

**RESULTS OF QUARTERLY  
GROUNDWATER MONITORING  
AUGUST 1994  
FORMER PENSKE TRUCK  
LEASING CO. FACILITY  
725 JULIE ANN WAY  
OAKLAND, CALIFORNIA**

September 1994

Prepared by

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

October 14, 1994  
Project No. RC0019.005

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

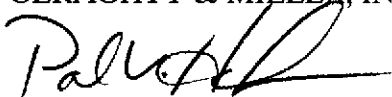
SUBJECT: Results of Quarterly Groundwater Monitoring, August 1994  
Former Penske Truck Leasing Facility  
725 Julie Ann Way, Oakland, California.

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 1994 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 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 1994

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

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**RESULTS OF QUARTERLY  
GROUNDWATER MONITORING  
AUGUST 1994  
FORMER PENSKE TRUCK  
LEASING CO. FACILITY  
725 JULIE ANN WAY  
OAKLAND, CALIFORNIA**

September 1994

Prepared by

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

September 29, 1994  
Project No. RC0019.005

Mr. Richard G. Saut  
Environmental Project Manager  
Penske Truck Leasing Co.  
Route 10, Green Hills  
P.O. Box 563  
Reading, PA 19603

**SUBJECT:** Results of Quarterly Groundwater Monitoring, August 1994  
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 September 12, 1994, 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 July 2, 1992. The monitoring program consists of collecting quarterly depth-to-water measurements and water samples from the eight monitor wells located at the project site. Three of these groundwater monitor wells were installed during July 1994 as part of a program of additional site assessment activities and implementation of a Non-Attainment Zone 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).

### **FIELD PROCEDURES**

The quarterly groundwater monitoring was performed on September 12, 1994. Groundwater samples were collected from Monitor Wells MW-1 through MW-8. The monitor-well locations are shown in Figure 2.

Prior to sampling, depth-to-water and total-well-depth measurements were obtained from each well. Additionally, the wells were checked for the presence of liquid-phase hydrocarbons. Liquid-phase hydrocarbons were not observed in any of the wells during this monitoring event. Each well sampled was purged of approximately three to four casing volumes of water using a



1-inch diaphragm pump. All equipment that entered the well was washed in a solution of nonphosphate detergent and water and then triple rinsed in deionized water prior to sampling each well. 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 disposable polyethylene bailer, with a new bailer used for each well. The purged water was stored in 55-gallon drums and retained onsite for subsequent disposal by Penske.

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 Superior Precision Analytical, Inc., 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), for benzene, toluene, ethylbenzene, and total xylenes (BTEX) (USEPA Method 8020), and for total dissolved solids (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 5.89 feet (Monitor Well MW-5) to 7.42 feet (Monitor Well MW-2) below the ground surface. A contour map based on the groundwater elevation data collected September 12, 1994, 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 on September 12, 1994.

The difference in the elevation of the groundwater surface between Wells MW-2 and MW-4 is 0.15 feet, producing a hydraulic gradient (slope of the groundwater surface) of approximately 0.0016 foot/foot in a west-northwesterly 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 collected from Monitor Wells MW-1 (230 micrograms per liter [ $\mu\text{g/L}$ ]), MW-4 (390  $\mu\text{g/L}$ ), MW-7 (160  $\mu\text{g/L}$ ), and MW-8 (170  $\mu\text{g/L}$ ). TPH as diesel was detected in the groundwater samples collected from Monitor Wells MW-1 (22,000  $\mu\text{g/L}$ ), MW-4 (95  $\mu\text{g/L}$ ), MW-7 (620  $\mu\text{g/L}$ ), and MW-8 (850  $\mu\text{g/L}$ ). Benzene was detected in the groundwater samples collected from Monitor Wells MW-1 (0.7  $\mu\text{g/L}$ ), MW-4 (120  $\mu\text{g/L}$ ), MW-7 (2.7  $\mu\text{g/L}$ ), and MW-8 (2.7  $\mu\text{g/L}$ ). All other BTEX constituent results are presented in Table 2. TPH as gasoline and BTEX were not detected in the trip blank. Additional analysis of total dissolved solids in the groundwater samples detected concentrations ranging from 560 milligrams per liter (mg/L) from Monitor Well MW-6 to 6,000 mg/L from Monitor Well MW-4 (Table 2).

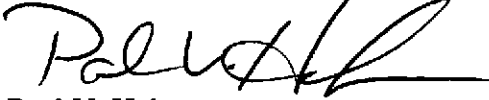
## FIELD PARAMETERS

As in all previous quarterly sampling events at this facility, the specific conductance measurements for the groundwater purged during the sampling (except for Monitor Well MW-6) continue to be high (Table 1). The high specific conductance measurements were verified by correspondingly high concentrations of total dissolved solids detected in the groundwater samples (Table 2).

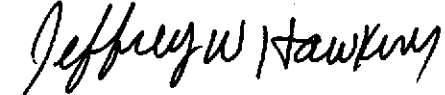


Geraghty & Miller appreciates the opportunity to be of service to Penske. If you have any questions regarding this report, please do not hesitate to call us.

Sincerely,  
GERAGHTY & MILLER, INC.



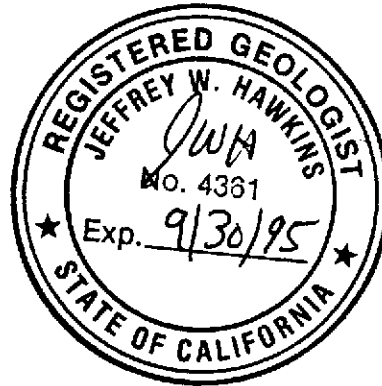
Paul V. Hehn  
Project Geologist/Project Manager



Jeffrey W. Hawkins, R.G.  
Senior Scientist



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
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.

———. July 2, 1992. Scope of Work and Project Budget Estimate for Ground-Water Monitoring Activities for the Period July 1992 through April 1993, 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 Purge Volume (b) (gallons)	Actual Purge Volume (gallons)	Field Measurements			Casing Diameter (inches)
		Water (a) (feet)	Elevation (feet)	Elevation (feet)	of Well (a) (feet)			pH	Temp. (°F)	SC (µS/cm)	
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	5.42	-3.12	33.58	65.00	70	6.30	66.0	9,700	
	25-Mar-91	7.35	5.42	-1.93	33.50	71.00	75	6.50	64.0	7,200	
	1-May-91	7.91	5.42	-2.49	33.70	67.00	51	6.20	65.0	3,500	
	5-Aug-91	8.63	5.42	-3.21	NM	51.00	68	NM	63.6	7,690	
	23-Oct-91	9.00	5.42	-3.58	33.77	67.00	67	9.40	64.2	7,470	
	6-Jan-92	8.52	5.42	-3.10	33.87	65.00	69	9.40	63.2	6,640	
	20-Jul-92	7.94	5.42	-2.52	33.95	65.02	66	7.20	65.7	6,410	
	23-Oct-92	8.62	5.42	-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	5.43	-0.94	33.80	71.32	65	6.60	66.7	>2,000	
	6-Aug-93	7.39	5.43	-1.96	33.88	68.67	69	7.22	68.1	5,890	
	28-Oct-93	7.85	5.43	-2.42	33.80	67.48	68	7.00	68.3	5,910	
	1-Feb-94	7.25	5.43	-1.82	33.99	69.52	70	7.63	63.2	7,610	
12-Sep-94	6.75	5.43	-1.32	33.95	70.72	70	6.90	75.8	7,950		
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	6.21	-2.98	29.39	53.00	55	6.60	64.0	9,000	
	25-Mar-91	7.95	6.21	-1.74	29.39	57.00	70	6.60	63.0	6,400	
	1-May-91	8.58	6.21	-2.37	29.60	55.00	50	6.20	64.0	3,000	
	5-Aug-91	9.33	6.21	-3.12	NM	40.00	54	NM	65.1	5,680	
	23-Oct-91	9.57	6.21	-3.36	29.35	52.00	53	7.60	65.4	7,970	
	6-Jan-92	9.08	6.21	-2.87	29.50	53.00	53	9.18	62.8	6,990	
	20-Jul-92	8.60	6.21	-2.39	29.45	54.21	55	6.50	65.2	6,690	
	23-Oct-92	9.33	6.21	-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	6.20	-0.75	29.32	58.16	60	6.90	66.7	>2,000	
	6-Aug-93	8.05	6.20	-1.85	29.33	55.33	66.5	7.26	66.4	6,250	
	28-Oct-93	8.50	6.20	-2.30	29.43	54.40	55	7.08	71.2	6,780	
	1-Feb-94	7.87	6.20	-1.67	29.54	56.32	57	8.35	62.4	8,250	
12-Sep-94	7.42	6.20	-1.22	29.45	57.24	66	(e)	69.9	8,130		

**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 Purge Volume (b) (gallons)	Actual Purge Volume (gallons)	Field Measurements			Casing Diameter (inches)
		Water (a) (feet)	Elevation (feet)	Elevation (feet)	of Well (a) (feet)			pH	Temp. (°F)	SC (µS/cm)	
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	6.10	-3.35	31.61	58.00	60	6.10	66.0	1,020	
	25-Mar-91	7.98	6.10	-1.88	31.60	70.00	75	6.40	65.0	8,200	
	1-May-91	8.58	6.10	-2.48	33.70	65.00	50	6.40	67.0	4,100	
	5-Aug-91	9.26	6.10	-3.16	NM	50.00	67	NM	64.1	6,190	
	23-Oct-91	9.60	6.10	-3.50	33.48	66.00	66	7.30	67.3	8,430	
	6-Jan-92	9.08	6.10	-2.98	33.66	64.00	64	9.98	61.7	7,010	
	20-Jul-92	8.59	6.10	-2.49	33.76	65.44	66	6.80	66.0	7,540	
	23-Oct-92	9.30	6.10	-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	6.10	-0.88	33.55	69.08	72	6.90	68.2	>2,000	
	6-Aug-93	8.01	6.10	-1.91	33.55	66.40	56 (d)	7.43	67.3	6,490	
	28-Oct-93	8.45	6.10	-2.35	33.60	65.40	66	7.02	72.0	6,590	
	1-Feb-94	8.03	6.10	-1.93	33.74	66.84	67	8.32	63.3	8,400	
12-Sep-94	7.39	6.10	-1.29	33.70	68.40	70	7.73	68.7	8,030		
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	5.18	-1.03	33.04	69.76	70	6.80	69.1	>2,000	
	6-Aug-93	7.20	5.18	-2.02	32.92	66.87	60 (d)	7.44	68.9	13,900	
	28-Oct-93	7.64	5.18	-2.46	32.98	65.88	66	6.79	72.1	11,940	
	1-Feb-94	7.26	5.18	-2.08	33.31	67.72	68	8.65	63.6	18,110	
	12-Sep-94	6.55	5.18	-1.37	33.41	69.84	60 (d)	6.03	77.5	16,710	
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	4.71	-0.72	31.36	67.42	68	7.20	68.0	>2,000	
	6-Aug-93	6.19	4.71	-1.48	31.30	65.29	68	7.47	63.6	5,180	
	28-Oct-93	6.86	4.71	-2.15	31.43	62.72	48 (d)	7.12	70.6	4,980	
	1-Feb-94	6.48	4.71	-1.77	31.43	64.84	49 (d)	(e)	63.1	6,120	
	12-Sep-94	5.89	4.71	-1.18	31.43	66.40	39 (d)	(e)	69.4	5,020	

**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 (inches)
								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
MW-7	12-Sep-94	6.16	5.38	-0.78	28.51	58.08	60	6.65	73.5	7,920	4
MW-8	12-Sep-94	6.46	5.44	-1.02	25.15	48.56	55	(e)	(e)	11,400	4

- (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.

SC Specific Conductance  
 (µS/cm) Microsiemens per centimeter  
 NM Not measured

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) (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-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	
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	

**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	
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
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

**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-6	12-Sep-94	ND(<50)	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)	560
MW-7	12-Sep-94	160	620	2.7	1.3	ND(<0.5)	2.1	1,100
MW-8	12-Sep-94	170	850	2.7	0.5	ND(<0.5)	2.0	5,500

(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 are 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.

( ) Reported detection limit

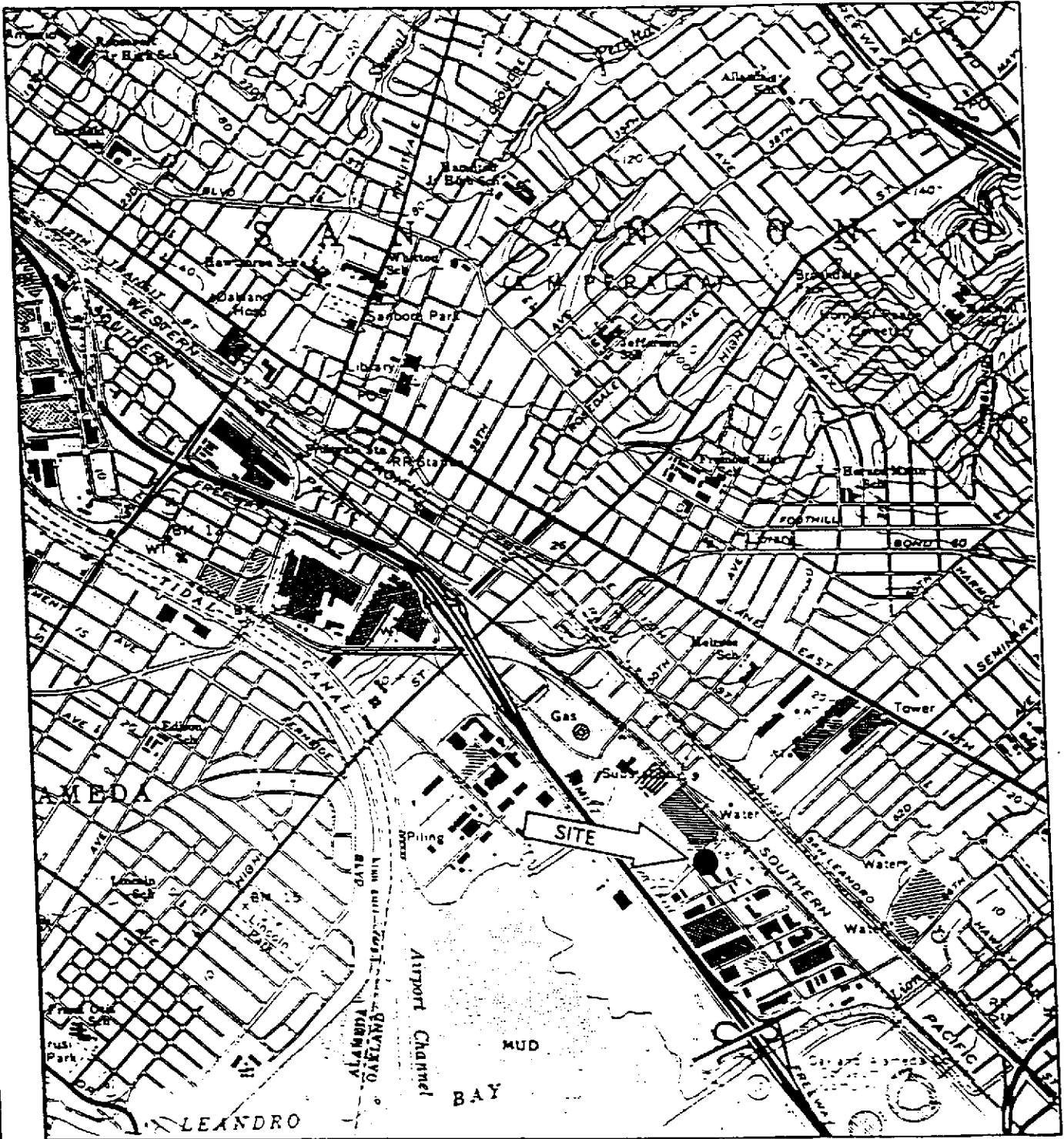
-- Not analyzed

ND Not detected

µg/L Micrograms per liter

mg/L Milligrams per 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



Proj. 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.

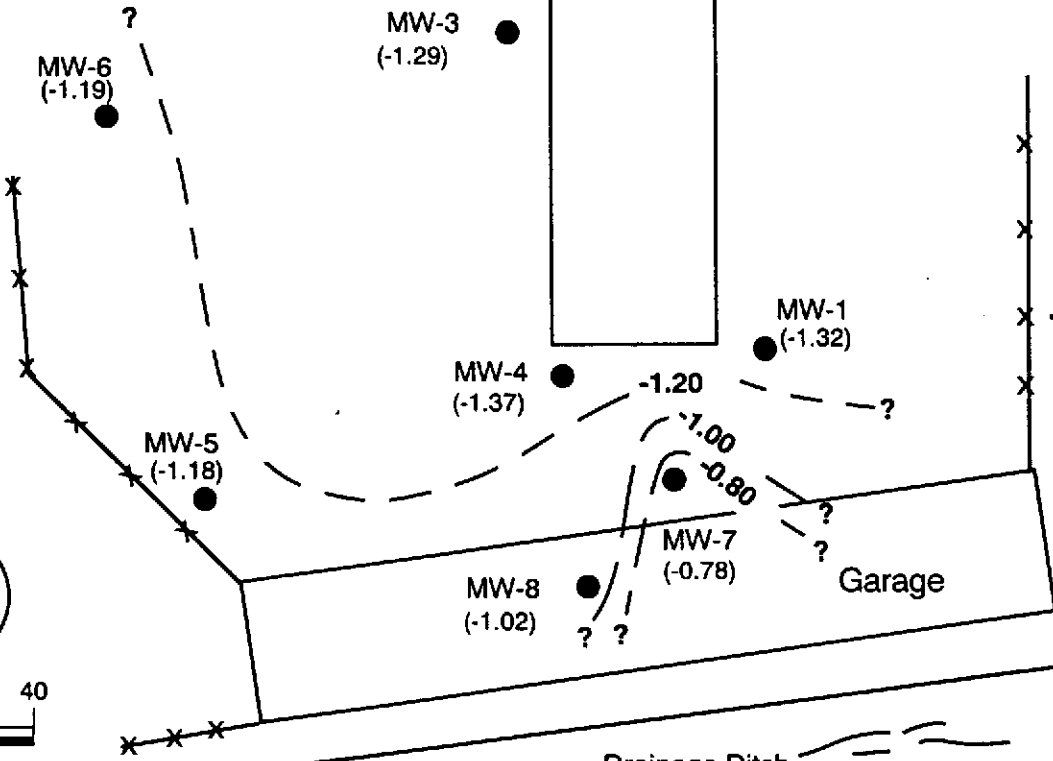


Approximate extent of former tank excavations



BM (6.62)

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).

(-1.22)

= Groundwater elevation (feet) relative to benchmark, measured August 12, 1994.

? - (-1.00)

= Groundwater elevation contour (feet); dashed where inferred (contour interval equals 0.2 feet).



Project No. RC0019.005

**MONITOR WELL AND SOIL BORING LOCATIONS**

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.

A member of ESSCON Environmental Support Service Consortium

GERAGHTY & MILLER  
Attn: PAUL HEHN

Project RC0019.005  
Reported 22-August-1994

ANALYSIS FOR GASOLINE, BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES  
by EPA SW-846 Methods 5030/8015M/8020.

## Chronology

Laboratory Number 58571

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
MW-3	08/12/94	08/15/94	08/16/94	08/16/94		1
MW-2	08/12/94	08/15/94	08/16/94	08/16/94		2
MW-5	08/12/94	08/15/94	08/16/94	08/16/94		3
MW-1	08/12/94	08/15/94	08/17/94	08/17/94		4
MW-4	08/12/94	08/15/94	08/18/94	08/18/94		5
TB	08/12/94	08/15/94	08/17/94	08/17/94		6



# Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

GERAGHTY & MILLER  
Attn: PAUL HEHN

Project RC0019.005  
Reported 22-August-1994

## ANALYSIS FOR GASOLINE, BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES

Laboratory Number	Sample Identification	Matrix
58571- 1	MW-3	Water
58571- 2	MW-2	Water
58571- 3	MW-5	Water
58571- 4	MW-1	Water
58571- 5	MW-4	Water
58571- 6	TB	Water

### RESULTS OF ANALYSIS

Laboratory Number:    58571- 1    58571- 2    58571- 3    58571- 4    58571- 5

Gasoline_Range:	ND<50	ND<50	ND<50	230	390
Benzene:	ND<0.5	ND<0.5	ND<0.5	0.7	120
Toluene:	ND<0.5	ND<0.5	ND<0.5	1.7	3.9
Ethyl Benzene:	ND<0.5	ND<0.5	ND<0.5	2.0	14
Total Xylenes:	ND<0.5	ND<0.5	ND<0.5	3.7	14

Concentration:            ug/L            ug/L            ug/L            ug/L            ug/L

-- Surrogate % Recoveries --

Trifluorotoluene (SS): 104            102            104            106            121

Laboratory Number:    58571- 6

Gasoline_Range:	ND<50
Benzene:	ND<0.5
Toluene:	ND<0.5
Ethyl Benzene:	ND<0.5
Total Xylenes:	ND<0.5

Concentration:            ug/L

-- Surrogate % Recoveries --

Trifluorotoluene (SS): 100



# Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

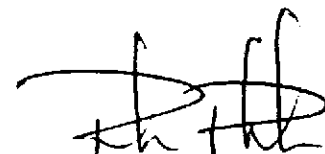
ANALYSIS FOR GASOLINE, BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES  
Quality Assurance and Control Data - Water

Laboratory Number 58571

Compound	Method Blank (ug/L)	RL (ug/L)	Spike Recovery (%)	Limits (%)	RPD (%)
Gasoline_Range:	ND<50	50	87/93	61-134	7%
Benzene:	ND<0.5	0.5	85/84	60-135	1%
Toluene:	ND<0.5	0.5	88/88	60-135	0%
Ethyl Benzene:	ND<0.5	0.5	86/88	60-135	2%
Total Xylenes:	ND<0.5	0.5	94/94	60-135	0%

**Definitions:**

ND = Not Detected  
 RPD = Relative Percent Difference  
 RL = Reporting Limit  
 ug/L = Parts per billion (ppb)  
 C File No. 58571

  
 8/22/94  
 Senior Chemist  
 Account Manager



# Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

GERAGHTY & MILLER  
Attn: PAUL HEHN

Project RC0019.005  
Reported 17-August-1994

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TOTAL PETROLEUM HYDROCARBONS AS DIESEL  
BY EPA SW-846 METHOD 8015M

Chronology

Laboratory Number 58571

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
MW-3	08/12/94	08/15/94	08/16/94	08/17/94		1
MW-2	08/12/94	08/15/94	08/16/94	08/17/94		2
MW-5	08/12/94	08/15/94	08/16/94	08/17/94		3
MW-1	08/12/94	08/15/94	08/16/94	08/17/94		4
MW-4	08/12/94	08/15/94	08/16/94	08/17/94		5



# Superior Precision Analytical, Inc.

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GERAGHTY & MILLER  
Attn: PAUL HEHN

Project RC0019.005  
Reported 17-August-1994

## TOTAL PETROLEUM HYDROCARBONS AS DIESEL

Laboratory Number	Sample Identification	Matrix
58571- 1	MW-3	Water
58571- 2	MW-2	Water
58571- 3	MW-5	Water
58571- 4	MW-1	Water
58571- 5	MW-4	Water

### RESULTS OF ANALYSIS

Laboratory Number: 58571- 1 58571- 2 58571- 3 58571- 4 58571- 5

Diesel Range:	ND<50	ND<50	ND<50	22000	95
Concentration:	ug/L	ug/L	ug/L	ug/L	ug/L



# Superior Precision Analytical, Inc.

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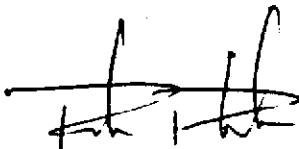
## TOTAL PETROLEUM HYDROCARBONS AS DIESEL Quality Assurance and Control Data - Water

Laboratory Number 58571

Compound	Method Blank (ug/L)	RL (ug/L)	Spike Recovery (%)	Limits (%)	RPD (%)
Diesel Range:	ND<50	50	58/52	50-150	11%

### Definitions:

- ND = Not Detected
- RPD = Relative Percent Difference
- RL = Reporting Limit
- ug/L = Parts per billion (ppb)
- File No. 58571

 8/22/94  
 Senior Chemist  
 Account Manager



# Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

## CERTIFICATE OF ANALYSIS

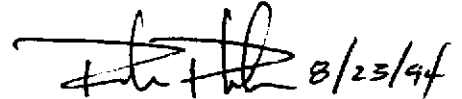
Laboratory No.: 58571  
Client : GERAGHTY & MILLER  
Client job No.: RC0019.005

Date received : 08/15/94  
Date reported : 08/22/94

### TOTAL DISSOLVED SOLIDS BY EPA METHOD 160.1

Lab Sample ID	Date Sampled	Date Analyzed	Analyte	Conc.	RL	Unit
1 MW-3	08/12/94	08/18/94	TDS	3500	10	mg/L
MW-2	08/12/94	08/18/94	TDS	2100	10	mg/L
MW-5	08/12/94	08/18/94	TDS	2600	10	mg/L
4 MW-1	08/12/94	08/18/94	TDS	4000	10	mg/L
5 MW-4	08/12/94	08/18/94	TDS	6000	10	mg/L
QC METHOD BLANK	Water	08/18/94	TDS	ND	10	mg/L

mg/L = parts per million (ppm)  
ND = Not Detected  
NA = Not Applicable  
R = Reporting Limit

  
Senior Chemist  
Account Manager



Project Number RC 0019.005  
 Project Location Penske Oakland  
 Laboratory Superior  
 Sampler(s)/Affiliation Geraghty & Miller  
G. Crowley

58571

SAMPLE IDENTITY	Code	Date/Time Sampled	Lab ID	SAMPLE BOTTLE / CONTAINER DESCRIPTION							TOTAL	
				TPH-Gasoline	TPH-Diesel	BTEX	Total Dissolved Solids					
<u>mw-3</u>	<u>L</u>	<u>8/12 1:30</u>		X	X	X	X					<u>5</u>
<u>mw-2</u>		<u>1:40</u>		X	X	X	X					<u>5</u>
<del><u>mw-6</u></del>		<del><u>1:45</u></del>		<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>					<del><u>5</u></del>
<u>mw-5</u>		<u>2:00</u>		X	X	X	X					<u>5</u>
<del><u>mw-8</u></del>		<del><u>2:15</u></del>		<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>					<del><u>5</u></del>
<del><u>mw-7</u></del>		<del><u>2:20</u></del>		<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>					<del><u>5</u></del>
<u>mw-1</u>		<u>2:30</u>		X	X	X	X					<u>5</u>
<u>mw-4</u>		<u>2:40</u>		X	X	X	X					<u>5</u>
<u>TB</u>				X		X						<u>5</u>

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

Total No. of Bottles/Containers 43

Relinquished by: <u>[Signature]</u>	Organization: <u>Geraghty &amp; Miller</u>	Date: <u>8/15/94</u> Time: <u>9:20 AM</u>	Seal Intact? <u>Yes</u>
Received by: <u>[Signature]</u>	Organization: <u>[Signature]</u>	Date: <u>8/15/94</u> Time: <u>9:30</u>	No N/A
Relinquished by: <u>[Signature]</u>	Organization: <u>Superior</u>	Date: <u>8/15/94</u> Time: _____	Seal Intact? <u>Yes</u>
Received by: <u>[Signature]</u>	Organization: <u>Superior</u>	Date: <u>8/15/94</u> Time: <u>1:00 AM</u>	No N/A

Special Instructions/Remarks: Contact Paul Helm with results  
Geraghty & Miller INC. 1050 Marina Way South Richmond Ca. 94804  
Report Results on this CoC separately!

Delivery Method:  In Person  Common Carrier  Lab Courier  Other



# Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

GERAGHTY & MILLER  
Attn: PAUL HEHN

Project RC0019.005  
Reported 17-August-1994

ANALYSIS FOR GASOLINE, BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES  
by EPA SW-846 Methods 5030/8015M/8020.

## Chronology

Laboratory Number 58572

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
MW-6	08/12/94	08/15/94	08/16/94	08/16/94		1
MW-7	08/12/94	08/15/94	08/16/94	08/16/94		2
MW-8	08/12/94	08/15/94	08/16/94	08/16/94		3



# Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

GERAGHTY & MILLER  
Attn: PAUL HEHN

Project RC0019.005  
Reported 17-August-1994

## ANALYSIS FOR GASOLINE, BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES

Laboratory Number	Sample Identification	Matrix
58572- 1	MW-6	Water
58572- 2	MW-7	Water
58572- 3	MW-8	Water

### RESULTS OF ANALYSIS

Laboratory Number: 58572- 1 58572- 2 58572- 3

Gasoline_Range:	ND<50	160	170
Benzene:	ND<0.5	2.7	2.7
Toluene:	ND<0.5	1.3	0.5
Ethyl Benzene:	ND<0.5	ND<0.5	ND<0.5
Total Xylenes:	ND<0.5	2.1	2.0
Concentration:	ug/L	ug/L	ug/L
-- Surrogate % Recoveries --			
Trifluorotoluene (SS):	99	100	93



# Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

## ANALYSIS FOR GASOLINE, BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES Quality Assurance and Control Data - Water

Laboratory Number 58572

Compound	Method Blank (ug/L)	RL (ug/L)	Spike Recovery (%)	Limits (%)	RPD (%)
Gasoline_Range:	ND<50	50	75/88	61-134	16%
Benzene:	ND<0.5	0.5	86/93	60-135	8%
Toluene:	ND<0.5	0.5	87/86	60-135	1%
Ethyl Benzene:	ND<0.5	0.5	84/84	60-135	0%
Total Xylenes:	ND<0.5	0.5	92/91	60-135	1%

### Definitions:

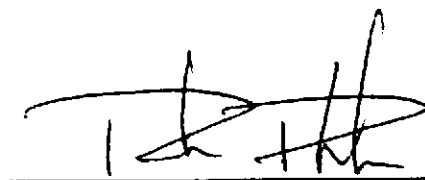
ND = Not Detected

RPD = Relative Percent Difference

RL = Reporting Limit

ug/L = Parts per billion (ppb)

QC File No. 58572



0/22/94

Senior Chemist  
Account Manager



# Superior Precision Analytical, Inc.

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

GERAGHTY & MILLER  
Attn: PAUL HEHN

Project RC0019.005  
Reported 19-August-1994

TOTAL PETROLEUM HYDROCARBONS AS DIESEL  
BY EPA SW-846 METHOD 8015M

Chronology

Laboratory Number 58572

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
MW-6	08/12/94	08/15/94	08/16/94	08/18/94		1
MW-7	08/12/94	08/15/94	08/16/94	08/18/94		2
MW-8	08/12/94	08/15/94	08/16/94	08/18/94		3



**GERAGHTY & MILLER**  
Attn: PAUL HEHN

**Project RC0019.005**  
**Reported 19-August-1994**

**TOTAL PETROLEUM HYDROCARBONS AS DIESEL**

<b>Laboratory Number</b>	<b>Sample Identification</b>	<b>Matrix</b>
58572- 1	MW-6	Water
58572- 2	MW-7	Water
58572- 3	MW-8	Water

**RESULTS OF ANALYSIS**

**Laboratory Number:** 58572- 1 58572- 2 58572- 3

<b>Diesel Range:</b>	ND<50	620	850
<b>Concentration:</b>	ug/L	ug/L	ug/L



# Superior Precision Analytical, Inc.

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

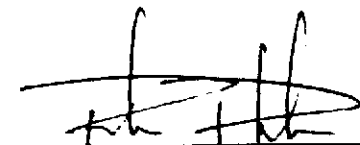
## TOTAL PETROLEUM HYDROCARBONS AS DIESEL Quality Assurance and Control Data - Water

Laboratory Number 58572

Compound	Method Blank (ug/L)	RL (ug/L)	Spike Recovery (%)	Limits (%)	RPD (%)
Diesel Range:	ND<50	50	56/56	50-150	0%

### Definitions:

- ND = Not Detected
- RPD = Relative Percent Difference
- RL = Reporting Limit
- ug/L = Parts per billion (ppb)
- C File No. 58572

 6/22/94  
 Senior Chemist  
 Account Manager



# Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

## CERTIFICATE OF ANALYSIS

Laboratory No.: 58572  
Client : GERAGHTY & MILLER  
Client job No.: RC0019.005

Date received : 08/15/94  
Date reported : 08/22/94

### TOTAL DISSOLVED SOLIDS BY EPA METHOD 160.1

Lab Sample ID	Date Sampled	Date Analyzed	Analyte	Conc.	RL	Unit
1 MW-6	08/12/94	08/18/94	TDS	560	10	mg/L
MW-7	08/12/94	08/18/94	TDS	1100	10	mg/L
MW-8	08/12/94	08/18/94	TDS	5500	10	mg/L
QA METHOD BLANK	Water	08/18/94	TDS	ND	10	mg/L

mg/L = parts per million (ppm)  
ND = Not Detected  
NA = Not Applicable  
RL = Reporting Limit

  
8/25/94  
Senior Chemist  
Account Manager



