

ENVIRONMENTAL  
PROTECTION  
96 OCT 22 PM 2

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

October 1996

Prepared by

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

96 OCT 22 PM 2: 27

October 21, 1996  
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

# 554

SUBJECT: Results of Quarterly Groundwater Monitoring, August 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 August 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.

As we discussed during our telephone conversation during March 1996, Penske has requested that Geraghty & Miller complete additional purging on Wells MW-1, MW-4 and MW-7 to try to remove additional diesel concentrations in the groundwater near these wells. This additional purging has resulted in higher concentrations for TPH as diesel being sampled during this current sampling event. However, even with the higher diesel concentrations, the benzene concentrations in the trigger wells remain at non-detect levels.



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.





October 21, 1996

Via Fax 510-233-3204

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

October 1, 1996  
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  
August 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 August 28, 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.

### FIELD PROCEDURES

The quarterly groundwater monitoring was performed on August 28, 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. The monitoring-well locations are shown in Figure 2.

Prior to sampling, depth-to-water measurements were obtained from all wells onsite. 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 help remove dissolved-phase petroleum hydrocarbons from the groundwater. The exact volume of water removed during the extra purging is unknown but exceeded the minimum 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 5.29 feet (Monitoring Well MW-5) to 7.15 feet (Monitoring Well MW-3) below the ground surface. A contour map based on the groundwater elevation data collected August 28, 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 August 1996.

The difference in the elevation of the groundwater surface between Wells MW-2 and MW-1 is 0.17 feet, producing a hydraulic gradient (slope of the groundwater surface) of approximately 0.0018 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 (11,000 micrograms per liter [ $\mu\text{g/L}$ ]), MW-4 (70,000  $\mu\text{g/L}$ ), and MW-7 (59,000  $\mu\text{g/L}$ ). TPH as diesel was detected in the groundwater samples collected from Monitoring Wells MW-1 (56,000  $\mu\text{g/L}$ ), MW-2 (680  $\mu\text{g/L}$ ), MW-3 (1,200  $\mu\text{g/L}$ ), MW-4 (1,300,000  $\mu\text{g/L}$ ), MW-5 (1,000  $\mu\text{g/L}$ ), and MW-7 (640,000  $\mu\text{g/L}$ ). Benzene was detected in the groundwater samples collected from Monitoring Wells MW-1 (110  $\mu\text{g/L}$ ), and MW-4 (340  $\mu\text{g/L}$ ). 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 410 milligrams per liter (mg/L) in Monitoring Well MW-2 to 3,300 mg/L in Monitoring Well MW-1 (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

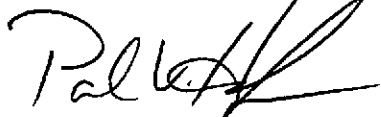
Concentrations for benzene were below the detection limit in shallow groundwater samples collected from the designated CZ-concept guard wells MW-3, MW-5, and MW-7 during the August 1996 quarterly sampling event. Concentrations of benzene were reported in Wells MW-1 (110  $\mu\text{g/L}$ ) and MW-4 (340  $\mu\text{g/L}$ ) which are not CZ-concept guard wells. Generally, higher concentrations for TPH as gasoline, TPH as diesel, and benzene were detected in some wells this quarter due to the extra purging activity requested by Penske. It is thought that this extra purging will help in the long term to remove additional remaining petroleum hydrocarbons from the groundwater downgradient from the former tank excavation, and thereby reduce the source of groundwater impacts.





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.

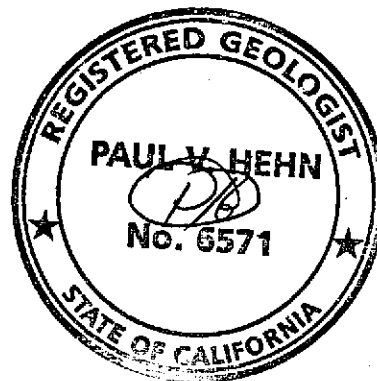
Sincerely,  
GERAGHTY & MILLER, INC.



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 (August 1996)                                 |
| Figure 3     | Benzene Concentrations (August 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	Top of Casing	Top of Water	Measured Depth	Calculated	Actual Purge	Field Measurements			Casing
		Water (a)	Elevation	Elevation	of Well (a)	Purge Volume (b)	Volume	pH	Temp. (°F)	SC (µS/cm)	Diameter (inches)
		(feet)	(feet)	(feet)	(feet)	(gallons)	(gallons)				
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	



**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 Diameter (inches)
		Water (a) (feet)	Elevation (feet)	Elevation (feet)	of Well (a) (feet)	Purge Volume (b) (gallons)	Volume (gallons)	pH	Temp. (°F)	SC (µS/cm)	
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	



**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)	Elevation	Elevation	of Well (a)	Purge Volume (b)	Volume	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		



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)	Elevation	Elevation	of Well (a)	Purge Volume (b)	Volume	pH	Temp. (°F)	SC (µS/cm)	Diameter (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		
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		



**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 Elevation (feet)	Measured Depth of Well (a) (feet)	Calculated Purge Volume (b) (gallons)	Actual Purge Volume (gallons)	Field Measurements			Casing Diameter (inches)
		Water (a) (feet)	Elevation (feet)					pH	Temp. (°F)	SC (µS/cm)	
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	
	<b>28-Aug-96</b>	<b>6.15</b>		<b>-0.78</b>	<b>24.67</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	
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	
	<b>28-Aug-96</b>	<b>6.20</b>		<b>-0.82</b>	<b>28.30</b>	<b>57.46</b>	<b>&gt;58</b>	<b>7.4</b>	<b>76.4</b>	<b>3,980</b>	
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	
	<b>28-Aug-96</b>	<b>6.17</b>		<b>-0.73</b>	<b>25.52</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	

Notes appear on the following page.

Project No. RC0019.010



**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 pH	Temp. (°F)	SC (µS/cm)	Casing Diameter (inches)
------	------	------------------------------	-----------------------------------	----------------------------------	--------------------------------------	--	----------------------------------	--------------------------	------------	------------	-----------------------------

- (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	Benzene (b)	Toluene (b)	Ethyl- benzene (b)	Xylenes (b)	Total Dissolved Solids (c)
		Gasoline (a)	Diesel (a)					
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/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



**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		Benzene (b) (µg/L)	Toluene (b) (µg/L)	Ethyl- benzene (b) (µg/L)	Xylenes (b) (µg/L)	Total Dissolved Solids (c) (mg/L)
		Gasoline (a) (µg/L)	Diesel (a) (µg/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)	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	1.1	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)	ND(<0.3)	--
	8-Apr-93	150	74 (h)	1	2.1	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)	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)	ND(<0.5)	5,400
	21-Nov-95	ND(<50)	180	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	5,800
	13-Feb-96	ND(<50)	1,500	ND(<0.5)	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)	ND(<0.5)	150
	28-Aug-96	ND(<50)	680	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	410



**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	Benzene (b) (µg/L)	Toluene (b) (µg/L)	Ethyl- benzene (b) (µg/L)	Xylenes (b) (µg/L)	Total Dissolved Solids (c) (mg/L)
		Gasoline (a) (µg/L)	Diesel (a) (µg/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)	--
	6-Jan-92	ND(<50)	ND(<50)	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)	--
	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)	--
	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)	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	3,400
	13-May-96	ND(<50)	250 (m)	1.7	ND(<0.5)	ND(<0.5)	ND(<0.5)	3,700
	28-Aug-96	ND(<50)	1,200	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	2,200



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	Benzene (b) (µg/L)	Toluene (b) (µg/L)	Ethyl-	Xylenes (b) (µg/L)	Total Dissolved
		Gasoline (a) (µg/L)	Diesel (a) (µg/L)			benzene (b) (µg/L)		Solids (c) (mg/L)
MW-4	4-Feb-93	58 (f)	450	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)	--
	8-Apr-93	74	220	19	0.4	ND(<0.3)	ND(<0.9)	--
	6-Aug-93	95	ND(<50)	68	0.9	1.1	ND(<0.9)	5,800
	28-Oct-93	160	600	46	0.7	1.6	1.2	5,200
	1-Feb-94	320	160	290	0.6	6.7	3.2	6,200
	12-Sep-94	390	95	120	3.9	14.0	14.0	6,000
	23-Nov-94	100	1,800	9.9	0.7	1.6	3.8	5,600
	21-Feb-95	91	680	23	ND(<0.5)	1.0	ND(<0.5)	7,100
	23-May-95	ND(<50)	270	5.3	ND(<0.5)	ND(<0.5)	ND(<0.5)	8,300
	16-Aug-95	ND(<50)	610	4.1	ND(<0.5)	ND(<0.5)	ND(<0.5)	7,100
	21-Nov-95	ND(<50)	280	1.0	ND(<0.5)	ND(<0.5)	ND(<0.5)	9,800
	13-Feb-96	980 (i)	7,500	570	ND(<0.5)	9.2	13	3,600
	13-May-96	150 (k)	1,200	45	ND(<1.0)	ND(<1.0)	1.5	7,900
	28-Aug-96	70,000 (k)	1,300,000	340	ND(<200)	ND(<200)	ND(<200)	1,800
MW-5	4-Feb-93	ND(<50)	240	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.3)	--
	8-Apr-93	ND(<50)	480	ND(<0.3)	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)	2,800
	28-Oct-93	ND(<50)	370	ND(<0.3)	ND(<0.3)	ND(<0.3)	ND(<0.9)	2,400
	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)	ND(<0.5)	2,600
	21-Feb-95	ND(<50)	170	ND(<0.5)	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)	ND(<0.5)	2,800
	21-Nov-95	ND(<50)	500	ND(<0.5)	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)	ND(<0.5)	3,000
	13-May-96	ND(<50)	870	0.59	ND(<0.5)	ND(<0.5)	ND(<0.5)	2,700
28-Aug-96	ND(<50)	1,000	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	2,000	



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	Benzene (b)	Toluene (b)	Ethyl-	Xylenes (b)	Total Dissolved
		Gasoline (a)	Diesel (a)			benzene (b)		Solids (c)
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
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
	<b>28-Aug-96</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>
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
	<b>28-Aug-96</b>	<b>59,000 (k)</b>	<b>640,000</b>	<b>ND(&lt;200)</b>	<b>ND(&lt;200)</b>	<b>ND(&lt;200)</b>	<b>600</b>	<b>3,100</b>
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
	<b>28-Aug-96</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>



**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	Benzene (b)	Toluene (b)	Ethyl- benzene (b)	Xylenes (b)	Total Dissolved Solids (c)
		Gasoline (a)	Diesel (a)					
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Trip Blank	28-Aug-96	ND(<50)	--	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	--

(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 gasoline and unidentified hydrocarbons >C8.

(l) Laboratory reports diesel and unidentified hydrocarbons >C16.

(m) Laboratory reports diesel and discrete peaks.

( ) Reported detection limit

-- Not analyzed

ND Not detected

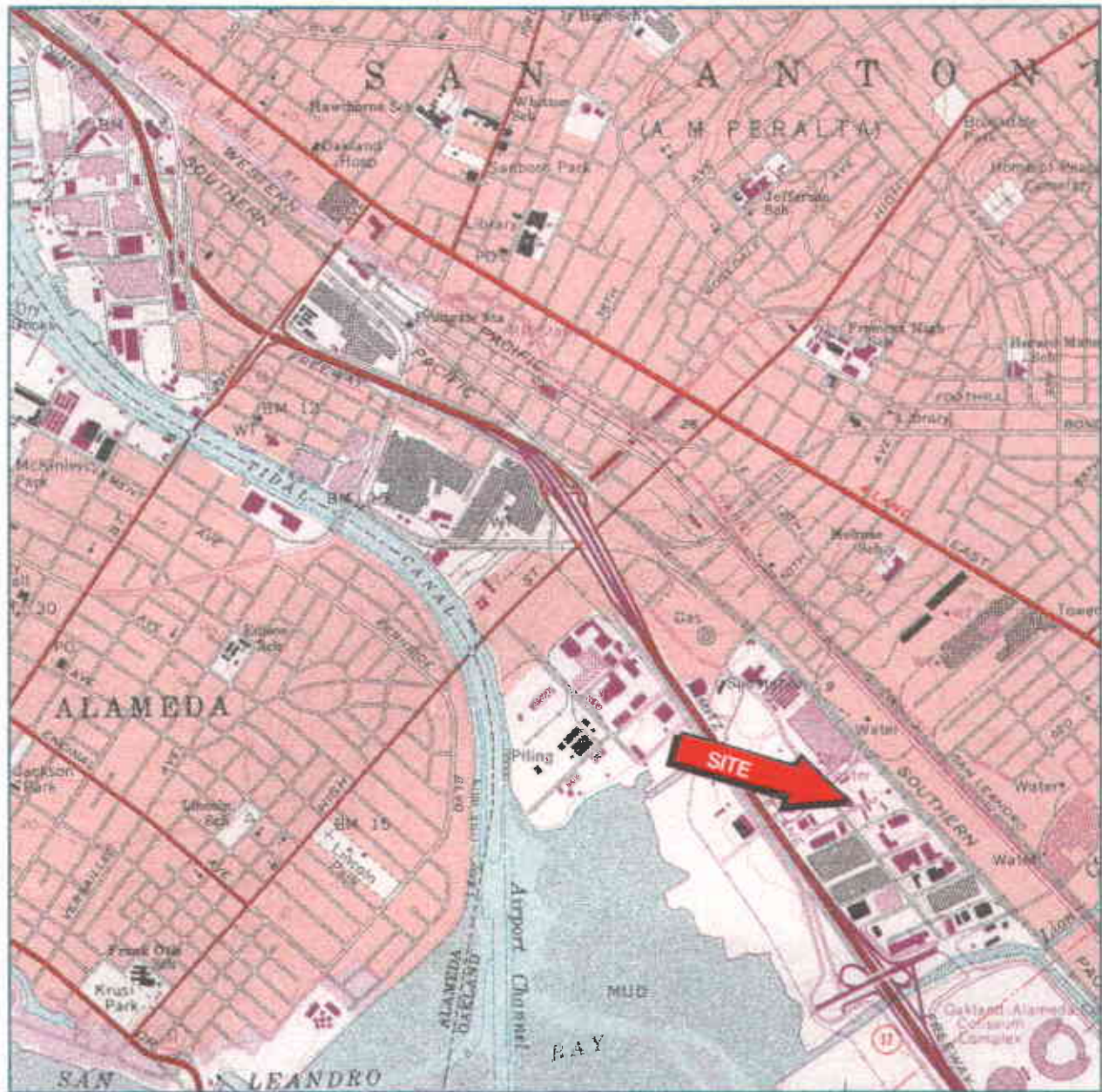
µg/L Micrograms per liter

mg/L Milligrams per liter

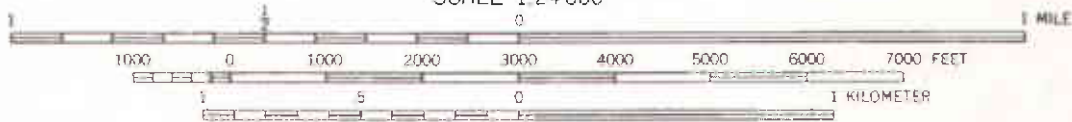
NS Well not sampled or monitored during this quarterly event.

Analysis by Sequoia Analytical, Walnut Creek, California.





SCALE 1:24 000



CONTOUR INTERVAL 20 FEET



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

**GERAGHTY & MILLER, INC.**  
*Environmental Services*  
 A Heidemij Company

Project No. RC0019.000

**SITE LOCATION MAP**  
 Former Penske Truck Leasing Co. Facility  
 725 Julie Ann Way  
 Oakland, California

FIGURE

**1**



Historic range of regional shallow groundwater flow directions

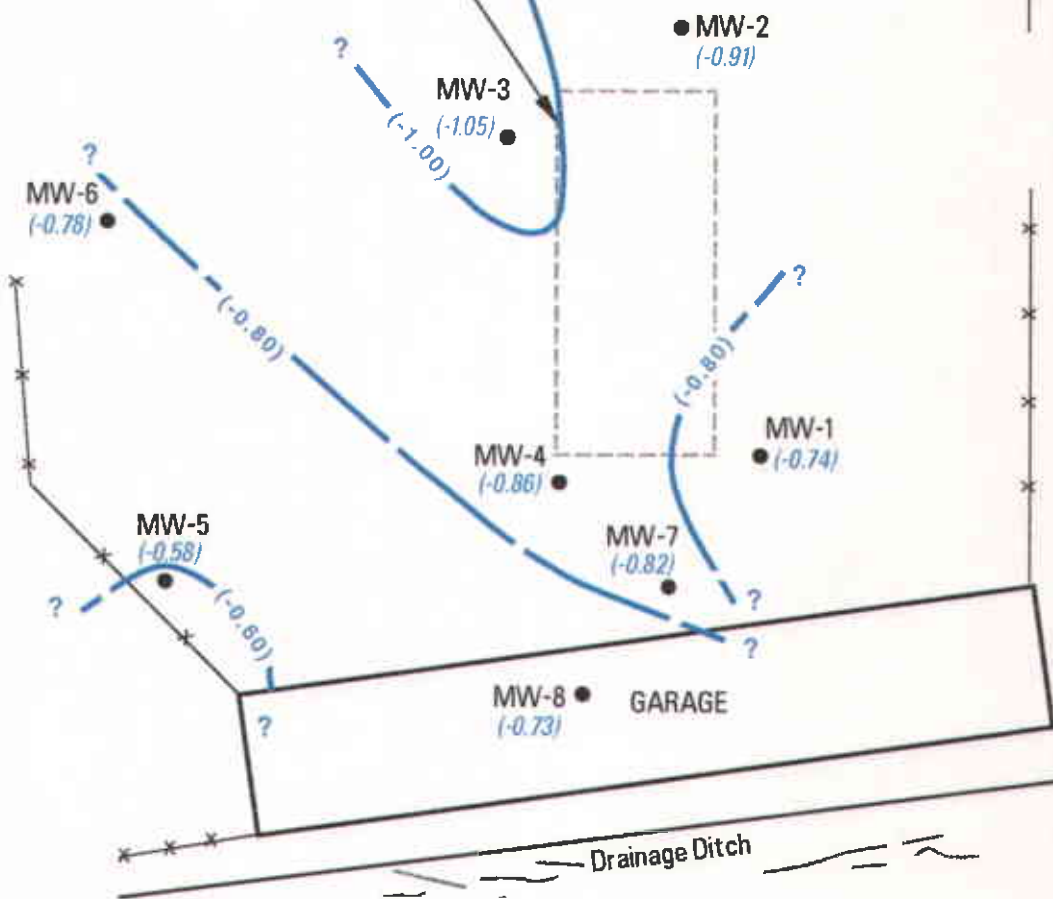


fence



BM  
(6.62)

Approximate extent of former tank excavations



Julie Ann Way

**EXPLANATION**

- MW-1 ● Approximate location of existing groundwater monitor wells.
- BM Survey Bench Mark (based on City of Oakland datum which is 3 feet lower than Mean Sea Level).

(-0.74) Groundwater elevation (feet) relative to benchmark, measured August 28, 1996.

(-0.60) Groundwater elevation contour (feet); dashed where inferred (contour interval equals 0.2 feet) queried where unknown.



**GERAGHTY & MILLER, INC.**  
Environmental Services  
A Heidemij Company

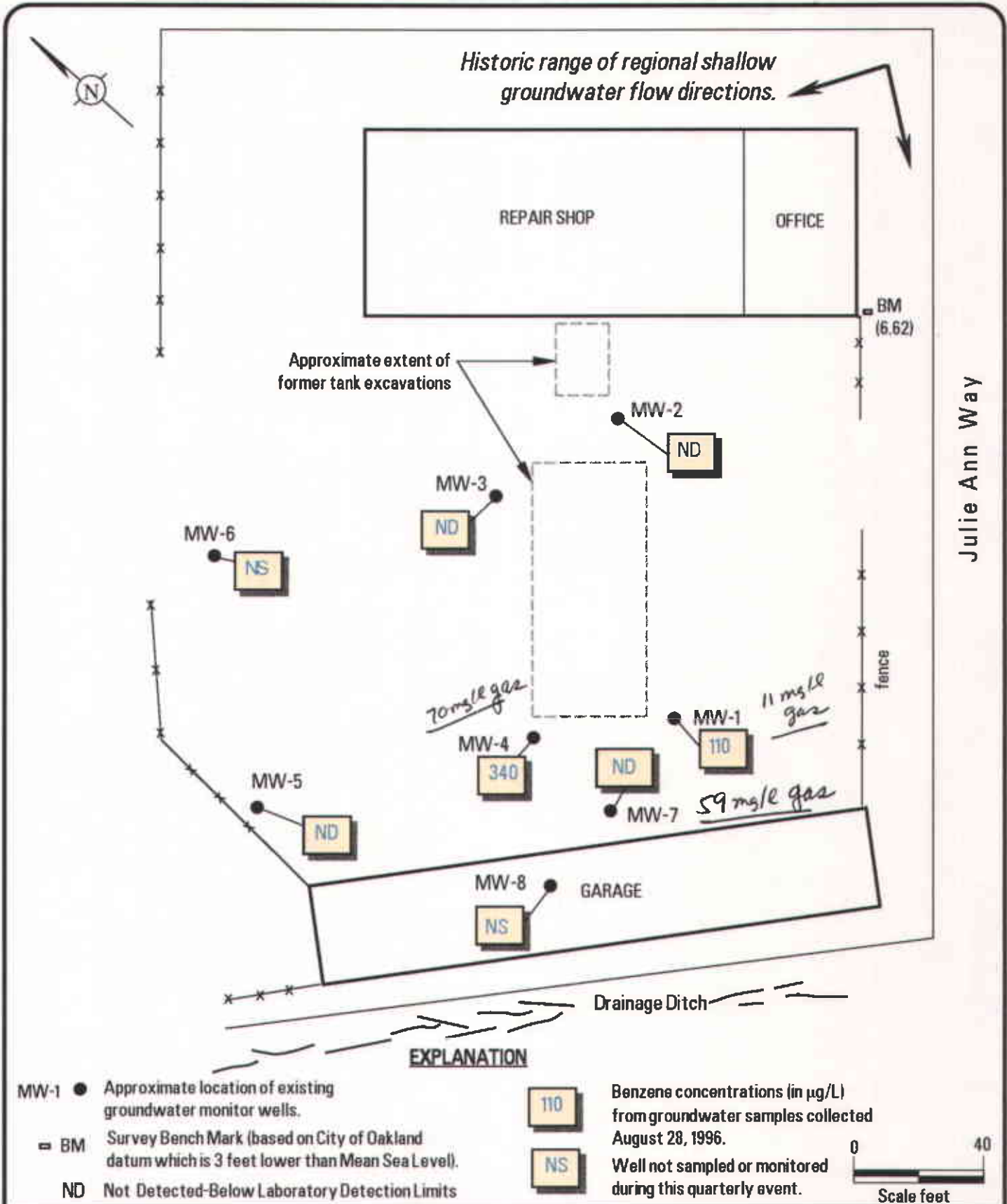
Project No. RC0019.000

**SHALLOW GROUNDWATER CONTOURS  
August 1996**

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

FIGURE  
**2**





A Heidemij Company

Project No. RC0019.010

**BENZENE CONCENTRATIONS**  
**August 1996**  
 Former Penske Truck Leasing Co.  
 725 Julie Ann Way, Oakland, California

FIGURE

**3**

ATTACHMENT 1

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



# Sequoia Analytical

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233  
 404 N. Wiget Lane Walnut Creek, CA 94598 (510) 988-9600 FAX (510) 988-9673  
 819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

Garaghty & Miller, Inc. Client Project ID: #RC0019.010 Sampled: Aug 28, 1996  
 1100 Marina Way South Sample Matrix: Water Received: Aug 29, 1996  
 Richmond, CA 94804 Analysis Method: EPA 5030/8015 Mod./8020 Reported: Sep 16, 1996  
 Attention: Paul Hehn First Sample #: 608-2136

Batch Number: GC091196 GC091196 GC091196 GC091196 GC091196 GC091196 GC091196

## TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 608-2136 MW-1	Sample I.D. 608-2137 MW-2	Sample I.D. 608-2138 MW-3	Sample I.D. 608-2139 MW-4	Sample I.D. 608-2140 MW-5	Sample I.D. 608-2141 MW-7
Purgeable hydrocarbons	50	11,000	N.D.	N.D.	70,000	N.D.	59,000
Benzene	0.50	110	N.D.	N.D.	340	N.D.	N.D.
Toluene	0.50	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.50	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Total Xylenes	0.50	N.D.	N.D.	N.D.	N.D.	N.D.	600
Chromatogram Pattern:		Unidentified Hydrocarbons >C8	--	--	Unidentified Hydrocarbons >C8	--	Unidentified Hydrocarbons >C8

### Quality Control Data

Report Limit Multiplication Factor:	100	1.0	1.0	400	1.0	400
Date Analyzed:	9/11/96	9/11/96	9/11/96	9/11/96	9/11/96	9/11/96
Instrument Identification:	HP-4	HP-4	HP-4	HP-4	HP-4	HP-4
Substrate Recovery, %: (QC Limits = 70-130%)	97	98	98	96	96	82

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

SEQUOIA ANALYTICAL, #1271

*Melissa A. Brewer*

Melissa A. Brewer  
 Client Services Representative



# Sequoia Analytical

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

Graghty & Miller, Inc.  
 100 Marina Way South  
 Richmond, CA 94804  
 Attention: Paul Hehn

Client Project ID: #RC0019.010  
 Sample Matrix: Water  
 Analysis Method: EPA 5030/8015 Mod./8020  
 First Sample #: 608-2142

Sampled: Aug 28, 1996  
 Received: Aug 29, 1996  
 Reported: Sep 16, 1996

Batch Number: GC091196

802004A

## TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit μg/L	Sample I.D. 608-2142 TB-LB
---------	-------------------------	----------------------------------

Purgeable Hydrocarbons	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Total Xylenes	0.50	N.D.

Chromatogram Pattern: --

### Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Analyzed:	9/11/96
Instrument Identification:	HP-4
Surrogate Recovery, %: (GC Limits = 70-130%)	96

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

SEQUOIA ANALYTICAL, #1271

*Melissa A. Brewer*

Melissa A. Brewer  
 Client Services Representative



# Sequoia Analytical

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

Geraghty & Miller, Inc. 1000 Marina Way South Richmond, CA 94804 Attention: Paul Hehn	Client Project ID: #RC0019.010 Sample Matrix: Water Analysis Method: EPA 3510/8015 Mod. First Sample #: 608-2136	Sampled: Aug 28, 1996 Received: Aug 29, 1996 Reported: Sep 16, 1996
--	---	---

QC Batch Number:	SP083096	SP083096	SP083096	SP083096	SP083096	SP083096
	8015EXA	8015EXA	8015EXA	8015EXA	8015EXA	8015EXA

## TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 608-2136 MW-1	Sample I.D. 608-2137 MW-2	Sample I.D. 608-2138 MW-3	Sample I.D. 608-2139 MW-4	Sample I.D. 608-2140 MW-5	Sample I.D. 608-2141 MW-7
Extractable Hydrocarbons	50	56,000	680	1,200	1,300,000	1,000	640,000
Chromatogram Pattern:		Diesel	Diesel	Diesel	Diesel	Diesel	Diesel

### Quality Control Data

Report Limit Multiplication Factor:	10	10	1.0	250	1.0	100
Date Extracted:	8/30/96	8/30/96	8/30/96	8/30/96	8/30/96	8/30/96
Date Analyzed:	8/30/96	8/30/96	8/30/96	8/30/96	8/30/96	8/30/96
Instrument Identification:	HP-3A	HP-3A	HP-3A	HP-3B	HP-3B	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

*Melissa A. Brewer*

Melissa A. Brewer  
 Client Services Representative



# Sequoia Analytical

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

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

Client Project ID: #RC0019.010  
 Sample Descript: Water  
 Analysis for: Total Dissolved Solids  
 First Sample #: 608-2136

Sampled: Aug 28, 1996  
 Received: Aug 29, 1996  
 Analyzed: Sep 3, 1996  
 Reported: Sep 16, 1996

## LABORATORY ANALYSIS FOR: Total Dissolved Solids

Sample Number	Sample Description	Detection Limit mg/L	Sample Result mg/L	QC Batch Number	Instrument ID
608-2136	MW-1	1.0	3,300	IN090396160100A	Manual
608-2137	MW-2	1.0	410	IN090396160100A	Manual
608-2138	MW-3	1.0	2,200	IN090396160100A	Manual
608-2139	MW-4	1.0	1,800	IN090396160100A	Manual
608-2140	MW-5	1.0	2,000	IN090396160100A	Manual
608-2141	MW-7	1.0	3,100	IN090396160100A	Manual

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

SEQUOIA ANALYTICAL, #1271

*Melissa A. Brewer*

Melissa A. Brewer  
 Client Services Representative

Number RC0011010  
 Location PEVSKIE/OAKLAND  
 Laboratory SEQUOIA  
 Sampler(s)/Affiliation GTC

SAMPLE BOTTLE / CONTAINER DESCRIPTION

SAMPLE IDENTITY	Code	Date/Time Sampled	Lab ID	BTEX/TPH-G	TPH-D	TDS					TOTAL
MW-1	L	8-28-96		X	X	X					5
MW-2	L	8-28-96		X	X	X				6082136	5
MW-3	L			X	X	X				6082137	5
MW-4	L			X	X	X				6082138	5
MW-5	L			X	X	X				6082139	5
MW-7	L			X	X	X				6082140	5
TB-LB	L			X	X	X				6082141	5
										6082142	1

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

Total No. of Bottles/Containers 31

Relinquished by: [Signature] Organization: GCM Date: 8/29/96 Time: 12:00  
 Received by: [Signature] Organization: SAL Date: 8/29/96 Time: 12:00 Seal Intact? (Yes) No N/A

Relinquished by: [Signature] Organization: SAL Date: 8/29/96 Time: 13:22  
 Received by: [Signature] Organization: Sequoia WC Date: 8/29/96 Time: 13:22 Seal Intact? (Yes) No N/A

Special Instructions/Remarks: PLEASE FAX RESULTS TO PAUL HENL AT 510-233-3209, MAIL RESULTS TO SAME AT GCM, 1050 MARINA WAY SOUTH, RICHMOND, CA 94804

Delivery Method:  In Person  Common Carrier  Lab Courier  Other