

December 3, 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

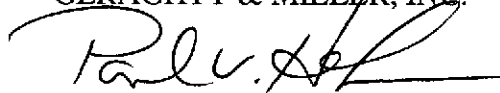
SUBJECT: Results of Quarterly Ground-Water Monitoring, October 1991, Former  
Penske Truck Leasing Facility, 725 Julie Ann Way, Oakland, California.

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 October 1991 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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November 26, 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 Quarterly Ground-Water Monitoring, October 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 performed on October 23, 1991, at the former Penske Truck Leasing Co. (Penske) facility referenced above (Figure 1) for the quarter ending October 1991. The scope of work for this project was presented to Penske in a 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 were performed monthly for a period of 3 months (February, March, and April 1991), quarterly for 2 quarters (July and October 1991) and will subsequently be performed quarterly for one additional quarter (January 1992).

### **FIELD PROCEDURES**

The quarterly ground-water monitoring was performed on October 23, 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 four casing volumes of water using a 1/2-inch diaphragm pump. A trip blank, consisting of a sample vial containing laboratory-grade water, which accompanied the sample vials from the laboratory to the site and back to the laboratory, 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 (if used), or by other exogenous sources. 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 San Francisco, 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**

### **SHALLOW GROUND-WATER FLOW**

A summary of the depth-to-water data is presented in Table 1. Depth to water ranged from 9.00 feet (Monitor Well MW-1) to 9.60 feet (Monitor Well MW-3) below the ground surface. A contour map based on the ground-water elevation data collected on October 23, 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 0.22 feet. Variations in lithology and/or well construction could have a significant effect on the ground-water elevations measured in each well. The hydraulic gradient (slope of the ground-water surface) was approximately 0.0024 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 23 micrograms per liter ( $\mu\text{g/L}$ ). TPH as gasoline and diesel were detected in the

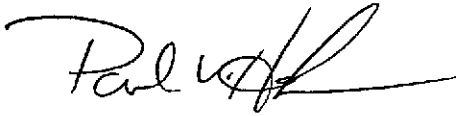
groundwater samples from Monitor Well MW-1 at concentrations of 440  $\mu\text{g/L}$  and 1,800  $\mu\text{g/L}$ , respectively. TPH as gasoline and BTXE were not detected in the trip blank.

### 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.



Paul V. Hehn  
Staff Geologist/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.

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

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 (inches)
								pH	Temp. (°F)	SC (µmhos/cm)	
MW-1	2-Oct-90	9.76	5.42	-4.34	37.28	59	47	6.7	87.5	536	4
	28-Feb-91	8.54	5.42	-3.12	33.58	65	70	6.3	86.0	970	
	25-Mar-91	7.35	5.42	-1.93	33.50	71	75	6.5	64.0	720	
	1-May-91	7.91	5.42	-2.49	33.70	67	51	6.2	65.0	350	
	5-Aug-91	8.63	5.42	-3.21	NM	51	68	NM	63.6	769	
	23-Oct-91	9.00	5.42	-3.58	33.77	67	67	9.4	64.2	747	
MW-2	2-Oct-90	10.38	6.21	-4.17	32.97	48	47	6.9	86.4	546	4
	28-Feb-91	9.19	6.21	-2.98	29.39	53	55	6.6	64.0	946	
	25-Mar-91	7.95	6.21	-1.74	29.39	57	70	6.6	63.0	640	
	1-May-91	8.58	6.21	-2.37	29.60	55	50	6.2	64.0	300	
	5-Aug-91	9.33	6.21	-3.12	NM	40	54	NM	65.1	568	
	23-Oct-91	9.57	6.21	-3.36	29.35	52	53	7.6	65.4	797	
MW-3	2-Oct-90	10.38	6.10	-4.28	37.08	57	54	6.9	88.4	639	4
	28-Feb-91	9.45	6.10	-3.35	31.61	58	60	6.1	66.0	1,020	
	25-Mar-91	7.98	6.10	-1.88	31.60	70	75	6.4	65.0	820	
	1-May-91	8.58	6.10	-2.48	33.70	65	50	6.4	67.0	410	
	5-Aug-91	9.26	6.10	-3.16	NM	50	67	NM	64.1	619	
	23-Oct-91	9.60	6.10	-3.50	33.48	66	66	7.3	67.3	843	

- (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: Summary of Ground-Water Analytical Results - Monthly and Quaterly 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
	23-Oct-91	440	1,800	23.0	21.0	6.2	35.0
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)
	23-Oct-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)
	23-Oct-91	ND(<50)	ND(<50)	ND(<0.3)	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

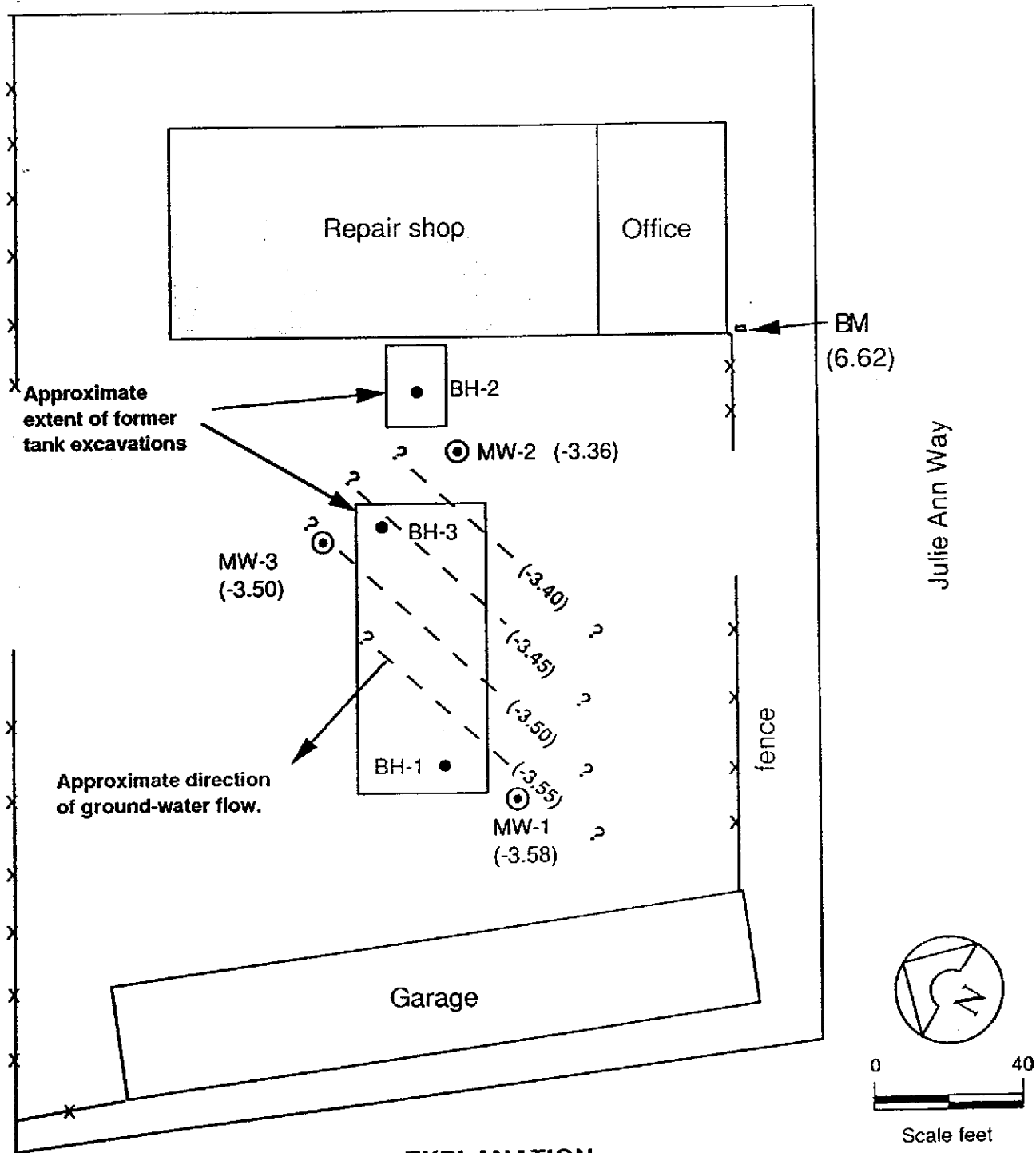


**GERAGHTY & MILLER, INC.**  
*Environmental Services*  
 Proj. No. RC01904 Date: March 19, 1991

**SITE LOCATION MAP**  
 Former Penske Truck Leasing Co.  
 725 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).

(-3.50) = Ground-Water elevation (feet) relative to benchmark, measured October 23, 1991.

?-(-3.50)-? = Ground-water elevation contour (feet); dashed where inferred (contour interval equals 0.05 feet).



Proj. No. RC01904 November 1991

**Shallow Groundwater Contours**  
Former Penske Truck Leasing Co.  
725 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 I • 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.: 54236  
CLIENT: Geraghty & Miller Inc.  
CLIENT JOB NO.: RC01904

DATE RECEIVED: 10/24/91  
DATE REPORTED: 11/05/91  
DATE REVISED : 11/08/91

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

LAB #	Sample Identification	Concentration (ug/L) Gasoline Range
1	MW-2	ND<50
2	MW-3	ND<50
3	MW-1	440
4	TRIP BLANK	ND<50

ug/L - parts per billion (ppb)

Minimum Detection Limit for Gasoline in Water: 50ug/L

#### QAQC Summary:

Daily Standard run at 2mg/L: %DIFF Gasoline = <15%  
MS/MSD Average Recovery = 87%: Duplicate RPD = 6.4%

Richard Srna, Ph.D.

*Greg A. Nwogu (for)*  
Laboratory Director



# Superior Precision Analytical, Inc.

1555 Burke, Unit I • 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.: 54236  
CLIENT: Geraghty & Miller Inc.  
CLIENT JOB NO.: RC01904

DATE RECEIVED: 10/24/91  
DATE REPORTED: 11/05/91  
DATE REVISED : 11/08/91

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-2	ND<0.3	ND<0.3	ND<0.3	ND<0.3
2	MW-3	ND<0.3	ND<0.3	ND<0.3	ND<0.3
3	MW-1	23	21	6.2	35
4	TRIP BLANK	ND<0.3	ND<0.3	ND<0.3	ND<0.3

ug/L - parts per billion (ppb)

Minimum Detection Limit in Water:0.3ug/L

### QAQC Summary:

Daily Standard run at 20ug/L: %DIFF 8020 = <15%  
MS/MSD Average Recovery = 91% : Duplicate RPD = 7.2%

Richard Srna, Ph.D.

*Oruji A. Awogunle*  
Laboratory Director

# SUPERIOR ANALYTICAL LABORATORIES, INC.

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

LABORATORY NO.: 54236  
CLIENT: Geraghty & Miller Inc.  
CLIENT JOB NO.: RC01904

DATE RECEIVED: 10/24/91  
DATE REPORTED: 11/05/91

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

LAB #	Sample Identification	Concentration (ug/L) Diesel Range
1	MW-2	ND<50
2	MW-3	ND<50
3	MW-1	1800

ug/L - parts per billion (ppb)

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

#### QAQC Summary:

Daily Standard run at 200mg/L: %DIFF Diesel = <15%  
MS/MSD Average Recovery = 85%: Duplicate RPD = 4.4%

Richard Srna, Ph.D.

*Cecilia Grazian (for)*  
Laboratory Director

OUTSTANDING QUALITY AND SERVICE

