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ARCADIS GERAGHTY & MILLER

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ARCADIS Geraghty & Miller, Inc.
1050 Marina Way South
Richmond
California 94804
Tel 510 233 3200
Fax 510 233 3204

WESTERN REGION

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, Fourth Quarter 1998
Former Penske Truck Leasing Company Facility
725 Julie Ann Way
Oakland, California

Richmond, California,
February 26, 1999

Contact:
Paul V. Hehn

Extension:
(510) 233-3200

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 quarterly groundwater monitoring and sampling for the fourth quarter 1998 at the Former Penske Truck Leasing Facility at 725 Julie Ann Way, Oakland.

Please note that the requested information related to additional measurements for dissolved oxygen and redox have been included in Table 1 and new Figure 4. Please also note the reductions in concentrations for most constituents since mid-1997 as shown in Table 2.

If you have any questions, please do not hesitate to call

Sincerely,

ARCADIS Geraghty & Miller, Inc.

Paul Hehn, R.G.
Project Geologist/Project Manager

Copies:
Mr. Richard G. Saut
Penske Truck Leasing Co.

Files - Project No. RC000019.0010

Our ref.:
Project No. RC000321.0002/aclt1298.doc

PENSKE
Truck Leasing

Via Fax 510-233-3204

February 22, 1999

Mr. Paul Hehn
Arcadis, Inc.
1050 Marina Way South
Richmond, CA 94804

Re: Fourth Quarter 1998
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

RGS/csk
L1022299.rgs

Results of Quarterly Groundwater Monitoring

Fourth Quarter 1998

Former Penske Truck Leasing Facility
725 Julie Ann Way
Oakland, California

ARCADIS
GERAGHTY & MILLER

1050 Marina Way South
Richmond, CA 94804
(510) 233-3200

QUARTERLY REPORT

Prepared February 5, 1999

ARCADIS GERAGHTY & MILLER

ARCADIS Geraghty & Miller, Inc.
1050 Marina Way South
Richmond
California 94804
Tel 510 233 3200
Fax 510 233 3204

WESTERN REGION

Mr. Richard G. Saut
Environmental Project Manager
Penske Truck Leasing Company, L.P.
Route 10, Green Hills
P.O. Box 7635
Reading, Pennsylvania 19603-7635

Subject:
Results of Quarterly Groundwater Monitoring, Fourth Quarter 1998,
Former Penske Truck Leasing Facility, 725 Julie Ann Way, Oakland, California.

Richmond,
February 5, 1999

Contact:
Paul V. Hehn

Extension:
510 233 3200

Dear Mr. Saut:

This report presents the results of the fourth quarter 1998 quarterly groundwater monitoring and sampling activities performed on December 22, 1998, 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 an ARCADIS 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 for laboratory analysis from selected wells. The scope of work also includes preparation of quarterly groundwater sampling and monitoring reports based on the data and groundwater samples collected during each quarterly event.

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 subject quarterly groundwater monitoring was performed on December 22, 1998. The monitoring-well locations are shown in Figure 2. Monitoring was completed and groundwater samples were collected from Monitoring Wells MW-1, MW-2, MW-4, MW-5, and MW-7 in accordance with the CZ remedial approach monitoring and sampling plan referenced above. Recent changes authorized by the ACHCSA for reduction in sampling from Wells MW-3 and MW-6 are discussed in

the section on Recent Regulatory Requested Changes. Monitoring Well MW-8 was not sampled during the current sampling event since the analytical results of the groundwater samples collected during the previous quarter were within the authorized compliance level. Further discussion of the compliance results is presented in the Discussion and Compliance with Containment Zone Approach section of this report.

est $\pi R^2 h \times 7.5$ gal/m³

The current fourth quarter sampling event represents the initial semi-annual sampling event for Monitoring Well MW-5. A discussion of the circumstance surrounding the revision of the sampling interval is also provided in the section on Recent Regulatory Requested Changes.

Prior to sampling, depth-to-water measurements were obtained from all on-site wells. Additionally, the wells were checked for the presence of liquid-phase hydrocarbons. All equipment that entered the well was washed in a solution of nonphosphate detergent and water and then triple rinsed in deionized water. Each well sampled was purged of at least four casing volumes of water. At Penske's request, additional purging was performed to remove dissolved-phase petroleum hydrocarbons from the groundwater. Due to the purging equipment used to perform the extra purging, the exact amount of water purged from each well cannot be accurately determined but definitely exceeded the amount necessary for a minimum full four well volume purge. The approximate well volume estimated by the field personnel indicates that the extra purge volume exceeded the four volume purge requirements by 15 to 50%. During the current event, it was estimated that 800 gallons were purged from the five wells sampled at the site. This total is approximately 50% more groundwater purged than would normally be required by a four volume well purge.

$\frac{800}{5} = 160$ gal/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 new disposable polyethylene bailer for each well. The purged water was removed by a Penske-contracted vacuum truck for proper disposal.

Groundwater samples were put into the appropriate USEPA-approved containers, placed on ice, and transported to Quanterra Laboratory in West Sacramento, California, under 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); benzene, toluene, ethylbenzene, and total xylenes (BTEX) (USEPA Method 8020); and methyl tertiary butyl ether (MTBE) (USEPA Method 8020).

Results

Shallow Groundwater Flow

A summary of the depth-to-water data is presented in Table 1. Depth to water ranged from 5.40 feet (Monitoring Well MW-5) to 6.73 feet (Monitoring Well MW-3) below the ground surface. A contour map based on the groundwater elevation data collected December 22, 1998, 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 December 1998. Liquid-phase hydrocarbons were measured in Wells MW-1 (0.01 foot) and MW-7 (0.04 foot) during this monitoring event.

The difference in the elevation of the groundwater surface between Wells MW-2 and MW-1 is 0.42 feet, producing a hydraulic gradient (slope of the groundwater surface) of approximately 0.0046 feet/foot in a southwesterly direction. The groundwater gradient and groundwater contours for the current quarter are consistent with those presented during previous quarters.

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).

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 (2,000 µg/L), MW-2 (67 µg/L), and MW-7 (3,900 µg/L). TPH as diesel was detected in the groundwater samples collected from Monitoring Wells MW-1 (79,000 µg/L), MW-2 (1,200 µg/L), MW-4 (3,700 µg/L), MW-5 (890 µg/L), and MW-7 (240,000 µg/L). Benzene was only detected in the groundwater samples collected from Monitoring Wells MW-1 (32 µg/L) and MW-7 (51 µg/L) (Figure 3). All other BTEX constituent results are presented in Table 2. TPH as gasoline, BTEX and MTBE were not detected in the trip blank.

Discussion and Compliance with Containment Zone Approach

Benzene was not detected at concentrations exceeding the compliance concentration of 71 µg/L in the shallow groundwater sample collected from designated CZ-concept

Guard Well MW-7 (51 µg/L). Since the benzene concentration detected in Guard Well MW-7 was below the compliance level during the previous quarterly sampling event (third quarter 1998), downgradient Well MW-8 was not sampled during the current fourth quarter sampling event. Sampling of Well MW-8 will be suspended. If any future quarterly sampling event detects benzene concentrations in excess of the compliance level in Guard Well MW-7, downgradient Well MW-8 will again be sampled during the next quarterly event following the out of compliance detection.

Increases in TPH as gasoline concentrations were detected in the samples collected from Wells MW-1 (from 1,300 µg/L to 2,000 µg/L) and MW-7 (from 710 µg/L to 3,900 µg/L). Decreases were detected in the groundwater samples collected from Wells MW-2 (from 3,200 µg/L to 67 µg/L) and MW-4 (from 2,400 µg/L to ND). TPH as gasoline was not detected (ND) in Well MW-5.

Increases in TPH as diesel concentrations were detected in the samples collected from Wells MW-1 (from 63,000 µg/L to 79,000 µg/L), MW-5 (from 630 µg/L to 890 µg/L), and MW-7 (from 89,000 µg/L to 240,000 µg/L). Decreases were detected in the groundwater samples collected from Wells MW-2 (from 3,500 µg/L to 1,200 µg/L) and MW-4 (from 670,000 µg/L to 3,700 µg/L).

Increases in benzene concentrations were only detected in the samples collected from Well MW-7 (from 39 µg/L to 51 µg/L). Decreases in benzene concentrations were detected in the groundwater samples collected from Well MW-1 (from 43 µg/L to 32 µg/L) and MW-4 (from 5.7 µg/L to ND). Benzene was not detected (ND) in Wells MW-2 and MW-5.

Concentrations of petroleum hydrocarbons continue to be detected in Wells MW-1, MW-4 and MW-7, all of which are located immediately downgradient from the former UST excavation. The concentrations that continue to be detected from these wells indicate that a mass of petroleum hydrocarbons remains downgradient from the former UST excavation. However, decreases in the concentrations of petroleum hydrocarbons detected in the groundwater samples collected from Wells MW-1, MW-4 and MW-7 may indicate that the mass of petroleum hydrocarbons present is being reduced by the additional vacuum-enhanced purging. The reductions could also indicate increased biodegradation activity taking place in the vicinity of these wells as a result of the addition of the ORC™ socks in Observation Wells OW-1 and OW-2 which are both located upgradient from Wells MW-1, MW-4 and MW-7.

At the request of Penske, additional groundwater purging using the vacuum-enhanced purging method will be continued during future quarterly events. The additional purging will help to remove additional mass of petroleum hydrocarbons from the groundwater downgradient from the former tank excavation which will aid in the remediation of the groundwater at this former facility.

Discussion on Recent Regulatory Requested Changes

A letter dated December 9, 1997 from Mr. Barney Chan at the ACHCSA was received by Penske. In his letter, Mr. Chan stated that Monitoring Wells MW-3 and MW-6 no longer need to be sampled. He also stated that there was no need to run total dissolved solids (TDS) from any of the wells being sampled at the site. Consequently, TDS is no longer being analyzed for groundwater samples collected, and Monitoring Wells MW-3 and MW-6 are no longer being sampled.

Mr. Chan also requested that dissolved oxygen (DO) and oxygen-reduction potential (redox) measurements be collected from all wells during all future quarterly sampling events (Figure 4). ARCADIS Geraghty & Miller recommends, and Penske would prefer that these measurements be collected twice a year rather than every quarter. It is recommended that these measurements be collected during the spring quarterly sampling event (higher average groundwater levels) and during the fall quarterly sampling event (lower average groundwater levels). This recommended frequency of measurements would collect sufficient information to monitor biodegradation activity.

NO !

In order to provide a baseline of DO and redox information, these measurements were collected from all available wells during the current fourth quarter sampling event. Measurements were collected from Wells MW-2, MW-3, MW-5, MW-6, and MW-8. DO and redox measurements were not collected from Wells MW-1, MW-4 and MW-7 since globular masses of weathered product in the water in these wells coated the measuring instruments making measurements inaccurate.

In another letter from the ACHCSA to Penske dated June 25, 1998, Mr. Chan stated that the monitoring of Well MW-5 could be reduced to semi-annual. The current fourth quarter sampling event represents the initial semi-annual sampling of this well. Monitoring Well MW-5 will be sampling again during the second quarter of 1999 and then every other quarter thereafter.

Additional Activities During the Next Quarter

During the first quarter of 1999, the ORC™ socks placed in Observation Wells OW-1 and OW-2 will be changed. To complete this change, the existing ORC™ socks will be removed from the wells. Once the socks are removed from the wells, the wells will be monitored for dissolved oxygen and redox measurements using down well field instruments. Following these measurements, the wells will be purged, monitored and sampled using the normal well purging and sampling procedures followed for this site. The groundwater samples collected from Observation Well

OW-1 and OW-2 will be analyzed for TPH as gasoline, TPH as diesel, BTEX, and MTBE. Groundwater samples will also be collected and analyzed for biodegradation parameters for nitrate, sulfate and ferrous iron as requested by the ACHCSA. Following the collection of the groundwater samples, additional groundwater will be purged from the wells using the vacuum-enhanced purging method. Upon completion of the well purging and sampling, the replacement ORC™ socks will be installed in Wells OW-1 and OW-2.

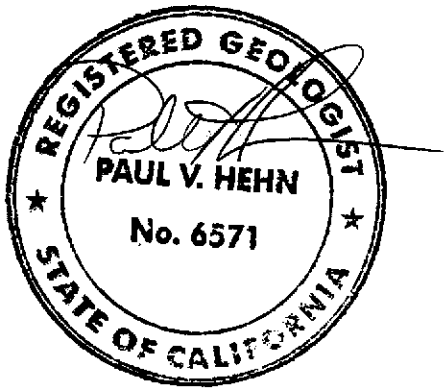
The results of the measurements and analytical results of the groundwater sampled from Observation Wells OW-1 and OW-2 will be reported as part of the first quarter 1999 sampling event report.

ARCADIS 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,
ARCADIS Geraghty & Miller, Inc.

Paul V. Hehn, R.G.
Project Geologist/Project Manager

Donald C. Trueblood
Regional 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 - Fourth Quarter 1998
Figure 3	Benzene Concentrations - Fourth Quarter 1998
Figure 4	Biodegradation Parameter Results - Fourth Quarter 1998
Attachment 1	Copies of Certified Laboratory Reports and Chain-of-Custody Documentation

References

Alameda County Health Care Services Agency. December 6, 1996. Letter to Penske Truck Leasing Co. on Former Penske Truck Leasing Facility, 725 Julie Ann Way, Oakland, CA 94621.

———. December 9, 1997. Letter to Penske Truck Leasing Co. on Former Penske Truck Leasing Facility, 725 Julie Ann Way, Oakland, CA 94621.

———. May 20, 1998. Letter to Penske Truck Leasing Co. on Former Penske Truck Leasing Facility, 725 Julie Ann Way, Oakland, CA 94621.

———. June 25, 1998. Letter to Penske Truck Leasing Co. on Former Penske Truck Leasing Facility, 725 Julie Ann Way, Oakland, CA 94621.

———. December 28, 1998. Letter to Penske Truck Leasing Co. on Former Penske Truck Leasing Facility, 725 Julie Ann Way, Oakland, CA 94621.

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.

ARCADIS GERAGHTY&MILLER

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)	DO (mg/L)	Redox (mv)	Casing Diameter (inches)
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			
	21-Nov-96	6.09		-0.66	33.92	72.43	>73	6.5	77.8	7,890			
	20-Feb-97	5.41		0.02	33.94	74.17	>75	6.0	66.3	1,900			
	28-May-97	5.98		-0.55	NM	72.69 (f)	>73	8.0	77	9,000			
	19-Sep-97	6.45		-1.02	33.80	71.12	>72	7.4	71.3	5,500			
	17-Nov-97	6.14		-0.71	34.03	72.51	>73	7.12	75	6,690			
	27-Feb-98	4.83		0.60	33.97	75.76	>76	6.80	65	6,680			
	27-May-98	6.42		-0.99	34.00	71.60	72	6.79	62.42	7,990			
	1-Oct-98	6.49		-1.06	34.00	71.52	>72	8.01	65.7	5,220			
	22-Dec-98	**6.35**		**-0.92**	**34.00**	**71.89**	**>72**	**6.82**	**63.4**	**5,860**	**NM**	**NM**	

ARCADIS GERAGHTY&MILLER

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)	DO (mg/L)	Redox (mv)	Casing Diameter (inches)
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			
	21-Nov-96	6.41		-0.21	29.43	59.85	>60	6.5	76.3	4,160			
	20-Feb-97	6.26		-0.06	29.54	60.52	>61	6.5	65.2	1,940			
	28-May-97	6.65		-0.45	NM	59.51 (f)	>60	7.0	73.6	5,540			
	19-Sep-97	6.90		-0.70	29.47	58.68	>59	6.9	69.7	12,630			
	17-Nov-97	6.75		-0.55	29.56	59.31	>60	8.08	75.7	710			
	27-Feb-98	5.31		0.89	29.45	62.76	>63	6.50	67.3	530			
	27-May-98	5.87		0.33	29.47	61.36	62	6.95	63.5	5,870			
	1-Oct-98	6.95		-0.75	29.45	58.52	>59	7.96	66.7	1,100			
	22-Dec-98	**6.70**		**-0.50**	**29.23**	**58.58**	**>59**	**6.74**	**52.8**	**450**	**0.30**	**-242**	

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ARCADIS GERAGHTY & MILLER

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)	DO (mg/L)	Redox (mv)	Casing 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			
	21-Nov-96	6.64		-0.54	33.54	69.94	>70	6.5	77.0	7,500			
	20-Feb-97	6.36		-0.26	33.67	71.00	>72	6.5	68.7	4,180			
	28-May-97	6.62		-0.52	NM	70.33 (f)	>71	7.0	74.1	6,580			
	19-Sep-97	6.83		-0.73	33.55	69.48	>70	7.0	70.8	8,570			
	17-Nov-97	6.77		-0.67	33.59	69.73	>70	7.08	75.0	6,580			
	27-Feb-98	5.38		0.72	33.60	73.37	>74	7.0	65.9	7,530			
	27-May-98	6.05		0.05	33.63	71.72	72	8.28	64.8	6,880			
	1-Oct-98	6.95		-0.85	33.70	69.56	>70	7.71	67.1	6,380			
	22-Dec-98	**6.73**		**-0.63**	**33.60**	**NS**	**NS**	**NS**	**NS**	**NS**	**0.80**	**118**	upgradient

ARCADIS GERAGHTY&MILLER

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)	DO (mg/L)	Redox (mv)	Casing 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			
	21-Nov-96	7.90		-2.72	33.17	65.70	>66	6.5	75.9	8,940			
	20-Feb-97	5.29		-0.11	33.28	72.77	>73	6.5	66.1	2,110			
	28-May-97	5.66		-0.48	NM	71.81 (f)	>72	7.0	74	6,480			
	19-Sep-97	6.00		-0.82	33.31	71.00	>71	7.4	71	4,330			
	17-Nov-97	6.06		-0.88	33.35	70.95	>71	6.81	70	11,020			
	27-Feb-98	4.66		0.52	33.22	74.25	>75	7.30	65.9	15,720			
	27-May-98	5.98		-0.80	33.00	70.40	35 (d)	6.89	62.4	10,980			
	1-Oct-98	5.23		-0.05	33.26	72.88	>73	7.87	66.8	3,390			
	22-Dec-98	**6.57**		**-1.39**	**33.52**	**70.07**	**>70**	**6.25**	**57.7**	**13,000**	**NM**	**NM**	

ARCADIS GERAGHTY&MILLER

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)	DO (mg/L)	Redox (mv)	Casing Diameter (inches)
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			
	21-Nov-96	5.44		-0.73	31.33	67.31	>67	6.5	76.0	7,260			
	20-Feb-97	4.68		0.03	31.46	69.62	>70	6.5	60.7	1,990			
	28-May-97	5.21		-0.50	NM	68.25 (f)	>69	7.8	70.7	11,500			
	19-Sep-97	5.43		-0.72	31.46	67.68	>68	7.1	67.9	3,920			
	17-Nov-97	5.28		-0.57	31.44	68.02	>69	7.0	73.0	5,180			
	27-Feb-98	4.10		0.61	31.49	71.21	>72	6.8	62.5	1,650			
	27-May-98	5.40		-0.69	32.00	70.40	70	6.89	64.2	4,830			
	1-Oct-98	5.42		-0.71	31.45	67.68	>68	7.65	65.6	4,290			
	22-Dec-98	**5.40**		**-0.69**	**31.45**	**67.73**	**>68**	**7.21**	**57.7**	**3,920**	**0.30**	**67.3**	

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ARCADIS GERAGHTY & MILLER

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)	DO (mg/L)	Redox (mv)	Casing Diameter (inches)
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			
	28-Aug-96	6.15		-0.78	24.67	NS	NS	NS	NS	NS			
	21-Nov-96	5.71		-0.34	24.65	NS	NS	NS	NS	NS			
	20-Feb-97	5.38		-0.01	24.79	NS	NS	NS	NS	NS			
	28-May-97	5.93		-0.56	NM	NS	NS	NS	NS	NS			
	19-Sep-97	6.15		-0.78	24.76	NS	NS	NS	NS	NS			
	17-Nov-97	6.06		-0.69	27.71	NS	NS	NS	NS	NS			
	27-Feb-98	4.74		0.63	24.64	NS	NS	NS	NS	NS			
	27-May-98	5.40		-0.03	29	NS	NS	NS	NS	NS			
	1-Oct-98	6.37		-1.00	24.72	NS	NS	NS	NS	NS			
	22-Dec-98	**6.06**		**-0.69**	**24.70**	**NS**	**NS**	**NS**	**NS**	**NS**	**5.4**	**202**	

BG high levels O_2

ARCADIS GERAGHTY & MILLER

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)	DO (mg/L)	Redox (mv)	Casing Diameter (inches)
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			
	28-Aug-96	6.20		-0.82	28.30	57.46	>58	7.4	76.4	3,980			
	21-Nov-96	6.12		-0.74	28.30	57.66	>58	6.5	75.2	8,400			
	20-Feb-97	5.70		-0.32	28.46	59.17	>60	6.5	63.9	4,410			
	28-May-97	5.46		-0.08	NM	59.80 (f)	>60	7.5	71.3	9,790			
	19-Sep-97	5.91		-0.53	28.49	58.72	>59	7.3	71.4	4,910			
	17-Nov-97	5.59		-0.21	23.39	46.28	>47	6.97	71.0	6,410			
	27-Feb-98	4.68		0.70	23.40	74.63	>75	6.80	64.0	7,070			
	27-May-98	5.17		0.21	30.00	66.00	65	6.89	63.0	4,980			
	1-Oct-98	5.80		-0.42	30.00	62.92	>63	7.58	64.1	4,000			
	22-Dec-98	**5.78**		**-0.40**	**30.00**	**62.97**	**>63**	**7.07**	**64.2**	**4,210**	**NM**	**NM**	

ARCADIS GERAGHTY & MILLER

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)	DO (mg/L)	Redox (mv)	Casing Diameter (inches)
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			
	28-Aug-96	6.17		-0.73	25.52	NS	NS	NS	NS	NS			
	21-Nov-96	5.74		-0.30	25.45	51.24	>52	6.5	73.6	9,300			
	20-Feb-97	5.10		0.34	25.54	53.14	>54	6.5	61.5	4,950			
	28-May-97	5.68		-0.24	NM	51.63 (f)	>54	7.5	71.2	14,930			
	19-Sep-97	5.95		-0.51	25.41	50.60	>51	7.0	67.8	7,860			
	17-Nov-97	5.91		-0.47	25.59	51.17	>52	7.49	70.2	8,320			
	27-Feb-98	4.50		0.94	25.58	54.80	>55	7.00	63.8	6,310			
	27-May-98	6.10		-0.66	31.00	65.00	65	7.19	63.9	6,460			
	1-Oct-98	6.13		-0.69	25.50	50.36	>51	7.74	63.7	6,880			
	22-Dec-98	**6.10**		**-0.66**	**31.00**	**NS**	**NS**	**NS**	**NS**	**NS**	**0.30**	**123**	

Notes appear on the follwong page.

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ARCADIS GERAGHTY & MILLER

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)	DO (mg/L)	Redox (mv)	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
(mg/L) milligrams per liter
(mv) millivolt
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.

ARCADIS GERAGHTY & MILLER

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 Gasoline (a) (µg/L)	TPH Diesel (a) (µg/L)	Benzene (b) (µg/L)	Toluene (b) (µg/L)	Ethylbenzene (b) (µg/L)	Xylenes (b) (µg/L)	MTBE (b) (µg/L)	Total Dissolved Solids (c) (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
	21-Nov-96	65 (k)	1,500	3.3	0.51	0.59	0.84		3,400
	20-Feb-97	2,900 (k)	200,000	260	61	42	96		1,400
	28-May-97	2,100	28,000 (o)	230	42	55	110		3,100
	19-Sep-97	110,000	2,700,000	230	140	250	700	ND (<500)	3,200
	17-Nov-97	40,000 (r)	950,000 (r)	240 (r)	190 (r)	270 (r)	880 (r)	ND (<300) (r)	3,400
	27-Feb-98	380,000	1,200,000	50	50	200	800	ND (<500)	3,600
	29-May-98	13,000	280,000	110	13	66	390	ND (<50)	--
	1-Oct-98	1,300 (t)	63,000	43	1.2	15	84	ND (<10)	--
	22-Dec-98	**2,000 (y,z)**	**79,000 (y,aa)**	**32 (y)**	**ND(<5.0) (y)**	**23 (y)**	**130 (y)**	**ND(<50) (y)**	--

ARCADIS GERAGHTY&MILLER

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 Gasoline (a) (µg/L)	TPH Diesel (a) (µg/L)	Benzene (b) (µg/L)	Toluene (b) (µg/L)	Ethylbenzene (b) (µg/L)	Xylenes (b) (µg/L)	MTBE (b) (µg/L)	Total Dissolved Solids (c) (mg/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		- -
	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
	21-Nov-96	ND(<50)	1,800 (n)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)		720
	20-Feb-97	ND(<50)	1,000 (n)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)		1,400
	28-May-97	ND(<50)	3,700 (n) (o)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)		830
	19-Sep-97	ND(<50)	4,100	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<2)	ND(<5)	1,200
	17-Nov-97	ND(<50)	1,300	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<2)	ND(<5)	340
	27-Feb-98	ND(<50)	340	ND(<0.5)	0.9	ND(<0.5)	ND(<2)	ND(<5)	210
	27-May-98	ND(<50)	1,300	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<2)	ND(<5)	- -
	1-Oct-98	3,200 (t)	3,500 (v)	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<2)	ND(<10)	- -
	22-Dec-98	**67 (t)**	**1,200 (ab)**	**ND(<0.50)**	**ND(<0.50)**	**ND(<0.50)**	**ND(<1)**	**ND(<5)**	- -

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Table 2: Summary of Groundwater Analytical Results - Monthly and Quarterly Sampling

Former Penske Truck Leasing Facility,
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Well	Date	TPH Gasoline (a) (µg/L)	TPH Diesel (a) (µg/L)	Benzene (b) (µg/L)	Toluene (b) (µg/L)	Ethylbenzene (b) (µg/L)	Xylenes (b) (µg/L)	MTBE (b) (µg/L)	Total Dissolved Solids (c) (mg/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
	21-Nov-96	ND(<50)	ND(<50)	0.82	ND(<0.5)	ND(<0.5)	ND(<0.5)		3,500
	20-Feb-97	ND(<50)	140 (n)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)		2,900
	28-May-97	ND(<50)	240 (n) (o)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)		1,900
	19-Sep-97	ND(<50)	ND(<50)	0.7	ND(<0.5)	ND(<0.5)	ND(<2)	ND(<5)	3,300
	17-Nov-97	ND(<50)	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<2)	ND(<5)	3,400
	27-Feb-98	ND(<50)	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<2)	ND(<5)	3,800
	27-May-98	ND(<50)	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<2)	ND(<5)	--
	1-Oct-98	ND(<50)	56 (w)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<1)	ND(<5)	--
	22-Dec-98	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	--

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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 Gasoline (a) (µg/L)	TPH Diesel (a) (µg/L)	Benzene (b) (µg/L)	Toluene (b) (µg/L)	Ethylbenzene (b) (µg/L)	Xylenes (b) (µg/L)	MTBE (b) (µg/L)	Total Dissolved 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	14		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
	21-Nov-96	52,000 (i)	40,000	130	ND(<100)	ND(<100)	ND(<100)		5,400
	20-Feb-97	64,000 (i)	470,000	ND(<100)	ND(<100)	ND(<100)	ND(<100)		1,500
	28-May-97	11,000 (i)	1,000,000 (o)	ND(<100)	ND(<100)	ND(<100)	ND(<100)		1,700
	19-Sep-97	37,000	2,600,000	260	ND(<30)	ND(<30)	ND(<100)	ND(<300)	2,700
	17-Nov-97	4,400 (r)	57,000 (r)	25 (r)	ND(<5) (r)	ND(<5) (r)	ND(<20) (r)	ND(<50) (r)	7,900
	27-Feb-98	580	9,300	2.7	0.8	0.8	3	ND(<50)	9,700
	29-May-98	3,900	11,000	1.4	0.6	ND(<0.5)	ND(<2)	ND(<5)	--
	1-Oct-98	2,400 (u)	670,000	5.7	ND(<2.0)	ND(<10)	4.6	ND(<10)	--
	22-Dec-98	**ND(<250) (y)**	**3,700 (y,ac)**	**ND(<2.5) (y)**	**ND(<2.5) (y)**	**ND(<2.5) (y)**	**ND(<5) (y)**	**ND(<25) (y)**	--

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Table 2: Summary of Groundwater Analytical Results - Monthly and Quarterly Sampling

Former Penske Truck Leasing Facility,
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Well	Date	TPH Gasoline (a) (µg/L)	TPH Diesel (a) (µg/L)	Benzene (b) (µg/L)	Toluene (b) (µg/L)	Ethylbenzene (b) (µg/L)	Xylenes (b) (µg/L)	MTBE (b) (µg/L)	Total Dissolved Solids (c) (mg/L)
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
	21-Nov-96	ND(<50)	610	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)		2,700
	20-Feb-97	ND(<50)	1,100 (n)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)		1,300
	28-May-97	60 (i)	560 (p) (o)	ND(<0.50)	ND(<0.50)	ND(<0.50)	ND(<0.50)		2,500
	19-Sep-97	70	1,000	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<2)	ND(<5)	2,400
	17-Nov-97	70	1,100	0.6	0.7	0.5	ND(<2)	5	2,800
	27-Feb-98	ND(<50)	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<2)	5	330
	29-May-98	ND(<50)	770	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<2)	ND(<5)	--
	1-Oct-98	ND(<50)	630	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<1.0)	ND(<5.0)	--
	22-Dec-98	**ND(<50)**	**890 (ab)**	**ND(<0.5)**	**ND(<0.5)**	**ND(<0.5)**	**ND(<1.0)**	**ND(<5.0)**	--

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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 Gasoline (a) (µg/L)	TPH Diesel (a) (µg/L)	Benzene (b) (µg/L)	Toluene (b) (µg/L)	Ethylbenzene (b) (µg/L)	Xylenes (b) (µg/L)	MTBE (b) (µg/L)	Total Dissolved Solids (c) (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
	28-Aug-96	NS	NS	NS	NS	NS	NS		NS
	21-Nov-96	NS	NS	NS	NS	NS	NS		NS
	20-Feb-97	NS	NS	NS	NS	NS	NS		NS
	28-May-97	NS	NS	NS	NS	NS	NS		NS
	19-Sep-97	NS	NS	NS	NS	NS	NS	NS	NS
	17-Nov-97	NS	NS	NS	NS	NS	NS	NS	NS
	27-Feb-98	NS	NS	NS	NS	NS	NS	NS	NS
	29-May-98	NS	NS	NS	NS	NS	NS	NS	--
	1-Oct-98	NS	NS	NS	NS	NS	NS	NS	--
	22-Dec-98	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	--

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Table 2: Summary of Groundwater Analytical Results - Monthly and Quarterly Sampling
Former Penske Truck Leasing Facility,
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Well	Date	TPH Gasoline (a) (µg/L)	TPH Diesel (a) (µg/L)	Benzene (b) (µg/L)	Toluene (b) (µg/L)	Ethylbenzene (b) (µg/L)	Xylenes (b) (µg/L)	MTBE (b) (µg/L)	Total Dissolved Solids (c) (mg/L)
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
	28-Aug-96	59,000 (k)	640,000	ND(<200)	ND(<200)	ND(<200)	600		3,100
	21-Nov-96	3,800 (k)	780,000	130	93	33	64		3,400
	20-Feb-97	15,000 (i)	1,500,000	81	51	ND(<50)	ND(<50)		3,300
	28-May-97	390,000 (i)	440,000 (o)	ND(<1000)	ND(<1000)	ND(<1000)	ND(<1000)		3,500
	19-Sep-97	3,600	910,000	110	64	37	ND(<100)	ND(<300)	3,200
	17-Nov-97	15,000 (r)	18,000,000 (r)	110 (r)	41 (r)	12 (r)	110 (r)	ND(<50) (r)	3,300
	27-Feb-98	45,000	290,000	80	60	ND(<50)	ND(<200)	ND(<500)	3,300
	29-May-98	140	1,600	2.3	0.9	0.9	3	ND(<5)	--
	1-Oct-98	710 (u)	89,000	39	2.4	11	31	ND(<10)	--
	22-Dec-98	**3,900 (z)**	**240,000 (ac)**	**51**	**ND(<25)**	**ND(<25)**	**ND(<50)**	**ND(<250)**	--

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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 Gasoline (a) (µg/L)	TPH Diesel (a) (µg/L)	Benzene (b) (µg/L)	Toluene (b) (µg/L)	Ethylbenzene (b) (µg/L)	Xylenes (b) (µg/L)	MTBE (b) (µg/L)	Total Dissolved Solids (c) (mg/L)
MW-8	12-Sep-94	170	850	2.7	0.5	ND(<0.5)	2		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
	28-Aug-96	NS	NS	NS	NS	NS	NS		NS
	21-Nov-96	400 (k)	2,200	4.6	37	4.6	68		5,100
	20-Feb-97	340 (k)	2,500	2.1	53	7.1	94		3,800
	28-May-97	480 (k)	200 (q) (o)	2.5	12	ND(<2.5)	76		4,100
	19-Sep-97	1,000	7,000	0.8	5.0	0.5	130	ND(<5)	5,000
	17-Nov-97	250	520	1.4	2.1	0.7	3	ND(<5)	4,600
	27-Feb-98	ND(<50)	150	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<2)	ND(<5)	3,500
	29-May-98	ND(<50)	70	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<2)	ND(<5)	--
	1-Oct-98	ND(<50)	440 (x)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<1)	ND(<5)	--
	22-Dec-98	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	--
TB-LB	**22-Dec-98**	**ND(<50)**	**NA**	**ND(<0.5)**	**ND(<0.5)**	**ND(<0.5)**	**ND(<1)**	**ND(<5.0)**	**NA**

Notes appear on the following page.

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Former Penske Truck Leasing Facility,
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Well	Date	TPH Gasoline (a) (µg/L)	TPH Diesel (a) (µg/L)	Benzene (b) (µg/L)	Toluene (b) (µg/L)	Ethylbenzene (b) (µg/L)	Xylenes (b) (µg/L)	MTBE (b) (µg/L)	Total Dissolved Solids (c) (mg/L)

(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 hydrocarbons >C8.
(j) Laboratory reports that chromatogram indicates unidentified hydrocarbons >C9.
(k) Laboratory reports that chromatogram indicates gasoline and unidentified hydrocarbons >C8.
(l) Laboratory reports that chromatogram indicates diesel and unidentified hydrocarbons >C16.
(m) Laboratory reports that chromatogram indicates diesel and discrete peaks.
(n) Laboratory reports that chromatogram indicates diesel and unidentified hydrocarbons >C20.
(o) Laboratory reports that the laboratory control sample failed for this batch, as well as when it was initially analyzed on 6/3/97. All results should be considered as estimated values. No additional sample was available for re-extraction.
(p) Laboratory reports that chromatogram indicates diesel and unidentified hydrocarbons >C24.
(q) Laboratory reports that chromatogram indicates diesel and unidentified hydrocarbons <C15.
(r) Laboratory reports reporting limits for diesel and gas/BTEX elevated due to high levels of target compound. Samples run at dilution.
(s) Laboratory reports analysis was performed outside of hold time due to improper preservation. Results are estimated.
(t) Laboratory reports the peak pattern present in this sample represents an unknown mixture atypical of gasoline in the range of n-C09 to greater than n-C12. Quantitation is based on a gasoline reference in the range of n-C07 to n-C12 only.
(u) Laboratory reports the peak pattern present in this sample represents an unknown mixture atypical of gasoline in the range of n-C07 to greater than n-C12. Quantitation is based on a gasoline reference in the range of n-C07 to n-C12 only.
(v) Laboratory reports the hydrocarbon pattern present in this sample represents an unknown mixture in the range of n-C08 to n-C40. Quantitation is based on a diesel reference between n-C10 and n-C24 only.
(w) Laboratory reports the hydrocarbon pattern present in this sample represents an unknown mixture in the range of n-C12 to n-C28. Quantitation is based on a diesel reference between n-C10 and n-C24 only.
(x) Laboratory reports the hydrocarbon pattern present in this sample represents an unknown mixture in the range of n-C10 to n-C28. Quantitation is based on a diesel reference between n-C10 and n-C24 only.

Notes continue on the following page.

ARCADIS GERAGHTY&MILLER

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 Gasoline (a) (µg/L)	TPH Diesel (a) (µg/L)	Benzene (b) (µg/L)	Toluene (b) (µg/L)	Ethylbenzene (b) (µg/L)	Xylenes (b) (µg/L)	MTBE (b) (µg/L)	Total Dissolved Solids (c) (mg/L)

(y) Laboratory reports reporting limit(s) raised due to high level of analyte present in sample.

(z) Laboratory reports the peak pattern present in this sample represents an unknown mixture atypical of gasoline in the range of n-C10 to greater than n-C12. Quantitation is based on a gasoline reference in the range of n-C07 to n-C12 only.

(aa) Laboratory reports the hydrocarbon pattern present in this sample represents an unknown mixture in the range of n-C09 to n-C36. Quantitation is based on a diesel reference between n-C10 and n-C24 only.

(ab) Laboratory reports the hydrocarbon pattern present in this sample represents an unknown mixture in the range of n-C10 to n-C40. Quantitation is based on a diesel reference between n-C10 and n-C24 only.

(ac) Laboratory reports the hydrocarbon pattern present in this sample represents an unknown mixture in the range of n-C10 to n-C26. Quantitation is based on a diesel reference between n-C10 and n-C24 only.

( ) Reported detection limit

-- Not analyzed

ND Not detected

µg/L Micrograms per liter

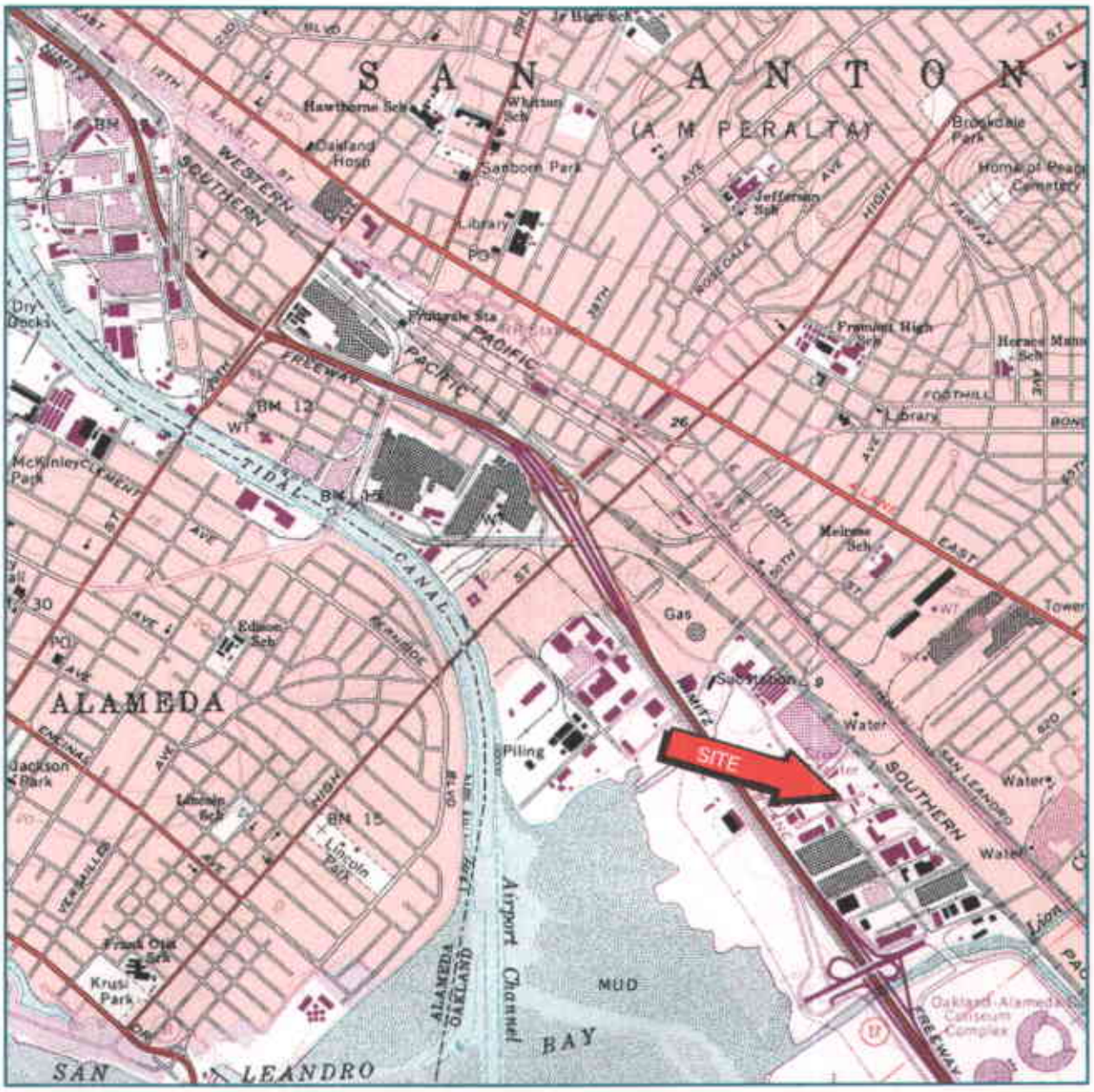
mg/L Milligrams per liter

NS Well not sampled or monitored during this quarterly event.

Analysis prior to May 28, 1997 by Sequoia Analytical, Walnut Creek, California.

Analysis after May 28, 1997 by American Environmental Network (AEN), Pleasant Hill, California.

Analysis beginning October 1, 1998 by Quanterra Incorporated, West Sacramento, California.



QUADRANGLE LOCATION

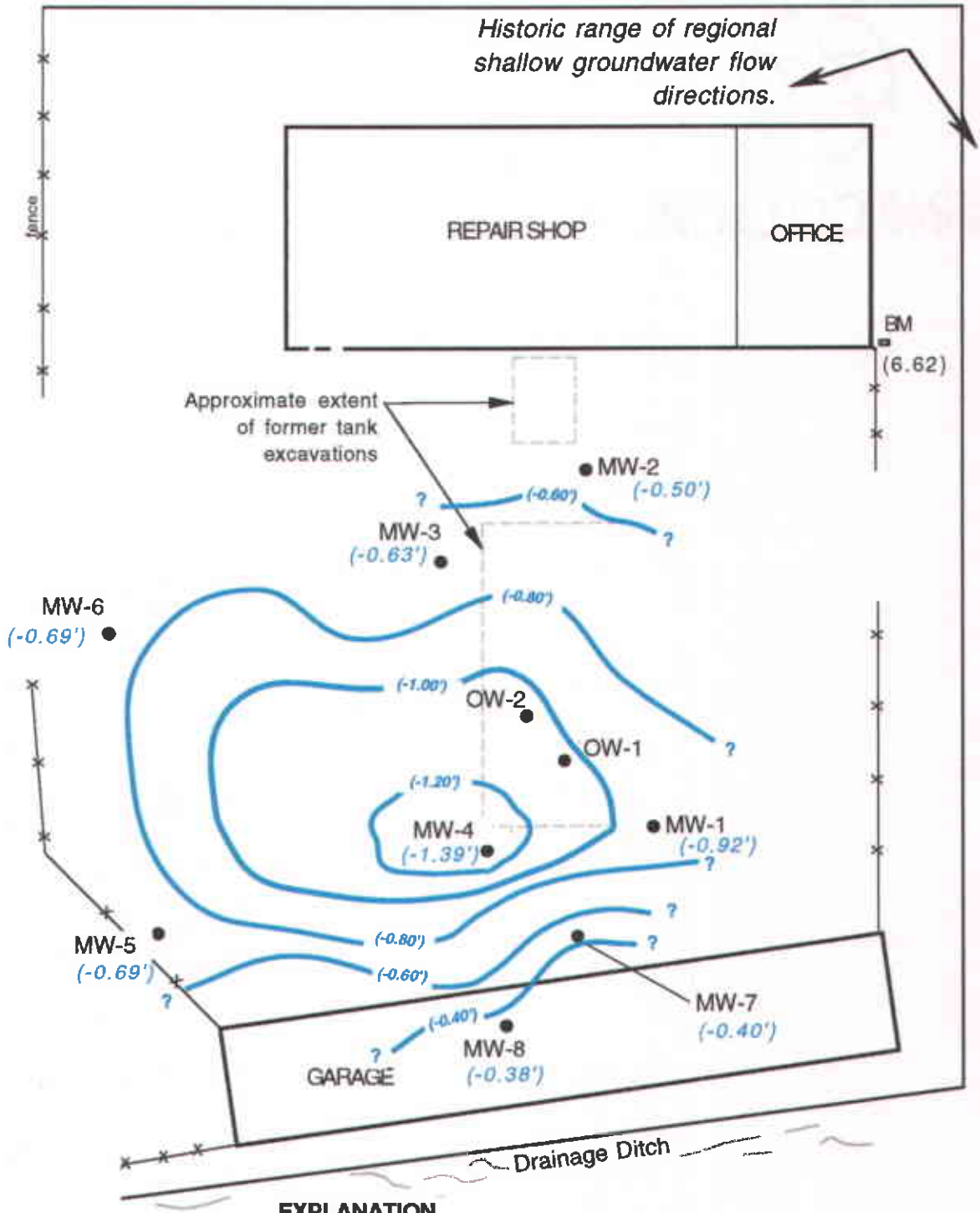
Reference: U.S.G.S. 7-minute Quadrangle, Oakland East, California, revised, Photorevised 1980.

ARCADIS GERAGHTY & MILLER

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

RC000019.0000

FIGURE
1



EXPLANATION

MW-1 ● Approximate location of existing groundwater monitoring wells.

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

(-0.50) Groundwater elevation (feet) relative to benchmark, measured December 22, 1998

(-0.30') ? Groundwater elevation contour (feet); dashed where inferred (contour interval equals 0.20 feet) queried where unknown.

N

0 40

Scale feet

ARCADIS GERAGHTY & MILLER

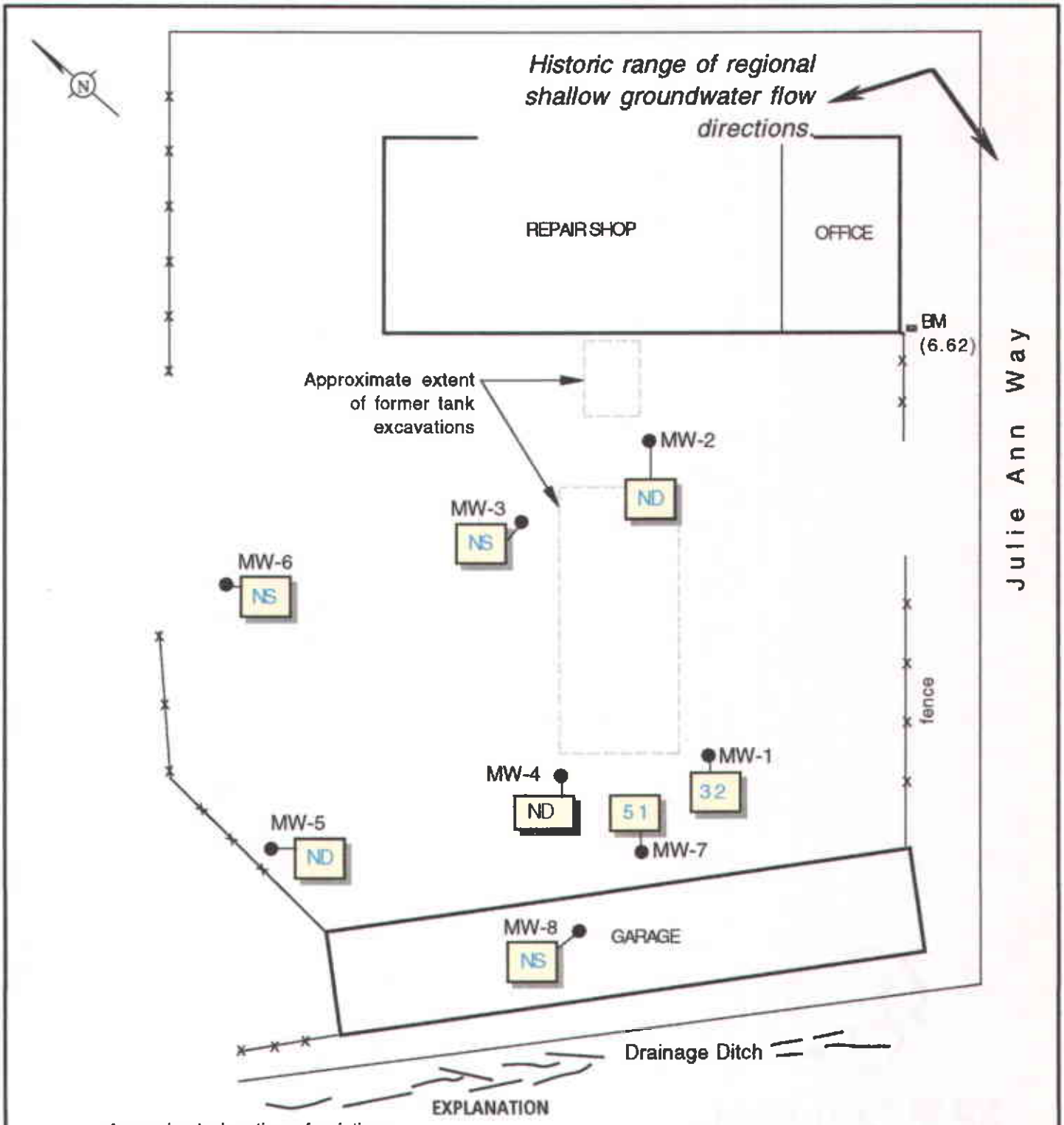
SHALLOW GROUNDWATER CONTOURS
Fourth Quarter 1998

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

RC000019.0010

FIGURE

2



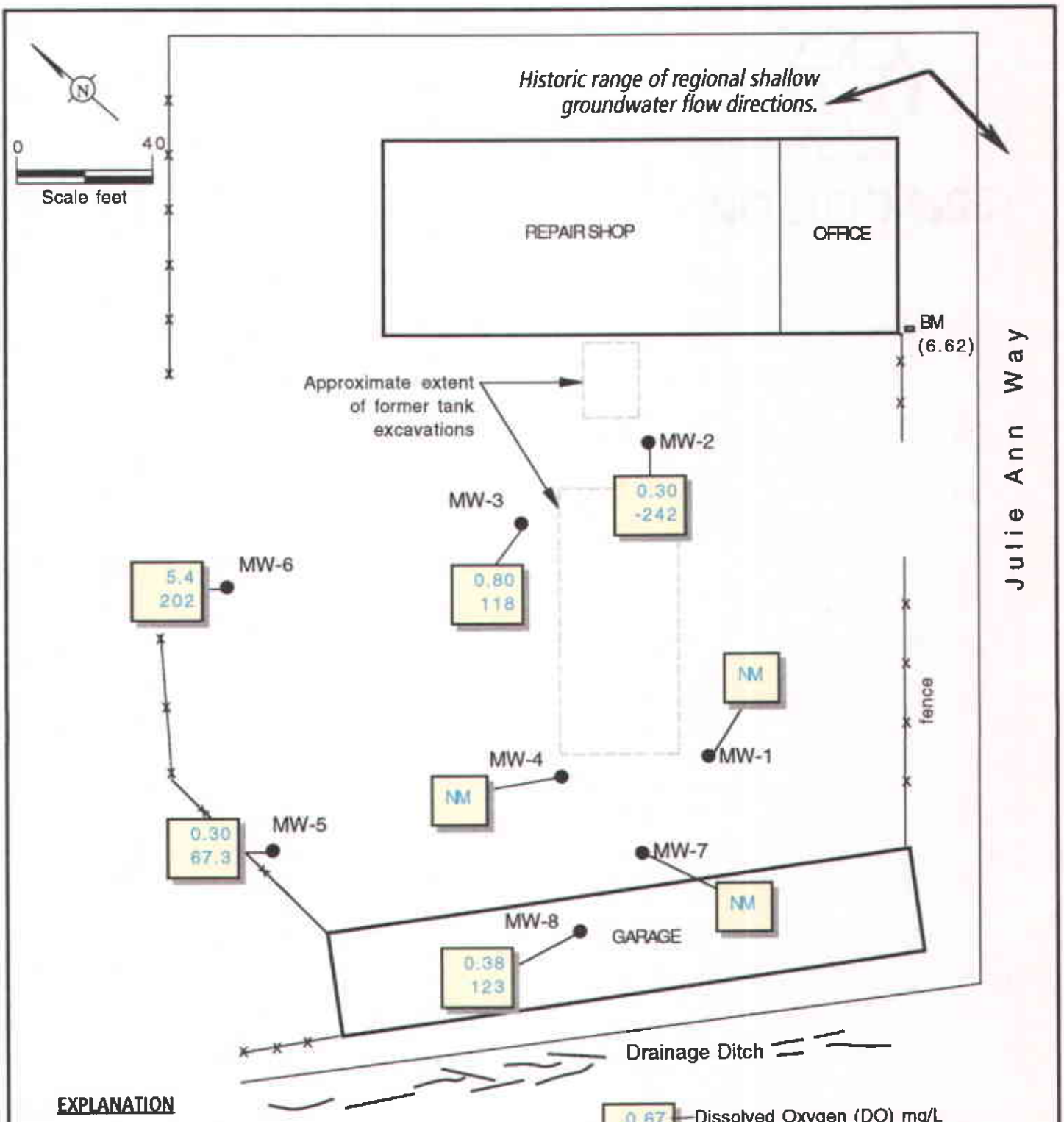
ARCADIS GERAGHTY & MILLER

BENZENE CONCENTRATIONS
Fourth Quarter 1998

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

RC000019.0010

FIGURE
3



EXPLANATION

MW-1 ● Approximate location of existing groundwater monitoring wells.

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

0.67 / -212 — Dissolved Oxygen (DO) mg/L; Oxygen Reduction Potential (Redox) mv

NM — Well not measured during this quarterly event.

ARCADIS GERAGHTY & MILLER

BIODEGRADATION PARAMETER RESULTS
Fourth Quarter 1998
Former Penske Truck Leasing Co.
725 Julie Ann Way, Oakland, California

RC000019.0010

FIGURE
4

ATTACHMENT 1

COPIES OF CERTIFIED LABORATORY REPORTS

AND CHAIN-OF-CUSTODY DOCUMENTATION

Quanterra Incorporated
880 Riverside Parkway
West Sacramento, California 95605

916 373-5600 Telephone
916 372-1059 Fax

January 19, 1999

QUANTERRA INCORPORATED PROJECT NUMBER: 303382
PO/CONTRACT: RC000019.0010

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

Dear Mr. Hehn,

This report contains the analytical results for the six samples received under chain of custody by Quanterra Incorporated on December 23, 1998. These samples are associated with your Penske Oakland project.

The case narrative is an integral part of this report.

If you have any questions, please feel free to call me at (916)374-4383.

Sincerely,

Calvin Tanaka
Project Manager

Quanterra

TABLE OF CONTENTS

QUANTERRA INCORPORATED PROJECT NUMBER 303382

Quanterra

CASE NARRATIVE

QUANTERRA INCORPORATED PROJECT NUMBER 303382

General Comments

The sample containers were received intact and in good condition.

Where applicable, the reporting limits are adjusted to reflect any dilutions.

The method blank and LCS results for this set met the specified QC criteria for acceptance. Where QC criteria were not initially met, corrective actions are documented.

Total Petroleum Hydrocarbons - Gas/BTEX - Method 8015

Sample MW-4 (303382-003) was analyzed at a dilution due to the matrix interferences present.

There were no other anomalies associated with this project.

Quanterra

Quanterra - Western Region

Quality Control Definitions

QC Parameter	Definition
QC Batch	A set of up to 20 field samples plus associated laboratory QC samples that are similar in composition (matrix) and that are processed within the same time period with the same reagent and standard lots.
Duplicate Control Sample (DCS)	Consist of a pair of LCSs analyzed within the same QC batch to monitor precision and accuracy independent of sample matrix effects. This QC is performed only if required by client or when insufficient sample is available to perform MS/MSD.
Duplicate Sample (DU)	A second aliquot of an environmental sample, taken from the same sample container when possible, that is processed independently with the first sample aliquot. The results are used to assess the effect of the sample matrix on the precision of the analytical process. The precision estimated using this sample is not necessarily representative of the precision for other samples in the batch.
Laboratory Control Sample (LCS)	A volume of reagent water for aqueous samples or a contaminant-free solid matrix (Ottawa sand) for soil and sediment samples which is spiked with known amounts of representative target analytes and required surrogates. An LCS is carried through the entire analytical process and is used to monitor the accuracy of the analytical process independent of potential matrix effects.
Matrix Spike and Matrix Spike Duplicate (MS/MSD)	A field sample fortified with known quantities of target analytes that are also added to the LCS. Matrix spike duplicate is a second matrix spike sample. MSs/MSDs are carried through the entire analytical process and are used to determine sample matrix effect on accuracy of the measurement system. The accuracy and precision estimated using MS/MSD is only representative of the precision of the sample that was spiked.
Method Blank (MB)	A sample composed of all the reagents (in the same quantities) in reagent water carried through the entire analytical process. The method blank is used to monitor the level of contamination introduced during sample preparation steps.
Surrogate Spike	Organic constituents not expected to be detected in environmental media and are added to every sample and QC at a known concentration. Surrogates are used to determine the efficiency of the sample preparation and the analytical process.

Source: Quanterra® Quality Control Program, Policy QA-003, Rev. 0, 8/19/96.

Quanterra

SAMPLE DESCRIPTION INFORMATION
for
Geraghty & Miller, Inc.

Lab ID	Client ID	Matrix	Sampled Date	Sampled Time	Received Date
303382-0001-SA	MW-1	AQUEOUS	22 DEC 98		23 DEC 98
303382-0002-SA	MW-2	AQUEOUS	22 DEC 98		23 DEC 98
303382-0003-SA	MW-4	AQUEOUS	22 DEC 98		23 DEC 98
303382-0004-SA	MW-5	AQUEOUS	22 DEC 98		23 DEC 98
303382-0005-SA	MW-7	AQUEOUS	22 DEC 98		23 DEC 98
303382-0006-TB	TB-LB	AQUEOUS	22 DEC 98		23 DEC 98

ARCADIS GERAGHTY & MILLER

Laboratory Task Order No./P.O. No. _____

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Project Number/Name RC000019.0010

Project Location Fenske / OAKLAND

Laboratory QUANTERRA

Project Manager PVH

Sampler(s)/Affiliation RK

Sample ID/Location	Matrix	Date/Time Sampled	Lab ID	ANALYSIS / METHOD / SIZE: BTEX/MTBE	TPH-D				Remarks	Total
MW-1	L	AS labeled		X	X					4
MW-2				X	X					4
MW-4				X	X					4
MW-5				X	X					4
MW-7				X	X					4
TB-LB	V			X						2
						-	SAMPLE DISSOLVED PHASE ONLY	-		
Reid in good condition 122398 MO										

Total No. of Bottles/Containers: 22

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

Relinquished by:	Organization: ARCADIS GERAGHTY & MILLER	Date 12-23-98	Time 1015	Seal Intact?	
Received by:	Organization: QES	Date 12/23/98	Time 1015	Yes No N/A	
Relinquished by:	Organization: QES	Date 12/23/98	Time 1145	Seal Intact?	
Received by:	Organization: QES	Date 12/23/98	Time 13:10	Yes No N/A	

Special Instructions/Remarks:

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

SPECIFY SPECIFY

AG 05 0597

Quanterra

Total Petroleum Hydrocarbons - Gas/BTEX - Method 8015

Quanterra

Benzene, Toluene, Ethyl Benzene and Xylenes (BTEX)
Method 8020

Client Name: Geraghty & Miller, Inc.
Client ID: MW-1
LAB ID: 303382-0001-SA
Matrix: AQUEOUS Sampled: 22 DEC 98 Received: 23 DEC 98
Authorized: 23 DEC 98 Prepared: NA Analyzed: 05 JAN 99

Dilution Factor: 10

Parameter	Result	Units	Reporting Limit	Qualifier
Benzene	32	ug/L	5.0	o
Toluene	ND	ug/L	5.0	
Ethylbenzene	23	ug/L	5.0	
Xylenes (total)	130	ug/L	10	
Methyl-t-butyl ether (MTBE)	ND	ug/L	50	

Surrogate	Recovery	Acceptable Range
a,a,a-Trifluorotoluene	98 %	75 - 124

Note o = Reporting limit(s) raised due to high level of analyte present in sample.
NA = Not Applicable
ND = Not Detected

Reported By: Karen Mason Approved By: Mike Orbanosky

The cover letter is an integral part of this report.
Rev 230787

Quanterra

Benzene, Toluene, Ethyl Benzene and Xylenes (BTEX)
Method 8020

Client Name: Geraghty & Miller, Inc.
Client ID: MW-2
LAB ID: 303382-0002-SA
Matrix: AQUEOUS Sampled: 22 DEC 98 Received: 23 DEC 98
Authorized: 23 DEC 98 Prepared: NA Analyzed: 05 JAN 99

Dilution Factor: 1.0

Parameter	Result	Units	Reporting Limit	Qualifier
Benzene	ND	ug/L	0.50	
Toluene	ND	ug/L	0.50	
Ethylbenzene	ND	ug/L	0.50	
Xylenes (total)	ND	ug/L	1.0	
Methyl-t-butyl ether (MTBE)	ND	ug/L	5.0	

Surrogate	Recovery	Acceptable Range
a,a,a-Trifluorotoluene	105 %	75 - 124

NA = Not Applicable
ND = Not Detected

Reported By: Karen Mason Approved By: Mike Orbanosky

The cover letter is an integral part of this report.
Rev 230787

Quanterra

Benzene, Toluene, Ethyl Benzene and Xylenes (BTEX)
Method 8020

Client Name: Geraghty & Miller, Inc.
Client ID: MW-4
LAB ID: 303382-0003-SA
Matrix: AQUEOUS Sampled: 22 DEC 98 Received: 23 DEC 98
Authorized: 23 DEC 98 Prepared: NA Analyzed: 04 JAN 99

Dilution Factor: 5.0

Parameter	Result	Units	Reporting Limit	Qualifier
Benzene	ND	ug/L	2.5	o
Toluene	ND	ug/L	2.5	
Ethylbenzene	ND	ug/L	2.5	
Xylenes (total)	ND	ug/L	5.0	
Methyl-t-butyl ether (MTBE)	ND	ug/L	25	

Surrogate	Recovery	Acceptable Range
a,a,a-Trifluorotoluene	96 %	75 - 124

Note o = Reporting limit(s) raised due to high level of analyte present in sample.
NA = Not Applicable
ND = Not Detected

Reported By: Karen Mason Approved By: Mike Orbanosky

The cover letter is an integral part of this report.
Rev 230787

Quanterra

Benzene, Toluene, Ethyl Benzene and Xylenes (BTEX)
Method 8020

Client Name: Geraghty & Miller, Inc.
Client ID: MW-5
LAB ID: 303382-0004-SA
Matrix: AQUEOUS Sampled: 22 DEC 98 Received: 23 DEC 98
Authorized: 23 DEC 98 Prepared: NA Analyzed: 04 JAN 99

Dilution Factor: 1.0

Parameter	Result	Units	Reporting Limit	Qualifier
Benzene	ND	ug/L	0.50	
Toluene	ND	ug/L	0.50	
Ethylbenzene	ND	ug/L	0.50	
Xylenes (total)	ND	ug/L	1.0	
Methyl-t-butyl ether (MTBE)	ND	ug/L	5.0	

Surrogate	Recovery	Acceptable Range
a,a,a-Trifluorotoluene	94 %	75 - 124

NA = Not Applicable
ND = Not Detected

Reported By: Karen Mason Approved By: Mike Orbanosky

The cover letter is an integral part of this report.
Rev 230787

Quanterra

Benzene, Toluene, Ethyl Benzene and Xylenes (BTEX)
Method 8020

Client Name: Geraghty & Miller, Inc.
Client ID: MW-7
LAB ID: 303382-0005-SA
Matrix: AQUEOUS Sampled: 22 DEC 98 Received: 23 DEC 98
Authorized: 23 DEC 98 Prepared: NA Analyzed: 04 JAN 99

Dilution Factor: 50

Parameter	Result	Units	Reporting Limit	Qualifier
Benzene	51	ug/L	25	
Toluene	ND	ug/L	25	
Ethylbenzene	ND	ug/L	25	
Xylenes (total)	ND	ug/L	50	
Methyl-t-butyl ether (MTBE)	ND	ug/L	250	

Surrogate	Recovery	Acceptable Range
a,a,a-Trifluorotoluene	94 %	75 - 124

NA = Not Applicable
ND = Not Detected

Reported By: Karen Mason Approved By: Mike Orbanosky

The cover letter is an integral part of this report.
Rev 230787

Quanterra

Benzene, Toluene, Ethyl Benzene and Xylenes (BTEX)
Method 8020

Client Name: Geraghty & Miller, Inc.
Client ID: TB-LB
LAB ID: 303382-0006-TB
Matrix: AQUEOUS Sampled: 22 DEC 98 Received: 23 DEC 98
Authorized: 23 DEC 98 Prepared: NA Analyzed: 02 JAN 99

Dilution Factor: 1.0

Parameter	Result	Units	Reporting Limit	Qualifier
Benzene	ND	ug/L	0.50	
Toluene	ND	ug/L	0.50	
Ethylbenzene	ND	ug/L	0.50	
Xylenes (total)	ND	ug/L	1.0	
Methyl-t-butyl ether (MTBE)	ND	ug/L	5.0	

Surrogate	Recovery	Acceptable Range
a,a,a-Trifluorotoluene	97 %	75 - 124

NA = Not Applicable
ND = Not Detected

Reported By: Karen Mason Approved By: Mike Orbanosky

The cover letter is an integral part of this report.
Rev 230787

Quanterra

QC LOT ASSIGNMENT REPORT
Volatile Organics by GC

Laboratory Sample Number	QC Matrix	QC Category	QC Lot Number (DCS)	QC Run Number (LCS/BLANK)
303382-0001-SA	AQUEOUS	602-A	04 JAN 99-64A	04 JAN 99-64A
303382-0002-SA	AQUEOUS	602-A	04 JAN 99-64A	04 JAN 99-64A
303382-0003-SA	AQUEOUS	602-A	04 JAN 99-64A	04 JAN 99-64A
303382-0004-SA	AQUEOUS	602-A	04 JAN 99-64A	04 JAN 99-64A
303382-0005-SA	AQUEOUS	602-A	04 JAN 99-64A	04 JAN 99-64A
303382-0006-TB	AQUEOUS	602-A	02 JAN 99-64A	02 JAN 99-64A

Quanterra

METHOD BLANK REPORT
Volatile Organics by GC
Project: 303382

Test: 8020-BTX-A — Benzene, Toluene, Ethyl Benzene and Xylenes (BTEX)
Method: 8020
Matrix: AQUEOUS
QC Lot: 04 JAN 99-64A — QC Run: 04 JAN 99-64A
Analyzed: 04 JAN 99 — Time: 12:55

Analyte	Result	Units	Reporting Limit	Qualifier
Benzene	ND	ug/L	0.50	
Toluene	ND	ug/L	0.50	
Ethylbenzene	ND	ug/L	0.50	
Xylenes (total)	ND	ug/L	1.0	
Methyl-t-butyl ether (MTBE)	ND	ug/L	5.0	

Surrogate	% Recovery	Acceptable Range
a,a,a-Trifluorotoluene	87	75 -124

Test: 8020-BTX-A — Benzene, Toluene, Ethyl Benzene and Xylenes (BTEX)
Method: 8020
Matrix: AQUEOUS
QC Lot: 02 JAN 99-64A — QC Run: 02 JAN 99-64A
Analyzed: 02 JAN 99 — Time: 13:55

Analyte	Result	Units	Reporting Limit	Qualifier
Benzene	ND	ug/L	0.50	
Toluene	ND	ug/L	0.50	
Ethylbenzene	ND	ug/L	0.50	
Xylenes (total)	ND	ug/L	1.0	
Methyl-t-butyl ether (MTBE)	ND	ug/L	5.0	

Surrogate	% Recovery	Acceptable Range
a,a,a-Trifluorotoluene	108	75 -124

ND = Not Detected

Quanterra

DUPLICATE CONTROL SAMPLE REPORT
Volatile Organics by GC
Project: 303382

Category: 602-A Aromatic Volatile Organics
Testcode: 8020-BTX-A Method: 8020
Matrix: AQUEOUS Concentration Units: ug/L
QC Lot: 04 JAN 99-64A Analyzed Date: 04 JAN 99 Time: 14:11

Analyte	Concentration Spiked	Concentration Measured DCS1	Concentration Measured DCS2	Accuracy (%) DCS1	Accuracy (%) DCS2	Limits	Precision (RPD) DCS	Precision (RPD) Limit
Benzene	10.0	9.61	9.47	96	95	72-116	1.5	15
Toluene	10.0	8.52	8.38	85	84	78-118	1.6	15
Ethylbenzene	10.0	9.33	9.26	93	93	79-119	0.79	15
Xylenes (total)	30.0	26.9	26.5	90	88	79-119	1.5	15
1,3-Dichlorobenzene	10.0	8.98	8.81	90	88	75-126	1.8	21

Surrogate	Concentration Spiked	Concentration Measured DCS1	Concentration Measured DCS2	Accuracy(%) DCS1	Accuracy(%) DCS2	Limits
a,a,a-Trifluorotoluene	20.0	19.4	18.8	97	94	75-124

Category: 602-A Aromatic Volatile Organics
Testcode: 8020-BTX-A Method: 8020
Matrix: AQUEOUS Concentration Units: ug/L
QC Lot: 02 JAN 99-64A Analyzed Date: 02 JAN 99 Time: 15:11

Analyte	Concentration Spiked	Concentration Measured DCS1	Concentration Measured DCS2	Accuracy (%) DCS1	Accuracy (%) DCS2	Limits	Precision (RPD) DCS	Precision (RPD) Limit
Benzene	10.0	10.2	10.2	102	102	72-116	0.75	15
Toluene	10.0	9.41	9.51	94	95	78-118	1.1	15
Ethylbenzene	10.0	9.40	9.51	94	95	79-119	1.1	15
Xylenes (total)	30.0	27.1	27.4	90	91	79-119	1.1	15
1,3-Dichlorobenzene	10.0	9.47	9.71	95	97	75-126	2.5	21

Surrogate	Concentration Spiked	Concentration Measured DCS1	Concentration Measured DCS2	Accuracy(%) DCS1	Accuracy(%) DCS2	Limits
a,a,a-Trifluorotoluene	20.0	20.6	20.8	103	104	75-124

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quanterra

Total Petroleum Hydrocarbons (Gasoline)
Method P/T-GAS-TR

Client Name: Geraghty & Miller, Inc.
Client ID: MW-1
LAB ID: 303382-0001-SA
Matrix: AQUEOUS Sampled: 22 DEC 98 Received: 23 DEC 98
Authorized: 23 DEC 98 Prepared: NA Analyzed: 05 JAN 99

Dilution Factor: 10

Parameter	Result	Units	Reporting Limit	Qualifier
Gasoline	ND	ug/L	500	
Unknown hydrocarbon	2000	ug/L	500	1o

Surrogate	Recovery	Acceptable Range
4-Bromofluorobenzene	96 %	87 - 122

Note 1 = The peak pattern present in this sample represents an unknown mixture atypical of gasoline in the range of n-C10 to greater than n-C12. Quantitation is based on a gasoline reference in the range of n-C07 to n-C12 only.
Note o = Reporting limit(s) raised due to high level of analyte present in sample.
NA = Not Applicable
ND = Not Detected

Reported By: Karen Mason Approved By: Mike Orbanosky

The cover letter is an integral part of this report.
Rev 230787

Quanterra

Total Petroleum Hydrocarbons (Gasoline)
Method P/T-GAS-TR

Client Name: Geraghty & Miller, Inc.
Client ID: MW-2
LAB ID: 303382-0002-SA
Matrix: AQUEOUS Sampled: 22 DEC 98 Received: 23 DEC 98
Authorized: 23 DEC 98 Prepared: NA Analyzed: 05 JAN 99

Dilution Factor: 1.0

Parameter	Result	Units	Reporting Limit	Qualifier
Gasoline	ND	ug/L	50	
Unknown hydrocarbon	67	ug/L	50	1

Surrogate	Recovery	Acceptable Range
4-Bromofluorobenzene	105 %	87 - 122

Note 1 = The peak pattern present in this sample represents an unknown mixture atypical of gasoline in the range of n-C09 to n-C12. Quantitation is based on a gasoline reference in the range of n-C07 to n-C12 only.
NA = Not Applicable
ND = Not Detected

Reported By: Karen Mason Approved By: Mike Orbanosky

The cover letter is an integral part of this report.
Rev 230787

Quanterra

Total Petroleum Hydrocarbons (Gasoline)
Method P/T-GAS-TR

Client Name: Geraghty & Miller, Inc.
Client ID: MW-4
LAB ID: 303382-0003-SA
Matrix: AQUEOUS Sampled: 22 DEC 98 Received: 23 DEC 98
Authorized: 23 DEC 98 Prepared: NA Analyzed: 04 JAN 99

Dilution Factor: 5.0

Parameter	Result	Units	Reporting Limit	Qualifier
Gasoline	ND	ug/L	250	o
Unknown hydrocarbon	ND	ug/L	250	

Surrogate	Recovery	Acceptable Range
4-Bromofluorobenzene	96 %	87 - 122

Note o = Reporting limit(s) raised due to high level of analyte present in sample.
NA = Not Applicable
ND = Not Detected

Reported By: Karen Mason Approved By: Mike Orbanosky

The cover letter is an integral part of this report.
Rev 230787

Quanterra

Total Petroleum Hydrocarbons (Gasoline)
Method P/T-GAS-TR

Client Name: Geraghty & Miller, Inc.
Client ID: MW-5
LAB ID: 303382-0004-SA
Matrix: AQUEOUS
Authorized: 23 DEC 98

Sampled: 22 DEC 98
Prepared: NA

Received: 23 DEC 98
Analyzed: 04 JAN 99

Dilution Factor: 1.0

Parameter	Result	Units	Reporting Limit	Qualifier
Gasoline	ND	ug/L	50	
Unknown hydrocarbon	ND	ug/L	50	

Surrogate	Recovery	Acceptable Range
4-Bromofluorobenzene	98 %	87 - 122

NA = Not Applicable
ND = Not Detected

Reported By: Karen Mason

Approved By: Mike Orbanosky

The cover letter is an integral part of this report.
Rev 230787

Quanterra

Total Petroleum Hydrocarbons (Gasoline)
Method P/T-GAS-TR

Client Name: Geraghty & Miller, Inc.
Client ID: MW-7
LAB ID: 303382-0005-SA
Matrix: AQUEOUS Sampled: 22 DEC 98 Received: 23 DEC 98
Authorized: 23 DEC 98 Prepared: NA Analyzed: 04 JAN 99

Dilution Factor: 50

Parameter	Result	Units	Reporting Limit	Qualifier
Gasoline	ND	ug/L	2500	
Unknown hydrocarbon	3900	ug/L	2500	1

Surrogate	Recovery	Acceptable Range
4-Bromofluorobenzene	97 %	87 - 122

Note 1 = The peak pattern present in this sample represents an unknown mixture atypical of gasoline in the range of n-C10 to greater than n-C12. Quantitation is based on a gasoline reference in the range of n-C07 to n-C12 only.
NA = Not Applicable
ND = Not Detected

Reported By: Karen Mason Approved By: Mike Orbanosky

The cover letter is an integral part of this report.
Rev 230787

Quanterra

Total Petroleum Hydrocarbons (Gasoline)
Method P/T-GAS-TR

Client Name: Geraghty & Miller, Inc.
Client ID: TB-LB
LAB ID: 303382-0006-TB
Matrix: AQUEOUS Sampled: 22 DEC 98 Received: 23 DEC 98
Authorized: 23 DEC 98 Prepared: NA Analyzed: 02 JAN 99

Dilution Factor: 1.0

Parameter	Result	Units	Reporting Limit	Qualifier
Gasoline	ND	ug/L	50	
Unknown hydrocarbon	ND	ug/L	50	

Surrogate	Recovery	Acceptable Range
4-Bromofluorobenzene	97 %	87 - 122

NA = Not Applicable
ND = Not Detected

Reported By: Karen Mason Approved By: Mike Orbanosky

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Quanterra

QC LOT ASSIGNMENT REPORT
Volatile Organics by GC

Laboratory Sample Number	QC Matrix	QC Category	QC Lot Number (DCS)	QC Run Number (LCS/BLANK)
303382-0001-SA	AQUEOUS	TPH-GAS-A	04 JAN 99-64A	04 JAN 99-64A
303382-0002-SA	AQUEOUS	TPH-GAS-A	04 JAN 99-64A	04 JAN 99-64A
303382-0003-SA	AQUEOUS	TPH-GAS-A	04 JAN 99-64A	04 JAN 99-64A
303382-0004-SA	AQUEOUS	TPH-GAS-A	04 JAN 99-64A	04 JAN 99-64A
303382-0005-SA	AQUEOUS	TPH-GAS-A	04 JAN 99-64A	04 JAN 99-64A
303382-0006-TB	AQUEOUS	TPH-GAS-A	02 JAN 99-64A	02 JAN 99-64A

Quanterra

METHOD BLANK REPORT
Volatile Organics by GC
Project: 303382

Test: TPH-GAS-TR-A Total Petroleum Hydrocarbons (Gasoline)
Method: P/T-GAS-TR
Matrix: AQUEOUS
QC Lot: 04 JAN 99-64A QC Run: 04 JAN 99-64A
Analyzed: 04 JAN 99 Time: 12:55

Analyte	Result	Units	Reporting Limit	Qualifier
Gasoline	ND	ug/L	50	
Unknown hydrocarbon	ND	ug/L	50	

Surrogate	% Recovery	Acceptable Range
4-Bromofluorobenzene	88	87 -122

Test: TPH-GAS-TR-A Total Petroleum Hydrocarbons (Gasoline)
Method: P/T-GAS-TR
Matrix: AQUEOUS
QC Lot: 02 JAN 99-64A QC Run: 02 JAN 99-64A
Analyzed: 02 JAN 99 Time: 13:55

Analyte	Result	Units	Reporting Limit	Qualifier
Gasoline	ND	ug/L	50	
Unknown hydrocarbon	ND	ug/L	50	

Surrogate	% Recovery	Acceptable Range
4-Bromofluorobenzene	98	87 -122

ND = Not Detected

Quanterra

UPLICATE CONTROL SAMPLE REPORT
Volatile Organics by GC
Project: 303382

Category: TPH-GAS-A TPH by Purge and Trap GC-FID
Testcode: TPH-GAS-TR-A Method: P/T-GAS-TR
atrix: AQUEOUS Concentration Units: ug/L
QC Lot: 04 JAN 99-64A Analyzed Date: 04 JAN 99 Time: 16:06

Analyte	Concentration Spiked	Measured DCS1	Measured DCS2	Accuracy (%) DCS1	Accuracy (%) DCS2	Limits	Precision (RPD) DCS	Limit
asoline	1000	930	931	93	93	74-120	0.10	15

urrogate	Concentration Spiked	Measured DCS1	Measured DCS2	Accuracy(%) DCS1	Accuracy(%) DCS2	Limits
-Bromofluorobenzene	20.0	20.4	20.3	102	101	87-122

Category: TPH-GAS-A TPH by Purge and Trap GC-FID
estcode: TPH-GAS-TR-A Method: P/T-GAS-TR
atrix: AQUEOUS Concentration Units: ug/L
QC Lot: 02 JAN 99-64A Analyzed Date: 02 JAN 99 Time: 16:27

Analyte	Concentration Spiked	Measured DCS1	Measured DCS2	Accuracy (%) DCS1	Accuracy (%) DCS2	Limits	Precision (RPD) DCS	Limit
asoline	1000	959	950	96	95	74-120	0.95	15

urrogate	Concentration Spiked	Measured DCS1	Measured DCS2	Accuracy(%) DCS1	Accuracy(%) DCS2	Limits
-Bromofluorobenzene	20.0	20.8	20.6	104	103	87-122

alculations are performed before rounding to avoid round-off errors in calculated results.

Quanterra

Total Petroleum Hydrocarbons - Diesel - Method 8015

Quanterra

Total Petroleum Hydrocarbons by GC/FID (Triregional)
Method TPH-D-TRIREGIONAL

Client Name: Geraghty & Miller, Inc.
Client ID: MW-1
LAB ID: 303382-0001-SA
Matrix: AQUEOUS Sampled: 22 DEC 98 Received: 23 DEC 98
Authorized: 23 DEC 98 Prepared: 28 DEC 98 Analyzed: 04 JAN 99

Dilution Factor: 100

Parameter	Result	Units	Reporting Limit	Qualifier
Diesel Fuel	ND	ug/L	5000	o
Unknown hydrocarbon	79000	ug/L	5000	1

Surrogate	Recovery	Acceptable Range	
o-Terphenyl	ND %	73 - 134	H

Note 1 = The hydrocarbon pattern present in this sample represents an unknown mixture in the range of n-C09 to n-C36. Quantitation is based on a diesel reference between n-C10 and n-C24 only.
Note H = Spiked analyte not detected because of required sample dilution.
Note o = Reporting limit(s) raised due to high level of analyte present in sample.
ND = Not Detected

Reported By: Cindy Jervi Approved By: Emily Uebelhoer

The cover letter is an integral part of this report.
Rev 230787

Quanterra

Total Petroleum Hydrocarbons by GC/FID (Triregional)
Method TPH-D-TRIREGIONAL

Client Name: Geraghty & Miller, Inc.
Client ID: MW-2
LAB ID: 303382-0002-SA
Matrix: AQUEOUS Sampled: 22 DEC 98 Received: 23 DEC 98
Authorized: 23 DEC 98 Prepared: 28 DEC 98 Analyzed: 14 JAN 99

Dilution Factor: 1.0

Parameter	Result	Units	Reporting Limit	Qualifier
Diesel Fuel	ND	ug/L	50	
Unknown hydrocarbon	1200	ug/L	50	1

Surrogate	Recovery	Acceptable Range	
o-Terphenyl	138 %	73 - 134	I

Note 1 = The hydrocarbon pattern present in this sample represents an unknown mixture in the range of n-C10 to n-C40. Quantitation is based on a diesel reference between n-C10 and n-C24 only.
Note I = Surrogate recovery outside of limits due to sample matrix interference.
ND = Not Detected

Reported By: Cindy Jervi Approved By: Lisa Stafford

The cover letter is an integral part of this report.
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Quanterra

Total Petroleum Hydrocarbons by GC/FID (Triregional)
Method TPH-D-TRIREGIONAL

Client Name: Geraghty & Miller, Inc.
Client ID: MW-4
LAB ID: 303382-0003-SA
Matrix: AQUEOUS Sampled: 22 DEC 98 Received: 23 DEC 98
Authorized: 23 DEC 98 Prepared: 28 DEC 98 Analyzed: 04 JAN 99

Dilution Factor: 20

Parameter	Result	Units	Reporting Limit	Qualifier
Diesel Fuel	ND	ug/L	1000	o
Unknown hydrocarbon	3700	ug/L	1000	1

Surrogate	Recovery	Acceptable Range	
o-Terphenyl	ND %	73 - 134	H

Note 1 = The hydrocarbon pattern present in this sample represents an unknown mixture in the range of n-C10 to n-C26. Quantitation is based on a diesel reference between n-C10 and n-C24 only.
Note H = Spiked analyte not detected because of required sample dilution.
Note o = Reporting limit(s) raised due to high level of analyte present in sample.
ND = Not Detected

Reported By: Cindy Jervi Approved By: Emily Uebelhoer

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Quanterra

Total Petroleum Hydrocarbons by GC/FID (Triregional)
Method TPH-D-TRIREGIONAL

Client Name: Geraghty & Miller, Inc.
Client ID: MW-5
LAB ID: 303382-0004-SA
Matrix: AQUEOUS Sampled: 22 DEC 98 Received: 23 DEC 98
Authorized: 23 DEC 98 Prepared: 28 DEC 98 Analyzed: 14 JAN 99

Dilution Factor: 1.0

Parameter	Result	Units	Reporting Limit	Qualifier
Diesel Fuel	ND	ug/L	50	
Unknown hydrocarbon	890	ug/L	50	1

Surrogate	Recovery	Acceptable Range	
o-Terphenyl	132 %	73 - 134	I

Note 1 = The hydrocarbon pattern present in this sample represents an unknown mixture in the range of n-C10 to n-C40. Quantitation is based on a diesel reference between n-C10 and n-C24 only.
Note I = Surrogate recovery outside of limits due to sample matrix interference.
ND = Not Detected

Reported By: Cindy Jervi Approved By: Lisa Stafford

The cover letter is an integral part of this report.
Rev 230787

Quanterra

Total Petroleum Hydrocarbons by GC/FID (Triregional)
Method TPH-D-TRIREGIONAL

Client Name: Geraghty & Miller, Inc.
Client ID: MW-7
LAB ID: 303382-0005-SA
Matrix: AQUEOUS Sampled: 22 DEC 98 Received: 23 DEC 98
Authorized: 23 DEC 98 Prepared: 28 DEC 98 Analyzed: 04 JAN 99

Dilution Factor: 500

Parameter	Result	Units	Reporting Limit	Qualifier
Diesel Fuel	ND	ug/L	25000	o
Unknown hydrocarbon	240000	ug/L	25000	1

Surrogate	Recovery	Acceptable Range	
o-Terphenyl	ND %	73 - 134	H

Note 1 = The hydrocarbon pattern present in this sample represents an unknown mixture in the range of n-C10 to n-C26. Quantitation is based on a diesel reference between n-C10 and n-C24 only.
Note H = Spiked analyte not detected because of required sample dilution.
Note o = Reporting limit(s) raised due to high level of analyte present in sample.
ND = Not Detected

Reported By: Cindy Jervi Approved By: Emily Uebelhoer

The cover letter is an integral part of this report.
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Quanterra

QC LOT ASSIGNMENT REPORT - MS QC
Hydrocarbon Work Cell

Laboratory Sample Number	QC Matrix	QC Category	QC Lot Number (DCS)	QC Run Number (BLANK/LCS)	MS QC Run Number (SA,MS,SD,DU)
303382-0001-SA	AQUEOUS	TPH-D-TR-A	28 DEC 98-11C	28 DEC 98-11C	
303382-0002-SA	AQUEOUS	TPH-D-TR-A	28 DEC 98-11C	28 DEC 98-11C	
303382-0003-SA	AQUEOUS	TPH-D-TR-A	28 DEC 98-11C	28 DEC 98-11C	
303382-0004-SA	AQUEOUS	TPH-D-TR-A	28 DEC 98-11C	28 DEC 98-11C	
303382-0005-SA	AQUEOUS	TPH-D-TR-A	28 DEC 98-11C	28 DEC 98-11C	

Quanterra

METHOD BLANK REPORT
Hydrocarbon Work Cell
Project: 303382

Test: TPH-D-TR-A Total Petroleum Hydrocarbons by GC/FID (Triregional)
Method: TPH-D-TRIREGIONAL
Matrix: AQUEOUS
QC Lot: 28 DEC 98-11C QC Run: 28 DEC 98-11C
Analyzed: 31 DEC 98 Time: 22:42

Analyte	Result	Units	Reporting Limit	Qualifier
Diesel Fuel	ND	ug/L	50	
Unknown hydrocarbon	ND	ug/L	50	

Surrogate	% Recovery	Acceptable Range
o-Terphenyl	103	73 -134

ND = Not Detected

Quanterra

DUPLICATE CONTROL SAMPLE REPORT
Hydrocarbon Work Cell
Project: 303382

Category: TPH-D-TR-A Petroleum Hydrocarbons (Diesel), Tri-Regional
Testcode: TPH-D-TR-A Method: TPH-D-TRIREGIONA
Matrix: AQUEOUS Concentration Units: ug/L
QC Lot: 28 DEC 98-11C Analyzed Date: 31 DEC 98 Time: 23:43

Analyte	Concentration Spiked	Concentration Measured DCS1	Concentration Measured DCS2	Accuracy (%) DCS1	Accuracy (%) DCS2	Limits	Precision (RPD) DCS	Precision (RPD) Limit
Diesel Fuel	300	256	243	85	81	57-112	5.2	23

Surrogate	Concentration Spiked	Concentration Measured DCS1	Concentration Measured DCS2	Accuracy(%) DCS1	Accuracy(%) DCS2	Limits
o-Terphenyl	40.0	41.6	41.0	104	102	73-134

Calculations are performed before rounding to avoid round-off errors in calculated results.