Report of Quarterly Groundwater Monitoring
for October 1 to December 31, 1996
for the
The Sherwin-Williams Plant
Emeryville, California

January 31, 1997
3435.00-004

Prepared for
The Sherwin-Williams Company
1450 Sherwin Avenue
Emeryville, California

Levine·Fricke·Recon
ENGINEERS, HYDROGEOLOGISTS & APPLIED SCIENTISTS

January 31, 1997

3435.00-004

Mr. Sumadhu Arigala
Regional Water Quality Control Board
2101 Webster Street, Suite 500
Oakland, California 94612

Subject: Report of Quarterly Groundwater Monitoring for October 1 to December 31, 1996, for the Sherwin-Williams Plant, Emeryville, California

Dear Mr. Arigala:

The enclosed report presents the results of the quarterly groundwater monitoring program conducted in November and December 1996 for the Sherwin-Williams plant in Emeryville, California ("the Site"). This is the third groundwater monitoring event following completion of interim remedial measures and recent installation of additional site monitoring wells.

The quarterly monitoring program included measuring groundwater elevations and collecting and analyzing groundwater samples. The samples were analyzed for volatile organic compounds using EPA Method 8240, total petroleum hydrocarbon compounds as diesel using EPA Method 3510, total petroleum hydrocarbon compounds as gasoline using EPA Method 5030, and arsenic using EPA Method 7060. In addition, for the second consecutive quarterly monitoring event, groundwater was collected from four A-zone and four B-zone monitoring wells, and was analyzed for general minerals and oxygen and hydrogen isotopes. Evaluation of this data will help assess the degree of mixing of water between the A zone and B zone at the Site.

If you have any questions or comments, please call either of the undersigned or Mike Marsden at (510) 652-4500.

Sincerely,

Mark D. Knox, P.E.
Principal Engineer

for Angela M. Jacobson
Kenton A. Gee
Project Hydrogeologist

Enclosure

cc: Distribution List

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CERTIFICATION

All information, conclusions, and recommendations in this document have been prepared under the supervision of and reviewed by a Levine·Fricke·Recon California Professional Engineer.

Mark D. Knox — 1/30/97

Mark D. Knox
Principal Engineer
California Professional Civil Engineer (33194)

Date

1.0 INTRODUCTION AND SCOPE

Levine·Fricke·Recon Inc. (LFR; formerly Levine·Fricke and Recon Environmental) has prepared this quarterly groundwater monitoring report for October 1 to December 31, 1996 on behalf of The Sherwin-Williams Company for submittal to the Regional Water Quality Control Board (RWQCB) as part of a self-monitoring program for its manufacturing facility located at 1450 Sherwin Avenue in Emeryville, California ("the Site"; Figures 1 and 2). This report describes the third monitoring event following completion of remedial construction measures and installation of new monitoring wells at the Site.

LFR conducted the quarterly groundwater monitoring for October 1 to December 31, 1996 in November and December 1996. The quarterly monitoring activities conducted this quarter included the following:

- Groundwater levels were measured in on- and off-site monitoring wells (LF-3, LF-4, LF-7, LF-8, LF-10, LF-11, LF-12, LF-13, LF-17, LF-18, LF-19, LF-20, LF-21, LF-22, LF-23, LF-24, LF-25, LF-26, LF-B3, LF-B4, LF-B-5, LF-B6, EX-1, EX-2, EX-3, and Rifkin Property wells RP-1 through RP-5 and MW-1 through MW-5).
- Groundwater samples were collected from ten A-zone monitoring wells located outside the site slurry wall, three A-zone monitoring wells located inside the slurry wall, three extraction wells located inside the site slurry wall, and all four B-zone monitoring wells.
- Groundwater samples collected from the ten A-zone monitoring wells located outside the site slurry wall, the three extraction wells located inside the slurry wall, and all four B-zone monitoring wells were analyzed for volatile organic compounds (VOCs) using EPA Method 8240, for total petroleum hydrocarbons as diesel (TPHd) using EPA Extraction Method 3510, for total petroleum hydrocarbons as gasoline (TPHg) using EPA Extraction Method 5030, and for inorganic compounds as arsenic using EPA Method 7060.
- Groundwater samples collected from one of the A-zone monitoring wells located outside the site slurry wall (LF-12), three A-zone monitoring wells located inside the slurry wall (LF-7, LF-10, and LF-22), and the four B-zone monitoring wells were analyzed for general minerals using EPA Method 3010, and for oxygen and hydrogen isotope analysis using an automated gas-source mass spectrometer.

Data were collected and reported in accordance with the guidelines set forth in the Quality Assurance Project Plan (QAPP) prepared for this project by LFR (LFR 1990a).

2.0 GROUNDWATER ELEVATIONS AND FLOW DIRECTIONS

Groundwater elevations were measured on December 13, 1996. Groundwater elevation data are presented in Table 1. Elevations and directions of groundwater flow in the A zone and the B zone are illustrated in Figures 3 and 4, respectively.

As shown in Figure 3, the A-zone groundwater flow direction outside the slurry wall is generally toward the northwest with flow directions changing in isolated areas. The A-zone groundwater flow direction inside the slurry wall is also generally toward the northwest with flow directions changing in isolated areas.

The groundwater flow contours as shown in Figure 3 indicate that groundwater flow in the A-zone on December 13, 1996 was affected by the on-site groundwater extraction and treatment system, which was not in operation before December 13, and increased precipitation during the rainy season. With a decrease in rainfall, continued pumping and extraction of groundwater from the A-zone within the slurry wall, and equilibration of the groundwater in the A-zone outside the slurry wall, the groundwater flow is expected to return to a general northwest direction (and variations in isolated areas) as indicated in the two previous quarterly groundwater monitoring reports.

The inconsistency of A-zone groundwater flow direction contours inside the slurry wall compared to A-zone groundwater flow direction contours outside the slurry wall indicate that A-zone groundwater within the slurry wall is being contained and prevented from moving off site.

As shown in Figure 4, B-zone groundwater flow direction is also toward the northwest. This is consistent with B-zone groundwater flow direction previously reported for the Site even though groundwater elevations have increased since the previous quarterly monitoring period.

3.0 GROUNDWATER QUALITY SAMPLING

Levine·Fricke·Recon personnel collected groundwater samples for chemical analysis from November 20 to December 13, 1996, from A-zone monitoring wells LF-3, LF-11, LF-12, LF-13, LF-18, LF-20, LF-21, LF-23, LF-24, and LF-25, A-zone extraction wells EX-1, EX-2, and EX-3, and B-zone monitoring wells LF-B3 to LF-B6.

A minimum of 3 well volumes of water was purged from each monitoring well before sampling. The wells were purged either by pumping with a centrifugal pump or by hand bailing with a disposable polyethylene bailer. Wells that recovered slowly were purged dry and allowed to recover to 80 percent of the initial well volume before they were sampled. The hoses attached to the centrifugal pump were steam cleaned before each use. The evacuated water was pumped into a portable storage tank and then transferred and discharged into the site groundwater treatment system. Field

measurements of temperature, pH, and specific conductance of the evacuated water were recorded during purging; wells were sampled after these parameters had stabilized.

After each well had been purged, groundwater samples were collected from monitoring wells for laboratory analysis using a new disposable, polyethylene bailer for each well. Groundwater samples collected from extraction wells were collected at discharge ports at the site treatment system. All samples for chemical analysis were analyzed by American Environmental Network of Pleasant Hill, California, a state-certified laboratory, according to EPA Method protocols. Laboratory certificates are included in Appendix A.

4.0 GROUNDWATER QUALITY ANALYSIS RESULTS

4.1 A-Zone Water Quality

Analytical results for samples collected from A-zone monitoring wells are presented in Table 2 for VOCs, Table 3 for TPHd and TPHg, and Table 4 for inorganic compounds. Graphic illustrations of chemical concentrations detected in A-zone wells are presented in Figure 5 for VOCs, Figure 6 for TPHd, Figure 7 for TPHg, and Figure 8 for concentrations of arsenic.

4.1.1 Volatile Organic Compounds

VOC analytical results for samples collected from A-zone wells, outside the slurry wall during this sampling event, were below the reported laboratory detection limits with the exception of the sample from well LF-3. Groundwater collected from well LF-3 contained 4.0 parts per million (ppm) ethylbenzene, 12.0 ppm total xylenes, and 41.0 ppm toluene.

4.1.2 Total Petroleum Hydrocarbons as Diesel

Relatively low hydrocarbon concentrations of TPHd (9.3 ppm or less) were detected in samples from A-zone wells located outside the slurry wall (see Table 3, Figure 6, and Appendix A). TPHd concentrations for well LF-12 did not exceed the detection limit of 0.050 ppm.

4.1.3 Total Petroleum Hydrocarbons as Gasoline

With the exception of wells LF-3, LF-20, and LF-21, concentrations of TPHg did not exceed the detection limit of 0.050 ppm in samples from A-zone wells located outside the slurry wall (see Table 3, Figure 7, and Appendix A). Samples collected from wells LF-20 and LF-21 contained relatively low TPHg concentrations of 0.250 and 0.060 ppm, respectively. A sample collected from well LF-3 contained 75 ppm TPHg.

4.1.4 Inorganic Compounds as Arsenic

Analytical results for samples collected from A-zone wells, located outside the slurry wall, were analyzed for inorganic compounds as arsenic (see Table 4). Concentrations of arsenic were detected in nine wells.

With the exception of well LF-3, concentrations ranged from 0.010 ppm in well LF-24 to 0.45 ppm in well LF-11. The sample from well LF-3 contained 72 ppm arsenic.

4.2 B-Zone Water Quality

Analytical results for samples collected from B-zone monitoring wells are presented in Table 2 for VOCs, Table 3 for TPHd and TPHg, and Table 4 for inorganic compounds. Graphic illustrations of chemical concentrations detected in B-zone wells are presented in Figure 6 for TPHd, Figure 7 for TPHg, Figure 9 for VOCs, and Figure 10 for inorganic compounds as arsenic.

4.2.1 Volatile Organic Compounds

VOC analytical results for samples collected from B-zone wells LF-B3, LF-B4, LF-B5, and LF-B6 are presented in Table 2. 1,2-dichloroethane (1,2-DCA) was detected in wells LF-B3, LF-B5, and LF-B6 at 0.036 /0.021 ppm (sample/duplicate), 0.320, and 0.046 /0.047 ppm (sample/duplicate), respectively. In addition, the sample from well LF-B4 contained 0.010 ppm toluene. The duplicate sample collected from well LF-B4 did not exceed the laboratory detection limit for toluene.

4.2.2 Total Petroleum Hydrocarbons as Diesel

The TPHd analytical results from samples collected from B-zone wells LF-B3, LF-B4, and LF-B6 indicated concentrations of diesel at 0.44/0.53 ppm (sample/duplicate), 0.16/ < 0.05 ppm (sample/duplicate), and 0.34/0.34 ppm (sample/duplicate), respectively. The concentrations of TPHd in the samples collected from well LF-B5 did not exceed the laboratory detection limit (see Table 3, Figure 6, and Appendix A).

4.2.3 Total Petroleum Hydrocarbons as Gasoline

The TPHg analytical results from samples collected from B-zone wells LF-B5 and LF-B6 indicated gasoline concentrations of 0.06 and 0.21/0.18 ppm (sample/duplicate), respectively. The concentrations of TPHd in the samples collected from wells LF-B3 and LF-B4 did not exceed the laboratory detection limit (see Table 3, Figure 7, and Appendix A).

4.2.4 Inorganic Compounds as Arsenic

Arsenic was detected in samples collected from wells LF-B3, LF-B5, and LF-B6 at concentrations of 0.006/0.004 (sample/duplicate), 0.11, and 0.027/0.030 ppm, respectively (see Table 4, Figure 10, and Appendix A. The concentrations of arsenic in groundwater collected from these three wells are similar to concentrations detected in the previous monitoring period. The concentrations of arsenic in the sample collected from well LF-B4 did not exceed the laboratory detection limit.

5.0 QUALITY ASSURANCE/QUALITY CONTROL PROCEDURES AND RESULTS

Quality assurance/quality control (QA/QC) measures were implemented for the purpose of maintaining data quality and minimizing the potential for field and/or laboratory cross contamination of samples. QA/QC procedures included collecting trip blank and bailer rinsate blank samples, controlling sampling order, using disposable bailers, and daily steam cleaning of pump hoses before and after use.

The results for the QA/QC samples are reported in Appendix A and in Tables 2 through 4. These results indicate that the QA/QC controls were effective in eliminating field and/or laboratory cross contamination of samples.

REFERENCE

Levine·Fricke·Recon, Inc. 1990a. Quality Assurance Project Plan for Sherwin-Williams Plant, Emeryville, California. November 29 (unpublished report).

Table 1
Groundwater Elevation Data, December 1996
The Sherwin-Williams Plant
Emeryville, California

Well Number	Date 13-Dec-96	Well Elevation	Measured Depth to Water	Ground-Water Elevation
Sherwin-Williams Wells				
LF-3	13-Dec-96	12.00	4.89	7.11
LF-4	13-Dec-96	12.53	5.62	6.91
LF-7	13-Dec-96	14.44	6.99	7.45
LF-8	13-Dec-96	12.91	5.12	7.79
LF-10	13-Dec-96	10.99	3.68	7.31
LF-11	13-Dec-96	10.05	4.31	5.74
LF-12	13-Dec-96	14.95	5.69	9.26
LF-13	13-Dec-96	14.78	5.50	9.28
LF-17	13-Dec-96	12.53	2.59	9.94
LF-18	13-Dec-96	13.05	6.44	6.61
LF-19	13-Dec-96	14.18	4.85	9.33
LF-20	13-Dec-96	11.77	7.71	4.06
LF-21	13-Dec-96	10.37	5.06	5.31
LF-22	13-Dec-96	19.16	9.07	10.09
LF-23	13-Dec-96	10.64	3.76	6.88
LF-24	13-Dec-96	10.22	4.10	6.12
LF-25	13-Dec-96	11.31	6.85	4.46
LF-26	13-Dec-96	12.90	6.75	6.15
EX-1	13-Dec-96	10.08	3.20	6.88
EX-2	13-Dec-96	10.08	2.21	7.87
EX-3	13-Dec-96	14.90	5.10	9.80
LF-B3	13-Dec-96	10.30	2.70	7.60
LF-B4	13-Dec-96	14.55	5.64	8.91
LF-B5	13-Dec-96	18.29	9.25	9.04
LF-B6	13-Dec-96	11.99	4.33	7.66
Rifkin Property Wells				
RP-1	13-Dec-96	15.14	6.00	9.14
RP-2	13-Dec-96	15.24	6.20	9.04
RP-3	13-Dec-96	15.17	6.03	9.14
RP-4	13-Dec-96	15.13	6.12	9.01
RP-5	13-Dec-96	15.04	5.93	9.11
MW-1	13-Dec-96	13.78	5.19	8.59
MW-2	13-Dec-96	13.58	5.04	8.54
MW-3	13-Dec-96	14.60	5.33	9.27
MW-4	13-Dec-96	15.53	6.75	8.78
MW-5	13-Dec-96	15.24	6.97	8.27

Data entered by SDS. Proofed by KAC.

TABLE 2
SUMARY OF HISTORICAL VOLATILE ORGANIC COMPOUNDS (EPA 8240) IN GROUNDWATER MONITORING WELLS
THE SHERWIN-WILLIAMS PLANT
EMERYVILLE, CALIFORNIA
(Results reported in parts per million [ppm])

Well Number	Date Sampled	Acetone	Benzene	Ethyl-Benzene	Methyl Ethyl Ketone	Total Xylenes	2-Hexa-none	Toluene	1,1,1-TCA	1,2-DCA	PCE	TCE	Chloro-benzene	Total Quantified Conc.	Notes
LF-1	01-Jun-89	30.000	<0.200	0.900	20.000	3.600	15.000	6.000	<0.200	<0.200	<0.200	<0.200	<0.200	75.500	
LF-1	07-Dec-89	<0.010	<0.001	<0.001	<0.020	0.040	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	0.042	
LF-1	20-Jul-90	0.450	0.002	<0.001	0.200	0.160	<0.001	0.018	<0.001	<0.001	0.005	0.004	<0.001	0.840	#2
LF-1	21-Jun-91	<0.020	<0.005	0.019	<0.020	0.010	<0.010	<0.005	<0.005	<0.005	0.002	<0.005	<0.005	0.032	
LF-1	09-Jul-92	<0.020	<0.005	0.008	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.008	
LF-1	09-Jun-93	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-1	Destroyed under permit														
LF-2	02-Jun-89	<0.050	0.015	0.015	<0.100	0.300	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.330	
LF-2	07-Dec-89	0.350	<0.020	<0.020	<0.400	0.840	<0.020	0.029	<0.020	<0.020	<0.020	<0.020	<0.020	1.219	
LF-2	20-Jul-90	<0.500	<0.050	0.066	8.800	0.910	12.000	0.051	<0.050	<0.050	<0.050	<0.050	0.050	21.827	
LF-2	Destroyed or lost during slurry wall and cap construction activities														
LF-3	02-Jun-89	<1.000	<0.100	2.500	<2.000	12.000	<0.100	17.000	<0.100	<0.100	<0.100	<0.100	<0.100	31.500	
LF-3	07-Dec-89	<5.000	<0.500	6.300	<10.000	32.000	<0.500	77.000	<0.500	<0.500	<0.500	<0.500	<0.500	115.300	
LF-3	20-Jul-90	10.000	0.110	5.000	7.700	22.000	1.900	52.000	<0.050	<0.050	<0.050	<0.050	<0.050	98.710	
LF-3	21-Jun-91	9.900	<1.000	7.500	8.200	44.000	<2.000	62.000	<1.000	<1.000	<1.000	<1.000	<1.000	131.600	
LF-3	09-Jul-92	<10.000	<2.500	8.900	<10.000	43.000	<5.000	92.000	<2.500	<2.500	<2.500	<2.500	<2.500	143.900	
DUP	09-Jul-92	<20.000	<5.000	8.800	<20.000	45.000	<10.000	100.000	<5.000	<5.000	<5.000	<5.000	<5.000	153.800	
LF-3	09-Jun-93	<10.000	<2.500	9.800	<10.000	48.000	<5.000	120.000	<2.500	<2.500	<2.500	<2.500	<2.500	177.800	
DUP	09-Jun-93	<10.000	<2.500	7.600	<10.000	37.000	<5.000	110.000	<2.500	<2.500	<2.500	<2.500	<2.500	154.600	
LF-3	16-Apr-96	<50.000	<3.000	5.500	<50.0	27.000	<30.000	45.000	<3.000	<3.000	<3.000	<3.000	<3.000	77.500	
LF-3	31-Jul-96	<50.000	<3.000	4.500	<50.000	24.000	<30.000	44.000	<3.000	<3.000	<3.000	<3.000	<3.000	72.500	
LF-3	20-Nov-96	<50.000	<3.000	4.000	<50.000	12.000	<30.000	41.000	<3.000	<3.000	<3.000	<3.000	<3.000	57.000	
LF-4	02-Jun-89	1.300	<0.200	1.300	4.700	3.800	0.260	<0.200	<0.020	<0.020	<0.020	<0.020	<0.020	11.360	
Dup	02-Jun-89	1.300	<0.200	1.700	4.700	4.100	0.280	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	12.080	
LF-4	06-Dec-89	<0.020	<0.020	0.200	<0.040	0.650	<0.002	<0.004	<0.002	<0.002	<0.002	<0.002	<0.002	0.850	
DUP	06-Dec-89	<0.050	<0.005	0.250	<0.100	0.750	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	1.000	
LF-4	20-Jul-90	<1.000	<1.000	<0.100	<2.000	0.380	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	0.380	
LF-4	21-Jun-91	0.079	0.039	0.058	<0.040	0.350	<0.020	0.007	<0.010	<0.010	<0.010	<0.010	0.005	0.556	
DUP	21-Jun-91	<0.040	0.040	0.140	<0.040	0.380	<0.020	0.008	<0.010	<0.010	<0.010	<0.010	0.006	0.594	#4
LF-4	09-Jul-92	<0.020	0.016	0.015	<0.020	0.069	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	0.008	0.108	
LF-4	09-Jun-93	<0.200	0.051	0.210	<0.200	1.500	<0.100	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	1.761	
LF-5	01-Jun-89	220.000	<2.000	2.000	390.000	8.000	<2.000	300.000	<1.000	<1.000	<1.000	<2.000	<1.000	920.000	
LF-5	06-Dec-89	51.000	<1.000	<1.000	320.000	<1.000	<1.000	310.000	<1.000	<1.000	<1.000	<1.000	<1.000	681.000	
LF-5	20-Jul-90	<10.000	<1.000	1.100	170.000	2.600	6.700	170.000	<1.000	<1.000	<1.000	<1.000	<1.000	350.400	
LF-5	21-Jun-91	<20.000	<5.000	<5.000	<20.000	5.400	<10.000	>200.00	<5.000	<5.000	<5.000	<5.000	<5.000	5.400	
LF-5	09-Jul-92	<20.000	<5.000	<5.000	<20.000	<5.000	<10.000	150.000	<5.000	<5.000	<5.000	<5.000	<5.000	150.000	
LF-5	09-Jun-93	<10.000	<2.500	<2.500	<10.000	4.500	<5.000	83.000	<2.500	<2.500	<2.500	<2.500	<2.500	87.500	
LF-5	Destroyed or lost during slurry wall and cap construction activities														

TABLE 2
SUMARY OF HISTORICAL VOLATILE ORGANIC COMPOUNDS (EPA 8240) IN GROUNDWATER MONITORING WELLS
THE SHERWIN-WILLIAMS PLANT
EMERYVILLE, CALIFORNIA
(Results reported in parts per million [ppm])

Well Number	Date Sampled	Acetone	Benzene	Ethyl-Benzene	Methyl Ethyl Ketone	Total Xylenes	2-Hexa-none	Toluene	1,1,1-TCA	1,2-DCA	PCE	TCE	Chloro-benzene	Total Quantified Conc.	Notes
LF-6	01-Jun-89	280.000	<1.000	6.000	470.000	210.000	<1.000	22.000	<0.200	<0.200	<0.200	<1.000	<0.200	988.000	
LF-6	05-Dec-89	64.000	<1.000	5.000	320.000	17.000	<1.000	59.000	<1.000	<1.000	<1.000	<1.000	<1.000	465.000	
LF-6	20-Jul-90	200.000	<1.000	4.000	720.000	13.000	24.000	45.000	<1.000	<1.000	45.000	<1.000	<1.000	1051.000	
LF-6	Sealed August 2, 1990														
LF-7	01-Jun-89	<0.005	0.050	<0.005	<0.005	0.580	<0.005	0.270	<0.001	<0.001	<0.001	<0.005	<0.001	0.900	
LF-7	06-Dec-89	<0.010	0.031	0.052	<0.020	0.150	<0.001	0.003	<0.001	<0.001	<0.001	<0.001	0.007	0.243	
LF-7	19-Jul-90	<0.010	<0.001	0.007	<0.020	0.044	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.052	
LF-7	20-Jun-91	<0.020	0.061	0.045	<0.020	0.120	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	0.233	
LF-7	09-Jul-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
DUP	09-Jul-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-7	09-Jun-93	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
DUP	09-Jun-93	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-7	06-Jan-94	<0.050	0.031	0.003	<0.050	0.014	<0.030	0.120	<0.003	<0.003	<0.003	<0.003	0.009	0.177	
LF-8	05-Dec-89	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	
LF-8	19-Jul-90	<0.010	<0.001	0.007	<0.020	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.010	
LF-8	21-Dec-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	
LF-8	20-Jun-91	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-8	09-Jul-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-8	30-Dec-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-8	09-Jun-93	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-8	06-Jan-94	<0.050	<0.003	<0.005	<0.050	<0.005	<0.030	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.000	
LF-9	05-Dec-89	<0.010	<0.001	0.022	<0.020	<0.001	<0.001	0.003	<0.001	<0.001	<0.001	<0.001	0.005	0.030	
LF-9	19-Jul-90	<0.010	<0.001	0.011	<0.020	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.004	0.017	
LF-9	21-Dec-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	
LF-9	21-Jun-91	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	0.006	
LF-9	09-Jul-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	0.005	
LF-9	30-Dec-92	<0.020	<0.005	0.007	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	<0.020	
LF-9	09-Jun-93	<0.020	0.005	<0.005	<0.020	<0.005	<0.010	0.005	<0.005	<0.005	<0.005	<0.005	0.005	0.010	
LF-9	Destroyed or lost during slurry wall and cap construction activities														
LF-10	07-Dec-89	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	
LF-10	19-Jul-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	
LF-10	19-Dec-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	
DUP	19-Dec-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	
LF-10	21-Jun-91	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-10	21-Jun-91	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-10	09-Jul-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-10	31-Dec-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
DUP	31-Dec-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-10	09-Jun-93	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	

TABLE 2
SUMARY OF HISTORICAL VOLATILE ORGANIC COMPOUNDS (EPA 8240) IN GROUNDWATER MONITORING WELLS
THE SHERWIN-WILLIAMS PLANT
EMERYVILLE, CALIFORNIA
(Results reported in parts per million [ppm])

Well Number	Date Sampled	Acetone	Benzene	Ethyl-Benzene	Methyl Ethyl Ketone	Total Xylenes	2-Hexa-none	Toluene	1,1,1-TCA	1,2-DCA	PCE	TCE	Chloro-benzene	Total Quantified Conc.	Notes
LF-10	06-Jan-94	<0.050	<0.003	<0.005	<0.050	<0.005	<0.030	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.000	
DUP	06-Jan-94	<0.050	<0.003	<0.005	<0.050	<0.005	<0.030	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.000	
LF-11	05-Dec-89	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	
DUP	05-Dec-89	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.023	<0.001	<0.001	<0.001	<0.001	<0.001	0.000	
LF-11	19-Jul-90	0.015	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	0.016	
LF-11	21-Dec-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	
LF-11	21-Jun-91	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
DUP	21-Jun-91	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-11	09-Jul-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-11	31-Dec-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-11	09-Jun-93	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-11	05-Jan-94	<0.050	<0.003	<0.005	<0.050	<0.005	<0.030	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.000	
LF-11	4-Apr-96	<0.100	<0.005	<0.005	<0.1	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-11	31-Jul-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-11	20-Nov-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-12	06-Dec-89	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	0.005	
LF-12	18-Jul-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002	<0.001	0.003	
LF-12	19-Dec-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	0.003	<0.001	0.005	
LF-12	19-Jun-91	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	0.002	<0.005	0.002	
LF-12	08-Jul-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-12	30-Dec-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-12	08-Jun-93	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-12	06-Jan-94	<0.050	<0.003	<0.005	<0.050	<0.005	<0.030	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.000	
LF-12	16-Apr-96	<0.100	<0.005	<0.005	<0.1	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-12	30-Jul-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-12	20-Nov-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-13	06-Dec-89	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	0.002	0.029	<0.001	<0.001	<0.001	<0.001	0.031	
LF-13	18-Jul-90	<0.010	<0.001	<0.001	<0.020	0.001	<0.001	0.002	0.056	<0.001	0.001	<0.001	<0.001	0.060	
LF-13	19-Dec-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	0.042	0.002	0.002	<0.001	<0.001	0.046	#3
LF-13	19-Jun-91	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	0.032	<0.005	<0.005	<0.005	<0.005	0.032	
LF-13	08-Jul-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	0.010	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-13	30-Dec-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-13	08-Jun-93	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	0.008	<0.005	<0.005	<0.005	<0.005	0.008	
LF-13	05-Jan-94	<0.050	<0.003	<0.005	<0.050	<0.005	<0.030	<0.003	0.004	<0.003	<0.003	<0.003	<0.003	0.004	
LF-13	16-Apr-96	<0.100	<0.005	<0.005	<0.1	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-13	30-Jul-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-13dup	30-Jul-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-13	20-Nov-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-14	04-Sep-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	

TABLE 2
SUMARY OF HISTORICAL VOLATILE ORGANIC COMPOUNDS (EPA 8240) IN GROUNDWATER MONITORING WELLS
THE SHERWIN-WILLIAMS PLANT
EMERYVILLE, CALIFORNIA
(Results reported in parts per million [ppm])

Well Number	Date Sampled	Acetone	Benzene	Ethyl-Benzene	Methyl Ethyl Ketone	Total Xylenes	2-Hexa-none	Toluene	1,1,1-TCA	1,2-DCA	PCE	TCE	Chloro-benzene	Total Quantified Conc.	Notes
LF-14	21-Dec-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	
LF-14	20-Jun-91	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-14	09-Jul-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-14	31-Dec-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-14	09-Jun-93	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-14	Destroyed during railway expansion activities														
LF-15	04-Sep-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	
LF-15	21-Dec-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	
LF-15	20-Jun-91	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-15	08-Jul-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-15	30-Dec-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-15	09-Jun-93	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-15	Destroyed during railway expansion activities														
LF-16	04-Sep-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	
LF-16	20-Dec-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	
LF-16	20-Jun-91	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-16	09-Jul-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-16	30-Dec-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-16	09-Jun-93	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-16	Destroyed under permit														
LF-18	11-Apr-96	<0.1	<0.005	<0.005	<0.100	<0.010	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-18	30-Jul-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-18	20-Nov-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-20	11-Apr-96	<0.1	<0.005	<0.005	<0.1	<0.010	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-20	30-Jul-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-20	21-Nov-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-21	10-Apr-96	<0.1	<0.005	<0.005	<0.1	<0.010	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-21	31-Jul-96	<0.1	<0.005	<0.005	<0.1	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-21	21-Nov-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-23	10-Apr-96	<0.1	<0.005	<0.005	<0.1	<0.010	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
(dup)	10-Apr-96	<0.1	<0.005	<0.005	<0.1	<0.010	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-23	2-Aug-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-23	21-Nov-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-24	11-Apr-96	<0.1	<0.005	<0.005	<0.1	<0.010	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-24	2-Aug-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-24	21-Nov-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	

TABLE 2
SUMARY OF HISTORICAL VOLATILE ORGANIC COMPOUNDS (EPA 8240) IN GROUNDWATER MONITORING WELLS
THE SHERWIN-WILLIAMS PLANT
EMERYVILLE, CALIFORNIA
(Results reported in parts per million [ppm])

Well Number	Date Sampled	Acetone	Benzene	Ethyl-Benzene	Methyl Ethyl Ketone	Total Xylenes	2-Hexa-none	Toluene	1,1,1-TCA	1,2-DCA	PCE	TCE	Chloro-benzene	Total Quantified Conc.	Notes
LF-25	11-Apr-96	<0.1	<0.005	<0.005	<0.1	<0.01	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-25	2-Aug-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-25	21-Nov-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-B1	07-Dec-89	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	0.051	<0.001	<0.001	<0.001	0.051	
LF-B1	18-Jul-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.002	<0.001	0.170	0.001	<0.001	<0.001	0.171	
LF-B1	20-Dec-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	0.130	<0.001	<0.001	<0.001	0.130	
LF-B1	20-Jun-91	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	0.180	<0.005	<0.005	<0.005	0.180	
LF-B1	08-Jul-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	0.150	<0.005	<0.005	<0.005	0.150	
LF-B1	30-Dec-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	0.140	<0.005	<0.005	<0.005	0.140	
LF-B1	08-Jun-93	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	0.160	<0.005	<0.005	<0.005	0.160	
LF-B1	Destroyed under permit														
LF-B2	06-Dec-89	<0.010	<0.001	<0.001	<0.020	0.013	<0.001	<0.001	<0.001	0.007	<0.001	<0.001	<0.001	0.020	
LF-B2	18-Jul-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	0.002	<0.001	0.007	<0.001	<0.001	<0.001	0.009	
DUP	18-Jul-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	0.002	<0.001	0.007	<0.001	<0.001	<0.001	0.009	
LF-B2	19-Dec-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	0.004	0.002	<0.001	<0.001	0.006	
LF-B2	20-Jun-91	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	0.150	<0.005	<0.005	<0.005	0.150	
LF-B2	08-Jul-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	0.006	
LF-B2	08-Jun-93	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	0.006	
LF-B2	Destroyed or lost during slurry wall and cap construction activities														
LF-B3	07-Dec-89	<0.010	<0.001	<0.001	<0.020	<0.001	0.001	<0.001	<0.001	0.100	<0.001	<0.001	<0.001	0.101	#1
DUP	07-Dec-89	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	0.073	<0.001	<0.001	<0.001	0.073	
LF-B3	18-Jul-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	0.002	<0.001	0.086	<0.001	<0.001	<0.001	0.088	
LF-B3	20-Dec-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	0.084	<0.001	<0.001	<0.001	0.084	
LF-B3	19-Jun-91	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	0.110	<0.005	<0.005	<0.005	0.110	
LF-B3	08-Jul-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	0.110	<0.005	<0.005	<0.005	0.110	
LF-B3	30-Dec-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	0.110	<0.005	<0.005	<0.005	0.110	
LF-B3	08-Jun-93	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	0.110	<0.005	<0.005	<0.005	0.110	
LF-B3	05-Jan-94	<0.050	<0.003	<0.005	<0.050	<0.005	<0.030	<0.003	<0.003	0.099	<0.003	<0.003	<0.003	0.099	
LF-B3	16-Apr-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	0.013	<0.005	<0.005	<0.005	0.013	
LF-B3	1-Aug-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	0.022	<0.005	<0.005	<0.005	0.022	
LF-B3	21-Nov-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	0.036	<0.005	<0.005	<0.005	0.036	
DUP	21-Nov-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	0.021	<0.005	<0.005	<0.005	0.021	
LF-B4	18-Jul-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	0.002	<0.001	0.001	<0.001	<0.001	<0.001	0.003	
LF-B4	19-Dec-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	
LF-B4	19-Jun-91	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-B4	08-Jul-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-B4	30-Dec-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-B4	08-Jun-93	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-B4	05-Jan-94	<0.050	<0.003	<0.005	<0.050	<0.005	<0.030	<0.003	<0.003	<0.003	<0.003	0.012	<0.003	0.012	
LF-B4	16-Apr-96	<0.100	<0.005	<0.005	<0.1	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	

TABLE 2
SUMARY OF HISTORICAL VOLATILE ORGANIC COMPOUNDS (EPA 8240) IN GROUNDWATER MONITORING WELLS
THE SHERWIN-WILLIAMS PLANT
EMERYVILLE, CALIFORNIA
(Results reported in parts per million [ppm])

Well Number	Date Sampled	Acetone	Benzene	Ethyl-Benzene	Methyl Ethyl Ketone	Total Xylenes	2-Hexa-none	Toluene	1,1,1-TCA	1,2-DCA	PCE	TCE	Chloro-benzene	Total Quantified Conc.	Notes
LF-B4	30-Jul-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-B4	22-Nov-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	0.010	<0.005	<0.005	<0.005	<0.005	<0.005	0.010	
DUP	22-Nov-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-B5	9-Apr-96	<1.000	<0.050	<0.050	<1.0	<0.100	<0.500	<0.050	<0.050	0.280	<0.050	<0.050	<0.050	0.280	
LF-B5	1-Aug-96	<0.500	<0.030	<0.030	<0.500	<0.050	<0.300	<0.030	<0.030	0.380	<0.030	<0.030	<0.030	0.380	
LF-B5	22-Nov-96	<0.500	<0.030	<0.030	<0.500	<0.050	<0.300	<0.030	<0.030	0.320	<0.030	<0.030	<0.030	0.320	
LF-B6	9-Apr-96	<2.000	<0.100	0.290	<2.0	0.970	<1.000	0.290	<0.100	<0.100	<0.100	<0.100	<0.100	1.550	
LF-B6	1-Aug-96	<0.100	<0.005	0.110	<0.100	<0.010	<0.050	<0.005	<0.005	0.030	<0.005	<0.005	<0.005	0.140	
LF-B6	25-Nov-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	0.046	<0.005	<0.005	<0.005	0.046	
DUP	25-Nov-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	0.047	<0.005	<0.005	<0.005	0.047	
EX-1	18-Apr-96	<0.100	<0.005	0.006	<0.100	0.020	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.026	
EX-1	1-Aug-96	<0.100	<0.005	<0.005	<0.100	0.019	<0.050	0.027	<0.005	<0.005	<0.005	<0.005	<0.005	0.046	
EX-1	18-Dec-96	<0.100	<0.005	0.031	<0.100	1.4	<0.050	0.87	<0.005	<0.005	<0.005	<0.005	<0.005	2.301	
EX-2	18-Apr-96	<50	<3.0	8.000	<50	10.0	<30.0	24.0	<3.0	<3.0	<3.0	<3.0	<3.0	42.000	
EX-2	1-Aug-96	<10.0	<0.500	0.650	<10.0	3.7	<5.0	6.6	<0.500	<0.500	<0.500	<0.500	<0.500	10.950	
EX-2	18-Dec-96	<20.0	<1.0	2.5	<20.0	12.0	<10.0	23.0	<1.0	<1.0	<1.0	<1.0	<1.0	37.500	
EX-3	18-Apr-96	<5.0	<0.3	<0.3	<5.0	<0.5	<3.0	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.000	
EX-3	1-Aug-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	0.006	
EX-3	18-Dec-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
FIELD BLANKS & TRIP BLANKS															
LF-1-FB	01-Jun-86	0.012	<0.001	<0.001	<0.020	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.016	
LF-1-FB	07-Dec-89	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	
LF-B1-FB	07-Dec-89	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	
LF-13-FB	06-Dec-89	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	
Trip Blank	07-Dec-89	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	
LF-B4-TB	18-Jul-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	
LF-B4-BB	18-Jul-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	
LF-11-TB	19-Jul-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	
LF-11-BB	19-Jul-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	
LF-B4-BR	19-Dec-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	
LF-8-TB	21-Dec-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	
LF-8-BR	21-Dec-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	
LF-B3-BR	20-Dec-90	<0.010	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.020	
LF-B3-BR	19-Jun-91	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-11-BR	20-Jun-91	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-4-TB	24-Jun-91	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	

TABLE 2
SUMARY OF HISTORICAL VOLATILE ORGANIC COMPOUNDS (EPA 8240) IN GROUNDWATER MONITORING WELLS
THE SHERWIN-WILLIAMS PLANT
EMERYVILLE, CALIFORNIA
(Results reported in parts per million [ppm])

Well Number	Date Sampled	Acetone	Benzene	Ethyl-Benzene	Methyl Ethyl Ketone	Total Xylenes	2-Hexa-none	Toluene	1,1,1-TCA	1,2-DCA	PCE	TCE	Chloro-benzene	Total Quantified Conc.	Notes
Trip Blank	06-Aug-91	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-B3-TB	08-Jul-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-B3-BR	08-Jul-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-7-TB	09-Jul-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-9-BR	09-Jul-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-B4-TB	30-Dec-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-B4-BR	30-Dec-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-11-BR	31-Dec-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-10DUP	31-Dec-92	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
TRIP08	08-Jun-93	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-B3-BR	08-Jun-93	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-7-TB	09-Jun-93	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-7-BR	09-Jun-93	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
LF-10-TB	09-Jun-93	<0.020	<0.005	<0.005	<0.020	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.020	
Trip Blank	03-Jan-94	<0.050	<0.003	<0.005	<0.050	<0.005	<0.030	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	
LF-10-FB	06-Jan-94	<0.050	<0.003	<0.005	<0.050	<0.005	<0.030	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	
LF-18-FB	11-Apr-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
LF-24-FB	02-Aug-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-B3-FB	21-Nov-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-B4-FB	22-Nov-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	
LF-B6-FB	25-Nov-96	<0.100	<0.005	<0.005	<0.100	<0.010	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000	

Data entered by SDS. Data proofed by CAC QA/QC by SXS

Notes:

DUP = Duplicate Sample

1,1,1-TCA = 1,1,1-Trichloroethane

1,2-DCA = 1,2-Dichloroethane

PCE = Tetrachloroethene

TCE = Trichloroethene

#1 LF-B3 6/02/89 - Vinyl Acetate reported at 0.001 ppm, Styrene reported at 0.001 ppm, and Methyl Isobutyl Ketone reported at 0.001 ppm.

#2 LF-1 7/20/90 - cis-Dichloroethene reported at 0.001 ppm.

#3 LF-13 12/19/90 - 1,1-Dichloroethane reported at 0.002 ppm.

#4 LF-4 DUP 06/21/91 - cis-1,2-Dichloroethene reported at 0.020 ppm.

TABLE 3
SUMMARY OF HISTORICAL TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND GASOLINE
IN GROUNDWATER MONITORING WELLS
THE SHERWIN-WILLIAMS PLANT, EMERYVILLE, CALIFORNIA
(Results reported in parts per million [ppm])

Well Number	Date Sampled	Total Petroleum Hydrocarbons As Diesel	Total Petroleum Hydrocarbons As Gasoline	Notes
LF-1	21-Jun-91	<0.050		
LF-1	09-Jul-92	0.110	<0.050	
LF-1	09-Jun-93	0.083		
LF-1	10-Jun-93		<0.050	
LF-1	Destroyed under permit			
LF-3	21-Jun-91	2.000		
LF-3	09-Jul-92	3.000	190.000	
DUP	09-Jul-92	3.300	180.000	
LF-3	10-Jun-93	100	150	#2
DUP	10-Jun-93	110	150	#2
LF-3	16-Apr-96	2.6	87	
LF-3	31-Jul-96	0.64	90	
LF-3	20-Nov-96	9.3	75	
LF-4	21-Jun-91	0.780		
DUP	21-Jun-91	0.510		
LF-4	09-Jul-92	1.200	14.000	
LF-4	09-Jun-93	1.200	2.200	#2
LF-5	06-Aug-91	4.700		
LF-5	09-Jul-92	0.830	69.000	
LF-5	09-Jun-93	2.000	95.000	#2
LF-5	Destroyed or lost during slurry wall and cap construction activities			
LF-7	20-Jun-91	<0.050		
LF-7	09-Jul-92	0.300	0.140	
DUP	09-Jul-92	0.480	0.130	
LF-7	09-Jun-93	0.340	0.110	
DUP	09-Jun-93	0.320	0.100	
LF-7	06-Jan-94	0.540	0.500	
LF-8	20-Jun-91	<0.050		
LF-8	09-Jul-92	0.250	<0.050	
LF-8	30-Dec-92	0.150	0.120	#4
LF-8	09-Jun-93	0.330	<0.050	#4
LF-8	06-Jan-94	1.700	<0.050	
LF-9	21-Jun-91	0.200		
LF-9	09-Jul-92	0.300	0.620	
LF-9	30-Dec-92	0.300	0.510	#4
LF-9	09-Jun-93	0.560	0.430	#4
LF-9	Destroyed or lost during slurry wall and cap construction activities			
LF-10	21-Jun-91	0.270		
LF-10	09-Jul-92	0.420	0.700	
LF-10	31-Dec-92	0.330	0.190	#1
DUP	31-Dec-92	0.370	0.180	#1
LF-10	10-Jun-93	0.470	0.180	
LF-10	06-Jan-94	1.500	0.200	
DUP	06-Jan-94	1.200	0.200	#4
LF-11	19-Jul-90			
LF-11	20-Jun-91	0.130		

TABLE 3
SUMMARY OF HISTORICAL TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND GASOLINE
IN GROUNDWATER MONITORING WELLS
THE SHERWIN-WILLIAMS PLANT, EMERYVILLE, CALIFORNIA
(Results reported in parts per million [ppm])

Well Number	Date Sampled	Total Petroleum Hydrocarbons As Diesel	Total Petroleum Hydrocarbons As Gasoline	Notes
DUP	20-Jun-91	0.120		
LF-11	09-Jul-92	0.260	<0.050	
LF-11	31-Dec-92	0.310	0.058	#1
LF-11	09-Jun-93	0.270	<0.050	
LF-11	05-Jan-94	0.800	0.060	
LF-11	16-Apr-96	0.930	<0.05	
LF-11	31-Jul-96	0.580	<0.050	
LF-11	20-Nov-96	1.5	<0.05	
LF-12	19-Jun-91	<0.050		
LF-12	08-Jul-92	<0.050	<0.050	
LF-12	30-Dec-92	<0.050	<0.050	
LF-12	08-Jun-93	0.099	<0.050	
LF-12	06-Jan-94	<0.050	<0.050	
LF-12	16-Apr-96	<0.05	<0.05	
LF-12	30-Jul-96	<0.050	<0.050	
LF-12	20-Nov-96	<0.05	<0.05	
LF-13	19-Jun-91	<0.050		
LF-13	08-Jul-92	<0.050	<0.050	
LF-13	30-Dec-92	<0.050	<0.050	
LF-13	08-Jun-93	0.052	<0.050	
LF-13	05-Jan-94	<0.050	<0.050	
LF-13	16-Apr-96	<0.05	<0.05	
LF-13	30-Jul-96	<0.05	<0.05	
DUP	30-Jul-96	<0.05	<0.05	
LF-13	20-Nov-96	<0.05	<0.05	
LF-14	20-Jun-91	<0.050		
LF-14	09-Jul-92	0.180	<0.050	
LF-14	31-Dec-92	0.190	0.068	#1
LF-14	09-Jun-93	0.240	<0.050	
LF-14	Destroyed during railway expansion activities			
LF-15	20-Jun-91	<0.050		
LF-15	08-Jul-92	<0.050	<0.050	
LF-15	30-Dec-92	<0.050	<0.050	
LF-15	09-Jun-93	0.098	<0.050	
LF-15	Destroyed during railway expansion activies			
LF-16	20-Jun-91	<0.050		
LF-16	09-Jul-92	0.075	<0.050	
LF-16	30-Dec-92	<0.050	0.050	
LF-16	09-Jun-93	0.083	<0.050	
LF-16	Destroyed under permit			
LF-18	11-Apr-96	0.320	<0.05	
LF-18	30-Jul-96	0.320	<0.05	
LF-18	20-Nov-96	0.50	<0.05	
LF-20	11-Apr-96	0.960	0.230	
LF-20	30-Jul-96	0.560	0.200	
LF-20	21-Nov-96	3.2	0.250	

TABLE 3
SUMMARY OF HISTORICAL TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND GASOLINE IN GROUNDWATER MONITORING WELLS
THE SHERWIN-WILLIAMS PLANT, EMERYVILLE, CALIFORNIA
(Results reported in parts per million [ppm])

Well Number	Date Sampled	Total Petroleum Hydrocarbons As Diesel	Total Petroleum Hydrocarbons As Gasoline	Notes
LF-21	10-Apr-96	2.800	<0.05	
LF-21	31-Jul-96	1.400	0.060	
LF-21	21-Nov-96	2.4	0.060	
LF-23	10-Apr-96	1.700	<0.05	
DUP	10-Apr-96	1.300	<0.05	
LF-23	2-Aug-96	5.600	<0.05	
LF-23	21-Nov-96	1.3	<0.05	
LF-24	11-Apr-96	0.090	<0.05	
LF-24	2-Aug-96	0.160	<0.05	
LF-24	21-Nov-96	0.14	<0.05	
LF-25	11-Apr-95	0.180	<0.05	
LF-25	2-Aug-96	0.300	<0.05	
LF-25	21-Nov-96	0.31	<0.05	
LF-B1	20-Jun-91	<0.050		
LF-B1	08-Jul-92	<0.050	0.180	
LF-B1	30-Dec-92	<0.050	0.200	#3
LF-B1	08-Jun-93	0.061	0.180	#3
LF-B1	Destroyed under permit			
LF-B2	21-Jun-91	<0.050		
LF-B2	08-Jul-92	<0.050	<0.050	
LF-B2	08-Jun-93	<0.050	<0.050	
LF-B2	Destroyed or lost during slurry wall and cap construction activities			
LF-B3	19-Jun-91	<0.050		
LF-B3	08-Jul-92	<0.050	0.140	
LF-B3	30-Dec-92	<0.050	0.150	#3
LF-B3	08-Jun-93	0.060	0.090	#3
LF-B3	05-Jan-94	<0.050	<0.050	
LF-B3	16-Apr-96	2.700	<0.050	
LF-B3	01-Aug-96	0.60	<0.050	
LF-B3	21-Nov-96	0.44	<0.05	
DUP	21-Nov-96	0.53	<0.05	
LF-B4	19-Jun-91	<0.050		
LF-B4	08-Jul-92	<0.050	<0.050	
LF-B4	30-Dec-92	<0.050	0.160	#3
LF-B4	08-Jun-93	0.066	<0.050	#3
LF-B4	05-Jan-94	<0.050	<0.050	
LF-B4	16-Apr-96	<0.05	<0.05	
LF-B4	22-Nov-96	0.16	<0.05	
DUP	22-Nov-96	<0.05	<0.05	
LF-B5	09-Apr-96	0.100	<0.05	
LF-B5	01-Aug-96	<0.050	0.150	
LF-B5	22-Nov-96	<0.05	0.06	
LF-B6	09-Apr-96	1.000	2.700	
LF-B6	01-Aug-96	0.080	0.380	
LF-B6	25-Nov-96	0.34	0.21	

TABLE 3
SUMMARY OF HISTORICAL TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND GASOLINE IN GROUNDWATER MONITORING WELLS
THE SHERWIN-WILLIAMS PLANT, EMERYVILLE, CALIFORNIA
(Results reported in parts per million [ppm])

Well Number	Date Sampled	Total Petroleum Hydrocarbons As Diesel	Total Petroleum Hydrocarbons As Gasoline	Notes
DUP	25-Nov-96	0.34	0.18	
EX-1	18-Apr-96	4.300	0.420	
EX-1	01-Aug-96	4.100	0.220	
EX-1	18-Dec-96	2.4	3.1	
EX-2	18-Apr-96	1.300	41.000	
EX-2	01-Aug-96	3.700	34.0	
EX-2	18-Dec-96	0.69	45.0	
EX-3	18-Apr-96	0.430	<0.05	
EX-3	01-Aug-96	0.820	<0.050	
EX-3	18-Dec-96	0.210	<0.050	
Field Blanks and Trip Blanks				
LF-24-FB	02-Aug-96	<0.05	<0.05	
TRIP BLANK	20-Nov-96	NA	<0.05	
LF-B3-FB	21-Nov-96	NA	<0.05	
TRIP BLANK	21-Nov-96	NA	<0.05	
LF-B4-FB	22-Nov-96	NA	<0.05	
TRIP BLANK	22-Nov-96	NA	<0.05	
LF-B6-FB	25-Nov-96	NA	<0.05	

Data entered by SDS. Data proofed by KAC QA/QC by SXS

Notes:

Samples analyzed by B&C using Modified EPA Method 8015 for total fuel hydrocarbons.
Samples analyzed by ANA and AEN using EPA Method 3510 for total petroleum hydrocarbons as diesel.
Samples analyzed using EPA Method 5030 for total petroleum hydrocarbons as gasoline

#1 - The concentrations reported as diesel by Anametrix for samples LF-10, LF-10DUP, LF-11, and LF-14 are primarily caused by the presence of a heavier petroleum product, possibly motor oil.
#2 - The concentrations reported as diesel by Anametrix for samples LF-3, LF-3DUP, LF-4, and LF-5 are primarily due to the presence of a lighter petroleum product of hydrocarbon range C6-C12, possibly gasoline.
#3 - The concentrations reported as gasoline by Anametrix for samples LF-B1, LF-B2 and LF-B4 are primarily caused by the presence of discrete hydrocarbon peak not indicative of gasoline.
#4 - The concentration reported by Anametrix as gasoline for samples LF-8 and LF-9 are primarily caused by the presence of a heavier petroleum hydrocarbon peak not indicative of gasoline.

TABLE 4
SUMMARY OF HISTORICAL INORGANIC COMPOUNDS IN GROUNDWATER MONITORING WELLS
THE SHERWIN-WILLIAMS PLANT
EMERYVILLE, CALIFORNIA

(Results reported in parts per million [ppm])

Well Number	Date Sampled	Arsenic	Barium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver
LF-1	01-Jun-89	200.000	NA	<0.0400	<0.300				
LF-1	07-Dec-89	190.000	NA	<0.0400	<0.300				
LF-1	20-Jul-90	120.000	0.060	<0.0500	<0.200				
LF-1	20-Jun-91	58.000	NA	<0.005	<0.004				
LF-1	09-Jul-92	53.200	<0.100	0.058	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-1	10-Jun-93	39.800	<0.100	<0.030	0.0039	<0.010	<0.0002	<0.050	<0.010
LF-1	Destroyed under permit								
LF-3	02-Jun-89	27.000	NA	<0.0400	<0.300				
LF-3	07-Dec-89	30.000	NA	<0.0400	<0.300				
LF-3	20-Jul-90	21.000	0.420	<0.0500	<0.200				
LF-3	20-Jun-91	60.400	NA	<0.005	<0.004				
LF-3	09-Jul-92	70.800	0.473	0.0205	<0.040	<0.010	<0.00027	<0.005	<0.010
DUP	09-Jul-92	66.600	0.452	0.0361	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-3	10-Jun-93	142.000	0.625	<0.100	<0.003	<0.010	<0.0002	<0.050	<0.010
DUP	10-Jun-93	141.000	0.635	<0.100	<0.003	<0.010	<0.0002	<0.050	<0.010
LF-3	16-Apr-96	58.000	NA	NA	<0.002	NA	NA	NA	NA
LF-3	31-Jul-96	72.000	NA	NA	NA	NA	NA	NA	NA
LF-3	20-Nov-96	72.000	NA	NA	NA	NA	NA	NA	NA
LF-4	02-Jun-89	0.530	NA	<0.0400	<0.300				
DUP	02-Jun-89	0.580	NA	<0.0400	<0.300				
LF-4	06-Dec-89	0.420	NA	<0.0400	<0.300				
DUP	06-Dec-89	0.550	NA	<0.0400	<0.300				
LF-4	20-Jul-90	0.190	0.160	<0.0500	<0.200				
LF-4	20-Jun-91	0.510	NA	<0.005	0.015				
DUP	20-Jun-91	0.493	NA	<0.005	0.010				
LF-4	09-Jul-92	0.367	0.119	<0.005	<0.040	<0.010	<0.00027	<0.025	<0.010
LF-4	09-Jun-93	1.520	0.250	<0.015	<0.003	<0.010	<0.0002	<0.025	<0.010
LF-5	01-Jun-89	0.017	NA	<0.0400	<0.300				
LF-5	06-Dec-89	*<0.070	NA	<0.0400	<0.300				
LF-5	20-Jul-90	0.020	0.170	<0.0500	<0.200				
LF-5	20-Jun-91	0.038	NA	<0.005	0.003				
LF-5	09-Jul-92	<0.010	0.111	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-5	09-Jun-93	0.0283	0.257	<0.005	<0.003	<0.010	<0.00027	<0.005	<0.010
LF-5	Destroyed or lost during slurry wall and cap construction activities								

TABLE 4
SUMMARY OF HISTORICAL INORGANIC COMPOUNDS IN GROUNDWATER MONITORING WELLS
THE SHERWIN-WILLIAMS PLANT
EMERYVILLE, CALIFORNIA

(Results reported in parts per million [ppm])

Well Number	Date Sampled	Arsenic	Barium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver
LF-6	01-Jun-89	13.000	NA	0.0900	<0.300				
LF-6	05-Dec-89	16.000	NA	0.0600	<0.300				
LF-6	20-Jul-90	14.000	0.210	<0.0500	<0.200				
LF-6	Sealed August 2, 1990								
LF-7	01-Jun-89	0.008	NA	<0.0400	<0.300				
LF-7	06-Dec-89	*<0.070	NA	<0.0400	<0.300				
LF-7	19-Jul-90	<0.002	0.060	<0.0500	<0.200				
LF-7	20-Jun-91	0.012	NA	<0.005	<0.004				
LF-7	09-Jul-92	<0.010	<0.100	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
DUP	09-Jul-92	<0.010	<0.100	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-7	09-Jun-93	<0.010	0.191	<0.005	<0.003	<0.010	<0.0002	<0.005	<0.010
DUP	09-Jun-93	<0.010	0.201	<0.005	<0.003	<0.010	<0.0002	<0.005	<0.010
LF-7	06-Jan-94	<0.002	0.07	<0.001	0.001	<0.002	<0.0002	<0.004	<0.001
LF-8	05-Dec-89	*<0.070	NA	<0.0400	<0.300				
LF-8	19-Jul-90	<0.002	0.120	<0.0500	<0.200				
LF-8	21-Dec-90	0.020	0.590	0.0015	<0.200				
LF-8	20-Jun-91	0.021	NA	<0.005	<0.004				
LF-8	09-Jul-92	<0.010	<0.100	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-8	30-Dec-92	0.029	0.177	<0.005	<0.040	<0.010	<0.0002	<0.005	<0.010
LF-8	09-Jun-93	0.0384	0.121	<0.005	<0.003	<0.010	<0.0002	<0.005	<0.010
LF-8	06-Jan-94	0.055	0.10	<0.001	<0.001	<0.002	<0.0002	0.005	<0.001
LF-9	05-Dec-89	0.067	NA	<0.0400	<0.300				
LF-9	19-Jul-90	0.008	0.110	<0.0500	<0.200				
LF-9	21-Dec-90	0.120	0.270	0.0029	<0.200				
LF-9	20-Jun-91	0.075	NA	<0.005	0.012				
LF-9	06-Aug-91	0.131	NA	NA	NA				
LF-9	09-Jul-92	<0.010	<0.100	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-9	30-Dec-92	0.106	<0.100	<0.005	<0.040	<0.010	<0.0002	<0.005	<0.010
LF-9	09-Jun-93	0.158	0.169	<0.005	<0.003	<0.010	<0.0002	<0.005	<0.010
LF-9	Destroyed or lost during slurry wall and cap construction activities								
LF-10	07-Dec-89	0.650	NA	<0.0400	<0.300				
LF-10	19-Jul-90	0.012	0.110	<0.0500	<0.200				
DUP	19-Jul-90	0.008	0.140	<0.0500	<0.300				
LF-10	21-Dec-90	1.000	0.330	0.0009	<0.200				

TABLE 4
SUMMARY OF HISTORICAL INORGANIC COMPOUNDS IN GROUNDWATER MONITORING WELLS
THE SHERWIN-WILLIAMS PLANT
EMERYVILLE, CALIFORNIA

(Results reported in parts per million [ppm])

Well Number	Date Sampled	Arsenic	Barium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver
DUP	21-Dec-90	1.100	0.350	0.0007	<0.300				
LF-10	20-Jun-91	0.657	NA	<0.005	0.013				
LF-10	06-Aug-91	1.090	NA	NA	NA				
LF-10	09-Jul-92	0.328	<0.100	<0.005	<0.040	<0.010	<0.00027	<0.025	<0.010
LF-10	31-Dec-92	0.550	<0.100	<0.005	<0.040	<0.010	<0.0002	<0.005	<0.010
DUP	31-Dec-92	0.552	<0.100	<0.005	<0.040	<0.010	<0.0002	<0.005	<0.010
LF-10	10-Jun-93	0.958	0.249	<0.005	<0.003	<0.010	<0.0002	<0.050	<0.010
LF-10	06-Jan-94	0.940	0.190	<0.001	<0.001	<0.002	<0.0002	<0.004	0.002
DUP	06-Jan-94	0.820	0.180	<0.001	0.001	<0.002	<0.0002	<0.004	0.002
LF-11	05-Dec-89	*<0.070	NA	<0.0400	<0.300				
LF-11	19-Jul-90	0.007	0.120	<0.0500	<0.200				
LF-11	21-Dec-90	0.011	0.180	0.0006	<0.200				
LF-11	20-Jun-91	0.023	NA	<0.005	0.007				
LF-11	20-Jun-91	0.024	NA	<0.005	0.006				
LF-11	06-Aug-91	0.021	NA	NA	NA				
LF-11	09-Jul-92	<0.010	0.169	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-11	31-Dec-92	<0.010	<0.100	<0.005	<0.040	<0.010	<0.0002	<0.005	<0.010
LF-11	09-Jun-93	0.0116	0.152	<0.005	<0.003	<0.010	<0.0002	<0.005	<0.010
LF-11	05-Jan-94	0.019	0.130	<0.001	<0.001	<0.002	<0.0002	<0.004	0.001
LF-11	16-Apr-96	0.048	NA	NA	<0.002	NA	NA	NA	NA
LF-11	31-Jul-96	0.110	NA	NA	NA	NA	NA	NA	NA
LF-11	20-Nov-96	0.45	NA	NA	NA	NA	NA	NA	NA
LF-12	06-Dec-89	*<0.070	NA	<0.0400	<0.300				
LF-12	18-Jul-90	0.004	0.060	<0.0500	<0.300				
LF-12	19-Jun-91	<0.010	NA	<0.005	<0.004				
LF-12	08-Jul-92	<0.010	<0.100	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-12	30-Dec-92	0.014	<0.100	<0.005	<0.040	<0.010	<0.0002	<0.005	<0.010
LF-12	08-Jun-93	0.0152	<0.100	<0.005	<0.003	<0.010	<0.0002	<0.005	<0.010
LF-12	06-Jan-94	0.013	0.060	<0.001	<0.001	0.006	<0.0002	0.005	<0.001
LF-12	16-Apr-96	0.043	NA	NA	<0.002	NA	NA	NA	NA
LF-12	30-Jul-93	0.006	NA	NA	NA	NA	NA	NA	NA
LF-12	20-Nov-96	0.022	NA	NA	NA	NA	NA	NA	NA
LF-13	06-Dec-89	*<0.070	NA	<0.0400	<0.300				
LF-13	18-Jul-90	<0.002	<0.050	<0.0500	<0.200				
LF-13	19-Dec-90	<0.002	0.100	<0.0005	<0.200				

TABLE 4
SUMMARY OF HISTORICAL INORGANIC COMPOUNDS IN GROUNDWATER MONITORING WELLS
THE SHERWIN-WILLIAMS PLANT
EMERYVILLE, CALIFORNIA

(Results reported in parts per million [ppm])

Well Number	Date Sampled	Arsenic	Barium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver
LF-13	19-Jun-91	<0.010	NA	<0.005	<0.004				
LF-13	08-Jul-92	<0.010	<0.100	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-13	30-Dec-92	<0.010	<0.100	<0.005	<0.040	<0.010	<0.0002	<0.005	<0.010
LF-13	08-Jun-93	<0.010	<0.100	<0.005	<0.003	<0.010	<0.0002	<0.005	<0.010
LF-13	05-Jan-94	0.003	0.040	<0.005	<0.001	<0.002	<0.0002	<0.004	<0.001
LF-13	16-Apr-96	<0.002	NA	NA	<0.002	NA	NA	NA	NA
LF-13	30-Jul-96	<0.002	NA	NA	NA	NA	NA	NA	NA
DUP	30-Jul-96	<0.002	NA	NA	NA	NA	NA	NA	NA
LF-13	20-Nov-96	<0.002	NA	NA	NA	NA	NA	NA	NA
LF-14	04-Sep-90	0.092	0.060	<0.0005	0.007				
LF-14	02-Oct-90	0.077	NA	NA	NA				
LF-14	20-Dec-90	0.150	0.470	0.0036	<0.200				
LF-14	20-Jun-91	0.095	NA	<0.005	<0.004				
LF-14	09-Jul-92	0.039	<0.100	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-14	31-Dec-92	0.121	<0.100	<0.005	<0.040	<0.010	<0.0002	<0.005	<0.010
LF-14	09-Jun-93	0.102	<0.100	<0.005	<0.003	<0.010	<0.0002	<0.005	<0.010
LF-14	Destroyed during railway expansion activities								
LF-15	04-Sep-90	0.002	0.060	<0.0005	0.043				
LF-15	20-Dec-90	0.007	0.230	0.0007	<0.200				
LF-15	20-Jun-91	<0.010	NA	<0.005	<0.004				
LF-15	08-Jul-92	<0.010	0.105	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-15	30-Dec-92	<0.010	<0.100	<0.005	<0.040	<0.010	<0.0002	<0.005	<0.010
LF-15	09-Jun-93	<0.010	<0.100	<0.005	<0.003	<0.010	<0.0002	<0.005	<0.010
LF-15	Destroyed during railway expansion activities								
LF-16	04-Sep-90	0.003	0.060	<0.0005	<0.002				
LF-16	20-Dec-90	0.003	0.170	0.0007	<0.200				
LF-16	20-Jun-91	0.010	NA	<0.005	<0.004				
LF-16	09-Jul-92	<0.010	<0.100	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-16	30-Dec-92	<0.010	<0.100	<0.005	<0.040	<0.010	<0.0002	<0.005	<0.010
LF-16	09-Jun-93	<0.010	<0.100	<0.005	<0.003	<0.010	<0.0002	<0.050	<0.010
LF-16	Destroyed under permit								
LF-18	11-Apr-96	0.012	NA	NA	<0.002	NA	NA	NA	NA
LF-18	30-Jul-96	0.037	NA	NA	NA	NA	NA	NA	NA
LF-18	20-Nov-96	0.043	NA	NA	NA	NA	NA	NA	NA

TABLE 4
SUMMARY OF HISTORICAL INORGANIC COMPOUNDS IN GROUNDWATER MONITORING WELLS
THE SHERWIN-WILLIAMS PLANT
EMERYVILLE, CALIFORNIA

(Results reported in parts per million [ppm])

Well Number	Date Sampled	Arsenic	Barium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver
LF-20	11-Apr-96	<0.002	NA	NA	<0.002	NA	NA	NA	NA
LF-20	30-Jul-96	0.085	NA	NA	NA	NA	NA	NA	NA
LF-20	21-Nov-96	0.120	NA	NA	NA	NA	NA	NA	NA
LF-21	10-Apr-96	<0.002	NA	NA	<0.002	NA	NA	NA	NA
LF-21	31-Jul-96	0.43	NA	NA	NA	NA	NA	NA	NA
LF-21	21-Nov-96	0.38	NA	NA	NA	NA	NA	NA	NA
LF-23	10-Apr-96	<0.002	NA	NA	<0.002	NA	NA	NA	NA
DUP	10-Apr-96	0.004	NA	NA	<0.002	NA	NA	NA	NA
LF-23	02-Aug-96	**0.009	NA	NA	NA	NA	NA	NA	NA
LF-23	21-Nov-96	0.027	NA	NA	NA	NA	NA	NA	NA
LF-24	11-Apr-96	0.005	NA	NA	<0.002	NA	NA	NA	NA
LF-24	02-Aug-96	**0.010	NA	NA	NA	NA	NA	NA	NA
LF-24	21-Nov-96	0.010	NA	NA	NA	NA	NA	NA	NA
LF-25	11-Apr-96	<0.002	NA	NA	<0.002	NA	NA	NA	NA
LF-25	02-Aug-96	0.070	NA	NA	NA	NA	NA	NA	NA
LF-25	21-Nov-96	0.14	NA	NA	NA	NA	NA	NA	NA
LF-B1	07-Dec-89	*<0.070	NA	<0.0400	<0.300				
LF-B1	18-Jul-90	0.007	0.08	<0.0500	<0.2				
LF-B1	20-Dec-90	0.005	0.100	0.0010	<0.200				
LF-B1	20-Jun-91	<0.010	NA	<0.005	0.004				
LF-B1	08-Jul-92	<0.010	0.122	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-B1	30-Dec-92	<0.010	<0.100	<0.005	<0.040	<0.010	<0.0002	<0.005	<0.010
LF-B1	08-Jun-93	<0.010	<0.100	<0.005	<0.003	<0.010	<0.0002	<0.005	<0.010
LF-B1	Destroyed under permit								
LF-B2	06-Dec-89	*<0.070	NA	<0.0400	<0.300				
LF-B2	18-Jul-90	0.005	0.140	<0.0500	<0.200				
DUP	18-Jul-90	0.004	0.150	<0.0500	<0.200				
LF-B2	19-Dec-90	0.008	0.320	0.0026	<0.200				
LF-B2	20-Jun-91	<0.010	NA	<0.005	0.005				
LF-B2	08-Jul-92	<0.010	0.245	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-B2	08-Jun-93	<0.010	0.233	<0.005	<0.003	<0.010	<0.0002	<0.005	<0.010
LF-B2	Destroyed or lost during slurry wall and cap construction activities								

TABLE 4
SUMMARY OF HISTORICAL INORGANIC COMPOUNDS IN GROUNDWATER MONITORING WELLS
THE SHERWIN-WILLIAMS PLANT
EMERYVILLE, CALIFORNIA

(Results reported in parts per million [ppm])

Well Number	Date Sampled	Arsenic	Barium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver
LF-B3	07-Dec-89	* <0.070	NA	<0.0400	<0.300				
LF-B3	18-Jul-90	0.003	0.100	<0.0500	<0.200				
LF-B3	20-Dec-90	0.002	0.160	<0.0005	<0.200				
LF-B3	19-Jun-91	<0.010	NA	<0.005	<0.004				
LF-B3	08-Jul-92	<0.010	0.133	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-B3	30-Dec-92	<0.010	0.112	<0.005	<0.040	<0.010	<0.0002	<0.005	<0.010
LF-B3	08-Jun-93	<0.010	<0.100	<0.005	<0.003	<0.010	<0.0002	<0.005	<0.010
LF-B3	05-Jan-94	0.004	0.110	0.0060	<0.001	<0.002	<0.0002	<0.004	<0.001
LF-B3	16-Apr-96	0.036	NA	NA	<0.002	NA	NA	NA	NA
LF-B3	01-Aug-96	0.004	NA	NA	NA	NA	NA	NA	NA
LF-B3	21-Nov-96	0.006	NA	NA	NA	NA	NA	NA	NA
DUP	21-Nov-96	0.004	NA	NA	NA	NA	NA	NA	NA
LF-B4	17-Jul-90	0.003	0.080	<0.0500	<0.200				
LF-B4	19-Dec-90	<0.002	0.080	0.0014	<0.200				
LF-B4	19-Jun-91	<0.010	NA	<0.005	<0.004				
LF-B4	08-Jul-92	<0.010	0.140	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-B4	30-Dec-92	<0.010	0.110	<0.005	<0.040	<0.010	<0.0002	<0.005	<0.010
LF-B4	08-Jun-93	<0.010	<0.100	<0.005	<0.003	<0.010	<0.0002	<0.005	<0.010
LF-B4	05-Jan-94	0.003	0.070	<0.001	0.001	<0.002	<0.0002	<0.004	<0.001
LF-B4	16-Apr-96	<0.002	NA	NA	<0.002	NA	NA	NA	NA
LF-B4	30-Jul-96	<0.002	NA	NA	NA	NA	NA	NA	NA
LF-B4	22-Nov-96	<0.002	NA	NA	NA	NA	NA	NA	NA
DUP	22-Nov-96	<0.002	NA	NA	NA	NA	NA	NA	NA
LF-B5	09-Apr-96	0.320	NA	NA	<0.002	NA	NA	NA	NA
LF-B5	01-Aug-96	0.097	NA	NA	NA	NA	NA	NA	NA
LF-B5	22-Nov-96	0.11	NA	NA	NA	NA	NA	NA	NA
LF-B6	09-Apr-96	0.080	NA	NA	<0.002	NA	NA	NA	NA
LF-B6	01-Aug-96	0.033	NA	NA	NA	NA	NA	NA	NA
LF-B6	25-Nov-96	0.027	NA	NA	NA	NA	NA	NA	NA
DUP	25-Nov-96	0.030	NA	NA	NA	NA	NA	NA	NA
EX-1	18-Apr-96	0.002	NA	NA	<0.002	NA	NA	NA	NA
EX-1	01-Aug-96	0.022	NA	NA	NA	NA	NA	NA	NA
EX-1	18-Dec-96	0.015	NA	NA	NA	NA	NA	NA	NA

TABLE 4
SUMMARY OF HISTORICAL INORGANIC COMPOUNDS IN GROUNDWATER MONITORING WELLS
THE SHERWIN-WILLIAMS PLANT
EMERYVILLE, CALIFORNIA

(Results reported in parts per million [ppm])

Well Number	Date Sampled	Arsenic	Barium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver
EX-2	18-Apr-96	9.3	NA	NA	<0.002	NA	NA	NA	NA
EX-2	01-Aug-96	57.0	NA	NA	NA	NA	NA	NA	NA
EX-2	18-Dec-96	34.0	NA	NA	NA	NA	NA	NA	NA
EX-3	18-Apr-96	200	NA	NA	<0.002	NA	NA	NA	NA
EX-3	01-Aug-96	170	NA	NA	NA	NA	NA	NA	NA
EX-3	18-Dec-96	270	NA	NA	NA	NA	NA	NA	NA
FIELD & TRIP BLANKS									
LF-1-FB	01-Jun-89	0.012	NA	<0.0400	<0.300				
LF-1-FB	07-Dec-89	0.003	NA	<0.0400	<0.300				
LF-B1-FB	07-Dec-89	0.014	NA	<0.0400	<0.300				
Trip Blank	07-Dec-89	0.013	NA	<0.0400	<0.300				
LF-B4-TB	18-Jul-90	<0.002	NA	<0.0500	<0.200				
LF-B4-BB	18-Jul-90	<0.002	NA	<0.0500	<0.200				
LF-11-TB	19-Jul-90	<0.002	NA	<0.0500	0.200				
LF-11-BB	19-Jul-90	<0.002	NA	<0.0500	<0.200				
LF-5- TB	20-Jul-90	0.002	NA	<0.0500	<0.200				
LF-16-TB	04-Sep-90	<0.002	NA	<0.0005	0.005				
LF-B4-TB	19-Dec-90	<0.002	<0.050	<0.0005	<0.200				
LF-B4-BB	19-Dec-90	<0.002	<0.050	<0.0005	<0.200				
LF-B3-TB	20-Dec-90	<0.002	<0.050	<0.0005	<0.200				
LF-B3-BR	20-Dec-90	<0.002	<0.050	<0.0005	<0.200				
LF-8-TB	21-Dec-90	<0.002	<0.050	<0.0005	<0.200				
LF-8-BR	21-Dec-90	<0.002	<0.050	<0.0005	<0.200				
LF-B3-BR	19-Jun-91	<0.010	NA	<0.005	<0.004				
LF-B4-TB	19-Jun-91	<0.010	NA	<0.005	<0.004				
LF-4-TB	20-Jun-91	<0.010	NA	<0.005	<0.004				
LF-11-TB	20-Jun-91	<0.010	NA	<0.005	<0.004				
LF-11-BR	20-Jun-91	<0.010	NA	<0.005	<0.004				
Trip Blank	06-Aug-91	<0.010	NA	NA	<0.003				
LF-B3-TB	08-Jul-92	<0.010	<0.100	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-7-TB	09-Jul-92	<0.010	<0.100	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-3-TB	09-Jul-92	<0.010	<0.100	<0.005	<0.040	<0.010	<0.00027	<0.005	<0.010
LF-B4-TB	30-Dec-92	<0.010	<0.100	<0.005	<0.040	<0.010	<0.0002	<0.005	<0.010
LF-B4-BR	30-Dec-92	<0.010	<0.100	<0.005	<0.040	<0.010	<0.0002	<0.005	<0.010
LF-7-TB	09-Jun-93	<0.010	<0.100	<0.005	<0.003	<0.010	<0.0002	<0.005	<0.010

TABLE 4
SUMMARY OF HISTORICAL INORGANIC COMPOUNDS IN GROUNDWATER MONITORING WELLS
THE SHERWIN-WILLIAMS PLANT
EMERYVILLE, CALIFORNIA

(Results reported in parts per million [ppm])

Well Number	Date Sampled	Arsenic	Barium	Cadmium	Lead	Total Chromium	Mercury	Selenium	Silver
LF-10-FB	10-Jun-93	<0.100	<0.100	<0.005	<0.003	<0.010	<0.0002	<0.005	<0.010
Trip Blank	08-Jun-93	<0.010	<0.100	<0.005	<0.003	<0.010	<0.0002	<0.005	<0.010
LF-10-FB	06-Jan-94	<0.002	<0.01	<0.001	<0.001	<0.01	<0.0002	<0.004	<0.001
LF-24-FB	02-Aug-96	0.004	NA	NA	NA	NA	NA	NA	NA
LF-B3-FB	21-Nov-96	<0.002	NA	NA	NA	NA	NA	NA	NA
Trip Blank	21-Nov-96	<0.05	NA	NA	NA	NA	NA	NA	NA
LF-B4-FB	22-Nov-96	<0.002	NA	NA	NA	NA	NA	NA	NA
LF-B6-FB	25-Nov-96	<0.002	NA	NA	NA	NA	NA	NA	NA

Data entered by SDS. Proofed by KAC.

Notes :

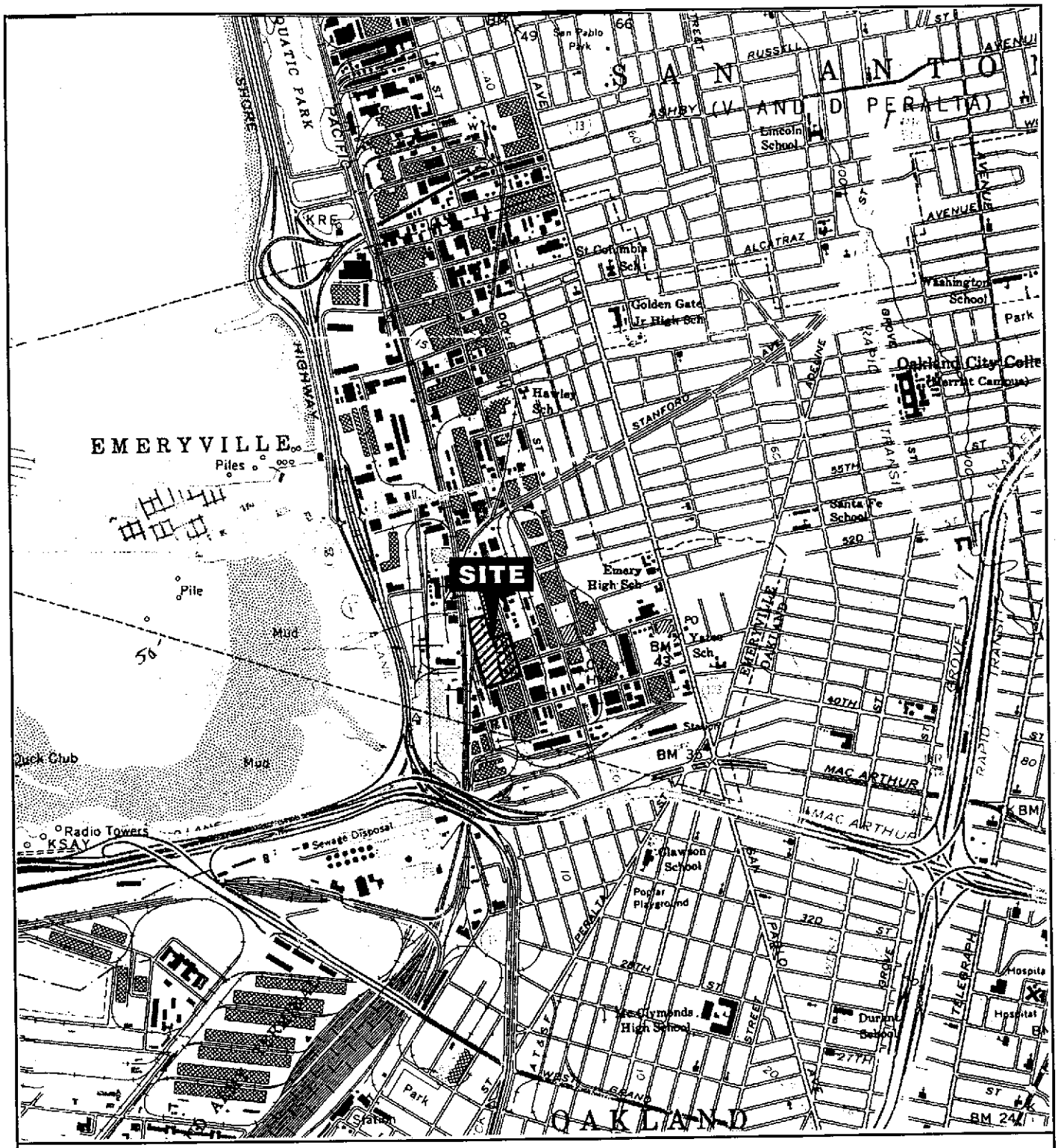
* = Data not validated based on positive results of trip blank (0.014 ppm) or bailer rinsate blank (0.013 ppm) of submitted samples. Detection Limit for arsenic for December 1989 sampling period set at 0.070 or 5 times the reported value of 0.014 ppm for trip blank sample.

** = Data not validatd based on positive results of bailer rinstate blank (0.004 ppm) of submitted samples.

NA = Not Analyzed

200/7000 = EPA Method 200/6000/7000 Series for selected metals.

Results of analyses for other inorganic compounds as metals that are not part of the annual and semiannual self-monitoring program for 1992 and 1993 are reported in Levine*Fricke, April 4, 1990, Table 10 and Levine*Fricke, December 20, 1991, Table 5.



Map Source:
U.S.G.S. Oakland West Quadrangle,
Oakland West, California
7.5 Minute Series

0 1/2 1 MILE

SHERWIN-WILLIAMS

Site Location Map

Levine-Fricke-Recon

Figure 1

Project No. 3435

3435SV01.CDR 102496RYL:KAG

3435

HORTON STREET

SHERWIN AVENUE

LF-13

LF-12

LF-B4

LF-B1

LF-1

LF-22

LF-B5

WAREHOUSE

WAREHOUSE AND OFFICE

SHOP

BOILER HOUSE

EX-3

TRI-BIO BIOLOGICAL TREATMENT SYSTEM

WAREHOUSE

IMPERVIOUS CAP WITHIN SLURRY WALL

LF-19

LF-7

LF-17

LF-2

FACTORY

FACTORY

LF-3

ANDCO ELECTROCHEMICAL TREATMENT SYSTEM

LF-18

DRAINAGE DITCH

LF-8

NPDES Storm Sewer Outfall

LF-B6

EX-1

LF-5

LF-B2

EX-2

WAREHOUSE OFFICE

TEMESCAL CREEK

TRUCK PARKING AREA

PAVED PARKING AREA

LF-26

LF-9

LF-4

WAREHOUSE

LF-20

LF-10

LF-B3

SOIL-BENTONITE SLURRY CUT-OFF WALL

LF-21

LF-11

LF-25

LF-14

LF-24

LF-15

LF-23

LF-16

EDGE OF PAVEMENT AND EASEMENT LINE

0 40 80 FEET

EXPLANATION

- Property boundary
- Chain link fence
- LF-10 A-zone monitoring well
- LF-B3 B-zone monitoring well
- EX-1 Groundwater extraction well location
- Monitoring well destroyed under permit
- Monitoring well destroyed or lost during slurry wall and cap construction activities
- Monitoring well destroyed during railway expansion activities

34358003.CDR 100896

SHERWIN-WILLIAMS

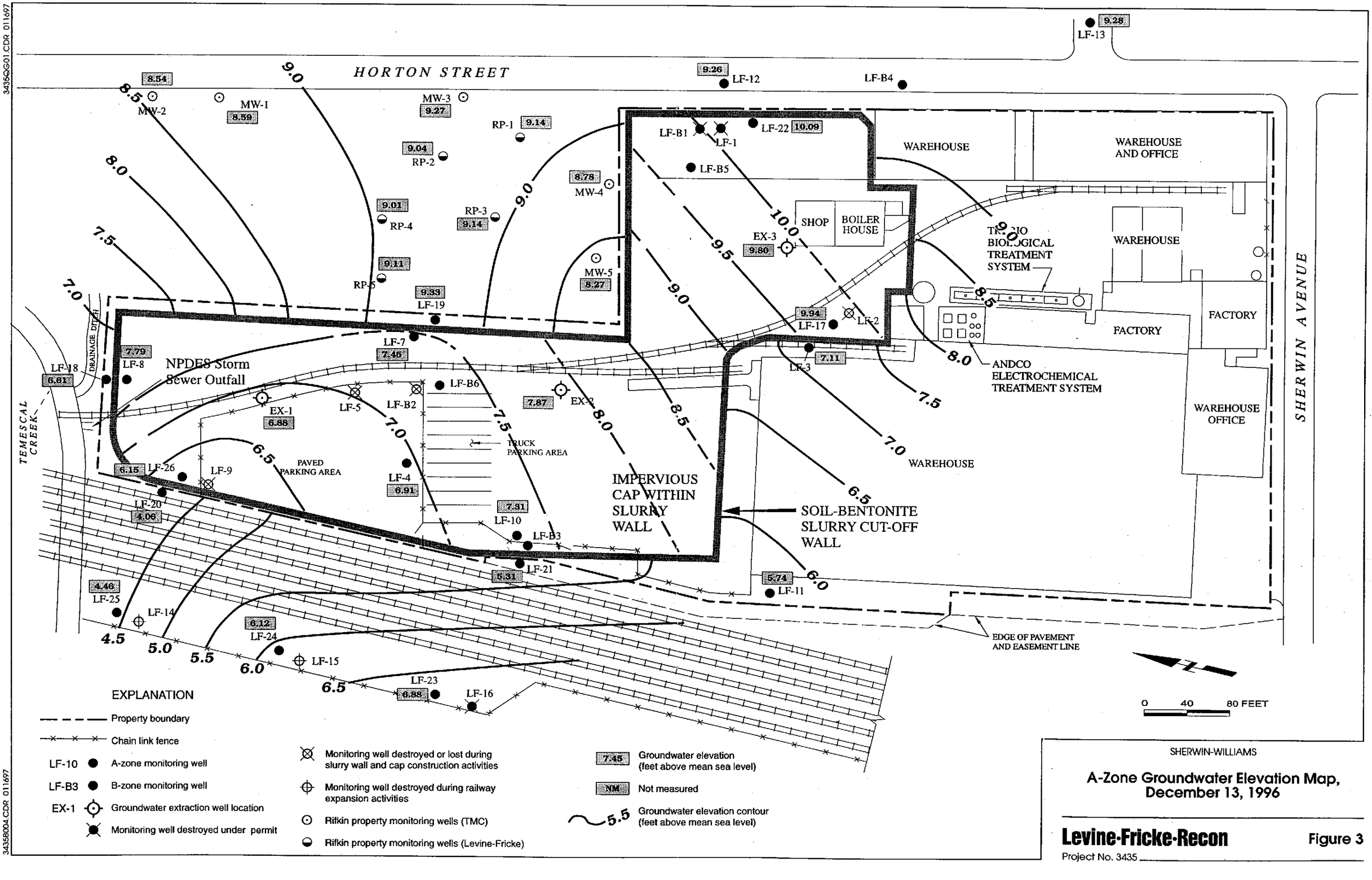
Site Plan
November-December 1996

Levine-Fricke-Recon

Figure 2

Project No. 3435

3435GG01.CDR 011697



3435B004.CDR 011697

SHERWIN-WILLIAMS

A-Zone Groundwater Elevation Map, December 13, 1996

Levine-Fricke-Recon Figure 3

Project No. 3435

3435G02.CDR 011697

HORTON STREET

LF-13

LF-12

LF-B4 8.91

LF-B1 LF-1

LF-22

LF-B5 9.04

WAREHOUSE

WAREHOUSE AND OFFICE

SHOP

BOILER HOUSE

9.0

EX-3

9.0

IMPERVIOUS CAP WITHIN SLURRY WALL

TRI-BIO BIOLOGICAL TREATMENT SYSTEM

WAREHOUSE

LF-19

LF-7

LF-2

LF-17

FACTORY

FACTORY

LF-18

DRAINAGE DITCH

LF-8

NPDES Storm Sewer Outfall

LF-3

ANDCO ELECTROCHEMICAL TREATMENT SYSTEM

LF-B6 7.66

EX-1

LF-5

LF-B2

EX-2

WAREHOUSE OFFICE

SHERWIN AVENUE

TEMESCAL CREEK

TRUCK PARKING AREA

8.0

LF-26

LF-9

PAVED PARKING AREA

LF-4

WAREHOUSE

LF-20

LF-10 7.60

LF-B3

SOIL-BENTONITE SLURRY CUT-OFF WALL

LF-21

LF-11

LF-25

LF-14

EDGE OF PAVEMENT AND EASEMENT LINE

LF-24

LF-15

LF-23

LF-16

0 40 80 FEET

EXPLANATION

- Property boundary
- Chain link fence
- LF-10 ● A-zone monitoring well
- LF-B3 ● B-zone monitoring well
- EX-1 ⊙ Groundwater extraction well location
- ✱ Monitoring well destroyed under permit
- ⊗ Monitoring well destroyed or lost during slurry wall and cap construction activities
- ⊕ Monitoring well destroyed during railway expansion activities
- 7.60 Groundwater elevation (feet above mean sea level)
- ~8.0 Groundwater elevation contour (feet above mean sea level); dashed where inferred

3435B003.CDR 100896KAG-ecm

SHERWIN-WILLIAMS

B-Zone Groundwater Elevation Map, December 13, 1996

Levine-Fricke-Recon Figure 4

Project No. 3435

3435QC05.CDR 012097

HORTON STREET

SHERWIN AVENUE

LF-13 <0.050 TPHd

LF-12 <0.050 TPHd

LF-B4 0.16/<0.05 TPHd

LF-B1 LF-1 LF-22

LF-B5 <0.050 TPHd

WAREHOUSE

WAREHOUSE AND OFFICE

SHOP

BOILER HOUSE

EX-3 0.210 TPHd

TRI-BIO BIOLOGICAL TREATMENT SYSTEM

WAREHOUSE

IMPERVIOUS CAP WITHIN SLURRY WALL

LF-19

LF-7

LF-17

LF-2

FACTORY

FACTORY

0.50 TPHd LF-18

DRAINAGE DITCH

LF-8

NPDES Storm Sewer Outfall

LF-3 9.3 TPHd

ANDCO ELECTROCHEMICAL TREATMENT SYSTEM

WAREHOUSE OFFICE

TEMESCAL CREEK

EX-1 2.4 TPHd

LF-5

LF-B2

LF-B6 0.34/0.34 TPHd

EX-2 0.69 TPHd

TRUCK PARKING AREA

LF-26

LF-9

PAVED PARKING AREA

LF-4

WAREHOUSE

3.2 TPHd LF-20

LF-10

LF-B3 0.44/0.53 TPHd

SOIL-BENTONITE SLURRY CUT-OFF WALL

LF-21 2.4 TPHd

1.5 TPHd LF-11

LF-25 0.31 TPHd

LF-14

LF-24 0.14 TPHd

LF-15

1.3 TPHd LF-23

LF-16

EDGE OF PAVEMENT AND EASEMENT LINE

0 40 80 FEET

EXPLANATION

- Property boundary
- Chain link fence
- LF-10 A-zone monitoring well
- LF-B3 B-zone monitoring well
- EX-1 Groundwater extraction well location
- Monitoring well destroyed under permit
- Monitoring well destroyed or lost during slurry wall and cap construction activities
- Monitoring well destroyed during railway expansion activities
- 0.16/<0.05 TPHd — Total petroleum hydrocarbons as diesel
  - Duplicate analysis
  - Concentration in parts per million (ppm)

34358003.CDR 100896

SHERWIN-WILLIAMS

Total Petroleum Hydrocarbons as Diesel, A-Zone and B-Zone Groundwater, November-December 1996

Levine-Fricke-Recon Figure 6

Project No. 3435

3435GC02.CDR 012097

HORTON STREET

LF-13 <0.05 TPHg

LF-12 <0.05 TPHg

LF-B4 <0.05/<0.05 TPHg

LF-B1 LF-1 LF-22

WAREHOUSE

WAREHOUSE AND OFFICE

LF-B5 0.06 TPHg

SHOP BOILER HOUSE

EX-3 <0.050 TPHg

IMPERVIOUS CAP WITHIN SLURRY WALL

TRI-BIO BIOLOGICAL TREATMENT SYSTEM

WAREHOUSE

LF-19

LF-7

LF-17 LF-2

FACTORY

FACTORY

<0.05 TPHg LF-18

DRAINAGE DITCH

LF-8 NPDES Storm Sewer Outfall

LF-3 75 TPHg

ANDCO ELECTROCHEMICAL TREATMENT SYSTEM

WAREHOUSE OFFICE

SHERWIN AVENUE

TEMESCAL CREEK

EX-1 3.1 TPHg

LF-5

LF-B2

LF-B6 0.21/0.18 TPHg

EX-2 45.0 TPHg

TRUCK PARKING AREA

LF-26

LF-9

PAVED PARKING AREA

LF-4

WAREHOUSE

LF-20 0.250 TPHg

LF-10

LF-B3 <0.05/<0.05 TPHg

SOIL-BENTONITE SLURRY CUT-OFF WALL

LF-21 0.060 TPHg

<0.05 TPHg LF-25

LF-14

LF-11 <0.05 TPHg

LF-24 <0.05 TPHg

LF-15

<0.05 TPHg LF-23

LF-16

EDGE OF PAVEMENT AND EASEMENT LINE

0 40 80 FEET

EXPLANATION

- Property boundary
- Chain link fence
- LF-10 A-zone monitoring well
- LF-B3 B-zone monitoring well
- EX-1 Ground-water extraction well location
- Monitoring well destroyed under permit
- Monitoring well destroyed or lost during slurry wall and cap construction activities
- Monitoring well destroyed during railway expansion activities
- <0.05/<0.05 TPHg — Total petroleum hydrocarbons as gasoline
  - Duplicate analysis
  - Concentration in parts per million (ppm)

3435B003.CDR 050696ECM:KAG

SHERWIN-WILLIAMS

Total Petroleum Hydrocarbons as Gasoline, A-Zone and B-Zone Groundwater, November-December 1996

Levine·Fricke·Recon Figure 7

Project No. 3435

3435GC08.CDR 012097

HORTON STREET

<0.002 As LF-13

0.022 As LF-12

LF-B4 <0.002/<0.002 As

LF-B1 LF-1 LF-22

LF-B5 0.11 As

WAREHOUSE

WAREHOUSE AND OFFICE

SHOP BOILER HOUSE

EX-3 270 As

IMPERVIOUS CAP WITHIN SLURRY WALL

TRI-BIO BIOLOGICAL TREATMENT SYSTEM

WAREHOUSE

LF-19

LF-7

LF-17 LF-2

FACTORY

FACTORY

0.043 As LF-18 DRAINAGE DITCH

LF-8 NPDES Storm Sewer Outfall

LF-3 72 As

ANDCO ELECTROCHEMICAL TREATMENT SYSTEM

LF-B6 0.027/0.030 As

EX-1 0.015 As

LF-5 LF-B2

EX-2 34 As

WAREHOUSE OFFICE

SHERWIN AVENUE

TEMESCAL CREEK

TRUCK PARKING AREA

LF-26 LF-9

PAVED PARKING AREA

LF-4

WAREHOUSE

LF-20 0.120 As

LF-10

LF-B3 0.006/0.004 As

SOIL-BENTONITE SLURRY CUT-OFF WALL

LF-21 0.38 As

LF-11 0.45 As

LF-25 0.14 As LF-14

EDGE OF PAVEMENT AND EASEMENT LINE

LF-24 0.010 As

LF-15

0.027 As LF-23

LF-16

0 40 80 FEET

EXPLANATION

- Property boundary
- Chain link fence
- LF-10 A-zone monitoring well
- LF-B3 B-zone monitoring well
- EX-1 Groundwater extraction well location
- Monitoring well destroyed under permit
- Monitoring well destroyed or lost during slurry wall and cap construction activities
- Monitoring well destroyed during railway expansion activities
- <0.002/<0.002 As — Arsenic; Duplicate analysis; Concentration in parts per million (ppm)

3435B003.CDR 100896

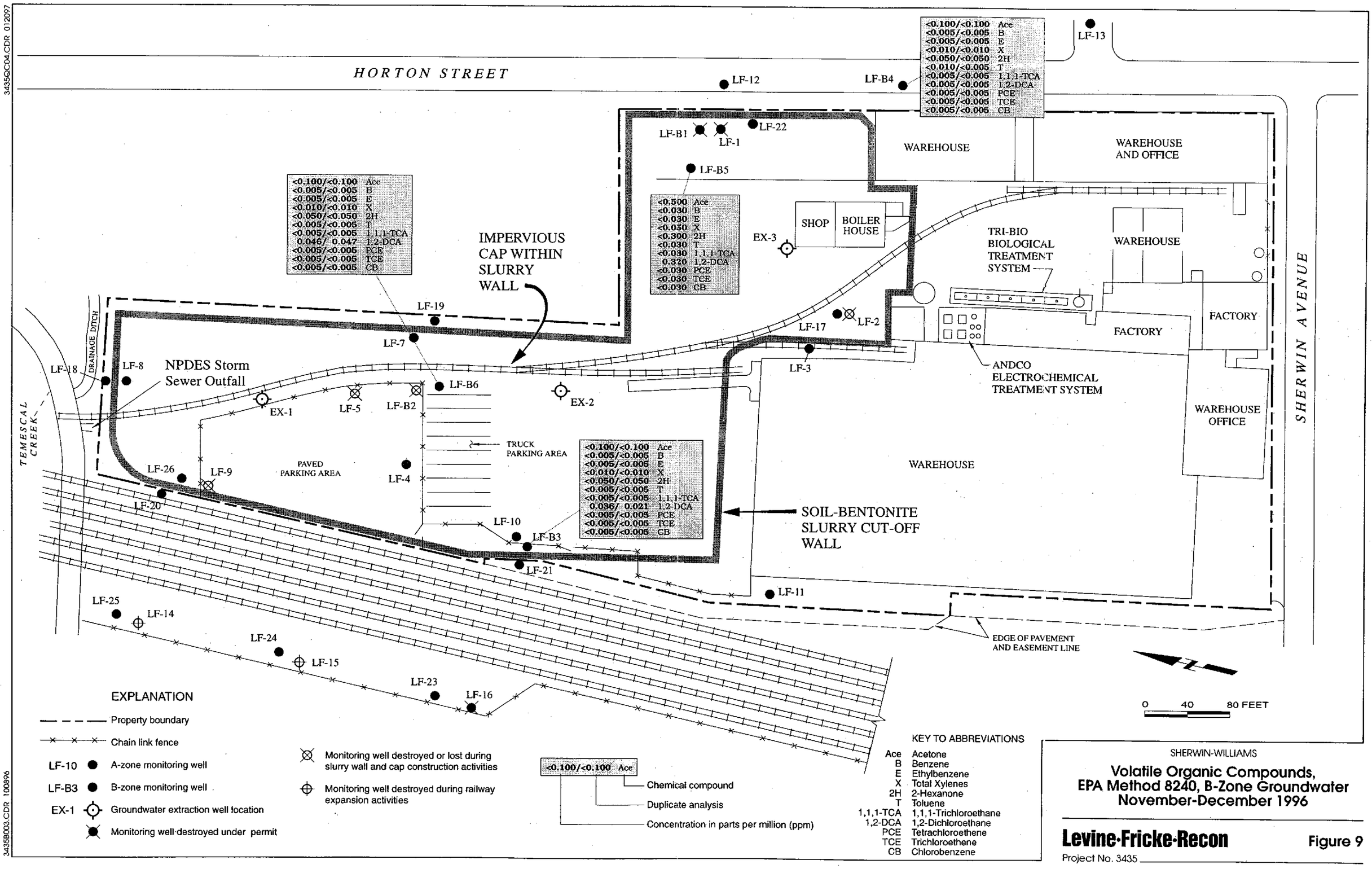
SHERWIN-WILLIAMS

Concentrations of Arsenic A-Zone Groundwater, November-December 1996

Levine-Fricke-Recon Figure 8

Project No. 3435

3435QC04.CDR 012097



3435B003.CDR 100896

SHERWIN-WILLIAMS

Volatile Organic Compounds, EPA Method 8240, B-Zone Groundwater November-December 1996

Levine·Fricke·Recon

Figure 9

Project No. 3435

3435GC09.CDR 012097

HORTON STREET

LF-13

LF-12

LF-B4 <0.002/<0.002 As

LF-B1 LF-1 LF-22

LF-B5 0.11 As

WAREHOUSE

WAREHOUSE AND OFFICE

SHOP BOILER HOUSE

EX-3

IMPERVIOUS CAP WITHIN SLURRY WALL

TRI-BIO BIOLOGICAL TREATMENT SYSTEM

WAREHOUSE

LF-19

LF-7

LF-17 LF-2

FACTORY

FACTORY

LF-18 DRAINAGE DITCH LF-8 NPDES Storm Sewer Outfall

LF-3

ANDCO ELECTROCHEMICAL TREATMENT SYSTEM

LF-B6 0.027/0.030 As

EX-1 LF-5 LF-B2 EX-2

WAREHOUSE OFFICE

SHERWIN AVENUE

TEMESCAL CREEK

TRUCK PARKING AREA

LF-26 LF-9 PAVED PARKING AREA LF-4

WAREHOUSE

LF-20

LF-10

LF-B3 0.006/0.004 As

SOIL-BENTONITE SLURRY CUT-OFF WALL

LF-21

LF-11

LF-25 LF-14

LF-24 LF-15

EDGE OF PAVEMENT AND EASEMENT LINE

LF-23 LF-16

0 40 80 FEET

EXPLANATION

- Property boundary
- Chain link fence
- LF-10 A-zone monitoring well
- LF-B3 B-zone monitoring well
- EX-1 Groundwater extraction well location
- Monitoring well destroyed under permit
- Monitoring well destroyed or lost during slurry wall and cap construction activities
- Monitoring well destroyed during railway expansion activities
- <0.002/<0.002 As — Arsenic; Duplicate analysis; Concentration in parts per million (ppm)

SHERWIN-WILLIAMS

Concentrations of Arsenic B-Zone Groundwater, November-December 1996

Levine-Fricke-Recon Figure 10

Project No. 3435

3435B003.CDR 100896

APPENDIX A

LABORATORY CERTIFICATES

American Environmental Network

Certificate of Analysis

DOHS Certification: 1172 AIHA Accreditation: 11134

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

ATT[redacted]
CLIENT PROJ. ID: 3435.00.04
CLIENT PROJ. NAME: SHERWIN WMS
C.O.C. NUMBER: 15228

REPORT DATE: 12/10/96
DATE(S) SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
AEN WORK ORDER: 9611308

PROJECT SUMMARY:

On November 21, 1996, this laboratory received 4 water sample(s).

Client requested sample(s) be analyzed for chemical parameters. Results of analysis are summarized on the following page(s). 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-RECON

SAMPLE ID: LF-B3-FB
AEN LAB NO: 9611308-01A
AEN WORK ORDER: 9611308
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/10/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in water	5030/GC-FID	ND	0.05	mg/L	12/02/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B3-FB
AEN LAB NO: 9611308-01D
AEN WORK ORDER: 9611308
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/10/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Volatile Organic Compounds	**EPA 8240**				
Acetone	67-64-1	ND	100	ug/L	11/27/96
Benzene	71-43-2	ND	5	ug/L	11/27/96
Bromodichloromethane	75-27-4	ND	5	ug/L	11/27/96
Bromoform	75-25-2	ND	5	ug/L	11/27/96
Bromomethane	74-83-9	ND	10	ug/L	11/27/96
2-Butanone	78-93-3	ND	100	ug/L	11/27/96
Carbon Disulfide	75-15-0	ND	10	ug/L	11/27/96
Carbon Tetrachloride	56-23-5	ND	5	ug/L	11/27/96
Chlorobenzene	108-90-7	ND	5	ug/L	11/27/96
Chloroethane	75-00-3	ND	10	ug/L	11/27/96
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	11/27/96
Chloroform	67-66-3	ND	5	ug/L	11/27/96
Chloromethane	74-87-3	ND	10	ug/L	11/27/96
Dibromochloromethane	124-48-1	ND	5	ug/L	11/27/96
1,1-Dichloroethane	75-34-3	ND	5	ug/L	11/27/96
1,2-Dichloroethane	107-06-2	ND	5	ug/L	11/27/96
1,1-Dichloroethene	75-35-4	ND	5	ug/L	11/27/96
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/L	11/27/96
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	11/27/96
1,2-Dichloropropane	78-87-5	ND	5	ug/L	11/27/96
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	11/27/96
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	11/27/96
Ethylbenzene	100-41-4	ND	5	ug/L	11/27/96
2-Hexanone	591-78-6	ND	50	ug/L	11/27/96
Methylene Chloride	75-09-2	ND	20	ug/L	11/27/96
4-Methyl-2-pentanone	108-10-1	ND	50	ug/L	11/27/96
Styrene	100-42-5	ND	5	ug/L	11/27/96
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	11/27/96
Tetrachloroethene	127-18-4	ND	5	ug/L	11/27/96
Toluene	108-88-3	ND	5	ug/L	11/27/96
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	11/27/96
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	11/27/96
Trichloroethene	79-01-6	ND	5	ug/L	11/27/96
Vinyl Acetate	108-05-4	ND	50	ug/L	11/27/96
Vinyl Chloride	75-01-4	ND	10	ug/L	11/27/96
Xylenes, Total	1330-20-7	ND	10	ug/L	11/27/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B3-FB
AEN LAB NO: 9611308-01G
AEN WORK ORDER: 9611308
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/10/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	11/21/96
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	11/26/96
Arsenic	EPA 7060	ND	0.002	mg/L	12/07/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B3
AEN LAB NO: 9611308-02A
AEN WORK ORDER: 9611308
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/10/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in water	5030/GC-FID	ND	0.05	mg/L	12/02/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B3
AEN LAB NO: 9611308-02D
AEN WORK ORDER: 9611308
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/10/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Volatile Organic Compounds	**EPA 8240**				
Acetone	67-64-1	ND	100	ug/L	11/27/96
Benzene	71-43-2	ND	5	ug/L	11/27/96
Bromodichloromethane	75-27-4	ND	5	ug/L	11/27/96
Bromoform	75-25-2	ND	5	ug/L	11/27/96
Bromomethane	74-83-9	ND	10	ug/L	11/27/96
2-Butanone	78-93-3	ND	100	ug/L	11/27/96
Carbon Disulfide	75-15-0	ND	10	ug/L	11/27/96
Carbon Tetrachloride	56-23-5	ND	5	ug/L	11/27/96
Chlorobenzene	108-90-7	ND	5	ug/L	11/27/96
Chloroethane	75-00-3	ND	10	ug/L	11/27/96
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	11/27/96
Chloroform	67-66-3	ND	5	ug/L	11/27/96
Chloromethane	74-87-3	ND	10	ug/L	11/27/96
Dibromochloromethane	124-48-1	ND	5	ug/L	11/27/96
1,1-Dichloroethane	75-34-3	ND	5	ug/L	11/27/96
1,2-Dichloroethane	107-06-2	36 *	5	ug/L	11/27/96
1,1-Dichloroethene	75-35-4	ND	5	ug/L	11/27/96
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/L	11/27/96
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	11/27/96
1,2-Dichloropropane	78-87-5	ND	5	ug/L	11/27/96
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	11/27/96
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	11/27/96
Ethylbenzene	100-41-4	ND	5	ug/L	11/27/96
2-Hexanone	591-78-6	ND	50	ug/L	11/27/96
Methylene Chloride	75-09-2	ND	20	ug/L	11/27/96
4-Methyl-2-pentanone	108-10-1	ND	50	ug/L	11/27/96
Styrene	100-42-5	ND	5	ug/L	11/27/96
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	11/27/96
Tetrachloroethene	127-18-4	ND	5	ug/L	11/27/96
Toluene	108-88-3	ND	5	ug/L	11/27/96
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	11/27/96
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	11/27/96
Trichloroethene	79-01-6	ND	5	ug/L	11/27/96
Vinyl Acetate	108-05-4	ND	50	ug/L	11/27/96
Vinyl Chloride	75-01-4	ND	10	ug/L	11/27/96
Xylenes, Total	1330-20-7	ND	10	ug/L	11/27/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B3
AEN LAB NO: 9611308-02G
AEN WORK ORDER: 9611308
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/10/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	11/25/96
TPH as Diesel	GC-FID	0.44 *	0.05	mg/L	11/30/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B3
AEN LAB NO: 9611308-02I
AEN WORK ORDER: 9611308
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/10/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	11/21/96
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	11/26/96
Arsenic	EPA 7060	0.006 *	0.002	mg/L	12/07/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B3
AEN LAB NO: 9611308-02J
AEN WORK ORDER: 9611308
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/10/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion, Metals by ICP	EPA 3010	-		Prep Date	11/26/96
Potassium	EPA 6010	4.4 *	0.1	mg/L	12/02/96
General Minerals					
Bicarbonate Alkalinity	SM 2320B	30 *	2	mg CaCO3/L	12/03/96
Carbonate Alkalinity	SM 2320B	130 *	2	mg CaCO3/L	12/03/96
Hydroxide Alkalinity	SM 2320B	ND	2	mg CaCO3/L	12/03/96
Calcium	EPA 6010	54 *	0.05	mg/L	12/02/96
Chloride	EPA 300	16 *	0.5	mg/L	11/27/96
Copper	EPA 6010	ND	0.01	mg/L	12/02/96
Iron	EPA 6010	ND	0.05	mg/L	12/02/96
Magnesium	EPA 6010	13 *	0.04	mg/L	12/02/96
Manganese	EPA 6010	0.30 *	0.005	mg/L	12/02/96
pH	EPA 9040	10.5	NA	std. units	11/21/96
Sodium	EPA 6010	28 *	0.1	mg/L	12/02/96
Sulfate	EPA 300	13 *	0.5	mg/L	11/27/96
Conductivity	EPA 120.1	370 *	20	umhos/cm	11/26/96
Total Dissolved Solids	EPA 160.1	260 *	10	mg/L	11/26/96
Hardness	SM 2340B	190 *	1	mg CaCO3/L	12/02/96
Zinc	EPA 6010	0.05 *	0.01	mg/L	12/02/96

Cations meq/L = 4.98
Anions meq/L = 5.55
Cation/Anion difference = 5.3%

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B103
AEN LAB NO: 9611308-03A
AEN WORK ORDER: 9611308
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/10/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in water	5030/GC-FID	ND	0.05	mg/L	12/02/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B103
AEN LAB NO: 9611308-03D
AEN WORK ORDER: 9611308
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/10/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Volatile Organic Compounds	**EPA 8240**				
Acetone	67-64-1	ND	100	ug/L	11/27/96
Benzene	71-43-2	ND	5	ug/L	11/27/96
Bromodichloromethane	75-27-4	ND	5	ug/L	11/27/96
Bromoform	75-25-2	ND	5	ug/L	11/27/96
Bromomethane	74-83-9	ND	10	ug/L	11/27/96
2-Butanone	78-93-3	ND	100	ug/L	11/27/96
Carbon Disulfide	75-15-0	ND	10	ug/L	11/27/96
Carbon Tetrachloride	56-23-5	ND	5	ug/L	11/27/96
Chlorobenzene	108-90-7	ND	5	ug/L	11/27/96
Chloroethane	75-00-3	ND	10	ug/L	11/27/96
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	11/27/96
Chloroform	67-66-3	ND	5	ug/L	11/27/96
Chloromethane	74-87-3	ND	10	ug/L	11/27/96
Dibromochloromethane	124-48-1	ND	5	ug/L	11/27/96
1,1-Dichloroethane	75-34-3	ND	5	ug/L	11/27/96
1,2-Dichloroethane	107-06-2	21 *	5	ug/L	11/27/96
1,1-Dichloroethene	75-35-4	ND	5	ug/L	11/27/96
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/L	11/27/96
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	11/27/96
1,2-Dichloropropane	78-87-5	ND	5	ug/L	11/27/96
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	11/27/96
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	11/27/96
Ethylbenzene	100-41-4	ND	5	ug/L	11/27/96
2-Hexanone	591-78-6	ND	50	ug/L	11/27/96
Methylene Chloride	75-09-2	ND	20	ug/L	11/27/96
4-Methyl-2-pentanone	108-10-1	ND	50	ug/L	11/27/96
Styrene	100-42-5	ND	5	ug/L	11/27/96
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	11/27/96
Tetrachloroethene	127-18-4	ND	5	ug/L	11/27/96
Toluene	108-88-3	ND	5	ug/L	11/27/96
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	11/27/96
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	11/27/96
Trichloroethene	79-01-6	ND	5	ug/L	11/27/96
Vinyl Acetate	108-05-4	ND	50	ug/L	11/27/96
Vinyl Chloride	75-01-4	ND	10	ug/L	11/27/96
Xylenes, Total	1330-20-7	ND	10	ug/L	11/27/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B103
AEN LAB NO: 9611308-03G
AEN WORK ORDER: 9611308
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/10/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	11/25/96
TPH as Diesel	GC-FID	0.53 *	0.05	mg/L	11/30/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B103
AEN LAB NO: 9611308-03I
AEN WORK ORDER: 9611308
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/10/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	11/21/96
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	11/26/96
Arsenic	EPA 7060	0.004 *	0.002	mg/L	12/07/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: TRIP BLANK
AEN LAB NO: 9611308-04A
AEN WORK ORDER: 9611308
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/10/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in water	5030/GC-FID	ND	0.05	mg/L	12/02/96

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

AEN (CALIFORNIA)
QUALITY CONTROL REPORT

AEN JOB NUMBER: 9611308

CLIENT PROJECT ID: 3435.00.04

Quality Control Summary

All 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: 9611308
AEN LAB NO: 1125-BLANK
DATE EXTRACTED: 11/25/96
DATE ANALYZED: 11/27/96
INSTRUMENT: C
MATRIX: WATER

Method Blank

Analyte	Result (mg/L)	Reporting Limit (mg/L)
Diesel	ND	0.05

QUALITY CONTROL DATA

METHOD: EPA 3510 GCFID

AEN JOB NO: 9611308
DATE(S) EXTRACTED: 11/25/96
INSTRUMENT: C
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery n-Pentacosane
11/30/96	LF-B3	02	94
11/30/96	LF-B103	03	98
QC Limits:			65-125

DATE EXTRACTED: 11/25/96
DATE ANALYZED: 11/27/96
SAMPLE SPIKED: 9611125-11
INSTRUMENT: C

Matrix Spike Recovery Summary

Analyte	Spike Added (mg/L)	Average Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Diesel	4.00	83	<1	60-110	15

QUALITY CONTROL DATA

METHOD: EPA 8020, 5030 GCFID

AEN JOB NO: 9611308
AEN LAB NO: 1202-BLANK
DATE ANALYZED: 12/02/96
INSTRUMENT: H
MATRIX: WATER

Method Blank

	CAS #	Result (mg/L)	Reporting Limit (mg/L)
HCs as Gasoline		ND	0.05

QUALITY CONTROL DATA

METHOD: EPA 8020, 5030 GCFID

AEN JOB NO: 9611308
INSTRUMENT: H
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery Fluorobenzene
12/02/96	LF-B3-FB	01	101
12/02/96	LF-B3	02	99
12/02/96	LF-B103	03	101
12/02/96	TRIP BLANK	04	102
QC Limits:			70-130

DATE ANALYZED: 12/02/96
SAMPLE SPIKED: 9611283-01
INSTRUMENT: H

Matrix Spike Recovery Summary

Analyte	Spike Added (ug/L)	Average Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Hydrocarbons as Gasoline	500	100	17	66-117	19

QUALITY CONTROL DATA

METHOD: EPA 8240

AEN JOB NO: 9611308
AEN LAB NO: 1127-BLANK
DATE ANALYZED: 11/27/96
INSTRUMENT: 13
MATRIX: WATER

Method Blank

Analyte	CAS #	Result (ug/L)	Reporting Limit (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	ND	5
trans-1,2-Dichloroethene	156-60-5	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	20
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, Total	1330-20-7	ND	10

QUALITY CONTROL DATA

METHOD: EPA 8240

AEN JOB NO: 9611308
INSTRUMENT: 13
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery 1,2-Dichloroethane-d_4	Toluene-d_8	p-Bromofluorobenzene
11/27/96	LF-B3-FB	01	93	91	90
11/27/96	LF-B3	02	88	93	92
11/27/96	LF-B103	03	94	90	89
QC Limits:			76-114	88-110	86-115

DATE ANALYZED: 11/28/96
SAMPLE SPIKED: 9611308-01
INSTRUMENT: 13

Matrix Spike Recovery Summary

Analyte	Spike Added (ug/L)	Average Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
1,1-Dichloroethene	50	90	4	59-155	25
Trichloroethene	50	105	1	71-157	25
Benzene	50	104	8	37-151	25
Toluene	50	89	4	47-150	25
Chlorobenzene	50	103	4	37-160	25

QUALITY CONTROL DATA

AEN JOB NO: 9611308
SAMPLE SPIKED: DI WATER
DATE(S) ANALYZED: 11/27-12/07/96
MATRIX: WATER

Method Blank and Spike Recovery Summary

Analyte	Inst./ Method	Blank Result (mg/L)	Spike Added (mg/L)	MS Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
As, Arsenic	4000/7060	ND	0.04	106	<1	82-140	13
Ca, Calcium	ICP/6010	ND	10.0	105	4	80-120	15
Cu, Copper	ICP/6010	ND	0.125	104	6	86-123	10
Fe, Iron	ICP/6010	ND	0.5	105	4	84-133	10
Mg, Magnesium	ICP/6010	ND	10.0	105	4	90-112	10
Mn, Manganese	ICP/6010	ND	0.25	106	3	93-122	10
Na, Sodium	ICP/6010	ND	10.0	106	5	86-112	10
Zn, Zinc	ICP/6010	ND	0.25	105	3	90-121	10
Chloride	DIONEX/300	ND	10.0	97	<1	80-120	15
Sulfate	DIONEX/300	ND	10.0	109	<1	80-120	15

END OF REPORT

[redacted]

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

9611308

Project No.: 3435.00.04	Field Logbook No.:	Date: 11-21-96	Serial No.: № 15228
Project Name: Sherwin Williams	Project Location: Emeryville, CA		
Sampler (Signature): [signature]			Samplers: JMR

9611308

	SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	TPHg	EPA 8240	TPHd	Dissolved As	General Minerals		HOLD	RUSH	REMARKS
	LF-21	11-21-96	8:50		9	H_2O	X	X	X	X					STD TAT
	LF-20	↓	9:30		9	↓	X	X	X	X					
	LF-25		10:30		9		X	X	X	X					Results to Kenton Gee
	LF-24		11:10		9		X	X	X	X					
	LF-23		11:45		9		X	X	X	X					Filter all metals in
01A-G	LF-B3-FB		13:45		7		X	X		X					Lab (dissolved As)
02A-K	LF-B3		13:50		11		X	X	X	X	X				
03A-I	LF-B103	↓	14:50		9	↓	X	X	X	X					General Minerals:
04A,B	Trip Blank	↓	9:00		2	↓	X								CATION-ANION Balance

RELINQUISHED BY: (Signature) [signature]	DATE 11-21-96	TIME 16:13	RECEIVED BY: (Signature) [signature]	DATE 11/21/96	TIME 16:13
RELINQUISHED BY: (Signature) [signature]	DATE 11-21-96	TIME 17:00	RECEIVED BY: (Signature) [signature]	DATE 11/21/96	TIME 17:40
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

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

American Environmental Network

Certificate of Analysis

DOHS Certification: 1172 AIHA Accreditation: 11134

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

ATTN: [redacted]
CLIENT PROJ. ID: 3435.00.04
CLIENT PROJ. NAME: SHERWIN WMS
C.O.C. NUMBER: 15228

REPORT DATE: 12/12/96
DATE(S) SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
AEN WORK ORDER: 9611307

PROJECT SUMMARY:

On November 21, 1996, this laboratory received 5 water sample(s).

Client requested sample(s) be analyzed for chemical parameters. Results of analysis are summarized on the following page(s). 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-RECON

SAMPLE ID: LF-21
AEN LAB NO: 9611307-01A
AEN WORK ORDER: 9611307
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in water	5030/GC-FID	0.06 *	0.05	mg/L	12/02/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-21
AEN LAB NO: 9611307-01D
AEN WORK ORDER: 9611307
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Volatile Organic Compounds	**EPA 8240**				
Acetone	67-64-1	ND	100	ug/L	11/27/96
Benzene	71-43-2	ND	5	ug/L	11/27/96
Bromodichloromethane	75-27-4	ND	5	ug/L	11/27/96
Bromoform	75-25-2	ND	5	ug/L	11/27/96
Bromomethane	74-83-9	ND	10	ug/L	11/27/96
2-Butanone	78-93-3	ND	100	ug/L	11/27/96
Carbon Disulfide	75-15-0	ND	10	ug/L	11/27/96
Carbon Tetrachloride	56-23-5	ND	5	ug/L	11/27/96
Chlorobenzene	108-90-7	ND	5	ug/L	11/27/96
Chloroethane	75-00-3	ND	10	ug/L	11/27/96
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	11/27/96
Chloroform	67-66-3	ND	5	ug/L	11/27/96
Chloromethane	74-87-3	ND	10	ug/L	11/27/96
Dibromochloromethane	124-48-1	ND	5	ug/L	11/27/96
1,1-Dichloroethane	75-34-3	ND	5	ug/L	11/27/96
1,2-Dichloroethane	107-06-2	ND	5	ug/L	11/27/96
1,1-Dichloroethene	75-35-4	ND	5	ug/L	11/27/96
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/L	11/27/96
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	11/27/96
1,2-Dichloropropane	78-87-5	ND	5	ug/L	11/27/96
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	11/27/96
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	11/27/96
Ethylbenzene	100-41-4	ND	5	ug/L	11/27/96
2-Hexanone	591-78-6	ND	50	ug/L	11/27/96
Methylene Chloride	75-09-2	ND	20	ug/L	11/27/96
4-Methyl-2-pentanone	108-10-1	ND	50	ug/L	11/27/96
Styrene	100-42-5	ND	5	ug/L	11/27/96
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	11/27/96
Tetrachloroethene	127-18-4	ND	5	ug/L	11/27/96
Toluene	108-88-3	ND	5	ug/L	11/27/96
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	11/27/96
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	11/27/96
Trichloroethene	79-01-6	ND	5	ug/L	11/27/96
Vinyl Acetate	108-05-4	ND	50	ug/L	11/27/96
Vinyl Chloride	75-01-4	ND	10	ug/L	11/27/96
Xylenes, Total	1330-20-7	ND	10	ug/L	11/27/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-21
AEN LAB NO: 9611307-01G
AEN WORK ORDER: 9611307
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	11/25/96
TPH as Diesel	GC-FID	2.4 *	0.05	mg/L	11/28/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-21
AEN LAB NO: 9611307-01I
AEN WORK ORDER: 9611307
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	11/21/96
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	11/25/96
Arsenic	EPA 7060	0.38 *	0.002	mg/L	12/07/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-20
AEN LAB NO: 9611307-02A
AEN WORK ORDER: 9611307
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in water	5030/GC-FID	0.25 *	0.05	mg/L	12/02/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-20
AEN LAB NO: 9611307-02D
AEN WORK ORDER: 9611307
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Volatile Organic Compounds	**EPA 8240**				
Acetone	67-64-1	ND	100	ug/L	11/27/96
Benzene	71-43-2	ND	5	ug/L	11/27/96
Bromodichloromethane	75-27-4	ND	5	ug/L	11/27/96
Bromoform	75-25-2	ND	5	ug/L	11/27/96
Bromomethane	74-83-9	ND	10	ug/L	11/27/96
2-Butanone	78-93-3	ND	100	ug/L	11/27/96
Carbon Disulfide	75-15-0	ND	10	ug/L	11/27/96
Carbon Tetrachloride	56-23-5	ND	5	ug/L	11/27/96
Chlorobenzene	108-90-7	ND	5	ug/L	11/27/96
Chloroethane	75-00-3	ND	10	ug/L	11/27/96
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	11/27/96
Chloroform	67-66-3	ND	5	ug/L	11/27/96
Chloromethane	74-87-3	ND	10	ug/L	11/27/96
Dibromochloromethane	124-48-1	ND	5	ug/L	11/27/96
1,1-Dichloroethane	75-34-3	ND	5	ug/L	11/27/96
1,2-Dichloroethane	107-06-2	ND	5	ug/L	11/27/96
1,1-Dichloroethene	75-35-4	ND	5	ug/L	11/27/96
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/L	11/27/96
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	11/27/96
1,2-Dichloropropane	78-87-5	ND	5	ug/L	11/27/96
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	11/27/96
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	11/27/96
Ethylbenzene	100-41-4	ND	5	ug/L	11/27/96
2-Hexanone	591-78-6	ND	50	ug/L	11/27/96
Methylene Chloride	75-09-2	ND	20	ug/L	11/27/96
4-Methyl-2-pentanone	108-10-1	ND	50	ug/L	11/27/96
Styrene	100-42-5	ND	5	ug/L	11/27/96
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	11/27/96
Tetrachloroethene	127-18-4	ND	5	ug/L	11/27/96
Toluene	108-88-3	ND	5	ug/L	11/27/96
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	11/27/96
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	11/27/96
Trichloroethene	79-01-6	ND	5	ug/L	11/27/96
Vinyl Acetate	108-05-4	ND	50	ug/L	11/27/96
Vinyl Chloride	75-01-4	ND	10	ug/L	11/27/96
Xylenes, Total	1330-20-7	ND	10	ug/L	11/27/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-20
AEN LAB NO: 9611307-02G
AEN WORK ORDER: 9611307
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	11/25/96
TPH as Diesel	GC-FID	3.2 *	0.05	mg/L	11/28/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-20
AEN LAB NO: 9611307-02I
AEN WORK ORDER: 9611307
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	11/21/96
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	11/25/96
Arsenic	EPA 7060	0.12 *	0.002	mg/L	12/07/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-25
AEN LAB NO: 9611307-03A
AEN WORK ORDER: 9611307
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in water	5030/GC-FID	ND	0.05	mg/L	12/02/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-25
AEN LAB NO: 9611307-03D
AEN WORK ORDER: 9611307
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Volatile Organic Compounds	**EPA 8240**				
Acetone	67-64-1	ND	100	ug/L	11/26/96
Benzene	71-43-2	ND	5	ug/L	11/26/96
Bromodichloromethane	75-27-4	ND	5	ug/L	11/26/96
Bromoform	75-25-2	ND	5	ug/L	11/26/96
Bromomethane	74-83-9	ND	10	ug/L	11/26/96
2-Butanone	78-93-3	ND	100	ug/L	11/26/96
Carbon Disulfide	75-15-0	ND	10	ug/L	11/26/96
Carbon Tetrachloride	56-23-5	ND	5	ug/L	11/26/96
Chlorobenzene	108-90-7	ND	5	ug/L	11/26/96
Chloroethane	75-00-3	ND	10	ug/L	11/26/96
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	11/26/96
Chloroform	67-66-3	ND	5	ug/L	11/26/96
Chloromethane	74-87-3	ND	10	ug/L	11/26/96
Dibromochloromethane	124-48-1	ND	5	ug/L	11/26/96
1,1-Dichloroethane	75-34-3	ND	5	ug/L	11/26/96
1,2-Dichloroethane	107-06-2	ND	5	ug/L	11/26/96
1,1-Dichloroethene	75-35-4	ND	5	ug/L	11/26/96
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/L	11/26/96
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	11/26/96
1,2-Dichloropropane	78-87-5	ND	5	ug/L	11/26/96
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	11/26/96
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	11/26/96
Ethylbenzene	100-41-4	ND	5	ug/L	11/26/96
2-Hexanone	591-78-6	ND	50	ug/L	11/26/96
Methylene Chloride	75-09-2	ND	20	ug/L	11/26/96
4-Methyl-2-pentanone	108-10-1	ND	50	ug/L	11/26/96
Styrene	100-42-5	ND	5	ug/L	11/26/96
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	11/26/96
Tetrachloroethene	127-18-4	ND	5	ug/L	11/26/96
Toluene	108-88-3	ND	5	ug/L	11/26/96
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	11/26/96
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	11/26/96
Trichloroethene	79-01-6	ND	5	ug/L	11/26/96
Vinyl Acetate	108-05-4	ND	50	ug/L	11/26/96
Vinyl Chloride	75-01-4	ND	10	ug/L	11/26/96
Xylenes, Total	1330-20-7	ND	10	ug/L	11/26/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-25
AEN LAB NO: 9611307-03G
AEN WORK ORDER: 9611307
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	11/25/96
TPH as Diesel	GC-FID	0.31 *	0.05	mg/L	11/28/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-25
AEN LAB NO: 9611307-03I
AEN WORK ORDER: 9611307
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	11/21/96
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	11/25/96
Arsenic	EPA 7060	0.14 *	0.002	mg/L	12/07/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-24
AEN LAB NO: 9611307-04A
AEN WORK ORDER: 9611307
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in water	5030/GC-FID	ND	0.05	mg/L	12/02/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-24
AEN LAB NO: 9611307-04D
AEN WORK ORDER: 9611307
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Volatile Organic Compounds	**EPA 8240**				
Acetone	67-64-1	ND	100	ug/L	11/26/96
Benzene	71-43-2	ND	5	ug/L	11/26/96
Bromodichloromethane	75-27-4	ND	5	ug/L	11/26/96
Bromoform	75-25-2	ND	5	ug/L	11/26/96
Bromomethane	74-83-9	ND	10	ug/L	11/26/96
2-Butanone	78-93-3	ND	100	ug/L	11/26/96
Carbon Disulfide	75-15-0	ND	10	ug/L	11/26/96
Carbon Tetrachloride	56-23-5	ND	5	ug/L	11/26/96
Chlorobenzene	108-90-7	ND	5	ug/L	11/26/96
Chloroethane	75-00-3	ND	10	ug/L	11/26/96
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	11/26/96
Chloroform	67-66-3	ND	5	ug/L	11/26/96
Chloromethane	74-87-3	ND	10	ug/L	11/26/96
Dibromochloromethane	124-48-1	ND	5	ug/L	11/26/96
1,1-Dichloroethane	75-34-3	ND	5	ug/L	11/26/96
1,2-Dichloroethane	107-06-2	ND	5	ug/L	11/26/96
1,1-Dichloroethene	75-35-4	ND	5	ug/L	11/26/96
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/L	11/26/96
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	11/26/96
1,2-Dichloropropane	78-87-5	ND	5	ug/L	11/26/96
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	11/26/96
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	11/26/96
Ethylbenzene	100-41-4	ND	5	ug/L	11/26/96
2-Hexanone	591-78-6	ND	50	ug/L	11/26/96
Methylene Chloride	75-09-2	ND	20	ug/L	11/26/96
4-Methyl-2-pentanone	108-10-1	ND	50	ug/L	11/26/96
Styrene	100-42-5	ND	5	ug/L	11/26/96
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	11/26/96
Tetrachloroethene	127-18-4	ND	5	ug/L	11/26/96
Toluene	108-88-3	ND	5	ug/L	11/26/96
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	11/26/96
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	11/26/96
Trichloroethene	79-01-6	ND	5	ug/L	11/26/96
Vinyl Acetate	108-05-4	ND	50	ug/L	11/26/96
Vinyl Chloride	75-01-4	ND	10	ug/L	11/26/96
Xylenes, Total	1330-20-7	ND	10	ug/L	11/26/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-24
AEN LAB NO: 9611307-04G
AEN WORK ORDER: 9611307
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	11/25/96
TPH as Diesel	GC-FID	0.14 *	0.05	mg/L	11/28/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-24
AEN LAB NO: 9611307-04I
AEN WORK ORDER: 9611307
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	11/21/96
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	11/25/96
Arsenic	EPA 7060	0.010 *	0.002	mg/L	12/07/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-23
AEN LAB NO: 9611307-05A
AEN WORK ORDER: 9611307
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in water	5030/GC-FID	ND	0.05	mg/L	12/02/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-23
AEN LAB NO: 9611307-05D
AEN WORK ORDER: 9611307
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Volatile Organic Compounds	**EPA 8240**				
Acetone	67-64-1	ND	100	ug/L	11/26/96
Benzene	71-43-2	ND	5	ug/L	11/26/96
Bromodichloromethane	75-27-4	ND	5	ug/L	11/26/96
Bromoform	75-25-2	ND	5	ug/L	11/26/96
Bromomethane	74-83-9	ND	10	ug/L	11/26/96
2-Butanone	78-93-3	ND	100	ug/L	11/26/96
Carbon Disulfide	75-15-0	ND	10	ug/L	11/26/96
Carbon Tetrachloride	56-23-5	ND	5	ug/L	11/26/96
Chlorobenzene	108-90-7	ND	5	ug/L	11/26/96
Chloroethane	75-00-3	ND	10	ug/L	11/26/96
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	11/26/96
Chloroform	67-66-3	ND	5	ug/L	11/26/96
Chloromethane	74-87-3	ND	10	ug/L	11/26/96
Dibromochloromethane	124-48-1	ND	5	ug/L	11/26/96
1,1-Dichloroethane	75-34-3	ND	5	ug/L	11/26/96
1,2-Dichloroethane	107-06-2	ND	5	ug/L	11/26/96
1,1-Dichloroethene	75-35-4	ND	5	ug/L	11/26/96
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/L	11/26/96
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	11/26/96
1,2-Dichloropropane	78-87-5	ND	5	ug/L	11/26/96
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	11/26/96
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	11/26/96
Ethylbenzene	100-41-4	ND	5	ug/L	11/26/96
2-Hexanone	591-78-6	ND	50	ug/L	11/26/96
Methylene Chloride	75-09-2	ND	20	ug/L	11/26/96
4-Methyl-2-pentanone	108-10-1	ND	50	ug/L	11/26/96
Styrene	100-42-5	ND	5	ug/L	11/26/96
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	11/26/96
Tetrachloroethene	127-18-4	ND	5	ug/L	11/26/96
Toluene	108-88-3	ND	5	ug/L	11/26/96
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	11/26/96
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	11/26/96
Trichloroethene	79-01-6	ND	5	ug/L	11/26/96
Vinyl Acetate	108-05-4	ND	50	ug/L	11/26/96
Vinyl Chloride	75-01-4	ND	10	ug/L	11/26/96
Xylenes, Total	1330-20-7	ND	10	ug/L	11/26/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-23
AEN LAB NO: 9611307-05G
AEN WORK ORDER: 9611307
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	11/25/96
TPH as Diesel	GC-FID	1.3 *	0.05	mg/L	11/28/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-23
AEN LAB NO: 9611307-05I
AEN WORK ORDER: 9611307
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/21/96
DATE RECEIVED: 11/21/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	11/21/96
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	11/25/96
Arsenic	EPA 7060	0.027 *	0.002	mg/L	12/07/96

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

AEN (CALIFORNIA)
QUALITY CONTROL REPORT

AEN JOB NUMBER: 9611307

CLIENT PROJECT ID: 3435.00.04

Quality Control Summary

All 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: 9611307
AEN LAB NO: 1125-BLANK
DATE EXTRACTED: 11/25/96
DATE ANALYZED: 11/27/96
INSTRUMENT: C
MATRIX: WATER

Method Blank

Analyte	Result (mg/L)	Reporting Limit (mg/L)
Diesel	ND	0.05

QUALITY CONTROL DATA

METHOD: EPA 3510 GCFID

AEN JOB NO: 9611307
DATE(S) EXTRACTED: 11/25/96
INSTRUMENT: C
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery n-Pentacosane
11/28/96	LF-21	01	88
11/28/96	LF-20	02	90
11/28/96	LF-25	03	82
11/28/96	LF-24	04	87
11/28/96	LF-23	05	95
QC Limits:			65-125

DATE EXTRACTED: 11/25/96
DATE ANALYZED: 11/27/96
SAMPLE SPIKED: 9611125-11
INSTRUMENT: C

Matrix Spike Recovery Summary

Analyte	Spike Added (mg/L)	Average Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Diesel	4.00	83	<1	60-110	15

QUALITY CONTROL DATA

METHOD: EPA 8020, 5030 GCFID

AEN JOB NO: 9611307
AEN LAB NO: 1202-BLANK
DATE ANALYZED: 12/02/96
INSTRUMENT: E
MATRIX: WATER

Method Blank

	CAS #	Result (mg/L)	Reporting Limit (mg/L)
HCs as Gasoline		ND	0.05

QUALITY CONTROL DATA

METHOD: EPA 8020, 5030 GCFID

AEN JOB NO: 9611307
INSTRUMENT: E
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery Fluorobenzene
12/02/96	LF-21	01	99
12/02/96	LF-20	02	100
12/02/96	LF-25	03	102
12/02/96	LF-24	04	101
12/02/96	LF-23	05	100
QC Limits:			70-130

DATE ANALYZED: 12/05/96
SAMPLE SPIKED: 9611298-02
INSTRUMENT: E

Matrix Spike Recovery Summary

Analyte	Spike Added (ug/L)	MS Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Hydrocarbons as Gasoline	500	105	<1	66-117	19

QUALITY CONTROL DATA

METHOD: EPA 8240

AEN JOB NO: 9611307
AEN LAB NO: 1126-BLANK
DATE ANALYZED: 11/26/96
INSTRUMENT: 13
MATRIX: WATER

Method Blank

Analyte	CAS #	Result (ug/L)	Reporting Limit (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	ND	5
trans-1,2-Dichloroethene	156-60-5	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	20
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, Total	1330-20-7	ND	10

QUALITY CONTROL DATA

METHOD: EPA 8240

AEN JOB NO: 9611307
AEN LAB NO: 1127-BLANK
DATE ANALYZED: 11/27/96
INSTRUMENT: 13
MATRIX: WATER

Method Blank

Analyte	CAS #	Result (ug/L)	Reporting Limit (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	ND	5
trans-1,2-Dichloroethene	156-60-5	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	20
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, Total	1330-20-7	ND	10

QUALITY CONTROL DATA

METHOD: EPA 8240

AEN JOB NO: 9611307
INSTRUMENT: 13
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery 1,2-Dichloroethane-d_4	Toluene-d_8	p-Bromofluorobenzene
11/27/96	LF-21	01	81	90	93
11/27/96	LF-20	02	82	94	97
11/26/96	LF-25	03	94	89	90
11/26/96	LF-24	04	96	90	91
11/26/96	LF-23	05	87	90	92
QC Limits:			76-114	88-110	86-115

DATE ANALYZED: 11/28/96
SAMPLE SPIKED: 9611308-01
INSTRUMENT: 13

Matrix Spike Recovery Summary

Analyte	Spike Added (ug/L)	Average Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
1,1-Dichloroethene	50	90	4	59-155	25
Trichloroethene	50	105	1	71-157	25
Benzene	50	104	8	37-151	25
Toluene	50	89	4	47-150	25
Chlorobenzene	50	103	4	37-160	25

QUALITY CONTROL DATA

AEN JOB NO: 9611307
SAMPLE SPIKED: DI WATER
DATE(S) ANALYZED: 12/07/96
MATRIX: WATER

Method Blank and Spike Recovery Summary

Analyte	Inst./ Method	Blank Result (mg/L)	Spike Added (mg/L)	MS Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
As, Arsenic	4000/7060	ND	0.04	106	<1	82-140	13

END OF REPORT

R-3, S-3 R-5, S-C INORG.

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

9611307

Project No.: 3435.00.04
Field Logbook No.:
Date: 11-21-96
Serial No.: № 15228

Project Name: Sherwin Williams
Project Location: Emeryville, CA

Sampler (Signature) [signature]
Samplers: JMR

	SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	TPHg	EPA 8240	TPHd	Dissolved As	General Minerals		HOLD	RUSH	REMARKS
01A-I	LF-21	11-21-96	8:50		9	H2O	X	X	X	X					STD TAT
02A-I	LF-20	↓	9:30		9	↓	X	X	X	X					
03A-I	LF-25		10:30		9		X	X	X	X					Results to Kanton Gee
04A-I	LF-24		11:10		9		X	X	X	X					
05A-I	LF-23		11:45		9		X	X	X	X					Filter all metals in
9611308	LF-B3-FB		13:45		7		X	X		X					Lab (dissolved As)
	LF-B3		13:50		11		X	X	X	X	X				
	LF-B103	↓	14:50		9	↓	X	X	X	X					General Minerals:
	Trip Blank	↓	9:00		2	↓	X								CATION-ANION Balance

RELINQUISHED BY: (Signature) [signature]	DATE 11-21-96	TIME 16:13	RECEIVED BY: (Signature) [signature]	DATE 11/21/96	TIME 16:13
RELINQUISHED BY: (Signature) [signature]	DATE 11-21-96	TIME 17:00	RECEIVED BY: (Signature) [signature]	DATE 11/21/96	TIME 17:40
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

Shipping Copy (White) Lab Copy (Green) File Copy (Yellow) Field Copy (Pink)

FORM NO. 86/COC/ARF

American Environmental Network

Certificate of Analysis

DOHS Certification: 1172 AIHA Accreditation: 11134

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

ATTN: [redacted]
CLIENT PROJ. ID: 3435.00.04
CLIENT PROJ. NAME: SHERWIN WMS
C.O.C. NUMBER: 15148

REPORT DATE: 12/12/96
DATE(S) SAMPLED: 11/22/96
DATE RECEIVED: 11/22/96
AEN WORK ORDER: 9611330

PROJECT SUMMARY:

On November 22, 1996, this laboratory received 6 water sample(s).

Client requested sample(s) be analyzed for chemical parameters. Results of analysis are summarized on the following page(s). 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-RECON

SAMPLE ID: LF-B4-FB
AEN LAB NO: 9611330-01A
AEN WORK ORDER: 9611330
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/22/96
DATE RECEIVED: 11/22/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in water	5030/GC-FID	ND	0.05	mg/L	12/05/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B4-FB
AEN LAB NO: 9611330-01D
AEN WORK ORDER: 9611330
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/22/96
DATE RECEIVED: 11/22/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Volatile Organic Compounds	**EPA 8240**				
Acetone	67-64-1	ND	100	ug/L	12/02/96
Benzene	71-43-2	ND	5	ug/L	12/02/96
Bromodichloromethane	75-27-4	ND	5	ug/L	12/02/96
Bromoform	75-25-2	ND	5	ug/L	12/02/96
Bromomethane	74-83-9	ND	10	ug/L	12/02/96
2-Butanone	78-93-3	ND	100	ug/L	12/02/96
Carbon Disulfide	75-15-0	ND	10	ug/L	12/02/96
Carbon Tetrachloride	56-23-5	ND	5	ug/L	12/02/96
Chlorobenzene	108-90-7	ND	5	ug/L	12/02/96
Chloroethane	75-00-3	ND	10	ug/L	12/02/96
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	12/02/96
Chloroform	67-66-3	ND	5	ug/L	12/02/96
Chloromethane	74-87-3	ND	10	ug/L	12/02/96
Dibromochloromethane	124-48-1	ND	5	ug/L	12/02/96
1,1-Dichloroethane	75-34-3	ND	5	ug/L	12/02/96
1,2-Dichloroethane	107-06-2	ND	5	ug/L	12/02/96
1,1-Dichloroethene	75-35-4	ND	5	ug/L	12/02/96
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/L	12/02/96
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	12/02/96
1,2-Dichloropropane	78-87-5	ND	5	ug/L	12/02/96
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	12/02/96
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	12/02/96
Ethylbenzene	100-41-4	ND	5	ug/L	12/02/96
2-Hexanone	591-78-6	ND	50	ug/L	12/02/96
Methylene Chloride	75-09-2	ND	20	ug/L	12/02/96
4-Methyl-2-pentanone	108-10-1	ND	50	ug/L	12/02/96
Styrene	100-42-5	ND	5	ug/L	12/02/96
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	12/02/96
Tetrachloroethene	127-18-4	ND	5	ug/L	12/02/96
Toluene	108-88-3	ND	5	ug/L	12/02/96
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	12/02/96
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	12/02/96
Trichloroethene	79-01-6	ND	5	ug/L	12/02/96
Vinyl Acetate	108-05-4	ND	50	ug/L	12/02/96
Vinyl Chloride	75-01-4	ND	10	ug/L	12/02/96
Xylenes, Total	1330-20-7	ND	10	ug/L	12/02/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B4-FB
AEN LAB NO: 9611330-01G
AEN WORK ORDER: 9611330
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/22/96
DATE RECEIVED: 11/22/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	11/22/96
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	11/29/96
Arsenic	EPA 7060	ND	0.002	mg/L	12/07/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B4
AEN LAB NO: 9611330-02A
AEN WORK ORDER: 9611330
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/22/96
DATE RECEIVED: 11/22/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in water	5030/GC-FID	ND	0.05	mg/L	12/05/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B4
AEN LAB NO: 9611330-02D
AEN WORK ORDER: 9611330
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/22/96
DATE RECEIVED: 11/22/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Volatile Organic Compounds	**EPA 8240**				
Acetone	67-64-1	ND	100	ug/L	12/02/96
Benzene	71-43-2	ND	5	ug/L	12/02/96
Bromodichloromethane	75-27-4	ND	5	ug/L	12/02/96
Bromoform	75-25-2	ND	5	ug/L	12/02/96
Bromomethane	74-83-9	ND	10	ug/L	12/02/96
2-Butanone	78-93-3	ND	100	ug/L	12/02/96
Carbon Disulfide	75-15-0	ND	10	ug/L	12/02/96
Carbon Tetrachloride	56-23-5	ND	5	ug/L	12/02/96
Chlorobenzene	108-90-7	ND	5	ug/L	12/02/96
Chloroethane	75-00-3	ND	10	ug/L	12/02/96
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	12/02/96
Chloroform	67-66-3	ND	5	ug/L	12/02/96
Chloromethane	74-87-3	ND	10	ug/L	12/02/96
Dibromochloromethane	124-48-1	ND	5	ug/L	12/02/96
1,1-Dichloroethane	75-34-3	ND	5	ug/L	12/02/96
1,2-Dichloroethane	107-06-2	ND	5	ug/L	12/02/96
1,1-Dichloroethene	75-35-4	ND	5	ug/L	12/02/96
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/L	12/02/96
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	12/02/96
1,2-Dichloropropane	78-87-5	ND	5	ug/L	12/02/96
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	12/02/96
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	12/02/96
Ethylbenzene	100-41-4	ND	5	ug/L	12/02/96
2-Hexanone	591-78-6	ND	50	ug/L	12/02/96
Methylene Chloride	75-09-2	ND	20	ug/L	12/02/96
4-Methyl-2-pentanone	108-10-1	ND	50	ug/L	12/02/96
Styrene	100-42-5	ND	5	ug/L	12/02/96
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	12/02/96
Tetrachloroethene	127-18-4	ND	5	ug/L	12/02/96
Toluene	108-88-3	10 *	5	ug/L	12/02/96
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	12/02/96
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	12/02/96
Trichloroethene	79-01-6	ND	5	ug/L	12/02/96
Vinyl Acetate	108-05-4	ND	50	ug/L	12/02/96
Vinyl Chloride	75-01-4	ND	10	ug/L	12/02/96
Xylenes, Total	1330-20-7	ND	10	ug/L	12/02/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B4
AEN LAB NO: 9611330-02G
AEN WORK ORDER: 9611330
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/22/96
DATE RECEIVED: 11/22/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	11/27/96
TPH as Diesel	GC-FID	0.16 *	0.05	mg/L	11/30/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B4
AEN LAB NO: 9611330-02I
AEN WORK ORDER: 9611330
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/22/96
DATE RECEIVED: 11/22/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	11/22/96
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	11/29/96
Arsenic	EPA 7060	ND	0.002	mg/L	12/07/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B4
AEN LAB NO: 9611330-02J
AEN WORK ORDER: 9611330
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/22/96
DATE RECEIVED: 11/22/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT		REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion, Metals by ICP	EPA 3010	-			Prep Date	11/29/96
Potassium	EPA 6010	0.6	*	0.1	mg/L	12/04/96
General Minerals						
Bicarbonate Alkalinity	SM 2320B	240	*	2	mg CaCO3/L	12/03/96
Carbonate Alkalinity	SM 2320B	ND		2	mg CaCO3/L	12/03/96
Hydroxide Alkalinity	SM 2320B	ND		2	mg CaCO3/L	12/03/96
Calcium	EPA 6010	41	*	0.05	mg/L	12/04/96
Chloride	EPA 300	37	*	0.5	mg/L	12/04/96
Copper	EPA 6010	ND		0.01	mg/L	12/04/96
Iron	EPA 6010	ND		0.05	mg/L	12/04/96
Magnesium	EPA 6010	25	*	0.04	mg/L	12/04/96
Manganese	EPA 6010	0.95	*	0.005	mg/L	12/04/96
pH	EPA 9040	6.9		NA	std. units	11/22/96
Sodium	EPA 6010	38	*	0.1	mg/L	12/04/96
Sulfate	EPA 300	29	*	0.5	mg/L	12/04/96
Conductivity	EPA 120.1	580	*	20	umhos/cm	11/26/96
Total Dissolved Solids	EPA 160.1	340	*	10	mg/L	11/26/96
Hardness	SM 2340B	210	*	1	mg CaCO3/L	12/04/96
Zinc	EPA 6010	0.04	*	0.01	mg/L	12/04/96

Cations meq/L = 5.8
Anions meq/L = 5.6
Cation/Anion difference = 1.6%

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B104
AEN LAB NO: 9611330-03A
AEN WORK ORDER: 9611330
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/22/96
DATE RECEIVED: 11/22/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in water	5030/GC-FID	ND	0.05	mg/L	12/05/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B104
AEN LAB NO: 9611330-03D
AEN WORK ORDER: 9611330
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/22/96
DATE RECEIVED: 11/22/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Volatile Organic Compounds	**EPA 8240**				
Acetone	67-64-1	ND	100	ug/L	12/02/96
Benzene	71-43-2	ND	5	ug/L	12/02/96
Bromodichloromethane	75-27-4	ND	5	ug/L	12/02/96
Bromoform	75-25-2	ND	5	ug/L	12/02/96
Bromomethane	74-83-9	ND	10	ug/L	12/02/96
2-Butanone	78-93-3	ND	100	ug/L	12/02/96
Carbon Disulfide	75-15-0	ND	10	ug/L	12/02/96
Carbon Tetrachloride	56-23-5	ND	5	ug/L	12/02/96
Chlorobenzene	108-90-7	ND	5	ug/L	12/02/96
Chloroethane	75-00-3	ND	10	ug/L	12/02/96
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	12/02/96
Chloroform	67-66-3	ND	5	ug/L	12/02/96
Chloromethane	74-87-3	ND	10	ug/L	12/02/96
Dibromochloromethane	124-48-1	ND	5	ug/L	12/02/96
1,1-Dichloroethane	75-34-3	ND	5	ug/L	12/02/96
1,2-Dichloroethane	107-06-2	ND	5	ug/L	12/02/96
1,1-Dichloroethene	75-35-4	ND	5	ug/L	12/02/96
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/L	12/02/96
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	12/02/96
1,2-Dichloropropane	78-87-5	ND	5	ug/L	12/02/96
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	12/02/96
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	12/02/96
Ethylbenzene	100-41-4	ND	5	ug/L	12/02/96
2-Hexanone	591-78-6	ND	50	ug/L	12/02/96
Methylene Chloride	75-09-2	ND	20	ug/L	12/02/96
4-Methyl-2-pentanone	108-10-1	ND	50	ug/L	12/02/96
Styrene	100-42-5	ND	5	ug/L	12/02/96
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	12/02/96
Tetrachloroethene	127-18-4	ND	5	ug/L	12/02/96
Toluene	108-88-3	ND	5	ug/L	12/02/96
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	12/02/96
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	12/02/96
Trichloroethene	79-01-6	ND	5	ug/L	12/02/96
Vinyl Acetate	108-05-4	ND	50	ug/L	12/02/96
Vinyl Chloride	75-01-4	ND	10	ug/L	12/02/96
Xylenes, Total	1330-20-7	ND	10	ug/L	12/02/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B104
AEN LAB NO: 9611330-03G
AEN WORK ORDER: 9611330
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/22/96
DATE RECEIVED: 11/22/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	11/27/96
TPH as Diesel	GC-FID	ND	0.05	mg/L	11/30/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B104
AEN LAB NO: 9611330-03I
AEN WORK ORDER: 9611330
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/22/96
DATE RECEIVED: 11/22/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	11/22/96
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	11/29/96
Arsenic	EPA 7060	ND	0.002	mg/L	12/07/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B5
AEN LAB NO: 9611330-04A
AEN WORK ORDER: 9611330
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/22/96
DATE RECEIVED: 11/22/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in water	5030/GC-FID	0.06 *	0.05	mg/L	12/05/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B5
AEN LAB NO: 9611330-04D
AEN WORK ORDER: 9611330
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/22/96
DATE RECEIVED: 11/22/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Volatile Organic Compounds	**EPA 8240**				
Acetone	67-64-1	ND	500	ug/L	12/03/96
Benzene	71-43-2	ND	30	ug/L	12/03/96
Bromodichloromethane	75-27-4	ND	30	ug/L	12/03/96
Bromoform	75-25-2	ND	30	ug/L	12/03/96
Bromomethane	74-83-9	ND	50	ug/L	12/03/96
2-Butanone	78-93-3	ND	500	ug/L	12/03/96
Carbon Disulfide	75-15-0	ND	50	ug/L	12/03/96
Carbon Tetrachloride	56-23-5	ND	30	ug/L	12/03/96
Chlorobenzene	108-90-7	ND	30	ug/L	12/03/96
Chloroethane	75-00-3	ND	50	ug/L	12/03/96
2-Chloroethyl Vinyl Ether	110-75-8	ND	50	ug/L	12/03/96
Chloroform	67-66-3	ND	30	ug/L	12/03/96
Chloromethane	74-87-3	ND	50	ug/L	12/03/96
Dibromochloromethane	124-48-1	ND	30	ug/L	12/03/96
1,1-Dichloroethane	75-34-3	ND	30	ug/L	12/03/96
1,2-Dichloroethane	107-06-2	320 *	30	ug/L	12/03/96
1,1-Dichloroethene	75-35-4	ND	30	ug/L	12/03/96
cis-1,2-Dichloroethene	156-59-2	ND	30	ug/L	12/03/96
trans-1,2-Dichloroethene	156-60-5	ND	30	ug/L	12/03/96
1,2-Dichloropropane	78-87-5	ND	30	ug/L	12/03/96
cis-1,3-Dichloropropene	10061-01-5	ND	30	ug/L	12/03/96
trans-1,3-Dichloropropene	10061-02-6	ND	30	ug/L	12/03/96
Ethylbenzene	100-41-4	ND	30	ug/L	12/03/96
2-Hexanone	591-78-6	ND	300	ug/L	12/03/96
Methylene Chloride	75-09-2	ND	100	ug/L	12/03/96
4-Methyl-2-pentanone	108-10-1	ND	300	ug/L	12/03/96
Styrene	100-42-5	ND	30	ug/L	12/03/96
1,1,2,2-Tetrachloroethane	79-34-5	ND	30	ug/L	12/03/96
Tetrachloroethene	127-18-4	ND	30	ug/L	12/03/96
Toluene	108-88-3	ND	30	ug/L	12/03/96
1,1,1-Trichloroethane	71-55-6	ND	30	ug/L	12/03/96
1,1,2-Trichloroethane	79-00-5	ND	30	ug/L	12/03/96
Trichloroethene	79-01-6	ND	30	ug/L	12/03/96
Vinyl Acetate	108-05-4	ND	300	ug/L	12/03/96
Vinyl Chloride	75-01-4	ND	50	ug/L	12/03/96
Xylenes, Total	1330-20-7	ND	50	ug/L	12/03/96

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B5
AEN LAB NO: 9611330-04D
AEN WORK ORDER: 9611330
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/22/96
DATE RECEIVED: 11/22/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED

Reporting limits elevated due to high levels of target compounds. Sample run at dilution.

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B5
AEN LAB NO: 9611330-04G
AEN WORK ORDER: 9611330
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/22/96
DATE RECEIVED: 11/22/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	11/27/96
TPH as Diesel	GC-FID	ND	0.05	mg/L	11/30/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B5
AEN LAB NO: 9611330-04I
AEN WORK ORDER: 9611330
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/22/96
DATE RECEIVED: 11/22/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	11/22/96
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	11/29/96
Arsenic	EPA 7060	0.11 *	0.002	mg/L	12/07/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B5
AEN LAB NO: 9611330-04J
AEN WORK ORDER: 9611330
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/22/96
DATE RECEIVED: 11/22/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT		REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion, Metals by ICP	EPA 3010	-			Prep Date	11/29/96
Potassium	EPA 6010	0.7	*	0.1	mg/L	12/04/96
General Minerals						
Bicarbonate Alkalinity	SM 2320B	250	*	2	mg CaCO3/L	12/03/96
Carbonate Alkalinity	SM 2320B	ND		2	mg CaCO3/L	12/03/96
Hydroxide Alkalinity	SM 2320B	ND		2	mg CaCO3/L	12/03/96
Calcium	EPA 6010	58	*	0.05	mg/L	12/04/96
Chloride	EPA 300	28	*	0.5	mg/L	12/04/96
Copper	EPA 6010	ND		0.01	mg/L	12/04/96
Iron	EPA 6010	ND		0.05	mg/L	12/04/96
Magnesium	EPA 6010	35	*	0.04	mg/L	12/04/96
Manganese	EPA 6010	1.6	*	0.005	mg/L	12/04/96
pH	EPA 9040	6.9		NA	std. units	11/22/96
Sodium	EPA 6010	47	*	0.1	mg/L	12/04/96
Sulfate	EPA 300	120	*	0.5	mg/L	12/04/96
Conductivity	EPA 120.1	780	*	20	umhos/cm	11/26/96
Total Dissolved Solids	EPA 160.1	460	*	10	mg/L	11/26/96
Hardness	SM 2340B	290	*	1	mg CaCO3/L	12/04/96
Zinc	EPA 6010	0.03	*	0.01	mg/L	12/04/96

Cations meq/L = 7.8
Anions meq/L = 7.4
Cation/Anion difference = 2.9%

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-7
AEN LAB NO: 9611330-05A
AEN WORK ORDER: 9611330
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/22/96
DATE RECEIVED: 11/22/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion, Metals by ICP	EPA 3010	-		Prep Date	11/29/96
Potassium	EPA 6010	11 *	0.1	mg/L	12/04/96
General Minerals					
Bicarbonate Alkalinity	SM 2320B	190 *	2	mg CaCO3/L	12/03/96
Carbonate Alkalinity	SM 2320B	ND	2	mg CaCO3/L	12/03/96
Hydroxide Alkalinity	SM 2320B	ND	2	mg CaCO3/L	12/03/96
Calcium	EPA 6010	67 *	0.05	mg/L	12/04/96
Chloride	EPA 300	23 *	0.5	mg/L	12/04/96
Copper	EPA 6010	ND	0.01	mg/L	12/04/96
Iron	EPA 6010	39 *	0.05	mg/L	12/04/96
Magnesium	EPA 6010	32 *	0.04	mg/L	12/04/96
Manganese	EPA 6010	2.9 *	0.005	mg/L	12/04/96
pH	EPA 9040	6.5	NA	std. units	11/22/96
Sodium	EPA 6010	31 *	0.1	mg/L	12/04/96
Sulfate	EPA 300	220 *	0.5	mg/L	12/04/96
Conductivity	EPA 120.1	950 *	20	umhos/cm	11/26/96
Total Dissolved Solids	EPA 160.1	730 *	10	mg/L	11/26/96
Hardness	SM 2340B	300 *	1	mg CaCO3/L	12/04/96
Zinc	EPA 6010	0.12 *	0.01	mg/L	12/04/96

Cations meq/L = 7.6
Anions meq/L = 8.3
Cation/Anion difference = 4.7%

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

LEVINE-FRICKE-RECON

SAMPLE ID: TRIP BLANK
AEN LAB NO: 9611330-06A
AEN WORK ORDER: 9611330
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/22/96
DATE RECEIVED: 11/22/96
REPORT DATE: 12/12/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in water	5030/GC-FID	ND	0.05	mg/L	12/05/96

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

AEN (CALIFORNIA)
QUALITY CONTROL REPORT

AEN JOB NUMBER: 9611330

CLIENT PROJECT ID: 3435.00.04

Quality Control Summary

All 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: 9611330
AEN LAB NO: 1127-BLANK
DATE EXTRACTED: 11/27/96
DATE ANALYZED: 11/30/96
INSTRUMENT: C
MATRIX: WATER

Method Blank

Analyte	Result (mg/L)	Reporting Limit (mg/L)
Diesel	ND	0.05

QUALITY CONTROL DATA

METHOD: EPA 3510 GCFID

AEN JOB NO: 9611330
DATE(S) EXTRACTED: 11/27/96
INSTRUMENT: C
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery n-Pentacosane
11/30/96	LF-B4	02	82
11/30/96	LF-B104	03	104
11/30/96	LF-B5	04	97
QC Limits:			65-125

DATE EXTRACTED: 11/25/96
DATE ANALYZED: 11/30/96
SAMPLE SPIKED: 9611125-05
INSTRUMENT: C

Matrix Spike Recovery Summary

Analyte	Spike Added (mg/L)	Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Diesel	4.00	94	1	60-110	15

QUALITY CONTROL DATA

METHOD: EPA 8020, 5030 GCFID

AEN JOB NO: 9611330
AEN LAB NO: 1202-BLANK
DATE ANALYZED: 12/02/96
INSTRUMENT: H
MATRIX: WATER

Method Blank

	CAS #	Result (mg/L)	Reporting Limit (mg/L)
HCs as Gasoline		ND	0.05

QUALITY CONTROL DATA

METHOD: EPA 8020, 5030 GCFID

AEN JOB NO: 9611330
INSTRUMENT: H
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery Fluorobenzene
12/05/96	LF-B4-FB	01	101
12/05/96	LF-B4	02	101
12/05/96	LF-B104	03	103
12/05/96	LF-B5	04	101
12/05/96	TRIP BLANK	06	99
QC Limits:			70-130

DATE ANALYZED: 12/04/96
SAMPLE SPIKED: 9611348-03
INSTRUMENT: H

Matrix Spike Recovery Summary

Analyte	Spike Added (ug/L)	Average Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Hydrocarbons as Gasoline	500	95	4	66-117	19

QUALITY CONTROL DATA

METHOD: EPA 8240

AEN JOB NO: 9611330
AEN LAB NO: 1202-BLANK
DATE ANALYZED: 12/02/96
INSTRUMENT: 13
MATRIX: WATER

Method Blank

Analyte	CAS #	Result (ug/L)	Reporting Limit (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	ND	5
trans-1,2-Dichloroethene	156-60-5	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	20
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, Total	1330-20-7	ND	10

QUALITY CONTROL DATA

METHOD: EPA 8240

AEN JOB NO: 9611330
AEN LAB NO: 1203-BLANK
DATE ANALYZED: 12/03/96
INSTRUMENT: 13
MATRIX: WATER

Method Blank

Analyte	CAS #	Result (ug/L)	Reporting Limit (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	ND	5
trans-1,2-Dichloroethene	156-60-5	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	20
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, Total	1330-20-7	ND	10

QUALITY CONTROL DATA

METHOD: EPA 8240

AEN JOB NO: 9611330
INSTRUMENT: 13
MATRIX: WATER

Surrogate Standard Recovery Summary

			Percent Recovery		
Date Analyzed	Client Id.	Lab Id.	1,2-Dichloroethane-d_4	Toluene-d_8	p-Bromofluorobenzene
12/02/96	LF-B4-FB	01	97	90	93
12/02/96	LF-B4	02	92	89	94
12/02/96	LF-B104	03	104	90	96
12/03/96	LF-B5	04	87	91	88
QC Limits:			76-114	88-110	86-115

DATE ANALYZED: 12/01/96
SAMPLE SPIKED: 9611373-01
INSTRUMENT: 13

Matrix Spike Recovery Summary

				QC Limits	
Analyte	Spike Added (ug/L)	Average Percent Recovery	RPD	Percent Recovery	RPD
1,1-Dichloroethene	50	109	4	59-155	25
Trichloroethene	50	118	7	71-157	25
Benzene	50	124	5	37-151	25
Toluene	50	99	7	47-150	25
Chlorobenzene	50	98	9	37-160	25

QUALITY CONTROL DATA

AEN JOB NO: 9611330
SAMPLE SPIKED: DI WATER
DATE(S) ANALYZED: 12/04-07/96
MATRIX: WATER

Method Blank and Spike Recovery Summary

Analyte	Inst./ Method	Blank Result (mg/L)	Spike Added (mg/L)	MS Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
As, Arsenic	4000/7060	ND	0.04	114	5	82-140	13
Ca, Calcium	ICP/6010	ND	10.0	97	1	80-120	15
Cu, Copper	ICP/6010	ND	0.125	94	1	86-123	10
Fe, Iron	ICP/6010	ND	0.5	92	3	84-133	10
K, Potassium	ICP/6010	ND	10.0	92	1	86-112	10
Mg, Magnesium	ICP/6010	ND	10.0	94	2	90-112	10
Mn, Manganese	ICP/6010	ND	0.25	94	2	93-122	10
Na, Sodium	ICP/6010	ND	10.0	94	2	86-112	10
Zn, Zinc	ICP/6010	ND	0.25	95	3	90-121	10
Chloride	DIONEX/300	ND	10.0	98	1	80-120	15
Sulfate	DIONEX/300	ND	10.0	112	1	80-120	15

END OF REPORT

9611330

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.: 3435.00.04	Field Logbook No.:	Date: 11-22-96	Serial No.: Nº 15149
Project Name: Sherwin Williams	Project Location: Emeryville, CA		
Sampler (Signature): J. M. Rodger			Samplers: JMR

SAMPLES						ANALYSES								
SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	TPHg	EPA 8240	TPHd	Dissolved As	General Minerals		HOLD	RUSH	REMARKS
LF-B4-FB	11-22-96	11:30	01A-G	7	H_2O	X	X		X					STD TAT
LF-B4		11:35	02A-K	11		X	X	X	X	X				
LF-B104		12:35	03A-I	9		X	X	X	X					Results to Kentan Gee
LF-B5		12:50	04A-K	11		X	X	X	X	X				
LF-7		13:40	05AB	2						X				Filter all metals in lab
TripBlank		11:05	06AB	2		X								
														General Minerals: CATION-ANION Balance

RELINQUISHED BY: (Signature) J. M. Rodger	DATE 11-22-96	TIME 1625	RECEIVED BY: (Signature) Michael E. Hendricks	DATE 11/22/96	TIME 1625
RELINQUISHED BY: (Signature) Michael E. Hendricks	DATE 11/22/96	TIME 1705	RECEIVED BY: (Signature) Ronald C. Jensen	DATE 11/22/96	TIME 17:05
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

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

American Environmental Network

Certificate of Analysis

DOHS Certification: 1172 AIHA Accreditation: 11134

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

ATTN: [redacted]
CLIENT PROJ. ID: 3435.00-04
CLIENT PROJ. NAME: SHERWIN WMS
C.O.C. NUMBER: 15172

REPORT DATE: 12/11/96
DATE(S) SAMPLED: 11/25/96
DATE RECEIVED: 11/25/96
AEN WORK ORDER: 9611353

PROJECT SUMMARY:

On November 25, 1996, this laboratory received 3 water sample(s).

Client requested sample(s) be analyzed for chemical parameters. Results of analysis are summarized on the following page(s). 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-RECON

SAMPLE ID: LF-B6-FB
AEN LAB NO: 9611353-01A
AEN WORK ORDER: 9611353
CLIENT PROJ. ID: 3435.00-04

DATE SAMPLED: 11/25/96
DATE RECEIVED: 11/25/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in water	5030/GC-FID	ND	0.05	mg/L	12/05/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B6-FB
AEN LAB NO: 9611353-01D
AEN WORK ORDER: 9611353
CLIENT PROJ. ID: 3435.00-04

DATE SAMPLED: 11/25/96
DATE RECEIVED: 11/25/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Volatile Organic Compounds	**EPA 8240**				
Acetone	67-64-1	ND	100	ug/L	12/02/96
Benzene	71-43-2	ND	5	ug/L	12/02/96
Bromodichloromethane	75-27-4	ND	5	ug/L	12/02/96
Bromoform	75-25-2	ND	5	ug/L	12/02/96
Bromomethane	74-83-9	ND	10	ug/L	12/02/96
2-Butanone	78-93-3	ND	100	ug/L	12/02/96
Carbon Disulfide	75-15-0	ND	10	ug/L	12/02/96
Carbon Tetrachloride	56-23-5	ND	5	ug/L	12/02/96
Chlorobenzene	108-90-7	ND	5	ug/L	12/02/96
Chloroethane	75-00-3	ND	10	ug/L	12/02/96
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	12/02/96
Chloroform	67-66-3	ND	5	ug/L	12/02/96
Chloromethane	74-87-3	ND	10	ug/L	12/02/96
Dibromochloromethane	124-48-1	ND	5	ug/L	12/02/96
1,1-Dichloroethane	75-34-3	ND	5	ug/L	12/02/96
1,2-Dichloroethane	107-06-2	ND	5	ug/L	12/02/96
1,1-Dichloroethene	75-35-4	ND	5	ug/L	12/02/96
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/L	12/02/96
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	12/02/96
1,2-Dichloropropane	78-87-5	ND	5	ug/L	12/02/96
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	12/02/96
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	12/02/96
Ethylbenzene	100-41-4	ND	5	ug/L	12/02/96
2-Hexanone	591-78-6	ND	50	ug/L	12/02/96
Methylene Chloride	75-09-2	ND	20	ug/L	12/02/96
4-Methyl-2-pentanone	108-10-1	ND	50	ug/L	12/02/96
Styrene	100-42-5	ND	5	ug/L	12/02/96
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	12/02/96
Tetrachloroethene	127-18-4	ND	5	ug/L	12/02/96
Toluene	108-88-3	ND	5	ug/L	12/02/96
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	12/02/96
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	12/02/96
Trichloroethene	79-01-6	ND	5	ug/L	12/02/96
Vinyl Acetate	108-05-4	ND	50	ug/L	12/02/96
Vinyl Chloride	75-01-4	ND	10	ug/L	12/02/96
Xylenes, Total	1330-20-7	ND	10	ug/L	12/02/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B6-FB
AEN LAB NO: 9611353-01G
AEN WORK ORDER: 9611353
CLIENT PROJ. ID: 3435.00-04

DATE SAMPLED: 11/25/96
DATE RECEIVED: 11/25/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	11/25/96
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	12/02/96
Arsenic	EPA 7060	ND	0.002	mg/L	12/07/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B6
AEN LAB NO: 9611353-02A
AEN WORK ORDER: 9611353
CLIENT PROJ. ID: 3435.00-04

DATE SAMPLED: 11/25/96
DATE RECEIVED: 11/25/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in water	5030/GC-FID	0.21 *	0.05	mg/L	12/09/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B6
AEN LAB NO: 9611353-02D
AEN WORK ORDER: 9611353
CLIENT PROJ. ID: 3435.00-04

DATE SAMPLED: 11/25/96
DATE RECEIVED: 11/25/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Volatile Organic Compounds	**EPA 8240**				
Acetone	67-64-1	ND	100	ug/L	12/02/96
Benzene	71-43-2	ND	5	ug/L	12/02/96
Bromodichloromethane	75-27-4	ND	5	ug/L	12/02/96
Bromoform	75-25-2	ND	5	ug/L	12/02/96
Bromomethane	74-83-9	ND	10	ug/L	12/02/96
2-Butanone	78-93-3	ND	100	ug/L	12/02/96
Carbon Disulfide	75-15-0	ND	10	ug/L	12/02/96
Carbon Tetrachloride	56-23-5	ND	5	ug/L	12/02/96
Chlorobenzene	108-90-7	ND	5	ug/L	12/02/96
Chloroethane	75-00-3	ND	10	ug/L	12/02/96
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	12/02/96
Chloroform	67-66-3	ND	5	ug/L	12/02/96
Chloromethane	74-87-3	ND	10	ug/L	12/02/96
Dibromochloromethane	124-48-1	ND	5	ug/L	12/02/96
1,1-Dichloroethane	75-34-3	ND	5	ug/L	12/02/96
1,2-Dichloroethane	107-06-2	46 *	5	ug/L	12/02/96
1,1-Dichloroethene	75-35-4	ND	5	ug/L	12/02/96
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/L	12/02/96
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	12/02/96
1,2-Dichloropropane	78-87-5	ND	5	ug/L	12/02/96
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	12/02/96
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	12/02/96
Ethylbenzene	100-41-4	ND	5	ug/L	12/02/96
2-Hexanone	591-78-6	ND	50	ug/L	12/02/96
Methylene Chloride	75-09-2	ND	20	ug/L	12/02/96
4-Methyl-2-pentanone	108-10-1	ND	50	ug/L	12/02/96
Styrene	100-42-5	ND	5	ug/L	12/02/96
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	12/02/96
Tetrachloroethene	127-18-4	ND	5	ug/L	12/02/96
Toluene	108-88-3	ND	5	ug/L	12/02/96
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	12/02/96
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	12/02/96
Trichloroethene	79-01-6	ND	5	ug/L	12/02/96
Vinyl Acetate	108-05-4	ND	50	ug/L	12/02/96
Vinyl Chloride	75-01-4	ND	10	ug/L	12/02/96
Xylenes, Total	1330-20-7	ND	10	ug/L	12/02/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B6
AEN LAB NO: 9611353-02G
AEN WORK ORDER: 9611353
CLIENT PROJ. ID: 3435.00-04

DATE SAMPLED: 11/25/96
DATE RECEIVED: 11/25/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	11/27/96
TPH as Diesel	GC-FID	0.34 *	0.05	mg/L	12/01/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B6
AEN LAB NO: 9611353-02I
AEN WORK ORDER: 9611353
CLIENT PROJ. ID: 3435.00-04

DATE SAMPLED: 11/25/96
DATE RECEIVED: 11/25/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion, Metals by ICP	EPA 3010	-		Prep Date	12/02/96
Potassium	EPA 6010	1.1 *	0.1	mg/L	12/04/96
General Minerals					
Bicarbonate Alkalinity	SM 2320B	340 *	2	mg CaCO3/L	12/03/96
Carbonate Alkalinity	SM 2320B	ND	2	mg CaCO3/L	12/03/96
Hydroxide Alkalinity	SM 2320B	ND	2	mg CaCO3/L	12/03/96
Calcium	EPA 6010	110 *	0.05	mg/L	12/04/96
Chloride	EPA 300	59 *	0.5	mg/L	12/06/96
Copper	EPA 6010	ND	0.01	mg/L	12/04/96
Iron	EPA 6010	0.17 *	0.05	mg/L	12/04/96
Magnesium	EPA 6010	57 *	0.04	mg/L	12/04/96
Manganese	EPA 6010	3.7 *	0.005	mg/L	12/04/96
pH	EPA 9040	7.2	NA	std. units	12/03/96
Sodium	EPA 6010	60 *	0.1	mg/L	12/04/96
Sulfate	EPA 300	260 *	0.5	mg/L	12/06/96
Conductivity	EPA 120.1	1,200 *	20	umhos/cm	11/26/96
Total Dissolved Solids	EPA 160.1	760 *	10	mg/L	11/27/96
Hardness	SM 2340B	510 *	1	mg CaCO3/L	12/04/96
Zinc	EPA 6010	0.04 *	0.005	mg/L	12/04/96

Cations meq/L = 12.8
Anions meq/L = 12.7
Cation/anion difference = <1%

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B6
AEN LAB NO: 9611353-02J
AEN WORK ORDER: 9611353
CLIENT PROJ. ID: 3435.00-04

DATE SAMPLED: 11/25/96
DATE RECEIVED: 11/25/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	11/25/96
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	12/02/96
Arsenic	EPA 7060	0.027 *	0.002	mg/L	12/07/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B106
AEN LAB NO: 9611353-03A
AEN WORK ORDER: 9611353
CLIENT PROJ. ID: 3435.00-04

DATE SAMPLED: 11/25/96
DATE RECEIVED: 11/25/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in water	5030/GC-FID	0.18 *	0.05	mg/L	12/09/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B106
AEN LAB NO: 9611353-03D
AEN WORK ORDER: 9611353
CLIENT PROJ. ID: 3435.00-04

DATE SAMPLED: 11/25/96
DATE RECEIVED: 11/25/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Volatile Organic Compounds	EPA 8240				
Acetone	67-64-1	ND	100	ug/L	12/02/96
Benzene	71-43-2	ND	5	ug/L	12/02/96
Bromodichloromethane	75-27-4	ND	5	ug/L	12/02/96
Bromoform	75-25-2	ND	5	ug/L	12/02/96
Bromomethane	74-83-9	ND	10	ug/L	12/02/96
2-Butanone	78-93-3	ND	100	ug/L	12/02/96
Carbon Disulfide	75-15-0	ND	10	ug/L	12/02/96
Carbon Tetrachloride	56-23-5	ND	5	ug/L	12/02/96
Chlorobenzene	108-90-7	ND	5	ug/L	12/02/96
Chloroethane	75-00-3	ND	10	ug/L	12/02/96
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	12/02/96
Chloroform	67-66-3	ND	5	ug/L	12/02/96
Chloromethane	74-87-3	ND	10	ug/L	12/02/96
Dibromochloromethane	124-48-1	ND	5	ug/L	12/02/96
1,1-Dichloroethane	75-34-3	ND	5	ug/L	12/02/96
1,2-Dichloroethane	107-06-2	47 *	5	ug/L	12/02/96
1,1-Dichloroethene	75-35-4	ND	5	ug/L	12/02/96
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/L	12/02/96
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	12/02/96
1,2-Dichloropropane	78-87-5	ND	5	ug/L	12/02/96
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	12/02/96
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	12/02/96
Ethylbenzene	100-41-4	ND	5	ug/L	12/02/96
2-Hexanone	591-78-6	ND	50	ug/L	12/02/96
Methylene Chloride	75-09-2	ND	20	ug/L	12/02/96
4-Methyl-2-pentanone	108-10-1	ND	50	ug/L	12/02/96
Styrene	100-42-5	ND	5	ug/L	12/02/96
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	12/02/96
Tetrachloroethene	127-18-4	ND	5	ug/L	12/02/96
Toluene	108-88-3	ND	5	ug/L	12/02/96
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	12/02/96
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	12/02/96
Trichloroethene	79-01-6	ND	5	ug/L	12/02/96
Vinyl Acetate	108-05-4	ND	50	ug/L	12/02/96
Vinyl Chloride	75-01-4	ND	10	ug/L	12/02/96
Xylenes, Total	1330-20-7	ND	10	ug/L	12/02/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B106
AEN LAB NO: 9611353-03G
AEN WORK ORDER: 9611353
CLIENT PROJ. ID: 3435.00-04

DATE SAMPLED: 11/25/96
DATE RECEIVED: 11/25/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	11/27/96
TPH as Diesel	GC-FID	0.34 *	0.05	mg/L	12/01/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-B106
AEN LAB NO: 9611353-03I
AEN WORK ORDER: 9611353
CLIENT PROJ. ID: 3435.00-04

DATE SAMPLED: 11/25/96
DATE RECEIVED: 11/25/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	11/25/96
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	12/02/96
Arsenic	EPA 7060	0.030 *	0.002	mg/L	12/07/96

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

AEN (CALIFORNIA)
QUALITY CONTROL REPORT

AEN JOB NUMBER: 9611353

CLIENT PROJECT ID: 3435.00.04

Quality Control Summary

All 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: 9611353
AEN LAB NO: 1127-BLANK
DATE EXTRACTED: 11/27/96
DATE ANALYZED: 11/30/96
INSTRUMENT: C
MATRIX: WATER

Method Blank

Analyte	Result (mg/L)	Reporting Limit (mg/L)
Diesel	ND	0.05

QUALITY CONTROL DATA

METHOD: EPA 3510 GCFID

AEN JOB NO: 9611353
DATE(S) EXTRACTED: 11/27/96
INSTRUMENT: C
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery n-Pentacosane
11/30/96	LF-B6	02	92
11/30/96	LF-B106	03	99
QC Limits:			65-125

DATE EXTRACTED: 11/27/96
DATE ANALYZED: 11/30/96
SAMPLE SPIKED: 9611125-09
INSTRUMENT: C

Matrix Spike Recovery Summary

Analyte	Spike Added (mg/L)	MS Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Diesel	4.00	102	3	60-110	15

QUALITY CONTROL DATA

METHOD: EPA 8020, 5030 GCFID

AEN JOB NO: 9611353
AEN LAB NO: 1205-BLANK
DATE ANALYZED: 12/05/96
INSTRUMENT: H
MATRIX: WATER

Method Blank

	CAS #	Result (mg/L)	Reporting Limit (mg/L)
HCs as Gasoline		ND	0.05

AEN LAB NO: 1209-BLANK
DATE ANALYZED: 12/09/96
INSTRUMENT: H
MATRIX: WATER

Method Blank

	CAS #	Result (mg/L)	Reporting Limit (mg/L)
HCs as Gasoline		ND	0.05

QUALITY CONTROL DATA

METHOD: EPA 8020, 5030 GCFID

AEN JOB NO: 9611353
INSTRUMENT: H
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery Fluorobenzene
12/05/96	LF-B6-FB	01	100
12/09/96	LF-B6	02	101
12/09/96	LF-B106	03	100
QC Limits:			70-130

DATE ANALYZED: 12/04/96
SAMPLE SPIKED: 9611348-03
INSTRUMENT: H

Matrix Spike Recovery Summary

Analyte	Spike Added (ug/L)	Average Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Hydrocarbons as Gasoline	500	95	4	66-117	19

QUALITY CONTROL DATA

METHOD: EPA 8240

AEN JOB NO: 9611353
AEN LAB NO: 1202-BLANK
DATE ANALYZED: 12/02/96
INSTRUMENT: 13
MATRIX: WATER

Method Blank

Analyte	CAS #	Result (ug/L)	Reporting Limit (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	ND	5
trans-1,2-Dichloroethene	156-60-5	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	20
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, Total	1330-20-7	ND	10

QUALITY CONTROL DATA

METHOD: EPA 8240

AEN JOB NO: 9611353
INSTRUMENT: 13
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery 1,2-Dichloroethane-d_4	Toluene-d_8	p-Bromofluorobenzene
12/02/96	LF-B6-FB	01	99	88	93
12/02/96	LF-B6	02	110	90	98
12/02/96	LF-B106	03	98	91	101
QC Limits:			76-114	88-110	86-115

DATE ANALYZED: 12/01/96
SAMPLE SPIKED: 9611373-01
INSTRUMENT: 13

Matrix Spike Recovery Summary

Analyte	Spike Added (ug/L)	Average Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
1,1-Dichloroethene	50	109	4	59-155	25
Trichloroethene	50	118	7	71-157	25
Benzene	50	124	5	37-151	25
Toluene	50	99	7	47-150	25
Chlorobenzene	50	98	9	37-160	25

QUALITY CONTROL DATA

AEN JOB NO: 9611353
SAMPLE SPIKED: DI WATER
DATE(S) ANALYZED: 12/03-07/96
MATRIX: WATER

Method Blank and Spike Recovery Summary

Analyte	Inst./ Method	Blank Result (mg/L)	Spike Added (mg/L)	MS Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
As, Arsenic	4000/7060	ND	0.04	113	7	82-140	13
Ca, Calcium	ICP/6010	ND	10.0	102	2	80-120	15
Cu, Copper	ICP/6010	ND	0.125	96	1	86-123	10
Fe, Iron	ICP/6010	ND	0.5	101	2	84-133	10
K, Potassium	ICP/6010	ND	10.0	96	1	86-112	10
Mg, Magnesium	ICP/6010	ND	10.0	100	2	90-112	10
Mn, Manganese	ICP/6010	ND	0.25	100	1	93-122	10
Na, Sodium	ICP/6010	ND	10.0	100	1	86-112	10
Zn, Zinc	ICP/6010	ND	0.25	94	7	90-121	10
Chloride	DIONEX/300	ND	10.0	97	<1	80-120	15
Sulfate	DIONEX/300	ND	10.0	111	<1	80-120	15

END OF REPORT

R-3, 5-3 R-1, 5-5 INORG.

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

96/1353

Project No.: 3435.00-04	Field Logbook No.:	Date: 11-25-96	Serial No.: No 15172
Project Name: Sherwin Williams	Project Location: Emeryville, CA		
Sampler (Signature): Jeffrey Rodgers			Samplers: JMR

	SAMPLES						ANALYSES								
	SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	TPHg	EPA 8240	TPHd	Dissolved As	General Minerals		HOLD	RUSH	REMARKS
1A-G	LF-B6-FB	11-25-96	12:20		7	H_2O	X	X		X					
2A-K	LF-B6	↓	12:25		11	↓	X	X	X	X	X				STD TAT
3A-I	LF-B106	↓	13:25		9	↓	X	X	X	X					
															Results to Kenton Gee
															Filter all metals in Lab.
															General Minerals: CATION-ANION Balance

RELINQUISHED BY: (Signature) Jeffrey Rodgers	DATE 11-25-96	TIME 15:20	RECEIVED BY: (Signature)	DATE 11-25-96	TIME 15:20
RELINQUISHED BY: (Signature)	DATE 11-25-96	TIME 17:45	RECEIVED BY: (Signature)	DATE 11/25/96	TIME 18:20
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

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

American Environmental Network

Certificate of Analysis

DOHS Certification: 1172 AIHA Accreditation: 11134

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

ATTN [redacted]
CLIENT PROJ. ID: 3435.00.04
CLIENT PROJ. NAME: SHERWIN WMS
C.O.C. NUMBER: 15227

REPORT DATE: 12/11/96
DATE(S) SAMPLED: 11/20/96
DATE RECEIVED: 11/20/96
AEN WORK ORDER: 9611290

PROJECT SUMMARY:

On November 20, 1996, this laboratory received 8 water sample(s).

Client requested sample(s) be analyzed for chemical parameters. Results of analysis are summarized on the following page(s). 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-RECON

SAMPLE ID: TRIP BLANK
AEN LAB NO: 9611290-01A
AEN WORK ORDER: 9611290
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/20/96
DATE RECEIVED: 11/20/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in water	5030/GC-FID	ND	0.05	mg/L	11/27/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-12
AEN LAB NO: 9611290-02A
AEN WORK ORDER: 9611290
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/20/96
DATE RECEIVED: 11/20/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in water	5030/GC-FID	ND	0.05	mg/L	11/27/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-12
AEN LAB NO: 9611290-02D
AEN WORK ORDER: 9611290
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/20/96
DATE RECEIVED: 11/20/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Volatile Organic Compounds	**EPA 8240**				
Acetone	67-64-1	ND	100	ug/L	11/26/96
Benzene	71-43-2	ND	5	ug/L	11/26/96
Bromodichloromethane	75-27-4	ND	5	ug/L	11/26/96
Bromoform	75-25-2	ND	5	ug/L	11/26/96
Bromomethane	74-83-9	ND	10	ug/L	11/26/96
2-Butanone	78-93-3	ND	100	ug/L	11/26/96
Carbon Disulfide	75-15-0	ND	10	ug/L	11/26/96
Carbon Tetrachloride	56-23-5	ND	5	ug/L	11/26/96
Chlorobenzene	108-90-7	ND	5	ug/L	11/26/96
Chloroethane	75-00-3	ND	10	ug/L	11/26/96
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	11/26/96
Chloroform	67-66-3	ND	5	ug/L	11/26/96
Chloromethane	74-87-3	ND	10	ug/L	11/26/96
Dibromochloromethane	124-48-1	ND	5	ug/L	11/26/96
1,1-Dichloroethane	75-34-3	ND	5	ug/L	11/26/96
1,2-Dichloroethane	107-06-2	ND	5	ug/L	11/26/96
1,1-Dichloroethene	75-35-4	ND	5	ug/L	11/26/96
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/L	11/26/96
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	11/26/96
1,2-Dichloropropane	78-87-5	ND	5	ug/L	11/26/96
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	11/26/96
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	11/26/96
Ethylbenzene	100-41-4	ND	5	ug/L	11/26/96
2-Hexanone	591-78-6	ND	50	ug/L	11/26/96
Methylene Chloride	75-09-2	ND	20	ug/L	11/26/96
4-Methyl-2-pentanone	108-10-1	ND	50	ug/L	11/26/96
Styrene	100-42-5	ND	5	ug/L	11/26/96
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	11/26/96
Tetrachloroethene	127-18-4	ND	5	ug/L	11/26/96
Toluene	108-88-3	ND	5	ug/L	11/26/96
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	11/26/96
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	11/26/96
Trichloroethene	79-01-6	ND	5	ug/L	11/26/96
Vinyl Acetate	108-05-4	ND	50	ug/L	11/26/96
Vinyl Chloride	75-01-4	ND	10	ug/L	11/26/96
Xylenes, Total	1330-20-7	ND	10	ug/L	11/26/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-12
AEN LAB NO: 9611290-02G
AEN WORK ORDER: 9611290
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/20/96
DATE RECEIVED: 11/20/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	11/22/96
TPH as Diesel	GC-FID	ND	0.05	mg/L	11/28/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-12
AEN LAB NO: 9611290-02I
AEN WORK ORDER: 9611290
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/20/96
DATE RECEIVED: 11/20/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	11/20/96
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	11/25/96
Arsenic	EPA 7060	0.022 *	0.002	mg/L	12/08/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-12
AEN LAB NO: 9611290-02J
AEN WORK ORDER: 9611290
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/20/96
DATE RECEIVED: 11/20/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion, Metals by ICP	EPA 3010	-		Prep Date	11/25/96
Potassium	EPA 6010	0.4 *	0.1	mg/L	12/02/96
General Minerals					
Bicarbonate Alkalinity	SM 2320B	130 *	2	mg CaCO3/L	12/03/96
Carbonate Alkalinity	SM 2320B	ND	2	mg CaCO3/L	12/03/96
Hydroxide Alkalinity	SM 2320B	ND	2	mg CaCO3/L	12/03/96
Calcium	EPA 6010	28 *	0.05	mg/L	12/02/96
Chloride	EPA 300	19 *	0.5	mg/L	11/27/96
Copper	EPA 6010	ND	0.01	mg/L	12/02/96
Iron	EPA 6010	ND	0.05	mg/L	12/02/96
Magnesium	EPA 6010	19 *	0.04	mg/L	12/02/96
Manganese	EPA 6010	0.49 *	0.005	mg/L	12/02/96
pH	EPA 9040	6.6	NA	std. units	11/20/96
Sodium	EPA 6010	26 *	0.1	mg/L	12/02/96
Sulfate	EPA 300	32 *	0.5	mg/L	11/27/96
Conductivity	EPA 120.1	410 *	20	umhos/cm	11/26/96
Total Dissolved Solids	EPA 160.1	250 *	10	mg/L	11/26/96
Hardness	SM 2340B	150 *	1	mg CaCO3/L	12/02/96
Zinc	EPA 6010	0.10 *	0.01	mg/L	12/02/96

Cations meq/L = 4.1
Anions meq/L = 3.6
Cation/Anion difference = 6.0%

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-13
AEN LAB NO: 9611290-03A
AEN WORK ORDER: 9611290
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/20/96
DATE RECEIVED: 11/20/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in water	5030/GC-FID	ND	0.05	mg/L	11/27/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-13
AEN LAB NO: 9611290-03D
AEN WORK ORDER: 9611290
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/20/96
DATE RECEIVED: 11/20/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Volatile Organic Compounds	**EPA 8240**				
Acetone	67-64-1	ND	100	ug/L	11/26/96
Benzene	71-43-2	ND	5	ug/L	11/26/96
Bromodichloromethane	75-27-4	ND	5	ug/L	11/26/96
Bromoform	75-25-2	ND	5	ug/L	11/26/96
Bromomethane	74-83-9	ND	10	ug/L	11/26/96
2-Butanone	78-93-3	ND	100	ug/L	11/26/96
Carbon Disulfide	75-15-0	ND	10	ug/L	11/26/96
Carbon Tetrachloride	56-23-5	ND	5	ug/L	11/26/96
Chlorobenzene	108-90-7	ND	5	ug/L	11/26/96
Chloroethane	75-00-3	ND	10	ug/L	11/26/96
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	11/26/96
Chloroform	67-66-3	ND	5	ug/L	11/26/96
Chloromethane	74-87-3	ND	10	ug/L	11/26/96
Dibromochloromethane	124-48-1	ND	5	ug/L	11/26/96
1,1-Dichloroethane	75-34-3	ND	5	ug/L	11/26/96
1,2-Dichloroethane	107-06-2	ND	5	ug/L	11/26/96
1,1-Dichloroethene	75-35-4	ND	5	ug/L	11/26/96
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/L	11/26/96
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	11/26/96
1,2-Dichloropropane	78-87-5	ND	5	ug/L	11/26/96
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	11/26/96
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	11/26/96
Ethylbenzene	100-41-4	ND	5	ug/L	11/26/96
2-Hexanone	591-78-6	ND	50	ug/L	11/26/96
Methylene Chloride	75-09-2	ND	20	ug/L	11/26/96
4-Methyl-2-pentanone	108-10-1	ND	50	ug/L	11/26/96
Styrene	100-42-5	ND	5	ug/L	11/26/96
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	11/26/96
Tetrachloroethene	127-18-4	ND	5	ug/L	11/26/96
Toluene	108-88-3	ND	5	ug/L	11/26/96
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	11/26/96
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	11/26/96
Trichloroethene	79-01-6	ND	5	ug/L	11/26/96
Vinyl Acetate	108-05-4	ND	50	ug/L	11/26/96
Vinyl Chloride	75-01-4	ND	10	ug/L	11/26/96
Xylenes, Total	1330-20-7	ND	10	ug/L	11/26/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-13
AEN LAB NO: 9611290-03G
AEN WORK ORDER: 9611290
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/20/96
DATE RECEIVED: 11/20/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	11/25/96
TPH as Diesel	GC-FID	ND	0.05	mg/L	11/28/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-13
AEN LAB NO: 9611290-03I
AEN WORK ORDER: 9611290
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/20/96
DATE RECEIVED: 11/20/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	11/20/96
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	11/25/96
Arsenic	EPA 7060	ND	0.002	mg/L	12/08/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-11
AEN LAB NO: 9611290-04A
AEN WORK ORDER: 9611290
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/20/96
DATE RECEIVED: 11/20/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in water	5030/GC-FID	ND	0.05	mg/L	11/27/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-11
AEN LAB NO: 9611290-04D
AEN WORK ORDER: 9611290
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/20/96
DATE RECEIVED: 11/20/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Volatile Organic Compounds	**EPA 8240**				
Acetone	67-64-1	ND	100	ug/L	11/27/96
Benzene	71-43-2	ND	5	ug/L	11/27/96
Bromodichloromethane	75-27-4	ND	5	ug/L	11/27/96
Bromoform	75-25-2	ND	5	ug/L	11/27/96
Bromomethane	74-83-9	ND	10	ug/L	11/27/96
2-Butanone	78-93-3	ND	100	ug/L	11/27/96
Carbon Disulfide	75-15-0	ND	10	ug/L	11/27/96
Carbon Tetrachloride	56-23-5	ND	5	ug/L	11/27/96
Chlorobenzene	108-90-7	ND	5	ug/L	11/27/96
Chloroethane	75-00-3	ND	10	ug/L	11/27/96
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	11/27/96
Chloroform	67-66-3	ND	5	ug/L	11/27/96
Chloromethane	74-87-3	ND	10	ug/L	11/27/96
Dibromochloromethane	124-48-1	ND	5	ug/L	11/27/96
1,1-Dichloroethane	75-34-3	ND	5	ug/L	11/27/96
1,2-Dichloroethane	107-06-2	ND	5	ug/L	11/27/96
1,1-Dichloroethene	75-35-4	ND	5	ug/L	11/27/96
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/L	11/27/96
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	11/27/96
1,2-Dichloropropane	78-87-5	ND	5	ug/L	11/27/96
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	11/27/96
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	11/27/96
Ethylbenzene	100-41-4	ND	5	ug/L	11/27/96
2-Hexanone	591-78-6	ND	50	ug/L	11/27/96
Methylene Chloride	75-09-2	ND	20	ug/L	11/27/96
4-Methyl-2-pentanone	108-10-1	ND	50	ug/L	11/27/96
Styrene	100-42-5	ND	5	ug/L	11/27/96
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	11/27/96
Tetrachloroethene	127-18-4	ND	5	ug/L	11/27/96
Toluene	108-88-3	ND	5	ug/L	11/27/96
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	11/27/96
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	11/27/96
Trichloroethene	79-01-6	ND	5	ug/L	11/27/96
Vinyl Acetate	108-05-4	ND	50	ug/L	11/27/96
Vinyl Chloride	75-01-4	ND	10	ug/L	11/27/96
Xylenes, Total	1330-20-7	ND	10	ug/L	11/27/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-11
AEN LAB NO: 9611290-04G
AEN WORK ORDER: 9611290
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/20/96
DATE RECEIVED: 11/20/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	11/25/96
TPH as Diesel	GC-FID	1.5 *	0.05	mg/L	11/28/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-11
AEN LAB NO: 9611290-04I
AEN WORK ORDER: 9611290
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/20/96
DATE RECEIVED: 11/20/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	11/20/96
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	11/25/96
Arsenic	EPA 7060	0.45 *	0.002	mg/L	12/08/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-3
AEN LAB NO: 9611290-05A
AEN WORK ORDER: 9611290
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/20/96
DATE RECEIVED: 11/20/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in water	5030/GC-FID	75 *	5	mg/L	11/29/96

Reporting limit elevated due to high level of target compound. Sample run at dilution.

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-3
AEN LAB NO: 9611290-05D
AEN WORK ORDER: 9611290
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/20/96
DATE RECEIVED: 11/20/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Volatile Organic Compounds	**EPA 8240**				
Acetone	67-64-1	ND	50000	ug/L	11/26/96
Benzene	71-43-2	ND	3000	ug/L	11/26/96
Bromodichloromethane	75-27-4	ND	3000	ug/L	11/26/96
Bromoform	75-25-2	ND	3000	ug/L	11/26/96
Bromomethane	74-83-9	ND	5000	ug/L	11/26/96
2-Butanone	78-93-3	ND	50000	ug/L	11/26/96
Carbon Disulfide	75-15-0	ND	5000	ug/L	11/26/96
Carbon Tetrachloride	56-23-5	ND	3000	ug/L	11/26/96
Chlorobenzene	108-90-7	ND	3000	ug/L	11/26/96
Chloroethane	75-00-3	ND	5000	ug/L	11/26/96
2-Chloroethyl Vinyl Ether	110-75-8	ND	5000	ug/L	11/26/96
Chloroform	67-66-3	ND	3000	ug/L	11/26/96
Chloromethane	74-87-3	ND	5000	ug/L	11/26/96
Dibromochloromethane	124-48-1	ND	3000	ug/L	11/26/96
1,1-Dichloroethane	75-34-3	ND	3000	ug/L	11/26/96
1,2-Dichloroethane	107-06-2	ND	3000	ug/L	11/26/96
1,1-Dichloroethene	75-35-4	ND	3000	ug/L	11/26/96
cis-1,2-Dichloroethene	156-59-2	ND	3000	ug/L	11/26/96
trans-1,2-Dichloroethene	156-60-5	ND	3000	ug/L	11/26/96
1,2-Dichloropropane	78-87-5	ND	3000	ug/L	11/26/96
cis-1,3-Dichloropropene	10061-01-5	ND	3000	ug/L	11/26/96
trans-1,3-Dichloropropene	10061-02-6	ND	3000	ug/L	11/26/96
Ethylbenzene	100-41-4	4,000 *	3000	ug/L	11/26/96
2-Hexanone	591-78-6	ND	30000	ug/L	11/26/96
Methylene Chloride	75-09-2	ND	10000	ug/L	11/26/96
4-Methyl-2-pentanone	108-10-1	ND	30000	ug/L	11/26/96
Styrene	100-42-5	ND	3000	ug/L	11/26/96
1,1,2,2-Tetrachloroethane	79-34-5	ND	3000	ug/L	11/26/96
Tetrachloroethene	127-18-4	ND	3000	ug/L	11/26/96
Toluene	108-88-3	41,000 *	3000	ug/L	11/26/96
1,1,1-Trichloroethane	71-55-6	ND	3000	ug/L	11/26/96
1,1,2-Trichloroethane	79-00-5	ND	3000	ug/L	11/26/96
Trichloroethene	79-01-6	ND	3000	ug/L	11/26/96
Vinyl Acetate	108-05-4	ND	30000	ug/L	11/26/96
Vinyl Chloride	75-01-4	ND	5000	ug/L	11/26/96
Xylenes, Total	1330-20-7	12,000 *	5000	ug/L	11/26/96

LEVINE-FRICKE-RECON

SAMPLE ID: LF-3
AEN LAB NO: 9611290-05D
AEN WORK ORDER: 9611290
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/20/96
DATE RECEIVED: 11/20/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED

Reporting limits elevated due to high levels of target compounds. Sample run at dilution.

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-3
AEN LAB NO: 9611290-05G
AEN WORK ORDER: 9611290
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/20/96
DATE RECEIVED: 11/20/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	11/25/96
TPH as Diesel	GC-FID	9.3 *	0.5	mg/L	12/02/96

Reporting limit elevated due to high level of target compound. Sample run at dilution.

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-3
AEN LAB NO: 9611290-05I
AEN WORK ORDER: 9611290
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/20/96
DATE RECEIVED: 11/20/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	11/20/96
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	11/25/96
Arsenic	EPA 7060	72 *	0.002	mg/L	12/09/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-22
AEN LAB NO: 9611290-06A
AEN WORK ORDER: 9611290
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/20/96
DATE RECEIVED: 11/20/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion, Metals by ICP	EPA 3010	-		Prep Date	11/25/96
Potassium	EPA 6010	0.6 *	0.1	mg/L	12/02/96
General Minerals					
Bicarbonate Alkalinity	SM 2320B	260 *	2	mg CaCO3/L	12/03/96
Carbonate Alkalinity	SM 2320B	ND	2	mg CaCO3/L	12/03/96
Hydroxide Alkalinity	SM 2320B	ND	2	mg CaCO3/L	12/03/96
Calcium	EPA 6010	52 *	0.05	mg/L	12/02/96
Chloride	EPA 300	25 *	0.5	mg/L	11/27/96
Copper	EPA 6010	ND	0.01	mg/L	12/02/96
Iron	EPA 6010	0.74 *	0.05	mg/L	12/02/96
Magnesium	EPA 6010	33 *	0.04	mg/L	12/02/96
Manganese	EPA 6010	7.3 *	0.005	mg/L	12/02/96
pH	EPA 9040	6.8	NA	std. units	11/20/96
Sodium	EPA 6010	34 *	0.1	mg/L	12/02/96
Sulfate	EPA 300	70 *	0.5	mg/L	11/27/96
Conductivity	EPA 120.1	670 *	20	umhos/cm	11/26/96
Total Dissolved Solids	EPA 160.1	540 *	10	mg/L	11/26/96
Hardness	SM 2340B	260 *	1	mg CaCO3/L	12/02/96
Zinc	EPA 6010	0.19 *	0.01	mg/L	12/02/96

Cations meq/L = 6.8
Anions meq/L = 6.4
Cation/Anion difference = 2.7%

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-10
AEN LAB NO: 9611290-07A
AEN WORK ORDER: 9611290
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/20/96
DATE RECEIVED: 11/20/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Digestion, Metals by ICP	EPA 3010	-		Prep Date	11/25/96
Potassium	EPA 6010	0.6 *	0.1	mg/L	12/02/96
General Minerals					
Bicarbonate Alkalinity	SM 2320B	870 *	2	mg CaCO3/L	12/03/96
Carbonate Alkalinity	SM 2320B	ND	2	mg CaCO3/L	12/03/96
Hydroxide Alkalinity	SM 2320B	ND	2	mg CaCO3/L	12/03/96
Calcium	EPA 6010	140 *	0.05	mg/L	12/02/96
Chloride	EPA 300	23 *	0.5	mg/L	11/27/96
Copper	EPA 6010	ND	0.01	mg/L	12/02/96
Iron	EPA 6010	15 *	0.05	mg/L	12/02/96
Magnesium	EPA 6010	86 *	0.04	mg/L	12/02/96
Manganese	EPA 6010	16 *	0.005	mg/L	12/02/96
pH	EPA 9040	6.7	NA	std. units	11/20/96
Sodium	EPA 6010	59 *	0.1	mg/L	12/02/96
Sulfate	EPA 300	ND	0.5	mg/L	11/27/96
Conductivity	EPA 120.1	1,500 *	20	umhos/cm	11/26/96
Total Dissolved Solids	EPA 160.1	880 *	10	mg/L	11/26/96
Hardness	SM 2340B	700 *	1	mg CaCO3/L	12/02/96
Zinc	EPA 6010	0.13 *	0.01	mg/L	12/02/96

Cations meq/L = 16.6
Anions meq/L = 15.2
Cation/Anion difference = 4.4%

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-18
AEN LAB NO: 9611290-08A
AEN WORK ORDER: 9611290
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/20/96
DATE RECEIVED: 11/20/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in water	5030/GC-FID	ND	0.05	mg/L	11/29/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-18
AEN LAB NO: 9611290-08D
AEN WORK ORDER: 9611290
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/20/96
DATE RECEIVED: 11/20/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Volatile Organic Compounds	**EPA 8240**				
Acetone	67-64-1	ND	100	ug/L	11/26/96
Benzene	71-43-2	ND	5	ug/L	11/26/96
Bromodichloromethane	75-27-4	ND	5	ug/L	11/26/96
Bromoform	75-25-2	ND	5	ug/L	11/26/96
Bromomethane	74-83-9	ND	10	ug/L	11/26/96
2-Butanone	78-93-3	ND	100	ug/L	11/26/96
Carbon Disulfide	75-15-0	ND	10	ug/L	11/26/96
Carbon Tetrachloride	56-23-5	ND	5	ug/L	11/26/96
Chlorobenzene	108-90-7	ND	5	ug/L	11/26/96
Chloroethane	75-00-3	ND	10	ug/L	11/26/96
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	11/26/96
Chloroform	67-66-3	ND	5	ug/L	11/26/96
Chloromethane	74-87-3	ND	10	ug/L	11/26/96
Dibromochloromethane	124-48-1	ND	5	ug/L	11/26/96
1,1-Dichloroethane	75-34-3	ND	5	ug/L	11/26/96
1,2-Dichloroethane	107-06-2	ND	5	ug/L	11/26/96
1,1-Dichloroethene	75-35-4	ND	5	ug/L	11/26/96
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/L	11/26/96
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	11/26/96
1,2-Dichloropropane	78-87-5	ND	5	ug/L	11/26/96
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	11/26/96
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	11/26/96
Ethylbenzene	100-41-4	ND	5	ug/L	11/26/96
2-Hexanone	591-78-6	ND	50	ug/L	11/26/96
Methylene Chloride	75-09-2	ND	20	ug/L	11/26/96
4-Methyl-2-pentanone	108-10-1	ND	50	ug/L	11/26/96
Styrene	100-42-5	ND	5	ug/L	11/26/96
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	11/26/96
Tetrachloroethene	127-18-4	ND	5	ug/L	11/26/96
Toluene	108-88-3	ND	5	ug/L	11/26/96
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	11/26/96
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	11/26/96
Trichloroethene	79-01-6	ND	5	ug/L	11/26/96
Vinyl Acetate	108-05-4	ND	50	ug/L	11/26/96
Vinyl Chloride	75-01-4	ND	10	ug/L	11/26/96
Xylenes, Total	1330-20-7	ND	10	ug/L	11/26/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-18
AEN LAB NO: 9611290-08G
AEN WORK ORDER: 9611290
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/20/96
DATE RECEIVED: 11/20/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	11/25/96
TPH as Diesel	GC-FID	0.50 *	0.05	mg/L	11/28/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: LF-18
AEN LAB NO: 9611290-08I
AEN WORK ORDER: 9611290
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 11/20/96
DATE RECEIVED: 11/20/96
REPORT DATE: 12/11/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	11/20/96
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	11/25/96
Arsenic	EPA 7060	0.043 *	0.002	mg/L	12/08/96

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

AEN (CALIFORNIA)
QUALITY CONTROL REPORT

AEN JOB NUMBER: 9611290

CLIENT PROJECT ID: 3435.00.04

Quality Control Summary

All 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: 9611290
AEN LAB NO: 1122-BLANK
DATE EXTRACTED: 11/22/96
DATE ANALYZED: 11/25/96
INSTRUMENT: C
MATRIX: WATER

Method Blank

Analyte	Result (mg/L)	Reporting Limit (mg/L)
Diesel	ND	0.05

AEN LAB NO: 1125-BLANK
DATE EXTRACTED: 11/25/96
DATE ANALYZED: 11/27/96
INSTRUMENT: C
MATRIX: WATER

Method Blank

Analyte	Result (mg/L)	Reporting Limit (mg/L)
Diesel	ND	0.05

QUALITY CONTROL DATA

METHOD: EPA 3510 GCFID

AEN JOB NO: 9611290
DATE(S) EXTRACTED: 11/22/96; 11/25/96
INSTRUMENT: C
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery n-Pentacosane
11/28/96	LF-12	02	92
11/28/96	LF-13	03	83
11/28/96	LF-11	04	87
11/28/96	LF-3	05	67
11/28/96	LF-18	08	82
QC Limits:			65-125

DATE EXTRACTED: 11/25/96
DATE ANALYZED: 11/27/96
SAMPLE SPIKED: 9611125-11
INSTRUMENT: C

Matrix Spike Recovery Summary

Analyte	Spike Added (mg/L)	Average Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Diesel	4.00	83	<1	60-110	15

QUALITY CONTROL DATA

METHOD: EPA 8020, 5030 GCFID

AEN JOB NO: 9611290
AEN LAB NO: 1127-BLANK
DATE ANALYZED: 11/27/96
INSTRUMENT: E
MATRIX: WATER

Method Blank

	CAS #	Result (mg/L)	Reporting Limit (mg/L)
HCs as Gasoline		ND	0.05

QUALITY CONTROL DATA

METHOD: EPA 8020, 5030 GCFID

AEN JOB NO: 9611290
INSTRUMENT: E
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery Fluorobenzene
11/27/96	TRIP BLANK	01	99
11/27/96	LF-12	02	103
11/27/96	LF-13	03	108
11/27/96	LF-11	04	103
11/27/96	LF-3	05	102
11/27/96	LF-18	08	98
QC Limits:			70-130

DATE ANALYZED: 11/27/96
SAMPLE SPIKED: 9611261-05
INSTRUMENT: E

Matrix Spike Recovery Summary

Analyte	Spike Added (ug/L)	MS Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Hydrocarbons as Gasoline	500	105	1	66-117	19

QUALITY CONTROL DATA

METHOD: EPA 8240

AEN JOB NO: 9611290
AEN LAB NO: 1126-BLANK
DATE ANALYZED: 11/26/96
INSTRUMENT: 13
MATRIX: WATER

Method Blank

Analyte	CAS #	Result (ug/L)	Reporting Limit (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	ND	5
trans-1,2-Dichloroethene	156-60-5	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	20
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, Total	1330-20-7	ND	10

QUALITY CONTROL DATA

METHOD: EPA 8240

AEN JOB NO: 9611290
AEN LAB NO: 1127-BLANK
DATE ANALYZED: 11/27/96
INSTRUMENT: 13
MATRIX: WATER

Method Blank

Analyte	CAS #	Result (ug/L)	Reporting Limit (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	ND	5
trans-1,2-Dichloroethene	156-60-5	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	20
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, Total	1330-20-7	ND	10

QUALITY CONTROL DATA

METHOD: EPA 8240

AEN JOB NO: 9611290
INSTRUMENT: 13
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery 1,2-Dichloroethane-d_4	Toluene-d_8	p-Bromofluorobenzene
11/26/96	LF-12	02	86	88	90
11/26/96	LF-13	03	89	91	92
11/27/96	LF-11	04	80	89	90
11/26/96	LF-3	05	87	92	87
11/26/96	LF-18	08	91	93	98
QC Limits:			76-114	88-110	86-115

DATE ANALYZED: 11/25/96
SAMPLE SPIKED: 9611232-22
INSTRUMENT: 13

Matrix Spike Recovery Summary

Analyte	Spike Added (ug/L)	Average Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
1,1-Dichloroethene	50	108	4	59-155	25
Trichloroethene	50	99	12	71-157	25
Benzene	50	117	18	37-151	25
Toluene	50	96	6	47-150	25
Chlorobenzene	50	110	3	37-160	25

QUALITY CONTROL DATA

AEN JOB NO: 9611290
SAMPLE SPIKED: DI WATER
DATE(S) ANALYZED: 11/26-12/02/96
MATRIX: WATER

Method Blank and Spike Recovery Summary

Analyte	Inst./ Method	Blank Result (mg/L)	Spike Added (mg/L)	MS Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
As, Arsenic	4000/7060	ND	0.04	99	4	69-136	13
Ca, Calcium	ICP/6010	ND	10.0	104	1	80-120	15
Cu, Copper	ICP/6010	ND	0.125	92	2	86-123	10
Fe, Iron	ICP/6010	ND	0.5	103	1	84-133	10
K, Potassium	ICP/6010	ND	10.0	104	<1	86-112	10
Mg, Magnesium	ICP/6010	ND	10.0	100	2	90-112	10
Mn, Manganese	ICP/6010	ND	0.25	110	1	93-122	10
Na, Sodium	ICP/6010	ND	10.0	100	1	86-112	10
Zn, Zinc	ICP/6010	ND	0.25	103	2	90-121	10
Chloride	DIONEX/300	ND	10.0	97	<1	80-120	15
Sulfate	DIONEX/300	ND	10.0	109	<1	80-120	15

END OF REPORT

INORG. R-3,5-4 R-4,5-4
R-5C

9611290

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.: 3435.00.04	Field Logbook No.:	Date: 11-20-96	Serial No.: № 15227
Project Name: Sherwin Williams	Project Location: Emeryville, CA		
Sampler (Signature): Jeff M. Rodgers			

SAMPLES						ANALYSES									
SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	TPHg	EPA 5210 TPHd	Dissolved As	General Minerals + K	HOLD	RUSH	REMARKS
Trip Blank	11/20/96	12:00	01A,B	2	H_2O	X						STD TAT
LF-12		12:25	02A→K	11		X	X	X	X	X		
LF-13		13:00	03A-I	9		X	X	X	X			Results to Kenton Gee
LF-11		13:30	04A-I	9		X	X	X	X			
LF-3		14:10	05A-I	9		X	X	X	X			Filter dissolved "As" is
LF-22		14:40	06A,B	2						X		Lab
LF-10		15:05	07A,B	2						X		
LF-18	↓	15:35	08A-I	9	↓	X	X	X	X			Cation Anion Balance requested
												General Minerals + Potassium

RELINQUISHED BY: (Signature)	DATE 11-20-96	TIME 1615	RECEIVED BY: (Signature)	DATE 11/20/96	TIME 1615
RELINQUISHED BY: (Signature)	DATE 11/20/96	TIME 1650	RECEIVED BY: (Signature)	DATE 11/21/	TIME 17:20
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
METHOD OF SHIPMENT:	DATE	TIME	LAB COMMENTS:		

Sampler: Jnr

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

Analytical Laboratory: AEN

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

American Environmental Network

Certificate of Analysis

DOHS Certification: 1172

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

ATTN: [redacted]
CLIENT PROJ. ID: 3435.00.04
CLIENT PROJ. NAME: SHERWIN WMS
C.O.C. NUMBER: 1026

REPORT DATE: 01/06/97

DATE(S) SAMPLED: 12/18/96

DATE RECEIVED: 12/18/96

AEN WORK ORDER: 9612284

PROJECT SUMMARY:

On December 18, 1996, this laboratory received 3 water sample(s).

Client requested sample(s) be analyzed for chemical parameters. Results of analysis are summarized on the following page(s). 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-RECON

SAMPLE ID: EX-3
AEN LAB NO: 9612284-01A
AEN WORK ORDER: 9612284
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 12/18/96
DATE RECEIVED: 12/18/96
REPORT DATE: 01/06/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in water	5030/GC-FID	ND	0.05	mg/L	12/20/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: EX-3
AEN LAB NO: 9612284-01D
AEN WORK ORDER: 9612284
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 12/18/96
DATE RECEIVED: 12/18/96
REPORT DATE: 01/06/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Volatile Organic Compounds	**EPA 8240**				
Acetone	67-64-1	ND	100	ug/L	12/31/96
Benzene	71-43-2	ND	5	ug/L	12/31/96
Bromodichloromethane	75-27-4	ND	5	ug/L	12/31/96
Bromoform	75-25-2	ND	5	ug/L	12/31/96
Bromomethane	74-83-9	ND	10	ug/L	12/31/96
2-Butanone	78-93-3	ND	100	ug/L	12/31/96
Carbon Disulfide	75-15-0	ND	10	ug/L	12/31/96
Carbon Tetrachloride	56-23-5	ND	5	ug/L	12/31/96
Chlorobenzene	108-90-7	ND	5	ug/L	12/31/96
Chloroethane	75-00-3	ND	10	ug/L	12/31/96
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	12/31/96
Chloroform	67-66-3	ND	5	ug/L	12/31/96
Chloromethane	74-87-3	ND	10	ug/L	12/31/96
Dibromochloromethane	124-48-1	ND	5	ug/L	12/31/96
1,1-Dichloroethane	75-34-3	ND	5	ug/L	12/31/96
1,2-Dichloroethane	107-06-2	ND	5	ug/L	12/31/96
1,1-Dichloroethene	75-35-4	ND	5	ug/L	12/31/96
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/L	12/31/96
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	12/31/96
1,2-Dichloropropane	78-87-5	ND	5	ug/L	12/31/96
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	12/31/96
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	12/31/96
Ethylbenzene	100-41-4	ND	5	ug/L	12/31/96
2-Hexanone	591-78-6	ND	50	ug/L	12/31/96
Methylene Chloride	75-09-2	ND	20	ug/L	12/31/96
4-Methyl-2-pentanone	108-10-1	ND	50	ug/L	12/31/96
Styrene	100-42-5	ND	5	ug/L	12/31/96
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	12/31/96
Tetrachloroethene	127-18-4	ND	5	ug/L	12/31/96
Toluene	108-88-3	ND	5	ug/L	12/31/96
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	12/31/96
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	12/31/96
Trichloroethene	79-01-6	ND	5	ug/L	12/31/96
Vinyl Acetate	108-05-4	ND	50	ug/L	12/31/96
Vinyl Chloride	75-01-4	ND	10	ug/L	12/31/96
Xylenes, Total	1330-20-7	ND	10	ug/L	12/31/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: EX-3
AEN LAB NO: 9612284-01G
AEN WORK ORDER: 9612284
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 12/18/96
DATE RECEIVED: 12/18/96
REPORT DATE: 01/06/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	12/27/96
TPH as Diesel	GC-FID	0.21 *	0.05	mg/L	12/28/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: EX-3
AEN LAB NO: 9612284-01I
AEN WORK ORDER: 9612284
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 12/18/96
DATE RECEIVED: 12/18/96
REPORT DATE: 01/06/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	12/18/96
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	12/22/96
Arsenic	EPA 7060	270 *	0.002	mg/L	12/30/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: EX-2
AEN LAB NO: 9612284-02A
AEN WORK ORDER: 9612284
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 12/18/96
DATE RECEIVED: 12/18/96
REPORT DATE: 01/06/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in water	5030/GC-FID	45 *	3	mg/L	12/23/96

Reporting limit elevated due to high level of target compound. Sample run at dilution.

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

LEVINE-FRICKE-RECON

SAMPLE ID: EX-2
AEN LAB NO: 9612284-02D
AEN WORK ORDER: 9612284
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 12/18/96
DATE RECEIVED: 12/18/96
REPORT DATE: 01/06/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Volatile Organic Compounds	**EPA 8240**				
Acetone	67-64-1	ND	20000	ug/L	01/01/97
Benzene	71-43-2	ND	1000	ug/L	01/01/97
Bromodichloromethane	75-27-4	ND	1000	ug/L	01/01/97
Bromoform	75-25-2	ND	1000	ug/L	01/01/97
Bromomethane	74-83-9	ND	2000	ug/L	01/01/97
2-Butanone	78-93-3	ND	20000	ug/L	01/01/97
Carbon Disulfide	75-15-0	ND	2000	ug/L	01/01/97
Carbon Tetrachloride	56-23-5	ND	1000	ug/L	01/01/97
Chlorobenzene	108-90-7	ND	1000	ug/L	01/01/97
Chloroethane	75-00-3	ND	2000	ug/L	01/01/97
2-Chloroethyl Vinyl Ether	110-75-8	ND	2000	ug/L	01/01/97
Chloroform	67-66-3	ND	1000	ug/L	01/01/97
Chloromethane	74-87-3	ND	2000	ug/L	01/01/97
Dibromochloromethane	124-48-1	ND	1000	ug/L	01/01/97
1,1-Dichloroethane	75-34-3	ND	1000	ug/L	01/01/97
1,2-Dichloroethane	107-06-2	ND	1000	ug/L	01/01/97
1,1-Dichloroethene	75-35-4	ND	1000	ug/L	01/01/97
cis-1,2-Dichloroethene	156-59-2	ND	1000	ug/L	01/01/97
trans-1,2-Dichloroethene	156-60-5	ND	1000	ug/L	01/01/97
1,2-Dichloropropane	78-87-5	ND	1000	ug/L	01/01/97
cis-1,3-Dichloropropene	10061-01-5	ND	1000	ug/L	01/01/97
trans-1,3-Dichloropropene	10061-02-6	ND	1000	ug/L	01/01/97
Ethylbenzene	100-41-4	2,500 *	1000	ug/L	01/01/97
2-Hexanone	591-78-6	ND	10000	ug/L	01/01/97
Methylene Chloride	75-09-2	ND	4000	ug/L	01/01/97
4-Methyl-2-pentanone	108-10-1	ND	10000	ug/L	01/01/97
Styrene	100-42-5	ND	1000	ug/L	01/01/97
1,1,2,2-Tetrachloroethane	79-34-5	ND	1000	ug/L	01/01/97
Tetrachloroethene	127-18-4	ND	1000	ug/L	01/01/97
Toluene	108-88-3	23,000 *	1000	ug/L	01/01/97
1,1,1-Trichloroethane	71-55-6	ND	1000	ug/L	01/01/97
1,1,2-Trichloroethane	79-00-5	ND	1000	ug/L	01/01/97
Trichloroethene	79-01-6	ND	1000	ug/L	01/01/97
Vinyl Acetate	108-05-4	ND	10000	ug/L	01/01/97
Vinyl Chloride	75-01-4	ND	2000	ug/L	01/01/97
Xylenes, Total	1330-20-7	12,000 *	2000	ug/L	01/01/97

LEVINE-FRICKE-RECON

SAMPLE ID: EX-2
AEN LAB NO: 9612284-02D
AEN WORK ORDER: 9612284
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 12/18/96
DATE RECEIVED: 12/18/96
REPORT DATE: 01/06/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED

Reporting limits elevated due to high levels of target compounds. Sample run at dilution.

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

LEVINE-FRICKE-RECON

SAMPLE ID: EX-2
AEN LAB NO: 9612284-02G
AEN WORK ORDER: 9612284
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 12/18/96
DATE RECEIVED: 12/18/96
REPORT DATE: 01/06/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	12/27/96
TPH as Diesel	GC-FID	0.69 *	0.05	mg/L	12/28/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: EX-2
AEN LAB NO: 9612284-02I
AEN WORK ORDER: 9612284
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 12/18/96
DATE RECEIVED: 12/18/96
REPORT DATE: 01/06/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	12/18/96
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	12/22/96
Arsenic	EPA 7060	34 *	0.002	mg/L	12/30/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: EX-1
AEN LAB NO: 9612284-03A
AEN WORK ORDER: 9612284
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 12/18/96
DATE RECEIVED: 12/18/96
REPORT DATE: 01/06/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in water	**5030/GC-FID**	3.1 *	0.5	mg/L	12/20/96

Reporting limit elevated due to high level of target compound. Sample run at dilution.

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

LEVINE-FRICKE-RECON

SAMPLE ID: EX-1
AEN LAB NO: 9612284-03D
AEN WORK ORDER: 9612284
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 12/18/96
DATE RECEIVED: 12/18/96
REPORT DATE: 01/06/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Volatile Organic Compounds	**EPA 8240**				
Acetone	67-64-1	ND	100	ug/L	01/01/97
Benzene	71-43-2	ND	5	ug/L	01/01/97
Bromodichloromethane	75-27-4	ND	5	ug/L	01/01/97
Bromoform	75-25-2	ND	5	ug/L	01/01/97
Bromomethane	74-83-9	ND	10	ug/L	01/01/97
2-Butanone	78-93-3	ND	100	ug/L	01/01/97
Carbon Disulfide	75-15-0	ND	10	ug/L	01/01/97
Carbon Tetrachloride	56-23-5	ND	5	ug/L	01/01/97
Chlorobenzene	108-90-7	ND	5	ug/L	01/01/97
Chloroethane	75-00-3	ND	10	ug/L	01/01/97
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	01/01/97
Chloroform	67-66-3	ND	5	ug/L	01/01/97
Chloromethane	74-87-3	ND	10	ug/L	01/01/97
Dibromochloromethane	124-48-1	ND	5	ug/L	01/01/97
1,1-Dichloroethane	75-34-3	ND	5	ug/L	01/01/97
1,2-Dichloroethane	107-06-2	ND	5	ug/L	01/01/97
1,1-Dichloroethene	75-35-4	ND	5	ug/L	01/01/97
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/L	01/01/97
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	01/01/97
1,2-Dichloropropane	78-87-5	ND	5	ug/L	01/01/97
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	01/01/97
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	01/01/97
Ethylbenzene	100-41-4	31 *	5	ug/L	01/01/97
2-Hexanone	591-78-6	ND	50	ug/L	01/01/97
Methylene Chloride	75-09-2	ND	20	ug/L	01/01/97
4-Methyl-2-pentanone	108-10-1	ND	50	ug/L	01/01/97
Styrene	100-42-5	ND	5	ug/L	01/01/97
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	01/01/97
Tetrachloroethene	127-18-4	ND	5	ug/L	01/01/97
Toluene	108-88-3	870 *	5	ug/L	01/02/97
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	01/01/97
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	01/01/97
Trichloroethene	79-01-6	ND	5	ug/L	01/01/97
Vinyl Acetate	108-05-4	ND	50	ug/L	01/01/97
Vinyl Chloride	75-01-4	ND	10	ug/L	01/01/97
Xylenes, Total	1330-20-7	1,400 *	10	ug/L	01/02/97

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

LEVINE-FRICKE-RECON

SAMPLE ID: EX-1
AEN LAB NO: 9612284-03G
AEN WORK ORDER: 9612284
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 12/18/96
DATE RECEIVED: 12/18/96
REPORT DATE: 01/06/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for TPH	EPA 3510	-		Extrn Date	12/27/96
TPH as Diesel	GC-FID	2.4 *	0.05	mg/L	12/28/96

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

LEVINE-FRICKE-RECON

SAMPLE ID: EX-1
AEN LAB NO: 9612284-03H
AEN WORK ORDER: 9612284
CLIENT PROJ. ID: 3435.00.04

DATE SAMPLED: 12/18/96
DATE RECEIVED: 12/18/96
REPORT DATE: 01/06/97

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	12/18/96
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	12/22/96
Arsenic	EPA 7060	0.015 *	0.002	mg/L	12/30/96

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

AEN (CALIFORNIA)
QUALITY CONTROL REPORT

AEN JOB NUMBER: 9612284

CLIENT PROJECT ID: 3435.00.04

Quality Control Summary

Sample EX-1: EPA 8240 analysis was first performed within EPA recommended holding time, with concentrations of Toluene and Total Xylenes greater than the calibration range. Reanalysis for Toluene and Total Xylenes was performed on diluted sample outside of EPA recommended holding time; results agree with undiluted (straight) run.

All 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: 9612284
AEN LAB NO: 1227-BLANK
DATE EXTRACTED: 12/27/96
DATE ANALYZED: 12/27/96
INSTRUMENT: C
MATRIX: WATER

Method Blank

Analyte	Result (mg/L)	Reporting Limit (mg/L)
Diesel	ND	0.05

QUALITY CONTROL DATA

METHOD: EPA 3510 GCFID

AEN JOB NO: 9612284
DATE(S) EXTRACTED: 12/27/96
INSTRUMENT: C
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery n-Pentacosane
12/28/96	EX-3	01	103
12/28/96	EX-2	02	104
12/28/96	EX-1	03	104
QC Limits:			65-125

DATE EXTRACTED: 12/27/96
DATE ANALYZED: 12/27/96
SAMPLE SPIKED: 9612207-03
INSTRUMENT: C

Matrix Spike Recovery Summary

Analyte	Spike Added (mg/L)	Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Diesel	4.00	90	<1	60-110	15

QUALITY CONTROL DATA

METHOD: EPA 8020, 5030 GCFID

AEN JOB NO: 9612284
AEN LAB NO: 1220-BLANK
DATE ANALYZED: 12/20/96
INSTRUMENT: H
MATRIX: WATER

Method Blank

	CAS #	Result (mg/L)	Reporting Limit (mg/L)
HCs as Gasoline		ND	0.05

AEN LAB NO: 1222-BLANK
DATE ANALYZED: 12/22/96
INSTRUMENT: H
MATRIX: WATER

Method Blank

	CAS #	Result (mg/L)	Reporting Limit (mg/L)
HCs as Gasoline		ND	0.05

QUALITY CONTROL DATA

METHOD: EPA 8020, 5030 GCFID

AEN JOB NO: 9612284
INSTRUMENT: H
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery Fluorobenzene
12/20/96	EX-3	01	101
12/23/96	EX-2	02	77
12/20/96	EX-1	03	95
QC Limits:			70-130

DATE ANALYZED: 12/20/96
SAMPLE SPIKED: 9612189-01
INSTRUMENT: H

Matrix Spike Recovery Summary

Analyte	Spike Added (ug/L)	Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
Hydrocarbons as Gasoline	500	108	4	66-117	19

QUALITY CONTROL DATA

METHOD: EPA 8240

AEN JOB NO: 9612284
AEN LAB NO: 1231-BLANK
DATE ANALYZED: 12/31/96
INSTRUMENT: 13
MATRIX: WATER

Method Blank

Analyte	CAS #	Result (ug/L)	Reporting Limit (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	ND	5
trans-1,2-Dichloroethene	156-60-5	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	20
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, Total	1330-20-7	ND	10

QUALITY CONTROL DATA

METHOD: EPA 8240

AEN JOB NO: 9612284
AEN LAB NO: 0101-BLANK
DATE ANALYZED: 01/01/97
INSTRUMENT: 12
MATRIX: WATER

Method Blank

Analyte	CAS #	Result (ug/L)	Reporting Limit (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	ND	5
trans-1,2-Dichloroethene	156-60-5	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	20
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, Total	1330-20-7	ND	10

QUALITY CONTROL DATA

METHOD: EPA 8240

AEN JOB NO: 9612284
INSTRUMENT: 13, 12
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery 1,2-Dichloroethane-d_4	Toluene-d_8	p-Bromofluorobenzene
12/31/96	EX-3	01	114	91	96
01/01/97	EX-2	02	111	107	102
01/01/97	EX-1	03	114	106	101
QC Limits:			76-114	88-110	86-115

DATE ANALYZED: 12/27/96
SAMPLE SPIKED: 9612346-01
INSTRUMENT: 13

Matrix Spike Recovery Summary

Analyte	Spike Added (ug/L)	Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
1,1-Dichloroethene	50	106	12	59-155	25
Trichloroethene	50	98	7	71-157	25
Benzene	50	124	6	37-151	25
Toluene	50	97	4	47-150	25
Chlorobenzene	50	104	5	37-160	25

QUALITY CONTROL DATA

AEN JOB NO: 9612284
SAMPLE SPIKED: DI WATER
DATE(S) ANALYZED: 12/23/96
MATRIX: WATER

Method Blank and Spike Recovery Summary

Analyte	Inst./ Method	Blank Result (mg/L)	Spike Added (mg/L)	Percent Recovery	RPD	QC Limits Percent Recovery	QC Limits RPD
As, Arsenic	4000/7060	ND	0.04	116	3	82-140	13

*** END OF REPORT ***

R-3,5-4

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

9612284

Project No.: 3435.00 04	Project Location: EMERYVILLE, CA	Date: 12/18/96
Project Name: SHERWIN WILLIAMS	Field Logbook No.:	Serial No.: Nº 1026
Sampler (Signature): Jeffrey M. Rodgers		Samplers: JMR

SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	ANALYSES: TPHg	EPA 8240	TPHd	Dissolved As			HOLD	RUSH	REMARKS
EX-3	12/18/96	11:30	61A-I	9	H2O	X	X	X	X					STD TAT
EX-2	↓	11:40	62A-I	9	↓	X	X	X	X					Filter Dissolved As in lab.
EX-1	↓	12:20	63A-I H	8	↓	X	X	X	X					Results to Kenton Gee
														EX-1: only 1 litre for TPHd (not enough water).

RELINQUISHED BY: (Signature) Jeffrey M. Rodgers	DATE 12/18/96	TIME 15:32	RECEIVED BY: (Signature)	DATE 12/18/96	TIME 15:32
RELINQUISHED BY: (Signature)	DATE 12-18-96	TIME 17:05	RECEIVED BY: (Signature) Robin Ryan	DATE 12/19/96	TIME 17:50
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
METHOD OF SHIPMENT:	DATE	TIME	LAB COMMENTS:		

Sample Collector:
LEVINE•FRICKE•RECON
1900 Powell Street, 12th Floor
Emeryville, California 94608-1827
(510) 652-4500

Analytical Laboratory: AEN

Shipping Copy (White) Lab Copy (Yellow) File Copy (Pink) Field Copy (Goldenrod)

COC CDR 101596RYL