GERAGHTY
& MILLER, INC.
Environmental Services

Ground Water *Engineering* *Hydrocarbon* *Remediation* *Education*

March 25, 1991
Project No. RC01904

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

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

Dear Mr. Levi:

The above referenced report is being forwarded to you at the request of Penske Truck Leasing Co (Penske). The report details the results of the monthly ground-water monitoring well sampling for February at the former Penske Truck Leasing Facility at 725 Julie Ann Way, Oakland. The monthly 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

Jeffrey W. Hawkins
Senior Hydrogeologist/Project Manager

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

CC: Mr. Marc Althen
Penske Truck Leasing Co.

91 MAR 29 PM 12:16

1050 Marina Way South • Richmond, California 94804 • (415) 233-3200 • FAX (415) 233-3204

GERAGHTY
& MILLER, INC.
Environmental Services

Ground Water *Engineering* *Hydrocarbon* *Remediation* *Education*

March 19, 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, FEBRUARY, 1991, FORMER PENSKE TRUCK LEASING FACILITY, 725 JULIE ANN WAY, OAKLAND, CALIFORNIA

Dear Mr. Althen,

This report presents the results of the monthly ground-water monitoring performed on February 28, 1991, at the former Penske Truck Leasing Co. (Penske) facility referenced above (see 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 monthly monitoring program consists of collecting depth-to-water measurements, total-well-depth measurements, and water samples from the three wells located at the project site.

FIELD PROCEDURES

The monthly ground-water monitoring was performed on February 28, 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 and total-well-depth 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. Phase-separated hydrocarbons were not observed in any of the wells, but a sheen was noted on the purge water pumped from Monitor Well MW-1. Each well was purged of approximately four casing volumes of water using a 1-inch diaphragm pump. A summary of the field data is presented in Table 1. Purged water was stored on site in 55-gallon drums and arrangements are currently being made for proper disposal of the purge water 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) TPH as diesel (USEPA Method 8015, modified) and benzene, toluene, xylenes, and ethylbenzene (BTXE) (USEPA Method 8020).

RESULTS

SHALLOW GROUND-WATER FLOW

A summary of the depth-to-water data is presented in Table 2. Depth-to-water ranged from approximately 8.54 feet (Monitor Well MW-1) to 9.45 feet (Monitor Well MW-3) below the ground surface. A ground-water contour map based on the ground-water elevation data collected on February 28, 1991, is presented in Figure 2. The direction of ground-water flow, based on the February 1991 data, is toward the northwest at a hydraulic gradient of 0.01 ft/ft.

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. TPH as gasoline were detected in Monitor Well MW-1 (260 µg/L). TPH as diesel were detected in Monitor Well MW-1 (550 µg/L). Benzene was detected in the water samples collected from Monitor Wells MW-1 (43 µg/L) and MW-2 (6 µg/L). Toluene (1 µg/L), ethylbenzene (7 µg/L) and xylenes (1 µg/l) were also detected in the water sample collected from Monitor Well MW-1.

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 proposal, please do not hesitate to call.

Sincerely,
GERAGHTY & MILLER, INC.

Paul V. Hehn
Staff Scientist/Project Geologist

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

Geraghty & Miller, 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, 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
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 (feet MSL)	Top of Water Elevation (feet MSL)	Measured Depth of Well (a) (feet)	Calculated Purge Volume (b) (gallons)	Actual Purge Volume (gallons)	Stabilized pH	Stabilized Temp. (F)	Stabilized SC (µmhos/cm)	Casing Diameter (inches)
MW-1	2-Oct-90(c)	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	4
MW-2	2-Oct-90(c)	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	4
MW-3	2-Oct-90(c)	10.38	6.10	-4.28	37.08	57	54	6.89	88.4	639	4
	28-Feb-91	9.45	6.1	-3.35	31.61	58	60	6.1	66	1,020	4

(a) Measured from top of PVC casing.
(b) Based on four casing volumes.
(c) Initial well sampling data collected during site assessment water sampling.

SC Specific Conductance
MSL Mean Sea-Level

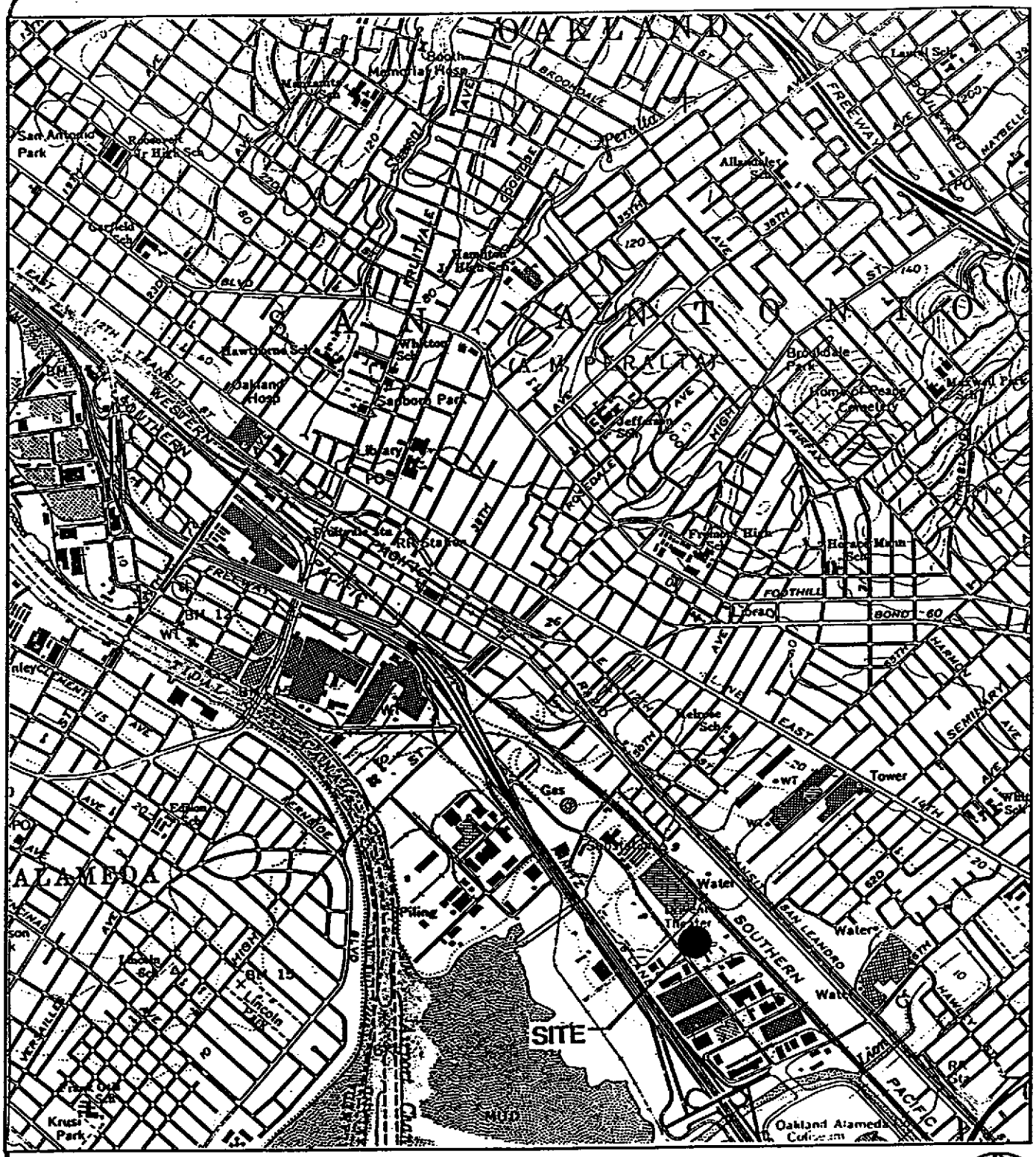
Table 2 - Ground-Water Analytical Results
Monthly and Quarterly Water Sampling
Former Penske Truck Leasing Facility, 725 Julie Ann Way, Oakland, CA.

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(c)	170	2,900	20.0	18.0	1.9	5.7
	28-Feb-91	260	550	43.0	1.0	7.0	1.0
MW-2	2-Oct-90(c)	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)
MW-3	2-Oct-90(c)	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)

(a) Total Petroleum Hydrocarbons analyzed by USEPA Method 8015, modified.
(b) Analyzed by USEPA Method 8020.

( ) Reported detection limit
ND Not Detected
Analysis by Superior Analytical Laboratories, Inc. San Francisco, California.

Project No. RC01904



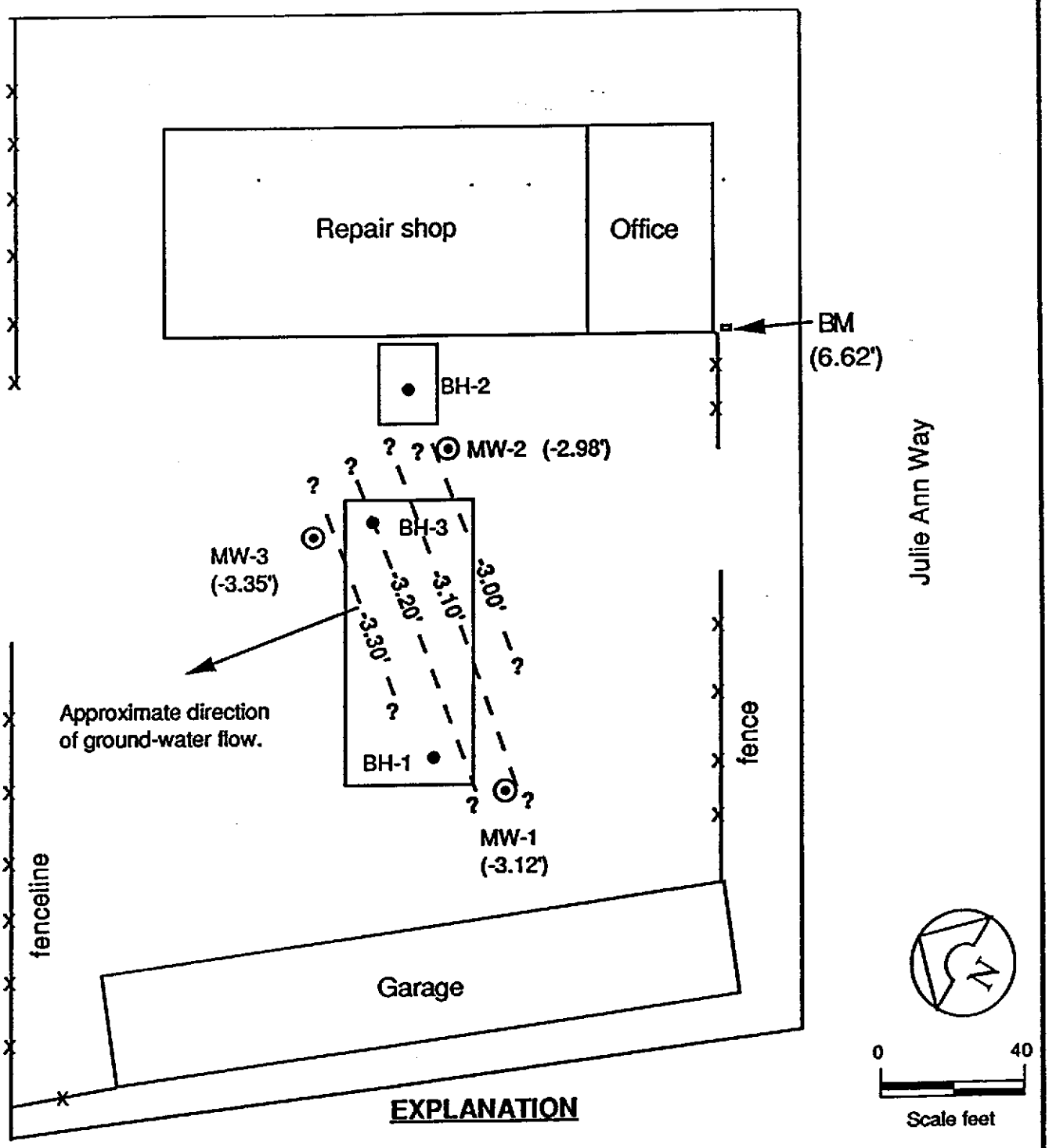
GERAGHTY & MILLER, INC.
Environmental Services

Proj. No. RC01904 Date: March 19, 1991

SITE LOCATION MAP

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

FIGURE
1



BH-1 ● = Approximate location of soil borings

MW-1 ⊙ = Approximate location of ground-water monitor well

▫ BM = Survey Bench Mark (based on City of Oakland datum which is 3 feet higher than Mean Sea Level).

(-3.35') = Ground-Water elevation (feet), measured February 28, 1991.

? -3.20' - = Ground-water elevation contour (feet); Dashed where inferred, queried where uncertain; (contour interval equals 0.10 foot).

GERAGHTY & MILLER, INC.
Environmental Services

Proj. No. RC01904 Date: March 14, 1991

GROUND-WATER CONTOUR MAP

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

FIGURE
2

Attachment 1

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

SUPERIOR ANALYTICAL LABORATORY, INC.
1555 BURKE. UNIT I · SAN FRANCISCO. CA 94124 · PHONE (415) 647-2081 DOHS #1332

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 53254
CLIENT: Geraghty & Miller Inc.
CLIENT JOB NO.: RC01904

DATE RECEIVED: 03/01/91
DATE REPORTED: 03/08/91

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	550

ug/L - parts per billion (ppb)

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

QAQC Summary:

Daily Standard run at 200mg/L: RPD Diesel = <15%
MS/MSD Average Recovery = 115%: Duplicate RPD = 3%

Richard Srna, Ph.D.
Laboratory Director

SUPERIOR ANALYTICAL LABORATORY, INC.
1555 BURKE, UNIT I · SAN FRANCISCO, CA 94124 · PHONE (415) 647-2081 DOHS #1332

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 53254
CLIENT: Geraghty & Miller Inc.
CLIENT JOB NO.: RC01904

DATE RECEIVED: 03/01/91
DATE REPORTED: 03/08/91

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	260

ug/L - parts per billion (ppb)
Minimum Detection Limit for Gasoline in Water: 50ug/L

QAQC Summary:
Daily Standard run at 2mg/L: RPD Gasoline = <15%
MS/MSD Average Recovery =93%: Duplicate RPD = 5%

Richard Srna, Ph.D.
Laboratory Director

SUPERIOR ANALYTICAL LABORATORY, INC.
1555 BURKE, UNIT I · SAN FRANCISCO, CA 94124 · PHONE (415) 647-2081 DOHS #1332

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 53254
CLIENT: Geraghty & Miller Inc.
CLIENT JOB NO.: RC01904

DATE RECEIVED: 03/01/91
DATE REPORTED: 03/08/91

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	6	ND<0.3	ND<0.3	ND<0.3
3	MW-1	43	1	7	1

ug/L - parts per billion (ppb)

Minimum Detection Limit in Water:0.3ug/L

QAQC Summary:
Daily Standard run at 20ug/L: RPD = <15%
MS/MSD Average Recovery = 94% : Duplicate RPD = <6%

Richard Srna, Ph.D.
Laboratory Director

GERAGHTY & MILLER, INC.
Environmental Services

Laboratory Task Order No. _____

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Project Number RC01904

Project Location Oakland

Laboratory Superior Analytical

Sampler(s)/Affiliation NM SHUAIB

SAMPLE IDENTITY	Code	Date/Time Sampled	Lab ID	SAMPLE BOTTLE / CONTAINER DESCRIPTION: TPH (gasoline) (use EPA method 8015 modified)	TPH (diesel) (use EPA method 8015 modified)	BTXE (use EPA method 8020)							TOTAL
MW2	L	2-28 1159		✓	✓	✓							3
MW3	L	1301		✓	✓	✓							3
MW1	L	1356		✓	✓	✓							3

Please initial: CMG

Samples Stored in ice. Yes

Appropriate containers.

Samples preserved

VOA's without headspace. N/A

Comments:

Total No. of Bottles/ Containers: 9

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

Relinquished by: _____ Organization: Geraghty & Miller
Received by: _____ Organization: Express ir
Date 3/1/91 Time 9:30
Seal Intact? (Yes) No N/A

Relinquished by: EA Walter x6077 Organization: Express-Et
Received by: Cecilia D Gonzales Organization: SAL
Date 3/1/91 Time 1115
Seal Intact? (Yes) No N/A

Special Instructions/Remarks: Mail results to: Paul V. Hehn, Geraghty & Miller, Inc., 1050 Marina Way South, Richmond, CA 94804

Delivery Method: ☐ In Person ☐ Common Carrier _____ SPECIFY ☐ Lab Courier ☐ Other _____ SPECIFY

G&M Form 09 1-90

Southprint 90-0136