# INDUSTRIAL & HAZARDOUS WASTE

IHW#

31547

FILE TYPE:

RP

VOL#

INCLUSIVE DATES:

1/1/1996-12/31/96

Media Code/Format: M

□ Microfiche

□ Roll Microfilm

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CORRECTIVE ACTION SECTION

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PERMIT NO. HW-50343-000 ANNUAL REPORT

JANUARY 1 THROUGH DECEMBER 31, 1996

### PERMIT NO. HW-50343-000 ANNUAL REPORT JANUARY 1 THROUGH DECEMBER 31, 1996

Union Pacific Railroad Company
(Formerly Southern Pacific Transportation Company)
Wood Preserving Works
4910 Liberty Road
Houston, Texas

Terranext Project No. 44102069/05

#### **Prepared For:**

Union Pacific Railroad Company (Formerly Southern Pacific Lines) One Market Plaza San Francisco, California 94105

January 24, 1996

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Union Pacific Railroad Company
(Formerly Southern Pacific Transportation Company)
Wood Preserving Works
4910 Liberty Road
Houston, Texas

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#### 1.0 INTRODUCTION

#### 1.1 Purpose

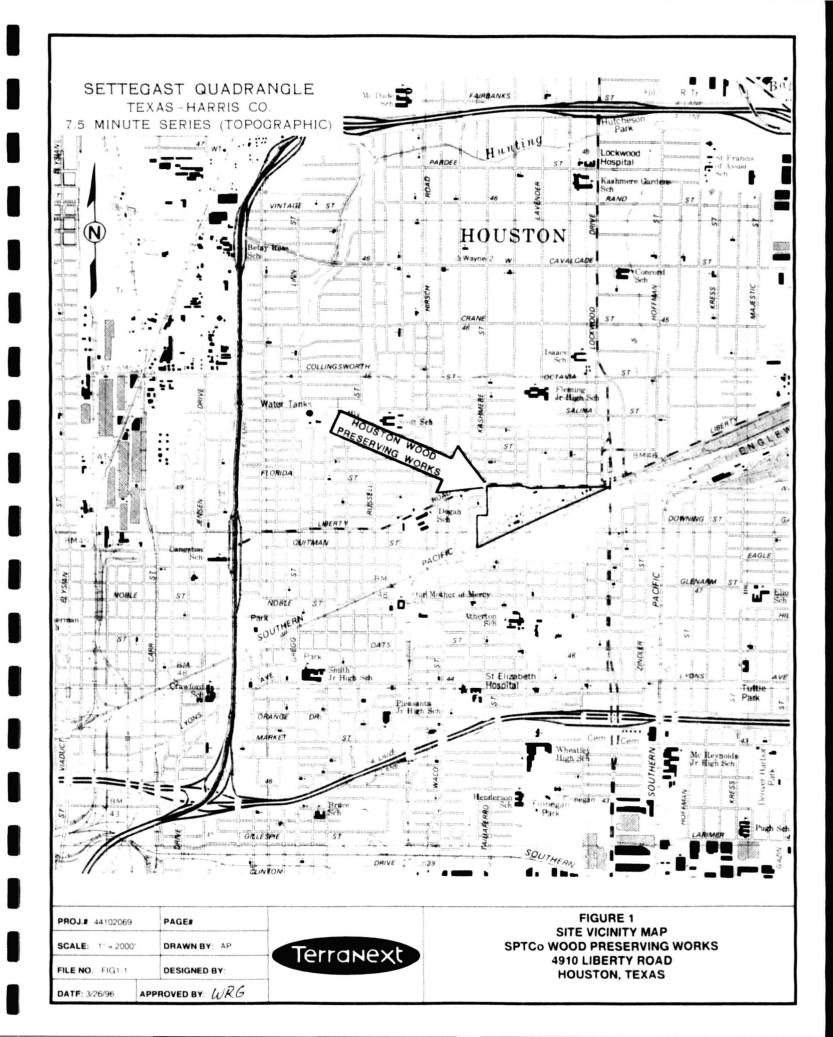
On June 20, 1994, the Texas Natural Resource Conservation Commission (TNRCC) issued Permit Number HW-50343-000 (hereinafter, Permit) and TNRCC Compliance Plan Number CP-50343, which is incorporated within the Permit. The Permit applies to post-closure care for one former surface impoundment (TNRCC Permit Unit No. II.B.1) located at the Union Pacific Railroad Company (UP - formerly Southern Pacific Transportation Company) former Houston Wood Preserving Works (HWPW), 4910 Liberty Road, Houston, Texas (Figure 1). The Permit requires a RCRA Facility Investigation (RFI), and the Compliance Plan requires an Extent of Contamination (EOC) Investigation; the EOC Work Plan dated September 16, 1994, and the RFI Work Plan dated October 14, 1994, were approved respectively by letters from the TNRCC dated September 29 and October 16, 1995. Field investigation activities (Phase 1) outlined in the EOC and RFI Work Plans were initiated in October 1995. This Annual Report (AR) for 1996 was prepared by Terranext on behalf of UP to comply with the requirements of Provisions III.B.1, IV.C.4.g, and V.F of the Permit.

#### 1.2 Applicability and Scope

Provision III.B.1 of the Permit requires that this AR include the following:

- a. Information and records required by Title 30 Texas Administrative Code (TAC) Section 335.154, including:
  - U.S. Environmental Protection Agency (EPA) identification number, name, and address of the facility;
  - Calendar year covered by the report;

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- TWC (Texas Water Commission, predecessor agency to the TNRCC)
  hazardous waste code and quantity of each hazardous waste received by
  the facility during the year;
- 4. Method of storage, processing, or disposal of each hazardous waste;
- Most recent closure cost estimate under the regulations contained in 40 Code of Federal Regulations (CFR) Section 264.142 and 30 TAC Section 1335.178, and for disposal facilities, the most recent postclosure cost estimate under 40 CFR 264.144 (see Item d below);
- For generators who treat, store, or dispose of hazardous waste on-site, a description of efforts undertaken to reduce the volume and toxicity of waste generated;
- 7. For generators who treat, store, or dispose of hazardous waste on-site, a description of changes in volume and toxicity of waste actually achieved in comparison with previous years;
- 8. Certification signed by owner or operator of the facility or authorized representative (see Item e below);
- b. Summary of ground water compliance monitoring activities;
- c. Summary of inspections made and any remedial activities conducted;
- d. Summary of annual cost estimate adjustments for facility closure and postclosure care;
- e. Certification of waste minimization in accordance with Permit Provision V.N, as follows:

- Permittee has a program in place to reduce the volume and toxicity of all hazardous wastes generated by the facility operation to the degree determined to be economically practicable;
- The proposed method of treatment, storage, or disposal is that
  practicable method currently available to the permittee which minimizes
  the present and future threat to human health and the environment.

As provided in Provision II.B, the Permit authorizes and requires the permittee to perform post-closure care for a landfill, closed, consisting of one former surface impoundment, Notice of Registration (NOR) Facility No. 01, total surface area of 0.5923 acre, total capacity of 5,065 cubic yards. Since this facility is closed, hazardous and toxic waste is not received or disposed of at the facility. Wastes are being generated as Investigation Derived Wastes (IDW) associated with the ongoing, periodic monitoring of Point of Compliance (POC) and Corrective Action Observation (CAO) wells, interim remedial activities, and implementation of Work Plans approved under the Permit and Compliance Plan. A recovery system has not been installed for this facility. Therefore, Items a through e, as listed above, are addressed herein as they relate to a facility under post-closure care.

The AR items as listed above are addressed in text summary in Section 2.0, with supporting figures and tables presented at the end of each major section. Reference information is presented in the appendices.

The definitions of the Uppermost Transmissive Zone (UTZ) and Secondary Transmissive Zone (STZ) as used in this AR are consistent with CP Provision I.A:

\* UTZ refers to the first sand unit encountered at 35 feet above mean sea level (MSL), averaging 6 to 8 feet in thickness.

\* STZ refers to the second sand unit encountered at approximately 15 feet MSL, averaging 8 to 10 feet in thickness.

#### 2.0 REPORT ITEMS

### 2.1 Information and Records Required by 30 TAC 335.154

#### 2.1.1 Facility Identification

This facility is identified by the following information:

EPA identification number: TXD000820266

Facility name: Surface Impoundment

Address: Former Houston Wood Preserving Works

Union Pacific Railroad Company

(Formerly Southern Pacific Transportation

Company)

4910 Liberty Road Houston, Texas 77020

#### 2.1.2 Calendar Year Covered by This Report

The activity period covered by this report is designated in Provision III.B.1 of the Permit and encompasses January 1 through December 31, 1996.

### 2.1.3 Hazardous Wastes Codes and Quantities Received

This facility is closed and has not received any hazardous wastes. A revised Notice of Registration (NOR) for solid wastes generated at 4910 Liberty Road was submitted to the TNRCC under cover letter dated August 8, 1995. The revised NOR includes notice of a temporary container storage area (i.e., less than 90 or 180 days, depending on volume of waste generated) around the permitted and clean-closed surface impoundment (Permit

Unit II.B.1) for the storage of waste ground water generated by purging and sampling of monitor wells and waste soil generated by soil boring/monitor well installation.

The revised NOR included hazardous aqueous wastes generated from equipment decontamination and purging of monitor wells for site investigation activities. Remediation wastes include soils contaminated with creosote sludge or constituents. Nonhazardous wastes such as scrap metals, personal protective equipment, waste oil, and waste rail ties were also included in the NOR. The scrap metals, waste oil, and rail ties are wastes generated from operations at the rail yard and are not related to activities conducted under the Permit.

#### 2.1.4 Storage, Processing, or Disposal of Hazardous Waste

No wastes have been processed at this facility. Only waste oils from facility operations and IDW wastes from monitoring or remedial action associated with conduct under the provisions of the Permit and Compliance Plan were generated during the reporting period. Waste ground water has been temporarily stored in accord with 30 TAC 335.69(d); these purge waters were contained in 55-gallon drums, labeled as to the contents of the drum and the source (i.e., monitor well), during the January 1996, and September 1996 semi-annual sampling events. Temporarily stored purge waters were vacuum-pumped from the drums for off-site disposal. The schedule for ground water monitoring converted to semi-annual from quarterly beginning in July 1995.

The IDW were properly disposed off-site; a copy of the Annual Waste Summary Form (submitted separately) for reporting year 1996 is presented in Appendix A.

#### 2.1.5 Post-Closure Care Cost Estimate

The regulated unit was clean-closed in 1984. A revised post-closure care cost estimate is addressed in Section 2.4 of this AR.

#### 2.1.6 Reduction of Volume and Toxicity of Waste Generated

Waste minimization typically applies to operating facilities; as stated above, this facility has been closed since 1984. However, wastes are generated at this facility as a result of the specific investigation or post-closure care activities directed by the TNRCC under the Permit and Compliance Plan. These IDW and remediation waste volumes will be directly related to the scope and schedule of activities as they are conducted under the RCRA Facility Investigation (RFI) and Extent of Contamination (EOC) Work Plans, as approved by the TNRCC under the Permit and Compliance Plan.

#### 2.1.7 Waste Minimization Relative to Previous Years

As stated in Section 2.1.6, IDW are directly controlled by the activities required by the Permit and Compliance Plan. These wastes are not directly comparable with respect to years prior to 1984 when this facility was operating.

#### 2.1.8 Certification

Certification is addressed in Section 2.5 of this AR.

#### 2.2 Summary of Ground Water Compliance Monitoring Activities

Existing CAO wells and POC wells (Figure 2) were monitored and sampled on a semi-annual basis in January and September 1996 to evaluate the extent of ground water contamination in the UTZ and STZ. The schedule for ground water monitoring was changed from quarterly to semi-annual beginning in July 1995, as provided by Provision VI.C.3 of the Compliance Plan. Ground water monitoring results, including analytical laboratory reports, were presented in the first semi-annual report, dated March 22, 1996. Ten wells (MW-1a, -2, -3, -4, -5, -7, -8, -9, -10a, and -11a) completed in the UTZ and two wells (MW-10b and -11b) and three piezometers (P-10, -11, and -12) completed in the STZ were sampled during each event in 1996.

The ground water analytical data for each semi-annual sampling event are listed in Tables 1 through 4; results are tabulated separately for the UTZ and STZ. For each sampling event, detected concentrations of analytes in excess of the Ground Water Protection Standard are indicated by shading on these tables. The presence of non-aqueous phase liquids (NAPLs), both light and dense phases, was not noted within any of the monitor wells or piezometers during either of the semi-annual monitoring events.

For each monitor well and piezometer, Table 5 lists the total depth, casing reference elevation, the measured depth to water, and the calculated water level elevation relative to mean sea level. For both water-bearing zones, but particularly in the STZ, the limited number of monitor wells and piezometers provides a general indication that the potentiometric (UTZ) and piezometric (STZ) surfaces have very low gradients. The actual directions of flow and gradients of the potentiometric and piezometric surfaces will be confirmed with additional site investigation being conducted under the EOC and RFI Work Plans.



# $\underset{\text{Houston Wood Preserving Works Site}}{\textbf{Monitoring Wells and Piezometers}}$



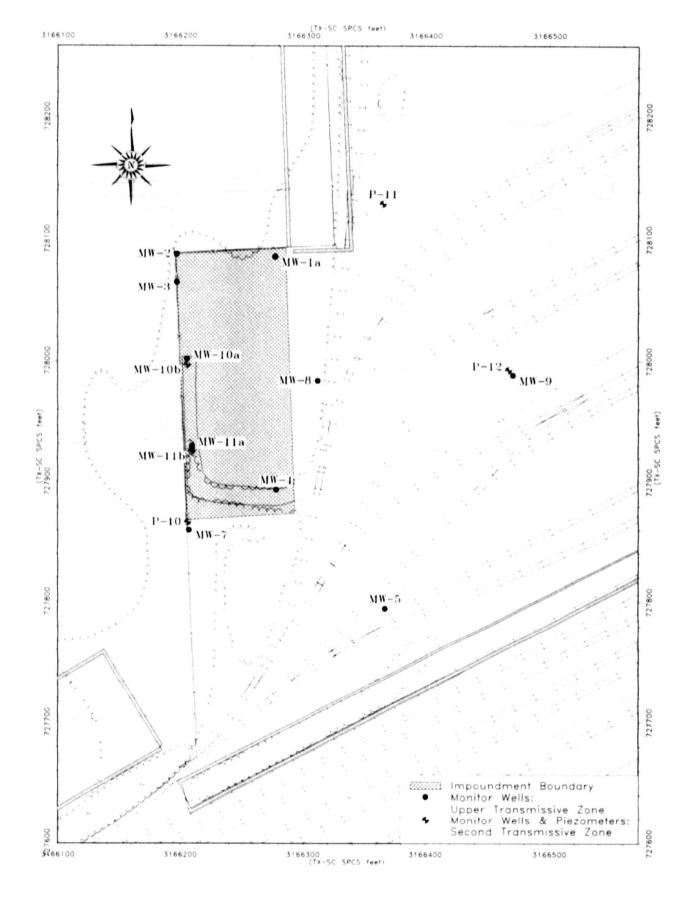


Figure 2. Monitoring Wells and Piezometers

Compliance Plan Provision VI.D provides two options for data evaluation, including direct comparison with the concentration limits for the Ground Water Protection Standard (Appendix B) or statistical analysis of the data. Table 6 lists the results of direct comparison of the analytical data for the semi-annual sampling events with the Ground Water Protection Standard and specifications of Compliance Plan Provision VI.D.1. Wells and piezometers are considered compliant with the Ground Water Protection Standard if all constituents of concern were detected at concentrations less than or equal to the respective concentration limit. Wells and piezometers are considered noncompliant if one or more constituents of concern were detected at a concentration greater than the respective concentration limit. In general, naphthalene, acenaphthene, and total benzene, toluene, ethylbenzene, and xylenes (BTEX) concentrations suggest isolated areas of concentration in both the UTZ and STZ for the semi-annual sampling events.

The concentrations of naphthalene, acenaphthene, and total BTEX for each sampling period for the UTZ are plotted on Figures 3, 4, and 5; and for the STZ on Figures 6, 7, and 8. Review of these figures demonstrates that the concentrations of the selected analytes have exceeded the TNRCC concentrations limits in select wells since monitoring was initiated in 1985. It is also apparent that the concentrations have generally been decreasing over time. The exception being the most recent semi-annual sampling event.

# Terranext

# $Naph thalene \\ \textit{Data Evaluations: Houston Wood Preservatives Works Site, Houston, TX}$



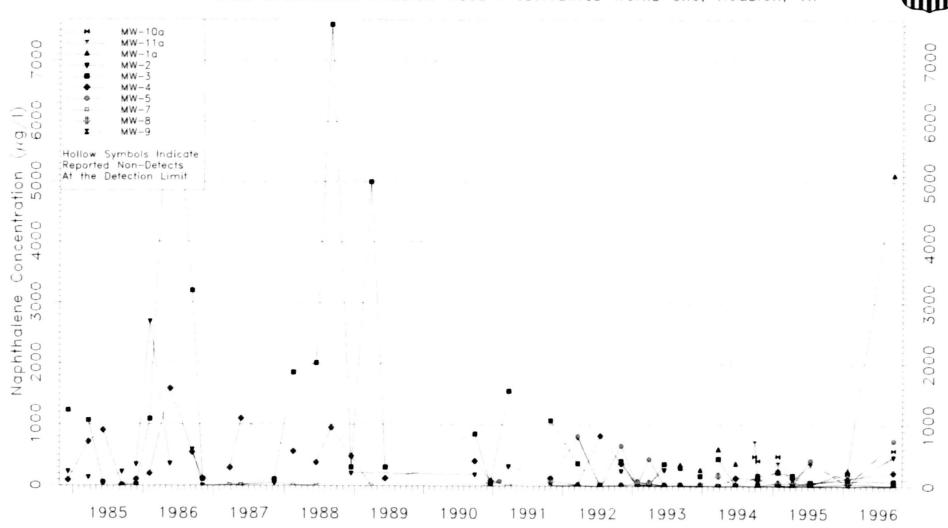


Figure 3: Concentration of Naphthalene Versus Time for UTZ WELLS

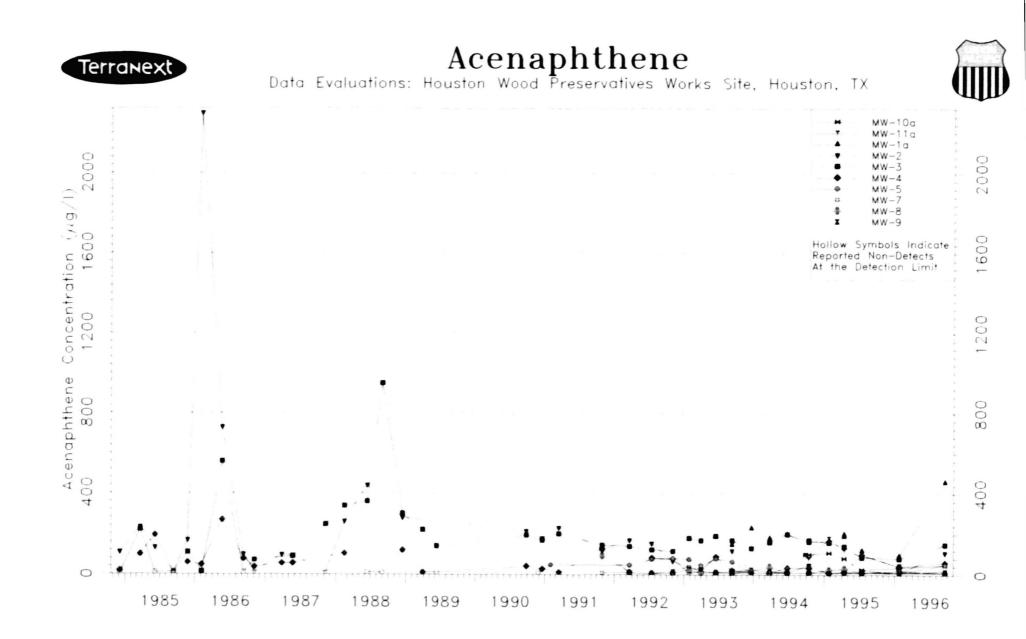


Figure 4: Concentration of Acenaphthene Versus Time for UTZ WELLS

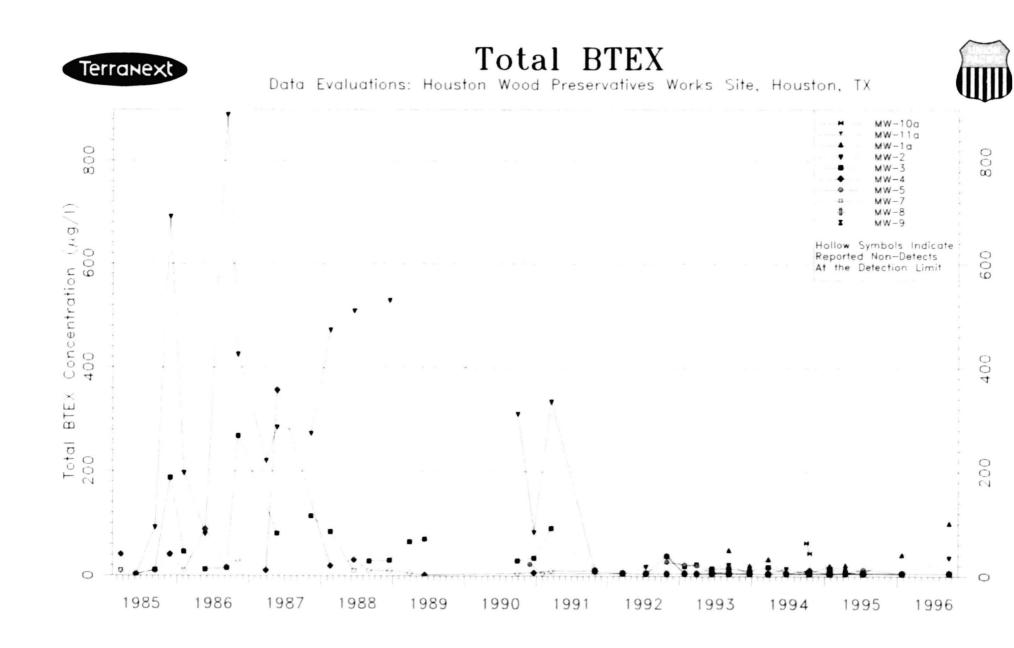


Figure 5: Concentration of Total BTEX Versus Time for UTZ WELLS

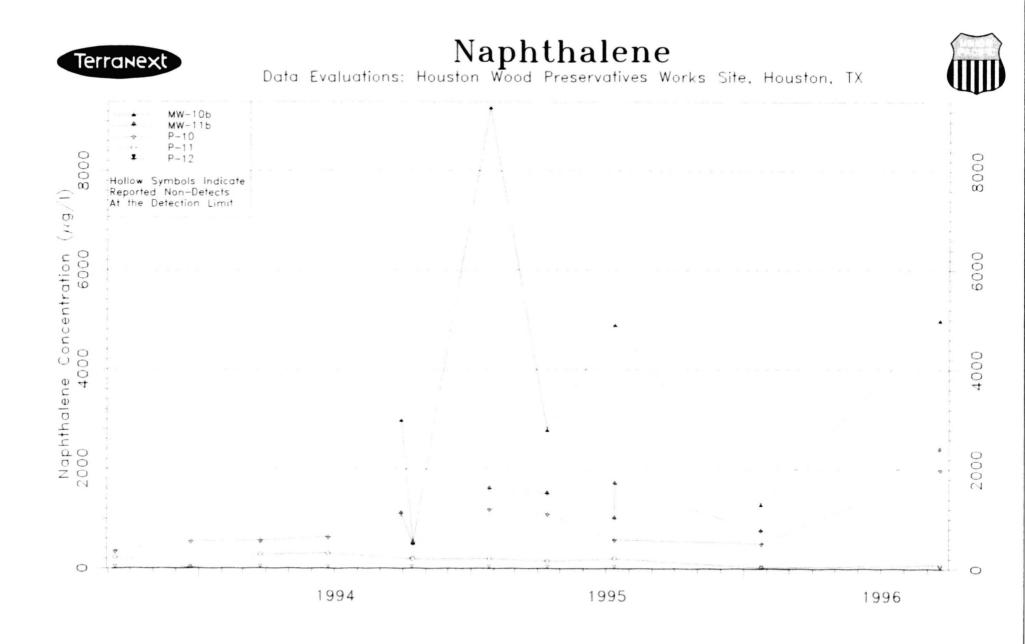


Figure 6: Concentration of Naphthalene Versus Time for STZ WELLS

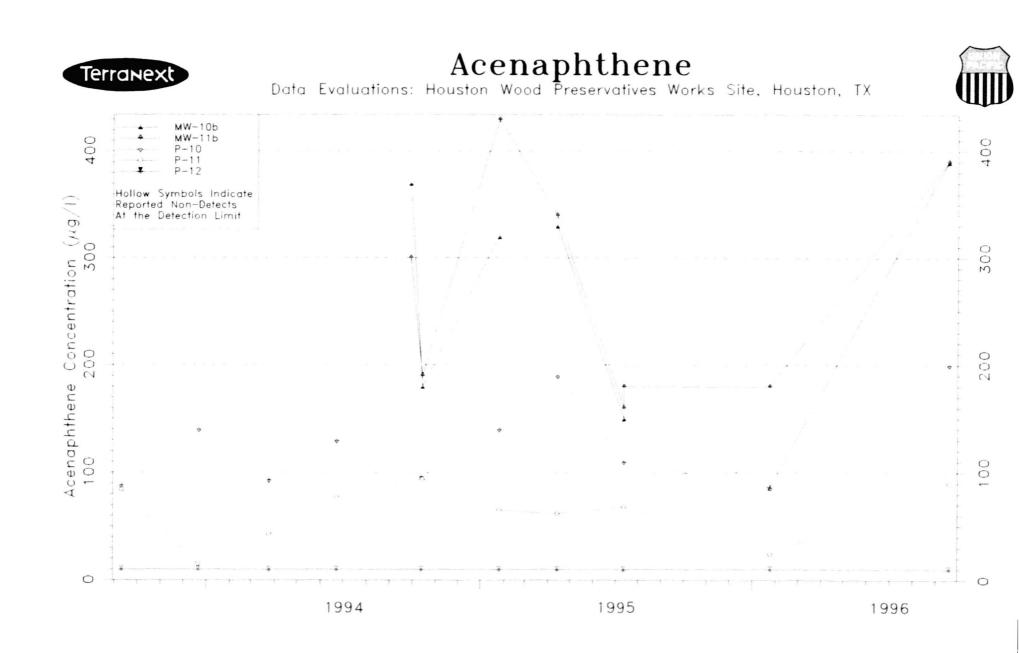


Figure 7: Concentration of Acenaphthene Versus Time for STZ WELLS

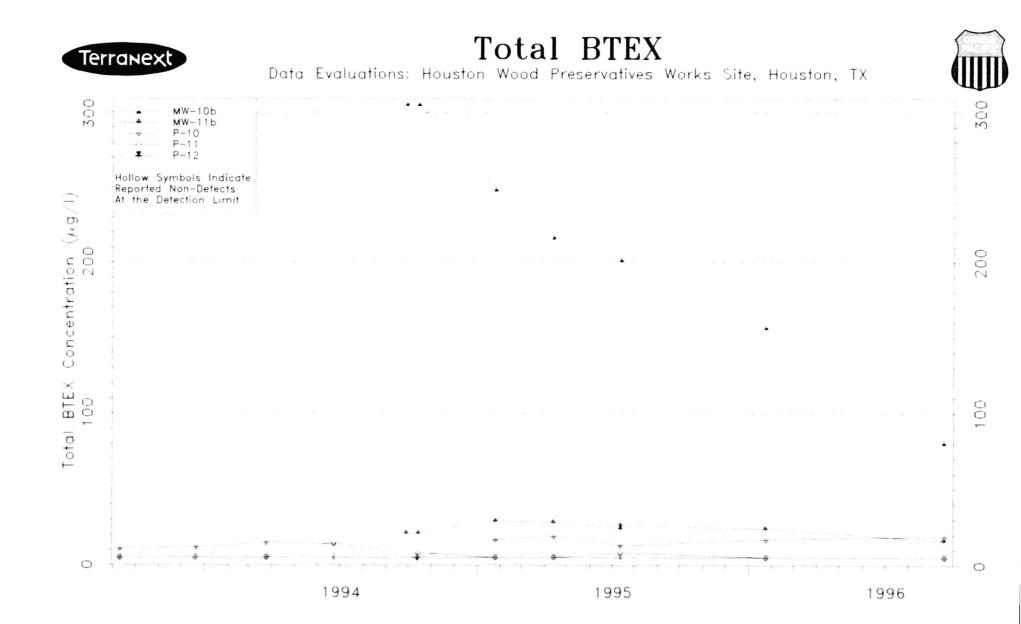


Figure 8: Concentration of Total BTEX Versus Time for STZ WELLS

The statistical methods outlined in the RCRA Facility Investigation Work Plan are currently being applied to the available data. It is anticipated that results of the statistical evaluation will be presented in the first Semi-annual Report for 1997 for this site.

#### 2.3 Summary of Inspections and Remedial Activities Conducted

By letter of January 10, 1995, the TNRCC acknowledged fulfillment of the requirement of Compliance Plan Provision XI.B by the Operation & Maintenance (O&M) Plan, dated August 19, 1994, together with the addendum to the O&M Plan, dated December 8, 1994. Under this O&M Plan, inspections of the surface impoundment and monitor wells were conducted monthly. O&M Plan Amendment 2, dated May 20, 1995, was submitted to the TNRCC on May 21, 1995; O&M Plan Amendment 3, dated June 23, 1995, was submitted to the TNRCC on August 8, 1995. By letter of October 13, 1995, the TNRCC provided approval of the amendments to the O&M Plan. O&M Amendment 3 establishes a weekly schedule for the surface impoundment and a quarterly inspection schedule for the monitor wells.

Inspection of the integrity of the well casings was conducted quarterly during January, April, September, and December, 1996. Inspections related to hazardous waste generation for container storage are performed weekly.

### 2.4 Summary of Annual Cost Estimate for Post-Closure Care

An adjusted annual cost estimate for post-closure care in 1997 is presented in Appendix C. The post-closure care cost estimate includes ground water monitoring, inspection, and operation and maintenance costs averaged on an annual basis. Ground water monitoring includes quarterly and semi-annual sampling and analytical testing for an estimated total of

21 monitor wells/piezometers. Operation and maintenance include minor repairs and upgrades. Costs for replacement of existing monitor wells are not included.

#### 2.5 Certification of Waste Minimization

The volume and toxicity of IDW are directly controlled by the activities required by the Permit and Compliance Plan. The scope and schedule of activities proposed in the RFI and EOC Work Plans, as approved by the TNRCC, were designed to reduce the volume and toxicity of the IDW generated by the facility investigations to the degree determined to be economically practicable and in accord with the requirements of the Permit and Compliance Plan requirements. Waste minimization has occurred and will continue through use of direct-push and Hydropunch™ techniques as outlined in the Work Plans, thereby potentially reducing the number of borings/wells and waste that could be generated.

Given the nature of the contaminants potentially present at the facility, the requirements of the Permit and Compliance Plan in investigating the facility, and the character of the IDW generated to date, the method of treatment, storage, or disposal of IDW is that practicable method currently available to the permittee which minimizes the present and future threat to human health and the environment.

#### TABLE 1 SUMMARY OF ANALYTICAL RESULTS FOR UTZ (EI +35-FOOT SAND ZONE) MONITOR WELLS

First Semi-annual Event 1996

ANALYTICAL RESULTS (Ap/L)										
COMPOUND	MW-in	MW-2	MW-3	MW4	MW-5	MW-7	MW-8	MWs	MW-10a	MW-IIa
BENZENE	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5
CHLOROBENZENE	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND<5	ND<5	ND < 5	ND < 5	ND < 5
1,2-DICHLOROETHANE	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5
DICHLOROMETHANE	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5
ETHYLBENZENE	13	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5
TOLUENE	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5
XYLENES	27	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5
ACENAPHTHENE	м	ND < 10	10	40	ND < 10	ND < 10	19	ND < 10	36	- 46
ACENAPHTHYLENE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
ANTHRACENE	10	ND < 10	ND < 10	ND < 10	<b>N</b> D < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
BENZO(A)ANTHRACENE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
BENZO(A)PYRENE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
BIS(2-ETHYLHEXYL)PHTHALATE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
BIS(2-CHLOROETHOXY)METHANE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
2-CHLORONAPHTHALENE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
CHRYSENE	ND < 10	ND < 10	ND < 10	ND < 10	<b>ND</b> < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
DIBENZOFURAN	52	ND < 10	28	15	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	28
2.4-DIMETHYLPHENOL	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
DI-N-BUTYL PHTHALATE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
4.6-DINITRO-O-CRESOL	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50
2,4-DINITROTOLUENE	ND < 10	ND < 10	<b>N</b> D < 10	ND < 10	<b>N</b> D < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
2,6-DINITROTOLUENE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
1,2-DIPHENYLHYDRAZINE	ND < 10	ND < 10	*	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
FLUORANTHENE	ND < 10	<b>N</b> D < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	<b>N</b> D < 10
FLUORENE	76	ND < 10	.55	20	ND < 10	ND < 10	18	ND < 10	18	30
2-METHYLNAPHTHALENE	57	ND < 10	ND < 10	14	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
NAPHTHALENE	250	ND < 10	¥	130	ND < 10	ND < 10	42	<b>ND</b> < 10	210	110
NITROBENZENE	ND < 10	ND < 10	ND < 10	ND < 10	<b>N</b> D < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
4-NITROPHENOL	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50
N-NITROSODIPHENYLAMINE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
PENTACHLOROPHENOL	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50
PHENANTHRENE	43	ND < 10	16	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	13
PHENOL	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	<b>N</b> D < 10	ND < 10	ND < 10	ND < 10
PYRENE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10

 $\mu g/L = micrograms per liter$ 

ND = Not Detected at given detection limit

#### TABLE 2 SUMMARY OF ANALYTICAL RESULTS FOR STZ (E1 +15-FOOT SAND ZONE) MONITOR WELLS AND PIEZOMETERS First Semi-annual Event 1996

ANALYTICAL RESULTS (#g/L)							
COMPOUND	P-10	P-13	P-12	MW-106	MW-11b		
BENZENE	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5		
CHLOROBENZENE	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5		
1.2-DICHLOROETHANE	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5		
DICHLOROMETHANE	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5		
ETHYLBENZENE	11	ND < 5	ND < 5	*	12		
TOLUENE	ND < 5	ND < 5	ND < 5	13	ND < 5		
XYLENES	•	ND < 5	ND < 5	*	12		
ACENAPHTHENE	86	24	ND < 10	86	180		
ACENAPHTHYLENE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10		
ANTHRACENE	11	ND < 10	ND < 10	10	22		
BENZO(A)ANTHRACENE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10		
BENZO(A)PYRENE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10		
BIS(2-ETHYLHEXYL)PHTHALATE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10		
BIS(2-CHLOROETHOXY)METHANE	<b>N</b> D < 10	ND < 10	ND < 10	ND < 10	ND < 10		
2-CHLORONAPHTHALENE	ND < 10	ND < 10	ND < 10	ND < 10	<b>ND</b> < 10		
CHRYSENE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10		
DIBENZOFURAN	12	ND < 10	ND < 10	57	59		
2.4-DIMETHYLPHENOL	ND< 10	ND < 10	ND < 10	ND < 10	ND < 10		
DEN-BUTYL PHTHALATE	ND < 10	<b>N</b> D < 10	ND < 10	ND < 10	ND < 10		
4.6-DINITRO-O-CRESOL	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50		
2,4-DINITROTOLUENE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10		
2,6-DINITROTOLUENE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10		
1.2-DIPHENYLHYDRAZINE	ND < 10	ND < 10	ND < 10	ND < 10	*		
FLUORANTHENE	ND < 10	ND < 10	ND < 10	ND < 10	19		
FLUORENE	50	ND < 10	ND < 10	•	140		
2-METHYLNAPHTHALENE	38	ND < 10	ND < 10	87	43		
NAPHTHALENE	510	26	ND < 10	1300	750		
NITROBENZENE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10		
4-NITROPHENOL	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50		
N-NITROSODIPHENYLAMINE	ND< 10	ND < 10	ND < 10	ND < 10	ND < 10		
PENTACHLOROPHENOL	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50		
PHENANTHRENE	37	ND < 10	ND < 10	46	160		
PHENOL	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10		
PYRENE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10		

 $\mu g/L = micrograms per liter$ 

ND = Not Detected at given detection limit

# TABLE 3 SUMMARY OF ANALYTICAL RESULTS FOR UTZ (EI +35-FOOT SAND ZONE) MONITOR WELLS Second Semi-annual Event 1996

ANALYTICAL RESULTS (pg/L)										
COMPOUND	MW-la	MW-2	MW-3	MW4	MW-s	MW-7	MW-8	MW-9	MW-10a	MW-Ita
BENZENE	9	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND<5
CHLOROBENZENE	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5
1,2-DICHLOROETHANE	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5
DICHLOROMETHANE	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5
ETHYLBENZENE	31	12	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5
TOLUENE	12	7	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5
XYLENES	46	17	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5	5	ND < 5
ACENAPHTHENE	460	110	150	60	50	20	ND < 10	ND < 10	49	150
ACENAPHTHYLENE	10	ND < 10	ND < 10	ND < 10	20	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
ANTHRACENE	30	ND < 10	10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
BENZO(A)ANTHRACENE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
BENZO(A)PYRENE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
BIS(2-ETHYLHEXYL)PHTHALATE	ND < 10	ND < 10	ND < 10	20	ND < 10	<b>N</b> D < 10	ND < 10	ND < 10	ND < 10	ND < 10
BIS(2-CHLOROETHOXY)METHANE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
2-CHLORONAPHTHALENE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
CHRYSENE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
DIBENZOFURAN	240	80	110	30	20	ND < 10	ND < 10	ND < 10	19	70
2,4-DIMETHYLPHENOL	20	ND < 10	<b>N</b> D < 10	ND < 10	<b>N</b> D < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
DI-N-BUTYL PHTHALATE	ND < 10	ND < 10	<b>N</b> D < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
4,6-DINITRO-O-CRESOL	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50
2,4-DINITROTOLUENE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
2,6-DINITROTOLUENE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	<b>N</b> D < 10	ND < 10	ND < 10	ND < 10
1.2-DIPHENYLHYDRAZINE	<b>N</b> D < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
FLUORANTHENE	20	ND < 10	20	ND < 10	ND < 10	ND < 10	<b>ND</b> < 10	ND < 10	ND < 10	10
FLUORENE	280	70	110	40	<del>20</del>	ND < 10	ND < 10	ND < 10	20	80
2-METHYLNAPHTHALENE	670	ND < 10	ND < 10	20	20	ND < 10	ND < 10	ND < 10	24	60
NAPHTHALENE	5050	478	79	224	736	ND < 10	ND < 10	ND < 10	582	468
NITROBENZENE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	<b>ND</b> < 10
4-NITROPHENOL	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50
N-NITROSODIPHENYLAMINE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	<b>ND</b> < 10
PENTACHLOROPHENOL	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50
PHENANTHRENE	140	10	50	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	40
PHENOL	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
PYRENE	ND < 10	ND < 10	10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10

 $\mu g/L = \text{micrograms per liter}$ 

ND = Not Detected at given detection limit

# TABLE 4 SUMMARY OF ANALYTICAL RESULTS FOR STZ (EI +15-FOOT SAND ZONE) MONITOR WELLS AND PIEZOMETERS Second Semi-annual Event 1996

COMPOUND	P-10	P-11	P-12	MW-10b	MW-116
BENZENE	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5
CHLOROBENZENE	ND < 5	ND<5	ND<5	ND<5	ND<5
TANK BURNES BANG BANG BANG BANG BANG BANG BANG BANG					
1,2-DICHLOROETHANE	ND < 5	ND < 5	ND < 5	ND < 5	ND < 5
DICHLOROMETHANE	ND < 5	ND < 5	ND < 5	ND < 5	ND<5
ETHYLBENZENE	10	ND<5	ND < 5	27	7
TOLUENE	ND < 5	ND < 5	ND < 5	•	ND < 5
XYLENES	,	ND < 5	ND < 5	48	,
ACENAPHTHENE	200	90	ND < 10	390	390
ACENAPHTHYLENE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
ANTHRACENE	10	ND < 10	ND < 10	30	40
BENZO(A)ANTHRACENE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
BENZO(A)PYRENE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
IS(2-ETHYLHEXYL)PHTHALATE	ND < 10	20	36	20	ND < 10
S(2-CHLOROETHOXY)METHANE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
2-CHLORONAPHTHALENE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
CHRYSENE	ND < 10	ND < 10	ND < 10	ND < 10	<b>ND</b> < 10
DIBENZOFURAN	.50	50	ND < 10	260	24
2,4-DIMETHYLPHENOL	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
DI-N-BUTYL PHTHALATE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
4,6-DINITRO-O-CRESOL	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50
2,4-DINITROTOLUENE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
2,6-DINITROTOLUENE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
1,2-DIPHENYLHYDRAZINE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
FLUORANTHENE	10	ND < 10	ND < 10	20	30
FLUORENE	110	50	<b>ND &lt;</b> 10	250	259
2-METHYLNAPHTHALENE	130	ND < 10	ND < 10	300	259
NAPHTHALENE	2010	75	ND < 10	4900	2440
NITROBENZENE	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
4-NITROPHENOL	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50
N-NITROSODIPHENYLAMINE	ND < 10	ND < 10	<b>ND</b> < 10	ND < 10	ND < 10
PENTACHLOROPHENOL	ND < 50	ND < 50	ND < 50	ND < 50	ND < 50
PHENANTHRENE	70	10	ND < 10	210	260
PHENOL	ND < 10	ND < 10	ND < 10	ND < 10	ND < 10
PYRENE	ND < 10	ND < 10	ND < 10	10	20

ND = Not Detected at given detection limit

TABLE 5
SEMI-ANNUAL WATER LEVEL DEPTHS AND ELEVATIONS
January and September 1996

UTZ Well	Total Depth		Reference	Depth	to Water	Water Level Elevation		
	1ST SA	2ND SA	Elevation	1ST SA	2ND SA	1ST SA	2ND SA	
MW-1a	19.45	19.44	47.97	5.67	8.33	42.30	39.64	
MW-2	18.39	18.40	48.05	5.69	8.84	42.36	39.21	
MW-3	19.95	19.93	48.63	6.27	9.31	42.36	39.32	
MW-4	22.59	22.03	49.91	7.85	10.09	42.06	39.82	
MW-5	22.20	27.23	49.60	7.42	9.01	42.18	40.59	
MW-7	24.56	24.61	47.71	6.99	9.41	40.72	38.30	
MW-8	24.93	24.91	49.37	7.20	9.51	42.17	39.86	
MW-9	25.22	25.25	48.81	7.09	8.58	41.72	40.23	
MW-10a	25.38	25.42	49.90	7.74	10.54	42.16	39.36	
MW-11a	23.79	23.86	50.03	8.01	10.56	42.02	39.47	
STZ Well/ Piezometer	1ST SA	2ND SA	Reference Elevation	1ST SA	2ND SA	1ST SA	2ND SA	
MW-10b	46.35	46.35	49.96	7.84	10.64	42.12	39.32	
MW-11b	46.52	46.56	50.19	8.20	10.83	41.99	39.36	
P-10	42.70	42.74	48.87	5.84	8.34	43.03	40.53	
P-11	42.61	42.64	49.02	6.81	9.15	42.21	39.87	
P-12	42.73	42.77	49.29	6.62	8.12	42.67	41.17	

Depth and elevation measurements are given in feet: depths relative to Reference Elevation point and elevations relative to Mean Sea Level UTZ - Upper Transmissive Zone

STZ - Secondary Transmissive Zone

# TABLE 6 COMPLIANCE OF WELLS AND PIEZOMETERS WITH GROUND WATER PROTECTION STANDARD

Monitoring Point	First Sen	ni-annual	Second Semi-annual			
UTZ Well	Compliant	Non- Compliant	Compliant	Non- Compliant		
MW-1a		X		х		
MW-2	X			X		
MW-3		X		Х		
MW-4		X		Х		
MW-5	х			х		
MW-7	х			х		
MW-8		х	х			
MW-9	х		х			
MW-10a		х		х		
MW-11a		х		х		
STZ Well/Piezometer	Compliant	Non- Compliant	Compliant	Non- Compliant		
MW-10b		х		х		
MW-11b		х		х		
P-10		х		х		
P-11		х		х		
P-12	x			х		

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION P.O. BOX 13007 AUSTIN, TEXAS 70711-3007  Mr. E.H. Honig, P.E.  Union Pacific Railroad 1416 Dodge St., RM 930  Omaha, NE 68179	FOR DATA YEAR: 1996  SUMMARY STATUS ORIGINAL SUMMARY REVISED SUMMARY SUPPLEMENTAL SUMMARY SUPPLEMENTAL SUMMARY NO REPORT REQUIRED See 30 TAC 335.9 (a)(3); also see instructions
TEXAS WASTE (1)  EPA HAZARDOUS	The waste is soil generated primarily by the boring of
QUANTITY HANDLED * TYPE CODE * * NUMBER REG	ECEIVER'S EPA ID # COMMENTS  88
57	88
57 66 67 70 71 76 57 66 67 70 71 76	88 11
TEXAS WASTE ()  EPA HAZARDOUS EPA HAZARDOUS EPA HAZARDOUS EPA HAZARDOUS WASTE NO.  WASTE NO.  WASTE NO.  WASTE NO.  WASTE NO.  31  35  39  43	
QUANTITY HANDLED	Waste oil. The waste oil is generated from four (4) for 47 9 Exerciser's EPA ID# COMMENTS 4900144 49
02012061 31 35 39 43  QUANTITY HANDLED SYSTEM FEE PACILITY NUMBER REI	Waste oil. The waste oil is generated from four (4) for 4 7 9 P
02012061 31 35 39 43  QUANTITY HANDLED UNITS SYSTEM TYPE CODE TO PACILITY NUMBER RE-  1 4 7 9 P M0 6 1 3 2 4 7 9 T X D 4  57 M M	Waste oil. The waste oil is generated from four (4) for 47 9 EP 66 66 66 66 66 66 66 66 66 66 66 66 66
02012061 31 35 39 43  QUANTITY HANDLED UNITS SYSTEM TYPE CODE TYPE CODE TYPE CODE TO THE STATE OF THE STATE O	Waste all. The waste all le generated from four (4) for 47 9 Exerciser's EPA ID# COMMENTS 490014149 88 11

Report for: 19 96 TEXAS NATURAL RESOURCE CONSERVATION COM P.O. BOX 12087 AUSTIN, TEXAS 78711-3087 FOR DATA YEAR: 1996 Mr. E.H. Honig, P.E. SUMMARY STATUS EPAID # TXD 0 0 0 8 20 2 6 6 Union Pacific Railroad M ORIGINAL SUMMARY 1416 Dodge St., RM 930 ☐ REVISED SUMMARY Page 2 of 5 ☐ SUPPLEMENTAL SUMMARY Omaha, NE 68179 NO REPORT REQUIRED See 30 TAC 335.9 (a)(3); also see instructions TEXAS WASTE (1) EPA HAZARDOUS EPA HAZARDOUS WASTE NO. WASTE NO. EPA HAZARDOUS EPA HAZARDOUS WASTE NO. WASTE NO. TOTAL QUANTITY GENERATED <del>0400301</del>1 Petroleum contaminated soil. These soils are generated SYSTEM TYPE CODE QUANTITY HANDLED TEXAS WASTE EPA HAZARDOUS EPA HAZARDOUS EPA HAZARDOUS EPA HAZARDOUS WASTE NO. WASTE NO. WASTE NO. TOTAL QUANTITY GENERATED SPENT SOLVENT QUANTITY HANDLED RECEIVER'S EPA ID # I certify under penality of law that I have personally examined and am familiar with the information submitted in this and all attached documents and that based (1) Waste generated in state only - does on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. not include maquiladora & foreign waste Enter one letter: P = pounds, T = tons (2000 lb).K = kilograms, \*\* See instructions re: Exemptions from hazardous waste generation Fee PS FORD THRCC BYRK A IR.

RIAL A PARDO STE D TEXAS NATURAL RESOURCE CONSERVATION COMMISSION P.O. BOX 13087 AUSTIN, TEXAS 78711-3087 TELEPHONE: (512) 239-6832	FOR DATA YEAR: 1996	GI Report for: 19 96
Mr. E.H. Honig, P.E.	SUMMARY STATUS	0,0,0,8,2,0,2,6,6
Union Pacific Railroad	2 ORIGINAL SUMMARY	
1416 Dodge St., RM 930	☐ REVISED SUMMARY ☐ SUPPLEMENTAL SUMMARY	Page3_ of _5
Omaha, NE 68179		TAC 335.9 (a)(3); also see instructions
TEXAS WASTE (1)  EPA HAZARDOUS EPA HAZARDOUS EPA HAZARDOUS WASTE NO.  WASTE NO.  WASTE NO.	EPA HAZARDOUS WASTE NO.	TOTAL QUANTITY GENERATED UNITS
23 35 39	Aqueous waste with low surfactants. Groundwater general	47 56
QUANTITY HANDLED UNITS SYSTEM FEE FACILITY TYPE CODE ** NUMBER	RECEIVER'S EPA ID " COMMENTS	
57 66 M 70 71	76 88	117
57 M	76 88	117
57 M 171 171 171 171 171 171 171 171 171	76 88	117
57	76 88	117
TEXAS WASTE (1) EPA HAZARDOUS EPA HAZARDOUS EPA HAZARDOUS		
CODE (1) WASTE NO. WASTE NO. WASTE NO.	EPA HAZARDOUS WASTE NO	TOTAL QUANTITY GENERATED UNITS
TEXAS WASTE (1)  EPA HAZARDOUS EPA HAZARDOUS EPA HAZARDOUS WASTE NO.  WASTE NO.  WASTE NO.  31  35  39	WASTE NO.  Creosote sludge, soil mixture. This mixture is generate	TOTAL QUANTITY GENERATED UNITS
<del>-09,1248911.</del>	Creosote sludge, soil mixture. This mixture is generate	TOTAL QUANTITY GENERATED UNITS
99,12489H 31 35 39	Creosote sludge, soil mixture. This mixture is generate	TOTAL QUANTITY GENERATED UNITS
9912489H 31 35 39  QUANTITY HANDLED UNITS SYSTEM FEE PACLITY NUMBER  M 77PE CODE *** NUMBER  57 66 67 70 71	Creosote sludge, soil mixture. This mixture is generate	56
23 31 35 39 39 39 39 39 39 39 39 39 39 39 39 39	Creosote sludge, soil mixture. This mixture is generate  RECEIVER'S EPA ID # COMMENTS  88	\$ 56  117  117
99,12489H  23  31  35  39  UNITS SYSTEM TYPE CODE ** NUMBER  NUMBER  57  66  67  70  71  57  68  67  70  71	Creosote sludge, soil mixture. This mixture is generate  RECEIVER'S EPA ID # COMMENTS  88	56
23 31 35 39 39 39 39 39 39 39 39 39 39 39 39 39	Creosote sludge, soil mixture. This mixture is generate  RECEIVER'S EPA ID # COMMENTS  88	\$ 56  117  117
QUANTITY HANDLED  UNITS SYSTEM FEE PACILITY NUMBER  TYPE CODE  TYP	Creosote sludge, soli mixture. This mixture is generate  RECEIVER'S EPA ID # COMMENTS  76 88  76 88  Familiar with the information submitted in this and all attached documents and that based	117 117
QUANTITY HANDLED  UNITS SYSTEM FEE PACILITY NUMBER  TYPE CODE  TYP	Creosote aludge, sold mixture. This mixture is generate  RECEIVER'S EPA ID # COMMENTS  76 88  88  88  6 88	117  117  117  117  118  119  119  119

P.O. BOX 13087 AUSTIN, TEXAS 78711-3087 FOR DATA YEAR: 1996 TELEPHONE: (512) 239-6832 SUMMARY STATUS Mr. E.H. Honig, P.E. EPA D. T.X.D. 0. 0. 0. 82 0 2 6 6 M ORIGINAL SUMMARY Union Pacific Railroad ☐ REVISED SUMMARY Page \_4\_\_ of 5\_\_\_ 1416 Dodge St., RM 930 SUPPLEMENTAL SUMMARY Omaha, NE 68179 NO REPORT REQUIRED See 30 TAC 335.9 (a)(3); also see instructions TEXAS WASTE EPA HAZARDOUS EPA HAZARDOUS EPA HAZARDOUS EPA HAZARDOUS WASTE NO. WASTE NO. WASTE NO. WASTE NO. TOTAL QUANTITY GENERATED 09,14101H 6 6 8 0 Aqueous waste with low solvents. Groundwater generated QUANTITY HANDLED TEXAS WASTE EPA HAZARDOUS EPA HAZARDOUS EPA HAZARDOUS WASTE NO. WASTE NO. WASTE NO. WASTE NO. TOTAL QUANTITY GENERATED Soil contaminated with organics. The soil is derived fr QUANTITY HANDLED I certify under penality of law that I have personally examined and am familiar with the information submitted in this and all attached documents and that based (1) Waste generated in state only - doe on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. not include maquiladora & foreign wast P = pounds, T = tons (2000 lb) Enter one letter: K = kilograms, \*\* See instructions re: Exemptions from 1-23-97 hazardous wast generation Fee LPS Form TNRCC 0436 A (Rev 02 01 95)

ANNUAL WASTE SUMMARY

ANNUAL WASTE SUMMARY (1) REGISTRATION NUMBER: FOR DATA YEAR: 1996 AUSTIN, TEXAS 78711-3087 TELEPHONE: (512) 239-6832 SUMMARY STATUS Mr. E.H. Honig, P.E. TX D 0 0 08 2 0 2 6 6 (C) ORIGINAL SUMMARY Union Pacific Railroad ☐ REVISED SUMMARY Page 5 of5 1416 Dodge St., RM 930 ☐ SUPPLEMENTAL SUMMARY Omaha, NE 68179 NO REPORT REQUIRED See 30 TAC 335.9 (a)(3); also see instruction TEXAS WASTE EPA HAZARDOUS EPA HAZARDOUS EPA HAZARDOUS EPA HAZARDOUS WASTE NO. WASTE NO. WASTE NO. WASTE NO. TOTAL QUANTITY GENERATED 4763101 3 9 USED FILTERS QUANTITY HANDLED RECEIVER'S EPA ID # EPA HAZARDOUS EPA HAZARDOUS EPA HAZARDOUS EPA HAZARDOUS WASTE NO. WASTE NO. WASTE NO. TEXAS WASTE TOTAL QUANTITY GENERATED QUANTITY HANDLED I certify under penality of law that I have personally examined and am familiar with the information submitted in this and all attached documents and that based (1) Waste generated in state only - d on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. not include maquiladora & foreign wa P = pounds, T = tons (2000 Enter one letter: K = kilograms, \*\* See instructions re: Exemptions fr hazardous wa generation Fee IPS Form TNRCC 0438 A (Rev 02 01 95)

# POTENTIAL CONTAMINANTS OF CONCERN AND CONCENTRATION LIMITS FOR GROUND WATER PROTECTION STANDARD

Acenaphthene         ND (0.010)           Acenaphthylene         ND (0.010)           Anthracene         ND (0.010)           Benzene         ND (0.005)           Benzo(A)anthracene         ND (0.010)           Benzo(A)pyrene         ND (0.010)           Benzo(A)pyrene         ND (0.010)           Bis(2-cthylhexyl)phthalate         ND (0.010)           Bis(2-cthylhexyl)phthalate         ND (0.010)           Bis(2-cthoroethoxy)methane         ND (0.010)           Chlorobenzene         ND (0.005)           2-Chloronaphthalene         ND (0.005)           2-Chloronaphthalene         ND (0.010)           Dibenzofuran         ND (0.010)           1.2-Dichloroethane         ND (0.010)           1.2-Dichloroethane         ND (0.005)           Dichloromethane (Methylene chloride)         ND (0.005)           2.4-Dimethylphenol         ND (0.010)           4.6-Dimitro-o-cresol         ND (0.010)           2.4-Dimitrotoluene         ND (0.010)           2.4-Dimitrotoluene         ND (0.010)           2.4-Dimitrotoluene         ND (0.010)           2.4-Dimitrotoluene         ND (0.010)           1.2-Diphenylhydrazine         ND (0.010)           Ethylbenzene	Hazardous Constituents	Detection Limits (mg/l)
Anthracene	Acenaphthene	ND (0.010)
Benzene	Acenaphthylene	ND (0.010)
Benzo(A)anthracene         ND (0.010)           Benzo(A)pyrene         ND (0.010)           Bis(2-ethylhexyl)phthalate         ND (0.010)           Bis(2-chloroethoxy)methane         ND (0.010)           Chlorobenzene         ND (0.005)           2-Chloronaphthalene         ND (0.010)           Chrysene         ND (0.010)           Dibenzofuran         ND (0.010)           1,2-Dichloroethane         ND (0.005)           Dichloromethane (Methylene chloride)         ND (0.005)           2,4-Dimethylphenol         ND (0.010)           Di-n-butyl phthalate         ND (0.010)           4,6-Dinitro-o-cresol         ND (0.010)           2,4-Dinitrotoluene         ND (0.010)           2,4-Dinitrotoluene         ND (0.010)           2,6-Dinitrotoluene         ND (0.010)           1,2-Diphenylhydrazine         ND (0.010)           Ethylbenzene         ND (0.010)           Fluorene         ND (0.010)           2-Methylnaphthalene         ND (0.010)           Naphthalene         ND (0.010)           Nitrobenzene         ND (0.010)           N-Nitrosodiphenylamine         ND (0.010)	Anthracene	ND (0.010)
Benzo(A)pyrene	Benzene	ND (0.005)
Bis(2-ethylhexyl)phthalate         ND (0.010)           Bis(2-chloroethoxy)methane         ND (0.005)           Chlorobenzene         ND (0.005)           2-Chloronaphthalene         ND (0.010)           Chrysene         ND (0.010)           Dibenzofuran         ND (0.010)           1,2-Dichloroethane         ND (0.005)           Dichloromethane (Methylene chloride)         ND (0.005)           2,4-Dimethylphenol         ND (0.010)           Di-n-butyl phthalate         ND (0.010)           4,6-Dinitro-o-cresol         ND (0.050)           2,4-Dinitrotoluene         ND (0.010)           2,6-Dinitrotoluene         ND (0.010)           1,2-Diphenylhydrazine         ND (0.010)           Ethylbenzene         ND (0.010)           Fluoranthene         ND (0.010)           Fluorene         ND (0.010)           2-Methylnaphthalene         ND (0.010)           Naphthalene         ND (0.010)           Nitrobenzene         ND (0.010)           4-Nitrophenol         ND (0.050)           N-Nitrosodiphenylamine         ND (0.010)	Benzo(A)anthracene	ND (0.010)
Bis(2-chloroethoxy)methane	Benzo(A)pyrene	ND (0.010)
Chlorobenzene         ND (0.005)           2-Chloronaphthalene         ND (0.010)           Chrysene         ND (0.010)           Dibenzofuran         ND (0.005)           1,2-Dichloroethane         ND (0.005)           Dichloromethane (Methylene chloride)         ND (0.005)           2,4-Dimethylphenol         ND (0.010)           Di-n-butyl phthalate         ND (0.010)           4,6-Dinitro-o-cresol         ND (0.050)           2,4-Dinitrotoluene         ND (0.010)           2,6-Dinitrotoluene         ND (0.010)           1,2-Diphenylhydrazine         ND (0.010)           Ethylbenzene         ND (0.010)           Fluoranthene         ND (0.010)           Fluorene         ND (0.010)           2-Methylnaphthalene         ND (0.010)           Naphthalene         ND (0.010)           Nitrobenzene         ND (0.010)           4-Nitrophenol         ND (0.050)           N-Nitrosodiphenylamine         ND (0.010)	Bis(2-ethylhexyl)phthalate	ND (0.010)
2-Chloronaphthalene         ND (0.010)           Chrysene         ND (0.010)           Dibenzofuran         ND (0.005)           1,2-Dichloroethane         ND (0.005)           Dichloromethane (Methylene chloride)         ND (0.005)           2,4-Dimethylphenol         ND (0.010)           Di-n-butyl phthalate         ND (0.010)           4,6-Dinitro-o-cresol         ND (0.050)           2,4-Dinitrotoluene         ND (0.010)           2,6-Dinitrotoluene         ND (0.010)           1,2-Diphenylhydrazine         ND (0.010)           Ethylbenzene         ND (0.005)           Fluoranthene         ND (0.010)           Fluorene         ND (0.010)           2-Methylnaphthalene         ND (0.010)           Naphthalene         ND (0.010)           Nitrobenzene         ND (0.010)           4-Nitrophenol         ND (0.050)           N-Nitrosodiphenylamine         ND (0.010)	Bis(2-chloroethoxy)methane	ND (0.010)
Chrysene         ND (0.010)           Dibenzofuran         ND (0.010)           1.2-Dichloroethane         ND (0.005)           Dichloromethane (Methylene chloride)         ND (0.005)           2,4-Dimethylphenol         ND (0.010)           Di-n-butyl phthalate         ND (0.010)           4,6-Dinitro-o-cresol         ND (0.050)           2,4-Dinitrotoluene         ND (0.010)           2,6-Dinitrotoluene         ND (0.010)           1.2-Diphenylhydrazine         ND (0.010)           Ethylbenzene         ND (0.005)           Fluoranthene         ND (0.010)           Fluorene         ND (0.010)           2-Methylnaphthalene         ND (0.010)           Naphthalene         ND (0.010)           Nitrobenzene         ND (0.010)           4-Nitrophenol         ND (0.050)           N-Nitrosodiphenylamine         ND (0.010)	Chlorobenzene	ND (0.005)
Dibenzofuran         ND (0.010)           1.2-Dichloroethane         ND (0.005)           Dichloromethane (Methylene chloride)         ND (0.005)           2.4-Dimethylphenol         ND (0.010)           Di-n-butyl phthalate         ND (0.010)           4.6-Dinitro-o-cresol         ND (0.050)           2.4-Dinitrotoluene         ND (0.010)           2.6-Dinitrotoluene         ND (0.010)           1.2-Diphenylhydrazine         ND (0.010)           Ethylbenzene         ND (0.005)           Fluoranthene         ND (0.010)           Fluorene         ND (0.010)           2-Methylnaphthalene         ND (0.010)           Naphthalene         ND (0.010)           Nitrobenzene         ND (0.010)           4-Nitrophenol         ND (0.050)           N-Nitrosodiphenylamine         ND (0.010)	2-Chloronaphthalene	ND (0.010)
1,2-Dichloroethane   ND (0.005)	Chrysene	ND (0.010)
Dichloromethane (Methylene chloride)         ND (0.005)           2,4-Dimethylphenol         ND (0.010)           Di-n-butyl phthalate         ND (0.010)           4,6-Dinitro-o-cresol         ND (0.050)           2,4-Dinitrotoluene         ND (0.010)           2,6-Dinitrotoluene         ND (0.010)           1,2-Diphenylhydrazine         ND (0.010)           Ethylbenzene         ND (0.005)           Fluoranthene         ND (0.010)           Fluorene         ND (0.010)           2-Methylnaphthalene         ND (0.010)           Naphthalene         ND (0.010)           Nitrobenzene         ND (0.010)           4-Nitrophenol         ND (0.050)           N-Nitrosodiphenylamine         ND (0.010)	Dibenzofuran	ND (0.010)
2,4-Dimethylphenol         ND (0.010)           Di-n-butyl phthalate         ND (0.010)           4,6-Dinitro-o-cresol         ND (0.050)           2,4-Dinitrotoluene         ND (0.010)           2,6-Dinitrotoluene         ND (0.010)           1,2-Diphenylhydrazine         ND (0.010)           Ethylbenzene         ND (0.005)           Fluoranthene         ND (0.010)           Fluorene         ND (0.010)           2-Methylnaphthalene         ND (0.010)           Naphthalene         ND (0.010)           Nitrobenzene         ND (0.010)           4-Nitrophenol         ND (0.050)           N-Nitrosodiphenylamine         ND (0.010)	1,2-Dichloroethane	ND (0.005)
Di-n-butyl phthalate         ND (0.010)           4,6-Dinitro-o-cresol         ND (0.050)           2,4-Dinitrotoluene         ND (0.010)           2,6-Dinitrotoluene         ND (0.010)           1,2-Diphenylhydrazine         ND (0.010)           Ethylbenzene         ND (0.005)           Fluoranthene         ND (0.010)           Fluorene         ND (0.010)           2-Methylnaphthalene         ND (0.010)           Naphthalene         ND (0.010)           Nitrobenzene         ND (0.010)           4-Nitrophenol         ND (0.050)           N-Nitrosodiphenylamine         ND (0.010)	Dichloromethane (Methylene chloride)	ND (0.005)
4,6-Dinitro-o-cresol         ND (0.050)           2,4-Dinitrotoluene         ND (0.010)           2,6-Dinitrotoluene         ND (0.010)           1,2-Diphenylhydrazine         ND (0.010)           Ethylbenzene         ND (0.005)           Fluoranthene         ND (0.010)           Fluorene         ND (0.010)           2-Methylnaphthalene         ND (0.010)           Naphthalene         ND (0.010)           Nitrobenzene         ND (0.010)           4-Nitrophenol         ND (0.050)           N-Nitrosodiphenylamine         ND (0.010)	2,4-Dimethylphenol	ND (0.010)
2,4-Dinitrotoluene         ND (0.010)           2,6-Dinitrotoluene         ND (0.010)           1,2-Diphenylhydrazine         ND (0.010)           Ethylbenzene         ND (0.005)           Fluoranthene         ND (0.010)           Fluorene         ND (0.010)           2-Methylnaphthalene         ND (0.010)           Naphthalene         ND (0.010)           Nitrobenzene         ND (0.010)           4-Nitrophenol         ND (0.050)           N-Nitrosodiphenylamine         ND (0.010)	Di-n-butyl phthalate	ND (0.010)
2,6-Dinitrotoluene         ND (0.010)           1,2-Diphenylhydrazine         ND (0.010)           Ethylbenzene         ND (0.005)           Fluoranthene         ND (0.010)           Fluorene         ND (0.010)           2-Methylnaphthalene         ND (0.010)           Naphthalene         ND (0.010)           Nitrobenzene         ND (0.010)           4-Nitrophenol         ND (0.050)           N-Nitrosodiphenylamine         ND (0.010)	4,6-Dinitro-o-cresol	ND (0.050)
1,2-Diphenylhydrazine         ND (0.010)           Ethylbenzene         ND (0.005)           Fluoranthene         ND (0.010)           Fluorene         ND (0.010)           2-Methylnaphthalene         ND (0.010)           Naphthalene         ND (0.010)           Nitrobenzene         ND (0.010)           4-Nitrophenol         ND (0.050)           N-Nitrosodiphenylamine         ND (0.010)	2,4-Dinitrotoluene	ND (0.010)
Ethylbenzene         ND (0.005)           Fluoranthene         ND (0.010)           Fluorene         ND (0.010)           2-Methylnaphthalene         ND (0.010)           Naphthalene         ND (0.010)           Nitrobenzene         ND (0.010)           4-Nitrophenol         ND (0.050)           N-Nitrosodiphenylamine         ND (0.010)	2,6-Dinitrotoluene	ND (0.010)
Fluoranthene         ND (0.010)           Fluorene         ND (0.010)           2-Methylnaphthalene         ND (0.010)           Naphthalene         ND (0.010)           Nitrobenzene         ND (0.010)           4-Nitrophenol         ND (0.050)           N-Nitrosodiphenylamine         ND (0.010)	1,2-Diphenylhydrazine	ND (0.010)
Fluorene         ND (0.010)           2-Methylnaphthalene         ND (0.010)           Naphthalene         ND (0.010)           Nitrobenzene         ND (0.010)           4-Nitrophenol         ND (0.050)           N-Nitrosodiphenylamine         ND (0.010)	Ethylbenzene	ND (0.005)
2-Methylnaphthalene         ND (0.010)           Naphthalene         ND (0.010)           Nitrobenzene         ND (0.010)           4-Nitrophenol         ND (0.050)           N-Nitrosodiphenylamine         ND (0.010)	Fluoranthene	ND (0.010)
Naphthalene         ND (0.010)           Nitrobenzene         ND (0.010)           4-Nitrophenol         ND (0.050)           N-Nitrosodiphenylamine         ND (0.010)	Fluorene	ND (0.010)
Nitrobenzene ND (0.010)  4-Nitrophenol ND (0.050)  N-Nitrosodiphenylamine ND (0.010)	2-Methylnaphthalene	ND (0.010)
4-Nitrophenol ND (0.050)  N-Nitrosodiphenylamine ND (0.010)	Naphthalene	ND (0.010)
N-Nitrosodiphenylamine ND (0.010)	Nitrobenzene	ND (0.010)
	4-Nitrophenol	ND (0.050)
	N-Nitrosodiphenylamine	ND (0.010)
Pentachiorophenol ND (0.050)	Pentachlorophenol	ND (0.050)
Phenanthrene ND (0.010)	Phenanthrene	ND (0.010)
Phenol ND (0.010)	Phenol	ND (0.010)
Pyrene ND (0.010)	Pyrene	ND (0.010)
Toluene ND (0.005)	Toluene	ND (0.005)
Xylenes ND (0.005)	Xylenes	ND (0.005)