UNION PACIFIC RAILROAD COMPANY

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January 20, 2000

Dr. Ata-ur Rahman
Permits Sections
Industrial & Hazardous Waste Division
Texas Natural Resource Conservation Commission
12100 Park 35 Circle
MC130
Austin, Texas 78753

Subject: Transmittal: Semiannual Monitoring Report; Second Semiannual Event 1999 – July 1, 1999 through December 31, 1999; Houston Wood Preserving Works Site, Houston, Texas

Dear Dr. Rahman:

In accordance with Section VII.B.2 of Compliance Plan No. CP-50343, issued in conjunction with Post Closure Care Permit No. HW-50343-000, please find enclosed two copies of the referenced report. Please note that we have completed the Phase 2B RFI/Extent of Contamination field activities and have updated the Compliance Schedule accordingly. If you have any question regarding the enclosed report, please call me at (402) 271-5979.

Sincerely,

UNION PACIFIC RAILROAD

Ed Honig, P.E.
Environmental Site Remediation Manager

EH/BS178422-K99
Enclosure

cc: Ray Risner, TNRCC, Austin
Marsha Hill, TNRCC Region 12, Houston
Allyn Davis, EPA Region 6, Dallas
Thomas Whitehurst, Environmental Resources Management (Houston)

A MEMBER OF THE ENVIRONMENTAL RESOURCES MANAGEMENT GROUP

Southern Pacific Transportation Company

Semiannual Monitoring Report: Second Semiannual Event 1999

Houston Wood Preserving Works

Houston, Texas

January 20, 2000

W.O. #422-009

Environmental Resources Management
16300 Katy Freeway, Suite 300
Houston, Texas 77094-1611
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ERM®

Southern Pacific Transportation Company

Semiannual Monitoring Report: Second Semiannual Event 1999 *Houston Wood Preserving Works Houston, Texas*

January 20, 2000

W.O. #422-009

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1.0 INTRODUCTION

1.1 BACKGROUND

On ~~September 27-28, 1999~~, Environmental Resources Management (ERM) conducted ground water sampling activities at Southern Pacific Transportation Company's Houston Wood Preserving Works (HWPW) site, located at 4910 Liberty Road, Houston, Texas (Figure 1-1). This semiannual sampling event included the on-site wells and piezometers associated with a closed surface impoundment (TNRCC Permit Unit No. II.B.1) as described in RCRA Permit No. HW-50343-000 and associated Compliance Plan (CP-50343), both issued by the Texas Natural Resource Conservation Commission (TNRCC). The sampling event, analytical data, and this data evaluation report represent the second semiannual monitoring period for 1999 (i.e., July 1 through December 31) and fulfill the semiannual reporting requirements described in Compliance Plan Section VII.B.2.

1.2 REPORT CONTENT AND ORGANIZATION

Section VII.B.2 of the Compliance Plan (CP) requires that a specific list of items be included in each Semiannual Report. As such, each item listed below is addressed by number in Section 2.0 of this report. As of December 31, 1999, a recovery system had not been installed at this facility. Therefore, in the few instances where a provision refers to a recovery system (i.e., items 5, 7, and 11), a notation was made in the text, and the items, as they relate to recovery wells, were not addressed in this report. The following items are required for the Semiannual Report, pursuant to CP Section VII.B.2:

1. A narrative summary of the evaluations made in accordance with CP Sections V, VI, and VII for the preceding six-month period. These periods shall be January 1 through June 30 and July 1 through December 31;

2. The results of the chemical analyses, submitted in a tabulated format in a form acceptable to the Executive Director, which clearly indicates each parameter that exceeds the Ground Water Protection Standard (GWPS). Copies of the original laboratory report for chemical analyses showing detection limits and quality control and quality assurance data shall be provided if requested by the Executive Director;

3. Tabulation of all water level elevations (relative to mean sea level), depth to water measurements, and total depth of well measurements collected since the data that was submitted in the previous semiannual report;

4. Potentiometric surface maps showing the elevation of the water table at the time of sampling;

5. If a recovery system is installed, potentiometric surface maps showing delineation of the radius of influence, minimum and maximum gradient within the hydrologically influenced area, and the direction of ground-water flow gradients outside the radius of influence;

6. A notation of the presence or absence of NAPLs, both light and dense phases, in each well during each sampling event since the last event covered in the previous semiannual report and tabulation of depth and thickness of NAPLs, if detected;

7. If a recovery system is installed, monthly tabulations of quantities of recovered ground-water and NAPLs (if encountered), and graphs of weekly recorded flow rates versus time for the recovery wells during each quarter;

8. Tabulation of all data evaluation results pursuant to Section VI.D and status of each well listed on CP Table III with regard to compliance with the corrective action objectives and compliance with the Ground Water Protection Standards;

9. Maps of the contaminated area depicting concentrations of naphthalene, acenaphthene, and total benzene, toluene, ethylbenzene, and xylenes (BTEX) as isopleth contours;

10. An updated schedule summary as required by Section XI.A;

11. Summary of any changes made to the monitoring/corrective action program and a summary of recovery well inspections, repairs, and any operational difficulties;

12. Recommendation for any changes; and,

13. Any other items requested by the Executive Director.

2.0 *SECOND SEMIANNUAL GROUND WATER SAMPLING EVENT*

This section contains a discussion of each of the Semiannual Report items required by CP Section VII.B.2.

2.1 *NARRATIVE SUMMARY OF SECOND SEMIANNUAL ACTIVITIES*

CP Section VII.B.2.a requires a narrative summary of evaluations completed in accordance with CP Sections V, VI, and VII. Section V relates to the Corrective Action Program in place for the permitted unit. Section VI relates to the Ground Water Monitoring Program designed to evaluate the effectiveness of the Corrective Action Program. Section VII includes provisions for amending the Corrective Action Program and/or Compliance Plan.

2.1.1 *Corrective Action Program*

Existing wells were sampled to evaluate the extent of affected ground water in the A-Transmissive Zone (A-TZ) and the B-Transmissive Zone (B-TZ). The definitions of the A-TZ and B-TZ are consistent with the UTZ and STZ, respectively, as defined in CP Provision I.A.

- A-TZ refers to the first sand unit encountered at approximately 35 feet above mean sea level (msl), averaging 6 to 8 feet in thickness.

- B-TZ refers to the second sand unit encountered at approximately 15 feet above msl, averaging 8 to 10 feet in thickness.

Existing monitoring wells in the A-TZ, designated by function in CP Table III (Appendix A), include the Corrective Action Observation (CAO) wells MW-04, MW-05, MW-07, MW-08, and MW-09, and the Point of Compliance (POC) wells MW-01A, MW-02, MW-03, MW-10A, and MW-11A. Existing monitoring wells in the B-TZ include the POC wells MW-10B and MW-11B, and the POC piezometers P-10, P-11, and P-12.

2.1.2 *Ground Water Monitoring*

ERM personnel performed monitoring activities at the site on September 27 through 29, 1999. The 15 A-TZ and B-TZ wells and piezometers listed in Section 2.1.1 (above) were located and inspected in preparation for the sampling event. Ground water sampling was performed using procedures outlined in a U.S. EPA document titled *Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures* (EPA/540/S-95/504) published in April 1996. Purging and sampling were performed using a low-flow pump, which drew a sample directly from the screened interval of each well.

Polytetrafluoroethylene (PTFE) tubing was placed in the wells and used for sampling. A Master-Flex® peristaltic pump was placed next to each well during sampling. Using a one-foot section of disposable silicon tubing placed around the pump head and attached to the PTFE tubing, ground water was pumped from the screened interval of the well at a flow rate of approximately 0.5 L/min. A measuring cup was used to collect purge water in one-liter increments to evaluate field parameters, including temperature, pH, specific conductivity, dissolved oxygen, and turbidity. When three successive readings indicated that the field parameters had stabilized, the well was sampled. The samples were collected at a flow rate of approximately 0.5 L/min. A compilation of recorded field parameters is included in Appendix B.

For each well, two 40-mL glass vials (for volatile organic compound analysis), and one 1000-mL amber glass bottle (for semivolatile organic compounds analysis) were filled directly from the pumping apparatus described above. The bottles, which had been preserved previously by the laboratory, were sealed and packed in coolers with sufficient ice to maintain a sample temperature of approximately 4° C. The coolers were delivered to Q.W.A.L. Laboratories, Inc. of Pittsburgh, Kansas for analysis. Chain-of-Custody (COC) forms were completed and kept with their respective samples. Copies of the analytical data and COCs are included in Appendix C.

2.2 *ANALYTICAL RESULTS*

The results of the chemical analyses performed on the A-TZ and B-TZ ground water samples collected during the second semiannual sampling event of 1999 are summarized in Tables 2-1 and 2-2, respectively. Those compounds reported by the laboratory to be above the GWPS are indicated in bold italics on the tables. The CP sets the GWPS at the practical quantitation limit (PQL) for each of the compounds analyzed.

2.3 *WATER LEVEL AND TOTAL DEPTH MEASUREMENT*

Because low-flow sampling procedures were utilized for this sampling event, it was important to reduce disruption of the water column to the extent practical prior to sampling. To accomplish this, light non-aqueous phase liquid (LNAPL) measurements were made first with an MMC® Model D-240 oil/water interface probe. No LNAPL was noted on the probe at any of the wells measured. Next, water levels were measured using the oil/water interface probe. Since the meter came into contact with only the upper surface of the water column, disruption of the water column was reduced.

Dense non-aqueous phase liquid (DNAPL) and total depth measurements were collected with the oil/water interface probe following ground water sampling. These measurements were collected in accordance with the methodology

described in EPA's low-flow guidance (U.S. EPA, April 1996) which suggests that a probe be lowered gently through the water column to the bottom of the well following sample collection. No DNAPL was noted at any of the wells measured. Table 2-3 summarizes the results of the depth-to-water and total well depth measurements.

2.4 *POTENTIOMETRIC SURFACE MAPS*

The ground water elevation data described in Section 2.3 were used to create potentiometric surface maps of the A-TZ and B-TZ (Figures 2-1 and 2-2, respectively).

2.5 *POTENTIOMETRIC SURFACE MAPS FOR RECOVERY SYSTEM*

As of December 31, 1999, no recovery system had been installed at the closed surface impoundment. Therefore, this item is not addressed herein.

2.6 *NON-AQUEOUS PHASE LIQUIDS*

The wells and piezometers were examined for the presence of light NAPLs before low-flow sampling and dense NAPLs after low-flow sampling was completed, in order to reduce disruption of the water column prior to sampling. The low-flow sampling method resulted in little or no drawdown. Accordingly, dense NAPL layers, if present, would not have been significantly affected by prior ground water sample collection. An MMC® Model D-240 oil/water interface probe was used to measure for light and heavy NAPLs. No NAPLs were detected in any of the wells sampled during this semiannual event.

2.7 *NAPL RECOVERIES*

As of December 31, 1999, no recovery system had been installed at the closed surface impoundment. Therefore, this item is not addressed herein.

2.8 *ANALYTICAL DATA EVALUATION*

CP Section VI.D describes two methods which may be used to determine the compliance status of a given well. The analytical results may be either directly compared to the GWPS (CP Table I; included in Appendix A herein), or statistically compared to the GWPS using the 99% significance level of the t-distribution. Table 2-4 shows the results of a direct comparison of data from the second semiannual sampling event to the GWPS. Wells and piezometers were considered to be compliant if each of the constituents listed in CP Table I was reported at a concentration less than or equal to the Concentration Limit (i.e., the GWPS). Conversely, wells and piezometers were considered non-compliant

if one or more constituents were reported at concentrations above the Concentration Limit.

The analytical results for the ground water sample collected from MW-01A during the Second Semiannual Event had poor surrogate recovery. Due to the amount of sample remaining, the laboratory ran the sample again without diluting it.

2.9 *BTEX, ACENAPHTHENE, AND NAPHTHALENE ISOPLETHS*

The concentration contours of these constituents were prepared using the data presented in Table 2-3. The contours were generated manually. Locations with reported non-detects were assigned a value equal to one-half of the reported detection limit.

The A-TZ and B-TZ BTEX concentrations measured during the second semiannual sampling event of 1999 are illustrated in Figures 2-3 and 2-4, respectively. Similarly, acenaphthene and naphthalene isopleths are provided in Figures 2-5 through 2-8.

2.10 *UPDATED COMPLIANCE SCHEDULE*

An updated compliance schedule is included as Appendix D of this report.

2.11 *SUMMARY OF CHANGES MADE TO THE MONITORING/CORRECTIVE ACTION PROGRAM AND SUMMARY OF RECOVERY WELL INSPECTIONS AND MAINTENANCE*

No recovery wells or ground water recovery system is present on site. Accordingly, there were no recovery well inspections, repairs, or operations conducted. However, the POC and CAO wells were inspected twice during the semiannual monitoring period. Based on the results of the inspections, one well (MW-16) bumper post was dislodged and leaning to one side. A summary of the well inspections will be included in the 1999 Annual Report.

2.12 *RECOMMENDATIONS FOR CHANGES*

At this time, no changes are recommended.

2.13 *OTHER REQUESTED ITEMS*

To date, no other items have been requested by the Executive Director.

Tables

TABLE 2-1

Summary of Analytical Results for the A-Transmissive Zone (A-TZ)

Second Semiannual Sampling Event, 1999
Houston Wood Preserving Works
Houston, Texas

Analyte	PQL (GWPS)[1]	MW-01A 9/28/99	MW-02 9/28/99	MW-03 9/28/99	MW-04 9/27/99	MW-05 9/28/99	MW-07 9/28/99	MW-08 9/27/99	MW-08D 9/27/99	MW-09 9/27/99	MW-10A 9/28/99	MW-11A 9/28/99
Benzene	0.005	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]
Chlorobenzene	0.005	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]
1,2-Dichloroethane	0.005	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]
Methylene chloride	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	0.005	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]
Toluene	0.005	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]
Xylene (total)	0.005	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]
Acenaphthene	0.010	***0.193***	***0.030***	***0.074***	ND	ND	ND	ND	ND	ND	ND	***0.160***
Acenaphthylene	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	0.010	***0.134***	***0.021***	***0.049***	ND	ND	ND	ND	ND	ND	ND	***0.112***
Di-n-butylphthalate	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-o-cresol	0.050	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	0.010	***0.144***	***0.024***	***0.049***	ND	ND	ND	ND	ND	ND	ND	***0.011***
2-Methylnaphthalene	0.010	***0.156***	ND	ND	ND	ND	ND	ND	ND	ND	ND	***0.082***
Naphthalene	0.010	***0.526***	ND	ND	ND	ND	ND	ND	ND	ND	ND	***1.470***
Nitrobenzene	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Nitrophenol	0.050	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	0.050	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	0.010	***0.102***	ND	ND	ND	ND	ND	ND	ND	ND	ND	***0.065***
Phenol	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	0.010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

NOTES:

All values reported in mg/L. ND - Not detected at the Practical Quantitation Limit (PQL).

[1]PQL - *Practical Quantitation Limit* as defined on Table I of the Compliance Plan, and determined by the analytical methods of EPA SW-846. The PQL is the Ground Water Protection Standard.

[2] ***Bold, italics*** indicate values reported above the Ground Water Protection Standard (GWPS).

[3]The compound was not detected but the reported detection limit was greater than the PQL.

TABLE 2-2

Summary of Analytical Results for the B-Transmissive Zone (B-TZ)

Second Semiannual Sampling Event, 1999
Houston Wood Preserving Works
Houston, Texas

Analyte	PQL (GWPS)[1]	MW-10B 9/28/99	MW-11B 9/28/99	MW-11BD 9/28/99	P-10 9/28/99	P-11 9/27/99	P-12 9/28/99
Benzene	0.005	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]
Chlorobenzene	0.005	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]
1,2-Dichloroethane	0.005	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]
Methylene chloride	0.010	ND	ND	ND	ND	ND	ND
Ethylbenzene	0.005	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]
Toluene	0.005	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]
Xylene (total)	0.005	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]	ND[3]
Acenaphthene	0.010	*0.135*	*0.130*	*0.140*	*0.167*	*0.043*	ND
Acenaphthylene	0.010	ND	ND	ND	ND	ND	ND
Anthracene	0.010	ND	ND	ND	*0.016*	ND	ND
Benzo(a)anthracene	0.010	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	0.010	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	0.010	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	0.010	ND	ND	ND	ND	ND	ND
Chrysene	0.010	ND	ND	ND	ND	ND	ND
Dibenzofuran	0.010	*0.083*	*0.079*	*0.085*	*0.080*	ND	ND
Di-n-butylphthalate	0.010	ND	ND[3]	ND[3]	ND	ND	ND
2,4-Dimethylphenol	0.010	ND	ND	ND	ND	ND	ND
4,6-Dinitro-o-cresol	0.050	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	0.010	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	0.010	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine	0.010	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	0.010	ND	ND	ND	ND	ND	ND
Fluoranthene	0.010	ND	ND	ND	ND	ND	ND
Fluorene	0.010	*0.084*	*0.078*	*0.083*	*0.150*	*0.024*	ND
2-Methylnaphthalene	0.010	ND	*0.035*	*0.038*	*0.048*	ND	ND
Naphthalene	0.010	*0.285*	*0.409*	*0.495*	***1.260***	*0.017*	ND
Nitrobenzene	0.010	ND	ND	ND	ND	ND	ND
p-Nitrophenol	0.050	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	0.010	ND	ND	ND	ND	ND	ND
Pentachlorophenol	0.050	ND	ND	ND	ND	ND	ND
Phenanthrene	0.010	*0.063*	*0.060*	*0.072*	*0.111*	ND	ND
Phenol	0.010	ND	ND	ND	ND	ND	ND
Pyrene	0.010	ND	ND	ND	ND	ND	ND

NOTES:

All values reported in mg/L. ND - Not detected at the Practical Quantitation Limit (PQL).

[1]PQL - *Practical Quantitation Limit* as defined on Table I of the Compliance Plan, and determined by the analytical methods of EPA SW-846. The PQL is the Ground Water Protection Standard.

[2] ***Bold, italics*** indicate values reported above the Ground Water Protection Standard (GWPS).

[3]The compound was not detected but the reported detection limit was greater than the PQL.

TABLE 2-3

Water Level and Total Depth of Well Measurements

Second Semiannual Sampling Event, 1999
Houston Wood Preserving Works
Houston, Texas

Well ID	Top of Casing Elevation (msl)	Depth to Water (ft TOC)	Water Surface Elevation (msl)	Total Depth of Well as Measured (ft TOC)	Total Depth as Logged (ft TOC) *
MW-01A	47.95'	9.67'	38.28'	19.61'	20.20'
MW-02	48.03'	10.12'	37.91'	18.43'	20.30'
MW-03	48.55'	10.48'	38.07'	19.51'	20.90'
MW-04	49.85'	11.32'	38.53'	21.59'	23.40'
MW-05	49.35'	10.17'	39.18'	27.27'	28.30'
MW-07	48.86'	10.64'	38.22'	24.69'	N/A
MW-08	49.37'	10.78'	38.59'	25.00'	26.80'
MW-09	49.29'	9.81'	39.48'	25.33'	26.80'
MW-10A	49.90'	11.73'	38.17'	25.48'	25.90'
MW-11A	50.04'	11.73'	38.31'	23.94'	24.40'

Well ID	Top of Casing Elevation (msl)	Depth to Water (ft TOC)	Water Surface Elevation (msl)	Total Depth of Well as (ft TOC) Measured	Total Depth as Logged (ft TOC) *
MW-10B	49.97'	11.90'	38.07'	46.43'	48.80'
MW-11B	50.19'	12.04'	38.15'	46.66'	46.80'
P-10	47.72'	9.58'	38.14'	42.81'	N/A
P-11	49.02'	10.49'	38.53'	42.71'	51.80'
P-12	48.82'	9.36'	39.46'	42.84'	51.70'

NOTES:

msl - feet above mean sea level
ft TOC - feet below the Top Of (the well) Casing
* Logged during well installation
N/A - Information not available

TABLE 2-4

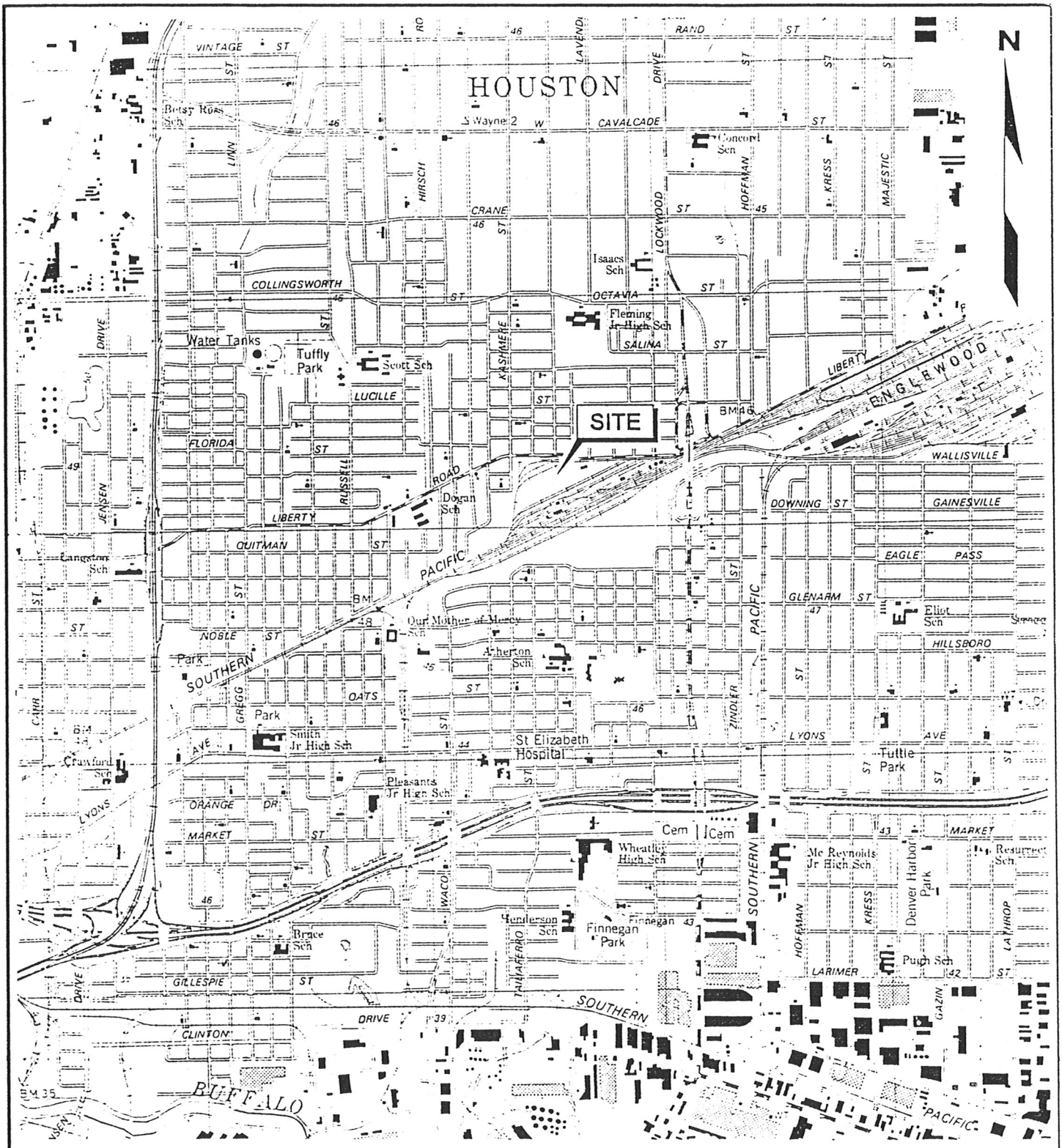
Compliance Status of Wells and Piezometers

Second Semiannual Sampling Event, 1999
Houston Wood Preserving Works
Houston, Texas

A-TZ Monitoring Location	Well Designation	Compliance Status
MW-01A	Point of compliance	Non-Compliant
MW-02	Point of compliance	Non-Compliant
MW-03	Point of compliance	Non-Compliant
MW-10A	Point of compliance	Compliant
MW-11A	Point of compliance	Non-Compliant
MW-04	Corrective action observation	Compliant
MW-05	Corrective action observation	Compliant
MW-07	Corrective action observation	Compliant
MW-08	Corrective action observation	Compliant
MW-09	Corrective action observation	Compliant

B-TZ Monitoring Location	Well Designation	Compliance Status
MW-10B	Point of compliance	Non-Compliant
MW-11B	Point of compliance	Non-Compliant
P-10	Point of compliance	Non-Compliant
P-11	Corrective action observation	Non-Compliant
P-12	Corrective action observation	Compliant

Figures



Source: U.S.G.S. Quadrangle
Settegast, Texas
1982
7.5 Minute Series (Topographic)

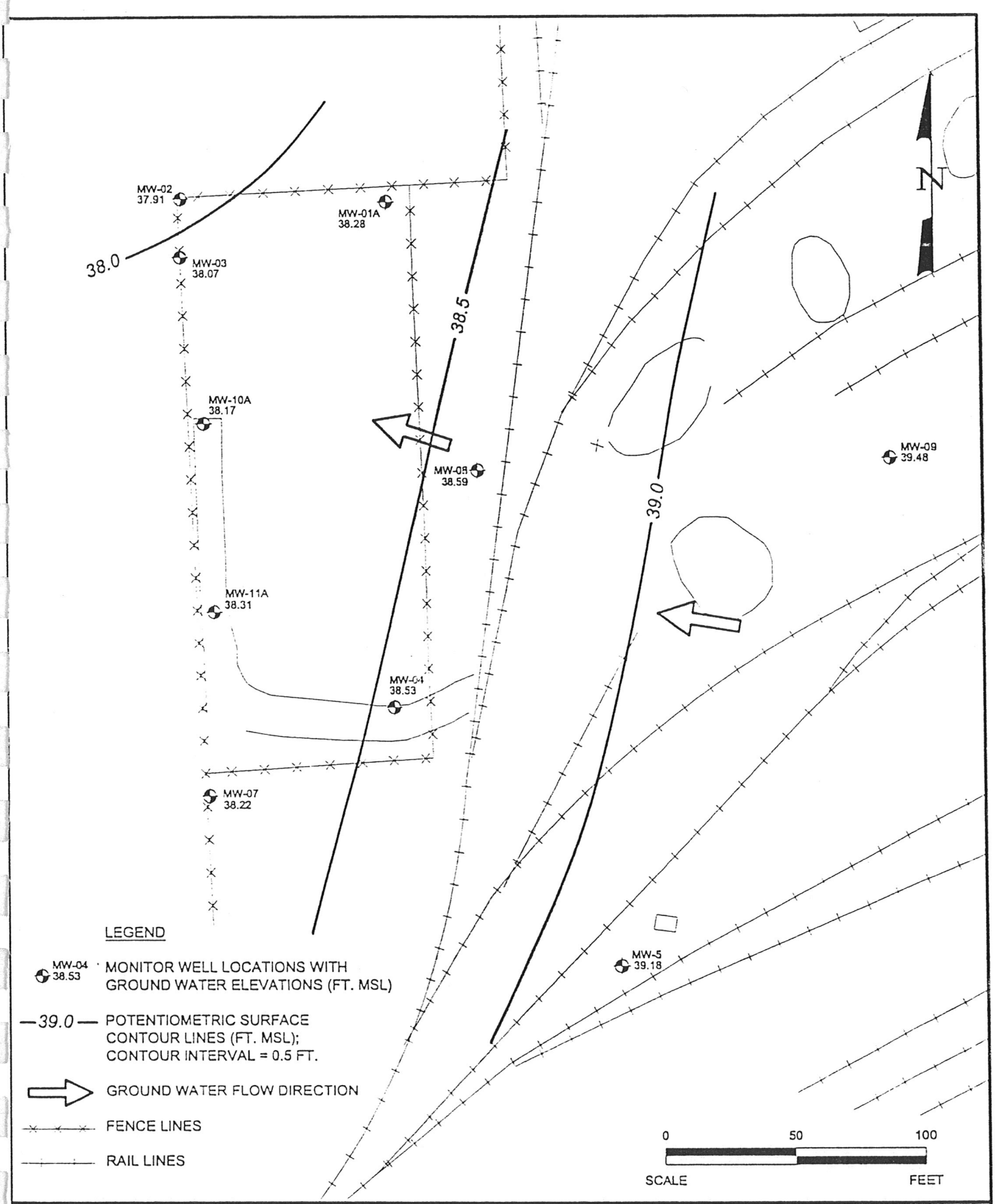
0 2000 4000
SCALE FEET

ERM-Southwest, Inc.
HOUSTON • NEW ORLEANS • AUSTIN • DALLAS • BEAUMONT
ERM

FIGURE 1-1
SITE LOCATION MAP
Houston Wood Preserving Works
Houston, Texas

DATE: 11/17/97

W.O.NO.: 42209A17



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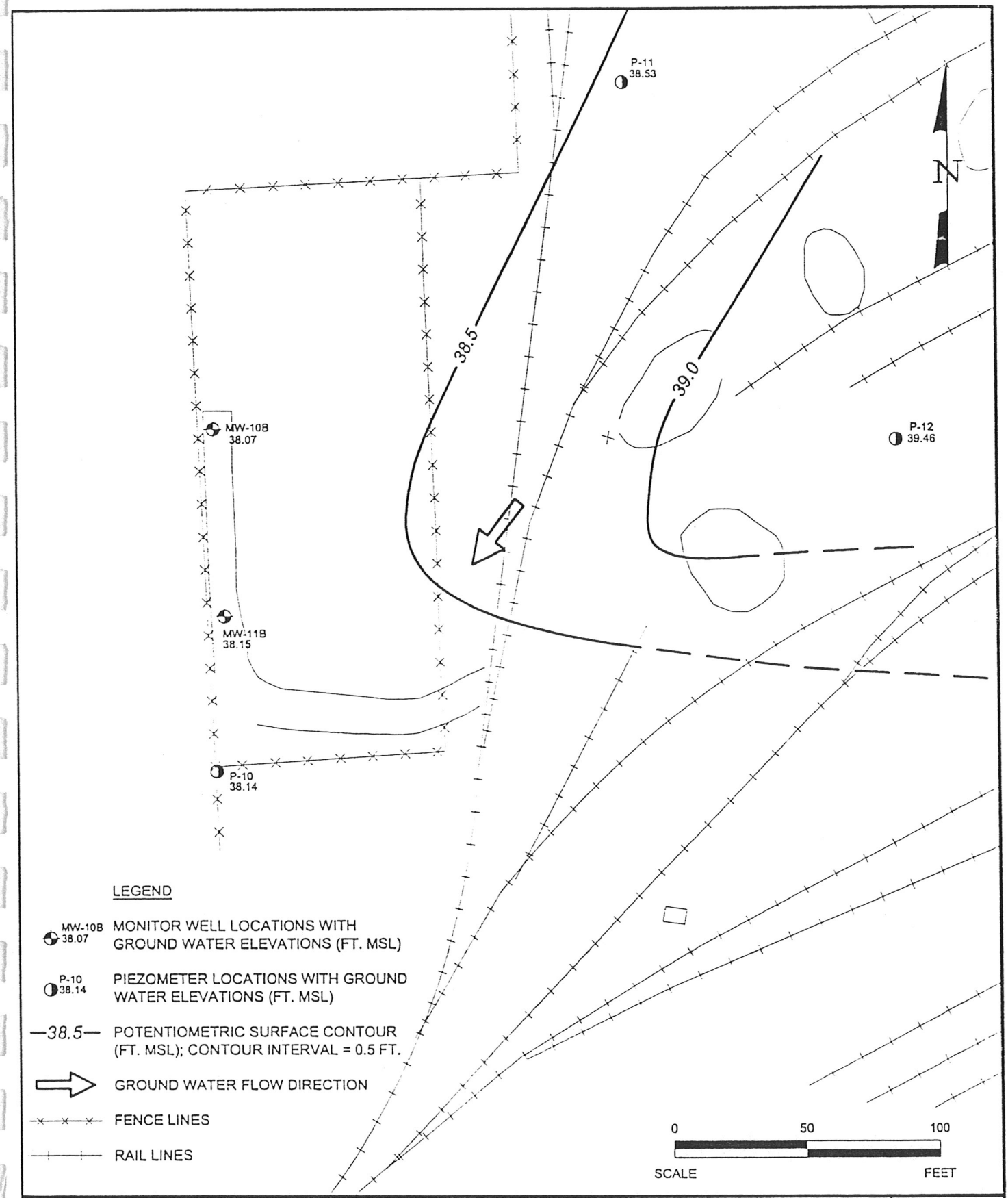
HOUSTON · NEW ORLEANS · AUSTIN · DALLAS · BEAUMONT

FIGURE 2-1
A-TZ POTENTIOMETRIC SURFACE
SEPTEMBER 27, 1999
TNRCC PERMIT UNIT No. II.B.1.
Houston Wood Preserving Works
Houston, Texas

ERM

DESIGN: LBG	CHKD.:	DATE: 11/15/99	REV.:
DRAWN: CAK	SCALE: AS SHOWN	W.O.NO.: 42209A94K99	

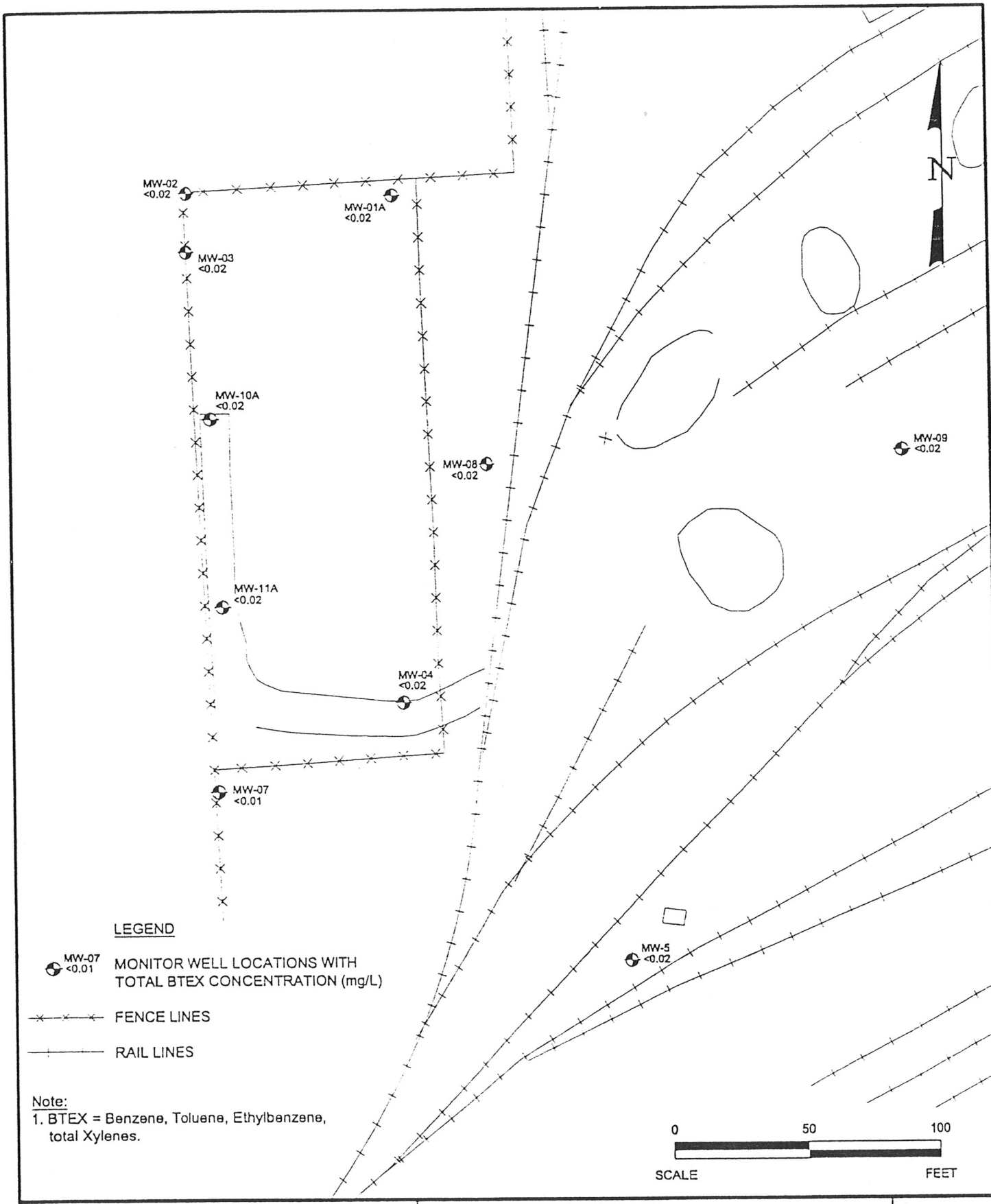


ERM-Southwest, Inc.
HOUSTON · NEW ORLEANS · AUSTIN · DALLAS · BEAUMONT

FIGURE 2-2
B-TZ POTENTIOMETRIC SURFACE
SEPTEMBER 27, 1999
TNRCC PERMIT UNIT No. II.B.1.
Houston Wood Preserving Works
Houston, Texas

ERM

DESIGN: LBG	CHKD.:	DATE: 11/16/99	REV.:
DRAWN: CAK	SCALE: AS SHOWN	W.O.NO.: 42209A95K99	



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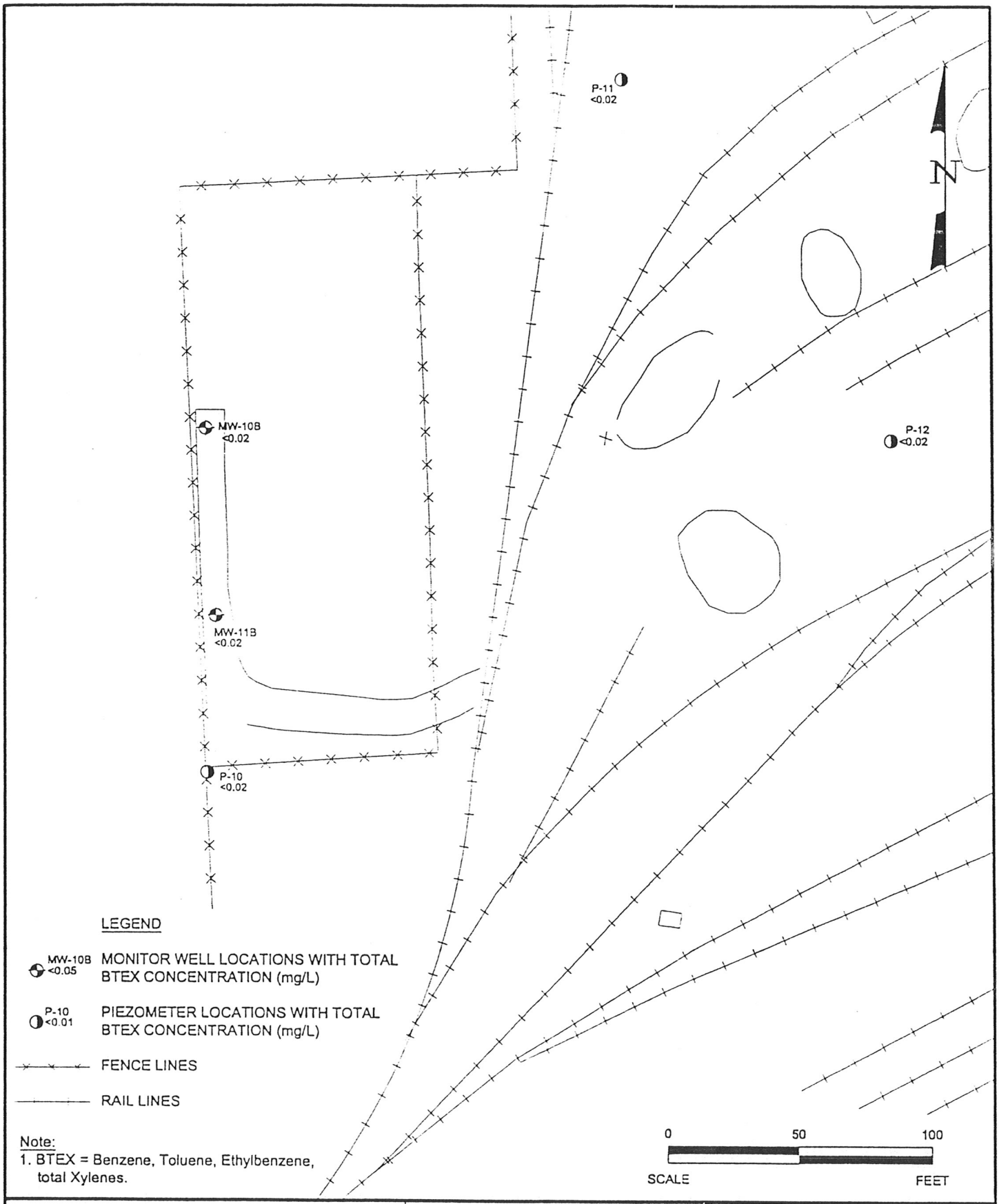
HOUSTON · NEW ORLEANS · AUSTIN · DALLAS · BEAUMONT

FIGURE 2-3
TOTAL BTEX IN A-TZ GROUND WATER (mg/L)
SEPTEMBER 28, 1999
TNRCC PERMIT UNIT No. II.B.1.
Houston Wood Preserving Works
Houston, Texas

DESIGN: LBG	CHKD.:	DATE: 01/05/00	REV.:
DRAWN: CAK	SCALE: AS SHOWN	W.O.NO.: 42209A96A00	

ERM

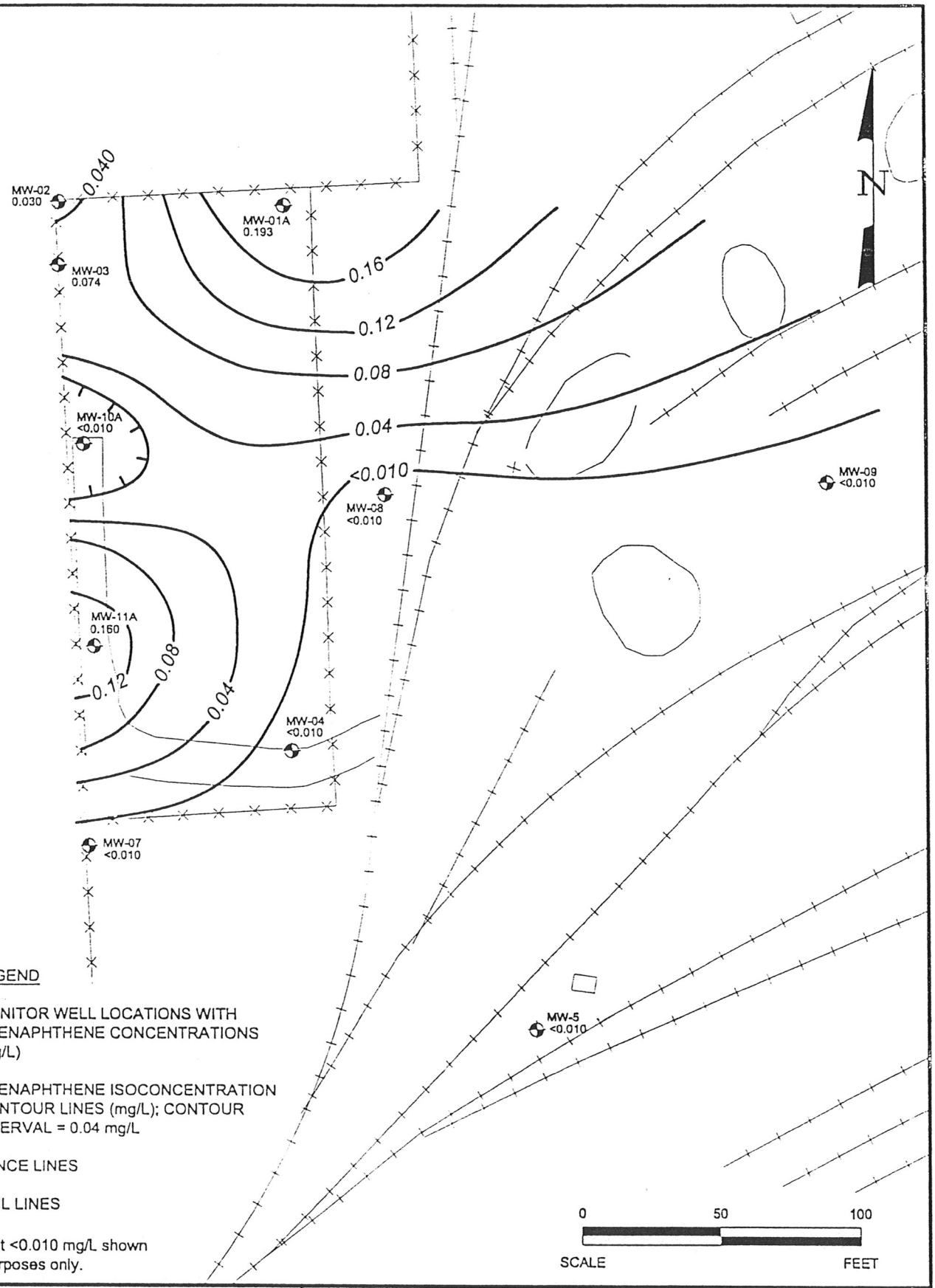


ERM-Southwest, Inc.
HOUSTON · NEW ORLEANS · AUSTIN · DALLAS · BEAUMONT

FIGURE 2-4
TOTAL BTEX IN B-TZ GROUND WATER (mg/L)
SEPTEMBER 28, 1999
TNRCC PERMIT UNIT No. II.B.1.
Houston Wood Preserving Works
Houston, Texas

ERM

DESIGN: LBG	CHKD.:	DATE: 01/05/00	REV.:
DRAWN: CAK	SCALE: AS SHOWN	W.O.NO.: 42209A97A00	



LEGEND

MW-03 0.074 — MONITOR WELL LOCATIONS WITH ACENAPHTHENE CONCENTRATIONS (mg/L)

— 0.04 — ACENAPHTHENE ISOCONCENTRATION CONTOUR LINES (mg/L); CONTOUR INTERVAL = 0.04 mg/L

FENCE LINES

RAIL LINES

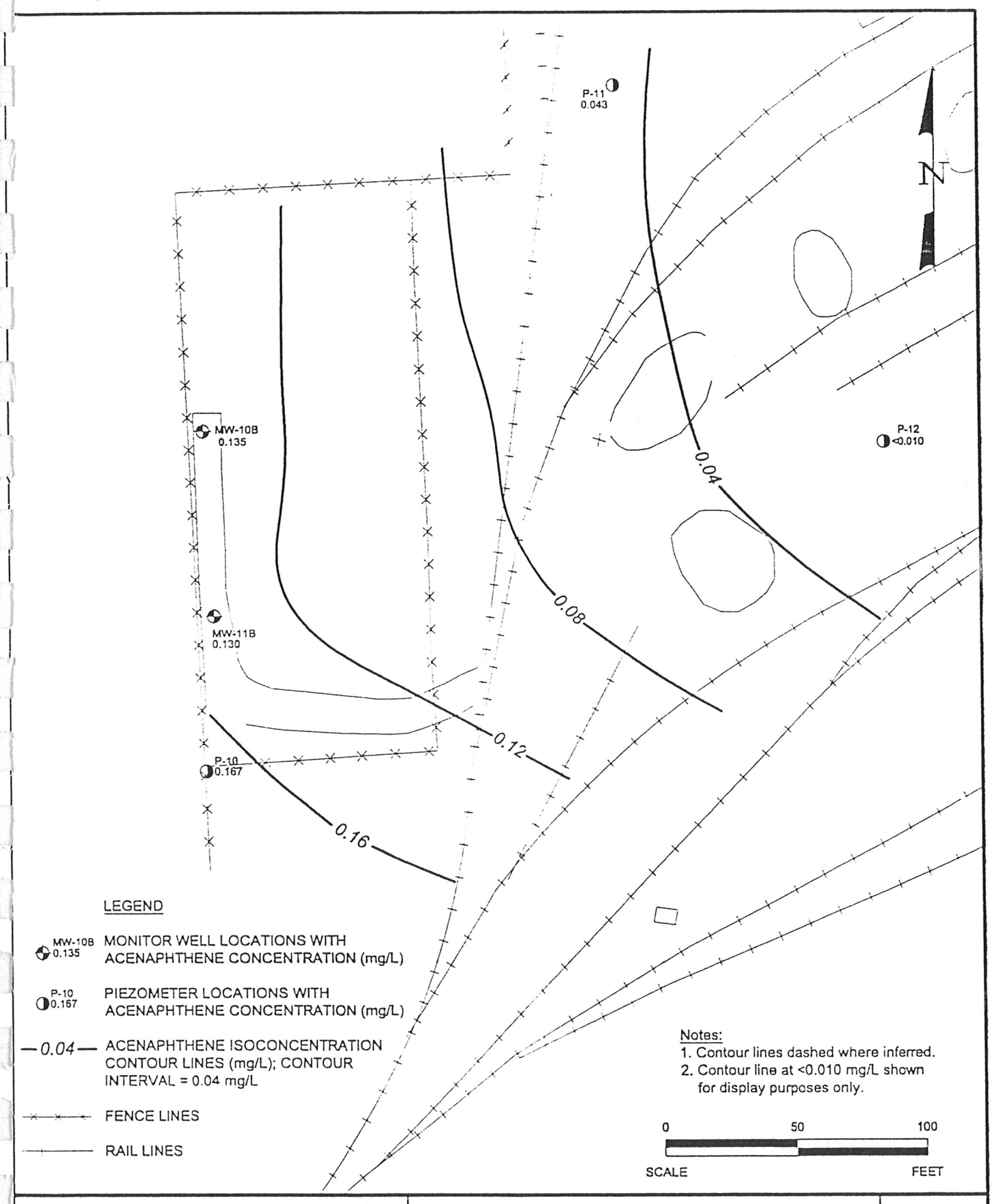
Note:
1. Contour line at <0.010 mg/L shown for display purposes only.

ERM-Southwest, Inc.
HOUSTON · NEW ORLEANS · AUSTIN · DALLAS · BEAUMONT

FIGURE 2-5
ACENAPHTHENE IN A-TZ GROUND WATER (mg/L)
SEPTEMBER 28, 1999
TNRCC PERMIT UNIT No. II.B.1.
Houston Wood Preserving Works
Houston, Texas

ERM

DESIGN: LBG	CHKD.:	DATE: 11/15/99	REV.:
DRAWN: CAK	SCALE: AS SHOWN	W.O.NO.: 42209A98K99	

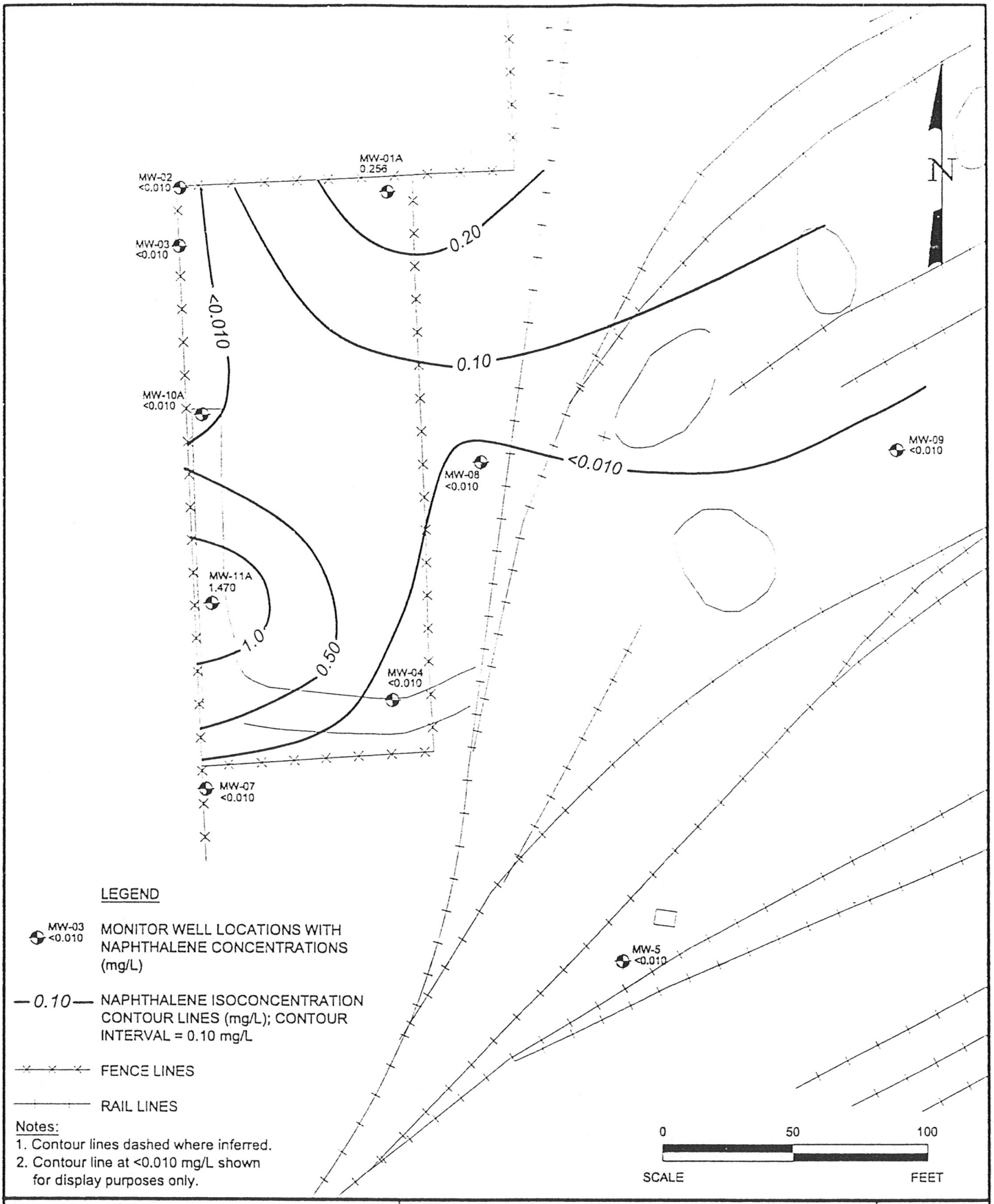


ERM-Southwest, Inc.
HOUSTON · NEW ORLEANS · AUSTIN · DALLAS · BEAUMONT

FIGURE 2-6
ACENAPHTHENE IN B-TZ GROUND WATER (mg/L)
SEPTEMBER 28, 1999
TNRCC PERMIT UNIT No. II.B.1.
Houston Wood Preserving Works
Houston, Texas

ERM

DESIGN: LBG	CHKD.:	DATE: 11/16/99	REV.:
DRAWN: CAK	SCALE: AS SHOWN	W.O.NO.: 42209A99K99	

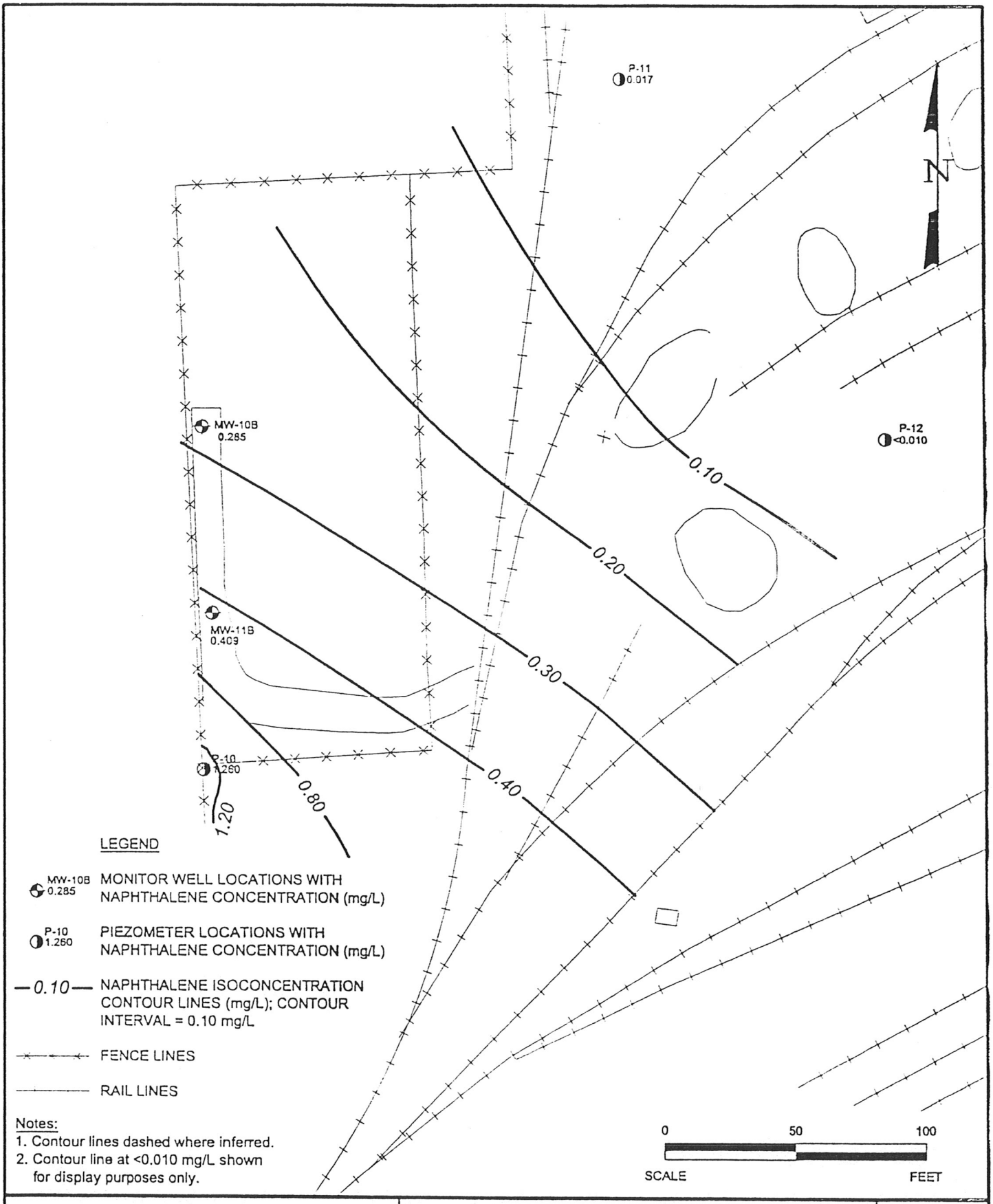


ERM-Southwest, Inc.
HOUSTON · NEW ORLEANS · AUSTIN · DALLAS · BEAUMONT

FIGURE 2-7
NAPHTHALENE IN A-TZ GROUND WATER (mg/L)
SEPTEMBER 28, 1999
TNRCC PERMIT UNIT No. II.B.1.
Houston Wood Preserving Works
Houston, Texas

DESIGN: LBG	CHKD.:	DATE: 01/17/00	REV.:
DRAWN: CAK	SCALE: AS SHOWN	W.O.NO.: 42209A100A00	

ERM



ERM-Southwest, Inc.
HOUSTON · NEW ORLEANS · AUSTIN · DALLAS · BEAUMONT

FIGURE 2-8
NAPHTHALENE IN B-TZ GROUND WATER (mg/L)
SEPTEMBER 28, 1999
TNRCC PERMIT UNIT No. II.B.1.
Houston Wood Preserving Works
Houston, Texas

ERM

DESIGN: LBG	CHKD.:	DATE: 01/05/00	REV.:
DRAWN: CAK	SCALE: AS SHOWN	W O.NO.: 42209A101A00	

Compliance Plan Tables

Appendix A

January 20, 2000
W.O. #422-009

Environmental Resources Management
16300 Katy Freeway, Suite 300
Houston, Texas 77094-1611
(281) 579-8999

Field Parameters

Appendix B

January 20, 2000
W.O. #422-009

Environmental Resources Management
16300 Katy Freeway, Suite 300
Houston, Texas 77094-1611
(281) 579-8999

TABLE B-1

Ground Water Sampling Field Parameters

Second Semiannual Sampling Event, 1999
Houston Wood Preserving Works
Houston, Texas

Well ID / Date Sampled	MW-01A 9/28/99	MW-02 9/28/99	MW-03 9/28/99	MW-04 9/28/99	MW-05 9/28/99	MW-07 9/28/99	MW-08 9/27/99	MW-09 9/27/99
Time Sampled (hrs)	1545	1510	1435	1025	0830	0910	1610	1655
Temperature (°C)	25.5	24.6	24.6	25.8	25.9	24.5	26.4	27.3
pH (Standard Units)	6.44	6.64	6.57	6.45	6.59	6.73	6.83	6.51
Specific Conductivity (uS)	1721	1098	1057	1015	735	924	825	796
Dissolved Oxygen (mg/L)	0.6	0.4	0.4	0.7	0.6	0.4	0.6	0.6
Turbidity	0.00	0.00	0.00	0.00	0.00	0.00	74	0.00

Well ID / Date Sampled	MW-10A 9/28/99	MW-10B 9/28/99	MW-11A 9/28/99	MW-11B 9/28/99	P-10 9/28/99	P-11 9/27/99	P-12 9/28/99
Time Sampled (hrs)	1400	1325	1145	1105	0940	1235	0800
Temperature (°C)	25.4	24.5	25.0	23.4	23.3	24.6	25.1
pH (Standard Units)	6.56	6.50	6.46	6.52	6.56	6.39	6.50
Specific Conductivity (uS)	1309	1381	1358	1106	1256	1428	1382
Dissolved Oxygen (mg/L)	0.6	0.4	0.2	0.6	0.5	0.6	1.8
Turbidity	0.00	0.00	0.00	0.00	0.00	15.16	0.00

Laboratory Analytical Reports

Appendix C

January 20, 2000

W.O. #422-009

Environmental Resources Management
16300 Katy Freeway, Suite 300
Houston, Texas 77094-1611
(281) 579-8999

Q.W.A.L. LABORATORIES, INC.

LABORATORY REPORT

CLIENT: ERM
ATTN: Melinda Ylagan
16300 Katy Frwy, Suite 300
Houston, TX 77094

Reference# 9909988

Priority Status: Regular

PROJECT/SITE: Houston Wood Preserving Works

SAMPLES SUBMITTED: 19 Samples

REPORT COPIES: 1

Date Collected: 09-28-99 Collected By: C. Young & S. Morris Date Received: 09-29-99

REPORT SUMMARY:

Samples were received in good condition on September 29, 1999. Initial surrogate recoveries associated with samples id: MW8-2SA99, MW8D-2SA99, and MW1A-2SA99 were below an acceptable limit of 10%. Insufficient sample volume prohibited a re-extraction and run of the samples. Melinda Ylagen of ERM was notified of the occurrence. Re-analysis was performed on the same extraction from the 3 samples. The data for both runs is presented, with the initial run followed by the second.

Detailed quantitative results are presented on the following page(s).

If you have any questions concerning this report, please do not hesitate to contact us at 316-232-1970.

Reviewed By: Steve Symsack Date: 10-21-99

Steve Symsack
Project Manager

2911 Rotary Terrace • P.O. Box 562 • Pittsburg, Kansas 66762
PHONE (316) 232-1970 • FAX (316) 232-7730

10-18-99

ERM
Attn: Melinda Ylagen
16300 Katy Freeway, Suite 300
Houston, TX 77094

Dear Melinda Ylagen:

Please note on the reports for the Houston Wood Preserving Works project the data qualifier flags in the semivolatile section. The initial surrogate recoveries associated with samples id: MW8-2SA99, MW8D-2SA99, and MW1A-2SA99 were below 10%. However, there was insufficient sample to re-extract and re-run those samples. Reruns were made from the same extraction. The data for both runs is presented, with the initial run followed by the secondary. The PQL for diluted reruns is 100µg/L. If you have further questions, or require additional information, please contact either myself or David Nance, Organics Supervisor.

Sincerely,

Steve Symsack

Q W A L L A B O R A T O R I E S, I N C.

2911 ROTARY TERRACE, P.O. BOX 562/ PITTSBURG, KS 66762/(316)232-1970

ABORATORY REPORT: REFERENCE #: 9909988

SENT ERM
O: 16300 KATY FREEWAY, SUITE 300
HOUSTON, TX 77094
MELINDA YLAGEN

DATE REPORTED: 10/15/99
DATE COLLECTED: 09/28/99
DATE RECEIVED: 09/29/99
P.O. #: 422-09

ROJECT:HOUSTON WOOD PRESERVING WORKS

ample ID: MW7-2SA99 Sample Matrix: WATER
ollection Date: 09/28/99 09:10:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
OLATILE ORGANICS	SW 846 8260					
BENZENE	71-43-2	ND	UG/L	1.0	10/10/99JDH	
CHLOROBENZENE	108-90-7	ND	UG/L	1.0	10/10/99JDH	
1,2-DICHLOROETHANE	107-06-2	ND	UG/L	1.0	10/10/99JDH	
DICHLOROMETHANE	75-09-2	ND	UG/L	1.0	10/10/99JDH	
ETHYLBENZENE	100-41-4	ND	UG/L	1.0	10/10/99JDH	
TOLUENE	108-88-3	ND	UG/L	1.0	10/10/99JDH	
XYLENES	1330-20-7	ND	UG/L	1.0	10/10/99JDH	
1,2-DICHLOROETHANE-D4 (SUR	-	124	125	75.0		
TOLUENE-d8 (SUR)	-	87	125	75.0		
BROMOFLUOROBENZENE (SUR)	-	78	125	75.0		
QA/QC PACKAGE LEVEL	NONE	DONE	SU		10/15/99JLO	
EMIVOLATILES	SW 846 8270B					
ACENAPHTHENE	83-32-9	ND	UG/L	10	10/09/99JLO	10/05/99
ACENAPHTHYLENE	208-96-8	ND	UG/L	10	10/09/99JLO	10/05/99
ANTHRACENE	120-12-7	ND	UG/L	10	10/09/99JLO	10/05/99
BENZO(A)ANTHRACENE	56-55-3	ND	UG/L	10	10/09/99JLO	10/05/99
BENZO(A)PYRENE	50-32-8	ND	UG/L	10	10/09/99JLO	10/05/99
BIS(2-ETHYL HEXYL)PHTHALA	117-81-7	ND	UG/L	10	10/09/99JLO	10/05/99
BIS(2-CHLOROETHOXY)METHAN	111-91-1	ND	UG/L	10	10/09/99JLO	10/05/99
2-CHLORONAPHTHALENE	91-58-7	ND	UG/L	10	10/09/99JLO	10/05/99
CHRYSENE	218-01-9	ND	UG/L	10	10/09/99JLO	10/05/99
DIBENZOFURAN	132-64-9	ND	UG/L	10	10/09/99JLO	10/05/99
2,4-DIMETHYLPHENOL	105-67-9	ND	UG/L	10	10/09/99JLO	10/05/99
DI-N-BUTYL PHTHALATE	84-74-2	ND	UG/L	10	10/09/99JLO	10/05/99
4,6-DINITRO-O-CRESOL	534-52-1	ND	UG/L	10	10/09/99JLO	10/05/99
2,4-DINITROTOLUENE	121-14-2	ND	UG/L	10	10/09/99JLO	10/05/99
2,6-DINITROTOLUENE	606-20-2	ND	UG/L	10	10/09/99JLO	10/05/99
1,2-DIPHENYLHYDRAZINE	122-66-7	ND	UG/L	10	10/09/99JLO	10/05/99
FLUORANTHENE	206-44-0	ND	UG/L	10	10/09/99JLO	10/05/99
FLUORENE	86-73-7	ND	UG/L	10	10/09/99JLO	10/05/99
2-METHYLNAPHTHALENE	91-57-6	ND	UG/L	10	10/09/99JLO	10/05/99
NAPHTHALENE	91-20-3	ND	UG/L	10	10/09/99JLO	10/05/99
NITROBENZENE	98-95-3	ND	UG/L	10	10/09/99JLO	10/05/99
4-NITROPHENOL	100-02-7	ND	UG/L	10	10/09/99JLO	10/05/99

Sample ID: MW7-2SA99 Sample Matrix: WATER
Collection Date: 09/28/99 09:10:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
N-NITROSODIPHENYLAMINE	86-30-6	ND	UG/L	10	10/09/99JLO	10/05/99
PENTACHLOROPHENOL	87-86-5	ND	UG/L	50	10/09/99JLO	10/05/99
PHENANTHRENE	85-01-8	ND	UG/L	10	10/09/99JLO	10/05/99
PHENOL	108-95-2	ND	UG/L	10	10/09/99JLO	10/05/99
PYRENE	129-00-0	ND	UG/L	10	10/09/99JLO	10/05/99
2-FLUOROBIPHENYL (SURROGAT	-	72	150	10		10/05/99
NITROBENZENE-D8 (SURROGATE	-	69	150	10		10/05/99
2-FLUOROPHENOL (SURROGATE)	-	25	150	10		10/05/99
2,4,6-TRIBROMOPHENOL (SURR	-	69	150	10		10/05/99
TERPHENYL-D14 (SURROGATE)	-	91	150	10		10/05/99
PHENOL-D5 (SURROGATE)	-	16	150	10		10/05/99

Sample ID: P10-2SA99 Sample Matrix: WATER
Collection Date: 09/28/99 09:40:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
VOLATILE ORGANICS	SW 846 8260					
BENZENE	71-43-2	ND	UG/L	1.0	10/10/99JDH	
CHLOROBENZENE	108-90-7	ND	UG/L	1.0	10/10/99JDH	
1,2-DICHLOROETHANE	107-06-2	ND	UG/L	1.0	10/10/99JDH	
DICHLOROMETHANE	75-09-2	ND	UG/L	1.0	10/10/99JDH	
ETHYLBENZENE	100-41-4	ND	UG/L	1.0	10/10/99JDH	
TOLUENE	108-88-3	ND	UG/L	1.0	10/10/99JDH	
XYLENES	1330-20-7	ND	UG/L	1.0	10/10/99JDH	
1,2-DICHLOROETHANE-D4 (SUR	-	123	125	75.0		
TOLUENE-d8 (SUR)	-	89	125	75.0		
BROMOFLUOROBENZENE (SUR)	-	85	125	75.0		
SEMIVOLATILES	SW 846 8270B					
ACENAPHTHENE	83-32-9	167 D	UG/L	10	10/09/99JLO	10/05/99
ACENAPHTHYLENE	208-96-8	ND	UG/L	10	10/09/99JLO	10/05/99
ANTHRACENE	120-12-7	15.8	UG/L	10	10/09/99JLO	10/05/99
BENZO(A)ANTHRACENE	56-55-3	ND	UG/L	10	10/09/99JLO	10/05/99
BENZO(A)PYRENE	50-32-8	ND	UG/L	10	10/09/99JLO	10/05/99
BIS(2-ETHYL HEXYL)PHTHALA	117-81-7	ND	UG/L	10	10/09/99JLO	10/05/99
BIS(2-CHLOROETHOXY)METHAN	111-91-1	ND	UG/L	10	10/09/99JLO	10/05/99
2-CHLORONAPHTHALENE	91-58-7	ND	UG/L	10	10/09/99JLO	10/05/99
CHRYSENE	218-01-9	ND	UG/L	10	10/09/99JLO	10/05/99
DIBENZOFURAN	132-64-9	79.5	UG/L	10	10/09/99JLO	10/05/99
2,4-DIMETHYLPHENOL	105-67-9	ND	UG/L	10	10/09/99JLO	10/05/99
DI-N-BUTYL PHTHALATE	84-74-2	ND	UG/L	10	10/09/99JLO	10/05/99
4,6-DINITRO-O-CRESOL	534-52-1	ND	UG/L	10	10/09/99JLO	10/05/99
2,4-DINITROTOLUENE	121-14-2	ND	UG/L	10	10/09/99JLO	10/05/99
2,6-DINITROTOLUENE	606-20-2	ND	UG/L	10	10/09/99JLO	10/05/99
1,2-DIPHENYLHYDRAZINE	122-66-7	ND	UG/L	10	10/09/99JLO	10/05/99
FLUORANTHENE	206-44-0	ND	UG/L	10	10/09/99JLO	10/05/99
FLUORENE	86-73-7	150	UG/L	10	10/09/99JLO	10/05/99

Sample ID: P10-2SA99 Sample Matrix: WATER
Collection Date: 09/28/99 09:40:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
2-METHYLNAPHTHALENE	91-57-6	48.4	UG/L	10	10/09/99JLO	10/05/99
NAPHTHALENE	91-20-3	1260 D	UG/L	10	10/09/99JLO	10/05/99
NITROBENZENE	98-95-3	ND	UG/L	10	10/09/99JLO	10/05/99
4-NITROPHENOL	100-02-7	ND	UG/L	10	10/09/99JLO	10/05/99
N-NITROSODIPHENYLAMINE	86-30-6	ND	UG/L	10	10/09/99JLO	10/05/99
PENTACHLOROPHENOL	87-86-5	ND	UG/L	50	10/09/99JLO	10/05/99
PHENANTHRENE	85-01-8	111	UG/L	10	10/09/99JLO	10/05/99
PHENOL	108-95-2	ND	UG/L	10	10/09/99JLO	10/05/99
PYRENE	129-00-0	ND	UG/L	10	10/09/99JLO	10/05/99
2-FLUOROBIPHENYL (SURROGAT	-	72	150	10		10/05/99
NITROBENZENE-D8 (SURROGATE	-	55	150	10		10/05/99
2-FLUOROPHENOL (SURROGATE)	-	33	150	10		10/05/99
2,4,6-TRIBROMOPHENOL (SURR	-	79	150	10		10/05/99
TERPHENYL-D14 (SURROGATE)	-	91	150	10		10/05/99
PHENOL-D5 (SURROGATE)	-	26	150	10		10/05/99

Sample ID: MW4-2SA99 Sample Matrix: WATER
Collection Date: 09/28/99 10:25:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
VOLATILE ORGANICS	SW 846 8260					
BENZENE	71-43-2	ND	UG/L	1.0	10/10/99JDH	
CHLOROBENZENE	108-90-7	ND	UG/L	1.0	10/10/99JDH	
1,2-DICHLOROETHANE	107-06-2	ND	UG/L	1.0	10/10/99JDH	
DICHLOROMETHANE	75-09-2	ND	UG/L	1.0	10/10/99JDH	
ETHYLBENZENE	100-41-4	ND	UG/L	1.0	10/10/99JDH	
TOLUENE	108-88-3	ND	UG/L	1.0	10/10/99JDH	
XYLENES	1330-20-7	ND	UG/L	1.0	10/10/99JDH	
1,2-DICHLOROETHANE-D4 (SUR	-	117	125	75.0		
TOLUENE-d8 (SUR)	-	94	125	75.0		
BROMOFLUOROBENZENE (SUR)	-	84	125	75.0		
SEMIVOLATILES	SW 846 8270B					
ACENAPHTHENE	83-32-9	ND	UG/L	10	10/09/99JLO	10/05/99
ACENAPHTHYLENE	208-96-8	ND	UG/L	10	10/09/99JLO	10/05/99
ANTHRACENE	120-12-7	ND	UG/L	10	10/09/99JLO	10/05/99
BENZO(A)ANTHRACENE	56-55-3	ND	UG/L	10	10/09/99JLO	10/05/99
BENZO(A)PYRENE	50-32-8	ND	UG/L	10	10/09/99JLO	10/05/99
BIS(2-ETHYL HEXYL)PHTHALA	117-81-7	ND	UG/L	10	10/09/99JLO	10/05/99
BIS(2-CHLOROETHOXY)METHAN	111-91-1	ND	UG/L	10	10/09/99JLO	10/05/99
2-CHLORONAPHTHALENE	91-58-7	ND	UG/L	10	10/09/99JLO	10/05/99
CHRYSENE	218-01-9	ND	UG/L	10	10/09/99JLO	10/05/99
DIBENZOFURAN	132-64-9	ND	UG/L	10	10/09/99JLO	10/05/99
2,4-DIMETHYLPHENOL	105-67-9	ND	UG/L	10	10/09/99JLO	10/05/99
DI-N-BUTYL PHTHALATE	84-74-2	ND	UG/L	10	10/09/99JLO	10/05/99
4,6-DINITRO-O-CRESOL	534-52-1	ND	UG/L	10	10/09/99JLO	10/05/99
2,4-DINITROTOLUENE	121-14-2	ND	UG/L	10	10/09/99JLO	10/05/99

Sample ID: MW4-2SA99 Sample Matrix: WATER
Collection Date: 09/28/99 10:25:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
2,6-DINITROTOLUENE	606-20-2	ND	UG/L	10	10/09/99JLO	10/05/99
1,2-DIPHENYLHYDRAZINE	122-66-7	ND	UG/L	10	10/09/99JLO	10/05/99
FLUORANTHENE	206-44-0	ND	UG/L	10	10/09/99JLO	10/05/99
FLUORENE	86-73-7	ND	UG/L	10	10/09/99JLO	10/05/99
2-METHYLNAPHTHALENE	91-57-6	ND	UG/L	10	10/09/99JLO	10/05/99
NAPHTHALENE	91-20-3	ND	UG/L	10	10/09/99JLO	10/05/99
NITROBENZENE	98-95-3	ND	UG/L	10	10/09/99JLO	10/05/99
4-NITROPHENOL	100-02-7	ND	UG/L	10	10/09/99JLO	10/05/99
N-NITROSODIPHENYLAMINE	86-30-6	ND	UG/L	10	10/09/99JLO	10/05/99
PENTACHLOROPHENOL	87-86-5	ND	UG/L	50	10/09/99JLO	10/05/99
PHENANTHRENE	85-01-8	ND	UG/L	10	10/09/99JLO	10/05/99
PHENOL	108-95-2	ND	UG/L	10	10/09/99JLO	10/05/99
PYRENE	129-00-0	ND	UG/L	10	10/09/99JLO	10/05/99
2-FLUOROBIPHENYL (SURROGAT	-	79	150	10		10/05/99
NITROBENZENE-D8 (SURROGATE	-	77	150	10		10/05/99
2-FLUOROPHENOL (SURROGATE)	-	41	150	10		10/05/99
2,4,6-TRIBROMOPHENOL (SURR	-	85	150	10		10/05/99
TERPHENYL-D14 (SURROGATE)	-	97	150	10		10/05/99
PHENOL-D5 (SURROGATE)	-	29	150	10		10/05/99

Sample ID: MW11B-2SA99 Sample Matrix: WATER
Collection Date: 09/28/99 11:05:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
VOLATILE ORGANICS	SW 846 8260					
BENZENE	71-43-2	ND	UG/L	1.0	10/10/99JDH	
CHLOROBENZENE	108-90-7	ND	UG/L	1.0	10/10/99JDH	
1,2-DICHLOROETHANE	107-06-2	ND	UG/L	1.0	10/10/99JDH	
DICHLOROMETHANE	75-09-2	ND	UG/L	1.0	10/10/99JDH	
ETHYLBENZENE	100-41-4	ND	UG/L	1.0	10/10/99JDH	
TOLUENE	108-88-3	ND	UG/L	1.0	10/10/99JDH	
XYLENES	1330-20-7	ND	UG/L	1.0	10/10/99JDH	
1,2-DICHLOROETHANE-D4 (SUR	-	113	125	75.0		
TOLUENE-d8 (SUR)	-	90	125	75.0		
BROMOFLUOROBENZENE (SUR)	-	82	125	75.0		
SEMIVOLATILES	SW 846 8270B					
ACENAPHTHENE	83-32-9	130	UG/L	10	10/09/99JLO	10/05/99
ACENAPHTHYLENE	208-96-8	ND	UG/L	10	10/09/99JLO	10/05/99
ANTHRACENE	120-12-7	ND	UG/L	10	10/09/99JLO	10/05/99
BENZO(A)ANTHRACENE	56-55-3	ND	UG/L	10	10/09/99JLO	10/05/99
BENZO(A)PYRENE	50-32-8	ND	UG/L	10	10/09/99JLO	10/05/99
BIS(2-ETHYL HEXYL)PHTHALA	117-81-7	ND	UG/L	10	10/09/99JLO	10/05/99
BIS(2-CHLOROETHOXY)METHAN	111-91-1	ND	UG/L	10	10/09/99JLO	10/05/99
2-CHLORONAPHTHALENE	91-58-7	ND	UG/L	10	10/09/99JLO	10/05/99
CHRYSENE	218-01-9	ND	UG/L	10	10/09/99JLO	10/05/99
DIBENZOFURAN	132-64-9	79.2	UG/L	10	10/09/99JLO	10/05/99

ample ID: MW11B-2SA99 Sample Matrix: WATER
ollection Date: 09/28/99 11:05:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
2,4-DIMETHYLPHENOL	105-67-9	ND	UG/L	10	10/09/99JLO	10/05/99
DI-N-BUTYL PHTHALATE	84-74-2	ND	UG/L	10	10/09/99JLO	10/05/99
4,6-DINITRO-O-CRESOL	534-52-1	ND	UG/L	10	10/09/99JLO	10/05/99
2,4-DINITROTOLUENE	121-14-2	ND	UG/L	10	10/09/99JLO	10/05/99
2,6-DINITROTOLUENE	606-20-2	ND	UG/L	10	10/09/99JLO	10/05/99
1,2-DIPHENYLHYDRAZINE	122-66-7	ND	UG/L	10	10/09/99JLO	10/05/99
FLUORANTHENE	206-44-0	ND	UG/L	10	10/09/99JLO	10/05/99
FLUORENE	86-73-7	78.2	UG/L	10	10/09/99JLO	10/05/99
2-METHYLNAPHTHALENE	91-57-6	34.6	UG/L	10	10/09/99JLO	10/05/99
NAPHTHALENE	91-20-3	409 D	UG/L	10	10/09/99JLO	10/05/99
NITROBENZENE	98-95-3	ND	UG/L	10	10/09/99JLO	10/05/99
4-NITROPHENOL	100-02-7	ND	UG/L	10	10/09/99JLO	10/05/99
N-NITROSODIPHENYLAMINE	86-30-6	ND	UG/L	10	10/09/99JLO	10/05/99
PENTACHLOROPHENOL	87-86-5	ND	UG/L	50	10/09/99JLO	10/05/99
PHENANTHRENE	85-01-8	59.8	UG/L	10	10/09/99JLO	10/05/99
PHENOL	108-95-2	ND	UG/L	10	10/09/99JLO	10/05/99
PYRENE	129-00-0	ND	UG/L	10	10/09/99JLO	10/05/99
2-FLUOROBIPHENYL (SURROGAT	-	70	150	10		10/05/99
NITROBENZENE-D8 (SURROGATE	-	65	150	10		10/05/99
2-FLUOROPHENOL (SURROGATE)	-	31	150	10		10/05/99
2,4,6-TRIBROMOPHENOL (SURR	-	74	150	10		10/05/99
TERPHENYL-D14 (SURROGATE)	-	95	150	10		10/05/99
PHENOL-D5 (SURROGATE)	-	23	150	10		10/05/99

ample ID: MW11BD-2SA99 Sample Matrix: WATER
ollection Date: 09/28/99 11:10:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
VOLATILE ORGANICS	SW 846 8260					
BENZENE	71-43-2	ND	UG/L	1.0	10/10/99JDH	
CHLOROBENZENE	108-90-7	ND	UG/L	1.0	10/10/99JDH	
1,2-DICHLOROETHANE	107-06-2	ND	UG/L	1.0	10/10/99JDH	
DICHLOROMETHANE	75-09-2	ND	UG/L	1.0	10/10/99JDH	
ETHYLBENZENE	100-41-4	ND	UG/L	1.0	10/10/99JDH	
TOLUENE	108-88-3	ND	UG/L	1.0	10/10/99JDH	
XYLENES	1330-20-7	ND	UG/L	1.0	10/10/99JDH	
1,2-DICHLOROETHANE-D4 (SUR	-	115	125	75.0		
TOLUENE-d8 (SUR)	-	93	125	75.0		
BROMOFLUOROBENZENE (SUR)	-	84	125	75.0		
SEMIVOLATILES	SW 846 8270B					
ACENAPHTHENE	83-32-9	140	UG/L	10	10/09/99JLO	10/05/99
ACENAPHTHYLENE	208-96-8	ND	UG/L	10	10/09/99JLO	10/05/99
ANTHRACENE	120-12-7	ND	UG/L	10	10/09/99JLO	10/05/99
BENZO(A)ANTHRACENE	56-55-3	ND	UG/L	10	10/09/99JLO	10/05/99
BENZO(A)PYRENE	50-32-8	ND	UG/L	10	10/09/99JLO	10/05/99
BIS(2-ETHYL HEXYL)PHTHALA	117-81-7	ND	UG/L	10	10/09/99JLO	10/05/99

Sample ID: MW11BD-2SA99 Sample Matrix: WATER
Collection Date: 09/28/99 11:10:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
BIS(2-CHLOROETHOXY)METHAN	111-91-1	ND	UG/L	10	10/09/99JLO	10/05/99
2-CHLORONAPHTHALENE	91-58-7	ND	UG/L	10	10/09/99JLO	10/05/99
CHRYSENE	218-01-9	ND	UG/L	10	10/09/99JLO	10/05/99
DIBENZOFURAN	132-64-9	85.2	UG/L	10	10/09/99JLO	10/05/99
2,4-DIMETHYLPHENOL	105-67-9	ND	UG/L	10	10/09/99JLO	10/05/99
DI-N-BUTYL PHTHALATE	84-74-2	ND	UG/L	10	10/09/99JLO	10/05/99
4,6-DINITRO-O-CRESOL	534-52-1	ND	UG/L	10	10/09/99JLO	10/05/99
2,4-DINITROTOLUENE	121-14-2	ND	UG/L	10	10/09/99JLO	10/05/99
2,6-DINITROTOLUENE	606-20-2	ND	UG/L	10	10/09/99JLO	10/05/99
1,2-DIPHENYLHYDRAZINE	122-66-7	ND	UG/L	10	10/09/99JLO	10/05/99
FLUORANTHENE	206-44-0	ND	UG/L	10	10/09/99JLO	10/05/99
FLUORENE	86-73-7	83.0	UG/L	10	10/09/99JLO	10/05/99
2-METHYLNAPHTHALENE	91-57-6	37.8	UG/L	10	10/09/99JLO	10/05/99
NAPHTHALENE	91-20-3	495 D	UG/L	10	10/09/99JLO	10/05/99
NITROBENZENE	98-95-3	ND	UG/L	10	10/09/99JLO	10/05/99
4-NITROPHENOL	100-02-7	ND	UG/L	10	10/09/99JLO	10/05/99
N-NITROSODIPHENYLAMINE	86-30-6	ND	UG/L	10	10/09/99JLO	10/05/99
PENTACHLOROPHENOL	87-86-5	ND	UG/L	50	10/09/99JLO	10/05/99
PHENANTHRENE	85-01-8	71.8	UG/L	10	10/09/99JLO	10/05/99
PHENOL	108-95-2	ND	UG/L	10	10/09/99JLO	10/05/99
PYRENE	129-00-0	ND	UG/L	10	10/09/99JLO	10/05/99
2-FLUOROBIPHENYL (SURROGAT	-	63	150	10		10/05/99
NITROBENZENE-D8 (SURROGATE	-	51	150	10		10/05/99
2-FLUOROPHENOL (SURROGATE)	-	23	150	10		10/05/99
2,4,6-TRIBROMOPHENOL (SURR	-	70	150	10		10/05/99
TERPHENYL-D14 (SURROGATE)	-	90	150	10		10/05/99
PHENOL-D5 (SURROGATE)	-	17	150	10		10/05/99

Sample ID: MW11A-2SA99 Sample Matrix: WATER
Collection Date: 09/28/99 11:45:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
VOLATILE ORGANICS	SW 846 8260					
BENZENE	71-43-2	ND	UG/L	50	10/11/99JDH	
CHLOROBENZENE	108-90-7	ND	UG/L	50	10/11/99JDH	
1,2-DICHLOROETHANE	107-06-2	ND	UG/L	50	10/11/99JDH	
DICHLOROMETHANE	75-09-2	ND	UG/L	50	10/11/99JDH	
ETHYLBENZENE	100-41-4	ND	UG/L	50	10/11/99JDH	
TOLUENE	108-88-3	ND	UG/L	50	10/11/99JDH	
XYLENES	1330-20-7	ND	UG/L	50	10/11/99JDH	
1,2-DICHLOROETHANE-D4 (SUR	-	119	125	75.0		
TOLUENE-d8 (SUR)	-	96	125	75.0		
BROMOFLUOROBENZENE (SUR)	-	98	125	75.0		
SEMIVOLATILES	SW 846 8270B					
ACENAPHTHENE	83-32-9	160 D	UG/L	10	10/09/99JLO	10/05/99
ACENAPHTHYLENE	208-96-8	ND	UG/L	10	10/09/99JLO	10/05/99

Sample ID: MW11A-2SA99 Sample Matrix: WATER
Collection Date: 09/28/99 11:45:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
ANTHRACENE	120-12-7	ND	UG/L	10	10/09/99JLO	10/05/99
BENZO(A)ANTHRACENE	56-55-3	ND	UG/L	10	10/09/99JLO	10/05/99
BENZO(A)PYRENE	50-32-8	ND	UG/L	10	10/09/99JLO	10/05/99
BIS(2-ETHYL HEXYL)PHTHALA	117-81-7	ND	UG/L	10	10/09/99JLO	10/05/99
BIS(2-CHLOROETHOXY)METHAN	111-91-1	ND	UG/L	10	10/09/99JLO	10/05/99
2-CHLORONAPHTHALENE	91-58-7	ND	UG/L	10	10/09/99JLO	10/05/99
CHRYSENE	218-01-9	ND	UG/L	10	10/09/99JLO	10/05/99
DIBENZOFURAN	132-64-9	112	UG/L	10	10/09/99JLO	10/05/99
2,4-DIMETHYLPHENOL	105-67-9	ND	UG/L	10	10/09/99JLO	10/05/99
DI-N-BUTYL PHTHALATE	84-74-2	ND	UG/L	10	10/09/99JLO	10/05/99
4,6-DINITRO-O-CRESOL	534-52-1	ND	UG/L	10	10/09/99JLO	10/05/99
2,4-DINITROTOLUENE	121-14-2	ND	UG/L	10	10/09/99JLO	10/05/99
2,6-DINITROTOLUENE	606-20-2	ND	UG/L	10	10/09/99JLO	10/05/99
1,2-DIPHENYLHYDRAZINE	122-66-7	ND	UG/L	10	10/09/99JLO	10/05/99
FLUORANTHENE	206-44-0	ND	UG/L	10	10/09/99JLO	10/05/99
FLUORENE	86-73-7	10.6	UG/L	10	10/09/99JLO	10/05/99
2-METHYLNAPHTHALENE	91-57-6	81.6	UG/L	10	10/09/99JLO	10/05/99
NAPHTHALENE	91-20-3	1470 D	UG/L	10	10/09/99JLO	10/05/99
NITROBENZENE	98-95-3	ND	UG/L	10	10/09/99JLO	10/05/99
4-NITROPHENOL	100-02-7	ND	UG/L	10	10/09/99JLO	10/05/99
N-NITROSODIPHENYLAMINE	86-30-6	ND	UG/L	10	10/09/99JLO	10/05/99
PENTACHLOROPHENOL	87-86-5	ND	UG/L	50	10/09/99JLO	10/05/99
PHENANTHRENE	85-01-8	65.1	UG/L	10	10/09/99JLO	10/05/99
PHENOL	108-95-2	ND	UG/L	10	10/09/99JLO	10/05/99
PYRENE	129-00-0	ND	UG/L	10	10/09/99JLO	10/05/99
2-FLUOROBIPHENYL (SURROGAT	-	64	150	10		10/05/99
NITROBENZENE-D8 (SURROGATE	-	45	150	10		10/05/99
2-FLUOROPHENOL (SURROGATE)	-	24	150	10		10/05/99
2,4,6-TRIBROMOPHENOL (SURR	-	64	150	10		10/05/99
TERPHENYL-D14 (SURROGATE)	-	86	150	10		10/05/99
PHENOL-D5 (SURROGATE)	-	18	150	10		10/05/99

Sample ID: MW10B-2SA99 Sample Matrix: WATER
Collection Date: 09/28/99 13:25:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
VOLATILE ORGANICS	SW 846 8260					
BENZENE	71-43-2	ND	UG/L	50	10/11/99JDH	
CHLOROBENZENE	108-90-7	ND	UG/L	50	10/11/99JDH	
1,2-DICHLOROETHANE	107-06-2	ND	UG/L	50	10/11/99JDH	
DICHLOROMETHANE	75-09-2	ND	UG/L	50	10/11/99JDH	
ETHYLBENZENE	100-41-4	ND	UG/L	50	10/11/99JDH	
TOLUENE	108-88-3	ND	UG/L	50	10/11/99JDH	
XYLENES	1330-20-7	ND	UG/L	50	10/11/99JDH	
1,2-DICHLOROETHANE-D4 (SUR	-	119	125	75.0		
TOLUENE-d8 (SUR)	-	98	125	75.0		

mple ID: MW10B-2SA99 Sample Matrix: WATER
ollection Date: 09/28/99 13:25:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
BROMOFLUOROBENZENE (SUR)	-	95	125	75.0		
MIVOLATILES	SW 846 8270B					
ACENAPHTHENE	83-32-9	135	UG/L	10	10/09/99JLO	10/05/99
ACENAPHTHYLENE	208-96-8	ND	UG/L	10	10/09/99JLO	10/05/99
ANTHRACENE	120-12-7	ND	UG/L	10	10/09/99JLO	10/05/99
BENZO(A)ANTHRACENE	56-55-3	ND	UG/L	10	10/09/99JLO	10/05/99
BENZO(A)PYRENE	50-32-8	ND	UG/L	10	10/09/99JLO	10/05/99
BIS(2-ETHYL HEXYL)PHTHALA	117-81-7	ND	UG/L	10	10/09/99JLO	10/05/99
BIS(2-CHLOROETHOXY)METHAN	111-91-1	ND	UG/L	10	10/09/99JLO	10/05/99
2-CHLORONAPHTHALENE	91-58-7	ND	UG/L	10	10/09/99JLO	10/05/99
CHRYSENE	218-01-9	ND	UG/L	10	10/09/99JLO	10/05/99
DIBENZOFURAN	132-64-9	82.5	UG/L	10	10/09/99JLO	10/05/99
2,4-DIMETHYLPHENOL	105-67-9	ND	UG/L	10	10/09/99JLO	10/05/99
DI-N-BUTYL PHTHALATE	84-74-2	ND	UG/L	10	10/09/99JLO	10/05/99
4,6-DINITRO-O-CRESOL	534-52-1	ND	UG/L	10	10/09/99JLO	10/05/99
2,4-DINITROTOLUENE	121-14-2	ND	UG/L	10	10/09/99JLO	10/05/99
2,6-DINITROTOLUENE	606-20-2	ND	UG/L	10	10/09/99JLO	10/05/99
1,2-DIPHENYLHYDRAZINE	122-66-7	ND	UG/L	10	10/09/99JLO	10/05/99
FLUORANTHENE	206-44-0	ND	UG/L	10	10/09/99JLO	10/05/99
FLUORENE	86-73-7	84.2	UG/L	10	10/09/99JLO	10/05/99
2-METHYLNAPHTHALENE	91-57-6	ND	UG/L	10	10/09/99JLO	10/05/99
NAPHTHALENE	91-20-3	285 D	UG/L	10	10/09/99JLO	10/05/99
NITROBENZENE	98-95-3	ND	UG/L	10	10/09/99JLO	10/05/99
4-NITROPHENOL	100-02-7	ND	UG/L	10	10/09/99JLO	10/05/99
N-NITROSODIPHENYLAMINE	86-30-6	ND	UG/L	10	10/09/99JLO	10/05/99
PENTACHLOROPHENOL	87-86-5	ND	UG/L	50	10/09/99JLO	10/05/99
PHENANTHRENE	85-01-8	62.5	UG/L	10	10/09/99JLO	10/05/99
PHENOL	108-95-2	ND	UG/L	10	10/09/99JLO	10/05/99
PYRENE	129-00-0	ND	UG/L	10	10/09/99JLO	10/05/99
2-FLUOROBIPHENYL (SURROGAT	-	76	150	10		10/05/99
NITROBENZENE-D8 (SURROGATE	-	67	150	10		10/05/99
2-FLUOROPHENOL (SURROGATE)	-	36	150	10		10/05/99
2,4,6-TRIBROMOPHENOL (SURR	-	80	150	10		10/05/99
TERPHENYL-D14 (SURROGATE)	-	101	150	10		10/05/99
PHENOL-D5 (SURROGATE)	-	28	150	10		10/05/99

Sample ID: MW10A-2SA99 Sample Matrix: WATER
Collection Date: 09/28/99 14:00:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
OLATILE ORGANICS	SW 846 8260					
BENZENE	71-43-2	ND	UG/L	1.0	10/11/99JDH	
CHLOROBENZENE	108-90-7	ND	UG/L	1.0	10/11/99JDH	
1,2-DICHLOROETHANE	107-06-2	ND	UG/L	1.0	10/11/99JDH	
DICHLOROMETHANE	75-09-2	ND	UG/L	1.0	10/11/99JDH	
ETHYLBENZENE	100-41-4	ND	UG/L	1.0	10/11/99JDH	

mple ID: MW10A-2SA99 Sample Matrix: WATER
llection Date: 09/28/99 14:00:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
TOLUENE	108-88-3	ND	UG/L	1.0	10/11/99JDH	
XYLENES	1330-20-7	ND	UG/L	1.0	10/11/99JDH	
,2-DICHLOROETHANE-D4 (SUR	-	119	125	75.0		
TOLUENE-d8 (SUR)	-	94	125	75.0		
BROMOFLUOROBENZENE (SUR)	-	80	125	75.0		
MIVOLATILES	SW 846 8270B					
ACENAPHTHENE	83-32-9	ND	UG/L	10	10/09/99JLO	10/05/99
ACENAPHTHYLENE	208-96-8	ND	UG/L	10	10/09/99JLO	10/05/99
ANTHRACENE	120-12-7	ND	UG/L	10	10/09/99JLO	10/05/99
BENZO(A)ANTHRACENE	56-55-3	ND	UG/L	10	10/09/99JLO	10/05/99
BENZO(A)PYRENE	50-32-8	ND	UG/L	10	10/09/99JLO	10/05/99
BIS(2-ETHYL HEXYL)PHTHALA	117-81-7	ND	UG/L	10	10/09/99JLO	10/05/99
BIS(2-CHLOROETHOXY)METHAN	111-91-1	ND	UG/L	10	10/09/99JLO	10/05/99
2-CHLORONAPHTHALENE	91-58-7	ND	UG/L	10	10/09/99JLO	10/05/99
CHRYSENE	218-01-9	ND	UG/L	10	10/09/99JLO	10/05/99
DIBENZOFURAN	132-64-9	ND	UG/L	10	10/09/99JLO	10/05/99
2,4-DIMETHYLPHENOL	105-67-9	ND	UG/L	10	10/09/99JLO	10/05/99
DI-N-BUTYL PHTHALATE	84-74-2	ND	UG/L	10	10/09/99JLO	10/05/99
4,6-DINITRO-O-CRESOL	534-52-1	ND	UG/L	10	10/09/99JLO	10/05/99
2,4-DINITROTOLUENE	121-14-2	ND	UG/L	10	10/09/99JLO	10/05/99
2,6-DINITROTOLUENE	606-20-2	ND	UG/L	10	10/09/99JLO	10/05/99
1,2-DIPHENYLHYDRAZINE	122-66-7	ND	UG/L	10	10/09/99JLO	10/05/99
FLUORANTHENE	206-44-0	ND	UG/L	10	10/09/99JLO	10/05/99
FLUORENE	86-73-7	ND	UG/L	10	10/09/99JLO	10/05/99
2-METHYLNAPHTHALENE	91-57-6	ND	UG/L	10	10/09/99JLO	10/05/99
NAPHTHALENE	91-20-3	ND	UG/L	10	10/09/99JLO	10/05/99
NITROBENZENE	98-95-3	ND	UG/L	10	10/09/99JLO	10/05/99
4-NITROPHENOL	100-02-7	ND	UG/L	10	10/09/99JLO	10/05/99
N-NITROSODIPHENYLAMINE	86-30-6	ND	UG/L	10	10/09/99JLO	10/05/99
PENTACHLOROPHENOL	87-86-5	ND	UG/L	50	10/09/99JLO	10/05/99
PHENANTHRENE	85-01-8	ND	UG/L	10	10/09/99JLO	10/05/99
PHENOL	108-95-2	ND	UG/L	10	10/09/99JLO	10/05/99
PYRENE	129-00-0	ND	UG/L	10	10/09/99JLO	10/05/99
2-FLUOROBIPHENYL (SURROGAT	-	65	150	10		10/05/99
NITROBENZENE-D8 (SURROGATE	-	60	150	10		10/05/99
2-FLUOROPHENOL (SURROGATE)	-	25	150	10		10/05/99
2,4,6-TRIBROMOPHENOL (SURR	-	65	150	10		10/05/99
TERPHENYL-D14 (SURROGATE)	-	88	150	10		10/05/99
PHENOL-D5 (SURROGATE)	-	16	150	10		10/05/99

Sample ID: P11-2SA99 Sample Matrix: WATER
ollection Date: 09/27/99 12:35:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
OLATILE ORGANICS	SW 846 8260					
BENZENE	71-43-2	ND	UG/L	1.0	10/11/99JDH	

ample ID: P11-2SA99 Sample Matrix: WATER
Collection Date: 09/27/99 12:35:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
CHLOROBENZENE	108-90-7	ND	UG/L	1.0	10/11/99JDH	
1,2-DICHLOROETHANE	107-06-2	ND	UG/L	1.0	10/11/99JDH	
DICHLOROMETHANE	75-09-2	ND	UG/L	1.0	10/11/99JDH	
ETHYLBENZENE	100-41-4	ND	UG/L	1.0	10/11/99JDH	
TOLUENE	108-88-3	ND	UG/L	1.0	10/11/99JDH	
XYLENES	1330-20-7	ND	UG/L	1.0	10/11/99JDH	
1,2-DICHLOROETHANE-D4 (SUR	-	118	125	75.0		
TOLUENE-d8 (SUR)	-	91	125	75.0		
BROMOFLUOROBENZENE (SUR)	-	107	125	75.0		
SEMIVOLATILES	SW 846 8270B					
ACENAPHTHENE	83-32-9	43.0	UG/L	10	10/09/99JLO	10/05/99
ACENAPHTHYLENE	208-96-8	ND	UG/L	10	10/09/99JLO	10/05/99
ANTHRACENE	120-12-7	ND	UG/L	10	10/09/99JLO	10/05/99
BENZO(A)ANTHRACENE	56-55-3	ND	UG/L	10	10/09/99JLO	10/05/99
BENZO(A)PYRENE	50-32-8	ND	UG/L	10	10/09/99JLO	10/05/99
BIS(2-ETHYL HEXYL)PHTHALA	117-81-7	ND	UG/L	10	10/09/99JLO	10/05/99
BIS(2-CHLOROETHOXY)METHAN	111-91-1	ND	UG/L	10	10/09/99JLO	10/05/99
2-CHLORONAPHTHALENE	91-58-7	ND	UG/L	10	10/09/99JLO	10/05/99
CHRYSENE	218-01-9	ND	UG/L	10	10/09/99JLO	10/05/99
DIBENZOFURAN	132-64-9	ND	UG/L	10	10/09/99JLO	10/05/99
2,4-DIMETHYLPHENOL	105-67-9	ND	UG/L	10	10/09/99JLO	10/05/99
DI-N-BUTYL PHTHALATE	84-74-2	ND	UG/L	10	10/09/99JLO	10/05/99
4,6-DINITRO-O-CRESOL	534-52-1	ND	UG/L	10	10/09/99JLO	10/05/99
2,4-DINITROTOLUENE	121-14-2	ND	UG/L	10	10/09/99JLO	10/05/99
2,6-DINITROTOLUENE	606-20-2	ND	UG/L	10	10/09/99JLO	10/05/99
1,2-DIPHENYLHYDRAZINE	122-66-7	ND	UG/L	10	10/09/99JLO	10/05/99
FLUORANTHENE	206-44-0	ND	UG/L	10	10/09/99JLO	10/05/99
FLUORENE	86-73-7	24.3	UG/L	10	10/09/99JLO	10/05/99
2-METHYLNAPHTHALENE	91-57-6	ND	UG/L	10	10/09/99JLO	10/05/99
NAPHTHALENE	91-20-3	16.6	UG/L	10	10/09/99JLO	10/05/99
NITROBENZENE	98-95-3	ND	UG/L	10	10/09/99JLO	10/05/99
4-NITROPHENOL	100-02-7	ND	UG/L	10	10/09/99JLO	10/05/99
N-NITROSODIPHENYLAMINE	86-30-6	ND	UG/L	10	10/09/99JLO	10/05/99
PENTACHLOROPHENOL	87-86-5	ND	UG/L	50	10/09/99JLO	10/05/99
PHENANTHRENE	85-01-8	ND	UG/L	10	10/09/99JLO	10/05/99
PHENOL	108-95-2	ND	UG/L	10	10/09/99JLO	10/05/99
PYRENE	129-00-0	ND	UG/L	10	10/09/99JLO	10/05/99
2-FLUOROBIPHENYL (SURROGAT	-	62	150	10		10/05/99
NITROBENZENE-D8 (SURROGATE	-	62	150	10		10/05/99
2-FLUOROPHENOL (SURROGATE)	-	36	150	10		10/05/99
2,4,6-TRIBROMOPHENOL (SURR	-	72	150	10		10/05/99
TERPHENYL-D14 (SURROGATE)	-	87	150	10		10/05/99
PHENOL-D5 (SURROGATE)	-	25	150	10		10/05/99

Sample ID: P11MS-2SA99 Sample Matrix: WATER
Collection Date: 09/27/99 12:40:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
VOLATILE ORGANICS	SW 846 8260					
BENZENE	71-43-2	96.2	% REC	1.0	10/11/99JDH	
CHLOROBENZENE	108-90-7	88.8	% REC	1.0	10/11/99JDH	
1,2-DICHLOROETHANE	107-06-2	ND	% REC	1.0	10/11/99JDH	
DICHLOROMETHANE	75-09-2	ND	% REC	1.0	10/11/99JDH	
ETHYLBENZENE	100-41-4	ND	% REC	1.0	10/11/99JDH	
TOLUENE	108-88-3	96.4	% REC	1.0	10/11/99JDH	
XYLENES	1330-20-7	ND	% REC	1.0	10/11/99JDH	
1,2-DICHLOROETHANE-D4 (SUR	-	115	125	75.0		
TOLUENE-d8 (SUR)	-	93	125	75.0		
BROMOFLUOROBENZENE (SUR)	-	110	125	75.0		
SEMIVOLATILES	SW 846 8270B					
ACENAPHTHENE	83-32-9	116	% REC	10	10/09/99JLO	10/05/99
ACENAPHTHYLENE	208-96-8	ND	% REC	10	10/09/99JLO	10/05/99
ANTHRACENE	120-12-7	ND	% REC	10	10/09/99JLO	10/05/99
BENZO(A)ANTHRACENE	56-55-3	ND	% REC	10	10/09/99JLO	10/05/99
BENZO(A)PYRENE	50-32-8	ND	% REC	10	10/09/99JLO	10/05/99
BIS(2-ETHYL HEXYL)PHTHALA	117-81-7	ND	% REC	10	10/09/99JLO	10/05/99
BIS(2-CHLOROETHOXY)METHAN	111-91-1	ND	% REC	10	10/09/99JLO	10/05/99
2-CHLORONAPHTHALENE	91-58-7	ND	% REC	10	10/09/99JLO	10/05/99
CHRYSENE	218-01-9	ND	% REC	10	10/09/99JLO	10/05/99
DIBENZOFURAN	132-64-9	ND	% REC	10	10/09/99JLO	10/05/99
2,4-DIMETHYLPHENOL	105-67-9	ND	% REC	10	10/09/99JLO	10/05/99
DI-N-BUTYL PHTHALATE	84-74-2	ND	% REC	10	10/09/99JLO	10/05/99
4,6-DINITRO-O-CRESOL	534-52-1	ND	% REC	10	10/09/99JLO	10/05/99
2,4-DINITROTOLUENE	121-14-2	123	% REC	10	10/09/99JLO	10/05/99
2,6-DINITROTOLUENE	606-20-2	ND	% REC	10	10/09/99JLO	10/05/99
1,2-DIPHENYLHYDRAZINE	122-66-7	ND	% REC	10	10/09/99JLO	10/05/99
FLUORANTHENE	206-44-0	ND	% REC	10	10/09/99JLO	10/05/99
FLUORENE	86-73-7	ND	% REC	10	10/09/99JLO	10/05/99
2-METHYLNAPHTHALENE	91-57-6	ND	% REC	10	10/09/99JLO	10/05/99
NAPHTHALENE	91-20-3	ND	% REC	10	10/09/99JLO	10/05/99
NITROBENZENE	98-95-3	ND	% REC	10	10/09/99JLO	10/05/99
4-NITROPHENOL	100-02-7	24	% REC	10	10/09/99JLO	10/05/99
N-NITROSODIPHENYLAMINE	86-30-6	104	% REC	10	10/09/99JLO	10/05/99
PENTACHLOROPHENOL	87-86-5	63	% REC	50	10/09/99JLO	10/05/99
PHENANTHRENE	85-01-8	ND	% REC	10	10/09/99JLO	10/05/99
PHENOL	108-95-2	19	% REC	10	10/09/99JLO	10/05/99
PYRENE	129-00-0	142	% REC	10	10/09/99JLO	10/05/99
2-FLUOROBIPHENYL (SURROGAT	-	60	150	10		10/05/99
NITROBENZENE-D8 (SURROGATE	-	57	150	10		10/05/99
2-FLUOROPHENOL (SURROGATE)	-	27	150	10		10/05/99
2,4,6-TRIBROMOPHENOL (SURR	-	68	150	10		10/05/99
TERPHENYL-D14 (SURROGATE)	-	77	150	10		10/05/99
PHENOL-D5 (SURROGATE)	-	16	150	10		10/05/99

Sample ID: P11MSD-2SA99 Sample Matrix: WATER
Collection Date: 09/07/99 12:45:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
VOLATILE ORGANICS	SW 846 8260					
BENZENE	71-43-2	5.53	RPD	1.0	10/11/99JDH	
CHLOROBENZENE	108-90-7	3.10	RPD	1.0	10/11/99JDH	
1,2-DICHLOROETHANE	107-06-2	ND	RPD	1.0	10/11/99JDH	
DICHLOROMETHANE	75-09-2	ND	RPD	1.0	10/11/99JDH	
ETHYLBENZENE	100-41-4	ND	RPD	1.0	10/11/99JDH	
TOLUENE	108-88-3	4.46	RPD	1.0	10/11/99JDH	
XYLENES	1330-20-7	ND	RPD	1.0	10/11/99JDH	
1,2-DICHLOROETHANE-D4 (SUR	-	110	125	75.0		
TOLUENE-d8 (SUR)	-	102	125	75.0		
BROMOFLUOROBENZENE (SUR)	-	104	125	75.0		
SEMIVOLATILES	SW 846 8270B					
ACENAPHTHENE	83-32-9	16	RPD	10	10/09/99JLO	10/05/99
ACENAPHTHYLENE	208-96-8	ND	RPD	10	10/09/99JLO	10/05/99
ANTHRACENE	120-12-7	ND	RPD	10	10/09/99JLO	10/05/99
BENZO(A)ANTHRACENE	56-55-3	ND	RPD	10	10/09/99JLO	10/05/99
BENZO(A)PYRENE	50-32-8	ND	RPD	10	10/09/99JLO	10/05/99
BIS(2-ETHYL HEXYL)PHTHALA	117-81-7	ND	RPD	10	10/09/99JLO	10/05/99
BIS(2-CHLOROETHOXY)METHAN	111-91-1	ND	RPD	10	10/09/99JLO	10/05/99
2-CHLORONAPHTHALENE	91-58-7	ND	RPD	10	10/09/99JLO	10/05/99
CHRYSENE	218-01-9	ND	RPD	10	10/09/99JLO	10/05/99
DIBENZOFURAN	132-64-9	ND	RPD	10	10/09/99JLO	10/05/99
2,4-DIMETHYLPHENOL	105-67-9	ND	RPD	10	10/09/99JLO	10/05/99
DI-N-BUTYL PHTHALATE	84-74-2	ND	RPD	10	10/09/99JLO	10/05/99
4,6-DINITRO-O-CRESOL	534-52-1	ND	RPD	10	10/09/99JLO	10/05/99
2,4-DINITROTOLUENE	121-14-2	15	RPD	10	10/09/99JLO	10/05/99
2,6-DINITROTOLUENE	606-20-2	ND	RPD	10	10/09/99JLO	10/05/99
1,2-DIPHENYLHYDRAZINE	122-66-7	ND	RPD	10	10/09/99JLO	10/05/99
FLUORANTHENE	206-44-0	ND	RPD	10	10/09/99JLO	10/05/99
FLUORENE	86-73-7	ND	RPD	10	10/09/99JLO	10/05/99
2-METHYLNAPHTHALENE	91-57-6	ND	RPD	10	10/09/99JLO	10/05/99
NAPHTHALENE	91-20-3	ND	RPD	10	10/09/99JLO	10/05/99
NITROBENZENE	98-95-3	ND	RPD	10	10/09/99JLO	10/05/99
4-NITROPHENOL	100-02-7	27	RPD	10	10/09/99JLO	10/05/99
N-NITROSODIPHENYLAMINE	86-30-6	ND	RPD	10	10/09/99JLO	10/05/99
PENTACHLOROPHENOL	87-86-5	31	RPD	50	10/09/99JLO	10/05/99
PHENANTHRENE	85-01-8	ND	RPD	10	10/09/99JLO	10/05/99
PHENOL	108-95-2	17	RPD	10	10/09/99JLO	10/05/99
PYRENE	129-00-0	17	RPD	10	10/09/99JLO	10/05/99
2-FLUOROBIPHENYL (SURROGAT	-	66	150	10		10/05/99
NITROBENZENE-D8 (SURROGATE	-	61	150	10		10/05/99
2-FLUOROPHENOL (SURROGATE)	-	30	150	10		10/05/99
2,4,6-TRIBROMOPHENOL (SURR	-	79	150	10		10/05/99
TERPHENYL-D14 (SURROGATE)	-	91	150	10		10/05/99
PHENOL-D5 (SURROGATE)	-	19	150	10		10/05/99

ample ID: MW8-2SA99 Sample Matrix: WATER
ollection Date: 09/27/99 16:10:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
VOLATILE ORGANICS	SW 846 8260					
BENZENE	71-43-2	ND	UG/L	1.0	10/11/99JDH	
CHLOROBENZENE	108-90-7	ND	UG/L	1.0	10/11/99JDH	
1,2-DICHLOROETHANE	107-06-2	ND	UG/L	1.0	10/11/99JDH	
DICHLOROMETHANE	75-09-2	ND	UG/L	1.0	10/11/99JDH	
ETHYLBENZENE	100-41-4	ND	UG/L	1.0	10/11/99JDH	
TOLUENE	108-88-3	ND	UG/L	1.0	10/11/99JDH	
XYLENES	1330-20-7	ND	UG/L	1.0	10/11/99JDH	
1,2-DICHLOROETHANE-D4 (SUR	-	105	125	75.0		
TOLUENE-d8 (SUR)	-	123	125	75.0		
BROMOFLUOROBENZENE (SUR)	-	103	125	75.0		
SEMIVOLATILES	SW 846 8270B					
ACENAPHTHENE	83-32-9	ND	UG/L	10	10/09/99JLO	10/05/99
ACENAPHTHYLENE	208-96-8	ND	UG/L	10	10/09/99JLO	10/05/99
ANTHRACENE	120-12-7	ND	UG/L	10	10/09/99JLO	10/05/99
BENZO(A)ANTHRACENE	56-55-3	ND	UG/L	10	10/09/99JLO	10/05/99
BENZO(A)PYRENE	50-32-8	ND	UG/L	10	10/09/99JLO	10/05/99
BIS(2-ETHYL HEXYL)PHTHALA	117-81-7	ND	UG/L	10	10/09/99JLO	10/05/99
BIS(2-CHLOROETHOXY)METHAN	111-91-1	ND	UG/L	10	10/09/99JLO	10/05/99
2-CHLORONAPHTHALENE	91-58-7	ND	UG/L	10	10/09/99JLO	10/05/99
CHRYSENE	218-01-9	ND	UG/L	10	10/09/99JLO	10/05/99
DIBENZOFURAN	132-64-9	ND	UG/L	10	10/09/99JLO	10/05/99
2,4-DIMETHYLPHENOL	105-67-9	ND	UG/L	10	10/09/99JLO	10/05/99
DI-N-BUTYL PHTHALATE	84-74-2	ND	UG/L	10	10/09/99JLO	10/05/99
4,6-DINITRO-O-CRESOL	534-52-1	ND	UG/L	10	10/09/99JLO	10/05/99
2,4-DINITROTOLUENE	121-14-2	ND	UG/L	10	10/09/99JLO	10/05/99
2,6-DINITROTOLUENE	606-20-2	ND	UG/L	10	10/09/99JLO	10/05/99
1,2-DIPHENYLHYDRAZINE	122-66-7	ND	UG/L	10	10/09/99JLO	10/05/99
FLUORANTHENE	206-44-0	ND	UG/L	10	10/09/99JLO	10/05/99
FLUORENE	86-73-7	ND	UG/L	10	10/09/99JLO	10/05/99
2-METHYLNAPHTHALENE	91-57-6	ND	UG/L	10	10/09/99JLO	10/05/99
NAPHTHALENE	91-20-3	ND	UG/L	10	10/09/99JLO	10/05/99
NITROBENZENE	98-95-3	ND	UG/L	10	10/09/99JLO	10/05/99
4-NITROPHENOL	100-02-7	ND	UG/L	10	10/09/99JLO	10/05/99
N-NITROSODIPHENYLAMINE	86-30-6	ND	UG/L	10	10/09/99JLO	10/05/99
PENTACHLOROPHENOL	87-86-5	ND	UG/L	50	10/09/99JLO	10/05/99
PHENANTHRENE	85-01-8	ND	UG/L	10	10/09/99JLO	10/05/99
PHENOL	108-95-2	ND	UG/L	10	10/09/99JLO	10/05/99
PYRENE	129-00-0	ND	UG/L	10	10/09/99JLO	10/05/99
2-FLUOROBIPHENYL (SURROGAT	-	74	150	10		10/05/99
NITROBENZENE-D8 (SURROGATE	-	70	150	10		10/05/99
2-FLUOROPHENOL (SURROGATE)	-	4.9 Q	150	10		10/05/99
2,4,6-TRIBROMOPHENOL (SURR	-	64	150	10		10/05/99
TERPHENYL-D14 (SURROGATE)	-	95	150	10		10/05/99
PHENOL-D5 (SURROGATE)	-	1.8 Q	150	10		10/05/99
ACENAPHTHENE	83-32-9	ND	UG/L	10	10/14/99JLO	10/05/99
ACENAPHTHYLENE	208-96-8	ND	UG/L	10	10/14/99JLO	10/05/99
ANTHRACENE	120-12-7	ND	UG/L	10	10/14/99JLO	10/05/99

ample ID: MW8-2SA99 Sample Matrix: WATER
Collection Date: 09/27/99 16:10:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
BENZO(A)ANTHRACENE	56-55-3	ND	UG/L	10	10/14/99JLO	10/05/99
BENZO(A)PYRENE	50-32-8	ND	UG/L	10	10/14/99JLO	10/05/99
BIS(2-ETHYL HEXYL)PHTHALA	117-81-7	ND	UG/L	10	10/14/99JLO	10/05/99
BIS(2-CHLOROETHOXY)METHAN	111-91-1	ND	UG/L	10	10/14/99JLO	10/05/99
2-CHLORONAPHTHALENE	91-58-7	ND	UG/L	10	10/14/99JLO	10/05/99
CHRYSENE	218-01-9	ND	UG/L	10	10/14/99JLO	10/05/99
DIBENZOFURAN	132-64-9	ND	UG/L	10	10/14/99JLO	10/05/99
2,4-DIMETHYLPHENOL	105-67-9	ND	UG/L	10	10/14/99JLO	10/05/99
DI-N-BUTYL PHTHALATE	84-74-2	ND	UG/L	10	10/14/99JLO	10/05/99
4,6-DINITRO-O-CRESOL	534-52-1	ND	UG/L	10	10/14/99JLO	10/05/99
2,4-DINITROTOLUENE	121-14-2	ND	UG/L	10	10/14/99JLO	10/05/99
2,6-DINITROTOLUENE	606-20-2	ND	UG/L	10	10/14/99JLO	10/05/99
1,2-DIPHENYLHYDRAZINE	122-66-7	ND	UG/L	10	10/14/99JLO	10/05/99
FLUORANTHENE	206-44-0	ND	UG/L	10	10/14/99JLO	10/05/99
FLUORENE	86-73-7	ND	UG/L	10	10/14/99JLO	10/05/99
2-METHYLNAPHTHALENE	91-57-6	ND	UG/L	10	10/14/99JLO	10/05/99
NAPHTHALENE	91-20-3	ND	UG/L	10	10/14/99JLO	10/05/99
NITROBENZENE	98-95-3	ND	UG/L	10	10/14/99JLO	10/05/99
4-NITROPHENOL	100-02-7	ND	UG/L	10	10/14/99JLO	10/05/99
N-NITROSODIPHENYLAMINE	86-30-6	ND	UG/L	10	10/14/99JLO	10/05/99
PENTACHLOROPHENOL	87-86-5	ND	UG/L	50	10/14/99JLO	10/05/99
PHENANTHRENE	85-01-8	ND	UG/L	10	10/14/99JLO	10/05/99
PHENOL	108-95-2	ND	UG/L	10	10/14/99JLO	10/05/99
PYRENE	129-00-0	ND	UG/L	10	10/14/99JLO	10/05/99
2-FLUOROBIPHENYL (SURROGAT	-	72	150	10		10/05/99
NITROBENZENE-D8 (SURROGATE	-	67	150	10		10/05/99
2-FLUOROPHENOL (SURROGATE)	-	3.6 Q	150	10		10/05/99
2,4,6-TRIBROMOPHENOL (SURR	-	64	150	10		10/05/99
TERPHENYL-D14 (SURROGATE)	-	96	150	10		10/05/99
PHENOL-D5 (SURROGATE)	-	1.6 Q	150	10		10/05/99

Sample ID: MW8D-2SA99 Sample Matrix: WATER
Collection Date: 09/27/99 16:20:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
VOLATILE ORGANICS	SW 846 8260					
BENZENE	71-43-2	ND	UG/L	1.0	10/11/99JDH	
CHLOROBENZENE	108-90-7	ND	UG/L	1.0	10/11/99JDH	
1,2-DICHLOROETHANE	107-06-2	ND	UG/L	1.0	10/11/99JDH	
DICHLOROMETHANE	75-09-2	ND	UG/L	1.0	10/11/99JDH	
ETHYLBENZENE	100-41-4	ND	UG/L	1.0	10/11/99JDH	
TOLUENE	108-88-3	ND	UG/L	1.0	10/11/99JDH	
XYLENES	1330-20-7	ND	UG/L	1.0	10/11/99JDH	
1,2-DICHLOROETHANE-D4 (SUR	-	107	125	75.0		
TOLUENE-d8 (SUR)	-	112	125	75.0		
BROMOFLUOROBENZENE (SUR)	-	89	125	75.0		

ample ID: MW8D-2SA99 Sample Matrix: WATER
Collection Date: 09/27/99 16:20:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
SEMIVOLATILES	SW 846 8270B					
ACENAPHTHENE	83-32-9	ND	UG/L	10	10/09/99JLO	10/05/99
ACENAPHTHYLENE	208-96-8	ND	UG/L	10	10/09/99JLO	10/05/99
ANTHRACENE	120-12-7	ND	UG/L	10	10/09/99JLO	10/05/99
BENZO(A)ANTHRACENE	56-55-3	ND	UG/L	10	10/09/99JLO	10/05/99
BENZO(A)PYRENE	50-32-8	ND	UG/L	10	10/09/99JLO	10/05/99
BIS(2-ETHYL HEXYL)PHTHALA	117-81-7	ND	UG/L	10	10/09/99JLO	10/05/99
BIS(2-CHLOROETHOXY)METHAN	111-91-1	ND	UG/L	10	10/09/99JLO	10/05/99
2-CHLORONAPHTHALENE	91-58-7	ND	UG/L	10	10/09/99JLO	10/05/99
CHRYSENE	218-01-9	ND	UG/L	10	10/09/99JLO	10/05/99
DIBENZOFURAN	132-64-9	ND	UG/L	10	10/09/99JLO	10/05/99
2,4-DIMETHYLPHENOL	105-67-9	ND	UG/L	10	10/09/99JLO	10/05/99
DI-N-BUTYL PHTHALATE	84-74-2	ND	UG/L	10	10/09/99JLO	10/05/99
4,6-DINITRO-O-CRESOL	534-52-1	ND	UG/L	10	10/09/99JLO	10/05/99
2,4-DINITROTOLUENE	121-14-2	ND	UG/L	10	10/09/99JLO	10/05/99
2,6-DINITROTOLUENE	606-20-2	ND	UG/L	10	10/09/99JLO	10/05/99
1,2-DIPHENYLHYDRAZINE	122-66-7	ND	UG/L	10	10/09/99JLO	10/05/99
FLUORANTHENE	206-44-0	ND	UG/L	10	10/09/99JLO	10/05/99
FLUORENE	86-73-7	ND	UG/L	10	10/09/99JLO	10/05/99
2-METHYLNAPHTHALENE	91-57-6	ND	UG/L	10	10/09/99JLO	10/05/99
NAPHTHALENE	91-20-3	ND	UG/L	10	10/09/99JLO	10/05/99
NITROBENZENE	98-95-3	ND	UG/L	10	10/09/99JLO	10/05/99
4-NITROPHENOL	100-02-7	ND	UG/L	10	10/09/99JLO	10/05/99
N-NITROSODIPHENYLAMINE	86-30-6	ND	UG/L	10	10/09/99JLO	10/05/99
PENTACHLOROPHENOL	87-86-5	ND	UG/L	50	10/09/99JLO	10/05/99
PHENANTHRENE	85-01-8	ND	UG/L	10	10/09/99JLO	10/05/99
PHENOL	108-95-2	ND	UG/L	10	10/09/99JLO	10/05/99
PYRENE	129-00-0	ND	UG/L	10	10/09/99JLO	10/05/99
2-FLUOROBIPHENYL (SURROGAT	-	67	150	10		10/05/99
NITROBENZENE-D8 (SURROGATE	-	63	150	10		10/05/99
2-FLUOROPHENOL (SURROGATE)	-	2.0 Q	150	10		10/05/99
2,4,6-TRIBROMOPHENOL (SURR	-	61	150	10		10/05/99
TERPHENYL-D14 (SURROGATE)	-	89	150	10		10/05/99
PHENOL-D5 (SURROGATE)	-	1.1 Q	150	10		10/05/99
ACENAPHTHENE	83-32-9	ND	UG/L	10	10/14/99JLO	10/05/99
ACENAPHTHYLENE	208-96-8	ND	UG/L	10	10/14/99JLO	10/05/99
ANTHRACENE	120-12-7	ND	UG/L	10	10/14/99JLO	10/05/99
BENZO(A)ANTHRACENE	56-55-3	ND	UG/L	10	10/14/99JLO	10/05/99
BENZO(A)PYRENE	50-32-8	ND	UG/L	10	10/14/99JLO	10/05/99
BIS(2-ETHYL HEXYL)PHTHALA	117-81-7	ND	UG/L	10	10/14/99JLO	10/05/99
BIS(2-CHLOROETHOXY)METHAN	111-91-1	ND	UG/L	10	10/14/99JLO	10/05/99
2-CHLORONAPHTHALENE	91-58-7	ND	UG/L	10	10/14/99JLO	10/05/99
CHRYSENE	218-01-9	ND	UG/L	10	10/14/99JLO	10/05/99
DIBENZOFURAN	132-64-9	ND	UG/L	10	10/14/99JLO	10/05/99
2,4-DIMETHYLPHENOL	105-67-9	ND	UG/L	10	10/14/99JLO	10/05/99
DI-N-BUTYL PHTHALATE	84-74-2	ND	UG/L	10	10/14/99JLO	10/05/99
4,6-DINITRO-O-CRESOL	534-52-1	ND	UG/L	10	10/14/99JLO	10/05/99
2,4-DINITROTOLUENE	121-14-2	ND	UG/L	10	10/14/99JLO	10/05/99

ample ID: MW8D-2SA99 Sample Matrix: WATER
Collection Date: 09/27/99 16:20:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
2,6-DINITROTOLUENE	606-20-2	ND	UG/L	10	10/14/99JLO	10/05/99
1,2-DIPHENYLHYDRAZINE	122-66-7	ND	UG/L	10	10/14/99JLO	10/05/99
FLUORANTHENE	206-44-0	ND	UG/L	10	10/14/99JLO	10/05/99
FLUORENE	86-73-7	ND	UG/L	10	10/14/99JLO	10/05/99
2-METHYLNAPHTHALENE	91-57-6	ND	UG/L	10	10/14/99JLO	10/05/99
NAPHTHALENE	91-20-3	ND	UG/L	10	10/14/99JLO	10/05/99
NITROBENZENE	98-95-3	ND	UG/L	10	10/14/99JLO	10/05/99
4-NITROPHENOL	100-02-7	ND	UG/L	10	10/14/99JLO	10/05/99
N-NITROSODIPHENYLAMINE	86-30-6	ND	UG/L	10	10/14/99JLO	10/05/99
PENTACHLOROPHENOL	87-86-5	ND	UG/L	50	10/14/99JLO	10/05/99
PHENANTHRENE	85-01-8	ND	UG/L	10	10/14/99JLO	10/05/99
PHENOL	108-95-2	ND	UG/L	10	10/14/99JLO	10/05/99
PYRENE	129-00-0	ND	UG/L	10	10/14/99JLO	10/05/99
2-FLUOROBIPHENYL (SURROGAT	-	70	150	10		10/05/99
NITROBENZENE-D8 (SURROGATE	-	68	150	10		10/05/99
2-FLUOROPHENOL (SURROGATE)	-	2.1 Q	150	10		10/05/99
2,4,6-TRIBROMOPHENOL (SURR	-	64	150	10		10/05/99
TERPHENYL-D14 (SURROGATE)	-	90	150	10		10/05/99
PHENOL-D5 (SURROGATE)	-	0.9 Q	150	10		10/05/99

Sample ID: MW9-2SA99 Sample Matrix: WATER
Collection Date: 09/27/99 16:55:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
VOLATILE ORGANICS	SW 846 8260					
BENZENE	71-43-2	ND	UG/L	1.0	10/11/99JDH	
CHLOROBENZENE	108-90-7	ND	UG/L	1.0	10/11/99JDH	
1,2-DICHLOROETHANE	107-06-2	ND	UG/L	1.0	10/11/99JDH	
DICHLOROMETHANE	75-09-2	ND	UG/L	1.0	10/11/99JDH	
ETHYLBENZENE	100-41-4	ND	UG/L	1.0	10/11/99JDH	
TOLUENE	108-88-3	ND	UG/L	1.0	10/11/99JDH	
XYLENES	1330-20-7	ND	UG/L	1.0	10/11/99JDH	
1,2-DICHLOROETHANE-D4 (SUR	-	109	125	75.0		
TOLUENE-d8 (SUR)	-	106	125	75.0		
BROMOFLUOROBENZENE (SUR)	-	88	125	75.0		
SEMIVOLATILES	SW 846 8270B					
ACENAPHTHENE	83-32-9	ND	UG/L	10	10/09/99JLO	10/05/99
ACENAPHTHYLENE	208-96-8	ND	UG/L	10	10/09/99JLO	10/05/99
ANTHRACENE	120-12-7	ND	UG/L	10	10/09/99JLO	10/05/99
BENZO(A)ANTHRACENE	56-55-3	ND	UG/L	10	10/09/99JLO	10/05/99
BENZO(A)PYRENE	50-32-8	ND	UG/L	10	10/09/99JLO	10/05/99
BIS(2-ETHYL HEXYL)PHTHALA	117-81-7	ND	UG/L	10	10/09/99JLO	10/05/99
BIS(2-CHLOROETHOXY)METHAN	111-91-1	ND	UG/L	10	10/09/99JLO	10/05/99
2-CHLORONAPHTHALENE	91-58-7	ND	UG/L	10	10/09/99JLO	10/05/99
CHRYSENE	218-01-9	ND	UG/L	10	10/09/99JLO	10/05/99
DIBENZOFURAN	132-64-9	ND	UG/L	10	10/09/99JLO	10/05/99

Sample ID: MW9-2SA99 Sample Matrix: WATER
Collection Date: 09/27/99 16:55:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
2,4-DIMETHYLPHENOL	105-67-9	ND	UG/L	10	10/09/99JLO	10/05/99
DI-N-BUTYL PHTHALATE	84-74-2	ND	UG/L	10	10/09/99JLO	10/05/99
4,6-DINITRO-O-CRESOL	534-52-1	ND	UG/L	10	10/09/99JLO	10/05/99
2,4-DINITROTOLUENE	121-14-2	ND	UG/L	10	10/09/99JLO	10/05/99
2,6-DINITROTOLUENE	606-20-2	ND	UG/L	10	10/09/99JLO	10/05/99
1,2-DIPHENYLHYDRAZINE	122-66-7	ND	UG/L	10	10/09/99JLO	10/05/99
FLUORANTHENE	206-44-0	ND	UG/L	10	10/09/99JLO	10/05/99
FLUORENE	86-73-7	ND	UG/L	10	10/09/99JLO	10/05/99
2-METHYLNAPHTHALENE	91-57-6	ND	UG/L	10	10/09/99JLO	10/05/99
NAPHTHALENE	91-20-3	ND	UG/L	10	10/09/99JLO	10/05/99
NITROBENZENE	98-95-3	ND	UG/L	10	10/09/99JLO	10/05/99
4-NITROPHENOL	100-02-7	ND	UG/L	10	10/09/99JLO	10/05/99
N-NITROSODIPHENYLAMINE	86-30-6	ND	UG/L	10	10/09/99JLO	10/05/99
PENTACHLOROPHENOL	87-86-5	ND	UG/L	50	10/09/99JLO	10/05/99
PHENANTHRENE	85-01-8	ND	UG/L	10	10/09/99JLO	10/05/99
PHENOL	108-95-2	ND	UG/L	10	10/09/99JLO	10/05/99
PYRENE	129-00-0	ND	UG/L	10	10/09/99JLO	10/05/99
2-FLUOROBIPHENYL (SURROGAT	-	62	150	10		10/05/99
NITROBENZENE-D8 (SURROGATE	-	58	150	10		10/05/99
2-FLUOROPHENOL (SURROGATE)	-	19	150	10		10/05/99
2,4,6-TRIBROMOPHENOL (SURR	-	67	150	10		10/05/99
TERPHENYL-D14 (SURROGATE)	-	82	150	10		10/05/99
PHENOL-D5 (SURROGATE)	-	18	150	10		10/05/99

Sample ID: P12-2SA99 Sample Matrix: WATER
Collection Date: 09/28/99 08:00:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
VOLATILE ORGANICS	SW 846 8260					
BENZENE	71-43-2	ND	UG/L	1.0	10/11/99JDH	
CHLOROBENZENE	108-90-7	ND	UG/L	1.0	10/11/99JDH	
1,2-DICHLOROETHANE	107-06-2	ND	UG/L	1.0	10/11/99JDH	
DICHLOROMETHANE	75-09-2	ND	UG/L	1.0	10/11/99JDH	
ETHYLBENZENE	100-41-4	ND	UG/L	1.0	10/11/99JDH	
TOLUENE	108-88-3	ND	UG/L	1.0	10/11/99JDH	
XYLENES	1330-20-7	ND	UG/L	1.0	10/11/99JDH	
1,2-DICHLOROETHANE-D4 (SUR	-	114	125	75.0		
TOLUENE-d8 (SUR)	-	107	125	75.0		
BROMOFLUOROBENZENE (SUR)	-	80	125	75.0		
SEMIVOLATILES	SW 846 8270B					
ACENAPHTHENE	83-32-9	ND	UG/L	10	10/09/99JLO	10/05/99
ACENAPHTHYLENE	208-96-8	ND	UG/L	10	10/09/99JLO	10/05/99
ANTHRACENE	120-12-7	ND	UG/L	10	10/09/99JLO	10/05/99
BENZO(A)ANTHRACENE	56-55-3	ND	UG/L	10	10/09/99JLO	10/05/99
BENZO(A)PYRENE	50-32-8	ND	UG/L	10	10/09/99JLO	10/05/99
BIS(2-ETHYL HEXYL)PHTHALA	117-81-7	ND	UG/L	10	10/09/99JLO	10/05/99

mple ID: P12-2SA99 Sample Matrix: WATER
Collection Date: 09/28/99 08:00:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
BIS(2-CHLOROETHOXY)METHAN	111-91-1	ND	UG/L	10	10/09/99JLO	10/05/99
2-CHLORONAPHTHALENE	91-58-7	ND	UG/L	10	10/09/99JLO	10/05/99
CHRYSENE	218-01-9	ND	UG/L	10	10/09/99JLO	10/05/99
DIBENZOFURAN	132-64-9	ND	UG/L	10	10/09/99JLO	10/05/99
2,4-DIMETHYLPHENOL	105-67-9	ND	UG/L	10	10/09/99JLO	10/05/99
DI-N-BUTYL PHTHALATE	84-74-2	ND	UG/L	10	10/09/99JLO	10/05/99
4,6-DINITRO-O-CRESOL	534-52-1	ND	UG/L	10	10/09/99JLO	10/05/99
2,4-DINITROTOLUENE	121-14-2	ND	UG/L	10	10/09/99JLO	10/05/99
2,6-DINITROTOLUENE	606-20-2	ND	UG/L	10	10/09/99JLO	10/05/99
1,2-DIPHENYLHYDRAZINE	122-66-7	ND	UG/L	10	10/09/99JLO	10/05/99
FLUORANTHENE	206-44-0	ND	UG/L	10	10/09/99JLO	10/05/99
FLUORENE	86-73-7	ND	UG/L	10	10/09/99JLO	10/05/99
2-METHYLNAPHTHALENE	91-57-6	ND	UG/L	10	10/09/99JLO	10/05/99
NAPHTHALENE	91-20-3	ND	UG/L	10	10/09/99JLO	10/05/99
NITROBENZENE	98-95-3	ND	UG/L	10	10/09/99JLO	10/05/99
4-NITROPHENOL	100-02-7	ND	UG/L	10	10/09/99JLO	10/05/99
N-NITROSODIPHENYLAMINE	86-30-6	ND	UG/L	10	10/09/99JLO	10/05/99
PENTACHLOROPHENOL	87-86-5	ND	UG/L	50	10/09/99JLO	10/05/99
PHENANTHRENE	85-01-8	ND	UG/L	10	10/09/99JLO	10/05/99
PHENOL	108-95-2	ND	UG/L	10	10/09/99JLO	10/05/99
PYRENE	129-00-0	ND	UG/L	10	10/09/99JLO	10/05/99
2-FLUOROBIPHENYL (SURROGAT	-	60	150	10		10/05/99
NITROBENZENE-D8 (SURROGATE	-	60	150	10		10/05/99
2-FLUOROPHENOL (SURROGATE)	-	29	150	10		10/05/99
2,4,6-TRIBROMOPHENOL (SURR	-	72	150	10		10/05/99
TERPHENYL-D14 (SURROGATE)	-	84	150	10		10/05/99
PHENOL-D5 (SURROGATE)	-	18	150	10		10/05/99

ample ID: MW5-2SA99 Sample Matrix: WATER
Collection Date: 09/28/99 08:30:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
VOLATILE ORGANICS	SW 846 8260					
BENZENE	71-43-2	ND	UG/L	1.0	10/11/99JDH	
CHLOROBENZENE	108-90-7	ND	UG/L	1.0	10/11/99JDH	
1,2-DICHLOROETHANE	107-06-2	ND	UG/L	1.0	10/11/99JDH	
DICHLOROMETHANE	75-09-2	ND	UG/L	1.0	10/11/99JDH	
ETHYLBENZENE	100-41-4	ND	UG/L	1.0	10/11/99JDH	
TOLUENE	108-88-3	ND	UG/L	1.0	10/11/99JDH	
XYLENES	1330-20-7	ND	UG/L	1.0	10/11/99JDH	
1,2-DICHLOROETHANE-D4 (SUR	-	116	125	75.0		
TOLUENE-d8 (SUR)	-	88	125	75.0		
BROMOFLUOROBENZENE (SUR)	-	83	125	75.0		
SEMIVOLATILES	SW 846 8270B					
ACENAPHTHENE	83-32-9	ND	UG/L	10	10/10/99JLO	10/05/99
ACENAPHTHYLENE	208-96-8	ND	UG/L	10	10/10/99JLO	10/05/99

Sample ID: MW5-2SA99 Sample Matrix: WATER
Collection Date: 09/28/99 08:30:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
ANTHRACENE	120-12-7	ND	UG/L	10	10/10/99JLO	10/05/99
BENZO(A)ANTHRACENE	56-55-3	ND	UG/L	10	10/10/99JLO	10/05/99
BENZO(A)PYRENE	50-32-8	ND	UG/L	10	10/10/99JLO	10/05/99
BIS(2-ETHYL HEXYL)PHTHALA	117-81-7	ND	UG/L	10	10/10/99JLO	10/05/99
BIS(2-CHLOROETHOXY)METHAN	111-91-1	ND	UG/L	10	10/10/99JLO	10/05/99
2-CHLORONAPHTHALENE	91-58-7	ND	UG/L	10	10/10/99JLO	10/05/99
CHRYSENE	218-01-9	ND	UG/L	10	10/10/99JLO	10/05/99
DIBENZOFURAN	132-64-9	ND	UG/L	10	10/10/99JLO	10/05/99
2,4-DIMETHYLPHENOL	105-67-9	ND	UG/L	10	10/10/99JLO	10/05/99
DI-N-BUTYL PHTHALATE	84-74-2	ND	UG/L	10	10/10/99JLO	10/05/99
4,6-DINITRO-O-CRESOL	534-52-1	ND	UG/L	10	10/10/99JLO	10/05/99
2,4-DINITROTOLUENE	121-14-2	ND	UG/L	10	10/10/99JLO	10/05/99
2,6-DINITROTOLUENE	606-20-2	ND	UG/L	10	10/10/99JLO	10/05/99
1,2-DIPHENYLHYDRAZINE	122-66-7	ND	UG/L	10	10/10/99JLO	10/05/99
FLUORANTHENE	206-44-0	ND	UG/L	10	10/10/99JLO	10/05/99
FLUORENE	86-73-7	ND	UG/L	10	10/10/99JLO	10/05/99
2-METHYLNAPHTHALENE	91-57-6	ND	UG/L	10	10/10/99JLO	10/05/99
NAPHTHALENE	91-20-3	ND	UG/L	10	10/10/99JLO	10/05/99
NITROBENZENE	98-95-3	ND	UG/L	10	10/10/99JLO	10/05/99
4-NITROPHENOL	100-02-7	ND	UG/L	10	10/10/99JLO	10/05/99
N-NITROSODIPHENYLAMINE	86-30-6	ND	UG/L	10	10/10/99JLO	10/05/99
PENTACHLOROPHENOL	87-86-5	ND	UG/L	50	10/10/99JLO	10/05/99
PHENANTHRENE	85-01-8	ND	UG/L	10	10/10/99JLO	10/05/99
PHENOL	108-95-2	ND	UG/L	10	10/10/99JLO	10/05/99
PYRENE	129-00-0	ND	UG/L	10	10/10/99JLO	10/05/99
2-FLUOROBIPHENYL (SURROGAT	-	74	150	10		10/05/99
NITROBENZENE-D8 (SURROGATE	-	71	150	10		10/05/99
2-FLUOROPHENOL (SURROGATE)	-	17	150	10		10/05/99
2,4,6-TRIBROMOPHENOL (SURR	-	67	150	10		10/05/99
TERPHENYL-D14 (SURROGATE)	-	94	150	10		10/05/99
PHENOL-D5 (SURROGATE)	-	16	150	10		10/05/99

Sample ID: MW3-2SA99 Sample Matrix: WATER
Collection Date: 09/28/99 14:35:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
VOLATILE ORGANICS	SW 846 8260					
BENZENE	71-43-2	ND	UG/L	1.0	10/11/99JDH	
CHLOROBENZENE	108-90-7	ND	UG/L	1.0	10/11/99JDH	
1,2-DICHLOROETHANE	107-06-2	ND	UG/L	1.0	10/11/99JDH	
DICHLOROMETHANE	75-09-2	ND	UG/L	1.0	10/11/99JDH	
ETHYLBENZENE	100-41-4	ND	UG/L	1.0	10/11/99JDH	
TOLUENE	108-88-3	ND	UG/L	1.0	10/11/99JDH	
XYLENES	1330-20-7	ND	UG/L	1.0	10/11/99JDH	
1,2-DICHLOROETHANE-D4 (SUR	-	113	125	75.0		
TOLUENE-d8 (SUR)	-	100	125	75.0		

mple ID: MW3-2SA99 Sample Matrix: WATER
ollection Date: 09/28/99 14:35:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
BROMOFLUOROBENZENE (SUR)	-	91	125	75.0		
MIVOLATILES	SW 846 8270B					
ACENAPHTHENE	83-32-9	73.6	UG/L	10	10/10/99JLO	10/05/99
ACENAPHTHYLENE	208-96-8	ND	UG/L	10	10/10/99JLO	10/05/99
ANTHRACENE	120-12-7	ND	UG/L	10	10/10/99JLO	10/05/99
BENZO(A)ANTHRACENE	56-55-3	ND	UG/L	10	10/10/99JLO	10/05/99
BENZO(A)PYRENE	50-32-8	ND	UG/L	10	10/10/99JLO	10/05/99
BIS(2-ETHYL HEXYL)PHTHALA	117-81-7	ND	UG/L	10	10/10/99JLO	10/05/99
BIS(2-CHLOROETHOXY)METHAN	111-91-1	ND	UG/L	10	10/10/99JLO	10/05/99
2-CHLORONAPHTHALENE	91-58-7	ND	UG/L	10	10/10/99JLO	10/05/99
CHRYSENE	218-01-9	ND	UG/L	10	10/10/99JLO	10/05/99
DIBENZOFURAN	132-64-9	49.4	UG/L	10	10/10/99JLO	10/05/99
2,4-DIMETHYLPHENOL	105-67-9	ND	UG/L	10	10/10/99JLO	10/05/99
DI-N-BUTYL PHTHALATE	84-74-2	ND	UG/L	10	10/10/99JLO	10/05/99
4,6-DINITRO-O-CRESOL	534-52-1	ND	UG/L	10	10/10/99JLO	10/05/99
2,4-DINITROTOLUENE	121-14-2	ND	UG/L	10	10/10/99JLO	10/05/99
2,6-DINITROTOLUENE	606-20-2	ND	UG/L	10	10/10/99JLO	10/05/99
1,2-DIPHENYLHYDRAZINE	122-66-7	ND	UG/L	10	10/10/99JLO	10/05/99
FLUORANTHENE	206-44-0	ND	UG/L	10	10/10/99JLO	10/05/99
FLUORENE	86-73-7	49.4	UG/L	10	10/10/99JLO	10/05/99
2-METHYLNAPHTHALENE	91-57-6	ND	UG/L	10	10/10/99JLO	10/05/99
NAPHTHALENE	91-20-3	ND	UG/L	10	10/10/99JLO	10/05/99
NITROBENZENE	98-95-3	ND	UG/L	10	10/10/99JLO	10/05/99
4-NITROPHENOL	100-02-7	ND	UG/L	10	10/10/99JLO	10/05/99
N-NITROSODIPHENYLAMINE	86-30-6	ND	UG/L	10	10/10/99JLO	10/05/99
PENTACHLOROPHENOL	87-86-5	ND	UG/L	50	10/10/99JLO	10/05/99
PHENANTHRENE	85-01-8	ND	UG/L	10	10/10/99JLO	10/05/99
PHENOL	108-95-2	ND	UG/L	10	10/10/99JLO	10/05/99
PYRENE	129-00-0	ND	UG/L	10	10/10/99JLO	10/05/99
2-FLUOROBIPHENYL (SURROGAT	-	54	150	10		10/05/99
NITROBENZENE-D8 (SURROGATE	-	51	150	10		10/05/99
2-FLUOROPHENOL (SURROGATE)	-	17	150	10		10/05/99
2,4,6-TRIBROMOPHENOL (SURR	-	61	150	10		10/05/99
TERPHENYL-D14 (SURROGATE)	-	75	150	10		10/05/99
PHENOL-D5 (SURROGATE)	-	16	150	10		10/05/99

Sample ID: MW2-2SA99 Sample Matrix: WATER
ollection Date: 09/28/99 15:10:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
OLATILE ORGANICS	SW 846 8260					
BENZENE	71-43-2	ND	UG/L	50	10/11/99JDH	
CHLOROBENZENE	108-90-7	ND	UG/L	50	10/11/99JDH	
1,2-DICHLOROETHANE	107-06-2	ND	UG/L	50	10/11/99JDH	
DICHLOROMETHANE	75-09-2	ND	UG/L	50	10/11/99JDH	
ETHYLBENZENE	100-41-4	ND	UG/L	50	10/11/99JDH	

mple ID: MW2-2SA99 Sample Matrix: WATER
ollection Date: 09/28/99 15:10:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
TOLUENE	108-88-3	ND	UG/L	50	10/11/99JDH	
XYLENES	1330-20-7	ND	UG/L	50	10/11/99JDH	
,2-DICHLOROETHANE-D4 (SUR	-	116	125	75.0		
TOLUENE-d8 (SUR)	-	94	125	75.0		
BROMOFLUOROBENZENE (SUR)	-	84	125	75.0		
MIVOLATILES	SW 846 8270B					
ACENAPHTHENE	83-32-9	30.2	UG/L	10	10/10/99JLO	10/05/99
ACENAPHTHYLENE	208-96-8	ND	UG/L	10	10/10/99JLO	10/05/99
ANTHRACENE	120-12-7	ND	UG/L	10	10/10/99JLO	10/05/99
BENZO(A)ANTHRACENE	56-55-3	ND	UG/L	10	10/10/99JLO	10/05/99
BENZO(A)PYRENE	50-32-8	ND	UG/L	10	10/10/99JLO	10/05/99
BIS(2-ETHYL HEXYL)PHTHALA	117-81-7	ND	UG/L	10	10/10/99JLO	10/05/99
BIS(2-CHLOROETHOXY)METHAN	111-91-1	ND	UG/L	10	10/10/99JLO	10/05/99
2-CHLORONAPHTHALENE	91-58-7	ND	UG/L	10	10/10/99JLO	10/05/99
CHRYSENE	218-01-9	ND	UG/L	10	10/10/99JLO	10/05/99
DIBENZOFURAN	132-64-9	21.0	UG/L	10	10/10/99JLO	10/05/99
2,4-DIMETHYLPHENOL	105-67-9	ND	UG/L	10	10/10/99JLO	10/05/99
DI-N-BUTYL PHTHALATE	84-74-2	ND	UG/L	10	10/10/99JLO	10/05/99
4,6-DINITRO-O-CRESOL	534-52-1	ND	UG/L	10	10/10/99JLO	10/05/99
2,4-DINITROTOLUENE	121-14-2	ND	UG/L	10	10/10/99JLO	10/05/99
2,6-DINITROTOLUENE	606-20-2	ND	UG/L	10	10/10/99JLO	10/05/99
1,2-DIPHENYLHYDRAZINE	122-66-7	ND	UG/L	10	10/10/99JLO	10/05/99
FLUORANTHENE	206-44-0	ND	UG/L	10	10/10/99JLO	10/05/99
FLUORENE	86-73-7	23.8	UG/L	10	10/10/99JLO	10/05/99
2-METHYLNAPHTHALENE	91-57-6	ND	UG/L	10	10/10/99JLO	10/05/99
NAPHTHALENE	91-20-3	ND	UG/L	10	10/10/99JLO	10/05/99
NITROBENZENE	98-95-3	ND	UG/L	10	10/10/99JLO	10/05/99
4-NITROPHENOL	100-02-7	ND	UG/L	10	10/10/99JLO	10/05/99
N-NITROSODIPHENYLAMINE	86-30-6	ND	UG/L	10	10/10/99JLO	10/05/99
PENTACHLOROPHENOL	87-86-5	ND	UG/L	50	10/10/99JLO	10/05/99
PHENANTHRENE	85-01-8	ND	UG/L	10	10/10/99JLO	10/05/99
PHENOL	108-95-2	ND	UG/L	10	10/10/99JLO	10/05/99
PYRENE	129-00-0	ND	UG/L	10	10/10/99JLO	10/05/99
2-FLUOROBIPHENYL (SURROGAT	-	62	150	10		10/05/99
NITROBENZENE-D8 (SURROGATE	-	60	150	10		10/05/99
2-FLUOROPHENOL (SURROGATE)	-	32	150	10		10/05/99
2,4,6-TRIBROMOPHENOL (SURR	-	81	150	10		10/05/99
TERPHENYL-D14 (SURROGATE)	-	87	150	10		10/05/99
PHENOL-D5 (SURROGATE)	-	22	150	10		10/05/99

Sample ID: MW1A-2SA99 Sample Matrix: WATER
ollection Date: 09/28/99 15:45:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
OLATILE ORGANICS	SW 846 8260					
BENZENE	71-43-2	ND	UG/L	50	10/11/99JDH	

mple ID: MW1A-2SA99 Sample Matrix: WATER
ollection Date: 09 28/99 15:45:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
CHLOROBENZENE	108-90-7	ND	UG/L	50	10/11/99JDH	
1,2-DICHLOROETHANE	107-06-2	ND	UG/L	50	10/11/99JDH	
DICHLOROMETHANE	75-09-2	ND	UG/L	50	10/11/99JDH	
ETHYLBENZENE	100-41-4	ND	UG/L	50	10/11/99JDH	
TOLUENE	108-88-3	ND	UG/L	50	10/11/99JDH	
XYLENES	1330-20-7	ND	UG/L	50	10/11/99JDH	
1,2-DICHLOROETHANE-D4 (SUR	-	116	125	75.0		
TOLUENE-d8 (SUR)	-	90	125	75.0		
BROMOFLUOROBENZENE (SUR)	-	86	125	75.0		
EMIVOLATILES	SW 846 8270B					
ACENAPHTHENE	83-32-9	258 E	UG/L	10	10/10/99JLO	10/05/99
ACENAPHTHYLENE	208-96-8	ND	UG/L	10	10/10/99JLO	10/05/99
ANTHRACENE	120-12-7	ND	UG/L	10	10/10/99JLO	10/05/99
BENZO(A)ANTHRACENE	56-55-3	ND	UG/L	10	10/10/99JLO	10/05/99
BENZO(A)PYRENE	50-32-8	ND	UG/L	10	10/10/99JLO	10/05/99
BIS(2-ETHYL HEXYL)PHTHALA	117-81-7	ND	UG/L	10	10/10/99JLO	10/05/99
BIS(2-CHLOROETHOXY)METHAN	111-91-1	ND	UG/L	10	10/10/99JLO	10/05/99
2-CHLORONAPHTHALENE	91-58-7	ND	UG/L	10	10/10/99JLO	10/05/99
CHRYSENE	218-01-9	ND	UG/L	10	10/10/99JLO	10/05/99
DIBENZOFURAN	132-64-9	172 E	UG/L	10	10/10/99JLO	10/05/99
2,4-DIMETHYLPHENOL	105-67-9	ND	UG/L	10	10/10/99JLO	10/05/99
DI-N-BUTYL PHTHALATE	84-74-2	ND	UG/L	10	10/10/99JLO	10/05/99
4,6-DINITRO-O-CRESOL	534-52-1	ND	UG/L	10	10/10/99JLO	10/05/99
2,4-DINITROTOLUENE	121-14-2	ND	UG/L	10	10/10/99JLO	10/05/99
2,6-DINITROTOLUENE	606-20-2	ND	UG/L	10	10/10/99JLO	10/05/99
1,2-DIPHENYLHYDRAZINE	122-66-7	ND	UG/L	10	10/10/99JLO	10/05/99
FLUORANTHENE	206-44-0	10.4	UG/L	10	10/10/99JLO	10/05/99
FLUORENE	86-73-7	183 E	UG/L	10	10/10/99JLO	10/05/99
2-METHYLNAPHTHALENE	91-57-6	169 E	UG/L	10	10/10/99JLO	10/05/99
NAPHTHALENE	91-20-3	338 E	UG/L	10	10/10/99JLO	10/05/99
NITROBENZENE	98-95-3	ND	UG/L	10	10/10/99JLO	10/05/99
4-NITROPHENOL	100-02-7	ND	UG/L	10	10/10/99JLO	10/05/99
N-NITROSODIPHENYLAMINE	86-30-6	ND	UG/L	10	10/10/99JLO	10/05/99
PENTACHLOROPHENOL	87-86-5	ND	UG/L	50	10/10/99JLO	10/05/99
PHENANTHRENE	85-01-8	134	UG/L	10	10/10/99JLO	10/05/99
PHENOL	108-95-2	ND	UG/L	10	10/10/99JLO	10/05/99
PYRENE	129-00-0	ND	UG/L	10	10/10/99JLO	10/05/99
2-FLUOROBIPHENYL (SURROGAT	-	66	150	10		10/05/99
NITROBENZENE-D8 (SURROGATE	-	49	150	10		10/05/99
2-FLUOROPHENOL (SURROGATE)	-	2.4 Q	150	10		10/05/99
2,4,6-TRIBROMOPHENOL (SURR	-	26	150	10		10/05/99
TERPHENYL-D14 (SURROGATE)	-	86	150	10		10/05/99
PHENOL-D5 (SURROGATE)	-	1.6 Q	150	10		10/05/99
ACENAPHTHENE	83-32-9	193	UG/L	100	10/14/99JLO	10/05/99
ACENAPHTHYLENE	208-96-8	ND	UG/L	100	10/14/99JLO	10/05/99
ANTHRACENE	120-12-7	ND	UG/L	100	10/14/99JLO	10/05/99
BENZO(A)ANTHRACENE	56-55-3	ND	UG/L	100	10/14/99JLO	10/05/99
BENZO(A)PYRENE	50-32-8	ND	UG/L	100	10/14/99JLO	10/05/99

ample ID: MW1A-2SA99 Sample Matrix: WATER
Collection Date: 09/28/99 15:45:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
BIS(2-ETHYL HEXYL)PHTHALA	117-81-7	ND	UG/L	100	10/14/99JLO	10/05/99
BIS(2-CHLOROETHOXY)METHAN	111-91-1	ND	UG/L	100	10/14/99JLO	10/05/99
2-CHLORONAPHTHALENE	91-58-7	ND	UG/L	100	10/14/99JLO	10/05/99
CHRYSENE	218-01-9	ND	UG/L	100	10/14/99JLO	10/05/99
DIBENZOFURAN	132-64-9	134	UG/L	100	10/14/99JLO	10/05/99
2,4-DIMETHYLPHENOL	105-67-9	ND	UG/L	100	10/14/99JLO	10/05/99
DI-N-BUTYL PHTHALATE	84-74-2	ND	UG/L	100	10/14/99JLO	10/05/99
4,6-DINITRO-O-CRESOL	534-52-1	ND	UG/L	100	10/14/99JLO	10/05/99
2,4-DINITROTOLUENE	121-14-2	ND	UG/L	100	10/14/99JLO	10/05/99
2,6-DINITROTOLUENE	606-20-2	ND	UG/L	100	10/14/99JLO	10/05/99
1,2-DIPHENYLHYDRAZINE	122-66-7	ND	UG/L	100	10/14/99JLO	10/05/99
FLUORANTHENE	206-44-0	ND	UG/L	100	10/14/99JLO	10/05/99
FLUORENE	86-73-7	144	UG/L	100	10/14/99JLO	10/05/99
2-METHYLNAPHTHALENE	91-57-6	156	UG/L	100	10/14/99JLO	10/05/99
NAPHTHALENE	91-20-3	526	UG/L	100	10/14/99JLO	10/05/99
NITROBENZENE	98-95-3	ND	UG/L	100	10/14/99JLO	10/05/99
4-NITROPHENOL	100-02-7	ND	UG/L	100	10/14/99JLO	10/05/99
N-NITROSODIPHENYLAMINE	86-30-6	ND	UG/L	100	10/14/99JLO	10/05/99
PENTACHLOROPHENOL	87-86-5	ND	UG/L	500	10/14/99JLO	10/05/99
PHENANTHRENE	85-01-8	102	UG/L	100	10/14/99JLO	10/05/99
PHENOL	108-95-2	ND	UG/L	100	10/14/99JLO	10/05/99
PYRENE	129-00-0	ND	UG/L	100	10/14/99JLO	10/05/99
2-FLUOROBIPHENYL (SURROGAT	-	54	150	10		10/05/99
NITROBENZENE-D8 (SURROGATE	-	45	150	10		10/05/99
2-FLUOROPHENOL (SURROGATE)	-	0 Q	150	10		10/05/99
2,4,6-TRIBROMOPHENOL (SURR	-	13	150	10		10/05/99
TERPHENYL-D14 (SURROGATE)	-	68	150	10		10/05/99
PHENOL-D5 (SURROGATE)	-	0 Q	150	10		10/05/99

ND=NONE DETECTED
PQL=PRACTICAL QUANTITATION LIMIT
SU=STANDARD UNITS
*BACKGROUND CONTAMINATION
Q=OUTSIDE LIMITS
B=DETECTED IN METHOD BLANK
SUR=SURROGATE

APPROVED BY: Terry Koester

TERRY ~~KOE~~STER
LABORATORY DIRECTOR

Data Qualifier Flags Semi-Volatiles:
D Result is from a secondary dilution
E Result is above the linear range of the instrument and must be re-run at a higher dilution.

ERM
9909988

Parameter	Test code	Test Description	Instrument description	Analysis Date	Time	Matrix	Units
Benzene	8260		GC/MS	10/10/99		water	ug/L
Chlorobenzene	8260		GC/MS	10/10/99		water	ug/L
1,2-Dichloroethane	8260		GC/MS	10/10/99		water	ug/L
Ethylbenzene	8260		GC/MS	10/10/99		water	ug/L
Methylene Chloride	8260		GC/MS	10/10/99		water	ug/L
Toluene	8260		GC/MS	10/10/99		water	ug/L
Total Xylenes	8260		GC/MS	10/10/99		water	ug/L
1,2-Dichloroethane-D4 (Sur)	8260		GC/MS	10/10/99		water	ug/L
Toluene-D8 (Sur)	8260		GC/MS	10/10/99		water	ug/L
4-Bromofluorobenzene (Sur)	8260		GC/MS	10/10/99		water	ug/L
Acenaphthene	8270		GC/MS	10/10/99		water	ug/l
Acenaphthylene	8270		GC/MS	10/10/99		water	ug/l
Anthracene	8270		GC/MS	10/10/99		water	ug/l
Benzidine	8270		GC/MS	10/10/99		water	ug/l
Benzo(a)anthracene	8270		GC/MS	10/10/99		water	ug/l
Benzo(b)fluoranthene	8270		GC/MS	10/10/99		water	ug/l
Benzo(k)fluoranthene	8270		GC/MS	10/10/99		water	ug/l
Benzoic Acid	8270		GC/MS	10/10/99		water	ug/l
Benzo(g,h,i)perylene	8270		GC/MS	10/10/99		water	ug/l
Benzo(a)pyrene	8270		GC/MS	10/10/99		water	ug/l
Benzyl Alcohol	8270		GC/MS	10/10/99		water	ug/l
Bis(2-chloroethoxy)methane	8270		GC/MS	10/10/99		water	ug/l
Bis(2-chloroethyl)ether	8270		GC/MS	10/10/99		water	ug/l
Bis(2-chloroisopropyl)ether	8270		GC/MS	10/10/99		water	ug/l
Bis(2-ethylhexyl)phthalate	8270		GC/MS	10/10/99		water	ug/l
4-Bromophenyl phenyl ether	8270		GC/MS	10/10/99		water	ug/l
Butylbenzylphthalate	8270		GC/MS	10/10/99		water	ug/l
4-Chloroaniline	8270		GC/MS	10/10/99		water	ug/l
4-Chloro-3-methylphenol	8270		GC/MS	10/10/99		water	ug/l
2-Chloronaphthalene	8270		GC/MS	10/10/99		water	ug/l
2-Chlorophenol	8270		GC/MS	10/10/99		water	ug/l
4-Chlorophenylphenylether	8270		GC/MS	10/10/99		water	ug/l
Chrysene	8270		GC/MS	10/10/99		water	ug/l
Dibenzo(a,h)anthracene	8270		GC/MS	10/10/99		water	ug/l
Dibenzofuran	8270		GC/MS	10/10/99		water	ug/l

ERM
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Parameter	Test code	Test Description	Instrument description	Analysis Date	Time	Matrix	Units
1,2-Dichlorobenzene	8270		GC/MS	10/10/99		water	ug/l
1,3-Dichlorobenzene	8270		GC/MS	10/10/99		water	ug/l
1,4-Dichlorobenzene	8270		GC/MS	10/10/99		water	ug/l
3,3'-Dichlorobenzidine	8270		GC/MS	10/10/99		water	ug/l
2,4-Dichlorophenol	8270		GC/MS	10/10/99		water	ug/l
Diethyl phthalate	8270		GC/MS	10/10/99		water	ug/l
2,4-Dimethylphenol	8270		GC/MS	10/10/99		water	ug/l
Dimethylphathalate	8270		GC/MS	10/10/99		water	ug/l
4,6-Dinitro-2-Methylphenol	8270		GC/MS	10/10/99		water	ug/l
Di-n-butylphthalate	8270		GC/MS	10/10/99		water	ug/l
2,4-Dinitrophenol	8270		GC/MS	10/10/99		water	ug/l
2,4-Dinitrotoluene	8270		GC/MS	10/10/99		water	ug/l
2,6-Dinitrotoluene	8270		GC/MS	10/10/99		water	ug/l
Di-n-Octylphthalate	8270		GC/MS	10/10/99		water	ug/l
1,2-Diphenyl Hydrazine	8270		GC/MS	10/10/99		water	ug/l
Fluoranthene	8270		GC/MS	10/10/99		water	ug/l
Fluorene	8270		GC/MS	10/10/99		water	ug/l
Hexachlorobenzene	8270		GC/MS	10/10/99		water	ug/l
Hexachlorobutadiene	8270		GC/MS	10/10/99		water	ug/l
Hexachlorocyclopentadiene	8270		GC/MS	10/10/99		water	ug/l
Hexachloroethane	8270		GC/MS	10/10/99		water	ug/l
Indeno(1,2,3-cd)pyrene	8270		GC/MS	10/10/99		water	ug/l
Isophorone	8270		GC/MS	10/10/99		water	ug/l
2-Methylnaphthalene	8270		GC/MS	10/10/99		water	ug/l
2-Methylphenol	8270		GC/MS	10/10/99		water	ug/l
4-Methylphenol	8270		GC/MS	10/10/99		water	ug/l
Naphthalene	8270		GC/MS	10/10/99		water	ug/l
2-Nitroaniline	8270		GC/MS	10/10/99		water	ug/l
3-Nitroaniline	8270		GC/MS	10/10/99		water	ug/l
4-Nitroaniline	8270		GC/MS	10/10/99		water	ug/l
Nitrobenzene	8270		GC/MS	10/10/99		water	ug/l
2-Nitrophenol	8270		GC/MS	10/10/99		water	ug/l
4-Nitrophenol	8270		GC/MS	10/10/99		water	ug/l
N-Nitroso-di-n-propylamine	8270		GC/MS	10/10/99		water	ug/l
N-Nitrosodiphenylamine(1)	8270		GC/MS	10/10/99		water	ug/l
N-Nitrosodimethylamine	8270		GC/MS	10/10/99		water	ug/l

ERM
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Parameter	Test code	Test Description	Instrument description	Analysis Date	Time	Matrix	Units
Pentachlorophenol	8270		GC/MS	10/10/99		water	ug/l
Phenanthrene	8270		GC/MS	10/10/99		water	ug/l
Phenol	8270		GC/MS	10/10/99		water	ug/l
Pyrene	8270		GC/MS	10/10/99		water	ug/l
1,2,4-Trichlorobenzene	8270		GC/MS	10/10/99		water	ug/l
2,4,5-Trichlorophenol	8270		GC/MS	10/10/99		water	ug/l
2,4,6-Trichlorophenol	8270		GC/MS	10/10/99		water	ug/l
2-Fluorobiphenyl (sur)	8270		GC/MS	10/10/99		water	ug/l
Nitrobenzene-d8 (sur)	8270		GC/MS	10/10/99		water	ug/l
2-Fluorophenol (sur)	8270		GC/MS	10/10/99		water	ug/l
2,4,6-Tribromophenol (sur)	8270		GC/MS	10/10/99		water	ug/l
Terphenyl-d14 (sur)	8270		GC/MS	10/10/99		water	ug/l
Phenol-d5 (sur)	8270		GC/MS	10/10/99		water	ug/l

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Parameter	Blank Data Result	Duplicate QC Data Sample	Duplicate	RPD	Spike / Spike Duplicate QC Data Sample	Spike Amt	Spk. Result	% Rec	Spk. Result	% Rec	RPD	LCS (known) QC Data Result	True Value	% Rec	
Benzene	ND				ND	25.00	26	104	24.6	98	6	48.7	50.00	97	*
Chlorobenzene	ND				ND	23	22.2	97	22.9	100	3	16.3	20.1	81	
1,2-Dichloroethane	ND				ND		ND		ND			ND	ND	N/A	
Ethylbenzene	ND				0.3		0.324		0.353			12.8	15.3	84	
Methylene Chloride	ND				0.4		1.31		1.12			70.3	65.3	108	
Toluene	ND				0.7	25	24.1	94	25.2	98	4	52.6	62.8	84	
Total Xylenes	ND				1.1		1.04		1.14			31.5	36.6	86	
1,2-Dichloroethane-D4 (Sur)	2.34				2.4	2	2.29	115	2.2	110	4	2.14	2	107	
Toluene-D8 (Sur)	1.96				1.8	2	1.85	93	2.03	102	9	1.99	2	100	
4-Bromofluorobenzene (Sur)	1.88				2.1	2	2.2	110	2.08	104	6	1.79	2	90	
Acenaphthene	ND				43	100.00	159.0	116	179.0	136	12	52.8	100	53	
Acenaphthylene	ND				ND							58.9	100	59	
Anthracene	ND				ND							56.1	100	56	
Benzidine	ND				ND							25.3	100	25	
Benzo(a)anthracene	ND				ND							60.0	100	60	
Benzo(b)fluoranthene	ND				ND							68.8	100	69	
Benzo(k)fluoranthene	ND				ND							64.0	100	64	
Benzoic Acid	ND				ND							52.0	100	52	
Benzo(g,h,i)perylene	ND				ND							34.6	100	35	
Benzo(a)pyrene	ND				ND							65.0	100	65	
Benzyl Alcohol	ND				ND							48.6	100	49	
Bis(2-chloroethoxy)methane	ND				ND							53.6	100	54	
Bis(2-chloroethyl)ether	ND				ND							43.9	100	44	
Bis(2-chloroisopropyl)ether	ND				ND							31.8	100	32	
Bis(2-ethylhexyl)phthalate	ND				ND							63.5	100	64	
4-Bromophenyl phenyl ether	ND				ND							57.1	100	57	
Butylbenzylphthalate	ND				ND							62.2	100	62	
4-Chloroaniline	ND				ND							47.7	100	48	
4-Chloro-3-methylphenol	ND				ND	200.00	126.0	63	148.0	74	16	70.7	100	71	
2-Chloronaphthalene	ND				ND							37.4	100	37	
2-Chlorophenol	ND				ND	200.00	102.0	51	113.0	57	10	45.3	100	45	
4-Chlorophenylphenylether	ND				ND							52.8	100	53	
Chrysene	ND				ND							57.6	100	58	
Dibenzo(a,h)anthracene	ND				ND							49.3	100	49	
Dibenzofuran	ND				ND							52.0	100	52	

ERM
9909988

Parameter	Blank Data	Duplicate QC Data			Spike / Spike Duplicate QC Data							LCS (known) QC Data		
	Result	Sample	Duplicate	RPD	Sample	Spike Amt	Spk. Result	% Rec	Spk. Result	% Rec	RPD	Result	True Value	% Rec
1,2-Dichlorobenzene	ND				ND							35.2	100	35
1,3-Dichlorobenzene	ND				ND							33.6	100	34
1,4-Dichlorobenzene	ND				ND	100.00	89.5	90	87.7	88	2	34.7	100	35
3,3'-Dichlorobenzidine	ND				ND							50.9	100	51
2,4-Dichlorophenol	ND				ND							52.0	100	52
Diethyl phthalate	ND				ND							49.5	100	50
2,4-Dimethylphenol	ND				ND							68.4	100	68
Dimethylphathalate	ND				ND							20.1	100	20
4,6-Dinitro-2-Methylphenol	ND				ND							40.2	100	40
Di-n-butylphthalate	ND				ND	100.00	127.0	127	143.0	143	12	58.8	100	59
2,4-Dinitrophenol	ND				ND							34.7	100	35
2,4-Dinitrotoluene	ND				ND	100.00	123.0	123	143.0	143	15	61.6	100	62
2,6-Dinitrotoluene	ND				ND							60.8	100	61
Di-n-Octylphthalate	ND				ND							70.3	100	70
1,2-Diphenyl Hydrazine	ND				ND							57.2	100	57
Fluoranthene	ND				ND							58.0	100	58
Fluorene	ND				24.3							57.1	100	57
Hexachlorobenzene	ND				ND							56.4	100	56
Hexachlorobutadiene	ND				ND							38.2	100	38
Hexachlorocyclopentadiene	ND				ND							30.8	100	31
Hexachloroethane	ND				ND							32.4	100	32
Indeno(1,2,3-cd)pyrene	ND				ND							46.2	100	46
Isophorone	ND				ND							53.3	100	53
2-Methylnaphthalene	ND				ND							43.5	100	44
2-Methylphenol	ND				ND							46.9	100	47
4-Methylphenol	ND				ND							49.8	100	50
Naphthalene	ND				16.6							40.4	100	40
2-Nitroaniline	ND				ND							60.2	100	60
3-Nitroaniline	ND				ND							62.0	100	62
4-Nitroaniline	ND				ND							66.6	100	67
Nitrobenzene	ND				ND							41.6	100	42
2-Nitrophenol	ND				ND							53.3	100	53
4-Nitrophenol	ND				ND	200.00	47.0	24	61.7	31	27	13.5	100	14
N-Nitroso-di-n-propylamine	ND				ND	100.00	104.0	104	107.0	107	3	48.4	100	48
N-Nitrosodiphenylamine(1)	ND				ND							24.8	100	25
N-Nitrosodimethylamine	ND				ND							35.4	100	35

QWAL Laboratories, Inc.
Quality Control Report

ERM
9909988

Parameter	Blank Data	Duplicate QC Data			Spike / Spike Duplicate QC Data							LCS (known) QC Data		
	Result	Sample	Duplicate	RPD	Sample	Spike Amt	Spk. Result	% Rec	Spk. Result	% Rec	RPD	Result	True Value	% Rec
Pentachlorophenol	ND				ND	200.00	125.0	63	171.0	86	31	19.3	100	19
Phenanthrene	ND				ND							59.0	100	59
Phenol	ND				ND	200.00	37.9	19	44.9	22	17	20.7	100	21
Pyrene	ND				ND	100.00	142.0	142	169.0	169 *	17	58.4	100	58
1,2,4-Trichlorobenzene	ND				ND	100.00	102.0	102	105.0	105	3	39.8	100	40
2,4,5-Trichlorophenol	ND				ND							49.5	100	50
2,4,6-Trichlorophenol	ND				ND							51.9	100	52
2-Fluorobiphenyl (sur)	58.4				62.3	100.00	60.0	60	65.7	66	9	46.5	100	47
Nitrobenzene-d8 (sur)	58.8				61.6	100.00	57.2	57	60.8	61	6	44.0	100	44
2-Fluorophenol (sur)	39.2				36.0	100.00	26.8	27	29.8	30	11	27.9	100	28
2,4,6-Tribromophenol (sur)	77.6				71.8	100.00	68.0	68	79.4	79	15	52.8	100	53
Terphenyl-d14 (sur)	83.8				86.9	100.00	77.3	77	91.0	91	16	58.9	100	59
Phenol-d5 (sur)	26.7				24.8	100.00	16.0	16	18.7	19	16	19.2	100	19

Quality Control Report Definitions	
QC	Quality Control
% Rec	Percent Recovery
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
sur	Surrogate
Blank	Method Blank

Quality Control Data Flags

Data Flag Type			
Prefix	Result	Suffix	Description
<			Less Than
>			Greater Than
	BDL		Below Detection Limit
	NA		Not Analyzed
	ND		None Detected
	*		Outside Limits
		B	Analyte found in the associated blank as well as the sample
		D	All compounds identified in an analysis at a secondary dilution
		E	Concentration exceeds the calibration range of the instrument
		J	Indicates an estimated value
		X	Laboratory specified Flag
		m	Matrix interference
		S	Client provided insufficient sample to perform matrix spike/ matrix spike duplicate analysis. Data reported from Reagent Blank Spike / Reagent Blank Spike Duplicate.

Q.W.A.L. LABORATORIES, INC.

Established 1976

2911 Rotary Terrace • Pittsburg, Kansas 66762

TO ORDER: **FAX 1-316-232-7730 OR PHONE 1-316-232-1970**

① Company Name: [illegible] SOUTHWEST, INC

Attention: MELINDA REAGAN

Address: [illegible] STE 300

[illegible] TX 77094

City, State, Zip Code

④ Phone #: (281) 579-8999

④ Fax #: (281) 579-8988

② Project Name or Number: HOUSTON WOOD PRESERVING WORKS

⑤ Purchase Order #: (4112-09)

③ Sampling Personnel Signature(s): [illegible signatures]

Sampling Personnel (print name): Scott Morris, Chris Young

⑬ TURNAROUND TIME REQUESTED (Additional Charges May Apply)

☒ Standard ☐ 72 Hours ☐ 48 Hours ☐ 24 Hours ☐ SameDay

* Note - Please contact lab for availability of priority service.

⑫ ANALYSIS REQUEST

(Write Tests Here)

⑥ Sample I.D.	⑦ Date	⑦ Time	⑧ Comp.	⑧ Grab	⑨ # of Containers	⑩ Method Preserved: H2S04	HN03	NAOH	HCL	Ice	None	⑪ Sample Matrix: Water	Soil	Air	Sludge	Other	8260 A	8270 B	REMARKS (If special detection limits are required please note below.)
[illegible]	[illegible]	1115		X	3				X	X		X					X	X	# 7241
[illegible]		1510			3				X	X		X					X	X	Routine
[illegible]		1545			3				X	X		X					X	X	QC
					3				X	X		X					X	X	
					3				X	X		X					X	X	
3					3				X	X		X					X	X	
					3				X	X		X					X	X	

⑭		Date	Time
Relinquished By:	Chris Young	9/28/99	1731
Received By:	FedEx	9/28/99	1731
Relinquished By:		Date	Time
Received By:	[illegible]	[illegible]	1000
Relinquished By:		Date	Time
Received By:		Date	Time

⑮ Send Report to:

Company ______
Attn: ______
Address: ______
City/State: ______
Phone: ______
Fax: ______

⑯ Send Invoice to:
(if different form report address)

Company ______
Attn: ______
Address: ______
City/State: ______
Phone: ______
Fax: ______

*FAILURE TO COMPLETE THIS FORM MAY DELAY LABORATORY RESULTS.

Q.W.A.L. LABORATORIES, INC.

Established 1976

2911 Rotary Terrace • Pittsburg, Kansas 66762

TO ORDER: FAX 1-316-232-7730 OR PHONE 1-316-232-1970

(1) Company Name: [illegible] ENVIRONMENTAL INC. (4) Phone #: 281-579-8999

Attention: [illegible] YUNGAN

Address: 16300 KATY FREEWAY STE 300 (4) Fax #: 281-579-8988

HOUSTON TX 77094

City, State, Zip Code

(2) Project Name or Number: ELECTRO WOOD PRESERVING WORKS

(5) Purchase Order #: 422-09

(3) Sampling Personnel Signature(s)

Sampling Personnel (print name): Scott Morris, Chris Young

(13) TURNAROUND TIME REQUESTED (Additional Charges May Apply)

☒ Standard ☐ 72 Hours ☐ 48 Hours ☐ 24 Hours ☐ SameDay

* Note - Please contact lab for availability of priority service.

(12) ANALYSIS REQUEST

(Write Tests Here)

(6) Sample I.D.	Date (7)	Time (7)	(8) Comp.	(8) Grab	(9) # of Containers	(10) Method Preserved: H2SO4	HNO3	NAOH	HCL	Ice	None	(11) Sample Matrix: Water	Soil	Air	Sludge	Other	8260 B	8270 C	REMARKS (If special detection limits are required please note below.)
[illegible]-25499	9/28	1030		X	3				X	X		X			?		X	X	[illegible]
[illegible]MS-25499		1040		X	3				X	X		X					X	X	
[illegible]		1250		X	3				X	X		X					X	X	[illegible]
[illegible]		1610		X	3				X	X		X					X	X	[illegible]
[illegible]		1620		X	3				X	X		X					X	X	
[illegible]		1655		X	3				X	X		X					X	X	
[illegible]-25499	9/28	1800		X	3				X	X		X					X	X	
[illegible]-25499		0850		X	3				X	X		X					X	X	

(14) Relinquished By: Chris Young Date 9/28/99 Time 1831

Received By: FED EX Date 9/28/99 Time 1831

Relinquished By: Date Time

Received By: Date Time

Relinquished By: Date Time

Received By: Date Time

(15) Send Report to:

Company _____

Attn: _____

Address: _____

City/State: _____

Phone: _____

Fax: _____

(16) Send Invoice to:

(if different form report address)

Company _____

Attn: _____

Address: _____

City/State: _____

Phone: _____

Fax: _____

*FAILURE TO COMPLETE THIS FORM MAY DELAY LABORATORY RESULTS.

Q.W.A.L. LABORATORIES, INC.

Established 1976

2911 Rotary Terrace • Pittsburg, Kansas 66762

TO ORDER: **FAX 1-316-232-7730 OR PHONE 1-316-232-1970**

(1) Company Name: [illegible], INC
Attention: [illegible]

Address: [illegible] KATY FREEWAY STE 300
[illegible] TX 77094
City, State, Zip Code

(4) Phone #: 281-579-8999

(4) Fax #: 281-579-8988

(2) Project Name or Number
HOUSTON WOOD PRESERVING WORKS

(5) Purchase Order #: 472-09

(3) Sampling Personnel Signature(s): [illegible] Chris Young

Sampling Personnel (print name): Scott Morris, Chris Young

(13) TURNAROUND TIME REQUESTED (Additional Charges May Apply)
☒ Standard ☐ 72 Hours ☐ 48 Hours ☐ 24 Hours ☐ SameDay
* Note - Please contact lab for availability of priority service.

(12) ANALYSIS REQUEST
(Write Tests Here)

(6) Sample I.D.	Date (7)	Time (7)	(8) Comp.	(8) Grab	(9) # of Containers	(10) Method Preserved: H2SO4	HN03	NAOH	HCL	Ice	None	(11) Sample Matrix: Water	Soil	Air	Sludge	Other	8250	8270	REMARKS (If special detection limits are required please note below.)
[illegible]	9/28																		
[illegible]	9/28	0910		X	3				X	X		X					X	X	# 7541
[illegible]		0940		X	3				X	X		X					X	X	[illegible]
[illegible]		1020		X	3				X	X		X					X	X	RC
[illegible]		1105		X	3				X	X		X					X	X	
[illegible]		1110		X	3				X	X		X					X	X	
[illegible]		1145		X	3				X	X		X					X	X	
[illegible]		1205		X	3				X	X		X					X	X	
[illegible]		1400																	

(14) Relinquished By: Chris Young Date 9/28/99 Time 1731

Received By: [illegible] Date 9/29/99 Time 1000

Relinquished By: Date Time

Received By: Date Time

Relinquished By: Date Time

Received By: Date Time

(15) Send Report to:
Company
Attn:
Address:
City/State:
Phone:
Fax:

(16) Send Invoice to:
(if different form report address)
Company
Attn:
Address:
City/State:
Phone:
Fax:

***FAILURE TO COMPLETE THIS FORM MAY DELAY LABORATORY RESULTS.**

Updated Compliance Schedule

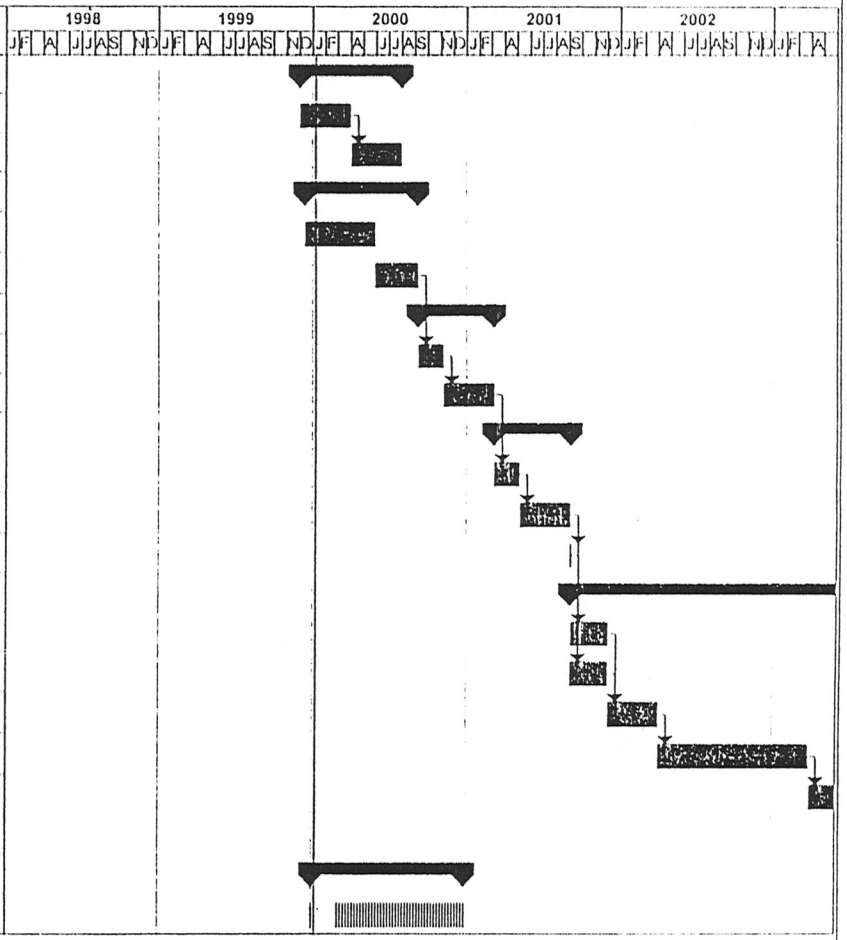
Appendix D

January 20, 2000
W.O. #422-009

Environmental Resources Management
16300 Katy Freeway, Suite 300
Houston, Texas 77094-1611
(281) 579-8999

COMBINED EOC/RFI SEMI-ANNUAL SCHEDULE REVISION

ID	Task Name/Permit or CP Section No.	Duration	Start	Finish	Predec
1	**On-Site Risk Assessment (Permit §VIII.I.)**	174d	12/2/99	8/1/00	
2	Submit RFI Risk Assessment	120ed	12/2/99	3/31/00	
3	TNRCC Review Process	120ed	4/3/00	8/1/00	2
4	**RFI/EOC Phase 2-C Implementation (Permit §VIII.D. and CP §VIII.)**	194d	12/15/99	9/7/00	
5	Complete Phase 2-C RFI/EOC	120d	12/15/99	5/29/00	
6	Submit RFI/EOC Progress Report to TNRCC	75d	5/29/00	9/7/00	
7	**Off-Site Risk Assessment (Permit §VIII.I.)**	128d	9/8/00	3/7/01	
8	Submit RFI Risk Assessment	60ed	9/8/00	11/7/00	6
9	TNRCC Review Process	120ed	11/7/00	3/7/01	8
10	**Corrective Measures Study (Permit §VIII.I. and CP §IX.)**	130d	3/7/01	9/4/01	
11	Submit Corrective Measures Study	60ed	3/7/01	5/6/01	9
12	TNRCC Review Process	120ed	5/7/01	9/4/01	11
13	RFI/EOC Phase 2-C Implementation (Permit §VIII.D. and CP §VIII.)	1d	9/4/01	9/4/01	12
14	**Corrective Measures Implementation (Permit §VIII.J. and CP §X.)**	474d	9/4/01	6/29/03	
15	Submit Proposed Permit Modification	90ed	9/5/01	12/4/01	13
16	Submit Corrective Measures Implementation Work Plan	90ed	9/4/01	12/3/01	12
17	TNRCC Review Process	120ed	12/4/01	4/3/02	15,16
18	Perform Corrective Action	360ed	4/3/02	3/29/03	17
19	Submit Corrective Measures Report	90ed	3/31/03	6/29/03	18
20					
21	**Compliance Activities (Permit §IV.C. and CP §VI.)**	262d	1/1/00	12/29/00	
22	Impoundment Inspections (Weekly)	262d	1/1/00	12/29/00	

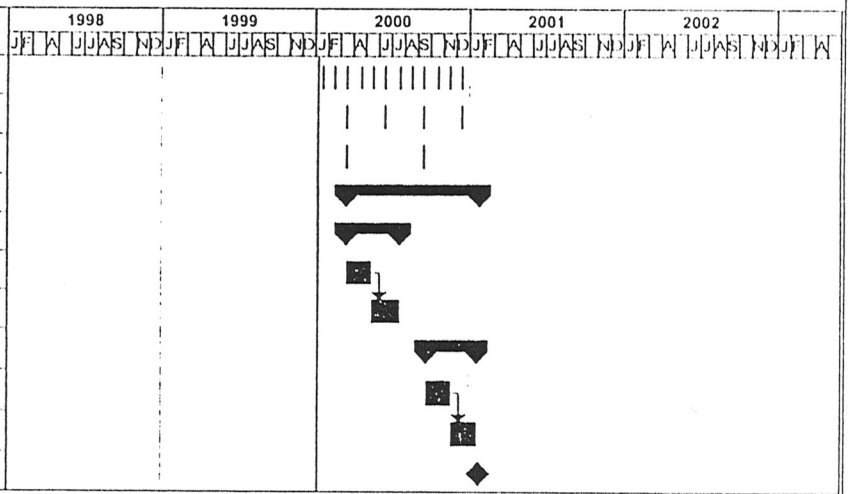


Project:
Date: 1/7/00

Task | Milestone | Rolled Up Task | Rolled Up Progress
Progress | Summary | Rolled Up Milestone

COMBINED EOC/RFI SEMI-ANNUAL SCHEDULE REVISION

ID	Task Name/Permit or CP Section No.	Duration	Start	Finish	Predec
75	Water Level Measurements (Monthly)	238d	1/20/00	12/15/00	
88	Monitor Well Inspections (Quarterly)	197d	3/17/00	12/15/00	
93	Ground Water Sampling (Semiannual)	132d	3/17/00	9/17/00	
96	Post-Closure Care Reporting 2000 through 2001	226d	3/17/00	1/25/01	
97	Semiannual Report - July 21, 2000 (CP §VII.B.2.)	91d	3/17/00	7/21/00	
98	Perform Data Evaluation	60ed	3/17/00	5/16/00	
99	Submit Report to TNRCC	66ed	5/16/00	7/21/00	98
100	Semiannual Report - January 21, 2001 (CP §VII.B.2.)	86d	9/22/00	1/21/01	
101	Perform Data Evaluation	60ed	9/22/00	11/21/00	
102	Submit Report to TNRCC	61ed	11/21/00	1/21/01	101
103	2000 Annual Report - January 25, 2001 (Permit §V.F. and §III.B.1)	1d	1/25/01	1/25/01	



Project:
Date: 1/7/00

Task
Progress
Milestone
Summary
Rolled Up Task
Rolled Up Milestone
Rolled Up Progress

Ecological Checklist

Tier 3 specific

Site characterization data in accordance w/ Site Characterization Work Plan Format

2/26 Lightfoot Mid-May u.o.# 553-002

tables & figures — seperate
Robin - analytical
Robin & Ted - database
Akilah - photos & questionnaires

Sampling - from Akilah

go by -
drinker

compare results to EPA 9 standards
exposure from plant (air, water)

1st report - end of the week (next Monday) - ~~Essie Mae Coles~~ (w.s.) Patricia Dismukes
QC tables
. hard analytical from Robyn

table

chemical	conc found	EPA 9 recmd conc	~~Plant~~ results ?

robin & merrare

2 samples

ERM

property samples
field samples - ditches

Plaintiff

vicinity

Parameter	Type
n-Nonadecane	TPH
n-Nonacosane	TPH
n-Heptadecane	TPH
n-Decane	TPH
Isoprenoid RRT 1650	TPH
Isoprenoid RRT 1380	TPH
n-Butylbenzene	TPH
n-Heptacosane	TPH
n-Docosane	TPH
n-Dodecane	TPH
n-Eicosane	TPH
n-Heneicosane	TPH
Isoprenoid RRT 1652	TPH
n-Hentriacontane	TPH
Isoprenoid RRT 1470	TPH
Total Xylenes	VOC
Carbon disulfide	VOC
Chlorobenzene	VOC
1,2,3-Trichloropropane	VOC
Carbon tetrachloride	VOC
Pentachloroethane	VOC
1,2-Dibromo-3-Chloropropan	VOC
p-Cymene(p-Isopropyltoluene	VOC
1,2-Dichloroethane	VOC
1,2-Dichloropropane	VOC
Chloroprene	VOC
Toluene	VOC
Dibromochloromethane	VOC
o-Xylene	VOC
Dibromomethane	VOC
Dichlorodifluoromethane	VOC
1,2-Dichloroethene	VOC
Trichloroethene	VOC
1,1,1-Trichloroethane	VOC
1,1,2,2-Tetrachloroethane	VOC
1,1,2-Trichloroethane	VOC
Vinyl Acetate	VOC
1,1-Dichloroethane	VOC
1,1-Dichloroethene	VOC
1,1-Dichloropropene	VOC
Chloroform	VOC
Trichlorofluoromethane	VOC
Chloroethane	VOC
Trans-1,4-Dichloro-2-Butene	VOC
trans-1,3-Dichloropropene	VOC
trans-1,2-Dichloroethene	VOC

Parameter	Type
Propionitrile	VOC
Vinyl chloride	VOC
Ethylene Dibromide	VOC
Chloromethane	VOC
1,3-Dichloropropane	VOC
1,1,1,2-Tetrachloroethane	VOC
Methyliodide	VOC
2-Chloroethyl Vinyl Ether	VOC
Methacrylonitrile	VOC
Methyl Iodide	VOC
2-Chlorotoluene	VOC
2-Hexanone	VOC
Methyl Methacrylate	VOC
Ethylbenzene	VOC
Allyl Chloride	VOC
Isopropylbenzene	VOC
Acrylonitrile	VOC
Acrolein	VOC
Acetonitrile	VOC
Acetone	VOC
MTBE	VOC
cis-1,2-Dichloroethene	VOC
4-Chlorotoluene	VOC
Methylene Chloride	VOC
Styrene	VOC
cis-1,3-Dichloropropene	VOC
1,4-Dioxane	VOC
Ethyl Methacrylate	VOC
4-Methyl-2-pentanone	VOC
2,2-Dichloropropane	VOC
Bromomethane	VOC
Tetrachloroethene	VOC
2-Butanone	VOC
Bromoform	VOC
m,p-Xylenes	VOC
Bromodichloromethane	VOC
Bromochloromethane	VOC
Bromobenzene	VOC
Isobutyl Alcohol	VOC
sec-Butylbenzene	VOC
Benzene	VOC
Dichloromethane	VOC
tert-Butylbenzene	VOC

Parameter	Type
1,1,2-Trichlorotrifluoroethane	
Total Particulates	
Benzyl Chloride	
4-Ethyltoluene	
Total PAH	
1,2-Dichlorotetrafluoroethane	
Chrysotile	Asbestos
Amosite	Asbestos
Crocidolite	Asbestos
2,3,7,8-TCDD	Dioxin
Total HxCDD	Dioxin
Total HpCDD	Dioxin
Total PeCDD	Dioxin
2,3,4,7,8-PeCDF	Dioxin
Total HxCDF	Dioxin
2,3,7,8-TCDF	Dioxin
Dioxins and Furans	Dioxin
2,3,4,6,7,8-HxCDF	Dioxin
1,2,3,6,7,8-HxCDD	Dioxin
1,2,3,4,6,7,8,9-OCDF	Dioxin
1,2,3,4,6,7,8-HpCDD	Dioxin
1,2,3,4,6,7,8-HpCDF	Dioxin
1,2,3,4,7,8,9-HpCDF	Dioxin
Total HpCDF	Dioxin
1,2,3,4,6,7,8,9-OCDD	Dioxin
Total PeCDF	Dioxin
1,2,3,4,7,8-HxCDF	Dioxin
1,2,3,6,7,8-HxCDF	Dioxin
1,2,3,7,8,9-HxCDD	Dioxin
1,2,3,7,8,9-HxCDF	Dioxin
1,2,3,7,8-PeCDD	Dioxin
1,2,3,7,8-PeCDF	Dioxin
Total TCDF	Dioxin
Total TCDD	Dioxin
1,2,3,4,7,8-HxCDD	Dioxin
2,4,5-T	Herb
Dichlorprop	Herb
MCPA	Herb
Dinoseb	Herb
Dicamba	Herb
Dalapon	Herb
2,4-DB	Herb
2,4,5-TP (Silvex)	Herb
MCPP	Herb
2,4-D	Herb
Arsenic	Metal

Parameter	Type
Selenium	Metal
Chromium	Metal
Barium	Metal
Mercury	Metal
Silver	Metal
Lead	Metal
Cadmium	Metal
Aroclor 1248	PCB
Aroclor 1254	PCB
Aroclor 1221	PCB
Aroclor 1232	PCB
Aroclor 1242	PCB
Aroclor 1016	PCB
Aroclor 1260	PCB
Endrin	Pest
4,4´-DDE	Pest
4,4´-DDD	Pest
beta-BHC	Pest
Endosulfan I	Pest
Endosulfan sulfate	Pest
Endrin aldehyde	Pest
Methoxychlor	Pest
Heptachlor epoxide	Pest
Endrin ketone	Pest
Endosulfan II	Pest
4,4´-DDT	Pest
gamma-BHC	Pest
gamma-Chlordane	Pest
Aldrin	Pest
alpha-BHC	Pest
alpha-Chlordane	Pest
Dieldrin	Pest
Chlordane	Pest
delta-BHC	Pest
Toxaphene	Pest
Heptachlor	Pest
Bis(2-chloroethyl)ether	SVOC
Benzo(b)fluoranthene	SVOC
Bis(2-chloroethoxy)methane	SVOC
Biphenyl	SVOC
Pyridine	SVOC
Benzyl alcohol	SVOC
Benzoic acid	SVOC
Benzo(k)fluoranthene	SVOC
Benzo(e)pyrene	SVOC
C1-Fluoranthenes/pyrenes	SVOC

Parameter	Type
Benzo(a)pyrene	SVOC
Benz(a)anthracene	SVOC
Benzo(g,h,i)perylene	SVOC
C2-Phenanthrenes/anthracen	SVOC
Chrysene	SVOC
Chloronaphthalene	SVOC
Chlorobenzilate	SVOC
Chloroaniline	SVOC
Carbazole	SVOC
C4-Phenanthrenes/anthracen	SVOC
C4-Naphthalenes	SVOC
C4-Chrysenes	SVOC
Phenanthrene	SVOC
C3-Naphthalenes	SVOC
C3-Fluoranthenes/pyrenes	SVOC
C1-Chrysenes	SVOC
C3-Chrysenes	SVOC
Bis(2-chloroisopropyl)ether	SVOC
C2-Naphthalenes	SVOC
C2-Fluorenes	SVOC
C2-Fluoranthenes/pyrenes	SVOC
C2-Dibenzothiophenes	SVOC
C2-Chrysenes	SVOC
C1-Phenanthrenes/anthracen	SVOC
C1-Naphthalenes	SVOC
C1-Fluorenes	SVOC
C1-Dibenzothiophenes	SVOC
Butyl benzyl phthalate	SVOC
Bis(2-ethylhexyl)phthalate	SVOC
C3-Dibenzothiophenes	SVOC
1-Naphthylamine	SVOC
Aramite	SVOC
2-Chlorophenol	SVOC
2-Chloronaphthalene	SVOC
2-Acetylaminofluorene	SVOC
2,6-Dinitrotoluene	SVOC
2,6-Dichlorophenol	SVOC
2,4-Dinitrotoluene	SVOC
2,4-Dinitrophenol	SVOC
2,4-Dimethylphenol	SVOC
2,4-Dichlorophenol	SVOC
2,4,6-Trichlorophenol	SVOC
2,4,5-Trichlorophenol	SVOC
Sulfotep	SVOC
2-Methylphenol	SVOC
1,3,5-Trimethylbenzene	SVOC

Parameter	Type
Trichlorophenol	SVOC
1,2,3-Trichlorobenzene	SVOC
1,2,4,5-Tetrachlorobenzene	SVOC
1,2,4-Trichlorobenzene	SVOC
1,2,4-Trimethylbenzene	SVOC
2,3,4,6-Tetrachlorophenol	SVOC
1,2-Diphenylhydrazine	SVOC
Thionazin	SVOC
1,3,5-Trinitrobenzene	SVOC
1,3-Dichlorobenzene	SVOC
1,3-Dinitrobenzene	SVOC
1,4-Dichlorobenzene	SVOC
1,4-Naphthoquinone	SVOC
2-Naphthylamine	SVOC
1,2-Dichlorobenzene	SVOC
4-Chlorophenyl phenyl ether	SVOC
Anthracene	SVOC
C3-Phenanthrenes/anthracen	SVOC
Aniline	SVOC
Quinoline	SVOC
Acetophenone	SVOC
Acenaphthylene	SVOC
Acenaphthene	SVOC
A,A-Dimethylphenethylamine	SVOC
7,12-Dimethylbenz(a)Anthrac	SVOC
5-Nitro-O-Toluidine	SVOC
4-Nitroquinoline 1-Oxide	SVOC
4-Nitrophenol	SVOC
4-Nitroaniline	SVOC
2-Methylnaphthalene	SVOC
3-Nitroaniline	SVOC
2-nitroaniline	SVOC
2-Nitrophenol	SVOC
2-Picoline	SVOC
3&4-Methylphenol	SVOC
3,3'-Dichlorobenzidine	SVOC
4-Methylphenol	SVOC
3-Methyl Cholanthrene	SVOC
Safrole	SVOC
4,6-Dinitro-2-methylphenol	SVOC
4-Aminobiphenyl	SVOC
4-Bromophenyl phenyl ether	SVOC
4-Chloro-3-methylphenol	SVOC
4-Chloroaniline	SVOC
Pyrene	SVOC
3,3-Dimethylbenzidine	SVOC

Parameter	Type
Indeno(1,2,3-cd)pyrene	SVOC
Methyl Methanesulfonate	SVOC
Methapyrilene	SVOC
Phenol	SVOC
Phorate	SVOC
Kepone	SVOC
Isosafrole	SVOC
Famphur	SVOC
Isodrin	SVOC
N-Nitrosopyrrolidine	SVOC
Hexachloropropene	SVOC
Hexachlorophene	SVOC
Hexachloroethane	SVOC
Hexachlorobutadiene	SVOC
Fluorene	SVOC
Fluoranthene	SVOC
Isophorone	SVOC
N-Nitrosodimethylamine	SVOC
C3-Fluorenes	SVOC
Nitroaniline	SVOC
Nitrobenzene	SVOC
Nitrophenol	SVOC
N-Nitrosodibutylamine	SVOC
Naphthalene	SVOC
Methyl Parathion	SVOC
Methylphenol	SVOC
Methyl Yellow	SVOC
N-Nitrosodi-n-propylamine	SVOC
Methylnaphthalene	SVOC
N-Nitrosodiphenylamine	SVOC
N-Nitrosomethylethylamine	SVOC
N-Nitrosomorpholine	SVOC
N-Nitrosopiperidine	SVOC
Hexachlorobenzene	SVOC
N-Nitrosodiethylamine	SVOC
Diethyl phthalate	SVOC
Dimethyl phthalate	SVOC
Perylene	SVOC
Dibenz(a,h)anthracene	SVOC
Pentachlorophenol	SVOC
Dibenzofuran	SVOC
Dibenzothiophene	SVOC
o,o,o-Triethylphosphorothioat	SVOC
Dimethoate	SVOC
Dinitrophenol	SVOC
Ethyl Methanesulfonate	SVOC

Parameter	Type
Pentachlorobenzene	SVOC
Hexachlorocyclopentadiene	SVOC
Parathion	SVOC
Dichlorophenol	SVOC
o-Toluidine	SVOC
Pronamide	SVOC
Pentachloronitrobenzene	SVOC
Diphenylamine	SVOC
Phenacetin	SVOC
Disulfoton	SVOC
Di-n-butyl phthalate	SVOC
Diallate	SVOC
Phytane	SVOC
P-Phenylenediamine	SVOC
Di-n-octyl phthalate	SVOC
Dinitrotoluene	SVOC
Pristane	SVOC
TPH (Diesel Range)	TPH
TPH	TPH
TPH (Motor Oil Range)	TPH
TPH (RES)	TPH
n-Hexatriacontane	TPH
n-Hexadecane	TPH
n-Hexacosane	TPH
n-Heptatriacontane	TPH
TPH (Gasoline Range)	TPH
n-Pentadecane	TPH
n-Tricosane	TPH
n-Triacontane	TPH
n-Tridecane	TPH
n-Tetratriacontane	TPH
n-Tetradecane	TPH
n-Tetracosane	TPH
n-Tetracontane	TPH
n-Propylbenzene	TPH
n-Dotriacontane	TPH
n-Tritriacontane	TPH
n-Pentatriacontane	TPH
n-Undecane	TPH
n-Pentacosane	TPH
n-Octatriacontane	TPH
n-Octane	TPH
n-Octadecane	TPH
n-Octacosane	TPH
n-Nonatriacontane	TPH
n-Nonane	TPH

DRAFT

Robert.

Privileged and Confidential
Attorney-Client Communication
Attorney Work Product

Comparison of emission rates - Calibrated BEEST Model Rates vs 2000 Stack Testing Rates

	SCRUB1 - Waste Water			SCRUB2 - Retort Scrubber			Retort Doors		
Constituent	Stack Test (g/s)	Stack Test (lb/hr)	BEEST Cal. (lb/hr)	Stack Test (g/s)	Stack Test (lb/hr)	BEEST Cal. (lb/hr)	Stack Test (ng)	Stack Test (lb/hr)[1]	BEEST Cal. (lb/hr)
Acenaphthene	1.87E-05	1.48E-04	8.047E-04	7.530E-03	5.977E-02	1.475E-02	3.046E+08	6.716E-04	1.207E-02
Acenanaphthylene	3.10E-04	2.46E-03	5.961E-06	7.950E-05	6.311E-04	1.093E-04	2.543E+06	5.607E-06	8.941E-05
Anthracene	1.70E-07	1.35E-06	5.067E-05	2.220E-05	1.762E-04	9.289E-04	2.802E+06	6.179E-06	7.600E-04
Benza(a)anthracene	2.94E-09	2.33E-08	1.699E-06	2.990E-06	2.373E-05	3.114E-05	7.148E+04	1.576E-07	2.548E-05
Benzo(a)pyrene	2.94E-09	2.33E-08	5.365E-07	8.100E-07	6.430E-06	9.835E-06	2.108E+04	4.647E-08	8.047E-06
Benzo(b)fluoranthene	2.94E-09	2.33E-08	9.537E-07	1.080E-06	8.573E-06	1.748E-05	2.108E+04	4.647E-08	1.431E-05
Benzo (g,h) perylene	2.94E-09	2.33E-08	2.086E-07	1.980E-07	1.572E-06	3.825E-06	2.108E+04	4.647E-08	3.129E-06
Benzo (k)fluoranthene	2.94E-09	2.33E-08	7.761E-07	7.670E-07	6.088E-06	1.423E-05	2.108E+04	4.647E-08	1.164E-05
Biphenyl	3.04E-06	2.41E-05	4.211E-04	3.060E-02	2.429E-01	7.720E-03	1.580E+08	3.484E-04	6.316E-03
Chrysene	2.94E-09	2.33E-08	2.354E-06	3.000E-06	2.381E-05	4.317E-05	5.520E+04	1.217E-07	3.532E-05
Dibenzo(a,h)anthracene	2.94E-09	2.33E-08	2.086E-07	6.600E-08	5.239E-07	3.825E-06	2.108E+04	4.647E-08	3.129E-06
Dibenzofuran	6.07E-06	4.82E-05	4.894E-04	1.090E-02	8.652E-02	8.973E-03	9.600E+07	2.117E-04	7.342E-03
Fluoranthene	1.20E-07	9.53E-07	4.470E-05	5.300E-05	4.207E-04	8.196E-04	2.549E+06	5.620E-06	6.706E-04
Fluorene	6.40E-06	5.08E-05	4.470E-04	1.410E-03	1.119E-02	8.196E-03	6.787E+07	1.497E-04	6.706E-03
Indeno(1,2,3-cd)pyrene	2.94E-09	2.33E-08	2.980E-07	1.910E-07	1.516E-06	5.464E-06	2.108E+04	4.647E-08	4.470E-06
naphthalene	9.48E-05	7.53E-04	1.162E-03	1.310E-01	1.040E+00	2.131E-02	2.902E+09	6.398E-03	1.744E-02
Phenanthrene	2.30E-06	1.83E-05	3.875E-04	2.400E-04	1.905E-03	7.103E-03	2.165E+07	4.774E-05	5.812E-03
Pyrene	5.40E-08	4.29E-07	2.504E-05	2.810E-05	2.231E-04	4.590E-04	1.325E+06	2.921E-06	3.755E-04
Quinoline	1.18E-06	9.37E-06	9.212E-04	1.690E-02	1.342E-01	1.689E-02	7.279E+07	1.605E-04	1.382E-02

(1) Stack testing data (in ng) was converted to lb/hr by assuming that all of the retort VOCs exited the retort in one hour. Thus, for naphthalene, 2.90E+9 ng/hg x 1E-9 g/1 ng x 2.205E-3 lb/1g = 0.019 lb/hr.

Revised copy
throw LAST ONE AWAY

6725 Woodbridge Pkwy

DRAFT
PRIVILEGED & CONFIDENTIAL
ATTORNEY-CLIENT COMMUNICATION
ATTORNEY WORK PRODUCT

OUTLINE FOR PLAINTIFF'S REPORTS
ANDREWS ET AL VS KERR-MCGEE FORECST PRODUCTS, INC.

Executive Summary – **Robin or Jeff**
(Should be a shortened conclusion section)

I) INTRODUCTION
- a. Objective and Goals of the Report – **Amanda**
- b. Use of Report – **Standard Language: Robin or Jeff**
- c. Background (why are we writing this report) – **Robert**
- d. Property Description – **Tadd**
  - i. Location – **Tadd**
  - ii. Property Value – **Tadd**
  - iii. Condition of the Home – **Akilah**
  - iv. Utility Supplier (specifically drinking water) – **Akilah**
  - v. Location Relative to Ditch – **Tadd**
  - vi. Historical Flooding – **Amanda**
  - vii. Analytical Results for Closest Ditch Samples – **Will** — Graph radius → make table ??
- e. Allegations – **Robert**
  - i. Original Complaint – **Robert**
  - ii. Depositions – **Robert**
- f. History – **Robert**
  - i. Discussion of Samples Collected by Plaintiff's Expert – **Robert**

II) Methodology – **Mary**
- a. Sampling Methodology – **Mary**
  - i. Wipe Samples – **Mary**
  - ii. Air Samples – **Mary**
  - iii. Soil Samples – **Mary**
  - iv. Dust Samples – **Mary**
  - v. Drinking Water Samples – **Mary**
- b. Quality Control and Quality Assurance Procedures – **Mary**
- c. Documentation – ~~**Mary**~~ Akilah - Redcale
  - i. Photographic and Video Documentation – **Mary**
  - ii. Home Survey – **Mary**
  - iii. Chain of Custody – **Mary**
- d. Real Estate Methodology – **Tadd**
- e. Air Modeling (refer to the Air Modeling Report for method) – **Robert**
- f. Groundwater Modeling – **Amanda**

III) Results – **Will**
- a. ERM Sample Results – **Will** — 5 summary tables - Uniform
  - i. Wipe Samples – **Will**
  - ii. Air Samples – **Will**
  - iii. Soil Samples – **Will**
  - iv. Dust Samples – **Will**

Separate Plaintiff data table

v. Drinking Water Samples – **Will**
vi. QA/QC Results – **Lori**

b. Plaintiff's Sample Results (Develop a List from the plaintiff's document)
   i. Individual Samples Results – **Will**
   ii. QC/QA – **Lori**

c. Discussion of Plaintiff Lifestyle – **Akilah**
   i. Questionnaire – **Akilah**
   ii. Video – **Akilah**
   iii. Photo Interpretations – **Akilah**
   iv. Depositions – **Robert** – to Akilah

d. Modeled Ambient Air Concentrations – **Will/Robert**

e. Groundwater – **Will/Amanda**

IV) Discussion of Analytical Results – **open**
   a. Comparison to EPA Region 9 Remedial Concentrations – **open**
   b. Comparison of ERM and Plaintiff's Results – **open**
   c. Statistical Comparison of Property to Other Andrews Plaintiffs – **open**
   d. Comparison of Soil Analytical Results to Commercial and Industrial Sampling (i.e. Urban Runoff) – **open**

V) Risk Evaluation of Analytical and Lifestyle Results – **Maxene**

VI) Conclusions – **open**

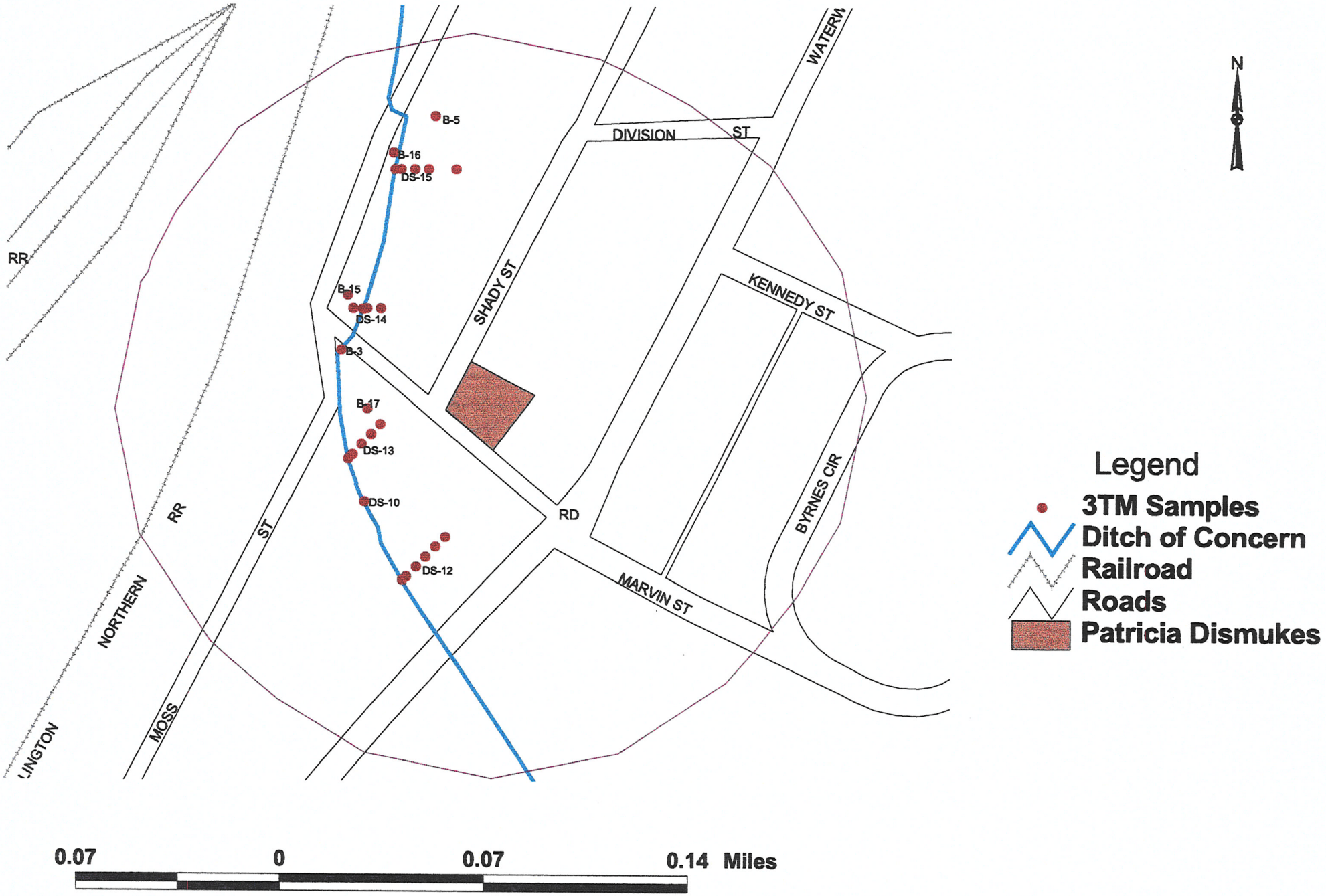
Tables
Figures

Appendices
A. Photographs
B. Laboratory Analytical Data Sheets
C. Questionnaire
D. Chain of Title

IMPORTANT NOTES:

- The first report will focus on ~~Essie Mae Cohen~~. Dsmokes
- Do not format any section that you write (i.e., no imbedded tables, charts, graphs). We will take care of that later.
- Please create any tables or figures you feel are necessary. Do not number any tables, figures, or appendices. For example, simply create a name for the table and refer to it in the text.
- Will Shutt will be the collection point for all text, figures, and appendices.

Samples Within 600 Foot Radius



Samples Within 600 Foot Radius