-Feb-96	ND(<50)		830	ND(<0.5)	ND(<0.5)	ND(<0.5)	3,000
	13-May-96	ND(<50)		870	0.59	ND(<0.5)	ND(<0.5)	2,700
	28-Aug-96	ND(<50)		1,000	ND(<0.5)	ND(<0.5)	ND(<0.5)	2,000
	21-Nov-96	ND(<50)		610	ND(<0.5)	ND(<0.5)	ND(<0.5)	2,700
MW-6	12-Sep-94	ND(<50)	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	560
	22-Nov-94	ND(<50)	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	1.5	1,800
	21-Feb-95	NS	NS	NS	NS	NS	NS	NS
	23-May-95	NS	NS	NS	NS	NS	NS	NS
	16-Aug-95	NS	NS	NS	NS	NS	NS	NS
	21-Nov-95	NS	NS	NS	NS	NS	NS	NS
	13-Feb-96	NS	NS	NS	NS	NS	NS	NS
	13-May-96	NS	NS	NS	NS	NS	NS	NS
	28-Aug-96	NS	NS	NS	NS	NS	NS	NS
	21-Nov-96	NS	NS	NS	NS	NS	NS	NS



**Table 2: Summary of Groundwater Analytical Results - Monthly and Quarterly Sampling**

Former Penske Truck Leasing Facility,  
725 Julie Ann Way, Oakland, California.

Well	Date	TPH		TPH		Ethyl-		Total Dissolved Solids (c) (mg/L)
		Gasoline (a) ( $\mu$ g/L)	Diesel (a) ( $\mu$ g/L)	Benzene (b) ( $\mu$ g/L)	Toluene (b) ( $\mu$ g/L)	benzene (b) ( $\mu$ g/L)	Xylenes (b) ( $\mu$ g/L)	
MW-7	12-Sep-94	160	620	2.7	1.3	ND(<0.5)	2.1	1,100
	23-Nov-94	ND(<50)	150	2.4	ND(<0.5)	ND(<0.5)	ND(<0.5)	3,600
	21-Feb-95	93	1,400	0.6	0.8	0.8	3.3	4,000
	23-May-95	ND(<50)	360	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	3,400
	16-Aug-95	53	1,100	0.5	ND(<0.5)	ND(<0.5)	0.5	4,000
	21-Nov-95	87	9,100	1.4	ND(<0.5)	1.0	1.5	4,200
	13-Feb-96	1,800,000 (j)	5,000,000	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	3,900
	13-May-96	ND(<50,000)	2,300,000	ND(<500)	ND(<500)	ND(<500)	500 (i)	3,500
	28-Aug-96	59,000 (k)	640,000	ND(<200)	ND(<200)	ND(<200)	600	3,100
	21-Nov-96	3,800 (k)	780,000	130	93	33	64	3,400
MW-8	12-Sep-94	170	850	2.7	0.5	ND(<0.5)	2.0	5,500
	23-Nov-94	ND(<50)	570	1.5	ND(<0.5)	ND(<0.5)	ND(<0.5)	6,300
	21-Feb-95	NS	NS	NS	NS	NS	NS	NS
	23-May-95	NS	NS	NS	NS	NS	NS	NS
	16-Aug-95	NS	NS	NS	NS	NS	NS	NS
	21-Nov-95	NS	NS	NS	NS	NS	NS	NS
	13-Feb-96	NS	NS	NS	NS	NS	NS	NS
	13-May-96	NS	NS	NS	NS	NS	NS	NS
	28-Aug-96	NS	NS	NS	NS	NS	NS	NS
	21-Nov-96	400 (k)	2,200	4.6	37	4.6	68	5,100
Trip Blank	21-Nov-96	ND(<50)	--	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	--



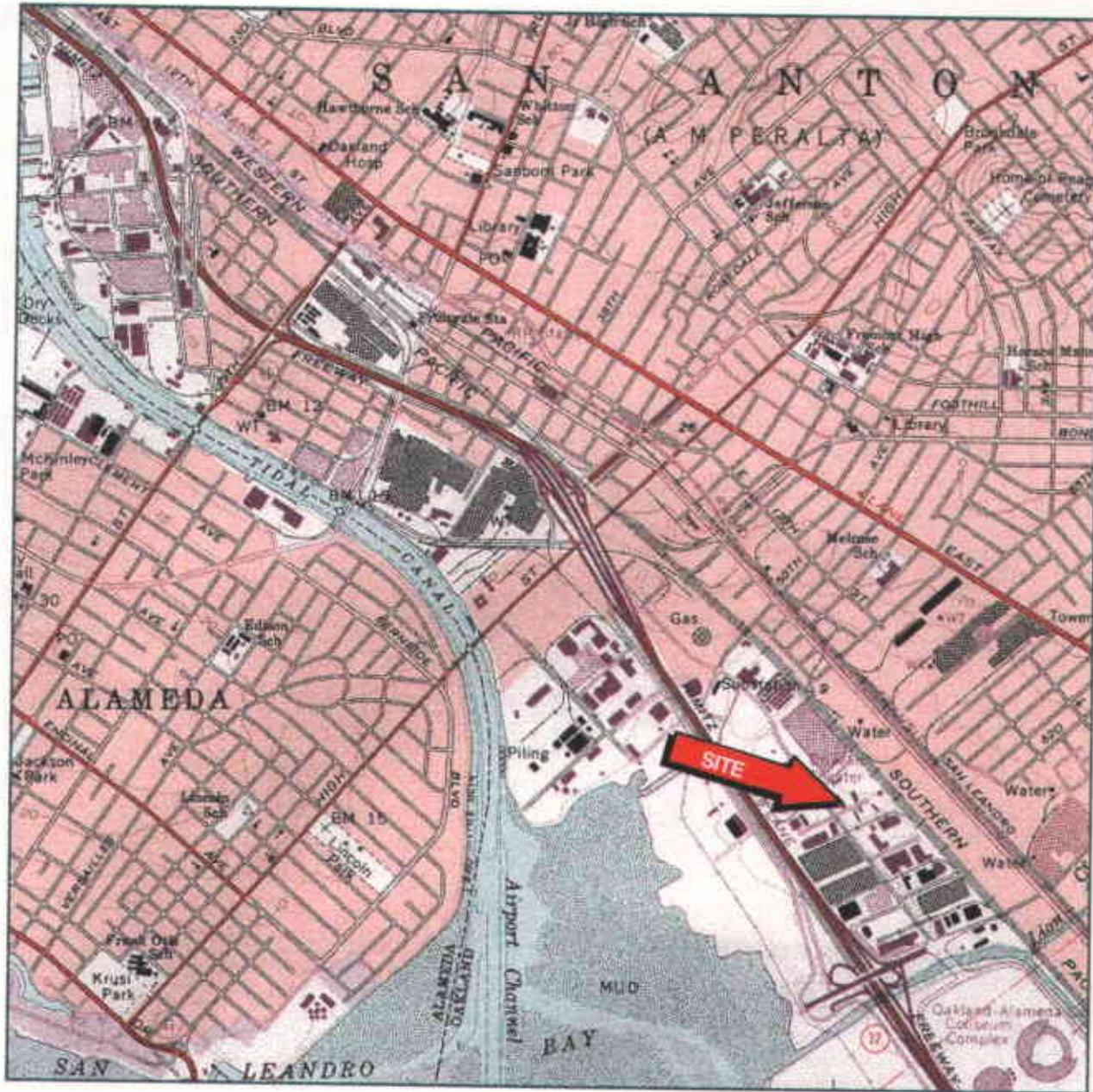
**Table 2: Summary of Groundwater Analytical Results - Monthly and Quarterly Sampling**

Former Penske Truck Leasing Facility,  
725 Julie Ann Way, Oakland, California.

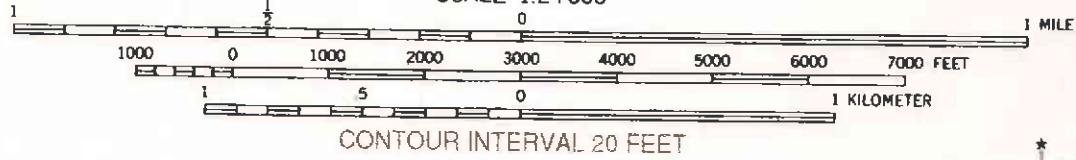
Well	Date	TPH Gasoline (a) ( $\mu\text{g/L}$ )	TPH Diesel (a) ( $\mu\text{g/L}$ )	Benzene (b) ( $\mu\text{g/L}$ )	Toluene (b) ( $\mu\text{g/L}$ )	Ethyl- benzene (b) ( $\mu\text{g/L}$ )	Xylenes (b) ( $\mu\text{g/L}$ )	Total Dissolved Solids (c) ( $\text{mg/L}$ )
(a)	Analyzed by USEPA Method 8015, modified.							
(b)	Analyzed by USEPA Method 8020.							
(c)	Analyzed by USEPA Method 160.1.							
(d)	No results - sample for TPH as diesel not collected.							
(e)	Diesel range concentration reported. A nonstandard diesel pattern was observed in the chromatogram.							
(f)	Does not match typical gasoline pattern. Pattern of peaks observed in the chromatograms is indicative of hydrocarbons heavier than gasoline.							
(g)	Detection limit increased due to insufficient sample amount.							
(h)	Diesel range concentration reported. The chromatogram shows only a single peak in the diesel range.							
(i)	Laboratory reports that chromatogram indicates unidentified carbons >C8.							
(j)	Laboratory reports that chromatogram indicates unidentified carbons >C9.							
(k)	Laboratory reports that chromatogram indicates gasoline and unidentified hydrocarbons >C8.							
(l)	Laboratory reports that chromatogram indicates diesel and unidentified hydrocarbons >C16.							
(m)	Laboratory reports that chromatogram indicates diesel and discrete peaks.							
(n)	Laboratory reports that chromatogram indicates diesel and unidentified hydrocarbons >C20.							
( )	Reported detection limit							
--	Not analyzed							
ND	Not detected							
$\mu\text{g/L}$	Micrograms per liter							
mg/L	Milligrams per liter							
NS	Well not sampled or monitored during this quarterly event.							

Analysis by Sequoia Analytical, Walnut Creek, California.



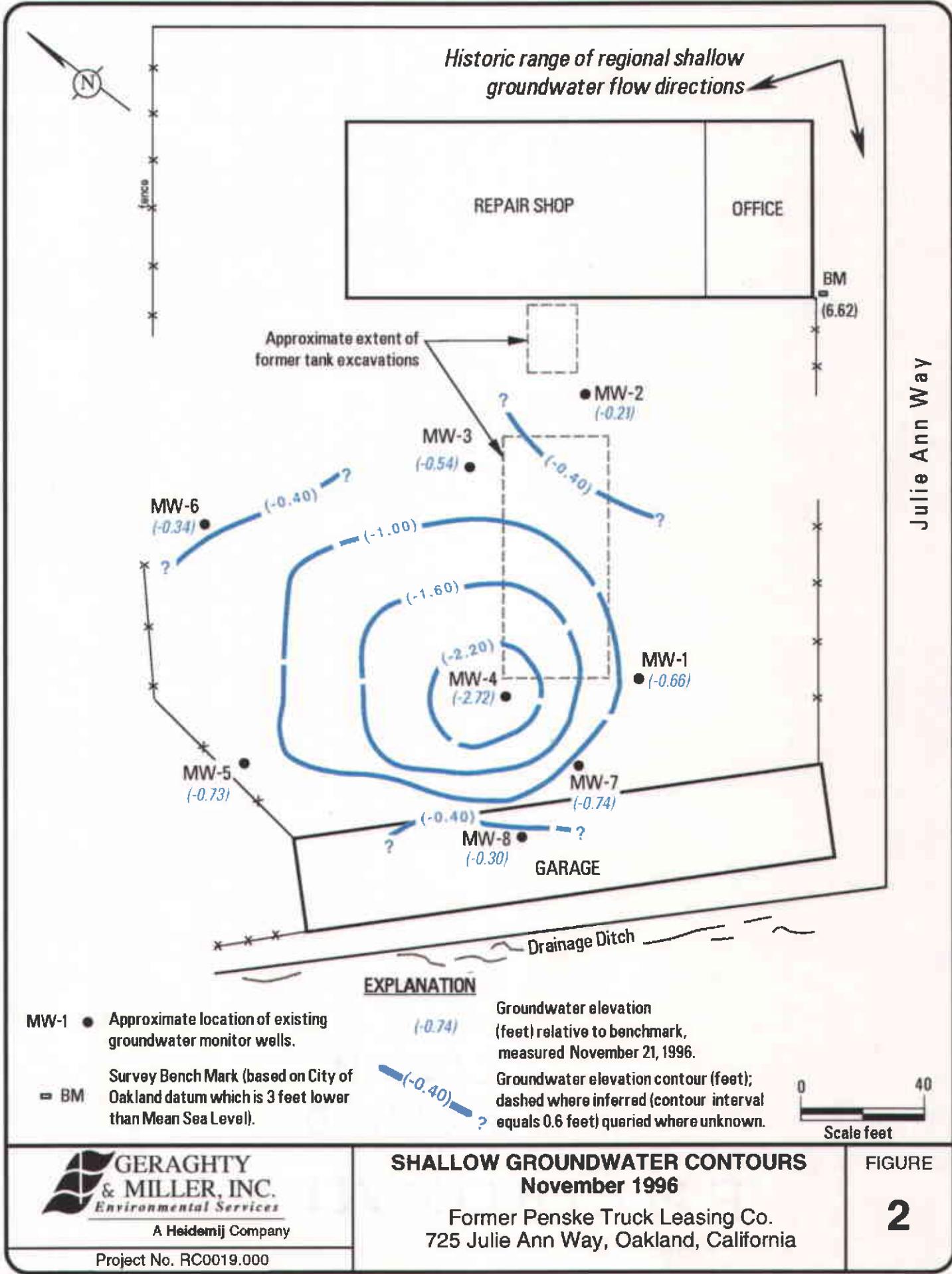


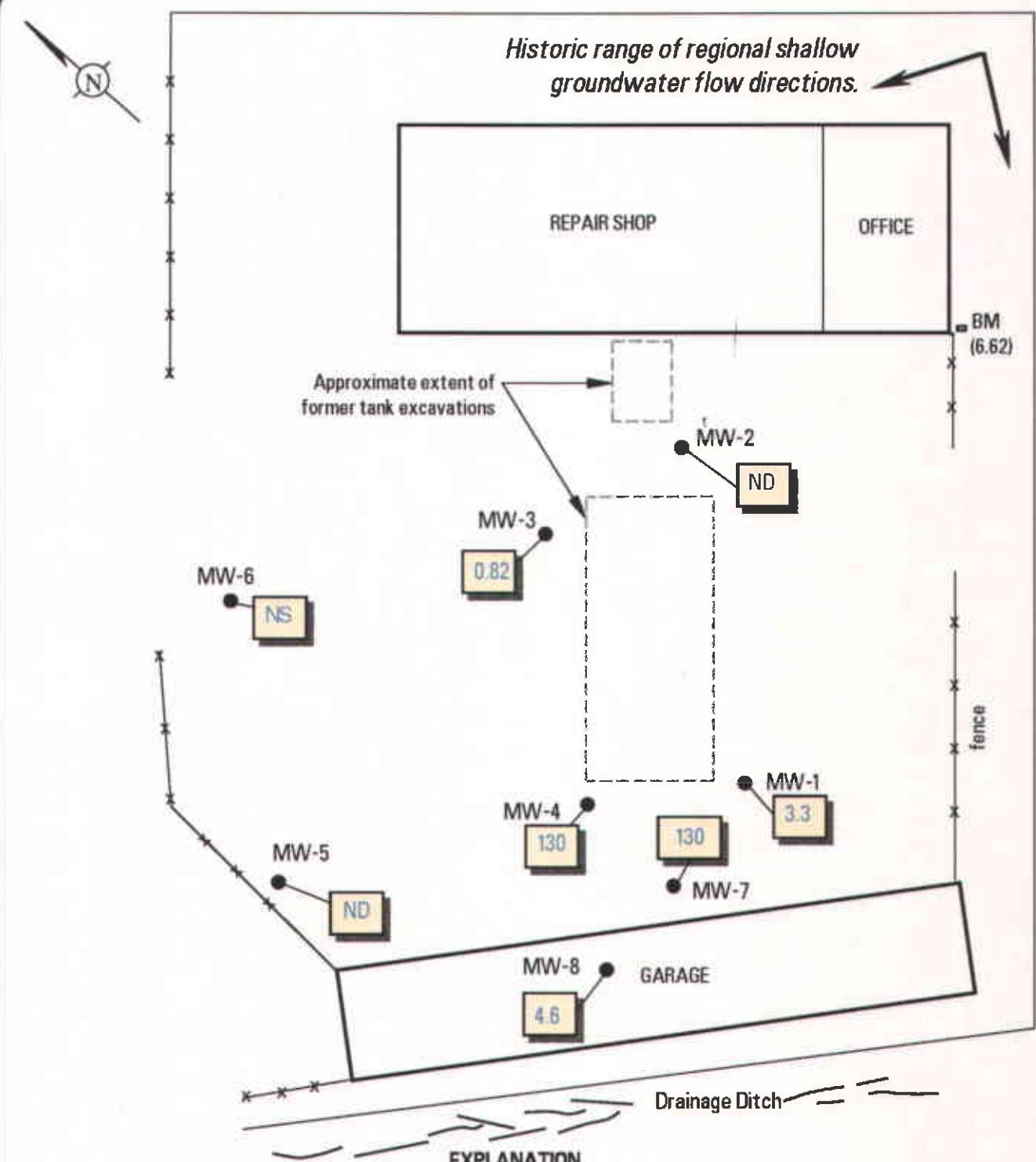
SCALE 1:24 000



Reference: U.S.G.S. 7-minute Quadrangle, Oakland East, California, revised, Photorevised 1980.

UTM GRID AND 1980 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET





**ATTACHMENT 1**

**COPIES OF CERTIFIED ANALYTICAL REPORTS  
AND CHAIN-OF-CUSTODY DOCUMENTATION**



**Sequoia  
Analytical**

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Graghty & Miller, Inc.  
1050 Marina Way South  
Richmond, CA 94804  
Attention: Teresa Payne

Client Project ID:	#RC0019.010	Sampled:	Nov 21, 1996
Sample Matrix:	Water	Received:	Nov 25, 1996
Analysis Method:	EPA 5030/8015 Mod./8020	Reported:	Dec 13, 1996
First Sample #:	611-1512		

QC Batch Number: GC121296 GC120596 GC120596 GC120596 GC120596 GC121296  
802005A 802002A 802002A 802002A 802002A 802002A

### TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 611-1512 MW-1 *	Sample I.D. 611-1513 MW-2	Sample I.D. 611-1514 MW-3	Sample I.D. 611-1515 MW-4	Sample I.D. 611-1516 MW-5	Sample I.D. 611-1517 MW-7 **
Purgeable Hydrocarbons	50	65	N.D.	N.D.	52,000	N.D.	3,800
Benzene	0.50	3.3	N.D.	0.82	130	N.D.	130
Toluene	0.50	0.51	N.D.	N.D.	N.D.	N.D.	93
Methyl Benzene	0.50	0.59	N.D.	N.D.	N.D.	N.D.	33
Total Xylenes	0.50	0.84	N.D.	N.D.	N.D.	N.D.	64
Chromatogram Pattern:		Gasoline & Unidentified Hydrocarbons >C8	--	--	Unidentified Hydrocarbons >C8	--	Gasoline & Unidentified Hydrocarbons >C8

### Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	200	1.0	20
Date Analyzed:	12/12/96	12/5/96	12/5/96	12/5/96	12/5/96	12/12/96
Instrument Identification:	HP-5	HP-2	HP-2	HP-2	HP-2	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	101	90	87	88	87	89

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

SEQUOIA ANALYTICAL, #1271

Please Note:

\* Sample was initially analyzed on 12/5/96 on HP-2 at a multiplication factor of 200. Results were N.D.

\*\* Sample was initially analyzed on 12/5/96 on HP-2 at a multiplication factor of 200. Results were N.D., except Benzene (130).

*Melissa A. Brewer*  
Melissa A. Brewer  
Client Services Representative



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Graighty & Miller, Inc.  
1050 Marina Way South  
Richmond, CA 94804  
Attention: Teresa Payne

Client Project ID: #RC0019.010 Sampled: Nov 21, 1996  
Sample Matrix: Water Received: Nov 25, 1996  
Analysis Method: EPA 5030/8015 Mod./8020 Reported: Dec 13, 1996  
First Sample #: 611-1518

QC Batch Number: GC121296 GC121096

802002A 802009A

## TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D.	Sample I.D.
		611-1518	611-1519
		MW-8 *	TB-LB **

Purgeable Hydrocarbons 50 400 N.D.

Benzene 0.50 4.6 N.D.

Toluene 0.50 37 N.D.

Ethyl Benzene 0.50 4.6 N.D.

Total Xylenes 0.50 68 N.D.

Chromatogram Pattern:  
Gasoline &  
Unidentified  
Hydrocarbons  
>C8

### Quality Control Data

Report Limit Multiplication Factor: 1.0 1.0

Date Analyzed: 12/12/96 12/10/96

Instrument Identification: HP-2 HP-9

Surrogate Recovery, %:  
(QC Limits = 70-130%) 88 92

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

SEQUOIA ANALYTICAL, #1271

*Melissa A. Brewer*

Melissa A. Brewer  
Client Services Representative

Please Note:

\* Sample was initially analyzed on 12/5/96 on HP-2 at a multiplication factor of 10. Results were:  
TPHG (N.D.), Benzene (7.7), Toluene (66), Ethyl Benzene (8.9), Xylenes (91)

\*\* Sample was analyzed after holding time had expired.



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Graghty & Miller, Inc. 1050 Marina Way South Richmond, CA 94804 Attention: Teresa Payne	Client Project ID: Sample Matrix: Analysis Method: First Sample #:	#RC0019.010 Water EPA 3510/8015 Mod. 611-1512	Sampled: Received: Reported:	Nov 21, 1996 Nov 25, 1996 Dec 13, 1996
--	---	--	------------------------------------	--

QC Batch Number: SP112796 SP112796 SP112796 SP112796 SP112796 SP112796  
8015EXA 8015EXA 8015EXA 8015EXA 8015EXA 8015EXA

### TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 611-1512 MW-1	Sample I.D. 611-1513 MW-2	Sample I.D. 611-1514 MW-3	Sample I.D. 611-1515 MW-4	Sample I.D. 611-1516 MW-5	Sample I.D. 611-1517 MW-7
---------	-------------------------	---------------------------------	---------------------------------	---------------------------------	---------------------------------	---------------------------------	---------------------------------

Extractable Hydrocarbons 50 1,500 1,800 N.D. 40,000 610 780,000

Chromatogram Pattern: Diesel Diesel & Unidentified Hydrocarbons >C20 Diesel Diesel Diesel Diesel

### Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	20	1.0	5,000
Date Extracted:	11/27/96	11/27/96	11/27/96	11/27/96	11/27/96	11/27/96
Date Analyzed:	12/2/96	12/2/96	12/2/96	12/2/96	12/2/96	12/3/96
Instrument Identification:	HP-3A	HP-3A	HP-3A	HP-3B	HP-3A	HP-3B

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

SEQUOIA ANALYTICAL, #1271

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Graghty & Miller, Inc.  
1050 Marina Way South  
Richmond, CA 94804  
Attention: Teresa Payne

Client Project ID: #RC0019.010  
Sample Matrix: Water  
Analysis Method: EPA 3510/8015 Mod.  
First Sample #: 611-1518

Sampled: Nov 21, 1996  
Received: Nov 25, 1996  
Reported: Dec 13, 1996

QC Batch Number: SP112796

8015EXA

### TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D.
Extractable Hydrocarbons	50	611-1518 MW-8

Extractable Hydrocarbons 50 2200

Chromatogram Pattern: Diesel

#### Quality Control Data

Report Limit Multiplication Factor: 1.0

Date Extracted: 11/27/96

Date Analyzed: 12/3/96

Instrument Identification: HP-3A

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

SEQUOIA ANALYTICAL, #1271

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Goughtry & Miller, Inc.  
1000 Marina Way South  
Richmond, CA 94804  
Attention: Teresa Payne

Client Project ID: #RC0019.010  
Sample Descript: Water  
Analysis for: Total Dissolved Solids  
First Sample #: 611-1512  
Sampled: Nov 21, 1996  
Received: Nov 25, 1996  
Analyzed: Nov 27, 1996  
Reported: Dec 13, 1996

**LABORATORY ANALYSIS FOR: Total Dissolved Solids**

Sample Number	Sample Description	Detection Limit mg/L	Sample Result mg/L	QC Batch Number	Instrument ID
611-1512	MW-1	1.0	3,400	IN112796160100A	Manual
611-1513	MW-2	1.0	720	IN112796160100A	Manual
611-1514	MW-3	1.0	3,500	IN112796160100A	Manual
611-1515	MW-4	1.0	5,400	IN112796160100A	Manual
611-1516	MW-5	1.0	2,700	IN112796160100A	Manual
611-1517	MW-7	1.0	3,400	IN112796160100A	Manual
611-1518	MW-8	1.0	5,100	IN112796160100B	Manual

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

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Graghty & Miller, Inc.  
 1050 Marina Way South  
 Richmond, CA 94804  
 Attention: Teresa Payne

Client Project ID: #RC0019.010  
 Matrix: Liquid

QC Sample Group: 6111512-519

Reported: Dec 13, 1996

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel	Total Dis- solved Solids	Total Dis- solved Solids
QC Batch#:	GC120596	GC120596	GC120596	GC120596	SP112796	IN112796	IN112796
	802002A	802002A	802002A	802002A	8015EXA	160100A	160100B
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015	EPA 160.1	EPA 160.1
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 3510	EPA 160.1	EPA 160.1

Analyst:	D. Newcomb	D. Newcomb	D. Newcomb	D. Newcomb	D. Sharma	K. Anderson	K. Anderson
MS/MSD #:	BLK120596	BLK120596	BLK120596	BLK120596	BLK112796	6111507	6111522
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.	4000 mg/L	6900 mg/L
Prepared Date:	12/5/96	12/5/96	12/5/96	12/5/96	11/27/96	11/27/96	11/27/96
Analyzed Date:	12/5/96	12/5/96	12/5/96	12/5/96	12/2/96	11/27/96	11/27/96
Instrument I.D. #:	HP-2	HP-2	HP-2	HP-2	HP-3A	Manual	Manual
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	300 µg/L	1000 mg/L	1000 mg/L
Result:	19	23	22	65	300	5000	7700
% Recovery:	95	115	110	108	100	100	80
Dup. Result:	20	24	23	68	300	4900	7900
MSD % Recov.:	100	120	115	113	100	90	100
RPD:	5.1	4.3	4.4	4.5	0.0	2.0	2.6
RPD Limit:	0-25	0-25	0-25	0-25	0-50	0-20	0-20

LCS #:	2LCS120596	2LCS120596	2LCS120596	2LCS120596	LCS112796	LCS112796	LCS112796
Prepared Date:	12/5/96	12/5/96	12/5/96	12/5/96	11/27/96	11/27/96	11/27/96
Analyzed Date:	12/5/96	12/5/96	12/5/96	12/5/96	12/2/96	11/27/96	11/27/96
Instrument I.D. #:	HP-2	HP-2	HP-2	HP-2	HP-3A	Manual	Manual
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	300 µg/L	500 mg/L	500 mg/L
LCS Result:	18	21	20	59	350	480	510
LCS % Recov.:	90	105	100	98	117	96	102

MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130	60-140	80-120	80-120
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Please Note:

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

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

SEQUOIA ANALYTICAL, #1271

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Client Services Representative



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Gleaghty & Miller, Inc.  
1050 Marina Way South  
Richmond, CA 94804  
Attention: Teresa Payne

Client Project ID: #RC0019.010  
Matrix: Liquid

QC Sample Group: 6111512-519

Reported: Dec 18, 1996

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC121096 802009A	GC121096 802009A	GC121096 802009A	GC121096 802009A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Rep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	D. Newcomb	D. Newcomb	D. Newcomb	D. Newcomb
MS/MSD #:	6111511	6111511	6111511	6111511
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	12/10/96	12/10/96	12/10/96	12/10/96
Analyzed Date:	12/10/96	12/10/96	12/10/96	12/10/96
Instrument I.D. #:	HP-9	HP-9	HP-9	HP-9
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Result:	21	23	23	76
MS % Recovery:	105	115	115	127
Dup. Result:	21	23	23	75
MSD % Recov.:	105	115	115	125
RPD:	0.0	0.0	0.0	1.3
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	9LCS121096	9LCS121096	9LCS121096	9LCS121096
Prepared Date:	12/10/96	12/10/96	12/10/96	12/10/96
Analyzed Date:	12/10/96	12/10/96	12/10/96	12/10/96
Instrument I.D. #:	HP-9	HP-9	HP-9	HP-9
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	22	23	23	75
MS % Recov.:	110	115	115	125

MS/MSD LCS Control Limits	70-130	70-130	70-180	70-130
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Please Note:

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

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

SEQUOIA ANALYTICAL, #1271

*Melissa A. Brewer*

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Geoghty & Miller, Inc.  
1050 Marina Way South  
Richmond, CA 94804  
Attention: Teresa Payne

Client Project ID: #RC0019.010  
Matrix: Liquid

QC Sample Group: 6111512-519

Reported: Dec 18, 1996

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl	Xylenes
QC Batch#:	GC121296	GC121296	GC121296	GC121296
	802002A	802002A	802002A	802002A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	D. Newcomb	D. Newcomb	D. Newcomb	D. Newcomb
MS/MSD #:	6120637	6120637	6120637	6120637
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	12/12/96	12/12/96	12/12/96	12/12/96
Analyzed Date:	12/12/96	12/12/96	12/12/96	12/12/96
Instrument I.D. #:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Result:	19	24	24	70
MS % Recovery:	95	120	120	117
Dup. Result:	19	23	23	69
MSD % Recov.:	95	115	115	115
RPD:	0.0	4.3	4.3	1.4
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	2LCS121296	2LCS121296	2LCS121296	2LCS121296
Prepared Date:	12/12/96	12/12/96	12/12/96	12/12/96
Analyzed Date:	12/12/96	12/12/96	12/12/96	12/12/96
Instrument I.D. #:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	19	23	22	67
MS % Recov.:	95	115	110	112

MS/MSD	70-130	70-130	70-130	70-130
LCS Control Limits				

Please Note:

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

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

SEQUOIA ANALYTICAL, #1271

*Melissa A. Brewer*

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Client Services Representative



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

Geoghty & Miller, Inc.  
 1050 Marina Way South  
 Richmond, CA 94804  
 Attention: Teresa Payne

Client Project ID: #RC0019.010  
 Matrix: Liquid

QC Sample Group: 6111512-519

Reported: Dec 18, 1996

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC121296 802005A	GC121296 802005A	GC121296 802005A	GC121296 802005A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Rep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	D. Newcomb	D. Newcomb	D. Newcomb	D. Newcomb
MS/MSD #:	6120332	6120332	6120332	6120332
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	12/12/96	12/12/96	12/12/96	12/12/96
Analyzed Date:	12/12/96	12/12/96	12/12/96	12/12/96
Instrument I.D. #:	HP-5	HP-5	HP-5	HP-5
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Result:	18	18	21	60
MS % Recovery:	90	90	105	100
Dup. Result:	19	18	21	60
MSD % Recov.:	95	90	105	100
RPD:	5.4	0.0	0.0	0.0
RPD Limit:	0.25	0.25	0.25	0.25

LCS #:	5LCS121296	5LCS121296	5LCS121296	5LCS121296
Prepared Date:	12/12/96	12/12/96	12/12/96	12/12/96
Analyzed Date:	12/12/96	12/12/96	12/12/96	12/12/96
Instrument I.D. #:	HP-5	HP-5	HP-5	HP-5
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	19	19	21	60
LCS % Recov.:	95	95	105	100

MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130
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Please Note:

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

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

SEQUOIA ANALYTICAL, #1271

*Melissa A. Brewer*

Melissa A. Brewer  
 Client Services Representative

Project Number RC0019.01D  
Project Location PENSKE / OAKLAND  
Laboratory SEQUIDIA  
Sampler(s)/Affiliation G. Crowley  
G&M

Sample Code: L = Liquid; S = Solid; A = Air

Total No. of Bottles/  
Containers

36

Relinquished by: <i>R. Murphy</i>	Organization: <i>GVM</i>	Date <i>11/21/96</i> Time <i>1610</i>	Seal Intact? Yes No N/A
Received by: <i>J. Murphy</i>	Organization: <i>SAC</i>	Date <i>11/25/96</i> Time <i>1641</i>	
Relinquished by: <i>J. Murphy</i>	Organization: <i>SAC</i>	Date <i>11/25/96</i> Time <i>1745</i>	Seal Intact? Yes No N/A
Received by: <i>J. Murphy</i>	Organization: <i>SAC</i>	Date <i>11/25/96</i> Time <i>1745</i>	

**Special Instructions/Remarks:**

Delivery Method:  In Person

Common Carrier

Lab Courier

Other