LEVINE•FRICKE
ENGINEERS, HYDROGEOLOGISTS & APPLIED SCIENTISTS

June 16, 1995

LF-3018.95-20

Ms. Madhulla Logan
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94501

Subject: Quarterly Ground-Water Monitoring Report for the Period from January 1 through March 31, 1995, 5050 Coliseum Way and 750-50th Avenue, Oakland, California

Dear Ms. Logan:

This quarterly report is submitted by Levine•Fricke on behalf of Volvo GM Heavy Truck Corporation for the subject site. During this quarterly round, depth-to-water measurements were collected in all 22 monitoring wells and ground-water samples were collected from 21 wells.

If you have any questions regarding this report, please call me (510-652-4500) or Mr. Robert Whelen of Volvo GM (910-279-2544).

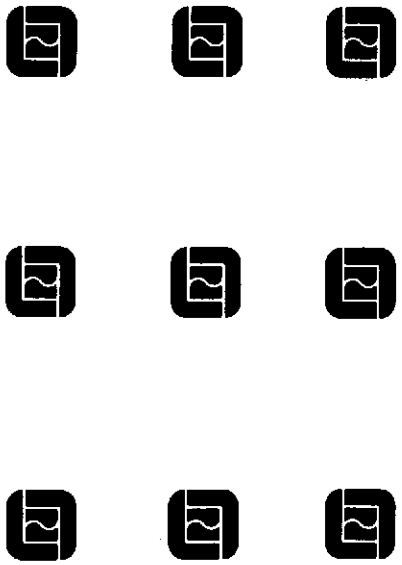
Sincerely,

Kathleen A. Isaacson, R.G.
Senior Associate Hydrogeologist

Enclosure

cc: Sum Arigala, Regional Water Quality Control Board
Bob Whelen, Volvo GM Heavy Truck Corp.
Martha Boyd, Volvo GM Heavy Truck Corp.

1900 Powell Street, 12th Floor
Emeryville, California 94608
(510) 652-4500
Fax (510) 652-2246



Quarterly Ground-Water Monitoring Report for the Period
from January 1 through March 31, 1995
5050 Coliseum Way and 750-50th Avenue
Oakland, California

June 16, 1995
3018.95-20

Prepared for
Volvo GM Heavy Truck Corporation
7900 National Service Road
P.O. Box 26115
Greensboro, North Carolina 27402-6115

LEVINE·FRICKE

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CERTIFICATION

All hydrogeologic and geologic information, conclusions, and recommendations have been prepared under the supervision of and reviewed by a Levine·Fricke California Registered Geologist.

Kathleen A. Isaacson
Senior Associate Hydrogeologist
California Registered Geologist (5106)

6/16/95
Date

June 16, 1995 3018.95-20

QUARTERLY GROUND-WATER MONITORING REPORT FOR THE PERIOD FROM JANUARY 1 THROUGH MARCH 31, 1995 5050 COLISEUM WAY AND 750-50TH AVENUE OAKLAND, CALIFORNIA

1.0 INTRODUCTION

This report presents results of quarterly ground-water monitoring activities conducted during the period from January 1 through March 31, 1995, for the properties located at 5050 Coliseum Way and 750-50th Avenue, Oakland, California (collectively referenced as "the Site"; Figure 1). This report was prepared on behalf of Volvo GM Heavy Truck Corporation ("Volvo GM") in accordance with our work plan dated January 6, 1993 and submitted to the Alameda County Health Care Services Agency (ACHCSA). This report includes graphic illustrations of potentiometric head (water-level) data and presents historical summaries of ground-water elevation and ground-water quality data collected at the Site.

2.0 WATER-LEVEL MEASUREMENTS AND GROUND-WATER FLOW DIRECTION

The top of each well casing at the Site has been surveyed relative to mean sea level by a state-licensed land surveyor. Water-level measurements were collected from all wells at the Site on March 13, 1995. A historical summary of depth-to-water measurements and ground-water elevations for the Site is presented in Table 1.

Ground-water elevations calculated from depth-to-water measurements collected in March 1995 were higher than historical ground-water for the property. Ground-water elevation increases relative to December 1994 were variable across the Site and ranged from 0.77 foot in well LF-17 to 2.38 feet in well MW-4.

Ground-water elevation contours for March 13, 1995 are presented in Figure 2. Ground-water elevation data indicate that the ground-water flow direction was generally toward the west and northwest, consistent with historical ground-water data. Ground-water flow data indicate a lateral hydraulic gradient which ranged from approximately 0.004 foot per foot (ft/ft; as calculated between wells LF-7 and LF-1) to 0.013 ft/ft (as calculated between wells LF-1 and LF-5).

Approximately 0.10 foot of free product was measured in well LF-13 using a product thickness bailer. The oil-water interface probe indicated approximately 1 foot of product, but the nature of the product is such that it distorts the probe's sensitivity.

3.0 GROUND-WATER QUALITY

Ground-water samples were collected from 21 monitoring wells (LF-1 through LF-12, LF-14 through LF-17, LF-F1, and MW-1 through MW-4) on March 13 through 16, 1995. Well LF-13 contained free product, approximately 0.10 foot thick, and the well was not sampled.

Ground-water samples collected from all wells were submitted to the laboratory for metals analysis using EPA Method 6010/7000 series. Samples collected from wells LF-3, LF-8, and LF-14 were also submitted for analysis of total petroleum hydrocarbons (TPH) as gasoline (TPHg) by EPA Method 3550, and as diesel (TPHd) and oil (TPHo) by EPA Method 3510. The ground-water sample collected from well LF-14 was analyzed for semivolatile organic compounds (SVOCs; by EPA Method 8270).

Analytical results for ground-water samples collected during the recent round of sampling were generally consistent with results reported previously for the Site. Analytical results for metals analysis are presented in Figure 3 and Table 2. Analytical results for TPHg and benzene, toluene, ethylbenzene, and total xylenes (BTEX) are presented on Table 3, and results for TPHd and TPHo are presented on Table 4. Laboratory certificates are presented in Appendix A.

3.1 Sampling Procedures

Before ground-water samples were collected, approximately 3 to 5 well casing volumes of water was removed from each well using a Teflon bailer. Specific conductance, pH, and temperature of the purged water were measured during this purging process to aid in evaluating overall ground-water quality. These parameters were recorded in the field on water-quality sampling forms. Copies of these forms are included in Appendix B. Ground-water samples were collected after these parameters stabilized to within 15 percent of the previous measurement.

Ground-water samples were collected using the same Teflon bailer used to purge the well. Ground-water samples for metals analysis were filtered in the field and preserved with

nitric acid. Samples were placed in an ice-chilled cooler immediately after collection for transportation to the analytical laboratory.

Samples were submitted to American Environmental Network, Inc. (formerly Quanteq Laboratories) of Pleasant Hill, California, a state-certified laboratory. The pH values for ground-water samples collected from each monitoring well were measured and recorded in the field during sampling activities.

For quality assurance/quality control measures, a duplicate sample and a field blank were collected for well LF-2. The duplicate sample was submitted for Title 22 metals analysis and the field blank was submitted to the laboratory on a hold basis, pending analytical results.

3.2 Ground-Water Quality Results

3.2.1 Metals

Analytical results for Title 22 metals in ground-water samples collected during the recent round of sampling were generally consistent with results reported previously for those wells.

Chromium was detected in well LF-3 and LF-5 at a concentration of 0.004 parts per million (ppm) in each, and in well LF-6 at the detection limit of 0.002 ppm. Silver, barium, beryllium, molybdenum, antimony, selenium, thallium, and vanadium were generally reported at concentrations below 0.3 ppm when detected in samples.

Zinc was detected in all wells sampled at concentrations ranging from 0.05 ppm in well MW-4 to 37,000 ppm in well LF-11. The highest concentration of lead (0.41 ppm) was detected in the sample from well LF-1. Lead was not reported above laboratory detection limits for wells MW-3, LF-12, or LF-5, located crossgradient or downgradient from LF-1.

The highest concentration of cadmium (91 ppm) was detected in the sample collected from LF-11 and the highest concentration of copper (21 ppm) was detected in the sample collected from well LF-16. The highest concentrations of cobalt (4.9 ppm) and nickel (22 ppm) were detected in the samples collected from LF-11. Of the downgradient wells that were sampled, well LF-12 contained the highest concentrations of those metals (cadmium, 3 ppm; cobalt, 2 ppm; copper, 1 ppm; nickel, 6.7 ppm).

Arsenic was detected in samples collected from nine of the wells, with the highest concentration of 2.8 ppm reported for well LF-3. Arsenic was not detected in downgradient wells LF-5 and LF-12, or crossgradient well MW-3, above laboratory detection limits.

3.2.2 Petroleum Hydrocarbons

Samples collected from wells LF-3, LF-8, and LF-14 were analyzed for TPHg, TPHd, and TPHo (Tables 3 and 4). TPHg was not detected in the sample collected from well LF-3, but was reported at concentrations of 0.3 ppm and 1.2 ppm in wells LF-8 and LF-14, respectively. TPHd was detected in all three wells (LF-3 at 0.8 ppm; LF-8 at 4.1 ppm; and LF-14 at 0.3 ppm). TPHo was only detected in LF-8 at a concentration of 0.2 ppm.

3.2.3 Volatile Organic Compounds

No samples were analyzed for VOCs this quarter.

3.2.4 Semivolatile Organic Compounds

Results of SVOC analysis for the sample collected from well LF-8 were similar to those previously reported. Compounds reported included 2-methyl-naphthalene (0.033 ppm), acenaphthene (0.36 ppm), acenaphthalene (0.013 ppm), anthracene (0.031 ppm), dibenzofuran (0.16 ppm), fluoranthene (0.029 ppm), fluorene (0.17 ppm), naphthalene (0.032 ppm), phenanthrene (0.015 ppm), and pyrene (0.017 ppm).

3.2.5 Measurements of pH

Measurements of ground-water pH were generally consistent with values previously reported for the Site. Recent monitoring indicates that pH values for shallow ground water beneath the Site are variable. The lowest pH (3.93) was measured in the sample from well LF-11. A pH value above 6.5 was measured for samples from only 7 of the 21 wells sampled.

3.2.6 Quality Assurance/Quality Control

Analytical results for the duplicate sample collected from well LF-2 (LF-102) generally showed similar metals concentrations when compared to the primary sample collected from that well (LF-2). The bailer blank prepared with distilled water before well LF-2 was sampled was submitted to the laboratory on a hold basis pending receipt of analytical results.

TABLE 1

HISTORICAL SUMMARY OF GROUND-WATER ELEVATION DATA
5050 COLISEUM WAY AND 750-50TH AVENUE
OAKLAND, CALIFORNIA

Well Number	Top of PVC Casing Elevation (feet msl)	Date Measured	Depth to Water (feet msl)	Ground-Water Elevation (feet msl)
LF-1	7.56	07-Nov-91	6.79	0.77
		26-Oct-92	4.69	2.87
		04-Mar-93	3.94	3.62
		14-Apr-93	3.41	4.15
		24-May-93	3.07	4.49
		14-Jun-93	3.41	4.15
		30-Jul-93	3.46	4.10
		31-Aug-93	3.67	3.89
		27-Sep-93	3.76	3.80
		25-Oct-93	3.74	3.82
		02-Nov-93	4.26	3.30
		08-Dec-93	4.42	3.14
		28-Jan-94	4.06	3.50
		15-Feb-94	3.94	3.62
		24-May-94	3.81	3.75
		21-Sep-94	3.75	3.81
		19-Dec-94	3.51	4.05
		13-Mar-95	2.33	5.23
LF-2	9.84	07-Nov-91	7.26	2.58
		26-Oct-92	6.28	3.56
		04-Mar-93	5.14	4.70
		14-Apr-93	4.95	4.89
		24-May-93	5.09	4.75
		14-Jun-93	5.21	4.63
		30-Jul-93	5.38	4.46
		31-Aug-93	5.57	4.27
		27-Sep-93	5.70	4.14
		25-Oct-93	5.80	4.04
		02-Nov-93	5.86	3.98
		08-Dec-93	6.21	3.63
		28-Jan-94	6.12	3.72
		15-Feb-94	6.07	3.77
		24-May-94	5.65	4.19
		21-Sep-94	6.00	3.84
		19-Dec-94	5.91	3.93
		13-Mar-95	4.30	5.54
LF-3	10.98	07-Nov-91	7.55	3.43
		26-Oct-92	7.05	3.93
		04-Mar-93	5.83	5.15
		14-Apr-93	5.48	5.50
		24-May-93	5.61	5.37
		14-Jun-93	5.75	5.23
		30-Jul-93	5.96	5.02
		31-Aug-93	6.18	4.80
		27-Sep-93	6.33	4.65
		25-Oct-93	6.46	4.52
		02-Nov-93	6.62	4.36
		08-Dec-93	6.71	4.27

TABLE 1

HISTORICAL SUMMARY OF GROUND-WATER ELEVATION DATA
5050 COLISEUM WAY AND 750-50TH AVENUE
OAKLAND, CALIFORNIA

Well Number	Top of PVC Casing Elevation (feet msl)	Date Measured	Depth to Water (feet msl)	Ground-Water Elevation (feet msl)
		28-Jan-94	6.72	4.26
		15-Feb-94	6.50	4.48
		24-May-94	6.15	4.83
		21-Sep-94	6.56	4.42
		19-Dec-94	6.06	4.92
		13-Mar-95	4.85	6.13
LF-4	10.36	07-Nov-91	11.63	-1.27
		26-Oct-92	7.31	3.05
		04-Mar-93	5.58	4.78
		14-Apr-93	5.21	5.15
		24-May-93	5.48	4.88
		14-Jun-93	5.63	4.73
		30-Jul-93	5.92	4.44
		31-Aug-93	6.16	4.20
		27-Sep-93	6.36	4.00
		25-Oct-93	6.54	3.82
		02-Nov-93	7.00	3.36
		08-Dec-93	6.96	3.40
		28-Jan-94	7.04	3.32
		15-Feb-94	6.84	3.52
		24-May-94	5.99	4.37
		21-Sep-94	6.62	3.74
		19-Dec-94	6.75	3.61
		13-Mar-95	5.67	4.69
LF-5	8.03	07-Nov-91	7.34	0.69
		26-Oct-92	7.05	0.98
		04-Mar-93	6.05	1.98
		14-Apr-93	6.25	1.78
		24-May-93	6.61	1.42
		14-Jun-93	6.97	1.06
		30-Jul-93	6.72	1.31
		31-Aug-93	6.84	1.19
		27-Sep-93	7.10	0.93
		25-Oct-93	7.11	0.92
		02-Nov-93	7.04	0.99
		08-Dec-93	7.27	0.76
		28-Jan-94	6.82	1.21
		15-Feb-94	6.85	1.18
		24-May-94	6.76	1.27
		21-Sep-94	7.05	0.98
		19-Dec-94	6.48	1.55
		13-Mar-95	5.25	2.78
LF-6	11.59	07-Nov-91	8.59	3.00
		26-Oct-92	8.82	2.77
		04-Mar-93	5.79	5.80
		14-Apr-93	5.41	6.18
		24-May-93	6.05	5.54

TABLE 1

HISTORICAL SUMMARY OF GROUND-WATER ELEVATION DATA
5050 COLISEUM WAY AND 750-50TH AVENUE
OAKLAND, CALIFORNIA

Well Number	Top of PVC Casing Elevation (feet msl)	Date Measured	Depth to Water (feet msl)	Ground-Water Elevation (feet msl)
		14-Jun-93	6.29	5.30
		30-Jul-93	6.83	4.76
		31-Aug-93	7.27	4.32
		27-Sep-93	7.61	3.98
		25-Oct-93	7.79	3.80
		02-Nov-93	8.07	3.52
		08-Dec-93	7.34	4.25
		28-Jan-94	6.37	5.22
		15-Feb-94	5.98	5.61
		24-May-94	6.14	5.45
		21-Sep-94	7.39	4.20
		19-Dec-94	6.12	5.47
		13-Mar-95	4.98	6.61
LF-7	10.65	07-Nov-91	8.54	2.11
		26-Oct-92	7.98	2.67
		04-Mar-93	4.92	5.73
		14-Apr-93	4.80	5.85
		24-May-93	5.03	5.62
		14-Jun-93	5.18	5.47
		30-Jul-93	5.51	5.14
		31-Aug-93	5.82	4.83
		27-Sep-93	6.14	4.51
		25-Oct-93	6.39	4.26
		02-Nov-93	6.60	4.05
		08-Dec-93	6.74	3.91
		28-Jan-94	6.03	4.62
		15-Feb-94	5.59	5.06
		24-May-94	5.46	5.19
		21-Sep-94	6.40	4.25
		19-Dec-94	5.59	5.06
		13-Mar-95	4.16	6.49
LF-8	10.91	02-Nov-93	6.18	4.73
		08-Dec-93	6.29	4.62
		28-Jan-94	6.38	4.53
		15-Feb-94	6.37	4.54
		24-May-94	6.15	4.76
		21-Sep-94	6.33	4.58
		19-Dec-94	6.31	4.60
		13-Mar-95	4.48	6.43
LF-9	11.70	02-Nov-93	6.76	4.94
		08-Dec-93	6.91	4.79
		28-Jan-94	6.88	4.82
		15-Feb-94	6.80	4.90
		24-May-94	6.80	4.90
		21-Sep-94	6.98	4.72
		19-Dec-94	6.34	5.36
		13-Mar-95	5.12	6.58

TABLE 1

HISTORICAL SUMMARY OF GROUND-WATER ELEVATION DATA
5050 COLISEUM WAY AND 750-50TH AVENUE
OAKLAND, CALIFORNIA

Well Number	Top of PVC Casing Elevation (feet msl)	Date Measured	Depth to Water (feet msl)	Ground-Water Elevation (feet msl)
LF-10	9.43	02-Nov-93	8.14	1.29
		08-Dec-93	7.82	1.61
		28-Jan-94	NM	NM
		15-Feb-94	7.47	1.96
		24-May-94	7.11	2.32
		21-Sep-94	7.90	1.53
		19-Dec-94	7.21	2.22
		13-Mar-95	5.68	3.75
LF-11	9.07	02-Nov-93	11.68	-2.61
		08-Dec-93	5.35	3.72
		28-Jan-94	5.27	3.80
		15-Feb-94	5.04	4.03
		24-May-94	4.20	4.87
		21-Sep-94	4.70	4.37
		19-Dec-94	4.72	4.35
		13-Mar-95	3.27	5.80
LF-12	8.70	02-Nov-93	7.87	0.83
		08-Dec-93	7.90	0.80
		28-Jan-94	7.46	1.24
		15-Feb-94	7.66	1.04
		21-Sep-94	7.80	0.90
		19-Dec-94	7.32	1.38
		13-Mar-95	6.00	2.70
LF-13 (1)	9.75	08-Dec-93	5.94	3.81
		28-Jan-94	4.94	4.81
		15-Feb-94	4.84	4.91
		24-May-94	4.81	4.99
		21-Sep-94	6.32	4.41
		19-Dec-94	4.67	5.08
		13-Mar-95	3.22	5.08
LF-14	11.72	08-Dec-93	7.96	3.76
		28-Jan-94	8.02	3.70
		15-Feb-94	7.85	3.87
		24-May-94	7.68	4.04
		21-Sep-94	7.69	4.03
		19-Dec-94	7.71	4.01
		13-Mar-95	6.68	5.04
LF-15	11.62	08-Dec-93	7.91	3.71
		28-Jan-94	7.74	3.88
		15-Feb-94	7.58	4.04
		24-May-94	8.07	3.55
		21-Sep-94	8.58	3.04
		19-Dec-94	NM	NM
		13-Mar-95	6.32	5.30

TABLE 1

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5050 COLISEUM WAY AND 750-50TH AVENUE
OAKLAND, CALIFORNIA

Well Number	Top of PVC Casing Elevation (feet msl)	Date Measured	Depth to Water (feet msl)	Ground-Water Elevation (feet msl)
LF-16	11.56	08-Dec-93	8.35	3.21
		28-Jan-94	8.40	3.16
		15-Feb-94	8.21	3.35
		24-May-94	8.01	3.55
		21-Sep-94	7.64	3.92
		19-Dec-94	8.60	2.96
		13-Mar-95	6.22	5.34
LF-17	9.71	08-Dec-93	6.72	2.99
		28-Jan-94	5.86	3.85
		15-Feb-94	5.87	3.84
		24-May-94	6.00	3.71
		21-Sep-94	6.88	2.83
		19-Dec-94	5.45	4.26
		13-Mar-95	4.68	5.03
LF-F1	8.82	08-Dec-93	4.08	4.74
		28-Jan-94	4.03	4.79
		15-Feb-94	3.90	4.92
		24-May-94	3.60	5.22
		21-Sep-94	4.05	4.77
		19-Dec-94	3.45	5.37
		13-Mar-95	2.22	6.60
MW-1	10.21	07-Nov-91	6.29	4.24
		26-Oct-92	6.38	2.63
		04-Mar-93	3.57	6.64
		14-Apr-93	3.57	6.64
		24-May-93	4.59	5.62
		14-Jun-93	4.86	5.35
		30-Jul-93	5.72	4.49
		31-Aug-93	6.38	3.83
		27-Sep-93	6.85	3.36
		25-Oct-93	7.03	3.18
		02-Nov-93	7.30	2.91
		08-Dec-93	6.51	3.70
		28-Jan-94	5.00	5.21
		15-Feb-94	4.46	5.75
		24-May-94	4.65	5.56
		21-Sep-94	6.35	3.86
		19-Dec-94	3.70	6.51
		13-Mar-95	2.71	7.50
MW-2	8.86	07-Nov-91	5.93	2.93
		26-Oct-92	5.41	3.45
		04-Mar-93	4.26	4.60
		14-Apr-93	3.83	5.03
		24-May-93	3.78	5.08
		14-Jun-93	3.89	4.97

TABLE 1

HISTORICAL SUMMARY OF GROUND-WATER ELEVATION DATA
5050 COLISEUM WAY AND 750-50TH AVENUE
OAKLAND, CALIFORNIA

Well Number	Top of PVC Casing Elevation (feet msl)	Date Measured	Depth to Water (feet msl)	Ground-Water Elevation (feet msl)
		30-Jul-93	4.10	4.76
		31-Aug-93	4.37	4.49
		27-Sep-93	4.72	4.14
		25-Oct-93	4.81	4.05
		02-Nov-93	4.96	3.90
		08-Dec-93	5.13	3.73
		28-Jan-94	5.18	3.68
		15-Feb-94	5.02	3.84
		24-May-94	4.43	4.43
		21-Sep-94	5.82	3.04
		12-Dec-94	4.75	4.11
		13-Mar-95	3.28	5.58
MW-3	9.01	07-Nov-91	6.94	2.07
		26-Oct-92	7.29	1.72
		04-Mar-93	5.07	3.94
		14-Apr-93	5.21	3.80
		24-May-93	5.95	3.06
		14-Jun-93	6.23	2.78
		27-Sep-93	6.46	2.55
		25-Oct-93	6.47	2.54
		02-Nov-93	6.62	2.39
		08-Dec-93	6.23	2.78
		28-Jan-94	5.58	3.43
		15-Feb-94	5.70	3.31
		24-May-94	5.59	3.42
		21-Sep-94	6.46	2.55
		19-Dec-94	5.46	3.55
		13-Mar-95	4.37	4.64
MW-4	10.75	07-Nov-91	10.26	0.49
		26-Oct-92	9.04	1.71
		04-Mar-93	5.77	4.98
		14-Apr-93	4.71	6.04
		24-May-93	5.60	5.15
		14-Jun-93	5.94	4.81
		30-Jul-93	6.72	4.03
		31-Aug-93	7.25	3.50
		27-Sep-93	7.66	3.09
		25-Oct-93	7.79	2.96
		02-Nov-93	7.97	2.78
		08-Dec-93	7.18	3.57
		28-Jan-94	5.50	5.25
		15-Feb-94	5.17	5.58
		24-May-94	5.46	5.29
		21-Sep-94	7.52	3.23
		19-Dec-94	4.42	6.33
		13-Mar-95	3.48	7.27

Data entered by KAC/25 Jan 95. Data proofed by JCK

TABLE 1

HISTORICAL SUMMARY OF GROUND-WATER ELEVATION DATA
5050 COLISEUM WAY AND 750-50TH AVENUE
OAKLAND, CALIFORNIA

Well Number	Top of PVC Casing Elevation (feet msl)	Date Measured	Depth to Water (feet msl)	Ground-Water Elevation (feet msl)

NOTES:

All elevations are measured relative to the mean-sea-level (msl) datum.
The top of casing elevations were measured from the north side of each PVC casing.

(1) Ground-water elevation corrected for the presence of free product as shown in Table 1A.

Table 1A

Well Number	Top of PVC Casing Elevation (feet msl)	Date Measured	Depth to Water (feet msl)	Depth to Product (feet msl)	Product Thickness* (ft)	Ground-Water Elevation** (feet msl)
LF-13	9.75	15-Feb-94	4.84	4.83	0.01	4.91
LF-13	9.75	24-May-94	4.81	4.75	0.06	4.99
LF-13	9.75	21-Sep-94	6.32	5.17	1.15	4.41
LF-13	9.75	19-Dec-94	4.67	4.57	0.1	5.08
LF-13	9.75	13-Mar-95	3.22	3.12	0.1	

* Product thickness measurement is approximate due to the viscous nature of the product.
**Ground-water elevation corrected for the presence of free product using the following equation: G = W + [(PT*D) - DW] where G is the ground-water elevation, W is the well elevation, PT is the product thickness, D is the product density (g/ml), and DW is the depth to water. For purposes of this calculation, D = 0.85 will be used.

TABLE 2

METALS DETECTED IN GROUND-WATER SAMPLES
5050 COLISEUM WAY AND 750-50TH AVENUE
OAKLAND, CALIFORNIA
(concentrations reported in parts per million [ppm])

Sample ID	Sample Date	Silver	Arsenic	Barium	Beryllium	Cadmium	Cobalt	Chromium	Copper	Mercury	Molybdenum	Nickel	Lead	Antimony	Selenium	Thallium	Vanadium	Zinc
LF-1	04-Nov-91	0.054	0.004	0.046	0.11	130	5.7	<0.01	1.9	<0.0003	0.11	20	0.5	<0.2	<0.004	<1	<0.005	40000
LF-1	27-Oct-92	<0.5	0.007	<0.5	<0.2	57	4.1	<1	1	<0.0003	<1	19	<4	<2	0.027	<10	<0.5	16000
LF-1	05-Mar-93	<0.5	0.22	<0.05	<0.2	43	3.6	<1	0.47	<0.0003	<1	11	<4	<2	<0.01	<10	<0.5	14000
Duplicate	05-Mar-93	<0.5	0.26	<0.05	<0.2	44	3.9	<1	0.50	<0.0003	<1	11	<4	<2	<0.01	<10	<0.5	14000
LF-1	25-May-93	<0.5	0.12	<0.05	<0.2	40	4.7	<1	1	<0.0003	<1	16	<0.4	<2	<0.004	<10	<0.5	19000
Duplicate	25-May-93	<0.03	0.36	<0.05	0.02	9.6	0.81	<0.05	0.15	<0.0003	<0.05	3	0.3	<0.1	<0.004	<0.5	<0.03	4700
LF-1	31-Aug-93	<0.5	0.072	<0.05	<0.2	32	2.3	<1	<1	<0.0003	<1	9	<4	<2	<0.004	<10	<0.5	13000
Duplicate	31-Aug-93	<0.5	0.66	<0.05	<0.2	13	1	<1	<1	<0.0003	<1	5	<4	<2	<0.004	<10	<0.5	7200
LF-1	26-Oct-93	<0.05	0.4	<0.5	0.02	15	1.3	0.6	0.9	<0.0003	<0.1	4.9	0.4	<0.2	<0.04	<1	<0.05	7100
LF-101 (dup)	26-Oct-93	<0.1	1.3	<1	<0.04	12	1	<0.2	0.3	<0.0003	<0.2	3.7	<0.8	<0.4	<0.08	<2	<0.1	5900
LF-1	18-Feb-94	<0.05	0.57	<0.5	<0.02	2.6	0.33	<0.1	<0.1	<0.0002	<0.1	1.4	0.8	<0.2	<0.004	<1	<0.05	2600
LF-1	25-May-94	<0.05	0.49	<0.05	<0.2	7.9	0.9	<1	<1	<0.0002	<1	3	0.79	<3	<0.004	<10	<0.5	5000
LF-1	22-Sep-94	<0.05	0.77	<0.05	<0.02	6.1	0.67	<0.1	<0.1	<0.0002	<0.1	2.5	0.91	<0.2	<0.02	<1	<0.05	4100
LF-1	20-Dec-94	<0.05	0.65	<0.5	<0.02	4.2	0.45	<0.1	<0.1	<0.0002	<0.1	1.7	0.6	<0.2	<0.04	<1	<0.05	3700
LF-1	15-Mar-95	<0.05	0.39	<0.1	<0.02	8.5	0.81	<0.1	0.2	<0.0002	<0.1	3.4	0.41	<0.2	<0.004	<0.5	<0.05	4700
LF-2	04-Nov-91	<0.002	0.028	0.026	<0.001	0.009	0.18	<0.01	0.008	<0.0003	<0.01	0.52	<0.005	<0.02	<0.004	<0.1	<0.005	4.2
LF-2	27-Oct-92	0.006	0.007	<0.05	<0.002	0.006	0.12	<0.01	0.02	<0.0003	<0.01	0.22	<0.04	<0.02	0.005	<0.1	<0.005	3.3
LF-2	04-Mar-93	<0.005	0.003	<0.05	<0.002	<0.005	0.10	<0.01	<0.01	<0.0003	<0.01	0.12	<0.04	<0.02	<0.004	<0.1	<0.005	1.9
LF-2	24-May-93	<0.005	0.005	<0.05	<0.002	<0.005	0.061	<0.01	<0.01	<0.0003	<0.01	0.08	<0.04	<0.02	<0.004	<0.1	<0.005	1.4
LF-2	31-Aug-93	<0.005	5	<0.05	0.003	0.021	0.016	<0.01	<0.01	<0.0003	0.14	<0.01	<0.04	<0.02	<0.004	<0.1	<0.005	8.6
LF-2	25-Oct-93	<0.005	0.004	<0.05	<0.002	0.009	0.055	<0.01	0.02	<0.0003	<0.01	0.11	<0.04	<0.02	<0.004	<0.1	<0.005	1.9
LF-2	16-Feb-94	<0.005	<0.002	<0.05	<0.002	<0.005	<0.005	<0.1	<0.01	<0.0002	<0.01	0.04	<0.04	<0.02	<0.004	<0.1	<0.005	0.41
LF-2	24-May-94	<0.001	<0.002	0.02	<0.0005	<0.001	0.037	<0.002	0.003	<0.0002	<0.002	0.024	<0.003	<0.005	<0.004	<0.02	<0.001	0.3
LF-2	22-Sep-94	<0.001	<0.002	0.02	<0.0005	<0.001	0.038	<0.002	0.006	<0.0002	<0.002	0.038	<0.005	0.007	<0.004	<0.02	0.001	0.59
LF-2	20-Dec-94	0.001	<0.002	0.02	<0.0005	<0.001	0.04	<0.002	0.006	<0.0002	<0.002	0.03	<0.002	<0.005	<0.004	<0.02	<0.001	0.39
LF-2	15-Mar-95	<0.001	<0.002	0.017	<0.0005	<0.001	0.033	<0.002	0.004	<0.0002	<0.002	0.031	<0.002	<0.004	<0.004	<0.01	0.002	0.49
LF-102 (dup)	16-Mar-95	<0.001	<0.002	0.017	<0.0005	<0.001	0.036	<0.002	0.005	<0.0002	<0.002	0.024	<0.002	<0.004	<0.004	<0.01	0.001	0.37
LF-3	04-Nov-91	<0.002	3.1	0.077	0.001	<0.005	0.016	<0.01	<0.004	<0.0003	0.16	0.012	<0.005	<0.02	<0.004	<0.1	0.006	3.1
LF-3	27-Oct-92	<0.005	3.6	0.11	0.004	0.013	0.029	<0.01	<0.01	<0.0003	0.22	0.02	<0.04	<0.02	0.018	<0.1	<0.005	12
LF-3	04-Mar-93	<0.005	4.9	0.07	0.003	0.012	0.023	<0.01	<0.01	<0.0003	0.18	0.04	<0.04	<0.02	<0.02	<0.1	<0.005	15
LF-3	25-May-93	<0.005	3.4	0.11	<0.002	0.04	0.01	<0.01	<0.01	<0.0003	0.13	0.01	<0.04	<0.02	<0.004	<0.1	<0.005	5.8
LF-3	31-Aug-93	<0.005	4.9	<0.05	0.003	0.023	0.019	<0.01	<0.01	<0.0003	0.15	0.01	<0.04	<0.02	<0.004	<0.1	<0.005	8.6
LF-3	25-Oct-93	<0.005	7.3	0.08	<0.002	0.005	0.013	<0.01	<0.01	<0.0003	0.13	0.02	<0.04	<0.02	<0.02	<0.1	<0.005	6.2
LF-3	16-Feb-94	<0.005	3.4	0.1	<0.002	<0.005	0.012	<0.01	<0.01	<0.0002	0.11	0.01	<0.04	<0.02	<0.01	<0.1	<0.005	5
LF-3	25-May-94	<0.001	2.4	0.08	0.0009	<0.001	0.009	0.002	<0.002	<0.0002	0.091	0.006	<0.003	<0.005	<0.02	<0.02	<0.001	4.1
LF-103 (dup)	25-May-94	0.001	2.8	0.08	0.0013	<0.001	0.011	<0.002	<0.002	<0.0002	0.11	0.008	<0.003	<0.005	<0.02	<0.02	<0.001	5.2
LF-3	23-Sep-94	<0.001	2.2	0.05	0.0014	<0.001	0.011	0.002	<0.002	<0.0002	0.11	0.008	<0.005	<0.005	<0.2	<0.02	0.004	5.5
LF-103 (dup)	23-Sep-94	<0.001	2.3	0.06	0.0010	<0.001	0.009	0.004	0.007	<0.0002	0.095	0.007	<0.005	<0.005	<0.2	<0.02	0.003	4.1
LF-3	20-Dec-94	<0.001	3.6	0.09	0.0013	<0.001	0.012	0.005	0.026	<0.0002	0.11	0.011	<0.002	<0.005	<0.04	<0.02	0.012	6.2
LF-103 (dup)	20-Dec-94	<0.001	4.5	0.04	0.0017	<0.001	0.014	0.003	0.003	<0.0002	0.13	0.011	<0.002	<0.005	<0.04	0.02	0.01	8.5
LF-3	15-Mar-95	<0.001	2.8	0.15	0.001	<0.001	0.008	0.004	0.003	<0.0002	0.086	0.007	<0.002	<0.004	<0.04	<0.01	0.011	4.3
LF-4	04-Nov-91	<0.002	0.026	0.082	<0.001	<0.005	<0.005	<0.01	<0.004	<0.0003	<0.01	0.013	<0.005	0.03	<0.004	<0.1	0.01	0.034
LF-4	27-Oct-92	<0.005	0.034	<0.05	<0.002	<0.005	<0.005	<0.01	<0.01	<0.0003	<0.01	0.03	<0.04	<0.02	<0.004	<0.1	<0.005	0.012
LF-4	04-Mar-93	<0.005	0.017	0.11	<0.002	<0.005	<0.005	<0.01	<0.01	<0.0003	<0.01	0.05	<0.04	0.02	<0.004	<0.1	0.008	0.04
LF-4	24-May-93	<0.005	0.013	0.22	<0.002	<0.005	<0.005	<0.01	<0.01	<0.0003	<0.01	0.03	<0.04	<0.02	<0.004	<0.1	<0.005	0.035
LF-4	31-Aug-93	<0.005	0.052	0.08	<0.002	<0.005	0.006	<0.01	<0.01	<0.0003	<0.01	0.04	<0.04	<0.02	<0.004	<0.1	0.009	0.038
LF-4	25-Oct-93	<0.005	0.014	0.12	<0.002	<0.005	<0.005	<0.01	<0.01	<0.0003	<0.01	0.04	<0.04	<0.02	<0.004	<0.1	0.015	0.068

TABLE 2

METALS DETECTED IN GROUND-WATER SAMPLES
5050 COLISEUM WAY AND 750-50TH AVENUE
OAKLAND, CALIFORNIA
(concentrations reported in parts per million [ppm])

Sample ID	Sample Date	Silver	Arsenic	Barium	Beryllium	Cadmium	Cobalt	Chromium	Copper	Mercury	Molybdenum	Nickel	Lead	Antimony	Selenium	Thallium	Vanadium	Zinc
LF-4	16-Feb-94	<0.005	0.008	0.29	<0.002	<0.005	0.006	<0.01	<0.01	<0.0002	<0.01	0.04	<0.04	<0.02	<0.004	<0.1	<0.005	0.05
LF-4	22-Sep-94	<0.001	0.005	0.19	<0.0005	0.001	0.003	<0.002	0.003	<0.0002	<0.002	0.037	<0.005	0.007	<0.004	<0.02	0.007	0.067
LF-4	15-Mar-95	<0.001	0.008	0.34	<0.0005	0.001	0.005	<0.002	<0.002	<0.0002	<0.002	0.037	<0.002	<0.004	<0.004	<0.01	0.002	0.064
LF-5	04-Nov-91	0.004	<0.002	0.018	<0.001	0.049	0.03	<0.01	<0.005	0.0004	<0.01	0.23	<0.005	<0.02	<0.004	<0.1	<0.005	11
LF-5	27-Oct-92	0.022	0.005	<0.05	<0.002	0.24	1.4	<0.01	<0.01	<0.0003	<0.01	5.4	<0.04	<0.02	0.017	<0.1	<0.005	35
LF-5	04-Mar-93	0.021	<0.005	<0.05	<0.002	0.21	1.1	<0.01	<0.01	<0.0003	<0.01	5.0	<0.04	<0.02	<0.010	<0.1	<0.005	36
LF-5	25-May-93	0.01	<0.002	<0.05	<0.002	0.17	0.84	<0.01	<0.01	<0.0003	<0.01	3.2	<0.04	<0.02	<0.004	0.2	<0.005	23
LF-5	31-Aug-93	0.013	0.02	<0.05	<0.002	0.25	1.3	<0.01	<0.01	<0.0003	<0.01	4.6	<0.04	<0.02	<0.02	0.2	<0.005	38
LF-5	26-Oct-93	0.011	0.052	<0.05	<0.002	0.28	1.4	<0.01	0.01	<0.0003	<0.01	5.3	0.07	<0.02	<0.04	0.3	0.01	51
LF-5	16-Feb-94	0.009	<0.02	<0.05	<0.002	0.16	0.95	<0.01	<0.01	<0.0002	<0.01	3.3	<0.04	<0.02	<0.04	0.1	<0.005	28
LF-5	24-May-94	0.008	<0.005	0.01	<0.0005	0.14	0.71	<0.002	<0.002	<0.0002	<0.002	2.4	<0.010	<0.005	<0.01	0.09	0.002	23
LF-5	21-Sep-94	0.006	<0.01	0.01	<0.0005	0.17	0.81	0.003	0.003	<0.0002	<0.002	2.5	<0.010	<0.005	<0.02	0.03	<0.001	25
LF-5	19-Dec-94	0.007	<0.01	0.01	<0.0005	0.25	1.2	0.003	0.004	<0.0002	<0.002	3.8	<0.008	<0.005	0.02	0.08	<0.001	58
LF-5	14-Mar-95	0.004	<0.02	0.013	<0.0005	0.11	0.61	0.004	0.003	<0.0002	<0.002	2.6	<0.01	<0.004	<0.04	0.06	0.003	25
LF-6	05-Nov-91	0.011	0.008	0.019	<0.001	0.079	0.58	<0.01	<0.005	0.0009	<0.01	2.1	0.009	<0.02	<0.004	<0.1	<0.005	8.1
LF-6	27-Oct-92	0.020	0.022	<0.05	<0.002	0.17	1.6	<0.01	<0.01	<0.0003	<0.01	5.5	<0.04	<0.02	0.012	<0.1	<0.005	23
LF-6	04-Mar-93	0.013	0.007	<0.05	0.003	0.13	1.2	<0.01	<0.01	<0.0003	<0.01	4.2	<0.04	<0.02	<0.004	<0.1	<0.005	17
LF-6	24-May-93	0.008	<0.002	<0.05	<0.002	0.13	0.97	<0.01	0.01	<0.0003	<0.01	3.4	<0.04	<0.02	<0.004	0.1	<0.005	13
LF-6	31-Aug-93	0.009	0.014	<0.05	0.003	0.13	1	<0.01	0.01	<0.0003	<0.01	3.7	<0.04	<0.02	<0.004	0.1	<0.005	14
LF-6	26-Oct-93	0.005	<0.002	<0.05	0.003	0.15	1	<0.01	0.02	<0.0003	<0.01	3.7	<0.04	<0.02	<0.004	0.1	<0.005	17
LF-6	16-Feb-94	0.007	0.016	<0.05	0.003	0.11	0.97	<0.01	<0.01	<0.0002	<0.01	3.4	<0.04	<0.02	<0.004	0.1	<0.005	13
LF-6	21-Sep-94	0.004	<0.002	0.01	0.0023	0.099	0.84	<0.002	0.011	<0.0002	<0.002	2.8	<0.005	<0.005	<0.004	0.02	<0.001	11
LF-6	16-Mar-95	0.003	<0.002	0.01	0.0023	0.091	0.74	0.002	0.01	<0.0002	<0.002	2.6	<0.005	<0.004	<0.004	0.06	0.001	10
LF-7	05-Nov-91	<0.002	0.004	0.13	<0.001	<0.005	<0.005	<0.01	0.006	0.0011	<0.01	0.01	<0.005	<0.02	<0.004	<0.1	0.006	<0.005
LF-7	27-Oct-92	<0.005	0.03	0.11	<0.002	<0.005	<0.005	<0.01	<0.01	<0.0003	0.01	0.01	<0.04	<0.02	<0.004	<0.1	0.008	0.021
LF-7	04-Mar-93	<0.005	0.025	0.08	<0.002	<0.005	<0.005	<0.01	<0.01	<0.0003	0.01	0.01	<0.04	<0.02	<0.010	<0.1	0.009	0.01
LF-7	24-May-93	<0.005	0.003	0.08	<0.002	<0.005	<0.005	<0.01	<0.01	<0.0003	<0.01	<0.01	<0.04	<0.02	<0.004	<0.1	0.006	0.007
LF-7	31-Aug-93	<0.005	0.013	0.08	<0.002	<0.005	<0.005	<0.01	<0.01	<0.0003	<0.01	<0.01	<0.04	<0.02	<0.004	<0.1	0.006	0.021
LF-7	25-Oct-93	<0.005	<0.002	0.09	<0.002	<0.005	<0.005	<0.01	<0.01	<0.0003	<0.01	<0.01	<0.04	<0.02	<0.004	<0.1	0.006	0.011
LF-7	16-Feb-94	<0.005	0.014	0.12	<0.002	<0.005	<0.005	<0.01	<0.01	<0.0002	<0.01	0.02	<0.04	<0.02	<0.004	<0.1	0.005	0.01
LF-7	21-Sep-94	<0.001	<0.002	0.10	<0.0005	<0.001	<0.001	<0.002	<0.002	<0.0002	0.006	0.010	<0.005	0.005	<0.004	<0.02	0.006	0.012
LF-7	15-Mar-95	<0.001	0.004	0.24	<0.0005	<0.001	<0.001	<0.002	<0.002	<0.0002	0.005	0.011	<0.005	<0.004	<0.004	<0.01	0.006	0.053
LF-8	27-Oct-93	<0.005	2.6	0.16	<0.002	<0.005	0.005	<0.01	<0.01	<0.0003	<0.01	0.01	<0.04	<0.02	<0.004	<0.1	<0.005	0.022
LF-8	16-Feb-94	<0.005	2.3	0.33	<0.002	<0.005	<0.005	<0.01	<0.01	<0.0002	<0.01	<0.01	<0.04	<0.02	<0.004	<0.1	<0.005	<0.01
LF-8	24-May-94	<0.001	2.5	0.2	<0.0005	<0.001	<0.001	<0.002	<0.002	<0.0002	0.004	<0.003	<0.003	<0.005	<0.02	<0.02	0.004	0.015
LF-8	23-Sep-94	<0.001	3.4	0.32	<0.0005	0.002	<0.001	<0.002	<0.002	<0.0002	<0.002	0.003	<0.005	0.005	<0.004	<0.02	0.005	0.024
LF-8	20-Dec-94	<0.001	2	0.39	<0.0005	<0.001	<0.001	<0.002	<0.002	<0.0002	<0.002	0.004	<0.002	<0.005	<0.04	<0.02	0.004	0.015
LF-8	15-Mar-95	<0.001	2	0.072	<0.0005	<0.001	<0.001	<0.002	<0.002	<0.0002	0.002	0.003	<0.002	<0.004	<0.04	<0.01	0.002	0.017
LF-9	01-Nov-93	<0.005	0.009	<0.05	<0.002	0.041	0.56	<0.01	0.02	<0.0003	<0.01	0.86	<0.04	<0.02	<0.02	<0.1	<0.005	14
LF-109 (dup)	01-Nov-93	<0.005	0.015	<0.05	<0.002	0.034	0.46	<0.01	<0.01	<0.0003	<0.01	0.71	<0.04	<0.02	<0.02	<0.1	<0.005	14
LF-9	17-Feb-94	<0.005	0.064	<0.05	<0.002	0.12	0.016	<0.01	<0.01	<0.0002	<0.01	0.1	<0.04	<0.02	<0.004	<0.1	<0.005	31
LF-9	21-Sep-94	<0.001	0.18	0.02	<0.0005	0.008	0.023	<0.002	<0.002	<0.0002	0.004	0.072	<0.005	0.006	<0.01	<0.02	0.002	20
LF-9	13-Mar-95	<0.001	0.15	0.021	<0.0005	0.01	0.028	<0.002	0.004	<0.0002	0.003	0.085	<0.005	<0.004	<0.004	<0.01	0.003	26
LF-10	28-Oct-93	<0.005	0.04	0.77	<0.002	0.02	0.019	0.07	0.04	<0.0003	<0.01	0.17	<0.04	<0.02	<0.04	<0.1	0.048	2

TABLE 2

METALS DETECTED IN GROUND-WATER SAMPLES
5050 COLISEUM WAY AND 750-50TH AVENUE
OAKLAND, CALIFORNIA
(concentrations reported in parts per million [ppm])

Sample ID	Sample Date	Silver	Arsenic	Barium	Beryllium	Cadmium	Cobalt	Chromium	Copper	Mercury	Molybdenum	Nickel	Lead	Antimony	Selenium	Thallium	Vanadium	Zinc
LF-10	16-Feb-94	<0.005	<0.005	<0.05	<0.002	0.005	0.018	<0.01	<0.01	<0.0002	<0.01	0.12	<0.04	<0.02	<0.01	<0.1	0.008	0.21
LF-10	22-Sep-94	0.001	<0.005	0.02	<0.0005	0.002	0.008	<0.002	0.005	<0.0002	<0.002	0.083	<0.010	<0.005	<0.01	<0.02	0.006	0.075
LF-10	15-Mar-95	<0.001	<0.02	0.018	<0.0005	0.001	0.018	<0.002	0.006	<0.0002	<0.002	0.13	<0.010	0.004	<0.04	0.02	0.004	0.13
LF-11	28-Oct-93	<0.005	0.07	0.1	<0.002	120	5.9	<0.01	3	<0.0003	<0.01	28	6	<0.02	<0.04	<0.1	2	47000
LF-11	18-Feb-94	<0.5	<0.02	<5	<0.2	140	8.4	<1	4	<0.0002	<1	37	<4	<2	<0.02	<10	<0.5	44000
LF-111 (dup)	18-Feb-94	<0.5	<0.02	<5	<0.2	140	9.4	<1	4	<0.0002	<1	40	<4	<2	<0.02	<10	<0.5	46000
LF-11	23-Sep-94	0.5	<0.02	<0.01	0.2	130	7.1	<1	5	<0.0002	<1	32	0.41	<2	<0.04	<10	<0.5	33000
LF-11	15-Mar-95	<0.5	<0.01	<1	<0.2	91	4.9	<1	3	<0.0002	<1	22	0.08	<2	<0.02	<5	<0.5	37000
LF-12	01-Nov-93	<0.05	0.022	<0.5	<0.02	3.7	2.7	<0.1	0.9	<0.0003	<0.1	8.1	<0.4	<0.2	0.014	<1	<0.05	3400
LF-12	17-Feb-94	<0.05	0.004	<0.5	<0.02	2.9	1.9	<0.1	0.7	<0.0002	<0.1	5.9	<0.4	<0.2	0.014	<1	<0.05	2700
LF-12	24-May-94	<0.05	0.008	<0.05	<0.02	3.6	2.4	<0.1	1	<0.0002	<0.1	7.1	0.049	<0.3	0.017	<1	<0.05	3100
LF-12	22-Sep-94	<0.05	<0.005	<0.05	0.02	3.4	2.2	<0.1	1.1	<0.0002	<0.1	6.7	0.02	<0.2	0.02	<1	<0.05	3100
LF-12	19-Dec-94	<0.05	<0.005	<0.5	0.02	3.5	2.3	<0.1	1.1	<0.0002	<0.1	6.9	0.01	<0.2	0.03	<1	<0.05	3200
LF-12	15-Mar-95	<0.05	<0.002	<0.1	0.02	3	2	<0.1	1	<0.0002	<0.1	6.7	<0.005	<0.2	0.019	<0.5	<0.05	2600
LF-13	06-Dec-93	<0.005	3.3	0.24	<0.002	<0.005	0.007	<0.01	<0.01	<0.0003	0.04	0.03	<0.04	<0.02	<0.2	<0.1	0.061	0.03
LF-14	08-Dec-93	<0.005	0.005	<0.05	<0.002	0.12	0.67	<0.01	0.68	0.0016	<0.01	1.6	<0.04	<0.02	<0.02	<0.1	<0.005	230
LF-14	17-Feb-94	<0.005	<0.002	<0.05	0.002	0.16	0.96	<0.01	2.1	<0.0002	<0.01	2.4	<0.04	<0.02	<0.004	<0.1	<0.005	300
LF-14	25-May-94	<0.005	0.004	<0.05	0.002	0.14	1	<0.01	3.5	<0.0002	<0.01	2.4	0.027	<0.03	<0.004	0.1	<0.005	340
LF-14	21-Sep-94	<0.005	<0.002	<0.05	<0.002	0.065	0.59	<0.01	1.1	<0.0002	<0.01	1.4	0.022	<0.02	<0.004	<0.1	<0.005	240
LF-14	19-Dec-94	<0.005	0.004	<0.05	0.004	0.12	0.96	<0.01	2.9	<0.0002	<0.01	2.3	0.03	<0.02	<0.004	<0.1	0.042	370
LF-14	15-Mar-95	<0.005	<0.002	0.01	0.004	0.12	0.86	<0.01	3.4	<0.0002	<0.01	2.3	0.017	<0.02	<0.004	<0.05	<0.005	340
LF-15	06-Dec-93	0.032	<0.05	0.28	0.017	1.7	8.1	<0.01	0.14	<0.0003	<0.01	23	1.1	<0.02	<0.1	0.9	<0.005	640
LF-15	18-Feb-94	<0.05	0.006	<0.5	<0.02	1.7	7.4	<0.1	<0.1	<0.0002	<0.1	20	0.6	<0.2	<0.04	<1	<0.05	660
LF-15	21-Sep-94	0.020	<0.01	<0.05	0.027	2.0	11	<0.01	<0.01	<0.0002	<0.01	29	0.21	<0.02	<0.02	1.1	<0.005	620
LF-15	13-Mar-95	<0.005	<0.002	0.01	0.019	1.5	8.8	<0.01	<0.01	<0.0002	<0.01	24	0.33	<0.02	<0.02	0.66	<0.005	550
LF-16	07-Dec-93	<0.05	<0.05	<0.5	<0.02	10	5.9	<0.1	0.4	<0.003	<0.1	16	<0.4	<0.2	<0.1	<1	<0.05	3400
LF-16	17-Feb-94	<0.05	<0.002	<0.5	0.04	15	8.3	<0.1	21	<0.0002	<0.1	24	<0.4	<0.2	<0.04	<1	<0.05	5200
LF-16	25-May-94	<0.05	<0.002	<0.5	0.02	12	7	<0.1	25	<0.0002	<0.1	20	<0.01	<0.3	<0.004	<1	<0.05	4100
LF-16	21-Sep-94	<0.05	<0.005	<0.05	0.03	11	6.2	<0.1	22	<0.0002	<0.1	17	<0.05	<0.2	<0.01	<1	<0.05	3700
LF-16	19-Dec-94	<0.05	<0.005	<0.5	0.03	10	6	<0.1	22	<0.0002	<0.1	17	<0.2	<0.2	<0.01	<1	0.08	3300
LF-16	15-Mar-95	<0.05	<0.02	<0.1	0.03	8.2	4.9	<0.1	21	<0.0002	<0.1	16	<0.05	<0.2	<0.04	<0.5	<0.05	3300
LF-17	08-Dec-93	<0.005	0.004	0.11	<0.002	<0.005	0.011	<0.01	<0.01	<0.0003	<0.01	0.04	<0.04	<0.02	<0.004	<0.1	0.008	0.1
LF-17	15-Feb-94	<0.005	<0.002	0.05	<0.002	<0.005	0.009	<0.01	<0.01	<0.0002	<0.01	0.03	<0.04	<0.02	<0.004	<0.1	0.007	0.05
LF-17	22-Sep-94	<0.001	<0.002	0.06	<0.0005	<0.001	0.005	<0.002	<0.002	<0.0002	0.003	0.015	<0.005	0.005	<0.004	<0.02	0.006	0.035
LF-17	14-Mar-95	<0.001	<0.002	0.065	<0.0005	<0.001	0.006	<0.002	<0.002	<0.002	<0.002	0.022	<0.002	<0.004	<0.004	0.01	0.003	0.056
LF-F1	08-Dec-93	<0.005	0.012	0.07	<0.002	0.049	0.055	<0.01	<0.01	<0.0003	<0.01	0.07	<0.04	<0.02	<0.04	<0.1	0.008	13
LF-F1	18-Feb-94	<0.005	0.004	<0.05	<0.002	0.065	0.062	<0.01	<0.01	<0.0002	0.02	0.07	<0.04	<0.02	<0.004	<0.1	<0.005	20
LF-F1	23-Sep-94	0.002	0.21	0.02	<0.0005	<0.005	0.2	<0.002	<0.002	<0.0002	0.006	0.13	<0.005	<0.02	<0.004	<0.1	<0.005	39
LF-F1	15-Mar-95	0.001	0.092	0.021	<0.0005	0.02	0.1	<0.002	<0.002	<0.0002	0.009	0.05	<0.002	<0.02	<0.004	<0.05	0.001	14
MW-1	05-Nov-91	<0.002	0.073	0.085	<0.001	<0.005	0.008	<0.01	<0.005	<0.0003	0.02	0.032	<0.005	<0.02	<0.004	<0.1	<0.005	2.7
MW-1	27-Oct-92	<0.005	0.084	0.09	<0.002	0.031	0.052	<0.01	<0.01	<0.0003	<0.01	0.3	<0.04	<0.02	<0.004	<0.1	0.007	42

TABLE 2

METALS DETECTED IN GROUND-WATER SAMPLES
5050 COLISEUM WAY AND 750-50TH AVENUE
OAKLAND, CALIFORNIA
(concentrations reported in parts per million [ppm])

Sample ID	Sample Date	Silver	Arsenic	Barium	Beryllium	Cadmium	Cobalt	Chromium	Copper	Mercury	Molybdenum	Nickel	Lead	Antimony	Selenium	Thallium	Vanadium	Zinc
MW-1	05-Mar-93	<0.005	0.024	0.05	<0.002	0.008	0.015	<0.01	<0.01	<0.0003	<0.01	0.11	<0.04	<0.02	<0.004	<0.1	0.006	16
MW-1	25-May-93	<0.005	0.064	0.06	<0.002	<0.005	0.008	<0.01	<0.01	<0.0003	0.02	0.02	<0.04	0.03	<0.004	<0.1	0.007	1.6
MW-1	01-Sep-93	<0.005	0.097	0.07	<0.002	<0.005	0.009	<0.01	<0.01	<0.0003	0.02	0.02	<0.04	<0.02	<0.004	<0.1	0.005	2.3
MW-1	26-Oct-93	<0.005	0.03	0.08	<0.002	0.009	0.012	<0.01	<0.01	<0.0003	<0.01	0.1	<0.04	<0.02	<0.004	<0.1	<0.005	13
MW-1	18-Feb-94	<0.005	0.052	0.1	<0.002	<0.005	0.011	<0.01	<0.01	<0.0002	0.01	0.02	<0.04	<0.02	<0.004	<0.1	0.007	2.8
MW-1	22-Sep-94	<0.001	0.029	0.08	<0.0005	0.005	0.009	<0.002	<0.002	<0.0002	0.007	0.051	<0.005	0.017	<0.01	<0.02	0.010	5.0
MW-1	14-Mar-95	<0.001	0.033	0.092	<0.0005	<0.001	0.02	<0.002	0.004	<0.0002	0.013	0.019	<0.002	0.079	<0.004	<0.01	0.009	1.8
MW-2	05-Nov-92	0.008	2.1	0.013	0.002	7	0.42	<0.01	0.093	0.0055	0.01	1.2	<0.2	<0.2	<0.004	<0.1	<0.005	4200
MW-2	27-Oct-92	<0.05	1.5	<0.5	<0.02	10	1.5	<0.1	0.2	<0.0003	<0.1	4.9	<0.4	<0.2	0.014	<1	<0.05	6000
MW-2 (1)	05-Mar-93	<0.005	0.011	<0.05	<0.002	0.28	0.24	<0.01	0.14	<0.0003	<0.1	1.0	<0.04	<0.02	<0.01	<0.1	<0.005	290
MW-2	25-May-93	<0.05	1.8	<0.05	<0.02	5.2	0.85	<0.1	<0.1	<0.0003	<0.1	2.4	<0.4	<0.2	<0.004	<1	<0.05	3000
MW-2	01-Sep-93	<0.05	2.1	<0.05	<0.02	5.2	0.77	<0.1	<0.1	<0.0003	<0.1	2.3	<0.4	<0.2	<0.004	<1	<0.05	2700
MW-2	26-Oct-93	<0.05	4	<0.5	<0.02	5.1	0.73	0.3	0.3	<0.0003	<0.1	2.2	<0.4	<0.2	<0.04	<1	<0.05	2600
MW-2	18-Feb-94	<0.05	1.5	<0.5	<0.02	4.6	0.62	<0.1	<0.1	<0.0002	<0.1	2	<0.4	<0.2	<0.004	<1	<0.05	2600
MW-2	22-Sep-94	<0.05	2.1	<0.05	<0.02	5.0	0.65	<0.1	0.1	<0.0002	<0.1	2	<0.010	<0.2	<0.2	<1	<0.05	2300
MW-2	14-Mar-95	<0.05	1.4	<0.1	<0.02	4.1	0.52	<0.1	<0.1	<0.0002	<0.1	1.8	<0.02	<0.2	<0.04	<0.5	<0.05	2200
MW-3	05-Nov-92	0.005	<0.002	0.017	0.001	0.57	0.42	<0.01	0.28	0.0028	<0.01	1.2	0.005	<0.02	<0.004	<0.1	<0.005	600
MW-3	27-Oct-92	0.009	0.004	<0.05	0.003	0.73	0.74	<0.01	0.3	<0.0003	<0.01	2.6	<0.04	<0.02	0.011	<0.1	<0.005	730
MW-3 (1)	05-Mar-93	<0.05	1.6	<0.05	<0.02	5.8	1.0	<0.1	0.07	<0.0003	<0.1	3.1	<0.4	<0.2	<0.02	<1	<0.05	3000
MW-3	25-May-93	<0.005	<0.002	<0.05	<0.002	0.28	0.24	<0.01	0.07	<0.0003	<0.01	0.83	<0.04	<0.02	<0.004	<0.1	<0.005	260
MW-3	01-Sep-93	<0.005	0.011	<0.05	<0.002	0.32	0.3	<0.01	0.2	<0.0003	<0.01	1.1	<0.04	<0.02	<0.004	<0.1	<0.005	360
MW-3	26-Oct-93	<0.005	<0.002	<0.05	0.002	0.44	0.49	<0.01	0.32	<0.0003	<0.01	1.7	<0.04	<0.02	<0.004	<0.1	<0.005	560
MW-3	18-Feb-94	<0.005	<0.002	<0.05	<0.002	0.22	0.25	<0.01	0.19	<0.0002	<0.01	0.77	<0.04	<0.02	<0.004	<0.1	<0.005	230
MW-3	24-May-94	<0.005	<0.002	<0.05	<0.002	0.1	0.14	<0.01	0.12	<0.0002	<0.01	0.42	<0.003	<0.03	<0.004	<0.1	<0.005	120
MW-3	22-Sep-94	<0.005	<0.002	<0.05	<0.002	0.21	0.25	<0.01	0.2	<0.0002	<0.01	0.75	<0.005	<0.02	<0.004	<0.1	<0.005	230
MW-3	19-Dec-94	<0.005	<0.002	<0.05	<0.002	0.094	0.089	<0.01	0.06	<0.0002	<0.01	0.36	<0.002	<0.02	<0.004	<0.1	<0.005	100
MW-3	14-Mar-95	<0.005	<0.002	0.02	<0.002	0.13	0.14	<0.01	0.1	<0.0002	<0.01	0.59	<0.002	<0.02	<0.004	<0.05	<0.005	220
MW-4	05-Nov-92	<0.002	0.007	0.017	<0.001	<0.005	<0.005	<0.01	<0.005	0.0027	<0.01	0.012	<0.005	<0.02	<0.004	<0.1	<0.005	<0.005
MW-4	27-Oct-92	<0.005	<0.002	<0.05	<0.002	0.006	<0.005	<0.01	0.02	<0.0003	<0.01	0.02	<0.04	<0.02	0.004	<0.1	0.011	0.047
MW-4	04-Mar-93	<0.005	<0.002	<0.05	<0.002	<0.005	<0.005	<0.01	<0.01	<0.0003	<0.01	0.02	<0.04	<0.02	<0.004	<0.1	0.010	0.03
MW-4	25-May-93	<0.005	<0.002	<0.05	<0.002	<0.005	<0.005	<0.01	<0.01	<0.0003	<0.01	<0.01	<0.04	<0.02	<0.004	<0.1	0.006	0.008
MW-4	01-Sep-93	<0.005	0.009	<0.05	<0.002	<0.005	<0.005	<0.01	<0.01	<0.0003	<0.01	<0.01	<0.04	<0.02	<0.004	<0.1	<0.005	0.016
MW-4	26-Oct-93	<0.005	0.003	<0.05	<0.002	<0.005	<0.005	<0.01	<0.01	<0.0003	<0.01	<0.01	<0.04	<0.02	<0.004	<0.1	<0.005	0.15
MW-4	18-Feb-94	<0.005	<0.002	<0.05	<0.002	<0.005	<0.005	<0.01	<0.01	<0.0002	<0.01	0.02	<0.04	<0.02	<0.004	<0.1	<0.005	0.17
MW-4	22-Sep-94	<0.001	<0.002	0.02	<0.0005	<0.001	<0.001	<0.002	<0.002	<0.0002	<0.002	0.025	<0.005	<0.005	<0.004	<0.02	0.004	0.039
MW-4	14-Mar-95	<0.001	<0.002	0.02	<0.0005	<0.001	<0.001	<0.002	<0.002	<0.0002	<0.002	0.02	<0.002	<0.004	<0.004	<0.01	0.004	0.05
LF-1-FB	26-Oct-93	<0.005	<0.002	<0.05	<0.002	<0.005	<0.005	<0.01	<0.01	<0.0003	<0.01	<0.01	<0.04	<0.02	<0.004	<0.1	<0.005	0.035
LF-9-FB	01-Nov-93	<0.005	<0.002	<0.05	<0.002	<0.005	<0.005	<0.01	<0.01	<0.0003	<0.01	<0.01	<0.04	<0.02	<0.004	<0.1	<0.005	0.038
LF-17-FB	08-Dec-93	<0.005	<0.002	<0.05	<0.002	<0.005	<0.005	<0.01	<0.01	<0.0003	<0.01	<0.01	<0.04	<0.02	<0.004	<0.1	<0.005	0.1
LF-11-FB	18-Feb-94	<0.005	<0.002	<0.05	<0.002	<0.005	<0.005	<0.01	<0.01	<0.0002	<0.01	<0.01	<0.04	<0.02	<0.004	<0.1	<0.005	0.05
LF-3-BB	25-May-94	<0.001	<0.002	<0.01	<0.0005	<0.001	<0.001	<0.002	<0.002	<0.0002	<0.002	<0.002	<0.003	<0.005	<0.004	<0.02	<0.001	0.015

Data entered by KAC/7 Apr 95. Data proofed by JCK. QA/QC by SXS

(1) Labeling errors in the field or laboratory may account for the anomalous data reported for wells MW-2 and MW-3.

TABLE 2

METALS DETECTED IN GROUND-WATER SAMPLES
5050 COLISEUM WAY AND 750-50TH AVENUE
OAKLAND, CALIFORNIA
(concentrations reported in parts per million (ppm))

Sample ID	Sample Date	Silver	Arsenic	Barium	Beryllium	Cadmium	Cobalt	Chromium	Copper	Mercury	Molybdenum	Nickel	Lead	Antimony	Selenium	Thallium	Vanadium	Zinc

Analyses performed by American Environmental Network, Pleasant Hill, California.
FB/BB - Field Blank

TABLE 3

GASOLINE HYDROCARBONS AND BTEX DETECTED IN GROUND-WATER SAMPLES
5050 COLISEUM WAY AND 750-50TH AVENUE
OAKLAND, CALIFORNIA
(concentrations reported in parts per million [ppm])

Sample ID	Sample date	TPHg	Benzene	Ethyl-benzene	Toluene	Xylenes
LF-1	04-Nov-91	<0.05	<0.005	<0.005	<0.005	<0.01
LF-2	04-Nov-91	<0.05	<0.005	<0.005	<0.005	<0.01
LF-3	04-Nov-91	<0.05	<0.005	<0.005	<0.005	<0.01
	25-May-94	<0.05	NA	NA	NA	NA
LF-103 (dup)	25-May-94	<0.05	NA	NA	NA	NA
LF-3	23-Sep-94	<0.05	NA	NA	NA	NA
LF-103 (dup)	23-Sep-94	<0.05	NA	NA	NA	NA
LF-3	20-Dec-94	<0.05	<0.0005	<0.0005	<0.0005	<0.002
LF-103(dup)	20-Dec-94	<0.05	<0.0005	<0.0005	<0.0005	<0.002
LF-3	15-Mar-95	<0.05	<0.0005	<0.0005	<0.0005	<0.002
LF-4	04-Nov-91	0.59	<0.005	<0.005	<0.005	<0.01
LF-5	04-Nov-91	NA	<0.005	<0.005	<0.005	<0.01
LF-6	04-Nov-91	NA	<0.005	<0.005	<0.005	<0.01
LF-7	04-Nov-91	NA	<0.005	<0.005	<0.005	<0.01
LF-8	28-Oct-93	<1.0	NA	NA	NA	NA
LF-8	24-May-94	0.7	NA	NA	NA	NA
LF-8	23-Sep-94	0.4	NA	NA	NA	NA
LF-8	20-Dec-94	0.4	0.003	0.0065	0.0009	0.004
LF-8	15-Mar-95	0.3	0.002	0.003	0.0006	0.003
LF-9	01-Nov-93	<0.1	NA	NA	NA	NA
LF-109 (dup)	01-Nov-93	<0.1	NA	NA	NA	NA
LF-9	23-Sep-94	NA	<0.005	<0.005	<0.005	<0.01
LF-11	28-Oct-93	<0.1	NA	NA	NA	NA
LF-13	06-Dec-93	0.05	<0.0005	<0.0005	<0.0005	<0.002
LF-113 (dup)	06-Dec-93	0.06	<0.0005	<0.0005	<0.0005	<0.002
LF-14	21-Sep-94	1.4	NA	NA	NA	NA
LF-14	19-Dec-94	1.0	0.001	<0.0005	0.002	0.012
LF-14	15-Mar-95	1.2	0.001	<0.0005	0.0006	0.015
MW-2	05-Nov-91	NA	<0.0003	<0.0003	<0.0003	<0.001
LF-9-FB	01-Nov-93	<0.1	NA	NA	NA	NA
LF-4-BB	04-Nov-91	<0.05	<0.005	<0.005	<0.005	<0.01
LF-3-BB	25-May-94	<0.05	NA	NA	NA	NA
Trip Blank	26-Sep-94	<0.05	NA	NA	NA	NA
Trip Blank	16-Mar-95	<0.05	<0.0005	<0.0005	<0.0005	<0.002

Data entered by KAC/7 Apr 95. Data proofed by JCK. QA/QC by SXS

Samples analyzed by American Environmental Network, Pleasant Hill, California.
FB/BB - Field Blank
NA - not analyzed
TPHg - Total petroleum hydrocarbons as gasoline (EPA Method 5030)
Benzene, ethylbenzene, toluene, and xylenes (BTEX) analyzed using modified EPA Method 8015 or by EPA Method 8240.

TABLE 4

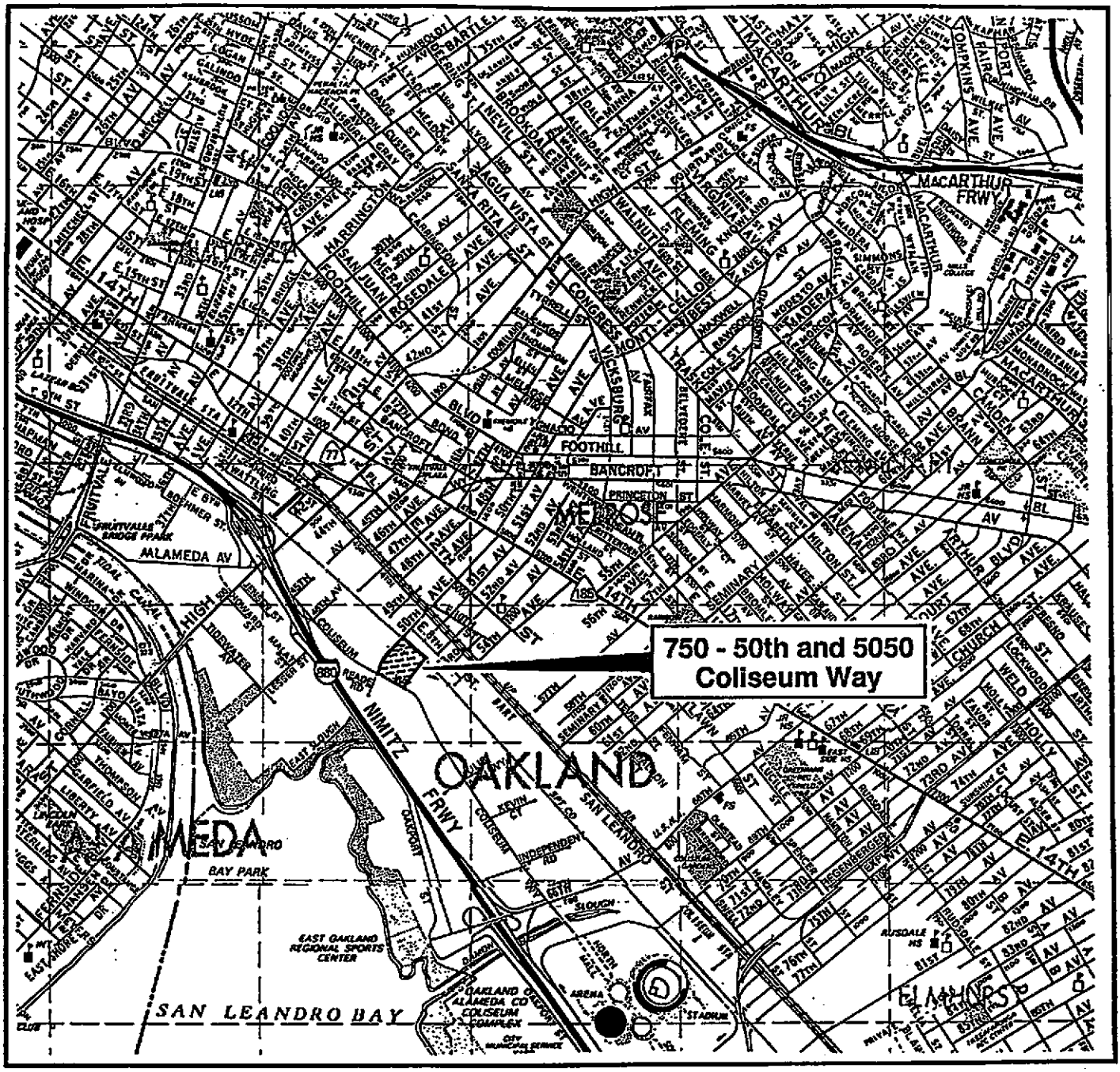
PETROLEUM HYDROCARBONS DETECTED IN GROUND-WATER SAMPLES
5050 COLISEUM WAY AND 750-50TH AVENUE
OAKLAND, CALIFORNIA
(concentrations reported in parts per million [ppm])

Sample ID	Sample Date	TPHd	TPHo	TOG	Hydrocarbons
LF-1	04-Nov-91	0.09	NA	<0.5	<0.5
LF-2	04-Nov-91	0.3	NA	NA	NA
LF-3	04-Nov-91	0.2	NA	NA	NA
LF-3	25-May-94	0.3	0.4	NA	NA
LF-103 (dup)	25-May-94	0.3	0.4	NA	NA
LF-3	23-Sep-94	1.2	<0.2	NA	NA
LF-103 (dup)	23-Sep-94	1.0	<0.2	NA	NA
LF-3	20-Dec-94	0.89	0.2	NA	NA
LF-103 (dup)	20-Dec-94	0.88	0.2	NA	NA
LF-3	15-Mar-95	0.8	<0.2	NA	NA
LF-4	04-Nov-91	0.1	NA	NA	NA
LF-8	28-Oct-93	9.8	NA	2	1
	24-May-94	4.5	0.6	NA	NA
	23-Sep-94	6.7	<0.2	NA	NA
	20-Dec-94	5.6	0.4	NA	NA
	15-Mar-95	4.1	0.2	NA	NA
LF-9	01-Nov-93	0.2	NA	<0.5	<0.5
LF-109 (dup)	01-Nov-93	0.2	NA	<0.5	<0.5
LF-11	28-Oct-93	<0.05	NA	<0.5	<0.5
LF-13 (*)	06-Dec-93	0.5	0.4	1	<0.5
LF-113 (dup)	06-Dec-93	0.6	0.4	NA	NA
LF-14	21-Sep-94	<0.3	<0.2	NA	NA
	19-Dec-94	0.65	<0.2	NA	NA
	15-Mar-95	0.3	<0.2	NA	NA
MW-2	04-Nov-91	<0.05	NA	NA	NA
LF-3-BB	25-May-94	<0.05	<0.2	NA	NA

Data entered by KAC/7 Apr 95. Data proofed by KCK. QA/QC by SXJ.

Analyses performed by American Environmental Network, Pleasant Hill, CA

BB - Field Blank
NA - not analyzed
TPHd - Total petroleum hydrocarbons as diesel (EPA Method 3510)
TPHo - Total petroluem hydrocarbons as oil (EPA Method 3510)
TOG - Total oil and grease (Standard Method 5520bf)
Hydrocarbons - Total hydrocarbons (Standard Method 5520f)
(*) - Free product measured in February 1994.



SOURCE: Thomas Bros. map
Alameda and Contra Costa
1990

N

0 1/2 1 MILE

Figure 1 : SITE LOCATION MAP

Project No. 3018

LEVINE•FRICKE
ENGINEERS, HYDROGEOLOGISTS & APPLIED SCIENTISTS

15OCT93#RYL

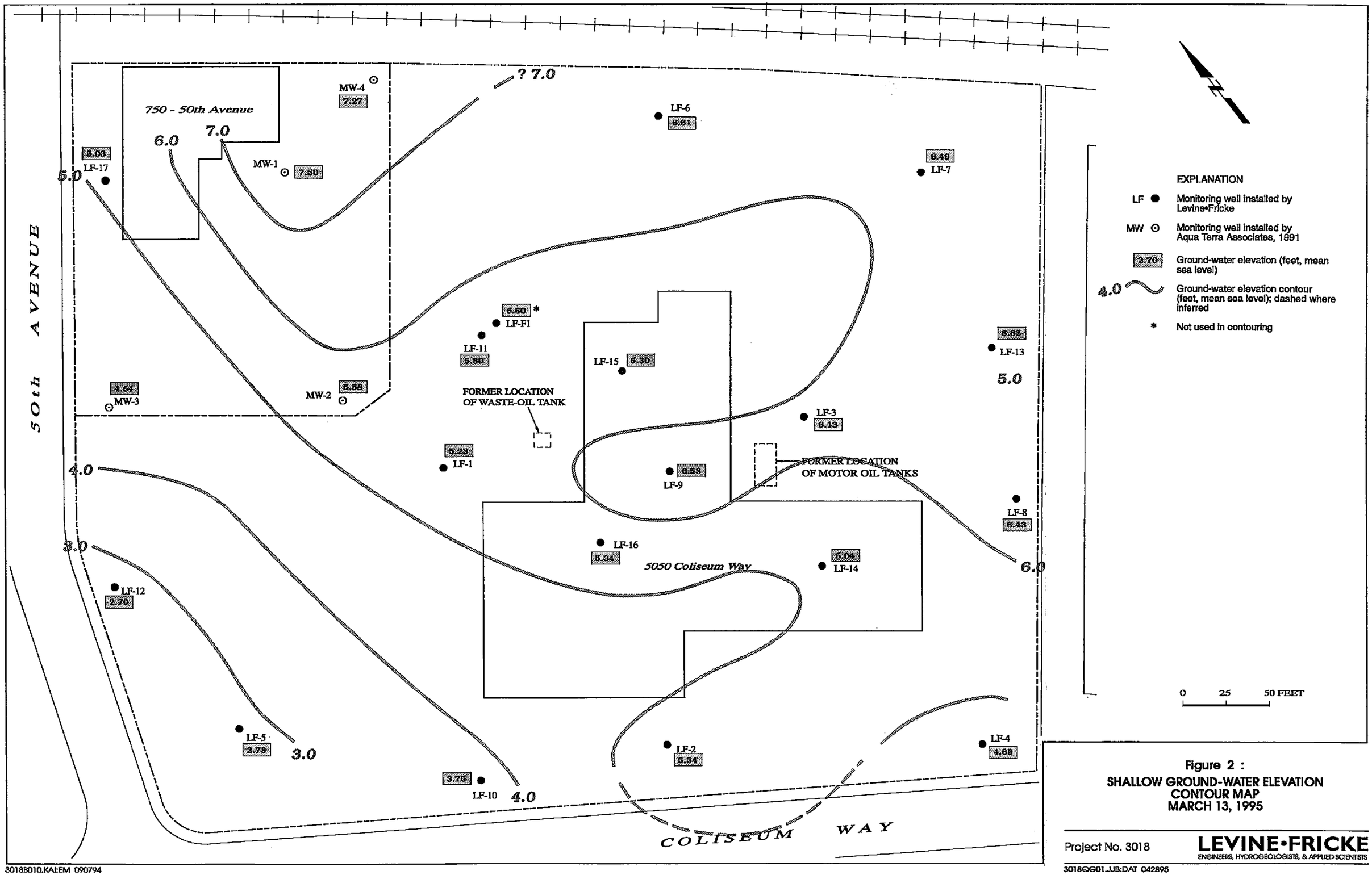


Figure 2 :
SHALLOW GROUND-WATER ELEVATION
CONTOUR MAP
MARCH 13, 1995

Project No. 3018

LEVINE•FRICKE
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30188010.KAI:EM 090794

3018QG01.JJB:DAT 042895

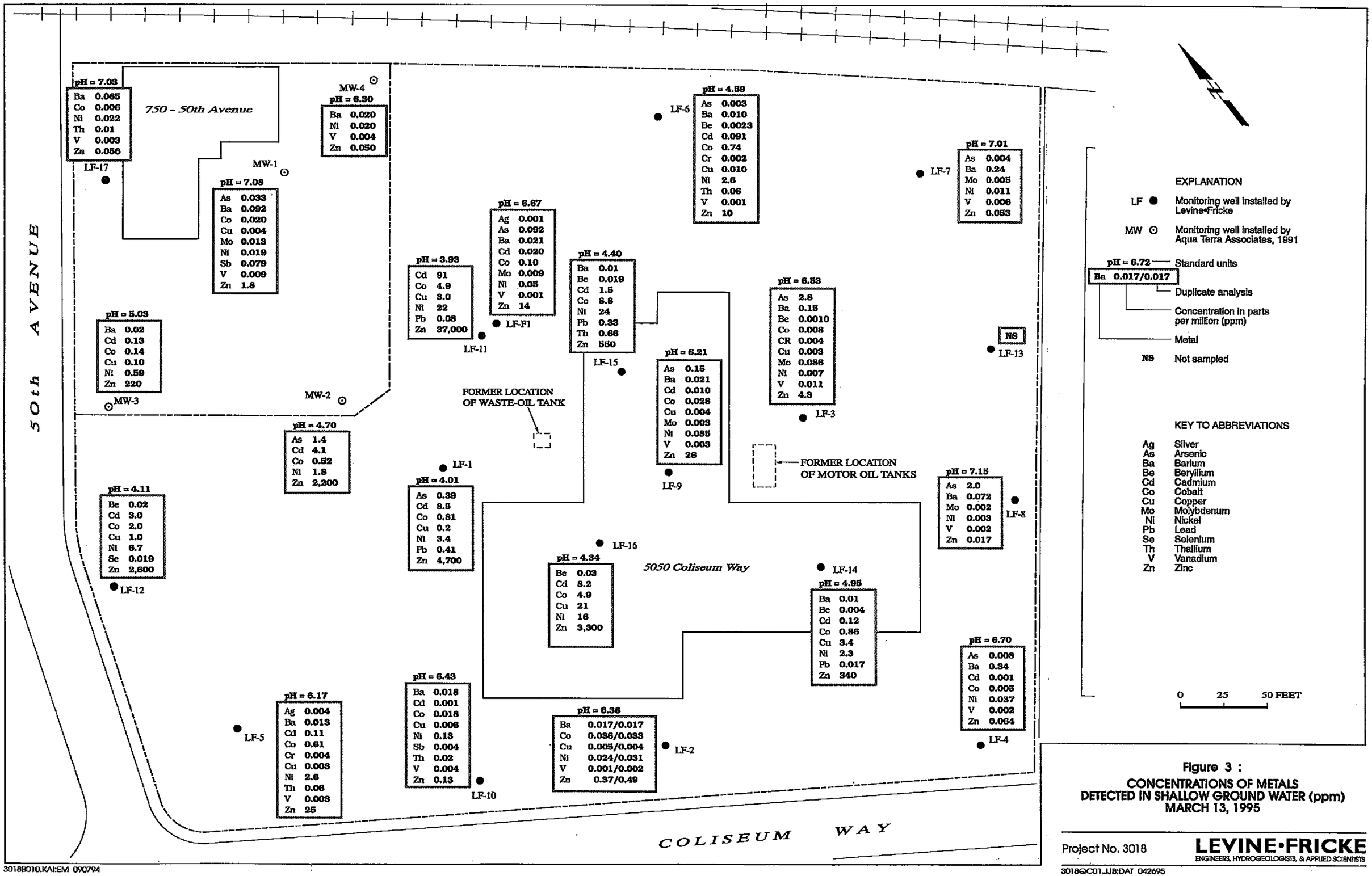

Figure 3 :
CONCENTRATIONS OF METALS DETECTED IN SHALLOW GROUND WATER (ppm) MARCH 13, 1995

Project No. 3018

LEVINE•FRICKE
ENGINEERS, HYDROGEOLOGISTS, & APPLIED SCIENTISTS

3018BQC01.JJB:DAT 042695

3018B010.KAI:EM 090794

APPENDIX A

LABORATORY CERTIFICATES

American Environmental Network

Certificate of Analysis

DOHS Certification: 1172 AIHA Accreditation: 11134

LEVINE-FRICKE
1900 POWELL ST. 12TH FL.
EMERYVILLE, CA 94608

ATTN: JENIFER BEATTY
CLIENT PROJ. ID: 3018.11
CLIENT PROJ. NAME: VOLVO/GM
C.O.C. NUMBER: 013469,013470

REPORT DATE: 04/03/95
DATE(S) SAMPLED: 03/13/95-03/15/95
DATE RECEIVED: 03/16/95
AEN WORK ORDER: 9503291

PROJECT SUMMARY:

On March 16, 1995, this laboratory received 24 water sample(s).

Client requested 23 samples be analyzed for inorganic and organic parameters; one sample was placed on hold. Results of analysis are summarized on the following pages. Please see quality control report for a summary of QC data pertaining to this project.

Samples will be stored for 30 days after completion of analysis, then disposed of in accordance with State and Federal regulations. Samples may be archived by prior arrangement.

If you have any questions, please contact Client Services at (510) 930-9090.

Larry Klein
Laboratory Director

LEVINE-FRICKE

SAMPLE ID: LF-9
AEN LAB NO: 9503291-01
AEN WORK ORDER: 9503291
CLIENT PROJ. ID: 3018.11

DATE SAMPLED: 03/13/95
DATE RECEIVED: 03/16/95
REPORT DATE: 04/03/95

ANALYTE	METHOD/ CAS#	RESULT		REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion/G. Furnace	EPA 200.0	-			Prep Date	03/23/95
#Digestion/ICP	EPA 200.0	-			Prep Date	03/24/95
CCR 17 Metals (Low Level)						
Ag Silver	EPA 200.7	ND		0.001	mg/L	03/25/95
As Arsenic	EPA 206.2	0.15	*	0.002	mg/L	03/27/95
Ba Barium	EPA 200.7	0.021	*	0.002	mg/L	03/25/95
Be Beryllium	EPA 200.7	ND		0.0005	mg/L	03/25/95
Cd Cadmium	EPA 200.7	0.010	*	0.001	mg/L	03/25/95
Co Cobalt	EPA 200.7	0.028	*	0.001	mg/L	03/25/95
Cr Chromium	EPA 200.7	ND		0.002	mg/L	03/25/95
Cu Copper	EPA 200.7	0.004	*	0.002	mg/L	03/25/95
Hg Mercury	EPA 245.1	ND		0.0002	mg/L	03/23/95
Mo Molybdenum	EPA 200.7	0.003	*	0.002	mg/L	03/25/95
Ni Nickel	EPA 200.7	0.085	*	0.002	mg/L	03/25/95
Pb Lead	EPA 239.2	ND		0.005	mg/L	03/28/95
Sb Antimony	EPA 200.7	ND		0.004	mg/L	03/25/95
Se Selenium	EPA 270.2	ND		0.004	mg/L	03/27/95
Tl Thallium	EPA 200.7	ND		0.01	mg/L	03/25/95
V Vanadium	EPA 200.7	0.003	*	0.001	mg/L	03/25/95
Zn Zinc	EPA 200.7	26	*	0.005	mg/L	03/25/95

Reporting limit elevated for lead due to matrix interference.

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

LEVINE-FRICKE

SAMPLE ID: LF-15
AEN LAB NO: 9503291-02
AEN WORK ORDER: 9503291
CLIENT PROJ. ID: 3018.11

DATE SAMPLED: 03/13/95
DATE RECEIVED: 03/16/95
REPORT DATE: 04/03/95

ANALYTE	METHOD/ CAS#	RESULT		REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion/G. Furnace	EPA 200.0	-			Prep Date	03/23/95
#Digestion/ICP	EPA 200.0	-			Prep Date	03/23/95
CCR 17 Metals (Low Level)						
Ag Silver	EPA 200.7	ND		0.005	mg/L	03/27/95
As Arsenic	EPA 206.2	ND		0.002	mg/L	03/27/95
Ba Barium	EPA 200.7	0.01	*	0.01	mg/L	03/27/95
Be Beryllium	EPA 200.7	0.019	*	0.002	mg/L	03/27/95
Cd Cadmium	EPA 200.7	1.5	*	0.005	mg/L	03/25/95
Co Cobalt	EPA 200.7	8.8	*	0.005	mg/L	03/25/95
Cr Chromium	EPA 200.7	ND		0.01	mg/L	03/27/95
Cu Copper	EPA 200.7	ND		0.01	mg/L	03/27/95
Hg Mercury	EPA 245.1	ND		0.0002	mg/L	03/23/95
Mo Molybdenum	EPA 200.7	ND		0.01	mg/L	03/27/95
Ni Nickel	EPA 200.7	24	*	0.01	mg/L	03/27/95
Pb Lead	EPA 239.2	0.33	*	0.002	mg/L	03/28/95
Sb Antimony	EPA 200.7	ND		0.02	mg/L	03/27/95
Se Selenium	EPA 270.2	ND		0.02	mg/L	03/27/95
Tl Thallium	EPA 200.7	0.66	*	0.05	mg/L	03/25/95
V Vanadium	EPA 200.7	ND		0.005	mg/L	03/27/95
Zn Zinc	EPA 200.7	550	*	0.01	mg/L	03/25/95

Reporting limits elevated for metals due to matrix interference.

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

LEVINE-FRICKE

SAMPLE ID: LF-17
AEN LAB NO: 9503291-03
AEN WORK ORDER: 9503291
CLIENT PROJ. ID: 3018.11

DATE SAMPLED: 03/14/95
DATE RECEIVED: 03/16/95
REPORT DATE: 04/03/95

ANALYTE		METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion/G. Furnace		EPA 200.0	-		Prep Date	03/23/95
#Digestion/ICP		EPA 200.0	-		Prep Date	03/24/95
CCR 17 Metals (Low Level)						
Ag	Silver	EPA 200.7	ND	0.001	mg/L	03/25/95
As	Arsenic	EPA 206.2	ND	0.002	mg/L	03/27/95
Ba	Barium	EPA 200.7	0.065 *	0.002	mg/L	03/25/95
Be	Beryllium	EPA 200.7	ND	0.0005	mg/L	03/25/95
Cd	Cadmium	EPA 200.7	ND	0.001	mg/L	03/25/95
Co	Cobalt	EPA 200.7	0.006 *	0.001	mg/L	03/25/95
Cr	Chromium	EPA 200.7	ND	0.002	mg/L	03/25/95
Cu	Copper	EPA 200.7	ND	0.002	mg/L	03/25/95
Hg	Mercury	EPA 245.1	ND	0.0002	mg/L	03/23/95
Mo	Molybdenum	EPA 200.7	ND	0.002	mg/L	03/25/95
Ni	Nickel	EPA 200.7	0.022 *	0.002	mg/L	03/25/95
Pb	Lead	EPA 239.2	ND	0.002	mg/L	03/28/95
Sb	Antimony	EPA 200.7	ND	0.004	mg/L	03/25/95
Se	Selenium	EPA 270.2	ND	0.004	mg/L	03/27/95
Tl	Thallium	EPA 200.7	0.01 *	0.01	mg/L	03/25/95
V	Vanadium	EPA 200.7	0.003 *	0.001	mg/L	03/25/95
Zn	Zinc	EPA 200.7	0.056 *	0.005	mg/L	03/25/95

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

LEVINE-FRICKE

SAMPLE ID: LF-5
AEN LAB NO: 9503291-04
AEN WORK ORDER: 9503291
CLIENT PROJ. ID: 3018.11

DATE SAMPLED: 03/14/95
DATE RECEIVED: 03/16/95
REPORT DATE: 04/03/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion/G. Furnace	EPA 200.0	-		Prep Date	03/23/95
#Digestion/ICP	EPA 200.0	-		Prep Date	03/24/95
CCR 17 Metals (Low Level)					
Ag Silver	EPA 200.7	0.004 *	0.001	mg/L	03/25/95
As Arsenic	EPA 206.2	ND	0.02	mg/L	03/27/95
Ba Barium	EPA 200.7	0.013 *	0.002	mg/L	03/25/95
Be Beryllium	EPA 200.7	ND	0.0005	mg/L	03/25/95
Cd Cadmium	EPA 200.7	0.11 *	0.001	mg/L	03/25/95
Co Cobalt	EPA 200.7	0.61 *	0.001	mg/L	03/25/95
Cr Chromium	EPA 200.7	0.004 *	0.002	mg/L	03/25/95
Cu Copper	EPA 200.7	0.003 *	0.002	mg/L	03/25/95
Hg Mercury	EPA 245.1	ND	0.0002	mg/L	03/23/95
Mo Molybdenum	EPA 200.7	ND	0.002	mg/L	03/25/95
Ni Nickel	EPA 200.7	2.6 *	0.002	mg/L	03/25/95
Pb Lead	EPA 239.2	ND	0.01	mg/L	03/28/95
Sb Antimony	EPA 200.7	ND	0.004	mg/L	03/25/95
Se Selenium	EPA 270.2	ND	0.04	mg/L	03/27/95
Tl Thallium	EPA 200.7	0.06 *	0.01	mg/L	03/25/95
V Vanadium	EPA 200.7	0.003 *	0.001	mg/L	03/25/95
Zn Zinc	EPA 200.7	25 *	0.005	mg/L	03/25/95

Reporting limit elevated for arsenic, lead and selenium due to matrix interference.

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

LEVINE-FRICKE

SAMPLE ID: MW-1
AEN LAB NO: 9503291-05
AEN WORK ORDER: 9503291
CLIENT PROJ. ID: 3018.11

DATE SAMPLED: 03/14/95
DATE RECEIVED: 03/16/95
REPORT DATE: 04/03/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion/G. Furnace	EPA 200.0	-		Prep Date	03/23/95
#Digestion/ICP	EPA 200.0	-		Prep Date	03/24/95
CCR 17 Metals (Low Level)					
Ag Silver	EPA 200.7	ND	0.001	mg/L	03/25/95
As Arsenic	EPA 206.2	0.033 *	0.002	mg/L	03/27/95
Ba Barium	EPA 200.7	0.092 *	0.002	mg/L	03/25/95
Be Beryllium	EPA 200.7	ND	0.0005	mg/L	03/25/95
Cd Cadmium	EPA 200.7	ND	0.001	mg/L	03/25/95
Co Cobalt	EPA 200.7	0.020 *	0.001	mg/L	03/25/95
Cr Chromium	EPA 200.7	ND	0.002	mg/L	03/25/95
Cu Copper	EPA 200.7	0.004 *	0.002	mg/L	03/25/95
Hg Mercury	EPA 245.1	ND	0.0002	mg/L	03/23/95
Mo Molybdenum	EPA 200.7	0.013 *	0.002	mg/L	03/25/95
Ni Nickel	EPA 200.7	0.019 *	0.002	mg/L	03/25/95
Pb Lead	EPA 239.2	ND	0.002	mg/L	03/28/95
Sb Antimony	EPA 200.7	0.079 *	0.004	mg/L	03/25/95
Se Selenium	EPA 270.2	ND	0.004	mg/L	03/27/95
Tl Thallium	EPA 200.7	ND	0.01	mg/L	03/25/95
V Vanadium	EPA 200.7	0.009 *	0.001	mg/L	03/25/95
Zn Zinc	EPA 200.7	1.8 *	0.005	mg/L	03/25/95

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

LEVINE-FRICKE

SAMPLE ID: MW-4
AEN LAB NO: 9503291-06
AEN WORK ORDER: 9503291
CLIENT PROJ. ID: 3018.11

DATE SAMPLED: 03/14/95
DATE RECEIVED: 03/16/95
REPORT DATE: 04/03/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion/G. Furnace	EPA 200.0	-		Prep Date	03/23/95
#Digestion/ICP	EPA 200.0	-		Prep Date	03/24/95
CCR 17 Metals (Low Level)					
Ag Silver	EPA 200.7	ND	0.001	mg/L	03/25/95
As Arsenic	EPA 206.2	ND	0.002	mg/L	03/27/95
Ba Barium	EPA 200.7	0.020 *	0.002	mg/L	03/25/95
Be Beryllium	EPA 200.7	ND	0.0005	mg/L	03/25/95
Cd Cadmium	EPA 200.7	ND	0.001	mg/L	03/25/95
Co Cobalt	EPA 200.7	ND	0.001	mg/L	03/25/95
Cr Chromium	EPA 200.7	ND	0.002	mg/L	03/25/95
Cu Copper	EPA 200.7	ND	0.002	mg/L	03/25/95
Hg Mercury	EPA 245.1	ND	0.0002	mg/L	03/23/95
Mo Molybdenum	EPA 200.7	ND	0.002	mg/L	03/25/95
Ni Nickel	EPA 200.7	0.020 *	0.002	mg/L	03/25/95
Pb Lead	EPA 239.2	ND	0.002	mg/L	03/28/95
Sb Antimony	EPA 200.7	ND	0.004	mg/L	03/25/95
Se Selenium	EPA 270.2	ND	0.004	mg/L	03/27/95
Tl Thallium	EPA 200.7	ND	0.01	mg/L	03/25/95
V Vanadium	EPA 200.7	0.004 *	0.001	mg/L	03/25/95
Zn Zinc	EPA 200.7	0.050 *	0.005	mg/L	03/25/95

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

LEVINE-FRICKE

SAMPLE ID: MW-2
AEN LAB NO: 9503291-07
AEN WORK ORDER: 9503291
CLIENT PROJ. ID: 3018.11

DATE SAMPLED: 03/14/95
DATE RECEIVED: 03/16/95
REPORT DATE: 04/03/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion/G. Furnace	EPA 200.0	-		Prep Date	03/23/95
#Digestion/ICP	EPA 200.0	-		Prep Date	03/23/95
CCR 17 Metals (Low Level)					
Ag Silver	EPA 200.7	ND	0.05	mg/L	03/27/95
As Arsenic	EPA 206.2	1.4 *	0.002	mg/L	03/27/95
Ba Barium	EPA 200.7	ND	0.1	mg/L	03/27/95
Be Beryllium	EPA 200.7	ND	0.02	mg/L	03/27/95
Cd Cadmium	EPA 200.7	4.1 *	0.05	mg/L	03/25/95
Co Cobalt	EPA 200.7	0.52 *	0.05	mg/L	03/25/95
Cr Chromium	EPA 200.7	ND	0.1	mg/L	03/27/95
Cu Copper	EPA 200.7	ND	0.1	mg/L	03/25/95
Hg Mercury	EPA 245.1	ND	0.0002	mg/L	03/23/95
Mo Molybdenum	EPA 200.7	ND	0.1	mg/L	03/25/95
Ni Nickel	EPA 200.7	1.8 *	0.1	mg/L	03/27/95
Pb Lead	EPA 239.2	ND	0.02	mg/L	03/28/95
Sb Antimony	EPA 200.7	ND	0.2	mg/L	03/27/95
Se Selenium	EPA 270.2	ND	0.04	mg/L	03/27/95
Tl Thallium	EPA 200.7	ND	0.5	mg/L	03/25/95
V Vanadium	EPA 200.7	ND	0.05	mg/L	03/25/95
Zn Zinc	EPA 200.7	2,200 *	0.1	mg/L	03/25/95

Reporting limits elevated for metals due to matrix interference.

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

LEVINE-FRICKE

SAMPLE ID: MW-3
AEN LAB NO: 9503291-08
AEN WORK ORDER: 9503291
CLIENT PROJ. ID: 3018.11

DATE SAMPLED: 03/14/95
DATE RECEIVED: 03/16/95
REPORT DATE: 04/03/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion/G. Furnace	EPA 200.0	-		Prep Date	03/23/95
#Digestion/ICP	EPA 200.0	-		Prep Date	03/23/95
CCR 17 Metals (Low Level)					
Ag Silver	EPA 200.7	ND	0.005	mg/L	03/27/95
As Arsenic	EPA 206.2	ND	0.002	mg/L	03/27/95
Ba Barium	EPA 200.7	0.02 *	0.01	mg/L	03/27/95
Be Beryllium	EPA 200.7	ND	0.002	mg/L	03/27/95
Cd Cadmium	EPA 200.7	0.13 *	0.005	mg/L	03/25/95
Co Cobalt	EPA 200.7	0.14 *	0.005	mg/L	03/25/95
Cr Chromium	EPA 200.7	ND	0.01	mg/L	03/27/95
Cu Copper	EPA 200.7	0.10 *	0.01	mg/L	03/27/95
Hg Mercury	EPA 245.1	ND	0.0002	mg/L	03/23/95
Mo Molybdenum	EPA 200.7	ND	0.01	mg/L	03/25/95
Ni Nickel	EPA 200.7	0.59 *	0.01	mg/L	03/27/95
Pb Lead	EPA 239.2	ND	0.002	mg/L	03/28/95
Sb Antimony	EPA 200.7	ND	0.02	mg/L	03/27/95
Se Selenium	EPA 270.2	ND	0.004	mg/L	03/27/95
Tl Thallium	EPA 200.7	ND	0.05	mg/L	03/27/95
V Vanadium	EPA 200.7	ND	0.005	mg/L	03/25/95
Zn Zinc	EPA 200.7	220 *	0.01	mg/L	03/25/95

Reporting limits elevated for metals due to matrix interference.

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

LEVINE-FRICKE

SAMPLE ID: LF-F1
AEN LAB NO: 9503291-09
AEN WORK ORDER: 9503291
CLIENT PROJ. ID: 3018.11

DATE SAMPLED: 03/15/95
DATE RECEIVED: 03/16/95
REPORT DATE: 04/03/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion/G. Furnace	EPA 200.0	-		Prep Date	03/23/95
#Digestion/ICP	EPA 200.0	-		Prep Date	03/24/95
CCR 17 Metals (Low Level)					
Ag Silver	EPA 200.7	0.001 *	0.001	mg/L	03/25/95
As Arsenic	EPA 206.2	0.092 *	0.002	mg/L	03/27/95
Ba Barium	EPA 200.7	0.021 *	0.002	mg/L	03/25/95
Be Beryllium	EPA 200.7	ND	0.0005	mg/L	03/25/95
Cd Cadmium	EPA 200.7	0.020 *	0.005	mg/L	03/25/95
Co Cobalt	EPA 200.7	0.10 *	0.001	mg/L	03/25/95
Cr Chromium	EPA 200.7	ND	0.002	mg/L	03/25/95
Cu Copper	EPA 200.7	ND	0.002	mg/L	03/25/95
Hg Mercury	EPA 245.1	ND	0.0002	mg/L	03/23/95
Mo Molybdenum	EPA 200.7	0.009 *	0.002	mg/L	03/25/95
Ni Nickel	EPA 200.7	0.05 *	0.01	mg/L	03/25/95
Pb Lead	EPA 239.2	ND	0.002	mg/L	03/28/95
Sb Antimony	EPA 200.7	ND	0.02	mg/L	03/25/95
Se Selenium	EPA 270.2	ND	0.004	mg/L	03/27/95
Tl Thallium	EPA 200.7	ND	0.05	mg/L	03/25/95
V Vanadium	EPA 200.7	0.001 *	0.001	mg/L	03/25/95
Zn Zinc	EPA 200.7	14 *	0.01	mg/L	03/25/95

Reporting limits elevated for cadmium, nickel, antimony, thallium and zinc due to matrix interference.

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

LEVINE-FRICKE

SAMPLE ID: LF-12
AEN LAB NO: 9503291-10
AEN WORK ORDER: 9503291
CLIENT PROJ. ID: 3018.11

DATE SAMPLED: 03/15/95
DATE RECEIVED: 03/16/95
REPORT DATE: 04/03/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion/G. Furnace	EPA 200.0	-		Prep Date	03/23/95
#Digestion/ICP	EPA 200.0	-		Prep Date	03/23/95
CCR 17 Metals (Low Level)					
Ag Silver	EPA 200.7	ND	0.05	mg/L	03/27/95
As Arsenic	EPA 206.2	ND	0.002	mg/L	03/27/95
Ba Barium	EPA 200.7	ND	0.1	mg/L	03/27/95
Be Beryllium	EPA 200.7	0.02 *	0.02	mg/L	03/27/95
Cd Cadmium	EPA 200.7	3.0 *	0.05	mg/L	03/25/95
Co Cobalt	EPA 200.7	2.0 *	0.05	mg/L	03/25/95
Cr Chromium	EPA 200.7	ND	0.1	mg/L	03/27/95
Cu Copper	EPA 200.7	1.0 *	0.1	mg/L	03/27/95
Hg Mercury	EPA 245.1	ND	0.0002	mg/L	03/23/95
Mo Molybdenum	EPA 200.7	ND	0.1	mg/L	03/25/95
Ni Nickel	EPA 200.7	6.7 *	0.1	mg/L	03/27/95
Pb Lead	EPA 239.2	ND	0.005	mg/L	03/28/95
Sb Antimony	EPA 200.7	ND	0.2	mg/L	03/27/95
Se Selenium	EPA 270.2	0.019 *	0.004	mg/L	03/27/95
Tl Thallium	EPA 200.7	ND	0.5	mg/L	03/27/95
V Vanadium	EPA 200.7	ND	0.05	mg/L	03/25/95
Zn Zinc	EPA 200.7	2,600 *	0.1	mg/L	03/25/95

Reporting limits elevated for metals due to matrix interference.

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

LEVINE-FRICKE

SAMPLE ID: LF-1
AEN LAB NO: 9503291-11
AEN WORK ORDER: 9503291
CLIENT PROJ. ID: 3018.11

DATE SAMPLED: 03/15/95
DATE RECEIVED: 03/16/95
REPORT DATE: 04/03/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion/G. Furnace	EPA 200.0	-		Prep Date	03/23/95
#Digestion/ICP	EPA 200.0	-		Prep Date	03/23/95
CCR 17 Metals (Low Level)					
Ag Silver	EPA 200.7	ND	0.05	mg/L	03/27/95
As Arsenic	EPA 206.2	0.39 *	0.002	mg/L	03/27/95
Ba Barium	EPA 200.7	ND	0.1	mg/L	03/27/95
Be Beryllium	EPA 200.7	ND	0.02	mg/L	03/27/95
Cd Cadmium	EPA 200.7	8.5 *	0.05	mg/L	03/25/95
Co Cobalt	EPA 200.7	0.81 *	0.05	mg/L	03/25/95
Cr Chromium	EPA 200.7	ND	0.1	mg/L	03/27/95
Cu Copper	EPA 200.7	0.2 *	0.1	mg/L	03/27/95
Hg Mercury	EPA 245.1	ND	0.0002	mg/L	03/26/95
Mo Molybdenum	EPA 200.7	ND	0.1	mg/L	03/25/95
Ni Nickel	EPA 200.7	3.4 *	0.1	mg/L	03/27/95
Pb Lead	EPA 239.2	0.41 *	0.002	mg/L	03/28/95
Sb Antimony	EPA 200.7	ND	0.2	mg/L	03/27/95
Se Selenium	EPA 270.2	ND	0.004	mg/L	03/27/95
Tl Thallium	EPA 200.7	ND	0.5	mg/L	03/27/95
V Vanadium	EPA 200.7	ND	0.05	mg/L	03/25/95
Zn Zinc	EPA 200.7	4,700 *	0.1	mg/L	03/25/95

Reporting limits elevated for metals due to matrix interference.

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

LEVINE-FRICKE

SAMPLE ID: LF-6
AEN LAB NO: 9503291-12
AEN WORK ORDER: 9503291
CLIENT PROJ. ID: 3018.11

DATE SAMPLED: 03/15/95
DATE RECEIVED: 03/16/95
REPORT DATE: 04/03/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion/G. Furnace	EPA 200.0	-		Prep Date	03/23/95
#Digestion/ICP	EPA 200.0	-		Prep Date	03/24/95
CCR 17 Metals (Low Level)					
Ag Silver	EPA 200.7	0.003 *	0.001	mg/L	03/25/95
As Arsenic	EPA 206.2	ND	0.002	mg/L	03/27/95
Ba Barium	EPA 200.7	0.010 *	0.002	mg/L	03/25/95
Be Beryllium	EPA 200.7	0.0023 *	0.0005	mg/L	03/25/95
Cd Cadmium	EPA 200.7	0.091 *	0.001	mg/L	03/25/95
Co Cobalt	EPA 200.7	0.74 *	0.001	mg/L	03/25/95
Cr Chromium	EPA 200.7	0.002 *	0.002	mg/L	03/25/95
Cu Copper	EPA 200.7	0.010 *	0.002	mg/L	03/25/95
Hg Mercury	EPA 245.1	ND	0.0002	mg/L	03/26/95
Mo Molybdenum	EPA 200.7	ND	0.002	mg/L	03/25/95
Ni Nickel	EPA 200.7	2.6 *	0.002	mg/L	03/25/95
Pb Lead	EPA 239.2	ND	0.005	mg/L	03/28/95
Sb Antimony	EPA 200.7	ND	0.004	mg/L	03/25/95
Se Selenium	EPA 270.2	ND	0.004	mg/L	03/27/95
Tl Thallium	EPA 200.7	0.06 *	0.01	mg/L	03/25/95
V Vanadium	EPA 200.7	0.001 *	0.001	mg/L	03/25/95
Zn Zinc	EPA 200.7	10 *	0.005	mg/L	03/25/95

Reporting limit elevated for lead due to matrix interference.

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

LEVINE-FRICKE

SAMPLE ID: LF-7
AEN LAB NO: 9503291-13
AEN WORK ORDER: 9503291
CLIENT PROJ. ID: 3018.11

DATE SAMPLED: 03/15/95
DATE RECEIVED: 03/16/95
REPORT DATE: 04/03/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion/G. Furnace	EPA 200.0	-		Prep Date	03/23/95
#Digestion/ICP	EPA 200.0	-		Prep Date	03/24/95
CCR 17 Metals (Low Level)					
Ag Silver	EPA 200.7	ND	0.001	mg/L	03/25/95
As Arsenic	EPA 206.2	0.004 *	0.002	mg/L	03/27/95
Ba Barium	EPA 200.7	0.24 *	0.002	mg/L	03/25/95
Be Beryllium	EPA 200.7	ND	0.0005	mg/L	03/25/95
Cd Cadmium	EPA 200.7	ND	0.001	mg/L	03/25/95
Co Cobalt	EPA 200.7	ND	0.001	mg/L	03/25/95
Cr Chromium	EPA 200.7	ND	0.002	mg/L	03/25/95
Cu Copper	EPA 200.7	ND	0.002	mg/L	03/25/95
Hg Mercury	EPA 245.1	ND	0.0002	mg/L	03/26/95
Mo Molybdenum	EPA 200.7	0.005 *	0.002	mg/L	03/25/95
Ni Nickel	EPA 200.7	0.011 *	0.002	mg/L	03/25/95
Pb Lead	EPA 239.2	ND	0.005	mg/L	03/28/95
Sb Antimony	EPA 200.7	ND	0.004	mg/L	03/25/95
Se Selenium	EPA 270.2	ND	0.004	mg/L	03/27/95
Tl Thallium	EPA 200.7	ND	0.01	mg/L	03/25/95
V Vanadium	EPA 200.7	0.006 *	0.001	mg/L	03/25/95
Zn Zinc	EPA 200.7	0.053 *	0.005	mg/L	03/25/95

Reporting limit elevated for lead due to matrix interference.

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

LEVINE-FRICKE

SAMPLE ID: LF-10
AEN LAB NO: 9503291-14
AEN WORK ORDER: 9503291
CLIENT PROJ. ID: 3018.11

DATE SAMPLED: 03/15/95
DATE RECEIVED: 03/16/95
REPORT DATE: 04/03/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion/G. Furnace	EPA 200.0	-		Prep Date	03/23/95
#Digestion/ICP	EPA 200.0	-		Prep Date	03/24/95
CCR 17 Metals (Low Level)					
Ag Silver	EPA 200.7	ND	0.001	mg/L	03/25/95
As Arsenic	EPA 206.2	ND	0.02	mg/L	03/27/95
Ba Barium	EPA 200.7	0.018 *	0.002	mg/L	03/25/95
Be Beryllium	EPA 200.7	ND	0.0005	mg/L	03/25/95
Cd Cadmium	EPA 200.7	0.001 *	0.001	mg/L	03/25/95
Co Cobalt	EPA 200.7	0.018 *	0.001	mg/L	03/25/95
Cr Chromium	EPA 200.7	ND	0.002	mg/L	03/25/95
Cu Copper	EPA 200.7	0.006 *	0.002	mg/L	03/25/95
Hg Mercury	EPA 245.1	ND	0.0002	mg/L	03/26/95
Mo Molybdenum	EPA 200.7	ND	0.002	mg/L	03/25/95
Ni Nickel	EPA 200.7	0.13 *	0.002	mg/L	03/25/95
Pb Lead	EPA 239.2	ND	0.01	mg/L	03/28/95
Sb Antimony	EPA 200.7	0.004 *	0.004	mg/L	03/25/95
Se Selenium	EPA 270.2	ND	0.04	mg/L	03/27/95
Tl Thallium	EPA 200.7	0.02 *	0.01	mg/L	03/25/95
V Vanadium	EPA 200.7	0.004 *	0.001	mg/L	03/25/95
Zn Zinc	EPA 200.7	0.13 *	0.005	mg/L	03/25/95

Reporting limit elevated for arsenic, lead and selenium due to matrix interference.

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

LEVINE-FRICKE

SAMPLE ID: LF-4
AEN LAB NO: 9503291-15
AEN WORK ORDER: 9503291
CLIENT PROJ. ID: 3018.11

DATE SAMPLED: 03/15/95
DATE RECEIVED: 03/16/95
REPORT DATE: 04/03/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion/G. Furnace	EPA 200.0	-		Prep Date	03/23/95
#Digestion/ICP	EPA 200.0	-		Prep Date	03/24/95
CCR 17 Metals (Low Level)					
Ag Silver	EPA 200.7	ND	0.001	mg/L	03/25/95
As Arsenic	EPA 206.2	0.008 *	0.002	mg/L	03/27/95
Ba Barium	EPA 200.7	0.34 *	0.002	mg/L	03/25/95
Be Beryllium	EPA 200.7	ND	0.0005	mg/L	03/25/95
Cd Cadmium	EPA 200.7	0.001 *	0.001	mg/L	03/25/95
Co Cobalt	EPA 200.7	0.005 *	0.001	mg/L	03/25/95
Cr Chromium	EPA 200.7	ND	0.002	mg/L	03/25/95
Cu Copper	EPA 200.7	ND	0.002	mg/L	03/25/95
Hg Mercury	EPA 245.1	ND	0.0002	mg/L	03/26/95
Mo Molybdenum	EPA 200.7	ND	0.002	mg/L	03/25/95
Ni Nickel	EPA 200.7	0.037 *	0.002	mg/L	03/25/95
Pb Lead	EPA 239.2	ND	0.002	mg/L	03/28/95
Sb Antimony	EPA 200.7	ND	0.004	mg/L	03/25/95
Se Selenium	EPA 270.2	ND	0.004	mg/L	03/27/95
Tl Thallium	EPA 200.7	ND	0.01	mg/L	03/25/95
V Vanadium	EPA 200.7	0.002 *	0.001	mg/L	03/25/95
Zn Zinc	EPA 200.7	0.064 *	0.005	mg/L	03/25/95

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

LEVINE-FRICKE

SAMPLE ID: LF-11
AEN LAB NO: 9503291-16
AEN WORK ORDER: 9503291
CLIENT PROJ. ID: 3018.11

DATE SAMPLED: 03/15/95
DATE RECEIVED: 03/16/95
REPORT DATE: 04/03/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion/G. Furnace	EPA 200.0	-		Prep Date	03/23/95
#Digestion/ICP	EPA 200.0	-		Prep Date	03/23/95
CCR 17 Metals (Low Level)					
Ag Silver	EPA 200.7	ND	0.5	mg/L	03/29/95
As Arsenic	EPA 206.2	ND	0.01	mg/L	03/27/95
Ba Barium	EPA 200.7	ND	1	mg/L	03/29/95
Be Beryllium	EPA 200.7	ND	0.2	mg/L	03/29/95
Cd Cadmium	EPA 200.7	91 *	0.5	mg/L	03/25/95
Co Cobalt	EPA 200.7	4.9 *	0.5	mg/L	03/25/95
Cr Chromium	EPA 200.7	ND	1	mg/L	03/29/95
Cu Copper	EPA 200.7	3 *	1	mg/L	03/29/95
Hg Mercury	EPA 245.1	ND	0.0002	mg/L	03/26/95
Mo Molybdenum	EPA 200.7	ND	1	mg/L	03/25/95
Ni Nickel	EPA 200.7	22 *	1	mg/L	03/29/95
Pb Lead	EPA 239.2	0.08 *	0.04	mg/L	03/29/95
Sb Antimony	EPA 200.7	ND	2	mg/L	03/29/95
Se Selenium	EPA 270.2	ND	0.02	mg/L	03/28/95
Tl Thallium	EPA 200.7	ND	5	mg/L	03/29/95
V Vanadium	EPA 200.7	ND	0.5	mg/L	03/25/95
Zn Zinc	EPA 200.7	37,000 *	1	mg/L	03/28/95

Reporting limits elevated for metals due to matrix interference.

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

LEVINE-FRICKE

SAMPLE ID: LF-2
AEN LAB NO: 9503291-18
AEN WORK ORDER: 9503291
CLIENT PROJ. ID: 3018.11

DATE SAMPLED: 03/15/95
DATE RECEIVED: 03/16/95
REPORT DATE: 04/03/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion/G. Furnace	EPA 200.0	-		Prep Date	03/23/95
#Digestion/ICP	EPA 200.0	-		Prep Date	03/24/95
CCR 17 Metals (Low Level)					
Ag Silver	EPA 200.7	ND	0.001	mg/L	03/25/95
As Arsenic	EPA 206.2	ND	0.002	mg/L	03/27/95
Ba Barium	EPA 200.7	0.017 *	0.002	mg/L	03/25/95
Be Beryllium	EPA 200.7	ND	0.0005	mg/L	03/25/95
Cd Cadmium	EPA 200.7	ND	0.001	mg/L	03/25/95
Co Cobalt	EPA 200.7	0.033 *	0.001	mg/L	03/25/95
Cr Chromium	EPA 200.7	ND	0.002	mg/L	03/25/95
Cu Copper	EPA 200.7	0.004 *	0.002	mg/L	03/25/95
Hg Mercury	EPA 245.1	ND	0.0002	mg/L	03/26/95
Mo Molybdenum	EPA 200.7	ND	0.002	mg/L	03/25/95
Ni Nickel	EPA 200.7	0.031 *	0.002	mg/L	03/25/95
Pb Lead	EPA 239.2	ND	0.002	mg/L	03/28/95
Sb Antimony	EPA 200.7	ND	0.004	mg/L	03/25/95
Se Selenium	EPA 270.2	ND	0.004	mg/L	03/27/95
Tl Thallium	EPA 200.7	ND	0.01	mg/L	03/25/95
V Vanadium	EPA 200.7	0.002 *	0.001	mg/L	03/25/95
Zn Zinc	EPA 200.7	0.49 *	0.005	mg/L	03/25/95

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

LEVINE-FRICKE

SAMPLE ID: LF-102
AEN LAB NO: 9503291-19
AEN WORK ORDER: 9503291
CLIENT PROJ. ID: 3018.11

DATE SAMPLED: 03/15/95
DATE RECEIVED: 03/16/95
REPORT DATE: 04/03/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion/G. Furnace	EPA 200.0	-		Prep Date	03/23/95
#Digestion/ICP	EPA 200.0	-		Prep Date	03/24/95
CCR 17 Metals (Low Level)					
Ag Silver	EPA 200.7	ND	0.001	mg/L	03/25/95
As Arsenic	EPA 206.2	ND	0.002	mg/L	03/27/95
Ba Barium	EPA 200.7	0.017 *	0.002	mg/L	03/25/95
Be Beryllium	EPA 200.7	ND	0.0005	mg/L	03/25/95
Cd Cadmium	EPA 200.7	ND	0.001	mg/L	03/25/95
Co Cobalt	EPA 200.7	0.036 *	0.001	mg/L	03/25/95
Cr Chromium	EPA 200.7	ND	0.002	mg/L	03/25/95
Cu Copper	EPA 200.7	0.005 *	0.002	mg/L	03/25/95
Hg Mercury	EPA 245.1	ND	0.0002	mg/L	03/26/95
Mo Molybdenum	EPA 200.7	ND	0.002	mg/L	03/25/95
Ni Nickel	EPA 200.7	0.024 *	0.002	mg/L	03/25/95
Pb Lead	EPA 239.2	ND	0.002	mg/L	03/28/95
Sb Antimony	EPA 200.7	ND	0.004	mg/L	03/25/95
Se Selenium	EPA 270.2	ND	0.004	mg/L	03/27/95
Tl Thallium	EPA 200.7	ND	0.01	mg/L	03/25/95
V Vanadium	EPA 200.7	0.001 *	0.001	mg/L	03/25/95
Zn Zinc	EPA 200.7	0.37 *	0.005	mg/L	03/25/95

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

LEVINE-FRICKE

SAMPLE ID: LF-16
AEN LAB NO: 9503291-20
AEN WORK ORDER: 9503291
CLIENT PROJ. ID: 3018.11

DATE SAMPLED: 03/15/95
DATE RECEIVED: 03/16/95
REPORT DATE: 04/03/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion/G. Furnace	EPA 200.0	-		Prep Date	03/23/95
#Digestion/ICP	EPA 200.0	-		Prep Date	03/23/95
CCR 17 Metals (Low Level)					
Ag Silver	EPA 200.7	ND	0.05	mg/L	03/27/95
As Arsenic	EPA 206.2	ND	0.02	mg/L	03/27/95
Ba Barium	EPA 200.7	ND	0.1	mg/L	03/27/95
Be Beryllium	EPA 200.7	0.03 *	0.02	mg/L	03/27/95
Cd Cadmium	EPA 200.7	8.2 *	0.05	mg/L	03/25/95
Co Cobalt	EPA 200.7	4.9 *	0.05	mg/L	03/25/95
Cr Chromium	EPA 200.7	ND	0.1	mg/L	03/27/95
Cu Copper	EPA 200.7	21 *	0.1	mg/L	03/27/95
Hg Mercury	EPA 245.1	ND	0.0002	mg/L	03/26/95
Mo Molybdenum	EPA 200.7	ND	0.1	mg/L	03/25/95
Ni Nickel	EPA 200.7	16 *	0.1	mg/L	03/27/95
Pb Lead	EPA 239.2	ND	0.05	mg/L	03/28/95
Sb Antimony	EPA 200.7	ND	0.2	mg/L	03/27/95
Se Selenium	EPA 270.2	ND	0.04	mg/L	03/27/95
Tl Thallium	EPA 200.7	ND	0.5	mg/L	03/27/95
V Vanadium	EPA 200.7	ND	0.05	mg/L	03/25/95
Zn Zinc	EPA 200.7	3,300 *	0.1	mg/L	03/27/95

Reporting limits elevated for metals due to matrix interference.

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

LEVINE-FRICKE

SAMPLE ID: LF-14
AEN LAB NO: 9503291-21
AEN WORK ORDER: 9503291
CLIENT PROJ. ID: 3018.11

DATE SAMPLED: 03/15/95
DATE RECEIVED: 03/16/95
REPORT DATE: 04/03/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	**EPA 8020**				
Benzene	71-43-2	1 *	0.5	ug/L	03/24/95
Toluene	108-88-3	0.6 *	0.5	ug/L	03/24/95
Ethylbenzene	100-41-4	ND	0.5	ug/L	03/24/95
Xylenes, Total	1330-20-7	15 *	2	ug/L	03/24/95
Purgeable HCs as Gasoline	5030/GCFID	1.2 *	0.05	mg/L	03/24/95
#Digestion/G. Furnace	**EPA 200.0**	-		Prep Date	03/23/95
#Digestion/ICP	**EPA 200.0**	-		Prep Date	03/23/95
#Extraction for TPH	**EPA 3510**	-		Extrn Date	03/24/95
TPH as Diesel	**GC-FID**	0.3 *	0.05	mg/L	03/28/95
TPH as Oil	**GC-FID**	ND	0.2	mg/L	03/28/95
CCR 17 Metals (Low Level)					
Ag Silver	EPA 200.7	ND	0.005	mg/L	03/27/95
As Arsenic	EPA 206.2	ND	0.002	mg/L	03/27/95
Ba Barium	EPA 200.7	0.01 *	0.01	mg/L	03/27/95
Be Beryllium	EPA 200.7	0.004 *	0.002	mg/L	03/27/95
Cd Cadmium	EPA 200.7	0.12 *	0.005	mg/L	03/25/95
Co Cobalt	EPA 200.7	0.86 *	0.005	mg/L	03/25/95
Cr Chromium	EPA 200.7	ND	0.01	mg/L	03/27/95
Cu Copper	EPA 200.7	3.4 *	0.01	mg/L	03/27/95
Hg Mercury	EPA 245.1	ND	0.0002	mg/L	03/26/95
Mo Molybdenum	EPA 200.7	ND	0.01	mg/L	03/25/95
Ni Nickel	EPA 200.7	2.3 *	0.01	mg/L	03/27/95
Pb Lead	EPA 239.2	0.017 *	0.005	mg/L	03/29/95
Sb Antimony	EPA 200.7	ND	0.02	mg/L	03/27/95
Se Selenium	EPA 270.2	ND	0.004	mg/L	03/27/95
Tl Thallium	EPA 200.7	ND	0.05	mg/L	03/27/95
V Vanadium	EPA 200.7	ND	0.005	mg/L	03/25/95
Zn Zinc	EPA 200.7	340 *	0.01	mg/L	03/27/95

Reporting limits elevated for metals due to matrix interference.

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

LEVINE-FRICKE

SAMPLE ID: LF-8
AEN LAB NO: 9503291-22
AEN WORK ORDER: 9503291
CLIENT PROJ. ID: 3018.11

DATE SAMPLED: 03/15/95
DATE RECEIVED: 03/16/95
REPORT DATE: 04/03/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	2 *	0.5	ug/L	03/24/95
Toluene	108-88-3	0.6 *	0.5	ug/L	03/24/95
Ethylbenzene	100-41-4	3 *	0.5	ug/L	03/24/95
Xylenes, Total	1330-20-7	3 *	2	ug/L	03/24/95
Purgeable HCs as Gasoline	5030/GCFID	0.3 *	0.05	mg/L	03/24/95
#Digestion/G. Furnace	EPA 200.0	-		Prep Date	03/23/95
#Digestion/ICP	EPA 200.0	-		Prep Date	03/24/95
#Extraction for TPH	EPA 3510	-		Extrn Date	03/24/95
TPH as Diesel	GC-FID	4.1 *	0.05	mg/L	03/28/95
TPH as Oil	GC-FID	0.2 *	0.2	mg/L	03/28/95
CCR 17 Metals (Low Level)					
Ag Silver	EPA 200.7	ND	0.001	mg/L	03/25/95
As Arsenic	EPA 206.2	2.0 *	0.002	mg/L	03/27/95
Ba Barium	EPA 200.7	0.072 *	0.002	mg/L	03/25/95
Be Beryllium	EPA 200.7	ND	0.0005	mg/L	03/25/95
Cd Cadmium	EPA 200.7	ND	0.001	mg/L	03/25/95
Co Cobalt	EPA 200.7	ND	0.001	mg/L	03/25/95
Cr Chromium	EPA 200.7	ND	0.002	mg/L	03/25/95
Cu Copper	EPA 200.7	ND	0.002	mg/L	03/25/95
Hg Mercury	EPA 245.1	ND	0.0002	mg/L	03/26/95
Mo Molybdenum	EPA 200.7	0.002 *	0.002	mg/L	03/25/95
Ni Nickel	EPA 200.7	0.003 *	0.002	mg/L	03/25/95
Pb Lead	EPA 239.2	ND	0.002	mg/L	03/28/95
Sb Antimony	EPA 200.7	ND	0.004	mg/L	03/25/95
Se Selenium	EPA 270.2	ND	0.04	mg/L	03/27/95
Tl Thallium	EPA 200.7	ND	0.01	mg/L	03/25/95
V Vanadium	EPA 200.7	0.002 *	0.001	mg/L	03/25/95
Zn Zinc	EPA 200.7	0.017 *	0.005	mg/L	03/25/95
#Extraction for BNAs	EPA 3520	-		Extrn Date	03/20/95
Semi-Volatile Organics	EPA 8270				
Acenaphthene	83-32-9	360 *	10	ug/L	03/27/95
Acenaphthylene	208-96-8	13 *	10	ug/L	03/23/95
Anthracene	120-12-7	31 *	10	ug/L	03/23/95

LEVINE-FRICKE

SAMPLE ID: LF-8
AEN LAB NO: 9503291-22
AEN WORK ORDER: 9503291
CLIENT PROJ. ID: 3018.11

DATE SAMPLED: 03/15/95
DATE RECEIVED: 03/16/95
REPORT DATE: 04/03/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Benzidine	92-87-5	ND	50	ug/L	03/23/95
Benzoic Acid	65-85-0	ND	50	ug/L	03/23/95
Benzo(a)anthracene	56-55-3	ND	10	ug/L	03/23/95
Benzo(b)fluoranthene	205-99-2	ND	10	ug/L	03/23/95
Benzo(k)fluoranthene	207-08-9	ND	10	ug/L	03/23/95
Benzo(g,h,i)perylene	191-24-2	ND	10	ug/L	03/23/95
Benzo(a)pyrene	50-32-8	ND	10	ug/L	03/23/95
Benzyl Alcohol	100-51-6	ND	20	ug/L	03/23/95
Bis(2-chloroethoxy)methane	111-91-1	ND	10	ug/L	03/23/95
Bis(2-chloroethyl) Ether	111-44-4	ND	10	ug/L	03/23/95
Bis(2-chloroisopropyl) Ether	108-60-1	ND	10	ug/L	03/23/95
Bis(2-ethylhexyl) Phthalate	117-81-7	ND	10	ug/L	03/23/95
4-Bromophenyl Phenyl Ether	101-55-3	ND	10	ug/L	03/23/95
Butylbenzyl Phthalate	85-68-7	ND	10	ug/L	03/23/95
4-Chloroaniline	106-47-8	ND	20	ug/L	03/23/95
2-Chloronaphthalene	91-58-7	ND	10	ug/L	03/23/95
4-Chlorophenyl Phenyl Ether	7005-72-3	ND	10	ug/L	03/23/95
Chrysene	218-01-9	ND	10	ug/L	03/23/95
Dibenzo(a,h)anthracene	53-70-3	ND	10	ug/L	03/23/95
Dibenzofuran	132-64-9	160 *	10	ug/L	03/23/95
Di-n-butyl Phthalate	84-74-2	ND	10	ug/L	03/23/95
1,2-Dichlorobenzene	95-50-1	ND	10	ug/L	03/23/95
1,3-Dichlorobenzene	541-73-1	ND	10	ug/L	03/23/95
1,4-Dichlorobenzene	106-46-7	ND	10	ug/L	03/23/95
3,3'-Dichlorobenzidine	91-94-1	ND	20	ug/L	03/23/95
Diethyl Phthalate	84-66-2	ND	10	ug/L	03/23/95
Dimethyl Phthalate	131-11-3	ND	10	ug/L	03/23/95
2,4-Dinitrotoluene	121-14-2	ND	10	ug/L	03/23/95
2,6-Dinitrotoluene	606-20-2	ND	10	ug/L	03/23/95
Di-n-octyl Phthalate	117-84-0	ND	10	ug/L	03/23/95
Fluoranthene	206-44-0	29 *	10	ug/L	03/23/95
Fluorene	86-73-7	170 *	10	ug/L	03/23/95
Hexachlorobenzene	118-74-1	ND	10	ug/L	03/23/95
Hexachlorobutadiene	87-68-3	ND	10	ug/L	03/23/95
Hexachlorocyclopentadiene	77-47-4	ND	10	ug/L	03/23/95
Hexachloroethane	67-72-1	ND	10	ug/L	03/23/95
Indeno(1,2,3-cd)pyrene	193-39-5	ND	10	ug/L	03/23/95
Isophorone	78-59-1	ND	10	ug/L	03/23/95
2-Methylnaphthalene	91-57-6	33 *	10	ug/L	03/23/95
Naphthalene	91-20-3	32 *	10	ug/L	03/23/95
2-Nitroaniline	88-74-4	ND	50	ug/L	03/23/95
3-Nitroaniline	99-09-2	ND	50	ug/L	03/23/95
4-Nitroaniline	100-01-6	ND	50	ug/L	03/23/95

LEVINE-FRICKE

SAMPLE ID: LF-8
AEN LAB NO: 9503291-22
AEN WORK ORDER: 9503291
CLIENT PROJ. ID: 3018.11

DATE SAMPLED: 03/15/95
DATE RECEIVED: 03/16/95
REPORT DATE: 04/03/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Nitrobenzene	98-95-3	ND	10	ug/L	03/23/95
N-Nitrosodiphenylamine	86-30-6	ND	10	ug/L	03/23/95
N-Nitrosodi-n-propylamine	621-64-7	ND	10	ug/L	03/23/95
Phenanthrene	85-01-8	15 *	10	ug/L	03/23/95
Pyrene	129-00-0	17 *	10	ug/L	03/23/95
1,2,4-Trichlorobenzene	120-82-1	ND	10	ug/L	03/23/95
4-Chloro-3-methylphenol	59-50-7	ND	10	ug/L	03/23/95
2-Chlorophenol	95-57-8	ND	10	ug/L	03/23/95
2,4-Dichlorophenol	120-83-2	ND	10	ug/L	03/23/95
2,4-Dimethylphenol	105-67-9	ND	10	ug/L	03/23/95
4,6-Dinitro-2-methylphenol	534-52-1	ND	50	ug/L	03/23/95
2,4-Dinitrophenol	51-28-5	ND	50	ug/L	03/23/95
2-Methylphenol	95-48-7	ND	10	ug/L	03/23/95
4-Methylphenol	106-44-5	ND	10	ug/L	03/23/95
2-Nitrophenol	88-75-5	ND	10	ug/L	03/23/95
4-Nitrophenol	100-02-7	ND	50	ug/L	03/23/95
Pentachlorophenol	87-86-5	ND	50	ug/L	03/23/95
Phenol	108-95-2	ND	10	ug/L	03/23/95
2,4,5-Trichlorophenol	95-95-4	ND	10	ug/L	03/23/95
2,4,6-Trichlorophenol	88-06-2	ND	10	ug/L	03/23/95

Reporting limit elevated for selenium due to matrix interference.

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

LEVINE-FRICKE

SAMPLE ID: LF-3
AEN LAB NO: 9503291-23
AEN WORK ORDER: 9503291
CLIENT PROJ. ID: 3018.11

DATE SAMPLED: 03/15/95
DATE RECEIVED: 03/16/95
REPORT DATE: 04/03/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	ND	0.5	ug/L	03/24/95
Toluene	108-88-3	ND	0.5	ug/L	03/24/95
Ethylbenzene	100-41-4	ND	0.5	ug/L	03/24/95
Xylenes, Total	1330-20-7	ND	2	ug/L	03/24/95
Purgeable HCs as Gasoline	5030/GCFID	ND	0.05	mg/L	03/24/95
#Digestion/G. Furnace	EPA 200.0	-		Prep Date	03/23/95
#Digestion/ICP	EPA 200.0	-		Prep Date	03/24/95
#Extraction for TPH	EPA 3510	-		Extrn Date	03/24/95
TPH as Diesel	GC-FID	0.8 *	0.05	mg/L	03/28/95
TPH as Oil	GC-FID	ND	0.2	mg/L	03/28/95
CCR 17 Metals (Low Level)					
Ag Silver	EPA 200.7	ND	0.001	mg/L	03/25/95
As Arsenic	EPA 206.2	2.8 *	0.002	mg/L	03/27/95
Ba Barium	EPA 200.7	0.15 *	0.002	mg/L	03/25/95
Be Beryllium	EPA 200.7	0.0010 *	0.0005	mg/L	03/25/95
Cd Cadmium	EPA 200.7	ND	0.001	mg/L	03/25/95
Co Cobalt	EPA 200.7	0.008 *	0.001	mg/L	03/25/95
Cr Chromium	EPA 200.7	0.004 *	0.002	mg/L	03/25/95
Cu Copper	EPA 200.7	0.003 *	0.002	mg/L	03/25/95
Hg Mercury	EPA 245.1	ND	0.0002	mg/L	03/26/95
Mo Molybdenum	EPA 200.7	0.086 *	0.002	mg/L	03/25/95
Ni Nickel	EPA 200.7	0.007 *	0.002	mg/L	03/25/95
Pb Lead	EPA 239.2	ND	0.002	mg/L	03/28/95
Sb Antimony	EPA 200.7	ND	0.004	mg/L	03/25/95
Se Selenium	EPA 270.2	ND	0.04	mg/L	03/27/95
Tl Thallium	EPA 200.7	ND	0.01	mg/L	03/25/95
V Vanadium	EPA 200.7	0.011 *	0.001	mg/L	03/25/95
Zn Zinc	EPA 200.7	4.3 *	0.005	mg/L	03/25/95

Reporting limit elevated for selenium due to matrix interference.

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

LEVINE-FRICKE

SAMPLE ID: TRIP BLANK
AEN LAB NO: 9503291-24
AEN WORK ORDER: 9503291
CLIENT PROJ. ID: 3018.11

DATE SAMPLED:
DATE RECEIVED: 03/16/95
REPORT DATE: 04/03/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	ND	0.5	ug/L	03/24/95
Toluene	108-88-3	ND	0.5	ug/L	03/24/95
Ethylbenzene	100-41-4	ND	0.5	ug/L	03/24/95
Xylenes, Total	1330-20-7	ND	2	ug/L	03/24/95
Purgeable HCs as Gasoline	5030/GCFID	ND	0.05	mg/L	03/24/95

ND = Not detected at or above the reporting limit
* = Value at or above reporting limit

AEN (CALIFORNIA)
QUALITY CONTROL REPORT

AEN JOB NUMBER: 9503291

CLIENT PROJECT ID: 3018.11

Quality Control Summary

Molybdenum and cadmium matrix spike recoveries were outside of established limits. This appears to be a matrix effect as method spike recoveries were within limits.

All other laboratory quality control parameters were found to be within established limits.

Definitions

Laboratory Control Sample (LCS)/Method Spike(s): Control samples of known composition. LCS and Method Spike data are used to validate batch analytical results.

Matrix Spike(s): Aliquot of a sample (aqueous or solid) with added quantities of specific compounds and subjected to the entire analytical procedure. Matrix spike and matrix spike duplicate QC data are advisory.

Method Blank: An analytical control consisting of all reagents, internal standards, and surrogate standards carried through the entire analytical process. Used to monitor laboratory background and reagent contamination.

Not Detected (ND): Not detected at or above the reporting limit.

Relative Percent Difference (RPD): An indication of method precision based on duplicate analysis.

Reporting Limit (RL): The lowest concentration routinely determined during laboratory operations. The RL is generally 1 to 10 times the Method Detection Limit (MDL). Reporting limits are matrix, method, and analyte dependent and take into account any dilutions performed as part of the analysis.

Surrogates: Organic compounds which are similar to analytes of interest in chemical behavior, but are not found in environmental samples. Surrogates are added to all blanks, calibration and check standards, samples, and spiked samples. Surrogate recovery is monitored as an indication of acceptable sample preparation and instrumental performance.

D: Surrogates diluted out.

#: Indicates result outside of established laboratory QC limits.

QUALITY CONTROL DATA

METHOD: EPA 3510 GCFID

AEN JOB NO: 9503291
AEN LAB NO: 0324-BLANK
DATE EXTRACTED: 03/24/95
DATE ANALYZED: 03/28/95
INSTRUMENT: C
MATRIX: WATER

Method Blank

	Result (mg/L)	Reporting Limit (mg/L)
Diesel	ND	0.05
Oil	ND	0.2

QUALITY CONTROL DATA

METHOD: EPA 3510 GCFID

AEN JOB NO: 9503291
DATE EXTRACTED: 03/24/95
INSTRUMENT: C
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery n-Pentacosane
03/28/95	LF-14	21	91
03/28/95	LF-8	22	99
03/28/95	LF-3	23	89
QC Limits:			73-129

DATE EXTRACTED: 03/23/95
DATE ANALYZED: 03/24/95
SAMPLE SPIKED: DI WATER

Method Spike Recovery Summary

Analyte	Spike Added (mg/L)	Average Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Diesel	2.02	86	9	65-103	12

QUALITY CONTROL DATA

METHOD: EPA 8020, 5030 GCFID

AEN JOB NO: 9503291
AEN LAB NO: 0324-BLANK
DATE ANALYZED: 03/24/95
INSTRUMENT: H
MATRIX: WATER

Method Blank

	CAS #	Result (ug/L)	Reporting Limit (ug/L)
Benzene	71-43-2	ND	0.5
Toluene	108-88-3	ND	0.5
Ethylbenzene	100-41-4	ND	0.5
Xylenes, Total	1330-20-7	ND	2
HCs as Gasoline		ND mg/L	0.05 mg/L

QUALITY CONTROL DATA

METHOD: EPA 8020, 5030 GCFID

AEN JOB NO: 9503291
INSTRUMENT: H
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery Fluorobenzene
03/24/95	LF-14	21	102
03/24/95	LF-8	22	100
03/24/95	LF-3	23	101
03/24/95	Trip Blank	24	100
QC Limits:			92-109

DATE ANALYZED: 03/23/95
SAMPLE SPIKED: 9503279-04
INSTRUMENT: H

Matrix Spike Recovery Summary

Analyte	Spike Added (ug/L)	Average Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Benzene	18.2	98	3	85-109	17
Toluene	52.8	96	3	87-111	16
HCs as Gasoline	500	92	1	66-117	19

QUALITY CONTROL DATA

METHOD: EPA 8270

AEN JOB NO: 9503291
AEN LAB NO: 0320-BLANK
DATE EXTRACTED: 03/20/95
DATE ANALYZED: 03/24/95
INSTRUMENT: 11
MATRIX: WATER

Semi-Volatile Organic Compounds
GC/MS Extractables

Analyte	CAS #	Result (ug/L)	Reporting Limit (ug/L)
Acenaphthene	83-32-9	ND	10
Acenaphthylene	208-96-8	ND	10
Anthracene	120-12-7	ND	10
Benzidine	92-87-5	ND	50
Benzoic Acid	65-85-0	ND	50
Benzo(a)anthracene	56-55-3	ND	10
Benzo(b)fluoranthene	205-99-2	ND	10
Benzo(k)fluoranthene	207-08-9	ND	10
Benzo(g,h,i)perylene	191-24-2	ND	10
Benzo(a)pyrene	50-32-8	ND	10
Benzyl Alcohol	100-51-6	ND	20
Bis(2-chloroethoxy)methane	111-91-1	ND	10
Bis(2-chloroethyl)ether	111-44-4	ND	10
Bis(2-chloroisopropyl)ether	108-60-1	ND	10
Bis(2-ethylhexyl)phthalate	117-81-7	ND	10
4-Bromophenyl phenyl ether	101-55-3	ND	10
Butylbenzyl phthalate	85-68-7	ND	10
4-Chloroaniline	106-47-8	ND	20
2-Chloronaphthalene	91-58-7	ND	10
4-Chlorophenyl phenylether	7005-72-3	ND	10
Chrysene	218-01-9	ND	10
Dibenzo(a,h)anthracene	53-70-3	ND	10
Dibenzofuran	132-64-9	ND	10
Di-n-butylphthalate	84-74-2	ND	10
1,2-Dichlorobenzene	95-50-1	ND	10
1,3-Dichlorobenzene	541-73-1	ND	10
1,4-Dichlorobenzene	106-46-7	ND	10
3,3'-Dichlorobenzidine	91-94-1	ND	20
Diethylphthalate	84-66-2	ND	10
Dimethylphthalate	131-11-3	ND	10
2,4-Dinitrotoluene	121-14-2	ND	10
2,6-Dinitrotoluene	606-20-2	ND	10
Di-n-octylphthalate	117-84-0	ND	10
1,2-Diphenylhydrazine	122-66-7	ND	10

QUALITY CONTROL DATA

METHOD: EPA 8270

AEN JOB NO: 9503291
AEN LAB NO: 0320-BLANK
DATE EXTRACTED: 03/20/95
DATE ANALYZED: 03/24/95
INSTRUMENT: 11
MATRIX: WATER

GC/MS Extractables (Cont.)

Analyte	CAS #	Result (ug/L)	Reporting Limit (ug/L)
Fluoranthene	206-44-0	ND	10
Fluorene	86-73-7	ND	10
Hexachlorobenzene	118-74-1	ND	10
Hexachlorobutadiene	87-68-3	ND	10
Hexachlorocyclopentadiene	77-47-4	ND	10
Hexachloroethane	67-72-1	ND	10
Indeno(1,2,3-cd)pyrene	193-39-5	ND	10
Isophorone	78-59-1	ND	10
2-Methylnaphthalene	91-57-6	ND	10
Naphthalene	91-20-3	ND	10
2-Nitroaniline	88-74-4	ND	50
3-Nitroaniline	99-09-2	ND	50
4-Nitroaniline	100-01-6	ND	50
Nitrobenzene	98-95-3	ND	10
N-nitrosodimethylamine	62-75-9	ND	10
N-nitrosodiphenylamine	86-30-6	ND	10
N-nitroso-di-n-propylamine	621-64-7	ND	10
Phenanthrene	85-01-8	ND	10
Pyrene	129-00-0	ND	10
1,2,4-Trichlorobenzene	120-82-1	ND	10
4-Chloro-3-methylphenol	59-50-7	ND	10
2-Chlorophenol	95-57-8	ND	10
2,4-Dichlorophenol	120-83-2	ND	10
2,4-Dimethylphenol	105-67-9	ND	10
4,6-Dinitro-2-methylphenol	534-52-1	ND	50
2,4-Dinitrophenol	51-28-5	ND	50
2-Methylphenol	95-48-7	ND	10
4-Methylphenol	106-44-5	ND	10
2-Nitrophenol	88-75-5	ND	10
4-Nitrophenol	100-02-7	ND	50
Pentachlorophenol	87-86-5	ND	50
Phenol	108-95-2	ND	10
2,4,5-Trichlorophenol	95-95-4	ND	10
2,4,6-Trichlorophenol	88-06-2	ND	10

QUALITY CONTROL DATA

METHOD: EPA 8270

AEN JOB NO: 9503291
DATE EXTRACTED: 03/20/95
INSTRUMENT: 11
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery: Nitrobenzene-d_5	2-Fluorobiphenyl	Terphenyl-d_{14}	Phenol-d_5	2-Fluorophenol	2,4,6-Tribromophenol
03/23/95	LF-8	22	97	90	99	89	69	142
QC Limits:			16-128	22-130	36-144	20-111	12-121	40-162

DATE EXTRACTED: 03/17/95
DATE ANALYZED: 03/20/95
SAMPLE SPIKED: DI WATER
INSTRUMENT: 11

Method Spike Recovery Summary

Analyte	Spike Added (ug/L)	Average Percent Recovery	RPD	QC Limits: Percent Recovery	QC Limits: RPD
Phenol	220	64	4	59-122	39
2-Chlorophenol	209	79	<1	72-120	42
1,4-Dichlorobenzene	208	45	7	34-105	38
N-Nitrosodi-n-propylamine	212	64	10	46-118	30
1,2,4-Trichlorobenzene	209	40	16	34- 88	28
4-Chloro-3-methylphenol	205	69	2	61-113	27
Acenaphthene	202	83	5	55-117	18
4-Nitrophenol	216	52	31	39- 96	34
2,4-Dinitrotoluene	211	73	<1	58-104	29
Pentachlorophenol	209	62	6	37-117	44
Pyrene	217	57	4	44-117	26

QUALITY CONTROL DATA

AEN JOB NO: 9503291
SAMPLE SPIKED: DI WATER
DATE(S) ANALYZED: 03/23-28/95
MATRIX: WATER

Method Blank and Spike Recovery Summary

Analyte	Inst./ Method	Blank Result (mg/L)	Spike Added (mg/L)	Average Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Ag, Silver	ICP/200.7	ND	0.005	95	2	83-119	9
As, Arsenic	4000/206.2	ND	0.04	87	2	84-118	12
Ba, Barium	ICP/200.7	ND	0.20	108	2	93-112	5
Be, Beryllium	ICP/200.7	ND	0.005	99	2	81-113	5
Cd, Cadmium	ICP/200.7	ND	0.01	102	1	90-113	9
Co, Cobalt	ICP/200.7	ND	0.05	109	1	94-117	5
Cr, Chromium	ICP/200.7	ND	0.02	108	<1	87-117	7
Cu, Copper	ICP/200.7	ND	0.025	105	3	83-114	5
Hg, Mercury	Hg/245.1	ND	2.0 ug/L	98	2	87-114	5
Mo, Molybdenum	ICP/200.7	ND	0.04	103	1	89-114	6
Ni, Nickel	ICP/200.7	ND	0.05	108	1	91-113	5
Pb, Lead	4000/239.2	ND	0.02	100	8	76-124	14
Sb, Antimony	ICP/200.7	ND	0.1	95	1	94-117	5
Se, Selenium	4000/270.2	ND	0.08	89	7	80-114	14
Tl, Thallium	ICP/200.7	ND	0.1	103	2	87-114	10
V, Vanadium	ICP/200.7	ND	0.05	106	1	95-111	5
Zn, Zinc	ICP/200.7	ND	0.05	107	<1	92-113	5

QUALITY CONTROL DATA

AEN JOB NO: 9503291
SAMPLE SPIKED: DI WATER
DATE(S) ANALYZED: 03/25-26/95
MATRIX: WATER

Method Blank and Spike Recovery Summary

Analyte	Inst./ Method	Blank Result (mg/L)	Spike Added (mg/L)	Average Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Ag, Silver	ICP/200.7	ND	0.025	94	<1	80-119	10
Ba, Barium	ICP/200.7	ND	1.00	102	2	93-112	5
Be, Beryllium	ICP/200.7	ND	0.025	96	2	87-114	5
Cd, Cadmium	ICP/200.7	ND	0.05	102	3	90-113	9
Co, Cobalt	ICP/200.7	ND	0.25	105	4	99-117	5
Cr, Chromium	ICP/200.7	ND	0.10	99	7	87-117	7
Cu, Copper	ICP/200.7	ND	0.125	98	4	83-114	5
Hg, Mercury	Hg/245.1	ND	2.0 ug/L	100	1	87-114	5
Mo, Molybdenum	ICP/200.7	ND	0.20	98	<1	93-113	5
Ni, Nickel	ICP/200.7	ND	0.05	100	5	91-113	5
Sb, Antimony	ICP/200.7	ND	0.5	92	5	86-108	5
Tl, Thallium	ICP/200.7	ND	0.5	102	6	90-111	10
V, Vanadium	ICP/200.7	ND	0.25	101	2	94-114	5
Zn, Zinc	ICP/200.7	ND	0.05	102	2	92-113	5

QUALITY CONTROL DATA

AEN JOB NO: 9503291
SAMPLE(S) SPIKED: 9503291-13(GFAA); 9503291-12(ICP); 9503291-17(Hg)
DATE(S) ANALYZED: 03/25-28/95
MATRIX: WATER

Matrix Spike Recovery Summary

Analyte	Inst./ Method	Sample Result (mg/L)	Spike Added (mg/L)	Average Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Ag, Silver	ICP/200.7	0.003	0.005	88	3	73-120	8
As, Arsenic	4000/206.2	0.004	0.04	124	4	75-125	20
Ba, Barium	ICP/200.7	0.010	0.20	92	2	77-122	5
Be, Beryllium	ICP/200.7	0.0023	0.005	85	2	64-104	7
Cd, Cadmium	ICP/200.7	0.091	0.01	88	<1	69-119	13
Co, Cobalt	ICP/200.7	0.742	0.05	95	1	74-121	6
Cr, Chromium	ICP/200.7	0.002	0.02	78	1	71-124	10
Cu, Copper	ICP/200.7	0.010	0.025	94	<1	75-122	7
Hg, Mercury	Hg/245.1	ND	2.0 ug/L	98	2	80-120	15
Mo, Molybdenum	ICP/200.7	ND	0.04	73 #	1	76-119	7
Ni, Nickel	ICP/200.7	2.57	0.05	107	1	71-120	5
Pb, Lead	4000/239.2	ND	0.02	94	2	75-125	20
Sb, Antimony	ICP/200.7	ND	0.1	79	4	79-116	8
Se, Selenium	4000/270.2	ND	0.08	78	1	0-147	20
Tl, Thallium	ICP/200.7	0.061	0.1	70	1	67-116	7
V, Vanadium	ICP/200.7	0.001	0.05	86	2	77-114	6
Zn, Zinc	ICP/200.7	9.98	0.05	N/A	2	59-137	5

N/A: Not applicable; spike overwhelmed

QUALITY CONTROL DATA

AEN JOB NO: 9503291
SAMPLE(S) SPIKED: 9503291-21(GFAA); 9503291-22(ICP); 9503291-21(Hg)
DATE(S) ANALYZED: 03/25-29/95
MATRIX: WATER

Matrix Spike Recovery Summary

Analyte	Inst./ Method	Sample Result (mg/L)	Spike Added (mg/L)	Average Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Ag, Silver	ICP/200.7	ND	0.005	88	5	73-120	8
As, Arsenic	4000/206.2	ND	0.04	81	7	75-125	20
Ba, Barium	ICP/200.7	0.072	0.2	98	1	77-122	5
Be, Beryllium	ICP/200.7	ND	0.005	90	<1	64-104	7
Cd, Cadmium	ICP/200.7	ND	0.01	27 #	<1	69-119	13
Co, Cobalt	ICP/200.7	ND	0.05	91	1	74-121	6
Cr, Chromium	ICP/200.7	ND	0.02	95	1	71-124	10
Cu, Copper	ICP/200.7	ND	0.025	100	1	75-122	7
Hg, Mercury	Hg/245.1	ND	2.0 ug/L	95	2	80-120	15
Mo, Molybdenum	ICP/200.7	0.002	0.04	89	2	76-119	7
Ni, Nickel	ICP/200.7	0.003	0.05	89	<1	71-120	5
Pb, Lead	4000/239.2	0.017	0.02	81	2	75-125	20
Sb, Antimony	ICP/200.7	ND	0.1	92	<1	79-116	8
Se, Selenium	4000/270.2	ND	0.08	45	2	0-147	20
Tl, Thallium	ICP/200.7	ND	0.1	93	<1	67-116	7
V, Vanadium	ICP/200.7	0.002	0.05	93	1	77-114	6
Zn, Zinc	ICP/200.7	0.017	0.05	90	3	59-137	5

*** END OF REPORT ***

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

9503291 C-1, S-5/4 R-4, S-E

Project No.: 3018.11	Field Logbook No.:	Date: 3/16/95	Serial No.: Nº 013469
Project Name: Volvo/GM	Project Location: Oakland, CA.		
Sampler (Signature): J. C. Kl			Samplers: JCK

SAMPLES						ANALYSES								
SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	EPA 601	EPA 624	TITLE 22 METALS				HOLD	RUSH	REMARKS
LF-9	3/13/95	16:10	01A	1	H2O			X						STD TAT
LF-15	↓	16:35	02A	↓	↓			X						
LF-17	3/14/95	10:10	03A					X						RESULTS TO JENNIFER BEATTY
LF-5	↓	11:30	04A					X						
MW-1		15:15	05A					X						
MW-4		15:30	06A					X						TITLE 22 METALS TO
MW-2		16:00	07A					X						BASIN PLAN DETECTION
MW-3	↓	16:15	08A					X						LIMITS
LF-F1	3/15/95	11:55	09A					X						FIELD FILTERED &
LF-12	↓	12 15	10A					X						PRESERVED W/ HNO3
LF-1		12 30	11A					X						
LF-6		14:35	12A					X						
LF-7		15 20	13A					X						
LF-10		1700	14A					X						
LF-4		1715	15A					X						
LF-11	↓	1740	16A	↓	↓			X						

RELINQUISHED BY: (Signature) J. C. Kl	DATE 3-16-95	TIME 17:00	RECEIVED BY: (Signature)	DATE 3-16-95	TIME 17:00
RELINQUISHED BY: (Signature)	DATE 3-16-95	TIME 17:55	RECEIVED BY: (Signature) Lisa Pruitt	DATE 3/16/95	TIME 1755
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
METHOD OF SHIPMENT:	DATE	TIME	LAB COMMENTS:		

Sample Collector: LEVINE-FRICKE
1900 Powell Street, 12th Floor
Emeryville, California 94608
(510) 652-4500

Analytical Laboratory: AEN
PLEASANT HILL CA.

White) Lab Copy (Green) File Copy (Yellow) Field Copy (Pink) FORM NO. 86/COC/ARF

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

C-1,S-5/4 R-4,5-E 2 of 2

Project No.: 3018.11	Field Logbook No.:	Date: 3/16/95	Serial No.:
Project Name: Volvo/GM	Project Location: Oakland, CA.		No 013470
Sampler (Signature): J. C. L			Samplers: JCK

SAMPLES						ANALYSES							
SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	EPA 601	EPA 624	TITLE 22 METALS	TPHd+O	TPHg+BTEX	8270	HOLD	RUSH	REMARKS
LF-2-FB	3/15/95	16:30	17A	1				X				X		STD TAT
LF-2	↓	16:40	18A	1				X						
LF-102	↓	17:40	19A	1				X						RESULTS TO
LF-16		10:15	20A	1				X						J. BEATY
LF-14		10:35	21A-F	6				X	X	X				
LF-8		1145	22A-H	8				X	X	X	X			
LF-3		1230	23A-F	6				X	X	X				TITLE 22 METALS
TRIP BLANK			24A B							X				BASIN PLAN DETECT
														FIELD FILTERED

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
J. C. L	3-16-95	17:00		3-16-95	17:00
RELINQUISHED BY: (Signature)	3-16-95	17:55	RECEIVED BY: (Signature) Jodi L. Pruitt	3-16-95	17:55
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
METHOD OF SHIPMENT:	DATE	TIME	LAB COMMENTS:		

Sample Collector:
LEVINE-FRICKE
1900 Powell Street, 12th Floor
Emeryville, California 94608
(510) 652-4500

Analytical Laboratory:
AEN
PLEASANT HILL, CA

Shipping Copy (White) Lab Copy (Green) File Copy (Yellow) Field Copy (Pink) FORM NO. 86/COC/ARF

APPENDIX B

WATER-QUALITY SAMPLING FORMS

WATER-QUALITY SAMPLING INFORMATION

Project No.: 3018.11
Date: 3/15/95
Project Name: VOLVO / GM
Sample No.: LF-1
Sample Location: LF-1
☐ FB:
Samplers Name: JCK
☐ DUP:
Sampling Plan Prepared By: JCK
Sampling Method:

☐ Centrifugal Pump ☐ Disposable Bailer
☐ Submersible Pump ☒ Teflon Bailer
☒ Hand Bail ☐ _____ (Other)

Analyses Requested	Number and Types of Bottle used
TITLE 22 METALS	1 QT PLASTIC

Method of Shipment
AEN (Lab Name)
☒ Courier
☐ Hand Deliver:

20.00
2.33
17.67
.16
10602
1767
2.8272

17.67 × .8 = 14136
20.00 − 14.14 = 586

80% DTW 5.86

Well Number: LF-1
Depth of Water: 2.33
Well Depth: 20.00
Height of Water Column: 17.67
Volume in Well: 2.83

Well Diameter:
☒ 2" (0.16 Gallon/Feet)
☐ 4" (0.65 Gallon/Feet
☐ 5" (1.02 Gallon/Feet)
☐ 6" (1.47 Gallon/Feet)

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
11:20								START
11:22		3		19.1	5.25	7540		CLEAR
11:24		6		19.3	5.07	8300		CLEAR
11:30		9		19.5	4.56	13840		TURBID
11:33		12		19.9	3.84	30900		TURBID
11:38	DEWATER	15		19.9	4.01	12200		TURBID
11:12	8.51							
12:30	5.78							SAMPLE

Inlet Depth:
Comments:
(Recommended Method For Purging Well)

WTRQLTY.SMPLNG.INFO.22JUL94TYL

WATER-QUALITY SAMPLING INFORMATION

Project No.: 3018.11 Date: 3/15/95

Project Name: VOLVO / GM Sample No.: LF-2

Sample Location:

☒ FB:

☒ DUP:

Samplers Name: JCK

Sampling Plan Prepared By: JCK

Sampling Method:

- ☐ Centrifugal Pump
- ☐ Submersible Pump
- ☒ Hand Bail
- ☐ Disposable Bailer
- ☒ Teflon Bailer
- ☐ _____ (Other)

Analyses Requested: TITLE 22 METALS

Number and Types of Bottle used: 1 QT PLASTIC

Method of Shipment: AEN (Lab Name)

- ☒ Courier
- ☐ Hand Deliver:

Well Number: LF-2

Depth of Water: 4.30

Well Depth: 14.75

Height of Water Column: 10.45

Volume in Well: 1.67

Well Diameter:

- ☐ 2" (0.16 Gallon/Feet)
- ☐ 4" (0.65 Gallon/Feet
- ☐ 5" (1.02 Gallon/Feet)
- ☐ 6" (1.47 Gallon/Feet)

14.75
4.30
10.45
.16
6270
1045
1.6720

10.45 × 8 = 8360

14.75 − 8.36 = 6.39

80% DTW 6.39

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
1[illegible]49				19.0	6.46	-		START
15:50		2		"	"	3710		TURBID
1[illegible]:52		4		18.9	6.41	3690		TURBID
15:56	~13.5	6		18.9	6.36	3700		TURBID
1[illegible]40	6.38							SAMPLE
[illegible]:40								DUPLICATE
[illegible]:30								FIELD BLANK

Inlet Depth:

Comments:

(Recommended Method For Purging Well)

WTR.QLTY.SMPLNG.INFO.22JUL94RYL

WATER-QUALITY SAMPLING INFORMATION

Project No.: 3018.11 Date: 3/16/95

Project Name: VOLVO / GM Sample No.: LF-3

Sample Location: LF-3 ☐ FB: ☐ DUP:

Samplers Name: JCK

Sampling Plan Prepared By: JCK

Sampling Method:

☐ Centrifugal Pump ☐ Disposable Bailer

☐ Submersible Pump ☒ Teflon Bailer

☒ Hand Bail ☐ _____ (Other)

Analyses Requested	Number and Types of Bottle used
TITLE 22 METALS	1 QT PLASTIC
TPH-D + O	2 L. GL AMBER
TPH-G BTEX	3 VOA

Method of Shipment: AEN (Lab Name) ☒ Courier ☐ Hand Deliver:

Well Number: LF-3

Depth of Water: 4.85

Well Depth: 14.93

Height of Water Column: 10.08

Volume in Well: 1.61

Well Diameter:
☐ 2" (0.16 Gallon/Feet)
☐ 4" (0.65 Gallon/Feet
☐ 5" (1.02 Gallon/Feet)
☐ 6" (1.47 Gallon/Feet)

14.93
4.85
10.08
.16
6048
1008
1.6128

10.08 × .8 = 8064

14.95 − 8.06 = 6.87

80% DTW 6.87

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
12:13								START
12:15		2		19.5	6.67	3640		TURBD
12:17		4		19.3	6.59	3820		TURBD
12:20		6		19.3	6.53	3890		TURBD
12:21	5.67							SAMPLE
12:30								

Inlet Depth:

Comments:

(Recommended Method For Purging Well)

WTR.QLTY.SMPLNG.INFO.22JUL94.RYL

WATER-QUALITY SAMPLING INFORMATION

Project No.: 3018.11
Date: 3/15/95
Project Name: VOLVO / GM
Sample No.: LF-4
Sample Location: LF-4
☐ FB:
☐ DUP:
Samplers Name: JCK
Sampling Plan Prepared By: JCK
Sampling Method:

☐ Centrifugal Pump
☐ Submersible Pump
☒ Hand Bail
☐ Disposable Bailer
☒ Teflon Bailer
☐ _____ (Other)

Analyses Requested: TITLE 22 METALS
Number and Types of Bottle used: 1 QT PLASTIC

Method of Shipment: AEN (Lab Name)
☒ Courier
☐ Hand Deliver:

Well Number: LF-4
Depth of Water: 5.67
Well Depth: 18.25
Height of Water Column: 12.58
Volume in Well: 2.01

Well Diameter:
☒ 2" (0.16 Gallon/Feet)
☐ 4" (0.65 Gallon/Feet)
☐ 5" (1.02 Gallon/Feet)
☐ 6" (1.47 Gallon/Feet)

18.25
5.67
1258
.16
7548
1258
2.0128

12.58
.8
10064

18.25
10.07
8.18

80% DTW 8.18

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
[illegible]31								START
[illegible]:33		2		19.3	6.68	2920		CLEAR
[illegible]:34		4		18.3	6.68	2750		CLEAR
15:58		6		18.7	6.70	2800		CLEAR
[illegible]:42	14.08							
[illegible]:05	11.45							
[illegible]:40	6.38	/	/	/	/		/	SAMPLE
[illegible]:40	/	/	/	/	/		/	DUPLICATE
17:15	10.05							SAMPLE

Inlet Depth:
Comments:
(Recommended Method For Purging Well)

WTR.QLTY.SMPLNG.INFO.22JUL94/YL

WATER-QUALITY SAMPLING INFORMATION

Project No.: 3018.11 Date: 3/14/95

Project Name: VOLVO / GM Sample No.: LF-5

Sample Location: LF-5 ☐ FB:

Samplers Name: JCK ☐ DUP:

Sampling Plan Prepared By: JCK

Sampling Method:

- ☐ Centrifugal Pump
- ☐ Submersible Pump
- ☒ Hand Bail
- ☐ Disposable Bailer
- ☒ Teflon Bailer
- ☐ FIELD FILTERED (Other)

Analyses Requested: TITLE 22 METALS

Number and Types of Bottle used: 1 QT PLASTIC

Method of Shipment: AEN (Lab Name)

☒ Courier

☐ Hand Deliver:

Well Number: LF-5

Depth of Water: 2.33

Well Depth: 21.10

Height of Water Column: 18.77

Volume in Well: 3.01

Well Diameter:

- ☒ 2" (0.16 Gallon/Feet)
- ☐ 4" (0.65 Gallon/Feet
- ☐ 5" (1.02 Gallon/Feet)
- ☐ 6" (1.47 Gallon/Feet)

21.10
2.33
18.77
.16
11262
1877
3.0032

18.77 × .8 = 15016

18.77 × 15.02 = 3.75

21.10 − 5.25 = 15.85 × .8 = 12480

21.10 − 12.40 = 8.70

80% DTW ~~5.25~~ 8.70

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
10:52								START EFFERVESCENT
10:55		3		18.8	6.55	12950		TURBID; [redacted]
10:58		6		18.9	6.41	11950		TURBID
11:05		5		18.7	6.27	15220		TURBID
11:11		12		18.7	6.50	12380		TURBID
11:15		5		19.0	6.21	19620		TURBID
11:19		18		19.2	6.17	19730		TURBID
11:24	9.95							
11:30	5.25							SAMPLE

Inlet Depth:

Comments: (Recommended Method For Purging Well) INTIAL DTW TAKEN FROM PRIOR WL READINGS AND IT WAS ACTUALLY 5.25

WTR.QLTY.SMPLNG.INFO.22JUL94/YL

WATER-QUALITY SAMPLING INFORMATION

Project No.: 3018.11 Date: 3/15/95

Project Name: VOLVO / GM Sample No.: LF-6

Sample Location: LF-6 ☐ FB:

Samplers Name: JCK ☐ DUP:

Sampling Plan Prepared By: JCK

Sampling Method:

☐ Centrifugal Pump ☐ Disposable Bailer

☐ Submersible Pump ☒ Teflon Bailer

☒ Hand Bail ☐ _____ (Other)

Analyses Requested: TITLE 22 METALS

Number and Types of Bottle used: 1 QT PLASTIC

Method of Shipment: AEN (Lab Name) ☒ Courier

☐ Hand Deliver:

Well Number: LF-6

Depth of Water: 4.98

Well Depth: 20.00

Height of Water Column: 15.02

Volume in Well: 2.40

Well Diameter:

☒ 2" (0.16 Gallon/Feet)

☐ 4" (0.65 Gallon/Feet

☐ 5" (1.02 Gallon/Feet)

☐ 6" (1.47 Gallon/Feet)

20.00
4.98
15.02
.16
9012
1502
2.4032

15.02 × .8 = 12.016

20.00 − 12.02 = 7.98

80% DTW 7.98

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
14:19								START
14:22		2.5		19.1	4.89	5180		TURBID
14:25		5.0		19.1	4.91	5120		TURBID
14:29		7.5		19.2	4.59	5140		TURBID
14:33	7.70							
14:35								SAMPLE

Inlet Depth:

Comments:

(Recommended Method For Purging Well)

WTR.QLTY.SMPLNG.INFO.22JUL94RYL

WATER-QUALITY SAMPLING INFORMATION

Project No.: 3018.11
Date: 3/15/95
Project Name: VOLVO / GM
Sample No.: LF-7
Sample Location: LF-7
☐ FB:
Samplers Name: JCK
☐ DUP:
Sampling Plan Prepared By: JCK
Sampling Method:

☐ Centrifugal Pump ☐ Disposable Bailer
☐ Submersible Pump ☒ Teflon Bailer
☒ Hand Bail ☐ _____ (Other)

Analyses Requested: TITLE 22 METALS
Number and Types of Bottle used: 1 QT PLASTIC

Method of Shipment: AEN (Lab Name)
☒ Courier
☐ Hand Deliver:

Well Number: LF-7
Depth of Water: 4.16
Well Depth: 21.50
Height of Water Column: 17.34
Volume in Well: 2.77

Well Diameter:
☐ 2" (0.16 Gallon/Feet)
☐ 4" (0.65 Gallon/Feet
☐ 5" (1.02 Gallon/Feet)
☐ 6" (1.47 Gallon/Feet)

21.50
4.16
17.34
.16
10404
1734
2.7744

17.34 × .8 = 13.872

21.50 − 13.87 = 7.63

80% DTW 7.63

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
1501								START
15:03		3		19.7	7.05	1933		TURBID
15:06		6		19.9	6.99	1809		TURBID
15:10		9		19.8	7.01	1770		TURBID
15:16	7.06							
15:20								SAMPLE

Inlet Depth:
Comments:
(Recommended Method For Purging Well)

WTR.QLTY.SMPLNG.INFO.22JUL94RYL

WATER-QUALITY SAMPLING INFORMATION

Project No.: 3018.11 Date: 3/16/95

Project Name: VOLVO / GM Sample No.: LF-8

Sample Location: LF-8 ☐ FB: ☐ DUP:

Samplers Name: JCK

Sampling Plan Prepared By: JCK

Sampling Method:

☐ Centrifugal Pump ☐ Disposable Bailer

☐ Submersible Pump ☐ Teflon Bailer

☐ Hand Bail ☐ _____ (Other)

Analyses Requested	Number and Types of Bottle used
TPH-G BTEX	3 VOA
TPH-D + O 8270	2L. + 2L. GL AMBER
TITLE 22 METAL	1 QT PLASTIC

14.65
4.48
10.17
.65
5085
6102
6.6105

Method of Shipment

AEN (Lab Name) ☒ Courier

☐ Hand Deliver:

Well Number: LF-8 Well Diameter:

Depth of Water: 4.48 ☒ 2" (0.16 Gallon/Feet)

Well Depth: 14.65 ☒ 4" (0.65 Gallon/Feet

Height of Water Column: 10.17 ☐ 5" (1.02 Gallon/Feet)

Volume in Well: 6.61 ☐ 6" (1.47 Gallon/Feet)

80% DTW

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
11:25								START
11:27		7		17.9	7.08	2830		TURBID
11:30	DEWATER	14		18.0	7.12	2510		TURBID OFF
11:32								O J
11:33		21		17.6	7.15	2250		CLEAR / OFF
11:37	5.00							
11:45								SAMPLE

WTR.QLTY.SMPLNG.INFO.22JUL94RYL

Inlet Depth:

Comments:

(Recommended Method For Purging Well)

WATER-QUALITY SAMPLING INFORMATION

Project No.: 3018.11 Date: 3/13/95

Project Name: VOLVO / GM Sample No.: LF-9

Sample Location: LF-9 ☐ FB:

Samplers Name: JCK ☐ DUP:

Sampling Plan Prepared By: JCK

Sampling Method:

☐ Centrifugal Pump ☐ Disposable Bailer

☐ Submersible Pump ☒ Teflon Bailer

☒ Hand Bail ☐ _____ (Other)

Analyses Requested: TITLE 22 METALS

Number and Types of Bottle used: 1 PL. PT

13.88
5.12
8.76
.16
5256
876
14016

8.76 × .8 = 7008

13.88 − 7.01 = 6.87

Method of Shipment: AEN (Lab Name)

☒ Courier

☐ Hand Deliver:

Well Number: LF-9

Depth of Water: 5.12

Well Depth: 13.88

Height of Water Column: 8.76

Volume in Well: 1.40

Well Diameter:

☐ 2" (0.16 Gallon/Feet)

☐ 4" (0.65 Gallon/Feet

☐ 5" (1.02 Gallon/Feet)

☐ 6" (1.47 Gallon/Feet)

80% DTW 6.87

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
1533								START
15:36		1.5		16.5	6.08	3480		TURBID
15:39		3.0		16.9	6.20	2970		TURBID
15:45		5.0		17.0	6.21	2920		TURBID
15:58	7.87							
16:10	6.80							SAMPLE

Inlet Depth:

Comments:
(Recommended Method For Purging Well)

WTR.QLTY.SMPLNG.INFO.22JUL94RYL

WATER-QUALITY SAMPLING INFORMATION

Project No.: 3018.11 Date: 3/15/95

Project Name: VOLVO / GM Sample No.: LF-10

Sample Location: LF-10 ☐ FB: ☐ DUP:

Samplers Name: JCK

Sampling Plan Prepared By: JCK

Sampling Method:

☐ Centrifugal Pump ☐ Disposable Bailer

☐ Submersible Pump ☐ Teflon Bailer

☐ Hand Bail ☐ _____ (Other)

Analyses Requested	Number and Types of Bottle used
TITLE 22 METALS	1 QT PLASTIC

14.74
5.68
9.06
.65
4530
5436
5.8890

Method of Shipment

AEN (Lab Name) ☒ Courier

☐ Hand Deliver:

9.06 × .8 = 7248

14.74 − 7.25 = 7.49

Well Number: LF-10 Well Diameter:

Depth of Water: 5.68 ☐ 2" (0.16 Gallon/Feet)

Well Depth: 14.74 ☒ 4" (0.65 Gallon/Feet

Height of Water Column: 9.06 ☐ 5" (1.02 Gallon/Feet)

Volume in Well: 5.89 ☐ 6" (1.47 Gallon/Feet)

80% DTW 7.49

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
13:07								START
13:08		6		19.1	6.20	11680		CLEAR
13:09	DEWATER	11						OFF
13:18	11.95							ON
13:19	DEWATER	13		20.7	6.43	15530		CLEAR / OFF
16:00	11.95							
16:00	11.65							SAMPLE

Inlet Depth:

Comments:

(Recommended Method For Purging Well)

WTRQLTY.SMPLNG.INFO.22/JUL94/YL

WATER-QUALITY SAMPLING INFORMATION

Project No.: 3018.11 Date: 3/15/95

Project Name: VOLVO / GM Sample No.: LF-11

Sample Location: LF-11 ☐ FB:

Samplers Name: JCK ☐ DUP:

Sampling Plan Prepared By: JCK

Sampling Method:

☒ Centrifugal Pump ☒ Disposable Bailer

☐ Submersible Pump ☒ Teflon Bailer

☐ Hand Bail ☐ _____ (Other)

Analyses Requested: TITLE 22 METALS

Number and Types of Bottle used: 3 X 1 QT PLASTIC

Method of Shipment: AEN (Lab Name) ☒ Courier

☐ Hand Deliver:

Well Number: LF-11

Depth of Water: 3.27

Well Depth: 20.01

Height of Water Column: ~~10.88~~ 16.74

Volume in Well: 10.88

Well Diameter:

☐ 2" (0.16 Gallon/Feet)

☒ 4" (0.65 Gallon/Feet)

☐ 5" (1.02 Gallon/Feet)

☐ 6" (1.47 Gallon/Feet)

20.01
3.27
16.74
.65
8370
10044
10.8810

16.74 × .8 = 13.392

20.01 − 13.39 = 662

80% DTW 6.62

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
9:56								START
9:58		11		18.8	4.13	30600		TURBID
10:00	DEWATER	18						OFF
10:04	16.25							
10:09	15.55							ON
10:22	DEWATER	23		20.9	5.93	45500		CLEAR; EFFERVESCENT OFF
10:52	17.25							
11:55	16.55							
12:40	15.72							SAMPLE

WTR.QLTY.SMPLNG.INFO.22JUL94RYL

Inlet Depth:

Comments:

(Recommended Method For Purging Well) -

WATER-QUALITY SAMPLING INFORMATION

Project No.: 3018.11 Date: 3/15/95

Project Name: VOLVO / GM Sample No.: LF-12

Sample Location: LF-12 ☐ FB: ☐ DUP:

Samplers Name: JCK

Sampling Plan Prepared By: JCK

Sampling Method:

- ☒ Centrifugal Pump
- ☐ Submersible Pump
- ☐ Hand Bail
- ☐ Disposable Bailer
- ☒ Teflon Bailer
- ☐ _____ (Other)

Analyses Requested: TITLE 22 METALS

Number and Types of Bottle used: 1 QT PLASTIC

Method of Shipment: AEN (Lab Name)

- ☒ Courier
- ☐ Hand Deliver:

Well Number: LF-12

Depth of Water: 6.00

Well Depth: 14.70

Height of Water Column: 8.70

Volume in Well: 5.66

Well Diameter:

- ☐ 2" (0.16 Gallon/Feet)
- ☒ 4" (0.65 Gallon/Feet
- ☐ 5" (1.02 Gallon/Feet)
- ☐ 6" (1.47 Gallon/Feet)

80% DTW _____

14.70
6.00
8.70
.65
4350
5220
5.6550

8.70 × .8 = 6960

14.70 − 6.96 = 7.74

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
:45								START
10:46		6		18.0	4.11	11110		CLEAR, EFFERVESCENT
:47	WATER	10						OFF
10:56	10.20	X6						ON
:57	PUMP	13		18.0	4.11	9910		CLEAR / OFF
12:10	6.57							
:15								SAMPLE

Inlet Depth:

Comments:
(Recommended Method For Purging Well)

WTR.QLTY.SMPLNG.INFO.22JUL94RTL

WATER-QUALITY SAMPLING INFORMATION

Project No.: 3018.11
Date: 3/16/95
Project Name: VOLVO / GM
Sample No.: LF-14
Sample Location: LF-14
☐ FB:
Samplers Name: JCK
☐ DUP:
Sampling Plan Prepared By: JCK
Sampling Method:

☐ Centrifugal Pump ☐ Disposable Bailer
☐ Submersible Pump ☒ Teflon Bailer
☒ Hand Bail ☐ _____ (Other)

Analyses Requested: TITLE 22 + OTHERS
Number and Types of Bottle used: 1 QT PLASTIC

25.00
6.68
18.32
.16
10992
1832
2.9212

18.32 × .8 = 14656

25.00 − 14.66 = 10.34

Method of Shipment
AEN (Lab Name)
☒ Courier
☐ Hand Deliver:

Well Number: LF-14
Depth of Water: 6.68
Well Depth: 25.00
Height of Water Column: 18.32
Volume in Well: 2.92

Well Diameter:
☒ 2" (0.16 Gallon/Feet)
☐ 4" (0.65 Gallon/Feet
☐ 5" (1.02 Gallon/Feet)
☐ 6" (1.47 Gallon/Feet)

80% DTW 10.34

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
9:51								START
1:54		3		18.2	4.58	5740		TURBID
1:59	DRY	6		18.3	4.95	6620		TURBID
10:30	9.37							
10:35								SAMPLE

WTRQLTY.SMPLNG.INFO.22/UL94/YL

Inlet Depth:

Comments:
(Recommended Method For Purging Well)

Page ___ of ___

WATER-QUALITY SAMPLING INFORMATION

Project No.: 3018.11

Date: 3/13/95

Project Name: VOLVO / GM

Sample No.: LF-15

Sample Location: LF-15

☐ FB:

Samplers Name: JCK

☐ DUP:

Sampling Plan Prepared By: JCK

Sampling Method:

☐ Centrifugal Pump ☐ Disposable Bailer

☐ Submersible Pump ☒ Teflon Bailer

☒ Hand Bail ☐ ________ (Other)

Analyses Requested

TITLE 22 METALS

FIELD FILTERED

Number and Types of Bottle used

1 PINT PLASTIC

20.03
6.32
13.71
.16
8226
1371
2.19336

13.71
.8
10.968

20.03
10.97
9.06

80% DTW 9.06

Method of Shipment

AEN (Lab Name)

☒ Courier

☐ Hand Deliver:

Well Number: LF-15

Well Diameter:

Depth of Water: 6.32

☐ 2" (0.16 Gallon/Feet)

Well Depth: 20.03

☐ 4" (0.65 Gallon/Feet

Height of Water Column: 13.71

☐ 5" (1.02 Gallon/Feet)

Volume in Well: 2.19

☐ 6" (1.47 Gallon/Feet)

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
1[illegible]56								START
14.58		2.5		17.0	5.11	19490		TURBID YELLOWISH
1[illegible]01		5.0		17.1	5.20	19000		TURBID; [redacted]
15:06		7.5		17.8	4.79	24100		TURBID
1[illegible]:09		9		17.8	4.48	23700		TURBID
15:14	~19-	100		17.7	4.40	22700		TURBID
1[illegible]50	12.05							
16:35	9.05							SAMPLE

Inlet Depth:

Comments:
(Recommended Method For Purging Well)

WTR.QLTY.SMPLNG.INFO.22.R4.94RYL

WATER-QUALITY SAMPLING INFORMATION

Project No.: 3018.11 Date: 3/16/95

Project Name: VOLVO / GM Sample No.: LF-16

Sample Location: LF-16 ☐ FB:

Samplers Name: JCK ☐ DUP:

Sampling Plan Prepared By: JCK

Sampling Method:

☐ Centrifugal Pump ☐ Disposable Bailer

☐ Submersible Pump ☒ Teflon Bailer

☒ Hand Bail ☐ _____ (Other)

Analyses Requested: TITLE 22 + GMOS

Number and Types of Bottle used: 1 QT PLASTIC

Method of Shipment: AEN (Lab Name) ☒ Courier

☐ Hand Deliver:

24.50
6.22
18.28
.16
10968
1828
2.9248

18.28 × .8 = 14.624

24.50 − 14.62 = 9.88

Well Number: LF-16 Well Diameter:

Depth of Water: 6.22 ☐ 2" (0.16 Gallon/Feet)

Well Depth: 24.50 ☐ 4" (0.65 Gallon/Feet

Height of Water Column: 18.28 ☐ 5" (1.02 Gallon/Feet)

Volume in Well: 2.93 ☐ 6" (1.47 Gallon/Feet)

80% DTW 9.88

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
9:24								START
9:27		3		12.9	4.40	15750		TURBID
9:32		6		18.0	4.42	16070		TURBID
9:37		9		18.3	4.34	17020		TURBID
9:05	11.55							
10:15	9.85							SAMPLE

WTR.QLTY.SMPLNG.INFO.22JUL94RYL

Inlet Depth:

Comments:

(Recommended Method For Purging Well)

WATER-QUALITY SAMPLING INFORMATION

Project No.: 3018.11
Project Name: VOLVO / GM
Sample Location: LF-17
Samplers Name: JCK
Sampling Plan Prepared By: JCK
Sampling Method:

Date: 3/24/95
Sample No.: LF-17
☐ FB:
☐ DUP:

☒ Centrifugal Pump ☐ Disposable Bailer
☐ Submersible Pump ☒ Teflon Bailer
☐ Hand Bail ☐ _____ (Other)

Analyses Requested: TITLE 22 METALS
Number and Types of Bottle used: 1 QT PL.

Method of Shipment: AEN (Lab Name) ☒ Courier ☐ Hand Deliver:

Well Number: LF-17
Depth of Water: 4.68
Well Depth: 20.20
Height of Water Column: 15.52
Volume in Well: 10.09

Well Diameter:
☐ 2" (0.16 Gallon/Feet)
☒ 4" (0.65 Gallon/Feet
☐ 5" (1.02 Gallon/Feet)
☐ 6" (1.47 Gallon/Feet)

20.20
4.68
15.52
.65
7760
9312
10.0880

15.52
.8
12.416

20.20
12.42
7.78

80% DTW 7.78

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
9:28								START
9:30		11		15.7	7.02	1377		CLEAR
9:34		22		16.6	7.07	1583		CLEAR
9:35	DEWATER							OFF
9:43	12.60							ON
9:45		33		16.4	7.03	1190		CLEAR
9:46	DEWATER	35						OFF
10:10	7.40							SAMPLE

Inlet Depth:
Comments:
(Recommended Method For Purging Well)

WTR.QLTY.SMPLNG.INFO.22JUL94RYL

WATER-QUALITY SAMPLING INFORMATION

Project No.: 3018.11
Date: 3/15/95
Project Name: VOLVO / GM
Sample No.: LF-F1
Sample Location: LF-F1
☐ FB:
Samplers Name: JCK
☐ DUP:
Sampling Plan Prepared By: JCK
Sampling Method:

☐ Centrifugal Pump ☐ Disposable Bailer
☐ Submersible Pump ☒ Teflon Bailer
☒ Hand Bail ☐ _____ (Other)

Analyses Requested: TITLE 22 METALS
Number and Types of Bottle used: 1 QT PLASTIC

Method of Shipment
AEN (Lab Name)
☒ Courier
☐ Hand Deliver:

Well Number: LF-F1
Depth of Water: 2.22
Well Depth: 7.16
Height of Water Column: 4.94
Volume in Well: 3.21

Well Diameter:
☐ 2" (0.16 Gallon/Feet)
☐ 4" (0.65 Gallon/Feet
☐ 5" (1.02 Gallon/Feet)
☐ 6" (1.47 Gallon/Feet)

7.16
2.22
4.94
.65
2470
2964
3.2110

4.94 × .8 = 3.952
7.16 − 3.95 = 3.21

80% DTW 3.21

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
10:05								START
10:08		3.5		18.0	6.49	4720		SLIGHTLY TURBID
10:11		7.0		18.0	6.50	4620		CLEAR
10:19	DEWATER	10.0		17.8	6.64	4340		& SLIGHTLY TURBID
11:52	3.43							
11:55								SAMPLE

Inlet Depth:
Comments:
(Recommended Method For Purging Well)

WTR.QLTY.SMPLNG.INFO.22JUL94RYL

WATER-QUALITY SAMPLING INFORMATION

Project No.: 3018.11
Date: 3/13/95
Project Name: Volvo / GM
Sample No.: MW-1
Sample Location: MW-1
☐ FB:
Samplers Name: JCK
☐ DUP:
Sampling Plan Prepared By: JCK
Sampling Method:

☒ Centrifugal Pump ☐ Disposable Bailer
☐ Submersible Pump ☒ Teflon Bailer
☐ Hand Bail ☐ _____ (Other)

Analyses Requested: TITLE 22 METALS
Number and Types of Bottle used: 1 QT PLASTIC

Method of Shipment: AEN (Lab Name)
☒ Courier
☐ Hand Deliver:

Well Number: MW-1
Depth of Water: 2.71
Well Depth: 28.50
Height of Water Column: 25.79
Volume in Well: 4.13

Well Diameter:
☒ 2" (0.16 Gallon/Feet)
☐ 4" (0.65 Gallon/Feet
☐ 5" (1.02 Gallon/Feet)
☐ 6" (1.47 Gallon/Feet)

28.50
2.71
2579
.16
15474
2579
4.1264

25.79
.8
20632

28.50
20.63
7.87

80% DTW 7.87

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
1303								START
1304		4.5		18.5	7.01	1369		~~GREAT~~ LOD TURBID
1305		9.0		19.5	7.01	1230		TURBID
1305	DEWATER	10						OFF
13:13								ON
13:15	DEWATER	14.5		20.6	7.08	1201		TURBID
13:15	2.90							SAMPLE

Inlet Depth:
Comments:
(Recommended Method For Purging Well)

WTR.QLTY.SMPLNG.INFO.22JUL94RYL

WATER-QUALITY SAMPLING INFORMATION

Project No.: 3018.11
Date: 3/14/95
Project Name: VOLVO / GM
Sample No.: # MW-2
Sample Location: MW-2
☐ FB:
Samplers Name: JCK
☐ DUP:
Sampling Plan Prepared By: JCK
Sampling Method:

☐ Centrifugal Pump ☐ Disposable Bailer
☐ Submersible Pump ☐ Teflon Bailer
☐ Hand Bail ☐ _____ (Other)

Analyses Requested: TITLE 22 METALS
Number and Types of Bottle used: 1 QT PL

Method of Shipment
AEN (Lab Name)
☒ Courier
☐ Hand Deliver:

Well Number: MW-2
Depth of Water: 3.28
Well Depth: 27.00
Height of Water Column: 23.72
Volume in Well: 3.80

Well Diameter:
☐ 2" (0.16 Gallon/Feet)
☐ 4" (0.65 Gallon/Feet
☐ 5" (1.02 Gallon/Feet)
☐ 6" (1.47 Gallon/Feet)

27.00
3.28
23.72
.16
14232
2372
3.7952

.80% DTW _____

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
[illegible]53								START
354		4		20.8	4.78	7560		TURBID
[illegible]56		8		20.0	4.80	7260		TURBID
4:00		12		20.0	4.70	7700		TURBID
[illegible]00	3.31							SAMPLE

WTR.QLTY.SMPLNG.INFO.22JUL94RYL

Inlet Depth:
Comments:
(Recommended Method For Purging Well)

WATER-QUALITY SAMPLING INFORMATION

Project No.: 3018 Date: 3/14/95

Project Name: Volvo / GM Sample No.: MW-3

Sample Location: MW-3 ☐ FB: ☐ DUP:

Samplers Name: JCK

Sampling Plan Prepared By: JCK

Sampling Method:

☒ Centrifugal Pump ☒ Disposable Bailer

☐ Submersible Pump ☐ Teflon Bailer

☐ Hand Bail ☐ _____ (Other)

Analyses Requested: TITLE 22 METALS

Number and Types of Bottle used: 1 QT. PLASTIC

Method of Shipment: AEN (Lab Name) ☒ Courier ☐ Hand Deliver:

Well Number: MW-3

Depth of Water: 4.37

Well Depth: 27.00

Height of Water Column: 22.63

Volume in Well: 3.62

Well Diameter:

☒ 2" (0.16 Gallon/Feet)

☐ 4" (0.65 Gallon/Feet

☐ 5" (1.02 Gallon/Feet)

☐ 6" (1.47 Gallon/Feet)

27.00
4.37
22.63
.16
13578
2263
3.6208

22.63
.8
18.104

27.00
18.10
8.90

80% DTW 8.90

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
1[illegible]19								START
14:22		4		17.8	5.08	4430		TURBID
[illegible]25		8		17.7	5.07	3930		TURBID
14:30		12		17.9	6.03	4480		TURBID
1[illegible]15	4.60							SAMPLE

[illegible]let Depth:

[illegible]omments:

(Recommended Method For Purging Well)

WTR.QLTY.SMPLNG.INFO.22JUL94RYL

WATER-QUALITY SAMPLING INFORMATION

Project No.: 3018 Date: 3/14/95

Project Name: Volvo / GM Sample No.: MW-4

Sample Location: MW-4 ☐ FB:

Samplers Name: JCK ☐ DUP:

Sampling Plan Prepared By: JCK

Sampling Method:

☒ Centrifugal Pump ☒ Disposable Bailer

☐ Submersible Pump ☒ Teflon Bailer

☐ Hand Bail ☐ _____ (Other)

Analyses Requested	Number and Types of Bottle used
TITLE 22 METALS	1 QT PLASTIC

28.50
3.48
25.02
.16
15012
2502
40032

Method of Shipment

AEN (Lab Name) ☒ Courier

☐ Hand Deliver:

Well Number: MW-4 Well Diameter:

Depth of Water: 3.48 ☐ 2" (0.16 Gallon/Feet)

Well Depth: 28.50 ☐ 4" (0.65 Gallon/Feet

Height of Water Column: 25.02 ☐ 5" (1.02 Gallon/Feet)

Volume in Well: 4.00 ☐ 6" (1.47 Gallon/Feet)

80% DTW

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temparture °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
[illegible]:28								START
13:30		4		20.5	6.45	2300		TURBID
[illegible]:33		8		20.1	6.32	2130		TURBID
13:35		12		20.1	6.30	2320		TURBID
[illegible]:30	4.00							SAMPLE

WTR.QLTY.SMPLNG.INFO.22JUL94/YL

Inlet Depth:

Comments:

(Recommended Method For Purging Well)