

**PHASE I  
REMEDIAL INVESTIGATION**

**Sunnyside Yard  
Queens, New York**

**Volume II of III**

**January 22, 1992**

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Washington D.C.**

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## APPENDIX A

### METHODS OF INVESTIGATION

#### **1.0 OBJECTIVES**

This section describes the types of samples collected and the procedures followed during the site characterization and remedial investigation activities (RI) performed at the Yard. Data generated by this investigation was used to support the screening and evaluation of remedial alternatives for the site.

#### **2.0 SAMPLING LOCATIONS**

The locations of monitoring wells and soil borings are shown in Figures 2 and 3. All monitoring well and soil boring locations and elevations were determined by Alfred W. Tay, Plainview, New York, a licensed New York State professional land surveyor. The elevations refer to the United States Coast and Geodetic datum (feet relative to mean sea level).

#### **3.0 SAMPLE CATALOGING**

Soil samples collected from borings were identified by the prefix S (Soil Boring). The boring location number follows the prefix. When more than one soil sample was collected from a single boring, the recorded sampling depth interval differentiated each sample. An example is "S-4 (3-4')", which identifies a sample collected from soil boring number four at a depth interval of 3 to 4 feet below land surface.

Boreholes drilled for the installation of monitoring wells were identified by an MW prefix (Monitoring Well). All soil samples collected during the installation of monitoring wells were identified by the well number and sampling depth interval. For example, a soil sample collected from 8 to 10 feet below land surface at monitoring well number five would be identified as "MW-5 (8-10)".

Aqueous samples were also identified by the prefix MW and the well number from which they were collected.

These numbering systems were used by the contracted laboratory, Envirosystems, Inc., Columbia, Maryland (the Laboratory) to identify samples collected for laboratory analysis during the sampling program. All chain-of-custody documentation also adhered to these numbering systems.

Samples collected were labeled with the following information:

- borehole or well number
- time and date of sample collection
- type of sample analysis
- affiliation of person(s) collecting the sample

All sampling information was recorded into a project field book.

#### **4.0 PROTOCOL FOR SOIL SAMPLING**

Soil samples were collected with a hollow stem auger drilling rig, a tripod mounted cathead (winch), or with hand tools (i.e., shovel, posthole digger, hand trowel).

##### **4.1 Equipment Preparation**

Prior to mobilization, the drill rig and all tools and accessories were thoroughly cleaned to remove all remains of previous operations (i.e., dirt, mud, dust and liquids). Cleaning of the machinery included wheels or tracks, under carriage, chassis and cab. Cleaning methods included:

- (a) brushing, sweeping and/or vacuuming loose dirt;
- (b) detergent wash and tap water rinse;
- (c) steam cleaning; and
- (d) air drying.

In addition to the general cleaning outlined above, specific items also required cleaning i.e., split-barrel samplers, auger flights, and all other down-hole tools.

##### **4.2 Equipment Cleaning Procedures**

Drilling or digging was, in general, performed beginning in areas of least contamination and proceeding toward areas of greatest known contamination.

If contamination was detected during drilling/digging operations (based on photoionization detector [PID] readings or visual observations), the drill rig was taken to an area where it was cleaned according to the procedures outlined below prior to moving to the next sampling location.

The cleaning procedure was as follows:

- (a) remove all loose material and soil;
- (b) rinse with tap water;
- (c) steam clean; and
- (d) air dry.

#### **4.3 Sampling Tool Cleaning Procedures**

Prior to soil sampling, all tools used for sample collection were cleaned in the following manner:

- (a) residue oils, grit, rust and soil were removed with a stiff wire brush;
- (b) thorough washing with detergent and tap water, utilizing a scrub brush;
- (c) rinse with tap water;
- (d) rinse with distilled or deionized water;
- (e) rinse with pesticide-grade methanol, or in Area 1, with pesticide-grade hexane;
- (f) rinse with distilled or deionized water; and
- (g) air dry.

#### **4.4 Soil Sampling Procedures**

The following soil sampling procedures were adopted due to unanticipated site conditions and Yard regulations. These procedures were developed with and approved by the NYSDEC Project Engineer, Mr. James Quinn.

- (1) At least the first 3 feet of all soil borings/well boreholes were dug using hand tools. This was required by AMTRAK in an effort to prevent damage to underground utilities. Soil samples for the 0-2 and 2-3 or 2-4 foot intervals were collected by placing the excavated soil on plastic sheeting, using separate sheets for each sample interval. The soil samples were scanned for volatile organic compounds using a PID, homogenized with a hand trowel, and a representative sample collected and placed in a proper container.

- (2) Samples below 3 feet were collected by advancing a standard, 2 or 3-inch split-barrel sampler (split spoon). Loose material was brushed off the external surface of the sampler prior to opening.
- (3) The sampler was placed on clean plastic sheeting and opened. Total recovery was measured and recorded. A representative composite of recovered material was immediately placed in the proper container, sealed and labelled.
- (4) Any non-representative material, such as twigs, large pebbles, etc., was not placed in the sample container.
- (5) Equipment used for filling sample containers was cleaned prior to each subsequent use.
- (6) Any soil samples selected for laboratory analyses were placed on ice and protected from light immediately after collection and until delivery to the laboratory.
- (7) Split-spoon samples were examined for lithology, evidence of contamination (presence of oil, odor) and degree of saturation. In addition, the contents of each split-spoon were tested for the presence of VOCs using a PID. All PID readings were recorded on the geologic logs. Finally, all split spoon samples were retained on site in masonry jars for potential future use.

#### **4.5 Sample Containers**

It was the responsibility of the contracted laboratory to provide clean sampling containers for the requested analyses. The sampling containers were filled according to laboratory specifications.

#### **4.6 Sample Handling**

All samples intended for laboratory analyses were placed on ice and protected from light immediately after collection and during transportation to the laboratory. The following preservation techniques and holding times were observed for soil samples.

PARAMETER	PRESERVATIVE	HOLDING TIME
Petroleum Hydrocarbons (PHCs)	Cool to 4°C	28 days
Polychlorinated Biphenyls (PCBs)	Cool to 4°C	5 days before extraction 40 days after extraction
Volatile Organic Compounds (VOCs)	Cool to 4°C	7 days before extraction 10 days after extraction
Base/Neutral Organic Compounds (BNs)	Cool to 4°C	5 days before extraction, 40 days after extraction

Pesticides	Cool to 4°C	5 days before extraction, 40 days after extraction
Total Metals	Cool to 4°C	6 months

#### **4.7 Field Quality Control**

Soil samples collected for VOC analysis were accompanied by a trip blank. The trip blank was prepared by the laboratory and consisted of a 40 ml vial filled with deionized water for VOC analysis. The results of these analyses were used to check for "artificial" contamination during field handling, shipment, or laboratory handling.

#### **4.8 Record Keeping**

All field data was recorded in the field sampler's bound notebook. This data included: weather conditions, location of boring, depth of sample and the sequence in which the borings were taken. A chain of custody was implemented during sample collection.

#### **4.9 Analytical Laboratory**

All soil samples were submitted with chain of custody to the Laboratory. Samples were analyzed according to NYSDEC Contract Laboratory Protocol (CLP) procedures, however, CLP QA/QC follow-up documentation was not requested. Once the analytical data was returned from the laboratory, it was submitted for validation to Data Validation Services, Riparius, New York.

### **5.0 PROTOCOL FOR MONITORING WELL INSTALLATION**

This protocol outlines procedures and equipment used in the drilling and installation of monitoring wells at Sunnyside Yard, Queens, New York. The monitoring wells were installed by Land, Air, Water Environmental Services, Center Moriches, New York, a New York State licensed driller using a hollow stem auger drilling rig.

Several proposed drilling locations were moved slightly due to obstructions, buried utilities and above ground railroad track locations.

### **5.1 Drilling Equipment Preparation**

Prior to use, the drill rig, and all tools and accessories were thoroughly cleaned to remove all remnants of previous drilling operations (e.g., dirt, mud, dust and liquids). Cleaning of the drill rig included the wheels or tracks, undercarriage, chassis and cab. The cleaning procedure was as follows:

- (a) remove all loose material and soil;
- (b) rinse with tap water;
- (c) steam clean; and
- (d) air dry.

All downhole tools and sampling equipment, as well as tools which came into immediate contact with this equipment, were cleaned in the same manner as the drilling equipment. Split-barrel samplers, drill stems and all other downhole tools were free of grease, oil and other forms of contamination during the drilling and installation of the wells.

### **5.2 Drilling Equipment Cleaning Procedures**

Following cursory cleaning of drill stems and downhole tools at the well (Section 4.2), the rear of the rig was cleaned of all loose material and soil. All contaminated clothing, gloves, boot covers and rags were containerized in on-site receptacles and disposed of properly.

Prior to drilling startup, an on-site area was designated for equipment cleanup. After preliminary cleaning between well sites was completed, drilling equipment such as drill stems, auger flights and other tools and equipment which came in contact with either soil or ground water was taken to the designated cleaning area. The cleanup procedure was as follows:

- (a) Thorough wash with detergent and tap water utilizing a scrub brush;
- (b) Rinse with tap water;
- (c) Steam clean; and
- (d) Air dry.

This cleanup was performed after each monitoring well had been installed and prior to movement of any equipment to the next well location.

Upon completion of the drilling program, contaminated soil from the drilling process was disposed of in accordance with applicable state and federal regulations.

### **5.3 Monitoring Well Installation**

All monitoring wells were constructed in accordance with NYSDEC specifications. The 18 water-table monitoring wells were installed to an approximate depth of 15 feet below land surface with well screens set approximately two feet above the existing water table. The deeper formation monitoring well (MW-23) was installed to 36 feet below land surface.

All monitoring wells were constructed of 4-inch diameter 10 feet long, 20 slot flush threaded well screens and 4-inch diameter PVC casing. Stainless steel well screens were installed in the seven wells that penetrated separate phase petroleum and PVC well screens were installed in twelve wells. The wells were gravel packed with the gravel extending approximately one-half foot to two feet above the well screen depending on field conditions. The annular space above the gravel pack was filled with a layer of granular bentonite followed by a bentonite-based grout. An outer locking, steel protective casing was placed over the well casing and the remaining unfilled portion of the annulus filled with concrete.

Split-barrel soil samples were collected during drilling at continuous two-foot intervals above the water table and one sample was obtained five feet below the water table, where possible. While drilling the borehole for monitoring well MW-23, split-spoon samples were collected at continuous two-foot intervals above the water-table and every five feet thereafter. Split-spoon samples were examined for lithology, evidence of contamination (presence of oil, odor) and degree of saturation. In addition, each split-spoon was tested for the presence of VOCs using PID equipment. All PID readings were recorded on the geologic logs. Finally, all split-spoon samples were retained onsite in masonry jars for potential future use.

All wells were developed after installation. The wells were developed until the discharged water was clean (i.e., turbidity was less than or equal to 50 NTUs) or for a minimum of one hour of continuous development. Wells were developed by mechanical surging and pumping. Since the source of contamination is defined, well development water generated

outside of Area 1 was allowed to infiltrate into the ground, and contained in recharge pits to preclude run-off from the site. Development water from monitoring wells in Area 1 that contained separate phase petroleum was containerized and properly disposed of.

#### **5.4 Record Keeping**

All field data was recorded by the on-site Geologist/Hydrogeologist in a bound notebook. This data included weather conditions, well location, depth of well, sequence in which the wells were completed and well completion data. A drill log was completed for each well by the on-site Geologist/Hydrogeologist. The compiled logs were based on drill cuttings, rig reaction and soil samples.

Data compiled in the logs also included: soil color and type, approximate grain size, physical characteristics (e.g., moisture, visible contamination), horizon depth and thickness, depth to ground water and PID readings.

### **6.0 PROTOCOL FOR GROUND-WATER SAMPLE COLLECTION**

This protocol outlines procedures and equipment for the collection of representative ground-water samples from monitoring wells at the Sunnyside Yard, Queens, New York. After collection these samples were submitted to the Laboratory for analyses including volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs), base/ neutrals (BNs), total petroleum hydrocarbon concentrations (PHCs), and the complete target compound list (TCL).

#### **6.1 Equipment Cleaning Procedures**

The following cleaning procedures applied for equipment used for the collection of ground-water samples.

##### **6.1.1 Purging Equipment**

Submersible pumps, discharge hoses, and cables were cleaned prior to initial use and after pumping each well in the following manner:

- (a) external surfaces were brushed free of all loose material, washed with detergent solution and rinsed with clean tap water;

- (b) internal surfaces were cleaned by placing the pump in a clean drum containing detergent solution followed by clean tap water and allowing the pump to operate; and
- (c) pump, discharge hose and cable were wrapped in plastic sheeting for transportation and storage.

#### **6.1.2 Bailers**

Bailers were cleaned prior to initial use and after each subsequent use in the following manner:

- (a) detergent wash;
- (b) tap water rinse;
- (c) distilled water rinse ;
- (d) pesticide-grade methanol rinse, or in Area 1, pesticide-grade hexane rinse;
- (e) distilled water rinse;
- (f) air dry; and
- (g) wrap in aluminum foil for transportation and storage.

#### **6.2 Sample Collection and Handling**

Sampling was performed by a two-person team with experience in environmental sampling. The senior member of the team (sample coordinator) was responsible for complete documentation of sampling which was kept in a bound field notebook appropriately dated and signed. The sampling team was responsible for the preservation and chain of custody records for all samples until they were transported to the laboratory for analysis.

Monitoring wells were unlocked immediately prior to initiating sampling procedures. All wells were re-secured when sampling was completed.

The diameter, water level and total depth of each well was measured to calculate the volume of the water column. Measurements were made to the nearest 0.01 foot with either a steel tape or, in Area 1, an ORS Interface Probe. The tape or Interface Probe was cleaned prior to initial use by the following procedure:

- (a) wipe with a pesticide-grade methanol, or in Area 1, a pesticide-grade hexane soaked paper towel;

- (b) air dry; and
- (c) wrap in foil for transportation and storage.

After each use, the tape or Interface Probe was wiped dry and cleaned in accordance with a, b and c above.

Prior to sampling, the volume of water in each well was calculated. All wells were purged before any sampling took place. The amount of water removed was determined by the condition of the well and the ability of the aquifer to transmit water. In no case was a well sampled unless all water standing in the well casing had been replaced by fresh ground water from the aquifer. Purging continued until 3 volumes of water had been removed from each well or until the well was bailed dry. All wells were purged and allowed to recover prior to the collection of ground-water samples as approved by the NYSDEC Project Engineer, Mr. James Quinn.

Ground-water samples were collected using bottom loading Teflon™ bailers. Bailers were cleaned in accordance with bailer cleaning procedures. Clean polypropylene cord was used to lower bailers into the wells. New cord and new disposable gloves were used for each well. Disposable gloves were worn when handling bailers and cord. Care was taken to prevent bailers or cord from coming into contact with any contaminants.

One bailer volume from each well was discarded prior to collecting a sample. Bailers were lowered gently into the wells to minimize agitation of the ground water.

Ground-water samples were poured from the bailers directly into bottles previously prepared. Pouring was accomplished in a manner that minimized agitation of samples.

All samples were placed on ice and protected from light immediately after collection and during transportation to the Laboratory.

The following holding times, containers and preservatives were used:

<u>PARAMETER</u>	<u>CONTAINER<sup>(1)</sup></u>	<u>PRESERVATIVE<sup>(2)</sup></u>	<u>MAXIMUM HOLDING TIME</u>
Petroleum Hydrocarbon Compounds	Glass with foil or teflon lined lid	Cool to 4°C	28 days
Polychlorinated Biphenyls (PCBs)	Glass with teflon lined lid	Cool to 4°C	5 days until extraction, 40 days after extraction
Volatile Organic Compounds	40 ml septum vial with/teflon container, must not contain air bubbles	Cool to 4°C	7 days
Base/Neutrals	Glass with teflon lined lid	Cool to 4°C	5 days until extraction, 40 days after extraction
Pesticides	Glass with teflon lined lid	Cool to 4°C	5 days until extraction, 40 days after extraction
Total Metals	Plastic	HNO <sub>3</sub> to pH <3, Cool to 4°C	6 months

(1) All samples collected with a 1 inch air space in container, with the exception of Volatile Organics.

(2) All samples were stored at 4°C from time of collection until arrival at the Laboratory.

### **6.3 Quality Assurance/Quality Control**

Field sample collection procedures were monitored through the use of field replicates, trip blanks and field blanks.

#### **6.3.1 Field Replicates**

A total of 4 blind field replicates were collected and analyzed as a check on the reproducibility of results within the Laboratory.

#### **6.3.2 Trip Blank**

Trip blanks were prepared by the Laboratory and travel unopened with the sample containers. Trip blanks are opened at the Laboratory and tested along with field samples

for the constituents of interest to detect if contamination has occurred during field handling, shipment, or in the Laboratory. A minimum of one trip blank accompanied each shipment of ground-water samples delivered to the Laboratory.

#### **6.3.3 Field Blank**

Prior to any ground-water sampling, a field blank was collected. After cleaning the bailer, the blank was collected from a final rise of laboratory supplied deionized/distilled water. Analysis of this field blank for the constituents of interest verified the efficiency of the sampling procedure and decontamination process. Field blanks were collected in the same manner from soil sampling equipment also.

#### **6.4 Record Keeping**

The following records were maintained by the field sampler during the sampling program.

##### **6.4.1 Field Data**

All field data was recorded in the field sampler's bound notebook. This data included: weather conditions, volume of water removed from the well, static water depth prior to sampling, and the sequence in which the samples were collected.

##### **6.4.2 Chain of Custody**

A chain of custody form was completed following the sample collection.

#### **7.0 SLUG TESTS**

Each of the seven slug tests were implemented using the following steps:

1. The monitoring well designation was identified;
2. The protective locking steel cap was removed, and the PVC well cap was removed, wiped clean, and placed on a clean, plastic sheet;
3. the depth to water in the monitoring well was measured with a steel tape and chalk;
4. The monitoring well was sounded (i.e., the total depth of the well was measured) with a steel tape and compared to the as-built well diagram;
5. The depth to water was subtracted from the sounded depth to calculate the length of the water column in the monitoring well;

6. A Hermit 2000 data logger was programmed to record water-level measurements;
7. A 10 psi transducer was attached to the data logger, lowered into the monitoring well, set near the bottom and secured. The water level was recorded in data logger;
8. A 3-inch diameter, 3-foot long PVC, bottom-filling bailer (slug) was lowered into the monitoring well and held below the top of the water level until the water level stabilized (i.e., reached the pretest level);
9. The slug was instantaneously (i.e., as quickly as possible) removed from the monitoring well to start the slug test;
10. The water levels in the monitoring well were monitored and recorded by the data logger until water levels stabilized again (i.e., returned to static conditions) and the slug test ended;
11. Steps 8 through 10 were repeated (second test on each well);
12. The PVC well cap was replaced and the monitoring well secured with the locking cap; and
13. All equipment that entered the well (i.e., the steel tape, transducer, and bailer) were cleaned with a non-phosphate, laboratory-grade detergent (MICRO™) and distilled water solution, rinsed with distilled water, and wiped with clean paper towels.

All well identifier, sounding, and depth to water data were recorded in the field notebook.

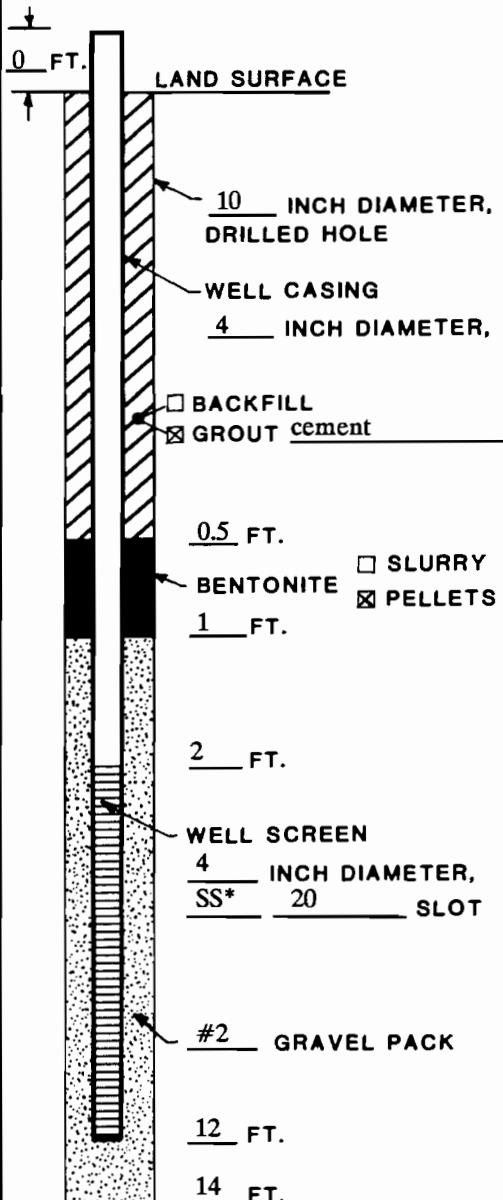
## **8.0 PROTOCOL FOR VOLATILE ORGANIC SCREENING OF SITE USING VAPOR PROBES**

1. A pre-cleaned 1/4-inch slide hammer with hardened tip was driven into the top of the desired sample zone.
2. A pre-cleaned 1/4-inch diameter stainless steel probe with perforated section was placed into the hole.
3. The perforated section of probe was driven six inches into the undisturbed soil to be sampled.
4. The probe was capped with 1/4-inch surgical grade rubber tubing.

5. A vacuum pump was attached to the tubing and evacuated three to five probe volumes of soil gas.
6. The tip of the PID was placed into the tubing, creating an air-tight seal.
7. The peak and average readings on the PID was recorded in the field book and on the base map.

## **APPENDIX B**

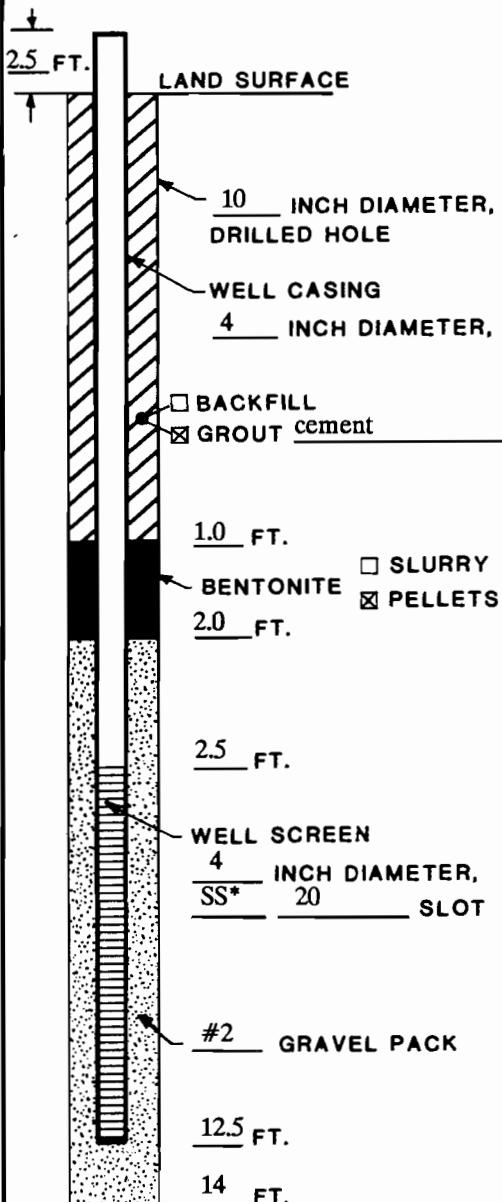
### **Well Construction Logs**

MONITORING WELL  
CONSTRUCTION LOG

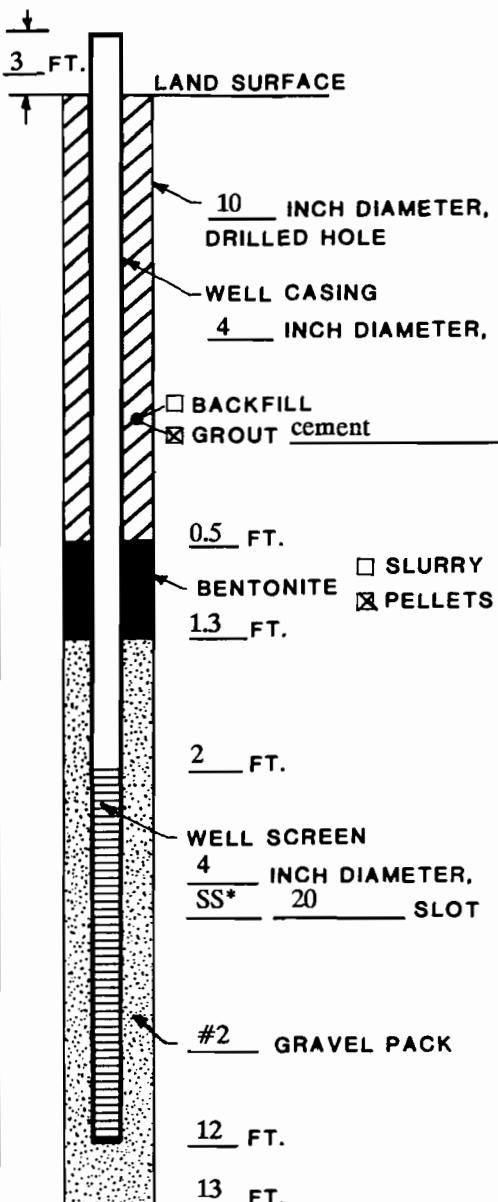
## NOTE:

ALL DEPTHS IN FEET  
BELOW LAND SURFACE

PROJECT NAME	Amtrak/Sunnyside Yard	NUMBER	05509Y
WELL NO.	MW-13	PERMIT NO.	
TOWN/CITY	Long Island City		
COUNTY	Queens	STATE	New York
LAND-SURFACE ELEVATION AND DATUM	FEET	<input type="checkbox"/> SURVEYED <input type="checkbox"/> ESTIMATED	
INSTALLATION DATE(S)	11/06/90		
DRILLING METHOD	Hollow Stem Auger		
DRILLING CONTRACTOR	Land, Air, Water Enviro. Services		
DRILLING FLUID	None		
DEVELOPMENT TECHNIQUE(S) AND DATE(S) Pump & surge - submersible pump. 10 gpm for 1 hour, 12/18/90.			
FLUID LOSS DURING DRILLING	None	GALLONS	
WATER REMOVED DURING DEVELOPMENT	600	GALLONS	
STATIC DEPTH TO WATER	4	FEET BELOW M.P.	
PUMPING DEPTH TO WATER		FEET BELOW M.P.	
PUMPING DURATION		HOURS	
YIELD	GPM	DATE	
SPECIFIC CAPACITY		GPM/FT.	
WELL PURPOSE	Monitoring		
REMARKS	*SS - stainless steel continuous slot.		
HYDROGEOLOGIST	H. Gregory		

MONITORING WELL  
CONSTRUCTION LOG

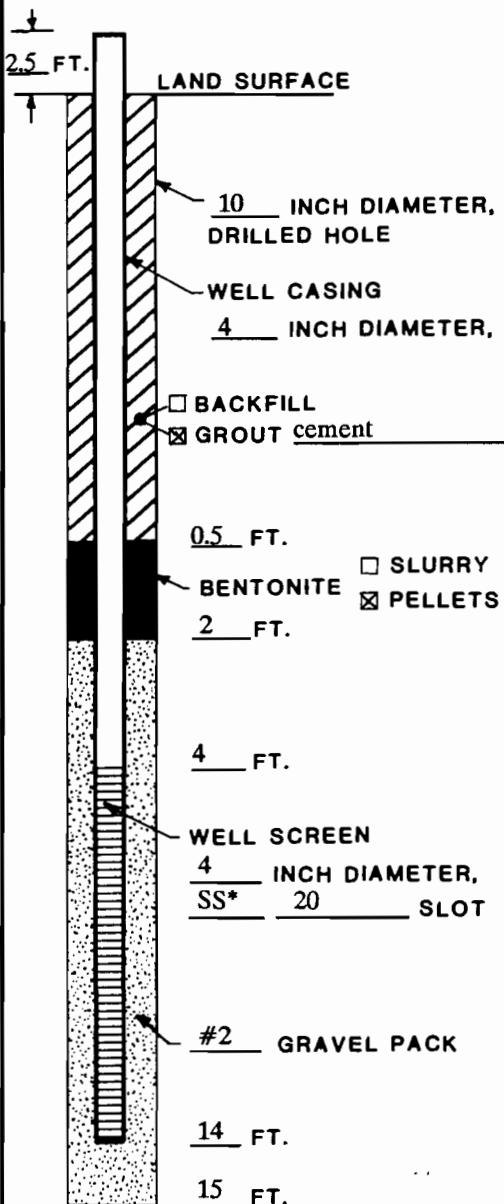
PROJECT NAME	Amtrak/Sunnyside Yard	NUMBER	05509Y
WELL NO.	MW-16	PERMIT NO.	
TOWN/CITY	Long Island City		
COUNTY	Queens	STATE	New York
LAND-SURFACE ELEVATION			
AND DATUM	FEET	<input type="checkbox"/> SURVEYED	
		<input type="checkbox"/> ESTIMATED	
INSTALLATION DATE(S)	11/07/90		
DRILLING METHOD	Hollow Stem Auger		
DRILLING CONTRACTOR	Land, Air, Water Enviro. Services		
DRILLING FLUID	None		
DEVELOPMENT TECHNIQUE(S) AND DATE(S)			
Bailed; pump & surge - submersible pump, 12/17/90, 12/19/90.			
FLUID LOSS DURING DRILLING	None GALLONS		
WATER REMOVED DURING DEVELOPMENT	50 GALLONS		
STATIC DEPTH TO WATER	7 FEET BELOW M.P.		
PUMPING DEPTH TO WATER	FEET BELOW M.P.		
PUMPING DURATION	HOURS		
YIELD	GPM	DATE	
SPECIFIC CAPACITY	GPM/FT.		
WELL PURPOSE	Monitoring		
REMARKS	*SS - stainless steel continuous slot.		
NOTE:			
ALL DEPTHS IN FEET BELOW LAND SURFACE			
HYDROGEOLOGIST	H. Gregory		

**ROUX**Consulting Ground-Water Geologists  
**ROUX ASSOCIATES INC****MONITORING WELL  
CONSTRUCTION LOG**

PROJECT NAME	Amtrak/Sunnyside Yard	NUMBER	05509Y
WELL NO.	MW-17	PERMIT NO.	
TOWN/CITY	Long Island City		
COUNTY	Queens	STATE	New York
LAND-SURFACE ELEVATION			
AND DATUM	FEET	<input type="checkbox"/> SURVEYED	
<input type="checkbox"/> ESTIMATED			
INSTALLATION DATE(S)	11/08/90		
DRILLING METHOD	Hollow Stem Auger		
DRILLING CONTRACTOR	Land, Air, Water Enviro. Service		
DRILLING FLUID	None		
DEVELOPMENT TECHNIQUE(S) AND DATE(S)			
Pump & surge - submersible pump, 7 gpm for 1 hour			
FLUID LOSS DURING DRILLING None GALLONS			
WATER REMOVED DURING DEVELOPMENT 420 GALLONS			
STATIC DEPTH TO WATER 7 FEET BELOW M.P.			
PUMPING DEPTH TO WATER FEET BELOW M.P.			
PUMPING DURATION HOURS			
YIELD	GPM	DATE	
SPECIFIC CAPACITY GPM/FT.			
WELL PURPOSE Monitoring			
REMARKS *SS - stainless steel continuous slot			
NOTE: ALL DEPTHS IN FEET BELOW LAND SURFACE			
HYDROGEOLOGIST H. Gregory			

**ROUX**Consulting Ground-Water Geologists  
ROUX ASSOCIATES INC

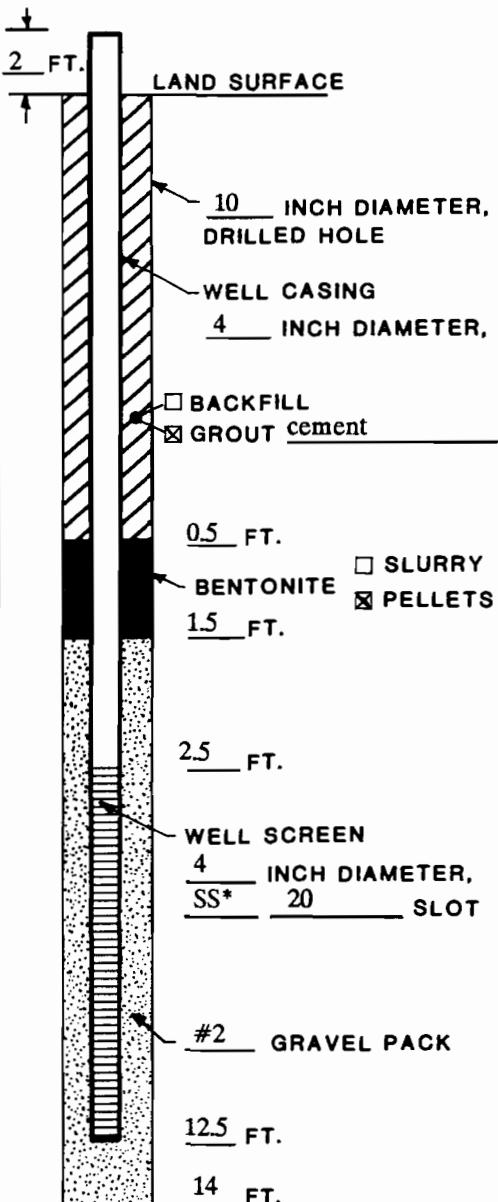
# MONITORING WELL CONSTRUCTION LOG



PROJECT NAME	Amtrak/Sunnyside Yard	NUMBER	05509Y
WELL NO.	MW-19	PERMIT NO.	
TOWN/CITY	Long Island City		
COUNTY	Queens	STATE	New York
LAND-SURFACE ELEVATION AND DATUM	FEET	<input type="checkbox"/> SURVEYED <input type="checkbox"/> ESTIMATED	
INSTALLATION DATE(S)	12/20/90		
DRILLING METHOD	Hollow Stem Auger		
DRILLING CONTRACTOR	Land, Air, Water Enviro. Services		
DRILLING FLUID	None		
DEVELOPMENT TECHNIQUE(S) AND DATE(S) Bailed; pump & surge - submersible pump, 12/20/90			
FLUID LOSS DURING DRILLING	None	GALLONS	
WATER REMOVED DURING DEVELOPMENT	25	GALLONS	
STATIC DEPTH TO WATER	8	FEET BELOW M.P.	
PUMPING DEPTH TO WATER		FEET BELOW M.P.	
PUMPING DURATION		HOURS	
YIELD	GPM	DATE	
SPECIFIC CAPACITY		GPM/FT.	
WELL PURPOSE	Monitoring		
REMARKS	*SS - stainless steel continuous slot.		
HYDROGEOLOGIST <u>J. Duminuco</u>			

NOTE:

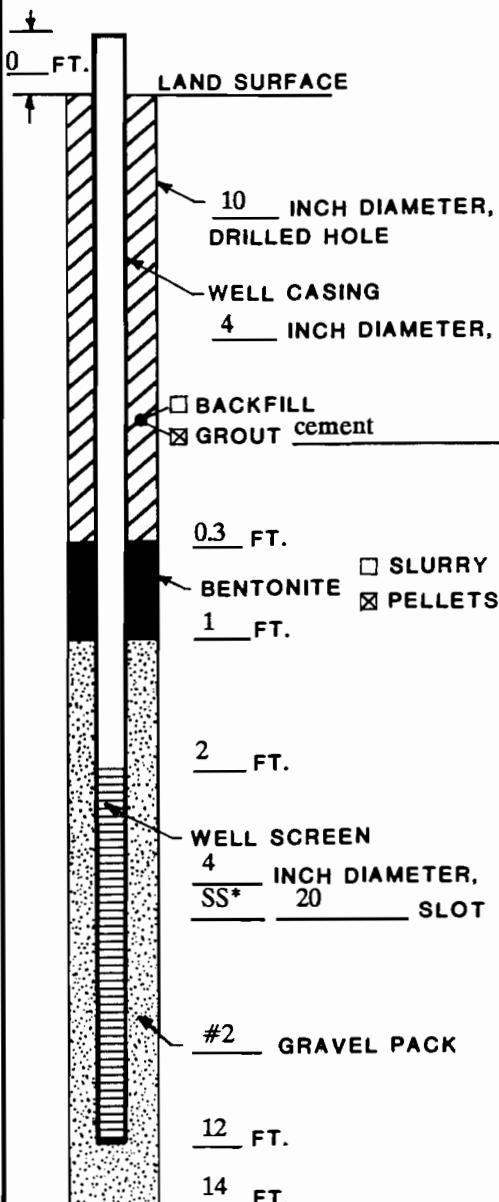
ALL DEPTHS IN FEET  
BELOW LAND SURFACE

**ROUX**Consulting Ground-Water Geologists  
ROUX ASSOCIATES INCMONITORING WELL  
CONSTRUCTION LOG

PROJECT NAME	Amtrak/Sunnyside Yard	NUMBER	05509Y
WELL NO.	MW-20	PERMIT NO.	
TOWN/CITY	Long Island City		
COUNTY	Queens	STATE	New York
LAND-SURFACE ELEVATION AND DATUM FEET			
		<input type="checkbox"/> SURVEYED	
		<input type="checkbox"/> ESTIMATED	
INSTALLATION DATE(S) 12/11/90			
DRILLING METHOD Hollow Stem Auger			
DRILLING CONTRACTOR Land, Air, Water Enviro. Services			
DRILLING FLUID None			
DEVELOPMENT TECHNIQUE(S) AND DATE(S) Pump & surge - submersible pump, 12/17/90			
FLUID LOSS DURING DRILLING _____ GALLONS			
WATER REMOVED DURING DEVELOPMENT 60 _____ GALLONS			
STATIC DEPTH TO WATER 4.5 FEET BELOW M.P.			
PUMPING DEPTH TO WATER _____ FEET BELOW M.P.			
PUMPING DURATION _____ HOURS			
YIELD _____ GPM DATE _____			
SPECIFIC CAPACITY _____ GPM/FT.			
WELL PURPOSE Monitoring			
REMARKS *SS - stainless continuous slot			
HYDROGEOLOGIST H. Gregory			

NOTE:

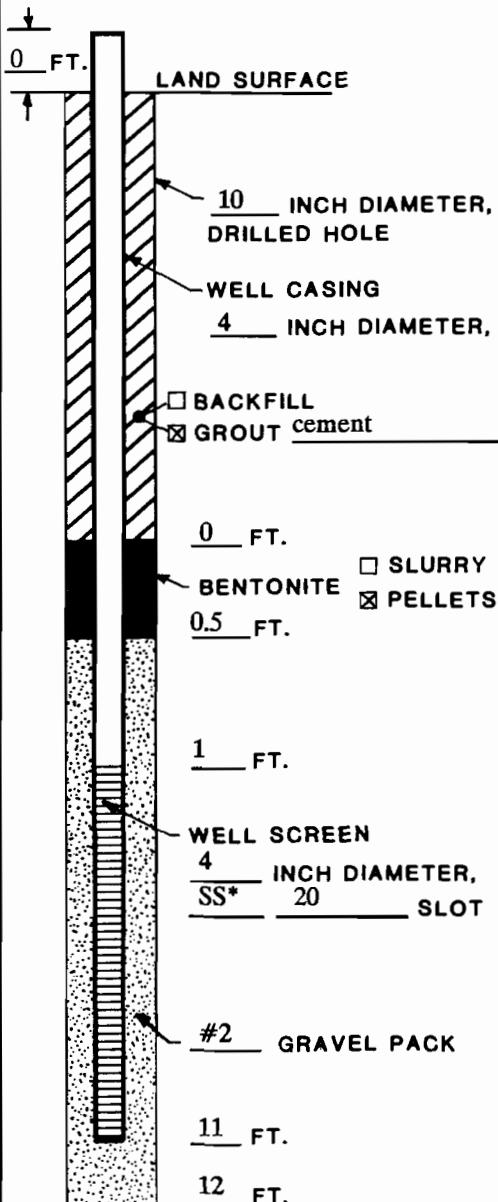
ALL DEPTHS IN FEET  
BELOW LAND SURFACE

MONITORING WELL  
CONSTRUCTION LOG

## NOTE:

ALL DEPTHS IN FEET  
BELOW LAND SURFACE

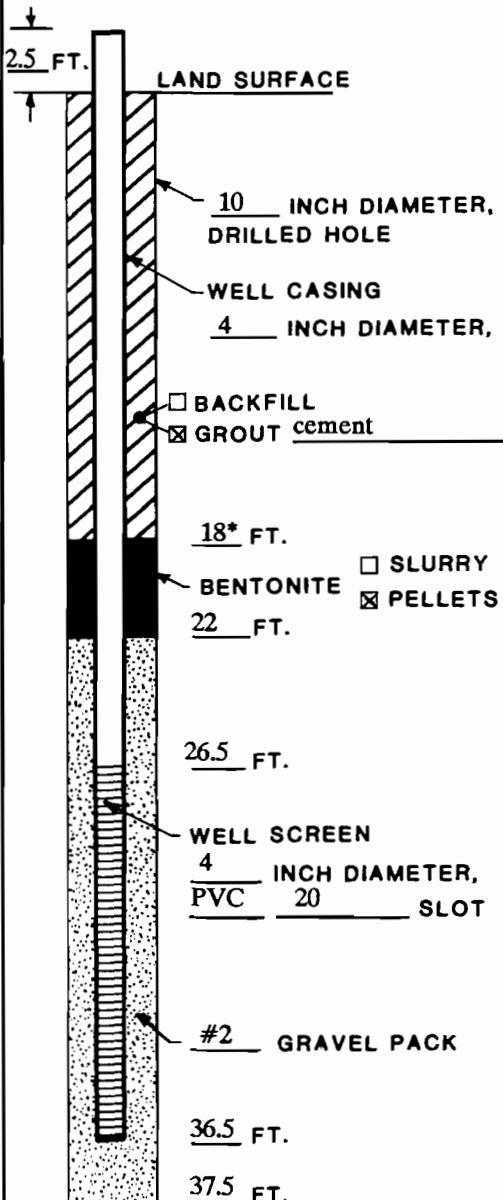
PROJECT NAME	Amtrak/Sunnyside Yard	NUMBER	05509Y
WELL NO.	MW-21	PERMIT NO.	
TOWN/CITY	Long Island City		
COUNTY	Queens	STATE	New York
LAND-SURFACE ELEVATION			
AND DATUM	FEET	<input type="checkbox"/> SURVEYED	
<input type="checkbox"/> ESTIMATED			
INSTALLATION DATE(S)	12/06/90		
DRILLING METHOD	Hollow Stem Auger		
DRILLING CONTRACTOR	Land, Air, Water Enviro. Services		
DRILLING FLUID	None		
DEVELOPMENT TECHNIQUE(S) AND DATE(S)			
Pump & surge - submersible pumps, 12/13/90			
FLUID LOSS DURING DRILLING	None	GALLONS	
WATER REMOVED DURING DEVELOPMENT	25	GALLONS	
STATIC DEPTH TO WATER	3	FEET BELOW M.P.	
PUMPING DEPTH TO WATER		FEET BELOW M.P.	
PUMPING DURATION		HOURS	
YIELD	GPM	DATE	
SPECIFIC CAPACITY		GPM/FT.	
WELL PURPOSE	Monitoring		
REMARKS	*SS - stainless steel continuous slot		
HYDROGEOLOGIST	H. Gregory		

**ROUX**Consulting Ground-Water Geologists  
ROUX ASSOCIATES INCMONITORING WELL  
CONSTRUCTION LOG

PROJECT NAME	Amtrak/Sunnyside Yard	NUMBER	05509Y
WELL NO.	MW-22	PERMIT NO. _____	
TOWN/CITY	Long Island City		
COUNTY	Queens	STATE	New York
LAND-SURFACE ELEVATION			
AND DATUM	FEET	<input type="checkbox"/> SURVEYED	
<input type="checkbox"/> ESTIMATED			
INSTALLATION DATE(S)	10/20/90		
DRILLING METHOD	Hollow Stem Auger		
DRILLING CONTRACTOR	Land, Air, Water Enviro. Services		
DRILLING FLUID	None		
DEVELOPMENT TECHNIQUE(S) AND DATE(S)			
Pump & surge - submersible pump, 8-9 gpm for 1 hour, 12/13/90			
FLUID LOSS DURING DRILLING _____ GALLONS			
WATER REMOVED DURING DEVELOPMENT 500 GALLONS			
STATIC DEPTH TO WATER 1.5 FEET BELOW M.P.			
PUMPING DEPTH TO WATER _____ FEET BELOW M.P.			
PUMPING DURATION _____ HOURS			
YIELD _____ GPM DATE _____			
SPECIFIC CAPACITY _____ GPM/FT.			
WELL PURPOSE Monitoring			
REMARKS Flush mount curb box installed 0.5 ft. above grade. *SS-stainless steel continuous slot.			
HYDROGEOLOGIST <u>H. Gregory</u>			

NOTE:

ALL DEPTHS IN FEET  
BELOW LAND SURFACE

MONITORING WELL  
CONSTRUCTION LOGPROJECT NAME Amtrak/Sunnyside Yard NUMBER 05509YWELL NO. MW-23 PERMIT NO. \_\_\_\_\_TOWN/CITY Long Island CityCOUNTY Queens STATE New York

LAND-SURFACE ELEVATION

AND DATUM \_\_\_\_\_ FEET  SURVEYED  
 ESTIMATEDINSTALLATION DATE(S) 12/10/90DRILLING METHOD Hollow Stem AugerDRILLING CONTRACTOR Land, Air, Water Enviro. ServicesDRILLING FLUID None

## DEVELOPMENT TECHNIQUE(S) AND DATE(S)

Pump &amp; surge - submersible pump, 6-7 gmp for 1 hour, 12/14/90

FLUID LOSS DURING DRILLING None GALLONSWATER REMOVED DURING DEVELOPMENT 400 GALLONSSTATIC DEPTH TO WATER 5 FEET BELOW M.P.

PUMPING DEPTH TO WATER \_\_\_\_\_ FEET BELOW M.P.

PUMPING DURATION \_\_\_\_\_ HOURS

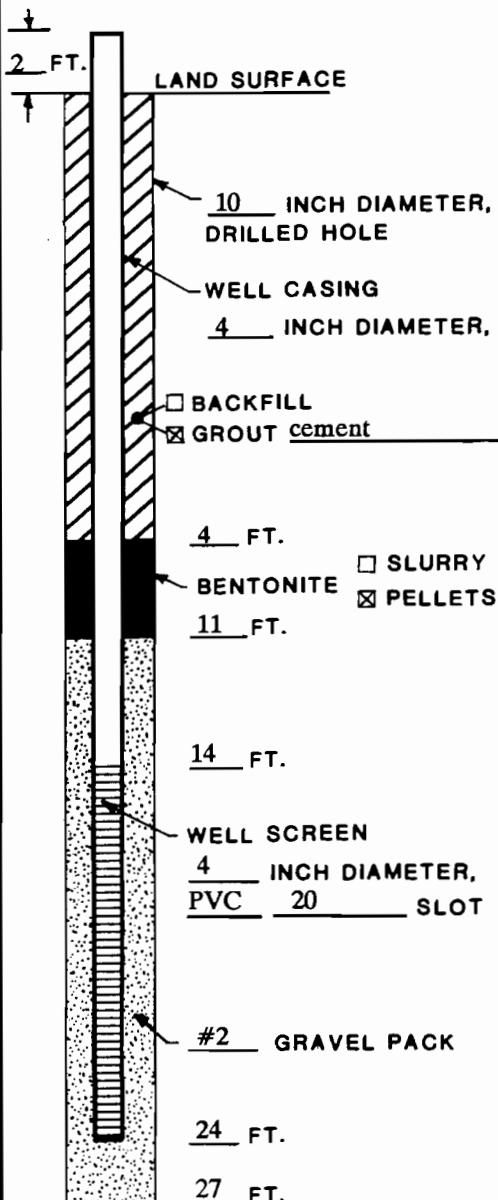
YIELD \_\_\_\_\_ GPM DATE \_\_\_\_\_

SPECIFIC CAPACITY \_\_\_\_\_ GPM/FT.

WELL PURPOSE Monitoring Well.REMARKS Well completed on third attempt.\* 22 ft to 18 ft - Bentonite and formation collapse.

## NOTE:

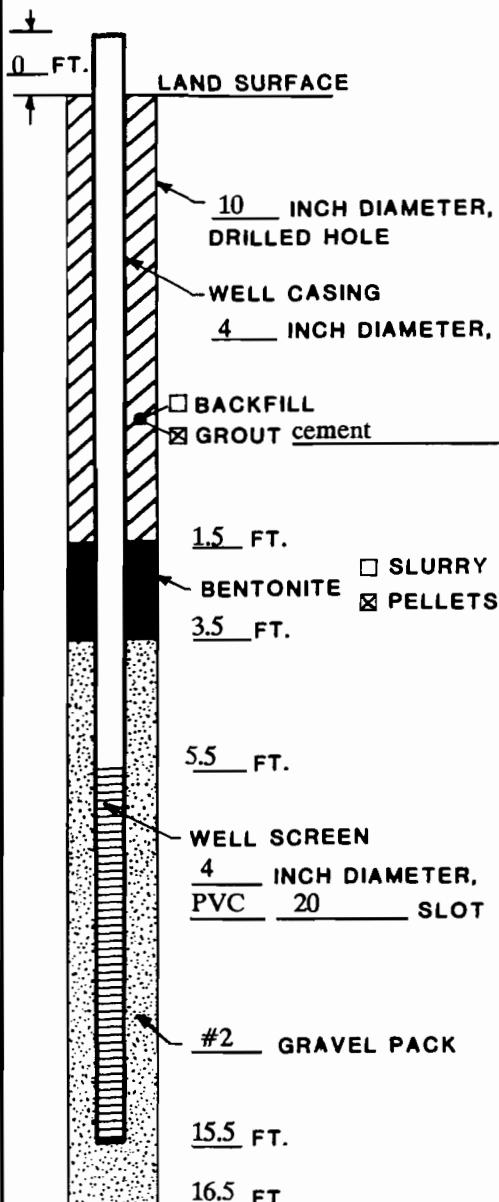
ALL DEPTHS IN FEET  
BELOW LAND SURFACEHYDROGEOLOGIST V. Singh

MONITORING WELL  
CONSTRUCTION LOG

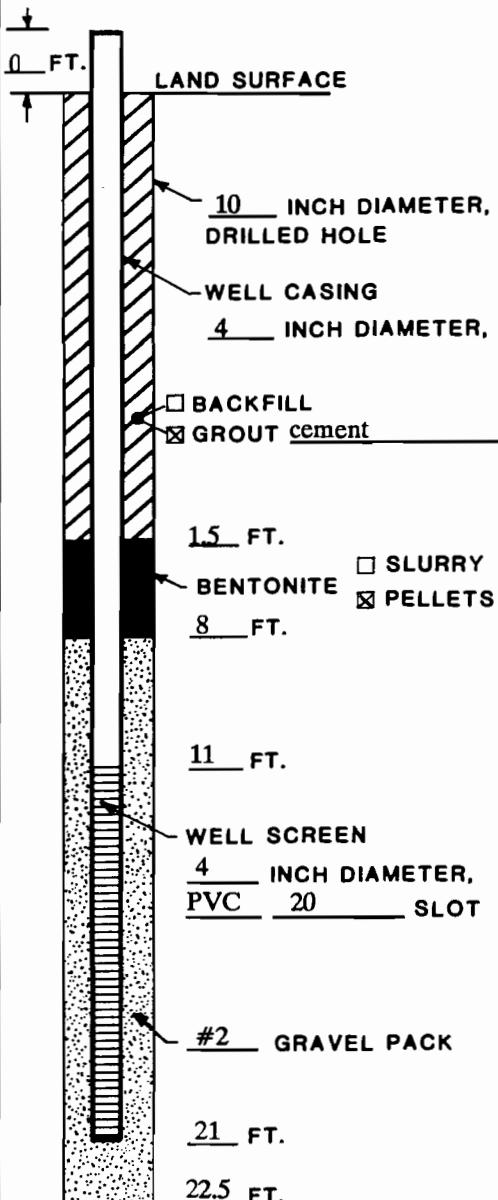
PROJECT NAME	Amtrak/Sunnyside Yard	NUMBER	05509Y
WELL NO.	MW-24	PERMIT NO. _____	
TOWN/CITY	Long Island City		
COUNTY	Queens	STATE	New York
LAND-SURFACE ELEVATION AND DATUM FEET <input type="checkbox"/> SURVEYED <input type="checkbox"/> ESTIMATED			
INSTALLATION DATE(S) 11/28/90			
DRILLING METHOD Hollow Stem Auger			
DRILLING CONTRACTOR Land, Air, Water Enviro. Services			
DRILLING FLUID None			
DEVELOPMENT TECHNIQUE(S) AND DATE(S) Pump & surge - submersible pump, 18-20 gpm for 1 hour, 12/12/90			
FLUID LOSS DURING DRILLING None GALLONS			
WATER REMOVED DURING DEVELOPMENT 1100-1200 GALLONS			
STATIC DEPTH TO WATER 18 FEET BELOW M.P.			
PUMPING DEPTH TO WATER FEET BELOW M.P.			
PUMPING DURATION HOURS			
YIELD GPM DATE			
SPECIFIC CAPACITY GPM/FT.			
WELL PURPOSE Monitoring			
REMARKS			
HYDROGEOLOGIST H. Gregory			

NOTE:

ALL DEPTHS IN FEET  
BELOW LAND SURFACE

**ROUX**Consulting Ground-Water Geologists  
ROUX ASSOCIATES INC**MONITORING WELL  
CONSTRUCTION LOG**

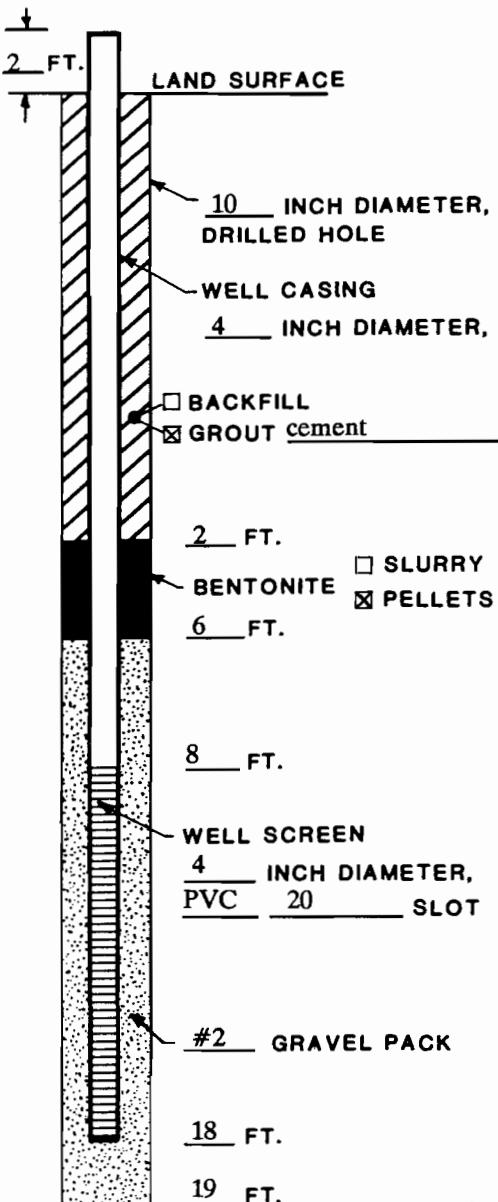
PROJECT NAME	Amtrak/Sunnyside Yard	NUMBER	05509Y
WELL NO.	MW-25	PERMIT NO.	
TOWN/CITY	Long Island City		
COUNTY	Queens	STATE	New York
LAND-SURFACE ELEVATION AND DATUM	FEET	<input type="checkbox"/> SURVEYED <input type="checkbox"/> ESTIMATED	
INSTALLATION DATE(S)	11/17/90		
DRILLING METHOD	Hollow Stem Auger		
DRILLING CONTRACTOR	Land, Air, Water Enviro. Services		
DRILLING FLUID	None		
DEVELOPMENT TECHNIQUE(S) AND DATE(S) Pump & surge - submersible pump, 18-20 gpm for 1 hour, 12/11/90			
FLUID LOSS DURING DRILLING	None	GALLONS	
WATER REMOVED DURING DEVELOPMENT	1100-1200	GALLONS	
STATIC DEPTH TO WATER	8	FEET BELOW M.P.	
PUMPING DEPTH TO WATER		FEET BELOW M.P.	
PUMPING DURATION		HOURS	
YIELD	GPM	DATE	
SPECIFIC CAPACITY		GPM/FT.	
WELL PURPOSE	Monitoring		
REMARKS			
NOTE: ALL DEPTHS IN FEET BELOW LAND SURFACE			
HYDROGEOLOGIST <u>B. Woods</u>			

**ROUX**Consulting Ground-Water Geologists  
**ROUX ASSOCIATES INC****MONITORING WELL  
CONSTRUCTION LOG**

PROJECT NAME	Amtrak/Sunnyside Yard	NUMBER	05509Y
WELL NO.	MW-26	PERMIT NO.	
TOWN/CITY	Long Island City		
COUNTY	Queens	STATE	New York
LAND-SURFACE ELEVATION AND DATUM	FEET	<input type="checkbox"/> SURVEYED <input type="checkbox"/> ESTIMATED	
INSTALLATION DATE(S)	12/05/90		
DRILLING METHOD	Hollow Stem Auger		
DRILLING CONTRACTOR	Land, Air, Water Enviro. Services		
DRILLING FLUID	None		
DEVELOPMENT TECHNIQUE(S) AND DATE(S)			
Pump & surge - submersible pump, 18-20 gpm for 1 hour, 12/12/90			
FLUID LOSS DURING DRILLING	None	GALLONS	
WATER REMOVED DURING DEVELOPMENT	1100-1200	GALLONS	
STATIC DEPTH TO WATER	13	FEET BELOW M.P.	
PUMPING DEPTH TO WATER		FEET BELOW M.P.	
PUMPING DURATION		HOURS	
YIELD	GPM	DATE	
SPECIFIC CAPACITY		GPM/FT.	
WELL PURPOSE	Monitoring.		
REMARKS			
HYDROGEOLOGIST <u>B. Woods</u>			

NOTE:

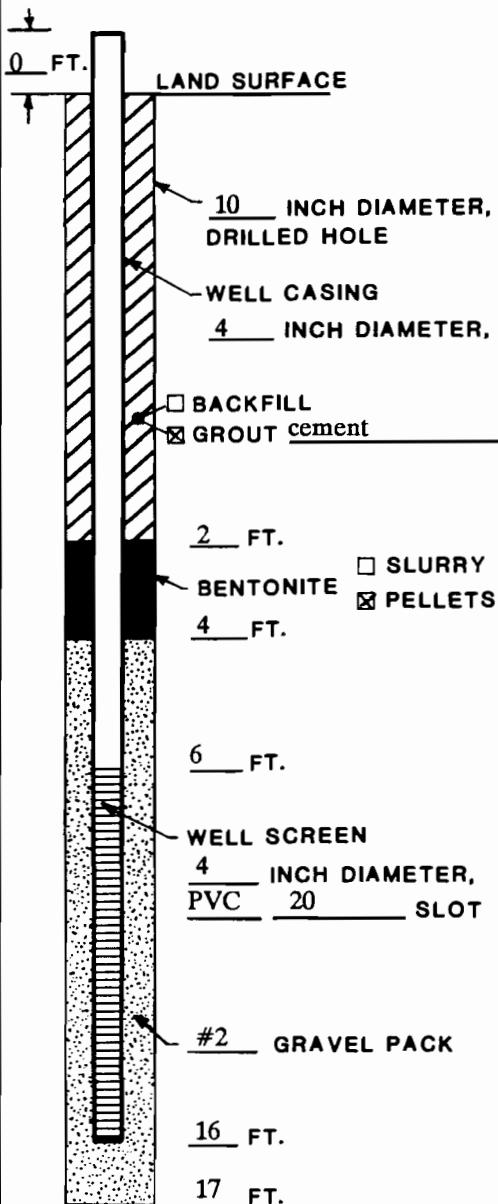
ALL DEPTHS IN FEET  
BELOW LAND SURFACE

**ROUX**Consulting Ground-Water Geologists  
ROUX ASSOCIATES INCMONITORING WELL  
CONSTRUCTION LOG

PROJECT NAME	Amtrak/Sunnyside Yard	NUMBER	05509Y
WELL NO.	MW-27	PERMIT NO.	
TOWN/CITY	Long Island City		
COUNTY	Queens	STATE	New York
LAND-SURFACE ELEVATION			
AND DATUM	FEET	<input type="checkbox"/> SURVEYED	
		<input type="checkbox"/> ESTIMATED	
INSTALLATION DATE(S)	12/01/90		
DRILLING METHOD	Hollow Stem Auger		
DRILLING CONTRACTOR	Land, Air, Water Enviro. Services		
DRILLING FLUID	None		
DEVELOPMENT TECHNIQUE(S) AND DATE(S)			
Pump & surge - submersible pump, 8-9 gpm for 1 hour,			
12/05/90			
FLUID LOSS DURING DRILLING _____ GALLONS			
WATER REMOVED DURING DEVELOPMENT 500 GALLONS			
STATIC DEPTH TO WATER	11	FEET BELOW M.P.	
PUMPING DEPTH TO WATER		FEET BELOW M.P.	
PUMPING DURATION	_____	HOURS	
YIELD	GPM	DATE	
SPECIFIC CAPACITY _____ GPM/FT.			
WELL PURPOSE Monitoring			
REMARKS			
HYDROGEOLOGIST H. Gregory			

## NOTE:

ALL DEPTHS IN FEET  
BELOW LAND SURFACE

MONITORING WELL  
CONSTRUCTION LOGPROJECT NAME Amtrak/Sunnyside Yard NUMBER 05509YWELL NO. MW-28 PERMIT NO. \_\_\_\_\_TOWN/CITY Long Island CityCOUNTY Queens STATE New York

LAND-SURFACE ELEVATION

AND DATUM \_\_\_\_\_ FEET  SURVEYED  
 ESTIMATEDINSTALLATION DATE(S) 11/09/90DRILLING METHOD Hollow Stem AugerDRILLING CONTRACTOR Land, Air, Water Enviro. ServicesDRILLING FLUID None

## DEVELOPMENT TECHNIQUE(S) AND DATE(S)

Pump & surge - submersible pump, 12/11/90FLUID LOSS DURING DRILLING None GALLONSWATER REMOVED DURING DEVELOPMENT 50 GALLONSSTATIC DEPTH TO WATER 7.5 FEET BELOW M.P.

PUMPING DEPTH TO WATER \_\_\_\_\_ FEET BELOW M.P.

PUMPING DURATION \_\_\_\_\_ HOURS

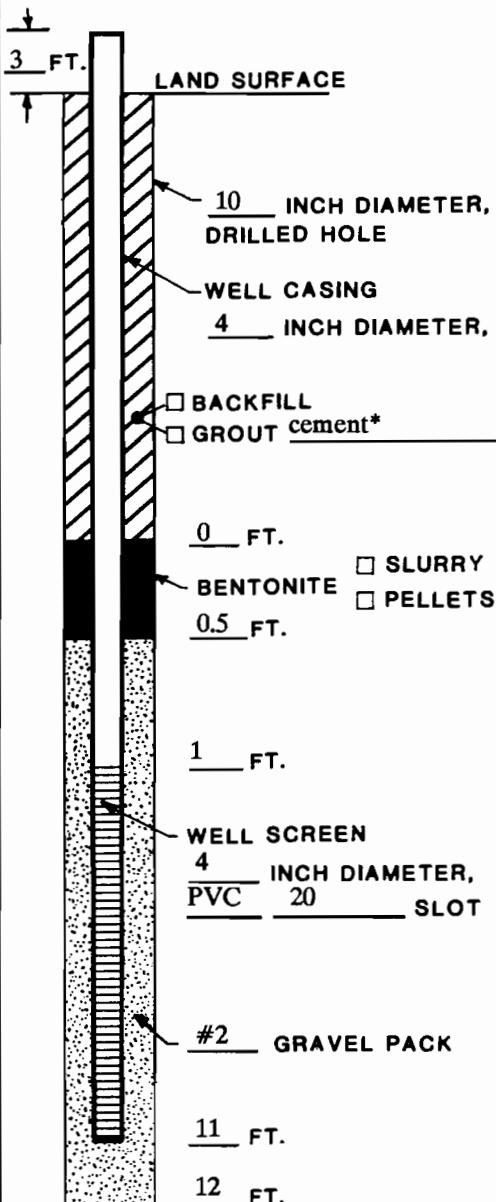
YIELD \_\_\_\_\_ GPM DATE \_\_\_\_\_

SPECIFIC CAPACITY \_\_\_\_\_ GPM/FT.

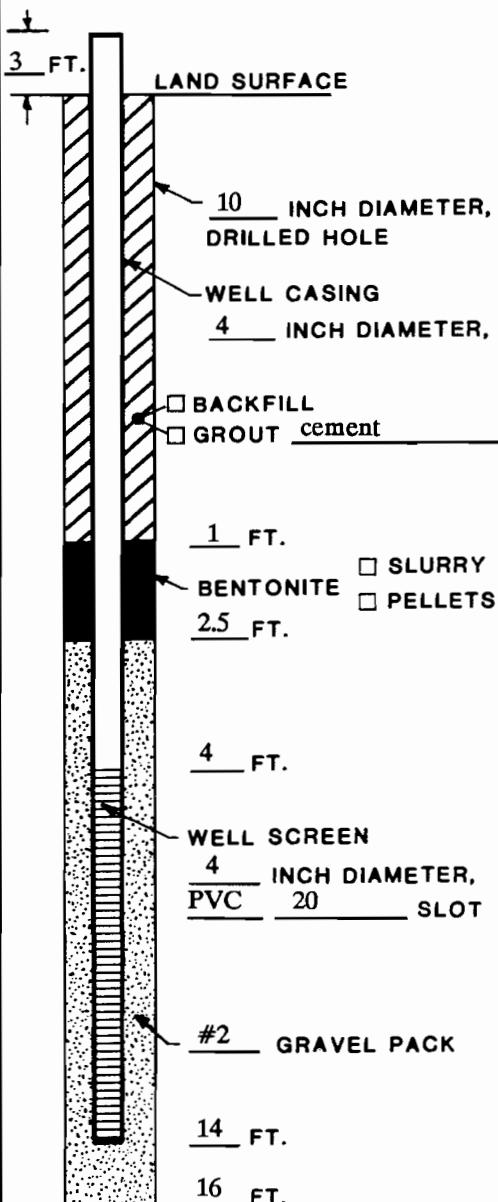
WELL PURPOSE MonitoringREMARKS 6" clay layer encountered at 14 ft, sand, silt and clay below.

## NOTE:

ALL DEPTHS IN FEET  
BELOW LAND SURFACEHYDROGEOLOGIST H. Gregory

**ROUX**Consulting Ground-Water Geologists  
**ROUX ASSOCIATES INC****MONITORING WELL  
CONSTRUCTION LOG****NOTE:****ALL DEPTHS IN FEET  
BELOW LAND SURFACE**

PROJECT NAME	Amtrak/Sunnyside Yard	NUMBER	05509Y
WELL NO.	MW-29	PERMIT NO.	
TOWN/CITY	Long Island City		
COUNTY	Queens	STATE	New York
LAND-SURFACE ELEVATION AND DATUM	FEET	<input type="checkbox"/> SURVEYED <input type="checkbox"/> ESTIMATED	
INSTALLATION DATE(S)	11/17/90		
DRILLING METHOD	Hollow Stem Auger		
DRILLING CONTRACTOR	Land, Air, Water Enviro. Services		
DRILLING FLUID	None		
DEVELOPMENT TECHNIQUE(S) AND DATE(S) Pump & surge - submersible pump, 12/13/90			
FLUID LOSS DURING DRILLING	None GALLONS		
WATER REMOVED DURING DEVELOPMENT	100 GALLONS		
STATIC DEPTH TO WATER	4 FEET BELOW M.P.		
PUMPING DEPTH TO WATER	FEET BELOW M.P.		
PUMPING DURATION	HOURS		
YIELD	GPM	DATE	
SPECIFIC CAPACITY	GPM/FT.		
WELL PURPOSE	Monitoring		
REMARKS	*Cement grout around protective steel casing.		
HYDROGEOLOGIST <u>H. Gregory</u>			

MONITORING WELL  
CONSTRUCTION LOG

## NOTE:

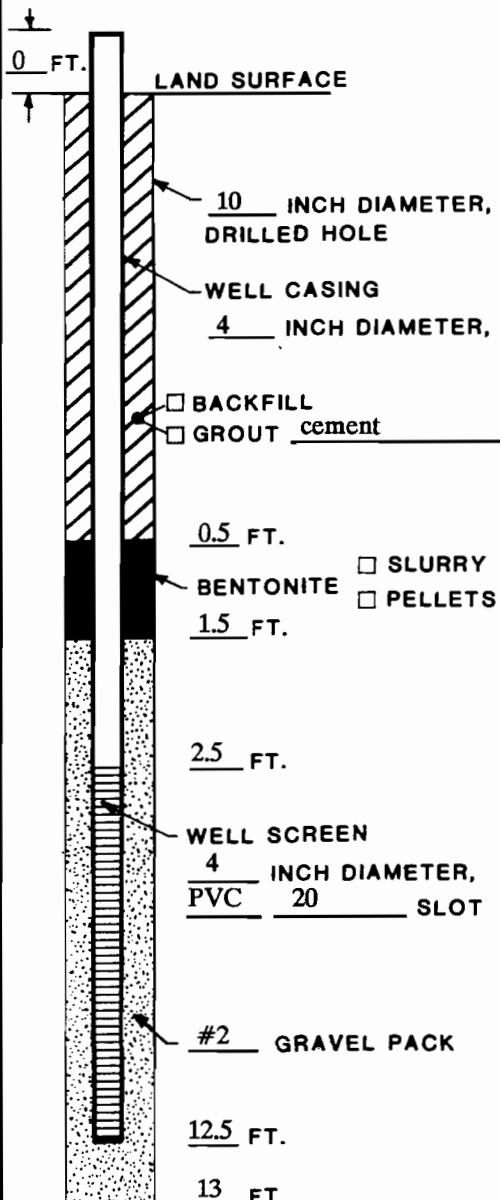
ALL DEPTHS IN FEET  
BELOW LAND SURFACE

PROJECT NAME	Amtrak/Sunnyside Yard	NUMBER	05509Y
WELL NO.	MW-30	PERMIT NO.	
TOWN/CITY	Long Island City		
COUNTY	Queens	STATE	New York
LAND-SURFACE ELEVATION AND DATUM _____ FEET			
<input type="checkbox"/> SURVEYED <input type="checkbox"/> ESTIMATED			
INSTALLATION DATE(S) 11/30/90			
DRILLING METHOD Hollow Stem Auger			
DRILLING CONTRACTOR Land, Air, Water Enviro. Services			
DRILLING FLUID None			
DEVELOPMENT TECHNIQUE(S) AND DATE(S) Pump & surge - submersible pump, 12/05/90			
FLUID LOSS DURING DRILLING None GALLONS			
WATER REMOVED DURING DEVELOPMENT 25 GALLONS			
STATIC DEPTH TO WATER 7.5 FEET BELOW M.P.			
PUMPING DEPTH TO WATER FEET BELOW M.P.			
PUMPING DURATION HOURS			
YIELD GPM DATE			
SPECIFIC CAPACITY GPM/FT.			
WELL PURPOSE Monitoring			
REMARKS Screen set in meadow mat with organic silty clay.			

HYDROGEOLOGIST H. Gregory

**ROUX**Consulting Ground-Water Geologists  
ROUX ASSOCIATES INC

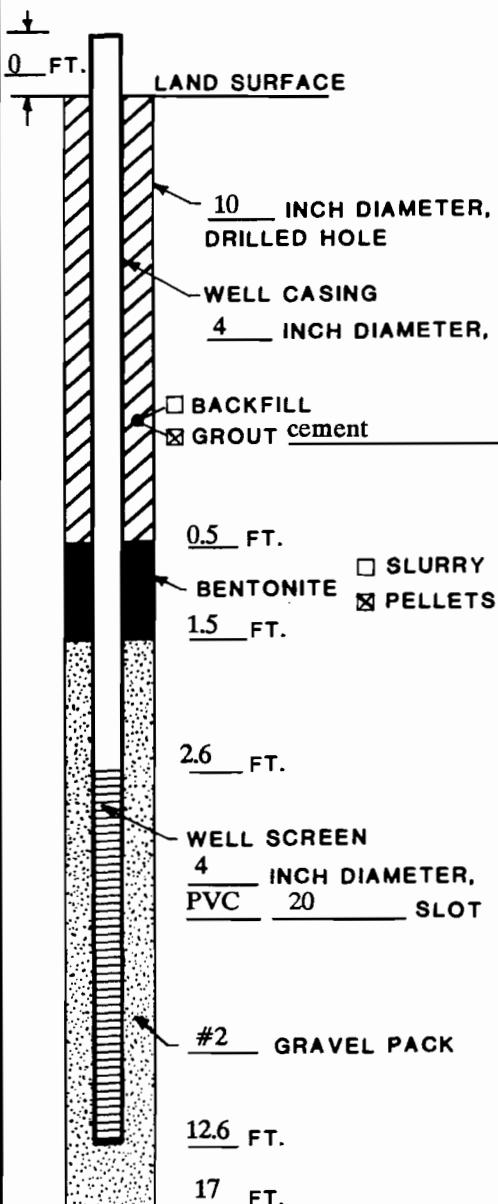
# MONITORING WELL CONSTRUCTION LOG



## NOTE:

ALL DEPTHS IN FEET  
BELOW LAND SURFACE

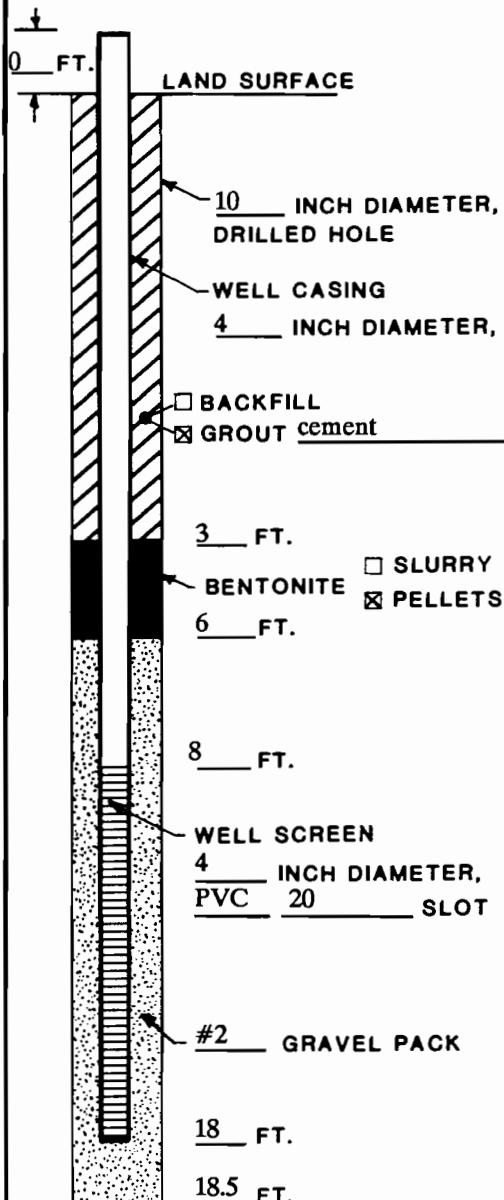
PROJECT NAME	Amtrak/Sunnyside Yard	NUMBER	05509Y
WELL NO.	MW-31	PERMIT NO.	
TOWN/CITY	Long Island City		
COUNTY	Queens	STATE	New York
LAND-SURFACE ELEVATION AND DATUM		FEET	<input type="checkbox"/> SURVEYED <input type="checkbox"/> ESTIMATED
INSTALLATION DATE(S)		11/08/90	
DRILLING METHOD		Hollow Stem Auger	
DRILLING CONTRACTOR		Land, Air, Water Enviro. Services	
DRILLING FLUID		None	
DEVELOPMENT TECHNIQUE(S) AND DATE(S) Pump & surge - submersible pump, 18-20 gpm for 1 hour, 12/11/90			
FLUID LOSS DURING DRILLING		None	GALLONS
WATER REMOVED DURING DEVELOPMENT		1100-1200	GALLONS
STATIC DEPTH TO WATER		4	FEET BELOW M.P.
PUMPING DEPTH TO WATER			FEET BELOW M.P.
PUMPING DURATION			HOURS
YIELD		GPM	DATE
SPECIFIC CAPACITY			GPM/FT.
WELL PURPOSE Monitoring			
REMARKS			
HYDROGEOLOGIST		H. Gregory	

**ROUX**Consulting Ground-Water Geologists  
**ROUX ASSOCIATES INC****MONITORING WELL  
CONSTRUCTION LOG**

PROJECT NAME	Amtrak/Sunnyside Yard	NUMBER	05509Y
WELL NO.	MW-32	PERMIT NO.	
TOWN/CITY	Long Island City		
COUNTY	Queens	STATE	New York
LAND-SURFACE ELEVATION			
AND DATUM	FEET	<input type="checkbox"/> SURVEYED	
		<input type="checkbox"/> ESTIMATED	
INSTALLATION DATE(S)	10/04/90		
DRILLING METHOD	Hollow Stem Auger		
DRILLING CONTRACTOR	Land, Air, Water Enviro. Services		
DRILLING FLUID	None		
DEVELOPMENT TECHNIQUE(S) AND DATE(S)			
Pump & surge - submersible pump, 12/05/90.			
FLUID LOSS DURING DRILLING None GALLONS			
WATER REMOVED DURING DEVELOPMENT 25 GALLONS			
STATIC DEPTH TO WATER 4.5 FEET BELOW M.P.			
PUMPING DEPTH TO WATER FEET BELOW M.P.			
PUMPING DURATION HOURS			
YIELD GPM DATE			
SPECIFIC CAPACITY GPM/FT.			
WELL PURPOSE Monitoring			
REMARKS			
HYDROGEOLOGIST V. Singh			

## NOTE:

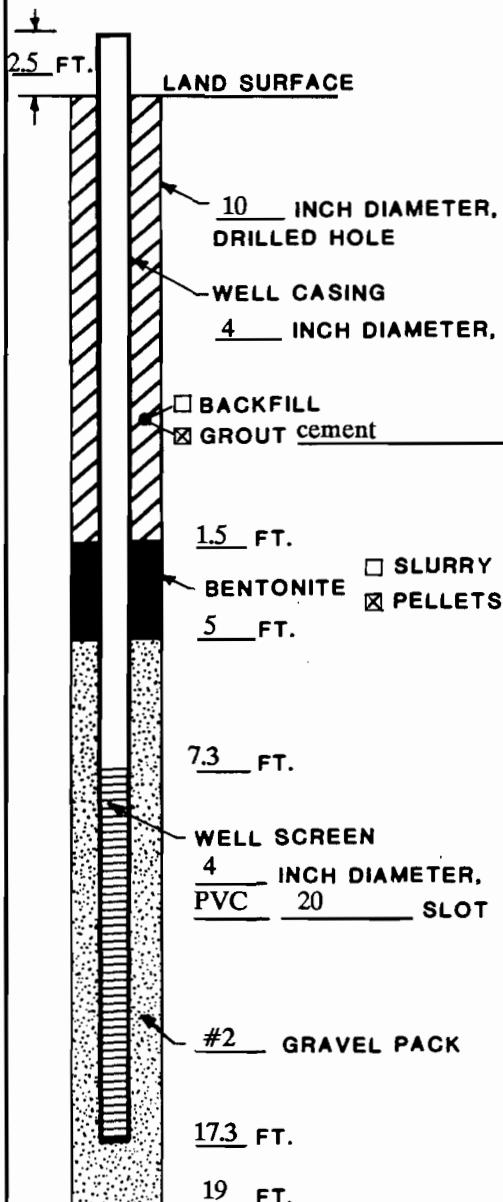
ALL DEPTHS IN FEET  
BELOW LAND SURFACE

MONITORING WELL  
CONSTRUCTION LOG

PROJECT NAME	Amtrak/Sunnyside Yard	NUMBER	05509Y
WELL NO.	MW-33	PERMIT NO.	
TOWN/CITY	Long Island City		
COUNTY	Queens	STATE	New York
LAND-SURFACE ELEVATION			
AND DATUM	FEET	<input type="checkbox"/> SURVEYED	
		<input type="checkbox"/> ESTIMATED	
INSTALLATION DATE(S)	11/15/90		
DRILLING METHOD	Hollow Stem Auger		
DRILLING CONTRACTOR	Land, Air, Water, Enviro. Services		
DRILLING FLUID	None		
DEVELOPMENT TECHNIQUE(S) AND DATE(S)			
Pump & surge - submersible pump, 18-20 gpm for 1 hour 12/05/90			
FLUID LOSS DURING DRILLING	None	GALLONS	
WATER REMOVED DURING DEVELOPMENT	1100-1200	GALLONS	
STATIC DEPTH TO WATER	10	FEET BELOW M.P.	
PUMPING DEPTH TO WATER		FEET BELOW M.P.	
PUMPING DURATION		HOURS	
YIELD	GPM	DATE	
SPECIFIC CAPACITY		GPM/FT.	
WELL PURPOSE	Monitoring Well		
REMARKS			
HYDROGEOLOGIST	V. Singh		

NOTE:

ALL DEPTHS IN FEET  
BELOW LAND SURFACE

MONITORING WELL  
CONSTRUCTION LOG

PROJECT NAME	Amtrak/Sunnyside Yard	NUMBER	05509Y
WELL NO.	MW-34	PERMIT NO. _____	
TOWN/CITY	Long Island City		
COUNTY	Queens	STATE	New York
LAND-SURFACE ELEVATION AND DATUM _____ FEET			
		<input type="checkbox"/> SURVEYED	
		<input type="checkbox"/> ESTIMATED	
INSTALLATION DATE(S) 11/29/90			
DRILLING METHOD Hollow Stem Auger			
DRILLING CONTRACTOR Land, Air, Water Enviro. Services			
DRILLING FLUID None			
DEVELOPMENT TECHNIQUE(S) AND DATE(S) Pump & surge - submersible pump, 12/05/90			
FLUID LOSS DURING DRILLING None GALLONS			
WATER REMOVED DURING DEVELOPMENT 15 GALLONS			
STATIC DEPTH TO WATER 14.5 FEET BELOW M.P.			
PUMPING DEPTH TO WATER FEET BELOW M.P.			
PUMPING DURATION HOURS			
YIELD GPM DATE			
SPECIFIC CAPACITY GPM/FT.			
WELL PURPOSE Monitoring			
REMARKS Screen set 3 ft above proposed depth to avoid silty clay layers below 17 ft depth.			
NOTE:			
ALL DEPTHS IN FEET BELOW LAND SURFACE			
HYDROGEOLOGIST H. Gregory/V.Singh			

## **APPENDIX C**

### **Soil Boring Logs**

ENVIRONMENTAL CONSULTING & MANAGEMENT  
ROUX ASSOCIATES, INC.

GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>10/26/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>H. Gregory</u> Well No. <u>S-1</u> Location _____ M.P. Elevation _____ Drilling Started <u>09:50</u> Ended <u>11:00</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>				<u>WELL DATA</u>		<u>G-W READINGS</u> <sup>(1)</sup>			
				Hole Diam. (in.) <u>8.0</u>	Final Depth (ft.) <u>10.0</u>	Date	DTW MP <sup>(2)</sup>	Elev. W.S.	
				Casing Diam. (in.) _____	Casing Length (ft.) _____				
				Screen Setting (ft.) _____	Screen Slot & Type _____				
				Well Status _____					
				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
				Type <u>Split Spoon</u>	Hammer <u>140</u> lb.	Fall <u>30</u> in.			
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
24		0-2'	Grab Sample	SAND and GRAVEL	0-2-	Brown, medium, SAND & GRAVEL (Railroad bed fill).			
35		2-3'	Grab Sample	-----2 ft----- SILT -----3 ft-----  SAND	2-3-	Green to gray, clayey SILT, some fine sand wet. (Water seeping into hole from above clay) Water Table at 3 ft.			
12	1.0'	8-10'	13, 10, 13, 35	-----10 ft----- Bottom of boring	8-10-	Gray stained, fine to medium, SAND and fine gravel. Brown, fine, SAND, some silt. Tip of spoon blocked with gravel.			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

ENVIRONMENTAL CONSULTING & MANAGEMENT  
ROUX ASSOCIATES, INC.

GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
Study No. <u>05509Y</u> Date <u>10/24/90</u>				Hole Diam. (in.) <u>2.0</u>		Date	DTW MP (2)	Elev. W.S.	
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>11.0</u>					
Client <u>AMTRAK</u>				Casing Diam. (in.) _____					
Page <u>1</u> of <u>1</u>				Casing Length (ft.) _____					
Logged By <u>B. Woods</u>				Screen Setting (ft.) _____					
Well No. <u>S-2</u>				Screen Slot & Type _____					
Location _____				Well Status _____					
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
Drilling Started <u>15:20</u> Ended <u>16:00</u>				Type <u>Split Spoon</u>					
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.					
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/'6			
0		0-2'	Grab Sample	SAND and GRAVEL	0-2-	Black to dark brown, medium, SAND and GRAVEL.			
5.7		2-4'	Grab Sample	-----2 ft----- CLAY -----4 ft-----  SAND  -----11 ft----- Bottom of boring	2-4-	Gray to green, CLAY with gray medium to fine Sand.  Water Table at 4 ft.			
23	1.6'	9-11'			9-11-	Brown to Dark brown, fine, SAND, some silt.			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

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GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
				Hole Diam. (in.)	8.0	Date	DTW MP (2)	Elev. W.S.	
Study No. <u>05509Y</u> Date <u>10/10/90</u>				Final Depth (ft.)	<u>11.0</u>				
Project <u>Sunnyside Yard</u>				Casing Diam. (in.)					
Client <u>AMTRAK</u>				Casing Length (ft.)					
Page <u>1</u> of <u>1</u>				Screen Setting (ft.)					
Logged By <u>V. Singh</u>				Screen Slot & Type					
Well No. <u>S-3</u>				Well Status					
Location _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
M.P. Elevation _____				Type	<u>Split Spoon</u>				
Drilling Started <u>11:10</u> Ended <u>12:20</u>				Hammer	<u>140</u> lb.				
Driller <u>Land, Air, Water Environmental Services</u>				Fall	<u>30</u> in.				
Type of Rig <u>Hollow stem auger</u>									
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
9		0-2'	Grab Sample	SAND	0-2-	Dark brown, medium SAND, little gravel.			
6		2-3'	Grab Sample		2-3-	Brown to black, medium SAND; wet.			
0	1.1'	3-5'	2,2,1,3		3-5-	Brown to black, fine SAND, little silt; Wet. Water Table at 3 ft.			
0	1.0'	9-11'	7,7,17,21		9-11-	Grey to black fine to medium SAND. Wet.			
					-----11 ft.----- Bottom of boring				
<p><b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing</p>									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>		
Study No. <u>05509Y</u> Date <u>10/10/90</u>				Hole Diam. (in.)		Date	DTW MP (2)	Elev. W.S.
Project <u>Sunnyside Yard</u>				Final Depth (ft.)				
Client <u>AMTRAK</u>				Casing Diam. (in.)				
Page <u>1</u> of <u>1</u>				Casing Length (ft.)				
Logged By <u>H. Gregory</u>				Screen Setting (ft.)				
Well No. <u>S-4</u>				Screen Slot & Type				
Location _____				Well Status				
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>		
Drilling Started <u>10:00</u> Ended <u>11:15</u>				Type <u>Split Spoon</u>				
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.				
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.				
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth			Blows/6"		
6		0-2'	Grab Sample	SAND	0-2-	Dark brown, fine to medium SAND, little gravel, wood (Railroad ties).		
6		2-3'	Grab Sample		2-3-	Brown, fine to medium SAND, trace gravel.		
0	1.6'	3-5'	3,5,11,11		3-5-	Brown, fine to coarse SAND, with some gray, silty clay at bottom 0.4' of spoon. Water Table at 4 ft.		
27	.8'	9-11'	7,8,11,15	-----11 ft----- Bottom of boring	9-11-	Dark brown to brown, fine to medium SAND, little silt; Wet.		
REMARKS      (1) in feet relative to a common datum (2) from top of PVC casing								

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GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>10/20/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>B. Woods</u> Well No. <u>S-5</u> Location _____ M.P. Elevation _____ Drilling Started <u>13:50</u> Ended <u>14:40</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>				<u>WELL DATA</u>		<u>G-W READINGS</u> <sup>(1)</sup>			
				Hole Diam. (in.) <u>8.0</u>		Date	DTW MP (2)	Elev. W.S	
				Final Depth (ft.) <u>9.8</u>					
				Casing Diam. (in.) _____					
				Casing Length (ft.) _____					
				Screen Setting (ft.) _____					
Screen Slot & Type _____									
Well Status _____									
				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
				Type <u>Split Spoon</u>					
				Hammer <u>140</u> lb.					
				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
1.0		0-2'	Grab Sample		0-2-	Dark Brown, medium to fine SAND, little medium gravel. Turns to Dark Gray, medium, SAND at 1.7 ft.			
27		2-4'	Grab Sample	SAND	2-4-	Gray very fine SAND, very uniform, little silt. Hydrocarbon odor.			
						Water Table at 4 ft.			
3.0	0.8'	9-9.8'	25, 100/2	-----9.8 ft.----- Bottom of boring  (Refusal)	9-9.8-	Dark gray, fine to medium, SAND; Wet. Strong PHC odor, rainbow sheen on water.			
REMARKS    (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>11/11/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>B. Woods</u> Well No. <u>S-6</u> Location _____ M.P. Elevation _____ Drilling Started <u>12:15</u> Ended <u>13:50</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>				<u>WELL DATA</u>		<u>G-W READINGS</u> <sup>(1)</sup>			
				Hole Diam. (in.) <u>8.0</u> Final Depth (ft.) <u>10.7</u> Casing Diam. (in.) _____ Casing Length (ft.) _____ Screen Setting (ft.) _____ Screen Slot & Type _____ Well Status <u>Soil Boring</u>		Date	DTW MP (2)	Elev. W.S	
				<u>SAMPLER</u>	<u>DEVELOPMENT</u>				
				Type <u>Split Spoon</u> Hammer <u>140</u> lb. Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab Sample		0-2-	0-1.5': Black stained, fine to medium SAND, cinders, gravel (Railroad bed). 1.5-2.0': Brown, medium to fine, SAND, trace gravel.			
0		2-4'	Grab Sample		2-4-	Brown to light brown, medium to fine SAND, trace gravel.			
0	1.5'	4-6'	N/R		4-6-	Brown, medium to fine SAND, with small discrete lenses of brown, silty-sand and fine sand.			
0	1.2'	6-8'	N/R	SAND	6-8-	Brown, fine SAND, well sorted.			
0	0.6'	8-9'	N/R		8-9-	Brown, fine, SAND well sorted, some brown, silt, moist.			
0	0.6'	10-10.7'	N/R	-----10.7 ft.----- Bottom of boring	10.7-	Brown, fine SAND, trace silt and gravel, wet. Water Table at 10 ft.			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
Study No. <u>05509Y</u> Date <u>10/25/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>H. Gregory</u> Well No. <u>S-8</u> Location _____ M.P. Elevation _____ Drilling Started <u>10:35</u> Ended <u>12:35</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Tripod</u>				Hole Diam. (in.) <u>2.0</u> Final Depth (ft.) <u>6.2</u> Casing Diam. (in.) _____ Casing Length (ft.) _____ Screen Setting (ft.) _____ Screen Slot & Type _____ Well Status <u>Soil Boring</u>	Date	DTW MP (2)	Elev. W.S.		
<u>PID (ppm)</u>	<u>SAMPLE</u>			<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
	No.	Rec.	Depth	Blows/6"	Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
0		0-2'	Grab Sample	SAND	0-2-	Brown, fine to medium SAND, trace gravel (Railroad bed fill). Water Table at 2 ft.			
51	1.0'	5-6.2'	N/R	-----6 ft.----- Bottom of boring (Refusal)	5-6.2-	Brown, medium SAND, stained grey to black, wet			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

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# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS</u> (1)			
Study No. <u>05509Y</u> Date <u>10/10/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>H. Gregory</u> Well No. <u>S-9</u> Location _____				Hole Diam. (in.) <u>8.0</u> Final Depth (ft.) <u>4.5</u> Casing Diam. (in.) _____ Casing Length (ft.) _____ Screen Setting (ft.) _____ Screen Slot & Type _____ Well Status <u>Soil Boring</u>		Date	DTW MP (2)	Elev. W.S.	
M.P. Elevation _____ Drilling Started <u>13:00</u> Ended <u>16:00</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>				<u>SAMPLER</u> Type <u>Split Spoon</u> Hammer <u>140</u> lb. Fall <u>30</u> in.		<u>DEVELOPMENT</u>			
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
135		0-2'	Grab Sample	SAND  -----4.5 ft.----- Bottom of boring (Refusal)	0-2-	Dark brown, fine to medium SAND, trace gravel.			
170		2-3'	Grab Sample		2-3-	Dark brown, fine to medium SAND, trace gravel.			
50	1'	3-4.5'	1,1,1,50/0		3-4.5-	Water Table at 2.5'. Brown to black, fine to medium SAND. Petroleum hydrocarbon staining.			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

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# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>		
Study No. <u>05509Y</u> Date <u>10/16/90</u>				Hole Diam. (in.) <u>8.0</u>	Final Depth (ft.) <u>11.0</u>	Date	DTW MP (2)	Elev. W.S.
Project <u>Sunnyside Yard</u>				Casing Diam. (in.) _____	Casing Length (ft.) _____			
Client <u>AMTRAK</u>				Screen Setting (ft.) _____	Screen Slot & Type _____			
Page <u>1</u> of <u>1</u>				Well Status <u>Soil Boring</u>	Well Status <u>Soil Boring</u>			
Logged By <u>V. Singh</u>				<u>SAMPLER</u>				
Well No. <u>S-10</u>				Type <u>Split Spoon</u>	Hammer <u>140</u> lb.			
Location _____				Fall <u>30</u> in.				
M.P. Elevation _____								
Drilling Started <u>13:55</u> Ended <u>14:20</u>								
Driller <u>Land, Air, Water Environmental Services</u>								
Type of Rig <u>Hollow stem auger</u>								
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth			Blows/6"		
0		0-2'	Grab Sample	SAND	0-2-	Brown, coarse SAND, some cobbles.		
0		2-4'	Grab Sample		2-4-	Brown, coarse SAND, moist.		
0	1.1'	4-6'	3,4,4,7		4-6-	Gray to brown, medium to coarse SAND. Water Table at 4.5 ft.		
12.4	1.1'	9-11'	8, 6, 9, 10	-----11 ft.----- Bottom of boring	9-11-	Brown, coarse SAND. Blackish gray, medium to coarse SAND. Wet, oil sheen.		
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing								

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# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>					
Study No. <u>05509Y</u> Date <u>11/11/90</u>				Hole Diam. (in.) <u>8.0</u>	Final Depth (ft.) <u>20.0</u>	Date	DTW MP (2)	Elev. W.S			
Project <u>Sunnyside Yard</u>				Casing Diam. (in.) _____	Casing Length (ft.) _____						
Client <u>AMTRAK</u>				Screen Setting (ft.) _____	Screen Slot & Type _____						
Page <u>1</u> of <u>1</u>				Well Status _____	Well Status _____						
Logged By <u>Brian Woods</u>				M.P. Elevation _____	<u>SAMPLER</u>				<u>DEVELOPMENT</u>		
Well No. <u>S-16</u>				Drilling Started <u>10:15</u> Ended <u>11:40</u>	Type <u>Split Spoon</u>						
Location _____				Driller <u>Land, Air, Water Environmental Services</u>	Hammer <u>140</u> lb.						
M.P. Elevation _____				Type of Rig <u>Hollow stem auger</u>	Fall <u>30</u> in.						
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>					
	No.	Rec.	Depth			Blows/6"					
0		0-2'	Grab sample	SAND	0-2-	Brown, fine to medium SAND, trace gravel.					
0		2-4'	Grab sample		2-4-	Brown, fine to medium SAND, trace gravel.					
0	1.1'	4-6'			4-6-	Brown, medium SAND, trace gravel and brick fragments.					
0	0.9'	6-8'			6-8-	Brown, medium to coarse SAND.					
0	1.0'	8-10'			8-10-	Brown, medium SAND, trace gravel.					
0	0.8'	10-12'			10-12-	Brown, fine to medium SAND.					
0	1.1'	12-14'			11-	Water table at 11 ft.					
0	1.1'	18-20'			12-14-	Brown, medium SAND.					
0	1.1'	18-20'			Bottom of boring -----20'-----	18-20-	Brown, coarse to medium SAND, wet.				
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing											

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS</u> (1)			
Study No. <u>05509Y</u> Date <u>10/19/90</u>				Hole Diam. (in.) <u>8.0</u>		Date	DTW MP (2)	Elev. W.S	
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>2.0</u>					
Client <u>AMTRAK</u>				Casing Diam. (in.) _____					
Page <u>1</u> of <u>1</u>				Casing Length (ft.) _____					
Logged By <u>Harry Gregory</u>				Screen Setting (ft.) _____					
Well No. <u>S-17</u>				Screen Slot & Type _____					
Location _____				Well Status <u>Soil Boring</u>					
M.P. Elevation _____				<u>SAMPLER</u>	<u>DEVELOPMENT</u>				
Drilling Started <u>10:45</u> Ended <u>11:30</u>				Type <u>Split Spoon</u>					
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.					
Type of Rig <u>Hand Driven</u>				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
1.5		0-2'	Grab Sample	SAND and SILT -----2'----- Bottom of boring	0-2- 2-	Dark brown, fine to medium, SAND and SILT, some organic matter. Wet at 2 ft.			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
Study No. <u>05509Y</u> Date <u>12/4/90</u>				Hole Diam. (in.) <u>8.0</u>	Final Depth (ft.) <u>19.0</u>	Date	DTW MP (2)	Elev. W.S.	
Project <u>Sunnyside Yard</u>				Casing Diam. (in.) _____					
Client <u>AMTRAK</u>				Casing Length (ft.) _____					
Page <u>1</u> of <u>1</u>				Screen Setting (ft.) _____					
Logged By <u>Brian Woods</u>				Screen Slot & Type _____					
Well No. <u>S-19</u>				Well Status <u>Soil Boring</u>					
Location _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
M.P. Elevation _____				Type <u>Split Spoon</u>					
Drilling Started <u>13:40</u> Ended <u>16:30</u>				Hammer <u>140</u> lb.					
Driller <u>Land, Air, Water Environmental Services</u>				Fall <u>30</u> in.					
Type of Rig <u>Hollow stem auger</u>									
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab Sample	SAND & GRAVEL	0-2-	Brown medium to fine, SAND, and coarse gravel (Railroad Bed Fill).			
0		2-4	Grab Sample	-----2 ft-----	2-4	Light brown, fine to medium, SAND, some gravel.			
0	1.4'	3-5'	N/R		3-5	Brown, medium to fine, SAND, trace gravel			
0	0.3'	5-7'	N/R		5-7	Brown, medium to fine, SAND, trace gravel			
0	0.6'	7-8.25'	N/R	SAND	7 - 8.25	Brown to light brown, medium, SAND			
0	1.4'	9-11'	N/R		9-11	Brown to light brown, medium, SAND, trace gravel.			
0	0.8'	11-13'	N/R		11-13	Brown medium to fine SAND, wet. Water table at 12 ft.			
0	0.4'	17-19'	N/R		17-19	Brown, medium, to coarse SAND. Wet			
				-----19 ft----- Bottom of boring					
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

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GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
Study No. <u>05509Y</u> Date <u>11/11/90</u>				Hole Diam. (in.) <u>8.0</u>		Date	DTW MP (2)	Elev. W.S.	
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>17.0</u>					
Client <u>AMTRAK</u>				Casing Diam. (in.) _____					
Page <u>1</u> of <u>1</u>				Casing Length (ft.) _____					
Logged By <u>B. Woods, V. Singh</u>				Screen Setting (ft.) _____					
Well No. <u>S-20</u>				Screen Slot & Type _____					
Location _____				Well Status _____					
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
Drilling Started <u>14:40</u> Ended <u>16:10</u>				Type <u>Split Spoon</u>					
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb. Fall <u>30</u> in.					
Type of Rig <u>Hollow stem auger</u>									
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab sample	GRAVEL and SAND	0-2-	Dark brown to black railroad fill with GRAVEL and coarse SAND, stained black. Brown, fine to coarse, SAND and GRAVEL AT 1 FT.			
0		2-4'	Grab sample	-----4 ft-----	2-4-	Brown, fine to coarse, SAND, some gravel.			
0	1.0'	4-6'	N/R		4-6-	Brown, fine to medium, SAND, little coarse gravel.			
0	2'	6-8'	N/R		6-8-	Fractured stones, almost no recovery.			
0	0'	8-8.11"	N/R		8-	No recovery; spoon refusal at 8.9.			
0	1.0'	10-12'	N/R		10-12-	Gray brown, fine to coarse, SAND, some unsorted gravel; wet. Water table at 10'ft.			
0	1.2'	15-17'	N/R	-----17 ft----- Bottom of boring	15-17-	Gray brown, fine to coarse, SAND, some unsorted gravel; wet.			
<p><b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing</p>									

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Study No. <u>05509Y</u> Date <u>10/05/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>B. Woods</u> Well No. <u>S-21</u> Location _____ M.P. Elevation _____ Drilling Started <u>15:00</u> Ended <u>15:50</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
				Hole Diam. (in.) <u>8.0</u>	Final Depth (ft.) <u>16.0</u>	Casing Diam. (in.) _____	Date _____	DTW MP (2) _____	Elev. W.S. _____
				Casing Length (ft.) _____	Screen Setting (ft.) _____	Screen Slot & Type _____			
				Well Status <u>Soil Boring</u>					
				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
				Type <u>Split Spoon</u>	Hammer <u>140</u> lb.	Fall <u>30</u> in.			
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab sample	SAND	0-2-	Dark brown, medium SAND, medium gravel and dark fragments.			
0		2-4'	Grab sample		2-4-	Light brown, medium SAND with trace medium gravel and light brown sandy clay.			
0	1.3'	4-6'	14, 11, 16, 15		4-6-	Light brown, medium SAND, little gravel.			
0	1.0'	6-8'	14, 11, 9, 8		6-8-	Brown to light brown, medium to coarse SAND.			
0	1.3'	8-10'	15, 11, 18, 24		8-10-	Brown to light brown, medium to coarse SAND; wet. Water table at 9'.			
0	2.0'	14-16'	15, 9, 8, 14		14-16-	Brown to light brown, medium to coarse SAND, with reddish brown clay, little gravel.			
					-----16 ft----- Bottom of boring				
REMARKS    (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS</u> (1)		
Study No. <u>05509Y</u> Date <u>10/17/90</u>				Hole Diam. (in.) <u>2.0</u>		Date	DTW MP (2)	Elev. W.S.
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>8.0</u>				
Client <u>AMTRAK</u>				Casing Diam. (in.) _____				
Page <u>1</u> of <u>1</u>				Casing Length (ft.) _____				
Logged By <u>B. Woods</u>				Screen Setting (ft.) _____				
Well No. <u>S-22</u>				Screen Slot & Type _____				
Location _____				Well Status _____				
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>		
Drilling Started <u>15:15</u> Ended <u>15:00</u>				Type <u>Split Spoon</u>				
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.				
Type of Rig <u>Tripod</u>				Fall <u>30</u> in.				
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth			Blows/6"		
0		0-2'	Grab sample	SAND  -----8 ft----- Bottom of boring	0-2-	Black to gray, medium SAND with slag fill.		
0		2-4'	Grab sample		2-4-	Brown to light brown medium SAND; little medium gravel.		
0	1.1	4-6'	N/R		4-6-	Black to brown medium SAND to fine SAND; little gravel; black slag at 0.9'.		
0	0.5	6-8'	N/R		6-8-	Black to brown medium to fine SAND; little gravel.		
REMARKS (1) in feet relative to a common datum (2) from top of PVC casing								

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GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>10/05/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>B. Woods</u> Well No. <u>S-23</u> Location _____ M.P. Elevation _____ Drilling Started <u>11:30</u> Ended <u>13:15</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>				<u>WELL DATA</u>		<u>G-W READINGS</u> (1)			
				Hole Diam. (in.) <u>6.0</u> Final Depth (ft.) <u>16.0</u> Casing Diam. (in.) _____ Casing Length (ft.) _____ Screen Setting (ft.) _____ Screen Slot & Type _____ Well Status _____		Date	DTW MP (2)	Elev. W.S.	
				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
				Type <u>Split Spoon</u>	Hammer <u>140</u> lb.	Fall <u>30</u> in.			
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab sample		0-2-	Dark brown and black medium SAND some coarse gravel (rail road fill).			
0		2-4'	Grab sample	SAND	2-4-	Dark brown and black medium SAND some coarse gravel (rail road fill).			
0	1.1	4-6'	25, 56, 42, 56		4-6-	Top 0-0.2': Light brown medium coarse SAND, little gravel. Bottom 0.2-1.1': Brown medium coarse SAND, some gravel.			
0	1.0	6-8'	30, 25, 32, 36		6-8-	Top 0-0.1': Dry, whitish brown, medium SAND Bottom 0.1-1.0': Brown, medium SAND			
0	0.8	8-10'	16, 33, 37, 43		8-10-	Top 0-0.1': White to brown, medium SAND Bottom 0.1-0.8': Brown, coarse to medium SAND, some gravel. Water table at 10 ft.			
0	0.6	14-16'	10, 11, 20, 22		14-16-	Brown, fine to medium SAND; Wet.			
				-----16 ft----- Bottom of boring					
REMARKS (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS</u> (1)		
Study No. <u>05509Y</u> Date <u>10/08/90</u>				Hole Diam. (in.) <u>6.0</u>	Final Depth (ft.) <u>16.0</u>	Date	DTW MP (2)	Elev. W.S.
Project <u>Sunnyside Yard</u>				Casing Diam. (in.)	Casing Length (ft.)			
Client <u>AMTRAK</u>				Screen Setting (ft.)	Screen Slot & Type			
Page <u>1</u> of <u>1</u>				Well Status				
Logged By <u>V. Singh</u>								
Well No. <u>S-24</u>								
Location _____								
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>		
Drilling Started <u>12:00</u> Ended <u>16:35</u>				Type <u>Split Spoon</u>				
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.				
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.				
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth			Blows/6"		
0		0-2'	Grab sample	SAND	0-2-	Top 0-0.6: Light brown, medium SAND Bottom 0.6-2': Black stained, medium SAND, some cobbles.		
0		2-3'	Grab sample		2-3-	Light brown, fine to medium SAND.		
0	0.2	3-5'	16, 22, 15, 19		3-5-	Fractured gravel.		
0	0.8	5-7'	42, 35, 37, 47		5-7-	Brown medium SAND, some fractured gravel.		
0	0	7-8.5'	37, 48, 50, 50		7-8.5-	N/R; no recovery; tip blocked with fractured cobble.		
0	0.7	9-11'	11, 19, 17, 20		9-11-	Brown, medium to coarse SAND; Wet at tip.		
						Water table at 11'		
0	1.4	14-16'	19, 22, 22, 14		14-16-	Brown, fine to coarse SAND.		
				-----16 ft----- Bottom of boring				
REMARKS				(1) in feet relative to a common datum (2) from top of PVC casing				

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS</u> (1)			
Study No. <u>05509Y</u> Date <u>12/05/90</u>				Hole Diam. (in.) <u>6.0</u>		Date	DTW MP (2)	Elev. W.S.	
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>21.0</u>					
Client <u>AMTRAK</u>				Casing Diam. (in.) _____					
Page <u>1</u> of <u>1</u>				Casing Length (ft.) _____					
Logged By <u>H. Gregory, V. Singh</u>				Screen Setting (ft.) _____					
Well No. <u>S-25</u>				Screen Slot & Type _____					
Location _____				Well Status _____					
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
Drilling Started <u>09:40</u> Ended <u>11:20</u>				Type <u>Split Spoon</u>					
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.	Fall <u>30</u> in.				
Type of Rig <u>Hollow stem auger</u>									
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
17		0-2'	Grab sample	SAND	0-2-	Dark brown, fine to coarse SAND, trace silt and gravel.			
30		2-4'	Grab sample		2-4-	Brown, medium to coarse SAND, trace gravel.			
12.6	1.0	4-6'	12, 14, 14, 16		4-6-	Brown, fine to medium SAND.			
13.8	1.3	6-8'	15, 24, 55, 55		6-8-	Brown, fine SAND.			
20	1.3	8-10'	10, 24, 21, 42		8-10-	Brown, fine SAND.			
34	1.4	10-12'	13, 14, 52, 30		10-12-	Brown, fine SAND.			
16.6	1.1	12-14'	14, 15, 13, 25		12-14-	Brown, fine SAND, slightly wet at tip.			
17.6	1.1	14-16'	N/R		14-16-	Brown, fine to medium SAND, wet; Water table at 14 ft.			
14.2	1.3	19-21'	10, 29, 20, 32		Bottom of boring 21 ft	19-21-	Brown, fine SAND		
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS</u> (1)		
Study No. <u>05509Y</u> Date <u>11/17/90</u>				Hole Diam. (in.) <u>6.0</u>		Date	DTW MP (2)	Elev. W.S.
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>15.0</u>				
Client <u>AMTRAK</u>				Casing Diam. (in.) _____				
Page <u>1</u> of <u>1</u>				Casing Length (ft.) _____				
Logged By <u>B. Woods</u>				Screen Setting (ft.) _____				
Well No. <u>S-26</u>				Screen Slot & Type _____				
Location _____				Well Status _____				
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>		
Drilling Started <u>13:00</u> Ended <u>?</u>				Type <u>Split Spoon</u>				
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.				
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.				
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth			Blows/6"		
0		0-2'	Grab sample	SAND	0-2-	Dark to light brown, medium to coarse SAND, some gravel		
0		2-4'	Grab sample		2-4-	Light brown, medium to coarse SAND, trace gravel.		
0	0.8'	4-6'	N/R		4-6-	Brown to tan, medium to coarse, SAND, trace gravel.		
0		6-8'	N/R		6-8-	Light brown, medium to fine, SAND; trace gravel; Wet. Water table at 7.5'		
0		13-15'	N/R		13-15-	Rusty brown, SAND; trace gravel; Wet.		
					-----15 ft----- Bottom of boring			

REMARKS (1) in feet relative to a common datum  
(2) from top of PVC casing

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# GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>10/02/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>V. Singh</u> Well No. <u>S-27</u> Location _____ M.P. Elevation _____ Drilling Started <u>15:00</u> Ended <u>16:00</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>		<b>WELL DATA</b> Hole Diam. (in.) <u>6.0</u> Final Depth (ft.) <u>11.0</u> Casing Diam. (in.) _____ Casing Length (ft.) _____ Screen Setting (ft.) _____ Screen Slot & Type _____ Well Status _____	<b>G-W READINGS (1)</b> Date _____ DTW MP (2) _____ Elev. W.S. _____																						
<b>PID (ppm)</b>	<b>SAMPLE</b> <table border="1"> <thead> <tr> <th>No.</th> <th>Rec.</th> <th>Depth</th> <th>Blows/6"</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>1.15'</td> <td>0.5-2.5'</td> <td>5, 7, 11, 12</td> </tr> <tr> <td>0</td> <td>1.6'</td> <td>2.5-4.5'</td> <td>10, 15, 24 38</td> </tr> <tr> <td>0</td> <td>2.0'</td> <td>4.5-6.5'</td> <td>20, 27, 38, 34</td> </tr> <tr> <td>0</td> <td>1.2'</td> <td>9-11'</td> <td>5, 7, 9, 13</td> </tr> </tbody> </table>			No.	Rec.	Depth	Blows/6"	0	1.15'	0.5-2.5'	5, 7, 11, 12	0	1.6'	2.5-4.5'	10, 15, 24 38	0	2.0'	4.5-6.5'	20, 27, 38, 34	0	1.2'	9-11'	5, 7, 9, 13	<b>SAMPLER</b> Type <u>Split Spoon</u> Hammer <u>140</u> lb. Fall <u>30</u> in.	<b>DEVELOPMENT</b>
	No.	Rec.	Depth	Blows/6"																					
0	1.15'	0.5-2.5'	5, 7, 11, 12																						
0	1.6'	2.5-4.5'	10, 15, 24 38																						
0	2.0'	4.5-6.5'	20, 27, 38, 34																						
0	1.2'	9-11'	5, 7, 9, 13																						
	Strata Change & Gen. Desc.	Depth (ft)	<b>SAMPLE DESCRIPTION</b>																						
0	1.15'	0.5-2.5'	5, 7, 11, 12	SAND	0.5- 2.5- 4.5- 6.5-	Brown, coarse SAND; trace fine gravel.  Brown, coarse SAND; trace fine gravel.  Brown, medium to coarse SAND; trace gravel; Wet at tip.  Water table at 7 ft.																			
0	1.6'	2.5-4.5'	10, 15, 24 38	SAND	2.5- 4.5-	Brown, coarse SAND; trace fine gravel.																			
0	2.0'	4.5-6.5'	20, 27, 38, 34	SAND	4.5- 6.5-	Brown, medium to coarse SAND; Wet at tip.																			
0	1.2'	9-11'	5, 7, 9, 13	SAND	9-11-	Brown, medium to coarse SAND; Wet.																			
					-----11 ft----- Bottom of boring																				
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing																									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>		
Study No. <u>05509Y</u> Date <u>10/09/90</u>				Hole Diam. (in.) <u>6.0</u>		Date	DTW MP (2)	Elev. W.S.
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>16.0</u>				
Client <u>AMTRAK</u>				Casing Diam. (in.) _____				
Page <u>1</u> of <u>1</u>				Casing Length (ft.) _____				
Logged By <u>B. Woods</u>				Screen Setting (ft.) _____				
Well No. <u>S-28</u>				Screen Slot & Type _____				
Location _____				Well Status _____				
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>		
Drilling Started <u>13:50</u> Ended <u>15:30</u>				Type <u>Split Spoon</u>				
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.				
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.				
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth			Blows/6"		
0		0-2'	Grab sample	SAND	0-2-	Dark brown to tan, fine to medium SAND, little gravel.		
0		2-4'	Grab sample		2-4-	Brown to tan, fine to medium SAND; trace gravel.		
0	0.8'	4-6'	9, 16, 40, 50/3"		4-6-	Top 0-0.4': Brown to tan medium SAND Middle 0.4-0.6': Dark brown, medium to coarse SAND Bottom 0.6-0.8': Brown to light brown, medium to coarse SAND, little gravel and fractured cobble.		
0	1.1'	6-8'	16, 46, 32, 36		6-8-	Top 0.2': Brown to tan, medium SAND 0.2-0.4': Brown medium SAND; little angular gravel. 0.4-0.9': Brown to tan, medium to coarse SAND; trace fine gravel.		
0	0.3'	8-10'	10, 12, 32, 27		8-10-	0.9-1.1': Fractured cobble. Top 0.1': Fractured cobble 0.1-0.2': Brown, medium SAND 0.2-0.3': Red, fractured cobble.		
0	0.1'	10-12'	9, 21, 37, 11		10-12-	Fractured cobble blocking tip at spoon; spoon wet; insufficient recovery for sample. Water table at 10.5 ft.		
0	1.2'	14-16'	11, 22, 27, 17		14-16-	Top 1.1': Brown, fine to medium SAND Bottom 0.1': Gray to brown, fine to coarse SAND; poorly sorted; Wet.		
					-----16 ft----- Bottom of boring			
<p><b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing</p>								

# GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>10/03/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>V. Singh</u> Well No. <u>S-29</u> Location _____ M.P. Elevation _____ Drilling Started <u>08:40</u> Ended <u>09:15</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
				Hole Diam. (in.) <u>6.0</u> Final Depth (ft.) <u>11.0</u> Casing Diam. (in.) _____ Casing Length (ft.) _____ Screen Setting (ft.) _____ Screen Slot & Type _____ Well Status _____			Date	DTW MP (2)	Elev. W.S.
				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
				Type <u>Split Spoon</u>					
				Hammer <u>140</u> lb.					
				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		1.5	0-2'	3, 4, 6, 14	SAND	0-2-	Brown to black, medium to coarse SAND and gravel.		
0		1.4	2.4'	18, 14, 13, 20		2-4-	Brown, medium to coarse SAND; trace gravel.		
0		1.1	4-6'	13, 27, 33, 30		4-6-	Brown, medium to coarse SAND; Moist at tip.  Water table at 6'		
0		1.0	9-11'	8, 10, 15, 17		9-11-	Brown, medium to coarse SAND; Wet.		
<u>REMARKS</u> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
Study No. <u>05509Y</u> Date <u>10/16/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>V. Singh</u> Well No. <u>S-30</u> Location _____				Hole Diam. (in.) <u>6.0</u> Final Depth (ft.) <u>11.0</u> Casing Diam. (in.) _____ Casing Length (ft.) _____ Screen Setting (ft.) _____ Screen Slot & Type _____ Well Status _____	Date _____	DTW MP (2) _____	Elev. W.S. _____		
M.P. Elevation _____ Drilling Started <u>10:00</u> Ended <u>12:40</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>				<u>SAMPLER</u> Type <u>Split Spoon</u> Hammer <u>140</u> lb. Fall <u>30</u> in.	<u>DEVELOPMENT</u>				
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab sample	<u>ASPHALT</u>	0-2-	Top 0-0.6': Concrete and asphalt Bottom 0.6-2.0': Brown, medium to coarse SAND.			
0		2-4'	Grab sample	SAND	2-4-	Top to 1.2': Gray, fine to coarse SAND			
0		4-6'	5, 3, 4, 2		4-6-	Gray, coarse SAND; Wet at tip.			
0	0.7	6-8'	1, 1, 3, 3		6-8-	Water table at 5.5 ft. Gray to brown, medium to coarse SAND; Wet.			
0	1.2	9-11'	6, 6, 9, 8	-----11 ft----- Bottom of boring	9-11-	Gray to brown, fine to coarse SAND, Wet.			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>		
Study No. <u>05509Y</u> Date <u>10/17/90</u>				Hole Diam. (in.) <u>12.0</u>		Date	DTW MP (2)	Elev. W.S.
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>7.0</u>				
Client <u>AMTRAK</u>				Casing Diam. (in.) _____				
Page <u>1</u> of <u>1</u>				Casing Length (ft.) _____				
Logged By <u>V. Singh</u>				Screen Setting (ft.) _____				
Well No. <u>S-31</u>				Screen Slot & Type _____				
Location _____				Well Status _____				
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>		
Drilling Started <u>15:00</u> Ended <u>16:00</u>				Type <u>Split Spoon</u>				
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.				
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.				
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth			Blows/6"		
0		0-2'	Grab sample		0-2-	Black stained, medium to coarse SAND; trace gravel.		
0		2-3'	Grab sample		2-3-	Brown, medium to coarse SAND.		
0	0.4	3-5'	N/R		3-5-	Black stained to brown, medium to coarse SAND.		
0	0.4	5-7'	N/R	SAND	5-7-	Gray to brown, medium SAND; trace gravel, Wet at tip (see NOTE).		
				-----7 FT----- Bottom of boring (hole collapsed)		Water table at 7 ft.		

REMARKS (1) in feet relative to a common datum  
(2) from top of PVC casing

NOTE: 3rd attempt: 2 spoons with no recovery

# GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>12/04/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>V. Woods, V. Singh, J. Duminuco</u> Well No. <u>S-32</u> Location _____ M.P. Elevation _____ Drilling Started <u>11:50</u> Ended <u>12:50</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>		<u>WELL DATA</u>		<u>G-W READINGS (1)</u>					
		Hole Diam. (in.) <u>6.0</u>			Date	DTW MP (2)	Elev. W.S		
		Final Depth (ft.) <u>12.5</u>							
		Casing Diam. (in.) _____							
		Casing Length (ft.) _____							
		Screen Setting (ft.) _____							
		Screen Slot & Type _____							
		Well Status _____							
		<u>SAMPLER</u> Type <u>Split Spoon</u> Hammer <u>140</u> lb. Fall <u>30</u> in.		<u>DEVELOPMENT</u>					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab sample	SAND  -----10 ft----- Meadow Mat/ Silt -----11 ft-----  CLAY -----12 ft----- Bottom of boring	0-2-	Brown to light brown, medium to fine sandy loam, trace gravel (railroad bed fill).			
0		2-4'	Grab sample		2-4-	Dark to light brown, fine to medium SAND; trace gravel.			
0	0.7	4-6'	N/R		4-6-	Light brown, medium to fine SAND.			
						Water table at 6 ft.			
0	1.5	10.5-12.5	N/R		10-12-	0-0.2': Light brown, medium SAND; Wet. 0.2-0.6': Meadow Mat 0.6-1.1': brown silt with vegetation. 1.1-1.5': Gray soft clay, some vegetation. H2S odor. Water table at 12.5'			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
Study No. <u>05509Y</u> Date <u>12/13/90</u>				Hole Diam. (in.) <u>6.0</u>		Date	DTW MP (2)	Elev. W.S	
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>12.0</u>					
Client <u>AMTRAK</u>				Casing Diam. (in.)					
Page <u>1</u> of <u>1</u>				Casing Length (ft.)					
Logged By <u>B. Woods</u>				Screen Setting (ft.)					
Well No. <u>S-33</u>				Screen Slot & Type					
Location _____				Well Status _____					
M.P. Elevation _____				<u>SAMPLER</u>	<u>DEVELOPMENT</u>				
Drilling Started <u>10:50</u> Ended <u>12:10</u>				Type <u>Split Spoon</u>					
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.					
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab sample	SAND	0-2-	Brown to light brown, medium to fine SAND; trace gravel.			
0		2-4'	Grab sample		2-4-	Brown to light brown, medium to fine SAND; trace gravel.			
0	1.75	4-6'	N/R		4-6-	Brown, medium to fine SAND; trace gravel.			
0	0.1	6-8'	N/R		6-8-	Brown, fine to medium SAND; Wet. Water table at 6 ft.			
0	0.2	8-10'	N/R		8-10-	Brown to gray SAND; wet.			
0	1.8	10-12'	N/R		10-12-	Gray, medium SAND; trace gravel, little clayey silt, Wet.			
				-----12 ft----- Bottom of boring					
REMARKS (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
Study No. <u>05509Y</u> Date <u>11/17/90</u>				Hole Diam. (in.) <u>8.0</u>		Date	DTW MP (2)	Elev. W.S.	
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>11.0</u>					
Client <u>AMTRAK</u>				Casing Diam. (in.)					
Page <u>1</u> of <u>1</u>				Casing Length (ft.)					
Logged By <u>H. Gregory</u>				Screen Setting (ft.)					
Well No. <u>S-34</u>				Screen Slot & Type					
Location _____				Well Status					
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
Drilling Started <u>12:05</u> Ended <u>12:50</u>				Type <u>Split Spoon</u>					
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.					
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab sample		0-2-	Top 1.0': Dark brown, fine SAND and silt with layers of coal, cinders and gravel (railroad bed fill).			
0		2-4'	Grab sample	SAND	2-4-	Brown to orange brown, fine SAND, little silt; trace gravel; Wet at bottom. Water table at 3.5'			
0		9-11'	6, 5, 8, 12		9-11-	Brown fine SAND and silt, little clay, tight.			
				-----11 ft----- Bottom of boring					
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

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GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS</u> (1)			
Study No. <u>05509Y</u> Date <u>11/30/90</u>				Hole Diam. (in.) <u>8.0</u>		Date	DTW MP (2)	Elev. W.S.	
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>12.0</u>					
Client <u>AMTRAK</u>				Casing Diam. (in.)					
Page <u>1</u> of <u>1</u>				Casing Length (ft.)					
Logged By <u>H. Gregory, V. Singh</u>				Screen Setting (ft.)					
Well No. <u>S-35</u>				Screen Slot & Type					
Location _____				Well Status _____					
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
Drilling Started <u>14:50</u> Ended <u>15:00</u>				Type <u>Split Spoon</u>					
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.					
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab sample		0-2-	Dark brown, fine to coarse SAND and gravel with interbedded cinders.			
0		2-4'	Grab sample	SAND	2-4-	Brown, medium to coarse SAND, trace gravel.			
8.0	0.5	4-6'			4-6-	Brown, fine to medium SAND			
20	0.6	6-8'	20, 12, 10, 9		6-8-	Brown, fine to medium SAND; Wet. Water table at 6'			
28	1.8	8-10'	10, 12, 20, 19		8-10-	Brown, fine to medium SAND; gray brown staining at bottom of spoon.			
20	1.6	10-12'	N/R	----- 11.5 ft CLAY ----- 12 ft Bottom of boring	10-12-	Top 1.3': Gray fine to medium SAND bottom 1.3-1.6': Gray to black silty CLAY.			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS</u> (1)			
Study No. <u>05509Y</u> Date <u>12/01/90</u>				Hole Diam. (in.) <u>8.0</u>		Date	DTW MP (2)	Elev. W.S.	
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>16.0</u>					
Client <u>AMTRAK</u>				Casing Diam. (in.)					
Page <u>1</u> of <u>1</u>				Casing Length (ft.)					
Logged By <u>H. Gregory/B. Woods</u>				Screen Setting (ft.)					
Well No. <u>S-36</u>				Screen Slot & Type					
Location _____				Well Status					
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
Drilling Started <u>09:15</u> Ended <u>10:45</u>				Type <u>Split Spoon</u>					
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.					
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
4		0-2'	Grab Sample		0-2-	Dark brown, fine to medium SAND & cinders (Railroad bed fill).			
18		2-4'	Grab Sample	SAND	2-4-	Brown, fine to medium SAND, trace gravel.			
6	1.5'	4-6'	N/R		4-6-	Light brown, medium to fine SAND, trace fine gravel, some pebbles.			
2.6	0.6'	6-8'	7,31,20,43		6-8-	Light brown, medium SAND.			
	0	8-10'	43,63,67,74		8-10-	Brown, medium to fine SAND, wet. Water Table at 9 ft.			
4.0	2.0'	14-16'	3,8,12,32		14-16-	Brown, coarse to medium SAND, wet.			
				-----16 ft.----- Bottom of boring					
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

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GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS</u> (1)		
Study No. <u>05509Y</u> Date <u>12/01/90</u>				Hole Diam. (in.) <u>8.0</u>		Date	DTW MP (2)	Elev. W.S.
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>16.0</u>				
Client <u>AMTRAK</u>				Casing Diam. (in.) _____				
Page <u>1</u> of <u>1</u>				Casing Length (ft.) _____				
Logged By <u>H. Gregory</u>				Screen Setting (ft.) _____				
Well No. <u>S-37</u>				Screen Slot & Type _____				
Location _____				Well Status _____				
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>		
Drilling Started <u>11:30</u> Ended <u>12:40</u>				Type <u>Split Spoon</u>				
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.				
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.				
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth			Blows/6"		
12.2		0-2'	Grab Sample		0-2-	Dark brown, fine to coarse SAND, trace cinders, (Railroad fill).		
12		2-4'	Grab Sample		2-4-	Brown, fine to coarse SAND, trace gravel.		
12.6	1.2'	4-6'	N/R		4-6-	Brown, fine to coarse SAND, trace silt and gravel.		
5.5	1.1'	6-8'	15,27,53,61		6-8-	Brown fine to medium SAND, trace gravel.		
12.9	1.2'	8-10'	20,31,31,35		8-10-	Brown, fine to medium SAND, wet at bottom of spoon. Water table at 9.5 ft.		
12.3	1.0'	14-16'	6,8,17,21		14-16-	Brown, fine to coarse SAND, trace fine gravel. Wet.		
				-----16 ft.----- Bottom of boring				
REMARKS			(1) in feet relative to a common datum (2) from top of PVC casing					

# GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>11/29/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>V. Singh</u> Well No. <u>S-38</u> Location _____ M.P. Elevation _____ Drilling Started <u>14:50</u> Ended <u>16:10</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
				Hole Diam. (in.) <u>8.0</u> Final Depth (ft.) <u>20.0</u> Casing Diam. (in.) _____ Casing Length (ft.) _____ Screen Setting (ft.) _____ Screen Slot & Type _____ Well Status _____	Date	DTW MP (2)	Elev. W.S.		
				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
				Type <u>Split Spoon</u>					
				Hammer <u>140</u> lb.					
				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab Sample		0-2-	Brown, fine SAND and silt, trace gravel and railroad bed fill.			
6		2-4'	Grab Sample		2-4-	Brown, fine SAND, trace silt.			
0	5.0'	4-6'	2,4,5,4		4-6-	Brown, fine SAND, trace silt.			
12	0.8'	6-8'	62,3,5,11		6-8-	Brown, fine SAND, trace silt.			
14	0.8'	8-10'	N/R	SAND	8-10-	Brown, fine SAND.			
4.4	1.0'	10-12'	5,7,7,8		10-12-	Brown, fine to medium SAND. Brown, fine SAND, trace silt.			
12	1.5'	12-14'	7,6,7,9		12-14-	Gray brown, fine to medium SAND. Wet(Bottom half) Water Table at 13 ft.			
180	0.3'	18-20'	9,17,15,21	Bottom of boring -----20 ft-----	18-20-	Grayish brown, fine to medium SAND.			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

## GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>		
Study No. <u>05509Y</u> Date <u>11/29/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>V. Singh</u> Well No. <u>S-39</u> Location _____ M.P. Elevation _____ Drilling Started <u>13:15</u> Ended <u>14:35</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>				Hole Diam. (in.) <u>8.0</u> Final Depth (ft.) <u>17.0</u> Casing Diam. (in.) _____ Casing Length (ft.) _____ Screen Setting (ft.) _____ Screen Slot & Type _____ Well Status _____		Date	DTW MP (2)	Elev. W.S.
				<u>SAMPLER</u>		<u>DEVELOPMENT</u>		
				Type <u>Split Spoon</u>				
				Hammer <u>140</u> lb.				
				Fall <u>30</u> in.				
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth			Blows/6"		
0		0-2'	Grab Sample		0-2-	Dark brown, medium to coarse SAND, trace gravel.		
0		2-4'	Grab Sample		2-4-	Brown, medium to coarse SAND, trace gravel. Thin lens of silty clay.		
0	1.0'	4-6'	N/R		4-6-	Gray brown, medium to coarse SAND with gravel.		
0	1.2'	6-8'	27,43,39,46	SAND	6-8-	Interbedded, gray and red-brown fine SAND, trace gravel, trace silt.		
0	1.2'	8-10'	10,14,14,14		8-10-	Red-brown, fine to coarse SAND. Wet at tip.		
0	1.0'	10-12'	2,2,4,9		10-12-	Red-brown, fine to medium SAND. Wet. Water Table at 10'.		
0	2.0'	15-17	3,5,9,15		15-17-	Red-brown, fine SAND.		
				-----17 ft.----- Bottom of boring				
REMARKS				(1) in feet relative to a common datum (2) from top of PVC casing				

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GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>11/05/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>H. Gregory</u> Well No. <u>S-41</u> Location _____ M.P. Elevation _____ Drilling Started <u>11:00</u> Ended <u>11:30</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hand Driven</u>				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
				Hole Diam. (in.) <u>2.0</u> Final Depth (ft.) <u>4.0</u> Casing Diam. (in.) _____ Casing Length (ft.) _____ Screen Setting (ft.) _____ Screen Slot & Type _____ Well Status _____	Date	DTW MP (2)	Elev. W.S.		
				<u>SAMPLER</u>	<u>DEVELOPMENT</u>				
				Type <u>Split Spoon</u>					
				Hammer <u>140</u> lb. Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
78		0-2'	Grab Sample		0-2-	Brown, fine to medium SAND, trace cinders and gravel.			
240		2-4'	Grab Sample	SAND -----4 ft----- Bottom of boring	2-4-	Top 1.5': Brown, fine to medium SAND, trace gravel. Bottom 0.5': Brown fine to medium SAND, trace gravel-stained grey to brown.			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>11/05/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>B. Woods</u> Well No. <u>S-42</u> Location _____ M.P. Elevation _____ Drilling Started <u>13:10</u> Ended <u>14:30</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
				Hole Diam. (in.) <u>8.0</u> Final Depth (ft.) <u>14.0</u> Casing Diam. (in.) _____ Casing Length (ft.) _____ Screen Setting (ft.) _____ Screen Slot & Type _____ Well Status _____	Date	DTW MP (2)	Elev. W.S.		
				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
				Type <u>Split Spoon</u>					
				Hammer <u>140</u> lb.					
				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab Sample		0-2-	Brown to black, medium to fine SAND and medium gravel.			
0		2-4'	Grab Sample		2-4-	Brown to light brown, medium SAND, little gravel.			
0	0.4'	4-6'	3,3,4,10		4-6-	Brown, medium SAND, trace gravel.			
0	0.8'	6-8'	4,4,7,9	SAND	6-8-	Brown, medium SAND, wet. Water Table at 6.5 ft.			
0	1.3'	12-14'	12,14,16,17		12-14-	Gray, medium SAND, trace fine and coarse gravel. Gray to brown, clayey silt with shredded wood chips.			
				-----14 ft.----- Bottom of boring					
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
Study No. <u>05509Y</u> Date <u>11/05/90</u>				Hole Diam. (in.) <u>10.0</u>	Final Depth (ft.) <u>3.0</u>	Date	DTW MP (2)	Elev. W.S.	
Project <u>Sunnyside Yard</u>				Casing Diam. (in.) _____	Casing Length (ft.) _____				
Client <u>AMTRAK</u>				Screen Setting (ft.) _____	Screen Slot & Type _____				
Page <u>1</u> of <u>1</u>				Well Status _____					
Logged By <u>H. Gregory</u>				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
Well No. <u>S-43</u>				Type <u>Split Spoon</u>	Hammer <u>140</u> lb.				
Location _____				Fall <u>30</u> in.					
M.P. Elevation _____									
Drilling Started <u>10:15</u> Ended <u>10:50</u>									
Driller <u>Land, Air, Water Environmental Services</u>									
Type of Rig <u>Hand Driven</u>									
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab Sample	SAND	0-2-	Brown, fine to medium SAND, trace gravel. Top 1.1' stained dark brown to black-portion of Railroad tie.			
0		2-3'	Grab Sample	-----3 ft.----- Bottom of boring	2-3-	Brown, fine to medium SAND, trace gravel.			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS</u> <sup>(1)</sup>			
Study No. <u>05509Y</u> Date <u>11/05/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>H. Gregory</u> Well No. <u>S-44</u> Location _____ M.P. Elevation _____ Drilling Started <u>11:35</u> Ended <u>11:55</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hand Driven</u>				Hole Diam. (in.) <u>2.0</u> Final Depth (ft.) <u>8.0</u> Casing Diam. (in.) _____ Casing Length (ft.) _____ Screen Setting (ft.) _____ Screen Slot & Type _____ Well Status _____	Date _____	DTW MP <sup>(2)</sup> _____	Elev. W.S. _____		
				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
				Type <u>Split Spoon</u>	Hammer <u>140</u> lb.	Fall <u>30</u> in.			
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab Sample		0-2-	Dark brown, fine to medium SAND, trace cinders and gravel. (Railroad bed fill).			
0		2-4'	Grab Sample	SAND	2-4-	Brown, fine to medium SAND, little gravel trace cinders stained gray to black.			
0		4-6'	N/R		4-6-	Brown, fine to medium SAND, trace gravel; stained gray.			
0		6-8'	N/R	-----8 ft. Bottom of boring	6-8-	Gray, medium to fine SAND, little gravel, slight hydrocarbon odor, wet. Water Table at 7 ft.			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
				Hole Diam. (in.)	2.0	Date	DTW MP (2)	Elev. W.S.	
Study No. <u>05509Y</u> Date <u>10/27/90</u>				Final Depth (ft.)	<u>13.0</u>				
Project <u>Sunnyside Yard</u>				Casing Diam. (in.)					
Client <u>AMTRAK</u>				Casing Length (ft.)					
Page <u>1</u> of <u>1</u>				Screen Setting (ft.)					
Logged By <u>B. Woods</u>				Screen Slot & Type					
Well No. <u>S-45</u>				Well Status					
Location _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
M.P. Elevation _____				Type <u>Split Spoon</u>					
Drilling Started <u>12:50</u> Ended <u>14:10</u>				Hammer <u>140</u>	lb.				
Driller <u>Land, Air, Water Environmental Services</u>				Fall <u>30</u>	in.				
Type of Rig <u>Tripod</u>									
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
2.2		0-2'	Grab Sample	SAND	0-2-	Black, medium SAND and GRAVEL (Railroad bed fill). Brown to rust, medium SAND, some gravel.			
65		2-4'	Grab Sample		2-4-	Brown to rust, medium to fine SAND, trace gravel.			
0	0.3'	4-6'	N/R		4-6-	Brown, medium to fine SAND, wet.			
0	0.6'	6-8'	N/R		6-8-	Brown, medium SAND, wet. Water Table at 7.7 ft.			
0	0.9'	8-10'	N/R		8-10-	Brown to dark brown, medium SAND, wet.			
					-----13 ft.----- Bottom of boring				
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>11/08/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>H. Gregory</u> Well No. <u>S-46</u> Location _____ M.P. Elevation _____ Drilling Started <u>16:00</u> Ended <u>16:50</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hand Driven</u>				<u>WELL DATA</u>		<u>G-W READINGS</u> <sup>(1)</sup>			
				Hole Diam. (in.) <u>2.0</u> Final Depth (ft.) <u>9.0</u> Casing Diam. (in.) _____ Casing Length (ft.) _____ Screen Setting (ft.) _____ Screen Slot & Type _____ Well Status _____	Date	DTW MP <sup>(2)</sup>	Elev. W.S.		
				<u>SAMPLER</u>	<u>DEVELOPMENT</u>				
				Type <u>Split Spoon</u>					
				Hammer <u>140</u> lb.					
				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
3.0		0-2'	Grab Sample	SAND	0-2-	Brown, fine SAND, trace silt and gravel.			
22		2-5'	Grab Sample		2-5-	Brown, fine SAND, trace gravel.			
4	1.0'	5-7'	N/R		5-7-	Brown, fine SAND, trace silt.			
0	0.8'	7-9'	N/R		7-9-	Brown, fine SAND, trace silt Water Table at 8'.			
-----9 ft.----- Bottom of boring									
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>10/19/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>V. Singh</u> Well No. <u>S-47</u> Location _____ M.P. Elevation _____ Drilling Started <u>11:00</u> Ended <u>12:45</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
				Hole Diam. (in.) <u>6.0</u> Final Depth (ft.) <u>18.0</u> Casing Diam. (in.) _____ Casing Length (ft.) _____ Screen Setting (ft.) _____ Screen Slot & Type _____ Well Status _____		Date	DTW MP (2)	Elev. W.S.	
				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
				Type <u>Split Spoon</u>	Hammer <u>140</u> lb.	Fall <u>30</u> in.			
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
10		0-2'	Grab Sample	SAND	0-2-	Dark brown stained, medium to coarse SAND and gravel(Railroad bed fill).			
5.2		2-4'	Grab Sample		2-4-	Brown to dark brown, medium to coarse SAND and gravel (Railroad bed fill).			
1.9	0'	4-6'	4,4,4,6		4-6-				
2.9	1.0'	5-7'	5,7,4,8		5-7-	Brown, medium to coarse SAND, trace fine to medium gravel.			
2.2	1.0'	7-9'	9,7,11,9		7-9-	Brown to red-brown, medium to coarse SAND, trace silt.			
2.2	1.6'	9-11'	17,15,21,25		9-11-	Brown, fine to coarse SAND, trace reddish silt, Wet at tip.  Water Table at 13 ft.			
3.2	1.0'	16-18'	8,11,7,13		16-18-	Red-brown, fine SAND and SILT, trace clay, wet.			
<u>REMARKS</u> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>		
Study No. <u>05509Y</u> Date <u>10/19/90</u>				Hole Diam. (in.) <u>6.0</u>		Date	DTW MP (2)	Elev. W.S.
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>18.0</u>				
Client <u>AMTRAK</u>				Casing Diam. (in.)				
Page <u>1</u> of <u>1</u>				Casing Length (ft.)				
Logged By <u>V. Singh</u>				Screen Setting (ft.)				
Well No. <u>S-48</u>				Screen Slot & Type				
Location _____				Well Status _____				
M.P. Elevation _____				<u>SAMPLER</u>	<u>DEVELOPMENT</u>			
Drilling Started <u>13:30</u> Ended <u>15:00</u>				Type <u>Split Spoon</u>				
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.				
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.				
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth			Blows/6"		
1.2		0-2'	Grab Sample		0-2-	Dark brown, medium to coarse SAND, some gravel (Railroad bed fill).		
0.8		2-4'	Grab Sample	SAND	2-4-	Dark brown, medium to coarse SAND, trace gravel.		
0	0'	4-6'	4, 3, 3, 2		4-6-	Gray to brown, fine SAND, trace silt, wood fragments.		
0	.1'	5-7'	3, 5, 4, 7		5-7-			
0	.15'	6-8'	6, 9, 9, 3		6-8-	Grey to brown, fine SAND, trace silt.		
0	0'	8-10'	9, 5, 6, 12		8-10-			
0	0.8'	9-11'	6, 8, 8, 6		9-11-	Brown, fine to medium SAND.		
1.4	0.8'	11-13'	10, 12, 15, 23		11-13-	Gray to brown, fine to coarse SAND, trace silt towards tip of spoon. Wet at tip. Water Table at 13 ft.		
6.7	0.7	16-18'	16, 8, 12, 9		16-18-	Gray, medium to coarse SAND, strong hydrocarbon odor and oil sheen.		
				-----18 ft----- Bottom of boring				
REMARKS			(1) in feet relative to a common datum (2) from top of PVC casing					

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
Study No. <u>05509Y</u> Date <u>10/19/90</u>				Hole Diam. (in.) <u>6.0</u>		Date	DTW MP (2)	Elev. W.S.	
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>13.7</u>					
Client <u>AMTRAK</u>				Casing Diam. (in.)					
Page <u>1</u> of <u>1</u>				Casing Length (ft.)					
Logged By <u>V. Singh</u>				Screen Setting (ft.)					
Well No. <u>S-49</u>				Screen Slot & Type					
Location _____				Well Status _____					
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
Drilling Started <u>09:00</u> Ended <u>10:15</u>				Type <u>Split Spoon</u>					
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.					
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
2.2		0-2'	Grab Sample		0-2-	Dark brown, medium to coarse SAND, some gravel (Railroad bed fill).			
4.5		2-4'	Grab Sample		2-4-	Grey to brown, fine to medium SAND, trace gravel.			
14	1.2'	4-6'	8,19,21,27		4-6-	Brown, fine to medium SAND, trace dark brown clay.			
2.2	0.2'	6-8'	36,25,33,78	SAND	6-8-	Grey to brown, fine to medium SAND.			
2.3	0.8'	8-10'	7,16,24,26		8-10-	Grey to brown, fine to medium SAND, wet at tip. Water Table at 10 ft.			
0.9	1.0'	13-13.7	35,50/2	-----13.7 ft.----- Bottom of boring	13-	Brown, fine to medium SAND, wet.			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

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# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS</u> (1)			
Study No. <u>05509Y</u> Date <u>11/10/90</u>				Hole Diam. (in.) <u>2.0</u>	Final Depth (ft.) <u>4.0</u>	Date	DTW MP (2)	Elev. W.S.	
Project <u>Sunnyside Yard</u>				Casing Diam. (in.) _____					
Client <u>AMTRAK</u>				Casing Length (ft.) _____					
Page <u>1</u> of <u>1</u>				Screen Setting (ft.) _____					
Logged By <u>B. Woods</u>				Screen Slot & Type _____					
Well No. <u>S-50</u>				Well Status _____					
Location _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
M.P. Elevation _____				Type <u>Split Spoon</u>	Hammer <u>140</u> lb. Fall <u>30</u> in.				
Drilling Started <u>11:30</u> Ended <u>12:45</u>									
Driller <u>Land, Air, Water Environmental Services</u>									
Type of Rig <u>Tripod</u>									
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab Sample		0-2-	Black, fine to medium SAND, little medium gravel.			
0		2-4'	Grab Sample	SAND	2-4-	Brown to light brown, fine SAND and SILT, well sorted.			
		4-6'	Refusal	-----4 ft.----- Bottom of boring	4-6-	Brown, coarse to fine SAND, little gravel and cobbles.			
						Made 4 attempts to offset boring, each time resulted in refusal @ approx. 4 ft.			
REMARKS				(1) in feet relative to a common datum (2) from top of PVC casing					

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# GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>11/10/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>H. Gregory</u> Well No. <u>S-51</u> Location _____ M.P. Elevation _____ Drilling Started <u>15:15</u> Ended <u>17:05</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Tripod</u>				<u>WELL DATA</u>		<u>G-W READINGS</u> (1)			
				Hole Diam. (in.) <u>2.0</u>	Final Depth (ft.) <u>14.0</u>	Casing Diam. (in.) _____	Date _____	DTW MP (2) _____	Elev. W.S. _____
				Casing Length (ft.) _____	Screen Setting (ft.) _____	Screen Slot & Type _____			
				Well Status _____					
				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
				Type <u>Split Spoon</u>	Hammer <u>140</u> lb.				
				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab Sample	SAND & GRAVEL	0-2-	Top 1.5': Dark brown to black, medium SAND and GRAVEL, some cinders (Railroad bed).			
0		2-4'	Grab Sample	-----	2-4-	Brown, medium SAND, trace gravel.			
0	1.3'	4-6'	N/R		4-6-	Brown, fine SAND, well sorted.			
0	1.0'	6-8'	N/R		6-8-	Brown, fine SAND, well sorted.			
0	1.6'	8-10'	N/R	SAND	8-10-	Brown, fine SAND, trace gravel, tight.			
0	0.1'	10-12'	N/R		10-12-	Fractured gravel blocking tip of spoon-no recovery.			
0	1.2'	12-14'	N/R		12-14-	Brown, fine to medium SAND wet. Water Table at 13.5 ft.			
				-----14 ft----- Bottom of boring					
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

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## GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>11/10/90</u>					<u>WELL DATA</u>		<u>G-W READINGS (1)</u>		
					Hole Diam. (in.) <u>8.0</u>		Date	DTW MP (2)	Elev. W.S.
					Final Depth (ft.) <u>13.0</u>				
					Casing Diam. (in.) _____				
					Casing Length (ft.) _____				
					Screen Setting (ft.) _____				
					Screen Slot & Type _____				
					Well Status _____				
					<u>SAMPLER</u>		<u>DEVELOPMENT</u>		
					Type <u>Split Spoon</u>				
					Hammer <u>140</u> lb.				
					Fall <u>30</u> in.				
PID (ppm)	<u>SAMPLE</u>				Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth	Blows/6"					
0		0-2'	Grab Sample		0-2-	Brown, medium SAND, gravel, cinders (Railroad bed), stained black.			
0		2-4'	Grab Sample		2-4-	Brown, medium SAND, well sorted.			
0	1.5'	4-6'	N/R		4-6-	Brown, medium SAND, well sorted.			
0	1.2'	6-8'	N/R	SAND	6-8-	Brown, medium SAND, well sorted, cinders Light brown, fine SAND.			
0	1.0'	8-10'	N/R		8-10-	Brown, fine SAND.			
0	1.6'	10-12'	N/r		10-12-	Brown, fine SAND, wet at tip.			
				-----13 ft.----- Bottom of boring		Water Table at 12 ft.			

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GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>11/18/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>B. Woods</u> Well No. <u>S-53</u> Location _____ M.P. Elevation _____ Drilling Started <u>09:30</u> Ended <u>13:00</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Tripod</u>				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
				Hole Diam. (in.) <u>2.0</u>	Final Depth (ft.) <u>12.0</u>	Date	DTW MP (2)	Elev. W.S.	
				Casing Diam. (in.) _____	Casing Length (ft.) _____				
				Screen Setting (ft.) _____	Screen Slot & Type _____				
				Well Status _____					
				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
				Type <u>Split Spoon</u>	Hammer <u>140</u> lb.	Fall <u>30</u> in.			
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
1.4		0-2'	Grab Sample		0-2-	Dark brown, fine to medium SAND and coarse gravel (Railroad Bed).			
11		2-3.5'	Grab Sample	SAND	2-3.5-	Brown, medium SAND. Well sorted.			
25	1.1'	3.5-5.5'	N/R		3.5-5-	Brown, medium SAND.			
10	1.3'	5-7'	N/R		5-7-	Sampled adjacent boring due to refusal. Brown, medium to coarse SAND.			
1.4	1.4'	8-10'	N/R		8-10-	Brown, medium to coarse SAND.			
0	1.1'	10-12'	N/R		10-12-	Brown, medium to coarse SAND. Wet. Water table at 11 ft.			
				-----12 ft----- Bottom of boring					
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>10/12/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>H. Gregory/B. Woods</u> Well No. <u>S-54</u> Location _____ M.P. Elevation _____ Drilling Started <u>11:00</u> Ended <u>14:00</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>				<u>WELL DATA</u>		<u>G-W READINGS</u> (1)			
				Hole Diam. (in.) <u>6.0</u>	Final Depth (ft.) <u>15.0</u>	Date	DTW MP (2)	Elev. W.S	
				Casing Diam. (in.) _____	Casing Length (ft.) _____				
				Screen Setting (ft.) _____	Screen Slot & Type _____				
				Well Status _____					
				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
				Type <u>Split Spoon</u>	Hammer <u>140</u> lb.	Fall <u>30</u> in.			
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab Sample		0-2-	Brown, fine to medium SAND and gravel (Railroad bed fill).			
0		2-3'	Grab Sample		2-3-	Brown, fine to medium SAND and gravel (Railroad bed fill).			
0	.1'	3-5'	7,6,6,13		3-5-	Gray, coarse gravel(Railroad bed fill).			
0	0.8'	5-7'	20,22,25,31	SAND	5-7-	Brown, clayey silt. Light brown, medium to fine SAND.			
0	1.0'	7-9'	5,18,31,45		7-9-	Very light tan, medium SAND.			
0	0.1'	9-11'	7,27,34,37		9-11-	Brown, medium SAND.  Water Table at 10.5 ft.			
0	0.6'	14-15'	50 for 6"		14-15-	Brown, coarse SAND and gravel,very wet.			
				-----15 ft.----- Bottom of boring					
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS</u> (1)		
Study No. 05509Y Date 10/12/90				Hole Diam. (in.) 6.0		Date	DTW MP (2)	Elev. W.S.
Project Sunnyside Yard				Final Depth (ft.) 14.5				
Client AMTRAK				Casing Diam. (in.)				
Page 1 of 1				Casing Length (ft.)				
Logged By B. Woods				Screen Setting (ft.)				
Well No. S-55				Screen Slot & Type				
Location				Well Status				
M.P. Elevation				<u>SAMPLER</u>		<u>DEVELOPMENT</u>		
Drilling Started 10:00 Ended 11:45				Type Split Spoon				
Driller Land, Air, Water Environmental Services				Hammer 140	lb.			
Type of Rig Hollow stem auger				Fall 30	in.			
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth			Blows/6"		
0		0-2'	Grab Sample	SAND	0-2-	Black to brownish gray, medium SAND, little medium to coarse gravel, slight petroleum hydrocarbon odor.		
0		2-3'	Grab Sample		2-3-	Brown, medium to fine SAND, some brown silt and medium gravel, slight oil odor.		
0	1.4'	3-5'	2,6,6,6		3-5-	Black, medium SAND, some gravel Light brown to tan, medium SAND, well sorted.		
0	1.1'	5-7'	2,2,3,3		5-7-	Brown to light brown, fine SAND and clayey silt.		
0	1.5'	7-9'	3,5,7,8		7-9-	Brown, fine SAND and silt. Light tan, medium quartz SAND, very well sorted.		
0	1.1'	9-11'	2,5,12,7		9-11-	Brown, medium to fine SAND, little gravel, wet at bottom.		
						Water table at 10.5 ft.		
0	0.3'	14-14.5'	75 for 6"		14-	Dark brown, fine SAND and silt, gravel, very wet.		
				-----14.5 ft.----- Bottom of boring				
REMARKS		(1) in feet relative to a common datum (2) from top of PVC casing						

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# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>		
Study No. <u>05509Y</u> Date <u>10/12/90</u>				Hole Diam. (in.) <u>6.0</u>		Date	DTW MP (2)	Elev. W.S.
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>11.0</u>				
Client <u>AMTRAK</u>				Casing Diam. (in.)				
Page <u>1</u> of <u>1</u>				Casing Length (ft.)				
Logged By <u>H. Gregory</u>				Screen Setting (ft.)				
Well No. <u>S-56</u>				Screen Slot & Type				
Location _____				Well Status				
M.P. Elevation _____				<u>SAMPLER</u>	<u>DEVELOPMENT</u>			
Drilling Started <u>09:00</u> Ended <u>10:55</u>				Type <u>Split Spoon</u>				
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.				
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.				
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth			Blows/6"		
0		0-2'	Grab sample	SAND	0-2-	Brown fine to medium SAND and SILT, little gravel.		
0	0	2-3'	Grab sample		2-3-	Light brown to tan, fine to medium SAND, little gravel.		
		3'	50/5		3-	refusal; no recovery - auger to 4'; retry spoon refusal; no recovery - auger to 5'; retry spoon		
0	1.3	5-7'	30, 13, 15, 13		5-7-	Brown to tan, fine to medium SAND, little silt, reddish iron staining.		
0	1.3	7-9'	3, 14, 18, 21		7-9-	Brown to tan, fine SAND; little silt.		
0	1.3	9-11'	5, 15, 20, 50/2		9-11-	Brown to tan, fine SAND.  Water table at 10.5 ft.		
				-----11 ft----- Bottom of boring (auger refusal)				
REMARKS				(1) in feet relative to a common datum (2) from top of PVC casing				

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## GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>11/14/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>H. Gregory</u> Well No. <u>S-57</u> Location _____ M.P. Elevation _____ Drilling Started <u>14:25</u> Ended <u>15:50</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>		
				Hole Diam. (in.) <u>8.0</u>		Date	DTW MP (2)	Elev. W.S.
				Final Depth (ft.) <u>16.0</u>				
				Casing Diam. (in.) _____				
				Casing Length (ft.) _____				
				Screen Setting (ft.) _____				
				Screen Slot & Type _____				
				Well Status _____				
				<u>SAMPLER</u>		<u>DEVELOPMENT</u>		
				Type <u>Split Spoon</u>				
				Hammer <u>140</u> lb.				
				Fall <u>30</u> in.				
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth			Blows/6"		
0		0-2'	Grab Sample	SAND and GRAVEL	0-2-	Dark brown to black stained, medium to coarse SAND and gravel and cinders (R.R. Bed fill).		
0		2-4'	Grab Sample		2-4-	Brown, medium to coarse SAND and fine gravel.		
0	0.4'	4-6'	100/6, 50/0		4-6-	Brown, medium to coarse SAND and gravel with fractures.		
0	0.4'	6-8'	45/6, 50/1		6-8-	Brown, medium to coarse SAND and gravel.		
0	1.0	8-10'	31, 63, 51, 55		8-10-	Brown, fine to coarse SAND and gravel with fractured gravel. Wet at 9 ft. Water table at 9 ft.		
0	1.5'	14-16'	14, 43, 23, 26		14-16-	Brown, medium to coarse SAND and gravel. Wet.		
				-----16 ft----- Bottom of boring				

**REMARKS** (1) in feet relative to a common datum  
(2) from top of PVC casing

NOTE: 0-2' PHC resampled on 11/26/90 (original sample lost by Fed. Ex.)

## GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
Study No. <u>05509Y</u> Date <u>10/17/90</u>				Hole Diam. (in.) <u>6.0</u>		Date	DTW MP (2)	Elev. W.S.	
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>4.5</u>					
Client <u>AMTRAK</u>				Casing Diam. (in.)					
Page <u>1</u> of <u>1</u>				Casing Length (ft.)					
Logged By <u>B. Woods</u>				Screen Setting (ft.)					
Well No. <u>S-58</u>				Screen Slot & Type					
Location _____				Well Status					
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
Drilling Started <u>09:10</u> Ended <u>12:00</u>				Type <u>Split Spoon</u>					
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.					
Type of Rig <u>Tripod</u>				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-3'	Grab Sample	SAND	0-3-	Brown, medium to fine SAND, little gravel.			
		3-5'		-----4.5 ft----- Bottom of boring (refusal)	3-5-				
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>10/17/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>B. Woods</u> Well No. <u>S-59</u> Location _____ M.P. Elevation _____ Drilling Started <u>08:50</u> Ended <u>11:00</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Tripod</u>				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
				Hole Diam. (in.) <u>2.0</u>	Final Depth (ft.) <u>7.0</u>	Casing Diam. (in.) _____	Date _____	DTW MP (2) _____	Elev. W.S. _____
				Casing Length (ft.) _____	Screen Setting (ft.) _____	Screen Slot & Type _____			
				Well Status _____					
				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
				Type <u>Split Spoon</u>	Hammer <u>140</u> lb.	Fall <u>30</u> in.			
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-3'	Grab sample	SAND  -----7 ft----- Bottom of boring (hole collapsed)	0-3-	Brown, medium to fine SAND, little gravel.			
0	0.9'	3-5'	12, 11, 9, 12		3-5-	Brown to light brown, medium to fine SAND, trace gravel.			
0	0.5'	5-7'	N/R		5-7-	Brown to light brown, medium SAND; trace gravel.			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>11/14/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>H. Gregory</u> Well No. <u>S-60</u> Location _____ M.P. Elevation _____ Drilling Started <u>11:20</u> Ended <u>13:55</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>				<u>WELL DATA</u>		<u>G-W READINGS</u> (1)			
				Hole Diam. (in.) <u>8.0</u>	Final Depth (ft.) <u>14.0</u>	Date _____	DTW MP (2) _____	Elev. W.S. _____	
				Casing Diam. (in.) _____	Casing Length (ft.) _____				
				Screen Setting (ft.) _____	Screen Slot & Type _____				
				Well Status _____					
PID (ppm)	<u>SAMPLE</u>			<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
	No.	Rec.	Depth	Blows/6"	Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	12		0-2'	Grab sample	SAND	0-2-	Dark brown, fine to medium SAND and gravel and cinders, stained.		
	12		2-4'	Grab sample		2-4-	Brown, fine to coarse SAND and gravel.		
5.5	1.5'	4-6'	45,49,41,50/3	4-6-		Brown, fine to coarse SAND and gravel.			
10.5	0.2'	6-7'	50, 50/5	6-7-		Brown, fine to coarse SAND and gravel; fractured. Not enough to sample.			
0	0.9	7-9'	14, 42, 18, 39	7-9-		Brown, fine to coarse SAND and gravel; fractured; Wet. Water table at 8'			
0	0.6'	13-15'	103, 75/3	-----14 ft----- Bottom of boring		13-15-	Brown fine SAND and coarse gravel; fractured. Refusal at 14 ft, wet.		
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									
NOTE: 0.2' PHC resampled on 11/26/90 - 4-6' TCL resampled 12/12/90 - originals lost by Fed. Ex.									

# GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>10/24/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>H. Gregory</u> Well No. <u>S-61</u> Location _____ M.P. Elevation _____ Drilling Started <u>12:05</u> Ended <u>12:50</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Tripod</u>				<u>WELL DATA</u>		<u>G-W READINGS</u> <sup>(1)</sup>			
				Hole Diam. (in.) <u>2.0</u>	Final Depth (ft.) <u>7.0</u>	Date	DTW MP (2)	Elev. W.S	
				Casing Diam. (in.) _____	Casing Length (ft.) _____				
				Screen Setting (ft.) _____	Screen Slot & Type _____				
				Well Status _____					
				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
				Type <u>Split Spoon</u>	Hammer <u>140</u> lb.	Fall <u>30</u> in.			
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-1.1'	Grab sample	SAND	0-2-	Brown fine SAND, black staining just below surface, wet. Water table at 1.1 ft.			
0	1.4'	5-7	N/R	-----7 ft----- Bottom of boring	5-7-	Brown, fine SAND, black staining, trace gravel.			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>10/24/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>H. Gregory</u> Well No. <u>S-62</u> Location _____ M.P. Elevation _____ Drilling Started <u>11:00</u> Ended <u>11:50</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Tripod</u>				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
				Hole Diam. (in.) <u>2.0</u>	Final Depth (ft.) <u>9.0</u>	Casing Diam. (in.) _____	Date _____	DTW MP (2) _____	Elev. W.S. _____
				Casing Length (ft.) _____	Screen Setting (ft.) _____	Screen Slot & Type _____			
				Well Status _____					
				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
				Type <u>Split Spoon</u>	Hammer <u>140</u> lb.				
				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab Sample	SAND	0-2-	Brown to black-stained, fine to medium SAND, trace gravel (R.R. bed fill).			
0		2-3'	Grab Sample		2-3-	Water table at 2 ft. Brown, fine to medium SAND, trace gravel, wet.			
0		7-9'			7-9-	Brown, medium to coarse SAND.			
				-----9 ft----- Bottom of boring					
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>					
Study No. <u>05509Y</u> Date <u>10/25/90</u>				Hole Diam. (in.) <u>10.0</u>	Final Depth (ft.) <u>3.0</u>	Date	DTW MP (2)	Elev. W.S			
Project <u>Sunnyside Yard</u>				Casing Diam. (in.) _____	Casing Length (ft.) _____						
Client <u>AMTRAK</u>				Screen Setting (ft.) _____	Screen Slot & Type _____						
Page <u>1</u> of <u>1</u>				Well Status _____	Well Status _____						
Logged By <u>H. Gregory</u>				<u>SAMPLER</u>					<u>DEVELOPMENT</u>		
Well No. <u>S-63</u>				Type <u>Split Spoon</u>	Hammer <u>140</u> lb.						
Location _____				Fall <u>30</u> in.							
M.P. Elevation _____											
Drilling Started <u>8:50</u> Ended <u>10:00</u>											
Driller <u>Land, Air, Water Environmental Services</u>											
Type of Rig <u>Hand Driven</u>											
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>					
	No.	Rec.	Depth			Blows/6"					
.4		0-2'	Grab Sample	SAND	0-2-	Brown, fine medium SAND (R.R. bed fill), trace coarse gravel.					
0.4		2-3'	Grab Sample	-----3 ft----- Bottom of boring	2-3-	Brown, fine to medium SAND, trace coarse gravel. Water table at 3 ft.					
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing											

ENVIRONMENTAL CONSULTING & MANAGEMENT  
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# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
Study No. <u>05509Y</u> Date <u>10/18/90</u>				Hole Diam. (in.) <u>14.0</u>		Date	DTW MP (2)	Elev. W.S	
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>3.0</u>					
Client <u>AMTRAK</u>				Casing Diam. (in.) _____					
Page <u>1</u> of <u>1</u>				Casing Length (ft.) _____					
Logged By <u>H. Gregory</u>				Screen Setting (ft.) _____					
Well No. <u>S-64</u>				Screen Slot & Type _____					
Location _____				Well Status _____					
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
Drilling Started <u>15:00</u> Ended <u>15:30</u>				Type <u>Split Spoon</u>					
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.					
Type of Rig <u>Hand Driven</u>				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab Sample		0-2-	Dark brown to brown, medium to coarse SAND and GRAVEL ( rail road bed fill).			
1.4		2-3'	Grab Sample	SAND -----3 ft----- Bottom of boring	2-3-	Dark brown to brown, medium to coarse SAND, trace gravel. Water table at 3'			
REMARKS (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>10/24/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>H. Gregory</u> Well No. <u>S-65</u> Location _____ M.P. Elevation _____ Drilling Started <u>12:40</u> Ended <u>2:35</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Tripod</u>				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
				Hole Diam. (in.) <u>2.0</u> Final Depth (ft.) <u>10.0</u> Casing Diam. (in.) _____ Casing Length (ft.) _____ Screen Setting (ft.) _____ Screen Slot & Type _____ Well Status _____	Date	DTW MP (2)	Elev. W.S.		
				<u>SAMPLER</u>	<u>DEVELOPMENT</u>				
				Type <u>Split Spoon</u>					
				Hammer <u>140</u> lb.					
				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab Sample		0-2-	Brown, fine to medium SAND, trace gravel (R.R. bed fill), some black staining.			
0		2-3'	Grab Sample	SAND	2-3-	Brown, fine SAND and silt, trace gravel. Water table at 3 ft.			
	1.7	8-10'	N/R	-----10 ft----- Bottom of boring	8-10-	Brown, fine SAND, little silt, tight, wet.			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
Study No. <u>05509Y</u> Date <u>10/10/90</u>				Hole Diam. (in.) <u>6.0</u>	Final Depth (ft.) <u>11.0</u>	Date	DTW MP (2)	Elev. W.S.	
Project <u>Sunnyside Yard</u>				Casing Diam. (in.) _____					
Client <u>AMTRAK</u>				Casing Length (ft.) _____					
Page <u>1</u> of <u>1</u>				Screen Setting (ft.) _____					
Logged By <u>B. Woods</u>				Screen Slot & Type _____					
Well No. <u>S-66</u>				Well Status _____					
Location _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
M.P. Elevation _____				Type <u>Split Spoon</u>					
Drilling Started <u>08:15</u> Ended <u>09:15</u>				Hammer <u>140</u> lb.					
Driller <u>Land, Air, Water Environmental Services</u>				Fall <u>30</u> in.					
Type of Rig <u>Hollow stem auger</u>									
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab sample	SAND	0-2-	Dark brown, medium to fine SAND, little gravel, trace cobbles.			
0		2-3'	Grab sample	SILT	2-3-	Brown, clayey SILT with some fine brown stone and gray silty clay, little medium gravel.			
6.1	1.3	3-5'	10, 11, 14, 16	SAND	3-5-	Gray, medium to fine SAND, appears stained, hydrocarbon odor. Water table at 4 ft.			
8.5	1.5	9-11'	4, 12, 12, 21	----- 11 ft. Bottom of boring	9-11-	Gray, medium to fine SAND, appears stained (spoon coated with oily sheen).			

**REMARKS** (1) in feet relative to a common datum  
(2) from top of PVC casing

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
Study No. <u>05509Y</u> Date <u>10/27/90</u>				Hole Diam. (in.) <u>8.0</u>		Date	DTW MP (2)	Elev. W.S.	
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>6.0</u>					
Client <u>AMTRAK</u>				Casing Diam. (in.) _____					
Page <u>1</u> of <u>1</u>				Casing Length (ft.) _____					
Logged By <u>H. Gregory</u>				Screen Setting (ft.) _____					
Well No. <u>S-67</u>				Screen Slot & Type _____					
Location _____				Well Status _____					
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
Drilling Started <u>10:25</u> Ended <u>11:15</u>				Type <u>Split Spoon</u>					
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.					
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab sample	SAND	0-2-	Brown, fine to medium SAND, trace silt and gravel (railroad bed fill); some dark brown staining at surface.			
0		2-4'	Grab sample		2-4-	Brown, fine to medium SAND, trace gravel.			
0		4-6'	10, 24, 18, 15		4-6-	Brown, fine to medium SAND, trace gravel (railroad bed gravel); Wet. Auger refusal at 4.5 ft. Water table at 5.5 ft.			
				-----6 ft----- Bottom of boring					
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
Study No. <u>05509Y</u> Date <u>10/27/90</u>				Hole Diam. (in.) <u>8.0</u>		Date	DTW MP (2)	Elev. W.S.	
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>12.0</u>					
Client <u>AMTRAK</u>				Casing Diam. (in.)					
Page <u>1</u> of <u>1</u>				Casing Length (ft.)					
Logged By <u>H. Gregory</u>				Screen Setting (ft.)					
Well No. <u>S-68</u>				Screen Slot & Type					
Location _____				Well Status					
M.P. Elevation _____				<u>SAMPLER</u>	<u>DEVELOPMENT</u>				
Drilling Started <u>08:55</u> Ended <u>10:00</u>				Type <u>Split Spoon</u>					
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.					
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab sample	SAND	0-2-	Brown, fine to medium SAND, trace silt, thin layer gray clay near 2' mark; trace gravel.			
0		2-4'	Grab sample		2-4-	Brown, fine to medium SAND, little silt, trace gravel; moist.			
0	1.0'	4-6'	6, 11, 12, 12		4-6-	Brown, fine to coarse SAND; Wet. Water table at 5 ft.			
19	0.4'	10-12'	5, 16, 16, 35		10-12-	Brown, medium SAND, little fine to coarse gravel; Wet.			
					-----12 ft----- Bottom of boring				
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

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# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
Study No. <u>05509Y</u> Date <u>10/10/90</u>				Hole Diam. (in.) <u>6.0</u>		Date	DTW MP (2)	Elev. W.S.	
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>11.0</u>					
Client <u>AMTRAK</u>				Casing Diam. (in.)					
Page <u>1</u> of <u>1</u>				Casing Length (ft.)					
Logged By <u>B. Woods</u>				Screen Setting (ft.)					
Well No. <u>S-69</u>				Screen Slot & Type					
Location _____				Well Status					
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
Drilling Started <u>09:30</u> Ended <u>10:15</u>				Type <u>Split Spoon</u>					
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.					
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab sample	SAND	0-2-	Dark brown, medium to fine SAND, little gravel			
0		2-3'	Grab sample		2-3-	Brown to light brown, medium quartz SAND, little gravel.			
0	1.3	3-5'	8, 12, 15, 8		3-5-	Brown to gray, clayey silt, trace fine gravel. Gray to black, medium quartz SAND, little fine gravel; Wet. Water table at 4.5 ft.			
20	1.2	9-11'	3, 15, 7, 8		9-11-	Gray, and medium quartz SAND, some clayey silt, wet, hydrocarbon sheen and odor in water.			
<p style="text-align: center;">-----11 ft----- Bottom of boring</p>									
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

					<u>WELL DATA</u>		<u>G-W READINGS (1)</u>		
Study No. <u>05509Y</u> Date <u>10/04/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>V. Singh</u> Well No. <u>S-70</u> Location _____					Hole Diam. (in.) <u>6.0</u> Final Depth (ft.) <u>10.0</u> Casing Diam. (in.) _____ Casing Length (ft.) _____ Screen Setting (ft.) _____ Screen Slot & Type _____ Well Status _____	Date	DTW MP (2)	Elev. W.S.	
M.P. Elevation _____ Drilling Started <u>13:30</u> Ended <u>14:35</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>					<u>SAMPLER</u> Type <u>Split Spoon</u> Hammer <u>140</u> lb. Fall <u>30</u> in.	<u>DEVELOPMENT</u>			
PID (ppm)	<u>SAMPLE</u>				Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth	Blows/6"					
0		0-2'	Grab sample	SAND and GRAVEL	0-2-	Black, medium to coarse SAND and GRAVEL (railroad bed fill)			
0		2-4'	Grab sample	SAND	2-4-	Brown, medium to coarse SAND, trace gravel.			
0	1.7	4-6'	19, 35, 58, 58	SAND	4-6-	Brown, medium to coarse SAND with fractured gravel.			
0	1.4	6-8'	34, 48, 58, 52	SAND	6-8-	Dark brown to gray to brown, medium to coarse SAND, trace fine gravel and fractured gravel.			
0	1.0	8-10'	23, 15, 17, 10	SAND	8-10-	Brown coarse SAND, trace gravel; Wet. Water table at 10 ft.			
				-----10 Ft----- Bottom of boring					
<p><b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing</p>									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS</u> (1)		
Study No. <u>05509Y</u> Date <u>10/04/90</u>				Hole Diam. (in.) <u>6.0</u>		Date	DTW MP (2)	Elev. W.S
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>10.0</u>				
Client <u>AMTRAK</u>				Casing Diam. (in.)				
Page <u>1</u> of <u>1</u>				Casing Length (ft.)				
Logged By <u>B. Woods/V. Singh</u>				Screen Setting (ft.)				
Well No. <u>S-71</u>				Screen Slot & Type				
Location _____				Well Status _____				
M.P. Elevation _____				<u>SAMPLER</u>	<u>DEVELOPMENT</u>			
Drilling Started <u>11:15</u> Ended <u>13:15</u>				Type <u>Split Spoon</u>				
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.				
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.				
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth			Blows/6"		
0		0-2'	Grab sample	SAND and GRAVEL	0-2-	Black, fine to medium SAND and GRAVEL (railroad bed fill).		
0		2-4'	Grab sample	SAND	2-4-	Brown, fine to medium SAND, little gravel and small rounded cobbles.		
0	1.9	4-6'	9, 17, 27, 37	SAND	4-6-	Gray to brown, medium to coarse SAND, trace gravel with fractured gravel.		
0	1.2	6-8'	N/R	SAND	6-8-	Brown, medium to coarse SAND, trace gravel with fractured gravel.		
0	1.4	8-10'	N/R	SAND	8-10-	Gray to brown, medium to coarse SAND, trace gravel with fractured gravel; Wet. Water table at 9 ft.		
				-----10 ft----- Bottom of boring				

REMARKS (1) in feet relative to a common datum  
(2) from top of PVC casing

# GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>10/04/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>V. Singh</u> Well No. <u>S-72</u> Location _____ M.P. Elevation _____ Drilling Started <u>14:50</u> Ended <u>16:40</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
				Hole Diam. (in.) <u>6.0</u>	Final Depth (ft.) <u>16.0</u>	Casing Diam. (in.) _____	Date	DTW MP (2)	Elev. W.S.
				Casing Length (ft.) _____	Screen Setting (ft.) _____	Screen Slot & Type _____			
				Well Status _____					
				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
				Type <u>Split Spoon</u>	Hammer <u>140</u> lb.	Fall <u>30</u> in.			
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab sample	SAND and GRAVEL	0-2-	Black, fine to coarse SAND and GRAVEL (railroad bed fill).			
0		2-4'	Grab sample	SAND	2-4-	Brown, medium to coarse SAND, trace gravel.			
0	1.1	4-6'	47, 38, 44, 48	SAND	4-6-	Brown, medium to coarse SAND, trace fractured gravel.			
0	0.7	6-8'	36, 50, 41, 39		6-8-	Gray to brown, medium to coarse SAND, trace fractured gravel.			
0	0.6	8-10'	36, 41, 27, 42		8-10-	Gray to brown, medium to coarse SAND, trace gravel; Wet. Water table at 9 ft.			
0	0.3	14-16'	21, 32, 41, 27	-----16 ft----- Bottom of boring	14-16-	Brown, medium to coarse SAND, trace gravel.			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS</u> (1)			
Study No. <u>05509Y</u> Date <u>10/04/90</u>				Hole Diam. (in.) <u>6.0</u>		Date	DTW MP (2)	Elev. W.S.	
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>3.5</u>					
Client <u>AMTRAK</u>				Casing Diam. (in.)					
Page <u>1</u> of <u>1</u>				Casing Length (ft.)					
Logged By <u>V. Singh</u>				Screen Setting (ft.)					
Well No. <u>S-73</u>				Screen Slot & Type					
Location _____				Well Status					
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
Drilling Started <u>17:00</u> Ended <u>18:40</u>				Type <u>Split Spoon</u>					
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.					
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
1.7		0-2'	Grab sample	SAND and GRAVEL	0-2-	Black, medium to coarse SAND and GRAVEL (railroad bed fill).			
0		2-4'	Grab sample	SAND -----3.5 ft----- Bottom of boring	2-4-	Wood fragments, also (railroad tie) wood (railroad ties) buried.			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>10/08/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>2</u> Logged By <u>B. Woods</u> Well No. <u>S-74</u> Location _____ M.P. Elevation _____ Drilling Started <u>08:30</u> Ended <u>10:30</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
				Hole Diam. (in.) <u>6.0</u>	Final Depth (ft.) <u>21.0</u>	Date	DTW MP (2)	Elev. W.S	
				Casing Diam. (in.) _____	Casing Length (ft.) _____				
				Screen Setting (ft.) _____	Screen Slot & Type _____				
				Well Status _____					
				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
				Type <u>Split Spoon</u>	Hammer <u>140</u> lb.	Fall <u>30</u> in.			
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab sample		0-2-	Dark brown, clayey SILT and very coarse gravel (road fill), damp.			
0		2-4'	Grab sample	SILT	2-4-	Dark brown, clayey SILT very coarse gravel (road fill).			
0	1.4	4-6'	14, 36, 18, 25	-----4 ft----- GRAVEL	4-6-	Gray, coarse GRAVEL (road fill).			
22	0.9	6-8'	58, 37, 108, 64	-----6 ft-----	6-8-	Black, gray, red, medium to fine SAND, little fine gravel, little light brown clay.			
4.2	0.4	8-10'	17, 23, 20, 14		8-10-	Light brown, medium to fine SAND, some gravel.			
		0	10-12'	47, 42, 44, 50/1	SAND	10-12-	No recovery.		
0	0.9	12-14'	32, 24, 28, 31		12-14-	Light brown to light tan, medium SAND, little medium to coarse gravel.			
0	0.9	14-16'	20, 23, 22, 15		14-16-	Light brown, medium SAND, little gravel; Wet. Water table at 15 ft.			
0	1.7	19-21'	6, 9, 16, 14	Bottom of boring -----21 ft.-----	19-21-	Brown to gray medium to fine SAND, some gravel.			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
Study No. <u>05509Y</u> Date <u>10/08/90</u>				Hole Diam. (in.) <u>6.0</u>		Date	DTW MP (2)	Elev. W.S.	
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>20.0</u>					
Client <u>AMTRAK</u>				Casing Diam. (in.)					
Page <u>1</u> of <u>1</u>				Casing Length (ft.)					
Logged By <u>B. Woods</u>				Screen Setting (ft.)					
Well No. <u>S-75</u>				Screen Slot & Type					
Location _____				Well Status _____					
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
Drilling Started _____ Ended _____				Type <u>Split Spoon</u>					
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.					
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-3'	Grab Sample		0-3-	Brown, medium and fine SAND and silt, with very coarse gravel and cobbles (road fill).			
0	0.5	3-5'	13,16,27,50		3-5-	Dark brown to black, medium and fine SAND, with large gravel (road fill).			
0	0.5	5-6'	47, 50/4		5-6-	Dark brown, medium and fine SAND.			
0	0.9	6-8'	21, 28, 23, 22		6-8-	Tan to light brown, fine to medium SAND, some gravel.			
0	0	8-9'	16, 30/6	SAND	8-9'-	No recovery.			
0	0.8	9-11'	16, 77, 68, 65		9-11-	Red and gray gravel, medium to coarse, with brown, medium SAND.			
0	0	11-11.5'	50/4		11-	No recovery.			
0	0	12-14'	50/1		12-14-	No recovery.			
0	0.4	14-16'	6,12,20,25		14-16-	Brown, medium quartz sand; Wet. Water table at 15 ft.			
0	0.3	19-20'	48-50/6	Bottom of boring -----20 ft-----	19-20-	Brown, coarse to medium SAND; Wet.			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS</u> <sup>(1)</sup>		
Study No. <u>05509Y</u> Date <u>10/25/90</u>				Hole Diam. (in.) <u>10.0</u>		Date	DTW MP <sup>(2)</sup>	Elev. W.S.
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>1.0</u>				
Client <u>AMTRAK</u>				Casing Diam. (in.)				
Page <u>1</u> of <u>1</u>				Casing Length (ft.)				
Logged By <u>H. Gregory</u>				Screen Setting (ft.)				
Well No. <u>S-76</u>				Screen Slot & Type				
Location _____				Well Status				
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>		
Drilling Started <u>12:55</u> Ended <u>1:15</u>				Type <u>Split Spoon</u>				
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.				
Type of Rig <u>Hand Driven</u>				Fall <u>30</u> in.				
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth			Blows/6"		
0		0-2'	Grab Sample	SAND & GRAVEL -----1 ft----- Bottom of boring	0-2	Brown, fine to medium SAND and GRAVEL, (R.R. bed fill), stained black. Wet at 0.7 ft.		
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing								
Note: Boring moved from proposed location into area 1 per J. Quinn of D.E.C.								

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
Study No. <u>05509Y</u> Date <u>10/8/90</u>				Hole Diam. (in.) <u>6.0</u>		Date	DTW MP (2)	Elev. W.S.	
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>20.5</u>					
Client <u>AMTRAK</u>				Casing Diam. (in.)					
Page <u>1</u> of <u>1</u>				Casing Length (ft.)					
Logged By <u>B. Woods</u>				Screen Setting (ft.)					
Well No. <u>S-77</u>				Screen Slot & Type					
Location _____				Well Status					
M.P. Elevation _____				<u>SAMPLER</u>	<u>DEVELOPMENT</u>				
Drilling Started <u>12:30</u> Ended <u>15:00</u>				Type <u>Split Spoon</u>					
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.					
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab Sample		0-2-	Light brown, medium to fine SAND, trace medium gravel.			
		2-4'	Grab Sample		2-4-	Light brown to tan, medium to fine SAND.			
0	1.4'	4-6'	5, 18, 20, 46		4-6'-	Brown to light brown, medium SAND.			
0	1.4'	6-8'	10, 11, 23, 21	SAND	6-8-	Brown to light brown, medium SAND, small gravel, brick fragments.			
0	0.6'	8-10'	6, 20, 50, 85		8-10-	Brown, medium SAND; little medium gravel, little brown silty SAND.			
0	1.0'	10-12'			10-12-				
0	1.0'	13-15'	22, 18, 36, 50		13-15-	Brown, medium SAND, little Gravel.			
0	1.0'	15-17'	29, 13, 33, 17		15-17-	Brown, medium quartz SAND. Wet at 16 ft. Water table at 16 ft.			
0	0.3'	19-20.5'	17, 28, 50/6	Bottom of boring -----20.5 ft-----	19- 20.5-	Brown, medium quartz SAND. Wet.			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

## GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS</u> <sup>(1)</sup>		
Study No. <u>05509Y</u> Date <u>11/14/90</u>				Hole Diam. (in.) <u>8.0</u>		Date	DTW MP (2)	Elev. W.S.
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>17.0</u>				
Client <u>AMTRAK</u>				Casing Diam. (in.)				
Page <u>1</u> of <u>1</u>				Casing Length (ft.)				
Logged By <u>H. Gregory</u>				Screen Setting (ft.)				
Well No. <u>S-78</u>				Screen Slot & Type				
Location _____				Well Status _____				
M.P. Elevation _____				<u>SAMPLER</u>	<u>DEVELOPMENT</u>			
Drilling Started <u>9:10</u> Ended <u>10:55</u>				Type <u>Split Spoon</u>				
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.				
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.				
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth			Blows/6		
0		0-2'	Grab Sample	SAND & GRAVEL	0-2-	Dark brown, fine to coarse SAND and gravel. Trace silt and cinders, (stained) to 1.6'.		
0		2-4'	Grab Sample		2-4-	Tan, medium to coarse SAND and Gravel.		
0	1.7	4-6'		-----	4-6-	Brown to tan, medium to coarse SAND and fine gravel.		
0	1.0'	6-8'			6-8-	Brown, fine SAND, well sorted.		
0	0.7	8-10'	12, 100/3	SAND	8-10-	Brown, fine to medium SAND.		
0	1.6'	10-12'	10, 25, 42, 47	-----	10-12-	Water table at 9.5 ft. Brown, medium to coarse SAND and fine gravel. Wet.		
0	1.5'	15-17	7, 22, 18, 35	SAND & GRAVEL	15-17-	Brown, medium to coarse SAND and fine gravel.		
				-----17 ft----- Bottom of boring				
REMARKS			(1) in feet relative to a common datum (2) from top of PVC casing					
			NOTE: 0.2' resampled on 11/26/90, 8-10' resampled on 12/12/90 - ????????? lost by Fed. Ex.					

ENVIRONMENTAL CONSULTING & MANAGEMENT  
ROUX ASSOCIATES, INC.

# GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>10/3/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>V. Singh</u> Well No. <u>S-79</u> Location _____ M.P. Elevation _____ Drilling Started <u>12:00</u> Ended <u>18:00</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>				<u>WELL DATA</u>		<u>G-W READINGS</u> <sup>(1)</sup>			
				Hole Diam. (in.) <u>6.0</u> Final Depth (ft.) <u>11.0</u> Casing Diam. (in.) _____ Casing Length (ft.) _____ Screen Setting (ft.) _____ Screen Slot & Type _____ Well Status _____		Date	DTW MP <sup>(2)</sup>	Elev. W.S.	
				<u>SAMPLER</u>	<u>DEVELOPMENT</u>				
				Type <u>Split Spoon</u> Hammer <u>140</u> lb. Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>				Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth	Blows/6"					
0.1		1.2'	0-2'	17, 8, 11, 12	<u>ASPHALT</u>	0-2-	Top 0.3': Asphalt. Brown, medium to coarse SAND, trace gravel.		
0		1.5'	2-4'	16, 18, 22, 27	SAND	2-4-	Black to brown, medium to coarse SAND, trace fractured gravel.		
0		1.3'	4-6'	25, 34, 37, 34		4-6-	Black to brown, fine to medium SAND. Trace fractured gravel.		
0		0.4'	9-11'	17, 29, 37, 34		9-11-	Brown, fine to medium SAND. Trace gravel. Water table at 9.5 ft.		
				-----11 ft-----					
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>		
Study No. <u>05509Y</u> Date <u>10/3/90</u>				Hole Diam. (in.) <u>6.0</u>		Date	DTW MP (2)	Elev. W.S.
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>8.0</u>				
Client <u>AMTRAK</u>				Casing Diam. (in.)				
Page <u>1</u> of <u>1</u>				Casing Length (ft.)				
Logged By <u>B. Woods</u>				Screen Setting (ft.)				
Well No. <u>S-80</u>				Screen Slot & Type				
Location _____				Well Status				
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>		
Drilling Started <u>13:40</u> Ended _____				Type <u>Split Spoon</u>				
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.				
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.				
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth			Blows/6"		
0		1.7	0-2'	16, 23, 32, 44	0-2-	Black to brown, fine to medium SAND and Silt, little gravel.		
0		1.7	2-4'	27, 35, 20, 20	SAND 2-4-	Black to brown, fine to medium SAND, trace fractured gravel.		
0		1.5'	4-6'	22, 30, 52, 25	4-6-	Dark brown, fine to medium SAND, trace gravel.		
0		1.8'	6-8'		6-8-	Dark brown to black, fine to medium SAND, trace gravel.		
				-----8 ft----- Bottom of boring (auger refusal)				
REMARKS				(1) in feet relative to a common datum (2) from top of PVC casing				

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>		
Study No. <u>05509Y</u> Date <u>10/9/90</u>				Hole Diam. (in.) <u>6.0</u>		Date	DTW MP (2)	Elev. W.S
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>16.0</u>				
Client <u>AMTRAK</u>				Casing Diam. (in.)				
Page <u>1</u> of <u>1</u>				Casing Length (ft.)				
Logged By <u>H. Gregory</u>				Screen Setting (ft.)				
Well No. <u>S-81</u>				Screen Slot & Type				
Location _____				Well Status				
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>		
Drilling Started <u>11:13</u> Ended <u>14:00</u>				Type <u>Split Spoon</u>				
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.				
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.				
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth			Blows/6"		
0		0-2'	Grab Sample		0-2-	Dark brown, medium to fine SAND, trace gravel.		
0		2-4'	Grab Sample	SAND	2-4-	Light brown to tan, medium to fine SAND.		
0	1.0'	4-6'	12, 12, 20, 20		4-6-	Tan, fine to medium to coarse SAND, some fine to coarse gravel.		
0	1.5'	6-8'	12, 14, 12, 12		6-8-	Brown to tan, fine to medium SAND.		
0	.3'	8-10'	9, 14, 11, 11		8-10-	Brown to tan, fine to medium SAND. Wet at tip. Not enough recovery to sample.		
0	.2'	10-12'	9, 11, 9, 14		10-12-	Brown to tan, medium to coarse SAND. Not enough recovery. Water table at 10 ft.		
0	1.1'	14-16'	10, 10, 12, 12		14-16-	Brown to tan, medium to coarse SAND, some fine gravel towards bottom of spoon. Red (iron) stain at 0.2' from bottom.		
				-----16 ft----- Bottom of boring				
<p><b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing</p>								

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>				
Study No. <u>05509Y</u> Date <u>10/16/90</u>				Hole Diam. (in.) <u>6.0</u>	Final Depth (ft.) <u>14.5</u>	Date	DTW MP (2)	Elev. W.S.		
Project <u>Sunnyside Yard</u>				Casing Diam. (in.) _____						
Client <u>AMTRAK</u>				Casing Length (ft.) _____						
Page <u>1</u> of <u>1</u>				Screen Setting (ft.) _____						
Logged By <u>B. Woods</u>				Screen Slot & Type _____						
Well No. <u>S-82</u>				Well Status _____						
Location _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>				
M.P. Elevation _____				Type <u>Split Spoon</u>	Hammer <u>140</u> lb. Fall <u>30</u> in.					
Drilling Started <u>08:50</u> Ended <u>12:00</u>										
Driller <u>Land, Air, Water Environmental Services</u>										
Type of Rig <u>Hollow stem auger</u>										
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>				
	No.	Rec.	Depth			Blows/6"				
0		0-2'	Grab Sample	SAND	0-2-	Dark brown, medium SAND, little black gravel and cobbles.				
0		2-3'	Grab Sample		2-3-	Dark brown, medium SAND, some gravel and cobbles.				
0	0.7	4-6'	7, 50, 57, 8		4-6-	Dark brown to light brown, medium SAND, trace gravel.				
0	0.6'	6-8'	14, 61, 67, 72		6-8-	Brown, to light brown, medium SAND, little gravel.				
	0' 0.2'	8-10' 8.6-10.6'	N/R		8-10-	Brown, medium SAND and fractured gravel, wet. Water table at 10 ft.				
	<0.1'	9-11'	N/R							
	1.1'	14-16'	45, 50/3 refusal		-----14.5 ft----- Bottom of boring	14-16-	Brown, medium to fine SAND and Silt, very wet.			
REMARKS (1) in feet relative to a common datum (2) from top of PVC casing										

# GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>10/17/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>V. Singh</u> Well No. <u>S-83</u> Location _____ M.P. Elevation _____ Drilling Started <u>15:10</u> Ended <u>15:35</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hand Driven</u>				<u>WELL DATA</u>		<u>G-W READINGS</u> (1)			
				Hole Diam. (in.) <u>12.0</u>	Final Depth (ft.) <u>3.0</u>	Casing Diam. (in.) _____	Date _____	DTW MP (2) _____	Elev. W.S. _____
				Casing Length (ft.) _____	Screen Setting (ft.) _____	Screen Slot & Type _____			
				Well Status _____					
				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
				Type <u>Split Spoon</u>	Hammer <u>140</u> lb.	Fall <u>30</u> in.			
PID (ppm)	<u>SAMPLE</u>				Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth	Blows/6"					
0		0-2'	Grab Sample	SAND	0-2-	Brown to black, medium to coarse SAND.			
0		2-3'	Grab Sample	-----3 ft----- Bottom of boring	2-3-	Brown, medium to coarse SAND			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

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# GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>10/17/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>V. Singh</u> Well No. <u>S-84</u> Location _____ M.P. Elevation _____ Drilling Started <u>14:10</u> Ended <u>14:50</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hand Driven</u>				<u>WELL DATA</u>		<u>G-W READINGS</u> <sup>(1)</sup>			
				Hole Diam. (in.) <u>12.0</u>	Final Depth (ft.) <u>3.0</u>	Date	DTW MP <sup>(2)</sup>	Elev. W.S.	
				Casing Diam. (in.) _____	Casing Length (ft.) _____				
				Screen Setting (ft.) _____	Screen Slot & Type _____				
				Well Status _____					
				<u>SAMPLER</u>	<u>DEVELOPMENT</u>				
				Type <u>Split Spoon</u>	Hammer <u>140</u> lb.				
				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab Sample		0-2-	Black stained and brown, medium to coarse SAND, trace gravel.			
0		2-3'	Grab Sample	SAND -----3 ft----- Bottom of boring	2-3-	Brown, fine to medium SAND.			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
Study No. <u>05509Y</u> Date <u>10/2/90</u>				Hole Diam. (in.) <u>6.0</u>	Final Depth (ft.) <u>11.0</u>	Date	DTW MP (2)	Elev. W.S.	
Project <u>Sunnyside Yard</u>				Casing Diam. (in.) _____					
Client <u>AMTRAK</u>				Casing Length (ft.) _____					
Page <u>1</u> of <u>1</u>				Screen Setting (ft.) _____					
Logged By <u>B. Woods</u>				Screen Slot & Type _____					
Well No. <u>S-85</u>				Well Status _____					
Location _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
M.P. Elevation _____				Type <u>Split Spoon</u>					
Drilling Started <u>11:40</u> Ended <u>12:20</u>				Hammer <u>140</u> lb.					
Driller <u>Land, Air, Water Environmental Services</u>				Fall <u>30</u> in.					
Type of Rig <u>Hollow stem auger</u>									
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0	1.3'	0-1'		<u>ASPHALT</u>	0-1-	ASPHALT, coarse Gravel (road fill)			
0	1.2'	1-3'	9, 9, 14, 15	SAND	1-3-	Brown to light brown, medium to fine SAND, some brown, silty clay.			
0	1.0'	3-5'	10, 13, 19, 15	SAND	3-5-	Brown to light brown, medium to fine SAND, little gravel, some orange silty clay.			
0	1.0'	5-7'	3, 5, 9, 14	SAND	5-7-	Brown, medium to fine SAND, wet. Water table at 6 ft.			
0	1.0'	9-11'	35, 27, 14, 20	SAND	9-11-	Brown, medium SAND, poorly sorted, some brown to gray silty clay, wet.			
				----- Bottom of boring					
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

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# GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>10/02/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>B. Woods</u> Well No. <u>S-86</u> Location _____ M.P. Elevation _____ Drilling Started <u>12:40</u> Ended <u>13:15</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
				Hole Diam. (in.) <u>6.0</u> Final Depth (ft.) <u>10.5</u> Casing Diam. (in.) _____ Casing Length (ft.) _____ Screen Setting (ft.) _____ Screen Slot & Type _____ Well Status _____	Date	DTW MP (2)	Elev. W.S.		
				<u>SAMPLER</u>	<u>DEVELOPMENT</u>				
				Type <u>Split Spoon</u> Hammer <u>140</u> lb. Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0	1.2'	0-0.5' 0.5-2.5'	1, 2, 4, 9	<u>ASPHALT</u>  <u>SAND</u>  <u>clay</u> <u>SAND</u> <u>-----10 ft-----</u> <u>Bottom of boring</u>	0-0.5'- 0.5'- 2.5'	Asphalt. Dark brown to black, medium to find SAND, some brown clay. Brown to light brown, medium to coarse SAND, wet.			
0	1.2'	2.5-4.5'	14, 10, 14, 16						
0	1.1'	4.5-6.5'	8, 9, 22, 27			Water table at 5 ft			
0	1.2'	8.5-10.5'	7, 9, 6, 5		8.5'- 10.5'	Orange-brown, medium to fine SAND, trace clay, wet.			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

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GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
Study No. <u>05509Y</u> Date <u>10/02/90</u>				Hole Diam. (in.) <u>6.0</u>		Date	DTW MP (2)	Elev. W.S.	
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>11.0</u>					
Client <u>AMTRAK</u>				Casing Diam. (in.)					
Page <u>1</u> of <u>1</u>				Casing Length (ft.)					
Logged By <u>V. Singh</u>				Screen Setting (ft.)					
Well No. <u>S-87</u>				Screen Slot & Type					
Location _____				Well Status _____					
M.P. Elevation _____				<u>SAMPLER</u>	<u>DEVELOPMENT</u>				
Drilling Started <u>13:35</u> Ended <u>14:20</u>				Type <u>Split Spoon</u>					
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.					
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0	1.2'	0-0.5'	3, 5, 7, 7	<u>ASPHALT</u>  <u>SAND</u>  -----11 ft----- Bottom of boring	0-0.5-	Asphalt.			
0	2.0'	0.5-2.5'	8, 14, 12, 17		0.5- 2.5'-	Brown, medium SAND, some silty clay			
0	1.3'	1.5-4.5'	9, 7, 12, 8		2.5'-	Brown, medium to coarse SAND, trace gravel.			
0	0.5'	4.5-6.5'	9, 7, 12, 8		4.5-	Brown, medium to coarse SAND, trace gravel, wet at 6 ft.			
0		9-11'	6, 12, 8, 6		6-	Water table at 6'.			
0				9-11-	Brown, fine to coarse SAND, trace gravel, wet.				
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS</u> (1)			
Study No. <u>05509Y</u> Date <u>10/01/90</u>				Hole Diam. (in.) <u>6.0</u>		Date	DTW MP (2)	Elev. W.S.	
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>11.0</u>					
Client <u>AMTRAK</u>				Casing Diam. (in.)					
Page <u>1</u> of <u>1</u>				Casing Length (ft.)					
Logged By <u>B. Woods</u>				Screen Setting (ft.)					
Well No. <u>S-88</u>				Screen Slot & Type					
Location _____				Well Status					
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
Drilling Started _____ Ended <u>13:15</u>				Type <u>Split Spoon</u>					
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.					
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>				Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth	Blows/6"					
0	1.7'	1-3'	15, 23, 10, 30	<u>ASPHALT</u>	1-3'	0-0.5': Asphalt Dark brown, medium SAND, little gravel.			
0	1.4'	3-5'	26, 35, 36, 23	SAND	3-5'	Brown to dark brown to gray, medium SAND, little gravel.			
0	1.4'	5-7'	5, 8, 10, 11		5-7'	Brown to light brown, medium to fine SAND, wet.  Water table at 6 ft.			
0	1.4'	7-9'	5, 8, 8, 11		7-9'	Dark brown to brown, medium to fine SAND, poorly sorted.			
0	1.1'	9-11'	5, 4, 6, 9		9-11'	0-1.1': Brown, medium to fine SAND, wet.			
				-----11 ft----- Bottom of boring					
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

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# GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>10/01/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>B. Woods</u> Well No. <u>S-89</u> Location _____ M.P. Elevation _____ Drilling Started <u>13:35</u> Ended <u>14:15</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>				<u>WELL DATA</u>		<u>G-W READINGS</u> <sup>(1)</sup>		
				Hole Diam. (in.) <u>6.0</u> Final Depth (ft.) <u>11.0</u> Casing Diam. (in.) _____ Casing Length (ft.) _____ Screen Setting (ft.) _____ Screen Slot & Type _____ Well Status _____	Date	DTW MP (2)	Elev. W.S.	
				<u>SAMPLER</u>		<u>DEVELOPMENT</u>		
				Type <u>Split Spoon</u>	Hammer <u>140</u> lb. Fall <u>30</u> in.			
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth			Blows/6"		
0.1	1.4	1-3'	8, 9, 16, 15	<u>ASPHALT</u>	0-0.5	ASPHALT		
0	1.5	3-5'	8, 12, 10, 16	SAND	1-3	Dark brown, medium to fine SAND; trace gravel.		
0	1.6	5-7'	5, 6, 6, 12	-----5 ft-----	3-5	Brown, fine SAND and Silt.		
0	1.7	9-11'	8, 10, 15, 16	SILT	5-7	Brown, very fine SILT; Wet. Water table at 6 ft.		
				-----11 ft----- Bottom of boring	9-11	Dark brown, SILT, wet, some fine sand.		

REMARKS      (1) in feet relative to a common datum  
                   (2) from top of PVC casing

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
Study No. <u>05509Y</u> Date <u>10/01/90</u>				Hole Diam. (in.) <u>6.0</u>	Date	DTW MP (2)	Elev. W.S.		
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>11.0</u>					
Client <u>AMTRAK</u>				Casing Diam. (in.) _____					
Page <u>1</u> of <u>1</u>				Casing Length (ft.) _____					
Logged By <u>B. Woods</u>				Screen Setting (ft.) _____					
Well No. <u>S-90</u>				Screen Slot & Type _____					
Location _____				Well Status _____					
M.P. Elevation _____				<u>SAMPLER</u>	<u>DEVELOPMENT</u>				
Drilling Started <u>15:40</u> Ended <u>11:30</u>				Type <u>Split Spoon</u>					
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.					
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0	1.5'	1-3'	9, 13, 16, 29	<u>ASPHALT</u>	1-3-	0-0.5': Asphalt.			
0	1.3'	3-5'	25, 25, 16, 20	SAND	3-5-	Dark brown to black, medium SAND, with little Gravel and cobbles.			
0	1.6'	5-7'	6, 8, 12, 16	-----	5-7-	Light tan, medium fine SAND, with cobbles, some silt, little clay.			
0	1.2'	9-11'	4, 7, 8, 15	SILT	9-11-	Brown, SILT, wet, with occasional gray silt layers. Water table at 6 ft.			
				-----11 ft----- Bottom of boring		0-1.2': Dark brown and gray SILT, wet.			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
Study No. <u>05509Y</u> Date <u>10/02/90</u>				Hole Diam. (in.) <u>6.0</u>	Final Depth (ft.) <u>11.0</u>	Date	DTW MP (2)	Elev. W.S.	
Project <u>Sunnyside Yard</u>				Casing Diam. (in.)	Casing Length (ft.)				
Client <u>AMTRAK</u>				Screen Setting (ft.)	Screen Slot & Type				
Page <u>1</u> of <u>1</u>				Well Status					
Logged By <u>B. Woods</u>				<u>SAMPLER</u>					<u>DEVELOPMENT</u>
Well No. <u>S-91</u>				Type <u>Split Spoon</u>	Hammer <u>140</u> lb.				
Location _____				Fall <u>30</u> in.					
M.P. Elevation _____									
Drilling Started <u>08:55</u> Ended <u>09:40</u>									
Driller <u>Land, Air, Water Environmental Services</u>									
Type of Rig <u>Hollow stem auger</u>									
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0	1.4'	1-3'	9, 19, 27, 20	<u>ASPHALT</u>	1-3-	ASPHALT and very coarse Gravel.  Dark brown, medium to fine SAND, little gravel (road fill).			
0	0.2'	3-5'	20, 30, 44, 32	SAND	3-5-	Dark brown, medium SAND, gravel.			
0	1.0'	5-7'			5-7-	Brown-orange to brown, medium to fine SAND, some clayey silt. Wet  Water table at 7 ft.			
0	1.4'	9-11'	5, 17, 19, 21	----- SILT ----- 11 ft Bottom of boring	9-11-	Brown to gray, clayey SILT, wet.			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

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## GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
Study No. <u>05509Y</u> Date <u>10/02/90</u>				Hole Diam. (in.) <u>6.0</u>		Date	DTW MP (2)	Elev. W.S.	
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>11.0</u>					
Client <u>AMTRAK</u>				Casing Diam. (in.)					
Page <u>1</u> of <u>1</u>				Casing Length (ft.)					
Logged By <u>B. Woods</u>				Screen Setting (ft.)					
Well No. <u>S-92</u>				Screen Slot & Type					
Location _____				Well Status					
M.P. Elevation _____				<u>SAMPLER</u>	<u>DEVELOPMENT</u>				
Drilling Started <u>10:10</u> Ended <u>11:15</u>				Type <u>Split Spoon</u>					
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.					
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>				Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth	Blows/6"					
0	1.3'	1-3'	7, 18, 24, 18	SAND	0-1-	Concrete and fill.			
0	0.9'	3-5'	41, 19, 18, 8		1-3-	Dark brown, medium to fine SAND, occasional concrete aggregate.			
0	1.0'	5-7'	42, 11, 10, 9		3-5-	Brown to light brown, medium SAND.			
0	0.7	7-9'	58, 40, 34, 24		5-7-	Brown, medium to fine SAND.			
0	0.5'	9-11'	34, 24, 19, 18		7-9-	Brown to olive, medium to fine SAND, some quartz cobbles.			
					9-11-	Gray, coarse SAND and gravel, wet. Water table at 10'.			
				-----11 ft----- Bottom of boring					
REMARKS (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS</u> (1)			
Study No. <u>05509Y</u> Date <u>10/18/90</u>				Hole Diam. (in.) <u>6.0</u>	Final Depth (ft.) <u>27.0</u>	Date	DTW MP (2)	Elev. W.S.	
Project <u>Sunnyside Yard</u>				Casing Diam. (in.) _____	Casing Length (ft.) _____				
Client <u>AMTRAK</u>				Screen Setting (ft.) _____	Screen Slot & Type _____				
Page <u>1</u> of <u>2</u>				Well Status _____					
Logged By <u>H. Gregory</u>				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
Well No. <u>S-93</u>				Type <u>Split Spoon</u>					
Location _____				Hammer <u>140</u> lb.					
M.P. Elevation _____				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab Sample		0-2-	Brown, fine to medium SAND, trace silt, trace fine gravel (R.R. bed gravel at top also).			
0		2-4'	Grab Sample		2-4-	Light brown, fine to medium SAND, trace silt; Trace fine gravel.			
0	.8'	4-6'	4, 6, 6, 16		4-6-	Brown to tan, fine to medium SAND, little silt			
0	1.0'	6-8'	12, 24, 36, 32	SAND	6-8-				
0	.8'	8-10'	7, 52, 50/3		8-10-	Light brown, medium to coarse SAND, little fine gravel, poorly sorted. Some angular rock fragments.			
0	.5'	10-12'	11, 37, 50/2		10-12-	Light brown, fine to coarse SAND, little fine to coarse gravel, poorly sorted. Some angular rock fragments.			
0	.7'	12-14'	7, 36, 50/1		12-14-	Brown to tan, fine to medium to coarse SAND.			
0	1.0'	14-16'	36, 50, 50, 32		14-16-	Brown to tan, medium to coarse SAND, little fine gravel. SAND			
0	.9'	16-18'	18, 28, 36, 57		16-18-	Brown to tan, fine to coarse to medium SAND and gravel - some fragments.			
0	1.1'	18-20'	17, 15, 24, 28		18-20-	Brown to tan, medium to coarse SAND, little fine gravel at tip.			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

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# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS</u> (1)		
Study No. <u>05509Y</u> Date <u>10/18/90</u>				Hole Diam. (in.) <u>6.0</u>		Date	DTW MP (2)	Elev. W.S.
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>27.0</u>				
Client <u>AMTRAK</u>				Casing Diam. (in.) _____				
Page <u>2</u> of <u>2</u>				Casing Length (ft.) _____				
Logged By <u>H. Gregory</u>				Screen Setting (ft.) _____				
Well No. <u>S-93</u>				Screen Slot & Type _____				
Location _____				Well Status _____				
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>		
Drilling Started <u>9:45</u> Ended <u>12:00</u>				Type <u>Split Spoon</u>				
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.				
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.				
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth			Blows/6"		
0		0.6'	20-22'	3, 18, 37, 12	20-22-		Brown to tan, fine to coarse SAND; trace fine gravel; Wet. Water table at 21 ft.	
0			25-27'	3, 6, 4, 7	25-27-		Brown to tan, fine to coarse SAND; Wet.	
				SAND -----27 ft----- Bottom of boring				

REMARKS (1) in feet relative to a common datum  
(2) from top of PVC casing

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GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS</u> (1)		
Study No. <u>05509Y</u> Date <u>10/18/90</u>				Hole Diam. (in.) <u>2.0</u>		Date	DTW MP (2)	Elev. W.S.
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>7.0</u>				
Client <u>AMTRAK</u>				Casing Diam. (in.) _____				
Page <u>1</u> of <u>1</u>				Casing Length (ft.) _____				
Logged By <u>V. Singh</u>				Screen Setting (ft.) _____				
Well No. <u>S-94</u>				Screen Slot & Type _____				
Location _____				Well Status _____				
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>		
Drilling Started _____ Ended _____				Type <u>Split Spoon</u>				
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.				
Type of Rig <u>Tripod</u>				Fall <u>30</u> in.				
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth			Blows/6"		
0		0-2'	Grab Sample	SAND	0-2-	Dark brown stained fine to coarse SAND and Gravel.		
0		2-3'	Grab Sample		2-3-	Black to brown, fine to coarse SAND, trace silt.		
0	0.3'	3-5'	N/R		3-5-	Black to brown, fine to coarse SAND, trace gravel and fractured gravel.		
0	4.0'	5-7'	N/R		5-7-	Brown, fine to coarse SAND, trace gravel and fractured gravel.		
				-----7 ft----- Bottom of boring				
REMARKS			(1) in feet relative to a common datum (2) from top of PVC casing					

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS</u> <sup>(1)</sup>			
Study No. <u>05509Y</u> Date <u>10/18/90</u>				Hole Diam. (in.) <u>2.0</u>	Date	DTW MP <sup>(2)</sup>	Elev. W.S.		
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>3.0</u>					
Client <u>AMTRAK</u>				Casing Diam. (in.)					
Page <u>1</u> of <u>1</u>				Casing Length (ft.)					
Logged By <u>V. Singh</u>				Screen Setting (ft.)					
Well No. <u>S-95</u>				Screen Slot & Type					
Location _____				Well Status					
M.P. Elevation _____				<u>SAMPLER</u>	<u>DEVELOPMENT</u>				
Drilling Started <u>14:00</u> Ended <u>14:15</u>				Type <u>Split Spoon</u>					
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.					
Type of Rig <u>Hand Driven</u>				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
2.2		0-2'	Grab Sample	SAND -----3 ft----- Bottom of boring	0-2-	Brown to black to gray, fine to coarse SAND and gravel (R.R. bed fill).			
2.2		2-3'	Grab Sample		2-3-	Gray to brown, fine to coarse SAND, little gravel.			
<b>REMARKS</b> <sup>(1)</sup> in feet relative to a common datum (2) from top of PVC casing									

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GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS</u> (1)			
Study No. <u>05509Y</u> Date <u>11/06/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>H. Gregory</u> Well No. <u>MW-13</u> Location _____				Hole Diam. (in.) <u>10</u> Final Depth (ft.) <u>14</u> Casing Diam. (in.) <u>4</u> Casing Length (ft.) <u>12</u> Screen Setting (ft.) <u>12 - 2</u> Screen Slot & Type <u>PVC</u> Well Status <u>Monitoring well</u>		Date	DTW MP (2)	Elev. W.S.	
M.P. Elevation _____ Drilling Started <u>08:40</u> Ended <u>10:30</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>				<u>SAMPLER</u> Type <u>Split Spoon</u> Hammer <u>140</u> lb. Fall <u>30</u> in.		<u>DEVELOPMENT</u> Pump and surge			
PID (ppm)	<u>SAMPLE</u>				Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth	Blows/6"					
0		0-2'	Grab sample		0-2-	Brown fine to medium SAND, trace silt and fine gravel.			
0.1		2-4'	Grab sample	SAND	2-4-	Brown fine to medium SAND, trace silt and fine gravel, gray staining to silt. Water table at 4 ft.			
30	1.7	9-11'	3, 3, 10, 12		9-11-	Brown fine to medium SAND, trace silt, fine gravel, gray staining.			
				-----14 ft----- Bottom of boring					

REMARKS (1) in feet relative to a common datum  
(2) from top of PVC casing

NOTE: 2nd attempt - 1st attempt abandoned when augers broke water pipe on 10/20/90

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GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS</u> (1)			
Study No. <u>05509Y</u> Date <u>11/07/90</u>				Hole Diam. (in.) <u>10</u>	Final Depth (ft.) <u>14</u>	Date	DTW MP (2)	Elev. W.S.	
Project <u>Sunnyside Yard</u>				Casing Diam. (in.) <u>4</u>	Casing Length (ft.) <u>15</u>				
Client <u>AMTRAK</u>				Screen Setting (ft.) <u>12.5 - 2.5</u>	Screen Slot & Type <u>20-slot S.S.</u>				
Page <u>1</u> of <u>1</u>				Well Status <u>Monitoring well</u>					
Logged By <u>H. Gregory</u>				<u>SAMPLER</u>					<u>DEVELOPMENT</u>
Well No. <u>MW-16</u>				Type <u>Split Spoon</u>	Hammer <u>140</u> lb.		Pump and surge - bail product		
Location _____				Fall <u>30</u> in.					
M.P. Elevation _____									
Drilling Started <u>09:45</u> Ended <u>14:45</u>									
Driller <u>Land, Air, Water Environmental Services</u>									
Type of Rig <u>Hollow stem auger</u>									
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
30		0-2'	Grab sample	SAND	0-2-	Brown fine to medium SAND and silt; railroad bed fill; broken concrete			
35		2-4'	Grab sample		2-4-	Brown fine to medium SAND stained gray			
60	1.1	4-6'	5, 7, 21, 27		4-6-	Brown medium SAND, trace fine sand and fine gravel stained gray, wet			
81	1.4	6-8'	11, 12, 36, 25			Water table at 5.2 ft.			
131	1,4	10-12'	8, 12, 25, 17		10-12-	Brown medium to coarse SAND stained gray			
				-----14 ft----- Bottom of boring					
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS</u> (1)			
Study No. <u>05509Y</u> Date <u>11/08/90</u>				Hole Diam. (in.) <u>10</u>	Final Depth (ft.) <u>13</u>	Date	DTW MP (2)	Elev. W.S	
Project <u>Sunnyside Yard</u>				Casing Diam. (in.) <u>4</u>	Casing Length (ft.) <u>15</u>				
Client <u>AMTRAK</u>				Screen Setting (ft.) <u>12 - 2</u>	Screen Slot & Type <u>20-slot S.S.</u>				
Page <u>1</u> of <u>1</u>				Well Status <u>Monitoring well</u>					
Logged By <u>B. Woods</u>									
Well No. <u>MW-17</u>									
Location _____									
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
Drilling Started <u>12:35</u> Ended <u>15:00</u>				Type <u>Split Spoon</u>		Pump and surge			
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.					
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab sample	SAND	0-2-	Brown and black sand, little gravel.			
62		2-4'	Grab sample		2-4-	Strong hydrocarbon odor.			
52	1.0	4-6'	N/R		4-6-	Gray fine to medium SAND, little gravel, strong hydrocarbon odor.			
60	1.3	9-11'	6, 12, 12, 25		9-11-	Gray stained fine to medium SAND, trace silt, strong hydrocarbon odor.			
					-----13 ft----- Bottom of boring				
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing NOTE: 3rd attempt to install well. 1st and 2nd attempts were abandoned due to auger refusal and heaving sand.									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS</u> (1)			
Study No. <u>05509Y</u> Date <u>12/07/90</u>				Hole Diam. (in.) <u>10</u>		Date	DTW MP (2)	Elev. W.S.	
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>15</u>					
Client <u>AMTRAK</u>				Casing Diam. (in.) <u>4</u>					
Page <u>1</u> of <u>1</u>				Casing Length (ft.) <u>16.5</u>					
Logged By <u>H. Gregory</u>				Screen Setting (ft.) <u>13.5 - 3.5</u>					
Well No. <u>MW-19</u>				Screen Slot & Type <u>20-slot S.S.</u>					
Location _____				Well Status <u>Monitoring well</u>					
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
Drilling Started <u>09:00</u> Ended <u>3:30</u>				Type <u>Split Spoon</u>		Pump and surge			
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.					
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
30		0-2'	Grab sample		0-2-	Dark brown fine to medium SAND. Gravel to cinders; Railroad bed fill.			
70/23		2-4'	Grab sample	SAND	2-4-	Top 1.0': Dark brown fine to coarse SAND, gravel and cinders, Railroad bed fill. Bottom 1.0': Brown fine to coarse SAND, trace silt.			
18	1.1	4-6'	1, 3, 4, 10	and	4-6-	Brown to gray brown fine SAND, trace silt (iron staining). Tip had gray fine sand with wet clayey silt. Water table at 5.5'			
3.9	1.5	6-8'	4, 5, 5, 6	SILT	6-8-	Top 0.5': Gray-brown fine SAND, trace clayey silt. Bottom 1.0': Brown fine to medium SAND, wet.			
60	13	12-14'	18, 21, 29, 30		12-14-	Brown fine to coarse SAND, trace silt.			
				-----15 ft----- Bottom of boring					
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS</u> <sup>(1)</sup>		
Study No. <u>05509Y</u> Date <u>12/11/90</u>				Hole Diam. (in.) <u>10</u>		Date	DTW MP <sup>(2)</sup>	Elev. W.S.
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>14</u>				
Client <u>AMTRAK</u>				Casing Diam. (in.) <u>4</u>				
Page <u>1</u> of <u>1</u>				Casing Length (ft.) <u>14.5</u>				
Logged By <u>H. Gregory</u>				Screen Setting (ft.) <u>12.5 - 2.5</u>				
Well No. <u>MW-20</u>				Screen Slot & Type <u>20-slot S.S.</u>				
Location _____				Well Status <u>Monitoring well</u>				
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>		
Drilling Started <u>08:30</u> Ended <u>10:30</u>				Type <u>Split Spoon</u>		Pump and surge		
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.				
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.				
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth			Blows/6"		
12.2		0-2'	Grab sample		0-2-	Dark brown fine to medium SAND and cinders (railroad bed fill).		
19.1		2-4'	Grab sample	SAND	2-4-	Dark gray-brown stained fine to medium SAND. Trace silt, oil soaked, free product entering hole.		
59.1	1.1	4-6'	6, 5, 5, 9		4-6-	Dark gray-brown stained fine to coarse SAND, trace silt, oil soaked, wet oily sheen. Water table at 4 ft.		
50.4	0.8	9-11'	7, 12, 8, 17		9-11-	Gray-brown fine to coarse SAND, trace silt, wet, oily sheen, tight.		
				-----14 ft----- Bottom of boring				
REMARKS				(1) in feet relative to a common datum (2) from top of PVC casing				

# GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>12/06/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>H. Gregory</u> Well No. <u>MW-21</u> Location _____ M.P. Elevation _____ Drilling Started <u>10:00</u> Ended <u>12:50</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
				Hole Diam. (in.) <u>10</u> Final Depth (ft.) <u>14</u> Casing Diam. (in.) <u>4</u> Casing Length (ft.) <u>12</u> Screen Setting (ft.) <u>12 - 2</u> Screen Slot & Type <u>PVC</u> Well Status <u>Monitoring well</u>		Date	DTW MP (2)	Elev. W.S	
				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
				Type <u>Split Spoon</u>	Hammer <u>140</u> lb.	Pump and surge			
				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
8.2		0-2'	Grab sample	SAND	0-2-	Dark brown to black stained fine to medium SAND and silt with railroad bed cinders.			
19		2-4'	Grab sample		2-4-	Brown fine SAND, little silt.			
1.5	1.3	4-6'	N/R		4-6-	Brown fine SAND, trace Silt, wet. Water table at 4 ft.			
47.7	0.2	9-9.5'	26, 102/0		9-9.5-	Spoon refusal at 9.5'; Dark gray stained medium to coarse SAND with fractured gravel.			
*	1.8	9-11	10, 12, 28, 35		9-11-	Dark gray to black stained fine to coarse SAND, trace gravel.			
					-----14 ft----- Bottom of boring				
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS</u> (1)		
Study No. <u>05509Y</u> Date <u>10/20/90</u>				Hole Diam. (in.) <u>10</u>		Date	DTW MP (2)	Elev. W.S.
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>12</u>				
Client <u>AMTRAK</u>				Casing Diam. (in.) <u>4</u>				
Page <u>1</u> of <u>1</u>				Casing Length (ft.) <u>11</u>				
Logged By <u>H. Gregory</u>				Screen Setting (ft.) <u>1 - 11</u>				
Well No. <u>MW-22</u>				Screen Slot & Type <u>20-slot S.S.</u>				
Location _____				Well Status <u>Monitoring well</u>				
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>		
Drilling Started <u>08:30</u> Ended <u>11:00</u>				Type <u>Split Spoon</u>		Pump and surge		
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.				
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.				
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth			Blows/6"		
40		0-2'	Grab sample	SAND	0-2-	Brown fine to medium SAND, little coarse gravel, hydrocarbon odor and staining.		
55		2-4'	Grab sample		2-4-	Brown medium SAND, trace coarse gravel; Hydrocarbon odor, black staining; free product. Water table at 3 ft.		
44	2	8-10'	4, 3, 3, 3		8-10-	Brown medium to coarse SAND; Hydrocarbon odor; black staining; Wet		
<p style="text-align: center;">-----12 ft----- Bottom of boring</p>								
<p><b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing</p>								

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# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>		
Study No. <u>05509Y</u> Date <u>11/16/90</u>				Hole Diam. (in.) <u>10</u>		Date	DTW MP (2)	Elev. W.S
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>40</u>				
Client <u>AMTRAK</u>				Casing Diam. (in.) <u>4</u>				
Page <u>1</u> of <u>3</u>				Casing Length (ft.) <u>39</u>				
Logged By <u>V. Singh</u>				Screen Setting (ft.) <u>36.5 - 26.5</u>				
Well No. <u>MW-23</u>				Screen Slot & Type <u>PVC</u>				
Location _____				Well Status <u>Monitoring well</u>				
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>		
Drilling Started <u>09:15</u> Ended <u>17:00</u>				Type <u>Split Spoon</u>		Pump and surge		
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.				
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.				
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth			Blows/6"		
35			0-2'	Grab sample	0-2-	Brown fine to medium SAND with gravel and cinders (railroad bed fill).		
107			2-4'	Grab sample	2-4-	Gray/brown stained fine to coarse SAND, trace gravel, hydrocarbon odor; free floating product observed at 3.5 ft. Water table at 3.5 ft.		
				SAND				
75	0.8	9-11'	N/R		9-11-	Gray stained fine to coarse SAND; strong hydrocarbon odor, free floating product, wet.		
100	1.2	14-16'	N/R		14-16-	Gray fine to coarse SAND, trace gravel, wet; Strong odor.		
100	1.4	19-21'	N/R		19-21-	Gray fine to coarse SAND, wet; Strong odor.		

REMARKS (1) in feet relative to a common datum  
(2) from top of PVC casing

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ROUX ASSOCIATES, INC.

GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>11/16/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>2</u> of <u>3</u> Logged By <u>V. Singh</u> Well No. <u>MW-23</u> Location _____ M.P. Elevation _____ Drilling Started <u>09:15</u> Ended <u>17:00</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>					<u>WELL DATA</u>		<u>G-W READINGS (1)</u>		
					Hole Diam. (in.) <u>10</u> Final Depth (ft.) <u>40</u> Casing Diam. (in.) <u>4</u> Casing Length (ft.) <u>39</u> Screen Setting (ft.) <u>36.5 - 26.5</u> Screen Slot & Type <u>PVC</u> Well Status <u>Monitoring well</u>	Date	DTW MP (2)	Elev. W.S	
					<u>SAMPLER</u>	<u>DEVELOPMENT</u>			
Type <u>Split Spoon</u>					Pump and surge				
Hammer <u>140</u> lb.									
Fall <u>30</u> in.									
PID (ppm)	<u>SAMPLE</u>				Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth	Blows/6"					
45	1.7	24-26'	N/R	SAND	24-26-	Gray stained fine to coarse SAND, wet, strong odor; (5' of heave in Augers; used split spoon and removed 5 full spoons, keeping 5th as most representative archive sample).			
65	2.0	29-31'	N/R		29-31-	Gray stained fine to medium SAND, wet: Strong odor (sampling procedure as above).			
32	2.0	34-36'	N/R	SILT	34-36-	Gray fine to coarse SAND, Wet: Strong odor (sampling procedure same as above). Bottom of boring abandoned 11/06/90; restart 11/26/90; plugged auger and drilled to 40' (OK per Chris Magee of DEC.); plug had dislodged and heave measures 9' inside auger. Unable to set screen; augers pulled at this time. Bottom auger contained a fine gray clayey SILT with trace coarse gravel and cobbles (inside auger and outside); samples of this were collected and archived at 36- to 40' sample. Gray clayey SILT, trace coarse gravel and cobbles.			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

ENVIRONMENTAL CONSULTING & MANAGEMENT  
ROUX ASSOCIATES, INC.

GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>		
Study No. <u>05509Y</u> Date <u>11/16/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>3</u> of <u>3</u> Logged By <u>V. Singh</u> Well No. <u>MW-23</u> Location _____				Hole Diam. (in.) <u>10</u> Final Depth (ft.) <u>40</u> Casing Diam. (in.) <u>4</u> Casing Length (ft.) <u>39</u> Screen Setting (ft.) <u>36.5 - 26.5</u> Screen Slot & Type <u>PVC</u> Well Status <u>Monitoring well</u>	Date	DTW MP (2)	Elev. W.S	
M.P. Elevation _____ Drilling Started <u>09:15</u> Ended <u>17:00</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>				<u>SAMPLER</u> Type <u>Split Spoon</u> Hammer <u>140</u> lb. Fall <u>30</u> in.		<u>DEVELOPMENT</u> Pump and surge		
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth			Blows/6"	Boring abandoned at this time. Well completed 12/10/90 (see well construction log).  NOTE: Well completed on third attempt.	
				-----40 ft----- Bottom of boring	40-			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing								

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
Study No. <u>05509Y</u> Date <u>11/27&amp;28/90</u>				Hole Diam. (in.) <u>10</u>		Date	DTW MP (2)	Elev. W.S.	
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>27</u>					
Client <u>AMTRAK</u>				Casing Diam. (in.) <u>4</u>					
Page <u>1</u> of <u>2</u>				Casing Length (ft.) <u>26</u>					
Logged By <u>H. Gregory</u>				Screen Setting (ft.) <u>24 - 14</u>					
Well No. <u>MW-24</u>				Screen Slot & Type <u>PVC</u>					
Location _____				Well Status <u>Monitoring well</u>					
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
Drilling Started <u>11:30/27</u> Ended <u>13:30/28</u>				Type <u>Split Spoon</u>		Pump and surge			
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.	Fall <u>30</u> in.				
Type of Rig <u>Hollow stem auger</u>									
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab sample	SAND	0-2-	Top 0.7': Dark brown fine SAND and silt. Bottom 1.3': Brown medium to coarse SAND, little fine gravel.			
0		2-4'	Grab sample		2-4-	Brown medium to coarse SAND, little fine gravel.			
0	0.6	4-6'	60, 70, 100/1"		4-6-	Brown medium to coarse SAND, some fine to coarse gravel and fractured gravel.			
0	.5	6-7'	17,100/5"		6-7-	Brown medium to coarse SAND, little gravel and fractured gravel.			
0	.3	7-8'	39, 150/6"		7-8-	Fractured rock.			
0	.6	8-9'	119, 77		8-9-	Brown fine to coarse SAND and gravel with fractured gravel.			
0	1.2	9-11'	13, 15, 53, 87		9-11-	Brown medium to coarse SAND, little gravel; fractured gravel at tip.			
0	1.5	11-13'	9, 27, 42, 57		11-13-	Brown medium to coarse SAND, trace fine gravel.			
0	1.4	13-15'	7, 20, 27, 34		13-15-	Brown fine to medium SAND			
0	1.6	15-17'	15, 33, 47, 65		15-17-	Brown fine to medium SAND, wet at tip Water table at 16 ft.			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

ENVIRONMENTAL CONSULTING & MANAGEMENT  
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GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
Study No. <u>05509Y</u> Date <u>11/27&amp;28/90</u>				Hole Diam. (in.) <u>10</u>	Final Depth (ft.) <u>27</u>	Date	DTW MP (2)	Elev. W.S	
Project <u>Sunnyside Yard</u>				Casing Diam. (in.) <u>4</u>					
Client <u>AMTRAK</u>				Casing Length (ft.) <u>26</u>					
Page <u>2</u> of <u>2</u>				Screen Setting (ft.) <u>24 - 14</u>					
Logged By <u>H. Gregory</u>				Screen Slot & Type <u>PVC</u>					
Well No. <u>MW-24</u>				Well Status <u>Monitoring well</u>					
Location _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
M.P. Elevation _____				Type <u>Split Spoon</u>	Pump and surge				
Drilling Started <u>11:30/27</u> Ended <u>13:30/28</u>				Hammer <u>140</u> lb.					
Driller <u>Land, Air, Water Environmental Services</u>				Fall <u>30</u> in.					
Type of Rig <u>Hollow stem auger</u>									
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		22-24	4, 3, 8, 14	SAND -----27 ft----- Bottom of boring	22-24-	Brown fine to medium SAND, wet.			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing <small>NOTE: 3rd attempt to install well. 1st and 2nd attempts abandoned due to auger; refusal and heaving sands</small>									

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# GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>11/17/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>B. Woods</u> Well No. <u>MW-25</u> Location _____ M.P. Elevation _____ Drilling Started <u>10:55</u> Ended <u>12:30</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
				Hole Diam. (in.) <u>10</u> Final Depth (ft.) <u>15.5</u> Casing Diam. (in.) <u>4</u> Casing Length (ft.) <u>15</u> Screen Setting (ft.) <u>15.5 - 5.5</u> Screen Slot & Type <u>PVC</u> Well Status <u>Monitoring well</u>	Date	DTW MP (2)	Elev. W.S		
				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
				Type <u>Split Spoon</u>	Pump and surge				
				Hammer <u>140</u> lb.					
				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab sample	SAND	0-2-	Top 0-0.8': Dark brown fine SAND, little gravel. Bottom 0.8-2.0': Light brown fine SAND.			
0		2-4'	Grab sample		2-4-	Light brown medium SAND, well sorted.			
0	1.2	4-6'			4-6-	Light brown-gray medium SAND, well sorted.			
0	1.5	6-8'	3, 8, 16, 25		6-8-	Brown to light brown medium to coarse SAND, moist. Water table at 8 ft.			
0	1.8	13-15'	6, 8, 5, 4		13-15-	Brown medium SAND, well sorted, wet.			
					-----15.5 ft----- Bottom of boring				
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

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GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>		
Study No. <u>05509Y</u> Date <u>12/05/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>V. Singh, B. Woods</u> Well No. <u>MW-26</u> Location _____				Hole Diam. (in.) <u>8</u> Final Depth (ft.) <u>22.5</u> Casing Diam. (in.) <u>4</u> Casing Length (ft.) <u>20</u> Screen Setting (ft.) <u>21 - 11</u> Screen Slot & Type <u>PVC</u> Well Status <u>Monitoring well</u>	Date	DTW MP (2)	Elev. W.S.	
M.P. Elevation _____ Drilling Started <u>12:30</u> Ended <u>18:00</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>				<u>SAMPLER</u> Type <u>Split Spoon</u> Hammer <u>140</u> lb. Fall <u>30</u> in.	<u>DEVELOPMENT</u> Pump and surge			
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth			Blows/6"		
0		0-2'	Grab sample	SAND & SILT	0-2-	Dark brown fine to medium SAND and SILT (Railroad fill)		
0		2-3'	Grab sample	-----2 ft-----	2-3-	Brown medium to fine SAND (Railroad fill).		
0	0.8	3-4'	N/R		3-4-	Brown fine to medium SAND, trace gravel.		
	0	4-6'	N/R		4-6-	Repeated auger refusals.		
12	0.25'	6-8'	N/R		6-8-	Fractured gravel (not enough for sampling).		
70	1.1'	9-11'	N/R		9-11-	Brown medium to fine SAND.		
-	0	11-11.7'	N/R					
40	0.9'	12-14'	38, 28, 66, 80	SAND	12-14-	Brown medium to fine SAND, some fractured gravel, wet. Water table at 13 ft		
34	0.8'	17-19'	43, 67, 38, 62		17-19-	Brown medium to fine SAND.		
				-----22.5 ft----- Bottom of boring				

REMARKS (1) in feet relative to a common datum  
(2) from top of PVC casing

NOTE: 3rd attempt to install well. 1st and 2nd attempts abandoned due to auger refusal, and heaving sands

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
Study No. <u>05509Y</u> Date <u>12/01/90</u>				Hole Diam. (in.) <u>10</u>		Date	DTW MP (2)	Elev. W.S.	
Project <u>Sunnyside Yard</u>				Final Depth (ft.) <u>19</u>					
Client <u>AMTRAK</u>				Casing Diam. (in.) <u>4</u>					
Page <u>1</u> of <u>1</u>				Casing Length (ft.) <u>20</u>					
Logged By <u>H. Gregory, B. Woods</u>				Screen Setting (ft.) <u>18 - 8</u>					
Well No. <u>MW-27</u>				Screen Slot & Type <u>PVC</u>					
Location _____				Well Status <u>Monitoring well</u>					
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
Drilling Started <u>13:15</u> Ended <u>16:30</u>				Type <u>Split Spoon</u>		Pump and surge			
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.					
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
37		0-2'	Grab sample		0-2-	Dark brown to light brown, medium SAND, some gravel, trace cobbles; dark stained in 0-7" interval.			
9.0		2-4'	Grab sample		2-4-	Light brown, fine to medium SAND, trace cobbles.			
15.5	1.2	4-6'	N/R		4-6-	Brown to light brown fine to coarse SAND, poorly sorted, wet in top 0.2.			
2.3	0.8	6-8'	N/R	SAND	7-9-	Gray medium to fine SAND, crushed rock.			
3.9	1.1	7-9'	11, 32, 56, 65		9-11-	Brown fine to medium SAND, well sorted; wet. Water table at 10 ft			
11.1	1.8	9-11'	4, 9, 21, 19						
		14-16'	12, 34, 19, 25		14-16-	Brown, medium to fine, SAND, wet.			
				Bottom of boring -----19 ft-----					
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS</u> (1)		
Study No. <u>05509Y</u> Date <u>11/09/90</u>				Hole Diam. (in.) <u>10</u>	Final Depth (ft.) <u>17</u>	Date	DTW MP (2)	Elev. W.S
Project <u>Sunnyside Yard</u>				Casing Diam. (in.) <u>4</u>				
Client <u>AMTRAK</u>				Casing Length (ft.) <u>16</u>				
Page <u>1</u> of <u>1</u>				Screen Setting (ft.) <u>16 - 6</u>				
Logged By <u>H. Gregory</u>				Screen Slot & Type <u>PVC</u>				
Well No. <u>MW-28</u>				Well Status <u>Monitoring well</u>				
Location _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>		
M.P. Elevation _____				Type <u>Split Spoon</u>	Pump and surge			
Drilling Started <u>08:00</u> Ended <u>11:00</u>				Hammer <u>140</u> lb.				
Driller <u>Land, Air, Water Environmental Services</u>				Fall <u>30</u> in.				
Type of Rig <u>Hollow stem auger</u>								
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth			Blows/6"		
7.1		0-2'	Grab sample		0-2-	Brown fine SAND, trace gravel and silt.		
21.4		2-4'	Grab sample	SAND	2-4-	Brown fine SAND, trace gravel and silt.		
12	1.6	4-6'	2, 2, 2, 6		4-6-	Brown fine SAND, trace silt and gravel.		
10.6	1.1	6-8'	5, 5,, 6, 7		6-8-	Brown fine SAND, little silt. (silt on bands 0.1' - 0.2' thick)  Water table at 8 ft.		
7.4	1.3	13-15'	10, 13, 10, 7		13-15-	Brown fine SAND, Trace Silt and clay; gray clay layer about 0.5' at 14.5 - 15'.		
	1.8	14-16'	7, 6, 13, 21	----- CLAY ----- SAND ----- Bottom of boring	14-16-	Brown fine SAND; Bottom .3': Gray brown medium to coarse SAND. Middle 0.8': Brown fine SAND, trace Silted clay top 0.5'.		

REMARKS (1) in feet relative to a common datum  
(2) from top of PVC casing

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ROUX ASSOCIATES, INC.

# GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>11/17/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>H. Gregory</u> Well No. <u>MW-29</u> Location _____ M.P. Elevation _____ Drilling Started <u>09:20</u> Ended <u>11:35</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>			
				Hole Diam. (in.) <u>10</u> Final Depth (ft.) <u>13</u> Casing Diam. (in.) <u>4</u> Casing Length (ft.) <u>14</u> Screen Setting (ft.) <u>11 - 1</u> Screen Slot & Type <u>PVC</u> Well Status <u>Monitoring well</u>	Date	DTW MP (2)	Elev. W.S		
				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
				Type <u>Split Spoon</u>	Pump and surge				
				Hammer <u>140</u> lb.					
				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>			
	No.	Rec.	Depth			Blows/6"			
0		0-2'	Grab sample	SAND	0-2-	Dark Brown fine to medium SAND and silt with gravel and cinders, (Railroad bed fill), wet at 2 ft.			
0		2-4'	Grab sample		2-4-	Brown fine to medium SAND, trace silt and gravel, wet. Water table at 2 ft.			
0	1.4	7-9'	2, 4, 3, 4		7-9-	Brown fine SAND, trace silt and gravel.			
0	1.8	11-13'	2, 2, 2, 3		11-13-	Brown fine SAND, trace silt and gravel.			
				-----13 ft----- Bottom of boring					
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>		
Study No. <u>05509Y</u> Date <u>11/30/90</u>				Hole Diam. (in.) <u>10</u>	Final Depth (ft.) <u>16</u>	Date	DTW MP (2)	Elev. W.S
Project <u>Sunnyside Yard</u>				Casing Diam. (in.) <u>4</u>	Casing Length (ft.) <u>17</u>			
Client <u>AMTRAK</u>				Screen Setting (ft.) <u>14 - 4</u>	Screen Slot & Type <u>PVC</u>			
Page <u>1</u> of <u>1</u>				Well Status <u>Monitoring well</u>				
Logged By <u>H. Gregory</u>				<u>SAMPLER</u>		<u>DEVELOPMENT</u>		
Well No. <u>MW-30</u>				Type <u>Split Spoon</u>	Pump and surge			
Location _____				Hammer <u>140</u> lb.	Fall <u>30</u> in.			
M.P. Elevation _____								
Drilling Started <u>9:00</u> Ended <u>14:00</u>								
Driller <u>Land, Air, Water Environmental Services</u>								
Type of Rig <u>Hollow stem auger</u>								
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth			Blows/"6		
0		0-2'	Grab sample	SAND, SILT & GRAVEL	0-2-	Top 0.6': Dark brown fine to medium SAND and Silt. Middle 0.4': Cinders Bottom 1': Brown fine to coarse SAND and gravel.		
0		2-4'	Grab sample		2-4-	Brown fine to coarse SAND and gravel.		
0	1.0	4-6'	4, 8, 7, 11	-----4 ft-----	4-6-	Brown fine to coarse SAND, Trace gravel; wet at tip. Water table at 6 ft.		
11	1.2	6-8'	2, 4, 6, 9	SAND	6-8-	Top is brown fine to coarse SAND Bottom 0.2': Dark gray silty clay; organic; trace Peat.		
	2	8-10'	4, 9, 6, 11	-----8 ft----- CLAY -----9 ft-----	8-10-	Top 0.5': Brown fine to coarse SAND Bottom 1.5': Meadow Mat; Wet.		
13	2	11-13'	5, 7, 7, 9	Meadow Mat with Silty CLAY -----16 ft----- Bottom of boring	11-13-	Meadow mat with gray black organic silty clay.		

REMARKS (1) in feet relative to a common datum  
(2) from top of PVC casing

# GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>11/08/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>H. Gregory</u> Well No. <u>MW-31</u> Location _____ M.P. Elevation _____ Drilling Started <u>08:20</u> Ended <u>11:10</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>				<u>WELL DATA</u>		<u>G-W READINGS</u> (1)			
				Hole Diam. (in.) <u>10</u>	Final Depth (ft.) <u>13</u>	Date	DTW MP (2)	Elev. W.S.	
				Casing Diam. (in.) <u>4</u>	Casing Length (ft.) <u>12.5</u>				
				Screen Setting (ft.) <u>12.5 - 2.5</u>	Screen Slot & Type <u>PVC</u>				
				Well Status <u>Monitoring well</u>					
				<u>SAMPLER</u>		<u>DEVELOPMENT</u>			
				Type <u>Split Spoon</u>	Hammer <u>140</u> lb.	Pump and surge			
				Fall <u>30</u> in.					
PID (ppm)	<u>SAMPLE</u>				Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth	Blows/6"					
0		0-2'	Grab sample	SAND and Silt	0-2-	Brown fine SAND and silt, trace gravel, stained dark brown to black.			
0		2-4'	Grab sample		2-4-	Brown fine to medium SAND and silt, trace gravel.			
0	0.7	4-6'	N/R	-----4 ft-----	4-6-	Brown fine to medium SAND, trace silt, wet. Water table at 4.5 ft.			
25	1.2	10-12'	5, 7, 25, 50	SAND -----13 ft----- Bottom of boring	10-12-	Brown medium to coarse SAND, little fine gravel.			
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing									

# GEOLOGIC LOG

				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>		
Study No. <u>05509Y</u> Date <u>10/04/90</u>				Hole Diam. (in.) <u>10</u>	Final Depth (ft.) <u>17</u>	Date	DTW MP (2)	Elev. W.S.
Project <u>Sunnyside Yard</u>				Casing Diam. (in.) <u>4</u>	Casing Length (ft.) <u>12.6</u>			
Client <u>AMTRAK</u>				Screen Setting (ft.) <u>12.2 - 2.6</u>	Screen Slot & Type <u>PVC</u>			
Page <u>1</u> of <u>1</u>				Well Status <u>Monitoring well</u>				
Logged By <u>V. Singh</u>								
Well No. <u>MW-32</u>								
Location _____								
M.P. Elevation _____				<u>SAMPLER</u>		<u>DEVELOPMENT</u>		
Drilling Started <u>08:30</u> Ended <u>1000</u>				Type <u>Split Spoon</u>			Pump and surge	
Driller <u>Land, Air, Water Environmental Services</u>				Hammer <u>140</u> lb.				
Type of Rig <u>Hollow stem auger</u>				Fall <u>30</u> in.				
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>		
	No.	Rec.	Depth			Blows/6"		
	1.3	0-2'	7, 11, 10, 15	SAND	0-2-	Black to brown fine to coarse SAND, trace gravel finer toward bottom.		
	1.3	2-4'	8, 16, 19, 8		2-4-	Black to brown fine to coarse SAND, trace gravel coarser toward bottom.		
	1.1	4-6'	24, 16, 8, 10		4-6-	Brown medium to coarse SAND, trace gravel in Top .8'; Wet Water table at 5 ft.		
	1.4	10-12'	7, 7, 9, 14		10-12-	Brown to black medium coarse SAND, trace gravel; wct.		
	1.3	15-17'	4, 8, 9, 8		-----15 ft----- SAND & SILT -----17 ft----- Bottom of boring	15-17-	Gray/brown fine to medium SAND and SILT, trace clay; Wet.	

REMARKS (1) in feet relative to a common datum  
(2) from top of PVC casing

## GEOLOGIC LOG

Study No. <u>05509Y</u> Date <u>11/15/90</u> Project <u>Sunnyside Yard</u> Client <u>AMTRAK</u> Page <u>1</u> of <u>1</u> Logged By <u>V. Singh</u> Well No. <u>MW-33</u> Location _____ M.P. Elevation _____ Drilling Started <u>12:00</u> Ended <u>3:20</u> Driller <u>Land, Air, Water Environmental Services</u> Type of Rig <u>Hollow stem auger</u>				<u>WELL DATA</u>		<u>G-W READINGS (1)</u>						
				Hole Diam. (in.) <u>10</u>	Final Depth (ft.) <u>20</u>	Casing Diam. (in.) <u>4</u>	Casing Length (ft.) <u>18</u>	Screen Setting (ft.) <u>18 - 8</u>	Date	DTW MP (2)	Elev. W.S.	
				Screen Slot & Type <u>PVC</u>	Well Status <u>Monitoring well</u>							
				<u>SAMPLER</u>		<u>DEVELOPMENT</u>						
				Type <u>Split Spoon</u>	Hammer <u>140</u> lb.	Fall <u>30</u> in.				Pump and surge		
PID (ppm)	<u>SAMPLE</u>				Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>					
	No.	Rec.	Depth	Blows/6"								
0		0-2'	Grab sample		0-2-	Black/brown fine to medium SAND and gravel (railroad bed fill).						
3.8		2-4'	Grab sample		2-4-	Brown fine to medium SAND, trace gravel and cobbles.						
0	1.25	4-6'	N/R	SAND	4-6-	Brown fine to medium SAND.						
0	0	6-8'	N/R		6-8-							
0	.9	8-10'	13, 21, 53, 31		8-10-	Brown fine to medium SAND; Wet at top.						
						Water table at 10 ft.						
0.5	18-20'	N/R		Bottom of boring -----20 ft-----	18-20-	Gray fine to coarse SAND, trace fine gravel; wet.						
<b>REMARKS</b> (1) in feet relative to a common datum (2) from top of PVC casing												

# GEOLOGIC LOG

		<u>WELL DATA</u>			<u>G-W READINGS (1)</u>		
		Hole Diam. (in.)	10	Date	DTW MP (2)	Elev. W.S	
Study No. <u>05509Y</u> Date <u>11/29/90</u>		Final Depth (ft.)	21				
Project <u>Sunnyside Yard</u>		Casing Diam. (in.)	4				
Client <u>AMTRAK</u>		Casing Length (ft.)	19.8				
Page <u>1</u> of <u>1</u>		Screen Setting (ft.)	17.3 - 7.3				
Logged By <u>V. Singh</u>		Screen Slot & Type	PVC				
Well No. <u>MW-34</u>		Well Status	Monitoring well				
Location _____							
M.P. Elevation _____		<u>SAMPLER</u>			<u>DEVELOPMENT</u>		
Drilling Started <u>09:45</u> Ended <u>12:45</u>		Type	Split Spoon	Pump and surge			
Driller <u>Land, Air, Water Environmental Services</u>		Hammer	140 lb.				
Type of Rig <u>Hollow stem auger</u>		Fall	30 in.				
PID (ppm)	<u>SAMPLE</u>			Strata Change & Gen. Desc.	Depth (ft)	<u>SAMPLE DESCRIPTION</u>	
	No.	Rec.	Depth			Blows/6"	
0		0-2'	Grab sample	SAND & SILT	0-2-	Dark brown fine SAND and silt.	
0		2-4'	Grab sample	-----2 ft-----	2-4-	Brown fine to medium SAND, trace fine gravel.	
0	1.6	4-6'	9, 17, 23, 28	SAND	4-6-	Brown fine to medium SAND, trace silt and gravel.	
0	1.2	6-8'	13, 18, 22, 27		6-8-	Brown fine to medium SAND, trace silt and gravel.	
0	1.3	8-10'	17, 19, 25, 32		8-10-	Top 0.5': Brown fine SAND, trace gravel. 0.5-1.3: Red/brown fine to medium SAND.	
0	1.2	10-12'	32, 37, 45, 48		10-12-	Red/brown fine to medium SAND, interbedded in layers; Wet at tip.	
0	1.7	12-14'	7, 12, 17, 20		12-14-	Red/brown fine SAND; Wet. Water table at 12 ft.	
0	1.8	17-19'	5, 12, 25, 32	Sand, Silt and Clay	17-19-	Red/brown fine sand, silt, and CLAY interbedded in layers; Wet.	
*0	1.8	19-21'	N/R	-----19 ft----- Clay	19-21-	Red/brown CLAY and silty clay in interbedded layers. Bottom of boring at 21 ft.	

**REMARKS** (1) in feet relative to a common datum  
(2) from top of PVC casing

NOTE: Well Screen set high to avoid clay

## **APPENDIX D**

### **Chain of Custody Forms**

**ROUX****CHAIN OF CUSTODY**

No. 160 Y

PROJECT NAME <b>AMTRAK SUNNYSIDE</b>		PROJECT NUMBER <b>05509Y</b>	ANALYSES		PAGE OF
PROJECT LOCATION SUNNYSIDE YARD, QUEENS, NY					
SAMPLER(S): V.S./H.G / B.W					
SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	NOTES		TOTAL BOTTLES
S-33 (0-2)	12/13/90	11:00	1		1
S-33 (4-6)	12/13/90	11:50	1		1
<b>TOTAL JARS</b>					<b>2</b>
RELINQUISHED BY: (SIGNATURE) <i>Miguel S.</i>	FOR DATE 12/13/90	TIME 5:00	RELINQUISHED BY: (SIGNATURE)		DATE TIME
RELINQUISHED BY: (SIGNATURE)	FOR DATE	TIME	RELINQUISHED BY: (SIGNATURE)		DATE TIME
RELINQUISHED BY: (SIGNATURE)	FOR DATE	TIME	RELINQUISHED BY: (SIGNATURE)		DATE TIME
DELIVERY METHOD <b>F EDEX</b>	COMMENTS <b>Air Mail # 8604922782.</b>				

**ROUX**

Consulting Ground-Water  
Geologists & Engineers  
**ROUX ASSOCIATES INC**

**CHAIN OF CUSTODY**

Nº

157

Y

ANALYSES				PAGE OF
SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	NOTES	TOTAL BOTTLES
MW-20 (0-2)	12/11/90	8:50		2
MW-20 (0-2)	12/11/90	8:50	1	1
S-60 (4-6)	12/12/90	10:50		1
S-78 (8-9)	12/12/90	9:30		1
TOTAL JARS				4
RELINQUISHED BY: (SIGNATURE)	FOR	DATE 12/12/90	TIME	RELINQUISHED BY: (SIGNATURE) FOR DATE TIME
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	RELINQUISHED BY: (SIGNATURE) FOR DATE TIME
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	RELINQUISHED BY: (SIGNATURE) FOR DATE TIME
DELIVERY METHOD	COMMENTS	AHR Bill # 86049 22-771		

## CHAIN OF CUSTODY

20

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163

## CHAIN OF CUSTODY

Nº:

151

Y

Consulting Ground-Water  
Geologists & Engineers  
**ROUX ASSOCIATES INC**  
775 PARK AVENUE, SUITE 255  
HUNTINGTON, NEW YORK 11743  
(516) 673-7200 FAX. (516) 673-7216

PROJECT NAME  
**AMTRAK SUNNYSIDE**

PROJECT NUMBER  
**05509 Y**

PROJECT LOCATION  
**SUNNY SIDE YARD, QUEENS, NY.**

SAMPLER(S):  
**V-S / 4.6.1.B.m.**

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	ANALYSES		PAGE OF TOTAL BOTTLES
			PHC	DCP/PB <sub>a</sub> (S <sub>b</sub> )	
S-32 (0-2)	12/04/90	12:05	1	1	2
S-19 (0-2)	12/04/90	2:00	1	1	1
S-25 (0-2)	12/05/90	9:50	1	1	1
S-25 (12-14)	12/05/90	10:45	1	1	1
S-25 (19-21)	12/05/90	11:15	1	1	1
<del>S-25 (0-1)</del>	<del>12/05/90</del>	<del>15:50</del>			
MW-26 (6-2)	12/05/90	12:45	1	1	1
S-19 (9-11)	12/04/90	15:30	1	1	1
MW-26 (9-11)	12/05/90	16:20	1	1	1
MW-26 (12-14)	12/05/90	16:50	1	1	1
MW-26 (17-19) (ANALYSIS) <del>17-19</del>	12/05/90	17:30	1	1	1
RELINQUISHED BY: (SIGNATURE) <i>✓ J. K. S. H.</i>	FOR	DATE 12/10/90	TIME 6:55	RELINQUISHED BY: (SIGNATURE) FOR	DATE TIME
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	RELINQUISHED BY: (SIGNATURE) FOR	DATE TIME
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	RELINQUISHED BY: (SIGNATURE) FOR	DATE TIME
DELIVERY METHOD	COMMENTS				
EEDEX	11-2 BILL #	8604	922443		

**ROUX**

CHAIN OF CUSTODY

No. 162 Y

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SECTION PAGE 0E

PROJECT NAME		PROJECT NUMBER		ANALYSES		PAGE OF
PROJECT LOCATION	SAMPLER(S):	DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	NOTES	
AMTRAK SUNNYSIDE	HG/BW/V-S.	S-36 (0-2)	12/01/90	9:30	1	2
		S-36 (6-8)	12/01/90	9:35	1	1
		S-36 (14-16)	12/01/90	10:20	1	1
		S-37 (0-2)	12/01/90	11:45	1	1
		S-37 (0-2) MS/MSD	12/01/90	11:50	1	1
		S-37 (4-6)	12/01/90	11:55	1	1
		S-37 (8-10)	12/01/90	12:20	1	1
		S-37 (14-16) concrete	12/01/90	12:35	1	1
		FB-10 (PD)	12/01/90	11:15	2	2 Post Digger.
		FB-9. (SS)	12/01/90	11:15	2	2 Split spoon
		TB - 5	12/01/90	11:15	2	2
		MW-27 (0-2)	12/01/90	15:30	1	1
		MW-27 (7-9)	12/01/90	15:30	1	1
		MW-27 (14-16)	12/01/90	15:30	1	1
RELINQUISHED BY: (SIGNATURE) <u>Joseph Dunn</u>		FOR	DATE 12-01-90	TIME 4:30	RELINQUISHED BY: (SIGNATURE)	FOR
RELINQUISHED BY: (SIGNATURE) <u>                                </u>		FOR	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	FOR
RELINQUISHED BY: (SIGNATURE) <u>                                </u>		FOR	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	FOR
DELIVERY METHOD F E D E X					DATE	TIME
COMMENTS AeBiu # 8604922701					DATE	TIME

**ROUX****CHAIN OF CUSTODY**

No. 153 Y

PROJECT NAME			ANALYSES			PAGE OF
AMTRAK SUNNYSIDE			TOTAL BOTTLES			
SUNNYSIDE YARD, QUEENS, NY						
U.S./B.W./H.G.						
SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	NOTES			
MW - 30 (0 - 2)	11/30/90	0910	1			
MW - 30 (6 - 8)	11/30/90	11:40	1			
MW - 30 (11 - 13)	11/30/90	1235	1			
S - 35 (0 - 2)	11/30/90	0936	1			
S - 35 (8 - 10)	11/30/90	1502	1			
Total						4
RELINQUISHED BY: <i>[Signature]</i>	FOR <i>[Signature]</i>	DATE 11/30/90	TIME 1000	REINQUISTERED BY: (SIGNATURE)		FOR
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	RELINQUISHED BY: (SIGNATURE)		FOR
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	RELINQUISHED BY: (SIGNATURE)		FOR
DELIVERY METHOD		COMMENTS <i>All soil at 8604922690</i>				

**ROUX****CHAIN OF CUSTODY**

No.

152

Y

Consulting Ground-Water  
Geologists & Engineers  
**ROUX ASSOCIATES INC**  
775 PARK AVENUE, SUITE 255  
HUNTINGTON, NEW YORK 11743  
(516) 673-7200 FAX. (516) 673-7216

PROJECT NAME **AMTRAK**PROJECT NUMBER **05509 Y**PROJECT LOCATION **AMTRAK, SUNNYSIDE YARD, QUEENS, NY**SAMPLER(S): **V.S./H.G./B.W**

SAMPLE DESIGNATION/LOCATION

DATE COLLECTED

TIME COLLECTED

NOTES

**MW-34 (0-2)****11-29-90****10:00****1****1****MW-34 (10-12)****11-29-90****11:30****1****1****S-38 (0-2)****11-29-90****15:00****1****1****S-38 (2-4)****11-29-90****15:00****1****1****S-38 (10-12)****11-29-90****15:30****1****1****S-38 (12-14)****11-29-90****15:40****1****1****S-39 (0-2)****11-29-90****13:00****1****1****S-39 (2-4)****11-29-90****13:20****1****1****S-39 (8-10)****11-29-90****14:05****1****1****MW-34 (15-17)****11-29-90****12:00****1****1****TOTAL JARS**RELINQUISHED BY: (SIGNATURE) **Nresh Singh.**DATE **11-29-90**TIME **6:00**RELINQUISHED BY: (SIGNATURE) **(Signature)**DATE TIME RELINQUISHED BY: (SIGNATURE) **(Signature)**DATE TIME RELINQUISHED BY: (SIGNATURE) **(Signature)**DATE TIME DELIVERY METHOD **FEDEX**COMMENTS **AIR BILL # 8604922406****DTK**

**ROUX****CHAIN OF CUSTODY**

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ANALYSES				PAGE OF			
PROJECT NAME	PROJECT LOCATION	PROJECT NUMBER	NOTES	TOTAL BOTTLES			
<b>ROUX ASSOCIATES INC</b>	<b>AMTRAK SUNNYSIDE YARD SUNNYSIDE, QUEENS NY</b>	<b>055091</b>					
SAMPLER(S):	B.W. H.G. V.S.						
SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED					
S-57 (0-2)	11/26/90	1000	1				
S-60 (0-2)	11/26/90	0930	1				
<del>5-78 (0-2)</del>	11/26/90	0900	1				
<del>5-24 (0-2)</del>	11/27/90	1205	1				
				1220			
RELINQUISHED BY: (SIGNATURE) <i>John D'Amato</i>	FOR <i>Box</i>	DATE <i>11/27/90</i>	TIME <i>10</i>	RELINQUISHED BY: (SIGNATURE) <i></i>	FOR <i></i>	DATE <i></i>	TIME <i></i>
RELINQUISHED BY: (SIGNATURE) <i></i>	FOR <i></i>	DATE <i></i>	TIME <i></i>	RELINQUISHED BY: (SIGNATURE) <i></i>	FOR <i></i>	DATE <i></i>	TIME <i></i>
RELINQUISHED BY: (SIGNATURE) <i></i>	FOR <i></i>	DATE <i></i>	TIME <i></i>	RELINQUISHED BY: (SIGNATURE) <i></i>	FOR <i></i>	DATE <i></i>	TIME <i></i>
DELIVERY METHOD <i>Air Mail</i>	Comments <i>Express</i>						

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**CHAIN OF CUSTODY**

No.

164 Y

SAMPLE DESIGNATION/LOCATION				DATE COLLECTED	TIME COLLECTED	ANALYSES	PAGE OF
S-53 (0-2)				11-18-90	07:55	1	1
S-53 (3.5-5.5)				11-18-90	10:30	1	1
S-53 (5-7)				11-18-90	12:30	1	1
S-53 (8-10)				11-18-90	13:00	1	1
<b>TOTAL (JARS)</b>							5
RELINQUISHED BY: (SIGNATURE) <i>W. Roux</i>	FOR	DATE 11-19-90	TIME 5:00 PM	RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME
DELIVERY METHOD <b>FED EX</b>	COMMENTS						

## **CHAIN OF CUSTODY**

Y 150



**ROUX**

No. 147 Y

**CHAIN OF CUSTODY**

Consulting Ground-Water  
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**ROUX ASSOCIATES INC**  
775 PARK AVENUE, SUITE 255  
HUNTINGTON, NEW YORK 11743  
(516) 673-7200 FAX. (516) 673-7216

PROJECT NAME AMTRAK SUNNYSIDE PROJECT NUMBER 05509 Y

PROJECT LOCATION SUNNYSIDE YARD, QUEENS, NY

SAMPLER(S): H6/V.S./B.W.

ANALYSES				PAGE OF
SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	NOTES	TOTAL BOTTLES
S-78 (0-2) MS/MSD	11/14/90	0930		1
S-78 (0-2)	11/14/90	0930	1	2
S-78 (8-9)	11/14/90	1020	1	1
S-60 (0-2)	11/14/90	1240	1	1
S-60 (4-6)	11/14/90	1320	1	1
S-57 (0-2)	11/14/90	1520	1	1
MW-33 (0-2)	11/15/90	1230	1	1
MW-33 (8-10)	11/15/90	1415	1	1
<b>Total # Bottles</b>				<b>9</b>
RELINQUISHED BY: (SIGNATURE) <i>Vince J. Roux</i>	FOR	DATE 11/15/90	TIME 5:15 pm	RELINQUISHED BY: (SIGNATURE) FOR
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	DATE
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	DATE
DELIVERY METHOD	COMMENTS			

## CHAIN OF CUSTODY

Nº

Y 145

Consulting Ground-Water  
Geologists & Engineers  
**ROUX ASSOCIATES INC**  
775 PARK AVENUE, SUITE 255  
HUNTINGTON, NEW YORK 11743  
(516) 673-7200 FAX: (516) 673-7216

PROJECT NAME  
**ANSTRACK / SUNNYSIDE**  
PROJECT LOCATION  
**SUNNYSIDE, QUEENS**

## ANALYSES

PAGE OF

1

SAMPLE DESIGNATION/LOCATION  
**BN 11C VS**

1

PROJECT NUMBER  
**O 5509 Y**

1

PROJECT LOCATION

1

SAMPLER(S): **BN 11C VS**

1

SAMPLE DESIGNATION/LOCATION  
**BN 11C VS**

1

DATE COLLECTED  
**11/11/90**

1

TIME COLLECTED  
**1230**

1

NOTES  
**2**

1

S-6 (0'-2')  
**11/11/90 1350**

1

S-16 (0'-2')  
**11/11/90 1050**

1

S-16 (0'-12')  
**11/11/90 1120**

1

S-20 (0'-2')  
**11/11/90 1440**

1

NOTES  
**2**

1

S-6 (8'-9')  
**11/11/90 1350**

1

S-16 (0'-2')  
**11/11/90 1050**

1

S-16 (0'-12')  
**11/11/90 1120**

1

S-20 (0'-2')  
**11/11/90 1440**

1

NOTES  
**2**

1

S-6 (8'-9')  
**11/11/90 1350**

1

S-16 (0'-2')  
**11/11/90 1050**

1

S-16 (0'-12')  
**11/11/90 1120**

1

S-20 (0'-2')  
**11/11/90 1440**

1

NOTES  
**2**

1

S-6 (8'-9')  
**11/11/90 1350**

1

S-16 (0'-2')  
**11/11/90 1050**

1

S-16 (0'-12')  
**11/11/90 1120**

1

S-20 (0'-2')  
**11/11/90 1440**

1

NOTES  
**2**

1

S-6 (8'-9')  
**11/11/90 1350**

1

S-16 (0'-2')  
**11/11/90 1050**

1

S-16 (0'-12')  
**11/11/90 1120**

1

S-20 (0'-2')  
**11/11/90 1440**

1

NOTES  
**2**

1

S-6 (8'-9')  
**11/11/90 1350**

1

S-16 (0'-2')  
**11/11/90 1050**

1

S-16 (0'-12')  
**11/11/90 1120**

1

S-20 (0'-2')  
**11/11/90 1440**

1

NOTES  
**2**

1

S-6 (8'-9')  
**11/11/90 1350**

1

S-16 (0'-2')  
**11/11/90 1050**

1

S-16 (0'-12')  
**11/11/90 1120**

1

S-20 (0'-2')  
**11/11/90 1440**

1

NOTES  
**2**

1

S-6 (8'-9')  
**11/11/90 1350**

1

S-16 (0'-2')  
**11/11/90 1050**

1

S-16 (0'-12')  
**11/11/90 1120**

1

S-20 (0'-2')  
**11/11/90 1440**

1

NOTES  
**2**

1

S-6 (8'-9')  
**11/11/90 1350**

1

S-16 (0'-2')  
**11/11/90 1050**

1

S-16 (0'-12')  
**11/11/90 1120**

1

S-20 (0'-2')  
**11/11/90 1440**

1

NOTES  
**2**

1

S-6 (8'-9')  
**11/11/90 1350**

1

S-16 (0'-2')  
**11/11/90 1050**

1

S-16 (0'-12')  
**11/11/90 1120**

1

S-20 (0'-2')  
**11/11/90 1440**

1

NOTES  
**2**

1

S-6 (8'-9')  
**11/11/90 1350**

1

S-16 (0'-2')  
**11/11/90 1050**

1

S-16 (0'-12')  
**11/11/90 1120**

1

S-20 (0'-2')  
**11/11/90 1440**

1

NOTES  
**2**

1

S-6 (8'-9')  
**11/11/90 1350**

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S-16 (0'-2')  
**11/11/90 1050**

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S-16 (0'-12')  
**11/11/90 1120**

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S-20 (0'-2')  
**11/11/90 1440**

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NOTES  
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S-6 (8'-9')  
**11/11/90 1350**

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S-16 (0'-2')  
**11/11/90 1050**

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S-16 (0'-12')  
**11/11/90 1120**

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S-20 (0'-2')  
**11/11/90 1440**

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NOTES  
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S-6 (8'-9')  
**11/11/90 1350**

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S-16 (0'-2')  
**11/11/90 1050**

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S-16 (0'-12')  
**11/11/90 1120**

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S-20 (0'-2')  
**11/11/90 1440**

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NOTES  
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S-6 (8'-9')  
**11/11/90 1350**

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S-16 (0'-2')  
**11/11/90 1050**

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S-16 (0'-12')  
**11/11/90 1120**

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S-20 (0'-2')  
**11/11/90 1440**

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NOTES  
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S-6 (8'-9')  
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S-16 (0'-2')  
**11/11/90 1050**

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S-16 (0'-12')  
**11/11/90 1120**

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S-20 (0'-2')  
**11/11/90 1440**

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NOTES  
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S-6 (8'-9')  
**11/11/90 1350**

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S-16 (0'-2')  
**11/11/90 1050**

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S-16 (0'-12')  
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S-20 (0'-2')  
**11/11/90 1440**

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NOTES  
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S-6 (8'-9')  
**11/11/90 1350**

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S-16 (0'-2')  
**11/11/90 1050**

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S-16 (0'-12')  
**11/11/90 1120**

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S-20 (0'-2')  
**11/11/90 1440**

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NOTES  
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S-6 (8'-9')  
**11/11/90 1350**

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S-16 (0'-2')  
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S-16 (0'-12')  
**11/11/90 1120**

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S-20 (0'-2')  
**11/11/90 1440**

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NOTES  
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S-6 (8'-9')  
**11/11/90 1350**

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S-16 (0'-2')  
**11/11/90 1050**

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S-16 (0'-12')  
**11/11/90 1120**

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S-20 (0'-2')  
**11/11/90 1440**

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NOTES  
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S-6 (8'-9')  
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S-16 (0'-2')  
**11/11/90 1050**

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S-16 (0'-12')  
**11/11/90 1120**

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S-20 (0'-2')  
**11/11/90 1440**

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NOTES  
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S-6 (8'-9')  
**11/11/90 1350**

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S-16 (0'-2')  
**11/11/90 1050**

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S-16 (0'-12')  
**11/11/90 1120**

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S-20 (0'-2')  
**11/11/90 1440**

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NOTES  
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S-6 (8'-9')  
**11/11/90 1350**

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S-16 (0'-2')  
**11/11/90 1050**

1

S-16 (0'-12')  
**11/11/90 1120**

1

S-20 (0'-2')  
**11/**

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**BOIX ASSOCIATES INC**  
Consulting Ground-Water  
Geologists & Engineers  
775 PARK AVENUE, SUITE 255  
HUNTINGTON, NEW YORK 11743  
(516) 673-7200 FAX. (516) 673-

**ROUX ASSOCIATES INC** (516) 673-7200 FAX: (516) 673-**5529** PROJECT NUMBER

PROJECT NAME	AMTRAK SUNNYSIDE
PROJECT NUMBER	055097

**PROJECT LOCATION**  
SUNNY SIDE YARD QUEENS, NY

SAMPLER(S): BN HGSJ

סימון ועיבוד נתונים/<sup>ט</sup>תאורה נורמלית (0-2) (0-90)

5-5 (0) 15-5 (2-0) 11/10/00 0451

S-52 (0 -2) 11|10|90 1350  
S-52 (1 -2) 11|10|90 1350

$$(\text{H}_1 - \text{Z}_1) (\text{Z}_5 - \text{S}_1) (\text{S}_5 - \text{G}_1) = 0$$

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ANSWER

1000

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RELINQUISHED BY: (SIGNATURE) FOR  
200X DATE 11-1-16 T1

REINQUISITION BY: (SIGNATURE) FOR DATE  
ASSOCIATE 10/40

RECOGNIZED BY: (SIGNATURE) \_\_\_\_\_ DATE \_\_\_\_\_

RELINQUISHED BY: (SIGNATURE) \_\_\_\_\_ FOR \_\_\_\_\_ DATE \_\_\_\_\_

<u>DELIVERY METHOD</u>	COMMENTS

## **CHAIN OF CUSTODY**

8  
13  
1

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**ROUX****CHAIN OF CUSTODY**

Nº

Y

135

ANALYSES				PAGE OF	PAGE
SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	NOTES		
MW-17 (0-2) ms/dsD	11-08-90	12:45			
MW-17 (0-2)	11-08-90	12:45		2	
MW-31 (0-2)	11-08-90	08:50		1	
MW-31 (10-12)	11-08-90	10:10		1	
MW-16 (0-2)	11-07-90	10:50		2	
MW-16 (6-8)	11-07-90	11:20		1	
MW-16 (10-12)	11-07-90	11:45		1	
S-41A (3.5-5.5)	11-07-90	16:25		1	
S-41A	11-07-90	16:30		2	
S-46 (0-2)	11-08-90	16:20		1	
S-46 (0-2) ms/dsD	11-08-90	16:20		1	
S-46 (7-9)	11-08-90	16:48		1	
TOTAL BOTTLES				13	8
RELINQUISHED BY: (SIGNATURE) <u>Joseph Dumaine</u>	FOR	DATE 11/8/90	TIME 17:00	RELINQUISHED BY: (SIGNATURE)	FOR
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	FOR
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	FOR
DELIVERY METHOD FEDERAL EXPRESS	COMMENTS NEED TCL RESULTS ASAP			DATE	TIME

## CHAIN OF CUSTODY

Nº

165

Y

Consulting Ground-Water  
Geologists & Engineers  
**ROUX ASSOCIATES INC**  
775 PARK AVENUE, SUITE 255  
HUNTINGTON, NEW YORK 11743  
(516) 673-7200 FAX. (516) 673-7216

PROJECT NAME

PROJECT LOCATION

SUNNYSIDE YARD

PROJECT NUMBER

05509 Y

SAMPLER(S):

H.G. / B.W. /

SAMPLE DESIGNATION/LOCATION

COLLECTED

TIME COLLECTED

ANALYSES

NOTES

TOTAL BOTTLES

(50)

MS/MSC

VQA (WATER)

TCL

PHC (50)

VQA (WATER)

(50)

MS/MSC

TOTAL

(50)

MS/MSC

VQA (WATER)

(50)

MS/MSC

**ROUX**

Consulting Ground-Water  
Geologists & Engineers  
**ROUX ASSOCIATES INC**

**CHAIN OF CUSTODY**

No. 166 Y

ANALYSES				PAGE 1 OF 1
				TOTAL BOTTLES
PROJECT NAME	PROJECT NUMBER	DATE COLLECTED	TIME COLLECTED	NOTES
AMIRAK	055094	10/27/90	10:35	1
Suny Side Rd., Queens		10/27/90	9:00	1
16x BW		10/27/90	13:15	1
		10/27/90	13:20	1
				6/11/90
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	RELINQUISHED BY: (SIGNATURE)
<i>John J. Roux</i>	Assoc.	10/27/90	14:45	
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	RELINQUISHED BY: (SIGNATURE)
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	RELINQUISHED BY: (SIGNATURE)
DELIVERY METHOD	COMMENTS			
FED. EXP.				



**ROUX****CHAIN OF CUSTODY**

N°

134

Y

ANALYSES				PAGE OF
SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	NOTES	
S-2 (0-2')	10/24/90	1530	1	
S-65 (0-2')	10/24/90	1200	1	
S-62 (0-2')	10/24/90	1100	1	
S-61 (0-1.1)	10/24/90	1130	1	
S-61 (0-1.1) ms/MSD	10/24/90	1130	1	
S-61 (5-7')	10/24/90	1230	1	
S-63 (0-2')	10/25/90	0950	1	
S-63 (0-2') ms/MSD	10/25/90	0950	1	
S-7 (0-2')	10/25/90	1100	1	
S-8 (0-2')	10/25/90	1100	1	
S-76 (0-0.7)	10/25/90	1310	1	
RELINQUISHED BY: (SIGNATURE) John J. Roux	FOR DATE 10/25/90	TIME 5:02	RELINQUISHED BY: (SIGNATURE) FOR DATE TIME	PAGE DATE TIME
RELINQUISHED BY: (SIGNATURE) FOR DATE TIME	RELINQUISHED BY: (SIGNATURE) FOR DATE TIME			
RELINQUISHED BY: (SIGNATURE) FOR DATE TIME	RELINQUISHED BY: (SIGNATURE) FOR DATE TIME			
DELIVERY METHOD FEDERAL EXPRESS	COMMENTS			

**ROUX**Consulting Ground Water  
Geologists & Engineers**ROUX ASSOCIATES INC**775 PARK AVENUE, SUITE 255  
HUNTINGTON, NEW YORK 11743

(516) 673-7200 FAX. (516) 673-7216

PROJECT NAME

SUNNYSIDE YARD / AMTRAK.

PROJECT NUMBER

05509

PROJECT LOCATION

SUNNYSIDE YARD QUEENS, NY

SAMPLER(S):

H.G.B.W/V.S.

SAMPLE DESIGNATION/LOCATION

DATE COLLECTED

TIME COLLECTED

NOTES

MW-22 (0-2')

10/20/90 0840

1 1

MW-22 (0-2') MS/MSD

10/20/90 0840

1 1

MW-13 (0-2')

10/20/90 1210

1 1

NOTES

TOTAL BOTTLES

(7105)

(551/551/551)

2

NOTES

TOTAL BOTTLES

(7105)

(551/551/551)

1

NOTES

TOTAL BOTTLES

(7105)

(551/551/551)

2

NOTES

TOTAL

**ROUX****CHAIN OF CUSTODY**

No. 083

Y

Consulting Ground-Water  
Geologists & Engineers  
**ROUX ASSOCIATES INC.**  
775 PARK AVENUE, SUITE 255  
HUNTINGTON, NEW YORK 11743  
(516) 673-7200 FAX. (516) 673-7216

PROJECT NAME **AMTRAK** PROJECT NUMBER **05509Y**

PROJECT LOCATION **BUNNYSIDE YARD, QUEENS**SAMPLER(S): **S/S HG/BW**

SAMPLE DESIGNATION/LOCATION		DATE COLLECTED	TIME COLLECTED	ANALYSES		PAGE OF
S-49	(0' - 2')	10/19/90	1100	1	1	2
S-49	(0' - 2')	10/19/90	0940	1	3	3
S-49	(2' - 4')	10/19/90	0930	1	2	2
S-49	(4' - 6')	10/19/90	0940	1	2	2
S-49	(8' - 10')	10/19/90	1000	1	2	2
S-48	(0' - 2')	10/19/90	1330	1	1	1
S-48	0.4' - 0.6'	10/19/90	1340	1	1	1
S-48	(2' - 4')	10/19/90	1340	1	1	1
S-48	(11' - 13')	10/19/90	1440	1	1	1
S-47	(0' - 2')	10/19/90	1100	1	1	1
S-47	(2' - 4')	10/19/90	1110	1	1	1
S-47	(7' - 9')	10/19/90	1140	1	1	1
S-47	(11' - 13')	10/19/90	1215	1	1	1
<b>REINQUISITION BY: (SIGNATURE)</b> <i>[Signature]</i>		FOR <b>ROUX Associates</b>	DATE <b>10/19/90</b>	TIME	<b>REINQUISITED BY: (SIGNATURE)</b> <i>[Signature]</i>	FOR
<b>REINQUISITION BY: (SIGNATURE)</b>		FOR	DATE	TIME	<b>REINQUISITED BY: (SIGNATURE)</b>	FOR
<b>REINQUISITION BY: (SIGNATURE)</b>		FOR	DATE	TIME	<b>REINQUISITED BY: (SIGNATURE)</b>	FOR
<b>DELIVERY METHOD</b> <b>Federal Express</b>		COMMENTS				

TOTAL BOTTLES  
86  
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PHC  
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**ROUX****CHAIN OF CUSTODY**

Nº 084 Y

ANALYSES				PAGE OF
				1
TOTAL BOTTLES				
PROJECT NAME	ROUX ASSOCIATES INC			
PROJECT LOCATION	SUNNY SIDE YARD, QUEENS NY.			
SAMPLER(S):	B.W./VS/H.G.			
SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	NOTES	
S - 94 (0-2')	10/18/90	11:00	1	
S - 94 (2-3')	10/18/90	11:00	1	
S - 93 (0-2')	10/18/90	10:00	1	
S - 93 (18-20')	10/18/90	11:45	1	
S - 25 (0-2')	10/18/90	12:45	1	
S - 95 (0-2')	10/18/90	14:00	1	
S - 64 (0-2')	10/18/90	15:30	1	
S - 64 (2'-3')	10/18/90	15:10	1	
RELINQUISHED BY: (SIGNATURE) FOR <i>[Signature]</i> FOR ASSOCIATE 10/18/90 DATE 1700 TIME				RELINQUISHED BY: (SIGNATURE) FOR ASSOCIATE DATE TIME
RELINQUISHED BY: (SIGNATURE) FOR FOR DATE TIME				RELINQUISHED BY: (SIGNATURE) FOR FOR DATE TIME
DELIVERY METHOD Federal Express				COMMENTS

**ROUX****CHAIN OF CUSTODY**

N° 082 Y

Consulting Ground-Water Geologists & Engineers <b>ROUX ASSOCIATES INC.</b>		775 PARK AVENUE, SUITE 255 HUNTINGTON, NEW YORK 11743 (516) 673-7200 FAX. (516) 673-7216		ANALYSES		PAGE OF
PROJECT NAME A M T R A K.	PROJECT NUMBER 05509 Y					
PROJECT LOCATION S U N S I D E Y A R D S , Q U E E N S , N Y .						
SAMPLER(S): H.S./B.W.						
SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	NOTES			
FB - 3 SS.	10/17/90	16:20	Q ●			
FB - 4 PD	10/17/90	16:20	Q			
TB - Q.	10/17/90	-	Q			
TOTAL BOTTLES (WATER)						
40 ml. VIALS (WATER)						
LOC						
TOTAL VIALS (WATER)						
TOTAL BOTTLES						
FIELD BLANK SPILL SPOT						
FIELD BLANK POST PIGGER.						
TRIP BLANK.						
RELINQUISHED BY: (SIGNATURE) John S. S.	FOR Rouxs.	DATE 10/17/90	TIME 17:00	RELINQUISHED BY: (SIGNATURE) John S. S.	FOR Rouxs.	DATE TIME
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	FOR	DATE TIME
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	FOR	DATE TIME
DELIVERY METHOD FEDERAL EXPRESS.						
COMMENTS						

**ROUX****CHAIN OF CUSTODY**N<sup>o</sup> 081

Y

ANALYSES				PAGE 1 OF 1
				TOTAL BOTTLES
				NOTES
PROJECT NAME <b>SUNNY ISIDE YARD / AMTRAK</b>	PROJECT NUMBER <b>055094</b>	DATE COLLECTED <b>10/12/90</b>	TIME COLLECTED <b>12:15</b>	
PROJECT LOCATION <b>SUNNY ISIDE YD. QUEENS, NY</b>				
SAMPLER(S): <b>J. S. B.W, H.G.</b>				
SAMPLE DESIGNATION/LOCATION				
S - 54 (0' - 2')	10/12/90	12:15	1	
S - 54 (7' - 9')	10/12/90	14:00	1	
S - 55 (0' - 2')	10/12/90	10:15	1	
S - 55 (7' - 9')	10/12/90	11:45	1	
S - 56 (0' - 2')	10/12/90	9:30	1	
S - 56 (7' - 9')	10/12/90	10:45	1	
RELINQUISHED BY: (SIGNATURE) FOR <b>Denny Shamm, Lab Assoc.</b>	DATE <b>10/13/90</b>	TIME <b>12:00</b>	RELINQUISHED BY: (SIGNATURE) FOR DATE TIME	DATE TIME
RELINQUISHED BY: (SIGNATURE) FOR	DATE	TIME	RELINQUISHED BY: (SIGNATURE) FOR DATE TIME	DATE TIME
RELINQUISHED BY: (SIGNATURE) FOR	DATE	TIME	RELINQUISHED BY: (SIGNATURE) FOR DATE TIME	DATE TIME
DELIVERY METHOD <b>FedEx Express</b>	COMMENTS			

**ROUX****CHAIN OF CUSTODY**

Consulting Ground-Water  
Geologists & Engineers  
**ROUX ASSOCIATES INC**

776 PARK AVENUE  
SUITE 255  
HUNTINGTON, NEW YORK 11743

**Project Name**  
SUNNYSIDE YARD / Amcor  
**Project Location**  
SUNNYSIDE YARD, QUEENS NY

**Project Number**  
055091

**Sample(s):** V.S. BW HG

**Sample Designation/Location**

**Date Collected**

**Time Collected**

**Notes**

ANALYSES						Page of
5 - 3 (0' - 2')	10/10/90	1130	-	-	2	TOTAL BOTTLES
5 - 4 (0' - 2')	10/10/90	1030	-	-	2	CERAMIC
5 - 9 (0' - 2')	10/10/90	1330	-	-	2	PLASTIC
5 - 10 (0' - 2')	10/10/90	1445	-	-	2	GLASS
5 - 66 (0' - 2')	10/10/90	0830	-	-	1	PCP
5 - 69 (0' - 2')	10/10/90	0930	-	-	1	PCP
5 - 3 (3' - 5')	10/10/90	1345	-	-	1	PCP
5 - 9 (3 - 4.5)	10/10/90	1530	-	-	1	PCP
5 - 66 (3 - 5')	10/10/90	0900	-	-	1	PCP
<b>Requisitioned by:(Signature)</b> <i>John J. Dunn</i>	<b>For</b>	<b>Date</b> 10/11/90	<b>Time</b> 1640	<b>Received by:(Signature)</b> <i>Roux Assoc.</i>	<b>For</b>	<b>Date</b>
<b>Requisitioned by:(Signature)</b> <i>John J. Dunn</i>	<b>For</b>	<b>Date</b>	<b>Time</b>	<b>Received by:(Signature)</b> <i>Roux Assoc.</i>	<b>For</b>	<b>Date</b>
<b>Requisitioned by:(Signature)</b> <i>John J. Dunn</i>	<b>For</b>	<b>Date</b>	<b>Time</b>	<b>Received by:(Signature)</b> <i>Roux Assoc.</i>	<b>For</b>	<b>Date</b>
<b>Delivery Method</b>				<b>Comments</b>		

**ROUX****CHAIN OF CUSTODY**

No. 087 Y

Consulting Ground-Water  
Geologists & Engineers  
**ROUX ASSOCIATES INC.**  
775 PARK AVENUE, SUITE 255  
HUNTINGTON, NEW YORK 11743  
(516) 673-7216 FAX. (516) 673-7216

PROJECT NAME: SUNNYSIDE / AMTRAK.  
PROJECT LOCATION: SUNNYSIDE YARD QUEENS NY.

SAMPLER(S): V.S / B.W.H.G.

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	ANALYSES			NOTES	PAGE OF
			TOTAL SOLIDS	WATER	SOIL		
S-24 (0-2')	10/08/90	14:30	1			-	1
S-24 (9-11')	10/08/90	1620	1			-	1
S-74 (0-2')	10/08/90	8:35	1	1		2	
S-74 (6-8')	10/08/90	9:50	1			1	
S-74 (12-14')	10/08/90	1015	1			1	
S-77 (0-2')	10/08/90	11:00	1	1		2	
S-77 (13-15')	10/08/90	14:30	1			1	
S-75 (0-2')	10/08/90	10:15	1	1		2	
S-81 (0-2')	10/09/90	13:30	1			1	
S-28 (0-2')	10/09/90	1400	1			1	
S-28 (0-2') MS/MSD	10/09/90	1400	1			1	
FB-1 - SS	10/09/90	1630				2	FIELD BLANK SPILL SPOT
FB-2 - PD	10/09/90	1630				2	FIELD BLANK POST DIGGER
TB-1	9/28/90	-				2	TRIP BLANK
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME
<i>John Dunn</i>	Paul Azeez	10/09/90	1705				
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME
DELIVERY METHOD	COMMENTS						

**ROUX****CHAIN OF CUSTODY**

Nº 089 Y

PROJECT NAME AVITRAK (SUNNYSIDE YARD)		PROJECT NUMBER 05509Y	ANALYSES		PAGE OF TOTAL BOTTLES		
PROJECT LOCATION SUNNYSIDE YARD (NY).							
SAMPLER(S): VIRESH SINGH / BRIAN WOODS.							
SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	NOTES				
MW - 3.3 (0-2')	05/10/90	0835	1				
S-21 (0-2')	05/10/90	1500	1				
S-21 (6-8')	05/10/90	1520	1				
S-23 (0-2')	05/10/90	1140	1				
S-23 (8-16)	05/10/90	1300	1				
There are all intact 10/05/90							
RELINQUISHED BY: (SIGNATURE) <u>Viresh Singh</u>	FOR	DATE 10/05/90	TIME 600	RECEIVED BY: (SIGNATURE) <u>Roux Assoc.</u>	FOR	DATE 10/05/90	TIME
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME
DELIVERY METHOD FEDERAL EXPRESS		COMMENTS					

**ROUX****CHAIN OF CUSTODY**N<sup>o</sup> 080 Y

PROJECT NAME AMTRAC		PROJECT LOCATION SUNNYSIDE YARD NY		SAMPLE DESIGNATION/LOCATION		DATE COLLECTED	TIME COLLECTED	ANALYSES		PAGE OF
ROUX ASSOCIATES INC		775 PARK AVENUE, SUITE 255 HUNTINGTON, NEW YORK 11743 (516) 673-7200 FAX. (516) 673-7216		PROJECT NUMBER 05509Y				TOTAL BOTTLES		
S-29	0'-2'	10/3/90	0910	1				1		
S-79	0'-2'	10/3/90	1200	1				1		
S-80	0'-2'	10/3/90	1400	1				1		
S-80	2'-4'	10/3/90	1405	4				1		
MW-32	0-2'	10/4/90	0900	1				2		
S-71	0'-2'	10/4/90	1140	1				1		
S-71	6'-8'	10/4/90	1305	1				1		
S-70	0'-2'	10/4/90	1335	1				1		
S-70	6'-8'	10/4/90	1430	1				1		
S-72	0'-2'	10/4/90	1515	1				1		
S-72	6'-8'	10/4/90	1530	1				1		
S-73	0'-2'	10/4/90	1710	1				1		
S-29	0-2' ms/msd	10/3/90	0910	1				1		
RELINQUISHED BY: (SIGNATURE)		FOR Roux Associates	DATE 10/4/90	TIME 10:00 AM	RECEIVED BY: (SIGNATURE)		FOR	DATE	TIME	
RELINQUISHED BY: (SIGNATURE)		FOR	DATE	TIME	REINQUISITION BY: (SIGNATURE)		FOR	DATE	TIME	
RELINQUISHED BY: (SIGNATURE)		FOR	DATE	TIME	REINQUISITION BY: (SIGNATURE)		FOR	DATE	TIME	
DELIVERY METHOD		Comments								

**ROUX**

## CHAIN OF CUSTODY

Nº 074

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CHAIN OF CUSTODY

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PROJECT NAME		PROJECT NUMBER		ANALYSES		PAGE OF
<b>ROUX ASSOCIATES INC</b>	<b>AMTRAK</b>	<b>5559 Y</b>	<b>5559 Y</b>	<b>TOTAL BOTTLES</b>	<b>1</b>	<b>1</b>
PROJECT LOCATION		SUNNYSIDE YARD (NY)				
SAMPLER(S): Brian Woods		VIBREZH SIGHT				
SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	NOTES			
S-85 (1-3)	10/02/90	12:15	x			
S-86 (0.5 - 2.5)	10/02/90	13:10	x			
S-87 (0.5 - 2.5)	10/01/90	14:00	x			
S-88 (5-7)	10/01/90	12:45	x			
S-89 (1-3)	10/01/90	13:30	x			
S-90 (1-3)	10/01/90	16:30	x			
S-91 (5-7)	10/02/90	09:30	x			
S-92 (3-5)	10/02/90	11:00	x			
S-93 (0.5-1.5)	10/02/90	15:15	x			
RECEIVED BY: (SIGNATURE) FOR: (SIGNATURE) DATE: 10/02/90 TIME: 16:30						DATE TIME
RELINQUISHED BY: (SIGNATURE) FOR: (SIGNATURE) DATE: TIME						DATE TIME
RECOGNIZED BY: (SIGNATURE) FOR: (SIGNATURE) DATE: TIME						DATE TIME
DELIVERY METHOD		COMMENTS				
<b>FEDERAL EXPRESS</b>						

## **CHAIN OF CUSTODY**

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## **CHAIN OF CUSTODY**

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ANALYSES				PAGE OF		
PROJECT NAME	PROJECT LOCATION	SAMPLER(S)	DATE COLLECTED	TIME COLLECTED	NOTES	TOTAL BOTTLES
Consulting Ground-Water Geologists & Engineers <b>ROUX ASSOCIATES INC</b>	775 PARK AVENUE, SUITE 255 HUNTINGTON, NEW YORK 11743 (516) 673-7200 FAX. (516) 673-7216	HG CZ JD US AM TANK - SUNNYSIDE YARD QUEENS, NY	MW-24 MW-26 MW-28 MW-29	1/3 9:45 10:35 16:30 15:30	1215 1 1 1	2 5 2 5
PHC (LITER AMBEE)				RELC (LITER AMBEE)		
TCI: RGT/RGR/EU				TCI: METALS/PCP/EU		
(4 LITER AMBEE)				(25ML PCP/PCP)		
TCI: METALS/PCP/EU				(10ML VOLC)		
(4 LITER AMBEE)				(25ML VOLC)		
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**ROUX**

CHAIN OF CUSTODY

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## CHAIN OF CUSTODY

*Consulting Ground-Water  
Geologists & Engineers*  
**ROUX ASSOCIATES INC**

PROJECT NAME	ANTICAT
PROJECT NUMBER	055D94

PROJECT LOCATION - SunnySide Blvd. Queens, N.Y.

SAMPLER(S): HG, U.S., CZ

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED
777-111-1233		

$R_{EP} = 3 \text{ (rcr)}$



**ROUX**

## CHAIN OF CUSTODY

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CHAIN OF CUSTODY

No. 00226 Y

**ROUX ASSOCIATES INC** 775 PARK AVENUE, SUITE 255  
HUNTINGTON, NEW YORK 11743  
(516) 673-7200 FAX (516) 673-7216  
*Consulting Ground-Water  
Geologists & Engineers*

**Geologists & Engineers** (318) 873-7200 FAX: (318) 873-7210

NAME	Porter
LOCATION	Sunnyside
PROJECT NUMBER	05504
	Queens

SAMPLER(S) 111 120 126 63

16 P B, VS, CL / DATE \_\_\_\_\_ / TIME \_\_\_\_\_

SAMPLE DESIGNATION/LOCATION      COLLECTED      COLLECTED

110-13 11740 10.45

W -22 : 1:1 1/2:35

W - 23 17:15

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✓ / (SAMPLER'S) DATE TIME

RELINQUISHED BY: (SIGNATURE) *[Signature]* FOR *[Signature]*

11/11/11 Eddie

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**RELINQUISHED BY: (SIGNATURE)** \_\_\_\_\_ FOR \_\_\_\_\_ DATE \_\_\_\_\_ TIME \_\_\_\_\_

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COMMENTS

ANALYTICAL LABORATORY

EduVoxsys 5

ANALYSES

PAGE 2 OF 3

ANALYSES							PAGE 2 OF 3		
PROJECT NAME	PROJECT LOCATION	PROJECT NUMBER	DATE COLLECTED	TIME COLLECTED	NOTES				
<b>ROUX ASSOCIATES INC</b> Consulting Ground-Water Geologists & Engineers	<b>Brent Rose</b> <b>Sunnyside Yd Queens</b>	<b>055094</b>							
SAMPLER(S)	46A PB, VS, C-2								
SAMPLE DESIGNATION/LOCATION									
111 W - 13	111 W - 22	111 W - 23	REP - 4	10:45	12:35	17:15			
				1	1	1			
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
<i>J. J. Young</i>	<i>Chase</i>	<i>1/19/91</i>	<i>17:00</i>	<i>Y</i>					
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
DELIVERY METHOD	COMMENTS	<i>Delivery by truck</i>							
		<i>8604422530</i>							
ANALYTICAL LABORATORY		<i>Environmental Sciences Inc.</i>							

**ROUX****CHAIN OF CUSTODY****Nº 00230 Y**

ANALYSES				TOTAL BOTTLES		
				5		
				4		
				3		
				2		
				1		
				0		
PROJECT NAME	PROJECT NUMBER			NOTES		
<i>Anttask</i>	<i>055094</i>					
PROJECT LOCATION	SAMPLE DESIGNATION/LOCATION			DATE COLLECTED	TIME COLLECTED	
SAMPLER(S) <i>HG PS VS, C 2</i>	HW - 1			11/7/91	15:30	1
	HW - 9				13:50	1
						2
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR
<i>Wally</i>	<i>hans</i>	<i>11/6/91</i>	<i>10:20</i>	<i>Y</i>		
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR
DELIVERY METHOD	COMMENTS			<i>All right Sbd 4922550</i>		
ANALYTICAL LABORATORY	<i>Microsystems</i>					



**CHAIN OF CUSTODY**

No. 00231 Y

## ORGANICS ANALYSIS DATA SHEETS

Envirosystems, Inc.

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3171-31

CLIENT SAMPLE ID:	S-90	S-80(2-4)	S-80(2-4)R	S-82(0-2)	S-82(0-2)R	S-30(0-2)
LAB SAMPLE ID:	90102164	90102243	90102243	90102374	90102374	90102376
SAMPLE DATE:	10/01/90	10/03/90	10/03/90	10/16/90	10/16/90	10/16/90
RECEIVED DATE:	10/03/90	10/05/90	10/05/90	10/18/90	10/18/90	10/18/90
ANALYSIS DATE:	10/09/90	10/09/90	10/09/90	10/19/90	10/19/90	10/19/90
FILE NAME:	102164R	102243R	102243RE	102374	102374R	102376
INSTRUMENT ID:	MSB	MSB	MSB	MSB	MSB	MSB
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
% MOISTURE:	7	4	4	10	10	10
DILUTION FACTOR:	1.0	2.0	2.0	1.0	1.0	1.0

## VOLATILE COMPOUNDS

Acetone	80	229	308	29	20	33
Benzene	5.0 U	10 U	10 U	6.0 U	6.0 U	6.0 U
Bromodichloromethane	5.0 U	10 U	10 U	6.0 U	6.0 U	6.0 U
Bromoform	5.0 U	10 U	10 U	6.0 U	6.0 U	6.0 U
Bromomethane	11 U	21 U	21 U	11 U	11 U	11 U
2-Butanone	11 U	21 U	21 U	11 U	11 U	11 U
Carbon Disulfide	5.1 J	19	17	7.1	4.4 J	6.0 U
Carbon Tetrachloride	5.0 U	10 U	10 U	6.0 U	6.0 U	6.0 U
Chlorobenzene	5.0 U	10 U	10 U	6.0 U	6.0 U	6.0 U
Chloroethane	11 U	21 U	21 U	11 U	11 U	11 U
2-Chloroethylvinylether	11 U	21 U	21 U	11 U	11 U	11 U
Chloroform	5.0 U	10 U	10 U	6.0 U	6.0 U	6.0 U
Chloromethane	11 U	21 U	21 U	11 U	11 U	11 U
Dibromochloromethane	5.0 U	10 U	10 U	6.0 U	6.0 U	6.0 U
1,3 Dichlorobenzene	5.0 U	10 U	10 U	6.0 U	6.0 U	6.0 U
1,2 Dichlorobenzene	5.0 U	10 U	10 U	6.0 U	6.0 U	6.0 U
1,4 Dichlorobenzene	5.0 U	10 U	10 U	6.0 U	6.0 U	6.0 U
1,2-Dichloroethane	5.0 U	10 U	10 U	6.0 U	6.0 U	6.0 U
1,1-Dichloroethane	5.0 U	10 U	10 U	6.0 U	6.0 U	6.0 U
1,1-Dichloroethene	5.0 U	10 U	10 U	6.0 U	6.0 U	6.0 U
1,2-Dichloroethene (total)	5.0 U	10 U	10 U	6.0 U	6.0 U	6.0 U
1,2-Dichloropropane	5.0 U	10 U	10 U	6.0 U	6.0 U	6.0 U
cis-1,3-Dichloropropene	5.0 U	10 U	10 U	6.0 U	6.0 U	6.0 U
Ethylbenzene	5.0 U	10 U	10 U	6.0 U	6.0 U	6.0 U
2-Hexanone	11 U	21 U	21 U	11 U	11 U	11 U
4-Methyl-2-Pentanone	11 U	21 U	21 U	11 U	11 U	11 U
Methylene Chloride	26	302	258	26	21	6.0 U
Styrene	5.0 U	10 U	10 U	6.0 U	6.0 U	6.0 U
1,1,2,2-Tetrachloroethane	5.0 U	10 U	10 U	6.0 U	6.0 U	6.0 U
Tetrachloroethene	5.0 U	10 U	10 U	6.0 U	6.0 U	6.0 U
Toluene	13	30	31	4.8 J	2.8 J	6.0 U
Trans-1,3-Dichloropropene	5.0 U	10 U	10 U	6.0 U	6.0 U	6.0 U
1,1,1-Trichloroethane	5.0 U	10 U	10 U	6.0 U	6.0 U	6.0 U
1,1,2-Trichloroethane	5.0 U	10 U	10 U	6.0 U	6.0 U	6.0 U
Trichloroethene	5.0 U	10 U	10 U	6.0 U	6.0 U	6.0 U
Trichlorofluoromethane	5.0 U	10 U	10 U	6.0 U	6.0 U	6.0 U

ORGANICS ANALYSIS DATA SHEETS  
Envirosystems, Inc.

CLIENT SAMPLE ID:	S-90	S-80(2-4)	S-80(2-4)R	S-82(0-2)	S-82(0-2)R	S-30(0-2)
LAB SAMPLE ID:	90102164	90102243	90102243	90102374	90102374	90102376
SAMPLE DATE:	10/01/90	10/03/90	10/03/90	10/16/90	10/16/90	10/16/90
RECEIVED DATE:	10/03/90	10/05/90	10/05/90	10/18/90	10/18/90	10/18/90
ANALYSIS DATE:	10/09/90	10/09/90	10/09/90	10/19/90	10/19/90	10/19/90
FILE NAME:	102164R	102243R	102243RE	102374	102374R	102376
INSTRUMENT ID:	MSB	MSB	MSB	MSB	MSB	MSB
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
% MOISTURE:	7	4	4	10	10	10
DILUTION FACTOR:	1.0	2.0	2.0	1.0	1.0	1.0
<b>VOLATILE COMPOUNDS</b>						
Vinyl Acetate	11 U	21 U	21 U	11 U	11 U	11 U
Vinyl Chloride	11 U	21 U	21 U	11 U	11 U	11 U
Xylenes (total)	5.0 U	10 U	10 U	6.0 U	6.0 U	6.0 U

B - Detected in Lab Blank. U - Below Reported Quantitation Level. J - Estimated Value.

## ORGANICS ANALYSIS DATA SHEETS

Envirosystems, Inc.

CLIENT SAMPLE ID:	S-22(0-2)	S-64(2-3)R	S-17(0-2)	S-49(2-4)	S-47(2-4)	S-62(0-2)
LAB SAMPLE ID:	90102382	90102403	90102423	90102425	90102433	90102502
SAMPLE DATE:	10/17/90	10/18/90	10/19/90	10/19/90	10/19/90	10/24/90
RECEIVED DATE:	10/18/90	10/19/90	10/20/90	10/20/90	10/20/90	10/26/90
ANALYSIS DATE:	10/19/90	10/19/90	10/23/90	10/23/90	10/23/90	10/29/90
FILE NAME:	102382	102403R	102423	102425	102433	102502
INSTRUMENT ID:	MSB	MSB	MSB	MSB	MSB	MSB
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
% MOISTURE:	18	16	31	6	7	10
DILUTION FACTOR:	1.0	1.0	1.0	1.0	1.0	1.0

## VOLATILE COMPOUNDS

Acetone	12	U	15	35	20	11	U	24
Benzene	6.0	U	6.0	U	7.0	U	5.0	U
Bromodichloromethane	6.0	U	6.0	U	7.0	U	5.0	U
Bromoform	6.0	U	6.0	U	7.0	U	5.0	U
Bromomethane	12	U	12	U	14	U	11	U
2-Butanone	12	U	12	U	14	U	11	U
Carbon Disulfide	7.7		6.0	U	7.0	U	5.0	U
Carbon Tetrachloride	6.0	U	6.0	U	7.0	U	5.0	U
Chlorobenzene	6.0	U	6.0	U	7.0	U	5.0	U
Chloroethane	12	U	12	U	14	U	11	U
2-Chloroethylvinylether	12	U	12	U	14	U	11	U
Chloroform	6.0	U	6.0	U	7.0	U	5.0	U
Chloromethane	12	U	12	U	14	U	11	U
Dibromochloromethane	6.0	U	6.0	U	7.0	U	5.0	U
1,3 Dichlorobenzene	6.0	U	6.0	U	7.0	U	5.0	U
1,2 Dichlorobenzene	6.0	U	6.0	U	7.0	U	5.0	U
1,4 Dichlorobenzene	6.0	U	6.0	U	7.0	U	5.0	U
1,2-Dichloroethane	6.0	U	6.0	U	7.0	U	5.0	U
1,1-Dichloroethane	6.0	U	6.0	U	7.0	U	5.0	U
1,1-Dichloroethene	6.0	U	6.0	U	7.0	U	5.0	U
1,2-Dichloroethene (total)	6.0	U	6.0	U	7.0	U	5.0	U
1,2-Dichloropropane	6.0	U	6.0	U	7.0	U	5.0	U
cis-1,3-Dichloropropene	6.0	U	6.0	U	7.0	U	5.0	U
Ethylbenzene	6.0	U	6.0	U	7.0	U	5.0	U
2-Hexanone	12	U	12	U	14	U	11	U
4-Methyl-2-Pentanone	12	U	12	U	14	U	11	U
Methylene Chloride	32		6.0	U	7.0	U	3.6	J
Styrene	6.0	U	6.0	U	7.0	U	5.0	U
1,1,2,2-Tetrachloroethane	6.0	U	6.0	U	7.0	U	5.0	U
Tetrachloroethene	6.0	U	6.0	U	7.0	U	5.0	U
Toluene	4.8	J	6.0	U	7.0	U	5.0	U
Trans-1,3-Dichloropropene	6.0	U	6.0	U	7.0	U	5.0	U
1,1,1-Trichloroethane	6.0	U	6.0	U	7.0	U	5.0	U
1,1,2-Trichloroethane	6.0	U	6.0	U	7.0	U	5.0	U
Trichloroethene	6.0	U	6.0	U	7.0	U	5.0	U
Trichlorofluoromethane	6.0	U	6.0	U	7.0	U	5.0	U

**ORGANICS ANALYSIS DATA SHEETS**  
**Envirosystems, Inc.**

CLIENT SAMPLE ID:	S-22(0-2)	S-64(2-3)R	S-17(0-2)	S-49(2-4)	S-47(2-4)	S-62(0-2)
LAB SAMPLE ID:	90102382	90102403	90102423	90102425	90102433	90102502
SAMPLE DATE:	10/17/90	10/18/90	10/19/90	10/19/90	10/19/90	10/24/90
RECEIVED DATE:	10/18/90	10/19/90	10/20/90	10/20/90	10/20/90	10/26/90
ANALYSIS DATE:	10/19/90	10/19/90	10/23/90	10/23/90	10/23/90	10/29/90
FILE NAME:	102382	102403R	102423	102425	102433	102502
INSTRUMENT ID:	MSB	MSB	MSB	MSB	MSB	MSB
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
% MOISTURE:	18	16	31	5	7	10
DILUTION FACTOR:	1.0	1.0	1.0	1.0	1.0	1.0
<b>VOLATILE COMPOUNDS</b>						
Vinyl Acetate	12 U	12 U	14 U	11 U	11 U	11 U
Vinyl Chloride	12 U	12 U	14 U	11 U	11 U	11 U
Xylenes (total)	6.0 U	6.0 U	7.0 U	5.0 U	5.0 U	6.0 U

B - Detected in Lab Blank. U - Below Reported Quantitation Level. J - Estimated Value.

**ORGANICS ANALYSIS DATA SHEETS**  
**Envirosystems, Inc.**

CLIENT SAMPLE ID:	S-61(5-7)	S-43(0-2)	S-41A(3-5)	MW-25(4-6)	S-53(5-7)	MW-34(0-2)
LAB SAMPLE ID:	90102505	90112583	90112600	90112698	90112732	90112772
SAMPLE DATE:	10/24/90	11/05/90	11/07/90	11/17/90	11/18/90	11/29/90
RECEIVED DATE:	10/26/90	11/07/90	11/09/90	11/19/90	11/21/90	11/30/90
ANALYSIS DATE:	10/29/90	11/13/90	11/13/90	11/21/90	11/21/90	11/30/90
FILE NAME:	102505	112583	112600	112698	112732	112772
INSTRUMENT ID:	MSB	MSB	MSB	MSB	MSB	MSB
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
% MOISTURE:	12	11	14	8	4	7
DILUTION FACTOR:	1.0	1.0	5.0	1.0	1.0	1.0
<b>VOLATILE COMPOUNDS</b>						
Acetone	53	11 U	293	18	38	11 U
Benzene	6.0 U	6.0 U	29 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	6.0 U	6.0 U	29 U	5.0 U	5.0 U	5.0 U
Bromoform	6.0 U	6.0 U	29 U	5.0 U	5.0 U	5.0 U
Bromomethane	11 U	11 U	58 U	11 U	10 U	11 U
2-Butanone	11 U	11 U	58 U	11 U	10 U	11 U
Carbon Disulfide	10	6.0 U	29 U	5.0 U	5.0 U	5.0 U
Carbon Tetrachloride	6.0 U	6.0 U	29 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	6.0 U	6.0 U	29 U	5.0 U	5.0 U	5.0 U
Chloroethane	11 U	11 U	58 U	11 U	10 U	11 U
2-Chloroethylvinylether	11 U	11 U	58 U	11 U	10 U	11 U
Chloroform	6.0 U	3.8 J	29 U	5.0 U	5.0 U	5.0 U
Chloromethane	11 U	11 U	58 U	11 U	10 U	11 U
Dibromochloromethane	6.0 U	6.0 U	29 U	5.0 U	5.0 U	5.0 U
1,3 Dichlorobenzene	6.0 U	6.0 U	29 U	5.0 U	5.0 U	5.0 U
1,2 Dichlorobenzene	6.0 U	6.0 U	29 U	5.0 U	5.0 U	5.0 U
1,4 Dichlorobenzene	6.0 U	6.0 U	29 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	6.0 U	6.0 U	29 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	6.0 U	6.0 U	29 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	6.0 U	6.0 U	29 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (total)	6.0 U	6.0 U	29 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	6.0 U	6.0 U	29 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	6.0 U	6.0 U	29 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	6.0 U	6.0 U	67	5.0 U	5.0 U	5.0 U
2-Hexanone	11 U	11 U	58 U	11 U	10 U	11 U
4-Methyl-2-Pentanone	11 U	11 U	58 U	11 U	10 U	11 U
Methylene Chloride	14	6.0 U	29 U	3.4 J	4.3 J	5.0 U
Styrene	6.0 U	6.0 U	29 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	6.0 U	6.0 U	29 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	6.0 U	6.0 U	29 U	5.0 U	5.0 U	5.0 U
Toluene	7.6	6.0 U	29 U	5.0 U	5.0 U	5.0 U
Trans-1,3-Dichloropropene	6.0 U	6.0 U	29 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	6.0 U	6.0 U	29 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	6.0 U	6.0 U	29 U	5.0 U	5.0 U	5.0 U
Trichloroethene	6.0 U	6.0 U	29 U	5.0 U	5.0 U	5.0 U
Trichlorofluoromethane	6.0 U	6.0 U	29 U	5.0 U	5.0 U	5.0 U

**ORGANICS ANALYSIS DATA SHEETS**  
**Envirosystems, Inc.**

CLIENT SAMPLE ID:	S-61(5-7)	S-43(0-2)	S-41A(3-5)	MW-25(4-6)	S-53(5-7)	MW-34(0-2)
LAB SAMPLE ID:	90102505	90112583	90112600	90112698	90112732	90112772
SAMPLE DATE:	10/24/90	11/05/90	11/07/90	11/17/90	11/18/90	11/29/90
RECEIVED DATE:	10/26/90	11/07/90	11/09/90	11/19/90	11/21/90	11/30/90
ANALYSIS DATE:	10/29/90	11/13/90	11/13/90	11/21/90	11/21/90	11/30/90
FILE NAME:	102505	112583	112600	112698	112732	112772
INSTRUMENT ID:	MSB	MSB	MSB	MSB	MSB	MSB
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
% MOISTURE:	12	11	14	8	4	7
DILUTION FACTOR:	1.0	1.0	5.0	1.0	1.0	1.0
<b>VOLATILE COMPOUNDS</b>						
Vinyl Acetate	11 U	11 U	58 U	11 U	10 U	11 U
Vinyl Chloride	11 U	11 U	58 U	11 U	10 U	11 U
Xylenes (total)	6.0 U	4.4 J	137	5.0 U	5.0 U	5.0 U

B - Detected in Lab Blank. U - Below Reported Quantitation Level. J - Estimated Value.

**ORGANICS ANALYSIS DATA SHEETS**  
**Envirosystems, Inc.**

CLIENT SAMPLE ID:	S-38(2-4)	S-39(2-4)	S-35(8-10)	S-37(4-6)	MW-26(9-11)	S-60(4-6)
LAB SAMPLE ID:	90112775	90112779	90122785	90122791	90122809	90122909
SAMPLE DATE:	11/29/90	11/29/90	11/30/90	12/01/90	12/05/90	12/12/90
RECEIVED DATE:	11/30/90	11/30/90	12/01/90	12/03/90	12/01/90	12/12/90
ANALYSIS DATE:	11/30/90	11/30/90	12/07/90	12/07/90	12/07/90	12/17/90
FILE NAME:	112775	112779	122785	122791	122809	122909
INSTRUMENT ID:	MSB	MSB	MSB	MSB	MSB	MSB
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
% MOISTURE:	15	5	13	6	4	3
DILUTION FACTOR:	1.0	1.0	1.0	1.0	1.0	1.0

**VOLATILE COMPOUNDS**

Acetone	12 U	11 U	15	16	11	20
Benzene	6.0 U	5.0 U	6.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	6.0 U	5.0 U	6.0 U	5.0 U	5.0 U	5.0 U
Bromoform	6.0 U	5.0 U	6.0 U	5.0 U	5.0 U	5.0 U
Bromomethane	12 U	11 U	11 U	11 U	10 U	10 U
2-Butanone	12 U	11 U	11 U	11 U	10 U	10 U
Carbon Disulfide	6.0 U	5.0 U	6.0 U	5.0 U	5.0 U	5.0 U
Carbon Tetrachloride	6.0 U	5.0 U	6.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	6.0 U	5.0 U	6.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	12 U	11 U	11 U	11 U	10 U	10 U
2-Chloroethylvinylether	12 U	11 U	11 U	11 U	10 U	10 U
Chloroform	6.0 U	5.0 U	6.0 U	5.0 U	5.0 U	5.0 U
Chloromethane	12 U	11 U	11 U	11 U	10 U	10 U
Dibromochloromethane	6.0 U	5.0 U	6.0 U	5.0 U	5.0 U	5.0 U
1,3 Dichlorobenzene	6.0 U	5.0 U	6.0 U	5.0 U	5.0 U	5.0 U
1,2 Dichlorobenzene	6.0 U	5.0 U	6.0 U	5.0 U	5.0 U	5.0 U
1,4 Dichlorobenzene	6.0 U	5.0 U	6.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	6.0 U	5.0 U	6.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	6.0 U	5.0 U	6.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	6.0 U	5.0 U	6.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (total)	6.0 U	5.0 U	6.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	6.0 U	5.0 U	6.0 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	6.0 U	5.0 U	6.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	6.0 U	5.0 U	6.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	12 U	11 U	11 U	11 U	10 U	10 U
4-Methyl-2-Pentanone	12 U	11 U	11 U	11 U	10 U	10 U
Methylene Chloride	6.0 U	5.0 U	6.0 U	5.0 U	5.0 U	29
Styrene	6.0 U	5.0 U	6.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	6.0 U	5.0 U	6.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	6.0 U	5.0 U	6.0 U	5.0 U	5.0 U	5.0 U
Toluene	6.0 U	5.0 U	6.0 U	5.0 U	5.0 U	5.0 U
Trans-1,3-Dichloropropene	6.0 U	5.0 U	6.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	6.0 U	5.0 U	6.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	6.0 U	5.0 U	6.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	6.0 U	5.0 U	6.0 U	5.0 U	5.0 U	5.0 U
Trichlorofluoromethane	6.0 U	5.0 U	6.0 U	5.0 U	5.0 U	5.0 U

ORGANICS ANALYSIS DATA SHEETS  
Envirosystems, Inc.

CLIENT SAMPLE ID:	S-38(2-4)	S-39(2-4)	S-35(8-10)	S-37(4-6)	MW-26(9-11)	S-60(4-6)
LAB SAMPLE ID:	90112775	90112779	90122785	90122791	90122809	90122909
SAMPLE DATE:	11/29/90	11/29/90	11/30/90	12/01/90	12/05/90	12/12/90
RECEIVED DATE:	11/30/90	11/30/90	12/01/90	12/03/90	12/01/90	12/12/90
ANALYSIS DATE:	11/30/90	11/30/90	12/07/90	12/07/90	12/07/90	12/17/90
FILE NAME:	112775	112779	122785	122791	122809	122909
INSTRUMENT ID:	MSB	MSB	MSB	MSB	MSB	MSB
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
% MOISTURE:	15	5	13	6	4	3
DILUTION FACTOR:	1.0	1.0	1.0	1.0	1.0	1.0
<b>VOLATILE COMPOUNDS</b>						
Vinyl Acetate	12 U	11 U	11 U	11 U	10 U	10 U
Vinyl Chloride	12 U	11 U	11 U	11 U	10 U	10 U
Xylenes (total)	6.0 U	5.0 U	6.0 U	5.0 U	5.0 U	5.0 U

B - Detected in Lab Blank. U - Below Reported Quantitation Level. J - Estimated Value.

ORGANICS ANALYSIS DATA SHEETS  
Envirosystems, Inc.

CLIENT SAMPLE ID: S-33(4-6)

LAB SAMPLE ID: 90122940  
SAMPLE DATE: 12/13/90  
RECEIVED DATE: 12/14/90  
ANALYSIS DATE: 12/17/90  
FILE NAME: 122940  
INSTRUMENT ID: MSB  
MATRIX: SOIL  
UNITS: UG/KG  
% MOISTURE: 7  
DILUTION FACTOR: 1.0

VOLATILE COMPOUNDS

Acetone	49
Benzene	5.0 U
Bromodichloromethane	5.0 U
Bromoform	5.0 U
Bromomethane	11 U
2-Butanone	11 U
Carbon Disulfide	5.0 U
Carbon Tetrachloride	5.0 U
Chlorobenzene	5.0 U
Chloroethane	11 U
2-Chloroethylvinylether	11 U
Chloroform	5.0 U
Chloromethane	11 U
Dibromochloromethane	5.0 U
1,3 Dichlorobenzene	5.0 U
1,2 Dichlorobenzene	5.0 U
1,4 Dichlorobenzene	5.0 U
1,2-Dichloroethane	5.0 U
1,1-Dichloroethane	5.0 U
1,1-Dichloroethene	5.0 U
1,2-Dichloroethene (total)	5.0 U
1,2-Dichloropropane	5.0 U
cis-1,3-Dichloropropene	5.0 U
Ethylbenzene	5.0 U
2-Hexanone	11 U
4-Methyl-2-Pentanone	11 U
Methylene Chloride	77
Styrene	5.0 U
1,1,2,2-Tetrachloroethane	5.0 U
Tetrachloroethene	5.0 U
Toluene	5.0 U
Trans-1,3-Dichloropropene	5.0 U
1,1,1-Trichloroethane	5.0 U
1,1,2-Trichloroethane	5.0 U
Trichloroethene	5.0 U
Trichlorofluoromethane	5.0 U

ORGANICS ANALYSIS DATA SHEETS  
Envirosystems, Inc.

CLIENT SAMPLE ID: S-33(4-6)

LAB SAMPLE ID: 90122940  
SAMPLE DATE: 12/13/90  
RECEIVED DATE: 12/14/90  
ANALYSIS DATE: 12/17/90  
FILE NAME: 122940  
INSTRUMENT ID: MSB  
MATRIX: SOIL  
UNITS: ug/kg  
% MOISTURE: 7  
DILUTION FACTOR: 1.0

VOLATILE COMPOUNDS

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Vinyl Acetate	11	U
Vinyl Chloride	11	U
Xylenes (total)	5.0	U

**ORGANICS ANALYSIS DATA SHEETS**  
Envirosystems, Inc.

CLIENT SAMPLE ID:	S-90	S-80(2-4)	S-82(0-2)	S-30(0-2)	S-22(0-2)	S-22(0-2)R
LAB SAMPLE ID:	90102164	90102243	90102374	90102376	90102382	90102382
SAMPLE DATE:	10/01/90	10/03/90	10/16/91	10/16/90	10/17/90	10/17/90
RECEIVED DATE:	10/03/90	10/05/90	10/18/90	10/18/90	10/18/90	10/18/90
EXTRACTION DATE:	10/09/90	10/09/90	10/18/90	10/18/90	10/18/90	10/18/90
ANALYSIS DATE:	11/02/90	11/02/90	11/05/90	10/19/90	10/19/90	11/05/90
FILE NAME:	102164R	102243R	102374R	102376	102382	102382R
INSTRUMENT ID:	MSA	MSA	MSA	MSA	MSA	MSA
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
X MOISTURE:	7	4	10	10	18	18

**SEMIVOLATILE COMPOUNDS**

Acenaphthene	1770 U	1720 U	1830 U	370 U	400 U	2010 U
Acenaphthylene	1770 U	1720 U	1830 U	370 U	337 J	2010 U
Anthracene	1770 U	1720 U	1830 U	370 U	307 J	2010 U
Benzidine	3230 U	3130 U	3330 U	670 U	730 U	3660 U
Benzo(a)Anthracene	1770 U	1720 U	1830 U	370 U	404	2010 U
Benzo(a)Pyrene	1770 U	1720 U	1830 U	370 U	699	2010 U
Benzo(b+k)fluoranthenes	1770 U	1720 U	1233 J	370 U	2427	2010 U
Benzo(g,h,i)Perylene	1770 U	1720 U	1830 U	370 U	400 U	2010 U
Benzoic Acid	8600 U	8330 U	8890 U	1780 U	1950 U	9760 U
Benzyl Alcohol	1770 U	1720 U	1830 U	370 U	400 U	2010 U
4-Bromophenyl-phenylether	1770 U	1720 U	1830 U	370 U	400 U	2010 U
Butylbenzylphthalate	1770 U	1720 U	1830 U	370 U	234 J	2010 U
4-Chloro-3-Methylphenol	1770 U	1720 U	1830 U	370 U	400 U	2010 U
4-Chloroaniline	1770 U	1720 U	1830 U	370 U	400 U	2010 U
bis(2-Chloroethoxy)Methane	1770 U	1720 U	1830 U	370 U	400 U	2010 U
bis(2-Chloroethyl)Ether	1770 U	1720 U	1830 U	370 U	400 U	2010 U
bis(2-Chloroisopropyl)Ether	1770 U	1720 U	1830 U	370 U	400 U	2010 U
2-Chloronaphthalene	1770 U	1720 U	1830 U	370 U	400 U	2010 U
2-Chlorophenol	1770 U	1720 U	1830 U	370 U	400 U	2010 U
4-Chlorophenyl-phenylether	1770 U	1720 U	1830 U	370 U	400 U	2010 U
Chrysene	1770 U	1720 U	1830 U	370 U	913	2010 U
Di-n-Butylphthalate	1770 U	875 B J	1830 U	555	898	2010 U
Di-n-Octyl Phthalate	1770 U	1720 U	1830 U	370 U	400 U	2010 U
Dibenz(a,h)Anthracene	1770 U	1720 U	1830 U	370 U	400 U	2010 U
Dibenzofuran	1770 U	1720 U	1830 U	370 U	400 U	2010 U
1,2-Dichlorobenzene	1770 U	1720 U	1830 U	370 U	400 U	2010 U
1,3-Dichlorobenzene	1770 U	1720 U	1830 U	370 U	400 U	2010 U
1,4-Dichlorobenzene	1770 U	1720 U	1830 U	370 U	400 U	2010 U
3,3'-Dichlorobenzidine	3550 U	3440 U	3670 U	730 U	805 U	4020 U
2,4-Dichlorophenol	1770 U	1720 U	1830 U	370 U	400 U	2010 U
Diethylphthalate	1770 U	1720 U	1830 U	370 U	400 U	2010 U
Dimethyl Phthalate	1770 U	1720 U	1830 U	370 U	400 U	2010 U
2,4-Dimethylphenol	1770 U	1720 U	1830 U	370 U	400 U	2010 U
4,6-Dinitro-2-Methylphenol	8600 U	8330 U	8890 U	1780 U	1950 U	9760 U
2,4-Dinitrophenol	8600 U	8330 U	8890 U	1780 U	1950 U	9760 U
2,4-Dinitrotoluene	1770 U	1720 U	1830 U	370 U	400 U	2010 U

**ORGANICS ANALYSIS DATA SHEETS**  
**Envirosystems, Inc.**

CLIENT SAMPLE ID:	S-90	S-80(2-4)	S-82(0-2)	S-30(0-2)	S-22(0-2)	S-22(0-2)R
LAB SAMPLE ID:	90102164	90102243	90102374	90102376	90102382	90102382
SAMPLE DATE:	10/01/90	10/03/90	10/16/91	10/16/90	10/17/90	10/17/90
RECEIVED DATE:	10/03/90	10/05/90	10/18/90	10/18/90	10/18/90	10/18/90
EXTRACTION DATE:	10/09/90	10/09/90	10/18/90	10/18/90	10/18/90	10/18/90
ANALYSIS DATE:	11/02/90	11/02/90	11/05/90	10/19/90	10/19/90	11/05/90
FILE NAME:	102164R	102243R	102374R	102376	102382	102382R
INSTRUMENT ID:	MSA	MSA	MSA	MSA	MSA	MSA
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
% MOISTURE:	7	4	10	10	18	18
<b>SEMICVOLATILE COMPOUNDS</b>						
2,6-Dinitrotoluene	1770 U	1720 U	1830 U	370 U	400 U	2010 U
bis(2-Ethylhexyl)Phthalate	1770 U	1720 U	1830 U	407	1048	1500 B J
Fluoranthene	1770 U	1720 U	1830 U	370 U	1878	2585
Fluorene	1770 U	1720 U	1830 U	370 U	400 U	2010 U
Hexachlorobenzene	1770 U	1720 U	1830 U	370 U	400 U	2010 U
Hexachlorobutadiene	1770 U	1720 U	1830 U	370 U	400 U	2010 U
Hexachlorocyclopentadiene	1770 U	1720 U	1830 U	370 U	400 U	2010 U
Hexachloroethane	1770 U	1720 U	1830 U	370 U	400 U	2010 U
Indeno(1,2,3-cd)Pyrene	1770 U	1720 U	1830 U	370 U	400 U	2010 U
Isophorone	1770 U	1720 U	1830 U	370 U	400 U	2010 U
2-Methylnaphthalene	1770 U	1720 U	1830 U	370 U	400 U	2010 U
4-Methylphenol	1770 U	1720 U	1830 U	370 U	400 U	2010 U
2-Methylphenol	1770 U	1720 U	1830 U	370 U	400 U	2010 U
N-Nitroso-Di-n-Propylamine	1770 U	1720 U	1830 U	370 U	400 U	2010 U
N-Nitrosodimethylamine	1770 U	1720 U	1830 U	370 U	400 U	2010 U
N-Nitrosodiphenylamine (1)	1770 U	1720 U	1830 U	370 U	400 U	2010 U
Naphthalene	1770 U	1720 U	1830 U	370 U	400 U	2010 U
2-Nitroaniline	8600 U	8330 U	8890 U	1780 U	1950 U	9760 U
4-Nitroaniline	8600 U	8330 U	8890 U	1780 U	1950 U	9760 U
3-Nitroaniline	8600 U	8330 U	8890 U	1780 U	1950 U	9760 U
Nitrobenzene	1770 U	1720 U	1830 U	370 U	400 U	2010 U
4-Nitrophenol	8600 U	8330 U	8890 U	1780 U	1950 U	9760 U
2-Nitrophenol	1770 U	1720 U	1830 U	370 U	400 U	2010 U
Pentachlorophenol	8600 U	8330 U	8890 U	1780 U	1950 U	9760 U
Phenanthrene	1770 U	1720 U	1830 U	370 U	406	2010 U
Phenol	1770 U	1720 U	1830 U	370 U	400 U	2010 U
Pyrene	1770 U	1720 U	1830 U	370 U	1011	1270 J
1,2,4-Trichlorobenzene	1770 U	1720 U	1830 U	370 U	400 U	2010 U
2,4,5-Trichlorophenol	8600 U	8330 U	8890 U	1780 U	1950 U	9760 U
2,4,6-Trichlorophenol	1770 U	1720 U	1830 U	370 U	400 U	2010 U

B - Detected in Lab Blank. U - Below Reported Quantitation Level. J - Estimated Value.

**ORGANICS ANALYSIS DATA SHEETS**  
**Envirosystems, Inc.**

CLIENT SAMPLE ID:	S-64(2-3)	S-17(0-2)	S-17(0-2)R	S-49(2-4)	S-49(2-4)R	S-47(2-4)
LAB SAMPLE ID:	90102403	90102423	90102423	90102425	90102425	90102433
SAMPLE DATE:	10/18/90	10/19/90	10/19/90	10/19/90	10/19/90	10/19/90
RECEIVED DATE:	10/18/90	10/20/90	10/20/90	10/20/90	10/20/90	10/20/90
EXTRACTION DATE:	10/19/90	10/24/90	10/24/90	10/24/90	10/24/90	10/24/90
ANALYSIS DATE:	11/02/90	10/25/90	11/05/90	10/25/90	11/05/90	10/25/90
FILE NAME:	102403R	102423	102423R	102425	102425R	102433
INSTRUMENT ID:	MSA	MSA	MSA	MSA	MSA	MSA
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
% MOISTURE:	16	31	31	6	6	7

**SEMICVOLATILE COMPOUNDS**

Acenaphthene	3930	U	480	U	2390	U	350	U	3510	U	355	U
Acenaphthylene	3930	U	480	U	2390	U	350	U	3510	U	355	U
Anthracene	3930	U	480	U	2390	U	350	U	3510	U	355	U
Benzidine	7140	U	810	U	4350	U	640	U	640	U	645	U
Benzo(a)Anthracene	3930	U	480	U	2390	U	350	U	3510	U	355	U
Benzo(a)Pyrene	3930	U	480	U	2390	U	415		3510	U	355	U
Benzo(b+k)fluoranthenes	3930	U	416	J	2390	U	350	U	3510	U	257	J
Benzo(g,h,i)Perylene	3930	U	480	U	2390	U	350	U	3510	U	355	U
Benzoic Acid	19000	U	2320	U	11600	U	1700	U	17000	U	1720	U
Benzyl Alcohol	3930	U	480	U	2390	U	350	U	3510	U	355	U
4-Bromophenyl-phenylether	3930	U	480	U	2390	U	350	U	3510	U	355	U
Butylbenzylphthalate	3930	U	480	U	2390	U	350	U	3510	U	355	U
4-Chloro-3-Methylphenol	3930	U	480	U	2390	U	350	U	3510	U	355	U
4-Chloroaniline	3930	U	480	U	2390	U	350	U	3510	U	355	U
bis(2-Chloroethoxy)Methane	3930	U	480	U	2390	U	350	U	3510	U	355	U
bis(2-Chloroethyl)Ether	3930	U	480	U	2390	U	350	U	3510	U	355	U
bis(2-Chloroisopropyl)Ether	3930	U	480	U	2390	U	350	U	3510	U	355	U
2-Chloronaphthalene	3930	U	480	U	2390	U	350	U	3510	U	355	U
2-Chlorophenol	3930	U	480	U	2390	U	350	U	3510	U	355	U
4-Chlorophenyl-phenylether	3930	U	480	U	2390	U	350	U	3510	U	355	U
Chrysene	3930	U	342	J	2390	U	350	U	3510	U	355	U
Di-n-Butylphthalate	3930	U	462	J	2390	U	350	U	3510	U	355	U
Di-n-Octyl Phthalate	3930	U	480	U	2390	U	350	U	3510	U	263	J
Dibenz(a,h)Anthracene	3930	U	480	U	2390	U	350	U	3510	U	355	U
Dibenzofuran	3930	U	480	U	2390	U	350	U	3510	U	355	U
1,2-Dichlorobenzene	3930	U	480	U	2390	U	350	U	3510	U	355	U
1,3-Dichlorobenzene	3930	U	480	U	2390	U	350	U	3510	U	355	U
1,4-Dichlorobenzene	3930	U	480	U	2390	U	350	U	3510	U	355	U
3,3'-Dichlorobenzidine	7860	U	960	U	4780	U	700	U	7020	U	710	U
2,4-Dichlorophenol	3930	U	480	U	2390	U	350	U	3510	U	355	U
Diethylphthalate	3930	U	480	U	2390	U	350	U	3510	U	355	U
Dimethyl Phthalate	3930	U	480	U	2390	U	350	U	3510	U	355	U
2,4-Dimethylphenol	3930	U	480	U	2390	U	350	U	3510	U	355	U
4,6-Dinitro-2-Methylphenol	19000	U	2320	U	11600	U	1700	U	17000	U	1720	U
2,4-Dinitrophenol	19000	U	2320	U	11600	U	1700	U	17000	U	1720	U
2,4-Dinitrotoluene	3930	U	480	U	2390	U	350	U	3510	U	355	U

**ORGANICS ANALYSIS DATA SHEETS**  
**Envirosystems, Inc.**

CLIENT SAMPLE ID:	S-47(2-4)R	S-62(0-2)	S-61(5-7)	S-43(0-2)	S-41A(3-5)	MW-25(4-6)
LAB SAMPLE ID:	90102433	90102502	90102505	90112583	90112600	90112698
SAMPLE DATE:	10/19/90	10/24/90	10/24/90	11/05/90	11/07/90	11/17/90
RECEIVED DATE:	10/20/90	10/26/90	10/26/90	11/07/90	11/09/90	11/19/90
EXTRACTION DATE:	10/24/90	10/30/90	10/30/90	11/12/90	11/12/90	11/20/90
ANALYSIS DATE:	11/05/90	11/02/90	11/02/90	11/19/90	11/19/90	12/26/90
FILE NAME:	102433R	102502	102505	112583	112600	112698
INSTRUMENT ID:	MSA	MSA	MSA	MSA	MSA	MSA
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
% MOISTURE:	7	10	12	11	14	8

**SEMICOLATILE COMPOUNDS**

Acenaphthene	3550	U	3670	U	3750	U	3710	U	3840	U	360	U
Acenaphthylene	3550	U	3670	U	3750	U	3710	U	3840	U	360	U
Anthracene	3550	U	3670	U	3750	U	1966	J	3840	U	360	U
Benzidine	6450	U	6670	U	6829	U	6749	U	6480	U	650	U
Benzo(a)Anthracene	3550	U	3670	U	3750	U	12600		3840	U	360	U
Benzo(a)Pyrene	3550	U	3670	U	3750	U	5760		3840	U	360	U
Benzo(b+k)fluoranthenes	3550	U	3670	U	3750	U	7400		3840	U	360	U
Benzo(g,h,i)Perylene	3550	U	3670	U	3750	U	5800		3840	U	360	U
Benzoic Acid	17200	U	17800	U	18200	U	18000	U	18600	U	1740	U
Benzyl Alcohol	3550	U	3670	U	3750	U	3710	U	3840	U	360	U
4-Bromophenyl-phenylether	3550	U	3670	U	3750	U	3710	U	3840	U	360	U
Butylbenzylphthalate	3550	U	3670	U	3750	U	3710	U	3840	U	360	U
4-Chloro-3-Methylphenol	3550	U	3670	U	3750	U	3710	U	3840	U	360	U
4-Chloroaniline	3550	U	3670	U	3750	U	3710	U	3840	U	360	U
bis(2-Chloroethoxy)Methane	3550	U	3670	U	3750	U	3710	U	3840	U	360	U
bis(2-Chloroethyl)Ether	3550	U	3670	U	3750	U	3710	U	3840	U	360	U
bis(2-Chloroisopropyl)Ether	3550	U	3670	U	3750	U	3710	U	3840	U	360	U
2-Chloronaphthalene	3550	U	3670	U	3750	U	3710	U	3840	U	360	U
2-Chlorophenol	3550	U	3670	U	3750	U	3710	U	3840	U	360	U
4-Chlorophenyl-phenylether	3550	U	3670	U	3750	U	3710	U	3840	U	360	U
Chrysene	3550	U	3670	U	3750	U	3710	U	3840	U	360	U
Di-n-Butylphthalate	3550	U	3670	U	3750	U	10100		3840	U	360	U
Di-n-Octyl Phthalate	3550	U	3670	U	3750	U	3710	U	3840	U	360	U
Dibenz(a,h)Anthracene	3550	U	3670	U	3750	U	2090	J	3840	U	360	U
Dibenzofuran	3550	U	3670	U	3750	U	3710	U	3840	U	360	U
1,2-Dichlorobenzene	3550	U	3670	U	3750	U	3710	U	3840	U	360	U
1,3-Dichlorobenzene	3550	U	3670	U	3750	U	3710	U	3840	U	360	U
1,4-Dichlorobenzene	3550	U	3670	U	3750	U	3710	U	3840	U	360	U
3,3'-Dichlorobenzidine	7100	U	7330	U	6500	U	7420	U	7670	U	720	U
2,4-Dichlorophenol	3550	U	3670	U	3750	U	3710	U	3840	U	360	U
Diethylphthalate	3550	U	3670	U	3750	U	3710	U	3840	U	360	U
Dimethyl Phthalate	3550	U	3670	U	3750	U	3710	U	3840	U	360	U
2,4-Dimethylphenol	3550	U	3670	U	3750	U	3710	U	3840	U	360	U
4,6-Dinitro-2-Methylphenol	17200	U	17800	U	18200	U	18000	U	18600	U	1740	U
2,4-Dinitrophenol	17200	U	17800	U	18200	U	18000	U	18600	U	1740	U
2,4-Dinitrotoluene	3550	U	3670	U	3750	U	3710	U	3840	U	360	U

**ORGANICS ANALYSIS DATA SHEETS**  
**Envirosystems, Inc.**

CLIENT SAMPLE ID:	S-47(2-4)R	S-62(0-2)	S-61(5-7)	S-43(0-2)	S-41A(3-5)	MW-25(4-6)
LAB SAMPLE ID:	90102433	90102502	90102505	90112583	90112600	90112698
SAMPLE DATE:	10/19/90	10/24/90	10/24/90	11/05/90	11/07/90	11/17/90
RECEIVED DATE:	10/20/90	10/26/90	10/26/90	11/07/90	11/09/90	11/19/90
EXTRACTION DATE:	10/24/90	10/30/90	10/30/90	11/12/90	11/12/90	11/20/90
ANALYSIS DATE:	11/05/90	11/02/90	11/02/90	11/19/90	11/19/90	12/26/90
FILE NAME:	102433R	102502	102505	112583	112600	112698
INSTRUMENT ID:	MSA	MSA	MSA	MSA	MSA	MSA
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
% MOISTURE:	7	10	12	11	14	8

**SEMOVOLATILE COMPOUNDS**

2,6-Dinitrotoluene	3550 U	3670 U	3750 U	3710 U	3840 U	360 U
bis(2-Ethylhexyl)Phthalate	3550 U	3670 U	3750 U	3710 U	3840 U	680 B
Fluoranthene	3550 U	3670 U	3750 U	19700 ←	3840 U	360 U
Fluorene	3550 U	3670 U	3750 U	3710 U	3840 U	360 U
Hexachlorobenzene	3550 U	3670 U	3750 U	3710 U	3840 U	360 U
Hexachlorobutadiene	3550 U	3670 U	3750 U	3710 U	3840 U	360 U
Hexachlorocyclopentadiene	3550 U	3670 U	3750 U	3710 U	3840 U	360 U
Hexachloroethane	3550 U	3670 U	3750 U	3710 U	3840 U	360 U
Indeno(1,2,3-cd)Pyrene	3550 U	3670 U	3750 U	4640	3840 U	360 U
Isophorone	3550 U	3670 U	3750 U	3710 U	3840 U	360 U
2-Methylnaphthalene	3550 U	3670 U	3750 U	3710 U	3840 U	360 U
4-Methylphenol	3550 U	3670 U	3750 U	3710 U	3840 U	360 U
2-Methylphenol	3550 U	3670 U	3750 U	3710 U	3840 U	360 U
N-Nitroso-Di-n-Propylamine	3550 U	3670 U	3750 U	3710 U	3840 U	360 U
N-Nitrosodimethylamine	3550 U	3670 U	3750 U	3710 U	3840 U	360 U
N-Nitrosodiphenylamine (1)	3550 U	3670 U	3750 U	954 J	3840 U	360 U
Naphthalene	3550 U	3670 U	3750 U	3710 U	3840 U	360 U
2-Nitroaniline	17200 U	17800 U	18200 U	18000 U	18600 U	1740 U
4-Nitroaniline	17200 U	17800 U	18200 U	18000 U	18600 U	1740 U
3-Nitroaniline	17200 U	17800 U	18200 U	18000 U	18600 U	1740 U
Nitrobenzene	3550 U	3670 U	3750 U	3710 U	3840 U	360 U
4-Nitrophenol	17200 U	17800 U	18200 U	18000 U	18600 U	1740 U
2-Nitrophenol	3550 U	3670 U	3750 U	3710 U	3840 U	360 U
Pentachlorophenol	17200 U	17800 U	18200 U	18000 U	18600 U	1740 U
Phenanthrene	3550 U	3670 U	3750 U	11900	3840 U	360 U
Phenol	3550 U	3670 U	3750 U	3710 U	3840 U	360 U
Pyrene	3550 U	3670 U	3750 U	16500	3840 U	360 U
1,2,4-Trichlorobenzene	3550 U	3670 U	3750 U	3710 U	3840 U	360 U
2,4,5-Trichlorophenol	17200 U	17800 U	18200 U	18000 U	18600 U	1740 U
2,4,6-Trichlorophenol	3550 U	3670 U	3750 U	3710 U	3840 U	360 U

B - Detected in Lab Blank. U - Below Reported Quantitation Level. J - Estimated Value.

**ORGANICS ANALYSIS DATA SHEETS**  
**Envirosystems, Inc.**

CLIENT SAMPLE ID:	S-53(5-7)	MW-34(0-2)	S-38(2-4)	S-39(2-4)	S-35(8-10)	S-37(4-6)
LAB SAMPLE ID:	90112732	90112772	90112775	90112779	90122785	90122791
SAMPLE DATE:	11/18/90	11/29/90	11/29/90	11/29/90	11/30/90	12/01/90
RECEIVED DATE:	11/21/90	11/30/90	11/30/90	11/30/90	12/01/90	12/03/90
EXTRACTION DATE:	11/21/90	12/04/90	12/04/90	12/04/90	12/04/90	12/04/90
ANALYSIS DATE:	12/26/90	01/02/91	01/02/91	01/02/91	01/02/91	01/02/91
FILE NAME:	112732	112772	112775	112779	122785	122791
INSTRUMENT ID:	MSA	MSA	MSA	MSA	MSA	MSA
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
% MOISTURE:	4	7	15	5	13	6

**SEMOVOLATILE COMPOUNDS**

Acenaphthene	340 U	355 U	390 U	350 U	380 U	350 U
Acenaphthylene	340 U	355 U	390 U	350 U	380 U	350 U
Anthracene	340 U	355 U	390 U	350 U	380 U	350 U
Benzidine	625 U	645 U	705 U	630 U	690 U	640 U
Benzo(a)Anthracene	340 U	441	390 U	350 U	380 U	350 U
Benzo(a)Pyrene	340 U	292 J	390 U	350 U	380 U	350 U
Benzo(b+k)fluoranthenes	340 U	1000	390 U	350 U	380 U	350 U
Benzo(g, h, i)Perylene	340 U	272 J	390 U	350 U	380 U	350 U
Benzoic Acid	1670 U	1720 U	1880 U	1680 U	1840 U	1700 U
Benzyl Alcohol	340 U	355 U	390 U	350 U	380 U	350 U
4-Bromophenyl-phenylether	340 U	355 U	390 U	350 U	380 U	350 U
Butylbenzylphthalate	340 U	355 U	390 U	350 U	380 U	350 U
4-Chloro-3-Methylphenol	340 U	355 U	390 U	350 U	380 U	350 U
4-Chloroaniline	340 U	355 U	390 U	350 U	380 U	350 U
bis(2-Chloroethoxy)Methane	340 U	355 U	390 U	350 U	380 U	350 U
bis(2-Chloroethyl)Ether	340 U	355 U	390 U	350 U	380 U	350 U
bis(2-Chloroisopropyl)Ether	340 U	355 U	390 U	350 U	380 U	350 U
2-Chloronaphthalene	340 U	355 U	390 U	350 U	380 U	350 U
2-Chlorophenol	340 U	355 U	390 U	350 U	380 U	350 U
4-Chlorophenyl-phenylether	340 U	355 U	390 U	350 U	380 U	350 U
Chrysene	340 U	538	390 U	350 U	380 U	350 U
Di-n-Butylphthalate	340 U	198 J	390 U	350 U	380 U	350 U
Di-n-Octyl Phthalate	340 U	355 U	390 U	350 U	380 U	350 U
Dibenzo(a, h)Anthracene	340 U	355 U	390 U	350 U	380 U	350 U
Dibenzofuran	340 U	355 U	390 U	350 U	380 U	350 U
1,2-Dichlorobenzene	340 U	355 U	390 U	350 U	380 U	350 U
1,3-Dichlorobenzene	340 U	355 U	390 U	350 U	380 U	350 U
1,4-Dichlorobenzene	340 U	355 U	390 U	350 U	380 U	350 U
3,3'-Dichlorobenzidine	690 U	710 U	780 U	695 U	760 U	700 U
2,4-Dichlorophenol	340 U	355 U	390 U	350 U	380 U	350 U
Diethylphthalate	340 U	355 U	390 U	350 U	380 U	350 U
Dimethyl Phthalate	340 U	355 U	390 U	350 U	380 U	350 U
2,4-Dimethylphenol	340 U	355 U	390 U	350 U	380 U	350 U
4,6-Dinitro-2-Methylphenol	1670 U	1720 U	1880 U	1680 U	1840 U	1700 U
2,4-Dinitrophenol	1670 U	1720 U	1880 U	1680 U	1840 U	1700 U
2,4-Dinitrotoluene	340 U	355 U	390 U	350 U	380 U	350 U

ORGANICS ANALYSIS DATA SHEETS  
Envirosystems, Inc.

CLIENT SAMPLE ID:	S-53(5-7)	MW-34(0-2)	S-38(2-4)	S-39(2-4)	S-35(8-10)	S-37(4-6)
LAB SAMPLE ID:	90112732	90112772	90112775	90112779	90122785	90122791
SAMPLE DATE:	11/18/90	11/29/90	11/29/90	11/29/90	11/30/90	12/01/90
RECEIVED DATE:	11/21/90	11/30/90	11/30/90	11/30/90	12/01/90	12/03/90
EXTRACTION DATE:	11/21/90	12/04/90	12/04/90	12/04/90	12/04/90	12/04/90
ANALYSIS DATE:	12/26/90	01/02/91	01/02/91	01/02/91	01/02/91	01/02/91
FILE NAME:	112732	112772	112775	112779	122785	122791
INSTRUMENT ID:	MSA	MSA	MSA	MSA	MSA	MSA
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
% MOISTURE:	4	7	15	5	13	6

**SEMICVOLATILE COMPOUNDS**

2,6-Dinitrotoluene	340 U	355 U	390 U	350 U	380 U	350 U
bis(2-Ethylhexyl)Phthalate	461 B	404 B	390 U	197 B J	203 B J	217 B J
Fluoranthene	340 U	716	390 U	350 U	380 U	350 U
Fluorene	340 U	355 U	390 U	350 U	380 U	350 U
Hexachlorobenzene	340 U	355 U	390 U	350 U	380 U	350 U
Hexachlorobutadiene	340 U	355 U	390 U	350 U	380 U	350 U
Hexachlorocyclopentadiene	340 U	355 U	390 U	350 U	380 U	350 U
Hexachloroethane	340 U	355 U	390 U	350 U	380 U	350 U
Indeno(1,2,3-cd)Pyrene	340 U	227 J	390 U	350 U	380 U	350 U
Isophorone	340 U	355 U	390 U	350 U	380 U	350 U
2-Methylnaphthalene	340 U	355 U	390 U	350 U	380 U	350 U
4-Methylphenol	340 U	355 U	390 U	350 U	380 U	350 U
2-Methylphenol	340 U	355 U	390 U	350 U	380 U	350 U
N-Nitroso-Di-n-Propylamine	340 U	355 U	390 U	350 U	380 U	350 U
N-Nitrosodimethylamine	340 U	355 U	390 U	350 U	380 U	350 U
N-Nitrosodiphenylamine (1)	340 U	355 U	390 U	350 U	380 U	350 U
Naphthalene	340 U	355 U	390 U	350 U	380 U	350 U
2-Nitroaniline	1670 U	1720 U	1880 U	1680 U	1840 U	1700 U
4-Nitroaniline	1670 U	1720 U	1880 U	1680 U	1840 U	1700 U
3-Nitroaniline	1670 U	1720 U	1880 U	1680 U	1840 U	1700 U
Nitrobenzene	340 U	355 U	390 U	350 U	380 U	350 U
4-Nitrophenol	1670 U	1720 U	1880 U	1680 U	1840 U	1700 U
2-Nitrophenol	340 U	355 U	390 U	350 U	380 U	350 U
Pentachlorophenol	1670 U	1720 U	1880 U	1680 U	1840 U	1700 U
Phenanthrene	340 U	234 J	390 U	350 U	380 U	350 U
Phenol	340 U	355 U	390 U	350 U	380 U	350 U
Pyrene	340 U	523	390 U	350 U	380 U	350 U
1,2,4-Trichlorobenzene	340 U	355 U	390 U	350 U	380 U	350 U
2,4,5-Trichlorophenol	1670 U	1720 U	1880 U	1680 U	1840 U	1700 U
2,4,6-Trichlorophenol	340 U	355 U	390 U	350 U	380 U	350 U

B - Detected in Lab Blank. U - Below Reported Quantitation Level. J - Estimated Value.

ORGANICS ANALYSIS DATA SHEETS  
Envirosystems, Inc.

CLIENT SAMPLE ID:	MW-26(9-11)	MW-26(9-11)R	S-60(4-6)	S-33(4-6)
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LAB SAMPLE ID:	90122809	90122809	90122909	90122940
SAMPLE DATE:	12/05/90	12/05/90	12/12/90	12/13/90
RECEIVED DATE:	12/06/90	12/06/90	12/13/90	12/14/90
EXTRACTION DATE:	12/10/90	01/03/91	12/17/90	12/17/90
ANALYSIS DATE:	01/03/91	01/03/91	01/03/91	01/03/91
FILE NAME:	122809	122809R	122909	122940
INSTRUMENT ID:	MSA	MSA	MSA	MSA
MATRIX:	SOIL	SOIL	SOIL	SOIL
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG
% MOISTURE:	4	4	3	7

**SEMIVOLATILE COMPOUNDS**

Acenaphthene	340 U	340 U	340 U	355 U
Acenaphthylene	340 U	340 U	340 U	355 U
Anthracene	340 U	340 U	340 U	355 U
Benzidine	625 U	625 U	620 U	645 U
Benzo(a)Anthracene	340 U	340 U	340 U	355 U
Benzo(a)Pyrene	340 U	340 U	340 U	355 U
Benzo(b+k)fluoranthenes	340 U	340 U	340 U	355 U
Benzo(g,h,i)Perylene	340 U	340 U	340 U	355 U
Benzoic Acid	1670 U	1670 U	1650 U	1720 U
Benzyl Alcohol	340 U	340 U	340 U	355 U
4-Bromophenyl-phenylether	340 U	340 U	340 U	355 U
Butylbenzylphthalate	340 U	340 U	340 U	355 U
4-Chloro-3-Methylphenol	340 U	340 U	340 U	355 U
4-Chloroaniline	340 U	340 U	340 U	355 U
bis(2-Chloroethoxy)Methane	340 U	340 U	340 U	355 U
bis(2-Chloroethyl)Ether	340 U	340 U	340 U	355 U
bis(2-Chloroisopropyl)Ether	340 U	340 U	340 U	355 U
2-Chloronaphthalene	340 U	340 U	340 U	355 U
2-Chlorophenol	340 U	340 U	340 U	355 U
4-Chlorophenyl-phenylether	340 U	340 U	340 U	355 U
Chrysene	340 U	340 U	340 U	355 U
Di-n-Butylphthalate	340 U	340 U	340 U	355 U
Di-n-Octyl Phthalate	340 U	340 U	340 U	355 U
Dibenz(a,h)Anthracene	340 U	340 U	340 U	355 U
Dibenzofuran	340 U	340 U	340 U	355 U
1,2-Dichlorobenzene	340 U	340 U	340 U	355 U
1,3-Dichlorobenzene	340 U	340 U	340 U	355 U
1,4-Dichlorobenzene	340 U	340 U	340 U	355 U
3,3'-Dichlorobenzidine	690 U	690 U	680 U	710 U
2,4-Dichlorophenol	340 U	340 U	340 U	355 U
Diethylphthalate	340 U	340 U	340 U	355 U
Dimethyl Phthalate	340 U	340 U	340 U	355 U
2,4-Dimethylphenol	340 U	340 U	340 U	355 U
4,6-Dinitro-2-Methylphenol	1670 U	1670 U	1650 U	1720 U
2,4-Dinitrophenol	1670 U	1670 U	1650 U	1720 U
2,4-Dinitrotoluene	340 U	340 U	340 U	355 U

**ORGANICS ANALYSIS DATA SHEETS**  
**Envirosystems, Inc.**

CLIENT SAMPLE ID:	MW-26(9-11)	MW-26(9-11)R	S-60(4-6)	S-33(4-6)
LAB SAMPLE ID:	90122809	90122809	90122909	90122940
SAMPLE DATE:	12/05/90	12/05/90	12/12/90	12/13/90
RECEIVED DATE:	12/06/90	12/06/90	12/13/90	12/14/90
EXTRACTION DATE:	12/10/90	01/03/91	12/17/90	12/17/90
ANALYSIS DATE:	01/03/91	01/03/91	01/03/91	01/03/91
FILE NAME:	122809	122809R	122909	122940
INSTRUMENT ID:	MSA	MSA	MSA	MSA
MATRIX:	SOIL	SOIL	SOIL	SOIL
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG
% MOISTURE:	4	4	3	7

**SEMICVOLATILE COMPOUNDS**

2,6-Dinitrotoluene	340 U	340 U	340 U	355 U
bis(2-Ethylhexyl)Phthalate	306 B J	829 B	340 U	355 U
Fluoranthene	340 U	340 U	340 U	355 U
Fluorene	340 U	340 U	340 U	355 U
Hexachlorobenzene	340 U	340 U	340 U	355 U
Hexachlorobutadiene	340 U	340 U	340 U	355 U
Hexachlorocyclopentadiene	340 U	340 U	340 U	355 U
Hexachloroethane	340 U	340 U	340 U	355 U
Indeno(1,2,3-cd)Pyrene	340 U	340 U	340 U	355 U
Isophorone	340 U	340 U	340 U	355 U
2-Methylnaphthalene	340 U	340 U	340 U	355 U
4-Methylphenol	340 U	340 U	340 U	355 U
2-Methylphenol	340 U	340 U	340 U	355 U
N-Nitroso-Di-n-Propylamine	340 U	340 U	340 U	355 U
N-Nitrosodimethylamine	340 U	340 U	340 U	355 U
N-Nitrosodiphenylamine (1)	340 U	340 U	340 U	355 U
Naphthalene	340 U	340 U	340 U	355 U
2-Nitroaniline	1670 U	1670 U	1650 U	1720 U
4-Nitroaniline	1670 U	1670 U	1650 U	1720 U
3-Nitroaniline	1670 U	1670 U	1650 U	1720 U
Nitrobenzene	340 U	340 U	340 U	355 U
4-Nitrophenol	1670 U	1670 U	1650 U	1720 U
2-Nitrophenol	340 U	340 U	340 U	355 U
Pentachlorophenol	1670 U	1670 U	1650 U	1720 U
Phenanthrene	340 U	340 U	340 U	355 U
Phenol	340 U	340 U	340 U	355 U
Pyrene	340 U	340 U	340 U	355 U
1,2,4-Trichlorobenzene	340 U	340 U	340 U	355 U
2,4,5-Trichlorophenol	1670 U	1670 U	1650 U	1720 U
2,4,6-Trichlorophenol	340 U	340 U	340 U	355 U

B - Detected in Lab Blank. U - Below Reported Quantitation Level. J - Estimated Value.

**ORGANIC ANALYSIS DATA SHEET**  
**Envirosystems, Inc.**

CLIENT SAMPLE ID:	S-90	S-80 (2-4)	S-82 (0-2)	S-30 (0-2)	S-22 (0-2)	S-64 (2-3)
LAB SAMPLE ID:	90102164	90102243	90102374	90102376	90102382	90102403
SAMPLE DATE:	10/01/90	10/03/90	10/16/90	10/16/90	10/17/90	10/18/90
RECEIVED DATE:	10/03/90	10/05/90	10/18/90	10/18/90	10/18/90	10/19/90
EXTRACTION DATE:	10/08/90	10/08/90	10/19/90	10/19/90	10/19/90	10/19/90
ANALYSIS DATE:	10/22/90	10/22/90	10/22/90	10/22/90	10/22/90	10/22/90
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
% MOISTURE:	7	4	10	10	18	16

**PESTICIDE AND PCB COMPOUNDS**

alpha-BHC	9.0 U	8.0 U	9.0 U	9.0 U	10 U	10 U
beta-BHC	9.0 U	8.0 U	9.0 U	9.0 U	10 U	10 U
delta-BHC	9.0 U	8.0 U	9.0 U	9.0 U	10 U	10 U
gamma-BHC (Lindane)	9.0 U	8.0 U	9.0 U	9.0 U	10 U	10 U
Heptachlor	485	8.0 U	9.0 U	9.0 U	10 U	10 U
Aldrin	9.0 U	8.0 U	9.0 U	9.0 U	10 U	10 U
Heptachlor Epoxide	9.0 U	8.0 U	9.0 U	9.0 U	10 U	10 U
Endosulfan I	9.0 U	8.0 U	9.0 U	9.0 U	10 U	10 U
Dieldrin	1521	17 U	18 U	18 U	20 U	19 U
4,4'-DDE	17 U	17 U	18 U	18 U	20 U	19 U
Endrin	1422	17 U	18 U	18 U	20 U	19 U
Endosulfan II	17 U	17 U	18 U	18 U	20 U	19 U
4,4'-DDD	17 U	17 U	18 U	18 U	20 U	19 U
Endosulfate	17 U	17 U	18 U	18 U	20 U	19 U
4,4'-DDT	17 U	17 U	18 U	18 U	20 U	19 U
Endrin Ketone	17 U	17 U	18 U	18 U	20 U	19 U
Methoxychlor	85 U	85 U	90 U	90 U	100 U	95 U
alpha-chlordane	9.0 U	8.0 U	9.0 U	9.0 U	10 U	10 U
gamma-chlordane	9.0 U	8.0 U	9.0 U	9.0 U	10 U	10 U
Toxaphene	170 U	170 U	180 U	180 U	200 U	190 U
Arochlor-1016	85 U	85 U	90 U	90 U	100 U	95 U
Arochlor-1221	85 U	85 U	90 U	90 U	100 U	95 U
Arochlor-1232	85 U	85 U	90 U	90 U	100 U	95 U
Arochlor-1242	85 U	85 U	90 U	90 U	100 U	95 U
Arochlor-1248	85 U	85 U	90 U	90 U	100 U	95 U
Arochlor-1254	85 U	85 U	934	90 U	262	838
Arochlor-1260	85 U	85 U	90 U	90 U	100 U	95 U

B - Detected in Lab Blank. U - Below Reported Quantitation Level. J - Estimated Value.

**ORGANIC ANALYSIS DATA SHEET**  
**Envirosystems, Inc.**

CLIENT SAMPLE ID:	S-17 (0-2)	S-49 (2-4)	S-47 (2-4)	S-62 (0-2)	S-61 (5-7)	S-43 (0-2)
LAB SAMPLE ID:	90102423	90102425	90102433	90102502	90102505	90112583
SAMPLE DATE:	10/19/90	10/19/90	10/19/90	10/24/90	10/24/90	11/05/90
RECEIVED DATE:	10/20/90	10/20/90	10/20/90	10/26/90	10/26/90	11/07/90
EXTRACTION DATE:	10/24/90	10/24/90	10/24/90	10/30/90	10/30/90	11/12/90
ANALYSIS DATE:	11/07/90	11/07/90	11/07/90	11/07/90	11/07/90	11/14/90
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
% MOISTURE:	31	6	7	10	12	11

**PESTICIDE AND PCB COMPOUNDS**

alpha-BHC	12 U	9.0 U	85.0 U	9.0 U	9.0 U	90.0 U
beta-BHC	12 U	9.0 U	85.0 U	9.0 U	9.0 U	90.0 U
delta-BHC	12 U	9.0 U	85.0 U	9.0 U	9.0 U	90.0 U
gamma-BHC (Lindane)	12 U	9.0 U	85.0 U	9.0 U	9.0 U	90.0 U
Heptachlor	12 U	9.0 U	85.0 U	9.0 U	9.0 U	90.0 U
Aldrin	12 U	9.0 U	85.0 U	9.0 U	9.0 U	90.0 U
Heptachlor Epoxide	12 U	9.0 U	85.0 U	9.0 U	9.0 U	90.0 U
Endosulfan I	12 U	9.0 U	85.0 U	9.0 U	9.0 U	90.0 U
Dieldrin	23 U	17 U	170 U	18 U	18 U	180 U
4,4'-DDE	23 U	17 U	170 U	18 U	18 U	180 U
Aldrin	23 U	17 U	170 U	18 U	18 U	180 U
Endosulfan II	23 U	17 U	170 U	18 U	18 U	180 U
4'-DDD	23 U	17 U	170 U	18 U	18 U	180 U
desulfate	23 U	17 U	170 U	18 U	18 U	180 U
4,4'-DDT	23 U	17 U	170 U	18 U	18 U	180 U
Aldrin Ketone	23 U	17 U	170 U	18 U	18 U	180 U
Heptachlor	115 U	85 U	860 U	90 U	90 U	900 U
alpha-chlordane	12 U	9.0 U	85.0 U	9.0 U	9.0 U	90.0 U
mma-chlordane	12 U	9.0 U	85.0 U	9.0 U	9.0 U	90.0 U
Xaphene	230 U	170 U	1720 U	180 U	180 U	1800 U
Arochlor-1016	115 U	85 U	860 U	90 U	90 U	900 U
Arochlor-1221	115 U	85 U	860 U	90 U	90 U	900 U
Arochlor-1232	115 U	85 U	860 U	90 U	90 U	900 U
Arochlor-1242	115 U	85 U	860 U	90 U	90 U	900 U
Arochlor-1248	115 U	85 U	860 U	90 U	90 U	900 U
Arochlor-1254	115 U	85 U	860 U	90 U	90 U	900 U
Arochlor-1260	604	710	934	90 U	90 U	900 U

B - Detected in Lab Blank. U - Below Reported Quantitation Level. J - Estimated Value.

**ORGANIC ANALYSIS DATA SHEET**  
**Envirosystems, Inc.**

CLIENT SAMPLE ID:	S-41A(3.5-5.5)	MW-25 (6-8)	S-53 (5-7)	MW-34 (0-2)	S-38 (2-4)	S-37 (2-4)
LAB SAMPLE ID:	90102600	90112698	90112732	90112772	90112775	90112779
SAMPLE DATE:	11/07/90	11/17/90	11/18/90	11/29/90	11/29/90	11/29/90
RECEIVED DATE:	11/09/90	11/19/90	11/21/90	11/30/90	11/30/90	11/30/90
EXTRACTION DATE:	11/12/90	11/20/90	11/21/90	12/03/90	12/03/90	12/03/90
ANALYSIS DATE:	11/14/90	11/20/90	12/17/90	12/17/90	12/17/90	12/17/90
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
% MOISTURE:	14	8	4	7	15	5

**PESTICIDE AND PCB COMPOUNDS**

alpha-BHC	95.0 U	9.0 U	8.0 U	9.0 U	9.0 U	8.0 U
beta-BHC	95.0 U	9.0 U	8.0 U	9.0 U	9.0 U	8.0 U
delta-BHC	95.0 U	9.0 U	8.0 U	9.0 U	9.0 U	8.0 U
gamma-BHC (Lindane)	95.0 U	9.0 U	8.0 U	9.0 U	9.0 U	8.0 U
Heptachlor	95.0 U	9.0 U	8.0 U	9.0 U	9.0 U	8.0 U
Aldrin	95.0 U	9.0 U	8.0 U	9.0 U	9.0 U	8.0 U
Heptachlor Epoxyde	95.0 U	9.0 U	8.0 U	9.0 U	9.0 U	8.0 U
Endosulfan I	95.0 U	9.0 U	8.0 U	9.0 U	9.0 U	8.0 U
Dieldrin	190 U	17 U	17 U	17 U	19 U	17 U
4,4'-DDE	190 U	17 U	17 U	17 U	19 U	17 U
Endrin	190 U	17 U	17 U	17 U	19 U	17 U
Endosulfan II	190 U	17 U	17 U	17 U	19 U	17 U
4,4'-DDD	190 U	17 U	17 U	17 U	19 U	17 U
Endosulfate	190 U	17 U	17 U	17 U	19 U	17 U
4,4'-DDT	190 U	17 U	17 U	17 U	19 U	17 U
Endrin Ketone	190 U	17 U	17 U	17 U	19 U	17 U
Methoxychlor	930 U	85 U	85 U	85 U	95 U	85 U
alpha-chlordane	95.0 U	9.0 U	8.0 U	9.0 U	9.0 U	8.0 U
gamma-chlordane	95.0 U	9.0 U	8.0 U	9.0 U	9.0 U	8.0 U
Toxaphene	1860 U	175 U	165 U	170 U	190 U	170 U
Arochlor-1016	930 U	85 U	85 U	85 U	95 U	85 U
Arochlor-1221	930 U	85 U	85 U	85 U	95 U	85 U
Arochlor-1232	930 U	85 U	85 U	85 U	95 U	85 U
Arochlor-1242	930 U	85 U	85 U	85 U	95 U	85 U
Arochlor-1248	930 U	85 U	85 U	85 U	95 U	85 U
Arochlor-1254	930 U	85 U	85 U	85 U	95 U	85 U
Arochlor-1260	930 U	330	161	454	108	85 U

B - Detected in Lab Blank. U - Below Reported Quantitation Level. J. - Estimated Value.

**ORGANIC ANALYSIS DATA SHEET**  
**Envirosystems, Inc.**

CLIENT SAMPLE ID:	S-35 (B-10)	S-37 (4-6)	MW-26 (9-11)	S-60 (4-6)	S-33 (4-6)
LAB SAMPLE ID:	90122785	90122791	90122809	90122909	90122940
SAMPLE DATE:	11/30/90	12/01/90	12/05/90	12/12/90	12/13/90
RECEIVED DATE:	12/01/90	12/03/90	12/06/90	12/13/90	12/14/90
EXTRACTION DATE:	12/04/90	12/04/90	12/10/90	12/17/90	12/17/90
ANALYSIS DATE:	12/17/90	12/17/90	12/17/90	01/21/91	01/21/91
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
% MOISTURE:	13	6	4	3	7

**PESTICIDE AND PCB COMPOUNDS**

alpha-BHC	9.0 U	9.0 U	8.0 U	8.0 U	9.0 U
beta-BHC	9.0 U	9.0 U	8.0 U	8.0 U	9.0 U
delta-BHC	9.0 U	9.0 U	8.0 U	8.0 U	9.0 U
gamma-BHC (Lindane)	9.0 U	9.0 U	8.0 U	8.0 U	9.0 U
Heptachlor	9.0 U	9.0 U	8.0 U	8.0 U	9.0 U
Aldrin	9.0 U	9.0 U	8.0 U	8.0 U	9.0 U
Heptachlor Epoxide	9.0 U	9.0 U	8.0 U	8.0 U	9.0 U
Endosulfan I	9.0 U	9.0 U	8.0 U	8.0 U	9.0 U
Dieldrin	18 U	17 U	17 U	16 U	17 U
4,4'-DDE	18 U	17 U	17 U	16 U	17 U
Endrin	18 U	17 U	17 U	16 U	17 U
Endosulfan II	18 U	17 U	17 U	16 U	17 U
4,4'-DDD	18 U	17 U	17 U	16 U	17 U
Endosulfate	18 U	17 U	17 U	16 U	17 U
4,4'-DDT	18 U	17 U	17 U	16 U	17 U
Endrin Ketone	18 U	17 U	17 U	16 U	17 U
Methoxychlor	90 U	85 U	85 U	80 U	85 U
alpha-chlordane	9.0 U	9.0 U	8.0 U	8.0 U	9.0 U
gamma-chlordane	9.0 U	9.0 U	8.0 U	8.0 U	9.0 U
Toraphene	185 U	170 U	170 U	165 U	170 U
Arochlor-1016	90 U	85 U	85 U	80 U	85 U
Arochlor-1221	90 U	85 U	85 U	80 U	85 U
Arochlor-1232	90 U	85 U	85 U	80 U	85 U
Arochlor-1242	90 U	85 U	85 U	80 U	85 U
Arochlor-1248	90 U	85 U	85 U	80 U	85 U
Arochlor-1254	90 U	85 U	85 U	80 U	85 U
Arochlor-1260	90 U	85 U	85 U	80 U	85 U

B - Detected in Lab Blank. U - Below Reported Quantitation Level. J - Estimated Value.

**ORGANIC ANALYSIS DATA SHEET**  
**Envirosystems, Inc.**

CLIENT SAMPLE ID:	S-74 (0-2)	S-77 (0-2)	S-75 (0-2)	S-3 (0-2)	S-4 (0-2)	S-9 (0-2)
LAB SAMPLE ID:	90102277	90102280	90102282	90102299	90102300	90102301
SAMPLE DATE:	10/08/90	10/08/90	10/08/90	10/10/90	10/10/90	10/10/90
RECEIVED DATE:	10/10/90	10/10/90	10/10/90	10/12/90	10/12/90	10/12/90
EXTRACTION DATE:	10/15/90	10/15/90	10/15/90	10/15/90	10/15/90	10/15/90
ANALYSIS DATE :	10/18/90	10/18/90	10/18/90	10/18/90	10/18/90	10/18/90
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
% MOISTURE:	12	3	11	11	8	7

**POLYCHLORINATED BIPHENYL COMPOUNDS**

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Arochlor-1016	910 U	80 U	900 U	900 U	870 U	860 U
Arochlor-1221	910 U	80 U	900 U	900 U	870 U	860 U
Arochlor-1232	910 U	80 U	900 U	900 U	870 U	860 U
Arochlor-1242	910 U	80 U	900 U	900 U	870 U	860 U
Arochlor-1248	910 U	80 U	900 U	900 U	870 U	860 U
Arochlor-1254	4550	80	3120	7490	870 U	860 U
Arochlor-1260	910 U	80 U	900 U	900 U	870 U	860 U

B - Detected in Lab Blank.    U - Below Reported Quantitation Level.    J - Estimated Value.

**ORGANIC ANALYSIS DATA SHEET**  
**Envirosystems, Inc.**

CLIENT SAMPLE ID:	S-3 (3-5)	S-9 (3-4.5)	S-66 (3-5)	S-10 (0-2)	S-59 (0-2)	S-31 (0-2)
LAB SAMPLE ID:	90102305	90102306	90102307	90102378	90102379	90102384
SAMPLE DATE:	10/10/90	10/10/90	10/10/90	10/16/90	10/17/90	10/17/90
RECEIVED DATE:	10/12/90	10/12/90	10/12/90	10/18/90	10/18/90	10/18/90
EXTRACTION DATE:	10/15/90	10/15/90	10/15/90	10/19/90	10/19/90	10/19/90
ANALYSIS DATE :	10/18/90	10/18/90	10/18/90	10/22/90	10/22/90	10/18/90
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
% MOISTURE:	53	16	9	4	6	7

**POLYCHLORINATED BIPHENYL COMPOUNDS**

Arochlor-1016	1700 U	950 U	90 U	80 U	85 U	85 U
Arochlor-1221	1700 U	950 U	90 U	80 U	85 U	85 U
Arochlor-1232	1700 U	950 U	90 U	80 U	85 U	85 U
Arochlor-1242	1700 U	950 U	90 U	80 U	85 U	85 U
Arochlor-1248	1700 U	950 U	90 U	80 U	85 U	85 U
Arochlor-1254	1700 U	1070	90 U	80 U	85 U	410
Arochlor-1260	1700 U	950 U	90 U	80 U	85 U	85 U

B - Detected in Lab Blank. U - Below Reported Quantitation Level. J - Estimated Value.

**ORGANIC ANALYSIS DATA SHEET**  
**Envirosystems, Inc.**

CLIENT SAMPLE ID:	S-84 (0-2)	S-83 (0-2)	S-94 (2-3)	MW-22 (0-2)	MW-13 (0-2)	S-2 (0-2)
LAB SAMPLE ID:	90102385	90102386	90102397	90102436	90102438	90102500
SAMPLE DATE:	10/17/90	10/17/90	10/18/90	10/20/90	10/20/90	10/24/90
RECEIVED DATE:	10/18/90	10/18/90	10/19/90	10/22/90	10/22/90	10/26/90
EXTRACTION DATE:	10/19/90	10/19/90	10/19/90	10/24/90	10/24/90	10/30/90
ANALYSIS DATE :	10/22/90	10/22/90	10/22/90	11/05/90	11/07/90	11/05/90
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
% MOISTURE:	8	10	12	21	14	12

**POLYCHLORINATED BIPHENYL COMPOUNDS**

Arochlor-1016	90 U	100 U	90 U	1010 U	930 U	910 U
Arochlor-1221	90 U	100 U	90 U	1010 U	930 U	910 U
Arochlor-1232	90 U	100 U	90 U	1010 U	930 U	910 U
Arochlor-1242	90 U	100 U	90 U	1010 U	930 U	910 U
Arochlor-1248	90 U	100 U	90 U	1010 U	930 U	910 U
Arochlor-1254	220	100 U	90 U	1010 U	930 U	910 U
Arochlor-1260	90 U	100 U	90 U	790	4350	1794

B - Detected in Lab Blank. U - Below Reported Quantitation Level. J - Estimated Value.

**ORGANIC ANALYSIS DATA SHEET**  
**Envirosystems, Inc.**

CLIENT SAMPLE ID:	S-63 (0-2)	S-7 (0-2)	S-8 (0-2)	S-76 (0-0.7)	S-67 (0-2)	S-68 (0-2)
LAB SAMPLE ID:	90102506	90102508	90102509	90102510	90102511	90102512
SAMPLE DATE:	10/25/90	10/25/90	10/25/90	10/25/90	10/27/90	10/27/90
RECEIVED DATE:	10/26/90	10/26/90	10/26/90	10/26/90	10/29/90	10/29/90
EXTRACTION DATE:	10/30/90	10/30/90	10/30/90	10/30/90	10/31/90	10/31/90
ANALYSIS DATE :	11/05/90	11/05/90	11/05/90	11/05/90	11/05/90	11/05/90
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
% MOISTURE:	16	12	9	11	9	11

**POLYCHLORINATED BIPHENYL COMPOUNDS**

Ar chlor-1016	95 U	90 U	90 U	900 U	90 U	90 U
Ar chlor-1221	95 U	90 U	90 U	900 U	90 U	90 U
Ar chlor-1232	95 U	90 U	90 U	900 U	90 U	90 U
Ar chlor-1242	95 U	90 U	90 U	900 U	90 U	90 U
Ar chlor-1248	95 U	90 U	90 U	900 U	90 U	90 U
Ar chlor-1254	95 U	90 U	90 U	900 U	90 U	90
Ar chlor-1260	3570	955	1290	2930	290	270

B - Detected in Lab Blank. U - Below Reported Quantitation Level. J - Estimated Value.

**ORGANIC ANALYSIS DATA SHEET**  
**Envirosystems, Inc.**

CLIENT SAMPLE ID:	S-1 (0-2)	S-1 (2-3)	MW-17 (0-2)	S-5 (0-2)	W.M.	MW-31 (0-2)
LAB SAMPLE ID:	90102515	90102516	90102517	90102519	90102520	90112595
SAMPLE DATE:	10/26/90	10/26/90	10/26/90	10/26/90	10/26/90	11/08/90
RECEIVED DATE:	10/29/90	10/29/90	10/29/90	10/29/90	10/29/90	11/09/90
EXTRACTION DATE:	10/31/90	10/31/90	10/31/90	10/31/90	10/30/90	11/12/90
ANALYSIS DATE :	11/07/90	11/07/90	11/07/90	11/07/90	10/30/90	11/14/90
MATRIX:	SOIL	SOIL	SOIL	SOIL	WATER	SOIL
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG	UG/L	UG/KG
% MOISTURE:	20	23	12	9	N/A	22

**POLYCHLORINATED BIPHENYL COMPOUNDS**

Arochlor-1016	1000 U	100 U	90 U	880 U	0.2 U	1030 U
Arochlor-1221	1000 U	100 U	90 U	880 U	0.2 U	1030 U
Arochlor-1232	1000 U	100 U	90 U	880 U	0.1 U	1030 U
Arochlor-1242	1000 U	100 U	90 U	880 U	0.1 U	1030 U
Arochlor-1248	1000 U	100 U	90 U	880 U	0.5 U	1030 U
Arochlor-1254	1000 U	100 U	90 U	880 U	0.5 U	1030 U
Arochlor-1260	3010	590	670	8150	0.2 U	7540

B - Detected in Lab Blank.    U - Below Reported Quanitation Level.    J - Estimated Value.

**ORGANIC ANALYSIS DATA SHEET**  
**Envirosystems, Inc.**

CLIENT SAMPLE ID:	MW-16 (0-2)	MW-16 (10-12)	S-50 (0-2)	S-51 (0-2)	S-52 (0-2)	S-6 (0-2)
LAB SAMPLE ID:	90112597	90112599	90112624	90112625	90112626	90112634
SAMPLE DATE:	11/07/90	11/07/90	11/10/90	11/10/90	11/10/90	11/11/90
RECEIVED DATE:	11/09/90	11/09/90	11/12/90	11/12/90	11/12/90	11/13/90
EXTRACTION DATE:	11/12/90	11/12/90	11/12/90	11/12/90	11/12/90	11/16/90
ANALYSIS DATE :	11/14/90	11/14/90	11/14/90	11/14/90	11/14/90	11/16/90
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
% MOISTURE:	18	14	13	10	13	14

**POLYCHLORINATED BIPHENYL COMPOUNDS**

Arochlor-1016	980 U	930 U	90 U	90 U	90 U	930 U
Arochlor-1221	980 U	930 U	90 U	90 U	90 U	930 U
Arochlor-1232	980 U	930 U	90 U	90 U	90 U	930 U
Arochlor-1242	980 U	930 U	90 U	90 U	90 U	930 U
Arochlor-1248	980 U	930 U	90 U	90 U	90 U	930 U
Arochlor-1254	980 U	930 U	90 U	90 U	90 U	930 U
Arochlor-1260	1210	350	470	191	1040	1810

B - Detected in Lab Blank.    U - Below Reported Quanitation Level.    J - Estimated Value.

ORGANIC ANALYSIS DATA SHEET  
Envirosystems, Inc.

CLIENT SAMPLE ID:	S-16 (0-2)	S-34 (0-2)	S-26 (0-2)	S-53 (0-2)	S-53 (3.5-5.5)	S-78 (0-2)
LAB SAMPLE ID:	90112636	90112694	90112695	90112730	90112731	90112750
SAMPLE DATE:	11/11/90	11/17/90	11/17/90	11/18/90	11/18/90	11/26/90
RECEIVED DATE:	11/13/90	11/19/90	11/19/90	11/21/90	11/21/90	11/28/90
EXTRACTION DATE:	11/16/90	11/20/90	11/20/90	11/21/90	11/21/90	12/03/90
ANALYSIS DATE :	11/16/90	11/20/90	11/20/90	12/17/90	12/17/90	12/17/90
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
% MOISTURE:	11	15	11	8	3	15

POLYCHLORINATED BIPHENYL COMPOUNDS

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Arochlor-1016	90 U	940 U	90 U	4350 U	80 U	95 U
Arochlor-1221	90 U	940 U	90 U	4350 U	80 U	95 U
Arochlor-1232	90 U	940 U	90 U	4350 U	80 U	95 U
Arochlor-1242	90 U	940 U	90 U	4350 U	80 U	95 U
Arochlor-1248	90 U	940 U	90 U	4350 U	80 U	95 U
Arochlor-1254	90 U	940 U	90 U	4350 U	80 U	95 U
Arochlor-1260	150	230	90 U	71160	410	1910

B - Detected in Lab Blank. U - Below Reported Quantitation Level. J - Estimated Value.

**ORGANIC ANALYSIS DATA SHEET**  
**Envirosystems, Inc.**

CLIENT SAMPLE ID:	MW-30 (0-2)	S-36 (0-2)	S-32 (0-2)	MW-21 (0-2)	MW-19 (0-2)	MW-20 (0-2)
LAB SAMPLE ID:	90122781	90122786	90122802	90122847	90122848	90122908
SAMPLE DATE:	11/30/90	12/01/90	12/04/90	12/06/90	12/07/90	12/11/90
RECEIVED DATE:	12/01/90	12/03/90	12/06/90	12/08/90	12/08/90	12/13/90
EXTRACTION DATE:	12/04/90	12/04/90	12/10/90	12/10/90	12/10/90	12/17/90
ANALYSIS DATE :	12/17/90	12/17/90	12/17/90	12/17/90	12/17/90	01/11/91
MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
% MOISTURE:	11	12	18	9	24	20

**POLYCHLORINATED BIPHENYL COMPOUNDS**

Arochlor-1016	90 U	90 U	100 U	90 U	110 U	100 U
Arochlor-1221	90 U	90 U	100 U	90 U	110 U	100 U
Arochlor-1232	90 U	90 U	100 U	90 U	110 U	100 U
Arochlor-1242	90 U	90 U	100 U	90 U	110 U	100 U
Arochlor-1248	90 U	90 U	100 U	90 U	110 U	100 U
Arochlor-1254	90 U	90 U	370	90 U	110 U	100 U
Arochlor-1260	290	90 U	100 U	320	110 U	60

B - Detected in Lab Blank.    U - Below Reported Quantitation Level.    J - Estimated Value.

ORGANIC ANALYSIS DATA SHEET  
Envirosystems, Inc.

CLIENT SAMPLE ID: S-78 (8-9)

LAB SAMPLE ID: 90122910  
SAMPLE DATE: 12/12/90  
RECEIVED DATE: 12/13/90  
EXTRACTION DATE: 12/17/90  
ANALYSIS DATE: 01/11/91  
MATRIX: SOIL  
UNITS: ug/kg  
% MOISTURE: 6

POLYCHLORINATED BIPHENYL COMPOUNDS

polchlor-1016 85 U

polchlor-1221 85 U

polchlor-1232 85 U

polchlor-1242 85 U

polchlor-1248 85 U

polchlor-1254 85 U

polchlor-1260 85 U

- D - Detected in Lab Blank. U - Below Reported Quantitation Level. J - Estimated Value.

RESULTS OF TOTAL PETROLEUM HYDROCARBONS IN SOIL SAMPLES  
ON DRY WEIGHT BASIS

INVIROSYSTEMS I.D.	CLIENT I.D.	TPH RESULTS MG/KG	DATE SAMPLED	DATE EXTRACTED
90102159	S-85	262	10/02/90	10/03/90
90102160	S-86	690	10/02/90	10/03/90
90102161	S-87	30	10/01/90	10/03/90
90102162	S-88	312	10/01/90	10/03/90
90102163	S-89	278	10/01/90	10/03/90
90102164	S-90	175	10/01/90	10/03/90
90102165	S-91	3300	10/02/90	10/03/90
90102166	S-92	201	10/02/90	10/03/90
90102167	S-27	62	10/02/90	10/03/90
90102240	S-29 (0-2)	9470	10/03/90	10/05/90
90102241	S-79 (0-2)	3340	10/03/90	10/05/90
90102242	S-80 (0-2)	750	10/03/90	10/05/90
90102244	MW-32 (0-2)	436	10/04/90	10/05/90
90102245	S-71 (0-2)	3395	10/04/90	10/05/90
90102246	S-71 (6-8)	220	10/04/90	10/05/90
90102247	S-70 (0-2)	3745	10/04/90	10/05/90
90102248	S-70 (6-8)	280	10/04/90	10/05/90
90102249	S-72 (0-2)	1715	10/04/90	10/05/90
90102250	S-72 (6-8)	360	10/04/90	10/05/90
90102251	S-73 (0-2)	2390	10/04/90	10/05/90
90102256	S-21 (0-2)	410	10/05/90	10/09/90
90102257	S-21 (6-8)	142	10/05/90	10/09/90
90102258	S-23 (0-2)	1395	10/05/90	10/09/90
90102259	S-23 (8-10)	<11	10/05/90	10/09/90
90102275	S-24 (0-2)	2120	10/08/90	01/10/91
90102276	S-24 (9-11)	238	10/08/90	01/10/91
90102277	S-74 (0-2)	2280	10/08/90	01/10/91
90102278	S-74 (6-8)	296	10/08/90	01/10/91
90102279	S-74 (12-14)	<10	10/08/90	01/10/91
90102280	S-77 (0-2)	<10	10/08/90	01/10/91
90102281	S-77 (13-15)	<10	10/08/90	01/10/91
90102282	S-75 (0-2)	3090	10/08/90	01/10/91
90102283	S-81 (0-2)	3480	10/09/90	01/10/91
90102284	S-28 (0-2)	102	10/09/90	01/10/91
90102299	S-3 (0-2)	4210	10/10/90	10/15/90
90102300	S-4 (0-2)	12120	10/10/90	10/15/90
90102301	S-9 (0-2)	31630	10/10/90	10/15/90
90102303	S-66 (0-2)	141	10/10/90	10/15/90
90102304	S-69 (0-2)	118	10/10/90	10/15/90
90102322	S-54 (0-2)	4350	10/12/90	10/17/90

ENVIROSYSTEMS I.D.	CLIENT I.D.	TPH RESULTS MG/KG	DATE SAMPLED	DATE EXTRACTED
90102323	S-54 (7-9)	120	10/12/90	10/17/90
90102324	S-55 (0-2)	162860	10/12/90	10/17/90
90102325	S-55 (7-9)	554	10/12/90	10/17/90
90102326	S-56 (0-2)	3890	10/12/90	10/17/90
90102327	S-56 (7-9)	43	10/12/90	10/17/90
90102374	S-82 (0-2)	371	10/16/90	10/18/90
90102375	S-82 (6-8)	200	10/16/90	10/18/90
90102376	S-30 (0-2)	88	10/16/90	10/18/90
90102377	S-30 (4-6)	<11	10/16/90	10/18/90
90102378	S-10 (0-2)	510	10/16/90	10/18/90
90102379	S-59 (0-2)	<11	10/17/90	10/18/90
90102380	S-58 (0-2)	360	10/17/90	10/18/90
90102381	S-40 (0-2)	562	10/17/90	10/18/90
90102382	S-22 (0-2)	1145	10/17/90	10/18/90
90102384	S-31 (0-2)	7730	10/17/90	10/19/90
90102385	S-84 (0-2)	15370	10/17/90	10/19/90
90102386	S-83 (0-2)	226	10/17/90	10/18/90
90102396	S-94 (0-2)	47	10/18/90	01/16/91
90102398	S-93 (0-2)	280	10/18/90	01/16/91
90102399	S-93 (18-20)	117	10/18/90	01/16/91
90102400	S-25 (0-2)	56	10/18/90	01/16/91
90102401	S-95 (0-2)	494	10/18/90	01/16/91
90102402	S-64 (0-2)	4850	10/18/90	01/16/91
90102423	S-17 (0-2)	210	10/19/90	10/23/90
90102424	S-49 (0-2)	4460	10/19/90	10/23/90
90102426	S-49 (4-6)	9465	10/19/90	10/23/90
90102427	S-49 (8-10)	5644	10/19/90	10/23/90
90102428	S-48 (0-2)	2996	10/19/90	10/23/90
90102430	S-48 (2-4)	3170	10/19/90	10/23/90
90102431	S-48 (11-13)	6700	10/19/90	10/23/90
90102432	S-47 (0-2)	28510	10/19/90	10/23/90
90102434	S-47 (7-9)	<11	10/19/90	10/23/90
90102435	S-47 (11-13)	<12	10/19/90	10/23/90
90102436	MW-22 (0-2)	18220	10/20/90	10/24/90
90102438	MW-13 (0-2)	494	10/20/90	10/24/90
90102500	S-2 (0-2)	44110	10/24/90	10/30/90
90102501	S-65 (0-2)	2424	10/24/90	10/30/90
90102502	S-62 (0-2)	4820	10/24/90	10/30/90
90102503	S-61 (0-1.1)	13690	10/24/90	10/30/90
90102506	S-63 (0-2)	7520	10/25/90	10/30/90
90102508	S-7 (0-2)	2962	10/25/90	10/30/90

## ENVIROSYSTEMS I.D.

## CLIENT I.D.

## TPH RESULTS

MG/KG

DATE  
SAMPLEDDATE  
EXTRACTED

90102509	S-8 (0-2)	1015	10/25/90	10/30/90
90102510	S-76 (0-0.7)	25940	10/25/90	10/30/90
90102511	S-67 (0-2)	124	10/27/90	10/31/90
90102512	S-68 (0-2)	442	10/27/90	10/31/90
90102513	S-45 (0-2)	1278	10/27/90	10/31/90
90102514	S-45 (2-4)	284	10/27/90	10/31/90
90102515	S-1 (0-2)	32750	10/27/90	10/31/90
90102516	S-1 (2-3)	5570	10/26/90	10/31/90
90102517	MW-17 (0-2)	2138	10/26/90	10/31/90
90102519	S-5 (0-2)	9710	10/26/90	10/31/90
90112581	S-44 (0-2)	650	11/05/90	11/08/90
90112582	S-44 (4-6)	10140	11/05/90	11/08/90
90112583	S-43 (0-2)	837	11/05/90	11/08/90
90112584	S-41 (0-2)	144	11/05/90	11/08/90
90112585	S-42 (0-2)	320	11/05/90	11/08/90
90112586	S-41 (2-4)	152	11/05/90	11/08/90
90112595	MW-31 (0-2)	16270	11/08/90	11/12/90
90112596	MW-31 (10-12)	233	11/08/90	11/12/90
90112597	MW-16 (0-2)	17840	11/07/90	11/12/90
90112602	S-46 (0-2)	658	11/08/90	11/12/90
90112604	S-46 (7-9)	90	11/08/90	11/12/90
90112622	MW-28 (0-2)	<11	11/09/90	11/12/90
90112623	MW-28 (6-8)	<11	11/09/90	11/12/90
90112624	S-50 (0-2)	<11	11/10/90	11/15/90
90112625	S-51 (0-2)	178	11/10/90	11/15/90
90112626	S-52 (0-2)	2482	11/10/90	11/15/90
90112627	S-52 (10-12)	354	11/10/90	11/15/90
90112628	S-51 (12-14)	320	11/10/90	11/15/90
90112634	S-6 (0-2)	1565	11/11/90	11/15/90
90112635	S-6 (8-9)	<12	11/11/90	11/15/90
90112636	S-16 (0-2)	960	11/11/90	11/15/90
90112637	S-16 (10-12)	<11	11/11/90	11/15/90
90112638	S-20 (0-2)	2574	11/11/90	11/15/90
90112692	MW-23 (9-11)	48290	11/16/90	11/20/90
90112693	MW-29 (0-2)	183	11/17/90	11/20/90
90112694	S-34 (0-2)	<12	11/17/90	11/20/90
90112695	S-26 (0-2)	1335	11/17/90	11/20/90
90112696	S-26 (4-6)	22	11/17/90	11/20/90
90112697	MW-25 (0-2)	331	11/17/90	11/20/90
90112699	MW-25 (6-8)	12	11/17/90	11/20/90
90112730	S-53 (0-2)	216	11/18/90	01/16/91
90112733	S-53 (8-10)	12	11/18/90	01/16/91

ENVIROSYSTEMS I.D.

CLIENT I.D.

TPH RESULTS  
MG/KGDATE  
SAMPLEDDATE  
EXTRACTED

90112748	S-57 (0-2)	2362	11/26/90	12/03/90
90112749	S-60 (0-2)	4456	11/26/90	12/03/90
90112750	S-78 (0-2)	12600	11/26/90	12/03/90
90112751	MW-24 (0-2)	178	11/27/90	12/03/90
90112772	MW-34 (0-2)	91	11/29/90	12/04/90
90112773	MW-34 (10-12)	11	11/29/90	12/04/90
90112774	S-38 (0-2)	112	11/29/90	12/04/90
90112776	S-38 (10-12)	41	11/29/90	12/04/90
90112777	S-38 (12-14)	377	11/29/90	12/04/90
90112778	S-39 (0-2)	218	11/29/90	12/04/90
90112780	S-39 (8-10)	198	11/29/90	12/04/90
90112781-A	MW-24 (15-17)	179	11/28/90	12/04/90
90122781	MW-30 (0-2)	970	11/30/90	12/05/90
90122782	MW-30 (6-8)	96	11/30/90	12/05/90
90122783	MW-30 (11-13)	91	11/30/90	12/05/90
90122784	S-35 (0-2)	28	11/30/90	12/05/90
90122786	S-36 (0-2)	61	12/01/90	12/10/90
90122787	S-36 (6-8)	35	12/01/90	12/10/90
90122789	S-37 (0-2)	682	12/01/90	12/10/90
90122792	S-37 (8-10)	<11	12/01/90	12/10/90
90122793	S-37 (14-16)	<12	12/01/90	12/10/90
90122797	MW-27 (0-2)	1244	12/01/90	12/10/90
90122798	MW-27 (7-9)	<11	12/01/90	12/10/90
90122799	MW-27 (14-16)	<12	12/01/90	12/10/90
90122802	S-32 (0-2)	<12	12/04/90	12/10/90
90122803	S-19 (0-2)	444	12/04/90	12/10/90
90122804	S-25 (0-2)	<11	12/05/90	12/10/90
90122805	S-25 (12-14)	<10	12/05/90	12/10/90
90122806	S-25 (19-21)	<11	12/05/90	12/10/90
90122807	MW-26 (0-2)	<12	12/05/90	12/10/90
90122808	S-19 (9-11)	<10	12/04/90	12/10/90
90122810	MW-26 (12-14)	<11	12/05/90	12/10/90
90122847	MW-21 (0-2)	93	12/06/90	12/10/90
90122848	MW-19 (0-2)	8612	12/07/90	12/10/90
90122908	MW-20 (0-2)	1158	12/11/90	12/17/90
90122939	S-33 (0-2)	<11	12/13/90	12/17/90

METAL ANALYSIS IN SAMPLES RECEIVED FROM ROUX ASSOCIATE  
Envirosystems, Inc.

CLIENT SAMPLE ID:	S-90	S-80 (2'-4')	S-82 (0'-2')	S-80 (0'-2')	S-23 (0'-2')	S-22 (0'-2') MS/MSD
LAB SAMPLE ID:	90102164	90102243	90102374	90102376	90102382	90102383
RECEIVED DATE:	10/03/90	10/05/90	10/18/90	10/18/90	10/18/90	10/18/90
ANALYSIS DATE:	11/19/90	11/19/90	11/19/90	11/19/90	11/19/90	11/19/90
MATRIX:	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
PCT. SOLID:	91.4	96.4	90.4	90.0	85.6	86.3
UNIT:	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG

## METALS

	4530	5300	3410	3950	2220	2300
ANTIMONY	< 1.7 N	< 1.6 N	< 1.7 N	2.4 BN	3.5 BN	2.0 BN
ARSENIC	3.3	2.7	6.9	< 1.2	26	20
BARIUM	296 *	41 B*	47 *	23 B*	81 *	66 *
BERYLLIUM	< 0.35	< 0.33	< 0.35	< 0.36	< 0.37	0.46
CADMIUM	1.3	< 0.68	< 0.73	< 0.73	< 0.77	< 0.76
CALCIUM	1890	1200	954 B	6850	468 B	587 B
CHROMIUM	12 N*	15 N*	16 N*	13 N*	17 N*	12 N*
COBALT	4.8 B	5.8 B	4.0 B	3.1 B	2.3 B	4.4 B
COPPER	57	40	73	7.8	349	280
IRON	10600	11300	17800	5610	27000	23100
LEAD	372 S*	45 S*	73 *	8.8 *	162 *	125 *
MAGNESIUM	1670	3040	1500	1510	610 B	444 B
MANGANESE	389 N*	251 N*	198 N*	165 N*	142 N*	95 N*
MERCURY	0.98 N	< 0.1 N	0.23 N	< 0.11 N	0.38 N	0.38 N
NICKEL	11	9.8	12	5.6 B	17	18
POTASSIUM	604 B	710 B	476 B	567 B	390 B	336 B
SELENIUM	< 0.57 N	< 0.54 N	< 0.58 N	< 0.58 N	< 0.61 N	< .06 N
SILVER	0.59	< 0.48	< 0.51	< 0.51	< 0.54	< .093
SODIUM	306 B	336 B	270 B	231 B	301 B	317 B
THALLIUM	< 0.61	< 0.58	< 0.62	< 0.62	< 0.65	< 0.65
VANADIUM	14	20	15	11 B	75	67
ZINC	270	34	37	22	61	49

B- Value &gt;IDL but &lt;CRDL S- Value determined by methode of standard addition

N- Matrix spike outside recovery limits \*- Duplicate RPD out of control

&lt; or U- Value &lt;IDL

**METAL ANALYSIS IN SAMPLES RECEIVED FROM ROUX ASSOCIATE  
Envirosystems, Inc.**

CLIENT SAMPLE ID.	S-64 (2'-3')	S-17 (0'-2')	S-49 (2'-4')	S-47 (2'-4')	S-62 (0-2)	S-61 (S-7) MS/MSD
LAB SAMPLE ID:	90102403	90102423	90102425	90102433	90102502	90102505
RECEIVED DATE:	10/19/90	10/20/90	10/20/90	10/20/90	10/26/90	10/26/90
ANALYSIS DATE:	11/19/90	11/19/90	11/19/90	11/19/90	11/19/90	11/19/90
MATRIX:	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
PCT. SOLID:	84.0	70.0	93.4	92.8	88.9	87.3
UNIT:	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG

**METALS**

	3000	4430	4620	4470	4090	4970
ANTIMONY	4.8 BN <	2.2 N <	1.6 N <	1.6 N <	1.7 N <	1.7 N
ARSENIC	8.1	20	2.7	11	3.1	2.6
BARIUM	97 *	85 *	31 B*	70 *	43 B*	41 *
BERYLLIUM	< 0.38	0.57 B <	0.34	0.43 B <	0.36	0.46 B
CADMIUM	2.1	< 0.94	< 0.71	< 0.71	< 0.74	< 0.76
CALCIUM	1610	1030 B	2170	18100	751 B	772 B
CHROMIUM	19 N*	18	9.6	9.4 N*	14 N*	10 N*
COBALT	3.1 B <	2.0	5.4 B	4.7 B	2.5 B	6.4 B
COPPER	279	244	27	41	76	96
IRON	38700	28600	9570	11200	10100	13000
LEAD	212 *	120 *	52 S*	129 S*	1080 S*	44 S*
MAGNESIUM	1420	1330 B	2170	4280	1630	2150
MANGANESE	445 N*	175 N*	274 N*	241 N*	314 N*	82 N*
MERCURY	0.29 N	0.9 N	0.22 N	0.49 N	0.31 N	0.17 N
NICKEL	23	17	12	10	10	14
POTASSIUM	412 B	391	762	802 B	466 B	832 B
SELENIUM	< 0.62 N <	0.74 N <	0.56 N <	0.56 N <	0.58	< 0.6 N
SILVER	0.79 B <	0.66	< 0.49	< 0.5	< 0.52	< 0.53
SODIUM	433 B	394 B	319 B	448 B	607 B	328 B
THALLIUM	< 0.67	< 0.8	< 0.6	< 0.6	< 0.63	< 0.64
VANADIUM	37	97	13	20	13	32
ZINC	303	95	94	65	58	100

B- Value >IDL but <CRDL      S- Value determined by method of standard addition  
 N- Matrix spike outside recovery limits      \*- Duplicate RPD out of control  
 < or U- Value <IDL

METAL ANALYSIS IN SAMPLES RECEIVED FROM ROUX ASSOCIATE  
Envirosystems, Inc.

CLIENT SAMPLE ID:      5-2      5-10  
                          (0'-2')      (0'-2')

LAB SAMPLE ID:      90102500      90102378  
RECEIVED DATE:      10/26/90      10/18/90  
ANALYSIS DATE:      11/19/90      11/19/90  
MATRIX:      SOLID      SOLID  
PCT. SOLID:      85.5      96.0  
UNIT:      MG/KG      MG/KG

**METALS**

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LEAD      332      149

< or U- Value <IDL

2 069

METAL ANALYSIS IN SAMPLES RECEIVED FROM ROUX ASSOCIATE  
Envirosystems, Inc.

CLIENT SAMPLE ID:	S-43 (0-2)	S-41A (3.5-5.5)	MM-25 (4-6)
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LAB SAMPLE ID:	90112593	90112600	90112698
RECEIVED DATE:	11/07/90	11/09/90	11/19/90
ANALYSIS DATE:	12/12/90	12/12/90	12/12/90
MATRIX:	SOLID	SOLID	SOLID
PCT. SOLID:	91.3	87.2	94.6
UNIT:	MG/KG	MG/KG	MG/KG

METALS

ALUMINUM	6170	4740	3140
ANTIMONY	3.5 B	< 1.7	< 1.6
ARSENIC	7.1	2.6	< 0.63
BARIUM	444	37 B	21 B
BERYLLIUM	0.44 B	< 0.37	< 0.34
CADMIUM	< 1.1	< 1.1	< 1.1
CALCIUM	6260	1040 B	425 B
CHROMIUM	42	18	10
COBALT	13	4.4 B	4.4 B
COPPER	377	22	25
IRON	58500	7400	8680
LEAD	605	52	3.7 S
MAGNESIUM	3810	1660	1550
MANGANESE	471	93	131
MERCURY	2.8	< 0.11	0.32
NICKEL	54	7.3 B	5.3 B
POTASSIUM	843 B	711 B	474 B
SELENIUM	< 0.57	< 0.60	< 0.55
SILVER	< 0.55	< 0.57	< 0.53
SODIUM	1770	229 B	235
THALLIUM	< 0.77	< 0.80	< 0.74
VANADIUM	28	14	9.7 B
ZINC	565	144	27

B- Value >IDL but <CRDL  
< or U- Value <IDL

S- Value determined by method of standard addition

-00 TEL No.00000

Mar.28,91 13:07 P.05

METAL ANALYSIS IN SAMPLES RECEIVED FROM ROUX ASSOCIATE  
Envirosystems, Inc.

CLIENT SAMPLE ID: MH-31 S-34 S-26  
(0-2) (0-2) (0-2)

LAB SAMPLE ID:	90112595	90112694	90112695
RECEIVED DATE:	11/09/90	11/19/90	11/19/90
ANALYSIS DATE:	12/12/90	12/12/90	12/12/90
MATRIX:	SOLID	SOLID	SOLID
PCT. SOLID:	82.2	86.5	90.0
UNIT:	MG/KG	MG/KG	MG/KG

METALS

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LEAD	1290 S	177 S	201 S
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S- Value determined by methods of standard addition  
< or U- Value <IDL

2 073

METAL ANALYSIS IN SAMPLES RECEIVED FROM ROUX ASSOCIATE  
Envirosystems, Inc.

CLIENT SAMPLE ID:	S-53 (5-7)	MW-34 (0-2)	S-38 (2-4)	S-39 (2-4)	S-35 (B-10)	S-37 (4-6)
LAB SAMPLE ID:	90112732	90112772	90112775	90112779	90122785	90122791
RECEIVED DATE:	11/21/90	11/30/90	11/30/90	11/30/90	12/01/90	12/03/90
ANALYSIS DATE:	12/17/90	12/17/90	12/17/90	12/17/90	12/17/90	12/17/90
MATRIX:	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
PCT. SOLID:	96.3	93.7	89.3	93.6	87.8	91.6
UNIT:	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG	MG/KG

**METALS**

ALUMINUM	6490	2990	11100	2840	4770	3330
ANTIMONY	< 1.5 N	1.9 BN	< 1.8 N	< 1.6 N	< 1.7 N	< 1.7 N
ARSENIC	< 0.6	7.7 S	1.1 B	1.6 B	< 0.68	< 0.66
BARIUM	16 B	43	44 B	31 B	32 B	33 B
BERYLLIUM	< 0.32	< 0.34	< 0.38	< 0.34	< 0.36	< 0.35
CADMIUM	< 1.0	1.3	< 1.2	< 1.1	< 1.1	< 1.1
CALCIUM	2660	702 B	442 B	1250	1400	4170
CHROMIUM	5.6 N	14 N	1.6 BN	6.4 SN	8.2 N	8.0 N
COBALT	2.6 B	5.8 B	11 B	3.4 B	3.0 B	5.0 B
COPPER	4.8 B	140	54	42	12	12
IRON	5680 *	14100 *	18900 *	7320 *	11200 *	8440 *
LEAD	1.4	137	20 S	9.9	3.5	3.3
MAGNESIUM	2430	1260	2570	1820	2510	3470
MANGANESE	151	130	342	249	224	181
MERCURY	< 0.1	< 0.1	< 0.11	< 0.1	< 0.11	< 0.1
NICKEL	6.0 B	8.1 B	15	8.3 B	11	9.0
POTASSIUM	318 B	448 B	760 B	566 B	861 B	1060 B
SELENIUM	< 0.52 N	< 0.55 N	< 0.61 N	< 0.56 N	< 0.59 N	< 0.57 N
SILVER	< 0.5	< 0.53	< 0.59	< 0.53	< 0.57	< 0.55
SODIUM	68 B	258 B	324 B	184 B	456 B	388 B
THALLIUM	< 0.7	< 0.75	< 0.82	< 0.75	< 0.8	< 0.76
VANADIUM	5.2 B	47	25	12	13	14
ZINC	27 *	149 *	39 *	40 *	20 *	18 *

B- Value >IDL but <CRDL      S- Value determined by method of standard addition  
 N- Matrix spike outside recovery limits      \*- Duplicate RPD out of control  
 < or U- Value <IDL

METAL ANALYSIS IN SAMPLES RECEIVED FROM ROUX ASSOCIATE  
Envirosystems, Inc.

CLIENT SAMPLE ID: MM-26  
(9-11)

LAB SAMPLE ID: 90122809  
RECEIVED DATE: 12/06/90  
ANALYSIS DATE: 12/17/90  
MATRIX: SOLID  
PCT. SOLID: 95.2  
UNIT: MG/KG

METALS

ALUMINUM	3010
ANTIMONY	< 1.6 N
ARSENIC	0.84 B
BARIUM	16 B
BERYLLIUM	< 0.34
CADMIUM	< 1.1
CALCIUM	772 B
CHROMIUM	6.5 SN
COBALT	1.9 B
COPPER	8.2
IRON	5990 *
LEAD	2.3
MAGNESIUM	1360
MANGANESE	148
MERCURY	< 0.1
NICKEL	6.7 B
POTASSIUM	416 B
SELENIUM	< 0.55 N
SILVER	< 0.53
SODIUM	113 B
THALLIUM	< 0.74
VANADIUM	7.6 B
ZINC	16 *

B- Value >IDL but <CRDL      S- Value determined by method of standard addition  
N- Matrix spike outside recovery limits      \*- Duplicate RPD out of control  
< or U- Value <IDL

METAL ANALYSIS IN SAMPLES RECEIVED FROM ROUX ASSOCIATE  
Envirosystems, Inc.

CLIENT SAMPLE ID: 5-36 5-32  
(0-2) (0-2)

LAB SAMPLE ID: 90122786 90122802  
RECEIVED DATE: 12/03/90 12/06/90  
ANALYSIS DATE: 12/17/90 12/17/90  
MATRIX: SOLID SOLID  
PCT. SOLID: 90.3 83.4  
UNIT: MG/KG MG/KG

METALS

LEAD 80 S 339

S- Value determined by method of standard addition

2 078

CLIENT SAMPLE ID: S-60      S-33  
                       (4-6)      (4-6)

LAB SAMPLE ID: 90122909      90122940  
 RECEIVED DATE: 12/13/90      12/14/90  
 ANALYSIS DATE: 12/28/90      12/28/90  
 MATRIX: SOLID      SOLID  
 PCT. SOLID: 96.4      93.1  
 UNIT: MG/KG      MG/KG

## METALS

ALUMINUM	4580	4580
ANTIMONY	< 1.6	< 1.6
ARSENIC	< 0.62	0.73 B
BARIUM	28 B	14 B
BERYLLIUM	< 0.33	< 0.34
CADMIUM	1.2	< 1.1
CALCIUM	1990	4920
CHROMIUM	53	7.5
COBALT	5.4 B	3.2 B
COPPER	53	10
IRON	7820	8190
LEAD	4.6	4.0
MAGNESIUM	2260	4260
MANGANESE	333	199
MERCURY	0.31	< 0.1
NICKEL	< 4.6	4.7 B
POTASSIUM	674 B	636 B
SELENIUM	< 0.54	< 0.56
SILVER	< 0.52	< 0.54
SODIUM	210 B	88 B
THALLIUM	< 0.73	< 0.75
VANADIUM	13	13
ZINC	22	18

B- Value &gt;IDL but &lt;CRDL

&lt; or U- Value &lt;IDL

METAL ANALYSIS IN SAMPLES RECEIVED FROM ROUX ASSOCIATE  
Envirosystems, Inc.

CLIENT SAMPLE ID: MW-21 MW-19 MW-20  
(0-2) (0-2) (0-2)

LAB SAMPLE ID: 90122847 90122848 90122908  
RECEIVED DATE: 12/08/90 12/08/90 12/13/90  
ANALYSIS DATE: 12/28/90 12/28/90 12/28/90  
MATRIX: SOLID SOLID SOLID  
PCT. SOLID: 82.9 82.3 81.1  
UNIT: MG/KG MG/KG MG/KG

METALS

LEAD C 0.4 498 415

C or U- Value <IDL

2 082

**Volatiles Results**

**2 002**

**ORGANICS ANALYSIS DATA SHEETS**  
Envirosystems, Inc.

CLIENT SAMPLE ID:	MW-32	FB-1	TRIP-BLANK-1	MW-26	MW-28	MW-29
LAB SAMPLE ID:	91010041	91010043	91010045	91010047	91010048	91010049
SAMPLE DATE:	01/03/91	01/03/91	01/03/91	01/03/91	01/03/91	01/03/91
RECEIVED DATE:	01/04/91	01/04/91	01/04/91	01/04/91	01/04/91	01/04/91
ANALYSIS DATE:	01/08/91	01/08/91	01/08/91	01/08/91	01/08/91	01/08/91
FILE NAME:	010041	010043	010045	010047	010048	010049
INSTRUMENT ID:	MSB	MSB	MSB	MSB	MSB	MSB
MATRIX:	WATER	WATER	WATER	WATER	WATER	WATER
UNITS:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
DILUTION FACTOR:	1.0	1.0	1.0	1.0	1.0	1.0

**VOLATILE COMPOUNDS**

Acetone	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane	10 U	10 U	10 U	10 U	10 U	10 U
2-Butanone	10 U	10 U	10 U	10 U	10 U	10 U
Carbon Disulfide	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Tetrachloride	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane	10 U	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (total)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethybenzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-Pantanone	10 U	10 U	10 U	10 U	10 U	10 U
Methylene Chloride	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	<u>2.3</u> J	5.0 U				
Toluene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trans-1,3-Dichloropropene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl Acetate	10 U	10 U	10 U	10 U	10 U	10 U
Vinyl Chloride	10 U	10 U	10 U	10 U	10 U	10 U
Xylenes (total)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

B - Detected in Lab Blank. U - Below Reported Quantitation Level. J - Estimated Value.

**ORGANICS ANALYSIS DATA SHEETS**  
Envirosystems, Inc.

CLIENT SAMPLE ID:	MW-19	MW-25	MW-33	REP-3	TRIP-BLANK-2	FB-2
LAB SAMPLE ID:	91010051	91010053	91010054	91010056	91010057	91010058
SAMPLE DATE:	01/04/91	01/04/91	01/04/91	01/04/91	01/04/91	01/04/91
RECEIVED DATE:	01/05/91	01/05/91	01/05/91	01/05/91	01/05/91	01/05/91
ANALYSIS DATE:	01/08/91	01/08/91	01/08/91	01/08/91	01/08/91	01/08/91
FILE NAME:	010051	010053	010054	010056	010057	010058
INSTRUMENT ID:	MSB	MSB	MSB	MSB	MSB	MSB
MATRIX:	WATER	WATER	WATER	WATER	WATER	WATER
UNITS:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
DILUTION FACTOR:	1.0	1.0	1.0	1.0	1.0	1.0

**VOLATILE COMPOUNDS**

Acetone	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane	10 U	10 U	10 U	10 U	10 U	10 U
2-Butanone	10 U	10 U	10 U	10 U	10 U	10 U
Carbon Disulfide	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Tetrachloride	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane	10 U	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (total)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-Pentanone	10 U	10 U	10 U	10 U	10 U	10 U
Methylene Chloride	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	<u>2.9</u> J	5.0 U				
Toluene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trans-1,3-Dichloropropene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	<u>2.0</u> J	5.0 U				
Vinyl Acetate	10 U	10 U	10 U	10 U	10 U	10 U
Vinyl Chloride	10 U	10 U	10 U	10 U	10 U	10 U
Xylenes (total)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

B - Detected in Lab Blank. U - Below Reported Quantitation Level. J - Estimated Value.

2 004

**ORGANICS ANALYSIS DATA SHEETS**  
Envirosystems, Inc.

CLIENT SAMPLE ID:	TRIP-BLANK-3	FB-3	MW-13	MW-13R	MW-22	MW-1
LAB SAMPLE ID:	91010062	91010063	91010071	91010071	91010072	91010075
SAMPLE DATE:	01/07/91	01/07/91	01/07/91	01/07/91	01/07/91	01/07/91
RECEIVED DATE:	01/08/91	01/08/91	01/08/91	01/08/91	01/08/91	01/08/91
ANALYSIS DATE:	01/09/91	01/09/91	01/09/91	01/09/91	01/09/91	01/09/91
FILE NAME:	010062	010063	010071R	010071RE	010072	010075
INSTRUMENT ID:	MSB	MSB	MSB	MSB	MSB	MSB
MATRIX:	WATER	WATER	WATER	WATER	WATER	WATER
UNITS:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
DILUTION FACTOR:	1.0	1.0	1.0	1.0	1.0	1.0
<b>VOLATILE COMPOUNDS</b>						
Acetone	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Bromomethane	10 U	10 U	10 U	10 U	10 U	10 U
2-Butanone	10 U	10 U	10 U	10 U	10 U	10 U
Carbon Disulfide	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon Tetrachloride	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chlorobenzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane	10 U	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (total)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	5.0 U	5.0 U	5.0 U	5.0 U	<u>8.8</u>	5.0 U
2-Hexanone	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-Pentanone	10 U	10 U	10 U	10 U	10 U	10 U
Methylene Chloride	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trans-1,3-Dichloropropene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl Acetate	10 U	10 U	10 U	10 U	10 U	10 U
Vinyl Chloride	10 U	10 U	10 U	10 U	10 U	10 U
Xylenes (total)	5.0 U	5.0 U	5.0 U	5.0 U	<u>18</u>	5.0 U

B - Detected in Lab Blank. U - Below Reported Quantitation Level. J - Estimated Value.

**2 005**

**ORGANICS ANALYSIS DATA SHEETS**  
**Envirosystems, Inc.**

CLIENT SAMPLE ID: MW-9

LAB SAMPLE ID: 91010076  
 SAMPLE DATE: 01/07/91  
 RECEIVED DATE: 01/08/91  
 ANALYSIS DATE: 01/09/91  
 FILE NAME: 010076  
 INSTRUMENT ID: MSB  
 MATRIX: WATER  
 UNITS: ug/L  
 DILUTION FACTOR: 1.0

**VOLATILE COMPOUNDS**

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Acetone	10 U
Benzene	5.0 U
Bromodichloromethane	5.0 U
Bromoform	5.0 U
Bromomethane	10 U
2-Butanone	10 U
Carbon Disulfide	5.0 U
Carbon Tetrachloride	5.0 U
Chlorobenzene	5.0 U
Chloroethane	10 U
Chloroform	5.0 U
Chloromethane	10 U
Dibromochloromethane	5.0 U
1,2-Dichloroethane	5.0 U
1,1-Dichloroethane	5.0 U
1,1-Dichloroethene	5.0 U
1,2-Dichloroethene (total)	5.0 U
1,2-Dichloropropane	5.0 U
cis-1,3-Dichloropropene	5.0 U
Ethylbenzene	5.0 U
2-Hexanone	10 U
4-Methyl-2-Pentanone	10 U
Methylene Chloride	5.0 U
Styrene	5.0 U
1,1,2,2-Tetrachloroethane	5.0 U
Tetrachloroethene	5.0 U
Toluene	5.0 U
Trans-1,3-Dichloropropene	5.0 U
1,1,1-Trichloroethane	5.0 U
1,1,2-Trichloroethane	5.0 U
Trichloroethene	5.0 U
Vinyl Acetate	10 U
Vinyl Chloride	10 U
Xlenes (total)	5.0 U

B - Detected in Lab Blank. U - Below Reported Quantitation Level. J - Estimated Value.

2 006

ORGANICS ANALYSIS DATA SHEETS  
Envirosystems, Inc.

CLIENT SAMPLE ID:	LAB-BLANK	LAB-BLANK
LAB SAMPLE ID:	0108VBB1	0109VBB1
SAMPLE DATE:	01/08/91	01/09/91
RECEIVED DATE:	01/08/91	01/09/91
ANALYSIS DATE:	01/08/91	01/09/91
FILE NAME:	0108VBB1	0109VBB1
INSTRUMENT ID:	MSB	MSB
MATRIX:	WATER	WATER
UNITS:	UG/L	UG/L
DILUTION FACTOR:	1.0	1.0

**VOLATILE COMPOUNDS**

---

Acetone	10 U	10 U
Benzene	5.0 U	5.0 U
Bromodichloromethane	5.0 U	5.0 U
Bromoform	5.0 U	5.0 U
Bromomethane	10 U	10 U
2-Butanone	10 U	10 U
Carbon Disulfide	5.0 U	5.0 U
Carbon Tetrachloride	5.0 U	5.0 U
Chlorobenzene	5.0 U	5.0 U
Chloroethane	10 U	10 U
Chloroform	5.0 U	5.0 U
Chloromethane	10 U	10 U
Dibromochloromethane	5.0 U	5.0 U
1,2-Dichloroethane	5.0 U	5.0 U
1,1-Dichloroethane	5.0 U	5.0 U
1,1-Dichloroethene	5.0 U	5.0 U
1,2-Dichloroethene (total)	5.0 U	5.0 U
1,2-Dichloropropane	5.0 U	5.0 U
cis-1,3-Dichloropropene	5.0 U	5.0 U
Ethylbenzene	5.0 U	5.0 U
2-Hexanone	10 U	10 U
4-Methyl-2-Pentanone	10 U	10 U
Methylene Chloride	5.0 U	5.0 U
Styrene	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U
Tetrachloroethene	5.0 U	5.0 U
Toluene	5.0 U	5.0 U
Trans-1,3-Dichloropropene	5.0 U	5.0 U
1,1,1-Trichloroethane	5.0 U	5.0 U
1,1,2-Trichloroethane	5.0 U	5.0 U
Trichloroethene	5.0 U	5.0 U
Vinyl Acetate	10 U	10 U
Vinyl Chloride	10 U	10 U
Xylenes (total)	5.0 U	5.0 U

B - Detected in Lab Blank. U - Below Reported Quantitation Level. J - Estimated Value.

2 007

**Semi-Volatiles Results**

**2 008**

**ORGANICS ANALYSIS DATA SHEETS**  
Envirosystems, Inc.

CLIENT SAMPLE ID:	MN-32	FB-1	MN-28	TRIP-BLK-1	MN-26	MN-26R
LAB SAMPLE ID:	91010041	91010043	91010044	91010045	91010047	91010047
SAMPLE DATE:	01/03/91	01/03/91	01/03/91	01/03/91	01/03/91	01/03/91
RECEIVED DATE:	01/04/91	01/04/91	01/04/91	01/04/91	01/04/91	01/04/91
EXTRACTION DATE:	01/07/91	01/07/91	01/07/91	01/07/91	01/07/91	01/18/91
ANALYSIS DATE:	01/15/91	01/16/91	01/16/91	01/15/91	01/16/91	01/22/91
FILE NAME:	010041	010043	010044	010045	010047	010047R
INSTRUMENT ID:	MSA	MSA	MSA	MSA	MSA	MSA
MATRIX:	WATER	WATER	WATER	WATER	WATER	WATER
UNITS:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L

**SEMOVOLATILE COMPOUNDS**

Acenaphthene	10 U					
Acenaphthylene	10 U					
Anthracene	10 U					
Benzidine	50 U					
Benzo(a)Anthracene	10 U					
Benzo(a)Pyrene	10 U					
Benzo(b+k)fluoranthenes	10 U					
Benzo(g,h,i)Perylene	10 U					
Benzoic Acid	50 U					
Benzyl Alcohol	10 U					
4-Bromophenyl-phenylether	10 U					
Butylbenzylphthalate	10 U					
4-Chloro-3-Methylphenol	10 U					
4-Chloroaniline	10 U					
bis(2-Chloroethoxy)Methane	10 U					
bis(2-Chloroethyl)Ether	10 U					
bis(2-Chloroisopropyl)Ether	10 U					
2-Chloronaphthalene	10 U					
2-Chlorophenol	10 U					
4-Chlorophenyl-phenylether	10 U					
Chrysene	10 U					
Di-n-Butylphthalate	10 U					
Di-n-Octyl Phthalate	10 U					
Dibenzo(a,b)Anthracene	10 U					
Dibenzofuran	10 U					
1,2-Dichlorobenzene	10 U					
1,3-Dichlorobenzene	10 U					
1,4-Dichlorobenzene	10 U					
3,3'-Dichlorobenzidine	20 U					
2,4-Dichlorophenol	10 U					
Diethylphthalate	10 U					
Dimethyl Phthalate	10 U					
2,4-Dimethylphenol	10 U					
4,6-Dinitro-2-Methylphenol	50 U					
2,4-Dinitrophenol	50 U					
2,4-Dinitrotoluene	10 U					

**ORGANICS ANALYSIS DATA SHEETS**  
Envirosystems, Inc.

CLIENT SAMPLE ID:	MW-32	FB-1	MW-28	TRIP-BLK-1	MW-26	MW-26R
LAB SAMPLE ID:	91010041	91010043	91010044	91010045	91010047	91010047
SAMPLE DATE:	01/03/91	01/03/91	01/03/91	01/03/91	01/03/91	01/03/91
RECEIVED DATE:	01/04/91	01/04/91	01/04/91	01/04/91	01/04/91	01/04/91
EXTRACTION DATE:	01/07/91	01/07/91	01/07/91	01/07/91	01/07/91	01/18/91
ANALYSIS DATE:	01/15/91	01/16/91	01/16/91	01/15/91	01/16/91	01/22/91
FILE NAME:	010041	010043	010044	010045	010047	010047R
INSTRUMENT ID:	MSA	MSA	MSA	MSA	MSA	MSA
MATRIX:	WATER	WATER	WATER	WATER	WATER	WATER
UNITS:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L

**SENOVOLATILE COMPOUNDS**

2,6-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)Pthalate	15 B	10 U	12 B	8.8 B J	10 U	10 U
Fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)Pyrene	10 U	10 U	10 U	10 U	10 U	10 U
Isoferone	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene	10 U	10 U	10 U	10 U	10 U	10 U
4-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylbenzol	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitroso-Di-n-Propylamine	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitrosodimethylamine	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitrosodiphenylamine (1)	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitroaniline	50 U	50 U	50 U	50 U	50 U	50 U
4-Nitroaniline	50 U	50 U	50 U	50 U	50 U	50 U
3-Nitroaniline	50 U	50 U	50 U	50 U	50 U	50 U
Nitrobenzene	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitrophenol	50 U	50 U	50 U	50 U	50 U	50 U
2-Nitrophenol	10 U	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol	50 U	50 U	50 U	50 U	50 U	50 U
Phenanthrene	10 U	10 U	10 U	10 U	10 U	10 U
Phenol	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	50 U	50 U	50 U	50 U	50 U	50 U
2,4,6-Trichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U

B - Detected in Lab Blank. U - Below Reported Quantitation Level. J - Estimated Value.

2 010

**ORGANICS ANALYSIS DATA SHEETS**  
Envirosystems, Inc.

CLIENT SAMPLE ID:	MW-29	MW-29R	MW-19	MW-25	MW-33	REP-3
LAB SAMPLE ID:	91010049	91010049	91010051	91010053	91010054	91010056
SAMPLE DATE:	01/03/91	01/03/91	01/04/91	01/04/91	01/04/91	01/04/91
RECEIVED DATE:	01/04/91	01/04/91	01/05/91	01/05/91	01/05/91	01/05/91
EXTRACTION DATE:	01/07/91	01/18/91	01/07/91	01/07/91	01/07/91	01/07/91
ANALYSIS DATE:	01/16/91	01/22/91	01/15/91	01/15/91	01/16/91	01/16/91
FILE NAME:	010049	010049R	010051	010053	010054	010056
INSTRUMENT ID:	MSA	MSA	MSA	MSA	MSA	MSA
MATRIX:	WATER	WATER	WATER	WATER	WATER	WATER
UNITS:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L

**SEMOVOLATILE COMPOUNDS**

Acenaphthene	10 U					
Acenaphthylene	10 U					
Anthracene	10 U					
Benzidine	50 U					
Benzo(a)Anthracene	10 U					
Benzo(a)Pyrene	10 U					
Benzo(b+k)Fluoranthenes	10 U					
Benzo(g,h,i)Perylene	10 U					
Benzoic Acid	50 U					
Benzyl Alcohol	10 U					
4-Bromophenyl-phenylether	10 U					
Butylbenzylphthalate	10 U					
4-Chloro-3-Methylphenol	10 U					
4-Chloroaniline	10 U					
bis(2-Chloroethoxy)Methane	10 U					
bis(2-Chloroethyl)Ether	10 U					
bis(2-Chloroisopropyl)Ether	10 U					
2-Chloronaphthalene	10 U					
2-Chlorophenol	10 U					
4-Chlorophenyl-phenylether	10 U					
Chrysene	10 U					
Di-n-Butylphthalate	10 U					
Di-n-Octyl Phthalate	10 U					
Dibenz(a,h)Anthracene	10 U					
Dibenzofuran	10 U					
1,2-Dichlorobenzene	10 U					
1,3-Dichlorobenzene	10 U					
1,4-Dichlorobenzene	10 U					
3,3'-Dichlorobenzidine	20 U					
2,4-Dichlorophenol	10 U					
Diethylphthalate	10 U					
Dimethyl Phthalate	10 U					
2,4-Dimethylphenol	10 U					
4,6-Dinitro-2-Methylphenol	50 U					
2,4-Dinitrophenol	50 U					
2,4-Dinitrotoluene	10 U					

**ORGANICS ANALYSIS DATA SHEETS**  
Envirosystems, Inc.

CLIENT SAMPLE ID:	MW-29	MW-29R	MW-19	MW-25	MW-33	REP-3
LAB SAMPLE ID:	91010049	91010049	91010031	91010033	91010034	91010036
SAMPLE DATE:	01/03/91	01/03/91	01/04/91	01/04/91	01/04/91	01/04/91
RECEIVED DATE:	01/04/91	01/04/91	01/05/91	01/05/91	01/05/91	01/05/91
EXTRACTION DATE:	01/07/91	01/18/91	01/07/91	01/07/91	01/07/91	01/07/91
ANALYSIS DATE:	01/16/91	01/22/91	01/15/91	01/15/91	01/16/91	01/16/91
FILE NAME:	010049	010049R	010031	010033	010034	010036
INSTRUMENT ID:	MSA	MSA	MSA	MSA	MSA	MSA
MATRIX:	WATER	WATER	WATER	WATER	WATER	WATER
UNITS:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L

**SEMICVOLATILE COMPOUNDS**

2,6-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)Phthalate	9.7 B J	10 U	10 U	10 B	10 U	10 U
Fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)Pyrene	10 U	10 U	10 U	10 U	10 U	10 U
Isophorone	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene	10 U	10 U	10 U	10 U	10 U	10 U
4-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitroso-Di-n-Propylamine	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitrosodimethylamine	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitrosodiphenylamine (1)	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitroaniline	50 U	50 U	50 U	50 U	50 U	50 U
4-Nitroaniline	50 U	50 U	50 U	50 U	50 U	50 U
3-Nitroaniline	50 U	50 U	50 U	50 U	50 U	50 U
Nitrobenzene	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitrophenol	50 U	50 U	50 U	50 U	50 U	50 U
2-Nitrophenol	10 U	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol	50 U	50 U	50 U	50 U	50 U	50 U
Phenanthrene	10 U	10 U	10 U	10 U	10 U	10 U
Phenol	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	50 U	50 U	50 U	50 U	50 U	50 U
2,4,6-Trichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U

2 012

B - Detected in Lab Blank. U - Below Reported Quantitation Level. J - Estimated Value.

**ORGANICS ANALYSIS DATA SHEETS**  
Envirosystems, Inc.

CLIENT SAMPLE ID:	TRIP-BLK-2	FB-2	TRIP-BLANK-3	FB-3	FB-3R	MW-13
LAB SAMPLE ID:	91010057	91010098	91010062	91010063	91010063	91010071
SAMPLE DATE:	01/04/91	01/04/91	01/07/91	01/07/91	01/07/91	01/07/91
RECEIVED DATE:	01/04/91	01/05/91	01/08/91	01/08/91	01/08/91	01/08/91
EXTRACTION DATE:	01/07/91	01/07/91	01/10/91	01/10/91	01/18/91	01/10/91
ANALYSIS DATE:	01/15/91	01/15/91	01/17/91	01/16/91	01/22/91	01/17/91
FILE NAME:	010057	010098	010062	010063	010063R	010071
INSTRUMENT ID:	MSA	MSA	MSA	MSA	MSA	MSA
MATRIX:	WATER	WATER	WATER	WATER	WATER	WATER
UNITS:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L

**SENVOLATILE COMPOUNDS**

Acenaphthene	10 U	9.8 J				
Acenaphthylene	10 U					
Anthracene	10 U					
Benzidine	50 U					
Benzo(a)Anthracene	10 U					
Benzo(a)Pyrene	10 U					
Benzo(b+k)fluoranthenes	10 U					
Benzo(g,h,i)Perylene	10 U					
Benzoic Acid	50 U					
Benzyl Alcohol	10 U					
4-Bromophenyl-phenylether	10 U					
Butylbenzylphthalate	10 U					
4-Chloro-3-Methylphenol	10 U					
4-Chloroaniline	10 U					
bis(2-Chloroethyl)Methane	10 U					
bis(2-Chloroethyl)Ether	10 U					
bis(2-Chloroisopropyl)Ether	10 U					
2-Chloronaphthalene	10 U					
2-Chlorophenol	10 U					
4-Chlorophenyl-phenylether	10 U					
Chrysene	10 U					
Di-n-Butylphthalate	10 U					
Di-n-Octyl Phthalate	10 U					
Dibenz(a,h)Anthracene	10 U					
Dibenzofuran	10 U	13				
1,2-Dichlorobenzene	10 U					
1,3-Dichlorobenzene	10 U					
1,4-Dichlorobenzene	10 U					
3,3'-Dichlorobenzidine	20 U					
2,4-Dichlorophenol	10 U					
Diethylphthalate	10 U					
Dimethyl Phthalate	10 U					
2,4-Dimethylphenol	10 U					
4,6-Dinitro-2-Methylphenol	50 U					
2,4-Dinitrophenol	50 U					
2,4-Dinitrotoluene	10 U					

**ORGANICS ANALYSIS DATA SHEETS**  
Envirosystems, Inc.

CLIENT SAMPLE ID:	TRIP-BLK-2	FB-2	TRIP-BLANK-3	FB-3	FB-3R	MN-13
LAB SAMPLE ID:	91010057	91010058	91010062	91010063	91010063	91010071
SAMPLE DATE:	01/04/91	01/04/91	01/07/91	01/07/91	01/07/91	01/07/91
RECEIVED DATE:	01/04/91	01/05/91	01/08/91	01/08/91	01/08/91	01/08/91
EXTRACTION DATE:	01/07/91	01/07/91	01/10/91	01/10/91	01/18/91	01/10/91
ANALYSIS DATE:	01/15/91	01/15/91	01/17/91	01/16/91	01/22/91	01/17/91
FILE NAME:	010057	010058	010062	010063	010063R	010071
INSTRUMENT ID:	MSA	MSA	MSA	MSA	MSA	MSA
MATRIX:	WATER	WATER	WATER	WATER	WATER	WATER
UNITS:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L

**SEMOVOLATILE COMPOUNDS**

2,6-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)Phthalate	8.8 B J	10 U	10 U	10 U	10 U	12
Fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	10 U	10 U	10 U	10 U	10 U	14
Hexachlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)Pyrene	10 U	10 U	10 U	10 U	10 U	10 U
Isothiophene	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene	10 U	10 U	10 U	10 U	10 U	66
4-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitroso-Di-n-Propylamine	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitrosodimethylamine	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitrosodiphenylamine (1)	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitroaniline	50 U	50 U	50 U	50 U	50 U	50 U
4-Nitroaniline	50 U	50 U	50 U	50 U	50 U	50 U
3-Nitroaniline	50 U	50 U	50 U	50 U	50 U	50 U
Nitrobenzene	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitrophenol	50 U	50 U	50 U	50 U	50 U	50 U
2-Nitrophenol	10 U	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol	50 U	50 U	50 U	50 U	50 U	50 U
Phenanthrene	10 U	10 U	10 U	10 U	10 U	11
Phenol	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	50 U	50 U	50 U	50 U	50 U	50 U
2,4,6-Trichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U

2 014

B - Detected in Lab Blank. U - Below Reported Quantitation Level. J - Estimated Value.

**ORGANICS ANALYSIS DATA SHEETS**  
Envirosystems, Inc.

CLIENT SAMPLE ID:	MW-23	MW-23R	MW-1	MW-9	MW-9R
LAB SAMPLE ID:	91010073	91010073	91010073	91010076	91010076
SAMPLE DATE:	01/07/91	01/07/91	01/07/91	01/07/91	01/07/91
RECEIVED DATE:	01/08/91	01/08/91	01/08/91	01/08/91	01/08/91
EXTRACTION DATE:	01/10/91	01/18/91	01/10/91	01/10/91	01/18/91
ANALYSIS DATE:	01/17/91	01/22/91	01/17/91	01/17/91	01/22/91
FILE NAME:	010073	010073R	010073	010076	010076R
INSTRUMENT ID:	MSA	MSA	MSA	MSA	MSA
MATRIX:	WATER	WATER	WATER	WATER	WATER
UNITS:	UG/L	UG/L	UG/L	UG/L	UG/L

**SEMOVOLATILE COMPOUNDS**

Acenaphthene	10 U				
Acenaphthylene	10 U				
Anthracene	10 U				
Benzidine	50 U				
Benzo(a)Anthracene	10 U				
Benzo(a)Pyrene	10 U				
Benzo(b+k)fluoranthenes	10 U				
Benzo(g,h,i)Perylene	10 U				
Benzoic Acid	50 U				
Benzyl Alcohol	10 U				
4-Bromophenyl-phenylether	10 U				
Butylbenzylphthalate	10 U				
4-Chloro-3-Methylphenol	10 U				
4-Chloroaniline	10 U				
bis(2-Chloroethoxy)Methane	10 U				
bis(2-Chloroethyl)Ether	10 U				
bis(2-Chloroisopropyl)Ether	10 U				
2-Chloronaphthalene	10 U				
2-Chlorophenol	10 U				
4-Chlorophenyl-phenylether	10 U				
Chrysene	10 U				
Di-n-Butylphthalate	10 U				
Di-n-Octyl Phthalate	10 U				
Dibenz(a,h)Anthracene	10 U				
Dibenzofuran	10 U				
1,2-Dichlorobenzene	10 U				
1,3-Dichlorobenzene	10 U				
1,4-Dichlorobenzene	10 U				
3,3'-Dichlorobenzidine	20 U				
2,4-Dichlorophenol	10 U				
Diethylphthalate	10 U				
Dimethyl Phthalate	10 U				
2,4-Dimethylphenol	10 U				
4,6-Dinitro-2-Methylphenol	50 U				
2,4-Dinitrophenol	50 U				
2,4-Dinitrotoluene	10 U				

**ORGANICS ANALYSIS DATA SHEETS**  
Envirosystems, Inc.

CLIENT SAMPLE ID:	MW-23	MW-23R	MW-1	MW-9	MW-9R
LAB SAMPLE ID:	91010073	91010073	91010073	91010076	91010076
SAMPLE DATE:	01/07/91	01/07/91	01/07/91	01/07/91	01/07/91
RECEIVED DATE:	01/08/91	01/08/91	01/08/91	01/08/91	01/08/91
EXTRACTION DATE:	01/10/91	01/18/91	01/10/91	01/10/91	01/18/91
ANALYSIS DATE:	01/17/91	01/22/91	01/17/91	01/17/91	01/22/91
FILE NAME:	010073	010073R	010073	010076	010076R
INSTRUMENT ID:	MSA	MSA	MSA	MSA	MSA
MATRIX:	WATER	WATER	WATER	WATER	WATER
UNITS:	UG/L	UG/L	UG/L	UG/L	UG/L

**SEMOVOLATILE COMPOUNDS**

2,6-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)Phthalate	32	9.3 J	10 U	10 U	10 U
Fluoranthene	10 U	10 U	10 U	10 U	10 U
Fluorene	9.4 J	10 U	10 U	10 U	10 U
Hexachlorobenzene	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene	10 U	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)Pyrene	10 U	10 U	10 U	10 U	10 U
Isoferone	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene	96	10 U	10 U	10 U	10 U
4-Methylphenol	10 U	10 U	10 U	10 U	10 U
2-Methylphenol	10 U	10 U	10 U	10 U	10 U
N-Nitroso-Di-n-Propylamine	10 U	10 U	10 U	10 U	10 U
N-Nitrosodimethylamine	10 U	10 U	10 U	10 U	10 U
N-Nitrosodiphenylamine (1)	10 U	10 U	10 U	10 U	10 U
Naphthalene	10 U	10 U	10 U	10 U	10 U
2-Nitroaniline	50 U	50 U	50 U	50 U	50 U
4-Nitroaniline	50 U	50 U	50 U	50 U	50 U
3-Nitroaniline	50 U	50 U	50 U	50 U	50 U
Nitrobenzene	10 U	10 U	10 U	10 U	10 U
4-Nitrophenol	50 U	50 U	50 U	50 U	50 U
2-Nitrobenzal	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol	50 U	50 U	50 U	50 U	50 U
Phenanthrene	10 U	10 U	10 U	10 U	10 U
Phenol	10 U	10 U	10 U	10 U	10 U
Pyrene	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	50 U	50 U	50 U	50 U	50 U
2,4,6-Trichlorophenol	10 U	10 U	10 U	10 U	10 U

B - Detected in Lab Blank. U - Below Reported Quantitation Level. J - Estimated Value.

2 016

**ORGANICS ANALYSIS DATA SHEETS**  
Envirosystems, Inc.

CLIENT SAMPLE ID:	BLK-01-07	BLK-10-10	BLK-01-18
LAB SAMPLE ID:	MBLK0107	MBLK0110	MBLK0118
SAMPLE DATE:			
RECEIVED DATE:	01/07/91	01/10/91	01/18/91
EXTRACTION DATE:			
ANALYSIS DATE:	01/15/91	01/16/91	01/22/91
FILE NAME:	MBLK0107	MBLK0110	MBLK0118
INSTRUMENT ID:	MSA	MSA	MSA
MATRIX:	WATER	WATER	WATER
UNITS:	UG/L	UG/L	UG/L

**SEMOVOLATILE COMPOUNDS**

Acenaphthene	10 U	10 U	10 U
Acenaphthylene	10 U	10 U	10 U
Anthracene	10 U	10 U	10 U
Benzidine	50 U	50 U	50 U
Benzo(a)Anthracene	10 U	10 U	10 U
Benzo(a)Pyrene	10 U	10 U	10 U
Benzo(b+k)fluoranthenes	10 U	10 U	10 U
Benzo(g,h,i)Perylene	10 U	10 U	10 U
Benzoic Acid	50 U	50 U	50 U
Benzyl Alcohol	10 U	10 U	10 U
4-Bromophenyl-phenylether	10 U	10 U	10 U
Butylbenzylphthalate	10 U	10 U	10 U
4-Chloro-3-Methylphenol	10 U	10 U	10 U
4-Chloroaniline	10 U	10 U	10 U
bis(2-Chloroethoxy)Methane	10 U	10 U	10 U
bis(2-Chloroethyl)Ether	10 U	10 U	10 U
bis(2-Chloroisopropyl)Ether	10 U	10 U	10 U
2-Chloronaphthalene	10 U	10 U	10 U
2-Chlorophenol	10 U	10 U	10 U
4-Chlorophenyl-phenylether	10 U	10 U	10 U
Chrysene	10 U	10 U	10 U
Di-n-Butylphthalate	10 U	10 U	10 U
Di-n-Octyl Phthalate	10 U	10 U	10 U
Dihenz(a,h)Anthracene	10 U	10 U	10 U
Dihenzofuran	10 U	10 U	10 U
1,2-Dichlorobenzene	10 U	10 U	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U
1,4-Dichlorobenzene	10 U	10 U	10 U
3,3'-Dichlorobenzidine	20 U	20 U	20 U
2,4-Dichlorophenol	10 U	10 U	10 U
Diethylphthalate	10 U	10 U	10 U
Dimethyl Phthalate	10 U	10 U	10 U
2,4-Dimethylphenol	10 U	10 U	10 U
4,6-Dinitro-2-Methylphenol	50 U	50 U	50 U
2,4-Dinitrophenol	50 U	50 U	50 U
2,4-Dinitrotoluene	10 U	10 U	10 U

**ORGANICS ANALYSIS DATA SHEETS**  
Envirosystems, Inc.

CLIENT SAMPLE ID:	BLK-01-07	BLK-10-10	BLK-01-18
LAB SAMPLE ID:	MBLK0107	MBLK0110	MBLK0118
SAMPLE DATE:			
RECEIVED DATE:	01/07/91	01/10/91	01/18/91
EXTRACTION DATE:			
ANALYSIS DATE:	01/15/91	01/16/91	01/22/91
FILE NAME:	MBLK0107	MBLK0110	MBLK0118
INSTRUMENT ID:	MBA	MBA	MBA
MATRIX:	WATER	WATER	WATER
UNITS:	UG/L	UG/L	UG/L

**SEMOVOLATILE COMPOUNDS**

2,6-Dinitrotoluene	10 U	10 U	10 U
bis(2-Ethylhexyl)Phthalate	8.9 J	10 U	10 U
Fluoranthene	10 U	10 U	10 U
Fluorene	10 U	10 U	10 U
Hexachlorobenzene	10 U	10 U	10 U
Hexachlorobutadiene	10 U	10 U	10 U
Hexachlorocyclopentadiene	10 U	10 U	10 U
Hexachloroethane	10 U	10 U	10 U
Indeno(1,2,3-cd)Pyrene	10 U	10 U	10 U
Isophorone	10 U	10 U	10 U
2-Methylnaphthalene	10 U	10 U	10 U
4-Methylphenol	10 U	10 U	10 U
2-Methylphenol	10 U	10 U	10 U
N-Nitroso-Di-n-Propylamine	10 U	10 U	10 U
N-Nitrosodimethylamine	10 U	10 U	10 U
N-Nitrosodiphenylamine (1)	10 U	10 U	10 U
Naphthalene	10 U	10 U	10 U
2-Nitroaniline	50 U	50 U	50 U
4-Nitroaniline	50 U	50 U	50 U
3-Nitroaniline	50 U	50 U	50 U
Nitrobenzene	10 U	10 U	10 U
4-Nitrophenol	50 U	50 U	50 U
2-Nitrophenol	10 U	10 U	10 U
Pentachlorophenol	50 U	50 U	50 U
Phenanthrene	10 U	10 U	10 U
Phenol	10 U	10 U	10 U
Pyrene	10 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U
2,4,5-Trichlorophenol	50 U	50 U	50 U
2,4,6-Trichlorophenol	10 U	10 U	10 U

B - Detected in Lab Blank. U - Below Reported Quantitation Level. J - Estimated Value.

2 018

**Pesticide/PCB Results**

**2 019**

**ORGANIC ANALYSIS DATA SHEET**  
**Envirosystems, Inc.**

CLIENT SAMPLE ID:	MW-32	FB-1	MW-28	TRIP BLANK 1	MW-26	MW-29
LAB SAMPLE ID:	91010041	91010043	91010044	91010045	91010047	91010049
SAMPLE DATE:	01/03/91	01/03/91	01/03/91	01/03/91	01/03/91	01/03/91
RECEIVED DATE:	01/04/91	01/04/91	01/04/91	01/04/91	01/04/91	01/04/91
EXTRACTION DATE:	01/07/91	01/07/91	01/07/91	01/07/91	01/07/91	01/07/91
ANALYSIS DATE:	02/04/91	02/04/91	02/04/91	02/04/91	02/04/91	02/04/91
MATRIX:	WATER	WATER	WATER	WATER	WATER	WATER
UNITS:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L

**PESTICIDE AND PCB COMPOUNDS**

alpha-BHC	0.05 U					
beta-BHC	0.05 U					
delta-BHC	0.05 U					
gamma-BHC (Lindane)	0.05 U					
Heptachlor	0.05 U					
Aldrin	0.05 U					
Heptachlor Epoxide	0.05 U					
Endosulfan I	0.05 U					
Dieldrin	0.10 U					
4,4'-DDE	0.10 U					
Endrin	0.10 U					
Endosulfan II	0.10 U					
4,4'-DDD	0.10 U					
Endosulfate	0.10 U					
4,4'-DDT	0.10 U					
Endrin Ketone	0.10 U					
Methoxychlor	0.50 U					
alpha-chlordane	0.50 U					
gamma-chlordane	0.50 U					
Toxaphene	1.00 U					
Arochlor-1016	0.50 U					
Arochlor-1221	0.50 U					
Arochlor-1232	0.50 U					
Arochlor-1242	0.50 U					
Arochlor-1248	0.50 U					
Arochlor-1254	1.00 U					
Arochlor-1260	1.00 U					

B - Detected in Lab Blank.    U - Below Reported Quanitation Level.    J - Estimated Value.

ORGANIC ANALYSIS DATA SHEET  
Envirosystems, Inc.

CLIENT SAMPLE ID:	TRIP BLANK 3	FIELD BLANK 3	MW-13	MW-23	MW-1	MW-9
LAB SAMPLE ID:	91010062	91010063	91010071	91010073	91010075	91010076
SAMPLE DATE:	01/07/91	01/07/91	01/07/91	01/07/91	01/07/91	01/07/91
RECEIVED DATE:	01/08/91	01/08/91	01/08/91	01/08/91	01/08/91	01/08/91
EXTRACTION DATE:	01/10/91	01/10/91	01/10/91	01/10/91	01/10/91	01/10/91
ANALYSIS DATE:	02/04/91	02/04/91	02/04/91	02/04/91	02/04/91	02/04/91
MATRIX:	WATER	WATER	WATER	WATER	WATER	WATER
UNITS:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L

**PESTICIDE AND PCB COMPOUNDS**

alpha-BHC	0.05 U					
beta-BHC	0.05 U					
delta-BHC	0.05 U					
gamma-BHC (Lindane)	0.05 U					
Heptachlor	0.05 U					
Aldrin	0.05 U					
Heptachlor Epoxide	0.05 U					
Endosulfan I	0.05 U					
Dieldrin	0.10 U					
4,4'-DDE	0.10 U					
Endrin	0.10 U					
Endosulfan II	0.10 U					
4,4'-DDD	0.10 U					
Endosulfate	0.10 U					
4,4'-DDT	0.10 U					
Endrin Ketone	0.10 U					
Methoxychlor	0.50 U					
alpha-chlordane	0.50 U					
gamma-chlordane	0.50 U					
Toxaphene	1.00 U					
Arochlor-1016	0.50 U					
Arochlor-1221	0.50 U					
Arochlor-1232	0.50 U					
Arochlor-1242	0.50 U					
Arochlor-1248	0.50 U					
Arochlor-1254	1.00 U	1.00 U	5.70	1.00 U	1.00 U	1.00 U
Arochlor-1260	1.00 U	1.00 U	3.20	1.00 U	1.00 U	1.00 U

B - Detected in Lab Blank. U - Below Reported Quantitation Level. J - Estimated Value.

ORGANIC ANALYSIS DATA SHEET  
Envirosystems, Inc.

CLIENT SAMPLE ID:	LAB BLANK	LAB BLANK
LAB SAMPLE ID:	LAB BLANK	LAB BLANK
SAMPLE DATE:		
RECEIVED DATE:		
EXTRACTION DATE:	01/07/91	01/10/91
ANALYSIS DATE:	02/04/91	02/04/91
UNITS:	WATER UG/L	WATER UG/L

PESTICIDE AND PCB COMPOUNDS

alpha-BHC	0.05 U	0.05 U
beta-BHC	0.05 U	0.05 U
delta-BHC	0.05 U	0.05 U
gamma-BHC (Lindane)	0.05 U	0.05 U
Heptachlor	0.05 U	0.05 U
Aldrin	0.05 U	0.05 U
Heptachlor Epoxide	0.05 U	0.05 U
Endosulfan I	0.05 U	0.05 U
Dieldrin	0.10 U	0.10 U
4,4'-DDE	0.10 U	0.10 U
Endrin	0.10 U	0.10 U
Endosulfan II	0.10 U	0.10 U
4,4'-DDD	0.10 U	0.10 U
Endosulfate	0.10 U	0.10 U
4,4'-DDT	0.10 U	0.10 U
Endrin Ketone	0.10 U	0.10 U
Methoxychlor	0.50 U	0.50 U
alpha-chlordane	0.50 U	0.50 U
gamma-chlordane	0.50 U	0.50 U
Toxaphene	1.00 U	1.00 U
Arochlor-1016	0.50 U	0.50 U
Arochlor-1221	0.50 U	0.50 U
Arochlor-1232	0.50 U	0.50 U
Arochlor-1242	0.50 U	0.50 U
Arochlor-1248	0.50 U	0.50 U
Arochlor-1254	1.00 U	1.00 U
Arochlor-1260	1.00 U	1.00 U

B - Detected in Lab Blank. U - Below Reported Quantitation Level. J - Estimated Value.

**ORGANIC ANALYSIS DATA SHEET**  
**Envirosystems, Inc.**

CLIENT SAMPLE ID:	MW-30	MW-34	MW-24	MW-21	REP-1	MW-27
LAB SAMPLE ID:	91010040	91010042	91010046	91010052	91010055	91010059
SAMPLE DATE:	01/03/91	01/03/91	01/03/91	01/04/91	01/04/91	01/04/91
RECEIVED DATE:	01/04/91	01/04/91	01/04/91	01/05/91	01/05/91	01/05/91
EXTRACTION DATE:	01/09/91	01/09/91	01/09/91	01/09/91	01/09/91	01/09/91
ANALYSIS DATE :	02/04/91	02/04/91	02/04/91	02/04/91	02/04/91	02/04/91
MATRIX:	WATER	WATER	WATER	WATER	WATER	WATER
UNITS:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L

**POLYCHLORINATED BIPHENYL COMPOUNDS**

Arocalor-1016	0.5 U					
Arocalor-1221	0.5 U					
Arocalor-1232	0.5 U					
Arochlor-1242	0.5 U					
Arochlor-1248	0.5 U					
Arochlor-1254	1.0 U					
Arochlor-1260	1.0 U					

B - Detected in Lab Blank.    U - Below Reported Quantitation Level.    J - Estimated Value.

**ORGANIC ANALYSIS DATA SHEET**  
**Envirosystems, Inc.**

CLIENT SAMPLE ID:	MW-31	REP-2	MW-5	MW-7	MW-16	MW-17
LAB SAMPLE ID:	91010060	91010061	91010064	91010065	91010066	91010067
SAMPLE DATE:	01/04/91	01/04/91	01/07/91	01/07/91	01/07/91	01/07/91
RECEIVED DATE:	01/05/91	01/05/91	01/08/91	01/08/91	01/08/91	01/08/91
EXTRACTION DATE:	01/09/91	01/09/91	01/11/91	01/11/91	01/11/91	01/11/91
ANALYSIS DATE :	02/04/91	02/04/91	01/11/91	01/11/91	01/11/91	01/11/91
MATRIX:	WATER	WATER	OIL	OIL	OIL	OIL
UNITS:	UG/L	UG/L	UG/KG	UG/KG	UG/KG	UG/KG

**POLYCHLORINATED BIPHENYL COMPOUNDS**

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Arochlor-1016	0.5 U	0.5 U	80 U	800 U	800 U	80 U
Arochlor-1221	0.5 U	0.5 U	80 U	800 U	800 U	80 U
Arochlor-1232	0.5 U	0.5 U	80 U	800 U	800 U	80 U
Arochlor-1242	0.5 U	0.5 U	80 U	800 U	800 U	80 U
Arochlor-1248	0.5 U	0.5 U	80 U	800 U	800 U	80 U
Arochlor-1254	1.0 U	1.0 U	80 U	800 U	800 U	80 U
Arochlor-1260	1.0 U	1.0 U	27100	234686	122763	6716

B - Detected in Lab Blank.    U - Below Reported Quantitation Level.    J - Estimated Value.

ORGANIC ANALYSIS DATA SHEET  
Envirosystems, Inc.

CLIENT SAMPLE ID: MW-3

LAB SAMPLE ID: 91020254  
SAMPLE DATE: 02/21/91  
RECEIVED DATE: 02/22/91  
EXTRACTION DATE: 02/22/91  
ANALYSIS DATE : 02/25/91  
MATRIX: WATER  
UNITS: ug/L

POLYCHLORINATED BIPHENYL COMPOUNDS

Arochlor-1016 0.5 U

Arochlor-1221 0.5 U

Arochlor-1232 0.5 U

Arochlor-1242 0.5 U

Arochlor-1248 0.5 U

Arochlor-1254 1.0 U

Arochlor-1260 1.0 U

B - Detected in Lab Blank. U - Below Reported Quanitation Level. J - Estimated Value.

ORGANIC ANALYSIS DATA SHEET  
Envirosystems, Inc.

CLIENT SAMPLE ID: LAB BLANK LAB BLANK

LAB SAMPLE ID: LAB BLANK LAB BLANK  
SAMPLE DATE:  
RECEIVED DATE:  
EXTRACTION DATE: 01/09/91 01/11/91  
ANALYSIS DATE : 02/04/90 01/11/91  
MATRIX: WATER OIL  
UNITS: ug/L ug/kg

POLYCHLORINATED BIPHENYL COMPOUNDS

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Arochlor-1016	0.5 U	80 U
Arochlor-1221	0.5 U	80 U
Arochlor-1232	0.5 U	80 U
Arochlor-1242	0.5 U	80 U
Arochlor-1248	0.5 U	80 U
Arochlor-1254	1.0 U	80 U
Arochlor-1260	1.0 U	80 U

B - Detected in Lab Blank. U - Below Reported Quantitation Level. J - Estimated Value.

**TPH Results**

**2 028**

RESULTS OF TOTAL PETROLEUM HYDROCARBON ANALYSIS

ENVIROSYSTEMS I. D.	CLIENT I. D.	TPH RESULTS MG/L	DATE SAMPLED	DATE EXTRACTED
91010040	MW-30	<0.9	01/03/91	01/09/91
91010041	MW-32	<0.9	01/03/91	01/09/91
91010042	MW-34	<0.9	01/03/91	01/09/91
91010043	FB-1	<0.9	01/03/91	01/09/91
91010045	TRIP BLANK 1	<0.9	01/03/91	01/09/91
91010046	MW-24	<0.9	01/03/91	01/09/91
91010047	MW-26	<0.9	01/03/91	01/09/91
91010048	MW-28	13.1	01/03/91	01/09/91
91010049	MW-29	<0.9	01/03/91	01/09/91
91010051	MW-19	<0.9	01/04/91	01/09/91
91010052	MW-21	11.0	01/04/90	01/09/91
91010053	MW-25	1.2	01/04/91	01/09/91
91010054	MW-33	15.0	01/04/91	01/09/91
91010055	REP-1	12.3	01/04/91	01/09/91
91010057	TRIP BLANK 2	<0.9	01/04/91	01/09/91
91010058	FB-2	<0.9	01/04/91	01/09/91
91010059	MW-27	<0.9	01/04/91	01/09/91
91010060	MW-31	<0.9	01/04/91	01/09/91
91010061	REP-2	2.2	01/04/91	01/09/91
91010062	TRIP BLANK 3	<0.9	01/07/91	01/09/91
91010063	FIELD BLANK 3	<0.9	01/07/91	01/09/91
91010071	MW-13	14.1	01/07/91	01/09/91
91010072	MW-22	8.0	01/07/91	01/09/91
91010073	MW-23	6.1	01/07/91	01/09/91
91010074	REP-4	4.5	01/07/91	01/09/91
91010075	MW-1	<0.9	01/07/91	01/09/91
91010076	MW-9	<0.9	01/07/91	01/09/91

2 029

RESULTS OF TOTAL PETROLEUM HYDROCARBON ANALYSIS

ENVIROSYSTEMS I. D.	CLIENT I. D.	TPH RESULTS MG/L	DATE SAMPLED	DATE EXTRACTED
91020254	MW-3	11.5	02/21/91	02/22/91

WATER SAMPLES ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA METHODS 413.1 & 418.1

Client: ROUX ASSOCIATES INC.

Client	Enviro.	Spike	Sample	MS	MS
Sample I.D.	Sample I.D.	Added	Conc.	Conc.	%
		(mg)	(mg/L)	(mg/L)	Rec.
MW-21	91010052	86.0	11.0	88.1	90
MW-33	91010054	86.0	15.0	99.4	98
MW-27	91010059	86.0	0.0	92.4	107

Client	Enviro.	Spike	MSD	MSD	%
Sample I.D.	Sample I.D.	Added	Conc.	%	RPD
		(mg)	(mg/L)	Rec.	
MW-21	91010052	86.0	79.4	80	12
MW-33	91010054	86.0	76.7	72	31
MW-27	91010059	86.0	88.1	102	5

2 030

## **Metals Results**

**METAL ANALYSIS IN SAMPLES RECEIVED FROM ROUX ASSOCIATE**  
**Envirosystems, Inc.**

CLIENT SAMPLE ID:	MW-33	MW-32	MW-29	MW-26	MW-25	MW-19
LAB SAMPLE ID:	91010054	91010041	91010049	91010047	91010053	91010051
RECEIVED DATE:	01/05/91	01/04/91	01/04/91	01/04/91	01/05/91	01/05/91
ANALYSIS DATE:	01/29/91	01/29/91	01/29/91	01/29/91	01/29/91	01/29/91
MATRIX:	WATER	WATER	WATER	WATER	WATER	WATER
PCT. SOLID:						
UNIT:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L

**METALS**

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ALUMINUM	4460	N*	869	294	15300	22600	1710
ANTIMONY	<	7.6	<	7.6	<	7.6	< 7.6
ARSENIC	<	3.0	<	3.0	5.9 B	3.3 B	< 3.0
BARIUM	95 B		29 B	152 B	318	247	89 B
BERYLLIUM	<	1.6	<	1.6	<	1.6	< 1.6
CADMIUM	<	5.0	<	5.0	<	5.0	< 5.0
CALCIUM	28700		31900	64500	75200	16500	49300
CHROMIUM	15		5.5 B	< 2.2	43	81	6.7 B
COBALT	12 B	<	8.7	< 8.7	23 B	35 B	< 8.7
COPPER	<	11	18 B	< 11	62	101	17 B
IRON	7450		1430	21400	28700	63000	2710
LEAD	17 N*		49	38	67	93	50
MAGNESIUM	8860		11500	21200	23400	11300	6290
MANGANESE	484 N		229	2750	3720	3490	2340
MERCURY	<	0.2	0.2	0.2	0.2	< 0.2	0.5
NICKEL	27 B	<	22	< 22	38 B	71	< 22
POTASSIUM	4470 B		3640 B	7070	5800	5370	5820
SELENIUM	5.2		< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
SILVER	<	2.8	< 2.8	< 2.8	< 2.8	< 2.8	< 2.8
SODIUM	43900		93400	169000	12700	4470	40700
THALLIUM	<	3.5	< 3.5	< 3.5	< 3.5	< 3.5	< 3.5
VANADIUM	<	9.2	< 9.2	< 9.2	30 B	79	< 9.2
ZINC	92		31	13 B	73	228	32

B- Value >IDL but <CRDL

N- Matrix spike outside recovery limits      \* Duplicate RPD out of control

< or U- Value <IDL

**METAL ANALYSIS IN SAMPLES RECEIVED FROM ROUX ASSOCIATE  
Envirosystems, Inc.**

CLIENT SAMPLE ID:	REP-3	TRIP BLANK-1	TRIP BLANK-2	FIELD BLANK-1	FIELD BLANK-2	TRIP BLANK-3
LAB SAMPLE ID:	91010056	91010045	91010057	91010043	91010058	91010062
RECEIVED DATE:	01/05/91	01/04/91	01/05/91	01/04/91	01/05/91	01/08/91
ANALYSIS DATE:	01/29/91	01/29/91	01/29/91	01/29/91	01/29/91	01/29/91
MATRIX:	WATER	WATER	WATER	WATER	WATER	WATER
PCT. SOLID:						
UNIT:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L

**METALS**

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ALUMINUM	3150	< 97	< 97	< 97	100 B	119 B
ANTIMONY	< 7.6	< 7.6	< 7.6	< 7.6	< 7.6	< 7.6
ARSENIC	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
BARIUM	105	< 3.2	< 3.2	< 3.2	< 3.2	< 3.2
BERYLLIUM	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6
CADMIUM	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
CALCIUM	30400	523 B	210 B	403 B	568 B	496 B
CHROMIUM	13	< 2.2	< 2.2	< 2.7	< 2.2	< 8.2 B
COBALT	19	< 8.7	< 8.7	< 8.7	< 8.7	< 8.7
COPPER	12	< 11	< 11	< 11	< 11	< 11
IRON	4940	71	79 B	69 B	140	64 B
LEAD	53	11	9.2	41	12	41
MAGNESIUM	8250	< 71	< 71	< 71	80 B	144 B
MANGANESE	442	< 3.2	< 3.4	< 3.4	< 3.4	< 3.4
MERCURY	< 0.2	< 0.2	< 0.2	0.7	0.3	0.6
NICKEL	< 22	< 22	< 22	< 22	< 22	< 22
POTASSIUM	4180	< 34	< 34	< 34	< 34	< 250 B
SELENIUM	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
SILVER	< 2.8	< 2.8	< 2.8	< 2.8	< 2.8	< 2.5
SODIUM	44800	660 B	530 B	720 B	800 B	480 B
THALLIUM	< 3.5	< 3.5	< 3.5	< 3.5	< 3.5	< 3.5
VANADIUM	< 9.2	< 9.2	< 9.2	< 9.2	< 9.2	< 12 B
ZINC	71	13 B	8.0 B	11 B	28	6.0 B

B- Value >IDL but <CRDL

< or U- Value <IDL

METAL ANALYSIS IN SAMPLES RECEIVED FROM ROUX ASSOCIATE  
Envirosystems, Inc.

CLIENT SAMPLE ID:	FIELD BLANK-3	MW-13	MW-23	MW-1	MW-9	MW-28
LAB SAMPLE ID:	91010063	91010071	91010073	91010075	91010076	91010048
RECEIVED DATE:	01/08/91	01/08/91	01/08/91	01/08/91	01/08/91	01/08/91
ANALYSIS DATE:	01/29/91	01/29/91	01/29/91	01/29/91	01/29/91	01/29/91
MATRIX:	WATER	WATER	WATER	WATER	WATER	WATER
PCT. SOLID:						
UNIT:	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L

**METALS**

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ALUMINUM	168 B	14200	887	3320	1800	1760
ANTIMONY	< 7.6	< 7.6	< 7.6	< 7.6	< 7.6	< 7.6
ARSENIC	< 3.0	5.0 B	< 3.0	< 3.0	8.0 B	< 3.0
BARIUM	< 3.2	132 B	532	107 B	160 B	47 B
BERYLLIUM	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6
CADMIUM	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
CALCIUM	381 B	12900	10300	72200	33100	24200
CHROMIUM	7.4 B	27	9.0 B	19	21	5.2 B
COBALT	< 8.7	< 8.7	< 8.7	< 8.7	< 8.7	< 8.7
COPPER	12 B	61	31	24 B	99	< 11
IRON	81 B	24100	14000	7120	6820	1790
LEAD	8.7	83	11	35	86	40
MAGNESIUM	176 B	5780	15900	26800	9510	4260 B
MANGANESE	< 3.4	1060	2940	557	803	1090
MERCURY	0.2	0.5	0.7	< 0.2	< 0.2	0.5
NICKEL	< 22	26 B	< 22	< 22	32 B	26
POTASSIUM	140 B	3830	5460	3240 B	5840	5020
SELENIUM	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
SILVER	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.8
SODIUM	230 B	90000	209000	6460	24900	134000
THALLIUM	< 3.5	< 3.5	< 3.5	< 3.5	< 3.5	< 3.5
VANADIUM	16 B	32 B	< 9.2	22 B	18 B	< 9.2
ZINC	9.0 B	98	28	36	505	20

B- Value >IDL but <CRDL  
< or U- Value <IDL

METAL ANALYSIS IN SAMPLES RECEIVED FROM ROUX ASSOCIATE  
Envirosystems, Inc.

PERCENTAGE RECOVERY DATA

ANALYSIS DATE:

UNIT: UG/L

METALS	TRUE VALUE	AMOUNT DETECTED	PERCENTAGE RECOVERY
ALUMINUM	1000	1090	109
ANTIMONY	100	102	102
ARSENIC	80	86	108
BARIUM	800	805	101
BERYLLIUM	300	307	102
CADMIUM	50	48	96
CALCIUM	10000	9420	94
CHROMIUM	80	77	96
COBALT	300	298	99
COPPER	400	410	103
IRON	1000	998	100
LEAD	80	75	94
MAGNESIUM	10000	9570	96
MANGANESE	400	413	103
MERCURY			
NICKEL	300	311	104
POTASSIUM	10000	9670	97
SELENIUM	80	84	105
SILVER	40	41	103
SODIUM	10000	9510	95
THALLIUM	80	76	95
VANADIUM	400	402	101
ZINC	400	409	102

METAL ANALYSIS IN SAMPLES RECEIVED FROM ROUX ASSOCIATE  
Envirosystems, Inc.

PERCENTAGE RECOVERY DATA

ANALYSIS DATE:

UNIT: ug/L

METALS	TRUE VALUE	AMOUNT DETECTED	PERCENTAGE RECOVERY
ALUMINUM	1000	994	99
ANTIMONY	100	83	83
ARSENIC	80	82	103
BARIUM	800	742	93
BERYLLIUM	300	286	95
CADMIUM	50	43	86
CALCIUM	10000	8860	89
CHROMIUM	80	76	95
COBALT	300	270	90
COPPER	400	365	91
IRON	1000	979	98
LEAD	80	75	94
MAGNESIUM	10000	9090	91
MANGANESE	400	353	88
MERCURY	7.0	8.3	119
NICKEL	300	277	92
POTASSIUM	10000	9320	93
SELENIUM	80	77	96
SILVER	40	40	100
SODIUM	10000	9510	95
THALLIUM	80	81	101
VANADIUM	400	356	89
ZINC	400	368	92

METAL ANALYSIS IN SAMPLES RECEIVED FROM ROUX ASSOCIATE  
Envirosystems, Inc.

BLANK RESULTS

	BLANK	DETECTION LIMIT
ANALYSIS DATE:		
MATRIX:	WATER	WATER
UNIT:	UG/L	UG/L

METALS

ALUMINUM	< 97	97
ANTIMONY	< 7.6	7.6
ARSENIC	< 3.0	3.0
BARIUM	< 3.2	3.2
BERYLLIUM	< 1.6	1.6
CADMUM	< 5.0	5.0
CALCIUM	191 B	14
CHROMIUM	< 2.2	2.2
COBALT	< 8.7	8.7
COPPER	< 11	11
IRON	47 B	13
LEAD	< 1.5	1.5
MAGNESIUM	131 B	71
MANGANESE	< 3.4	3.4
MERCURY		
NICKEL	< 22	22
POTASSIUM	120 B	34
SELENIUM	< 3.3	3.3
SILVER	< 2.5	2.5
SODIUM	< 48	48
THALLIUM	< 3.5	3.5
VANADIUM	< 9.2	9.2
ZINC	< 4.6	4.6

METAL ANALYSIS IN SAMPLES RECEIVED FROM ROUX ASSOCIATE  
Envirosystems, Inc.

BLANK RESULTS

	BLANK	DETECTION LIMIT
ANALYSIS DATE:		
MATRIX:	WATER	WATER
UNIT:	UG/L	UG/L

METALS

ALUMINUM	< 97	97
ANTIMONY	< 7.6	7.6
ARSENIC	< 3.0	3.0
BARIUM	< 3.2	3.2
BERYLLIUM	< 1.6	1.6
CADMIUM	< 5.0	5.0
CALCIUM	129 B	14
CHROMIUM	< 2.2	2.2
COBALT	16 B	8.7
COPPER	< 11	11
IRON	< 13	13
LEAD	< 1.5	1.5
MAGNESIUM	< 71	71
MANGANESE	< 3.4	3.4
MERCURY	< 0.2	0.2
NICKEL	< 22	22
POTASSIUM	< 34	34
SELENIUM	< 3.3	3.3
SILVER	< 2.8	2.8
SODIUM	390 B	48
THALLIUM	< 3.5	3.5
VANADIUM	< 9.2	9.2
ZINC	5.0 B	4.6

**Tentatively Identified Compounds (TICs)**

**Volatile Organic Compounds and  
Semi-Volatile Organic Compounds**

**Area-1 Ground Water**

Roux VOA WATER TICS  
TENTATIVELY IDENTIFIED COMPOUNDS

LAB ID: 91010071  
CLIENT ID: MW-13

COMPOUND	SCAN	ESTIMATED CONC. (PPB)
UNKNOWN	1114	20
UNKNOWN ALKANE	1179	25
UNKNOWN ALKANE	1235	11
UNKNOWN	1279	28
UNKNOWN	1298	23
ALKYL BENZENE	1323	41
UNKNOWN	1346	31
TETRAMETHYL BENZENE	1358	24
UNKNOWN ALKANE	1371	36
ALKYL BENZENE	1409	32
METHYL DIHYDRO INDENE	1420	46
DIMETHYL DIHYDRO INDENE	1460	35
ALKYL BENZENE	1535	18
METHYL NAPHTHALENE	1584	49

Roux VOA TICs - water

TENTATIVELY IDENTIFIED COMPOUNDS

LAB ID: 91010071  
CLIENT ID: MW-13R

COMPOUND	SCAN	ESTIMATED CONC. (PPB)
UNKNOWN ALKANE	1115	26
UNKNOWN	1125	19
UNKNOWN ALKANE	1179	31
UNKNOWN HYDROCARBON	1233	24
UNKNOWN	1279	37
UNKNOWN	1298	27
ALKYL BENZENE	1324	51
UNKNOWN HYDROCARBON	1339	27
UNKNOWN	1346	27
UNKNOWN ALKANE	1372	63
ALKYL BENZENE	1409	34
METHYL DIHYDRO INDENE	1421	45
DIMETHYL DIHYDRO INDENE	1460	40
UNKNOWN	1535	20
METHYL NAPHTHALENE	1584	39

*Roux VOA WATER TIC'S*  
TENTATIVELY IDENTIFIED COMPOUNDS

LAB ID: 91010051  
CLIENT ID: MW-19

COMPOUND	SCAN	ESTIMATED CONC. (PPB)
C6 ALKANE	589	10

Roux VOA TICs - WATER

TENTATIVELY IDENTIFIED COMPOUNDS

LAB ID: 91010072  
CLIENT ID: MW-22

COMPOUND	SCAN	ESTIMATED CONC. (PPB)
TRIMETHYL BENZENE	1189	13
ALKYL BENZENE	1212	5
TRIMETHYL BENZENE	1225	64
TRIMETHYL BENZENE	1270	21
UNKNOWN	1300	23
ALKYL BENZENE	1325	16
UNKNOWN	1347	17
TETRAMETHYL BENZENE	1359	15
TETRAMETHYL BENZENE	1367	24
ALKYL BENZENE	1411	28
METHYL DIHYDRO INDENE	1421	39
UNKNOWN	1443	15
DIMETHYL DIHYDRO INDENE	1461	17
UNKNOWN	1537	17
METHYL NAPHTHALENE	1586	90

*Roux BNA water*

TENTATIVELY IDENTIFIED COMPOUNDS

LAB ID: 91010076  
CLIENT ID: MW-9

COMPOUND	SCAN	ESTIMATED CONC. (PPB)
UNKNOWN	245	10
UNKNOWN	1270	15

Roux BNA ~~WATER~~  
TENTATIVELY IDENTIFIED COMPOUNDS

LAB ID: 91010071  
CLIENT ID: MW-13

COMPOUND	SCAN	ESTIMATED CONC. (PPB)
UNKNOWN	770	72
UNKNOWN	831	53
DIMETHYL NAPHTHALENE	857	73
DIMETHYL NAPHTHALENE	870	94
UNKNOWN HYDROCARBON	905	67
TRIMETHYL NAPHTHALENE	961	44
TRIMETHYL NAPHTHALENE	981	46
TRIMETHYL NAPHTHALENE	991	35
UNKNOWN HYDROCARBON	1056	67
UNKNOWN HYDROCARBON	1100	128
UNKNOWN HYDROCARBON	1175	67

*Roux BNA-WATER*  
TENTATIVELY IDENTIFIED COMPOUNDS

LAB ID: 91010051  
CLIENT ID: MW-19

COMPOUND	SCAN	ESTIMATED CONC. (PPB)
UNKNOWN	651	8
UNKNOWN	1659	8
UNKNOWN	1794	8

*Roux BNA Water*  
TENTATIVELY IDENTIFIED COMPOUNDS

LAB ID: 91010073  
CLIENT ID: MW-23

COMPOUND	SCAN	ESTIMATED CONC. (PPB)
UNKNOWN	539	15
METHYL DIHYDRO INDENE	608	17
METHYL NAPHTHALENE	769	46
UNKNOWN	828	11
DIMETHYL NAPHTHALENE	854	18
DIMETHYL NAPHTHALENE	868	37
DIMETHYL NAPHTHALENE	885	14
TRIMETHYL NAPHTHALENE	977	10
UNKNOWN	1097	26
UNKNOWN HYDROCARBON	1172	13

Roux BNA WATER  
TENTATIVELY IDENTIFIED COMPOUNDS

LAB ID: 91010073  
CLIENT ID: MW-23R

COMPOUND	SCAN	ESTIMATED CONC. (PPB)
UNKNOWN	597	6
UNKNOWN	607	7
UNKNOWN	674	5
UNKNOWN	732	6
METHYL NAPHTHALENE	768	8
UNKNOWN	827	12
UNKNOWN	977	8
UNKNOWN	1015	5
UNKNOWN	1097	32
UNKNOWN HYDROCARBON	1172	19

**Oil Results  
Specific Gravity  
Kinematic Viscosity  
Polychlorinated Biphenyls**

**ORGANIC ANALYSIS DATA SHEET**  
Envirosystems, Inc.

CLIENT SAMPLE ID:	MW-5	MW-7	MW-16	MW-17	MW-20	REC TANK #1
LAB SAMPLE ID:	91010064	91010065	91010066	91010067	91010068	91010069
SAMPLE DATE:	01/07/91	01/07/91	01/07/91	01/07/91	01/07/91	01/07/91
RECEIVED DATE:	01/08/91	01/08/91	01/08/91	01/08/91	01/08/91	01/08/91
EXTRACTION DATE:	01/11/91	01/11/91	01/11/91	01/11/91	01/11/91	01/11/91
ANALYSIS DATE :	01/11/91	01/11/91	01/11/91	01/11/91	01/11/91	01/11/91
MATRIX:	OIL	OIL	OIL	OIL	OIL	OIL
UNITS:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG

**POLYCHLORINATED BIPHENYL COMPOUNDS**

Arochlor-1016	B0 U	B0 U	B0 U	B0 U	B0 U	B0 U
Arochlor-1221	B0 U	B0 U	B0 U	B0 U	B0 U	B0 U
Arochlor-1232	B0 U	B0 U	B0 U	B0 U	B0 U	B0 U
Arochlor-1242	B0 U	B0 U	B0 U	B0 U	B0 U	B0 U
Arochlor-1248	B0 U	B0 U	B0 U	B0 U	B0 U	B0 U
Arochlor-1254	B0 U	B0 U	B0 U	B0 U	B0 U	B0 U
Arochlor-1260	27100	234686	122763	6716	7624	10055

B - Detected in Lab Blank. U - Below Reported Quantitation Level. J - Estimated Value.

RESULTS OF SPECIFIC GRAVITY ANALYSIS

ENVIROSYSTEMS I. D.	CLIENT I. D.	SPECIFIC GRAVITY	VISCOSITY @ 100 C, cST
91010064	MW-5	0.8390	1.45
91010065	MW-7	0.8238	1.33
91010066	MW-16	0.8386	1.65
91010067	MW-17	0.8230	1.35
91010068	MW-20	0.8377	1.33

# ENVIROSYSTEMS, INC.

9200 Rumsey Road • Suite B102 • Columbia, Maryland 21045 • (301) 964-0330

March 12, 1991

MAR 14 1991

Mr. Joe Dominico  
Roux Associates, Inc.  
775 Park Avenue  
Huntington, New York 11743

Dear Joe:

Listed below is the result of a TOC analysis performed on a soil sample received on November 9, 1990. The volatile solids analysis was used for TOC determination. Please note that determination of volatile solids does not distinguish precisely between losses due to organic and inorganic matter. The total volatile solids for the sample MI-16(5-3) is found to be 1.6%.

Please do not hesitate to give me a call if you have any questions, comments or require additional information.

Sincerely,

*Mohan Khare*

Mohan Khare, Ph.D.  
President/Laboratory Director

HK/sup