

*AM*

September 23, 1991  
Project No. RC01904

Mr. Barney Chan  
Division of Hazardous Materials  
Department of Environmental Health  
Alameda County Health Care Services Agency  
80 Swan Way  
Oakland, CA 94621

**SUBJECT: Results of Quarterly Ground-Water Monitoring, July 1991, Former  
Penske Truck Leasing Facility, 725 Julie Ann Way, Oakland, California**

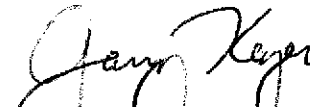
Dear Mr. Chan,

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 ground-water monitoring well sampling for July 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 ground-water sampling contained in the Alameda County Health Care Services, Department of Environmental Health 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  
Staff Geologist/Project Manager

  
Gary W. Keyes, P.E.  
Principal Engineer/Project Officer

CC: Mr. Marc Althen  
Penske Truck Leasing Co.

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September 16, 1991  
Project No. RC01904

Mr. Marc E. Althen  
Manager, Environmental Services  
Penske Truck Leasing Co.  
Route 10, Green Hills  
P.O. Box 563  
Reading, PA 19603

**SUBJECT: Results of Monthly Ground-Water Monitoring, August 1991, Former Penske Truck Leasing Facility, 725 Julie Ann Way, Oakland, California**

Dear Mr. Althen,

This report presents the results of the quarterly ground-water monitoring for July 1991, which was performed on August 5, 1991, 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 previous Geraghty & Miller, Inc. (Geraghty & Miller) letter dated February 7, 1991. The monitoring program consists of collecting depth-to-water measurements and water samples from the three monitor wells located at the project site. In accordance with the requirements of the Alameda County Health Care Services Agency, Department of Environmental Health (ACDEH) dated October 24, 1989, the monitoring activities have been performed monthly for a period of 3 months (February, March, and April 1991) and will subsequently be performed quarterly for 3 additional quarters (July and October 1991, and January 1992).

### **FIELD PROCEDURES**

The monthly ground-water monitoring was performed on August 5, 1991. Ground-water samples were collected from Monitor Wells MW-1 through MW-3. The monitor well locations are shown in Figure 2.

Prior to sampling, depth-to-water measurements were obtained from each well, and the wells were checked for the presence of liquid-phase hydrocarbons, with a new disposable polyethylene bailer used for each well. Liquid-phase hydrocarbons were not observed in any of the wells. Each well was purged of a minimum of three casing volumes of water using a 1-inch

diaphragm pump. A summary of the field data is presented in Table 1. Purged water has been stored on site in 55-gallon drums for proper disposal by Penske.

Ground-water samples were collected following purging, with a new polyethylene bailer used for each well. Ground-water samples were placed into the appropriate USEPA approved containers, placed on ice, and transported to Superior Analytical Laboratory, Inc. located in Martinez, 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), and for benzene, toluene, ethylbenzene, and total xylenes (BTEX) (USEPA Method 8020).

## **RESULTS**

### **ELEVATION SURFACE OF SHALLOW GROUND-WATER**

A summary of the depth-to-water data is presented in Table 1. The contour of the elevation surface of shallow ground-water based on the ground-water elevation data collected on August 5, 1991, is presented in Figure 2. The approximate direction of ground-water flow is toward the west. The maximum difference in the elevation of the ground-water surface between the wells is 0.09 feet. Variations in lithology and/or well construction could have a significant affect on the ground-water elevations measured in each well. The hydraulic gradient (slope of the elevation surface) was 0.001 ft/ft towards the west. The ground-water elevation surface is therefore very flat within the area defined by the three wells.

### **GROUND-WATER ANALYTICAL RESULTS**

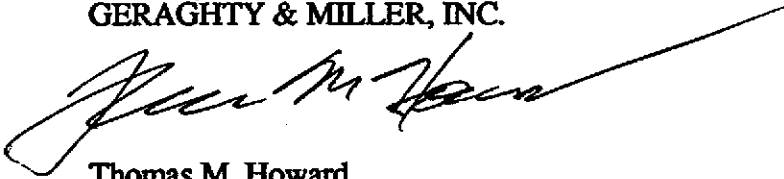
A summary of the ground-water analytical results is presented in Table 2. Copies of the certified laboratory reports and chain-of-custody documentation are included in Attachment 1. Benzene was detected in the ground-water sample collected from Monitor Well MW-1 at a concentration of 22 micrograms per liter ( $\mu\text{g/L}$ ) and 1.7  $\mu\text{g/L}$  in the ground-water sample from monitor well MW-3. TPH as gasoline and diesel were detected in the groundwater samples from Monitor Well MW-1 at concentrations of 310  $\mu\text{g/L}$  and 330  $\mu\text{g/L}$ , respectively.

**RECOMMENDATION**

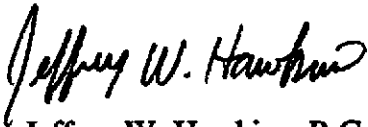
Geraghty & Miller recommends that a copy of this monthly ground-water monitoring report be forwarded to the Alameda County Health Care Services Agency, Department of Environmental Health in Oakland, California.

Geraghty & Miller appreciates the opportunity to be of service to Penske. If you have any questions regarding this report, please call us.

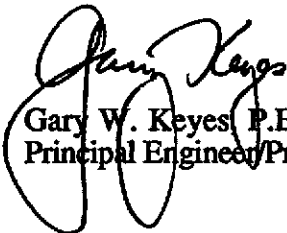
Sincerely,  
GERAGHTY & MILLER, INC.



Thomas M. Howard  
Project Scientist/Hydrogeologist



Jeffrey W. Hawkins, R.G.  
Senior Scientist/Project Manager



Gary W. Keyes, P.E.  
Principal Engineer/Project Officer

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

Table 2 - Summary of Ground-Water Analytical Results

Figure 1 - Site Location Map

Figure 2 - Ground-Water Contour Map

Attachment 1 - Copies of Certified Laboratory Reports and Chain-of-Custody  
Documentation

**REFERENCES**

Alameda County Health Care Services Agency. October 24, 1989. Letter on Unauthorized Release, Underground Fuel and Waste Oil Tanks, 725 Julie Ann Way, Oakland, California.

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.

Geraghty & Miller, Inc. 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.

Geraghty & Miller, Inc. March 19, 1991. Results of Monthly Ground-Water Monitoring, February 1991, Former Penske Truck Leasing Facility, 725 Julie Ann Way, Oakland, California.

Geraghty & Miller, Inc. April 11, 1991. Results of Monthly Ground-Water Monitoring, March 1991, Former Penske Truck Leasing Facility, 725 Julie Ann Way, Oakland, California.

Table 1 Summary of Field Sampling, Depth-to-Water, and Casing Elevation Data Monthly and Quarterly Water Sampling Former Penske Truck Leasing Facility, 725 Julie Ann Way, Oakland, CA.

Well	Date	Depth to Water (a) (feet)	Top of Casing Elevation	Top of Water Elevation	Measured Depth of Well (a) (feet)	Calculated Purge Volume (b) (gallons)	Actual Purge Volume (gallons)	Field Measurements			Casing Diameter (inches)
								pH	Temp. (F)	SC ( $\mu\text{mhos/cm}$ )	
MW-1	2-Oct-90	9.76	5.42	-4.34	37.28	59	47	6.71	87.5	536	4
	28-Feb-91	8.54	5.42	-3.12	33.58	65	70	6.3	66	970	
	25-Mar-91	7.35	5.42	-1.93	33.5	71	75	6.5	64	720	
	1-May-91	7.91	5.42	-2.49	33.7	67	51	6.2 <sup>a</sup>	65	350	
	5-Aug-91	8.63	5.42	-3.21	NM	51	68	NM	63.6	769	
MW-2	2-Oct-90	10.38	6.21	-4.17	32.97	48	47	6.92	86.4	546	4
	28-Feb-91	9.19	6.21	-2.98	29.39	53	55	6.6	64	946	
	25-Mar-91	7.95	6.21	-1.74	29.39	57	70	6.6	63	640	
	1-May-91	8.58	6.21	-2.37	29.6	55	50	6.2	64	300	
	5-Aug-91	9.33	6.21	-3.12	NM	40	54	NM	65.1	568	
MW-3	2-Oct-90	10.38	6.10	-4.28	37.08	57	54	6.89	88.4	639	4
	28-Feb-91	9.45	6.10	-3.35	31.61	58	60	6.1	66	1,020	
	25-Mar-91	7.98	6.10	-1.88	31.6	70	75	6.4	65	820	
	1-May-91	8.58	6.10	-2.48	33.7	65	50	6.4	67	410	
	5-Aug-91	9.26	6.10	-3.16	NM	50	67	NM	64.1	619	

- (a) Measured from top of PVC casing.  
 (b) Based on four casing volumes.  
 SC Specific Conductance  
 NM Not Measured

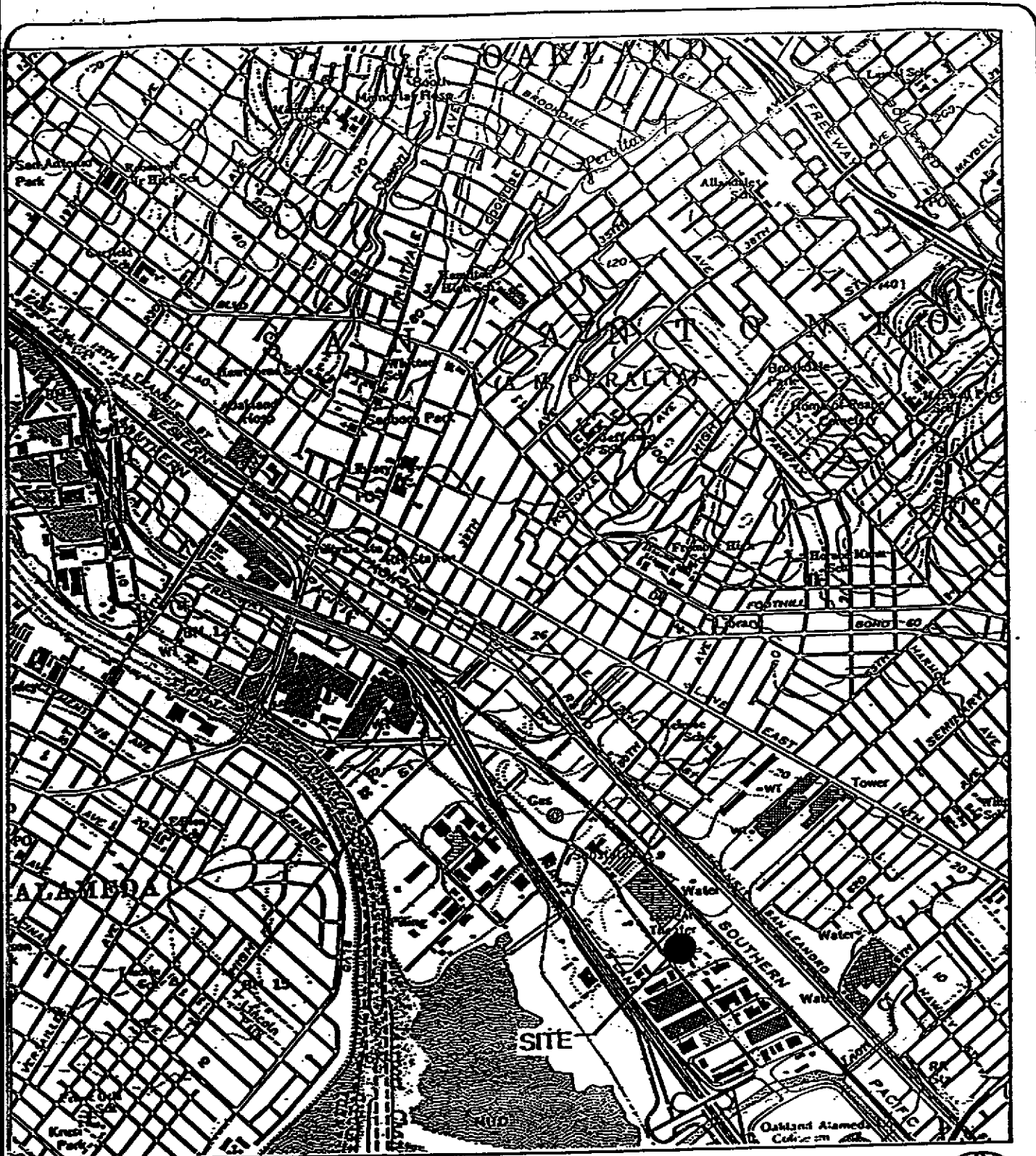
All elevations are measured relative to a site bench mark (elevation 6.62') based on the City of Oakland datum.

Table 2 Ground-Water Analytical Results Monthly and Quarterly Water Sampling Former Penske Truck Leasing Facility, 725 Julie Ann Way, Oakland, CA

Well	Date	TPH Gasoline (a) (µg/L)	TPH Diesel (a) (µg/L)	Benzene (b) (µg/L)	Toluene (b) (µg/L)	Ethyl- benzene (b) (µg/L)	Xylenes (b) (µg/L)
MW-1	2-Oct-90	170	2,900	20.0	18.0	1.9	5.7
	28-Feb-91	260	550	43.0	1.0	7.0	1.0
	25-Mar-91	73	160	10.0	ND(<0.3)	0.5	ND(<0.3)
	1-May-91	ND(<50)	(c)	2.2	ND(<0.3)	ND(<0.3)	ND(<0.3)
	5-Aug-91	310	330	22.0	5.5	9.5	23.0
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)	(c)	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)
MW-3	2-Oct-90	ND(<50)	90	28.0	3.1	0.6	1.5
	28-Feb-91	ND(<50)	ND(<50)	6.0	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)	(c)	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)

- (a) Analyzed by USEPA Method 8015, modified.  
 (b) Analyzed by USEPA Method 8020.  
 (c) No Results - Sample for TPH as Diesel Not Collected.  
 ( ) Reported Detection Limit  
 ND Not Detected  
 µg/L Micrograms/Liter

Analysis by Superior Analytical Laboratories, Inc. San Francisco and Martinez, California.



Reference: USGS Oakland East, Ca. 7 1/2 Min. Quad  
 Scale: 1:24,000

● = Site

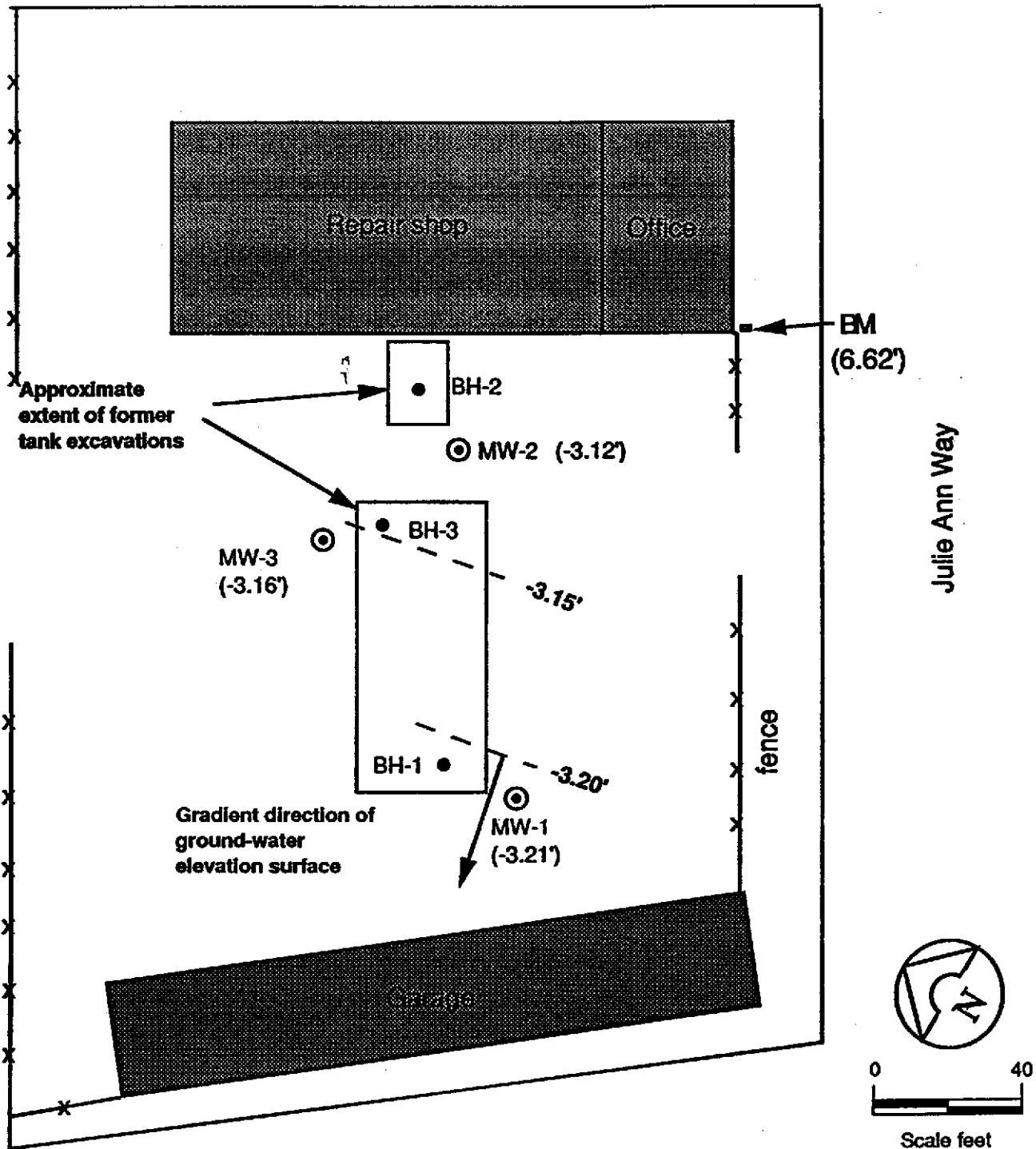


**GERAGHTY & MILLER, INC.**  
*Environmental Services*  
 Proj. No. RC01904 Date: March 19, 1991

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

**FIGURE**  
**1**





**EXPLANATION**

- BH-1 ● = Approximate location of soil borings
- MW-1 ⊙ = Approximate location of ground-water monitor wells
- BM = Survey Bench Mark (based on City of Oakland datum which is 3 feet lower than Mean Sea Level).

(-3.12) = Ground-Water elevation (feet) relative to benchmark, measured Aug. 5, 1991.

-3.20' = Ground-water elevation contour (feet); Dashed where inferred, (contour interval equals 0.05 feet).

**Contour Map of Shallow Groundwater**

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

FIGURE

**2**

**ATTACHMENT 1**

**COPIES OF CERTIFIED ANALYTICAL REPORTS**

**AND**

**CHAIN-OF-CUSTODY DOCUMENTATION**



# Superior Precision Analytical, Inc.

1555 Burke, Unit 1 • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

## C E R T I F I C A T E   O F   A N A L Y S I S

LABORATORY NO.: 53952  
CLIENT: Geraghty & Miller Inc.  
CLIENT JOB NO.: RC01904

DATE RECEIVED: 08/06/91  
DATE REPORTED: 08/13/91

### ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS by Modified EPA SW-846 Method 5030 and 8015

LAB #	Sample Identification	Concentration (ug/L) Gasoline Range
1	MW-1	310
2	MW-2	ND<50
3	MW-3	ND<50

ug/L - parts per billion (ppb)

Minimum Detection Limit for Gasoline in Water: 50ug/l.

#### QA/QC Summary:

Daily Standard run at 2mg/l: %Diff Gasoline = <15

MS/MSD Average Recovery = 94%; Duplicate RPD = 1.7%

Richard Srna, Ph.D.

  
Laboratory Director

# Superior Precision Analytical, Inc.

1555 Burke, Unit 1 • San Francisco, California 94124 • (415) 647-7081 / fax (415) 821-7123

## C E R T I F I C A T E   O F   A N A L Y S I S

LABORATORY NO.: 53952  
CLIENT: Geraghty & Miller Inc.  
CLIENT JOB NO.: RCO1904

DATE RECEIVED: 08/06/91  
DATE REPORTED: 08/13/91

### ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS by Modified EPA SW-846 Method 8015

LAB #	Sample Identification	Concentration (ug/L) Diesel Range
1	MW-1	330
2	MW-2	ND<50
3	MW-3	ND<50

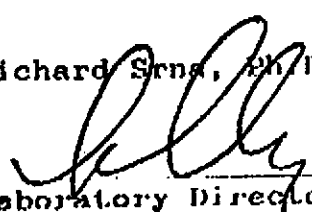
ug/L - parts per billion (ppb)

Minimum Detection Limit for Diesel in Water: 50ug/L.

#### QA/QC Summary:

Daily Standard run at 200mg/L: %Diff Diesel = <15  
MS/MSD Average Recovery = 101%: Duplicate RPD = 0.8%

Richard Serra, Ph.D.

  
Laboratory Director

# Superior Precision Analytical, Inc.

1555 Burke, Unit 1 • San Francisco, California 94174 • (415) 647-2081 / fax (415) 821-7123

## C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 53952  
CLIENT: Geraghty & Miller Inc.  
CLIENT JOB NO.: RC01904

DATE RECEIVED: 08/06/91  
DATE REPORTED: 08/13/91

ANALYSIS FOR BENZENE, TOLUENE, ETHYL BENZENE & XYLENES  
by EPA SW-846 Methods 5030 and 8020

LAB #	Sample Identification	Concentration(ug/l.)			
		Benzene	Toluene	Ethyl Benzene	Xylenes
1	MW-1	22	5.5	9.5	23
2	MW-2	ND<0.3	ND<0.3	ND<0.3	ND<0.3
3	MW-3	1.7	ND<0.3	ND<0.3	ND<0.3

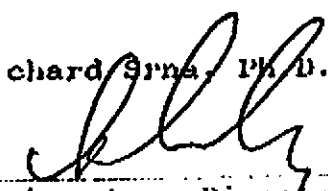
ug/L - parts per billion (ppb)

Minimum Detection Limit in Water: 0.3ug/L

### QA/QC Summary:

Daily Standard run at 20ug/l: %Diff 8020 = <15  
MS/MSD Average Recovery =102% : Duplicate RPD = 3%

Richard Orna, Ph.D.

  
Laboratory Director