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A Member of The IT Group

the IT group

November 28, 2001

Mr. Robert Allen
Delaware Department of Natural Resources
and Environmental Control
391 Lukens Drive
New Castle, DE 19720

Subject: **Diesel Fuel Oil Remedy System Installation and Progress Report; AMTRAK Former Fueling Facility (DE266), Wilmington, Delaware**

Dear Mr. Allen:

Please find enclosed two copies of the progress report for activities related to the Diesel Fuel Oil Remedy at the AMTRAK Former Fueling Facility, Wilmington, Delaware. The Diesel Fuel Oil Remedy was installed and continues operation in accordance with the Diesel Fuel Remedial Work Plan, March 17, 2000, DNREC's approval dated June 22, 2000, and subsequent communications dated September 28, 2000, June 14, 2001 and June 19, 2001 regarding system operations.

This report describes the diesel fuel oil recovery system installation and operational results for the period December 2000 through October 2001. As expected, oil recovery this past fall was enhanced due to seasonal low water table elevations. For the period of system installation through October 2001, approximately 4,900 gallons of diesel fuel oil were recovered.

Operational data, including liquid level measurements, groundwater sampling data and other diesel fuel oil recovery information are included. We anticipate the next operational reporting period to include the remainder of Q4 of CY 2001 and Q1/Q2 of CY 2002.

Should you have any questions, please feel free to call us at 610-241-5000 (general office number), extension 2014 for Frank Aceto and extension 2015 for Steve Baggett.

Sincerely,
IT Corporation

Frank Aceto, PG
Principal Hydrogeologist

Steve Baggett, PG
Senior Hydrogeologist

Cc: USEPA, Fibers & Organics Branch (7404), Jared Roberts, Esq., Jerry Homer, Esq. Robert Noonan, Charles Lin, Roy Deitchman, Ben Stonelake, Esq., Eileen Drelick, Paul Yaniga, Kathleen Cyr, Project File

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Fibers & Organics Branch (7404)
Office of Pollution Prevention & Toxics
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460-0001

Subject: **Notification of Possible Change In PCB Waste Handling Activity**
PADS Id. No. DED060058062

To: Fibers & Organics Branch (7404)
Office of Pollution Prevention & Toxics
U.S. Environmental Protection Agency

IT Corporation ("IT") is currently performing fuel oil remediation for National Railroad Passenger Corporation ("AMTRAK") and American Premier Underwriters, Inc. ("APU") at a portion of AMTRAK's Wilmington, Delaware maintenance facilities which is referred to as the Former Refueling Facility ("Facility"). This fuel oil remediation is being conducted pursuant to a Voluntary Cleanup Program ("VCP") Agreement with the Delaware Department of Natural Resources and Environmental Control ("DNREC"). As part of the fuel oil remediation, IT is recovering non-aqueous phase liquid ("NAPL") fuel oil from the water table under a portion of the Facility pursuant to a Cleanup Plan approved by DNREC.

In accordance with the approved Cleanup Plan, IT installed several sumps, collection drains, a NAPL recovery tank and associated equipment to collect the NAPL fuel oil. Although PCBs were detected previously in samples taken at the Facility, NAPL fuel oil collected in the recovery tank before October 2001 did not contain detectable levels of PCBs. However, a sample of NAPL fuel oil collected in the recovery tank in October 2001 contained 25.7 parts per million ("ppm") of PCBs. Thereafter, IT collected samples of NAPL fuel oil from each drain that leads to the recovery tank to determine if the PCBs were being collected from a localized portion of the system. Analytical results obtained on October 30, 2001 reported that three of fourteen samples of NAPL fuel oil from the drains contained PCBs above 50 ppm with a maximum concentration of 69 ppm. All other samples taken were less than 50 ppm with a range from 2.8 ppm to 34.5 ppm. We are enclosing a copy of the Diesel Fuel Oil Remedy System Installation and Progress Report, which is being submitted to DNREC at this time. This Progress Report includes the recent data for the collection drains and recovery tank.

As a precautionary measure, we are submitting this letter and the enclosed form (Notification of PCB Activity) to notify EPA pursuant to 40 CFR §761.205(f) within 30 days of receipt of the above-referenced data of activity that might be considered a change in PCB waste handling activity (i.e. the NAPL fuel oil from two collection drains containing PCBs above 50 ppm is being temporarily stored with the other NAPL fuel oil in the recovery tank). The NAPL fuel oil collected in the recovery tank after September 2001 is being disposed at a TSCA facility in accordance with the Cleanup Plan approved by DNREC.

As stated above, DNREC has been notified of the above-referenced data and the progress report is being submitted to DNREC under the VCP Agreement. AMTRAK and APU currently plan to address PCBs at the Facility under the VCP agreement with DNREC but they may elect to conduct future remediation of PCBs at the Facility in accordance with EPA's rules for self-implementing on-site cleanup and disposal of PCB remediation waste, which appear at 40 CFR §761.61. If so, IT will submit to EPA the information required by this regulation.

Please call me at (610) 241-2014 if you have any questions.

Very truly yours,
IT Corporation

Frank Aceto, PG
Principal Hydrogeologist
Project Director

cc: Jared Roberts, Esq.
Jeremy W. Homer, Esq.
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Kathleen Cyr
Charles Lin
John J. Wood
Robert Allen, DNREC, (Via Overnight Courier)

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USEPA	United States **Environmental Protection Agency** Washington, DC 20460	Form Approved OMB No. 2070-0112

Notification of PCB Activity

Return To:	For Official Use Only
Fibers & Organics Branch (7404) Office of Pollution Prevention & Toxics U.S. Environmental Protection Agency 1200 Pennsylvania Ave., N.W. Washington, DC 20460-0001	

1. Name of Facility	Name of Owner Facility	2. EPA Identification Number (if already assigned under RCRA)
Amtrak Wilmington Maintenance Facility	National Railroad Passenger Corporation	DED060058062

3. Facility Mailing Address (Street or PO Box, City, State, & Zip Code)	4. Location of Facility (No. Street, City, State, & Zip Code)
Amtrak Wilmington Maintenance Facility 4001 Vandever Avenue Wilmington, DE 19802	Amtrak Wilmington Maintenance Facility 4001 Vandever Avenue Wilmington, DE 19802

5. Installation Contact (Name and Title)	6. Type of PCB Activity (Mark 'X' in appropriate box. See Instructions.)
John Wood Acting General Manager Amtrak Wilmington Maintenance Facility	[X] A. Generator w/onsite storage facility [ ] B. Storer (Commercial) [ ] C. Transporter [ ] D. R&D/ Treatability [ ] E. Approved Disposer [ ] F. Scrap Metal Recovery Oven/Smelter, High Efficiency Boilers
Telephone Number (Area Code and Number) 302-425-6203	

7. Certification

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as a company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

Signature	Name and Official Title (Type of Print)	Date Signed
Roy Deitchman	Roy Deitchman Assistant Vice President Environmental	28 Nov 2001

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The annual public burden for this collection of information is estimated to average 1.5 hours per response. This estimate includes time for reading instructions, searching existing data sources, gathering and maintaining the needed data, and completing and reviewing collection of information, including suggestions for reducing the burden to: Director, Collection Strategies Division, U.S. Environmental Protection Agency (mail code 2822), 1200 Pennsylvania Ave., N.W., Washington, D.C. 20460-0001. Include the OMB number identified above in any correspondence. Do not send the completed form to this address. The actual information or form should be submitted in accordance with the instructions accompanying the form, or as specified in the corresponding regulations.

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DIESEL FUEL OIL REMEDY SYSTEM INSTALLATION AND PROGRESS REPORT

AMTRAK FORMER FUELING FACILITY
VANDEVER AVENUE
WILMINGTON, DELAWARE

DE-266

November, 2001

Prepared for:

National Railroad Passenger Corporation (AMTRAK)
and
American Premier Underwriters, Inc.

Prepared by:

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1.0 INTRODUCTION

This report has been prepared on behalf of National Railroad Passenger Corporation (AMTRAK) and American Premier Underwriters, Inc. (APU) to document the installation of the diesel fuel remedy installed at the Former Fueling Facility portion of the AMTRAK Wilmington Shops. The AMTRAK Wilmington Shops are located along Vandever Avenue in Wilmington, Delaware (**Figure 1**). This report also summarizes the operation and monitoring of the diesel fuel remedy from installation through October 2001.

A remedial investigation (RI) has previously been conducted under the Delaware Voluntary Cleanup Program (VCP) enacted under 7 Del. C. Chapter 91: Delaware Hazardous Substance Cleanup Act (HSCA). The RI was documented in *Draft Remedial Investigation Report - Amtrak Former Fueling Facility, Vandever Avenue, Wilmington, Delaware* (Draft RI Report) prepared by the IT Corporation and dated May 28, 1999. Data collected during the RI, other previous site investigations and interim remedial measures (the scope was provided to DNREC in a September 9, 1998 correspondence) were used to develop an appropriate remedial program for the removal of liquid-phase diesel fuel from beneath the Former Fueling Facility. The diesel fuel remedy was described in *Diesel Fuel Remedial Work Plan - Amtrak Former Fueling Facility, Vandever Avenue, Wilmington, Delaware* (Diesel Fuel Remedial Work Plan) prepared by the IT Corporation and dated March 2000. Delaware Department of Natural Resources (DNREC) approved the Diesel Fuel Remedial Work Plan as a component of the overall site remedy in a letter to IT Corporation dated June 22, 2000. Construction of the diesel fuel remedy initiated in September 2000 and the recovery system was operational in December 2000.

1.1 Purpose

This report provides a summary of the implementation of the activities described in the Diesel Fuel Remedial Work Plan as well as site observations during the installation of the diesel fuel remedy. This report also summarizes the system operation and monitoring program (described in the Diesel Fuel Remedial Work Plan) through October 2001. Components of the diesel fuel remedy include:

- The excavation of approximately 1200 linear feet of subsurface materials at the fueling facility and replacing with porous backfill (pea gravel) to construct four subsurface recovery drains which intercept the product/groundwater interface; hereafter referred to as recovery trenches for the oil recovery system. The recovery trenches are approximately 9 feet deep and function to collect product for active product skimming.

- The installation of 11 oil collection and monitoring sumps installed in the vicinity of the Eastern and Western Drainage Ditches.

- Test trenching in the vicinity of the ditches in order to identify potential oil migration pathways,

such as abandoned piping, and the removal/closure of identified potential oil migration pathways.

- Bioremediation of stained surface soils in three areas in the vicinity of the Eastern Drainage Ditch.
- Operation and monitoring of the diesel fuel remedy.

1.2 Site Description

The AMTRAK Wilmington Shops consist of the Maintenance Facility and Former Fueling Facility. The Former Fueling Facility encompasses approximately 20 acres (refer to **Figure 2**). The Former Fueling Facility is located south of the former round house, bounded to the east by the unnamed surface water drainage feature (to be referred to as the Eastern Drainage Ditch), and to the west by a drainage ditch (to be referred to as the Western Drainage Ditch), which separates the AMTRAK Wilmington Shops from the former Atlas Sanitation property. Both of the drainage ditches flow to the south and empty into a confluence area. The Former Fueling Facility is bounded to the south by the confluence of the two surface water features and 12th Street. The Former Fueling Facility is situated in an industrial area of southeast Wilmington. The site is zoned General Industrial (M-2) by the City of Wilmington. Located immediately east of the Eastern Drainage Ditch is an open area and then an access road. On the east side of the access road is the former CONRAIL Edgemoor Yards, now operated by Norfolk Southern (NS), a tank car cleaning company, an asphalt plant, and a cement plant. The Western Drainage Ditch separates the Former Fueling Facility from a tract of land formerly operated by Atlas Sanitation. The area across 12th Street to the south of the study area is also industrialized and is referred to as the Brandywine Industrial Complex.

The Former Fueling Facility was used primarily to service locomotives with coal and later diesel fuel, lubricating oil and sand. Fueling operations ceased in this area in November 1995 and were transferred to a newly constructed facility north of the former roundhouse. Other operations historically performed in the Former Fueling Facility included the refilling of caboose cabin heaters with kerosene and supplying steam engines with water, sand and coal. The area is currently used to store passenger railcars, locomotives, maintenance of way equipment, and other equipment, and will continue to be used for that purposed in the future.

1.3 Interim Remedial Measures

Based on field observations and data collected during the remedial investigation, interim remedial measures (IRM) were implemented in September 1998. The scope of the interim remedial measures was provided to DNREC in *Interim Remedial Measures Plan* (IRM Plan) prepared by IT Corporation dated September 9, 1998. Interim remedial measures performed included:

- Gauging and manual recovery of product from site monitoring wells and standpipes.

- Installation of two 30-inch diameter product recovery sumps; automated product skimming equipment was installed in the sump determined to yield the most product (Sump #1).
- Installation of in-well collection devices in three select monitoring wells.
- Removal of oil and surface debris (oil-soaked leaves, etc.) from the Western Drainage Ditch.
- Replacement of existing sorbent booms and placement and maintenance of additional booms in the site drainage features.
- Field reconnaissance and exploratory excavations for preferred pathways of product seepage to either Eastern or Western Drainage Ditches, such as piping runs.

IRM activities were documented in the Draft RI Report and in the Diesel Fuel Remedial Work Plan.

1.4 Report Organization

This report has been prepared in order to document the installation of the diesel fuel remedy and to provide a summary of the operation and monitoring of the system. The remaining sections of this report are described as follows:

- Section 2.0 - provides a description of the installation of the trench recovery system and oil collection and monitoring sumps. It also provides a summary of test trenching observations.
- Section 3.0 - provides a discussion of the operation and monitoring program. It includes oil recovery volumes, the laboratory analyses of oil samples collected from recovery wells and standpipes in the oil recovery trenches, liquid level data and the results of the April 19, 2001 and August 2, 2001 groundwater sampling events.
- Section 4.0 - presents a description of the status of the bioremediation of the stained surface soils in the vicinity of the Eastern Drainage Ditch.
- Section 5.0 - describes the focussed characterization of materials in the Western Drainage Ditch (upgradient of Dam C).
- Section 6.0 - provides a summary of the activities planned for the next reporting period.

2.0 OIL RECOVERY SYSTEM INSTALLATION

The oil recovery system described in the Diesel Fuel Remedial Work Plan was installed during the period September to December 2000. The system was installed to address liquid phase diesel-fuel occurrence in the Former Fueling Facility. Slight modifications were made to the proposed system presented in the Diesel Fuel Remedial Work Plan as a result of conditions encountered during installation. Construction of the oil recovery system began on September 5, 2000. The system was installed and equipment shakedown completed by December 1, 2000. The operation and maintenance of the system began in December 2000 (refer to Section 3.0). The layout of the oil recovery system is presented on **Figure 3**. The installation of the oil recovery system included the following:

- Installation of approximately 1200 feet of recovery trenches approximately 9 feet deep. Four trenches were installed for active product skimming.

- A total five 30-inch diameter recovery wells (RW-1, 2, 3, 4 and 5) and nine 8-inch diameter standpipes (SP-1 through 9) were installed within the active product skimming trenches.

- All subsurface piping encountered in the recovery trenches were capped and/or sealed on both sides of the trench.

- All recovery wells, standpipe and trench locations were surveyed and a new base map prepared **(Figure 3)**.

- A total of 11 oil collection and monitoring sumps were installed in the vicinity of the Eastern and Western Drainage Ditches. The sumps consist of 12-inch diameter PVC well screen placed to a depths from 5 to 7 feet, backfilled with pea gravel and covered with site fill material. As indicated on **Figure 3**, the lateral extent of the pea gravel at each location varies and is dependent on the extent oil observed in the subsurface during excavation (the lateral extent of each sump will be described in Section 2.3). The rationale for placing each sump is also described.

- Six sumps were installed in the vicinity of the East Ditch (ED-1 through ED-6). As indicated on **Figure 3**, ED-3 and ED-4 were installed in a "passive" recovery trench approximately 100 feet in length.

- Five sumps were installed in the vicinity of the West Ditch (WD-A, WD-B, WD-D, WD-E and WD-F).

- The former inspection pit was filled with pea gravel and backfilled. Holes were drilled into the concrete of the pit before backfilling to allow oil collection. Two 8-inch diameter recovery sumps

were installed to a depth of approximately 2 feet below the bottom of the inspection pit. The pea gravel was covered with geofrabric and crush-and-run was placed above the geofrabric.

A summary of the system installation and observations is presented below. A detailed description of the design of the recovery system was provided in the Diesel Fuel Remedial Work Plan.

2.1 Installation Product Recovery Trenches in the Former Fueling Area Vicinity

Four recovery trenches were installed within the vicinity of the former fueling area for active product skimming equipment. Trench locations and construction specifications were based on data collected during the remedial investigations and operation of the IRM. Trenches were constructed by excavating the existing material and replacing it with porous backfill (pea gravel) to promote product migration into and along the trenches. As will be described, electric oil skimming pumps were installed in the recovery wells. Piping was installed in the trenches in order to convey product from the oil skimming pumps to a recovery tank situated in a centralized location. The following is a discussion of the trench layout, trench construction, recovery equipment and provisions for future modification of the systems.

2.1.1 Recovery Trench Layout

The layout of the recovery trenching was based on site logistics, observed product distribution and recoverability, and site hydrogeology. Trenches were located in a general north-south direction in order to collect product migrating from the general former fueling area towards the drainage features. This allowed trenches to be placed parallel to active track and cross track only where necessary. The layout of the trench and oil recovery system is depicted in **Figure 3**. The rationale for determining trench location was described in the Diesel Fuel Remedial Work Plan.

2.1.2 Recovery Trench Construction

Recovery trenches were constructed by excavating the existing subsurface material and replacing it with porous backfill. The trenches were excavated to a depth of approximately nine feet below grade and are approximately four feet wide. The depth of the trenches ensure that the seasonal low groundwater/product interface will remain within the extent of the trench. The backfill material was washed gravel with a significantly higher permeability than the surrounding materials. The gravel was placed from the bottom of the trench to a level below ground surface. Materials excavated during construction of the recovery trenches that were visually hydrocarbon-impacted or that were removed from below the water table were stockpiled on site in a containment cell located in the northeast portion of the Former Fueling Facility. Soils that were excavated above the water table that were not visibly hydrocarbon-impacted were used to backfill the surface of the trench above the placed gravel. Sedimentation and erosion control measures were implemented prior to the initiation of trenching activities and maintained during trench construction.

Five recovery wells (designated RW-1 through RW-5) were placed at strategic locations within the recovery trenches to permit active product recovery. They are constructed using 30-inch diameter galvanized steel with 40-slot well screen. These wells extend to the bottom of the recovery trench (9-feet deep).

Nine standpipes (designated SP-1 through SP-9) were installed along the length of the trench to monitor product and groundwater levels. They were located near the ends of the trenches and at approximately 100-foot intervals along the length of the trench. The standpipes were constructed of 8-inch diameter PVC. Each trench standpipe was completed in a flush-mount manhole.

During the construction of the recovery system, it became necessary to remove water from the trenches in order to allow excavation to continue to the desired depths. Liquids (water and oil where present) were pumped to a 21,000 gallon frac tank. The frac tank was used to temporarily store the recovered liquids and allowed the oil and water to separate. Water was drained from the bottom of the tank, routed through granular activated carbon (GAC) and discharged to the ground surface. Confirmation of DNREC authorization for the treatment of the water was provided in correspondence to DNREC dated September 14, 2000. After treatment of the water, the oil was then removed from the tank as will be described.

2.1.3 Product Recovery System

Following construction of the recovery trenches, several depth to liquids measurements were recorded from each recovery well. These measurements were recorded to verify a suitable oil thickness in each well was present for active oil skimming. Based on the depth to liquid measurements, active product skimming pumps were initially installed in RW-1 and RW-3. As will be described in Section 3.0, product recovery pumps were subsequently placed in RW-2, RW-4 and RW-5.

Large Diameter Filter Scavenger® (LDFS) electric product skimming pumps were installed in the recovery wells. The unit consists of a floating intake buoy within the sump and a pump/control module located on the surface. The LDFS buoy is 18.5-inches in diameter and floats on the water at the product and water interface. The filter scavenger buoy is capable of moving and operating throughout the depth of the well and can recover product to 1/8-inches thickness. Product enters the buoy by passing through a 100-mesh filter cartridge that inhibits water entry. The product is stored in a reservoir within the buoy. When the product fills the reservoir, a high level switch is actuated to energize the pump and withdraw the product from the reservoir. When the reservoir is emptied, the float de-actuates and shuts off the pump. A second float to detect water is also contained within the product reservoir. The float is manufactured to float in water but sink in product. If water enters the reservoir and begins to build up, the water float will rise and place the unit in water alarm. The unit does not pump after a water alarm has been received until the condition is manually cleared. A probe cable transmits the float status from the filter scavenger buoy to the pump/control module. Product

from the filter scavenger buoy passes through a flexible 2-inch diameter teflon corrugated hose which allows the buoy to rise and fall with the product and water interface, a check valve which prevents the product line from draining back into the well, then through a 3/4-inch inner diameter urethane hose which is connected to the pump/control module. Floats are placed on the urethane hose and probe cable to prevent them from dropping below the water level and becoming entangled.

Recovered product is conveyed from the pump/control modules near each recovery well to the 1,000-gallon double walled above ground tank (AST). The tank contains a safe fill level probe that will actuate when the tank is approximately 75% filled. A high level alarm and a high-high level alarm (a backup alarm for added protection from overfill) will actuate at 90% and 95% of the tank capacity, respectively, and deactivate the recovery pumps. An interstitial tank monitor was also installed to provide notification if a leak in the tank occurs and to deactivate the pumps in the event of a leak. The tank is situated on a concrete pad and surrounded by bollards. A control panel was installed near the product storage tank to operate the system and signal any alarm conditions.

2.1.4 Trench and Piping

Three sets of pipes were installed within the trenches: product conveyance, power, and spare conduits for future recovery applications. The exterior containment sleeves for the different services are constructed of polyethylene (PE) solid rolled pipe. The product conveyance line consists of a steel-reinforced Nylon core with a Urethane cover. The steel reinforcing was grounded to the end-fittings to reduce static electricity build-up. The pipeline end fittings are brass quick-connect hydraulic design with double shut-off to prevent discharges.

Piping from each recovery well was installed within the recovery trench itself or in utility-only trenches (approximately 3 feet deep). The electric service piping is routed to a control panel located immediately south of the 1,000 gallon AST. The product conveyance lines are routed to the north side of the AST and connected to inlets on the top of the AST. The spare conduits are routed to the north end of the AST pad and are stubbed for future use.

As will be described in Section 3.0, the spare conduit was used to route water removed from the trenches trough granular activated carbon (GAC) located in the vicinity of the 1,000 gallon AST.

2.2 Test Trenching/Pipe Removal

As detailed in the Diesel Fuel Remedial Work Plan, test trenching was performed adjacent to the Eastern and Western Drainage Ditches in order identify preferential oil migration pathways. The observation of subsurface piping from the oil recovery system installation, test trenching performed in conjunction with system installation, and the previously conducted test trenching are presented on **Figure 4**. All piping removed from the subsurface was rinsed and placed and covered with plastic

sheeting (refer to Section 2.6 for materials management). The piping encountered in the trenches was capped and/or sealed.

The most significant subsurface features observed during the installation of the oil recovery system are described below. Oil encountered in the excavation was pumped into the frac tanks.

An 8-inch diameter vitrified clay pipe was encountered on September 12, 2000 in the RW-3 recovery trench at a location approximately 4 feet south of MW-7. The pipe was encountered approximately 6.5 feet below ground surface (bgs). Initially, oil ran out of the pipe and into the trench. After oil drained out of the pipe, water flowed out of the pipe for a short period of time. In order to continue with the oil recovery system installation, the trench was completed as designed and the piping to the East Ditch was to be removed at a later time. On October 20, 2000, the portion of this pipe between the RW-3 trench and the Eastern Drainage Ditch was removed and/or crushed in-place, except under track. From approximately 20 feet east of the easternmost track to the end of the pipe, the pipe was full of oil. Liquids in the excavation were pumped to the frac tank at the site. At the end of the pipe, near the Eastern Drainage Ditch, there was a segment of a 12-inch diameter steel reinforced concrete. The end of the concrete pipe was clogged with debris.

A 14-inch steel pipe was encountered approximately 7 feet bgs, first in the RW-1/RW-4 and then in the RW-2 trench and in the RW-5 trench. As indicated on **Figure 4**, this pipe ran perpendicular to the recovery trenches. Oil was observed in the pipe at the three locations where it was encountered. In the RW-1/RW-4 and RW-2 trenches the pipe was cut, allowed to drain and then sealed. A 90° fitting was found in the RW-5 trench where the orientation of the pipe changed from an east-west to a north-south direction. After the 90° fitting, the pipe was oriented parallel and within the RW-5 recovery trench. The end of the pipe had a valve. The pipe was cut where it entered the trench from the east, an inflatable seal and concrete grout was placed to seal the pipe.

The 14-inch pipe terminated near where a subsurface wooden "box" type structure was encountered in the RW-5 trench excavation. The wooden material was removed revealing a brick wall along the track to the west. This brick wall was then removed. After the brick wall was removed, two wooden "box" conduits were observed on the western wall of the excavation. Both wooden conduits were approximately 2 feet by 2 feet, and occurred at depths of 3.5 feet bgs and 5.5 feet bgs. The shallower wooden conduit was clogged with dirt and no liquids were observed in it. The deeper conduit contained oil and water and was determined to be open by inserting a steel tape at least 5 feet into the conduit. The 5-foot section of the conduit was filled with concrete in order to complete the excavation. While excavating the piping in the trench, the wooden structure, and the brick, it was necessary to pump oil and water entering the excavation in order to allow work to continue. These liquids were pumped to the frac tank.

After the completion of the RW-5 trench, additional test trenching was performed to locate the wooden conduits to the west of the RW-5 trench (refer to **Figure 4**). The deeper wooden conduit was located, although the shallower conduit appeared to terminate beneath track immediately west of the RW-5 trench. The deeper conduit was excavated immediately west of this track and the section beneath the track to the RW-5 trench was filled with concrete. The wooden conduit was then traced to the Western Drainage Ditch. The end of the wooden conduit was encountered approximately 2 feet below the current base of the Western Drainage Ditch. Immediately adjacent to the Western Drainage Ditch, oily gravel was encountered.

The entire section of the wooden conduit between the Western Drainage Ditch and the westernmost track was removed. Oil was observed in the conduit at each location where it was encountered. As described below, a sump was installed in the vicinity where the wooden conduit entered the Western Drainage Ditch (WD-E).

On June 7, 2001 additional test trenching was performed in an attempt to determine the source of the oil detected at sump ED-1. As described below, sump ED-1 was installed at a location where oil was observed within construction during previous test trenching activities. A test trench was installed between sump ED-1 and the track to the west (refer to **Figure 4**). Oily construction debris was also observed in this test trench. However, neither oil or construction debris was observed in additional test trenches installed immediately west of the track. This suggests that oil in the vicinity of sump ED-1 is an isolated occurrence.

A test trench was also installed immediately adjacent to standpipe ED-A in order to assess the cause of the sheen on the Eastern Drainage Ditch in the vicinity of this standpipe. Test trenching at this location revealed a sheen on water emanating from coarse fill material at depths of 3 to 3.5 feet bgs. This material was situated above dense clay.

Other subsurface piping encountered is displayed on **Figure 4**.

2.3 Oil Collection and Monitoring Sump Installation

Recovery sumps were installed to observe and recover product at remote locations (areas without electric service). These sumps were installed at locations where significant oil accumulations were observed during test trenching performed during or prior to the installation of the oil remedy.

Each sump was constructed using 12-inch diameter slotted PVC pipe and pea gravel backfill. The depth of the sumps range from 5 to 7 feet below ground surface. Sump locations are depicted on **Figure 3**.

The following is a summary of the rationale for sump installation.

Eastern Drainage Ditch Vicinity

- Sump ED-1 was installed where oil was observed within construction debris during the previous test trenching. The sump excavation is approximately 20 feet long and 4 feet wide. The placement and orientation of the construction debris appears to represent a preferential pathway for oil movement which has resulted in the stained surface soils southeast of sump ED-1.

- Sump ED-2 was installed in the vicinity of MW-10A. Product has continually been bailed from MW-10A during the ongoing O&M program (approximately 22 gallons of oil was hand bailed from MW-10A during 2000). The sump excavation is approximately 16 feet long and 4 feet wide.

- Sumps ED-3 and ED-4 were installed in a trench approximately 100 feet long and 4 feet wide. The sumps were installed where several pipes had been removed and oil seepage was observed. The pipes removed from this area appear to have contributed to the stained soils to the east of these sumps.

- Sump ED-5 was installed where oily water was observed associated with debris and rail ties. Preferential movement through this material also appears to have resulted in stained soils to the east of sump ED-5. The sump excavation is approximately 16 feet long and 4 feet wide.

- Sump ED-6 was installed where oil was observed during previous test trenching. The sump excavation is approximately 16 feet long and 4 feet wide.

Western Drainage Ditch Vicinity

- Sumps WD-A, WD-B and WD-D were installed at the location of previously existing standpipes. Sump WD-A and WD-B were placed at locations where oil seepage was observed. Sump WD-D was installed where drainage piping had been previously removed. These sump excavations are approximately 16 feet in diameter.

- Sump WD-E was installed near where the wooden conduit from the RW-5 area drained to the Western Drainage Ditch. When installing sump WD-E, limestone gravel (not native materials) was encountered near the location where the conduit entered the Western Drainage Ditch. This gravel contained oil and oily water. The sump excavation is approximately 16 feet in diameter.

- Sump WD-F was installed on February 1, 2001 where a seep to the Western Drainage Ditch was observed. When installing the sump, the material removed was mostly gravel. The gravel was oily and appeared to have been placed during the installation of catanary pole in the vicinity of sump WD-F. The sump excavation is approximately 7 feet wide and 10 feet long.

2.4 Compressed Gas-Powered Product Skimming System Installation

In response to the measurement of approximately 0.3 to 0.35 feet of oil on the water surface at sump WD-B, a product skimming system was installed during April 2001. Since electrical service was not available in the vicinity of sump WD-B, a compressed gas powered product skimming system was installed.

The compressed gas powered product skimming system utilizes a pump intake that floats on the water surface. The system is operated by a battery-powered timer which activates the pump. The timer is set to activate the pump at a selected number of intervals and duration of each interval (determined based on the oil recovery rate). When the pump is activated, compressed nitrogen gas is used to evacuate oil collecting in the pump intake. The recovered oil is routed to a recovery drum located near the recovery sump. The recovery drum is equipped with an overfill shutoff probe that will deactivate the system when the tank is full. Operation of this system is described in Section 3.1. As will be described, the compressed gas powered system was moved to other necessary locations based on liquid level measurements and oil recovery rates.

2.5 Laboratory Analyses of Oil Samples During System Installation

During the installation of the oil recovery system, six oil samples were collected for the analyses of PCBs. Laboratory analytical reports are included in **Appendix A**.

Two oil samples were collected on September 27, 2000 from the first frac tank used for the analyses of PCBs (the samples were designated storage tank oil samples #1 and #2). The samples were collected after encountering the pipe in the vicinity of MW-7 and after the 14-inch steel pipe was encountered in the RW-1 trench (oil was observed from both of these pipes and oil was pumped to the frac tank). No PCBs were measured in either sample at the detection limit (2.5 mg/kg). As a result, oil in this tank was pumped to the second frac tank and the first frac tank was decontaminated and demobilized.

An oil sample was collected from a 4-inch fuel oil pipe encountered to the south of RW-2. No PCBs were detected at the reporting limit (2.5 mg/kg).

An oil sample was collected from the excavation near RW-5 after the wooden structure was encountered. This oil sample reported 4.1 mg/kg aroclor 1254 and 12.4 mg/kg aroclor 1260.

Oil samples were collected from the second frac tank and a 350-gallon poly oil recovery tank (this tank was used to recover oil during the equipment shakedown period) on November 16, 2000. The sample from the second frac tank reported 4 mg/kg aroclor 1260. The sample from the poly tank reported 3

mg/kg aroclor 1260. As described below, these results were used to guide the management of recovered oil.

2.6 Materials Management

The following is a discussion of the management of materials generated during construction of the oil recovery system.

2.6.1 Excavated Soils

Approximately 1,300 yd^3 of soil were excavated during construction of the oil recovery system. The excavated soil was placed in the containment area located in the northwestern portion of the Former Fueling Facility. The containment area was constructed using Jersey barriers as berms and plastic sheeting beneath and on top of the soils. Soil samples were collected from the stockpile during two sampling events performed in November 2000 and October 2001.

Stockpiled soils were characterized in a manner to allow flexibility in assessing soil management options. Lancaster Laboratories performed the analyses, which is a DNREC-approved lab. During the November 17 and 19, 2000 sampling event, one composite sample per approximately 100 yd^3 of soils was collected and analyzed for PCBs (using EPA Method 8082) and Petroleum Hydrocarbons (using the carbon-range groupings for aliphatic and aromatic hydrocarbons presented in DNREC's Uniform Risk-Based Remediation Standards). These samples were designated Composite Samples 1 through 11. Each of these samples was a composite of approximately 4 hand auger borings into the soil pile. Two additional composite samples (designated Composite Samples 12 and 13) were prepared from the first 11 composite samples for PCBs, Petroleum Hydrocarbons, full Toxicity Characteristics Leaching Procedure (TCLP) analysis, including volatile organic compounds, semivolatile organic compounds, pesticides and metals. Analyses were also performed for ignitibility, corrosivity, reactivity and pH analyses.

The results of the November 17 and 19, 2000 soil sampling are summarized in **Appendix B.1**. **Appendix B.1** also includes the laboratory analytical data reports. As indicated, PCB concentrations for the sum of Aroclors detected in Composite Samples 1 through 11 ranged from 0.075 mg/kg to 0.52 mg/kg.

For Composite Samples 1 through 11, C9 to C18 aliphatic hydrocarbon (EPH Method) concentrations ranged from 2,500 mg/kg to 11,000 mg/kg. C11 to C22 aromatic hydrocarbon (EPH Method) concentrations ranged from 1800 mg/kg to 8,500 mg/kg. C9 to C10 aromatic hydrocarbon (VPH Method) concentrations ranged from 29 mg/kg to 865 mg/kg.

The TCLP results for Composites 12 and 13 were below TCLP regulatory levels. The results of RCRA characteristic analyses indicated soils were also not corrosive, not ignitable and the sulfide and

cyanide reactivity were below detection levels. Total PCB concentrations for the sum of Aroclors detected were 0.290 mg/kg in Composite 12 and 0.130 mg/kg in Composite 13. The total TPH (Method 418.1) in Composites 12 and 13 were 19,200 mg/kg and 16,400 mg/kg, respectively. The pH levels in Composites 12 and 13 were 5.26 and 5.99, respectively.

Soil samples were also collected from the stockpile on October 16, 2001. During this sampling event, 48 discrete samples were collected for the analyses of PCBs (using EPA Method 8082). Discrete soil samples were collected using a hand auger targeting the depth of highest petroleum hydrocarbon occurrence based on field observations.

The results of the October 16, 2001 soil sampling event are summarized in **Appendix B.2**. **Appendix B.2** also includes the laboratory analytical data reports. As indicated, 47 of the 48 samples reported PCB concentrations less than 1.0 mg/kg. Only one sample (SP-35) reported a PCB concentration greater than 1.0 mg/kg (3.1 mg/kg).

Based on the results of the November 17 and 19, 2000 and October 16, 2001 sampling events, the soils will be bioremediated at the site to lower the petroleum hydrocarbon content of the soils to DNREC's Uniform Risk-Based Remediation Standards. The DNREC Uniform Risk-Based Remediation Standard for PCB aroclor 1260 is 3.0 mg/kg (all PCBs detected in the stockpile soil samples were Aroclor 1260 with exception for one location, SP-16 which reported 0.210 mg/kg Aroclor 1248). Of a total of 61 samples collected during the sampling events, only one sample (3.1 mg/kg in discrete soil sample SP-35) reported a PCB concentration greater than 1 mg/kg.

The bioremediation of the soil stockpile will be initiated in Spring 2002. Soils representative of location SP-35 will be separated for management independent of the remaining soils. All other soils representative of locations SP-1 to SP-34 and SP-36 to SP-48 will be bioremediated in the area where soils are currently stored. Nutrients (the same as those applied during the stained surface soil remediation – refer to Section 4.0) will be applied to the soils. The soils will be aerated by reworking the soil pile on a monthly basis with a backhoe or excavator. After at least four reworking events, approximately 13 composite soil samples will be collected from the soil pile for analyses of petroleum hydrocarbons (EPH-VPH methodology). Providing the petroleum hydrocarbon results are below DNREC's Uniform Risk-Based Remediation Standards, the present intention is to spread the soils on site away from surface water drainage ditches. If a sample result exceeds the DNREC standards, bioremediation of the soils represented by that composite sample will continue until subsequent sample results are below the standards or off-site disposal will be considered.

2.6.2 Recovered Oil Management and Frac Tank Clean-out

As described, water and oil recovered during trench dewatering for construction was routed into frac tanks. Two frac tanks were needed to provide the necessary storage capacity during the initial phase of trench construction. As mentioned previously, oil samples collected from the first frac tank used at

the site and reported nondetectable PCB concentrations. Water in the tank was routed through GAC and discharged to the ground surface, the remaining liquids were pumped to the second frac tank, and the tank was cleaned and demobilized from the site in early October, 2000.

As also previously mentioned, an oil sample collected from the second frac tank on November 16, 2000 reported 4 mg/kg PCB. After water in this tank was routed through GAC, the remaining liquids were removed from the tank. On December 14, 2001 the tank was then cleaned and rinsed according to TSCA regulations by Clean Harbors, Inc. A wipe sample was then collected from the tank and reported no PCBs (at reporting limits of 0.25 ug/wipe or 0.30 ug/wipe depending on the PCB aroclor). This data is also included in **Appendix A.**

Liquids (recovered oil, residual water and diesel fuel used to rinse the tank) recovered from the second frac tank were transported to Onyx-CWM's Port Arthur, Texas facility (a TSCA authorized facility) for thermal destruction. Approximately 574 gallons of oil pumped directly into the frac tanks during trench dewatering.

The oil recovered using the Filter Scavenger from RW-1 and RW-3 during systems shakedown and testing was first pumped into the 350-gallon poly tank (used during the operations of the IRM system). When the poly tank was full, the recovered oil was routed to the 1,000-gallon AST used for the oil recovery system (refer to Section 3.0). Oil pumped into the poly tank was also removed on December 14, 2000 and transported to Port Arthur facility for thermal destruction. The poly tank was rinsed after the oil was removed (the rinse water was managed with the recovered oil) and the tank will be used at the site for other purposes.

Two 55-gallon drums containing sediment from the frac tank clean out were generated and disposed as TSCA waste under the direction of Amtrak.

2.6.3 Granular Activated Carbon

A total of three 200-pound GAC units were used to treat water from the frac tanks. A composite sample was collected from the spent carbon in order to evaluate GAC disposal options. The sample was analyzed for TCLP volatile organic compounds and PCBs. All TCLP volatile organic compound and PCB (0.100 mg/kg reporting limit) results were below detection limits. As a result, the GAC units were regenerated (nonhazardous classification) by the GAC vendor.

2.6.4 Excavated Pipe

Several types of pipe were removed during the test trenching and oil recovery system construction. All piping remaining at the site has been rinsed and is covered with plastic sheeting. The management of this piping is described below.

- An approximately 80-foot long section of transite piping was removed from the area between the

former oil water separator and the East Ditch. This pipe has been properly disposed off-site.

- Several sections of metal piping were removed and rinsed at the site (all decontamination water was contained and routed to the frac tank). This piping will be managed as scrap metal.

- Vitrified clay piping was mostly crushed during removal. No additional management of this piping is required.

- Approximately 12 feet of 12-inch diameter steel re-enforced concrete piping was also removed and rinsed. This piping will be managed with other facility construction debris.

2.6.5 Rail Ties

Approximately 20 to 30 rail ties were removed during test trenching and oil recovery system construction. A composite sample of the rail ties was collected for PCB analyses. No PCBs were detected in the sample (at a detection level of 0.017 mg/kg). The laboratory analytical data report is included in **Appendix A**. As a result, these rail ties will be managed with other used rail ties at the facility.

3.0 OIL RECOVERY SYSTEM OPERATION AND MONITORING

The operation and maintenance of the oil recovery system is performed to service the recovery equipment as well as to perform other tasks including manually recovering oil, collecting depth to liquids measurements and inspecting the sorbent booms in the drainage features. The effectiveness of the system is monitored through recording oil recovery volumes, depth to liquids measurements, groundwater sampling and analysis, and tracking the results of surface water sampling associated with the NPDES permit for the site. The operation and maintenance include weekly, monthly and quarterly work scopes. As will be described, a temporary system was installed during July 2001 to remove water accumulated in the trenches in order to enhance oil recovery.

On a weekly basis, the activities performed include:

- Service oil recovery pumps and record depth to liquids measurements in the 1,000-gallon recovery AST.
- Service the compressed gas-powered recovery pump and record depth to liquids measurements in the recovery drum.
- Record depth to liquid measurements in all recovery wells and standpipes in the recovery trenches, and the standpipes and sumps in the vicinity of the Eastern and Western Drainage Ditches.
- Manually recover product in sumps near the Eastern and Western Drainage Ditches.
- Record surface water elevation at the staff gauges installed upgradient and downgradient of Dam B, Dam C and the 12th Street Dam.
- Record the conditions of the sorbent booms in the ditches. Amtrak facility personnel is notified if any booms need to be changed.

On a monthly basis, the following are performed:

- Gauge the depth to liquids in all site monitoring wells, peizometers, sumps and standpipes. Note that MW-1 had been destroyed prior to the construction of the oil recovery system.
- Manually recover oil in the locations gauged on a monthly basis where appropriate.

On a quarterly basis:

- Collect groundwater samples from monitoring wells without liquid-phase diesel fuel (groundwater sampling began in the second quarter 2001).

Routine operation and maintenance visits initiated were initiated in December 2000. The following is a summary of oil recovery system operation and monitoring from December 2000 through October 2001.

3.1 Oil Recovery Operations

As described previously, Filter Scavenger oil recovery pumps where initially placed in RW-1 and RW-3. Oil recovery pumps were in operation in these wells throughout the reporting period with the exception of when the recovery lines froze as described below. Oil is pumped from these wells when the reservoir in the pump is filled with oil and the high level switch energizes the pump. The pumps are not actively removing oil when there is not sufficient oil in the intake reservoir to activate the high level switch (the pumps cycles on when sufficient oil has accumulated). Once a sufficient volume of oil enters the reservoir, the pump is activated. Oil recovered from these wells is routed to the 1,000 gallon recovery AST.

The oil recovery lines from the pumps in RW-1 and RW-3 froze in late December 2000. As a result, the oil recovery line from RW-1 was heat traced in early January, and the pump was placed back in operation on January 16, 2001. Because of the lower oil recovery rate at RW-3, this line was not heat traced and the pump was reactivated on February 8 after the line thawed.

In order to increase oil recovery from the active oil-skimming recovery trenches, a temporary system was installed to remove water accumulated in the trenches, route the water through granular activated carbon (GAC) and drain the treated water to the ground surface in the immediate track area. This removal of the water accumulated in the trenches is being performed in similar fashion to what was implemented in the fall of 2000 during trench construction. This procedure was reviewed with DNREC via telephone conversation on June 19, 2000 and relayed via correspondence to DNREC on June 14, 2001 (request for authorization to remove water) and June 19, 2001 (confirmation of authorization to remove water). Water pumps installed in RW-1 and RW-3 on July 25, 2001 were operated manually until the water level floats, storage tank and controls were in place.

As water levels in site recovery well decreased during the summer months, oil thicknesses in the recovery wells without product pumps increased. As a result, Filter Scavenger recovery pumps were placed in RW-2 and RW-4 during September 2001 and in RW-5 during October 2001.

Water pumps were also placed in RW-2, RW-4 and RW-5 to remove accumulated water and maintain a low water level in the trenches to enhance oil recovery. Water evacuated from all recovery wells is routed to 10,000 gallon settling/holding tank located immediately south of the 1,000 gallon oil storage

AST. Water from the 10,000 gallon AST passes through a bag filter unit to remove suspended solids and then through a 1,100-pound GAC unit. As mentioned, previously treated water is discharged to the track area for re-infiltration as authorized by DNREC.

Figure 5 displays the cumulative oil recovery from Sump #1, RW-1, RW-2, RW-3, RW-4 and RW-5. As discussed previously, active product skimming from Sump #1 initiated in December 1998 as part of the IRM and was performed until September 2000 when the oil remedy was installed.

As indicated on **Figure 5**, approximately 900 gallons of oil were recovered from Sump #1 during the IRM (December 1998 to September 2000). Oil recovery increased during November 2000 and December 2000 when oil recovery pumps were installed in RW-1 and RW-3 and water levels in the trenches were at relative low elevations of 3 to 4 feet above mean sea level (amsl). The oil recovery rate diminished during the period January 2001 into July 2001 when the water level elevations in the trenches were generally higher (approximately 5 to 8 feet amsl) than in late 2000. The oil recovery rate increased significantly in July 2001 when removal of water from the trenches was initiated which functioned to lower the water level elevation to 3 to 4 feet amsl.

On a weekly basis, oil is manually recovered from select standpipes, monitoring wells and sumps. The locations accounting for the majority of the oil recovered from manual bailing program includes MW-7, MW-15, MW-16, TP-1, sump WD-F and sump WD-B. **Figure 6** summarizes the cumulative and weekly recovery from the manual gauging program. As indicated, the total recovery volume from the manual recovery program is approximately 620 gallons.

As described previously, a compressed gas (nitrogen) powered oil recovery pump was installed at sump WD-B during April 2001. The cumulative recovery volumes for this system is depicted on **Figure 7**. A total of approximately 91 gallons have been recovered through October 2001. The oil recovery from the system was approximately 23 gallons of oil during the first week of operation. The system was re-located to sump WD-F from April 19 through May 16, 2001 as part of the pilot testing of the pump. During this time period approximately 3 gallons of oil were recovered. Oil recovery was low during this time period due to lower oil thickness in sump WD-F than in sump WD-B, as well as a result of equipment shakedown issues pertaining to the supply of compressed nitrogen and the battery that operates the timer. On May 16, 2001, the system was relocated to sump WD-B. Additional compressed nitrogen gas cylinders were connected in series and a backup battery was purchased in order to allow a longer period of operation for the system. In an attempt to increase the oil recovery rate, the system was relocated to MW-16 on October 1, 2001. However, the oil recovery from this well was only 2 to 4 gallons per week. As a result, the system was relocated to Sump #1 on October 27, 2001.

Figure 8, depicts the total liquid product oil recovery from the initiation of the IRM through October 2001. As indicated, the total oil recovery volume is approximately 6269 gallons. This total includes the

following:

- Approximately 574 gallons of oil recovered during trench construction.
- Approximately 4984 gallons of oil recovery for the Filter Scavenger product recovery pumps installed in Sump #1, RW-1, RW-2, RW-3, RW-4 and RW-5.
- Approximately 620 gallons from the manual recovery program.
- Approximately 91 gallons from the compressed nitrogen gas system.

During the reporting period, oil was removed from the 1,000 gallon oil recovery AST on five occasions. Prior to the removal of the oil from the AST on each occasion, an oil sample was collected for PCB analyses in order to determine the appropriate management of the recovered oil. PCBs were not detected (detection limit of 2 mg/kg) in oil samples collected from the AST prior to tank pump-outs on July 30, 2001 (approximately 540 gallons), September 7, 2001 (approximately 815 gallons), September 24, 2001 approximately 722 gallons) and October 3, 2001 (approximately 730 gallons). As a result, oil recovered during these events was transported to International Petroleum Corporation's facility in Wilmington Delaware for recycling.

An oil sample collected prior to tank pump-out on October 26, 2001 (approximately 793 gallons) reported 25.7 mg/kg PCBs. As a result of the quantification of PCBs in the oil sample, the recovered oil was transported to the Safety Kleen, Inc. facility in Deer Park, Texas (a TSCA authorized facility) for thermal destruction. Laboratory reports for the analyses oil samples from the 1,000 gallon AST are included in **Appendix A.** Also during the reporting period, the 55-gallon drums containing oil recovered during the manual product bailing program where transported to Onyx-CWM's Port Arthur, Texas facility (a TSCA authorized facility) for thermal destruction.

In response to detection of 25.7 mg/kg PCBs in the 1,000 gallon recovery AST, oil samples were collected from recovery wells and standpipes in the oil recovery trenches for PCB analyses. These samples were collected in order to determine if the oil containing PCBs was localized to discrete areas of the recovery trench system. The results of the analyses of the oil samples are presented on **Table 1** (the laboratory data sheets are included in **Appendix C**). As indicated on **Table 1**, PCB concentrations ranged from 2.8 mg/kg (Sump #1) to 69.0 mg/kg (SP-6). The highest PCB concentrations were reported at SP-6 and SP-9 (65 mg/kg) located on the southwest portion of the recovery area and at RW-5 (53 mg/kg) located in the westernmost trench.

During October 2001, water was pumped from sumps WD-B, WD-D and WD-F located adjacent to the Western Drainage Ditch, and sumps ED-1, ED-4 and ED-6 adjacent to the Eastern Drainage Ditch. Tests were performed in order to evaluate the effectiveness of lowering the water level in these sumps

to enhance oil recovery. Water pumping rates ranged from 9 to 12 gallons per minute. Water pumped from these wells were routed through the GAC system at the site. Data collected from these tests are presented graphically in **Appendix D**. The data will be considered for future oil recovery operations.

3.2 Liquid Level Gauging Results

Depth to liquids measurements are recorded from select locations on a weekly basis and from all wells, standpipes and sumps on a monthly basis. Liquid level data collected from the monthly gauging events are summarized in **Appendix E**.

Weekly and monthly liquid level data were used to develop hydrographs for select wells and order to evaluate seasonal water table elevation and oil thickness. Hydrographs for recovery wells RW-1 and RW-3 and monitoring wells MW-7 and MW-16.

Hydrographs for MW-7 and MW-16 displays the seasonal fluctuations of the water table at the site. The water table elevation is typically lowest during the late summer through fall. Water levels typically increase through the winter and spring. Seasonal water table fluctuations generally of 4 to 5 feet have been recorded and are typical for the site.

The hydrographs from RW-1 and RW-3 are effected by the extraction of water from the trenches. Water accumulating in the trenches was removed during the fall of 2000 during trench construction and again beginning in July 2001. Comparison of the hydrographs for RW-1 and RW-3 to **Figure 5** (cumulative oil recovery for the trench system) confirms that increased oil recovery occurs when the water levels in the trenches are low.

Oil has not been detected in MW-1, MW-2, MW-3, MW-4, MW-8A, MW-11, MW-12, MW-13 and MW-14 since liquid level gauging began. MW-1 had been destroyed prior to the construction of the oil recovery system.

The apparent oil thickness in monitoring points will be evaluated on an ongoing basis in order to assess the effectiveness of the diesel for remedy as operation of the system proceeds.

3.3 Groundwater Monitoring

The diesel fuel remedial program includes the monitoring of groundwater in order to verify that the natural attenuation of dissolved constituents is occurring. Groundwater samples were collected on two sampling events during the reporting period. On April 19, 2001 and on August 2, 2001, groundwater samples were collected from all site monitoring wells in which liquid phase product was

not detected. Groundwater samples were collected from MW-2, MW-3, MW-4, MW-8, MW-8A, MW-11, MW-12, MW-13 and MW-14 (MW-1 has been destroyed).

Before collecting the groundwater samples, the depth to water and well depth of each well was measured using an electronic interface probe. The wells will then be purged of at least three well volumes or pumped dry to ensure the collection of representative groundwater samples. During purging, field measurements of temperature, pH, specific conductance, Eh, and dissolved oxygen were recorded. Well purging and sampling equipment were decontaminated between each well.

Groundwater samples were placed directly into sample bottles provided and prepared by the laboratory. Once collected, the samples were placed directly into a cooler and kept on ice for delivery to the laboratory. A chain-of-custody form was completed and conveyed with the samples throughout the shipping and analytical process.

All groundwater samples were shipped to Lancaster Laboratories of Lancaster, Pennsylvania and analyzed for total petroleum hydrocarbons-diesel range organics (TPH-DRO) by modified EPA Method 8015B. Laboratory analyses were also performed for iron and manganese (dissolved and total), nitrate, nitrite, sulfate, alkalinity, free carbon dioxide, and methane.

The results of laboratory analyses and field measurements from the April 19, 2001 sampling event are summarized on **Table 2** (laboratory data sheets are included in **Appendix F.1)**. As indicated in **Table 2**, the TPH-DRO concentrations ranged from 0.37 mg/l (MW-12) to 40 mg/l (MW-8A). In general, the wells located at a greater distance from the former fueling area reported lower TPH-DRO concentrations than those wells closer to the former fueling area. Because of the heterogeneous nature of the subsurface materials at the site, the water chemistry at each well location will reflect local subsurface conditions. However, in general, wells reporting the highest TPH-DRO concentrations also reported low dissolved oxygen and higher methane concentrations. (Note that MW-8 reported 7.82 mg/l dissolved oxygen and TPH-DRO concentration of 39 mg/l. This dissolved oxygen measurement is not believed to representative of formation conditions since the temperature measurements at that time was 16.97 °C which is significantly higher than any other measurement). This relationship between TPH-DRO concentrations and dissolved oxygen content indicates that natural bioremediation of dissolved hydrocarbons is occurring.

The results of the laboratory analyses and field measurements from the August 2, 2001 sampling event are summarized on **Table 3** (laboratory data sheets are included in **Appendix F.2).** As indicated on **Table 3**, the TPH-DRO concentrations ranged from 0.20 mg/l (MW-12) to 40 mg/l (MW-8). As in the previous sampling event, the TPH-DRO concentrations generally decreased with distance from the former fueling area. The wells reporting the highest TPH-DRO concentrations also reported the highest methane concentrations indicating that anaerobic degradation of dissolved hydrocarbons is occurring.

Laboratory results and field measurements from future quarterly groundwater monitoring events will be assessed in order to evaluate the natural biodegradation of dissolved hydrocarbons.

3.4 NPDES Monitoring Program

As described in the Diesel Fuel Remedial Work Plan surface water data collected by Amtrak as part of the NPDES monitoring program at the facility will be evaluated on an ongoing basis to verify the groundwater discharge does not have an adverse effect on surface water quality in the ditches. Three sampling locations adjacent to or downgradient of the former fueling area are identified in the current NPDES permit (No. DE005092), effective January 2000, are monitored on a quarterly basis.

These locations are described as follows:

Outfall 001 – in the Eastern Drainage Ditch at dam B.

Outfall 005 – in the Western Drainage Ditch at dam C.

Outfall 006 – located downstream of the site in the pond area at the confluence of the Eastern and Western Drainage Ditches. The sampling location is after the dam, prior to 12th Street.

The monitoring requirements of the NPDES permit vary by outfall locations are included in **Appendix G**. Parameters for analysis under the permit include oil and grease, pH, TCE, surfactants, and PCBs.

Water sampled at location 006 receives water from the watershed drainage area including flow from the adjacent NS Yard, cement and asphalt plant, the former Atlas Sanitation Company landfill, and tank car cleaning operations in addition to the City of Wilmington drainage ditch.

No exceedences of the analytical parameters specified in the permit have been reported by Amtrak from sampling performed in accordance with the permit.

4.0 STAINED SURFACE SOIL REMEDIATION

Hydrocarbon-stained surface soils adjacent to the Eastern Drainage Ditch are being addressed using bioremediation. These soils occur in three general areas adjacent to the Eastern Drainage Ditch; immediately north of the former 250,000 gallon AST location, immediately south of the former 250,000 gallon AST location and to the southwest of sump ED-1 (refer to **Figure 3).**

As described in the Diesel Fuel Remedial Work Plan, diesel fuel components biodegrade most efficiently under aerobic (oxygen-rich conditions). Under aerobic conditions, indigenous microorganisms utilize inorganic nutrients and oxygen to convert hydrocarbons into cell mass, carbon dioxide and water. In the areas of the stained surface soils, inorganic nutrients such as nitrogen, phosphorous and potassium have been added by tilling a fertilizer into the soils. The fertilizer has the approximate composition of 29% total nitrogen, 3% available phosphorous and 4% potassium. The nitrogen source is urea-based and the phosphorous source is an orthophosphate. These constituents have been selected in order to allow continual release/treatment over time. Prior to initiating tilling of the soils, silt-fencing was installed between each of the areas of treatment and the Eastern Drainage Ditch as erosion and sedimentation control.

On April 17, 2001, approximately 1,000 pounds of the nutrient mixture was applied to the area immediately south of the former 250,000 AST and the area southwest of sump ED-1. These areas were also tilled at the time of nutrient application. The tilling of soil introduces atmospheric oxygen to the soils. Oxygen is added to the soils through precipitation. The area north of the former 250,000 AST location was not addressed at this time because the area was too wet.

On May 15, 2001, approximately 1,000 pounds of nutrients were applied to area north of the former AST location. All three areas were tilled at this time. None of the areas were tilled in June 2001 because they were all too wet.

Between July 25, 2001 and August 2, 2001 all areas were tilled. During this period approximately 500 to 600 pounds of nutrients were applied to each area. Each area was also tilled August 17-22, 2001, October 8, 2001 and October 27, 2001 (the last tilling event for the season). Tilling will not be performed over the winter months when biologic activity in the surface soils will slow during cold weather conditions.

The purpose of the bioremediation is to address the presence of hydrocarbon in surface soils adjacent to the ditch. Therefore, surface soils treatment will be considered complete when they are no longer visibly oil-stained. However, during November, 2001 one composite sample will be collected from each of the three areas for the analyses of petroleum hydrocarbons (using the carbon-range groupings for aliphatic and aromatic hydrocarbons presented in DNREC's Uniform Risk-Based Remediation Standards) in order to evaluate the status of the bioremediation effort.

5.0 ADDITIONAL SITE CHARACTERIZATION ACTIVITIES

In order to assess conditions in the Western Drainage Ditch, samples were collected from the Western Drainage Ditch north (upgradient) of Dam C. Three samples of material in the ditch were collected from each of three locations (designated WD-1, WD-2 and WD-3) using a hand-driven coring device. These locations are displayed on **Figure 9**. At each location samples were collected at depths of 0 to 0.5 feet below ground surface (bgs), 1.5 to 2.0 feet bgs and 3.5 to 4.0 feet bgs. Each sample was analyzed for petroleum hydrocarbons (C10 through C40) and PCBs.

At sampling locations WD-1 and WD-2, dense blue/gray clay was encountered at approximately 3.5 feet below the bottom of the surface of the material in the ditch. At sampling location WD-3, dense blue/gray clay was encountered at approximately 3 feet below the surface. At all three locations, the material above the blue/gray clay was dark silty material rich in decaying organic debris.

The analytical results for the material in the ditch are summarized on **Table 4** and the analytical data sheets are included in **Appendix H**.

As indicated on **Table 4**, the highest petroleum hydrocarbon and PCB concentrations (ranging from 76,000 to 150,000 mg/kg and 21.0 to 45.0 mg/kg, respectively) were measured in the surface sample collected at a depth of 0 to 0.5 below the surface of the saturated material at each location. The lowest petroleum hydrocarbon and PCB concentrations (ranging from 850 to 8,800 mg/kg and 0.1 to 2.5 mg/kg, respectively) were reported in the deepest sampled (collected at a depth of 3.5 to 4.0 feet below the surface of saturated material and in the clay) at each location. **Table 4** also indicates that the saturated material above the clay consisted of 66.5% to 78.8% water.

6.0 ACTIVITIES PLANNED FOR THE NEXT REPORTING PERIOD

During the next reporting period, (November 2001 through June 2002) the following system operation and monitoring activities are planned:

On a weekly basis, the following activities will be performed:

- Service recovery pumps and record depth to liquids measurements in the recovery AST.
- Maintain water removal (from recovery trenches) and treatment system as weather permits.
- Service the compressed gas-powered recovery pump and record depth to liquids measurements in the recovery drum.
- Record depth to liquid measurements in all recovery wells and standpipes in the recovery trenches, and the standpipes and sumps in the vicinity of the Eastern and Western Drainage Ditches.
- Manually recover product in standpipes and sumps near the Eastern and Western Drainage Ditches.
- Record surface water elevation at the staff gauges installed upgradient and downgradient of Dam B, Dam C and the 12th Street Dam.
- Record the conditions of the booms in the ditches. Amtrak facility personnel will be notified if any booms need to be changed.

On a monthly basis, the following will be performed:

- Gauge the depth to liquids in all site monitoring wells, peizometers, sumps and standpipes. Note that MW-1 had been destroyed prior to the construction of the oil recovery system.
- Manually recover oil in the locations gauged on a monthly basis where appropriate.
- Till the three stained soils areas and apply nutrients as needed beginning in spring/summer 2002 (depending on weather conditions).

On a quarterly basis:

- Collect groundwater samples for laboratory analyses from monitoring wells without liquid-phase product.

TABLES

TABLE 1

Recovery Trench System Oil Sample PCB Analytical Results
October 24, 2001

Amtrak Former Fueling Facility
Wilmington, Deleware

Sample Identification	Collection Date	Analytical Results (dry weight basis) PCBs						
		PCB-1016 (mg/kg)	PCB-1221 (mg/kg)	PCB-1232 (mg/kg)	PCB-1242 (mg/kg)	PCB-1248 (mg/kg)	PCB-1254 (mg/kg)	PCB-1260 (mg/kg)
RW-3 Trench								
RW-3	10/24/01	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SP-1	10/24/01	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	3.9
SP-2	10/24/01	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	4.2
RW-1/RW-4 Trench								
RW-1	10/24/01	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	5.2
RW-4	10/24/01	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	34.5
SP-3	10/24/01	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	8.1
SP-4	10/24/01	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	6.5
SP-5	10/24/01	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	22.4
SP-6	10/24/01	<25	<25	<25	<25	<25	<25	69.0
Sump #1	10/24/01	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	2.8
RW-2 Trench								
RW-2	10/24/01	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	6.9
RW-5 Trench								
RW-5	10/24/01	<25	<25	<25	<25	<25	<25	53.0
SP-7	10/24/01	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	9.7
SP-8	10/24/01	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	23.2
SP-9	10/24/01	<25	<25	<25	<25	<25	<25	65.0

NOTES:
PCBs = Polychlorinated Biphenyls
N/A = Not applicable, there was not enough oil in RW-3 for sample analyses
mg/kg = Milligrams per kilogram

TABLE 2
Groundwater Analytical Results
April 19, 2001

Amtrak Former Fueling Facility
4001 Vandever Avenue
Wilmington, Delaware

Analysis	MW-2	MW-3	MW-4	MW-8	MW-8A	MW-11	MW-12	MW-13	MW-14
TPH-DRO	1.7	8.5	15	39	40	7.6	0.37	6.6	7.7
Total Iron	101	80.8	100	101	148	122	83.9	99.8	344
Dissolved Iron	0.471	0.753	3.69	2.72	17	17.1	0.174	6.15	7.62
Total Manganese	1.05	1.04	0.507	0.387	0.789	2.03	3.62	0.639	2.12
Dissolved Manganese	0.838	0.438	0.375	0.253	0.481	1.86	3.19	0.606	0.946
Nitrite Nitrogen	0.125	0.079	0.147	0.047J*	0.051*	0.152	<0.015*	<0.015*	0.078
Nitrate Nitrogen	<0.04	0.51	0.13	0.095J	<0.04	0.095J	0.087J	0.089J	0.86
pH	6.49	6.36	6.32	6.33	6.34	6.31	6.43	6.5	6.25
Alkalinity to pH 8.3	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
Alkalinity to pH 4.5	114	140	149	149	137	119	272	169	135
Free Carbon Dioxide	73.8	122	143	139	125	117	202	107	152
Sulfate (turbidimetric)	24.1	53.6	41.9	46.6	53.3	19.3	5.5	84	95
Methane	6.4	7.8	15	21	22	6.7	7.7	11	2.7
Field Measurements									
pH (s.u.)	6.47	6.51	6.28	6.43	6.14	6.32	6.16	6.31	6.05
Temperature (°C)	11.47	12.35	11.48	16.97	11.63	12.11	10.41	10.64	12.14
Specific Conductance (ms/cm)	0.244	0.696	0.580	0.582	0.622	0.375	0.548	0.732	0.379
Dissolved Oxygen (mg/l)	10.04	1.96	8.65	7.82	1.84	3.64	3.08	3.63	6.70
Redox (mv)	-1.60	23.40	-31.70	-22.70	-25.60	-23.50	-40.70	-82.30	87.30

Notes:

All results are reported in milligrams per liter (mg/L) unless otherwise noted

TPH-DRO = Total Petroleum Hydrocarbons - Diesel Range Organics

* = The nitrite nitrogen analysis was originally performed within the 48 hour holding time, however the result obtained was greater than the subsequent result obtained for nitrate. The nitrite analysis was repeated past the holding time to yield the reported result.

J = estimated value

<0.41 = result not detected above quantitation limit

TPH-DRO analyzed by US EPA Method 8015B, iron analyzed by US EPA Method 7380, manganese analyzed by US EPA Method 7460, nitrite nitrogen and nitrate nitrogen analyzed by US EPA Method 353.2, alkalinity to pH 8.3 and 4.5 analyzed by US EPA Method 310.1, pH analyzed by US EPA Method 150.1, sulfate analyzed by US EPA Method 300.0, free carbon dioxide analyzed by Method SM-18 4500CO2.

N:\Projects\APU-AMTR\[GWANALYTICAL.xls]April 2001

TABLE 3
Groundwater Analytical Results
August 2, 2001

Amtrak Former Fueling Facility
4001 Vandever Avenue
Wilmington, Delaware

Analysis	MW-2	MW-3	MW-4	MW-8	MW-8A	MW-11	MW-12	MW-13	MW-14
TPH-DRO	1.6	0.5	18	40	19	2.0	0.20	3.8	8.1
Total Iron	62.1	34.9	70	95.3	60.7	63.2	57.7	54.9	27.1
Dissolved Iron	18.2	0.051J	27.6	45.1	25.7	24.4	8.44	7.61	13.7
Total Manganese	0.941	1.19	0.263	0.362	0.358	2.26	4.94	0.48	0.448
Dissolved Manganese	0.811	1.02	0.281	0.348	0.367	2.24	4.44	0.49	0.464
Nitrite Nitrogen	0.099	0.079	0.043J	0.064	0.042J	0.042J	0.054	0.35J	0.063
Nitrate Nitrogen	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.04	<0.04	<0.04
pH	6.16	6.52	6.17	6.18	6.12	6.19	6.28	6.15	6.25
Alkalinity to pH 8.3	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
Alkalinity to pH 4.5	79.5	338	155	171	127	115	250	123	154
Free Carbon Dioxide	110	204	210	226	193	149	262	174	173
Sulfate (turbidimetric)	2.5J	9.7	<1.5	22.8	6.9	2.6J	1.5	<1.5	5.7
Methane	5400	8600	14000	21000	11000	6100	7300	11000	6500
Field Measurements									
pH (s.u.)	6.03	6.84	6.89	6.42	6.37	6.58	6.82	7.19	6.41
Temperature (^{o}C)	18.3	18.0	19.9	18.7	18.4	19.1	17.8	18.1	18.2
Specific Conductance (ms/cm)	NA	NA	56.7	92.0	89.0	NA	NA	NA	91.0
Dissolved Oxygen (mg/l)	0.57	0.58	0.66	0.77	0.38	1.77	1.09	1.50	0.90
Redox (mv)	-61.8	-101.0	-98.6	-71.1	-74.4	-65.7	-60.4	-75.2	-62.7

Notes:

All results are reported in milligrams per liter (mg/L) unless otherwise noted

TPH-DRO = Total Petroleum Hydrocarbons - Diesel Range Organics

J = estimated value

<0.41 = result not detected above quantitation limit

TPH-DRO analyzed by US EPA Method 8015B, iron analyzed by US EPA Method 7380, manganese analyzed by US EPA Method 7460, nitrite nitrogen and nitrate nitrogen analyzed by US EPA Method 353.2, alkalinity to pH 8.3 and 4.5 analyzed by US EPA Method 310.1, pH analyzed by US EPA Method 150.1, sulfate analyzed by US EPA Method 300.0, free carbon dioxide analyzed by Method SM-18 4500CO2.

NA = not analyzed due to equipment problem

N:\Projects\APU-AMTR\[GWANALYTICAL.xls]August 2001

TABLE 4
Western Drainage Ditch Samples
Analytical Results
April 4, 2001

Amtrak Former Fueling Facility
4001 Vandever Avenue
Wilmington, Delaware

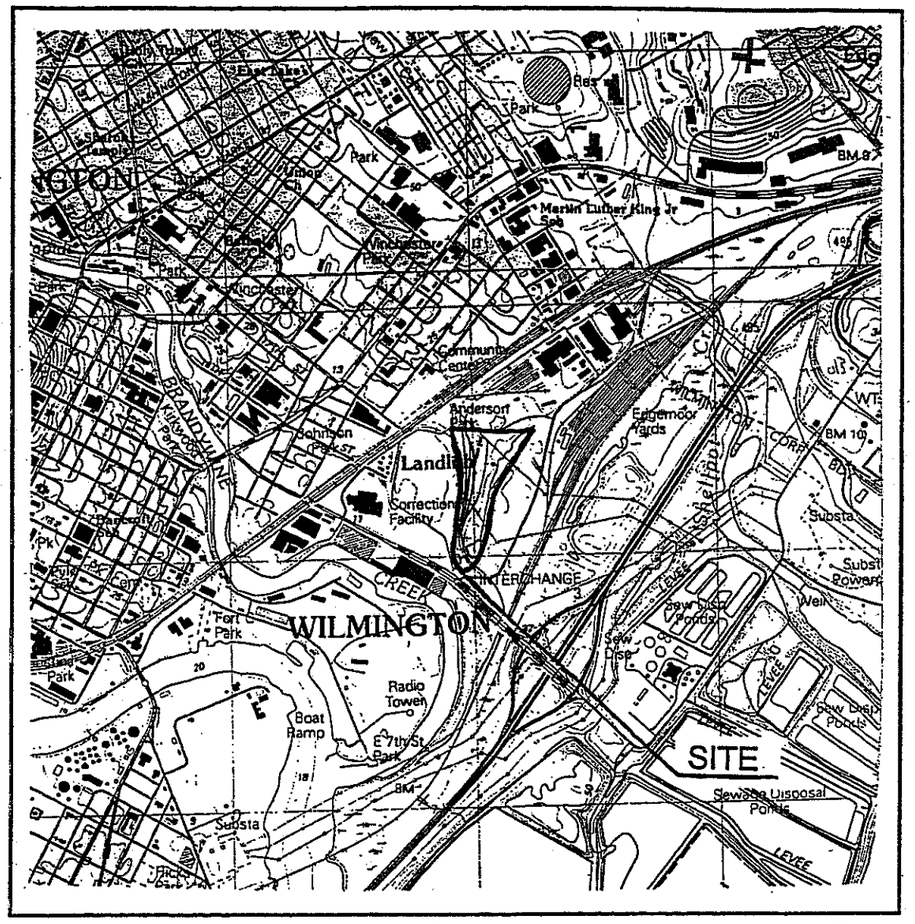
Sample Identification	Collection Date	Collection Depth (Feet BGS)	Percent Moisture	Analytical Results (dry weight basis)									
				PCBs							TPH		
				PCB-1016 (ug/kg)	PCB-1221 (ug/kg)	PCB-1232 (ug/kg)	PCB-1242 (ug/kg)	PCB-1248 (ug/kg)	PCB-1254 (ug/kg)	PCB-1260 (ug/kg)	Total TPH (mg/kg)	C10-C28 (mg/kg)	>C28-C40 (mg/kg)
WD-1(0-.5)	4/4/01	0.0-0.5	74.2%	<6.6	<6.6	<6.6	<6.6	<6.6	<6.6	45.0	81,000	81,000	<5,400
WD-1 (1.5-2)	4/4/01	1.5-2.0	75.2%	<6.9	<6.9	<6.9	<6.9	<6.9	<6.9	32.0	13,000	13,000	<1,400
WD-1 (3.5-4)	4/4/01	3.5-4.0	40.6%	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	2.1	3,000	2,800	190
WD-2 (0-.5)	4/4/01	0.0-0.5	78.8%	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	21.0	76,000	73,000	3,300
WD-2 (1.5-2)	4/4/01	1.5-2.0	70.4%	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	5.7	47,000	47,000	<2,400
WD-2 (3.5-4)	4/4/01	3.5-4.0	47.5%	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	2.5	8,800	8,800	<670
WD-3 (0-.5)	4/4/01	0.0-0.5	83.4%	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	43.0	150,000	150,000	<8,400
WD-3 (1.5-2)	4/4/01	1.5-2.0	66.5%	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	17.0	91,000	91,000	<4,200
WD-3 (3.5-4)	4/4/01	3.5-4.0	39.0%	<0.028	<0.028	<0.028	<0.028	<0.028	<0.028	0.1	850	770	76

NOTES:
PCBs = Polychlorinated Biphenyls
TPH = Total Petroleum Hydrocarbons
mg/kg = Milligrams per kilogram
BGS = Below Ground Surface

PCBs
This should
be mg/kg
not ug/kg

N:\Projects\APU-AMTR\[westditchsamples.xls]Sheet2

FIGURES



1 1/2 0 1 MILE

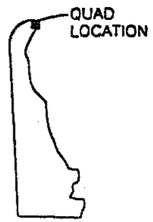
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

FIGURE 1

SITE LOCATION MAP

FORMER FUELING FACILITY
AMTRAK WILMINGTON SHOPS



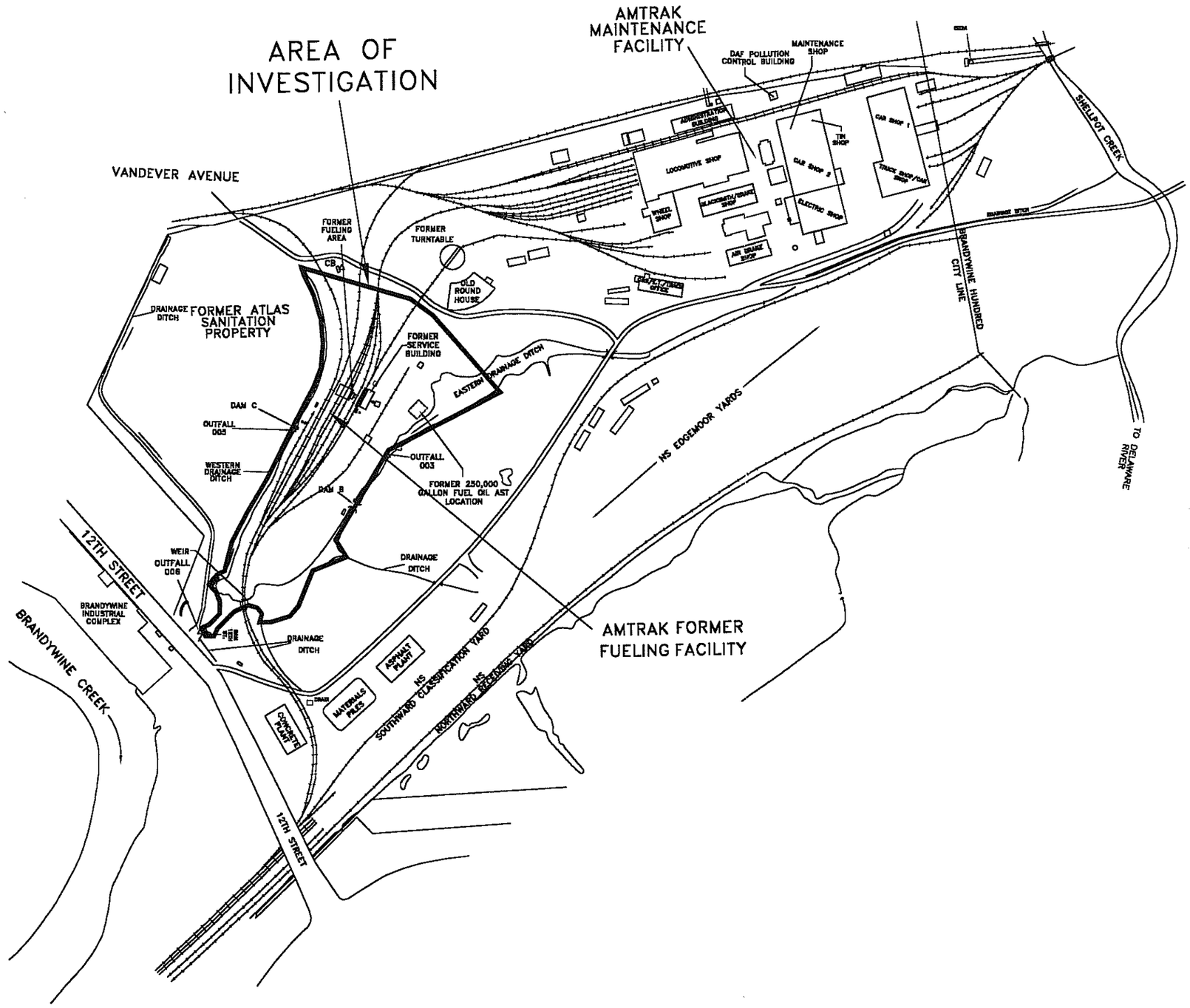
VANDEVER AVENUE
WILMINGTON, DE

N

IT CORPORATION

SOURCE: U.S.G.S. TOPOGRAPHIC QUADRANGLE
WILMINGTON SOUTH, DE–NJ, 1993 &
WILMINGTON NORTH, DE–PA, 1993
7.5 MINUTE SERIES

01303–0177



NO.	DATE	BY	REVISION

N

0 250 500
SCALE FEET

TITLE/SIGNATURE	DATE

IT CORPORATION
1220 WARD AVENUE
WEST CHESTER, PA 19380
(610) 241-5000

AREA OF INVESTIGATION

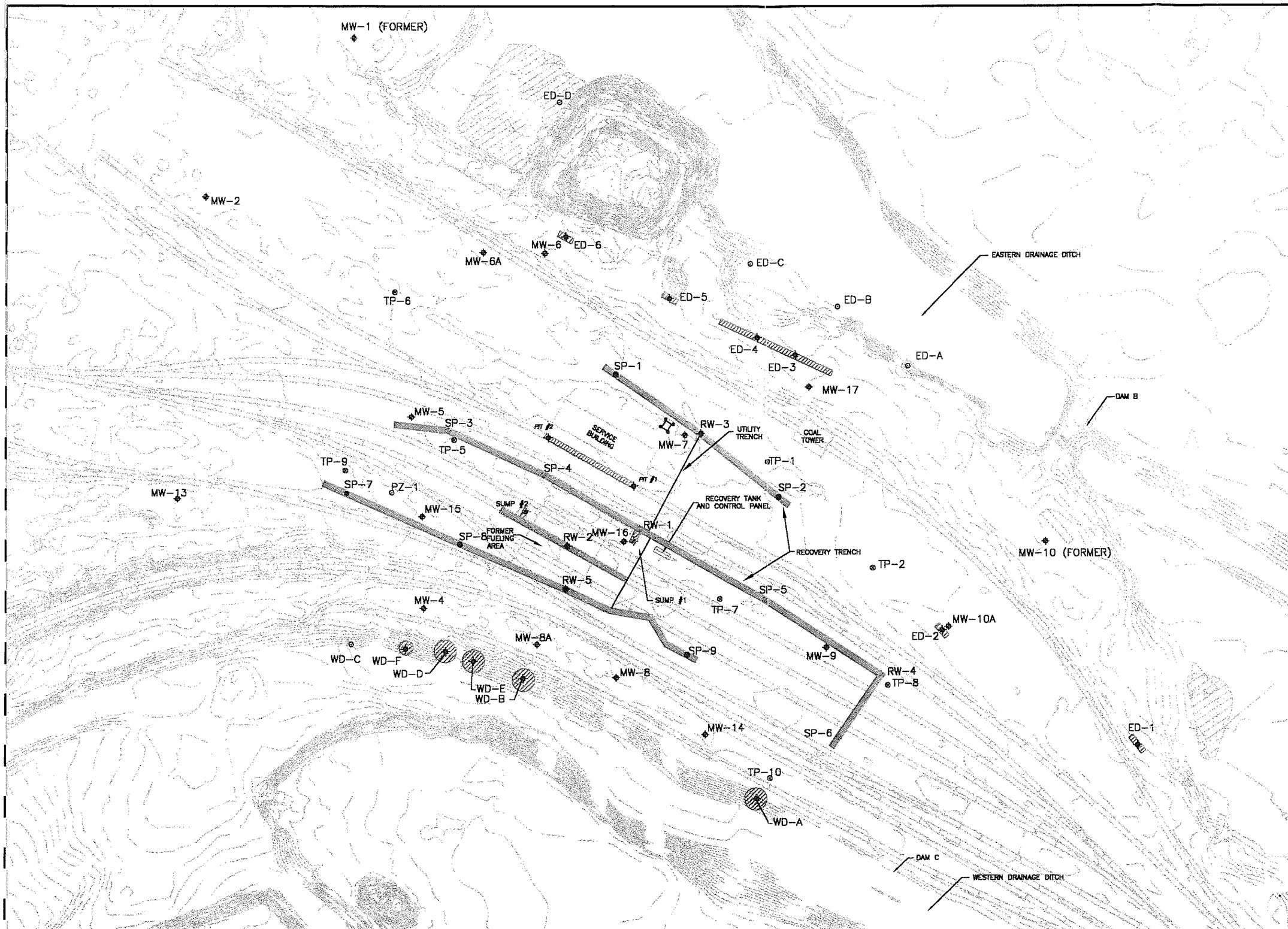
CLIENT: FORMER FUELING FACILITY
AMTRAK WILMINGTON SHOPS

LOCATION: VANDEVER AVE.
WILMINGTON, DELAWARE

DESIGNED BY:	DETAILED BY: BRD	CHECKED BY:

DRAWING DATE: 07/24/01	ACAD FILE: ATWINV2001
PROJECT NO.: 01303-0177	NOTES:

FIGURE 2



	8/27/00	SL	ISSUED FOR CONSTRUCTION BIDS

N

RECOVERY WELL

MW-11 MONITORING WELL

RECOVERY SUMP LOCATIONS

TP-2 TEST PIT STAND PIPE

ED-2 OBSERVATION STAND PIPES

SP-4 RECOVERY TRENCH STANDPIPES

IT CORPORATION

1220 WARD AVENUE
WEST CHESTER, PA 19380
(610) 241-5000

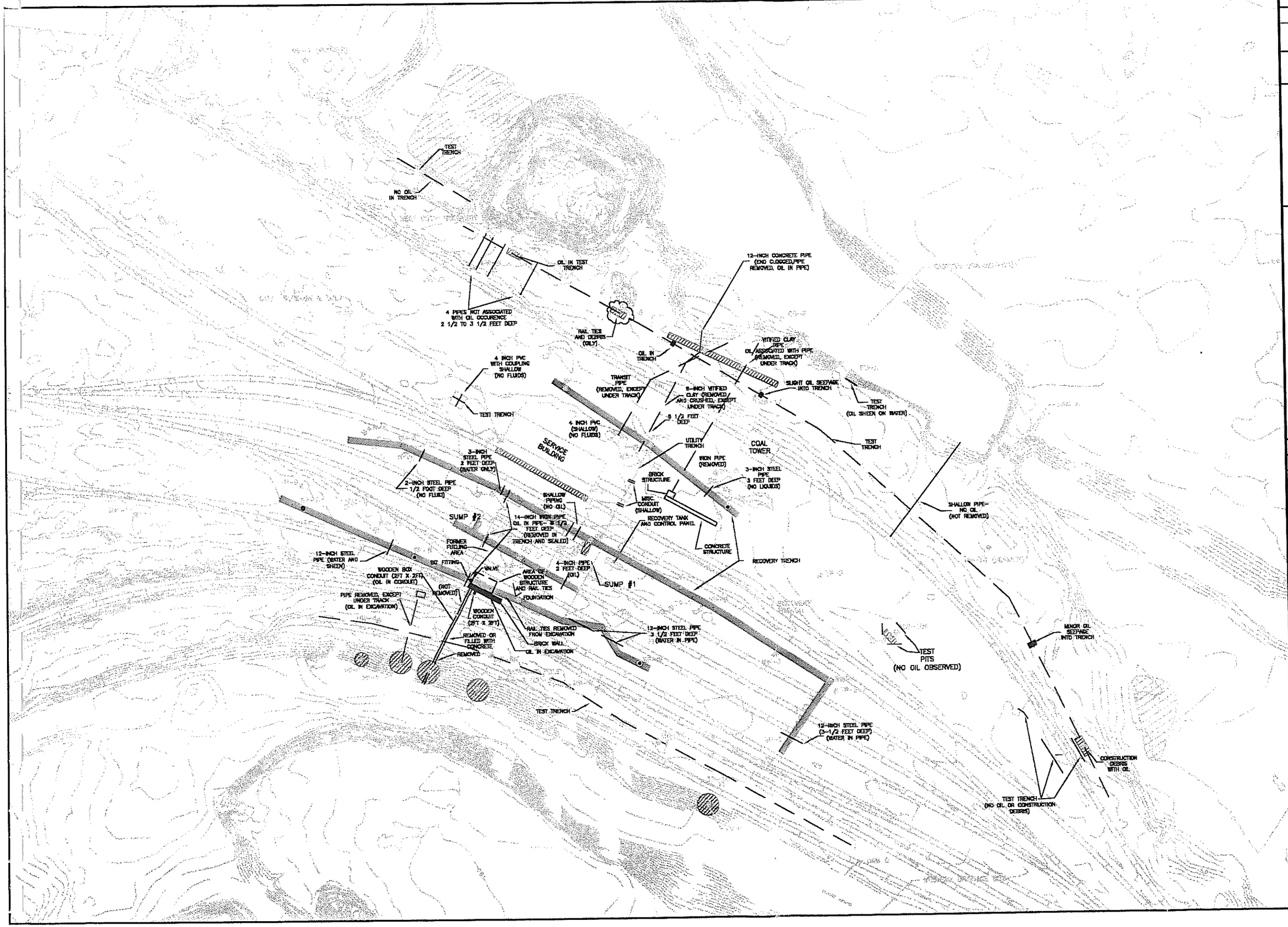
DIESEL FUEL REMEDIAL SYSTEM LAYOUT

AMTRAK FORMER FUELING FACILITY

VANDEVER AVE.
WILMINGTON, DELAWARE

SB	BRD	
07/24/01	0177-0048	
01303-0177		

FIGURE – 3



	6/27/00	SL	ISSUED FOR CONSTRUCTION BIDS

N

NOTE: PIPING LOCATIONS ARE APPROXIMATE

- RECOVERY WELL
- MONITORING WELL
- RECOVERY SUMP LOCATIONS
- TEST PIT STAND PIPE
- OBSERVATION STAND PIPES
- RECOVERY TRENCH STANDPIPES

IT CORPORATION
1220 WARD AVENUE
WEST CHESTER, PA 19380
(610) 241-5000

TEST TRENCHING AND EXCAVATION OBSERVATIONS

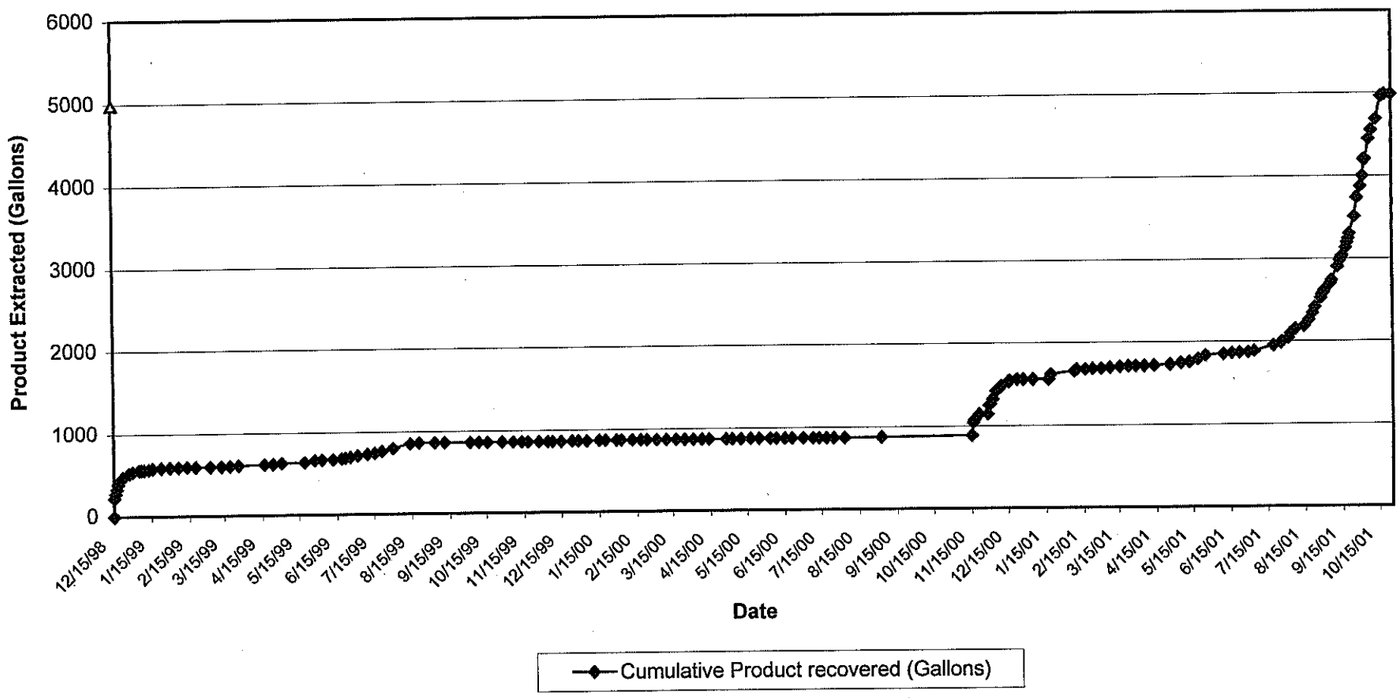
AMTRAK FORMER FUELING FACILITY

VANDEVER AVE.
WILMINGTON, DELAWARE

SB	BRD
02/06/01	0177-005
01303-0177	

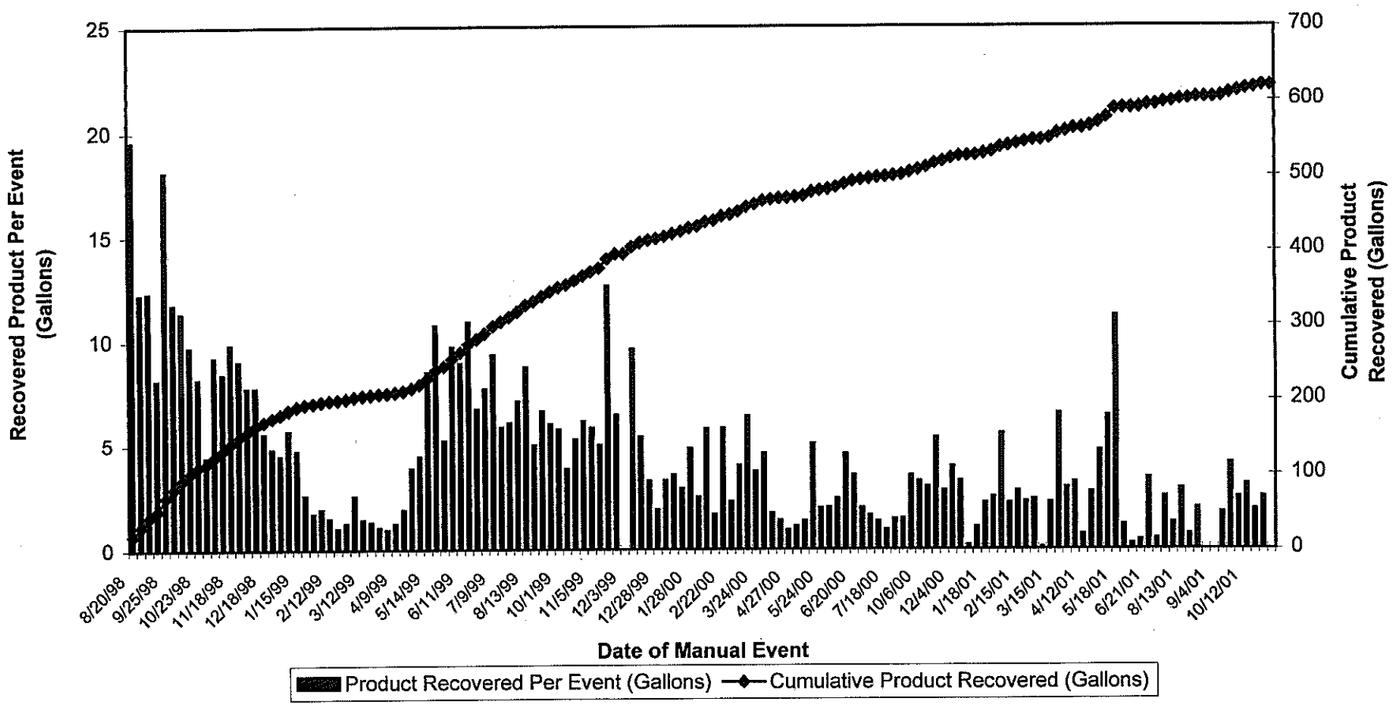
FIGURE – 4

FIGURE 5
Cumulative Product Recovery
Sump #1 (IRM) and Trench Recovery Wells
Through October 31, 2001
Amtrak Former Fueling Facility
4001 Vandever Avenue
Wilmington, Delaware



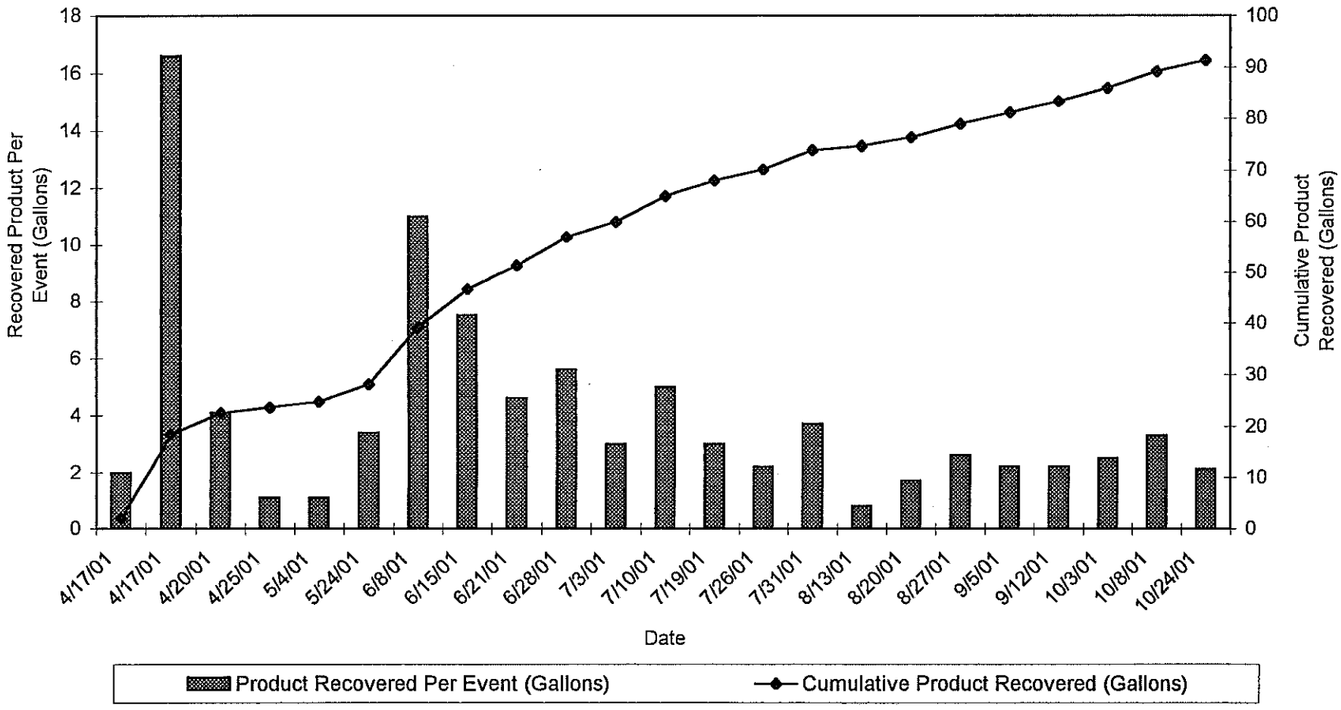
r:\projects\apu-amtr\lph\Product Recovery\Sys Cht

FIGURE 6
Manual Product Recovery by Event and Cumulative Product Recovery Summary
Through October 31, 2001
Amtrak Former Fueling Facility
4001 Vandever Avenue
Wilmington, Delaware



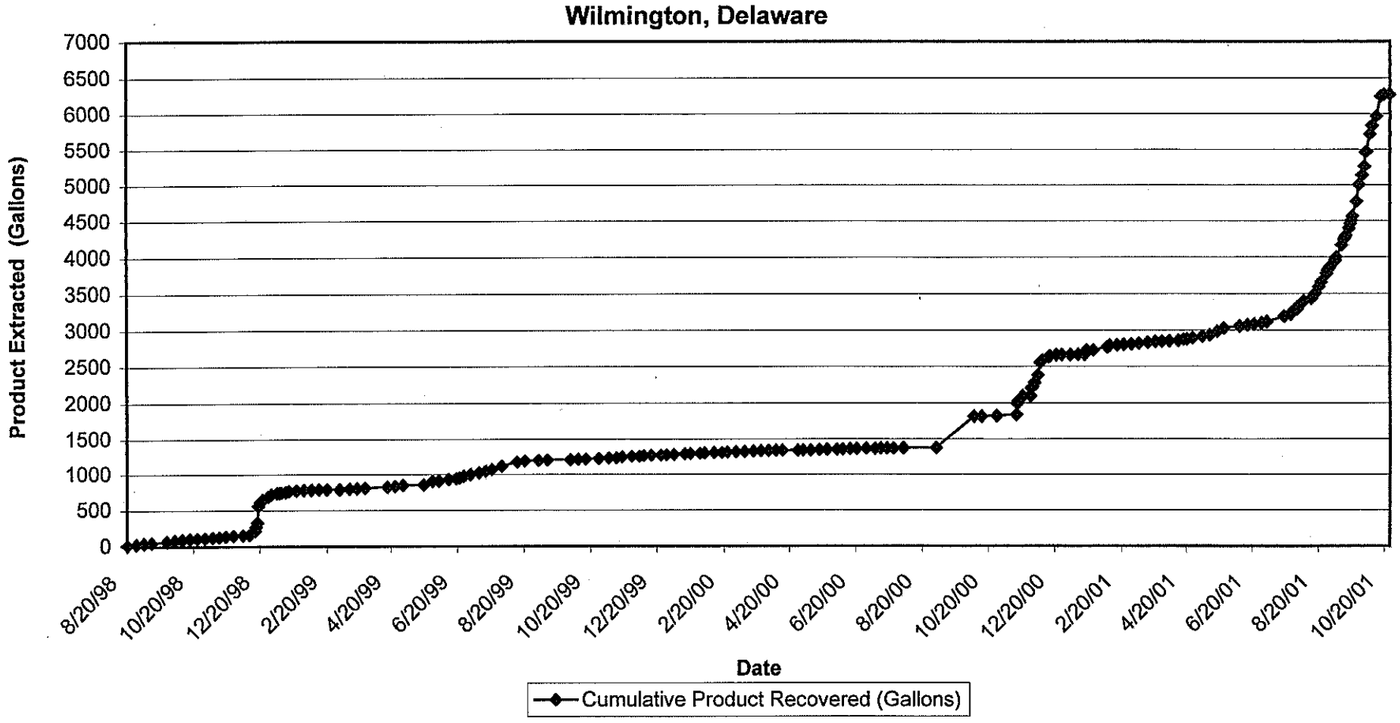
r:\projects\apu-amtr\lph\Product Recovery\Man Cht

FIGURE 7
Product Recovery Summary
Compressed Gas System
Through October 31, 2001
Amtrak Former Fueling Facility
4001 Vandever Avenue
Wilmington, Delaware

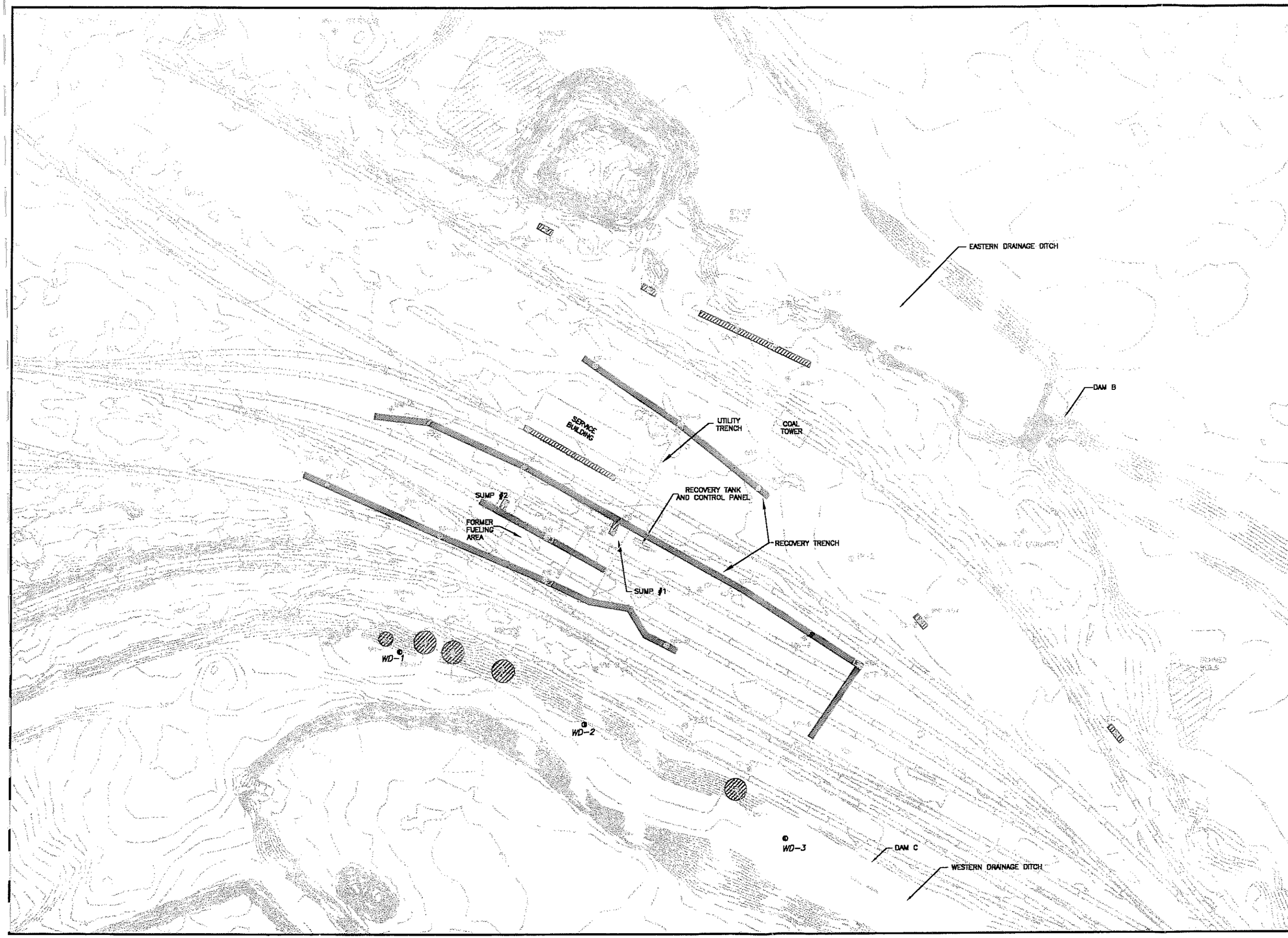


r:\projects\apu-amtr\ph\Product Recovery\Man Cht

FIGURE 8
Cumulative Product Recovery
Manual Recovery, Sump #1 (IRM), Trench Recovery Wells,
Construction Dewatering, and Compressed Gas System
through October 31, 2001
Amtrak Former Fueling Facility
4001 Vandever Avenue
Wilmington, Delaware



r:\projects\apu-amtr\lph\Product Recovery\Tot Cht



	8/27/00	SL	ISSUED FOR CONSTRUCTION BIDS

N

WESTERN DRAINAGE DITCH SAMPLING LOCATION

40 0 80
SCALE FEET

IT CORPORATION

1220 WARD AVENUE
WEST CHESTER, PA 19380
(610) 241-5000

WESTERN DRAINAGE DITCH SAMPLING LOCATIONS

AMTRAK FORMER FUELING FACILITY

VANDEVER AVE.
WILMINGTON, DELAWARE

SB	BRD	
07/24/01	0177-004A	
01303-0177		

FIGURE – 9

Appendix A

Diesel Fuel Remedy Product Analytical and Rail Tie Analytical Data

Lancaster Laboratories
Where quality is a science.

ANALYTICAL RESULTS

Prepared for:

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 733075. Samples arrived at the laboratory on Friday, September 29, 2000. The PO# for this group is 130301772307.

Client Description	Lancaster Labs Number
Storage Tank #1 Oil Sample	3468802
Storage Tank #2 Oil Sample	3468803

1 COPY TO IT Corporation-PA Attn: Mr. Steve Baggett

Questions? Contact your Client Services Representative
Tan H. Vo at (717) 656-2300.

Respectfully Submitted,

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. G5 3468802

Collected:09/27/2000 11:50 by SB

Account Number: 01401

Submitted: 09/29/2000 15:40
Reported: 10/17/00 at 02:27 AM
Discard: 11/1/00
Storage Tank #1 Oil Sample
Amtrak Former Fueling Area

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

OILS1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00174	PCBs in Oil					
04815	PCB-1016	12674-11-2	< 2,500.	2,500.	ug/kg	1
04816	PCB-1221	11104-28-2	< 2,500.	2,500.	ug/kg	1
04817	PCB-1232	11141-16-5	< 2,500.	2,500.	ug/kg	1
04818	PCB-1242	53469-21-9	< 2,500.	2,500.	ug/kg	1
04819	PCB-1248	12672-29-6	< 2,500.	2,500.	ug/kg	1
04820	PCB-1254	11097-69-1	< 2,500.	2,500.	ug/kg	1
04821	PCB-1260	11096-82-5	< 2,500.	2,500.	ug/kg	1

Commonwealth of Pennsylvania Lab Certification No. 36-037

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. G5 3468803

Collected:09/27/2000 12:10 by SB

Account Number: 01401

Submitted: 09/29/2000 15:40
Reported: 10/17/00 at 02:27 AM
Discard: 11/1/00
Storage Tank #2 Oil Sample
Amtrak Former Fueling Area

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

OILS2

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00174	PCBs in Oil					
04815	PCB-1016	12674-11-2	< 2,500.	2,500.	ug/kg	1
04816	PCB-1221	11104-28-2	< 2,500.	2,500.	ug/kg	1
04817	PCB-1232	11141-16-5	< 2,500.	2,500.	ug/kg	1
04818	PCB-1242	53469-21-9	< 2,500.	2,500.	ug/kg	1
04819	PCB-1248	12672-29-6	< 2,500.	2,500.	ug/kg	1
04820	PCB-1254	11097-69-1	< 2,500.	2,500.	ug/kg	1
04821	PCB-1260	11096-82-5	< 2,500.	2,500.	ug/kg	1

Commonwealth of Pennsylvania Lab Certification No. 36-037

GREAT LAKES ANALYTICAL

CHAIN OF CUSTODY REPORT

~~1380 Busch Parkway~~ ~~20725 Watertown~~ Road
Buffalo Grove, IL 60089-4505 ~~Brookfield, WI 53501~~
~~(847) 808-7766~~ ~~(414) 798-1030~~
~~FAX (847) 808-7772~~ ~~FAX (414) 798-1066~~

Acct# 1401 // #3493662-3 LANCASTER LABS

Client: IT Corporation	Bill To: IT Corp.	TAT: 5 DAY 4 DAY 3 DAY 2 DAY 1 DAY < 24 HRS.
Address: 1220 Ward Ave Suite 300 West Chester PA 19380	Address: West Chester PA	DATE RESULTS NEEDED: Standard TAT
		TEMPERATURE UPON RECEIPT: 5°C
Report to: Steve Baggett Phone #: (610) 241-5000 Fax #: (610) 241-5050	State & Program: Phone #: ( ) Fax #: ( )	AIR BILL NO.

Project: Amtrak Former Fueling Area
Sampler: Baggett / Smith
PO/Quote #: 13030177 23020000

	FIELD ID, LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	PRESERVATIVES	NO. CONTAINERS	TYPE CONTAINERS	PCBs in	0.1 EPA 8082									SAMPLE CONTROL: CRACKED-BROKEN	SAMPLE CONTROL: IMPROPERLY SEALED	SAMPLE CONTROL: GOOD CONDITION	LABORATORY ID NUMBER
1	RW-2 Trench Product Line 0.1	10/6/00	12:30	0.1	ICE	3	VOA	X													
2	RW-5 Area Excavation Oil	10/6/00	13:00	0.1	ICE	3	VOA	X													
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					

RELINQUISHED	DATE / TIME	RECEIVED	DATE / TIME	RELINQUISHED	DATE / TIME	RECEIVED	DATE / TIME
Steve Baggett	11/1/00	Marvin McGallah	11/3/00 12:30	Marvin McGallah	11/3/00 13:50		
						G. Thompson	11-3-00 18:50

COMMENTS: Intact

PAGE OF

JG958198

Lancaster Laboratories
Where quality is a science.

ANALYTICAL RESULTS

Prepared for:

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 737982. Samples arrived at the laboratory on Friday, November 03, 2000. The PO# for this group is 13030177 and the release number is 23070000.

Client Description	Lancaster Labs Number
RW-2 Trench Product Line Oil Sample	3493662
RW-5 Area Excavation Oil Sample	3493663

1 COPY TO IT Corporation-PA Attn: Mr. Steve Baggett

Questions? Contact your Client Services Representative
De Brooks at (717) 656-2300.

Respectfully Submitted,
Christine Milano

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3493662

Collected:10/06/2000 12:30 by SB

Account Number: 01401

Submitted: 11/03/2000 18:50
Reported: 11/10/00 at 10:24 PM
Discard: 11/25/00
RW-2 Trench Product Line Oil Sample
Amtrak Former Fueling Area

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

R2TR[

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00174	PCBs in Oil					
04815	PCB-1016	12674-11-2	< 2,500.	2,500.	ug/kg	1
04816	PCB-1221	11104-28-2	< 2,500.	2,500.	ug/kg	1
04817	PCB-1232	11141-16-5	< 2,500.	2,500.	ug/kg	1
04818	PCB-1242	53469-21-9	< 2,500.	2,500.	ug/kg	1
04819	PCB-1248	12672-29-6	< 2,500.	2,500.	ug/kg	1
04820	PCB-1254	11097-69-1	< 2,500.	2,500.	ug/kg	1
04821	PCB-1260	11096-82-5	< 2,500.	2,500.	ug/kg	1

Commonwealth of Pennsylvania Lab Certification No. 36-037

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3493663

Collected:10/06/2000 13:00 by SB

Account Number: 01401

Submitted: 11/03/2000 18:50
Reported: 11/10/00 at 10:24 PM
Discard: 11/25/00
RW-5 Area Excavation Oil Sample
Amtrak Former Fueling Area

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

R5AEO

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00174	PCBs in Oil					
04815	PCB-1016	12674-11-2	< 2,500.	2,500.	ug/kg	1
04816	PCB-1221	11104-28-2	< 2,500.	2,500.	ug/kg	1
04817	PCB-1232	11141-16-5	< 2,500.	2,500.	ug/kg	1
04818	PCB-1242	53469-21-9	< 2,500.	2,500.	ug/kg	1
04819	PCB-1248	12672-29-6	< 2,500.	2,500.	ug/kg	1
04820	PCB-1254	11097-69-1	4,100.	2,500.	ug/kg	1
04821	PCB-1260	11096-82-5	12,400.	2,500.	ug/kg	1

Commonwealth of Pennsylvania Lab Certification No. 36-037

STEVE BAGGET - FAX.

FAX

The Washington Group International
Environmental Laboratory
301 Chelsea Parkway
Boothwyn, PA 19061

Phone 610 497 8000 *FAX 610 497 8005*

TO: Mr. Andy Enzman
AT: Clean Harbors, Inc.

Number of Pages (including Cover): 2

FAXNO: 856-227-9350

FROM: John Billings

DATE: 11/28/2000

Comments:

Summary# 57990

AMTRAK WMF
SOUTH YARD PROJ.
FRAC TANK & PSLY TANK OIL SAMPLES

The Washington Group, International is not responsible for fax transmission errors. Unless otherwise noted, this data is preliminary and has not had final quality control review.

The Washington Group International
Environmental Services Laboratory Data Summary
Summary # 37990 Printed - 11/28/00 16:34:29

Log	Description		Code	Parameter	Result	Limit	Units	Sampled	Started	Complete	Analyst
242269	FRAC-01		G140	Aroclor 1016	ND	3	mg/kg-dry	11/16/2000	11/21/2000	11/21/2000	JDP
242269	FRAC-01		G140	Aroclor 1221	ND	3	mg/kg-dry	11/16/2000	11/21/2000	11/21/2000	JDP
242269	FRAC-01	FRAC TANK	G140	Aroclor 1232	ND	3	mg/kg-dry	11/16/2000	11/21/2000	11/21/2000	JDP
242269	FRAC-01		G140	Aroclor 1242	ND	3	mg/kg-dry	11/16/2000	11/21/2000	11/21/2000	JDP
242269	FRAC-01		G140	Aroclor 1248	ND	3	mg/kg-dry	11/16/2000	11/21/2000	11/21/2000	JDP
242269	FRAC-01		G140	Aroclor 1254	ND	3	mg/kg-dry	11/16/2000	11/21/2000	11/21/2000	JDP
242269	FRAC-01		G140	Aroclor 1260	4	3	mg/kg-dry	11/16/2000	11/21/2000	11/21/2000	JDP
242270	PLSU-01		G140	Aroclor 1016	ND	3	mg/kg-dry	11/16/2000	11/21/2000	11/21/2000	JDP
242270	PLSU-01		G140	Aroclor 1221	ND	3	mg/kg-dry	11/16/2000	11/21/2000	11/21/2000	JDP
242270	PLSU-01	POLY TANK	G140	Aroclor 1232	ND	3	mg/kg-dry	11/16/2000	11/21/2000	11/21/2000	JDP
242270	PLSU-01		G140	Aroclor 1242	ND	3	mg/kg-dry	11/16/2000	11/21/2000	11/21/2000	JDP
242270	PLSU-01		G140	Aroclor 1248	ND	3	mg/kg-dry	11/16/2000	11/21/2000	11/21/2000	JDP
242270	PLSU-01		G140	Aroclor 1254	ND	3	mg/kg-dry	11/16/2000	11/21/2000	11/21/2000	JDP
242270	PLSU-01		G140	Aroclor 1260	3	3	mg/kg-dry	11/16/2000	11/21/2000	11/21/2000	JDP

Approved by:_____

Report Prep:_____

Washington — Laboratory Chain Of Custody

Quote No:

Client/Office: CLEAN HARBORS Phone: 856 589-5000

Address: 2301 PENNA. AVE., DEPTFORD, NJ 08096

Send report to: ATTN. A. ENZMAN Fax: 856 227-9350

Project Description: AMTRAK SOUTH YARD PROJECT

TAT (for data) (identify number of "working days" below):...or Date-->:

☒ Rush 1 2 3 4 5 days ☐ Firm(6-12) ____ ☐ Std.(~12) ____ ☐ Other ____

Lab Staffer confirming Rush/Firm: ____ Hardcopy TAT Date?: ____

Report Type: ☒ Results only ☐ Data +QC ☐ Reduced Deliv. ☐ Other: ____
☐ Regulatory Format (CLP "like") ☐ Electronic/disk->(Format?)

Regulatory Samples? ☐ YES ☒ NO If YES?: ☐ Act II ☐ UST ☐ RCRA ☐ NPDES ☐ Phase III ☐ ISRA ☐ Other: ____

Analytical Protocol: ☐ SW846 ☐ EPA600 ☐ Drinking H2O ☐ ASTM ☐ Other: ____

Ship To:

Lab Job No:

Send Invoice to: SAME

Address:

P.O. No: 4/4/NJ

Washington Group Laboratory
301 Chelsea Parkway
Boothwyn, PA 19061
Phone: 610-497-8000
Fax: 610-497-8005

Lab Use Only
rev. 10/12/99
Due Date:
Cooler Tmp deg C
custody seal yes___ no___
No.:
Summary No.
Lab Log No:

Sample Data (NJ HAZITE disk deliverable limits sample ID to 7 Characters)									Container Data				Analysis Required: PCB
ID (NJ limit=7 characters)	date	time	matrix	grab	comp	type	no.	preservative	pH				
FRAC-01	11/16		OIL	X			1						X
PLSU-01	11/16		OIL	X			1						X

Comments/Special Handling/Storage/Disposal--->:

Sampled by: AMTRAK

Phone no:

Relinquished By:		Received By:		Method of Shipment
Name: [illegible]	Date: 11/21/00	Name: [illegible]	Date: 11/21/00	Airbill No.
Organization: CHESE	Time: 1100	Organization: TWG	Time: 1100	
Name:	Date:	Name:	Date:	
Organization:	Time:	Organization:	Time:	
Name:	Date:	Name:	Date:	
Organization:	Time:	Organization:	Time:	

THE WASHINGTON GROUP
ENVIRONMENTAL SERVICES LABORATORY

301 Chelsea Parkway
Boothwyn, Pa. 19061
(610) 497-8000

Report For:

Clean Harbors, Inc.
Mr. Andy Enzman
2301 Pennsylvania Avenue
Deptford NJ 08096

Job Number

75700323

Summary Number

58536

December 26, 2000

Reviewed by _____
for Project Manager Elizabeth Witouski

NJ ID# 77343	EPA ID# PA00078	PA ID# 23-272
CA ID# 1924	RI ID# A70	CT ID# PH0687
NY ID# 11345	DE ID# PA00078	MA ID# M-PA078

The Washington Group International
Environmental Services Laboratory Data Summary
Summary # 58536 Printed - 12/26/00 08:58:37

Log	Description	Code	Parameter	Result	Limit	Units	Sampled	Started	Complete	Analyst
244540	SYF-01	753	EXT PEST/PCB WP			COMPLETE	12/14/2000	12/18/2000	12/18/2000	RMJ
244540	SYF-01	G14	Aroclor 1016	ND	0.30	ug/wipe	12/14/2000	12/21/2000	12/21/2000	JDP
244540	SYF-01	G14	Aroclor 1221	ND	0.30	ug/wipe	12/14/2000	12/21/2000	12/21/2000	JDP
244540	SYF-01	G14	Aroclor 1232	ND	0.30	ug/wipe	12/14/2000	12/21/2000	12/21/2000	JDP
244540	SYF-01	G14	Aroclor 1242	ND	0.30	ug/wipe	12/14/2000	12/21/2000	12/21/2000	JDP
244540	SYF-01	G14	Aroclor 1248	ND	0.30	ug/wipe	12/14/2000	12/21/2000	12/21/2000	JDP
244540	SYF-01	G14	Aroclor 1254	ND	0.30	ug/wipe	12/14/2000	12/21/2000	12/21/2000	JDP
244540	SYF-01	G14	Aroclor 1260	ND	0.25	ug/wipe	12/14/2000	12/21/2000	12/21/2000	JDP

Approved by: _____

Report Prep: _____

THE WASHINGTON GROUP
ENVIRONMENTAL LABORATORY

Methods Used for Summary# 58536:

Code	Description
753	Pesticide/PCB extraction from wipe/ SW-846 Method 3550B mod.
G14	PCBs by GC/EPA Method 608/SW-846 Method 8082 (PCBs only)

Raytheon
Laboratory Chain Of Custody

Ship To:

Raytheon Laboratory
301 Chelsea Parkway
Boothwyn, PA 19061
Phone: 610-497-8000
Fax: 610-497-8005

Quote No.:

Lab Job No: 25700323

Client/Office: CLEAN HARBORS ENV. SERVICES Phone: 856 589-5000
Address: 2301 PENNA. AVE. DEPTFORD NJ 08096
Send report To: A. ENZMAN Fax: 856 227-9350
Project Description: AMTRAK/IT WMF SOUTH YARD

Send invoice to:
Address:
P.O. No.: 44NJ

TAT (for data): Identify number of "working days" below);...or Date-->:
☑ Rush 1 2 3 4 5 days ☐ Firm(6-12)____ ☐ Std.(~12)____ ☐ Other____
Lab Staffer confirming Rush/Firm:____ Hardcopy TAT Date?:____

Report Type: ☑ Results only ☐ Data+QC ☐ Reduced Deliv. ☐ Other:____
☐ Regulatory Format (CLP "like") ☐ Electronic/disk->(Format?)____

Regulatory Samples? ☐ YES ☑ NO If YES ?: ☐ Act II ☐ UST ☐ RCRA ☐ NPDES ☐ Phase I/II ☐ ISRA ☐ Other:____

Analytical Protocol: ☐ SW846 ☐ EPA600 ☐ Drinking H2O ☐ ASTM ☐ Other:

Analysis Required: PCB (WIPE, 100 cm²)

Lab Use Only
rev. 10/12/99
Due Date:
Cooler Tmp N/A deg C
custody seal yes__ no ✓
No.:
Summary No. 58536

Sample Data (NJ HAZITE disk deliverable limits sample ID to 7 Characters)

ID (NJ limit=7 characters)	date	time	matrix	grab	comp	type	no.	preservative	pH	PCB (WIPE, 100 cm²)	Lab Log No.
SYF-01	12/14		WIPE			202	1			X	244540

Comments/Special Handling/Storage/Disposal--->:
Sampled by: D. HARTSHORNE
Phone no: 856 589-5000

Relinquished By:		Received By:		Method of Shipment
Name: [signature]	Date: 12/13	Name: K. Wolfe	Date: 12/18/00	Airbill No.
Organization: CHE 5-6	Time:	Organization: TWG	Time: 1005	
Name:	Date:	Name:	Date:	
Organization:	Time:	Organization:	Time:	
Name:	Date:	Name:	Date:	
Organization:	Time:	Organization:	Time:	

Washington Environmental Laboratory

SAMPLE RECEIVING CHECKLIST

Client/Site: Clean Harbor

Assigned Summary # 58536

Section 1. Laboratory Courier (omit if samples received directly from client or 3rd party)

1.1 Samples taken by lab personnel?	☐ Yes	☐ No	
Preserved in field?	☐ Yes	☐ No	☐ Not Req.
Stored on ice?	☐ Yes	☐ No	☐ Not Req.
Date/time last sample placed in cooler: _____			
1.2 Samples taken by customer or 3rd party?	☐ Yes	☐ No	
Received under refrigeration?	☐ Yes (cooler)	☐ Yes (refrig.)	☐ No
If yes, in Cooler sealed?	☐ Yes	☐ No	
If no, ice present?	☐ Yes	☐ No	
Ice added?	☐ Yes	☐ No	
If refrig. placed in cooler/iced	☐ Yes	☐ No	

Section 2. Laboratory

2.1 Delivered by	☒ Client	☐ Lab Pers	☐ Parcel Svc
2.2 Packaging	☐ Cooler, temp: N/A °C		☒ Other/none
Custody Seals	☐ Present	☒ Absent	☐ Broken
Ice	☐ Present	☒ Absent	☐ Melted
2.3 Documentation			
Airbill Present	☐ Yes, #_____		☐ No
COC	☒ Rec'd		☐ Prpd by Lab
2.4 Sample Containers			
Appropriate for specified analyses?	☒ Yes	☐ No*	
Intact?	☒ Yes	☐ No*	
Labeled, and labels legible?	☒ Yes	☐ No*	
Labels agree with COC?	☒ Yes	☐ No*	

2.5 Preservation (water samples only)				
Metals	pH<2	☐ Yes	☐ No*	☐ NA
Cyanides	pH >12	☐ Yes	☐ No*	☐ NA
Sulfides	pH >9	☐ Yes	☐ No*	☐ NA
BNA, Pest, PCB, CN, Phenols	Cl_2 absent	☐ Yes	☐ No*	☐ NA
TOC, COD, Oil/Grease, Phenols, TPH	pH<2	☐ Yes	☐ No*	☐ NA
TKN, NH3, Tot. P.	pH<2	☐ Yes	☐ No*	☐ NA
Were preservatives added at lab?		☐ Yes*	☐ No	☐ N/A

Comments (note: any response marked "*" requires detailed explanation identify specific samples, what was wrong, and what was done)

_____

_____

_____

_____

_____

Initials: LM Date: 12-18-00

admin3/QA/IList/SR Checlist

Washington
Environmental Laboratory

LABORATORY ORGANICS DATA SHEET

LAB SAMPLE # : 244540
MATRIX : WIPE
CLIENT ID : SYF-01
Sample wt/vol : 1w

ANALYSIS DATE : 12/21/2000
RECVD DATE : 12/18/2000
ID FILE : g14.id
DATA FILE : M0017758

Compound			Result ug/wipe	Detection Limit ug/wipe
12674-11-2	Aroclor	1016	ND	0.30
11104-28-2	Aroclor	1221	ND	0.30
11141-16-5	Aroclor	1232	ND	0.30
53469-21-9	Aroclor	1242	ND	0.30
12672-29-6	Aroclor	1248	ND	0.30
11097-69-1	Aroclor	1254	ND	0.30
11096-82-5	Aroclor	1260	ND	0.25

ND - Not Detected
J - Indicates an Estimated Value below MDL
B - Analyte Also Found in blank
D - Diluted
E - Estimated

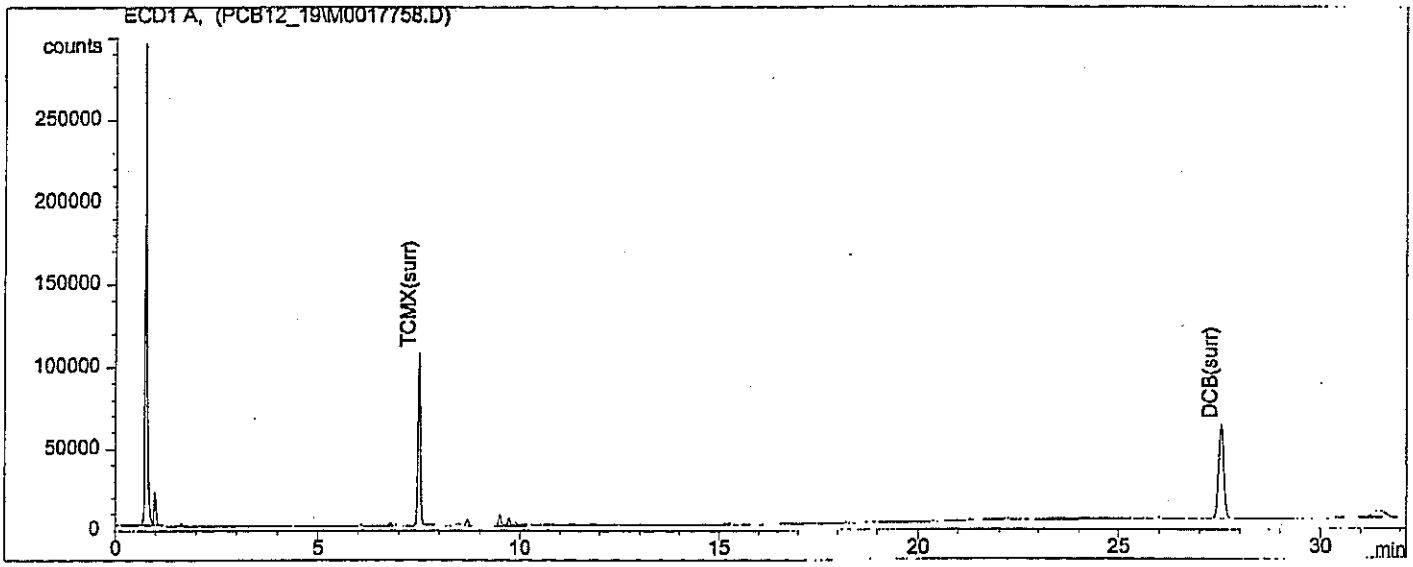
10.00SUMMARY 58536

The Washington Group Laboratory
Boothwyn PA

ANALYSIS: PCBs (Method 8082)

SAMPLE: 244540 Sample Size: 1w/10ml k046016 ->
Data File name: C:\HPCHEM\1\DATA\PCB12_19\M0017758.D
Method name: C:\HPCHEM\1\METHODS\PCB48.M
Acq. Operator: JDP
Injection Date: 12/21/00 1:41:39 AM
vial # 25
Instrument M Column: 30m DB5

58536 Page 0007



REPORT

#	Detector	Ret. Time [min]	Area	Amount [ug/l]	Compound Name
1	ECD1 A,	7.500	459160	72.3	TCMX(surr)
2	ECD1 A,	0.000	0	0.0	PCB1016A
3	ECD1 A,	0.000	0	0.0	PCB1016B
4	ECD1 A,	0.000	0	0.0	PCB1016C
5	ECD1 A,	0.000	0	0.0	PCB1016D
6	ECD1 A,	0.000	0	0.0	PCB1260A
7	ECD1 A,	0.000	0	0.0	PCB1260B
8	ECD1 A,	0.000	0	0.0	PCB1260C
9	ECD1 A,	0.000	0	0.0	PCB1260D
10	ECD1 A,	27.526	532992	93.4	DCB(surr)
			Total:	165.7	

AREA SUM:

Comp. Group Name	Area Sum	Amount Sum
PCB1016	0	0.0
PCB1260	0	0.0

JDP
12-22-00

created on:12/22/00 2:12:33 PM

Washington
Environmental Laboratory

2E

Lab Name WASHINGTON GROUP Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: N/A

EPA SAMPLE NO.	S1 (DCB) #	OTHER *
MB016	80	66
244540	93	72

Advisory QC (24-150)

S1 (DCB) = Decachlorobiphenyl

Column used to flag recovery values

* Tetra-chloro-m-xylene surrogate
D Surrogates Diluted Out

 FORM II PEST-1 1/87 Rev.

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. G5 3585272

Collected:04/04/2001 13:00 by SM

Account Number: 01401

Submitted: 04/05/2001 18:20
Reported: 04/17/01 at 10:23 AM
Discard: 5/2/01
Rail Tie Composite Wood Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

RTCMP

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 17.	17.	ug/kg	1
01496	PCB-1221	11104-28-2	< 17.	17.	ug/kg	1
01497	PCB-1232	11141-16-5	< 17.	17.	ug/kg	1
01498	PCB-1242	53469-21-9	< 17.	17.	ug/kg	1
01499	PCB-1248	12672-29-6	< 17.	17.	ug/kg	1
01500	PCB-1254	11097-69-1	< 17.	17.	ug/kg	1
01501	PCB-1260	11096-82-5	< 17.	17.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01216	PCBs in Solids	SW-846 8082	1	04/09/2001 13:52	Michele D. Hamilton	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	04/06/2001 15:30	Luis E. Villamil	1

INTERNATIONAL PETROLEUM CORPORATION

A Subsidiary of World Fuel Services Corporation (NYSE:INT)

DATE: July 30, 2001

SAMPLE NUMBER: 01-1303

SAMPLE DESCRIPTION: WASTE OIL

COMPANY: AMTRAK

COMPONENTS	METHOD	RESULT
ARSENIC, PPM	D-5185	
CADMIUM, PPM	D-5185	
CHROMIUM, PPM	D-5185	
LEAD, PPM	D-5185	
API GRAVITY	D-1298	
POUNDS PER GALLON	D-1298	
HALIDES, PPM	D-4929	155
PCBs, PPM	D-4059	BDL
FLASH POINT, °F	D-93	
WATER, VOLUME %	D-4006	
BOTTOM SEDIMENT, VOLUME %	D-2273	

LAURI ALBERT
CHEMIST

590 gal
From IT Group
[illegible] Tank @ S. Loco Yard

INTERNATIONAL PETROLEUM CORPORATION

A Subsidiary of World Fuel Services Corporation (NYSE:INT)

AH Steve Baggett

DATE: September 6, 2001

SAMPLE NUMBER: 01-1361

SAMPLE DESCRIPTION: WASTE OIL

COMPANY: AMTRAK - PHIL TIBERI

COMPONENTS	METHOD	RESULT
ARSENIC, PPM	D-5185	
CADMIUM, PPM	D-5185	
CHROMIUM, PPM	D-5185	
LEAD, PPM	D-5185	
API GRAVITY	D-1298	
POUNDS PER GALLON	D-1298	
HALIDES, PPM	D-4929	
PCBs, PPM	D-4059	BDL
FLASH POINT, ^{o} F	D-93	
WATER, VOLUME %	D-4006	
BOTTOM SEDIMENT, VOLUME %	D-2273	

LA

LAURI ALBERT
CHEMIST

INTERNATIONAL PETROLEUM CORPORATION

A Subsidiary of World Fuel Services Corporation (NYSE:INT)

DATE: September 24, 2001

SAMPLE NUMBER: 01-1388

SAMPLE DESCRIPTION: FORMER FUELING AREA

COMPANY: AMTRAK

COMPONENTS	METHOD	RESULT
ARSENIC, PPM	D-5185	
CADMIUM, PPM	D-5185	
CHROMIUM, PPM	D-5185	
LEAD, PPM	D-5185	
API GRAVITY	D-1298	
POUNDS PER GALLON	D-1298	
HALIDES, PPM	D-4929	
PCBs, PPM	D-4059	BDL
FLASH POINT, ^{o} F	D-93	
WATER, VOLUME %	D-4006	
BOTTOM SEDIMENT, VOLUME %	D-2273	

LA

LAURI ALBERT
CHEMIST

610-241-5050
IT

INTERNATIONAL PETROLEUM CORPORATION

A Subsidiary of World Fuel Services Corporation (NYSE-INT)

DATE: October 3, 2001

SAMPLE NUMBER: 01-1401

SAMPLE DESCRIPTION: WASTE OIL

COMPANY: AMTRAK

COMPONENTS	METHOD	RESULT
ARSENIC, PPM	D-5185	
CADMIUM, PPM	D-5185	
CHROMIUM, PPM	D-5185	
LEAD, PPM	D-5185	
API GRAVITY	D-1298	
POUNDS PER GALLON	D-1298	
HALIDES, PPM	D-4929	
PCBs, PPM	D-4059	BDL
FLASH POINT, ^{o} F	D-93	
WATER, VOLUME %	D-4006	
BOTTOM SEDIMENT, VOLUME %	D-2273	

LA

LAURI ALBERT
CHEMIST

***** Lancaster Laboratories Analytical Report *****
2425 New Holland Pike, Lancaster, PA 17601

Sample Number: G53703077 Account: 01401 IT CORPORATION- PA
Date Submitted: 10/10/01 Date Reported: 10/12/01
Date Collected: 10/06/01

1,000 Recovery Tank Oil Sample
Amtrak - Delaware

	ANALYSIS NAME	RESULT	LIMIT OF QUANTITATION	UNITS
0174	PCBs in Oil			

Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.

==========

4815	PCB-1016	< 2,500.	2,500.	ug/kg
4816	PCB-1221	< 2,500.	2,500.	ug/kg
4817	PCB-1232	< 2,500.	2,500.	ug/kg
4818	PCB-1242	< 2,500.	2,500.	ug/kg
4819	PCB-1248	< 2,500.	2,500.	ug/kg
4820	PCB-1254	< 2,500.	2,500.	ug/kg
4821	PCB-1260	25,700.	2,500.	ug/kg

==========

Appendix B

Diesel Fuel Remedy Soil Stockpile Analytical Data

Appendix B.1

November 17 and 19, 2001 Sampling Event

Petroleum Hydrocarbons
Soil Stockpile Analytical Results
Amtrak Former Fueling Facility

Lab ID	3502908	3502909	3502910	3502911	3502912	3502913	3505896	3505897	3505898	3505899	3505900	DNREC URS Standards	
Soil Composite ID	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	*surface soils*	*subsurface soils*
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
MA EPH Method													
Naphthalene	3	18	5.6	6.2	10	3.3	8	23	16	3.6	<14	4100	4100
Acenaphthylene	<6.1	<18	<6.0	<11	<11	<2.8	<14	<28	<11	<5.5	<14	na	na
Acenaphthene	3.8	13	5.3	6.6	6.7	3.4	9.2	22	13	4.9	8.2	5000	5000
Fluorene	4.2	17	5.7	6.9	6.4	3.9	13	27	14	5.1	5.7	5000	5000
Phenanthrene	11	41	14	18	16	11	28	65	37	15	17	5000	5000
Anthracene	3.6	12	4.7	5.9	6.3	3.1	8.8	15	10	5.3	10	500	500
Fluoranthene	2.8	9.4	3.7	<11	7	2.9	6.8	19	8.1	4.9	8	500	500
Pyrene	<6.1	<18	<6.0	<11	4.7	1.6	<14	13	4.9	3.2	5.7	5000	5000
Benzo(a)anthracene	<6.1	<18	<6.0	<11	<11	<2.8	<14	<28	<11	<5.5	<14	8	8
Chrysene	<6.1	<18	<6.0	<11	<11	<2.8	<14	<28	<11	<5.5	<14	780	780
Benzo(b)fluoranthene	<6.1	<18	<6.0	<11	<11	<2.8	<14	<28	<11	<5.5	<14	8	8
Benzo(k)fluoranthene	<6.1	<18	<6.0	<11	<11	<2.8	<14	<28	<11	<5.5	<14	78	78
Benzo(a)pyrene	<6.1	<18	<6.0	<11	<11	<2.8	<14	<28	<11	<5.5	<14	0.8	0.8
Indeno(1,2,3-cd)pyrene	<6.1	<18	<6.0	<11	<11	<2.8	<14	<28	<11	<5.5	<14	8	8
Dibenzo(a,h)anthracene	<6.1	<18	<6.0	<11	<11	<2.8	<14	<28	<11	<5.5	<14	0.8	0.8
Benzo(g,h,i)perylene	<6.1	<18	<6.0	<11	<11	<2.8	<14	<28	<11	<5.5	<14	na	na
2-Methylnaphthalene	18	79	23	44	51	27	83	160	120	35	32	4100	4100
C9 to C18 Aliphatics	**3900**	**11000**	**4500**	**5500**	**6800**	**2500**	**6000**	**9000**	**6300**	**4300**	**4200**	2500	2500
C19 to C36 Aliphatices	770	1300	490	940	1100	470	920	1000	1100	650	510	5000	5000
C11 to C22 Aromatics	**2200**	**8300**	**3100**	**3600**	**3800**	1800	**5300**	**8500**	**5900**	**2900**	**5900**	2000	2000
MA VPH Method													
Benzene	0.27	0.25	<0.42	<0.34	0.35	<0.36	<1.4	<1.4	<1.4	<1.3	<1.3	200	200
Toluene	1.05	0.3	<0.42	0.18	0.67	<0.36	0.71	1.4	0.74	<1.3	<1.3	5000	5000
Ethylebenzene	<0.36	<0.48	<0.42	2.58	2.12	1.22	4.5	5.6	3.5	<1.3	<1.3	5000	5000
m,p-Xylenes	1.43	1.05	0.75	0.96	2.6	0.42	4.4	6.8	3.7	<1.3	0.71	5000	5000
o-Xylene	2.59	0.77	0.82	0.7	0.67	0.34	1.7	2.5	1.6	<1.3	<1.3	5000	5000
Methyl t-butyl ether	<0.36	<0.48	<0.42	<0.34	<0.37	<0.36	<1.4	<1.4	<1.4	<1.3	<1.3	1000	1000
Naphthalene	23.6	33.8	23.9	21.8	18.9	15.3	33.6	49.4	38.2	19.5	20.7	4100	4100
c5-c8 Aliphatic Hydrocarbons	78	44	31	24	14.6	11.8	41	46	<69	<67	<65	500	500
C9-C12 Aliphatic Hydrocarbons	776	971	795	635	510	402	733	1020	856	451	561	2500	2500
C9-C10 Aromatic Hydrocarbons	47	64	55	39	36	29	**703**	**865**	**729**	404	454	500	500

Note: DNREC URS Surface and Subsurface Standards assume Non Critical Water Resource Area and Restricted Use
DNREC URS Standards Source: Remediation Standards Guidance Under the Delaware Hazardous Substance Cleanup Act (DNREC, 1999)

PCB
Soil Stockpile Analytical Results
Amtrak Former Fueling Facility

Lab ID	3502908	3502909	3502910	3502911	3502912	3502913	3505896	3505897	3505898	3505899	3505900	DNREC URS Standards	
Soil Composite ID	1	2	3	4	5	6	7	8	9	10	11	*surface soils*	*subsurface soils*
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCB-1016	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	82	82
PCB-1221	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	3	3
PCB-1232	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	3	3
PCB-1242	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	3	3
PCB-1248	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	3	3
PCB-1254	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	3	3
PCB1260	0.52	0.36	0.29	0.3	0.42	0.085	0.14	0.1	0.15	0.12	0.075	3	3

Note: DNREC URS Surface and Subsurface Standards assume Non Critical Water Resource Area and Restricted Use
DNREC URS Standards Source: Remediation Standards Guidance Under the Delaware Hazardous Substance Cleanup Act (DNREC, 1999)

Composite Samples 12 and 13 Analytical Results

Soil Stockpile

Amtrak Former Fueling Facility

PCB

Lab ID	3502908	3502909	**DNREC URS Standards**	
Soil Composite ID	**12**	**13**	*surface soils*	*subsurface soils*
Units	mg/kg	mg/kg	mg/kg	mg/kg
PCB-1016	<0.021	<0.019	82	82
PCB-1221	<0.021	<0.019	3	3
PCB-1232	<0.021	<0.019	3	3
PCB-1242	<0.021	<0.019	3	3
PCB-1248	<0.021	<0.019	3	3
PCB-1254	<0.021	<0.019	3	3
PCB1260	0.29	0.13	3	3

Note: DNREC URS Surface and Subsurface Standards assume Non Critical Water Resource Area and Restricted Use

DNREC URS Standards Source: Remediation Standards Guidance Under the Delaware Hazardous Substance Cleanup Act (DNREC, 1999)

Composite Samples 12 and 13 Analytical Results
Soil Stockpile
Amtrak Former Fueling Facility

RCRA Charateristic and TPH

Lab ID		3502908	3502909
Soil Composite ID	**Units**	**12**	**13**
RCRA Charateristics			
Moisture	%	18	11
pH	pH units	5.26	5.99
Corrosivity	na	no	no
Ignitablitity	na	no	no
Reactive Sulfide	mg/kg	<120	<120
Reactive Cyanide	mg/kg	<100	<100
Total Petroleum	mg/kg	19,200	16,400
Hydrocarbons			

Composite Samples 12 and 13 Analytical Results
Soil Stockpile
Amtrak Former Fueling Facility

TCLP

Lab ID Soil Composite ID	Units	3502908 12	3502909 13	TCLP Standard
Inorganics				
Mercury	mg/l	<0.00020	<0.00020	0.2
Arsenic	mg/l	<0.1	<0.1	5
Selenium	mg/l	<0.2	<0.2	1
Barium	mg/l	0.598	0.684	100
Cadmium	mg/l	<0.0100	<0.0100	1
Chromium	mg/l	<0.03	<0.03	5
Lead	mg/l	0.18	0.107	5
Silver	mg/l	<0.02	<0.02	5
Semivolatiles				
Pyridine	mg/l	<0.03	<0.02	5
1,4-Dichlorobenzene	mg/l	<0.03	<0.02	7.5
2-Methylphenol	mg/l	<0.03	<0.02	200
4-Methylphenol	mg/l	<0.03	<0.02	200
Hexachloroethane	mg/l	<0.03	<0.02	3
Nitrobenzene	mg/l	<0.03	<0.02	2
Hexachlorobutadiene	mg/l	<0.03	<0.02	0.5
2,4,6-Trichlorophenol	mg/l	<0.03	<0.02	2
2,4,5-Trichlorophenol	mg/l	<0.03	<0.02	400
2,4-Dinitrotoluene	mg/l	<0.03	<0.02	0.13
Hexachlorobenzene	mg/l	<0.03	<0.02	0.13
Pentachlorophenol	mg/l	<0.08	<0.05	100
Pesticides/Herbicides				
Chlordane	mg/l	<0.0025	<0.0025	0.03
Endrin	mg/l	<0.00010	<0.00010	0.02
Heptachlor	mg/l	<0.00005	<0.00005	0.008
Heptachlor Epoxide	mg/l	<0.00005	<0.00005	0.008
Gamma BHC-Lindane	mg/l	<0.00005	<0.00005	0.4
Methoxychlor	mg/l	<0.00050	<0.00050	10
Toxaphene	mg/l	<0.005	<0.005	0.5
2,4-D	mg/l	<0.010	<0.010	10
2,4,5-TP	mg/l	<0.0010	<0.0010	1
Volatiles				
Vinyl Chloride	mg/l	<0.025	<0.025	0.2
1, 1,-Dichloroethene	mg/l	<0.025	<0.025	0.7
2-Butanone	mg/l	<0.025	<0.025	200
Chloroform	mg/l	<0.025	<0.025	6
Carbon Tetrachloride	mg/l	<0.025	<0.025	0.5
Benzene	mg/l	<0.025	<0.025	0.5
1,2-Dichloroethane	mg/l	<0.025	<0.025	0.5
Chlorobenzene	mg/l	<0.025	<0.025	100

Lancaster Laboratories
Where quality is a science.

ANALYTICAL RESULTS

Prepared for:

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 739893. Samples arrived at the laboratory on Wednesday, November 15, 2000.

Client Description	Lancaster Labs Number
Soil Composite 1 Sample	3502908
Soil Composite 2 Sample	3502909
Soil Composite 3 Sample	3502910
Soil Composite 4 Sample	3502911
Soil Composite 5 Sample	3502912
Soil Composite 6 Sample	3502913
Soil Composite 12 Sample	3502914
Soil Composite 12 Sample	3502915
Soil Composite 12 Sample	3502916
Storage Blank Water Sample	3502917

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO IT Corporation-PA Attn: Mr. Steve Baggett

Lancaster Laboratories
Where quality is a science.

Questions? Contact your Client Services Representative
De Brooks at (717) 656-2300.

Respectfully Submitted,

Robert E Mellinger
Sr. Chemist/Coordinator

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

MEMBER ACIL

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3502908

Collected:11/14/2000 10:25 by BB

Account Number: 01401

Submitted: 11/15/2000 18:30
Reported: 12/12/00 at 05:12 PM
Discard: 12/27/00
Soil Composite 1 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

SED-1

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	18.4		0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.						
05332	MA EPH - Soils						
05349	Naphthalene	91-20-3	3.0	J	6.1	mg/kg	10
05350	Acenaphthylene	208-96-8	N.D.		6.1	mg/kg	10
05351	Acenaphthene	83-32-9	3.8	J	6.1	mg/kg	10
05352	Fluorene	86-73-7	4.2	J	6.1	mg/kg	10
05353	Phenanthrene	85-01-8	11.		6.1	mg/kg	10
05354	Anthracene	120-12-7	3.6	J	6.1	mg/kg	10
05355	Fluoranthene	206-44-0	2.8	J	6.1	mg/kg	10
05356	Pyrene	129-00-0	N.D.		6.1	mg/kg	10
05357	Benzo(a)anthracene	56-55-3	N.D.		6.1	mg/kg	10
05358	Chrysene	218-01-9	N.D.		6.1	mg/kg	10
05359	Benzo(b)fluoranthene	205-99-2	N.D.		6.1	mg/kg	10
05360	Benzo(k)fluoranthene	207-08-9	N.D.		6.1	mg/kg	10
05361	Benzo(a)pyrene	50-32-8	N.D.		6.1	mg/kg	10
05362	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.		6.1	mg/kg	10
05363	Dibenzo(a,h)anthracene	53-70-3	N.D.		6.1	mg/kg	10
05364	Benzo(g,h,i)perylene	191-24-2	N.D.		6.1	mg/kg	10
08395	2-Methylnaphthalene	91-57-6	18.		6.1	mg/kg	10
08396	C9 to C18 Aliphatics	n.a.	3,900.		92.	mg/kg	25
08397	C19 to C36 Aliphatics	n.a.	770.		150.	mg/kg	25
08398	C11 to C22 Aromatics	n.a.	2,200.		49.	mg/kg	10
08837	Unadjusted C11 - C22 Aromatics	n.a.	2,300.		49.	mg/kg	10

The surrogate standard for the aliphatic hydrocarbons is 1-chloro-octadecane.
The surrogate standard for the aromatic hydrocarbons is ortho-terphenyl.
The EPH fractionation surrogate is 2-fluorobiphenyl.

Significant modifications to the method are listed below:
Fractionation of the aliphatic and aromatic hydrocarbons was performed using a reduced size silica gel column with reduced elution volumes.
Alternate elution solvent was used as defined in SW-846 method 3630C for

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3502908

Collected:11/14/2000 10:25 by BB

Account Number: 01401

Submitted: 11/15/2000 18:30
Reported: 12/12/00 at 05:12 PM
Discard: 12/27/00
Soil Composite 1 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

SED-1

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation	Units	Dilution Factor

the aliphatic fraction. This fractionation technique has been validated in our laboratory and was used to produce acceptable data for the MA Round Robin study of the EPH method. A single EPH fractionation surrogate, 2-fluorobiphenyl, rather than a mixture of 2-fluorobiphenyl and 2-bromo-naphthalene was used. Both compounds elute in the aromatic fraction.
Sample containers were received in satisfactory condition.
Samples were recieved on ice at a temperature of 4 C.

The quantitation limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.

Accurate surrogate recoveries could not be determined due to the dilution required for analysis of the sample.

The fractionation surrogate was inadvertently not added during the sample preparation. However, accurate surrogate recovery could not have been determined due to the dilution necessary on the aromatic fraction.

08765	MA - VPH soils						
08766	Benzene	71-43-2	0.27	J	0.36	mg/kg	147
08767	Toluene	108-88-3	1.05		0.36	mg/kg	147
08768	Ethylbenzene	100-41-4	N.D.		0.36	mg/kg	147
08769	m,p-Xylenes	1330-20-7	1.43		0.36	mg/kg	147
08770	o-Xylene	95-47-6	2.59		0.36	mg/kg	147
08771	Methyl t-butyl ether	1634-04-4	N.D.		0.36	mg/kg	147
08772	Naphthalene	91-20-3	23.6		0.36	mg/kg	147
08773	C5-C8 Aliphatic Hydrocarbons	n.a.	78.		18.	mg/kg	147
08774	C9-C12 Aliphatic Hydrocarbons	n.a.	776.		18.	mg/kg	147
08775	C9-C10 Aromatic Hydrocarbons	n.a.	47.		18.	mg/kg	147
08840	Unadjusted C5-C8 Aliphatics	n.a.	79.		18.	mg/kg	147
08841	Unadjusted C9-C12 Aliphatics	n.a.	828.		18.	mg/kg	147

The concentrations of individual target analytes and the surrogate standard have been subtracted from the concentrations of the appropriate hydrocarbon ranges as specified by the method.
Elution ranges for the target analytes are listed below:
benzene, toluene, methyl t-butyl ether - C5-C8 aliphatics
ethyl benzene, m,p-xylenes, o-xylene - C9-C12 aliphatics

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3502908

Collected:11/14/2000 10:25 by BB

Account Number: 01401

Submitted: 11/15/2000 18:30
Reported: 12/12/00 at 05:12 PM
Discard: 12/27/00
Soil Composite 1 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

SED-1

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor

Significant modifications to the method are listed below:
The surrogate standard for the VPH analysis is a,a,a-trifluorotoluene for both the PID and FID. This compound elutes in the C5-C8 range. 1-Chloro-3-fluorobenzene is also used as an internal standard for the PID and elutes in the C5-C8 range. A retention time marker compound, 4-bromofluorobenzene, is also added to each sample. It elutes in the C9-C12 aliphatic range and aromatic range. The use of the internal standard, surrogate standard, and retention time marker compound that elute in the specified aliphatic or aromatic ranges is a significant modification. The peak areas for these standards are subtracted from the area for the specific ranges before the concentrations are calculated. This process has been validated in our laboratory and has produced acceptable data in the MA Round Robin study.
This sample was submitted with a sample weight that does not conform to the acceptance criteria in the MA-VPH January 1998 method. According to this method, 15 grams of sample +/- 25% (i.e. 11.25 to 18.75 grams) are required to perform this analysis. This sample was submitted with 5.12 grams of sample. The client was notified of this non-conformance and we proceeded with the analysis.

Sample containers were received in satisfactory condition.
Samples were received on ice at a temperature of 4 C.

01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	N.D.	210.	ug/kg	10
01496	PCB-1221	11104-28-2	N.D.	210.	ug/kg	10
01497	PCB-1232	11141-16-5	N.D.	210.	ug/kg	10
01498	PCB-1242	53469-21-9	N.D.	210.	ug/kg	10
01499	PCB-1248	12672-29-6	N.D.	210.	ug/kg	10
01500	PCB-1254	11097-69-1	N.D.	210.	ug/kg	10
01501	PCB-1260	11096-82-5	520.	210.	ug/kg	10

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Lancaster Laboratories Sample No. SW 3502908

Collected:11/14/2000 10:25 by BB

Account Number: 01401

Submitted: 11/15/2000 18:30
Reported: 12/12/00 at 05:12 PM
Discard: 12/27/00
Soil Composite 1 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

SED-1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	11/19/2000 10:11	Susan A. Engle	1
05332	MA EPH - Soils	MA EPH, 1/98	1	12/06/2000 23:14	Robert G. Brown	25
05332	MA EPH - Soils	MA EPH, 1/98	1	12/07/2000 14:38	Robert G. Brown	10
05332	MA EPH - Soils	MA EPH, 1/98	1	12/06/2023 14:38	Robert G. Brown	25
08765	MA - VPH soils	MADEP-VPH,mod./8021B/5035	1	11/21/2000 22:33	Matthew E. Barton	147
01216	PCBs in Solids	SW-846 8082	1	11/28/2000 22:28	Artie D. Kunselman	10
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	11/20/2000 08:30	Jennytza L. Marcano	1
02168	Extraction - DRO Soil Special	MA EPH, 1/98	1	11/21/2000 18:00	Desiree J. Wann	1

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Lancaster Laboratories Sample No. SW 3502909

Collected:11/14/2000 12:00 by BB

Account Number: 01401

Submitted: 11/15/2000 18:30
Reported: 12/12/00 at 05:13 PM
Discard: 12/27/00
Soil Composite 2 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

SCM2T

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	30.3		0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.						
05332	MA EPH - Soils						
05349	Naphthalene	91-20-3	18.	J	18.	mg/kg	25
05350	Acenaphthylene	208-96-8	N.D.		18.	mg/kg	25
05351	Acenaphthene	83-32-9	13.	J	18.	mg/kg	25
05352	Fluorene	86-73-7	17.	J	18.	mg/kg	25
05353	Phenanthrene	85-01-8	41.		18.	mg/kg	25
05354	Anthracene	120-12-7	12.	J	18.	mg/kg	25
05355	Fluoranthene	206-44-0	9.4	J	18.	mg/kg	25
05356	Pyrene	129-00-0	N.D.		18.	mg/kg	25
05357	Benzo(a)anthracene	56-55-3	N.D.		18.	mg/kg	25
05358	Chrysene	218-01-9	N.D.		18.	mg/kg	25
05359	Benzo(b)fluoranthene	205-99-2	N.D.		18.	mg/kg	25
05360	Benzo(k)fluoranthene	207-08-9	N.D.		18.	mg/kg	25
05361	Benzo(a)pyrene	50-32-8	N.D.		18.	mg/kg	25
05362	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.		18.	mg/kg	25
05363	Dibenzo(a,h)anthracene	53-70-3	N.D.		18.	mg/kg	25
05364	Benzo(g,h,i)perylene	191-24-2	N.D.		18.	mg/kg	25
08395	2-Methylnaphthalene	91-57-6	79.		18.	mg/kg	25
08396	C9 to C18 Aliphatics	n.a.	11,000.		430.	mg/kg	100
08397	C19 to C36 Aliphatics	n.a.	1,300.		720.	mg/kg	100
08398	C11 to C22 Aromatics	n.a.	8,300.		140.	mg/kg	25
08837	Unadjusted C11 - C22 Aromatics	n.a.	8,500.		140.	mg/kg	25

The surrogate standard for the aliphatic hydrocarbons is 1-chloro-octadecane.
The surrogate standard for the aromatic hydrocarbons is ortho-terphenyl.
The EPH fractionation surrogate is 2-fluorobiphenyl.

Significant modifications to the method are listed below:
Fractionation of the aliphatic and aromatic hydrocarbons was performed using a reduced size silica gel column with reduced elution volumes.
Alternate elution solvent was used as defined in SW-846 method 3630C for

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Lancaster Laboratories Sample No. SW 3502909

Collected:11/14/2000 12:00 by BB

Account Number: 01401

Submitted: 11/15/2000 18:30
Reported: 12/12/00 at 05:13 PM
Discard: 12/27/00
Soil Composite 2 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

SCM2T

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation	Units	Dilution Factor

the aliphatic fraction. This fractionation technique has been validated in our laboratory and was used to produce acceptable data for the MA Round Robin study of the EPH method. A single EPH fractionation surrogate, 2-fluorobiphenyl, rather than a mixture of 2-fluorobiphenyl and 2-bromo-naphthalene was used. Both compounds elute in the aromatic fraction.
Sample containers were received in satisfactory condition.
Samples were recieved on ice at a temperature of 4 C.

The quantitation limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.

Accurate surrogate recoveries could not be determined due to the dilution required for analysis of the sample.

The fractionation surrogate was inadvertently not added during the sample preparation. However, accurate surrogate recovery could not have been determined due to the dilution necessary on the aromatic fraction.

08765	MA - VPH soils						
08766	Benzene	71-43-2	0.25	J	0.48	mg/kg	169
08767	Toluene	108-88-3	0.30	J	0.48	mg/kg	169
08768	Ethylbenzene	100-41-4	N.D.		0.48	mg/kg	169
08769	m,p-Xylenes	1330-20-7	1.05		0.48	mg/kg	169
08770	o-Xylene	95-47-6	0.77		0.48	mg/kg	169
08771	Methyl t-butyl ether	1634-04-4	N.D.		0.48	mg/kg	169
08772	Naphthalene	91-20-3	33.8		0.48	mg/kg	169
08773	C5-C8 Aliphatic Hydrocarbons	n.a.	44.		24.	mg/kg	169
08774	C9-C12 Aliphatic Hydrocarbons	n.a.	971.		24.	mg/kg	169
08775	C9-C10 Aromatic Hydrocarbons	n.a.	64.		24.	mg/kg	169
08840	Unadjusted C5-C8 Aliphatics	n.a.	44.		24.	mg/kg	169
08841	Unadjusted C9-C12 Aliphatics	n.a.	1,040.		24.	mg/kg	169

The concentrations of individual target analytes and the surrogate standard have been subtracted from the concentrations of the appropriate hydrocarbon ranges as specified by the method.
Elution ranges for the target analytes are listed below:
benzene, toluene, methyl t-butyl ether - C5-C8 aliphatics
ethyl benzene, m,p-xylenes, o-xylene - C9-C12 aliphatics

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Lancaster Laboratories Sample No. SW 3502909

Collected:11/14/2000 12:00 by BB

Account Number: 01401

Submitted: 11/15/2000 18:30
Reported: 12/12/00 at 05:13 PM
Discard: 12/27/00
Soil Composite 2 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

SCM2T

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor

Significant modifications to the method are listed below:
The surrogate standard for the VPH analysis is a,a,a-trifluorotoluene for both the PID and FID. This compound elutes in the C5-C8 range. 1-Chloro-3-fluorobenzene is also used as an internal standard for the PID and elutes in the C5-C8 range. A retention time marker compound, 4-bromofluorobenzene, is also added to each sample. It elutes in the C9-C12 aliphatic range and aromatic range. The use of the internal standard, surrogate standard, and retention time marker compound that elute in the specified aliphatic or aromatic ranges is a significant modification. The peak areas for these standards are subtracted from the area for the specific ranges before the concentrations are calculated. This process has been validated in our laboratory and has produced acceptable data in the MA Round Robin study.
This sample was submitted with a sample weight that does not conform to the acceptance criteria in the MA-VPH January 1998 method. According to this method, 15 grams of sample +/- 25% (i.e. 11.25 to 18.75 grams) are required to perform this analysis. This sample was submitted with 4.44 grams of sample. The client was notified of this non-conformance and we proceeded with the analysis.

Sample containers were received in satisfactory condition.
Samples were received on ice at a temperature of 4 C.

01216 PCBs in Solids

01495	PCB-1016	12674-11-2	N.D.	24.	ug/kg	1
01496	PCB-1221	11104-28-2	N.D.	24.	ug/kg	1
01497	PCB-1232	11141-16-5	N.D.	24.	ug/kg	1
01498	PCB-1242	53469-21-9	N.D.	24.	ug/kg	1
01499	PCB-1248	12672-29-6	N.D.	24.	ug/kg	1
01500	PCB-1254	11097-69-1	N.D.	24.	ug/kg	1
01501	PCB-1260	11096-82-5	360.	24.	ug/kg	1

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Lancaster Laboratories Sample No. SW 3502909

Collected:11/14/2000 12:00 by BB

Account Number: 01401

Submitted: 11/15/2000 18:30
Reported: 12/12/00 at 05:13 PM
Discard: 12/27/00
Soil Composite 2 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

SCM2T

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	11/19/2000 10:11	Susan A. Engle	1
05332	MA EPH - Soils	MA EPH, 1/98	1	12/07/2000 01:47	Robert G. Brown	25
05332	MA EPH - Soils	MA EPH, 1/98	1	12/07/2000 02:38	Robert G. Brown	100
08765	MA - VPH soils	MADEP-VPH,mod./8021B/5035	1	11/21/2000 23:16	Matthew E. Barton	169
01216	PCBs in Solids	SW-846 8082	1	11/22/2000 22:52	Artie D. Kunselman	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	11/20/2000 08:30	Jennytza L. Marcano	1
02168	Extraction - DRO Soil Special	MA EPH, 1/98	1	11/21/2000 18:00	Desiree J. Wann	1

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Lancaster Laboratories Sample No. SW 3502910

Collected:11/14/2000 12:20 by BB

Account Number: 01401

Submitted: 11/15/2000 18:30
Reported: 12/12/00 at 05:13 PM
Discard: 12/27/00
Soil Composite 3 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

SCM3T

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	16.5		0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.						
05332	MA EPH - Soils						
05349	Naphthalene	91-20-3	5.6	J	6.0	mg/kg	10
05350	Acenaphthylene	208-96-8	N.D.		6.0	mg/kg	10
05351	Acenaphthene	83-32-9	5.3	J	6.0	mg/kg	10
05352	Fluorene	86-73-7	5.7	J	6.0	mg/kg	10
05353	Phenanthrene	85-01-8	14.		6.0	mg/kg	10
05354	Anthracene	120-12-7	4.7	J	6.0	mg/kg	10
05355	Fluoranthene	206-44-0	3.7	J	6.0	mg/kg	10
05356	Pyrene	129-00-0	N.D.		6.0	mg/kg	10
05357	Benzo(a)anthracene	56-55-3	N.D.		6.0	mg/kg	10
05358	Chrysene	218-01-9	N.D.		6.0	mg/kg	10
05359	Benzo(b)fluoranthene	205-99-2	N.D.		6.0	mg/kg	10
05360	Benzo(k)fluoranthene	207-08-9	N.D.		6.0	mg/kg	10
05361	Benzo(a)pyrene	50-32-8	N.D.		6.0	mg/kg	10
05362	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.		6.0	mg/kg	10
05363	Dibenzo(a,h)anthracene	53-70-3	N.D.		6.0	mg/kg	10
05364	Benzo(g,h,i)perylene	191-24-2	N.D.		6.0	mg/kg	10
08395	2-Methylnaphthalene	91-57-6	23.		6.0	mg/kg	10
08396	C9 to C18 Aliphatics	n.a.	4,500.		90.	mg/kg	25
08397	C19 to C36 Aliphatics	n.a.	490.		150.	mg/kg	25
08398	C11 to C22 Aromatics	n.a.	3,100.		48.	mg/kg	10
08837	Unadjusted C11 - C22 Aromatics	n.a.	3,200.		48.	mg/kg	10

The surrogate standard for the aliphatic hydrocarbons is 1-chloro-octadecane.
The surrogate standard for the aromatic hydrocarbons is ortho-terphenyl.
The EPH fractionation surrogate is 2-fluorobiphenyl.

Significant modifications to the method are listed below:
Fractionation of the aliphatic and aromatic hydrocarbons was performed using a reduced size silica gel column with reduced elution volumes.
Alternate elution solvent was used as defined in SW-846 method 3630C for

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Lancaster Laboratories Sample No. SW 3502910

Collected:11/14/2000 12:20 by BB

Account Number: 01401

Submitted: 11/15/2000 18:30
Reported: 12/12/00 at 05:13 PM
Discard: 12/27/00
Soil Composite 3 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

SCM3T

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor

the aliphatic fraction. This fractionation technique has been validated in our laboratory and was used to produce acceptable data for the MA Round Robin study of the EPH method. A single EPH fractionation surrogate, 2-fluorobiphenyl, rather than a mixture of 2-fluorobiphenyl and 2-bromo-naphthalene was used. Both compounds elute in the aromatic fraction.
Sample containers were received in satisfactory condition.
Samples were recieved on ice at a temperature of 4 C.

The quantitation limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.

Accurate surrogate recoveries could not be determined due to the dilution required for analysis of the sample.

The fractionation surrogate was inadvertently not added during the sample preparation. However, accurate surrogate recovery could not have been determined due to the dilution necessary on the aromatic fraction.

08765 MA - VPH soils

08766	Benzene	71-43-2	N.D.	0.42	mg/kg	176
08767	Toluene	108-88-3	N.D.	0.42	mg/kg	176
08768	Ethylbenzene	100-41-4	N.D.	0.42	mg/kg	176
08769	m,p-Xylenes	1330-20-7	0.75	0.42	mg/kg	176
08770	o-Xylene	95-47-6	0.82	0.42	mg/kg	176
08771	Methyl t-butyl ether	1634-04-4	N.D.	0.42	mg/kg	176
08772	Naphthalene	91-20-3	23.9	0.42	mg/kg	176
08773	C5-C8 Aliphatic Hydrocarbons	n.a.	31.	21.	mg/kg	176
08774	C9-C12 Aliphatic Hydrocarbons	n.a.	795.	21.	mg/kg	176
08775	C9-C10 Aromatic Hydrocarbons	n.a.	55.	21.	mg/kg	176
08840	Unadjusted C5-C8 Aliphatics	n.a.	32.	21.	mg/kg	176
08841	Unadjusted C9-C12 Aliphatics	n.a.	851.	21.	mg/kg	176

The concentrations of individual target analytes and the surrogate standard have been subtracted from the concentrations of the appropriate hydrocarbon ranges as specified by the method.
Elution ranges for the target analytes are listed below:
benzene, toluene, methyl t-butyl ether - C5-C8 aliphatics
ethyl benzene, m,p-xylenes, o-xylene - C9-C12 aliphatics

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Lancaster Laboratories Sample No. SW 3502910

Collected:11/14/2000 12:20 by BB

Account Number: 01401

Submitted: 11/15/2000 18:30
Reported: 12/12/00 at 05:13 PM
Discard: 12/27/00
Soil Composite 3 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

SCM3T

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor

Significant modifications to the method are listed below:
The surrogate standard for the VPH analysis is a,a,a-trifluorotoluene for both the PID and FID. This compound elutes in the C5-C8 range.
1-Chloro-3-fluorobenzene is also used as an internal standard for the PID and elutes in the C5-C8 range. A retention time marker compound, 4-bromofluorobenzene, is also added to each sample. It elutes in the C9-C12 aliphatic range and aromatic range. The use of the internal standard, surrogate standard, and retention time marker compound that elute in the specified aliphatic or aromatic ranges is a significant modification. The peak areas for these standards are subtracted from the area for the specific ranges before the concentrations are calculated. This process has been validated in our laboratory and has produced acceptable data in the MA Round Robin study.
This sample was submitted with a sample weight that does not conform to the acceptance criteria in the MA-VPH January 1998 method. According to this method, 15 grams of sample +/- 25% (i.e. 11.25 to 18.75 grams) are required to perform this analysis. This sample was submitted with 4.26 grams of sample. The client was notified of this non-conformance and we proceeded with the analysis.

Sample containers were received in satisfactory condition.
Samples were received on ice at a temperature of 4 C.

01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	N.D.	20.	ug/kg	1
01496	PCB-1221	11104-28-2	N.D.	20.	ug/kg	1
01497	PCB-1232	11141-16-5	N.D.	20.	ug/kg	1
01498	PCB-1242	53469-21-9	N.D.	20.	ug/kg	1
01499	PCB-1248	12672-29-6	N.D.	20.	ug/kg	1
01500	PCB-1254	11097-69-1	N.D.	20.	ug/kg	1
01501	PCB-1260	11096-82-5	290.	20.	ug/kg	1

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Lancaster Laboratories Sample No. SW 3502910

Collected:11/14/2000 12:20 by BB

Account Number: 01401

Submitted: 11/15/2000 18:30
Reported: 12/12/00 at 05:13 PM
Discard: 12/27/00
Soil Composite 3 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

SCM3T

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	11/19/2000 10:11	Susan A. Engle	1
05332	MA EPH - Soils	MA EPH, 1/98	1	12/07/2000 03:29	Robert G. Brown	10
05332	MA EPH - Soils	MA EPH, 1/98	1	12/07/2000 06:02	Robert G. Brown	25
08765	MA - VPH soils	MADEP-VPH,mod./8021B/5035	1	11/22/2000 00:00	Matthew E. Barton	176
01216	PCBs in Solids	SW-846 8082	1	11/22/2000 23:14	Artie D. Kunselman	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	11/20/2000 08:30	Jennytza L. Marcano	1
02168	Extraction - DRO Soil Special	MA EPH, 1/98	1	11/21/2000 18:00	Desiree J. Wann	1

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Lancaster Laboratories Sample No. SW 3502911

Collected:11/14/2000 12:50 by BB

Account Number: 01401

Submitted: 11/15/2000 18:30
Reported: 12/12/00 at 05:13 PM
Discard: 12/27/00
Soil Composite 4 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

SCM4T

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	11.3		0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.						
05332	MA EPH - Soils						
05349	Naphthalene	91-20-3	6.2	J	11.	mg/kg	20
05350	Acenaphthylene	208-96-8	N.D.		11.	mg/kg	20
05351	Acenaphthene	83-32-9	6.6	J	11.	mg/kg	20
05352	Fluorene	86-73-7	6.9	J	11.	mg/kg	20
05353	Phenanthrene	85-01-8	18.		11.	mg/kg	20
05354	Anthracene	120-12-7	5.9	J	11.	mg/kg	20
05355	Fluoranthene	206-44-0	N.D.		11.	mg/kg	20
05356	Pyrene	129-00-0	N.D.		11.	mg/kg	20
05357	Benzo(a)anthracene	56-55-3	N.D.		11.	mg/kg	20
05358	Chrysene	218-01-9	N.D.		11.	mg/kg	20
05359	Benzo(b)fluoranthene	205-99-2	N.D.		11.	mg/kg	20
05360	Benzo(k)fluoranthene	207-08-9	N.D.		11.	mg/kg	20
05361	Benzo(a)pyrene	50-32-8	N.D.		11.	mg/kg	20
05362	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.		11.	mg/kg	20
05363	Dibenzo(a,h)anthracene	53-70-3	N.D.		11.	mg/kg	20
05364	Benzo(g,h,i)perylene	191-24-2	N.D.		11.	mg/kg	20
08395	2-Methylnaphthalene	91-57-6	44.		11.	mg/kg	20
08396	C9 to C18 Aliphatics	n.a.	5,500.		170.	mg/kg	50
08397	C19 to C36 Aliphatics	n.a.	940.		280.	mg/kg	50
08398	C11 to C22 Aromatics	n.a.	3,600.		90.	mg/kg	20
08837	Unadjusted C11 - C22 Aromatics	n.a.	3,700.		90.	mg/kg	20

The surrogate standard for the aliphatic hydrocarbons is 1-chloro-octadecane.
The surrogate standard for the aromatic hydrocarbons is ortho-terphenyl.
The EPH fractionation surrogate is 2-fluorobiphenyl.

Significant modifications to the method are listed below:
Fractionation of the aliphatic and aromatic hydrocarbons was performed using a reduced size silica gel column with reduced elution volumes.
Alternate elution solvent was used as defined in SW-846 method 3630C for

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Lancaster Laboratories Sample No. SW 3502911

Collected:11/14/2000 12:50 by BB

Account Number: 01401

Submitted: 11/15/2000 18:30
Reported: 12/12/00 at 05:13 PM
Discard: 12/27/00
Soil Composite 4 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

SCM4T

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation	Units	Dilution Factor

the aliphatic fraction. This fractionation technique has been validated in our laboratory and was used to produce acceptable data for the MA Round Robin study of the EPH method. A single EPH fractionation surrogate, 2-fluorobiphenyl, rather than a mixture of 2-fluorobiphenyl and 2-bromo-naphthalene was used. Both compounds elute in the aromatic fraction.
Sample containers were received in satisfactory condition.
Samples were recieved on ice at a temperature of 4 C.

The quantitation limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.

Accurate surrogate recoveries could not be determined due to the dilution required for analysis of the sample.

The fractionation surrogate was inadvertently not added during the sample preparation. However, accurate surrogate recovery could not have been determined due to the dilution necessary on the aromatic fraction.

08765 MA - VPH soils

08766	Benzene	71-43-2	N.D.		0.34	mg/kg	152
08767	Toluene	108-88-3	0.18	J	0.34	mg/kg	152
08768	Ethylbenzene	100-41-4	2.58		0.34	mg/kg	152
08769	m,p-Xylenes	1330-20-7	0.96		0.34	mg/kg	152
08770	o-Xylene	95-47-6	0.70		0.34	mg/kg	152
08771	Methyl t-butyl ether	1634-04-4	N.D.		0.34	mg/kg	152
08772	Naphthalene	91-20-3	21.8		0.34	mg/kg	152
08773	C5-C8 Aliphatic Hydrocarbons	n.a.	24.		17.	mg/kg	152
08774	C9-C12 Aliphatic Hydrocarbons	n.a.	635.		17.	mg/kg	152
08775	C9-C10 Aromatic Hydrocarbons	n.a.	39.		17.	mg/kg	152
08840	Unadjusted C5-C8 Aliphatics	n.a.	24.		17.	mg/kg	152
08841	Unadjusted C9-C12 Aliphatics	n.a.	678.		17.	mg/kg	152

The concentrations of individual target analytes and the surrogate standard have been subtracted from the concentrations of the appropriate hydrocarbon ranges as specified by the method.
Elution ranges for the target analytes are listed below:
benzene, toluene, methyl t-butyl ether - C5-C8 aliphatics
ethyl benzene, m,p-xylenes, o-xylene - C9-C12 aliphatics

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Discard: 12/27/00
Soil Composite 4 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

SCM4T

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor

Significant modifications to the method are listed below:
The surrogate standard for the VPH analysis is a,a,a-trifluorotoluene for both the PID and FID. This compound elutes in the C5-C8 range.
1-Chloro-3-fluorobenzene is also used as an internal standard for the PID and elutes in the C5-C8 range. A retention time marker compound, 4-bromofluorobenzene, is also added to each sample. It elutes in the C9-C12 aliphatic range and aromatic range. The use of the internal standard, surrogate standard, and retention time marker compound that elute in the specified aliphatic or aromatic ranges is a significant modification. The peak areas for these standards are subtracted from the area for the specific ranges before the concentrations are calculated. This process has been validated in our laboratory and has produced acceptable data in the MA Round Robin study.
This sample was submitted with a sample weight that does not conform to the acceptance criteria in the MA-VPH January 1998 method. According to this method, 15 grams of sample +/- 25% (i.e. 11.25 to 18.75 grams) are required to perform this analysis. This sample was submitted with 4.94 grams of sample. The client was notified of this non-conformance and we proceeded with the analysis.

Sample containers were received in satisfactory condition.
Samples were received on ice at a temperature of 4 C.

01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	N.D.	19.	ug/kg	1
01496	PCB-1221	11104-28-2	N.D.	19.	ug/kg	1
01497	PCB-1232	11141-16-5	N.D.	19.	ug/kg	1
01498	PCB-1242	53469-21-9	N.D.	19.	ug/kg	1
01499	PCB-1248	12672-29-6	N.D.	19.	ug/kg	1
01500	PCB-1254	11097-69-1	N.D.	19.	ug/kg	1
01501	PCB-1260	11096-82-5	300.	19.	ug/kg	1

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Lancaster Laboratories Sample No. SW 3502911

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Account Number: 01401

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Discard: 12/27/00
Soil Composite 4 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

SCM4T

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	11/19/2000 10:11	Susan A. Engle	1
05332	MA EPH - Soils	MA EPH, 1/98	1	12/07/2000 06:53	Robert G. Brown	20
05332	MA EPH - Soils	MA EPH, 1/98	1	12/07/2000 07:45	Robert G. Brown	50
08765	MA - VPH soils	MADEP-VPH,mod./8021B/5035	1	11/22/2000 13:20	Matthew E. Barton	152
01216	PCBs in Solids	SW-846 8082	1	11/22/2000 23:35	Artie D. Kunselman	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	11/20/2000 08:30	Jennytza L. Marcano	1
02168	Extraction - DRO Soil Special	MA EPH, 1/98	1	11/21/2000 18:00	Desiree J. Wann	1

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Lancaster Laboratories Sample No. SW 3502912

Collected:11/14/2000 13:10 by BB

Account Number: 01401

Submitted: 11/15/2000 18:30
Reported: 12/12/00 at 05:13 PM
Discard: 12/27/00
Soil Composite 5 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

SCM5T

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	12.9		0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.						
05332	MA EPH - Soils						
05349	Naphthalene	91-20-3	10.	J	11.	mg/kg	20
05350	Acenaphthylene	208-96-8	N.D.		11.	mg/kg	20
05351	Acenaphthene	83-32-9	6.7	J	11.	mg/kg	20
05352	Fluorene	86-73-7	6.4	J	11.	mg/kg	20
05353	Phenanthrene	85-01-8	16.		11.	mg/kg	20
05354	Anthracene	120-12-7	6.3	J	11.	mg/kg	20
05355	Fluoranthene	206-44-0	7.0	J	11.	mg/kg	20
05356	Pyrene	129-00-0	4.7	J	11.	mg/kg	20
05357	Benzo(a)anthracene	56-55-3	N.D.		11.	mg/kg	20
05358	Chrysene	218-01-9	N.D.		11.	mg/kg	20
05359	Benzo(b)fluoranthene	205-99-2	N.D.		11.	mg/kg	20
05360	Benzo(k)fluoranthene	207-08-9	N.D.		11.	mg/kg	20
05361	Benzo(a)pyrene	50-32-8	N.D.		11.	mg/kg	20
05362	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.		11.	mg/kg	20
05363	Dibenzo(a,h)anthracene	53-70-3	N.D.		11.	mg/kg	20
05364	Benzo(g,h,i)perylene	191-24-2	N.D.		11.	mg/kg	20
08395	2-Methylnaphthalene	91-57-6	51.		11.	mg/kg	20
08396	C9 to C18 Aliphatics	n.a.	6,800.		340.	mg/kg	100
08397	C19 to C36 Aliphatics	n.a.	1,100.		570.	mg/kg	100
08398	C11 to C22 Aromatics	n.a.	3,800.		92.	mg/kg	20
08837	Unadjusted C11 - C22 Aromatics	n.a.	3,900.		92.	mg/kg	20

The surrogate standard for the aliphatic hydrocarbons is 1-chloro-octadecane.
The surrogate standard for the aromatic hydrocarbons is ortho-terphenyl.
The EPH fractionation surrogate is 2-fluorobiphenyl.

Significant modifications to the method are listed below:
Fractionation of the aliphatic and aromatic hydrocarbons was performed using a reduced size silica gel column with reduced elution volumes.
Alternate elution solvent was used as defined in SW-846 method 3630C for

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Lancaster Laboratories Sample No. SW 3502912

Collected:11/14/2000 13:10 by BB

Account Number: 01401

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Reported: 12/12/00 at 05:13 PM
Discard: 12/27/00
Soil Composite 5 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

SCM5T

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation	Units	Dilution Factor

the aliphatic fraction. This fractionation technique has been validated in our laboratory and was used to produce acceptable data for the MA Round Robin study of the EPH method. A single EPH fractionation surrogate, 2-fluorobiphenyl, rather than a mixture of 2-fluorobiphenyl and 2-bromo-naphthalene was used. Both compounds elute in the aromatic fraction.
Sample containers were received in satisfactory condition.
Samples were recieved on ice at a temperature of 4 C.

The quantitation limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.

Accurate surrogate recoveries could not be determined due to the dilution required for analysis of the sample.

The fractionation surrogate was inadvertently not added during the sample preparation. However, accurate surrogate recovery could not have been determined due to the dilution necessary on the aromatic fraction.

08765	MA - VPH soils						
08766	Benzene	71-43-2	0.35	J	0.37	mg/kg	163
08767	Toluene	108-88-3	0.67		0.37	mg/kg	163
08768	Ethylbenzene	100-41-4	2.12		0.37	mg/kg	163
08769	m,p-Xylenes	1330-20-7	2.60		0.37	mg/kg	163
08770	o-Xylene	95-47-6	0.67		0.37	mg/kg	163
08771	Methyl t-butyl ether	1634-04-4	N.D.		0.37	mg/kg	163
08772	Naphthalene	91-20-3	18.9		0.37	mg/kg	163
08773	C5-C8 Aliphatic Hydrocarbons	n.a.	14.6	J	19.	mg/kg	163
08774	C9-C12 Aliphatic Hydrocarbons	n.a.	510.		19.	mg/kg	163
08775	C9-C10 Aromatic Hydrocarbons	n.a.	36.		19.	mg/kg	163
08840	Unadjusted C5-C8 Aliphatics	n.a.	15.6	J	19.	mg/kg	163
08841	Unadjusted C9-C12 Aliphatics	n.a.	551.		19.	mg/kg	163

The concentrations of individual target analytes and the surrogate standard have been subtracted from the concentrations of the appropriate hydrocarbon ranges as specified by the method.
Elution ranges for the target analytes are listed below:
benzene, toluene, methyl t-butyl ether - C5-C8 aliphatics
ethyl benzene, m,p-xylenes, o-xylene - C9-C12 aliphatics

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Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

SCM5T

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor

Significant modifications to the method are listed below:
The surrogate standard for the VPH analysis is a,a,a-trifluorotoluene for both the PID and FID. This compound elutes in the C5-C8 range. 1-Chloro-3-fluorobenzene is also used as an internal standard for the PID and elutes in the C5-C8 range. A retention time marker compound, 4-bromofluorobenzene, is also added to each sample. It elutes in the C9-C12 aliphatic range and aromatic range. The use of the internal standard, surrogate standard, and retention time marker compound that elute in the specified aliphatic or aromatic ranges is a significant modification. The peak areas for these standards are subtracted from the area for the specific ranges before the concentrations are calculated. This process has been validated in our laboratory and has produced acceptable data in the MA Round Robin study.
This sample was submitted with a sample weight that does not conform to the acceptance criteria in the MA-VPH January 1998 method. According to this method, 15 grams of sample +/- 25% (i.e. 11.25 to 18.75 grams) are required to perform this analysis. This sample was submitted with 4.59 grams of sample. The client was notified of this non-conformance and we proceeded with the analysis.

Sample containers were received in satisfactory condition.
Samples were received on ice at a temperature of 4 C.

01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	N.D.	200.	ug/kg	10
01496	PCB-1221	11104-28-2	N.D.	200.	ug/kg	10
01497	PCB-1232	11141-16-5	N.D.	200.	ug/kg	10
01498	PCB-1242	53469-21-9	N.D.	200.	ug/kg	10
01499	PCB-1248	12672-29-6	N.D.	200.	ug/kg	10
01500	PCB-1254	11097-69-1	N.D.	200.	ug/kg	10
01501	PCB-1260	11096-82-5	420.	200.	ug/kg	10

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Amtrak - Wilmington, DE

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West Chester PA 19380

SCM5T

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	11/19/2000 10:11	Susan A. Engle	1
05332	MA EPH - Soils	MA EPH, 1/98	1	12/07/2000 08:37	Robert G. Brown	20
05332	MA EPH - Soils	MA EPH, 1/98	1	12/07/2000 09:28	Robert G. Brown	100
08765	MA - VPH soils	MADEP-VPH,mod./8021B/5035	1	11/22/2000 01:26	Matthew E. Barton	163
01216	PCBs in Solids	SW-846 8082	1	11/28/2000 23:32	Artie D. Kunselman	10
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	11/20/2000 08:30	Jennytza L. Marcano	1
02168	Extraction - DRO Soil Special	MA EPH, 1/98	1	11/21/2000 18:00	Desiree J. Wann	1

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Lancaster Laboratories Sample No. SW 3502913

Collected:11/14/2000 14:00 by BB

Account Number: 01401

Submitted: 11/15/2000 18:30
Reported: 12/12/00 at 05:14 PM
Discard: 12/27/00
Soil Composite 6 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

SCM6T

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	10.4		0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.						
05332	MA EPH - Soils						
05349	Naphthalene	91-20-3	3.3		2.8	mg/kg	5
05350	Acenaphthylene	208-96-8	N.D.		2.8	mg/kg	5
05351	Acenaphthene	83-32-9	3.4		2.8	mg/kg	5
05352	Fluorene	86-73-7	3.9		2.8	mg/kg	5
05353	Phenanthrene	85-01-8	11.		2.8	mg/kg	5
05354	Anthracene	120-12-7	3.1		2.8	mg/kg	5
05355	Fluoranthene	206-44-0	2.9		2.8	mg/kg	5
05356	Pyrene	129-00-0	1.6	J	2.8	mg/kg	5
05357	Benzo(a)anthracene	56-55-3	N.D.		2.8	mg/kg	5
05358	Chrysene	218-01-9	N.D.		2.8	mg/kg	5
05359	Benzo(b)fluoranthene	205-99-2	N.D.		2.8	mg/kg	5
05360	Benzo(k)fluoranthene	207-08-9	N.D.		2.8	mg/kg	5
05361	Benzo(a)pyrene	50-32-8	N.D.		2.8	mg/kg	5
05362	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.		2.8	mg/kg	5
05363	Dibenzo(a,h)anthracene	53-70-3	N.D.		2.8	mg/kg	5
05364	Benzo(g,h,i)perylene	191-24-2	N.D.		2.8	mg/kg	5
08395	2-Methylnaphthalene	91-57-6	27.		2.8	mg/kg	5
08396	C9 to C18 Aliphatics	n.a.	2,500.		67.	mg/kg	20
08397	C19 to C36 Aliphatics	n.a.	470.		110.	mg/kg	20
08398	C11 to C22 Aromatics	n.a.	1,800.		22.	mg/kg	5
08837	Unadjusted C11 - C22 Aromatics	n.a.	1,800.		22.	mg/kg	5

The surrogate standard for the aliphatic hydrocarbons is 1-chloro-octadecane.
The surrogate standard for the aromatic hydrocarbons is ortho-terphenyl.
The EPH fractionation surrogate is 2-fluorobiphenyl.

Significant modifications to the method are listed below:
Fractionation of the aliphatic and aromatic hydrocarbons was performed using a reduced size silica gel column with reduced elution volumes.
Alternate elution solvent was used as defined in SW-846 method 3630C for

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Lancaster Laboratories Sample No. SW 3502913

Collected:11/14/2000 14:00 by BB

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Amtrak - Wilmington, DE

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West Chester PA 19380

SCM6T

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation	Units	Dilution Factor

the aliphatic fraction. This fractionation technique has been validated in our laboratory and was used to produce acceptable data for the MA Round Robin study of the EPH method. A single EPH fractionation surrogate, 2-fluorobiphenyl, rather than a mixture of 2-fluorobiphenyl and 2-bromo-naphthalene was used. Both compounds elute in the aromatic fraction.
Sample containers were received in satisfactory condition.
Samples were recieved on ice at a temperature of 4 C.

The quantitation limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.

Accurate surrogate recoveries could not be determined due to the dilution required for analysis of the sample.

The fractionation surrogate was inadvertently not added during the sample preparation. However, accurate surrogate recovery could not have been determined due to the dilution necessary on the aromatic fraction.

08765	MA - VPH soils						
08766	Benzene	71-43-2	N.D.		0.36	mg/kg	163
08767	Toluene	108-88-3	N.D.		0.36	mg/kg	163
08768	Ethylbenzene	100-41-4	1.22		0.36	mg/kg	163
08769	m,p-Xylenes	1330-20-7	0.42		0.36	mg/kg	163
08770	o-Xylene	95-47-6	0.34	J	0.36	mg/kg	163
08771	Methyl t-butyl ether	1634-04-4	N.D.		0.36	mg/kg	163
08772	Naphthalene	91-20-3	15.3		0.36	mg/kg	163
08773	C5-C8 Aliphatic Hydrocarbons	n.a.	11.8	J	18.	mg/kg	163
08774	C9-C12 Aliphatic Hydrocarbons	n.a.	402.		18.	mg/kg	163
08775	C9-C10 Aromatic Hydrocarbons	n.a.	29.		18.	mg/kg	163
08840	Unadjusted C5-C8 Aliphatics	n.a.	11.9	J	18.	mg/kg	163
08841	Unadjusted C9-C12 Aliphatics	n.a.	433.		18.	mg/kg	163

The concentrations of individual target analytes and the surrogate standard have been subtracted from the concentrations of the appropriate hydrocarbon ranges as specified by the method.
Elution ranges for the target analytes are listed below:
benzene, toluene, methyl t-butyl ether - C5-C8 aliphatics
ethyl benzene, m,p-xylenes, o-xylene - C9-C12 aliphatics

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Lancaster Laboratories Sample No. SW 3502913

Collected:11/14/2000 14:00 by BB

Account Number: 01401

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SCM6T

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor

Significant modifications to the method are listed below:
The surrogate standard for the VPH analysis is a,a,a-trifluorotoluene for both the PID and FID. This compound elutes in the C5-C8 range. 1-Chloro-3-fluorobenzene is also used as an internal standard for the PID and elutes in the C5-C8 range. A retention time marker compound, 4-bromofluorobenzene, is also added to each sample. It elutes in the C9-C12 aliphatic range and aromatic range. The use of the internal standard, surrogate standard, and retention time marker compound that elute in the specified aliphatic or aromatic ranges is a significant modification. The peak areas for these standards are subtracted from the area for the specific ranges before the concentrations are calculated. This process has been validated in our laboratory and has produced acceptable data in the MA Round Robin study.
This sample was submitted with a sample weight that does not conform to the acceptance criteria in the MA-VPH January 1998 method. According to this method, 15 grams of sample +/- 25% (i.e 11.25 to 18.75 grams) are required to perform this analysis. This sample was submitted with 4.60 grams of sample. The client was notified of this non-conformance and we proceeded with the analysis.

Sample containers were received in satisfactory condition.
Samples were received on ice at a temperature of 4 C.

01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	N.D.	19.	ug/kg	1
01496	PCB-1221	11104-28-2	N.D.	19.	ug/kg	1
01497	PCB-1232	11141-16-5	N.D.	19.	ug/kg	1
01498	PCB-1242	53469-21-9	N.D.	19.	ug/kg	1
01499	PCB-1248	12672-29-6	N.D.	19.	ug/kg	1
01500	PCB-1254	11097-69-1	N.D.	19.	ug/kg	1
01501	PCB-1260	11096-82-5	85.	19.	ug/kg	1

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Lancaster Laboratories Sample No. SW 3502913

Collected:11/14/2000 14:00 by BB

Account Number: 01401

Submitted: 11/15/2000 18:30
Reported: 12/12/00 at 05:14 PM
Discard: 12/27/00
Soil Composite 6 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

SCM6T

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	11/19/2000 10:11	Susan A. Engle	1
05332	MA EPH - Soils	MA EPH, 1/98	1	12/07/2000 10:20	Robert G. Brown	5
05332	MA EPH - Soils	MA EPH, 1/98	1	12/07/2000 11:11	Robert G. Brown	20
08765	MA - VPH soils	MADEP-VPH,mod./8021B/5035	1	11/22/2000 02:09	Matthew E. Barton	163
01216	PCBs in Solids	SW-846 8082	1	11/23/2000 00:18	Artie D. Kunselman	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	11/20/2000 08:30	Jennytza L. Marcano	1
02168	Extraction - DRO Soil Special	MA EPH, 1/98	1	11/21/2000 18:00	Desiree J. Wann	1

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Lancaster Laboratories Sample No. SW 3502914

Collected:11/14/2000 14:20 by BB

Account Number: 01401

Submitted: 11/15/2000 18:30
Reported: 12/12/00 at 05:14 PM
Discard: 12/27/00
Soil Composite 12 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

SCM12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	18.0	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	N.D.	21.	ug/kg	1
01496	PCB-1221	11104-28-2	N.D.	21.	ug/kg	1
01497	PCB-1232	11141-16-5	N.D.	21.	ug/kg	1
01498	PCB-1242	53469-21-9	N.D.	21.	ug/kg	1
01499	PCB-1248	12672-29-6	N.D.	21.	ug/kg	1
01500	PCB-1254	11097-69-1	N.D.	21.	ug/kg	1
01501	PCB-1260	11096-82-5	290.	21.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	11/19/2000 10:11	Susan A. Engle	1
01216	PCBs in Solids	SW-846 8082	1	11/23/2000 00:40	Artie D. Kunselman	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	11/20/2000 08:30	Jennytza L. Marcano	1

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Lancaster Laboratories Sample No. TL 3502915

Collected:11/14/2000 14:20 by BB

Account Number: 01401

Submitted: 11/15/2000 18:30
Reported: 12/12/00 at 05:14 PM
Discard: 12/27/00
Soil Composite 12 Sample
TCLP NON VOLATILE EXTRACTION
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

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CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00259	Mercury	7439-97-6	N.D.	0.00020	mg/l	1

The metal analyses were performed on a non-volatile leachate prepared according to the procedure specified in SW-846, Chapter 7.4 (Revision 3, December, 1994). A sample is considered to have failed the Toxicity Characteristic (TC) test and is considered a hazardous waste if any of the metal concentrations (mg/l) in the leachate exceed the following maxima (100 times the Primary Drinking Water Standards):

Arsenic	5.0	Cadmium	1.0	Lead	5.0	Selenium	1.0
Barium	100.0	Chromium	5.0	Mercury	0.2	Silver	5.0

01335	Arsenic	7440-38-2	N.D.	0.100	mg/l	1
01336	Selenium	7782-49-2	N.D.	0.200	mg/l	1
01746	Barium	7440-39-3	0.598	0.100	mg/l	1
01749	Cadmium	7440-43-9	N.D.	0.0100	mg/l	1
01751	Chromium	7440-47-3	N.D.	0.0300	mg/l	1
01755	Lead	7439-92-1	0.180	0.100	mg/l	1
01766	Silver	7440-22-4	N.D.	0.0200	mg/l	1

00950 TCLP Pesticides

01972	Gamma BHC - Lindane	58-89-9	N.D.	0.000050	mg/l	1
01973	Heptachlor	76-44-8	N.D.	0.000050	mg/l	1
01974	Heptachlor Epoxide	1024-57-3	N.D.	0.000050	mg/l	1
01975	Methoxychlor	72-43-5	N.D.	0.00050	mg/l	1
01976	Endrin	72-20-8	N.D.	0.00010	mg/l	1
01977	Chlordane	57-74-9	N.D.	0.0025	mg/l	1
01978	Toxaphene	8001-35-2	N.D.	0.0050	mg/l	1

The pesticide/herbicide analyses were performed on a non-volatile toxicity characteristic leachate of the submitted waste. The leachate was prepared according to the procedure specified in the March 29 and the June 29, 1990 Federal Registers.
A sample is considered to have failed the Toxicity Characteristic (TC) test and is therefore considered a hazardous waste if any of the contaminant concentrations (mg/l) in the leachate exceed the following maxima:

Chlordane	0.03	Methoxychlor	10.0
Endrin	0.02	Toxaphene	0.5

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Soil Composite 12 Sample
TCLP NON VOLATILE EXTRACTION
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1220 Ward Avenue, Suite 300
West Chester PA 19380

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CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
	Heptachlor (and epoxide)	0.008	2,4-D	10.0		
	Lindane	0.4	2,4,5-TP(Silvex)	1.0		

The limits are published in March 29, 1990 Federal Register, pp. 11845-6. The endrin and methoxychlor recoveries are outside the QC limits for the LCS. Since the recoveries are high and these compounds were not detected in the sample, the results are reported.

00952 TCLP Herbicides

01979	2,4-D	94-75-7	N.D.	0.010	mg/l	1
01980	2,4,5-TP	93-72-1	N.D.	0.0010	mg/l	1

00949 TCLP Acid Base/Neutrals

03324	Pyridine	110-86-1	N.D.	0.030	mg/l	1
03325	1,4-Dichlorobenzene	106-46-7	N.D.	0.030	mg/l	1
03326	2-Methylphenol	95-48-7	N.D.	0.030	mg/l	1
03327	4-Methylphenol	106-44-5	N.D.	0.030	mg/l	1

3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.

03328	Hexachloroethane	67-72-1	N.D.	0.030	mg/l	1
03329	Nitrobenzene	98-95-3	N.D.	0.030	mg/l	1
03330	Hexachlorobutadiene	87-68-3	N.D.	0.030	mg/l	1
03331	2,4,6-Trichlorophenol	88-06-2	N.D.	0.030	mg/l	1
03332	2,4,5-Trichlorophenol	95-95-4	N.D.	0.030	mg/l	1
03333	2,4-Dinitrotoluene	121-14-2	N.D.	0.030	mg/l	1
03334	Hexachlorobenzene	118-74-1	N.D.	0.030	mg/l	1
03335	Pentachlorophenol	87-86-5	N.D.	0.080	mg/l	1

The semivolatile analyses were performed on a non-volatile toxicity characteristic leachate of the submitted waste. The leachate was prepared according to the procedure specified in SW-846, Chapter 7.4 (Revision 3, 12/94). If the TCLP extract contains any one of the Toxicity Characteristic (TC) constituents in an amount equal to or exceeding the concentrations specified in 40 CFR part 261.24, the waste possesses the characteristic of toxicity and is a hazardous waste. These limits are listed below in mg/L. Other limits may apply for analyses performed under other regulations.

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Lancaster Laboratories Sample No. TL 3502915

Collected:11/14/2000 14:20 by BB

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Soil Composite 12 Sample
TCLP NON VOLATILE EXTRACTION
Amtrak - Wilmington, DE

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SCM12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
	Total Methylphenols	200.0	Nitrobenzene	2.0		
	1,4-Dichlorobenzene	7.5	Pentachlorophenol	100.0		
	2,4-Dinitrotoluene	0.13	Pyridine	5.0		
	Hexachlorobenzene	0.13	2,4,5-Trichlorophenol	400.0		
	Hexachlorobutadiene	0.5	2,4,6-Trichlorophenol	2.0		
	Hexachloroethane	3.0				

Due to insufficient sample, the quantitation limits for the GC/MS semivolatile compounds were raised.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00259	Mercury	SW-846 7470A	1	11/30/2000 09:54	Damary S. Valentin	1
01335	Arsenic	SW-846 6010B	1	11/29/2000 04:28	Donna R. Sackett	1
01336	Selenium	SW-846 6010B	1	11/29/2000 04:28	Donna R. Sackett	1
01746	Barium	SW-846 6010B	1	11/29/2000 04:28	Donna R. Sackett	1
01749	Cadmium	SW-846 6010B	1	11/29/2000 04:28	Donna R. Sackett	1
01751	Chromium	SW-846 6010B	1	11/29/2000 04:28	Donna R. Sackett	1
01755	Lead	SW-846 6010B	1	11/29/2000 04:28	Donna R. Sackett	1
01766	Silver	SW-846 6010B	1	11/29/2000 04:28	Donna R. Sackett	1
00950	TCLP Pesticides	SW-846 8081A	1	11/30/2000 04:52	Douglas D. Seitz	1
00952	TCLP Herbicides	SW-846 8151A	1	11/30/2000 10:43	Anita M. Dale	1
00949	TCLP Acid Base/Neutrals	SW-846 8270C	1	12/02/2000 17:38	Mark Clark	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	11/29/2000 00:30	Darin P. Wagner	1
00817	Water Sample Pest. Extraction	SW-846 3510C	1	11/28/2000 16:30	Wanda F. Oswald	1
00947	TCLP Non-volatile Extraction	SW-846 1311	1	11/27/2000 13:00	Minerva Diaz	n.a.
04731	TCLP Leachate Extraction	SW-846 3510C	2	12/01/2000 13:45	John M. Becker	1
05705	WW/TL SW 846 ICP Digest (tot)	SW-846 3010A	1	11/29/2000 01:00	James L. Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	11/29/2000 22:03	Nelli S. Markaryan	1

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Lancaster Laboratories Sample No. TL 3502916

Collected:11/14/2000 14:20 by BB

Account Number: 01401

Submitted: 11/15/2000 18:30
Reported: 12/12/00 at 05:14 PM
Discard: 12/27/00
Soil Composite 12 Sample
TCLP ZERO HEADSPACE EXTRACTION
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

M12ZH

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
03636	TCLP by 8260					
05386	Vinyl Chloride	75-01-4	N.D.	0.025	mg/l	5
05390	1,1-Dichloroethene	75-35-4	N.D.	0.025	mg/l	5
05396	Chloroform	67-66-3	N.D.	0.025	mg/l	5
05399	Carbon Tetrachloride	56-23-5	N.D.	0.025	mg/l	5
05401	Benzene	71-43-2	N.D.	0.025	mg/l	5
05402	1,2-Dichloroethane	107-06-2	N.D.	0.025	mg/l	5
05403	Trichloroethene	79-01-6	N.D.	0.025	mg/l	5
05409	Tetrachloroethene	127-18-4	N.D.	0.025	mg/l	5
05413	Chlorobenzene	108-90-7	N.D.	0.025	mg/l	5
06305	2-Butanone	78-93-3	N.D.	0.050	mg/l	5

The volatile organic analyses were performed on a zero headspace toxicity characteristic leachate of the submitted waste. The leachate was prepared according to the procedure specified in SW-846, Chapter 7.4 (Revision 3, 12/94).
If the TCLP extract contains any one of the Toxicity Characteristic (TC) constituents in an amount equal to or exceeding the concentrations specified in 40 CFR Part 261.24, the waste possesses the characteristic of toxicity and is a hazardous waste. These limits are listed below in mg/L. Other limits may apply for analyses performed under other regulations.

Benzene	0.5	1,1-Dichloroethene	0.7
Carbon Tetrachloride	0.5	Methyl Ethyl Ketone (2-Butanone)	200.0
Chlorobenzene	100.0	Tetrachloroethene	0.7
Chloroform	6.0	Trichloroethene	0.5
1,2-Dichloroethane	0.5	Vinyl Chloride	0.2

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
03636	TCLP by 8260	SW-846 8260B	1	11/27/2000 01:46	Susan A. McMahon-Luu	5

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Lancaster Laboratories Sample No. TL 3502916

Collected:11/14/2000 14:20 by BB

Account Number: 01401

Submitted: 11/15/2000 18:30
Reported: 12/12/00 at 05:14 PM
Discard: 12/27/00
Soil Composite 12 Sample
TCLP ZERO HEADSPACE EXTRACTION
Amtrak - Wilmington, DE

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M12ZH

00946	TCLP Zero Headspace Extraction	SW-846 1311	1	11/24/2000 12:30	Kenneth A. Yingst	n.a.

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Lancaster Laboratories Sample No. WW 3502917

Collected:11/14/2000 14:20 by BB

Account Number: 01401

Submitted: 11/15/2000 18:30
Reported: 12/12/00 at 05:14 PM
Discard: 12/27/00
Storage Blank Water Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

AMTSB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
08754	MA - VPH waters					
08755	Benzene	71-43-2	N.D.	1.0	ug/l	1
08756	Toluene	108-88-3	N.D.	5.0	ug/l	1
08757	Ethylbenzene	100-41-4	N.D.	5.0	ug/l	1
08758	m,p-Xylenes	1330-20-7	N.D.	10.	ug/l	1
08759	o-Xylene	95-47-6	N.D.	5.0	ug/l	1
08760	Methyl t-butyl ether	1634-04-4	N.D.	5.0	ug/l	1
08761	Naphthalene	91-20-3	N.D.	5.0	ug/l	1
08762	C5-C8 Aliphatic Hydrocarbons	n.a.	N.D.	100.	ug/l	1
08763	C9-C12 Aliphatic Hydrocarbons	n.a.	N.D.	100.	ug/l	1
08764	C9-C10 Aromatic Hydrocarbons	n.a.	N.D.	100.	ug/l	1
08838	Unadjusted C5-C8 Aliphatics	n.a.	N.D.	100.	ug/l	1
08839	Unadjusted C9-C12 Aliphatics	n.a.	N.D.	100.	ug/l	1

The concentrations of individual target analytes and the surrogate standard have been subtracted from the concentrations of the appropriate hydrocarbon ranges as specified by the method.
Elution ranges for the target analytes are listed below:
benzene, toluene, methyl t-butyl ether - C5-C8 aliphatics
ethyl benzene, m,p-xylenes, o-xylene - C9-C12 aliphatics

Significant modifications to the method are listed below:
The surrogate standard for the VPH analysis is a,a,a-trifluorotoluene for both the PID and FID. This compound elutes in the C5-C8 range. 1-Chloro-3-fluorobenzene is also used as an internal standard for the PID and elutes in the C5-C8 range. A retention time marker compound, 4-bromofluorobenzene, is also added to each sample. It elutes in the C9-C12 aliphatic range and aromatic range. The use of the internal standard, surrogate standard, and retention time marker compound that elute in the specified aliphatic or aromatic ranges is a significant modification. The peak areas for these standards are subtracted from the area for the specific ranges before the concentrations are calculated. This process has been validated in our laboratory and has produced acceptable data in the MA Round Robin study.
Sample containers were received in satisfactory condition.
Sample preservation met requirements (pH </= 2).

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Lancaster Laboratories Sample No. WW 3502917

Collected:11/14/2000 14:20 by BB

Account Number: 01401

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Discard: 12/27/00
Storage Blank Water Sample
Amtrak - Wilmington, DE

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AMTSB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor

Samples were received on ice at a temperature of 4 +/- 2C.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08754	MA - VPH waters	MADEP-VPH,modified/8021B	1	11/21/2000 14:03	Michael C. Wehn	1

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Quality Control Summary

Client Name: IT Corporation- PA
Reported: 12/12/00 at 05:14 PM

Group Number: 739893

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 003240006A	Sample number(s): 3502908-3502914							
PCB-1016	N.D.	17.	ug/kg	108		62-126		
PCB-1221	N.D.	17.	ug/kg					
PCB-1232	N.D.	17.	ug/kg					
PCB-1242	N.D.	17.	ug/kg					
PCB-1248	N.D.	17.	ug/kg					
PCB-1254	N.D.	17.	ug/kg					
PCB-1260	N.D.	17.	ug/kg	103		67-120		
Batch number: 00324820006A	Sample number(s): 3502908-3502914							
Moisture				100	100	99-101	0	4
Batch number: 00325A99	Sample number(s): 3502908-3502913							
Benzene	N.D.	.1	mg/kg	93	95	70-130	3	50
Toluene	N.D.	.1	mg/kg	97	101	70-130	4	50
Ethylbenzene	N.D.	.1	mg/kg	98	101	70-130	3	50
m,p-Xylenes	N.D.	.1	mg/kg	100	103	70-130	3	50
o-Xylene	N.D.	.1	mg/kg	104	106	70-130	2	50
Methyl t-butyl ether	N.D.	.1	mg/kg	95	97	70-130	2	50
Naphthalene	N.D.	.1	mg/kg	77	77	70-130	1	50
C5-C8 Aliphatic Hydrocarbons	N.D.	5.	mg/kg	89	95	70-130	6	50
C9-C12 Aliphatic Hydrocarbons	N.D.	5.	mg/kg	76	77	70-130	1	50
C9-C10 Aromatic Hydrocarbons	N.D.	5.	mg/kg	104	102	70-130	2	50
Unadjusted C5-C8 Aliphatics	N.D.	5.	mg/kg	92	96	70-130	4	50
Unadjusted C9-C12 Aliphatics	N.D.	5.	mg/kg	96	99	70-130	3	50
Batch number: 003260006A P339	Sample number(s): 3502908-3502913							
Naphthalene	N.D.	.5	mg/kg	76	84	40-140	10	50
Acenaphthylene	N.D.	.5	mg/kg	68	77	40-140	13	50
Acenaphthene	N.D.	.5	mg/kg	72	81	40-140	12	50
Fluorene	N.D.	.5	mg/kg	75	82	40-140	10	50
Phenanthrene	N.D.	.5	mg/kg	75	85	40-140	12	50
Anthracene	N.D.	.5	mg/kg	60	68	40-140	14	50
Fluoranthene	N.D.	.5	mg/kg	73	80	40-140	10	50
Pyrene	N.D.	.5	mg/kg	72	81	40-140	12	50
Benzo(a)anthracene	N.D.	.5	mg/kg	67	73	40-140	8	50
Chrysene	N.D.	.5	mg/kg	68	72	40-140	6	50
Benzo(b)fluoranthene	N.D.	.5	mg/kg	66	72	40-140	8	50
Benzo(k)fluoranthene	N.D.	.5	mg/kg	62	64	40-140	3	50
Benzo(a)pyrene	N.D.	.5	mg/kg	47	54	40-140	14	50
Indeno(1,2,3-cd)pyrene	N.D.	.5	mg/kg	63	68	40-140	8	50
Dibenzo(a,h)anthracene	N.D.	.5	mg/kg	60	64	40-140	6	50
Benzo(g,h,i)perylene	N.D.	.5	mg/kg	66	70	40-140	5	50
2-Methylnaphthalene	N.D.	.5	mg/kg	72	82	40-140	13	50
C9 to C18 Aliphatics	N.D.	3.	mg/kg	69	68	40-140	1	50
C19 to C36 Aliphatics	N.D.	5.	mg/kg	69	66	40-140	4	50
C11 to C22 Aromatics	N.D.	4.	mg/kg					
Unadjusted C11 - C22 Aromatics	N.D.	4.	mg/kg	69	78	40-140	13	50
Batch number: 00326A01	Sample number(s): 3502917							
Benzene	N.D.	1.	ug/l	111	113	70-130	2	50

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

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Quality Control Summary

Client Name: IT Corporation- PA
Reported: 12/12/00 at 05:14 PM

Group Number: 739893

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Toluene	N.D.	5.	ug/l	113	115	70-130	2	50
Ethylbenzene	N.D.	5.	ug/l	110	112	70-130	2	50
m,p-Xylenes	N.D.	10.	ug/l	111	113	70-130	2	50
o-Xylene	N.D.	5.	ug/l	110	112	70-130	1	50
Methyl t-butyl ether	N.D.	5.	ug/l	104	106	70-130	2	50
Naphthalene	N.D.	5.	ug/l	100	100	70-130	0	50
C5-C8 Aliphatic Hydrocarbons	N.D.	100.	ug/l	88	89	70-130	2	50
C9-C12 Aliphatic Hydrocarbons	N.D.	100.	ug/l	76	76	70-130	0	50
C9-C10 Aromatic Hydrocarbons	N.D.	100.	ug/l	114	115	70-130	1	50
Unadjusted C5-C8 Aliphatics	N.D.	100.	ug/l	99	100	70-130	2	50
Unadjusted C9-C12 Aliphatics	N.D.	100.	ug/l	105	107	70-130	1	50
Batch number: 003330003A	Sample number(s): 3502915							
Gamma BHC - Lindane	N.D.	.05	ug/l	122		57-143		
Heptachlor	0.022 J	.05	ug/l	108		38-129		
Heptachlor Epoxide	N.D.	.05	ug/l	120		52-136		
Methoxychlor	N.D.	.5	ug/l	176*		72-160		
Endrin	N.D.	.1	ug/l	159*		68-156		
Chlordane	N.D.	2.5	ug/l					
Toxaphene	N.D.	5.	ug/l					
Batch number: 003330007A	Sample number(s): 3502915							
2,4-D	N.D.	10.	ug/l	92		36-168		
2,4,5-TP	N.D.	1.	ug/l	73		33-161		
Batch number: 003345705001	Sample number(s): 3502915							
Arsenic	N.D.	.1	mg/l	97		90-110		
Selenium	N.D.	.2	mg/l	97		90-110		
Barium	N.D.	.1	mg/l	99		95-110		
Cadmium	N.D.	.01	mg/l	101		94-110		
Chromium	N.D.	.03	mg/l	102		95-110		
Lead	N.D.	.1	mg/l	99		94-110		
Silver	N.D.	.02	mg/l	100		94-110		
Batch number: 003345713003	Sample number(s): 3502915							
Mercury	N.D.	.0002	mg/l	92		84-124		
Batch number: 00336WAB026	Sample number(s): 3502915							
Pyridine	N.D.	.02	mg/l	61		35-91		
1,4-Dichlorobenzene	N.D.	.02	mg/l	69		39-109		
2-Methylphenol	N.D.	.02	mg/l	76		50-117		
4-Methylphenol	N.D.	.02	mg/l	69		47-112		
Hexachloroethane	N.D.	.02	mg/l	49		25-96		
Nitrobenzene	N.D.	.02	mg/l	100		58-126		
Hexachlorobutadiene	N.D.	.02	mg/l	44		19-95		
2,4,6-Trichlorophenol	N.D.	.02	mg/l	100		57-134		
2,4,5-Trichlorophenol	N.D.	.02	mg/l	102		61-131		
2,4-Dinitrotoluene	N.D.	.02	mg/l	99		62-129		
Hexachlorobenzene	N.D.	.02	mg/l	101		59-129		
Pentachlorophenol	N.D.	.05	mg/l	76		36-135		
Batch number: N003211AE	Sample number(s): 3502916							

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

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Quality Control Summary

Client Name: IT Corporation- PA
Reported: 12/12/00 at 05:14 PM

Group Number: 739893

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Vinyl Chloride	N.D.	5.	ug/l	97		57-127		
1,1-Dichloroethene	N.D.	5.	ug/l	122		79-136		
Chloroform	N.D.	5.	ug/l	112		86-124		
Carbon Tetrachloride	N.D.	5.	ug/l	120		77-130		
Benzene	16.	5.	ug/l	105		85-125		
1,2-Dichloroethane	N.D.	5.	ug/l	113		84-131		
Trichloroethene	N.D.	5.	ug/l	103		86-126		
Tetrachloroethene	N.D.	5.	ug/l	103		79-136		
Chlorobenzene	N.D.	5.	ug/l	103		87-121		
2-Butanone	N.D.	10.	ug/l	99		69-131		

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 003240006A	Sample number(s): 3502908-3502914								
PCB-1016	122	97	41-149	22	50				
PCB-1260	154*	71	43-144	23	50				
Batch number: 00324820006A	Sample number(s): 3502908-3502914								
Moisture						10.4	11.0	6	16
Batch number: 003260006A P339	Sample number(s): 3502908-3502913								
Naphthalene						2.5 J	1.8	34 (1)	50
Acenaphthylene						N.D.	N.D.	0 (1)	50
Acenaphthene						3.1 J	2.2	36 (1)	50
Fluorene						3.5 J	2.3	38 (1)	50
Phenanthrene						9.2	6.2	39	50
Anthracene						3.0 J	2.1	34 (1)	50
Fluoranthene						2.3 J	1.6	36 (1)	50
Pyrene						N.D.	N.D.	0 (1)	50
Benzo(a)anthracene						N.D.	N.D.	0 (1)	50
Chrysene						N.D.	N.D.	0 (1)	50
Benzo(b)fluoranthene						N.D.	N.D.	0 (1)	50
Benzo(k)fluoranthene						N.D.	N.D.	0 (1)	50
Benzo(a)pyrene						N.D.	N.D.	0 (1)	50
Indeno(1,2,3-cd)pyrene						N.D.	N.D.	0 (1)	50
Dibenzo(a,h)anthracene						N.D.	N.D.	0 (1)	50
Benzo(g,h,i)perylene						N.D.	N.D.	0 (1)	50
2-Methylnaphthalene						15.	10.	36	50
C9 to C18 Aliphatics						3,200.	2,400.	29	50
C19 to C36 Aliphatics						620.	400.	44	50
C11 to C22 Aromatics						1,800.	1,200.	38	50
Unadjusted C11 - C22 Aromatics						1,900.	1,300.	38	50
Batch number: 003330003A	Sample number(s): 3502915								
Gamma BHC - Lindane	107	110	59-141	2	30				
Heptachlor	89	86	45-130	3	30				

*- Outside of specification
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(2) The background result was more than four times the spike added.

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Quality Control Summary

Client Name: IT Corporation- PA
Reported: 12/12/00 at 05:14 PM

Group Number: 739893

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Heptachlor Epoxide	104	107	37-152	3	30				
Methoxychlor	157	165	53-188	5	30				
Endrin	155*	154	70-154	1	30				
Batch number: 003330007A	Sample number(s): 3502915								
2,4-D	106	114	22-179	7	30				
2,4,5-TP	79	83	30-160	5	30				
Batch number: 003345705001	Sample number(s): 3502915								
Arsenic	101	101	75-125	0	20	N.D.	N.D.	0 (1)	20
Selenium	100	100	75-125	1	20	N.D.	N.D.	0 (1)	20
Barium	101	100	75-125	1	20	0.241	0.238	1 (1)	20
Cadmium	96	98	74-124	2	20	0.0072 J	0.0068 J	6 (1)	20
Chromium	102	103	89-117	1	20	N.D.	N.D.	0 (1)	20
Lead	96	98	75-125	1	20	1.03	1.00	2	20
Silver	110	110	79-129	0	20	N.D.	N.D.	0 (1)	20
Batch number: 003345713003	Sample number(s): 3502915								
Mercury	91	88	80-120	4	20	N.D.	N.D.	200* (1)	20
Batch number: 00336WAB026	Sample number(s): 3502915								
Pyridine	60	59	26-93	2	30				
1,4-Dichlorobenzene	77	76	31-121	0	30				
2-Methylphenol	76	79	25-129	5	30				
4-Methylphenol	65	68	14-138	5	30				
Hexachloroethane	72	70	16-116	3	30				
Nitrobenzene	99	102	36-139	3	30				
Hexachlorobutadiene	73	76	20-107	4	30				
2,4,6-Trichlorophenol	98	101	46-139	3	30				
2,4,5-Trichlorophenol	101	101	41-144	0	30				
2,4-Dinitrotoluene	97	96	36-145	1	30				
Hexachlorobenzene	101	101	49-134	0	30				
Pentachlorophenol	89	92	2-143	3	30				
Batch number: N003211AE	Sample number(s): 3502916								
Vinyl Chloride	95	96	46-144	1	30				
1,1-Dichloroethene	121	106	67-155	13	30				
Chloroform	116	109	76-138	6	30				
Carbon Tetrachloride	125	114	66-148	9	30				
Benzene	111	105	73-140	6	30				
1,2-Dichloroethane	111	110	75-141	1	30				
Trichloroethene	117	108	70-145	9	30				
Tetrachloroethene	108	103	61-152	5	30				
Chlorobenzene	105	100	77-132	5	30				
2-Butanone	115	109	32-162	5	30				

Surrogate Quality Control

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

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Quality Control Summary

Client Name: IT Corporation- PA
Reported: 12/12/00 at 05:14 PM

Group Number: 739893

Surrogate Quality Control

Analysis Name: PCBs in Solids
Batch number: 003240006A

	Tetrachloro-m-xylene	Decachlorobiphenyl
3502908	98	140
3502909	117	104
3502910	110	104
3502911	104	94
3502912	85	124
3502913	105	95
3502914	109	97
Blank	113	97
LCS	114	100
MS	206*	165
MSD	171*	128
Limits:	24-136	1-190

Analysis Name: MA - VPH soils
Batch number: 00325A99

	Trifluorotoluene-P	Trifluorotoluene-F
3502908	77	84
3502909	82	82
3502910	72	84
3502911	74	84
3502912	75	84
3502913	79	82
Blank	98	104
LCS	99	102
LCSD	98	102
Limits:	70-130	70-130

Analysis Name: MA EPH - Soils
Batch number: 003260006A P339

	1-Chloro-octadecane	Orthoterphenyl
3502908	327*	141*
3502909	766*	64
3502910	368*	193*
3502911	443*	37*
3502912	700*	47
3502913	301*	153*
LCS	67	66
LCSD	63	69
PD	252*	177*
Limits:	40-140	40-140

Analysis Name: MA - VPH waters
Batch number: 00326A01

	Trifluorotoluene-P	Trifluorotoluene-F
3502917	95	82

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
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Lancaster, PA 17605-2425
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Quality Control Summary

Client Name: IT Corporation- PA
Reported: 12/12/00 at 05:14 PM

Group Number: 739893

Surrogate Quality Control

Blank	96	82
LCS	95	82
LCSD	95	82
Limits:	70-130	70-130

Analysis Name: TCLP Pesticides
Batch number: 003330003A

	Tetrachloro-m-xylene	Decachlorobiphenyl
3502915	84	105
Blank	86	106
LCS	85	113
MS	83	108
MSD	76	114
Limits:	36-121	19-153

Analysis Name: TCLP Herbicides
Batch number: 003330007A

	2,4-Dichlorophenylacetic acid
3502915	82
Blank	71
LCS	71
MS	77
MSD	84
Limits:	37-151

Analysis Name: TCLP Acid Base/Neutrals
Batch number: 00336WAB026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14	Phenol-d6
3502915	99	82	78	32
Blank	97	82	87	27
LCS	98	85	102	31
MS	98	87	83	29
MSD	101	88	96	31
Limits:	55-130	57-117	42-139	9-77

	2-Fluorophenol	2,4,6-Tribromophenol
3502915	51	100
Blank	44	91
LCS	50	95
MS	48	95
MSD	50	94
Limits:	15-113	32-157

Analysis Name: TCLP by 8260

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
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Quality Control Summary

Client Name: IT Corporation- PA
Reported: 12/12/00 at 05:14 PM

Group Number: 739893

Surrogate Quality Control

Batch number: N003211AE

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
3502916	95	93	94	88
Blank	95	92	94	89
LCS	102	94	98	99
MS	103	92	95	96
MSD	101	95	94	96
Limits:	86-118	80-120	88-110	86-115

*- Outside of specification
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Analysis Request/ Environmental Services Chain of Custody

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For Lancaster Laboratories use only
Acct. # 1401 Sample # 3502908-17

Please print. Instructions on reverse side correspond with circled numbers.

(1)
Client: IT Corporation Acct. #:
Project Name/#: Amtrak - Wilmington PWSID #:
Project Manager: Steve Bissett P.O.#
Sampler: Brian Beecham Quote #:
Name of state where samples were collected: Delaware

For lab use only
FSC:
SCR #: 1145933

(2) (3) (4) (5) (6)

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Matrix: Water (☐ Potable ☐ NPDES) (Check if applicable)	Matrix: Other	Total # of Containers	MAVPH	Moisture 8765	PCB 1016	EPH	Fyn't Neut (S-IF) Acid Extractable, Carbon, pH TPH 5332				Remarks	Temperature of samples upon receipt (if requested)
Soil composite 1	11-14-00	1025		X	X			3	X	X	X	X	X					
Soil composite 2	11-14-00	1200		X	X			3	X	X	X	X	X					
Soil composite 3	11-14-00	1220		X	X			3	X	X	X	X	X				5.0 C	
Soil composite 4	11-14-00	1250		X	X			3	X	X	X	X	X					
Soil composite 5	11-14-00	1310		X	X			3	X	X	X	X	X					
Soil composite 6	11-14-00	1400		X	X			3	X	X	X	X	X					
Soil composite 12	11-14-00	1420		X	X			4		X	X	X	X					

(7)
Turnaround Time Requested (TAT) (please circle): Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax
Phone #: Fax #:

(8)
Data Package Options (please circle if requested)
QC Summary Type VI (Raw Data)
Type I (Tier I) GLP
Type II (Tier II) Other
Type III (NJ Red. Del.)
Type IV (CLP)

SDG Complete? Yes No

Site-specific QC required? Yes No
(If yes, indicate QC sample and submit triplicate volume.)
Internal Chain of Custody required? Yes No

(9)

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	11/16/00	1830			
[signature]	11-14-00	1700	Lloyd Beverley	11-15-00	15:00
Lloyd Beverley	11-15-00	1830			
			[signature]	11/15/00	1830

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ANALYTICAL RESULTS

Prepared for:

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 745983. Samples arrived at the laboratory on Tuesday, January 09, 2001.

Client Description	Lancaster Labs Number
Soil Composite 12 Sample	3531029

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO IT Corporation-PA Attn: Mr. Steve Baggett

Questions? Contact your Client Services Representative
De Brooks at (717) 656-2300.

Respectfully Submitted,

Erik J. Frederiksen
Group Leader

Analysis Report

Lancaster Laboratories
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Lancaster Laboratories Sample No. SW 3531029

Collected:11/14/2000 14:20 by BB

Account Number: 01401

Submitted: 01/09/2001 08:25
Reported: 01/22/01 at 01:15 PM
Discard: 2/6/01
Soil Composite 12 Sample
Previous LL# 3502914
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

S-12-

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
01562	Petroleum Hydrocarbons	n.a.	19,200.	4,900.	mg/kg	100
00394	pH	n.a.	5.26	0.010		1
	The pH was performed on a 1:1 slurry (25 gms. of sample and 25 ml. of deionized water) after being tumbled for 30 min.					
00496	Corrosivity	n.a.	See Below		See Below	1
	Corrosivity: The pH of a 1:1 slurry (with deionized water) was 5.26 indicating that the waste is not corrosive. A waste is corrosive if it exhibits a pH equal to or less than 2 or equal to or greater than 12.5.					
00542	Ignitability	n.a.	See Below		See Below	1
	The sample did not spontaneously ignite when exposed to air or water. The sample did not ignite by friction. The sample vapors did not ignite when exposed to a flame using a closed cup apparatus.					
01121	Reactivity	n.a.	See Below		See Below	1
	Reactivity: The sample was extracted by the interim method described in SW 846, Chapter 7.3. This solution was analyzed for cyanide and sulfide. This waste is not considered reactive and hazardous because it does not generate a quantity of hydrogen cyanide exceeding 250 mg/kg or hydrogen sulfide exceeding 500 mg/kg. These interim threshold limits were established by the Solid Waste Branch of EPA, July, 1992. These results do not reflect total cyanide or total sulfide.					
01122	Sulfide (Reactivity)	n.a.	N.D.	120.	mg/kg	1
01123	Cyanide (Reactivity)	n.a.	N.D.	100.	mg/kg	1
07801	Moisture (Re-Entry)	n.a.	18.0	0.50	% by wt.	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
1562	Petroleum Hydrocarbons	EPA 418.1 modified	1	01/11/2001 10:38	Michelle Heidig	100

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Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories
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Quality Control Summary

Client Name: IT Corporation- PA
Reported: 01/22/01 at 01:15 PM

Group Number: 745983

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 01009039401A	Sample number(s): 3531029							
pH				100	100	98-102	0	1
Batch number: 01010156201A	Sample number(s): 3531029							
Petroleum Hydrocarbons	12.8 J	40.	mg/kg	94		74-108		
Batch number: 01018112101A	Sample number(s): 3531029							
Sulfide (Reactivity)	N.D.	120.	mg/kg	81		80-120		
Batch number: 01019104201A	Sample number(s): 3531029							
Cyanide (Reactivity)	N.D.	99.99	mg/kg	99		90-112		

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 01009039401A	Sample number(s): 3531029								
pH						8.32	8.32	0	2
Batch number: 01010156201A	Sample number(s): 3531029								
Petroleum Hydrocarbons	94	90	39-132	4	15	890.	750.	17 (1)	21
Batch number: 01018112101A	Sample number(s): 3531029								
Sulfide (Reactivity)	67	80	0-136	17	19				
Batch number: 01019104201A	Sample number(s): 3531029								
Cyanide (Reactivity)	2	2	0-20	9	14				

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

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Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Analysis Request/ Environmental Services Chain of Custod

Lancaster Laboratories
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For Lancaster Laboratories use only
Acct. # 1401 Sample # 3505896 -90

Please print. Instructions on reverse side correspond with circled numbers.

(1)
Client: IT Corporation Acct. #:
Project Name/#: Amtrak - Wilmington PWSID #:
Project Manager: Steve Baggott P.O.#
Sampler: Brian Beecham Quote #:
Name of state where samples were collected: DE

For lab use only
FSC:
SCR #: 1145933

(2)

Sample Identification	Date Collected	Time Collected	(3) Grab	Composite	Matrix (4) Soil	Water ☐ Potable (Check if applicable) ☐ NPDES	Other	Total # of Containers	(5) Analyses Requested: Moisture, PCB	MAVPH and EPH	Ignitability, Sulfide (reactivity), Cyanide (reactivity), Corrosivity	pH, TPH,	TCLP VOCs, SVOCs, use tols, Pest/Herb				Remarks	Temperature of samples upon receipt (if requested)
Soil Composite 7	11-17-00	0950		X	X			3	X	X								
Soil Composite 8	11-17-00	1020		X	X			3	X	X								
Soil Composite 9	11-17-00	1100		X	X			3	X	X								
Soil Composite 10	11-17-00	1140		X	X			3	X	X								
Soil Composite 11	11-17-00	1225		X	X			3	X	X								
Soil Composite 13	11-17-00	1245		X	X			4	X		X	X	X	X				

(7) **Turnaround Time Requested** (TAT) (please circle): (Normal) Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax
Phone #: Fax #:

(8) **Data Package Options** (please circle if requested)
QC Summary Type VI (Raw Data)
Type I (Tier I) GLP
Type II (Tier II) Other
Type III (NJ Red. Del.)
Type IV (CLP)

SDG Complete? Yes No

Site-specific QC required? Yes No
(If yes, indicate QC sample and submit triplicate volume.)

Internal Chain of Custody required? Yes No

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	11/10/00	1830			
Brian Beecham	11/17/00	1445	Marvin McLallen	11/20/00	11:20
Marvin McLallen	11/20/00	18:15			
			[signature]	11/20/00	1755

Lancaster Laboratories ... Subsidiary of Thermo ... Inc., ... no Ele... Compa...
242... Hollan... Pike, PO Box ...5, Lancaster, PA 176...-2425 (717) ...-2300 Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client 2102 Rev. 6/7/99

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ANALYTICAL RESULTS

Prepared for:

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 740514. Samples arrived at the laboratory on Monday, November 20, 2000.

Client Description	Lancaster Labs Number
Soil Composite 7 Sample	3505896
Soil Composite 8 Sample	3505897
Soil Composite 9 Sample	3505898
Soil Composite 10 Sample	3505899
Soil Composite 11 Sample	3505900
Soil Composite 13 Sample	3505901
Soil Composite 13 Sample	3505902
Soil Composite 13 Sample	3505903
Storage Blank Water Sample	3505904

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO IT Corporation-PA Attn: Mr. Steve Baggett

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Questions? Contact your Client Services Representative
De Brooks at (717) 656-2300.

Respectfully Submitted,

Matthew E. Barton
Sr. Chemist/Coordinator

Lancaster Laboratories
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Lancaster Laboratories Sample No. SW 3505896

Collected:11/17/2000 09:50 by BB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:38 AM
Discard: 1/4/01
Soil Composite 7 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

S-7--

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation	Units	Dilution Factor
08842	MA - VPH certification	n.a.				see below	633

All QA/QC procedures required by the VPH method were followed. Yes No
All performance/acceptance standards for the required QA/QC were achieved. Yes No
Significant modifications to the method are reported below.

I attest, under penalties of perjury, that the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature: Matthew E Barton Position: SENIOR CHEMIST/COORDINATOR

Printed Name: MATTHEW E. BARTON Date: DEC 27 2000

00111	Moisture	n.a.	10.0		0.50	% by wt.	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.

05332 MA EPH - Soils

05349	Naphthalene	91-20-3	8.0	J	14.	mg/kg	25
05350	Acenaphthylene	208-96-8	N.D.		14.	mg/kg	25
05351	Acenaphthene	83-32-9	9.2	J	14.	mg/kg	25
05352	Fluorene	86-73-7	13.	J	14.	mg/kg	25
05353	Phenanthrene	85-01-8	28.		14.	mg/kg	25
05354	Anthracene	120-12-7	8.8	J	14.	mg/kg	25
05355	Fluoranthene	206-44-0	6.8	J	14.	mg/kg	25
05356	Pyrene	129-00-0	N.D.		14.	mg/kg	25
05357	Benzo(a)anthracene	56-55-3	N.D.		14.	mg/kg	25
05358	Chrysene	218-01-9	N.D.		14.	mg/kg	25
05359	Benzo(b)fluoranthene	205-99-2	N.D.		14.	mg/kg	25
05360	Benzo(k)fluoranthene	207-08-9	N.D.		14.	mg/kg	25

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Lancaster Laboratories Sample No. SW 3505896

Collected:11/17/2000 09:50 by BB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:38 AM
Discard: 1/4/01
Soil Composite 7 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

S-7--

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
05361	Benzo(a)pyrene	50-32-8	N.D.	14.	mg/kg	25
05362	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	14.	mg/kg	25
05363	Dibenzo(a,h)anthracene	53-70-3	N.D.	14.	mg/kg	25
05364	Benzo(g,h,i)perylene	191-24-2	N.D.	14.	mg/kg	25
08395	2-Methylnaphthalene	91-57-6	83.	14.	mg/kg	25
08396	C9 to C18 Aliphatics	n.a.	6,000.	170.	mg/kg	50
08397	C19 to C36 Aliphatics	n.a.	920.	280.	mg/kg	50
08398	C11 to C22 Aromatics	n.a.	5,300.	110.	mg/kg	25
08837	Unadjusted C11 - C22 Aromatics	n.a.	5,500.	110.	mg/kg	25

The surrogate standard for the aliphatic hydrocarbons is 1-chloro-octadecane.
The surrogate standard for the aromatic hydrocarbons is ortho-terphenyl.
The EPH fractionation surrogate is 2-fluorobiphenyl.

Significant modifications to the method are listed below:
Fractionation of the aliphatic and aromatic hydrocarbons was performed using a reduced size silica gel column with reduced elution volumes. Alternate elution solvent was used as defined in SW-846 method 3630C for the aliphatic fraction. This fractionation technique has been validated in our laboratory and was used to produce acceptable data for the MA Round Robin study of the EPH method. A single EPH fractionation surrogate, 2-fluorobiphenyl, rather than a mixture of 2-fluorobiphenyl and 2-bromo-naphthalene was used. Both compounds elute in the aromatic fraction.
Sample containers were received in satisfactory condition.
Samples were recieved on ice at a temperature of 4 C.

The quantitation limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.

Accurate surrogate recoveries could not be determined due to the dilution required for analysis of the sample.

The fractionation surrogate was inadvertently not added during the sample preparation. The aliphatic and aromatic surrogates recovered in the proper fraction without breakthrough, and the LCS/LCSD recoveries as well as the fractionation check spike indicate that the fractionation step was in control. Therefore, there is no impact on the data.

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Lancaster Laboratories Sample No. SW 3505896

Collected:11/17/2000 09:50 by BB

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Discard: 1/4/01
Soil Composite 7 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

S-7--

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation	Units	Dilution Factor
	The recovery for benzo(a)pyrene is outside the QC limits in the LCSD associated with this sample. Since the LCS is within the limits and all other PAH data is within the limits, the data is reported.						
08765	MA - VPH soils						
08766	Benzene	71-43-2	N.D.		1.4	mg/kg	633
08767	Toluene	108-88-3	0.71	J	1.4	mg/kg	633
08768	Ethylbenzene	100-41-4	4.5		1.4	mg/kg	633
08769	m,p-Xylenes	1330-20-7	4.4		1.4	mg/kg	633
08770	o-Xylene	95-47-6	1.7		1.4	mg/kg	633
08771	Methyl t-butyl ether	1634-04-4	N.D.		1.4	mg/kg	633
08772	Naphthalene	91-20-3	33.6		1.4	mg/kg	633
08773	C5-C8 Aliphatic Hydrocarbons	n.a.	41.	J	70.	mg/kg	633
08774	C9-C12 Aliphatic Hydrocarbons	n.a.	733.		70.	mg/kg	633
08775	C9-C10 Aromatic Hydrocarbons	n.a.	703.		70.	mg/kg	633
08840	Unadjusted C5-C8 Aliphatics	n.a.	42.	J	70.	mg/kg	633
08841	Unadjusted C9-C12 Aliphatics	n.a.	1,450.		70.	mg/kg	633

The concentrations of individual target analytes and the surrogate standard have been subtracted from the concentrations of the appropriate hydrocarbon ranges as specified by the method.
Elution ranges for the target analytes are listed below:
benzene, toluene, methyl t-butyl ether - C5-C8 aliphatics
ethyl benzene, m,p-xylenes, o-xylene - C9-C12 aliphatics

Significant modifications to the method are listed below:
The surrogate standard for the VPH analysis is a,a,a-trifluorotoluene for both the PID and FID. This compound elutes in the C5-C8 range. 1-Chloro-3-fluorobenzene is also used as an internal standard for the PID and elutes in the C5-C8 range. A retention time marker compound, 4-bromofluorobenzene, is also added to each sample. It elutes in the C9-C12 aliphatic range and aromatic range. The use of the internal standard, surrogate standard, and retention time marker compound that elute in the specified aliphatic or aromatic ranges is a significant modification. The peak areas for these standards are subtracted from the area for the specific ranges before the concentrations are calculated. This process has been validated in our laboratory and has produced acceptable data in the MA Round Robin study.

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Lancaster Laboratories Sample No. SW 3505896

Collected:11/17/2000 09:50 by BB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:38 AM
Discard: 1/4/01
Soil Composite 7 Sample
Amtrak - Wilmington, DE

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S-7--

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor

This sample was submitted with a sample weight that does not conform to the acceptance criteria in the MA-VPH January 1998 method. According to this method, 15 grams of sample +/- 25% (i.e. 11.25 to 18.75 grams) are required to perform this analysis. This sample was submitted with 4.74 grams of sample. The client was notified of this non-conformance and we proceeded with the analysis.

Sample containers were received in satisfactory condition.
Samples were received on ice at a temperature of 4 C.

A poor surrogate recovery was observed due to the dilution needed to perform the analysis.

01216 PCBs in Solids

01495	PCB-1016	12674-11-2	N.D.	19.	ug/kg	1
01496	PCB-1221	11104-28-2	N.D.	19.	ug/kg	1
01497	PCB-1232	11141-16-5	N.D.	19.	ug/kg	1
01498	PCB-1242	53469-21-9	N.D.	19.	ug/kg	1
01499	PCB-1248	12672-29-6	N.D.	19.	ug/kg	1
01500	PCB-1254	11097-69-1	N.D.	19.	ug/kg	1
01501	PCB-1260	11096-82-5	140.	19.	ug/kg	1

08105 MA - EPH certification
All QA/QC procedures required by the EPH method were followed. Yes No
All performance/acceptance standards for the required QA/QC were achieved. Yes No
Significant modifications to the method are reported below.

I attest, under penalties of perjury, that the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature: Christine Dulaney Position: Senior chemist

Printed Name: Christine Dulaney Date: 12/21/00

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Lancaster Laboratories Sample No. SW 3505896

Collected:11/17/2000 09:50 by BB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:38 AM
Discard: 1/4/01
Soil Composite 7 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

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CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08842	MA - VPH certification	MADEP-VPH,modified/8021B	1	12/05/2000 16:48	Matthew E. Barton	633
00111	Moisture	EPA 160.3 modified	1	11/23/2000 08:20	Susan A. Engle	1
05332	MA EPH - Soils	MA EPH, 1/98	1	12/07/2000 18:02	Robert G. Brown	50
05332	MA EPH - Soils	MA EPH, 1/98	1	12/08/2000 05:12	Robert G. Brown	25
08765	MA - VPH soils	MADEP-VPH,mod./8021B/5035	1	12/05/2000 16:48	Matthew E. Barton	633
01216	PCBs in Solids	SW-846 8082	1	12/02/2000 06:18	Rick Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	11/27/2000 23:30	Karen L. Beyer	1
02168	Extraction - DRO Soil Special	MA EPH, 1/98	1	11/22/2000 19:00	Sally L. Appleyard	1

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Lancaster Laboratories Sample No. SW 3505897

Collected:11/17/2000 10:20 by BB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:38 AM
Discard: 1/4/01
Soil Composite 8 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

S-8--

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation	Units	Dilution Factor
08842	MA - VPH certification	n.a.				see below	637

All QA/QC procedures required by the VPH method were followed. (Yes) No
All performance/acceptance standards for the required QA/QC were achieved. (Yes) No
Significant modifications to the method are reported below.

I attest, under penalties of perjury, that the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature: Matthew E Barton Position: SENIOR CHEMIST/COORDINATOR

Printed Name: MATTHEW E. BARTON Date: DEC 27 2000

00111	Moisture	n.a.	11.1		0.50	% by wt.	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.

05332 MA EPH - Soils

05349	Naphthalene	91-20-3	23.	J	28.	mg/kg	50
05350	Acenaphthylene	208-96-8	N.D.		28.	mg/kg	50
05351	Acenaphthene	83-32-9	22.	J	28.	mg/kg	50
05352	Fluorene	86-73-7	27.	J	28.	mg/kg	50
05353	Phenanthrene	85-01-8	65.		28.	mg/kg	50
05354	Anthracene	120-12-7	15.	J	28.	mg/kg	50
05355	Fluoranthene	206-44-0	19.	J	28.	mg/kg	50
05356	Pyrene	129-00-0	13.	J	28.	mg/kg	50
05357	Benzo(a)anthracene	56-55-3	N.D.		28.	mg/kg	50
05358	Chrysene	218-01-9	N.D.		28.	mg/kg	50
05359	Benzo(b)fluoranthene	205-99-2	N.D.		28.	mg/kg	50
05360	Benzo(k)fluoranthene	207-08-9	N.D.		28.	mg/kg	50

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Lancaster Laboratories Sample No. SW 3505897

Collected:11/17/2000 10:20 by BB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:38 AM
Discard: 1/4/01
Soil Composite 8 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

S-8--

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
05361	Benzo(a)pyrene	50-32-8	N.D.	28.	mg/kg	50
05362	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	28.	mg/kg	50
05363	Dibenzo(a,h)anthracene	53-70-3	N.D.	28.	mg/kg	50
05364	Benzo(g,h,i)perylene	191-24-2	N.D.	28.	mg/kg	50
08395	2-Methylnaphthalene	91-57-6	160.	28.	mg/kg	50
08396	C9 to C18 Aliphatics	n.a.	9,000.	340.	mg/kg	100
08397	C19 to C36 Aliphatics	n.a.	1,000.	560.	mg/kg	100
08398	C11 to C22 Aromatics	n.a.	8,500.	220.	mg/kg	50
08837	Unadjusted C11 - C22 Aromatics	n.a.	8,800.	220.	mg/kg	50

The surrogate standard for the aliphatic hydrocarbons is 1-chloro-octadecane.
The surrogate standard for the aromatic hydrocarbons is ortho-terphenyl.
The EPH fractionation surrogate is 2-fluorobiphenyl.

Significant modifications to the method are listed below:
Fractionation of the aliphatic and aromatic hydrocarbons was performed using a reduced size silica gel column with reduced elution volumes. Alternate elution solvent was used as defined in SW-846 method 3630C for the aliphatic fraction. This fractionation technique has been validated in our laboratory and was used to produce acceptable data for the MA Round Robin study of the EPH method. A single EPH fractionation surrogate, 2-fluorobiphenyl, rather than a mixture of 2-fluorobiphenyl and 2-bromo-naphthalene was used. Both compounds elute in the aromatic fraction.
Sample containers were received in satisfactory condition.
Samples were recieved on ice at a temperature of 4 C.

The quantitation limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.

Accurate surrogate recoveries could not be determined due to the dilution required for analysis of the sample.

The fractionation surrogate was inadvertently not added during the sample preparation. The aliphatic and aromatic surrogates recovered in the proper fraction without breakthrough, and the LCS/LCSD recoveries as well as the fractionation check spike indicate that the fractionation step was in control. Therefore, there is no impact on the data.

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Lancaster Laboratories Sample No. SW 3505897

Collected:11/17/2000 10:20 by BB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:38 AM
Discard: 1/4/01
Soil Composite 8 Sample
Amtrak - Wilmington, DE

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West Chester PA 19380

S-8--

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation	Units	Dilution Factor
	The recovery for benzo(a)pyrene is outside the QC limits in the LCSD associated with this sample. Since the LCS is within the limits and all other PAH data is within the limits, the data is reported.						
08765	MA - VPH soils						
08766	Benzene	71-43-2	N.D.		1.4	mg/kg	637
08767	Toluene	108-88-3	1.4		1.4	mg/kg	637
08768	Ethylbenzene	100-41-4	5.6		1.4	mg/kg	637
08769	m,p-Xylenes	1330-20-7	6.8		1.4	mg/kg	637
08770	o-Xylene	95-47-6	2.5		1.4	mg/kg	637
08771	Methyl t-butyl ether	1634-04-4	N.D.		1.4	mg/kg	637
08772	Naphthalene	91-20-3	49.4		1.4	mg/kg	637
08773	C5-C8 Aliphatic Hydrocarbons	n.a.	46.	J	72.	mg/kg	637
08774	C9-C12 Aliphatic Hydrocarbons	n.a.	1,020.		72.	mg/kg	637
08775	C9-C10 Aromatic Hydrocarbons	n.a.	865.		72.	mg/kg	637
08840	Unadjusted C5-C8 Aliphatics	n.a.	48.	J	72.	mg/kg	637
08841	Unadjusted C9-C12 Aliphatics	n.a.	1,900.		72.	mg/kg	637

The concentrations of individual target analytes and the surrogate standard have been subtracted from the concentrations of the appropriate hydrocarbon ranges as specified by the method.
Elution ranges for the target analytes are listed below:
benzene, toluene, methyl t-butyl ether - C5-C8 aliphatics
ethyl benzene, m,p-xylenes, o-xylene - C9-C12 aliphatics

Significant modifications to the method are listed below:
The surrogate standard for the VPH analysis is a,a,a-trifluorotoluene for both the PID and FID. This compound elutes in the C5-C8 range. 1-Chloro-3-fluorobenzene is also used as an internal standard for the PID and elutes in the C5-C8 range. A retention time marker compound, 4-bromofluorobenzene, is also added to each sample. It elutes in the C9-C12 aliphatic range and aromatic range. The use of the internal standard, surrogate standard, and retention time marker compound that elute in the specified aliphatic or aromatic ranges is a significant modification. The peak areas for these standards are subtracted from the area for the specific ranges before the concentrations are calculated. This process has been validated in our laboratory and has produced acceptable data in the MA Round Robin study.

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Lancaster Laboratories Sample No. SW 3505897

Collected:11/17/2000 10:20 by BB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:38 AM
Discard: 1/4/01
Soil Composite 8 Sample
Amtrak - Wilmington, DE

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1220 Ward Avenue, Suite 300
West Chester PA 19380

S-8--

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
	This sample was submitted with a sample weight that does not conform to the acceptance criteria in the MA-VPH January 1998 method. According to this method, 15 grams of sample +/- 25% (i.e. 11.25 to 18.75 grams) are required to perform this analysis. This sample was submitted with 4.71 grams of sample. The client was notified of this non-conformance and we proceeded with the analysis.					
	Sample containers were received in satisfactory condition. Samples were received on ice at a temperature of 4 C.					
	A poor surrogate recovery was observed due to the dilution needed to perform the analysis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	N.D.	19.	ug/kg	1
01496	PCB-1221	11104-28-2	N.D.	19.	ug/kg	1
01497	PCB-1232	11141-16-5	N.D.	19.	ug/kg	1
01498	PCB-1242	53469-21-9	N.D.	19.	ug/kg	1
01499	PCB-1248	12672-29-6	N.D.	19.	ug/kg	1
01500	PCB-1254	11097-69-1	N.D.	19.	ug/kg	1
01501	PCB-1260	11096-82-5	100.	19.	ug/kg	1

08105 MA - EPH certification

All QA/QC procedures required by the EPH method were followed. Yes No

All performance/acceptance standards for the required QA/QC were achieved. Yes No

Significant modifications to the method are reported below.

I attest, under penalties of perjury, that the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature: Christine Dulaney Position: Senior chemist

Printed Name: Christine Dulaney Date: 12/21/00

Lancaster Laboratories
2425 New Holland Pike
PO Box 12425
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Lancaster Laboratories Sample No. SW 3505897

Collected:11/17/2000 10:20 by BB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:38 AM
Discard: 1/4/01
Soil Composite 8 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

S-8--

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08842	MA - VPH certification	MADEP-VPH,modified/8021B	1	12/05/2000 17:31	Matthew E. Barton	637
00111	Moisture	EPA 160.3 modified	1	11/23/2000 08:20	Susan A. Engle	1
05332	MA EPH - Soils	MA EPH, 1/98	1	12/07/2000 21:28	Robert G. Brown	100
05332	MA EPH - Soils	MA EPH, 1/98	1	12/13/2000 21:53	Robert G. Brown	50
08765	MA - VPH soils	MADEP-VPH,mod./8021B/5035	1	12/05/2000 17:31	Matthew E. Barton	637
01216	PCBs in Solids	SW-846 8082	1	12/02/2000 07:23	Rick Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	11/27/2000 23:30	Karen L. Beyer	1
02168	Extraction - DRO Soil Special	MA EPH, 1/98	1	11/22/2000 19:00	Sally L. Appleyard	1

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Lancaster Laboratories Sample No. SW 3505898

Collected:11/17/2000 11:00 by BB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:39 AM
Discard: 1/4/01
Soil Composite 9 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

S-9--

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation	Units	Dilution Factor
08842	MA - VPH certification	n.a.				see below	616

All QA/QC procedures required by the VPH method were followed. Yes No
All performance/acceptance standards for the required QA/QC were achieved. Yes No
Significant modifications to the method are reported below.

I attest, under penalties of perjury, that the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature: Matthew E Barton Position: SENIOR CHEMIST/COORDINATOR

Printed Name: MATTHEW E. BARTON Date: DEC 27 2000

00111	Moisture	n.a.	10.1		0.50	% by wt.	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.

05332 MA EPH - Soils

05349	Naphthalene	91-20-3	16.		11.	mg/kg	20
05350	Acenaphthylene	208-96-8	N.D.		11.	mg/kg	20
05351	Acenaphthene	83-32-9	13.		11.	mg/kg	20
05352	Fluorene	86-73-7	14.		11.	mg/kg	20
05353	Phenanthrene	85-01-8	37.		11.	mg/kg	20
05354	Anthracene	120-12-7	10.	J	11.	mg/kg	20
05355	Fluoranthene	206-44-0	8.1	J	11.	mg/kg	20
05356	Pyrene	129-00-0	4.9	J	11.	mg/kg	20
05357	Benzo(a)anthracene	56-55-3	N.D.		11.	mg/kg	20
05358	Chrysene	218-01-9	N.D.		11.	mg/kg	20
05359	Benzo(b)fluoranthene	205-99-2	N.D.		11.	mg/kg	20
05360	Benzo(k)fluoranthene	207-08-9	N.D.		11.	mg/kg	20

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Lancaster Laboratories Sample No. SW 3505898

Collected:11/17/2000 11:00 by BB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:39 AM
Discard: 1/4/01
Soil Composite 9 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

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CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
05361	Benzo(a)pyrene	50-32-8	N.D.	11.	mg/kg	20
05362	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	11.	mg/kg	20
05363	Dibenzo(a,h)anthracene	53-70-3	N.D.	11.	mg/kg	20
05364	Benzo(g,h,i)perylene	191-24-2	N.D.	11.	mg/kg	20
08395	2-Methylnaphthalene	91-57-6	120.	11.	mg/kg	20
08396	C9 to C18 Aliphatics	n.a.	6,300.	330.	mg/kg	100
08397	C19 to C36 Aliphatics	n.a.	1,100.	560.	mg/kg	100
08398	C11 to C22 Aromatics	n.a.	5,900.	89.	mg/kg	20
08837	Unadjusted C11 - C22 Aromatics	n.a.	6,100.	89.	mg/kg	20

The surrogate standard for the aliphatic hydrocarbons is 1-chloro-octadecane.
The surrogate standard for the aromatic hydrocarbons is ortho-terphenyl.
The EPH fractionation surrogate is 2-fluorobiphenyl.

Significant modifications to the method are listed below:
Fractionation of the aliphatic and aromatic hydrocarbons was performed using a reduced size silica gel column with reduced elution volumes. Alternate elution solvent was used as defined in SW-846 method 3630C for the aliphatic fraction. This fractionation technique has been validated in our laboratory and was used to produce acceptable data for the MA Round Robin study of the EPH method. A single EPH fractionation surrogate, 2-fluorobiphenyl, rather than a mixture of 2-fluorobiphenyl and 2-bromo-naphthalene was used. Both compounds elute in the aromatic fraction.
Sample containers were received in satisfactory condition.
Samples were recieved on ice at a temperature of 4 C.

The quantitation limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.

Accurate surrogate recoveries could not be determined due to the dilution required for analysis of the sample.

The fractionation surrogate was inadvertently not added during the sample preparation. The aliphatic and aromatic surrogates recovered in the proper fraction without breakthrough, and the LCS/LCSD recoveries as well as the fractionation check spike indicate that the fractionation step was in control. Therefore, there is no impact on the data.

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Lancaster Laboratories Sample No. SW 3505898

Collected:11/17/2000 11:00 by BB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:39 AM
Discard: 1/4/01
Soil Composite 9 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

S-9--

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation	Units	Dilution Factor
	The recovery for benzo(a)pyrene is outside the QC limits in the LCSD associated with this sample. Since the LCS is within the limits and all other PAH data is within the limits, the data is reported.						
08765	MA - VPH soils						
08766	Benzene	71-43-2	N.D.		1.4	mg/kg	616
08767	Toluene	108-88-3	0.74	J	1.4	mg/kg	616
08768	Ethylbenzene	100-41-4	3.5		1.4	mg/kg	616
08769	m,p-Xylenes	1330-20-7	3.7		1.4	mg/kg	616
08770	o-Xylene	95-47-6	1.6		1.4	mg/kg	616
08771	Methyl t-butyl ether	1634-04-4	N.D.		1.4	mg/kg	616
08772	Naphthalene	91-20-3	38.2		1.4	mg/kg	616
08773	C5-C8 Aliphatic Hydrocarbons	n.a.	N.D.		69.	mg/kg	616
08774	C9-C12 Aliphatic Hydrocarbons	n.a.	856.		69.	mg/kg	616
08775	C9-C10 Aromatic Hydrocarbons	n.a.	729.		69.	mg/kg	616
08840	Unadjusted C5-C8 Aliphatics	n.a.	N.D.		69.	mg/kg	616
08841	Unadjusted C9-C12 Aliphatics	n.a.	1,590.		69.	mg/kg	616

The concentrations of individual target analytes and the surrogate standard have been subtracted from the concentrations of the appropriate hydrocarbon ranges as specified by the method.
Elution ranges for the target analytes are listed below:
benzene, toluene, methyl t-butyl ether - C5-C8 aliphatics
ethyl benzene, m,p-xylenes, o-xylene - C9-C12 aliphatics

Significant modifications to the method are listed below:
The surrogate standard for the VPH analysis is a,a,a-trifluorotoluene for both the PID and FID. This compound elutes in the C5-C8 range. 1-Chloro-3-fluorobenzene is also used as an internal standard for the PID and elutes in the C5-C8 range. A retention time marker compound, 4-bromofluorobenzene, is also added to each sample. It elutes in the C9-C12 aliphatic range and aromatic range. The use of the internal standard, surrogate standard, and retention time marker compound that elute in the specified aliphatic or aromatic ranges is a significant modification. The peak areas for these standards are subtracted from the area for the specific ranges before the concentrations are calculated. This process has been validated in our laboratory and has produced acceptable data in the MA Round Robin study.

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Lancaster Laboratories Sample No. SW 3505898

Collected:11/17/2000 11:00 by BB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:39 AM
Discard: 1/4/01
Soil Composite 9 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

S-9--

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
	This sample was submitted with a sample weight that does not conform to the acceptance criteria in the MA-VPH January 1998 method. According to this method, 15 grams of sample +/- 25% (i.e. 11.25 to 18.75 grams) are required to perform this analysis. This sample was submitted with 4.87 grams of sample. The client was notified of this non-conformance and we proceeded with the analysis.					
	Sample containers were received in satisfactory condition. Samples were received on ice at a temperature of 4 C.					
	A poor surrogate recovery was observed due to the dilution needed to perform the analysis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	N.D.	19.	ug/kg	1
01496	PCB-1221	11104-28-2	N.D.	19.	ug/kg	1
01497	PCB-1232	11141-16-5	N.D.	19.	ug/kg	1
01498	PCB-1242	53469-21-9	N.D.	19.	ug/kg	1
01499	PCB-1248	12672-29-6	N.D.	19.	ug/kg	1
01500	PCB-1254	11097-69-1	N.D.	19.	ug/kg	1
01501	PCB-1260	11096-82-5	150.	19.	ug/kg	1

08105 MA - EPH certification

All QA/QC procedures required by the EPH method were followed. Yes No
All performance/acceptance standards for the required QA/QC were achieved. Yes No
Significant modifications to the method are reported below.

I attest, under penalties of perjury, that the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature: Christine Dulaney Position: Senior chemist

Printed Name: Christine Dulaney Date: 12/21/00

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Lancaster Laboratories Sample No. SW 3505898

Collected:11/17/2000 11:00 by BB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:39 AM
Discard: 1/4/01
Soil Composite 9 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

S-9--

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08842	MA - VPH certification	MADEP-VPH,modified/8021B	1	12/05/2000 18:14	Matthew E. Barton	616
00111	Moisture	EPA 160.3 modified	1	11/23/2000 08:20	Susan A. Engle	1
05332	MA EPH - Soils	MA EPH, 1/98	1	12/07/2000 22:20	Robert G. Brown	20
05332	MA EPH - Soils	MA EPH, 1/98	1	12/07/2000 23:12	Robert G. Brown	100
08765	MA - VPH soils	MADEP-VPH,mod./8021B/5035	1	12/05/2000 18:14	Matthew E. Barton	616
01216	PCBs in Solids	SW-846 8082	1	12/02/2000 07:45	Rick Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	11/27/2000 23:30	Karen L. Beyer	1
02168	Extraction - DRO Soil Special	MA EPH, 1/98	1	11/22/2000 19:00	Sally L. Appleyard	1

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Lancaster Laboratories Sample No. SW 3505899

Collected:11/17/2000 11:40 by BB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:39 AM
Discard: 1/4/01
Soil Composite 10 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

S-10-

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation	Units	Dilution Factor
08842	MA - VPH certification	n.a.				see below	611

All QA/QC procedures required by the VPH method were followed. Yes No
All performance/acceptance standards for the required QA/QC were achieved. Yes No
Significant modifications to the method are reported below.

I attest, under penalties of perjury, that the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature: Matthew E Barton Position: SENIOR CHEMIST/COORDINATOR

Printed Name: MATTHEW E. BARTON Date: DEC 27 2000

00111	Moisture	n.a.	8.52		0.50	% by wt.	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.

05332 MA EPH - Soils

05349	Naphthalene	91-20-3	3.6	J	5.5	mg/kg	10
05350	Acenaphthylene	208-96-8	N.D.		5.5	mg/kg	10
05351	Acenaphthene	83-32-9	4.9	J	5.5	mg/kg	10
05352	Fluorene	86-73-7	5.1	J	5.5	mg/kg	10
05353	Phenanthrene	85-01-8	15.		5.5	mg/kg	10
05354	Anthracene	120-12-7	5.3	J	5.5	mg/kg	10
05355	Fluoranthene	206-44-0	4.9	J	5.5	mg/kg	10
05356	Pyrene	129-00-0	3.2	J	5.5	mg/kg	10
05357	Benzo(a)anthracene	56-55-3	N.D.		5.5	mg/kg	10
05358	Chrysene	218-01-9	N.D.		5.5	mg/kg	10
05359	Benzo(b)fluoranthene	205-99-2	N.D.		5.5	mg/kg	10
05360	Benzo(k)fluoranthene	207-08-9	N.D.		5.5	mg/kg	10

Lancaster Laboratories
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Lancaster Laboratories Sample No. SW 3505899

Collected:11/17/2000 11:40 by BB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:39 AM
Discard: 1/4/01
Soil Composite 10 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

S-10-

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
05361	Benzo(a)pyrene	50-32-8	N.D.	5.5	mg/kg	10
05362	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	5.5	mg/kg	10
05363	Dibenzo(a,h)anthracene	53-70-3	N.D.	5.5	mg/kg	10
05364	Benzo(g,h,i)perylene	191-24-2	N.D.	5.5	mg/kg	10
08395	2-Methylnaphthalene	91-57-6	35.	5.5	mg/kg	10
08396	C9 to C18 Aliphatics	n.a.	4,300.	82.	mg/kg	25
08397	C19 to C36 Aliphatics	n.a.	650.	140.	mg/kg	25
08398	C11 to C22 Aromatics	n.a.	2,900.	44.	mg/kg	10
08837	Unadjusted C11 - C22 Aromatics	n.a.	3,000.	44.	mg/kg	10

The surrogate standard for the aliphatic hydrocarbons is 1-chloro-octadecane.
The surrogate standard for the aromatic hydrocarbons is ortho-terphenyl.
The EPH fractionation surrogate is 2-fluorobiphenyl.

Significant modifications to the method are listed below:
Fractionation of the aliphatic and aromatic hydrocarbons was performed using a reduced size silica gel column with reduced elution volumes. Alternate elution solvent was used as defined in SW-846 method 3630C for the aliphatic fraction. This fractionation technique has been validated in our laboratory and was used to produce acceptable data for the MA Round Robin study of the EPH method. A single EPH fractionation surrogate, 2-fluorobiphenyl, rather than a mixture of 2-fluorobiphenyl and 2-bromo-naphthalene was used. Both compounds elute in the aromatic fraction.
Sample containers were received in satisfactory condition.
Samples were recieved on ice at a temperature of 4 C.

The quantitation limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.

Accurate surrogate recoveries could not be determined due to the dilution required for analysis of the sample.

The fractionation surrogate was inadvertently not added during the sample preparation. The aliphatic and aromatic surrogates recovered in the proper fraction without breakthrough, and the LCS/LCSD recoveries as well as the fractionation check spike indicate that the fractionation step was in control. Therefore, there is no impact on the data.

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Lancaster Laboratories Sample No. SW 3505899

Collected:11/17/2000 11:40 by BB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:39 AM
Discard: 1/4/01
Soil Composite 10 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

S-10-

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
	The recovery for benzo(a)pyrene is outside the QC limits in the LCSD associated with this sample. Since the LCS is within the limits and all other PAH data is within the limits, the data is reported.					
08765	MA - VPH soils					
08766	Benzene	71-43-2	N.D.	1.3	mg/kg	611
08767	Toluene	108-88-3	N.D.	1.3	mg/kg	611
08768	Ethylbenzene	100-41-4	N.D.	1.3	mg/kg	611
08769	m,p-Xylenes	1330-20-7	N.D.	1.3	mg/kg	611
08770	o-Xylene	95-47-6	N.D.	1.3	mg/kg	611
08771	Methyl t-butyl ether	1634-04-4	N.D.	1.3	mg/kg	611
08772	Naphthalene	91-20-3	19.5	1.3	mg/kg	611
08773	C5-C8 Aliphatic Hydrocarbons	n.a.	N.D.	67.	mg/kg	611
08774	C9-C12 Aliphatic Hydrocarbons	n.a.	451.	67.	mg/kg	611
08775	C9-C10 Aromatic Hydrocarbons	n.a.	404.	67.	mg/kg	611
08840	Unadjusted C5-C8 Aliphatics	n.a.	N.D.	67.	mg/kg	611
08841	Unadjusted C9-C12 Aliphatics	n.a.	856.	67.	mg/kg	611

The concentrations of individual target analytes and the surrogate standard have been subtracted from the concentrations of the appropriate hydrocarbon ranges as specified by the method.
Elution ranges for the target analytes are listed below:
benzene, toluene, methyl t-butyl ether - C5-C8 aliphatics
ethyl benzene, m,p-xylenes, o-xylene - C9-C12 aliphatics

Significant modifications to the method are listed below:
The surrogate standard for the VPH analysis is a,a,a-trifluorotoluene for both the PID and FID. This compound elutes in the C5-C8 range. 1-Chloro-3-fluorobenzene is also used as an internal standard for the PID and elutes in the C5-C8 range. A retention time marker compound, 4-bromofluorobenzene, is also added to each sample. It elutes in the C9-C12 aliphatic range and aromatic range. The use of the internal standard, surrogate standard, and retention time marker compound that elute in the specified aliphatic or aromatic ranges is a significant modification. The peak areas for these standards are subtracted from the area for the specific ranges before the concentrations are calculated. This process has been validated in our laboratory and has produced acceptable data in the MA Round Robin study.

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Lancaster Laboratories Sample No. SW 3505899

Collected:11/17/2000 11:40 by BB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:39 AM
Discard: 1/4/01
Soil Composite 10 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

S-10-

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
	This sample was submitted with a sample weight that does not conform to the acceptance criteria in the MA-VPH January 1998 method. According to this method, 15 grams of sample +/- 25% (i.e. 11.25 to 18.75 grams) are required to perform this analysis. This sample was submitted with 4.91 grams of sample. The client was notified of this non-conformance and we proceeded with the analysis.					
	Sample containers were received in satisfactory condition. Samples were received on ice at a temperature of 4 C.					
	A poor surrogate recovery was observed due to the dilution needed to perform the analysis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	N.D.	19.	ug/kg	1
01496	PCB-1221	11104-28-2	N.D.	19.	ug/kg	1
01497	PCB-1232	11141-16-5	N.D.	19.	ug/kg	1
01498	PCB-1242	53469-21-9	N.D.	19.	ug/kg	1
01499	PCB-1248	12672-29-6	N.D.	19.	ug/kg	1
01500	PCB-1254	11097-69-1	N.D.	19.	ug/kg	1
01501	PCB-1260	11096-82-5	120.	19.	ug/kg	1

08105 MA - EPH certification
All QA/QC procedures required by the EPH method were followed. Yes No
All performance/acceptance standards for the required QA/QC were achieved. Yes No
Significant modifications to the method are reported below.

I attest, under penalties of perjury, that the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature: Christine Dulaney Position: Senior chemist

Printed Name: Christine Dulaney Date: 12/21/00

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Lancaster Laboratories Sample No. SW 3505899

Collected:11/17/2000 11:40 by BB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:39 AM
Discard: 1/4/01
Soil Composite 10 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

S-10-

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08842	MA - VPH certification	MADEP-VPH,modified/8021B	1	12/05/2000 18:57	Matthew E. Barton	611
00111	Moisture	EPA 160.3 modified	1	11/23/2000 08:20	Susan A. Engle	1
05332	MA EPH - Soils	MA EPH, 1/98	1	12/08/2000 00:03	Robert G. Brown	10
05332	MA EPH - Soils	MA EPH, 1/98	1	12/08/2000 00:55	Robert G. Brown	25
08765	MA - VPH soils	MADEP-VPH,mod./8021B/5035	1	12/05/2000 18:57	Matthew E. Barton	611
01216	PCBs in Solids	SW-846 8082	1	12/02/2000 08:07	Rick Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	11/27/2000 23:30	Karen L. Beyer	1
02168	Extraction - DRO Soil Special	MA EPH, 1/98	1	11/22/2000 19:00	Sally L. Appleyard	1

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Lancaster Laboratories Sample No. SW 3505900

Collected:11/17/2000 12:25 by BB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:39 AM
Discard: 1/4/01
Soil Composite 11 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

S-11-

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation	Units	Dilution Factor
08842	MA - VPH certification	n.a.				see below	577

All QA/QC procedures required by the VPH method were followed. Yes No
All performance/acceptance standards for the required QA/QC were achieved. Yes No
Significant modifications to the method are reported below.

I attest, under penalties of perjury, that the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature: Matthew E Barton Position: SENIOR CHEMIST/COORDINATOR

Printed Name: MATTHEW E. BARTON Date: DEC 27 2000

00111	Moisture	n.a.	11.7		0.50	% by wt.	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.

05332 MA EPH - Soils

05349	Naphthalene	91-20-3	N.D.		14.	mg/kg	25
05350	Acenaphthylene	208-96-8	N.D.		14.	mg/kg	25
05351	Acenaphthene	83-32-9	8.2	J	14.	mg/kg	25
05352	Fluorene	86-73-7	5.7	J	14.	mg/kg	25
05353	Phenanthrene	85-01-8	17.		14.	mg/kg	25
05354	Anthracene	120-12-7	10.	J	14.	mg/kg	25
05355	Fluoranthene	206-44-0	8.0	J	14.	mg/kg	25
05356	Pyrene	129-00-0	5.7	J	14.	mg/kg	25
05357	Benzo(a)anthracene	56-55-3	N.D.		14.	mg/kg	25
05358	Chrysene	218-01-9	N.D.		14.	mg/kg	25
05359	Benzo(b)fluoranthene	205-99-2	N.D.		14.	mg/kg	25
05360	Benzo(k)fluoranthene	207-08-9	N.D.		14.	mg/kg	25

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Lancaster Laboratories Sample No. SW 3505900

Collected:11/17/2000 12:25 by BB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:39 AM
Discard: 1/4/01
Soil Composite 11 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

S-11-

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
05361	Benzo(a)pyrene	50-32-8	N.D.	14.	mg/kg	25
05362	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	14.	mg/kg	25
05363	Dibenzo(a,h)anthracene	53-70-3	N.D.	14.	mg/kg	25
05364	Benzo(g,h,i)perylene	191-24-2	N.D.	14.	mg/kg	25
08395	2-Methylnaphthalene	91-57-6	32.	14.	mg/kg	25
08396	C9 to C18 Aliphatics	n.a.	4,200.	85.	mg/kg	25
08397	C19 to C36 Aliphatics	n.a.	510.	140.	mg/kg	25
08398	C11 to C22 Aromatics	n.a.	5,900.	110.	mg/kg	25
08837	Unadjusted C11 - C22 Aromatics	n.a.	6,000.	110.	mg/kg	25

The surrogate standard for the aliphatic hydrocarbons is 1-chloro-octadecane.
The surrogate standard for the aromatic hydrocarbons is ortho-terphenyl.
The EPH fractionation surrogate is 2-fluorobiphenyl.

Significant modifications to the method are listed below:
Fractionation of the aliphatic and aromatic hydrocarbons was performed using a reduced size silica gel column with reduced elution volumes. Alternate elution solvent was used as defined in SW-846 method 3630C for the aliphatic fraction. This fractionation technique has been validated in our laboratory and was used to produce acceptable data for the MA Round Robin study of the EPH method. A single EPH fractionation surrogate, 2-fluorobiphenyl, rather than a mixture of 2-fluorobiphenyl and 2-bromo-naphthalene was used. Both compounds elute in the aromatic fraction.
Sample containers were received in satisfactory condition.
Samples were recieved on ice at a temperature of 4 C.

The quantitation limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.

Accurate surrogate recoveries could not be determined due to the dilution required for analysis of the sample.

The fractionation surrogate was inadvertently not added during the sample preparation. The aliphatic and aromatic surrogates recovered in the proper fraction without breakthrough, and the LCS/LCSD recoveries as well as the fractionation check spike indicate that the fractionation step was in control. Therefore, there is no impact on the data.

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Lancaster Laboratories Sample No. SW 3505900

Collected:11/17/2000 12:25 by BB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:39 AM
Discard: 1/4/01
Soil Composite 11 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

S-11-

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Limit of Quantitation	Units	Dilution Factor
	The recovery for benzo(a)pyrene is outside the QC limits in the LCSD associated with this sample. Since the LCS is within the limits and all other PAH data is within the limits, the data is reported.						
08765	MA - VPH soils						
08766	Benzene	71-43-2	N.D.		1.3	mg/kg	577
08767	Toluene	108-88-3	N.D.		1.3	mg/kg	577
08768	Ethylbenzene	100-41-4	N.D.		1.3	mg/kg	577
08769	m,p-Xylenes	1330-20-7	0.71	J	1.3	mg/kg	577
08770	o-Xylene	95-47-6	N.D.		1.3	mg/kg	577
08771	Methyl t-butyl ether	1634-04-4	N.D.		1.3	mg/kg	577
08772	Naphthalene	91-20-3	20.7		1.3	mg/kg	577
08773	C5-C8 Aliphatic Hydrocarbons	n.a.	N.D.		65.	mg/kg	577
08774	C9-C12 Aliphatic Hydrocarbons	n.a.	561.		65.	mg/kg	577
08775	C9-C10 Aromatic Hydrocarbons	n.a.	454.		65.	mg/kg	577
08840	Unadjusted C5-C8 Aliphatics	n.a.	N.D.		65.	mg/kg	577
08841	Unadjusted C9-C12 Aliphatics	n.a.	1,020.		65.	mg/kg	577

The concentrations of individual target analytes and the surrogate standard have been subtracted from the concentrations of the appropriate hydrocarbon ranges as specified by the method.
Elution ranges for the target analytes are listed below:
benzene, toluene, methyl t-butyl ether - C5-C8 aliphatics
ethyl benzene, m,p-xylenes, o-xylene - C9-C12 aliphatics

Significant modifications to the method are listed below:
The surrogate standard for the VPH analysis is a,a,a-trifluorotoluene for both the PID and FID. This compound elutes in the C5-C8 range. 1-Chloro-3-fluorobenzene is also used as an internal standard for the PID and elutes in the C5-C8 range. A retention time marker compound, 4-bromofluorobenzene, is also added to each sample. It elutes in the C9-C12 aliphatic range and aromatic range. The use of the internal standard, surrogate standard, and retention time marker compound that elute in the specified aliphatic or aromatic ranges is a significant modification. The peak areas for these standards are subtracted from the area for the specific ranges before the concentrations are calculated. This process has been validated in our laboratory and has produced acceptable data in the MA Round Robin study.

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Lancaster Laboratories Sample No. SW 3505900

Collected:11/17/2000 12:25 by BB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:39 AM
Discard: 1/4/01
Soil Composite 11 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

S-11-

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
	This sample was submitted with a sample weight that does not conform to the acceptance criteria in the MA-VPH January 1998 method. According to this method, 15 grams of sample +/- 25% (i.e. 11.25 to 18.75 grams) are required to perform this analysis. This sample was submitted with 5.20 grams of sample. The client was notified of this non-conformance and we proceeded with the analysis.					
	Sample containers were received in satisfactory condition. Samples were received on ice at a temperature of 4 C.					
	A poor surrogate recovery was observed due to the dilution needed to perform the analysis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	N.D.	19.	ug/kg	1
01496	PCB-1221	11104-28-2	N.D.	19.	ug/kg	1
01497	PCB-1232	11141-16-5	N.D.	19.	ug/kg	1
01498	PCB-1242	53469-21-9	N.D.	19.	ug/kg	1
01499	PCB-1248	12672-29-6	N.D.	19.	ug/kg	1
01500	PCB-1254	11097-69-1	N.D.	19.	ug/kg	1
01501	PCB-1260	11096-82-5	75.	19.	ug/kg	1

08105 MA - EPH certification

All QA/QC procedures required by the EPH method were followed. Yes No
All performance/acceptance standards for the required QA/QC were achieved. Yes No
Significant modifications to the method are reported below.

I attest, under penalties of perjury, that the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature: Christine Dulaney Position: Senior chemist

Printed Name: Christine Dulaney Date: 12/20/00

Lancaster Laboratories
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

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See reverse side for explanation of symbols and abbreviations.

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Lancaster Laboratories Sample No. SW 3505900

Collected:11/17/2000 12:25 by BB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:39 AM
Discard: 1/4/01
Soil Composite 11 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

S-11-

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08842	MA - VPH certification	MADEP-VPH,modified/8021B	1	12/05/2000 19:40	Matthew E. Barton	577
00111	Moisture	EPA 160.3 modified	1	11/23/2000 08:20	Susan A. Engle	1
05332	MA EPH - Soils	MA EPH, 1/98	1	12/08/2000 04:21	Robert G. Brown	25
05332	MA EPH - Soils	MA EPH, 1/98	1	12/13/2000 22:44	Robert G. Brown	25
08765	MA - VPH soils	MADEP-VPH,mod./8021B/5035	1	12/05/2000 19:40	Matthew E. Barton	577
01216	PCBs in Solids	SW-846 8082	1	12/02/2000 08:29	Rick Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	11/27/2000 23:30	Karen L. Beyer	1
02168	Extraction - DRO Soil Special	MA EPH, 1/98	1	11/22/2000 19:00	Sally L. Appleyard	1

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Lancaster Laboratories Sample No. SW 3505901

Collected:11/17/2000 12:45 by BB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:40 AM
Discard: 1/4/01
Soil Composite 13 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

S-13-

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
01562	Petroleum Hydrocarbons	n.a.	16,400.	4,500.	mg/kg	100
00111	Moisture	n.a.	11.0	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
00394	pH	n.a.	5.99	0.010		1
	The pH was performed on a 1:1 slurry (25 gms. of sample and 25 ml. of deionized water) after being tumbled for 30 min.					
00496	Corrosivity	n.a.	See Below		See Below	1
	Corrosivity: The pH of a 1:1 slurry (with deionized water) was 5.99 indicating that the waste is not corrosive. A waste is corrosive if it exhibits a pH equal to or less than 2 or equal to or greater than 12.5.					
00542	Ignitability	n.a.	See Below		See Below	1
	The sample did not spontaneously ignite when exposed to air or water. The sample did not ignite by friction. The sample vapors did not ignite when exposed to a flame using a closed cup apparatus.					
01121	Reactivity	n.a.	See Below		See Below	1
	Reactivity: The sample was extracted by the interim method described in SW 846, Chapter 7.3. This solution was analyzed for cyanide and sulfide. This waste is not considered reactive and hazardous because it does not generate a quantity of hydrogen cyanide exceeding 250 mg/kg or hydrogen sulfide exceeding 500 mg/kg. These interim threshold limits were established by the Solid Waste Branch of EPA, July, 1992. These results do not reflect total cyanide or total sulfide.					
01122	Sulfide (Reactivity)	n.a.	N.D.	120.	mg/kg	1
01123	Cyanide (Reactivity)	n.a.	N.D.	100.	mg/kg	1
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	N.D.	19.	ug/kg	1
01496	PCB-1221	11104-28-2	N.D.	19.	ug/kg	1

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Lancaster Laboratories Sample No. SW 3505901

Collected:11/17/2000 12:45 by BB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:40 AM
Discard: 1/4/01
Soil Composite 13 Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

S-13-

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
01497	PCB-1232	11141-16-5	N.D.	19.	ug/kg	1
01498	PCB-1242	53469-21-9	N.D.	19.	ug/kg	1
01499	PCB-1248	12672-29-6	N.D.	19.	ug/kg	1
01500	PCB-1254	11097-69-1	N.D.	19.	ug/kg	1
01501	PCB-1260	11096-82-5	130.	19.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01562	Petroleum Hydrocarbons	EPA 418.1 modified	1	12/05/2000 14:25	Yolunder Y. Bunch	100
00111	Moisture	EPA 160.3 modified	1	11/23/2000 08:20	Susan A. Engle	1
00394	pH	SW-846 9045C (modified)	1	11/22/2000 20:35	Luz M. Groff	1
00496	Corrosivity	SW-846 Chapter 7	1	11/22/2000 20:35	Luz M. Groff	1
00542	Ignitability	40 CFR 261.21	1	11/22/2000 11:30	Catherine L. Cammauf	1
01121	Reactivity	SW-846 Chapter 7.3	1	12/01/2000 08:05	Susan E. Hibner	1
01122	Sulfide (Reactivity)	SW-846 9034	1	12/01/2000 08:05	Susan E. Hibner	1
01123	Cyanide (Reactivity)	SW-846 9012	1	12/02/2000 11:17	Mark A. Buckwalter	1
01216	PCBs in Solids	SW-846 8082	1	12/02/2000 08:50	Rick Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	11/27/2000 23:30	Karen L. Beyer	1
08125	TPH IR (SW), Prep.	EPA 418.1 modified	1	12/05/2000 09:00	Yolunder Y. Bunch	1

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Lancaster Laboratories Sample No. TL 3505902

Collected:11/17/2000 12:45 by BB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:40 AM
Discard: 1/4/01
Soil Composite 13 Sample
TCLP NON-VOLATILE EXTRACTION
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

S13NV

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00259	Mercury	7439-97-6	N.D.	0.00020	mg/l	1

The metal analyses were performed on a non-volatile leachate prepared according to the procedure specified in SW-846, Chapter 7.4 (Revision 3, December, 1994). A sample is considered to have failed the Toxicity Characteristic (TC) test and is considered a hazardous waste if any of the metal concentrations (mg/l) in the leachate exceed the following maxima (100 times the Primary Drinking Water Standards):

Arsenic	5.0	Cadmium	1.0	Lead	5.0	Selenium	1.0
Barium	100.0	Chromium	5.0	Mercury	0.2	Silver	5.0

01335	Arsenic	7440-38-2	N.D.	0.100	mg/l	1
01336	Selenium	7782-49-2	N.D.	0.200	mg/l	1
01746	Barium	7440-39-3	0.684	0.100	mg/l	1
01749	Cadmium	7440-43-9	N.D.	0.0100	mg/l	1
01751	Chromium	7440-47-3	N.D.	0.0300	mg/l	1
01755	Lead	7439-92-1	0.107	0.100	mg/l	1
01766	Silver	7440-22-4	N.D.	0.0200	mg/l	1

00950 TCLP Pesticides

01972	Gamma BHC - Lindane	58-89-9	N.D.	0.000050	mg/l	1
01973	Heptachlor	76-44-8	N.D.	0.000050	mg/l	1
01974	Heptachlor Epoxide	1024-57-3	N.D.	0.000050	mg/l	1
01975	Methoxychlor	72-43-5	N.D.	0.00050	mg/l	1
01976	Endrin	72-20-8	N.D.	0.00010	mg/l	1
01977	Chlordane	57-74-9	N.D.	0.0025	mg/l	1
01978	Toxaphene	8001-35-2	N.D.	0.0050	mg/l	1

The pesticide/herbicide analyses were performed on a non-volatile toxicity characteristic leachate of the submitted waste. The leachate was prepared according to the procedure specified in the March 29 and the June 29, 1990 Federal Registers.
A sample is considered to have failed the Toxicity Characteristic (TC) test and is therefore considered a hazardous waste if any of the contaminant concentrations (mg/l) in the leachate exceed the following maxima:

Chlordane	0.03	Methoxychlor	10.0
Endrin	0.02	Toxaphene	0.5

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Lancaster Laboratories Sample No. TL 3505902

Collected:11/17/2000 12:45 by BB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:40 AM
Discard: 1/4/01
Soil Composite 13 Sample
TCLP NON-VOLATILE EXTRACTION
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

S13NV

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
	Heptachlor (and epoxide)	0.008	2,4-D	10.0		
	Lindane	0.4	2,4,5-TP(Silvex)	1.0		

The limits are published in March 29, 1990 Federal Register, pp. 11845-6. The endrin and methoxychlor recoveries are outside the QC limits for the LCS. Since the recoveries are high and these compounds were not detected in the sample, the results are reported.

00952 TCLP Herbicides

01979	2,4-D	94-75-7	N.D.	0.010	mg/l	1
01980	2,4,5-TP	93-72-1	N.D.	0.0010	mg/l	1

00949 TCLP Acid Base/Neutrals

03324	Pyridine	110-86-1	N.D.	0.020	mg/l	1
03325	1,4-Dichlorobenzene	106-46-7	N.D.	0.020	mg/l	1
03326	2-Methylphenol	95-48-7	N.D.	0.020	mg/l	1
03327	4-Methylphenol	106-44-5	N.D.	0.020	mg/l	1

3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.

03328	Hexachloroethane	67-72-1	N.D.	0.020	mg/l	1
03329	Nitrobenzene	98-95-3	N.D.	0.020	mg/l	1
03330	Hexachlorobutadiene	87-68-3	N.D.	0.020	mg/l	1
03331	2,4,6-Trichlorophenol	88-06-2	N.D.	0.020	mg/l	1
03332	2,4,5-Trichlorophenol	95-95-4	N.D.	0.020	mg/l	1
03333	2,4-Dinitrotoluene	121-14-2	N.D.	0.020	mg/l	1
03334	Hexachlorobenzene	118-74-1	N.D.	0.020	mg/l	1
03335	Pentachlorophenol	87-86-5	N.D.	0.050	mg/l	1

The semivolatile analyses were performed on a non-volatile toxicity characteristic leachate of the submitted waste. The leachate was prepared according to the procedure specified in SW-846, Chapter 7.4 (Revision 3, 12/94). If the TCLP extract contains any one of the Toxicity Characteristic (TC) constituents in an amount equal to or exceeding the concentrations specified in 40 CFR part 261.24, the waste possesses the characteristic of toxicity and is a hazardous waste. These limits are listed below in mg/L. Other limits may apply for analyses performed under other regulations.

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Lancaster Laboratories Sample No. TL 3505902

Collected:11/17/2000 12:45 by BB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:40 AM
Discard: 1/4/01
Soil Composite 13 Sample
TCLP NON-VOLATILE EXTRACTION
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

S13NV

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
	Total Methylphenols	200.0	Nitrobenzene	2.0		
	1,4-Dichlorobenzene	7.5	Pentachlorophenol	100.0		
	2,4-Dinitrotoluene	0.13	Pyridine	5.0		
	Hexachlorobenzene	0.13	2,4,5-Trichlorophenol	400.0		
	Hexachlorobutadiene	0.5	2,4,6-Trichlorophenol	2.0		
	Hexachloroethane	3.0				

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00259	Mercury	SW-846 7470A	1	11/30/2000 10:10	Damary S. Valentin	1
01335	Arsenic	SW-846 6010B	1	11/29/2000 04:53	Donna R. Sackett	1
01336	Selenium	SW-846 6010B	1	11/29/2000 04:53	Donna R. Sackett	1
01746	Barium	SW-846 6010B	1	11/29/2000 04:53	Donna R. Sackett	1
01749	Cadmium	SW-846 6010B	1	11/29/2000 04:53	Donna R. Sackett	1
01751	Chromium	SW-846 6010B	1	11/29/2000 04:53	Donna R. Sackett	1
01755	Lead	SW-846 6010B	1	11/29/2000 04:53	Donna R. Sackett	1
01766	Silver	SW-846 6010B	1	11/29/2000 04:53	Donna R. Sackett	1
00950	TCLP Pesticides	SW-846 8081A	1	11/30/2000 06:11	Douglas D. Seitz	1
00952	TCLP Herbicides	SW-846 8151A	1	11/30/2000 14:23	Anita M. Dale	1
00949	TCLP Acid Base/Neutrals	SW-846 8270C	1	12/02/2000 21:58	Mark Clark	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	11/29/2000 00:30	Darin P. Wagner	1
00817	Water Sample Pest. Extraction	SW-846 3510C	1	11/28/2000 16:30	Wanda F. Oswald	1
00947	TCLP Non-volatile Extraction	SW-846 1311	1	11/27/2000 13:00	Minerva Diaz	n.a.
04731	TCLP Leachate Extraction	SW-846 3510C	2	12/01/2000 13:45	John M. Becker	1
05705	WW/TL SW 846 ICP Digest (tot)	SW-846 3010A	1	11/29/2000 01:00	James L. Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	11/29/2000 22:03	Nelli S. Markaryan	1

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Lancaster Laboratories Sample No. TL 3505903

Collected:11/17/2000 12:45 by BB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:40 AM
Discard: 1/4/01
Soil Composite 13 Sample
TCLP ZERO HEADSPACE EXTRACTION
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

S13NV

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
03636	TCLP by 8260					
05386	Vinyl Chloride	75-01-4	N.D.	0.025	mg/l	5
05390	1,1-Dichloroethene	75-35-4	N.D.	0.025	mg/l	5
05396	Chloroform	67-66-3	N.D.	0.025	mg/l	5
05399	Carbon Tetrachloride	56-23-5	N.D.	0.025	mg/l	5
05401	Benzene	71-43-2	N.D.	0.025	mg/l	5
05402	1,2-Dichloroethane	107-06-2	N.D.	0.025	mg/l	5
05403	Trichloroethene	79-01-6	N.D.	0.025	mg/l	5
05409	Tetrachloroethene	127-18-4	N.D.	0.025	mg/l	5
05413	Chlorobenzene	108-90-7	N.D.	0.025	mg/l	5
06305	2-Butanone	78-93-3	N.D.	0.050	mg/l	5

The volatile organic analyses were performed on a zero headspace toxicity characteristic leachate of the submitted waste. The leachate was prepared according to the procedure specified in SW-846, Chapter 7.4 (Revision 3, 12/94).
If the TCLP extract contains any one of the Toxicity Characteristic (TC) constituents in an amount equal to or exceeding the concentrations specified in 40 CFR Part 261.24, the waste possesses the characteristic of toxicity and is a hazardous waste. These limits are listed below in mg/L. Other limits may apply for analyses performed under other regulations.

Benzene	0.5	1,1-Dichloroethene	0.7
Carbon Tetrachloride	0.5	Methyl Ethyl Ketone (2-Butanone)	200.0
Chlorobenzene	100.0	Tetrachloroethene	0.7
Chloroform	6.0	Trichloroethene	0.5
1,2-Dichloroethane	0.5	Vinyl Chloride	0.2

Poor surrogate recoveries were observed for the GC/MS volatile fraction. The analysis was repeated and poor surrogate recoveries were again observed indicating a significant matrix effect.

Laboratory Chronicle

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Lancaster Laboratories Sample No. TL 3505903

Collected:11/17/2000 12:45 by BB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:40 AM
Discard: 1/4/01
Soil Composite 13 Sample
TCLP ZERO HEADSPACE EXTRACTION
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

S13NV

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
03636	TCLP by 8260	SW-846 8260B	1	12/01/2000 10:13	Amanda L. Fish	5
00946	TCLP Zero Headspace Extraction	SW-846 1311	1	11/28/2000 12:30	Kenneth A. Yingst	n.a.

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Lancaster Laboratories Sample No. WW 3505904

Collected:11/21/2000 09:25 by LAB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:40 AM
Discard: 1/4/01
Storage Blank Water Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

SBAMT

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
08842	MA - VPH certification	n.a.			see below	1

All QA/QC procedures required by the VPH method were followed. Yes No
All performance/acceptance standards for the required QA/QC were achieved. Yes No
Significant modifications to the method are reported below.

I attest, under penalties of perjury, that the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Signature: Matthew E Barton Position: SENIOR CHEMIST/COORDINATOR

Printed Name: MATTHEW E. BARTON Date: DEC 27 2000

08754	MA - VPH waters					
08755	Benzene	71-43-2	N.D.	1.0	ug/l	1
08756	Toluene	108-88-3	N.D.	5.0	ug/l	1
08757	Ethylbenzene	100-41-4	N.D.	5.0	ug/l	1
08758	m,p-Xylenes	1330-20-7	N.D.	10.	ug/l	1
08759	o-Xylene	95-47-6	N.D.	5.0	ug/l	1
08760	Methyl t-butyl ether	1634-04-4	N.D.	5.0	ug/l	1
08761	Naphthalene	91-20-3	N.D.	5.0	ug/l	1
08762	C5-C8 Aliphatic Hydrocarbons	n.a.	N.D.	100.	ug/l	1
08763	C9-C12 Aliphatic Hydrocarbons	n.a.	N.D.	100.	ug/l	1
08764	C9-C10 Aromatic Hydrocarbons	n.a.	N.D.	100.	ug/l	1
08838	Unadjusted C5-C8 Aliphatics	n.a.	N.D.	100.	ug/l	1
08839	Unadjusted C9-C12 Aliphatics	n.a.	N.D.	100.	ug/l	1

The concentrations of individual target analytes and the surrogate standard have been subtracted from the concentrations of the appropriate hydrocarbon ranges as specified by the method.
Elution ranges for the target analytes are listed below:

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Lancaster Laboratories Sample No. WW 3505904

Collected:11/21/2000 09:25 by LAB

Account Number: 01401

Submitted: 11/20/2000 18:15
Reported: 12/20/00 at 08:40 AM
Discard: 1/4/01
Storage Blank Water Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

SBAMT

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
	benzene, toluene, methyl t-butyl ether - C5-C8 aliphatics					
	ethyl benzene, m,p-xylenes, o-xylene - C9-C12 aliphatics					

Significant modifications to the method are listed below:
The surrogate standard for the VPH analysis is a,a,a-trifluorotoluene for both the PID and FID. This compound elutes in the C5-C8 range.
1-Chloro-3-fluorobenzene is also used as an internal standard for the PID and elutes in the C5-C8 range. A retention time marker compound, 4-bromofluorobenzene, is also added to each sample. It elutes in the C9-C12 aliphatic range and aromatic range. The use of the internal standard, surrogate standard, and retention time marker compound that elute in the specified aliphatic or aromatic ranges is a significant modification. The peak areas for these standards are subtracted from the area for the specific ranges before the concentrations are calculated.
This process has been validated in our laboratory and has produced acceptable data in the MA Round Robin study.
Sample containers were received in satisfactory condition.
Sample preservation met requirements (pH </= 2).
Samples were received on ice at a temperature of 4 +/- 2C.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08842	MA - VPH certification	MADEP-VPH,modified/8021B	1	12/02/2000 13:48	Michael C. Wehn	1
08754	MA - VPH waters	MADEP-VPH,modified/8021B	1	12/02/2000 13:48	Michael C. Wehn	1

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Quality Control Summary

Client Name: IT Corporation- PA
Reported: 12/20/00 at 08:40 AM

Group Number: 740514

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 003270011A P339	Sample number(s): 3505896-3505900							
Naphthalene	N.D.	.5	mg/kg	77	56	40-140	31	50
Acenaphthylene	N.D.	.5	mg/kg	71	54	40-140	28	50
Acenaphthene	N.D.	.5	mg/kg	76	57	40-140	28	50
Fluorene	N.D.	.5	mg/kg	79	60	40-140	28	50
Phenanthrene	N.D.	.5	mg/kg	78	59	40-140	29	50
Anthracene	N.D.	.5	mg/kg	58	43	40-140	31	50
Fluoranthene	N.D.	.5	mg/kg	78	61	40-140	25	50
Pyrene	N.D.	.5	mg/kg	76	59	40-140	26	50
Benzo(a)anthracene	N.D.	.5	mg/kg	73	53	40-140	31	50
Chrysene	N.D.	.5	mg/kg	68	55	40-140	22	50
Benzo(b)fluoranthene	N.D.	.5	mg/kg	73	57	40-140	24	50
Benzo(k)fluoranthene	N.D.	.5	mg/kg	67	50	40-140	28	50
Benzo(a)pyrene	N.D.	.5	mg/kg	53	38*	40-140	33	50
Indeno(1,2,3-cd)pyrene	N.D.	.5	mg/kg	71	55	40-140	26	50
Dibenzo(a,h)anthracene	N.D.	.5	mg/kg	69	52	40-140	28	50
Benzo(g,h,i)perylene	N.D.	.5	mg/kg	73	56	40-140	26	50
2-Methylnaphthalene	N.D.	.5	mg/kg	75	56	40-140	30	50
C9 to C18 Aliphatics	N.D.	3.	mg/kg	73	66	40-140	10	50
C19 to C36 Aliphatics	N.D.	5.	mg/kg	75	65	40-140	14	50
C11 to C22 Aromatics	N.D.	4.	mg/kg	76	57	40-140	28	50
Unadjusted C11 - C22 Aromatics	N.D.	4.	mg/kg	76	57	40-140	28	50
Batch number: 003270011A P347	Sample number(s): 3505897,3505900							
Naphthalene	N.D.	.5	mg/kg	77	56	40-140	31	50
Acenaphthylene	N.D.	.5	mg/kg	71	54	40-140	28	50
Acenaphthene	N.D.	.5	mg/kg	76	57	40-140	28	50
Fluorene	N.D.	.5	mg/kg	79	60	40-140	28	50
Phenanthrene	N.D.	.5	mg/kg	78	59	40-140	29	50
Anthracene	N.D.	.5	mg/kg	58	43	40-140	31	50
Fluoranthene	N.D.	.5	mg/kg	78	61	40-140	25	50
Pyrene	N.D.	.5	mg/kg	76	59	40-140	26	50
Benzo(a)anthracene	N.D.	.5	mg/kg	73	53	40-140	31	50
Chrysene	N.D.	.5	mg/kg	68	55	40-140	22	50
Benzo(b)fluoranthene	N.D.	.5	mg/kg	73	57	40-140	24	50
Benzo(k)fluoranthene	N.D.	.5	mg/kg	67	50	40-140	28	50
Benzo(a)pyrene	N.D.	.5	mg/kg	53	38*	40-140	33	50
Indeno(1,2,3-cd)pyrene	N.D.	.5	mg/kg	71	55	40-140	26	50
Dibenzo(a,h)anthracene	N.D.	.5	mg/kg	69	52	40-140	28	50
Benzo(g,h,i)perylene	N.D.	.5	mg/kg	73	56	40-140	26	50
2-Methylnaphthalene	N.D.	.5	mg/kg	75	56	40-140	30	50
C11 to C22 Aromatics	N.D.	4.	mg/kg	76	57	40-140	28	50
Unadjusted C11 - C22 Aromatics	N.D.	4.	mg/kg	76	57	40-140	28	50
Batch number: 00327039401A	Sample number(s): 3505901							
pH				101	101	98-102	0	1
Batch number: 00328820005A	Sample number(s): 3505896-3505901							
Moisture				100	100	99-101	0	4
Batch number: 003320017A	Sample number(s): 3505896-3505901							

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

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Quality Control Summary

Client Name: IT Corporation- PA
Reported: 12/20/00 at 08:40 AM

Group Number: 740514

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1016	N.D.	17.	ug/kg	106		62-126		
PCB-1221	N.D.	17.	ug/kg					
PCB-1232	N.D.	17.	ug/kg					
PCB-1242	N.D.	17.	ug/kg					
PCB-1248	N.D.	17.	ug/kg					
PCB-1254	N.D.	17.	ug/kg					
PCB-1260	N.D.	17.	ug/kg	96		67-120		
Batch number: 003330003A	Sample number(s): 3505902							
Gamma BHC - Lindane	N.D.	.05	ug/l	122		57-143		
Heptachlor	0.022 J	.05	ug/l	108		38-129		
Heptachlor Epoxide	N.D.	.05	ug/l	120		52-136		
Methoxychlor	N.D.	.5	ug/l	176*		72-160		
Endrin	N.D.	.1	ug/l	159*		68-156		
Chlordane	N.D.	2.5	ug/l					
Toxaphene	N.D.	5.	ug/l					
Batch number: 003330007A	Sample number(s): 3505902							
2,4-D	N.D.	10.	ug/l	92		36-168		
2,4,5-TP	N.D.	1.	ug/l	73		33-161		
Batch number: 003345705001	Sample number(s): 3505902							
Arsenic	N.D.	.1	mg/l	97		90-110		
Selenium	N.D.	.2	mg/l	97		90-110		
Barium	N.D.	.1	mg/l	99		95-110		
Cadmium	N.D.	.01	mg/l	101		94-110		
Chromium	N.D.	.03	mg/l	102		95-110		
Lead	N.D.	.1	mg/l	99		94-110		
Silver	N.D.	.02	mg/l	100		94-110		
Batch number: 003345713003	Sample number(s): 3505902							
Mercury	N.D.	.0002	mg/l	92		84-124		
Batch number: 00336112101A	Sample number(s): 3505901							
Sulfide (Reactivity)	N.D.	120.	mg/kg	87		80-120		
Batch number: 00336WAB026	Sample number(s): 3505902							
Pyridine	N.D.	.02	mg/l	61		35-91		
1,4-Dichlorobenzene	N.D.	.02	mg/l	69		39-109		
2-Methylphenol	N.D.	.02	mg/l	76		50-117		
4-Methylphenol	N.D.	.02	mg/l	69		47-112		
Hexachloroethane	N.D.	.02	mg/l	49		25-96		
Nitrobenzene	N.D.	.02	mg/l	100		58-126		
Hexachlorobutadiene	N.D.	.02	mg/l	44		19-95		
2,4,6-Trichlorophenol	N.D.	.02	mg/l	100		57-134		
2,4,5-Trichlorophenol	N.D.	.02	mg/l	102		61-131		
2,4-Dinitrotoluene	N.D.	.02	mg/l	99		62-129		
Hexachlorobenzene	N.D.	.02	mg/l	101		59-129		
Pentachlorophenol	N.D.	.05	mg/l	76		36-135		
Batch number: 00337104201A	Sample number(s): 3505901							
Cyanide (Reactivity)	N.D.	99.99	mg/kg	95		84-117		

*- Outside of specification
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Quality Control Summary

Client Name: IT Corporation- PA
Reported: 12/20/00 at 08:40 AM

Group Number: 740514

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 00337A01	Sample number(s): 3505904							
Benzene	N.D.	1.	ug/l	113	116	70-130	3	50
Toluene	N.D.	5.	ug/l	114	116	70-130	2	50
Ethylbenzene	N.D.	5.	ug/l	111	114	70-130	2	50
m,p-Xylenes	N.D.	10.	ug/l	112	114	70-130	2	50
o-Xylene	N.D.	5.	ug/l	111	113	70-130	2	50
Methyl t-butyl ether	N.D.	5.	ug/l	99	99	70-130	1	50
Naphthalene	N.D.	5.	ug/l	97	100	70-130	3	50
C5-C8 Aliphatic Hydrocarbons	N.D.	100.	ug/l	84	89	70-130	6	50
C9-C12 Aliphatic Hydrocarbons	N.D.	100.	ug/l	72	74	70-130	2	50
C9-C10 Aromatic Hydrocarbons	N.D.	100.	ug/l	115	117	70-130	2	50
Unadjusted C5-C8 Aliphatics	N.D.	100.	ug/l	96	100	70-130	4	50
Unadjusted C9-C12 Aliphatics	N.D.	100.	ug/l	106	108	70-130	2	50
Batch number: 00340156201A	Sample number(s): 3505901							
Petroleum Hydrocarbons	11.5 J	40.	mg/kg	84		74-108		
Batch number: 00340A99	Sample number(s): 3505896-3505900							
Benzene	N.D.	.1	mg/kg	104	98	70-130	6	50
Toluene	N.D.	.1	mg/kg	110	104	70-130	6	50
Ethylbenzene	N.D.	.1	mg/kg	103	97	70-130	6	50
m,p-Xylenes	N.D.	.1	mg/kg	96	90	70-130	6	50
o-Xylene	N.D.	.1	mg/kg	98	93	70-130	5	50
Methyl t-butyl ether	N.D.	.1	mg/kg	100	100	70-130	0	50
Naphthalene	N.D.	.1	mg/kg	81	82	70-130	1	50
C5-C8 Aliphatic Hydrocarbons	N.D.	5.	mg/kg	98	87	70-130	12	50
C9-C12 Aliphatic Hydrocarbons	N.D.	5.	mg/kg	93	86	70-130	8	50
C9-C10 Aromatic Hydrocarbons	N.D.	5.	mg/kg	100	95	70-130	5	50
Unadjusted C5-C8 Aliphatics	N.D.	5.	mg/kg	101	94	70-130	8	50
Unadjusted C9-C12 Aliphatics	N.D.	5.	mg/kg	98	92	70-130	6	50
Batch number: N003231AK	Sample number(s): 3505903							
Vinyl Chloride	N.D.	5.	ug/l	92		57-127		
1,1-Dichloroethene	N.D.	5.	ug/l	100		79-136		
Chloroform	N.D.	5.	ug/l	99		86-124		
Carbon Tetrachloride	N.D.	5.	ug/l	98		77-130		
Benzene	N.D.	5.	ug/l	108		85-125		
1,2-Dichloroethane	N.D.	5.	ug/l	99		84-131		
Trichloroethene	N.D.	5.	ug/l	104		86-126		
Tetrachloroethene	N.D.	5.	ug/l	113		79-136		
Chlorobenzene	N.D.	5.	ug/l	103		87-121		
2-Butanone	N.D.	10.	ug/l	98		69-131		

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

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Quality Control Summary

Client Name: IT Corporation- PA
Reported: 12/20/00 at 08:40 AM

Group Number: 740514

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 003270011A P339	Sample number(s): 3505896-3505900								
Naphthalene						7.2 J	8.8	20	50
Acenaphthylene						N.D.	N.D.	0 (1)	50
Acenaphthene						8.3 J	10.	21	50
Fluorene						11. J	13.	17	50
Phenanthrene						25.	31.	20	50
Anthracene						7.9 J	8.6	9	50
Fluoranthene						6.1 J	6.8	11	50
Pyrene						N.D.	N.D.	0 (1)	50
Benzo(a)anthracene						N.D.	N.D.	0 (1)	50
Chrysene						N.D.	N.D.	0 (1)	50
Benzo(b)fluoranthene						N.D.	N.D.	0 (1)	50
Benzo(k)fluoranthene						N.D.	N.D.	0 (1)	50
Benzo(a)pyrene						N.D.	N.D.	0 (1)	50
Indeno(1,2,3-cd)pyrene						N.D.	N.D.	0 (1)	50
Dibenzo(a,h)anthracene						N.D.	N.D.	0 (1)	50
Benzo(g,h,i)perylene						N.D.	N.D.	0 (1)	50
2-Methylnaphthalene						74.	85.	13	50
C9 to C18 Aliphatics						5,400.	5,900.	9	50
C19 to C36 Aliphatics						820.	720.	14	50
C11 to C22 Aromatics						4,800.	5,400.	12	50
Unadjusted C11 - C22 Aromatics						4,900.	5,500.	12	50
Batch number: 003270011A P347	Sample number(s): 3505897,3505900								
Naphthalene						7.2 J	8.8	20	50
Acenaphthylene						N.D.	N.D.	0 (1)	50
Acenaphthene						8.3 J	10.	21	50
Fluorene						11. J	13.	17	50
Phenanthrene						25.	31.	20	50
Anthracene						7.9 J	8.6	9	50
Fluoranthene						6.1 J	6.8	11	50
Pyrene						N.D.	N.D.	0 (1)	50
Benzo(a)anthracene						N.D.	N.D.	0 (1)	50
Chrysene						N.D.	N.D.	0 (1)	50
Benzo(b)fluoranthene						N.D.	N.D.	0 (1)	50
Benzo(k)fluoranthene						N.D.	N.D.	0 (1)	50
Benzo(a)pyrene						N.D.	N.D.	0 (1)	50
Indeno(1,2,3-cd)pyrene						N.D.	N.D.	0 (1)	50
Dibenzo(a,h)anthracene						N.D.	N.D.	0 (1)	50
Benzo(g,h,i)perylene						N.D.	N.D.	0 (1)	50
2-Methylnaphthalene						74.	85.	13	50
C11 to C22 Aromatics						4,800.	5,400.	12	50
Unadjusted C11 - C22 Aromatics						4,900.	5,500.	12	50
Batch number: 00327039401A	Sample number(s): 3505901								
pH						13.1	13.1	0	2
Batch number: 00328820005A	Sample number(s): 3505896-3505901								
Moisture						14.9	18.6	22*	16
Batch number: 003320017A	Sample number(s): 3505896-3505901								

*- Outside of specification
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(2) The background result was more than four times the spike added.

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Quality Control Summary

Client Name: IT Corporation- PA
Reported: 12/20/00 at 08:40 AM

Group Number: 740514

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
PCB-1016	171*	155*	41-149	10	50				
PCB-1260	(2)	(2)	43-144	40	50				
Batch number: 003330003A	Sample number(s): 3505902								
Gamma BHC - Lindane	107	110	59-141	2	30				
Heptachlor	89	86	45-130	3	30				
Heptachlor Epoxide	104	107	37-152	3	30				
Methoxychlor	157	165	53-188	5	30				
Endrin	155*	154	70-154	1	30				
Batch number: 003330007A	Sample number(s): 3505902								
2,4-D	106	114	22-179	7	30				
2,4,5-TP	79	83	30-160	5	30				
Batch number: 003345705001	Sample number(s): 3505902								
Arsenic	101	101	75-125	0	20	N.D.	N.D.	0 (1)	20
Selenium	100	100	75-125	1	20	N.D.	N.D.	0 (1)	20
Barium	101	100	75-125	1	20	0.241	0.238	1 (1)	20
Cadmium	96	98	74-124	2	20	0.0072 J	0.0068 J	6 (1)	20
Chromium	102	103	89-117	1	20	N.D.	N.D.	0 (1)	20
Lead	96	98	75-125	1	20	1.03	1.00	2	20
Silver	110	110	79-129	0	20	N.D.	N.D.	0 (1)	20
Batch number: 003345713003	Sample number(s): 3505902								
Mercury	91	88	80-120	4	20	N.D.	N.D.	200* (1)	20
Batch number: 00336112101A	Sample number(s): 3505901								
Sulfide (Reactivity)	56	56	0-136	0	19				
Batch number: 00336WAB026	Sample number(s): 3505902								
Pyridine	60	59	26-93	2	30				
1,4-Dichlorobenzene	77	76	31-121	0	30				
2-Methylphenol	76	79	25-129	5	30				
4-Methylphenol	65	68	14-138	5	30				
Hexachloroethane	72	70	16-116	3	30				
Nitrobenzene	99	102	36-139	3	30				
Hexachlorobutadiene	73	76	20-107	4	30				
2,4,6-Trichlorophenol	98	101	46-139	3	30				
2,4,5-Trichlorophenol	101	101	41-144	0	30				
2,4-Dinitrotoluene	97	96	36-145	1	30				
Hexachlorobenzene	101	101	49-134	0	30				
Pentachlorophenol	89	92	2-143	3	30				
Batch number: 00337104201A	Sample number(s): 3505901								
Cyanide (Reactivity)	3	3	0-21	13	13				
Batch number: 00340156201A	Sample number(s): 3505901								
Petroleum Hydrocarbons	76	82	39-132	6	15	14,600.	11,800.	21 (1)	21
Batch number: N003231AK	Sample number(s): 3505903								
Vinyl Chloride	73	75	46-144	3	30				

*- Outside of specification
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2) The background result was more than four times the spike added.

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Quality Control Summary

Client Name: IT Corporation- PA
Reported: 12/20/00 at 08:40 AM

Group Number: 740514

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1,1-Dichloroethene	91	87	67-155	4	30				
Chloroform	94	88	76-138	6	30				
Carbon Tetrachloride	88	86	66-148	1	30				
Benzene	95	92	73-140	3	30				
1,2-Dichloroethane	99	95	75-141	4	30				
Trichloroethene	89	88	70-145	1	30				
Tetrachloroethene	97	94	61-152	3	30				
Chlorobenzene	94	89	77-132	5	30				
2-Butanone	117	111	32-162	6	30				

Surrogate Quality Control

Analysis Name: MA EPH - Soils
Batch number: 003270011A P339

	1-Chloro-octadecane	Orthoterphenyl
3505896	593*	58
3505898	607*	572*
3505899	486*	32*
LCS	80	72
LCSD	69	55
PD	680*	69
Limits:	40-140	40-140

Analysis Name: MA EPH - Soils
Batch number: 003270011A P347

	1-Chloro-octadecane	Orthoterphenyl
LCS	80	72
LCSD	69	55
Limits:	40-140	40-140

Analysis Name: PCBs in Solids
Batch number: 003320017A

	Tetrachloro-m-xylene	Decachlorobiphenyl
3505896	66	78
3505897	68	85
3505898	58	74
3505899	69	79
3505900	67	77
3505901	67	58
Blank	77	35
LCS	89	101
MS	94	155
MSD	107	97

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
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Quality Control Summary

Client Name: IT Corporation- PA
Reported: 12/20/00 at 08:40 AM

Group Number: 740514

Surrogate Quality Control

Limits:	24-136	1-190

Analysis Name: TCLP Pesticides
Batch number: 003330003A

	Tetrachloro-m-xylene	Decachlorobiphenyl
3505902	87	106
Blank	86	106
LCS	85	113
MS	83	108
MSD	76	114
Limits:	36-121	19-153

Analysis Name: TCLP Herbicides
Batch number: 003330007A

	2,4-Dichlorophenylacetic acid
3505902	80
Blank	71
LCS	71
MS	77
MSD	84
Limits:	37-151

Analysis Name: TCLP Acid Base/Neutrals
Batch number: 00336WAB026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14	Phenol-d6
3505902	96	78	71	31
Blank	97	82	87	27
LCS	98	85	102	31
MS	98	87	83	29
MSD	101	88	96	31
Limits:	55-130	57-117	42-139	9-77

	2-Fluorophenol	2,4,6-Tribromophenol
3505902	50	100
Blank	44	91
LCS	50	95
MS	48	95
MSD	50	94
Limits:	15-113	32-157

Analysis Name: MA - VPH waters
Batch number: 00337A01

	Trifluorotoluene-P	Trifluorotoluene-F

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

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Quality Control Summary

Client Name: IT Corporation- PA
Reported: 12/20/00 at 08:40 AM

Group Number: 740514

Surrogate Quality Control

3505904	94	78
Blank	94	79
LCS	95	79
LCSD	95	79
Limits:	70-130	70-130

Analysis Name: MA - VPH soils
Batch number: 00340A99

	Trifluorotoluene-P	Trifluorotoluene-F
3505896	27*	28*
3505897	25*	27*
3505898	21*	27*
3505899	20*	28*
3505900	21*	28*
Blank	109	108
LCS	102	107
LCSD	103	106
Limits:	70-130	70-130

Analysis Name: TCLP by 8260
Batch number: N003231AK

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
3505903	104	94	86*	84*
Blank	98	91	91	86
LCS	89	93	98	93
MS	92	95	98	96
MSD	92	94	98	95
Limits:	86-118	80-120	88-110	86-115

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

Appendix B.2

October 16, 2001 Sampling Event

Soil Pile Samples
Analytical Results
October 16, 2001
Amtrak Former Fueling Facility
4001 Vandever Avenue
Wilmington, Delaware

Sample Identification	Collection Date	Collection Depth (Feet BGS)	Analytical Results (dry weight basis)						
			PCBs						
			PCB-1016 (ug/kg)	PCB-1221 (ug/kg)	PCB-1232 (ug/kg)	PCB-1242 (ug/kg)	PCB-1248 (ug/kg)	PCB-1254 (ug/kg)	PCB-1260 (ug/kg)
SP-1	10/16/01	1	<19	<19	<19	<19	<19	<19	230
SP-2	10/16/01	2	<19	<19	<19	<19	<19	<19	180
SP-3	10/16/01	3	<19	<19	<19	<19	<19	<19	180
SP-4	10/16/01	2	<19	<19	<19	<19	<19	<19	210
SP-5	10/16/01	2.5	<95	<95	<95	<95	<95	<95	450
SP-6	10/16/01	1.5	<19	<19	<19	<19	<19	<19	290
SP-7	10/16/01	1	<18	<18	<18	<18	<18	<18	190
SP-8	10/16/01	1.5	<19	<19	<19	<19	<19	<19	190
SP-9	10/16/01	3	<19	<19	<19	<19	<19	<19	210
SP-10	10/16/01	1	<19	<19	<19	<19	<19	<19	240
SP-11	10/16/01	1	<19	<19	<19	<19	<19	<19	220
SP-12	10/16/01	1.5	<23	<23	<23	<23	<23	<23	150
SP-13	10/16/01	2	<94	<94	<94	<94	<94	<94	470
SP-14	10/16/01	3	<18	<18	<18	<18	<18	<18	250
SP-15	10/16/01	2	<19	<19	<19	<19	<19	<19	260
SP-16	10/16/01	1	<91	<91	<91	<91	210	<91	500
SP-17	10/16/01	2.5	<92	<92	<92	<92	<92	<92	380
SP-18	10/16/01	2	<93	<93	<93	<93	<93	<93	390
SP-19	10/16/01	1.5	<19	<19	<19	<19	<19	<19	220
SP-20	10/16/01	0.5	<94	<94	<94	<94	<94	<94	300
SP-21	10/16/01	2.5	<94	<94	<94	<94	<94	<94	780
SP-22	10/16/01	1	<95	<95	<95	<95	<95	<95	520
SP-23	10/16/01	1	<94	<94	<94	<94	<94	<94	320
SP-24	10/16/01	2	<17	<17	<17	<17	<17	<17	140
SP-25	10/16/01	1.5	<18	<18	<18	<18	<18	<18	190
SP-26	10/16/01	3	<19	<19	<19	<19	<19	<19	140
SP-27	10/16/01	1.5	<96	<96	<96	<96	<96	<96	310
SP-28	10/16/01	0.5	<19	<19	<19	<19	<19	<19	130
SP-29	10/16/01	1	<18	<18	<18	<18	<18	<18	39
SP-30	10/16/01	1.5	<19	<19	<19	<19	<19	<19	120
SP-31	10/16/01	1	<19	<19	<19	<19	<19	<19	110
SP-32	10/16/01	1	<94	<94	<94	<94	<94	<94	260
SP-33	10/16/01	2	<95	<95	<95	<95	<95	<95	320
SP-34	10/16/01	2.5	<19	<19	<19	<19	<19	<19	110
SP-35	10/16/01	1	<380	<380	<380	<380	<380	<380	3100
SP-36	10/16/01	1.5	<94	<94	<94	<94	<94	<94	420
SP-37	10/16/01	2.5	<95	<95	<95	<95	<95	<95	230
SP-38	10/16/01	3	<93	<93	<93	<93	<93	<93	250
SP-39	10/16/01	1	<19	<19	<19	<19	<19	<19	160
SP-40	10/16/01	1.5	<17	<17	<17	<17	<17	<17	63
SP-41	10/16/01	1.5	<19	<19	<19	<19	<19	<19	71
SP-42	10/16/01	1.5	<18	<18	<18	<18	<18	<18	68
SP-43	10/16/01	1	<19	<19	<19	<19	<19	<19	86
SP-44	10/16/01	1	<19	<19	<19	<19	<19	<19	75
SP-45	10/16/01	1.5	<100	<100	<100	<100	<100	<100	220
SP-46	10/16/01	3	<19	<19	<19	<19	<19	<19	95
SP-47	10/16/01	3	<19	<19	<19	<19	<19	<19	68
SP-48	10/16/01	2.5	<20	<20	<20	<20	<20	<20	<20

NOTES:
PCBs = Polychlorinated Biphenyls
mg/kg = Milligrams per kilogram
BGS = Below Ground Surface

E:\projects\apu-amtrak\soilpile samples

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ANALYTICAL RESULTS

Prepared for:

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

610-241-5000

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 782995. Samples arrived at the laboratory on Wednesday, October 17, 2001.

Client Description	Lancaster Labs Number
SP-1/1' Grab Soil Sample	3710675
SP-2/2' Grab Soil Sample	3710676
SP-3/3' Grab Soil Sample	3710677
SP-4/2' Grab Soil Sample	3710678
SP-5/2.5' Grab Soil Sample	3710679
SP-6/1.5' Grab Soil Sample	3710680
SP-7/1.0' Grab Soil Sample	3710681
SP-8/1.5' Grab Soil Sample	3710682
SP-9/3' Grab Soil Sample	3710683
SP-10/1' Grab Soil Sample	3710684
SP-11/1' Grab Soil Sample	3710685
SP-12/1.5' Grab Soil Sample	3710686
SP-13/2' Grab Soil Sample	3710687
SP-14/3' Grab Soil Sample	3710688
SP-15/2' Grab Soil Sample	3710689
SP-16/1' Grab Soil Sample	3710690
SP-17/2.5' Grab Soil Sample	3710691
SP-18/2' Grab Soil Sample	3710692
SP-19/1.5' Grab Soil Sample	3710693
SP-20/0.5' Grab Soil Sample	3710694
SP-21/2.5' Grab Soil Sample	3710695
SP-22/1' Grab Soil Sample	3710696
SP-23/1' Grab Soil Sample	3710697
SP-24/2' Grab Soil Sample	3710698
SP-25/1.5' Grab Soil Sample	3710699
SP-26/3' Grab Soil Sample	3710700
SP-27/1.5' Grab Soil Sample	3710701
SP-28/0.5' Grab Soil Sample	3710702
SP-29/1' Grab Soil Sample	3710703

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SP-30/1.5' Grab Soil Sample	3710704
SP-31/1' Grab Soil Sample	3710705
SP-32/1' Grab Soil Sample	3710706
SP-33/2' Grab Soil Sample	3710707
SP-34/2.5' Grab Soil Sample	3710708
SP-35/1' Grab Soil Sample	3710709
SP-36/1.5' Grab Soil Sample	3710710
SP-37/2.5' Grab Soil Sample	3710711
SP-38/3' Grab Soil Sample	3710712
SP-39/1' Grab Soil Sample	3710713
SP-40/1.5' Grab Soil Sample	3710714
SP-41/1.5' Grab Soil Sample	3710715
SP-42/1.5' Grab Soil Sample	3710716
SP-43/1.0' Grab Soil Sample	3710717
SP-44/1.0' Grab Soil Sample	3710718
SP-45/1.5' Grab Soil Sample	3710719
SP-46/3' Grab Soil Sample	3710720
SP-47/3' Grab Soil Sample	3710721
SP-48/2.5' Grab Soil Sample	3710722

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO IT Corporation-PA Attn: Mr. Steve Baggett

Questions? Contact your Client Services Representative
De Brooks at (717) 656-2300.

Respectfully Submitted,

Jenifer E. Hess
Group Leader

MEMBER ACIL
Lancaster Laboratories, Inc.
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PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710675

Collected:10/16/2001 09:40 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:32
Discard: 11/15/2001
SP-1/1' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP-1

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	8.95	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 19.	19.	ug/kg	1
01496	PCB-1221	11104-28-2	< 19.	19.	ug/kg	1
01497	PCB-1232	11141-16-5	< 19.	19.	ug/kg	1
01498	PCB-1242	53469-21-9	< 19.	19.	ug/kg	1
01499	PCB-1248	12672-29-6	< 19.	19.	ug/kg	1
01500	PCB-1254	11097-69-1	< 19.	19.	ug/kg	1
01501	PCB-1260	11096-82-5	230.	19.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:20	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/23/2001 21:14	Andrea J. Brubaker	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 09:30	Jennytza L. Marcano	1

Analysis Report

Lancaster Laboratories
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Lancaster Laboratories Sample No. SW 3710676

Collected:10/16/2001 09:45 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:32
Discard: 11/15/2001
SP-2/2' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP-2

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	9.76	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 19.	19.	ug/kg	1
01496	PCB-1221	11104-28-2	< 19.	19.	ug/kg	1
01497	PCB-1232	11141-16-5	< 19.	19.	ug/kg	1
01498	PCB-1242	53469-21-9	< 19.	19.	ug/kg	1
01499	PCB-1248	12672-29-6	< 19.	19.	ug/kg	1
01500	PCB-1254	11097-69-1	< 19.	19.	ug/kg	1
01501	PCB-1260	11096-82-5	180.	19.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:20	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/23/2001 22:29	Andrea J. Brubaker	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 09:30	Jennytza L. Marcano	1

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710677

Collected:10/16/2001 10:05 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:32
Discard: 11/15/2001
SP-3/3' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP-3

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	10.7	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 19.	19.	ug/kg	1
01496	PCB-1221	11104-28-2	< 19.	19.	ug/kg	1
01497	PCB-1232	11141-16-5	< 19.	19.	ug/kg	1
01498	PCB-1242	53469-21-9	< 19.	19.	ug/kg	1
01499	PCB-1248	12672-29-6	< 19.	19.	ug/kg	1
01500	PCB-1254	11097-69-1	< 19.	19.	ug/kg	1
01501	PCB-1260	11096-82-5	180.	19.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:20	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/23/2001 22:47	Andrea J. Brubaker	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 09:30	Jennytza L. Marcano	1

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710678

Collected:10/16/2001 09:58 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:32
Discard: 11/15/2001
SP-4/2' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP-4

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	9.46	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 19.	19.	ug/kg	1
01496	PCB-1221	11104-28-2	< 19.	19.	ug/kg	1
01497	PCB-1232	11141-16-5	< 19.	19.	ug/kg	1
01498	PCB-1242	53469-21-9	< 19.	19.	ug/kg	1
01499	PCB-1248	12672-29-6	< 19.	19.	ug/kg	1
01500	PCB-1254	11097-69-1	< 19.	19.	ug/kg	1
01501	PCB-1260	11096-82-5	210.	19.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:20	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/23/2001 23:06	Andrea J. Brubaker	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 09:30	Jennytza L. Marcano	1

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710679

Collected:10/16/2001 10:10 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:32
Discard: 11/15/2001
SP-5/2.5' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP-5

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	10.1	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 95.	95.	ug/kg	5
01496	PCB-1221	11104-28-2	< 95.	95.	ug/kg	5
01497	PCB-1232	11141-16-5	< 95.	95.	ug/kg	5
01498	PCB-1242	53469-21-9	< 95.	95.	ug/kg	5
01499	PCB-1248	12672-29-6	< 95.	95.	ug/kg	5
01500	PCB-1254	11097-69-1	< 95.	95.	ug/kg	5
01501	PCB-1260	11096-82-5	450.	95.	ug/kg	5

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:20	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/24/2001 19:54	Andrea J. Brubaker	5
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 09:30	Jennytza L. Marcano	1

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710680

Collected:10/16/2001 10:15 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:32
Discard: 11/15/2001
SP-6/1.5' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP-6

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	8.22	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 19.	19.	ug/kg	1
01496	PCB-1221	11104-28-2	< 19.	19.	ug/kg	1
01497	PCB-1232	11141-16-5	< 19.	19.	ug/kg	1
01498	PCB-1242	53469-21-9	< 19.	19.	ug/kg	1
01499	PCB-1248	12672-29-6	< 19.	19.	ug/kg	1
01500	PCB-1254	11097-69-1	< 19.	19.	ug/kg	1
01501	PCB-1260	11096-82-5	290.	19.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:20	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/24/2001 00:21	Andrea J. Brubaker	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 09:30	Jennytza L. Marcano	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710681

Collected:10/16/2001 10:20 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:32
Discard: 11/15/2001
SP-7/1.0' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP-7

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	7.70	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 18.	18.	ug/kg	1
01496	PCB-1221	11104-28-2	< 18.	18.	ug/kg	1
01497	PCB-1232	11141-16-5	< 18.	18.	ug/kg	1
01498	PCB-1242	53469-21-9	< 18.	18.	ug/kg	1
01499	PCB-1248	12672-29-6	< 18.	18.	ug/kg	1
01500	PCB-1254	11097-69-1	< 18.	18.	ug/kg	1
01501	PCB-1260	11096-82-5	190.	18.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:20	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/24/2001 00:40	Andrea J. Brubaker	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 09:30	Jennytza L. Marcano	1

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710682

Collected:10/16/2001 10:28 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:32
Discard: 11/15/2001
SP-8/1.5' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP-8

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	9.48	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 19.	19.	ug/kg	1
01496	PCB-1221	11104-28-2	< 19.	19.	ug/kg	1
01497	PCB-1232	11141-16-5	< 19.	19.	ug/kg	1
01498	PCB-1242	53469-21-9	< 19.	19.	ug/kg	1
01499	PCB-1248	12672-29-6	< 19.	19.	ug/kg	1
01500	PCB-1254	11097-69-1	< 19.	19.	ug/kg	1
01501	PCB-1260	11096-82-5	190.	19.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:20	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/24/2001 00:59	Andrea J. Brubaker	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 09:30	Jennytza L. Marcano	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710683

Collected:10/16/2001 10:35 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:32
Discard: 11/15/2001
SP-9/3' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP-9

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	20.4	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 21.	21.	ug/kg	1
01496	PCB-1221	11104-28-2	< 21.	21.	ug/kg	1
01497	PCB-1232	11141-16-5	< 21.	21.	ug/kg	1
01498	PCB-1242	53469-21-9	< 21.	21.	ug/kg	1
01499	PCB-1248	12672-29-6	< 21.	21.	ug/kg	1
01500	PCB-1254	11097-69-1	< 21.	21.	ug/kg	1
01501	PCB-1260	11096-82-5	210.	21.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:20	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/24/2001 01:17	Andrea J. Brubaker	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 09:30	Jennytza L. Marcano	1

Analysis Report

Lancaster Laboratories
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Lancaster Laboratories Sample No. SW 3710684

Collected:10/16/2001 10:38 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:32
Discard: 11/15/2001
SP-10/1' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	8.65	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 19.	19.	ug/kg	1
01496	PCB-1221	11104-28-2	< 19.	19.	ug/kg	1
01497	PCB-1232	11141-16-5	< 19.	19.	ug/kg	1
01498	PCB-1242	53469-21-9	< 19.	19.	ug/kg	1
01499	PCB-1248	12672-29-6	< 19.	19.	ug/kg	1
01500	PCB-1254	11097-69-1	< 19.	19.	ug/kg	1
01501	PCB-1260	11096-82-5	240.	19.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:20	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/24/2001 01:36	Andrea J. Brubaker	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 09:30	Jennytza L. Marcano	1

Lancaster Laboratories
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Lancaster Laboratories Sample No. SW 3710685

Collected:10/16/2001 10:43 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:32
Discard: 11/15/2001
SP-11/1' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	9.90	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 19.	19.	ug/kg	1
01496	PCB-1221	11104-28-2	< 19.	19.	ug/kg	1
01497	PCB-1232	11141-16-5	< 19.	19.	ug/kg	1
01498	PCB-1242	53469-21-9	< 19.	19.	ug/kg	1
01499	PCB-1248	12672-29-6	< 19.	19.	ug/kg	1
01500	PCB-1254	11097-69-1	< 19.	19.	ug/kg	1
01501	PCB-1260	11096-82-5	220.	19.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:20	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/24/2001 01:55	Andrea J. Brubaker	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 09:30	Jennytza L. Marcano	1

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710686

Collected:10/16/2001 10:45 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:32
Discard: 11/15/2001
SP-12/1.5' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	27.3	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 23.	23.	ug/kg	1
01496	PCB-1221	11104-28-2	< 23.	23.	ug/kg	1
01497	PCB-1232	11141-16-5	< 23.	23.	ug/kg	1
01498	PCB-1242	53469-21-9	< 23.	23.	ug/kg	1
01499	PCB-1248	12672-29-6	< 23.	23.	ug/kg	1
01500	PCB-1254	11097-69-1	< 23.	23.	ug/kg	1
01501	PCB-1260	11096-82-5	150.	23.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:20	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/24/2001 02:13	Andrea J. Brubaker	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 09:30	Jennytza L. Marcano	1

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710687

Collected:10/16/2001 11:00 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:32
Discard: 11/15/2001
SP-13/2' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	10.0	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 94.	94.	ug/kg	5
01496	PCB-1221	11104-28-2	< 94.	94.	ug/kg	5
01497	PCB-1232	11141-16-5	< 94.	94.	ug/kg	5
01498	PCB-1242	53469-21-9	< 94.	94.	ug/kg	5
01499	PCB-1248	12672-29-6	< 94.	94.	ug/kg	5
01500	PCB-1254	11097-69-1	< 94.	94.	ug/kg	5
01501	PCB-1260	11096-82-5	470.	94.	ug/kg	5

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:20	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/24/2001 20:13	Andrea J. Brubaker	5
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 09:30	Jennytza L. Marcano	1

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710688

Collected:10/16/2001 11:05 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:33
Discard: 11/15/2001
SP-14/3' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	7.45	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 18.	18.	ug/kg	1
01496	PCB-1221	11104-28-2	< 18.	18.	ug/kg	1
01497	PCB-1232	11141-16-5	< 18.	18.	ug/kg	1
01498	PCB-1242	53469-21-9	< 18.	18.	ug/kg	1
01499	PCB-1248	12672-29-6	< 18.	18.	ug/kg	1
01500	PCB-1254	11097-69-1	< 18.	18.	ug/kg	1
01501	PCB-1260	11096-82-5	250.	18.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:20	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/24/2001 02:51	Andrea J. Brubaker	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 09:30	Jennytza L. Marcano	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710689

Collected:10/16/2001 11:10 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:33
Discard: 11/15/2001
SP-15/2' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	10.5	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 19.	19.	ug/kg	1
01496	PCB-1221	11104-28-2	< 19.	19.	ug/kg	1
01497	PCB-1232	11141-16-5	< 19.	19.	ug/kg	1
01498	PCB-1242	53469-21-9	< 19.	19.	ug/kg	1
01499	PCB-1248	12672-29-6	< 19.	19.	ug/kg	1
01500	PCB-1254	11097-69-1	< 19.	19.	ug/kg	1
01501	PCB-1260	11096-82-5	260.	19.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:20	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/24/2001 03:09	Andrea J. Brubaker	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 09:30	Jennytza L. Marcano	1

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710690

Collected:10/16/2001 11:15 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:33
Discard: 11/15/2001
SP-16/1' Grab Soil Sample
Amtrak/APU - DE

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West Chester PA 19380

ASP16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	6.74	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 91.	91.	ug/kg	5
01496	PCB-1221	11104-28-2	< 91.	91.	ug/kg	5
01497	PCB-1232	11141-16-5	< 91.	91.	ug/kg	5
01498	PCB-1242	53469-21-9	< 91.	91.	ug/kg	5
01499	PCB-1248	12672-29-6	210.	91.	ug/kg	5
01500	PCB-1254	11097-69-1	< 91.	91.	ug/kg	5
01501	PCB-1260	11096-82-5	500.	91.	ug/kg	5

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:20	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/24/2001 20:32	Andrea J. Brubaker	5
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 09:30	Jennytza L. Marcano	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710691

Collected:10/16/2001 11:25 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:33
Discard: 11/15/2001
SP-17/2.5' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	8.01	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 92.	92.	ug/kg	5
01496	PCB-1221	11104-28-2	< 92.	92.	ug/kg	5
01497	PCB-1232	11141-16-5	< 92.	92.	ug/kg	5
01498	PCB-1242	53469-21-9	< 92.	92.	ug/kg	5
01499	PCB-1248	12672-29-6	< 92.	92.	ug/kg	5
01500	PCB-1254	11097-69-1	< 92.	92.	ug/kg	5
01501	PCB-1260	11096-82-5	380.	92.	ug/kg	5

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:20	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/24/2001 20:50	Andrea J. Brubaker	5
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 09:30	Jennytza L. Marcano	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710692

Collected:10/16/2001 11:30 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:33
Discard: 11/15/2001
SP-18/2' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	8.83	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 93.	93.	ug/kg	5
01496	PCB-1221	11104-28-2	< 93.	93.	ug/kg	5
01497	PCB-1232	11141-16-5	< 93.	93.	ug/kg	5
01498	PCB-1242	53469-21-9	< 93.	93.	ug/kg	5
01499	PCB-1248	12672-29-6	< 93.	93.	ug/kg	5
01500	PCB-1254	11097-69-1	< 93.	93.	ug/kg	5
01501	PCB-1260	11096-82-5	390.	93.	ug/kg	5

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:20	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/24/2001 21:09	Andrea J. Brubaker	5
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 09:30	Jennytza L. Marcano	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710693

Collected:10/16/2001 13:25 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:33
Discard: 11/15/2001
SP-19/1.5' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	8.54	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 19.	19.	ug/kg	1
01496	PCB-1221	11104-28-2	< 19.	19.	ug/kg	1
01497	PCB-1232	11141-16-5	< 19.	19.	ug/kg	1
01498	PCB-1242	53469-21-9	< 19.	19.	ug/kg	1
01499	PCB-1248	12672-29-6	< 19.	19.	ug/kg	1
01500	PCB-1254	11097-69-1	< 19.	19.	ug/kg	1
01501	PCB-1260	11096-82-5	220.	19.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:31	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/24/2001 05:02	Andrea J. Brubaker	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 09:30	Jennytza L. Marcano	1

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710694

Collected:10/16/2001 13:20 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:33
Discard: 11/15/2001
SP-20/0.5' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
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West Chester PA 19380

ASP20

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	9.18	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 94.	94.	ug/kg	5
01496	PCB-1221	11104-28-2	< 94.	94.	ug/kg	5
01497	PCB-1232	11141-16-5	< 94.	94.	ug/kg	5
01498	PCB-1242	53469-21-9	< 94.	94.	ug/kg	5
01499	PCB-1248	12672-29-6	< 94.	94.	ug/kg	5
01500	PCB-1254	11097-69-1	< 94.	94.	ug/kg	5
01501	PCB-1260	11096-82-5	300.	94.	ug/kg	5
	Accurate surrogate recoveries could not be determined due to the dilution required for analysis of the sample.					

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:31	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/25/2001 04:58	Andrea J. Brubaker	5
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 18:00	Luis E. Villamil	1

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710695

Collected:10/16/2001 13:35 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:33
Discard: 11/15/2001
SP-21/2.5' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP21

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	9.82	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 94.	94.	ug/kg	5
01496	PCB-1221	11104-28-2	< 94.	94.	ug/kg	5
01497	PCB-1232	11141-16-5	< 94.	94.	ug/kg	5
01498	PCB-1242	53469-21-9	< 94.	94.	ug/kg	5
01499	PCB-1248	12672-29-6	< 94.	94.	ug/kg	5
01500	PCB-1254	11097-69-1	< 94.	94.	ug/kg	5
01501	PCB-1260	11096-82-5	780.	94.	ug/kg	5

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:31	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/25/2001 05:54	Andrea J. Brubaker	5
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 18:00	Luis E. Villamil	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710696

Collected:10/16/2001 13:30 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:33
Discard: 11/15/2001
SP-22/1' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP22

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	10.6	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 95.	95.	ug/kg	5
01496	PCB-1221	11104-28-2	< 95.	95.	ug/kg	5
01497	PCB-1232	11141-16-5	< 95.	95.	ug/kg	5
01498	PCB-1242	53469-21-9	< 95.	95.	ug/kg	5
01499	PCB-1248	12672-29-6	< 95.	95.	ug/kg	5
01500	PCB-1254	11097-69-1	< 95.	95.	ug/kg	5
01501	PCB-1260	11096-82-5	520.	95.	ug/kg	5

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:31	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/25/2001 06:13	Andrea J. Brubaker	5
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 18:00	Luis E. Villamil	1

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2425 New Holland Pike
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717-656-2300 Fax: 717-656-2681

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Lancaster Laboratories Sample No. SW 3710697

Collected:10/16/2001 13:38 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:33
Discard: 11/15/2001
SP-23/1' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP23

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	9.80	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 94.	94.	ug/kg	5
01496	PCB-1221	11104-28-2	< 94.	94.	ug/kg	5
01497	PCB-1232	11141-16-5	< 94.	94.	ug/kg	5
01498	PCB-1242	53469-21-9	< 94.	94.	ug/kg	5
01499	PCB-1248	12672-29-6	< 94.	94.	ug/kg	5
01500	PCB-1254	11097-69-1	< 94.	94.	ug/kg	5
01501	PCB-1260	11096-82-5	320.	94.	ug/kg	5

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:31	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/25/2001 07:09	Andrea J. Brubaker	5
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 18:00	Luis E. Villamil	1

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Lancaster Laboratories Sample No. SW 3710698

Collected:10/16/2001 13:45 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:33
Discard: 11/15/2001
SP-24/2' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP24

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	8.64	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 19.	19.	ug/kg	1
01496	PCB-1221	11104-28-2	< 19.	19.	ug/kg	1
01497	PCB-1232	11141-16-5	< 19.	19.	ug/kg	1
01498	PCB-1242	53469-21-9	< 19.	19.	ug/kg	1
01499	PCB-1248	12672-29-6	< 19.	19.	ug/kg	1
01500	PCB-1254	11097-69-1	< 19.	19.	ug/kg	1
01501	PCB-1260	11096-82-5	140.	19.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:31	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/25/2001 07:28	Andrea J. Brubaker	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 18:00	Luis E. Villamil	1

Analysis Report

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Lancaster Laboratories Sample No. SW 3710699

Collected:10/16/2001 13:48 by KSE

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:33
Discard: 11/15/2001
SP-25/1.5' Grab Soil Sample
Amtrak/APU - DE

Account Number: 01401

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ASP25

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	8.07	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 18.	18.	ug/kg	1
01496	PCB-1221	11104-28-2	< 18.	18.	ug/kg	1
01497	PCB-1232	11141-16-5	< 18.	18.	ug/kg	1
01498	PCB-1242	53469-21-9	< 18.	18.	ug/kg	1
01499	PCB-1248	12672-29-6	< 18.	18.	ug/kg	1
01500	PCB-1254	11097-69-1	< 18.	18.	ug/kg	1
01501	PCB-1260	11096-82-5	190.	18.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:31	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/25/2001 07:47	Andrea J. Brubaker	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 18:00	Luis E. Villamil	1

Analysis Report

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Lancaster Laboratories Sample No. SW 3710700

Collected:10/16/2001 13:57 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:33
Discard: 11/15/2001
SP-26/3' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
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ASP26

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	9.72	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 19.	19.	ug/kg	1
01496	PCB-1221	11104-28-2	< 19.	19.	ug/kg	1
01497	PCB-1232	11141-16-5	< 19.	19.	ug/kg	1
01498	PCB-1242	53469-21-9	< 19.	19.	ug/kg	1
01499	PCB-1248	12672-29-6	< 19.	19.	ug/kg	1
01500	PCB-1254	11097-69-1	< 19.	19.	ug/kg	1
01501	PCB-1260	11096-82-5	140.	19.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:31	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/25/2001 08:05	Andrea J. Brubaker	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 18:00	Luis E. Villamil	1

Analysis Report

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Lancaster Laboratories Sample No. SW 3710701

Collected:10/16/2001 13:55 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:33
Discard: 11/15/2001
SP-27/1.5' Grab Soil Sample
Amtrak/APU - DE

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ASP27

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	11.8	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 96.	96.	ug/kg	5
01496	PCB-1221	11104-28-2	< 96.	96.	ug/kg	5
01497	PCB-1232	11141-16-5	< 96.	96.	ug/kg	5
01498	PCB-1242	53469-21-9	< 96.	96.	ug/kg	5
01499	PCB-1248	12672-29-6	< 96.	96.	ug/kg	5
01500	PCB-1254	11097-69-1	< 96.	96.	ug/kg	5
01501	PCB-1260	11096-82-5	310.	96.	ug/kg	5

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:31	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/25/2001 08:24	Andrea J. Brubaker	5
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 18:00	Luis E. Villamil	1

Analysis Report

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Lancaster Laboratories Sample No. SW 3710702

Collected:10/16/2001 14:00 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:33
Discard: 11/15/2001
SP-28/0.5' Grab Soil Sample
Amtrak/APU - DE

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AS-28

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	8.69	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 19.	19.	ug/kg	1
01496	PCB-1221	11104-28-2	< 19.	19.	ug/kg	1
01497	PCB-1232	11141-16-5	< 19.	19.	ug/kg	1
01498	PCB-1242	53469-21-9	< 19.	19.	ug/kg	1
01499	PCB-1248	12672-29-6	< 19.	19.	ug/kg	1
01500	PCB-1254	11097-69-1	< 19.	19.	ug/kg	1
01501	PCB-1260	11096-82-5	130.	19.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:31	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/25/2001 08:43	Andrea J. Brubaker	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 18:00	Luis E. Villamil	1

Analysis Report

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Lancaster Laboratories Sample No. SW 3710703

Collected:10/16/2001 14:15 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:33
Discard: 11/15/2001
SP-29/1' Grab Soil Sample
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ASP29

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	7.98	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 18.	18.	ug/kg	1
01496	PCB-1221	11104-28-2	< 18.	18.	ug/kg	1
01497	PCB-1232	11141-16-5	< 18.	18.	ug/kg	1
01498	PCB-1242	53469-21-9	< 18.	18.	ug/kg	1
01499	PCB-1248	12672-29-6	< 18.	18.	ug/kg	1
01500	PCB-1254	11097-69-1	< 18.	18.	ug/kg	1
01501	PCB-1260	11096-82-5	39.	18.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:31	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/25/2001 09:01	Andrea J. Brubaker	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 18:00	Luis E. Villamil	1

Analysis Report

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Lancaster Laboratories Sample No. SW 3710704

Collected:10/16/2001 14:12 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:33
Discard: 11/15/2001
SP-30/1.5' Grab Soil Sample
Amtrak/APU - DE

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ASP30

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	10.8	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 19.	19.	ug/kg	1
01496	PCB-1221	11104-28-2	< 19.	19.	ug/kg	1
01497	PCB-1232	11141-16-5	< 19.	19.	ug/kg	1
01498	PCB-1242	53469-21-9	< 19.	19.	ug/kg	1
01499	PCB-1248	12672-29-6	< 19.	19.	ug/kg	1
01500	PCB-1254	11097-69-1	< 19.	19.	ug/kg	1
01501	PCB-1260	11096-82-5	120.	19.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:31	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/25/2001 09:20	Andrea J. Brubaker	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 18:00	Luis E. Villamil	1

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Lancaster Laboratories Sample No. SW 3710705

Collected:10/16/2001 14:25 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:34
Discard: 11/15/2001
SP-31/1' Grab Soil Sample
Amtrak/APU - DE

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ASP31

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	10.7	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 19.	19.	ug/kg	1
01496	PCB-1221	11104-28-2	< 19.	19.	ug/kg	1
01497	PCB-1232	11141-16-5	< 19.	19.	ug/kg	1
01498	PCB-1242	53469-21-9	< 19.	19.	ug/kg	1
01499	PCB-1248	12672-29-6	< 19.	19.	ug/kg	1
01500	PCB-1254	11097-69-1	< 19.	19.	ug/kg	1
01501	PCB-1260	11096-82-5	110.	19.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:31	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/25/2001 09:39	Andrea J. Brubaker	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 18:00	Luis E. Villamil	1

Analysis Report

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Lancaster Laboratories Sample No. SW 3710706

Collected:10/16/2001 14:20 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:34
Discard: 11/15/2001
SP-32/1' Grab Soil Sample
Amtrak/APU - DE

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ASP32

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	9.53	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 94.	94.	ug/kg	5
01496	PCB-1221	11104-28-2	< 94.	94.	ug/kg	5
01497	PCB-1232	11141-16-5	< 94.	94.	ug/kg	5
01498	PCB-1242	53469-21-9	< 94.	94.	ug/kg	5
01499	PCB-1248	12672-29-6	< 94.	94.	ug/kg	5
01500	PCB-1254	11097-69-1	< 94.	94.	ug/kg	5
01501	PCB-1260	11096-82-5	260.	94.	ug/kg	5

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:31	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/25/2001 09:57	Andrea J. Brubaker	5
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 18:00	Luis E. Villamil	1

Analysis Report

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Where quality is a science.

Lancaster Laboratories Sample No. SW 3710707

Collected:10/16/2001 14:30 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:34
Discard: 11/15/2001
SP-33/2' Grab Soil Sample
Amtrak/APU - DE

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ASP33

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	10.8	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 95.	95.	ug/kg	5
01496	PCB-1221	11104-28-2	< 95.	95.	ug/kg	5
01497	PCB-1232	11141-16-5	< 95.	95.	ug/kg	5
01498	PCB-1242	53469-21-9	< 95.	95.	ug/kg	5
01499	PCB-1248	12672-29-6	< 95.	95.	ug/kg	5
01500	PCB-1254	11097-69-1	< 95.	95.	ug/kg	5
01501	PCB-1260	11096-82-5	320.	95.	ug/kg	5

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:31	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/25/2001 10:54	Andrea J. Brubaker	5
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 18:00	Luis E. Villamil	1

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710708

Collected:10/16/2001 14:35 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:34
Discard: 11/15/2001
SP-34/2.5' Grab Soil Sample
Amtrak/APU - DE

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West Chester PA 19380

ASP34

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	10.2	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 19.	19.	ug/kg	1
01496	PCB-1221	11104-28-2	< 19.	19.	ug/kg	1
01497	PCB-1232	11141-16-5	< 19.	19.	ug/kg	1
01498	PCB-1242	53469-21-9	< 19.	19.	ug/kg	1
01499	PCB-1248	12672-29-6	< 19.	19.	ug/kg	1
01500	PCB-1254	11097-69-1	< 19.	19.	ug/kg	1
01501	PCB-1260	11096-82-5	110.	19.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:31	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/25/2001 11:12	Andrea J. Brubaker	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 18:00	Luis E. Villamil	1

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710709

Collected:10/16/2001 14:50 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:34
Discard: 11/15/2001
SP-35/1' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
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West Chester PA 19380

ASP35

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	10.1	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 380.	380.	ug/kg	20
01496	PCB-1221	11104-28-2	< 380.	380.	ug/kg	20
01497	PCB-1232	11141-16-5	< 380.	380.	ug/kg	20
01498	PCB-1242	53469-21-9	< 380.	380.	ug/kg	20
01499	PCB-1248	12672-29-6	< 380.	380.	ug/kg	20
01500	PCB-1254	11097-69-1	< 380.	380.	ug/kg	20
01501	PCB-1260	11096-82-5	3,100.	380.	ug/kg	20
	Accurate surrogate recoveries could not be determined due to the dilution required for analysis of the sample.					

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:31	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/25/2001 11:31	Andrea J. Brubaker	20
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 18:00	Luis E. Villamil	1

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710710

Collected:10/16/2001 14:45 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:34
Discard: 11/15/2001
SP-36/1.5' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

AS-36

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	9.58	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 94.	94.	ug/kg	5
01496	PCB-1221	11104-28-2	< 94.	94.	ug/kg	5
01497	PCB-1232	11141-16-5	< 94.	94.	ug/kg	5
01498	PCB-1242	53469-21-9	< 94.	94.	ug/kg	5
01499	PCB-1248	12672-29-6	< 94.	94.	ug/kg	5
01500	PCB-1254	11097-69-1	< 94.	94.	ug/kg	5
01501	PCB-1260	11096-82-5	420.	94.	ug/kg	5

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:31	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/25/2001 11:50	Andrea J. Brubaker	5
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 18:00	Luis E. Villamil	1

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710711

Collected:10/16/2001 14:55 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:34
Discard: 11/15/2001
SP-37/2.5' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP37

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	10.3	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 95.	95.	ug/kg	5
01496	PCB-1221	11104-28-2	< 95.	95.	ug/kg	5
01497	PCB-1232	11141-16-5	< 95.	95.	ug/kg	5
01498	PCB-1242	53469-21-9	< 95.	95.	ug/kg	5
01499	PCB-1248	12672-29-6	< 95.	95.	ug/kg	5
01500	PCB-1254	11097-69-1	< 95.	95.	ug/kg	5
01501	PCB-1260	11096-82-5	230.	95.	ug/kg	5

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:31	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/25/2001 12:09	Andrea J. Brubaker	5
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 18:00	Luis E. Villamil	1

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710712

Collected:10/16/2001 15:00 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:34
Discard: 11/15/2001
SP-38/3' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP38

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	8.75	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 93.	93.	ug/kg	5
01496	PCB-1221	11104-28-2	< 93.	93.	ug/kg	5
01497	PCB-1232	11141-16-5	< 93.	93.	ug/kg	5
01498	PCB-1242	53469-21-9	< 93.	93.	ug/kg	5
01499	PCB-1248	12672-29-6	< 93.	93.	ug/kg	5
01500	PCB-1254	11097-69-1	< 93.	93.	ug/kg	5
01501	PCB-1260	11096-82-5	250.	93.	ug/kg	5

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:31	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/25/2001 12:27	Andrea J. Brubaker	5
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 18:00	Luis E. Villamil	1

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710713

Collected:10/16/2001 15:05 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:34
Discard: 11/15/2001
SP-39/1' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP39

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	9.60	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 19.	19.	ug/kg	1
01496	PCB-1221	11104-28-2	< 19.	19.	ug/kg	1
01497	PCB-1232	11141-16-5	< 19.	19.	ug/kg	1
01498	PCB-1242	53469-21-9	< 19.	19.	ug/kg	1
01499	PCB-1248	12672-29-6	< 19.	19.	ug/kg	1
01500	PCB-1254	11097-69-1	< 19.	19.	ug/kg	1
01501	PCB-1260	11096-82-5	160.	19.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 20:14	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/25/2001 12:46	Andrea J. Brubaker	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/22/2001 18:00	Luis E. Villamil	1

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710714

Collected:10/16/2001 15:10 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:34
Discard: 11/15/2001
SP-40/1.5' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP40

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	5.97	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 18.	18.	ug/kg	1
01496	PCB-1221	11104-28-2	< 18.	18.	ug/kg	1
01497	PCB-1232	11141-16-5	< 18.	18.	ug/kg	1
01498	PCB-1242	53469-21-9	< 18.	18.	ug/kg	1
01499	PCB-1248	12672-29-6	< 18.	18.	ug/kg	1
01500	PCB-1254	11097-69-1	< 18.	18.	ug/kg	1
01501	PCB-1260	11096-82-5	63.	18.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 20:14	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/26/2001 17:20	Andrea J. Brubaker	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/24/2001 09:00	Jennytza L. Marcano	1

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710715

Collected:10/16/2001 15:12 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:34
Discard: 11/15/2001
SP-41/1.5' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP41

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	10.9	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 19.	19.	ug/kg	1
01496	PCB-1221	11104-28-2	< 19.	19.	ug/kg	1
01497	PCB-1232	11141-16-5	< 19.	19.	ug/kg	1
01498	PCB-1242	53469-21-9	< 19.	19.	ug/kg	1
01499	PCB-1248	12672-29-6	< 19.	19.	ug/kg	1
01500	PCB-1254	11097-69-1	< 19.	19.	ug/kg	1
01501	PCB-1260	11096-82-5	71.	19.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 20:14	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/26/2001 18:16	Andrea J. Brubaker	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/24/2001 09:00	Jennytza L. Marcano	1

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710716

Collected:10/16/2001 15:15 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:34
Discard: 11/15/2001
SP-42/1.5' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP42

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	7.20	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 18.	18.	ug/kg	1
01496	PCB-1221	11104-28-2	< 18.	18.	ug/kg	1
01497	PCB-1232	11141-16-5	< 18.	18.	ug/kg	1
01498	PCB-1242	53469-21-9	< 18.	18.	ug/kg	1
01499	PCB-1248	12672-29-6	< 18.	18.	ug/kg	1
01500	PCB-1254	11097-69-1	< 18.	18.	ug/kg	1
01501	PCB-1260	11096-82-5	68.	18.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 20:14	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/26/2001 18:35	Andrea J. Brubaker	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/24/2001 09:00	Jennytza L. Marcano	1

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710717

Collected:10/16/2001 15:20 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:34
Discard: 11/15/2001
SP-43/1.0' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP43

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	10.2	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 19.	19.	ug/kg	1
01496	PCB-1221	11104-28-2	< 19.	19.	ug/kg	1
01497	PCB-1232	11141-16-5	< 19.	19.	ug/kg	1
01498	PCB-1242	53469-21-9	< 19.	19.	ug/kg	1
01499	PCB-1248	12672-29-6	< 19.	19.	ug/kg	1
01500	PCB-1254	11097-69-1	< 19.	19.	ug/kg	1
01501	PCB-1260	11096-82-5	86.	19.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 20:14	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/26/2001 18:53	Andrea J. Brubaker	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/24/2001 09:00	Jennytza L. Marcano	1

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710718

Collected:10/16/2001 15:25 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:34
Discard: 11/15/2001
SP-44/1.0' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP44

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	10.3	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 19.	19.	ug/kg	1
01496	PCB-1221	11104-28-2	< 19.	19.	ug/kg	1
01497	PCB-1232	11141-16-5	< 19.	19.	ug/kg	1
01498	PCB-1242	53469-21-9	< 19.	19.	ug/kg	1
01499	PCB-1248	12672-29-6	< 19.	19.	ug/kg	1
01500	PCB-1254	11097-69-1	< 19.	19.	ug/kg	1
01501	PCB-1260	11096-82-5	75.	19.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 20:14	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/26/2001 19:12	Andrea J. Brubaker	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/24/2001 09:00	Jennytza L. Marcano	1

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710719

Collected:10/16/2001 15:30 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:34
Discard: 11/15/2001
SP-45/1.5' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP45

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	14.8	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 100.	100.	ug/kg	5
01496	PCB-1221	11104-28-2	< 100.	100.	ug/kg	5
01497	PCB-1232	11141-16-5	< 100.	100.	ug/kg	5
01498	PCB-1242	53469-21-9	< 100.	100.	ug/kg	5
01499	PCB-1248	12672-29-6	< 100.	100.	ug/kg	5
01500	PCB-1254	11097-69-1	< 100.	100.	ug/kg	5
01501	PCB-1260	11096-82-5	220.	100.	ug/kg	5

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:43	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/26/2001 19:31	Andrea J. Brubaker	5
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/24/2001 09:00	Jennytza L. Marcano	1

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710720

Collected:10/16/2001 15:35 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:34
Discard: 11/15/2001
SP-46/3' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP46

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	11.9	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 19.	19.	ug/kg	1
01496	PCB-1221	11104-28-2	< 19.	19.	ug/kg	1
01497	PCB-1232	11141-16-5	< 19.	19.	ug/kg	1
01498	PCB-1242	53469-21-9	< 19.	19.	ug/kg	1
01499	PCB-1248	12672-29-6	< 19.	19.	ug/kg	1
01500	PCB-1254	11097-69-1	< 19.	19.	ug/kg	1
01501	PCB-1260	11096-82-5	95.	19.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:43	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/26/2001 19:49	Andrea J. Brubaker	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/24/2001 09:00	Jennytza L. Marcano	1

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710721

Collected:10/16/2001 15:40 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:34
Discard: 11/15/2001
SP-47/3' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP47

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	12.4	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 19.	19.	ug/kg	1
01496	PCB-1221	11104-28-2	< 19.	19.	ug/kg	1
01497	PCB-1232	11141-16-5	< 19.	19.	ug/kg	1
01498	PCB-1242	53469-21-9	< 19.	19.	ug/kg	1
01499	PCB-1248	12672-29-6	< 19.	19.	ug/kg	1
01500	PCB-1254	11097-69-1	< 19.	19.	ug/kg	1
01501	PCB-1260	11096-82-5	68.	19.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:43	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/26/2001 20:46	Andrea J. Brubaker	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/24/2001 09:00	Jennytza L. Marcano	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3710722

Collected:10/16/2001 15:45 by KSE

Account Number: 01401

Submitted: 10/17/2001 17:30
Reported: 10/31/2001 at 09:35
Discard: 11/15/2001
SP-48/2.5' Grab Soil Sample
Amtrak/APU - DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

ASP48

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	14.5	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 20.	20.	ug/kg	1
01496	PCB-1221	11104-28-2	< 20.	20.	ug/kg	1
01497	PCB-1232	11141-16-5	< 20.	20.	ug/kg	1
01498	PCB-1242	53469-21-9	< 20.	20.	ug/kg	1
01499	PCB-1248	12672-29-6	< 20.	20.	ug/kg	1
01500	PCB-1254	11097-69-1	< 20.	20.	ug/kg	1
01501	PCB-1260	11096-82-5	< 20.	20.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	10/21/2001 19:43	Justin M. Bowers	1
01216	PCBs in Solids	SW-846 8082	1	10/26/2001 21:04	Andrea J. Brubaker	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	10/24/2001 09:00	Jennytza L. Marcano	1

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2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories
Where quality is a science.

Quality Control Summary

Client Name: IT Corporation- PA
Reported: 10/31/01 at 09:35 AM

Group Number: 782995

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 012930017A	Sample number(s): 3710675-3710693							
PCB-1016	< 17.	17.	ug/kg	88		72-120		
PCB-1221	< 17.	17.	ug/kg					
PCB-1232	< 17.	17.	ug/kg					
PCB-1242	< 17.	17.	ug/kg					
PCB-1248	< 17.	17.	ug/kg					
PCB-1254	< 17.	17.	ug/kg					
PCB-1260	< 17.	17.	ug/kg	88		76-122		
Batch number: 01294820004B	Sample number(s): 3710675-3710692							
Moisture				100	100	99-101	0	4
Batch number: 01294820005A	Sample number(s): 3710693-3710702							
Moisture				100	100	99-101	0	4
Batch number: 01294820005B	Sample number(s): 3710703-3710712							
Moisture				100	100	99-101	0	4
Batch number: 01294820006A	Sample number(s): 3710719-3710722							
Moisture				100	100	99-101	0	4
Batch number: 01294820007A	Sample number(s): 3710713-3710718							
Moisture				100	100	99-101	0	4
Batch number: 012950007A	Sample number(s): 3710694-3710713							
PCB-1016	< 17.	17.	ug/kg	82		72-120		
PCB-1221	< 17.	17.	ug/kg					
PCB-1232	< 17.	17.	ug/kg					
PCB-1242	< 17.	17.	ug/kg					
PCB-1248	< 17.	17.	ug/kg					
PCB-1254	< 17.	17.	ug/kg					
PCB-1260	< 17.	17.	ug/kg	94		76-122		
Batch number: 012960023A	Sample number(s): 3710714-3710722							
PCB-1016	< 17.	17.	ug/kg	82		72-120		
PCB-1221	< 17.	17.	ug/kg					
PCB-1232	< 17.	17.	ug/kg					
PCB-1242	< 17.	17.	ug/kg					
PCB-1248	< 17.	17.	ug/kg					
PCB-1254	< 17.	17.	ug/kg					
PCB-1260	< 17.	17.	ug/kg	88		76-122		

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 012930017A	Sample number(s): 3710675-3710693								

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
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2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories
Where quality is a science.

Quality Control Summary

Client Name: IT Corporation- PA
Reported: 10/31/01 at 09:35 AM

Group Number: 782995

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
PCB-1016	94	88	61-128	6	50				
PCB-1260	94	65	47-139	14	50				
Batch number: 01294820004B	Sample number(s): 3710675-3710692								
Moisture						27.3	24.9	9	11
Batch number: 01294820005A	Sample number(s): 3710693-3710702								
Moisture						10.6	11.6	9	11
Batch number: 01294820005B	Sample number(s): 3710703-3710712								
Moisture						10.2	11.0	8	11
Batch number: 01294820006A	Sample number(s): 3710719-3710722								
Moisture						21.8	22.4	3	11
Batch number: 01294820007A	Sample number(s): 3710713-3710718								
Moisture						10.9	10.3	6	11
Batch number: 012950007A	Sample number(s): 3710694-3710713								
PCB-1016	94	88	61-128	6	50				
PCB-1260	224*	200*	47-139	6	50				
Batch number: 012960023A	Sample number(s): 3710714-3710722								
PCB-1016	76	106	61-128	32	50				
PCB-1260	83	89	47-139	5	50				

Surrogate Quality Control

Analysis Name: PCBs in Solids
Batch number: 012930017A

	Tetrachloro-m-xylene	Decachlorobiphenyl
3710675	79	91
3710676	81	93
3710677	79	88
3710678	80	89
3710679	88	114
3710680	84	91
3710681	75	86
3710682	78	89
3710683	78	111
3710684	81	93
3710685	82	93
3710686	80	92
3710687	99	118
3710688	87	93
3710689	82	91
3710690	98	114

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

Lancaster Laboratories
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Quality Control Summary

Client Name: IT Corporation- PA
Reported: 10/31/01 at 09:35 AM

Group Number: 782995

Surrogate Quality Control

3710691	90	110
3710692	88	112
3710693	79	78
Blank	87	84
LCS	92	88
MS	94	116
MSD	80	97
Limits:	53-139	41-132

Analysis Name: PCBs in Solids
Batch number: 012950007A

	Tetrachloro-m-xylene	Decachlorobiphenyl
3710694	49*	69
3710695	85	129
3710696	99	121
3710697	102	120
3710698	97	95
3710699	91	103
3710700	87	96
3710701	102	115
3710702	86	97
3710703	85	89
3710704	88	91
3710705	91	90
3710706	99	114
3710707	92	103
3710708	82	88
3710709	102	147*
3710710	102	122
3710711	93	117
3710712	96	116
3710713	85	97
Blank	96	99
LCS	88	89
MS	90	126
MSD	86	122
Limits:	53-139	41-132

Analysis Name: PCBs in Solids
Batch number: 012960023A

	Tetrachloro-m-xylene	Decachlorobiphenyl
3710714	76	84
3710715	89	98
3710716	82	87
3710717	84	93
3710718	82	90
3710719	97	117
3710720	86	92
3710721	87	94
3710722	90	88
Blank	98	100

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

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Quality Control Summary

Client Name: IT Corporation- PA
Reported: 10/31/01 at 09:35 AM

Group Number: 782995

Surrogate Quality Control

LCS	92	96
MS	87	93
MSD	81	96
Limits:	53-139	41-132

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

Appendix C

Product Analytical from the Recovery Trench System – October 24, 2001

Lancaster Laboratories
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ANALYTICAL RESULTS

Prepared for:

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

610-241-5000

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 783699. Samples arrived at the laboratory on Thursday, October 25, 2001.

Client Description	Lancaster Labs Number
SP#1 Product Sample	3714092
SP#2 Product Sample	3714093
SP#3 Product Sample	3714094
SP#4 Product Sample	3714095
RW#1 Product Sample	3714096
SP#5 Product Sample	3714097
RW#4 Product Sample	3714098
SP#6 Product Sample	3714099
RW#2 Product Sample	3714100
SP#7 Product Sample	3714101
SP#8 Product Sample	3714102
RW#5 Product Sample	3714103
SP#9 Product Sample	3714104
SUMP#1 Product Sample	3714105

1 COPY TO IT Corporation-PA Attn: Mr. Steve Baggett

Lancaster Laboratories
Where quality is a science

Questions? Contact your Client Services Representative
De Brooks at (717) 656-2300.

Respectfully Submitted,

Jenifer E. Hess
Group Leader

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. G5 3714092

Collected:10/24/2001 11:25 by MS

Account Number: 01401

Submitted: 10/25/2001 18:30
Reported: 10/30/2001 at 16:16
Discard: 11/14/2001
SP#1 Product Sample
Amtrak, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

AM-S1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00174	PCBs in Oil					
04815	PCB-1016	12674-11-2	< 2,500.	2,500.	ug/kg	1
04816	PCB-1221	11104-28-2	< 2,500.	2,500.	ug/kg	1
04817	PCB-1232	11141-16-5	< 2,500.	2,500.	ug/kg	1
04818	PCB-1242	53469-21-9	< 2,500.	2,500.	ug/kg	1
04819	PCB-1248	12672-29-6	< 2,500.	2,500.	ug/kg	1
04820	PCB-1254	11097-69-1	< 2,500.	2,500.	ug/kg	1
04821	PCB-1260	11096-82-5	3,900.	2,500.	ug/kg	1

Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00174	PCBs in Oil	SW-846 8082	1	10/28/2001 15:03	Rick Shober	1
00815	Oil Sample PCB's Cleanup Ext.	SW-846 3580A	1	10/26/2001 12:30	Roxanne M. Roth	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. G5 3714093

Collected:10/24/2001 11:45 by MS

Account Number: 01401

Submitted: 10/25/2001 18:30
Reported: 10/30/2001 at 16:16
Discard: 11/14/2001
SP#2 Product Sample
Amtrak, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

AM-S2

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00174	PCBs in Oil					
04815	PCB-1016	12674-11-2	< 2,500.	2,500.	ug/kg	1
04816	PCB-1221	11104-28-2	< 2,500.	2,500.	ug/kg	1
04817	PCB-1232	11141-16-5	< 2,500.	2,500.	ug/kg	1
04818	PCB-1242	53469-21-9	< 2,500.	2,500.	ug/kg	1
04819	PCB-1248	12672-29-6	< 2,500.	2,500.	ug/kg	1
04820	PCB-1254	11097-69-1	< 2,500.	2,500.	ug/kg	1
04821	PCB-1260	11096-82-5	4,200.	2,500.	ug/kg	1

Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00174	PCBs in Oil	SW-846 8082	1	10/28/2001 15:22	Rick Shober	1
00815	Oil Sample PCB's Cleanup Ext.	SW-846 3580A	1	10/26/2001 12:30	Roxanne M. Roth	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. G5 3714094

Collected:10/24/2001 11:55 by MS

Account Number: 01401

Submitted: 10/25/2001 18:30
Reported: 10/30/2001 at 16:16
Discard: 11/14/2001
SP#3 Product Sample
Amtrak, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

AM-S3

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00174	PCBs in Oil					
04815	PCB-1016	12674-11-2	< 2,500.	2,500.	ug/kg	1
04816	PCB-1221	11104-28-2	< 2,500.	2,500.	ug/kg	1
04817	PCB-1232	11141-16-5	< 2,500.	2,500.	ug/kg	1
04818	PCB-1242	53469-21-9	< 2,500.	2,500.	ug/kg	1
04819	PCB-1248	12672-29-6	< 2,500.	2,500.	ug/kg	1
04820	PCB-1254	11097-69-1	< 2,500.	2,500.	ug/kg	1
04821	PCB-1260	11096-82-5	8,100.	2,500.	ug/kg	1

Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00174	PCBs in Oil	SW-846 8082	1	10/28/2001 15:41	Rick Shober	1
00815	Oil Sample PCB's Cleanup Ext.	SW-846 3580A	1	10/26/2001 12:30	Roxanne M. Roth	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. G5 3714095

Collected:10/24/2001 12:15 by MS

Account Number: 01401

Submitted: 10/25/2001 18:30
Reported: 10/30/2001 at 16:16
Discard: 11/14/2001
SP#4 Product Sample
Amtrak, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

AM-S4

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00174	PCBs in Oil					
04815	PCB-1016	12674-11-2	< 2,500.	2,500.	ug/kg	1
04816	PCB-1221	11104-28-2	< 2,500.	2,500.	ug/kg	1
04817	PCB-1232	11141-16-5	< 2,500.	2,500.	ug/kg	1
04818	PCB-1242	53469-21-9	< 2,500.	2,500.	ug/kg	1
04819	PCB-1248	12672-29-6	< 2,500.	2,500.	ug/kg	1
04820	PCB-1254	11097-69-1	< 2,500.	2,500.	ug/kg	1
04821	PCB-1260	11096-82-5	6,500.	2,500.	ug/kg	1

Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00174	PCBs in Oil	SW-846 8082	1	10/28/2001 15:59	Rick Shober	1
00815	Oil Sample PCB's Cleanup Ext.	SW-846 3580A	1	10/26/2001 12:30	Roxanne M. Roth	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. G5 3714096

Collected:10/24/2001 14:55 by MS

Account Number: 01401

Submitted: 10/25/2001 18:30
Reported: 10/30/2001 at 16:16
Discard: 11/14/2001
RW#1 Product Sample
Amtrak, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

AMR1-

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00174	PCBs in Oil					
04815	PCB-1016	12674-11-2	< 2,500.	2,500.	ug/kg	1
04816	PCB-1221	11104-28-2	< 2,500.	2,500.	ug/kg	1
04817	PCB-1232	11141-16-5	< 2,500.	2,500.	ug/kg	1
04818	PCB-1242	53469-21-9	< 2,500.	2,500.	ug/kg	1
04819	PCB-1248	12672-29-6	< 2,500.	2,500.	ug/kg	1
04820	PCB-1254	11097-69-1	< 2,500.	2,500.	ug/kg	1
04821	PCB-1260	11096-82-5	5,200.	2,500.	ug/kg	1

Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00174	PCBs in Oil	SW-846 8082	1	10/28/2001 16:18	Rick Shober	1
00815	Oil Sample PCB's Cleanup Ext.	SW-846 3580A	1	10/26/2001 12:30	Roxanne M. Roth	1

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Where quality is a science.

Lancaster Laboratories Sample No. G5 3714097

Collected:10/24/2001 15:10 by MS

Account Number: 01401

Submitted: 10/25/2001 18:30
Reported: 10/30/2001 at 16:16
Discard: 11/14/2001
SP#5 Product Sample
Amtrak, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

AM-S5

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00174	PCBs in Oil					
04815	PCB-1016	12674-11-2	< 2,500.	2,500.	ug/kg	1
04816	PCB-1221	11104-28-2	< 2,500.	2,500.	ug/kg	1
04817	PCB-1232	11141-16-5	< 2,500.	2,500.	ug/kg	1
04818	PCB-1242	53469-21-9	< 2,500.	2,500.	ug/kg	1
04819	PCB-1248	12672-29-6	< 2,500.	2,500.	ug/kg	1
04820	PCB-1254	11097-69-1	< 2,500.	2,500.	ug/kg	1
04821	PCB-1260	11096-82-5	22,400.	2,500.	ug/kg	1

Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00174	PCBs in Oil	SW-846 8082	1	10/28/2001 16:37	Rick Shober	1
00815	Oil Sample PCB's Cleanup Ext.	SW-846 3580A	1	10/26/2001 12:30	Roxanne M. Roth	1

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Lancaster Laboratories Sample No. G5 3714098

Collected:10/24/2001 15:25 by MS

Account Number: 01401

Submitted: 10/25/2001 18:30
Reported: 10/30/2001 at 16:16
Discard: 11/14/2001
RW#4 Product Sample
Amtrak, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

AM-R4

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00174	PCBs in Oil					
04815	PCB-1016	12674-11-2	< 2,500.	2,500.	ug/kg	1
04816	PCB-1221	11104-28-2	< 2,500.	2,500.	ug/kg	1
04817	PCB-1232	11141-16-5	< 2,500.	2,500.	ug/kg	1
04818	PCB-1242	53469-21-9	< 2,500.	2,500.	ug/kg	1
04819	PCB-1248	12672-29-6	< 2,500.	2,500.	ug/kg	1
04820	PCB-1254	11097-69-1	< 2,500.	2,500.	ug/kg	1
04821	PCB-1260	11096-82-5	34,500.	2,500.	ug/kg	1

Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00174	PCBs in Oil	SW-846 8082	1	10/28/2001 17:33	Rick Shober	1
00815	Oil Sample PCB's Cleanup Ext.	SW-846 3580A	1	10/26/2001 12:30	Roxanne M. Roth	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. G5 3714099

Collected:10/24/2001 15:38 by MS

Account Number: 01401

Submitted: 10/25/2001 18:30
Reported: 10/30/2001 at 16:16
Discard: 11/14/2001
SP#6 Product Sample
Amtrak, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

AM-S6

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00174	PCBs in Oil					
04815	PCB-1016	12674-11-2	< 25,000.	25,000.	ug/kg	10
04816	PCB-1221	11104-28-2	< 25,000.	25,000.	ug/kg	10
04817	PCB-1232	11141-16-5	< 25,000.	25,000.	ug/kg	10
04818	PCB-1242	53469-21-9	< 25,000.	25,000.	ug/kg	10
04819	PCB-1248	12672-29-6	< 25,000.	25,000.	ug/kg	10
04820	PCB-1254	11097-69-1	< 25,000.	25,000.	ug/kg	10
04821	PCB-1260	11096-82-5	69,000.	25,000.	ug/kg	10

Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00174	PCBs in Oil	SW-846 8082	1	10/28/2001 17:51	Rick Shober	10
00815	Oil Sample PCB's Cleanup Ext.	SW-846 3580A	1	10/26/2001 12:30	Roxanne M. Roth	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. G5 3714100

Collected:10/24/2001 15:50 by MS

Account Number: 01401

Submitted: 10/25/2001 18:30
Reported: 10/30/2001 at 16:17
Discard: 11/14/2001
RW#2 Product Sample
Amtrak, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

AM-R2

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00174	PCBs in Oil					
04815	PCB-1016	12674-11-2	< 2,500.	2,500.	ug/kg	1
04816	PCB-1221	11104-28-2	< 2,500.	2,500.	ug/kg	1
04817	PCB-1232	11141-16-5	< 2,500.	2,500.	ug/kg	1
04818	PCB-1242	53469-21-9	< 2,500.	2,500.	ug/kg	1
04819	PCB-1248	12672-29-6	< 2,500.	2,500.	ug/kg	1
04820	PCB-1254	11097-69-1	< 2,500.	2,500.	ug/kg	1
04821	PCB-1260	11096-82-5	6,900.	2,500.	ug/kg	1

Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00174	PCBs in Oil	SW-846 8082	1	10/28/2001 18:10	Rick Shober	1
00815	Oil Sample PCB's Cleanup Ext.	SW-846 3580A	1	10/26/2001 12:30	Roxanne M. Roth	1

Lancaster Laboratories
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Lancaster Laboratories Sample No. G5 3714101

Collected:10/24/2001 16:10 by MS

Account Number: 01401

Submitted: 10/25/2001 18:30
Reported: 10/30/2001 at 16:17
Discard: 11/14/2001
SP#7 Product Sample
Amtrak, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

AM-S7

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00174	PCBs in Oil					
04815	PCB-1016	12674-11-2	< 2,500.	2,500.	ug/kg	1
04816	PCB-1221	11104-28-2	< 2,500.	2,500.	ug/kg	1
04817	PCB-1232	11141-16-5	< 2,500.	2,500.	ug/kg	1
04818	PCB-1242	53469-21-9	< 2,500.	2,500.	ug/kg	1
04819	PCB-1248	12672-29-6	< 2,500.	2,500.	ug/kg	1
04820	PCB-1254	11097-69-1	< 2,500.	2,500.	ug/kg	1
04821	PCB-1260	11096-82-5	9,700.	2,500.	ug/kg	1

Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00174	PCBs in Oil	SW-846 8082	1	10/28/2001 18:28	Rick Shober	1
00815	Oil Sample PCB's Cleanup Ext.	SW-846 3580A	1	10/26/2001 12:30	Roxanne M. Roth	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. G5 3714102

Collected:10/24/2001 16:20 by MS

Account Number: 01401

Submitted: 10/25/2001 18:30
Reported: 10/30/2001 at 16:17
Discard: 11/14/2001
SP#8 Product Sample
Amtrak, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

AM-S8

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00174	PCBs in Oil					
04815	PCB-1016	12674-11-2	< 2,500.	2,500.	ug/kg	1
04816	PCB-1221	11104-28-2	< 2,500.	2,500.	ug/kg	1
04817	PCB-1232	11141-16-5	< 2,500.	2,500.	ug/kg	1
04818	PCB-1242	53469-21-9	< 2,500.	2,500.	ug/kg	1
04819	PCB-1248	12672-29-6	< 2,500.	2,500.	ug/kg	1
04820	PCB-1254	11097-69-1	< 2,500.	2,500.	ug/kg	1
04821	PCB-1260	11096-82-5	23,200.	2,500.	ug/kg	1

Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00174	PCBs in Oil	SW-846 8082	1	10/28/2001 18:47	Rick Shober	1
00815	Oil Sample PCB's Cleanup Ext.	SW-846 3580A	1	10/26/2001 12:30	Roxanne M. Roth	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. G5 3714103

Collected:10/24/2001 16:40 by MS

Account Number: 01401

Submitted: 10/25/2001 18:30
Reported: 10/30/2001 at 16:17
Discard: 11/14/2001
RW#5 Product Sample
Amtrak, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

AM-R5

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00174	PCBs in Oil					
04815	PCB-1016	12674-11-2	< 25,000.	25,000.	ug/kg	10
04816	PCB-1221	11104-28-2	< 25,000.	25,000.	ug/kg	10
04817	PCB-1232	11141-16-5	< 25,000.	25,000.	ug/kg	10
04818	PCB-1242	53469-21-9	< 25,000.	25,000.	ug/kg	10
04819	PCB-1248	12672-29-6	< 25,000.	25,000.	ug/kg	10
04820	PCB-1254	11097-69-1	< 25,000.	25,000.	ug/kg	10
04821	PCB-1260	11096-82-5	53,000.	25,000.	ug/kg	10

Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.
Accurate surrogate recoveries could not be determined due to the dilution required for analysis of the sample.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00174	PCBs in Oil	SW-846 8082	1	10/28/2001 19:06	Rick Shober	10
00815	Oil Sample PCB's Cleanup Ext.	SW-846 3580A	1	10/26/2001 12:30	Roxanne M. Roth	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. G5 3714104

Collected:10/24/2001 16:55 by MS

Account Number: 01401

Submitted: 10/25/2001 18:30
Reported: 10/30/2001 at 16:17
Discard: 11/14/2001
SP#9 Product Sample
Amtrak, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

AM-S9

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00174	PCBs in Oil					
04815	PCB-1016	12674-11-2	< 25,000.	25,000.	ug/kg	10
04816	PCB-1221	11104-28-2	< 25,000.	25,000.	ug/kg	10
04817	PCB-1232	11141-16-5	< 25,000.	25,000.	ug/kg	10
04818	PCB-1242	53469-21-9	< 25,000.	25,000.	ug/kg	10
04819	PCB-1248	12672-29-6	< 25,000.	25,000.	ug/kg	10
04820	PCB-1254	11097-69-1	< 25,000.	25,000.	ug/kg	10
04821	PCB-1260	11096-82-5	65,000.	25,000.	ug/kg	10

Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.
Accurate surrogate recoveries could not be determined due to the dilution required for analysis of the sample.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00174	PCBs in Oil	SW-846 8082	1	10/28/2001 19:24	Rick Shober	10
00815	Oil Sample PCB's Cleanup Ext.	SW-846 3580A	1	10/26/2001 12:30	Roxanne M. Roth	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. G5 3714105

Collected:10/24/2001 17:10 by MS

Account Number: 01401

Submitted: 10/25/2001 18:30
Reported: 10/30/2001 at 16:17
Discard: 11/14/2001
SUMP#1 Product Sample
Amtrak, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

AM-SU

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00174	PCBs in Oil					
04815	PCB-1016	12674-11-2	< 2,500.	2,500.	ug/kg	1
04816	PCB-1221	11104-28-2	< 2,500.	2,500.	ug/kg	1
04817	PCB-1232	11141-16-5	< 2,500.	2,500.	ug/kg	1
04818	PCB-1242	53469-21-9	< 2,500.	2,500.	ug/kg	1
04819	PCB-1248	12672-29-6	< 2,500.	2,500.	ug/kg	1
04820	PCB-1254	11097-69-1	< 2,500.	2,500.	ug/kg	1
04821	PCB-1260	11096-82-5	2,800.	2,500.	ug/kg	1

Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00174	PCBs in Oil	SW-846 8082	1	10/28/2001 19:43	Rick Shober	1
00815	Oil Sample PCB's Cleanup Ext.	SW-846 3580A	1	10/26/2001 12:30	Roxanne M. Roth	1

Analysis Request/Environmental Services Chain of Custody

Lancaster Laboratories
Where quality is a science.

For Lancaster Laboratories use only
Acct. # 1401 Sample # 3714091-105

Please print. Instructions on reverse side correspond with circled numbers.

(1)
Client: IT Group Acct. #:
Project Name/#: Amtrak PWSID #:
Project Manager: Steve Baggett P.O.#
Sampler: Mike Smith Quote #:
Name of state where samples were collected: DE

For lab use only
FSC:
SCR #: 1158623

(2) (3) (4) (5) (6)

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water (☐ Potable ☐ NPDES)	Other	Total # of Containers	PCB							Remarks	Temperature of samples upon receipt (if requested)
RW#1	10/24	11:12				X		2	X								
SP#1	10/24	11:25				X		2	X								
SP#2	10/24	11:45				X		2	X								
SP#3	10/24	11:55				X		2	X								
SP#4	10/24	12:15				X		2	X								
RW#1	10/24	2:55				X		2	X								
SP#5	10/24	3:10				X		2	X								
RW#4	10/24	3:25				X		2	X								
SP#6	10/24	3:38				X		2	X								
RW#2	10/24	3:50				X		2	X								

Analyses Requested: PCB

24 hr AR Turn Around

(7) **Turnaround Time Requested** (TAT) (please circle): Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed: 24 hr
Rush results requested by (please circle): Phone Fax
Phone #: (610)241-5000 Fax #: (610)241-5050

(8) **Data Package Options** (please circle if requested)
QC Summary Type VI (Raw Data)
Type I (Tier I) GLP
Type II (Tier II) Other
Type III (NJ Red. Del.)
Type IV (CLP)

SDG Complete? Yes No

Site-specific QC required? Yes No
(If yes, indicate QC sample and submit triplicate volume.)

Internal Chain of Custody required? Yes No

(9)

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	10-22-01	1100			
[signature]	10/24/01	5:30			
			T. Conlon	10/25/01	1830

Lancaster Laboratories, Inc., 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 (717) 656-2300
Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client

2102 Rev. 3/7/01

Analysis Request/Environmental Services Chain of Custody

Lancaster Laboratories
Where quality is a science.

For Lancaster Laboratories use only
Acct. # 1401 Sample # 3714091-105

Please print. Instructions on reverse side correspond with circled numbers.

(1)
Client: IT Group Acct. #:
Project Name/#: Amtrak PWSID #:
Project Manager: Steve Baggett P.O.#
Sampler: Mike Smith Quote #:
Name of state where samples were collected: DE

For lab use only
FSC:
SCR #: 1158623

(2) Sample Identification	Date Collected	Time Collected	(3) Grab	Composite	Matrix (4) Soil	Potable (Check if applicable)	NPDES	Water	Other	Total # of Containers	(5) Analyses Requested: PCB								Remarks	(6) Temperature of samples upon receipt (if requested)
SP #7	10/24	4:10							X	2	X									
SP #8	10/24	4:20							X	2	X									
Rw #5	10/24	4:40							X	2	X									
SP #9	10/24	4:55							X	2	X									
Sump #1	10/24	5:10							X	2	X									

(7) **Turnaround Time Requested** (TAT) (please circle): Normal (Rush)
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed: 24 hr
Rush results requested by (please circle): (Phone) Fax
Phone #: (610) 241-5000 Fax #: (610) 241-3050

(8) **Data Package Options** (please circle if requested)
QC Summary — Type VI (Raw Data)
Type I (Tier I) — GLP
Type II (Tier II) — Other
Type III (NJ Red. Del.)
Type IV (CLP)

SDG Complete? Yes No

Site-specific QC required? Yes No
(If yes, indicate QC sample and submit triplicate volume.)

Internal Chain of Custody required? Yes No

(9)

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	10-22-01	1100			
[signature]	10/24/01	5:30			
			T. Carlson	10/25/01	8:30

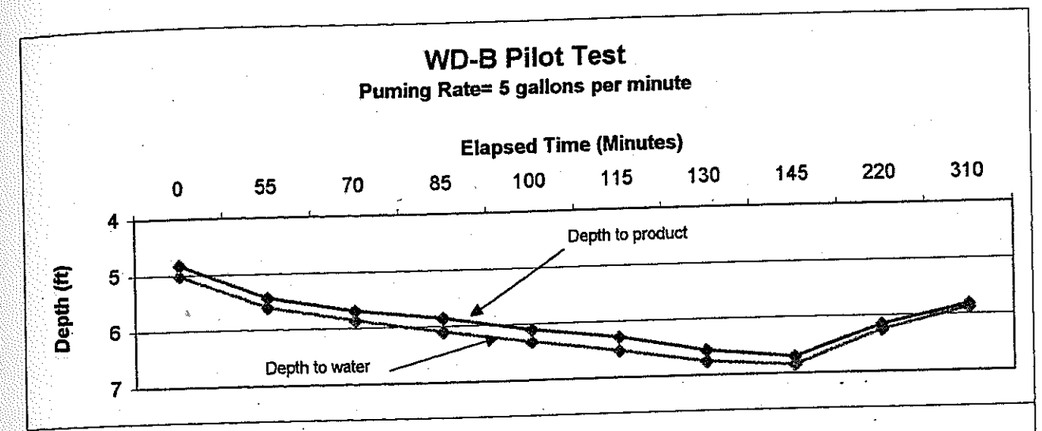
APPENDIX
D

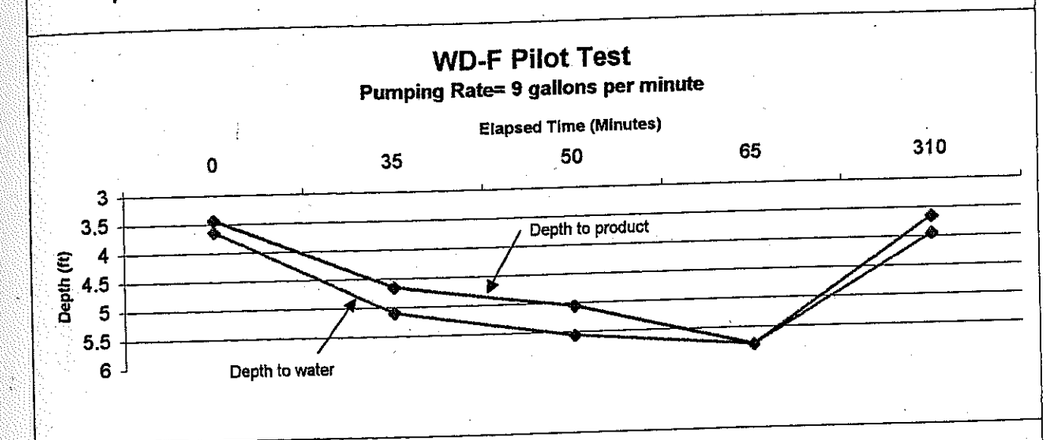
91B-2-99

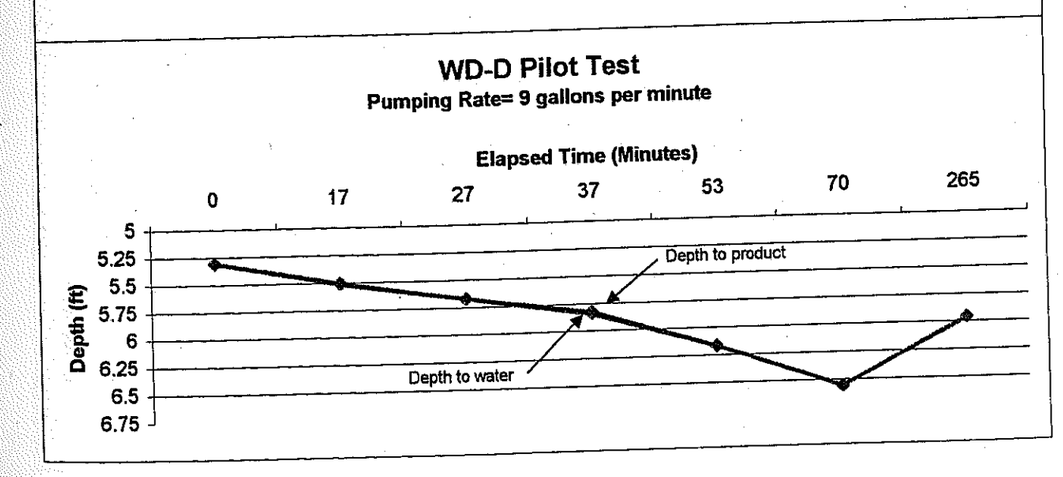
Appendix D

Oil Recovery Sump Pilot Test Data Graphs

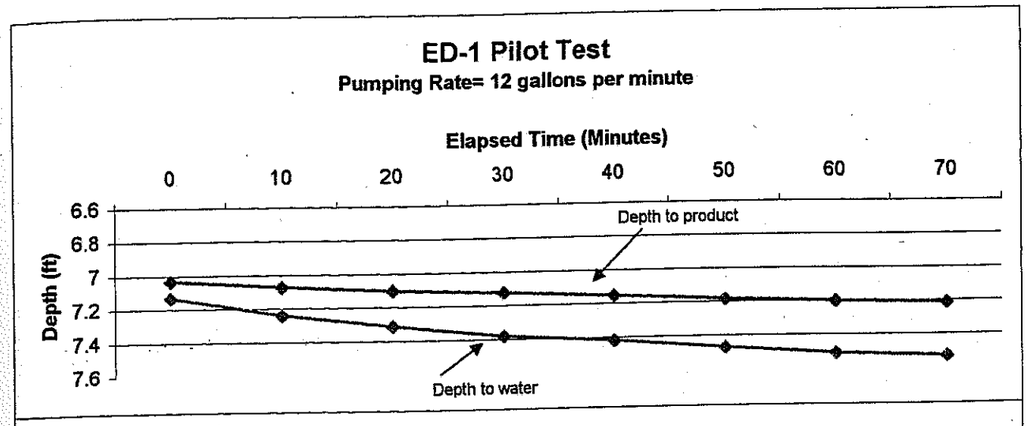
Amtrak Former Fueling Facility
Vandever Avenue
Wilmington Delaware

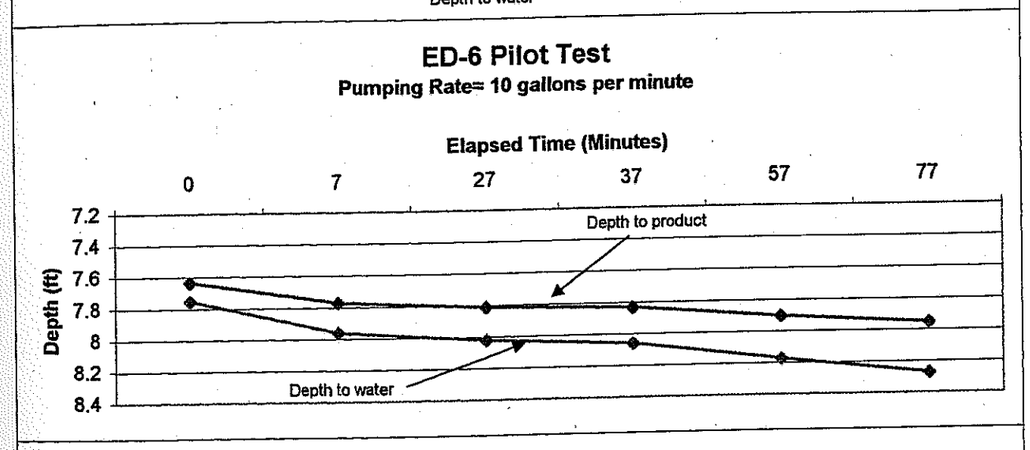


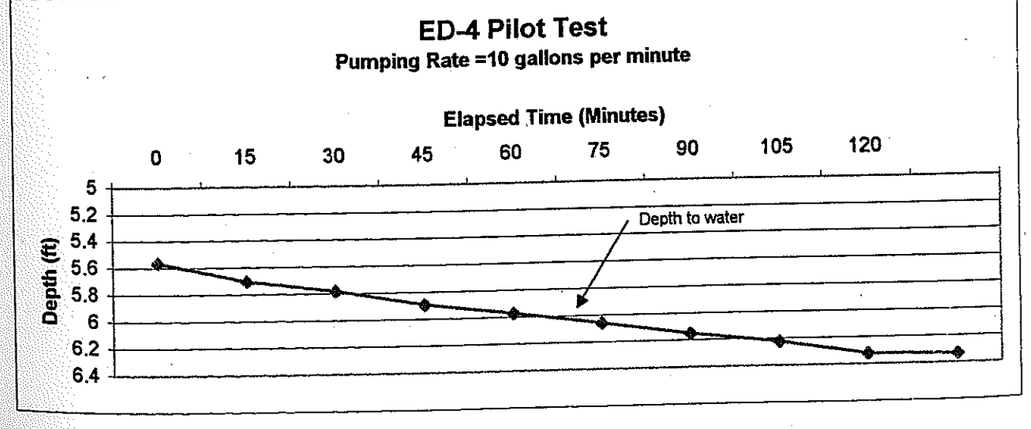




Amtrak Former Fueling Facility
Vandever Avenue
Wilmington Delaware



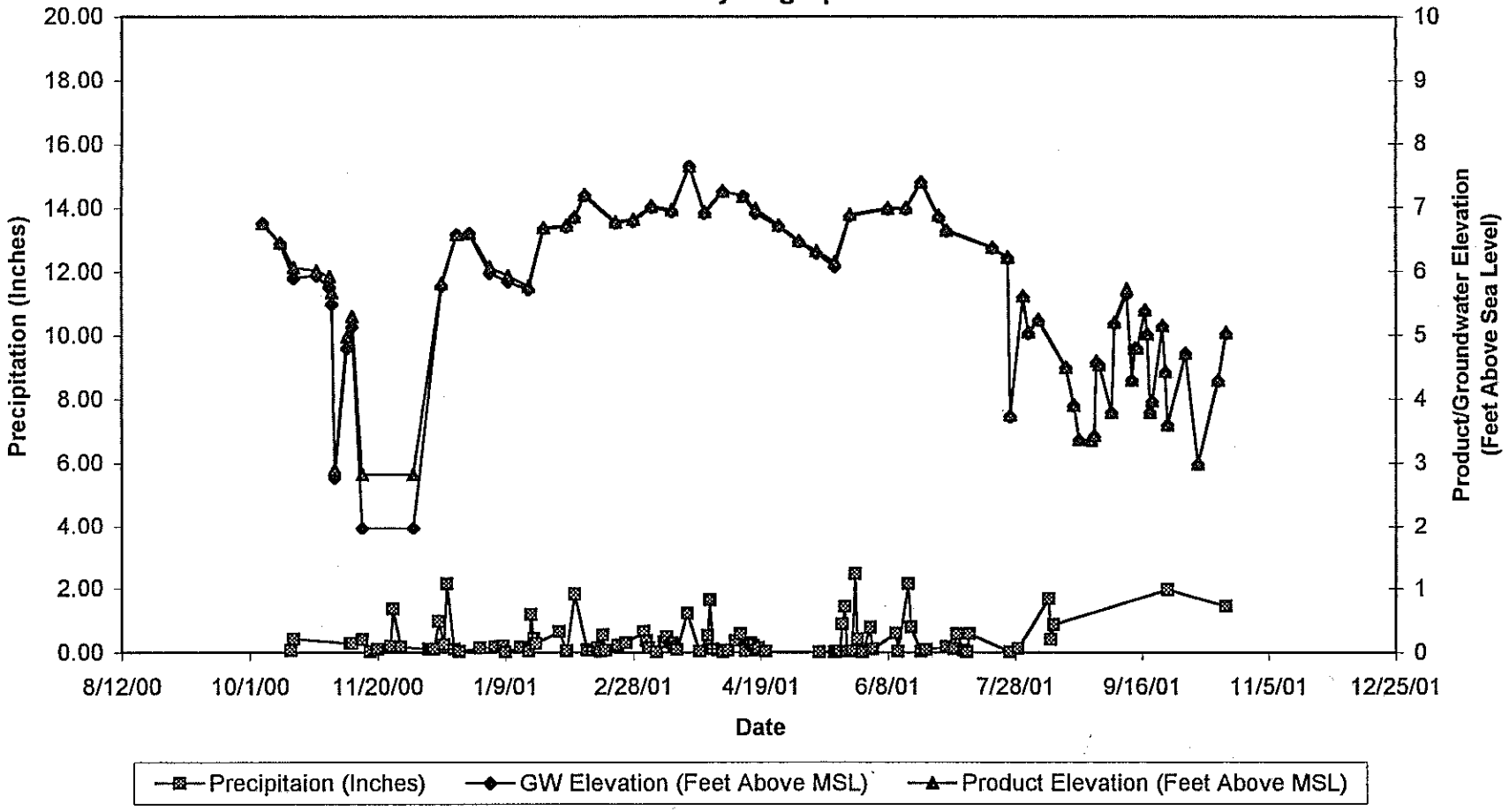




Appendix E

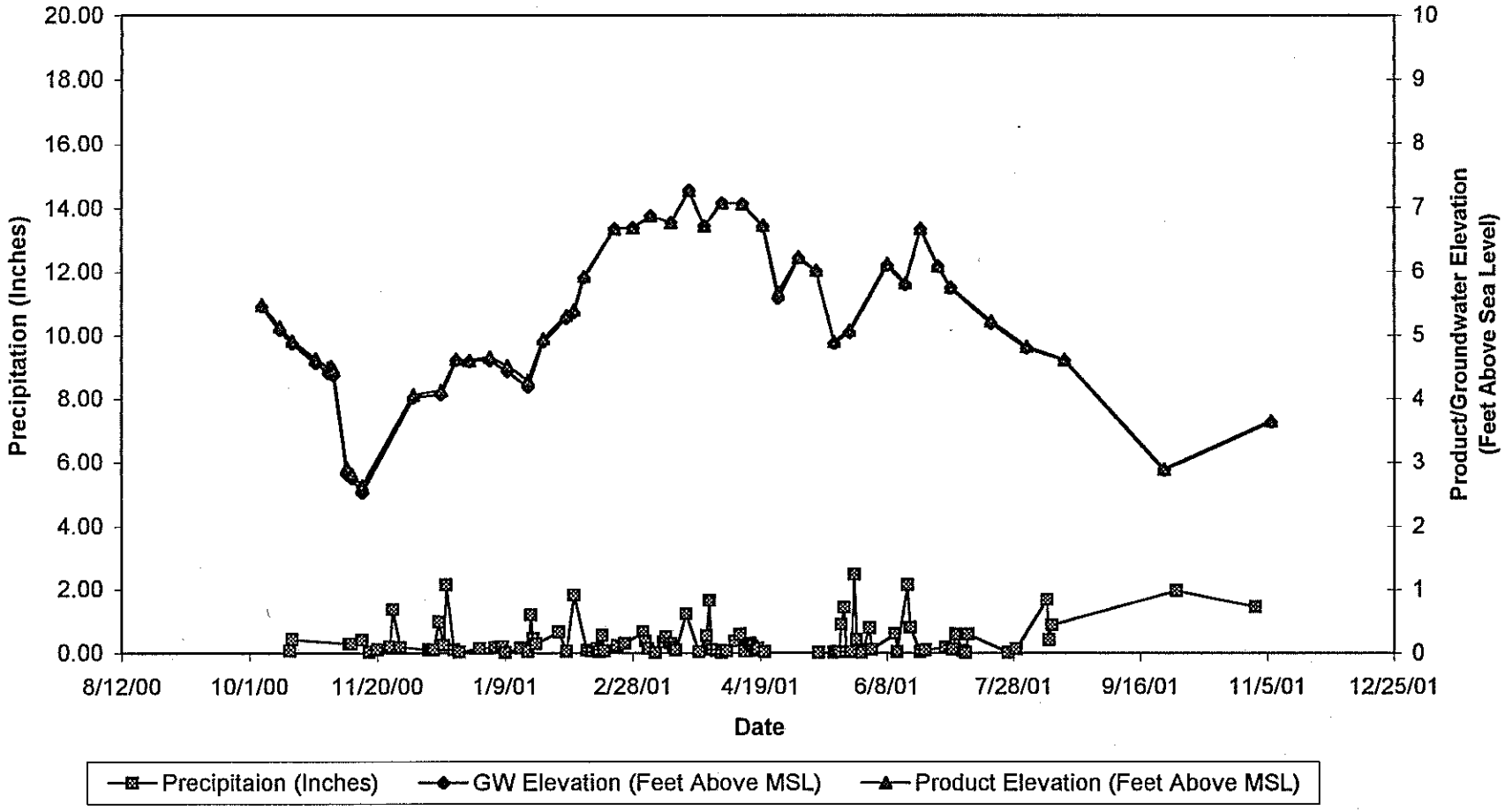
Liquid Level Gauging Data and Select Hydrographs

Former Fueling Facility
AMTRAK Wilmington Shops
Vandever Avenue
Wilmington Delaware
RW-1, Through October, 2001
Hydrograph



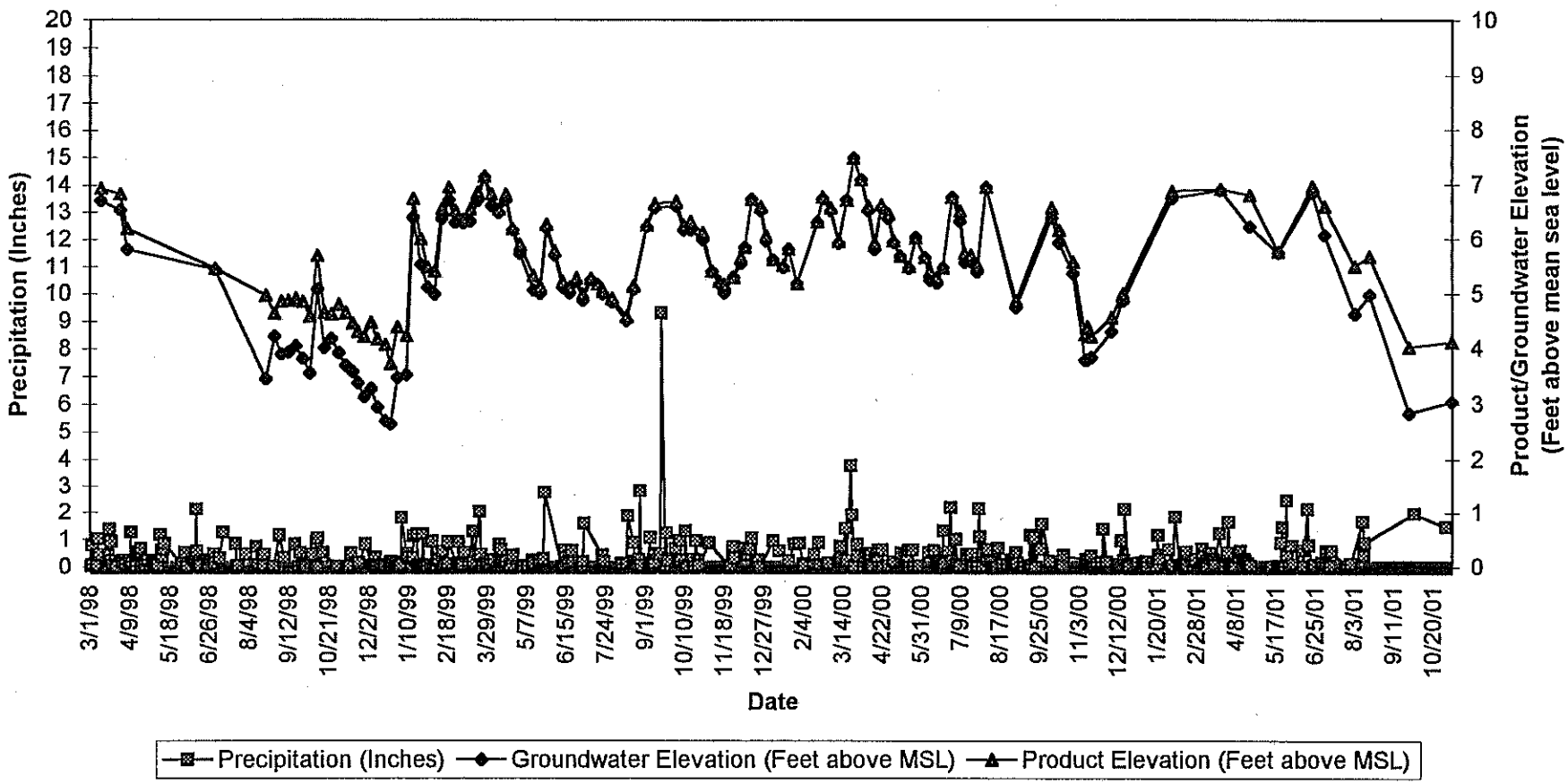
r:\projects\apu-amtr\welldata\Elev-PCP\RW-1 Cht

Former Fueling Facility
AMTRAK Wilmington Shops
Vandever Avenue
Wilmington Delaware
RW-3, Through October, 2001
Hydrograph



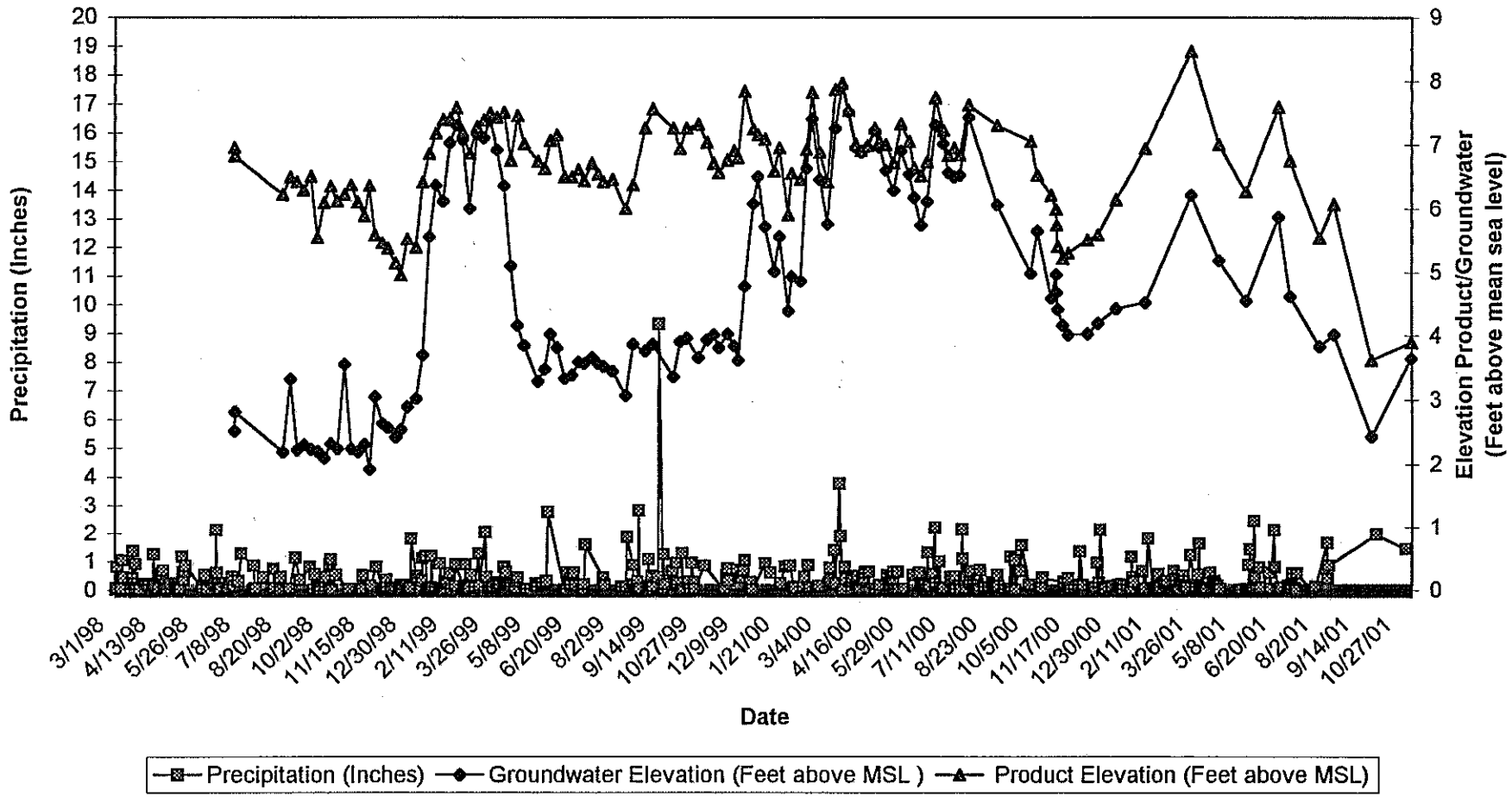
r:\projects\apu-amtr\welldata\Elev-PCP\RW-3 Cht

Former Fueling Facility
AMTRAK Wilmington Shops
Vandever Avenue
Wilmington Delaware
MW-7, Through October, 2001
Hydrograph



r:\projects\apu-amtr\welldata\Elev-PCP\MW-7Cht

Former Fueling Facility
AMTRAK Wilmington Shops
Vandever Avenue
Wilmington Delaware
MW-16, Through October, 2001
Hydrograph



r:\projects\apu-amtr\welldata\Elev-PCP\MW-16Cht

Amtrak Former Fueling Facility
4001 Vandever Avenue
Wilmington, Delaware

Monthly Liquid Level Data Sheet
December 15, 2000

Well ID	Measuring Point Elevation (ft rmsl)	Depth to Product (feet)	Depth to Water (feet)	Apparent Product Thickness (feet)	Estimated Product Specific Gravity [1]	Water Level Elevation (ft rmsl)	Product Level Elevation (ft rmsl)	Corrected Water Level Elevation (ft (rmsl)
MW-2	9.26	NM	NM	---	NA	---	---	---
MW-3	14.59	NM	NM	---	NA	---	---	---
MW-4	8.98	NM	NM	---	NA	---	---	---
MW-5	9.48	4.04	4.88	0.84	0.87	4.60	5.44	5.33
MW-6A	9.13	5.70	5.88	0.18	0.87	3.25	3.43	3.41
MW-7	10.07	5.06	5.20	0.14	0.87	4.87	5.01	4.99
MW-8*	NS	NM	NM	---	NA	---	---	---
MW-9	9.25	NM	NM	---	0.87	---	---	---
MW-10A	8.22	3.66	4.35	0.69	0.87	3.87	4.56	4.47
MW-11	7.97	NM	NM	---	NA	---	---	---
MW-12	7.04	NM	NM	---	NA	---	---	---
MW-13	6.66	NM	NM	---	NA	---	---	---
MW-14	8.41	NM	NM	---	NA	---	---	---
MW-15	8.54	3.15	3.37	0.22	0.87	5.17	5.39	5.36
MW-16	9.67	4.08	5.47	1.39	0.87	4.20	5.59	5.41
MW-17	5.86	2.61	2.80	0.19	0.87	3.06	3.25	3.23
TP-1	12.22	8.49	9.90	1.41	0.87	2.32	3.73	3.55
TP-6	13.21	NM	NM	---	NA	---	---	---
TP-7	14.48	---	8.02	---	NA	6.46	---	6.46
TP-8	13.58	---	7.30	---	NA	6.28	---	6.28
TP-9	11.88	6.25	6.27	0.02	0.87	5.61	5.63	5.63

NS = Not Surveyed
NA = Not Applicalbe
NM = Not Measured
1 = Specific Gravity Estimated Based on Product Type Analyses
ft rmsl = Feet Relitive to Mean Sea Level

Amtrak Former Fueling Facility
4001 Vandever Avenue
Wilmington, Delaware

Monthly Liquid Level Data Sheet
December 15, 2000

Well ID	Measuring Point Elevation (ft rmsl)	Depth to Product (feet)	Depth to Water (feet)	Apparent Product Thickness (feet)	Estimated Product Specific Gravity [1]	Water Level Elevation (ft rmsl)	Product Level Elevation (ft rmsl)	Corrected Water Level Elevation (ft (rmsl)
ED-A	6.26	---	4.60	---	NA	1.66	---	1.66
ED-B	5.31	---	3.75	---	NA	1.56	---	1.56
ED-C	5.14	---	3.21	---	NA	1.93	---	1.93
ED-D	5.86	---	3.45	---	NA	2.41	---	2.41
WD-A	8.01	---	7.63	---	NA	0.38	---	0.38
WD-B	6.40	4.90	4.91	0.01	0.87	1.49	1.50	1.50
WD-C	6.43	---	2.94	---	NA	3.49	---	3.49
WD-D	NS	5.29	5.31	0.02	NA	---	---	---
WD-E	NS	5.02	5.03	0.01	NA	---	---	---
PZ-1	9.80	6.85	7.83	0.98	0.87	1.97	2.95	2.82
Sump #1	10.94	---	5.34	---	NA	5.60	---	5.60
Sump#2	10.37	---	4.16	---	NA	6.21	---	6.21
SP#1	9.66	---	5.63	---	NA	4.03	---	4.03
SP#2	9.60	5.45	5.48	0.03	0.87	4.12	4.15	4.15
SP#3	9.85	4.08	4.28	0.20	0.87	5.57	5.77	5.74
SP#4	10.72	4.92	5.07	0.15	0.87	5.65	5.80	5.78
SP#5	9.67	3.90	4.00	0.10	0.87	5.67	5.77	5.76
SP#6	9.74	3.97	3.98	0.01	0.87	5.76	5.77	5.77
SP#7	8.75	3.29	3.30	0.01	0.87	5.45	5.46	5.46
SP#8	9.51	4.06	4.07	---	NA	5.44	---	5.44
SP#9	9.82	---	4.38	---	NA	5.44	---	5.44

NS = Not Surveyed
NA = Not Applicalbe
NM = Not Measured
1 = Specific Gravity Estimated Based on Product Type Analyses
ft rmsl = Feet Relitive to Mean Sea Level

Amtrak Former Fueling Facility
4001 Vandever Avenue
Wilmington, Delaware

Monthly Liquid Level Data Sheet
December 15, 2000

Well ID	Measuring Point Elevation (ft rmsl)	Depth to Product (feet)	Depth to Water (feet)	Apparent Product Thickness (feet)	Estimated Product Specific Gravity [1]	Water Level Elevation (ft rmsl)	Product Level Elevation (ft rmsl)	Corrected Water Level Elevation (ft (rmsl)
RW#1	9.70	3.88	3.92	0.04	0.87	5.78	5.82	5.81
RW#2	8.37	---	1.85	---	NA	6.52	---	6.52
RW#3	9.62	5.49	5.55	0.06	0.87	4.07	4.13	4.12
RW#4	8.45	4.69	4.76	0.07	0.87	3.69	3.76	3.75
RW#5	8.63	---	4.20	---	NA	4.43	---	4.43
Pit#1	10.05	---	3.83	---	NA	6.22	---	6.22
Pit#2	8.16	---	3.94	---	NA	4.22	---	4.22
ED#1	10.28	6.86	6.93	0.07	0.87	3.35	3.42	3.41
ED#2	11.77	6.92	6.97	0.05	0.87	4.80	4.85	4.84
ED#3	8.58	---	5.41	---	NA	3.17	---	3.17
ED#4	8.55	---	5.38	---	NA	3.17	---	3.17
ED#5	9.96	---	6.66	---	NA	3.30	---	3.30
ED#6	10.73	7.40	7.41	0.01	0.87	3.32	3.33	3.33
Dam B-N	NA	---	---	---	---	1.6	---	1.6
Dam B-S	NA	---	---	---	---	0.3	---	0.3
Dam C-N	NA	---	---	---	---	2.3	---	2.3
Dam C-S	NA	---	---	---	---	2.0	---	2.0
12th St. Dam-N	NA	---	---	---	---	0.4	---	0.4
12th St. Dam-S	NA	---	---	---	---	-0.6	---	-0.6

NS = Not Surveyed
NA = Not Applicalbe
NM = Not Measured
1 = Specific Gravity Estimated Based on Product Type Analyses
ft rmsl = Feet Relitive to Mean Sea Level

Amtrak Former Fueling Facility
4001 Vandever Avenue
Wilmington, Delaware

Monthly Liquid Level Data Sheet
January 3, 2001

Well ID	Measuring Point Elevation (ft rmsl)	Depth to Product (feet)	Depth to Water (feet)	Apparent Product Thickness (feet)	Estimated Product Specific Gravity [1]	Water Level Elevation (ft rmsl)	Product Level Elevation (ft rmsl)	Corrected Water Level Elevation (ft (rmsl)
MW-2	9.26	---	4.62	---	NA	---	---	---
MW-3	14.59	---	10.19	---	NA	4.40	---	4.40
MW-4	8.98	---	4.55	---	NA	4.43	---	4.43
MW-5	9.48	3.36	5.78	2.42	0.87	3.70	6.12	5.81
MW-6A	9.13	5.56	5.71	0.15	0.87	3.42	3.57	3.55
MW-7	10.07	NM	NM	---	NA	---	---	---
MW-8*	NS	---	4.71	---	NA	---	---	---
MW-8A	8.90	---	4.58	---	NA	4.32	---	4.32
MW-9	9.25	NM	NM	---	NA	---	---	---
MW-10A	8.22	3.25	3.75	0.50	0.87	4.47	4.97	4.91
MW-11	7.97	---	5.54	---	NA	2.43	---	2.43
MW-12	7.04	---	6.40	---	NA	0.64	---	0.64
MW-13	6.66	---	1.22	---	NA	5.44	---	5.44
MW-14	8.41	NM	NM	---	NA	---	---	---
MW-15	8.54	NM	NM	---	NA	---	---	---
MW-16	9.67	3.52	5.24	1.72	0.87	4.43	6.15	5.93
MW-17	5.86	2.44	2.58	0.14	0.87	3.28	3.42	3.40
TP-1	12.22	7.90	9.35	1.45	0.87	2.87	4.32	4.13
TP-6	13.21	---	8.20	---	NA	5.01	---	5.01
TP-7	14.48	---	7.95	---	NA	6.53	---	6.53
TP-8	13.58	---	7.55	---	NA	6.03	---	6.03
TP-9	11.88	5.19	5.20	0.01	0.87	6.68	6.69	6.69

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Amtrak Former Fueling Facility
4001 Vandever Avenue
Wilmington, Delaware

Monthly Liquid Level Data Sheet
January 3, 2001

Well ID	Measuring Point Elevation (ft rmsl)	Depth to Product (feet)	Depth to Water (feet)	Apparent Product Thickness (feet)	Estimated Product Specific Gravity [1]	Water Level Elevation (ft rmsl)	Product Level Elevation (ft rmsl)	Corrected Water Level Elevation (ft (rmsl)
ED-A	6.26	---	4.60	---	NA	1.66	---	1.66
ED-B	5.31	---	3.72	---	NA	1.59	---	1.59
ED-C	5.14	---	3.17	---	NA	1.97	---	1.97
ED-D	5.86	---	3.40	---	NA	2.46	---	2.46
WD-A	8.01	---	7.60	---	NA	0.41	---	0.41
WD-B	6.40	4.86	4.98	0.12	0.87	1.42	1.54	1.52
WD-C	6.43	---	3.02	---	NA	3.41	---	3.41
WD-D	NS	5.26	5.28	0.02	NA	---	---	---
WD-E	NS	4.99	5.01	0.02	NA	---	---	---
PZ-1	9.80	6.51	8.00	3.17	0.87	1.80	4.97	4.56
Sump #1	10.94	4.83	4.84	0.81	0.87	6.10	6.91	6.80
Sump#2	10.37	4.03	4.04	---	NA	6.33	---	6.33
SP#1	9.66	---	5.06	---	NA	4.60	---	4.60
SP#2	9.60	4.91	4.98	0.07	0.87	4.62	4.69	4.68
SP#3	9.85	3.83	3.97	0.14	0.87	5.88	6.02	6.00
SP#4	10.72	4.68	4.80	0.12	0.87	5.92	6.04	6.02
SP#5	9.67	3.63	3.70	0.07	0.87	5.97	6.04	6.03
SP#6	9.74	---	3.70	---	NA	6.04	---	6.04
SP#7	8.75	3.06	3.07	0.01	0.87	5.68	5.69	5.69
SP#8	9.51	3.83	3.84	0.01	0.87	5.67	5.68	5.68
SP#9	9.82	---	4.13	---	NA	5.69	---	5.69
RW#1	9.70	3.63	3.72	0.09	0.87	5.98	6.07	6.06

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Amtrak Former Fueling Facility
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Wilmington, Delaware

Monthly Liquid Level Data Sheet
January 3, 2001

Well ID	Measuring Point Elevation (ft rmsl)	Depth to Product (feet)	Depth to Water (feet)	Apparent Product Thickness (feet)	Estimated Product Specific Gravity [1]	Water Level Elevation (ft rmsl)	Product Level Elevation (ft rmsl)	Corrected Water Level Elevation (ft (rmsl)
RW#2	8.37	3.66	3.68	0.02	0.87	4.69	4.71	4.71
RW#3	9.62	4.96	5.01	0.05	0.87	4.61	4.66	4.65
RW#4	8.45	2.32	2.34	0.02	0.87	6.11	6.13	6.13
RW#5	8.63	---	3.98	---	NA	4.65	---	4.65
Pit#1	10.05	---	3.84	---	NA	6.21	---	6.21
Pit#2	8.16	3.93	4.01	0.08	0.87	4.15	4.23	4.22
ED#1	10.28	6.77	6.85	0.08	0.87	3.43	3.51	3.50
ED#2	11.77	6.65	6.66	0.01	0.87	5.11	5.12	5.12
ED#3	8.58	---	5.34	---	NA	3.24	---	3.24
ED#4	8.55	---	5.25	---	NA	3.30	---	3.30
ED#5	9.96	---	6.50	---	NA	3.46	---	3.46
ED#6	10.73	---	7.28	---	NA	3.45	---	3.45
Dam B-N	NA	---	---	---	---	1.6	---	1.6
Dam B-S	NA	---	---	---	---	0.4	---	0.4
Dam C-N	NA	---	---	---	---	2.1	---	2.1
Dam C-S	NA	---	---	---	---	2.1	---	2.1
12th St. Dam-N	NA	---	---	---	---	0.5	---	0.5
12th St. Dam-S	NA	---	---	---	---	-0.3	---	-0.3

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Amtrak Former Fueling Facility
4001 Vandever Avenue
Wilmington, Delaware

Monthly Liquid Level Data Sheet
February 2, 2001

Well ID	Measuring Point Elevation (ft rmsl)	Depth to Product (feet)	Depth to Water (feet)	Apparent Product Thickness (feet)	Estimated Product Specific Gravity [1]	Water Level Elevation (ft rmsl)	Product Level Elevation (ft rmsl)	Corrected Water Level Elevation (ft (rmsl)
MW-2	9.26	---	3.80	---	NA	---	---	---
MW-3	14.59	---	10.13	---	NA	4.46	---	4.46
MW-4	8.98	---	4.18	---	NA	4.80	---	4.80
MW-5	9.48	2.75	3.95	1.20	0.87	5.53	6.73	6.57
MW-6A	9.13	5.22	5.33	0.11	0.87	3.80	3.91	3.90
MW-7	10.07	3.18	3.32	0.14	0.87	6.75	6.89	6.87
MW-8*	NS	---	4.04	---	NA	---	---	---
MW-8A	8.90	---	3.94	---	NA	4.96	---	4.96
MW-9	9.25	2.41	3.50	1.09	0.87	5.75	6.84	6.70
MW-10A	8.22	2.56	3.20	0.64	0.87	5.02	5.66	5.58
MW-11	7.97	---	5.01	---	NA	2.96	---	2.96
MW-12	7.04	---	5.88	---	NA	1.16	---	1.16
MW-13	6.66	---	0.60	---	NA	6.06	---	6.06
MW-14	8.41	NM	NM	---	NA	---	---	---
MW-15	8.54	2.00	2.02	0.02	0.87	6.52	6.54	6.54
MW-16	9.67	2.72	5.15	2.43	0.87	4.52	6.95	6.63
MW-17	5.86	2.08	2.25	0.17	0.87	3.61	3.78	3.76
TP-1	12.22	7.10	8.25	1.15	0.87	3.97	5.12	4.97
TP-6	13.21	---	6.90	---	NA	6.31	---	6.31
TP-7	14.48	---	7.46	---	NA	7.02	---	7.02
TP-8	13.58	---	6.93	---	NA	6.65	---	6.65
TP-9	11.88	5.40	5.42	0.02	0.87	6.46	6.48	6.48

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Amtrak Former Fueling Facility
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Wilmington, Delaware

Monthly Liquid Level Data Sheet
February 2, 2001

Well ID	Measuring Point Elevation (ft rmsl)	Depth to Product (feet)	Depth to Water (feet)	Apparent Product Thickness (feet)	Estimated Product Specific Gravity [1]	Water Level Elevation (ft rmsl)	Product Level Elevation (ft rmsl)	Corrected Water Level Elevation (ft (rmsl)
ED-A	6.26	---	4.45	---	NA	1.81	---	1.81
ED-B	5.31	---	3.75	---	NA	1.56	---	1.56
ED-C	5.14	---	3.14	---	NA	2.00	---	2.00
ED-D	5.86	---	4.35	---	NA	1.51	---	1.51
WD-A	8.01	---	7.49	---	NA	0.52	---	0.52
WD-B	6.40	4.81	5.02	0.21	0.87	1.38	1.59	1.56
WD-C	6.43	---	3.01	---	NA	3.42	---	3.42
WD-D	NS	5.22	5.27	0.05	NA	---	---	---
WD-E	NS	4.94	4.97	0.03	NA	---	---	---
WD-F	NS	3.62	3.63	0.01	NA	---	---	---
PZ-1	9.80	6.26	7.05	0.79	0.87	2.75	3.54	3.44
Sump #1	10.94	4.27	4.29	0.02	0.87	6.65	6.67	6.67
Sump#2	10.37	---	3.35	---	NA	7.02	---	7.02
SP#1	9.66	---	4.40	---	NA	5.26	---	5.26
SP#2	9.60	4.25	4.29	0.04	0.87	5.31	5.35	5.34
SP#3	9.85	3.16	3.23	0.07	0.87	6.62	6.69	6.68
SP#4	10.72	4.00	4.06	0.06	0.87	6.66	6.72	6.71
SP#5	9.67	2.98	3.03	0.05	0.87	6.64	6.69	6.68
SP#6	9.74	---	2.05	---	NA	7.69	---	7.69
SP#7	8.75	---	2.23	---	NA	6.52	---	6.52
SP#8	9.51	---	2.98	---	NA	6.53	---	6.53
SP#9	9.82	---	3.26	---	NA	6.56	---	6.56

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Amtrak Former Fueling Facility
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Wilmington, Delaware

Monthly Liquid Level Data Sheet
February 2, 2001

Well ID	Measuring Point Elevation (ft rmsl)	Depth to Product (feet)	Depth to Water (feet)	Apparent Product Thickness (feet)	Estimated Product Specific Gravity [1]	Water Level Elevation (ft rmsl)	Product Level Elevation (ft rmsl)	Corrected Water Level Elevation (ft (rmsl)
RW#1	9.70	2.97	3.00	0.03	0.87	6.70	6.73	6.73
RW#2	8.37	---	3.00	---	NA	5.37	---	5.37
RW#3	9.62	4.30	4.35	0.05	0.87	5.27	5.32	5.31
RW#4	8.45	1.62	1.65	0.03	0.87	6.80	6.83	6.83
RW#5	8.63	---	3.10	---	NA	5.53	---	5.53
Pit#1	10.05	---	3.14	---	NA	6.91	---	6.91
Pit#2	8.16	3.05	3.08	0.03	0.87	5.08	5.11	5.11
ED#1	10.28	6.42	6.45	0.03	0.87	3.83	3.86	3.86
ED#2	11.77	---	5.68	---	NA	6.09	---	6.09
ED#3	8.58	---	4.99	---	NA	3.59	---	3.59
ED#4	8.55	---	4.93	---	NA	3.62	---	3.62
ED#5	9.96	---	6.18	---	NA	3.78	---	3.78
ED#6	10.73	---	6.87	---	NA	3.86	---	3.86
Dam B-N	NA	---	---	---	---	1.7	---	1.7
Dam B-S	NA	---	---	---	---	0.8	---	0.8
Dam C-N	NA	---	---	---	---	2.3	---	2.3
Dam C-S	NA	---	---	---	---	2.0	---	2.0
12th St. Dam-N	NA	---	---	---	---	0.9	---	0.9
12th St. Dam-S	NA	---	---	---	---	-0.6	---	-0.6

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Amtrak Former Fueling Facility
4001 Vandever Avenue
Wilmington, Delaware

Monthly Liquid Level Data Sheet
March 22, 2001

Well ID	Measuring Point Elevation (ft rmsl)	Depth to Product (feet)	Depth to Water (feet)	Apparent Product Thickness (feet)	Estimated Product Specific Gravity [1]	Water Level Elevation (ft rmsl)	Product Level Elevation (ft rmsl)	Corrected Water Level Elevation (ft (rmsl)
MW-2	9.26	---	3.73	---	NA	5.53	---	5.53
MW-3	14.59	---	3.75	---	NA	10.84	---	10.84
MW-4	8.98	---	3.75	---	NA	5.23	---	5.23
MW-5	9.48	2.00	2.50	0.50	0.87	6.98	7.48	7.42
MW-6A	9.13	5.00	5.01	0.01	0.87	4.12	4.13	4.13
MW-7	10.07	3.15	3.17	0.02	0.87	6.90	6.92	6.92
MW-8*	NS	---	3.98	---	NA	---	---	---
MW-8A	8.90	---	3.64	---	NA	5.26	---	5.26
MW-9	9.25	1.60	2.33	0.73	0.87	6.92	7.65	7.56
MW-10A	8.22	2.42	3.07	0.65	0.87	5.15	5.80	5.72
MW-11	7.97	---	4.81	---	NA	3.16	---	3.16
MW-12	7.04	---	5.31	---	NA	1.73	---	1.73
MW-13	6.66	---	0.00	---	NA	6.66	---	6.66
MW-14	8.41	---	3.68	---	NA	4.73	---	4.73
MW-15	8.54	---	1.17	---	NA	7.37	---	7.37
MW-16	9.67	1.20	3.45	2.25	0.87	6.22	8.47	8.18
MW-17	5.86	1.83	1.96	0.13	0.87	3.90	4.03	4.01
TP-1	12.22	6.43	7.36	0.93	0.87	4.86	5.79	5.67
TP-6	13.21	---	6.35	---	NA	6.86	---	6.86
TP-7	14.48	---	6.70	---	NA	7.78	---	7.78
TP-8	13.58	---	6.20	---	NA	7.38	---	7.38
TP-9	11.88	---	4.77	---	NA	7.11	---	7.11

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Wilmington, Delaware

Monthly Liquid Level Data Sheet
March 22, 2001

Well ID	Measuring Point Elevation (ft rmsl)	Depth to Product (feet)	Depth to Water (feet)	Apparent Product Thickness (feet)	Estimated Product Specific Gravity [1]	Water Level Elevation (ft rmsl)	Product Level Elevation (ft rmsl)	Corrected Water Level Elevation (ft (rmsl)
ED-A	6.26	---	4.15	---	NA	2.11	---	2.11
ED-B	5.31	NM	NM	---	NA	---	---	---
ED-C	5.14	---	3.08	---	NA	2.06	---	2.06
ED-D	5.86	---	3.40	---	NA	2.46	---	2.46
WD-A	8.01	7.31	7.32	0.01	0.87	0.69	0.70	0.70
WD-B	6.40	4.76	5.09	0.33	0.87	1.31	1.64	1.60
WD-C	6.43	---	3.00	---	NA	3.43	---	3.43
WD-D	NS	5.10	5.13	0.03	0.87	---	---	---
WD-E	NS	4.83	4.87	0.04	0.87	---	---	---
WD-F	NS	3.10	3.11	0.01	0.87	---	---	---
PZ-1	9.80	4.65	4.96	0.31	0.87	4.84	5.15	5.11
Sump #1	10.94	3.34	3.36	0.02	0.87	7.58	7.60	7.60
Sump#2	10.37	2.64	2.65	0.01	0.87	7.72	7.73	7.73
SP#1	9.66	---	3.72	---	NA	5.94	---	5.94
SP#2	9.60	---	3.55	---	NA	6.05	---	6.05
SP#3	9.85	2.22	2.32	0.10	0.87	7.53	7.63	7.62
SP#4	10.72	3.08	3.14	0.06	0.87	7.58	7.64	7.63
SP#5	9.67	2.05	2.10	0.05	0.87	7.57	7.62	7.61
SP#6	9.74	---	2.14	---	NA	7.60	---	7.60
SP#7	8.75	---	1.55	---	NA	7.20	---	7.20
SP#8	9.51	---	2.27	---	NA	7.24	---	7.24
SP#9	9.82	---	2.57	---	NA	7.25	---	7.25

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Wilmington, Delaware

Monthly Liquid Level Data Sheet
March 22, 2001

Well ID	Measuring Point Elevation (ft rmsl)	Depth to Product (feet)	Depth to Water (feet)	Apparent Product Thickness (feet)	Estimated Product Specific Gravity [1]	Water Level Elevation (ft rmsl)	Product Level Elevation (ft rmsl)	Corrected Water Level Elevation (ft (rmsl)
RW#1	9.70	---	2.05	---	NA	7.65	---	7.65
RW#2	8.37	---	2.35	---	NA	6.02	---	6.02
RW#3	9.62	3.60	3.61	0.01	0.87	6.01	6.02	6.02
RW#4	8.45	0.71	0.74	0.03	0.87	7.71	7.74	7.74
RW#5	8.63	---	2.40	---	NA	6.23	---	6.23
Pit#1	10.05	---	2.46	---	NA	7.59	---	7.59
Pit#2	8.16	2.33	2.35	0.02	0.87	5.81	5.83	5.83
ED#1	10.28	6.10	6.11	0.01	0.87	4.17	4.18	4.18
ED#2	11.77	---	5.21	---	NA	6.56	---	6.56
ED#3	8.58	---	4.65	---	NA	3.93	---	3.93
ED#4	8.55	---	4.60	---	NA	3.95	---	3.95
ED#5	9.96	---	5.95	---	NA	4.01	---	4.01
ED#6	10.73	---	6.48	---	NA	4.25	---	4.25
Dam B-N	NA	---	---	---	---	1.9	---	1.9
Dam B-S	NA	---	---	---	---	1.2	---	1.2
Dam C-N	NA	---	---	---	---	2.3	---	2.3
Dam C-S	NA	---	---	---	---	2.1	---	2.1
12th St. Dam-N	NA	---	---	---	---	1.5	---	1.5
12th St. Dam-S	NA	---	---	---	---	1.3	---	1.3

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Amtrak Former Fueling Facility
4001 Vandever Avenue
Wilmington, Delaware

Monthly Liquid Level Data Sheet
April 20, 2001

Well ID	Measuring Point Elevation (ft rmsl)	Depth to Product (feet)	Depth to Water (feet)	Apparent Product Thickness (feet)	Estimated Product Specific Gravity [1]	Water Level Elevation (ft rmsl)	Product Level Elevation (ft rmsl)	Corrected Water Level Elevation (ft (rmsl)
MW-2	9.26	---	3.80	---	NA	---	---	---
MW-3	14.59	---	9.03	---	NA	5.56	---	5.56
MW-4	8.98	---	4.03	---	NA	4.95	---	4.95
MW-5	9.48	2.29	3.13	0.84	0.87	6.35	7.19	7.08
MW-6A	9.13	5.22	5.55	0.33	0.87	3.58	3.91	3.87
MW-7	10.07	3.27	3.94	0.67	0.87	6.13	6.80	6.71
MW-8*	NS	---	4.20	---	NA	---	---	---
MW-8A	8.90	---	4.02	---	NA	4.88	---	4.88
MW-9	9.25	2.44	2.48	0.04	0.87	6.77	6.81	6.80
MW-10A	8.22	2.59	3.59	1.00	0.87	4.63	5.63	5.50
MW-11	7.97	---	5.10	---	NA	2.87	---	2.87
MW-12	7.04	---	6.23	---	NA	0.81	---	0.81
MW-13	6.66	---	0.00	---	NA	6.66	---	6.66
MW-14	8.41	---	4.20	---	NA	4.21	---	4.21
MW-15	8.54	1.93	1.94	0.01	0.87	6.60	6.61	6.61
MW-16	9.67	2.66	4.48	1.82	0.87	5.19	7.01	6.77
MW-17	5.86	2.16	2.25	0.09	0.87	3.61	3.70	3.69
TP-1	12.22	6.71	8.10	1.39	0.87	4.12	5.51	5.33
TP-6	13.21	---	6.82	---	NA	6.39	---	6.39
TP-7	14.48	---	7.39	---	NA	7.09	---	7.09
TP-8	13.58	---	6.62	---	NA	6.96	---	6.96
TP-9	11.88	---	5.34	---	NA	6.54	---	6.54

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Monthly Liquid Level Data Sheet
April 20, 2001

Well ID	Measuring Point Elevation (ft rmsl)	Depth to Product (feet)	Depth to Water (feet)	Apparent Product Thickness (feet)	Estimated Product Specific Gravity [1]	Water Level Elevation (ft rmsl)	Product Level Elevation (ft rmsl)	Corrected Water Level Elevation (ft (rmsl)
ED-A	6.26	---	4.64	---	NA	1.62	---	1.62
ED-B	5.31	---	3.79	---	NA	1.52	---	1.52
ED-C	5.14	---	3.23	---	NA	1.91	---	1.91
ED-D	5.86	---	3.49	---	NA	2.37	---	2.37
WD-A	8.01	7.49	7.54	0.05	0.87	0.47	0.52	0.51
WD-B	6.40	4.82	4.91	0.09	0.87	1.49	1.58	1.57
WD-C	6.43	---	3.03	---	NA	3.40	---	3.40
WD-D	NS	5.20	5.23	0.03	NA	---	---	---
WD-E	NS	4.90	4.93	0.03	NA	---	---	---
WD-F	NS	3.25	3.34	0.09	NA	---	---	---
PZ-1	9.80	5.76	5.80	0.04	0.87	4.00	4.04	4.03
Sump #1	10.94	4.03	4.11	0.08	0.87	6.83	6.91	6.90
Sump#2	10.37	3.24	3.25	0.01	0.87	7.12	7.13	7.13
SP#1	9.66	---	3.79	---	NA	5.87	---	5.87
SP#2	9.60	3.61	3.79	0.18	0.87	5.81	5.99	5.97
SP#3	9.85	2.95	3.08	0.13	0.87	6.77	6.90	6.88
SP#4	10.72	3.79	3.89	0.10	0.87	6.83	6.93	6.92
SP#5	9.67	2.75	2.82	0.07	0.87	6.85	6.92	6.91
SP#6	9.74	---	2.84	---	NA	6.90	---	6.90
SP#7	8.75	---	2.09	---	NA	6.66	---	6.66
SP#8	9.51	---	2.89	---	NA	6.62	---	6.62
SP#9	9.82	---	3.16	---	NA	6.66	---	6.66

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Amtrak Former Fueling Facility
4001 Vandever Avenue
Wilmington, Delaware

Monthly Liquid Level Data Sheet
April 20, 2001

Well ID	Measuring Point Elevation (ft rmsl)	Depth to Product (feet)	Depth to Water (feet)	Apparent Product Thickness (feet)	Estimated Product Specific Gravity [1]	Water Level Elevation (ft rmsl)	Product Level Elevation (ft rmsl)	Corrected Water Level Elevation (ft (rmsl)
RW#1	9.70	2.72	2.79	0.07	0.87	6.91	6.98	6.97
RW#2	8.37	2.89	2.91	0.02	0.87	5.46	5.48	5.48
RW#3	9.62	3.64	3.72	0.08	0.87	5.90	5.98	5.97
RW#4	8.45	1.59	1.62	0.03	0.87	6.83	6.86	6.86
RW#5	8.63	---	2.96	---	NA	5.67	---	5.67
Pit#1	10.05	---	2.83	---	NA	7.22	---	7.22
Pit#2	8.16	2.69	2.72	0.03	0.87	5.44	5.47	5.47
ED#1	10.28	6.43	6.46	0.03	0.87	3.82	3.85	3.85
ED#2	11.77	5.59	5.60	0.01	0.87	6.17	6.18	6.18
ED#3	8.58	---	5.03	---	NA	3.55	---	3.55
ED#4	8.55	---	5.00	---	NA	3.55	---	3.55
ED#5	9.96	---	6.19	---	NA	3.77	---	3.77
ED#6	10.73	6.94	6.95	0.01	0.87	3.78	3.79	3.79
Dam B-N	NA	---	---	---	---	1.5	---	1.5
Dam B-S	NA	---	---	---	---	0.2	---	0.2
Dam C-N	NA	---	---	---	---	2.3	---	2.3
Dam C-S	NA	---	---	---	---	2.0	---	2.0
12th St. Dam-N	NA	---	---	---	---	-0.3	---	-0.3
12th St. Dam-S	NA	---	---	---	---	-0.7	---	-0.7

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Wilmington, Delaware

Monthly Liquid Level Data Sheet
May 18, 2001

Well ID	Measuring Point Elevation (ft rmsl)	Depth to Product (feet)	Depth to Water (feet)	Apparent Product Thickness (feet)	Estimated Product Specific Gravity [1]	Water Level Elevation (ft rmsl)	Product Level Elevation (ft rmsl)	Corrected Water Level Elevation (ft (rmsl)
MW-2	9.26	---	4.64	---	NA	---	---	---
MW-3	14.59	---	10.17	---	NA	4.42	---	4.42
MW-4	8.98	---	4.73	---	NA	4.25	---	4.25
MW-5	9.48	3.35	5.36	2.01	0.87	4.12	6.13	5.87
MW-6A	9.13	5.88	6.15	0.27	0.87	2.98	3.25	3.21
MW-7	10.07	4.30	4.32	0.02	0.87	5.75	5.77	5.77
MW-8*	NS	---	4.78	---	NA	---	---	---
MW-8A	8.90	---	4.60	---	NA	4.30	---	4.30
MW-9	9.25	3.00	4.60	1.60	0.87	4.65	6.25	6.04
MW-10A	8.22	3.27	4.52	1.25	0.87	3.70	4.95	4.79
MW-11	7.97	---	6.18	---	NA	1.79	---	1.79
MW-12	7.04	---	6.53	---	NA	0.51	---	0.51
MW-13	6.66	---	1.20	---	NA	5.46	---	5.46
MW-14	8.41	---	5.12	---	NA	3.29	---	3.29
MW-15	8.54	2.84	3.15	0.31	0.87	5.39	5.70	5.66
MW-16	9.67	3.40	5.12	1.72	0.87	4.55	6.27	6.05
MW-17	5.86	2.75	2.89	0.14	0.87	2.97	3.11	3.09
TP-1	12.22	7.66	8.75	1.09	0.87	3.47	4.56	4.42
TP-6	13.21	---	8.16	---	NA	5.05	---	5.05
TP-7	14.48	---	7.92	---	NA	6.56	---	6.56
TP-8	13.58	---	7.57	---	NA	6.01	---	6.01
TP-9	11.88	6.22	6.42	0.20	0.87	5.46	5.66	5.63

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Wilmington, Delaware

Monthly Liquid Level Data Sheet
May 18, 2001

Well ID	Measuring Point Elevation (ft rmsl)	Depth to Product (feet)	Depth to Water (feet)	Apparent Product Thickness (feet)	Estimated Product Specific Gravity [1]	Water Level Elevation (ft rmsl)	Product Level Elevation (ft rmsl)	Corrected Water Level Elevation (ft (rmsl)
ED-A	6.26	---	4.69	---	NA	1.57	---	1.57
ED-B	5.31	---	3.84	---	NA	1.47	---	1.47
ED-C	5.14	---	3.32	---	NA	1.82	---	1.82
ED-D	5.86	---	3.85	---	NA	2.01	---	2.01
WD-A	8.01	7.67	7.68	0.01	0.87	0.33	0.34	0.34
WD-B	6.40	4.88	5.16	0.28	0.87	1.24	1.52	1.48
WD-C	6.43	---	3.10	---	NA	3.33	---	3.33
WD-D	NS	5.33	5.37	0.04	NA	---	---	---
WD-E	NS	5.06	5.10	0.04	NA	---	---	---
WD-F	NS	3.46	3.60	0.14	NA	---	---	---
PZ-1	9.80	6.68	6.71	0.03	0.87	3.09	3.12	3.12
Sump #1	10.94	4.78	4.96	0.18	0.87	5.98	6.16	6.14
Sump#2	10.37	4.01	4.14	0.13	0.87	6.23	6.36	6.34
SP#1	9.66	---	4.82	---	NA	4.84	---	4.84
SP#2	9.60	4.70	4.82	0.12	0.87	4.78	4.90	4.88
SP#3	9.85	3.75	3.90	0.15	0.87	5.95	6.10	6.08
SP#4	10.72	4.58	4.72	0.14	0.87	6.00	6.14	6.12
SP#5	9.67	3.56	3.68	0.12	0.87	5.99	6.11	6.09
SP#6	9.74	3.60	3.61	0.01	0.87	6.13	6.14	6.14
SP#7	8.75	3.05	3.09	0.04	0.87	5.66	5.70	5.69
SP#8	9.51	3.83	3.87	0.04	0.87	5.64	5.68	5.67
SP#9	9.82	---	4.20	---	NA	5.62	---	5.62

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Monthly Liquid Level Data Sheet
May 18, 2001

Well ID	Measuring Point Elevation (ft rmsl)	Depth to Product (feet)	Depth to Water (feet)	Apparent Product Thickness (feet)	Estimated Product Specific Gravity [1]	Water Level Elevation (ft rmsl)	Product Level Elevation (ft rmsl)	Corrected Water Level Elevation (ft (rmsl)
RW#1	9.70	3.55	3.62	0.07	0.87	6.08	6.15	6.14
RW#2	8.37	3.67	3.68	0.01	0.87	4.69	4.70	4.70
RW#3	9.62	4.72	4.74	0.02	0.87	4.88	4.90	4.90
RW#4	8.45	2.37	2.40	0.03	0.87	6.05	6.08	6.08
RW#5	8.63	---	3.96	---	NA	4.67	---	4.67
Pit#1	10.05	---	3.53	---	NA	6.52	---	6.52
Pit#2	8.16	3.66	3.78	0.12	0.87	4.38	4.50	4.48
ED#1	10.28	7.12	7.25	0.13	0.87	3.03	3.16	3.14
ED#2	11.77	---	6.70	---	NA	5.07	---	5.07
ED#3	8.58	---	5.61	---	NA	2.97	---	2.97
ED#4	8.55	---	5.58	---	NA	2.97	---	2.97
ED#5	9.96	---	6.84	---	NA	3.12	---	3.12
ED#6	10.73	7.64	7.65	0.01	0.87	3.08	3.09	3.09
Dam B-N	NA	---		---	---	---	---	---
Dam B-S	NA	---		---	---	---	---	---
Dam C-N	NA	---		---	---	2.3	---	2.30
Dam C-S	NA	---		---	---	2.0	---	2.00
12th St. Dam-N	NA	---		---	---	---	---	---
12th St. Dam-S	NA	---		---	---	---	---	---

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Amtrak Former Fueling Facility
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Wilmington, Delaware

Monthly Liquid Level Data Sheet
June 21, 2001

Well ID	Measuring Point Elevation (ft rmsl)	Depth to Product (feet)	Depth to Water (feet)	Apparent Product Thickness (feet)	Estimated Product Specific Gravity [1]	Water Level Elevation (ft rmsl)	Product Level Elevation (ft rmsl)	Corrected Water Level Elevation (ft (rmsl)
MW-2	9.26	---	NM	---	NA	---	---	---
MW-3	14.59	---	3.53	---	NA	11.06	---	11.06
MW-4	8.98	---	3.90	---	NA	5.08	---	5.08
MW-5	9.48	1.92	3.60	1.68	0.87	5.88	7.56	7.34
MW-6A	9.13	4.63	4.84	0.21	0.87	4.29	4.50	4.47
MW-7	10.07	3.10	3.24	0.14	0.87	6.83	6.97	6.95
MW-8*	NS	---	3.87	---	NA	---	---	---
MW-8A	8.90	---	3.58	---	NA	5.32	---	5.32
MW-9	9.25	1.85	2.72	0.87	0.87	6.53	7.40	7.29
MW-10A	8.22	1.55	2.00	0.45	0.87	6.22	6.67	6.61
MW-11	7.97	---	4.35	---	NA	3.62	---	3.62
MW-12	7.04	---	5.02	---	NA	2.02	---	2.02
MW-13	6.66	---	0.00	---	NA	6.66	---	6.66
MW-14	8.41	---	3.80	---	NA	4.61	---	4.61
MW-15	8.54	1.68	1.70	0.02	0.87	6.84	6.86	6.86
MW-16	9.67	2.07	3.80	1.73	0.87	5.87	7.60	7.38
MW-17	5.86	---	1.62	---	NA	4.24	---	4.24
TP-1	12.22	6.36	7.15	0.79	0.87	5.07	5.86	5.76
TP-6	13.21	---	6.75	---	NA	6.46	---	6.46
TP-7	14.48	---	6.87	---	NA	7.61	---	7.61
TP-8	13.58	---	6.48	---	NA	7.10	---	7.10
TP-9	11.88	4.96	4.97	0.01	0.87	6.91	6.92	6.92

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Wilmington, Delaware

Monthly Liquid Level Data Sheet
June 21, 2001

Well ID	Measuring Point Elevation (ft rmsl)	Depth to Product (feet)	Depth to Water (feet)	Apparent Product Thickness (feet)	Estimated Product Specific Gravity [1]	Water Level Elevation (ft rmsl)	Product Level Elevation (ft rmsl)	Corrected Water Level Elevation (ft (rmsl)
ED-A	6.26	---	4.02	---	NA	2.24	---	2.24
ED-B	5.31	---	0.00	---	NA	5.31	---	5.31
ED-C	5.14	---	3.15	---	NA	1.99	---	1.99
ED-D	5.86	---	3.43	---	NA	2.43	---	2.43
WD-A	8.01	7.30	7.31	0.01	0.87	0.70	0.71	0.71
WD-B	6.40	4.72	4.87	0.15	0.87	1.53	1.68	1.66
WD-C	6.43	---	3.03	---	NA	3.40	---	3.40
WD-D	NS	4.99	5.04	0.05	NA	---	---	---
WD-E	NS	4.71	4.75	0.04	NA	---	---	---
WD-F	NS	3.94	3.98	0.04	NA	---	---	---
PZ-1	9.80	5.30	5.33	0.03	0.87	4.47	4.50	4.50
Sump #1	10.94	3.60	3.63	0.03	0.87	7.31	7.34	7.34
Sump#2	10.37	2.82	2.84	0.02	0.87	7.53	7.55	7.55
SP#1	9.66	---	3.06	---	NA	6.60	---	6.60
SP#2	9.60	2.88	2.94	0.06	0.87	6.66	6.72	6.71
SP#3	9.85	2.51	2.54	0.03	0.87	7.31	7.34	7.34
SP#4	10.72	3.33	3.40	0.07	0.87	7.32	7.39	7.38
SP#5	9.67	2.32	2.35	0.03	0.87	7.32	7.35	7.35
SP#6	9.74	---	2.37	---	NA	7.37	---	7.37
SP#7	8.75	---	1.67	---	NA	7.08	---	7.08
SP#8	9.51	---	2.45	---	NA	7.06	---	7.06
SP#9	9.82	---	2.75	---	NA	7.07	---	7.07

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June 21, 2001

Well ID	Measuring Point Elevation (ft rmsl)	Depth to Product (feet)	Depth to Water (feet)	Apparent Product Thickness (feet)	Estimated Product Specific Gravity [1]	Water Level Elevation (ft rmsl)	Product Level Elevation (ft rmsl)	Corrected Water Level Elevation (ft (rmsl)
RW#1	9.70	2.30	2.31	0.01	0.87	7.39	7.40	7.40
RW#2	8.37	---	2.48	---	NA	5.89	---	5.89
RW#3	9.62	2.95	2.96	0.01	0.87	6.66	6.67	6.67
RW#4	8.45	1.10	1.17	0.07	0.87	7.28	7.35	7.34
RW#5	8.63	---	2.55	---	NA	6.08	---	6.08
Pit#1	10.05	---	2.40	---	NA	7.65	---	7.65
Pit#2	8.16	2.28	2.29	0.01	0.87	5.87	5.88	5.88
ED#1	10.28	5.93	5.95	0.02	0.87	4.33	4.35	4.35
ED#2	11.77	---	5.25	---	NA	6.52	---	6.52
ED#3	8.58	---	4.50	---	NA	4.08	---	4.08
ED#4	8.55	---	4.50	---	NA	4.05	---	4.05
ED#5	9.96	---	5.60	---	NA	4.36	---	4.36
ED#6	10.73	---	6.30	---	NA	4.43	---	4.43
Dam B-N	NA	---	---	---	---	---	---	---
Dam B-S	NA	---	---	---	---	---	---	---
Dam C-N	NA	---	---	---	---	2.3	---	2.30
Dam C-S	NA	---	---	---	---	2.0	---	2.00
12th St. Dam-N	NA	---	---	---	---	---	---	---
12th St. Dam-S	NA	---	---	---	---	---	---	---

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Monthly Liquid Levels Data Sheet
July 3, 2001

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MW-2	9.26	---	4.09	---	---	5.17	---	5.17
MW-3	14.59	---	10.04	---	---	4.55	---	4.55
MW-4	8.98	---	4.28	---	---	4.70	---	4.70
MW-5	9.48	2.60	4.26	1.66	0.87	5.22	6.88	6.66
MW-6A	9.13	5.14	5.41	0.27	0.87	3.72	3.99	3.95
MW-7	10.07	3.48	4.00	0.52	0.87	6.07	6.59	6.52
MW-8*	NS	---	4.44	---	---	---	---	---
MW-8A	8.90	---	4.15	---	---	4.75	---	4.75
MW-9	9.25	2.55	4.05	1.50	0.87	5.20	6.70	6.51
MW-10A	8.22	2.75	3.50	0.75	0.87	4.72	5.47	5.37
MW-11	7.97	---	5.36	---	---	2.61	---	2.61
MW-12	7.04	---	6.22	---	---	0.82	---	0.82
MW-13	6.66	---	0.63	---	---	6.03	---	6.03
MW-14	8.41	---	4.88	---	---	3.53	---	3.53
MW-15	8.54	3.28	3.29	0.01	0.87	5.25	5.26	5.26
MW-16	9.67	2.92	5.05	2.13	0.87	4.62	6.75	6.47
MW-17	5.86	2.12	2.13	0.01	0.87	3.73	3.74	3.74
TP-1	12.22	7.03	7.87	0.84	0.87	4.35	5.19	5.08
TP-6	13.21	---	7.30	---	---	5.91	---	5.91
TP-7	14.48	---	7.55	---	---	6.93	---	6.93
TP-8	13.58	---	7.13	---	---	6.45	---	6.45
TP-9	11.88	5.60	5.62	0.02	0.87	6.26	6.28	6.28
ED-A	6.26	---	4.64	---	---	1.62	---	1.62

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Monthly Liquid Levels Data Sheet
July 3, 2001

Well ID	Measuring Point Elevation (ft rmsl)	Depth to Product (feet)	Depth to Water (feet)	Apparent Product Thickness (feet)	Estimated Product Specific Gravity [1]	Water Level Elevation (ft rmsl)	Product Level Elevation (ft rmsl)	Corrected Water Level Elevation (ft (rmsl)
ED-B	5.31	---	3.82	---	---	1.49	---	1.49
ED-C	5.14	---	3.26	---	---	1.88	---	1.88
ED-D	5.86	---	3.85	---	---	2.01	---	2.01
ED-E	NS	---	2.99	---	---	---	---	---
ED-F	NS	---	3.25	---	---	---	---	---
ED-G	NS	---	3.14	---	---	---	---	---
WD-A	8.01	7.57	7.60	0.03	0.87	0.41	0.44	0.44
WD-B	6.40	4.83	4.91	0.08	0.87	1.49	1.57	1.56
WD-C	6.43	---	3.13	---	---	3.30		3.30
WD-D	NS	5.20	5.25	0.05	0.87	---	---	---
WD-E	NS	4.93	4.97	0.04	0.87	---	---	---
WD-F	NS	---	3.24	---	---	---	---	---
PZ-1	9.80	6.03	6.05	0.02	0.87	3.75	3.77	3.77
Sump #1	10.94	4.35	4.41	0.06	0.87	6.53	6.59	6.58
Sump#2	10.37	3.53	3.60	0.07	0.87	6.77	6.84	6.83
SP#1	9.66	---	3.99	---	---	5.67	---	5.67
SP#2	9.60	3.80	3.86	0.06	0.87	5.74	5.80	5.79
SP#3	9.85	3.25	3.35	0.10	0.87	6.50	6.60	6.59
SP#4	10.72	4.08	4.15	0.07	0.87	6.57	6.64	6.63
SP#5	9.67	3.06	3.16	0.10	0.87	6.51	6.61	6.60
SP#6	9.74	3.10	3.16	0.06	0.87	6.58	6.64	6.63
SP#7	8.75	---	2.42	---	---	6.33	---	6.33
SP#8	9.51	---	3.21	---	---	6.30	---	6.30
SP#9	9.82	---	3.52	---	---	6.30	---	6.30

NS = Not Surveyed
NA = Not Applicable
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1 = Specific Gravity Estimated Based on Product Type Analyses
ft rmsl = Feet Relitive to Mean Sea Level

Amtrak Former Fueling Facility
4001 Vanderver Avenue
Wilmington, Delaware

Monthly Liquid Levels Data Sheet
July 3, 2001

Well ID	Measuring Point Elevation (ft rmsl)	Depth to Product (feet)	Depth to Water (feet)	Apparent Product Thickness (feet)	Estimated Product Specific Gravity [1]	Water Level Elevation (ft rmsl)	Product Level Elevation (ft rmsl)	Corrected Water Level Elevation (ft (rmsl)
RW#1	9.70	3.05	3.07	0.02	0.87	6.63	6.65	6.65
RW#2	8.37	3.20	3.21	0.01	0.87	5.16	5.17	5.17
RW#3	9.62	3.87	3.88	0.01	0.87	5.74	5.75	5.75
RW#4	8.45	1.87	1.90	0.03	0.87	6.55	6.58	6.58
RW#5	8.63	---	3.33	---	---	5.30	---	5.30
Pit#1	10.05	---	2.98	---	---	7.07	---	7.07
Pit#2	8.16	2.86	2.88	0.02	0.87	5.28	5.30	5.30
ED#1	10.28	6.31	6.34	0.03	0.87	3.94	3.97	3.97
ED#2	11.77	6.01	6.02	0.01	0.87	5.75	5.76	5.76
ED#3	8.58	---	4.99	---	---	3.59	---	3.59
ED#4	8.55	---	4.97	---	---	3.58	---	3.58
ED#5	9.96	---	6.12	---	---	3.84	---	3.84
ED#6	10.73	---	6.91	---	---	3.82	---	3.82
Dam B-N	NA	---	1.60	---	---	1.60	---	1.60
Dam B-S	NA	---	0.20	---	---	0.20	---	0.20
Dam C-N	NA	---	2.10	---	---	2.10	---	2.10
Dam C-S	NA	---	1.90	---	---	1.90	---	1.90
12th St. Dam-N	NA	---	0.30	---	---	0.30	---	0.30
12th St. Dam-S	NA	---	-1.20	---	---	-1.20	---	-1.20

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Amtrak Former Fueling Facility
4001 Vandever Avenue
Wilmington, Delaware

Monthly Liquid Level Data Sheet
August 2, 2001

Well ID	Measuring Point Elevation (ft rmsl)	Depth to Product (feet)	Depth to Water (feet)	Apparent Product Thickness (feet)	Estimated Product Specific Gravity [1]	Water Level Elevation (ft rmsl)	Product Level Elevation (ft rmsl)	Corrected Water Level Elevation (ft (rmsl)
MW-2	9.26	---	4.64	---	NA	4.62	---	4.62
MW-3	14.59	---	10.25	---	NA	4.34	---	4.34
MW-4	8.98	---	4.61	---	NA	4.37	---	4.37
MW-5	9.48	4.00	4.90	0.90	0.87	4.58	5.48	5.36
MW-6A	9.13	5.74	5.99	0.25	0.87	3.14	3.39	3.36
MW-7	10.07	4.57	5.44	0.87	0.87	4.63	5.50	5.39
MW-8*	NS	---	4.75	---	NA	---	---	---
MW-8A	8.90	---	4.61	---	NA	4.29	---	4.29
MW-9	9.25	3.66	6.90	3.24	0.87	2.35	5.59	5.17
MW-10A	8.22	3.69	4.78	1.09	0.87	3.44	4.53	4.39
MW-11	7.97	---	6.29	---	NA	1.68	---	1.68
MW-12	7.04	---	6.63	---	NA	0.41	---	0.41
MW-13	6.66	---	1.24	---	NA	5.42	---	5.42
MW-14	8.41	---	5.21	---	NA	3.20	---	3.20
MW-15	8.54	2.89	3.65	0.76	0.87	4.89	5.65	5.55
MW-16	9.67	4.13	5.83	1.70	0.87	3.84	5.54	5.32
MW-17	5.86	2.61	2.67	0.06	0.87	3.19	3.25	3.24
TP-1	12.22	7.86	9.33	1.47	0.87	2.89	4.36	4.17
TP-6	13.21	---	8.34	---	NA	4.87	---	4.87
TP-7	14.48	---	8.56	---	NA	5.92	---	5.92
TP-8	13.58	---	7.65	---	NA	5.93	---	5.93
TP-9	11.88	6.18	6.52	0.34	0.87	5.36	5.70	5.66

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ft rmsl = Feet Relitive to Mean Sea Level

Amtrak Former Fueling Facility
4001 Vandever Avenue
Wilmington, Delaware

Monthly Liquid Level Data Sheet
August 2, 2001

Well ID	Measuring Point Elevation (ft rmsl)	Depth to Product (feet)	Depth to Water (feet)	Apparent Product Thickness (feet)	Estimated Product Specific Gravity [1]	Water Level Elevation (ft rmsl)	Product Level Elevation (ft rmsl)	Corrected Water Level Elevation (ft (rmsl)
ED-A	6.26	---	4.76	---	NA	1.50	---	1.50
ED-B	5.31	---	3.90	---	NA	1.41	---	1.41
ED-C	5.14	---	3.34	---	NA	1.80	---	1.80
ED-D	5.86	---	2.24	---	NA	3.62	---	3.62
ED-E	NS	---	3.22	---	NA	---	---	---
ED-F	NS	---	3.35	---	NA	---	---	---
ED-G	NS	---	3.65	---	NA	---	---	---
WD-A	8.01	7.65	7.68	0.03	0.87	0.33	0.36	0.36
WD-B	6.40	Not Gauged, Xitech						
WD-C	6.43	---	3.08	---	NA	3.35	---	3.35
WD-D	NS	5.23	5.30	0.07	0.87	---	---	---
WD-E	NS	4.97	5.05	0.08	0.87	---	---	---
WD-F	NS	3.31	3.50	0.19	0.87	---	---	---
PZ-1	9.80	6.73	7.24	0.51	0.87	2.56	3.07	3.00
Sump #1	10.94	5.45	5.61	0.16	0.87	5.33	5.49	5.47
Sump#2	10.37	4.18	4.39	0.21	0.87	5.98	6.19	6.16
SP#1	9.66	---	4.89	---	NA	4.77	---	4.77
SP#2	9.60	4.70	4.84	0.14	0.87	4.76	4.90	4.88
SP#3	9.85	4.78	4.88	0.10	0.87	4.97	5.07	5.06
SP#4	10.72	5.61	5.73	0.12	0.87	4.99	5.11	5.09
SP#5	9.67	4.63	4.71	0.08	0.87	4.96	5.04	5.03
SP#6	9.74	4.09	4.26	0.17	0.87	5.48	5.65	5.63

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ft rmsl = Feet Relitive to Mean Sea Level

Amtrak Former Fueling Facility
4001 Vandever Avenue
Wilmington, Delaware

Monthly Liquid Level Data Sheet
August 2, 2001

Well ID	Measuring Point Elevation (ft rmsl)	Depth to Product (feet)	Depth to Water (feet)	Apparent Product Thickness (feet)	Estimated Product Specific Gravity [1]	Water Level Elevation (ft rmsl)	Product Level Elevation (ft rmsl)	Corrected Water Level Elevation (ft (rmsl)
SP#7	8.75	3.19	3.26	0.07	0.87	5.49	5.56	5.55
SP#8	9.51	3.99	4.06	0.07	0.87	5.45	5.52	5.51
SP#9	9.82	4.32	4.52	0.20	0.87	5.30	5.50	5.47
RW#1	9.70	4.65	4.67	0.02	0.87	5.03	5.05	5.05
RW#2	8.37	3.79	3.97	0.18	0.87	4.40	4.58	4.56
RW#3	9.62	4.80	4.82	0.02	0.87	4.80	4.82	4.82
RW#4	8.45	3.42	3.58	0.16	0.87	4.87	5.03	5.01
RW#5	8.63	4.08	4.24	0.16	0.87	4.39	4.55	4.53
Pit#1	10.05	---	3.93	---	NA	6.12	---	6.12
Pit#2	8.16	3.96	4.04	0.08	0.87	4.12	4.20	4.19
ED#1	10.28	6.95	7.05	0.10	0.87	3.23	3.33	3.32
ED#2	11.77	7.10	7.15	0.05	0.87	4.62	4.67	4.66
ED#3	8.58	---	5.50	---	NA	3.08	---	3.08
ED#4	8.55	---	5.47	---	NA	3.08	---	3.08
ED#5	9.96	---	6.70	---	NA	3.26	---	3.26
ED#6	10.73	7.47	7.57	0.10	0.87	3.16	3.26	3.25
Dam B-N	NA	---	---	---	---	1.50	---	1.50
Dam B-S	NA	---	---	---	---	0.30	---	0.30
Dam C-N	NA	---	---	---	---	2.2	---	2.20
Dam C-S	NA	---	---	---	---	1.9	---	1.90
12th St. Dam-N	NA	---	---	---	---	0.50	---	0.50
12th St. Dam-S	NA	---	---	---	---	0.40	---	0.40

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ft rmsl = Feet Relitive to Mean Sea Level

Amtrak Former Fueling Facility
4001 Vandever Avenue
Wilmington, Delaware

Monthly Liquid Level Data Sheet
September 25, 2001

Well ID	Measuring Point Elevation (ft rmsl)	Depth to Product (feet)	Depth to Water (feet)	Apparent Product Thickness (feet)	Estimated Product Specific Gravity [1]	Water Level Elevation (ft rmsl)	Product Level Elevation (ft rmsl)	Corrected Water Level Elevation (ft (rmsl)
MW-2	9.26	---	4.79	---	NA	4.47	---	4.47
MW-3	14.59	---	10.01	---	NA	4.58	---	4.58
MW-4	8.98	---	4.84	---	NA	4.14	---	4.14
MW-5	9.48	4.23	4.45	0.22	0.87	5.03	5.25	5.22
MW-6A	9.13	5.90	6.38	0.48	0.87	2.75	3.23	3.17
MW-7	10.07	6.05	7.24	1.19	0.87	2.83	4.02	3.87
MW-8*	NS	---	4.97	---	NA	---	---	---
MW-8A	8.90	---	4.87	---	NA	4.03	---	4.03
MW-9	9.25	3.60	7.71	4.11	0.87	1.54	5.65	5.12
MW-10A	8.22	3.95	4.85	0.90	0.87	3.37	4.27	4.15
MW-11	7.97	---	6.31	---	NA	1.66	---	1.66
MW-12	7.04	---	6.58	---	NA	0.46	---	0.46
MW-13	6.66	---	1.35	---	NA	5.31	---	5.31
MW-14	8.41	---	5.28	---	NA	3.13	---	3.13
MW-15	8.54	3.08	3.83	0.75	0.87	4.71	5.46	5.36
MW-16	9.67	4.62	6.51	1.89	0.87	3.16	5.05	4.80
MW-17	5.86	2.80	3.00	0.20	0.87	2.86	3.06	3.03
TP-1	12.22	5.59	6.68	1.09	0.87	5.54	6.63	6.49
TP-6	13.21	---	7.92	---	NA	5.29	---	5.29
TP-7	14.48	---	8.89	---	NA	5.59	---	5.59

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Amtrak Former Fueling Facility
4001 Vandever Avenue
Wilmington, Delaware

Monthly Liquid Level Data Sheet
September 25, 2001

Well ID	Measuring Point Elevation (ft rmsl)	Depth to Product (feet)	Depth to Water (feet)	Apparent Product Thickness (feet)	Estimated Product Specific Gravity [1]	Water Level Elevation (ft rmsl)	Product Level Elevation (ft rmsl)	Corrected Water Level Elevation (ft (rmsl)
TP-8	13.58	---	5.68	---	NA	7.90	---	7.90
TP-9	11.88	6.09	6.19	0.10	0.87	5.69	5.79	5.78
ED-A	6.26	---	4.66	---	NA	1.60	---	1.60
ED-B	5.31	---	3.83	---	NA	1.48	---	1.48
ED-C	5.14	---	3.20	---	NA	1.94	---	1.94
ED-D	5.86	---	3.50	---	NA	2.36	---	2.36
ED-E	NS	---	3.02	---	NA	---	---	---
ED-F	NS	---	3.26	---	NA	---	---	---
ED-G	NS	---	3.11	---	NA	---	---	---
WD-A	8.01	7.60	7.64	0.04	0.87	0.37	0.41	0.40
WD-B	6.40	Not Gauged, Xitech						
WD-C	6.43	---	3.02	---	NA	3.41	---	3.41
WD-D	NS	5.22	5.26	0.04	0.87	---	---	---
WD-E	NS	4.95	5.03	0.08	0.87	---	---	---
WD-F	NS	3.36	3.48	0.12	0.87	---	---	---
PZ-1	9.80	6.31	7.18	0.87	0.87	2.62	3.49	3.38
Sump #1	10.94	6.92	7.04	0.12	0.87	3.90	4.02	4.00
Sump#2	10.37	4.95	5.15	0.20	0.87	5.22	5.42	5.39
SP#1	9.66	6.80	6.84	0.04	NA	2.82	---	2.82
SP#2	9.60	6.68	6.76	0.08	0.87	2.84	2.92	2.91
SP#3	Abandoned							

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Amtrak Former Fueling Facility
4001 Vandever Avenue
Wilmington, Delaware

Monthly Liquid Level Data Sheet
September 25, 2001

Well ID	Measuring Point Elevation (ft rmsl)	Depth to Product (feet)	Depth to Water (feet)	Apparent Product Thickness (feet)	Estimated Product Specific Gravity [1]	Water Level Elevation (ft rmsl)	Product Level Elevation (ft rmsl)	Corrected Water Level Elevation (ft (rmsl)
SP#4	10.72	6.26	6.41	0.15	0.87	4.31	4.46	4.44
SP#5	9.67	5.17	5.26	0.09	0.87	4.41	4.50	4.49
SP#6	9.74	3.88	4.00	0.12	0.87	5.74	5.86	5.84
SP#7	8.75	3.31	3.38	0.07	0.87	5.37	5.44	5.43
SP#8	9.51	4.06	4.21	0.15	0.87	5.30	5.45	5.43
SP#9	9.82	4.41	4.58	0.17	0.87	5.24	5.41	5.39
RW#1	9.70	5.27	5.28	0.01	0.87	4.42	4.43	4.43
RW#2	8.37	4.14	4.45	0.31	0.87	3.92	4.23	4.19
RW#3	9.62	6.73	6.74	0.01	0.87	2.88	2.89	2.89
RW#4	8.45	3.81	3.86	0.05	0.87	4.59	4.64	4.63
RW#5	8.63	4.24	4.41	0.17	0.87	4.22	4.39	4.37
Pit#1	10.05	---	3.76	---	NA	3.76	---	3.76
Pit#2	8.16	---	3.91	---	0.87	3.91	---	3.91
ED#1	10.28	7.10	7.21	0.11	0.87	3.07	3.18	3.17
ED#2	11.77	7.24	7.28	0.04	0.87	4.49	4.53	4.52
ED#3	8.58	---	5.55	---	NA	3.03	---	3.03
ED#4	8.55	---	5.53	---	NA	3.02	---	3.02
ED#5	9.96	---	6.89	---	NA	3.07	---	3.07
ED#6	10.73	7.65	7.77	0.12	0.87	2.96	3.08	3.06
Dam B-N	NA	---	---	---	---	1.60	---	1.60
Dam B-S	NA	---	---	---	---	0.90	---	0.90

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Amtrak Former Fueling Facility
4001 Vandever Avenue
Wilmington, Delaware

Monthly Liquid Level Data Sheet
September 25, 2001

Well ID	Measuring Point Elevation (ft rmsl)	Depth to Product (feet)	Depth to Water (feet)	Apparent Product Thickness (feet)	Estimated Product Specific Gravity [1]	Water Level Elevation (ft rmsl)	Product Level Elevation (ft rmsl)	Corrected Water Level Elevation (ft (rmsl)
Dam C-N	Not gaged during dam construction work							
Dam C-S								
12th St. Dam-N								
12th St. Dam-S								

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NA = Not Applicable
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Appendix F

Groundwater Monitoring Analytical Data

Appendix F.1

April 19, 2001 Analytical Data

Lancaster Laboratories
Where quality is a science.

ANALYTICAL RESULTS

Prepared for:

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 759685. Samples arrived at the laboratory on Friday, April 20, 2001. The PO# for this group is 170347.

Client Description	Lancaster Labs Number
MW-2 Grab Groundwater Sample	3596174
MW-13 Grab Groundwater Sample	3596175
MW-4 Grab Groundwater Sample	3596176
MW-8 Grab Groundwater Sample	3596177
MW-11 Grab Groundwater Sample	3596178
MW-12 Grab Groundwater Sample	3596179
MW-3 Grab Groundwater Sample	3596180
MW-14 Grab Groundwater Sample	3596181
MW-8A Grab Groundwater Sample	3596182
Trip Blank Water Sample	3596183
Storage Blank Water Sample	3596184

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO IT Corporation-PA Attn: Mr. Steve Baggett
1 COPY TO Data Package Group

Lancaster Laboratories
Where quality is a science.

Questions? Contact your Client Services Representative
De Brooks at (717) 656-2300.

Respectfully Submitted,

Elizabeth A. Tomlinson
Sr. Chemist

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3596174

Collected:04/19/2001 11:40 by CB

Account Number: 01401

Submitted: 04/20/2001 15:55
Reported: 05/09/01 at 09:48 PM
Discard: 5/24/01
MW-2 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

MK2-X SDG#: AMR01-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08269	TPH-DRO by 8015B	n.a.	1.7	1.0	mg/l	10
	According to the SW-846 8015B method, the quantitation for Diesel Range Organics was performed by peak area comparison of the sample pattern to that of our #2 Fuel Oil reference standard (between C10 and C28 normal hydrocarbons). The quantitation limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.					
	Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.					
00254	Iron	7439-89-6	101.	2.00	mg/l	40
00258	Manganese	7439-96-5	1.05	0.0120	mg/l	1
00200	pH	n.a.	6.49	0.010		1
00201	Alkalinity to pH 8.3	n.a.	N.D.	0.41	mg/l	1
00202	Alkalinity to pH 4.5	n.a.	114.	0.41	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	0.125	0.015	mg/l	1
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	mg/l	1
00228	Sulfate	14808-79-8	24.1	1.5	mg/l	5
00238	Free Carbon Dioxide	n.a.	73.8	0.41	mg/l	1
07105	Volatile Headspace Hydrocarbon					
07106	Methane	74-82-8	6,400.	200.	ug/l	100

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08269	TPH-DRO by 8015B	SW-846 8015B	1	05/04/2001 06:33	Dawn Boley	10
00254	Iron	SW-846 7380	1	04/30/2001 10:34	Rosalind D. Ernest	40
00258	Manganese	SW-846 7460	1	05/02/2001 10:00	Rosalind D. Ernest	1
00200	pH	EPA 150.1	1	04/21/2001 09:30	Daniel S. Smith	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3596174

Collected:04/19/2001 11:40 by CB

Account Number: 01401

Submitted: 04/20/2001 15:55
Reported: 05/09/01 at 09:48 PM
Discard: 5/24/01
MW-2 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

MK2-X SDG#: AMR01-01

00201	Alkalinity to pH 8.3	EPA 310.1	1	04/24/2001 09:40	Susan A. Engle	1
00202	Alkalinity to pH 4.5	EPA 310.1	1	04/24/2001 09:40	Susan A. Engle	1
00219	Nitrite Nitrogen	EPA 353.2	1	04/21/2001 09:07	Mark A. Buckwalter	1
00220	Nitrate Nitrogen	EPA 353.2	1	04/27/2001 14:11	Venia M. McFadden	1
00228	Sulfate	EPA 300.0	1	04/23/2001 17:29	Brad M. La Placa	5
00238	Free Carbon Dioxide	SM-18 4500CO2	1	04/24/2001 09:40	Susan A. Engle	1
07105	Volatile Headspace Hydrocarbon	SW-846 8015B, modified	1	05/01/2001 14:24	Tracy A. McNickle	100
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	04/26/2001 09:35	Denise K. Conners	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	04/26/2001 09:00	Joseph S. Feister	1

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Lancaster Laboratories Sample No. WW 3596180

Collected:04/19/2001 10:45 by CB

Account Number: 01401

Submitted: 04/20/2001 15:55
Reported: 05/09/01 at 09:48 PM
Discard: 5/24/01
MW-3 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

MK-3- SDG#: AMR01-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08269	TPH-DRO by 8015B	n.a.	8.5	1.0	mg/l	10
	According to the SW-846 8015B method, the quantitation for Diesel Range Organics was performed by peak area comparison of the sample pattern to that of our #2 Fuel Oil reference standard (between C10 and C28 normal hydrocarbons). The quantitation limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.					
	Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.					
00254	Iron	7439-89-6	80.8	2.00	mg/l	40
00258	Manganese	7439-96-5	1.04	0.0120	mg/l	1
00200	pH	n.a.	6.36	0.010		1
00201	Alkalinity to pH 8.3	n.a.	N.D.	0.41	mg/l	1
00202	Alkalinity to pH 4.5	n.a.	140.	0.41	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	0.079	0.015	mg/l	1
00220	Nitrate Nitrogen	14797-55-8	0.51	0.040	mg/l	1
00228	Sulfate	14808-79-8	53.6	1.5	mg/l	5
00238	Free Carbon Dioxide	n.a.	122.	0.41	mg/l	1
07105	Volatile Headspace Hydrocarbon					
07106	Methane	74-82-8	7,800.	200.	ug/l	100

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08269	TPH-DRO by 8015B	SW-846 8015B	1	05/04/2001 12:23	Dawn Boley	10
00254	Iron	SW-846 7380	1	04/30/2001 10:47	Rosalind D. Ernest	40
00258	Manganese	SW-846 7460	1	05/02/2001 10:05	Rosalind D. Ernest	1
00200	pH	EPA 150.1	1	04/21/2001 09:30	Daniel S. Smith	1

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Lancaster Laboratories Sample No. WW 3596180

Collected:04/19/2001 10:45 by CB

Account Number: 01401

Submitted: 04/20/2001 15:55
Reported: 05/09/01 at 09:48 PM
Discard: 5/24/01
MW-3 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

MK-3- SDG#: AMR01-07

00201	Alkalinity to pH 8.3	EPA 310.1	1	04/24/2001 09:40	Susan A. Engle	1
00202	Alkalinity to pH 4.5	EPA 310.1	1	04/24/2001 09:40	Susan A. Engle	1
00219	Nitrite Nitrogen	EPA 353.2	1	04/21/2001 09:14	Mark A. Buckwalter	1
00220	Nitrate Nitrogen	EPA 353.2	1	04/27/2001 14:18	Venia M. McFadden	1
00228	Sulfate	EPA 300.0	1	04/23/2001 19:33	Brad M. La Placa	5
00238	Free Carbon Dioxide	SM-18 4500CO2	1	04/24/2001 09:40	Susan A. Engle	1
07105	Volatile Headspace Hydrocarbon	SW-846 8015B, modified	1	05/01/2001 15:57	Tracy A. McNickle	100
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	04/26/2001 09:35	Denise K. Conners	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	04/26/2001 09:00	Joseph S. Feister	1

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Lancaster Laboratories Sample No. WW 3596176

Collected:04/19/2001 10:20 by CB

Account Number: 01401

Submitted: 04/20/2001 15:55
Reported: 05/09/01 at 09:48 PM
Discard: 5/24/01
MW-4 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

MK-4X SDG#: AMR01-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08269	TPH-DRO by 8015B	n.a.	15.	1.0	mg/l	10

According to the SW-846 8015B method, the quantitation for Diesel Range Organics was performed by peak area comparison of the sample pattern to that of our #2 Fuel Oil reference standard (between C10 and C28 normal hydrocarbons).
The quantitation limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.

Due to the nature of the sample matrix, the surrogate standard recovery is above the range of specifications.

Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.

00254	Iron	7439-89-6	100.	2.00	mg/l	40
00258	Manganese	7439-96-5	0.507	0.0120	mg/l	1
00200	pH	n.a.	6.32	0.010		1
00201	Alkalinity to pH 8.3	n.a.	N.D.	0.41	mg/l	1
00202	Alkalinity to pH 4.5	n.a.	149.	0.41	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	0.147	0.015	mg/l	1
00220	Nitrate Nitrogen	14797-55-8	0.13	0.040	mg/l	1
00228	Sulfate	14808-79-8	41.9	1.5	mg/l	5
00238	Free Carbon Dioxide	n.a.	143.	0.41	mg/l	1
07105	Volatile Headspace Hydrocarbon					
07106	Methane	74-82-8	15,000.	400.	ug/l	200

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08269	TPH-DRO by 8015B	SW-846 8015B	1	05/04/2001 07:17	Dawn Boley	10

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Lancaster Laboratories Sample No. WW 3596176

Collected:04/19/2001 10:20 by CB

Account Number: 01401

Submitted: 04/20/2001 15:55
Reported: 05/09/01 at 09:48 PM
Discard: 5/24/01
MW-4 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

MK-4X SDG#: AMR01-03

00254	Iron	SW-846 7380	1	04/30/2001 10:42	Rosalind D. Ernest	40
00258	Manganese	SW-846 7460	1	05/02/2001 10:01	Rosalind D. Ernest	1
00200	pH	EPA 150.1	1	04/21/2001 09:30	Daniel S. Smith	1
00201	Alkalinity to pH 8.3	EPA 310.1	1	04/24/2001 09:40	Susan A. Engle	1
00202	Alkalinity to pH 4.5	EPA 310.1	1	04/24/2001 09:40	Susan A. Engle	1
00219	Nitrite Nitrogen	EPA 353.2	1	04/21/2001 09:09	Mark A. Buckwalter	1
00220	Nitrate Nitrogen	EPA 353.2	1	04/27/2001 14:13	Venia M. McFadden	1
00228	Sulfate	EPA 300.0	1	04/23/2001 18:00	Brad M. La Placa	5
00238	Free Carbon Dioxide	SM-18 4500CO2	1	04/24/2001 09:40	Susan A. Engle	1
07105	Volatile Headspace Hydrocarbon	SW-846 8015B, modified	1	05/01/2001 15:06	Tracy A. McNickle	200
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	04/26/2001 09:35	Denise K. Conners	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	04/26/2001 09:00	Joseph S. Feister	1

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Lancaster Laboratories Sample No. WW 3596177

Collected:04/19/2001 09:45 by CB

Account Number: 01401

Submitted: 04/20/2001 15:55
Reported: 05/09/01 at 09:48 PM
Discard: 5/24/01
MW-8 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

MK-8X SDG#: AMR01-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08269	TPH-DRO by 8015B	n.a.	39.	9.7	mg/l	100
	According to the SW-846 8015B method, the quantitation for Diesel Range Organics was performed by peak area comparison of the sample pattern to that of our #2 Fuel Oil reference standard (between C10 and C28 normal hydrocarbons).					
	Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.					
	The quantitation limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.					
00254	Iron	7439-89-6	101.	2.00	mg/l	40
00258	Manganese	7439-96-5	0.387	0.0120	mg/l	1
00200	pH	n.a.	6.33	0.010		1
00201	Alkalinity to pH 8.3	n.a.	N.D.	0.41	mg/l	1
00202	Alkalinity to pH 4.5	n.a.	149.	0.41	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	0.047 J	0.015	mg/l	1
	The nitrite analysis was originally performed within the 48 hour holding time, however the result obtained was greater than the subsequent result obtained for nitrate. The nitrite analysis was repeated past the holding time to yield the reported result.					
00220	Nitrate Nitrogen	14797-55-8	0.095 J	0.040	mg/l	1
00228	Sulfate	14808-79-8	46.6	1.5	mg/l	5
00238	Free Carbon Dioxide	n.a.	139.	0.41	mg/l	1
07105	Volatile Headspace Hydrocarbon					
07106	Methane	74-82-8	21,000.	400.	ug/l	200

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor

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Lancaster Laboratories Sample No. WW 3596177

Collected:04/19/2001 09:45 by CB

Account Number: 01401

Submitted: 04/20/2001 15:55
Reported: 05/09/01 at 09:48 PM
Discard: 5/24/01
MW-8 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

MK-8X SDG#: AMR01-04

08269	TPH-DRO by 8015B	SW-846 8015B	1	05/04/2001 22:15	Dawn Boley	100
00254	Iron	SW-846 7380	1	04/30/2001 10:43	Rosalind D. Ernest	40
00258	Manganese	SW-846 7460	1	05/02/2001 10:02	Rosalind D. Ernest	1
00200	pH	EPA 150.1	1	04/21/2001 09:30	Daniel S. Smith	1
00201	Alkalinity to pH 8.3	EPA 310.1	1	04/24/2001 09:40	Susan A. Engle	1
00202	Alkalinity to pH 4.5	EPA 310.1	1	04/24/2001 09:40	Susan A. Engle	1
00219	Nitrite Nitrogen	EPA 353.2	2	05/02/2001 09:51	Matthew J. Mercer	1
00220	Nitrate Nitrogen	EPA 353.2	1	04/27/2001 14:14	Venia M. McFadden	1
00228	Sulfate	EPA 300.0	1	04/23/2001 18:47	Brad M. La Placa	5
00238	Free Carbon Dioxide	SM-18 4500CO2	1	04/24/2001 09:40	Susan A. Engle	1
07105	Volatile Headspace Hydrocarbon	SW-846 8015B, modified	1	05/01/2001 15:26	Tracy A. McNickle	200
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	04/26/2001 09:35	Denise K. Conners	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	04/26/2001 09:00	Joseph S. Feister	1

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Lancaster Laboratories Sample No. WW 3596182

Collected:04/19/2001 10:00 by CB

Account Number: 01401

Submitted: 04/20/2001 15:55
Reported: 05/09/01 at 09:48 PM
Discard: 5/24/01
MW-8A Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

MK-8A SDG#: AMR01-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08269	TPH-DRO by 8015B	n.a.	40.	4.8	mg/l	50
	According to the SW-846 8015B method, the quantitation for Diesel Range Organics was performed by peak area comparison of the sample pattern to that of our #2 Fuel Oil reference standard (between C10 and C28 normal hydrocarbons). Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.					
	The quantitation limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.					
00254	Iron	7439-89-6	148.	2.50	mg/l	50
00258	Manganese	7439-96-5	0.789	0.0120	mg/l	1
00200	pH	n.a.	6.34	0.010		1
00201	Alkalinity to pH 8.3	n.a.	N.D.	0.41	mg/l	1
00202	Alkalinity to pH 4.5	n.a.	137.	0.41	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	0.051	0.015	mg/l	1
	The nitrite analysis was originally performed within the 48 hour holding time, however the result obtained was greater than the subsequent result obtained for nitrate. The nitrite analysis was repeated past the holding time to yield the reported result.					
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	mg/l	1
00228	Sulfate	14808-79-8	53.3	1.5	mg/l	5
00238	Free Carbon Dioxide	n.a.	125.	0.41	mg/l	1
07105	Volatile Headspace Hydrocarbon					
07106	Methane	74-82-8	22,000.	400.	ug/l	200

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor

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Lancaster Laboratories Sample No. WW 3596182

Collected:04/19/2001 10:00 by CB

Account Number: 01401

Submitted: 04/20/2001 15:55
Reported: 05/09/01 at 09:48 PM
Discard: 5/24/01
MW-8A Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

MK-8A SDG#: AMR01-09

08269	TPH-DRO by 8015B	SW-846 8015B	1	05/08/2001 05:05	Dawn Boley	50
00254	Iron	SW-846 7380	1	04/30/2001 10:54	Rosalind D. Ernest	50
00258	Manganese	SW-846 7460	1	05/02/2001 10:10	Rosalind D. Ernest	1
00200	pH	EPA 150.1	1	04/21/2001 09:30	Daniel S. Smith	1
00201	Alkalinity to pH 8.3	EPA 310.1	1	04/24/2001 09:40	Susan A. Engle	1
00202	Alkalinity to pH 4.5	EPA 310.1	1	04/24/2001 09:40	Susan A. Engle	1
00219	Nitrite Nitrogen	EPA 353.2	2	05/02/2001 09:54	Matthew J. Mercer	1
00220	Nitrate Nitrogen	EPA 353.2	1	04/27/2001 14:26	Venia M. McFadden	1
00228	Sulfate	EPA 300.0	1	04/23/2001 20:05	Brad M. La Placa	5
00238	Free Carbon Dioxide	SM-18 4500CO2	1	04/24/2001 09:40	Susan A. Engle	1
07105	Volatile Headspace Hydrocarbon	SW-846 8015B, modified	1	05/01/2001 16:18	Tracy A. McNickle	200
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	04/26/2001 09:35	Denise K. Conners	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	04/26/2001 09:00	Joseph S. Feister	1

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Lancaster Laboratories Sample No. WW 3596178

Collected:04/19/2001 12:40 by CB

Account Number: 01401

Submitted: 04/20/2001 15:55
Reported: 05/09/01 at 09:48 PM
Discard: 5/24/01
MW-11 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

MK-11 SDG#: AMR01-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08269	TPH-DRO by 8015B	n.a.	7.6	1.0	mg/l	10
	According to the SW-846 8015B method, the quantitation for Diesel Range Organics was performed by peak area comparison of the sample pattern to that of our #2 Fuel Oil reference standard (between C10 and C28 normal hydrocarbons). The quantitation limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.					
	Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.					
00254	Iron	7439-89-6	122.	2.00	mg/l	40
00258	Manganese	7439-96-5	2.03	0.0120	mg/l	1
00200	pH	n.a.	6.31	0.010		1
00201	Alkalinity to pH 8.3	n.a.	N.D.	0.41	mg/l	1
00202	Alkalinity to pH 4.5	n.a.	119.	0.41	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	0.152	0.015	mg/l	1
00220	Nitrate Nitrogen	14797-55-8	0.095 J	0.040	mg/l	1
00228	Sulfate	14808-79-8	19.3	1.5	mg/l	5
00238	Free Carbon Dioxide	n.a.	117.	0.41	mg/l	1
07105	Volatile Headspace Hydrocarbon					
07106	Methane	74-82-8	6,700.	200.	ug/l	100

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08269	TPH-DRO by 8015B	SW-846 8015B	1	05/04/2001 03:13	Dawn Boley	10
00254	Iron	SW-846 7380	1	04/30/2001 10:44	Rosalind D. Ernest	40
00258	Manganese	SW-846 7460	1	05/02/2001 10:02	Rosalind D. Ernest	1
00200	pH	EPA 150.1	1	04/21/2001 09:30	Daniel S. Smith	1

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Lancaster Laboratories Sample No. WW 3596178

Collected:04/19/2001 12:40 by CB

Account Number: 01401

Submitted: 04/20/2001 15:55
Reported: 05/09/01 at 09:48 PM
Discard: 5/24/01
MW-11 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

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1220 Ward Avenue, Suite 300
West Chester PA 19380

MK-11 SDG#: AMR01-05

00201	Alkalinity to pH 8.3	EPA 310.1	1	04/24/2001 09:40	Susan A. Engle	1
00202	Alkalinity to pH 4.5	EPA 310.1	1	04/24/2001 09:40	Susan A. Engle	1
00219	Nitrite Nitrogen	EPA 353.2	1	04/21/2001 09:12	Mark A. Buckwalter	1
00220	Nitrate Nitrogen	EPA 353.2	1	04/27/2001 14:16	Venia M. McFadden	1
00228	Sulfate	EPA 300.0	1	04/23/2001 19:02	Brad M. La Placa	5
00238	Free Carbon Dioxide	SM-18 4500CO2	1	04/24/2001 09:40	Susan A. Engle	1
07105	Volatile Headspace Hydrocarbon	SW-846 8015B, modified	1	05/01/2001 15:37	Tracy A. McNickle	100
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	04/26/2001 09:35	Denise K. Conners	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	04/26/2001 09:00	Joseph S. Feister	1

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Lancaster Laboratories Sample No. WW 3596179

Collected:04/19/2001 13:10 by CB

Account Number: 01401

Submitted: 04/20/2001 15:55
Reported: 05/09/01 at 09:48 PM
Discard: 5/24/01
MW-12 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

MK-12 SDG#: AMR01-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08269	TPH-DRO by 8015B	n.a.	0.37	0.097	mg/l	1
	According to the SW-846 8015B method, the quantitation for Diesel Range Organics was performed by peak area comparison of the sample pattern to that of our #2 Fuel Oil reference standard (between C10 and C28 normal hydrocarbons). Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.					
00254	Iron	7439-89-6	83.9	2.00	mg/l	40
00258	Manganese	7439-96-5	3.62	0.0600	mg/l	5
00200	pH	n.a.	6.43	0.010		1
00201	Alkalinity to pH 8.3	n.a.	N.D.	0.41	mg/l	1
00202	Alkalinity to pH 4.5	n.a.	272.	0.41	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	N.D.	0.015	mg/l	1
	The nitrite analysis was originally performed within the 48 hour holding time, however the result obtained was greater than the subsequent result obtained for nitrate. The nitrite analysis was repeated past the holding time to yield the reported result.					
00220	Nitrate Nitrogen	14797-55-8	0.087 J	0.040	mg/l	1
00228	Sulfate	14808-79-8	5.5	1.5	mg/l	5
00238	Free Carbon Dioxide	n.a.	202.	0.41	mg/l	1
07105	Volatile Headspace Hydrocarbon					
07106	Methane	74-82-8	7,700.	200.	ug/l	100

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08269	TPH-DRO by 8015B	SW-846 8015B	1	05/03/2001 21:39	Dawn Boley	1
00254	Iron	SW-846 7380	1	04/30/2001 10:45	Rosalind D. Ernest	40
00258	Manganese	SW-846 7460	1	05/02/2001 10:05	Rosalind D. Ernest	5

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Lancaster Laboratories Sample No. WW 3596179

Collected:04/19/2001 13:10 by CB

Account Number: 01401

Submitted: 04/20/2001 15:55
Reported: 05/09/01 at 09:48 PM
Discard: 5/24/01
MW-12 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

MK-12 SDG#: AMR01-06

00200	pH	EPA 150.1	1	04/21/2001 09:30	Daniel S. Smith	1
00201	Alkalinity to pH 8.3	EPA 310.1	1	04/24/2001 09:40	Susan A. Engle	1
00202	Alkalinity to pH 4.5	EPA 310.1	1	04/24/2001 09:40	Susan A. Engle	1
00219	Nitrite Nitrogen	EPA 353.2	2	05/02/2001 09:53	Matthew J. Mercer	1
00220	Nitrate Nitrogen	EPA 353.2	1	04/27/2001 14:17	Venia M. McFadden	1
00228	Sulfate	EPA 300.0	1	04/23/2001 19:18	Brad M. La Placa	5
00238	Free Carbon Dioxide	SM-18 4500CO2	1	04/24/2001 09:40	Susan A. Engle	1
07105	Volatile Headspace Hydrocarbon	SW-846 8015B, modified	1	05/01/2001 15:47	Tracy A. McNickle	100
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	04/26/2001 09:35	Denise K. Conners	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	04/26/2001 09:00	Joseph S. Feister	1

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Lancaster Laboratories Sample No. WW 3596175

Collected:04/19/2001 11:10 by CB

Account Number: 01401

Submitted: 04/20/2001 15:55
Reported: 05/09/01 at 09:48 PM
Discard: 5/24/01
MW-13 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

MK13X SDG#: AMR01-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08269	TPH-DRO by 8015B	n.a.	6.6	1.0	mg/l	10
	According to the SW-846 8015B method, the quantitation for Diesel Range Organics was performed by peak area comparison of the sample pattern to that of our #2 Fuel Oil reference standard (between C10 and C28 normal hydrocarbons). The quantitation limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.					
	Due to the nature of the sample matrix, the surrogate standard recovery is above the range of specifications.					
	Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.					
00254	Iron	7439-89-6	99.8	2.00	mg/l	40
00258	Manganese	7439-96-5	0.639	0.0120	mg/l	1
00200	pH	n.a.	6.50	0.010		1
00201	Alkalinity to pH 8.3	n.a.	N.D.	0.41	mg/l	1
00202	Alkalinity to pH 4.5	n.a.	169.	0.41	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	N.D.	0.015	mg/l	1
	The nitrite analysis was originally performed within the 48 hour holding time, however the result obtained was greater than the subsequent result obtained for nitrate. The nitrite analysis was repeated past the holding time to yield the reported result.					
00220	Nitrate Nitrogen	14797-55-8	0.089 J	0.040	mg/l	1
00228	Sulfate	14808-79-8	84.	3.0	mg/l	10
00238	Free Carbon Dioxide	n.a.	107.	0.41	mg/l	1
07105	Volatile Headspace Hydrocarbon					
07106	Methane	74-82-8	11,000.	400.	ug/l	200

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Lancaster Laboratories Sample No. WW 3596175

Collected:04/19/2001 11:10 by CB

Account Number: 01401

Submitted: 04/20/2001 15:55
Reported: 05/09/01 at 09:48 PM
Discard: 5/24/01
MW-13 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

MK13X SDG#: AMR01-02

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08269	TPH-DRO by 8015B	SW-846 8015B	1	05/04/2001 02:50	Dawn Boley	10
00254	Iron	SW-846 7380	1	04/30/2001 10:35	Rosalind D. Ernest	40
00258	Manganese	SW-846 7460	1	05/02/2001 10:01	Rosalind D. Ernest	1
00200	pH	EPA 150.1	1	04/21/2001 09:30	Daniel S. Smith	1
00201	Alkalinity to pH 8.3	EPA 310.1	1	04/24/2001 09:40	Susan A. Engle	1
00202	Alkalinity to pH 4.5	EPA 310.1	1	04/24/2001 09:40	Susan A. Engle	1
00219	Nitrite Nitrogen	EPA 353.2	2	05/02/2001 09:50	Matthew J. Mercer	1
00220	Nitrate Nitrogen	EPA 353.2	1	04/27/2001 14:12	Venia M. McFadden	1
00228	Sulfate	EPA 300.0	1	04/24/2001 01:01	Brad M. La Placa	10
00238	Free Carbon Dioxide	SM-18 4500CO2	1	04/24/2001 09:40	Susan A. Engle	1
07105	Volatile Headspace Hydrocarbon	SW-846 8015B, modified	1	05/01/2001 14:55	Tracy A. McNickle	200
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	04/26/2001 09:35	Denise K. Conners	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	04/26/2001 09:00	Joseph S. Feister	1

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Lancaster Laboratories Sample No. WW 3596181

Collected:04/19/2001 09:30 by CB

Account Number: 01401

Submitted: 04/20/2001 15:55
Reported: 05/09/01 at 09:48 PM
Discard: 5/24/01
MW-14 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

MK-14 SDG#: AMR01-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08269	TPH-DRO by 8015B	n.a.	7.7	1.0	mg/l	10

According to the SW-846 8015B method, the quantitation for Diesel Range Organics was performed by peak area comparison of the sample pattern to that of our #2 Fuel Oil reference standard (between C10 and C28 normal hydrocarbons).
The quantitation limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.

Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.

00254	Iron	7439-89-6	344.	5.00	mg/l	100
00258	Manganese	7439-96-5	2.12	0.0120	mg/l	1
00200	pH	n.a.	6.25	0.010		1
00201	Alkalinity to pH 8.3	n.a.	N.D.	0.41	mg/l	1
00202	Alkalinity to pH 4.5	n.a.	135.	0.41	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	0.078	0.015	mg/l	1
00220	Nitrate Nitrogen	14797-55-8	0.86	0.040	mg/l	1
00228	Sulfate	14808-79-8	95.	7.5	mg/l	25
00238	Free Carbon Dioxide	n.a.	152.	0.41	mg/l	1
07105	Volatile Headspace Hydrocarbon					
07106	Methane	74-82-8	2,700.	100.	ug/l	50

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08269	TPH-DRO by 8015B	SW-846 8015B	1	05/04/2001 13:08	Dawn Boley	10
00254	Iron	SW-846 7380	1	04/30/2001 10:53	Rosalind D. Ernest	100
00258	Manganese	SW-846 7460	1	05/02/2001 10:06	Rosalind D. Ernest	1
00200	pH	EPA 150.1	1	04/21/2001 09:30	Daniel S. Smith	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3596181

Collected:04/19/2001 09:30 by CB

Account Number: 01401

Submitted: 04/20/2001 15:55
Reported: 05/09/01 at 09:48 PM
Discard: 5/24/01
MW-14 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

MK-14 SDG#: AMR01-08

00201	Alkalinity to pH 8.3	EPA 310.1	1	04/24/2001 09:40	Susan A. Engle	1
00202	Alkalinity to pH 4.5	EPA 310.1	1	04/24/2001 09:40	Susan A. Engle	1
00219	Nitrite Nitrogen	EPA 353.2	1	04/21/2001 09:15	Mark A. Buckwalter	1
00220	Nitrate Nitrogen	EPA 353.2	1	04/27/2001 14:22	Venia M. McFadden	1
00228	Sulfate	EPA 300.0	1	04/24/2001 01:16	Brad M. La Placa	25
00238	Free Carbon Dioxide	SM-18 4500CO2	1	04/24/2001 09:40	Susan A. Engle	1
07105	Volatile Headspace Hydrocarbon	SW-846 8015B, modified	1	05/01/2001 16:08	Tracy A. McNickle	50
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	04/26/2001 09:35	Denise K. Conners	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	04/26/2001 09:00	Joseph S. Feister	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3596183

Collected: n.a.

Account Number: 01401

Submitted: 04/20/2001 15:55
Reported: 05/09/01 at 09:49 PM
Discard: 5/24/01
Trip Blank Water Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

MK-TB SDG#: AMR01-10TB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
07105	Volatile Headspace Hydrocarbon					
07106	Methane	74-82-8	8.3	2.	ug/l	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
07105	Volatile Headspace Hydrocarbon	SW-846 8015B, modified	1	05/01/2001 14:04	Tracy A. McNickle	1

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3596184

Collected:04/20/2001 20:00 by LAB

Account Number: 01401

Submitted: 04/20/2001 15:55
Reported: 05/09/01 at 09:49 PM
Discard: 5/24/01
Storage Blank Water Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

MK-SB SDG#: AMR01-11SB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit	Units	Dilution Factor
07105	Volatile Headspace Hydrocarbon						
07106	Methane	74-82-8	5.	J	2.	ug/l	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
07105	Volatile Headspace Hydrocarbon	SW-846 8015B, modified	1	05/01/2001 14:14	Tracy A. McNickle	1

Lancaster Laboratories
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Quality Control Summary

Client Name: IT Corporation- PA Group Number: 759685
Reported: 05/09/01 at 09:49 PM

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 01111020001A	Sample number(s): 3596174-3596182							
pH				101	100	98-102	0	1
Batch number: 01111105101A	Sample number(s): 3596174,3596176,3596178,3596180-3596181							
Nitrite Nitrogen	N.D.	.015	mg/l	101		90-110		
Batch number: 01113113101A	Sample number(s): 3596174-3596178							
Sulfate	N.D.	.3	mg/l	100		89-110		
Batch number: 01113113101B	Sample number(s): 3596179-3596182							
Sulfate	N.D.	.3	mg/l	100		89-110		
Batch number: 01114020202A	Sample number(s): 3596174-3596182							
Alkalinity to pH 4.5				101		98-103		
Batch number: 011150026A	Sample number(s): 3596174-3596182							
TPH-DRO by 8015B	N.D.	.1	mg/l	76	81	50-120	6	20
Batch number: 011160820001	Sample number(s): 3596174-3596182							
Iron	N.D.	.05	mg/l	101		88-111		
Manganese	N.D.	.012	mg/l	102		90-108		
Batch number: 01117106103A	Sample number(s): 3596174-3596181							
Nitrate Nitrogen	N.D.	.04	mg/l	101		89-110		
Batch number: 01117106103B	Sample number(s): 3596182							
Nitrate Nitrogen	N.D.	.04	mg/l	101		89-110		
Batch number: 011200023A	Sample number(s): 3596174-3596184							
Methane	4. J	2.	ug/l	105		80-120		
Batch number: 01122105102A	Sample number(s): 3596175,3596177,3596179,3596182							
Nitrite Nitrogen	N.D.	.015	mg/l	104		90-110		

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 01111020001A	Sample number(s): 3596174-3596182								
pH						6.49	6.48	0	2
Batch number: 01111105101A	Sample number(s): 3596174,3596176,3596178,3596180-3596181								
Nitrite Nitrogen	103		90-110			N.D.	N.D.	38* (1)	6

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

Lancaster Laboratories
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Quality Control Summary

Client Name: IT Corporation- PA
Reported: 05/09/01 at 09:49 PM

Group Number: 759685

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 01113113101A	Sample number(s): 3596174-3596178								
Sulfate	102		90-110			20.	21.	2 (1)	2
Batch number: 01113113101B	Sample number(s): 3596179-3596182								
Sulfate	101		90-110			126.	124.	1 (1)	2
Batch number: 01114020202A	Sample number(s): 3596174-3596182								
Alkalinity to pH 8.3						N.D.	N.D.	0 (1)	3
Alkalinity to pH 4.5	100	100	50-137	0	3	186.	190.	2	3
Batch number: 011160820001	Sample number(s): 3596174-3596182								
Iron	95	97	80-120	1	20	0.352	0.379	7 (1)	20
Manganese	95	95	85-111	0	20	0.0220	0.0160 J	32* (1)	20
Batch number: 01117106103A	Sample number(s): 3596174-3596181								
Nitrate Nitrogen	92		90-110			0.59	0.48	21* (1)	6
Batch number: 01117106103B	Sample number(s): 3596182								
Nitrate Nitrogen	95	98	90-110	2	2	6.66	6.64	0	6
Batch number: 011200023A	Sample number(s): 3596174-3596184								
Methane	90	90	75-125	0	20				
Batch number: 01122105102A	Sample number(s): 3596175,3596177,3596179,3596182								
Nitrite Nitrogen	83*	87*	90-110	5*	2	N.D.	N.D.	0 (1)	6

Surrogate Quality Control

Analysis Name: TPH-DRO by 8015B
Batch number: 011150026A

	Orthoterphenyl
3596174	113
3596175	151*
3596176	312*
3596177	96
3596178	101
3596179	96
3596180	149
3596181	108
3596182	93
Blank	97
LCS	107
LCSD	116

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

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Quality Control Summary

Client Name: IT Corporation- PA
Reported: 05/09/01 at 09:49 PM

Group Number: 759685

Surrogate Quality Control

Limits: 50-150

Analysis Name: Volatile Headspace Hydrocarbon
Batch number: 011200023A

	Propene
3596174	82
3596175	86
3596176	85
3596177	79
3596178	83
3596179	84
3596180	91
3596181	88
3596182	80
3596183	88
3596184	82
Blank	106
LCS	109
MS	79
MSD	87
Limits:	70-130

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

Analysis Request/Environmental Services Chain of Custody

Lancaster Laboratories
Where quality is a science.

For Lancaster Laboratories use only
Acct. # 1401 Sample # 3596174-84
3596189-97

Please print. Instructions on reverse side correspond with circled numbers.

1
Client: IT Corporation Acct. #:
Project Name/#: Amtrak/13030177 PWSID #:
Project Manager: Steve Baggett P.O.#
Sampler: Craig Bruse/Mike Smith Quote #:
Name of state where samples were collected: DE

For lab use only
FSC:
SCR #: 1151426

2 Sample Identification	Date Collected	Time Collected	3 Grab	Composite	Matrix 4: Soil	Water (Potable / NPDES)	Other	Total # of Containers	5 Analyses Requested: Total/Dissolved Iron/Manganese	CO2, pH, Alkalinity 8.3, Alkalinity 4.5, Sulfate	TPH-DRO 8015B	Nitrite Nitrogen	Nitrate Nitrogen	Methane	Dissolved Metals MN, FE		Remarks	6 Temperature of samples upon receipt (if requested)
MW-2	4/19/01	11:40	X			GW	9	8	X	X	X	X	X	X	X			
MW-~~3~~ 13 CB	4/19/01	11:10	X			GW	9	8	X	X	X	X	X	X	X			
MW-4	4/19/01	10:20	X			GW	9	8	X	X	X	X	X	X	X			
~~MW-5~~						GW		8	X	X	X	X	X	X			CB	
~~MW-6~~						GW		8	X	X	X	X	X	X			CB	
~~MW-7~~						GW		8	X	X	X	X	X	X			CB	
MW-8	4/19/01	9:45	X			GW	9	8	X	X	X	X	X	X	X			
~~MW-9~~						GW		8	X	X	X	X	X	X			CB	
~~MW-10~~						GW		8	X	X	X	X	X	X			CB	
MW-11	4/19/01	12:40	X			GW	9	8	X	X	X	X	X	X	X		3-4 S. CHAZ 4/20/01	

Turnaround Time Requested (TAT) (please circle): Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax
Phone #: Fax #:

Data Package Options (please circle if requested)
QC Summary Type VI (Raw Data)
Type I (Tier I) GLP
Type II (Tier II) Other
Type III (NJ Red. Del.)
Type IV (CLP)

SDG Complete? Yes No

Site-specific QC required? Yes No
(If yes, indicate QC sample and submit triplicate volume.)

Internal Chain of Custody required? Yes No

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	4/19/01	415	[signature]	4/20/01	11:15
[signature]	4/20/01	15:55			
			T. Carlson	4/20/01	1555

9

Lancaster Laboratories, Inc., 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 (717) 656-2300
Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client
2102 Rev. 3/7/01

Analysis Request/Environmental Services Chain of Custody

Lancaster Laboratories
Where quality is a science.

For Lancaster Laboratories use only
Acct. # 1401 Sample # 3596174-84
3596189-97

Please print. Instructions on reverse side correspond with circled numbers.

1
Client: IT Corporation Acct. #:
Project Name/#: Amtrak/13030177 PWSID #:
Project Manager: Steve Baggett P.O.#
Sampler: CRAIG BRUDE/MIKE SMITH Quote #:
Name of state where samples were collected: DE

For lab use only
FSC:
SCR #: 1151426

2 Sample Identification	Date Collected	Time Collected	3 Grab	Composite	Matrix 4: Soil	Water (Potable / NPDES)	Other	Total # of Containers	5 Analyses Requested: Total/Dissolved Iron/Manganese	CO_2, pH, Alkalinity 8.3, Alkalinity 4.5, Sulfate	TPH-DRO 80158	Nitrite Nitrogen	Nitrate Nitrogen	Methane	Dissolved METALS MN, FE		Remarks	6 Temperature of samples upon receipt (if requested)
MW-12	4/19/01	1:10	X			GW	9	8	X	X	X	X	X	X	X			
MW-~~13~~ 3 CB	4/19/01	10:45	X			GW	9	8	X	X	X	X	X	X	X			
MW-14	4/19/01	9:30	X			GW	9	8	X	X	X	X	X	X	X			
~~MW-15~~						GW		8	X	X	X	X	X	X			CB	
~~MW-16~~						GW		8	X	X	X	X	X	X			CB	
~~MW-17~~						GW		8	X	X	X	X	X	X			CB	
MW#8A	4/19/01	10:00	X					9	X	X	X	X	X	X	X			
TRIP BLANK	4/19/01		X					2										
																	3-4.5°C HAZ 4/20/01	

Turnaround Time Requested (TAT) (please circle): Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax
Phone #: Fax #:

Data Package Options (please circle if requested)
QC Summary Type VI (Raw Data)
Type I (Tier I) GLP
Type II (Tier II) Other
Type III (NJ Red. Del.)
Type IV (CLP)

SDG Complete? Yes No

Site-specific QC required? Yes No
(If yes, indicate QC sample and submit triplicate volume.)

Internal Chain of Custody required? Yes No

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	4/19/01	4:15	[signature]	4/20/01	11:15
[signature]	4/20/01	15:15			
			T. [signature]	4/20/01	1555

9

Lancaster Laboratories, Inc., 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 (717) 656-2300
Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client
2102 Rev. 3/7/01

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Where quality is a science.

ANALYTICAL RESULTS

Prepared for:

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 759688. Samples arrived at the laboratory on Friday, April 20, 2001. The PO# for this group is 170347.

Client Description	Lancaster Labs Number
MW-2 Filtered Grab Groundwater Sample	3596189
MW-13 Filtered Grab Groundwater Sample	3596190
MW-4 Filtered Grab Groundwater Sample	3596191
MW-8 Filtered Grab Groundwater Sample	3596192
MW-11 Filtered Grab Groundwater Sample	3596193
MW-12 Filtered Grab Groundwater Sample	3596194
MW-3 Filtered Grab Groundwater Sample	3596195
MW-14 Filtered Grab Groundwater Sample	3596196
MW-8A Filtered Grab Groundwater Sample	3596197

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO IT Corporation-PA Attn: Mr. Steve Baggett
1 COPY TO Data Package Group

Lancaster Laboratories
Where quality is a science.

Questions? Contact your Client Services Representative
De Brooks at (717) 656-2300.

Respectfully Submitted,

Max E. Snavely
Sr. Chemist

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3596189

Collected:04/19/2001 11:40 by CB

Account Number: 01401

Submitted: 04/20/2001 15:55
Reported: 05/04/01 at 10:04 PM
Discard: 5/19/01
MW-2 Filtered Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

MK2FI SDG#: AMR02-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00254	Iron	7439-89-6	0.471	0.0500	mg/l	1
00258	Manganese	7439-96-5	0.838	0.0120	mg/l	1

This sample was filtered in the lab for dissolved metals.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00254	Iron	SW-846 7380	1	04/30/2001 11:07	Rosalind D. Ernest	1
00258	Manganese	SW-846 7460	1	05/02/2001 10:19	Rosalind D. Ernest	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	04/27/2001 09:33	Denise K. Conners	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3596190

Collected:04/19/2001 11:10 by CB

Account Number: 01401

Submitted: 04/20/2001 15:55
Reported: 05/04/01 at 10:04 PM
Discard: 5/19/01
MW-13 Filtered Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

M13FI SDG#: AMR02-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00254	Iron	7439-89-6	6.15	0.250	mg/l	5
00258	Manganese	7439-96-5	0.606	0.0120	mg/l	1

This sample was filtered in the lab for dissolved metals.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00254	Iron	SW-846 7380	1	04/30/2001 11:12	Rosalind D. Ernest	5
00258	Manganese	SW-846 7460	1	05/02/2001 10:21	Rosalind D. Ernest	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	04/27/2001 09:33	Denise K. Conners	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3596191

Collected:04/19/2001 10:20 by CB

Account Number: 01401

Submitted: 04/20/2001 15:55
Reported: 05/04/01 at 10:04 PM
Discard: 5/19/01
MW-4 Filtered Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

M4-FI SDG#: AMR02-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00254	Iron	7439-89-6	3.69	0.0500	mg/l	1
00258	Manganese	7439-96-5	0.375	0.0120	mg/l	1

This sample was filtered in the lab for dissolved metals.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00254	Iron	SW-846 7380	1	04/30/2001 11:13	Rosalind D. Ernest	1
00258	Manganese	SW-846 7460	1	05/02/2001 10:22	Rosalind D. Ernest	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	04/27/2001 09:33	Denise K. Conners	1

Lancaster Laboratories, Inc.
[illegible]
P.O. Box [illegible]
Lancaster, PA 17605-2325
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3596192

Collected:04/19/2001 09:45 by CB

Account Number: 01401

Submitted: 04/20/2001 15:55
Reported: 05/04/01 at 10:04 PM
Discard: 5/19/01
MW-8 Filtered Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

M8-FI SDG#: AMR02-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00254	Iron	7439-89-6	2.72	0.0500	mg/l	1
00258	Manganese	7439-96-5	0.253	0.0120	mg/l	1

This sample was filtered in the lab for dissolved metals.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00254	Iron	SW-846 7380	1	04/30/2001 11:14	Rosalind D. Ernest	1
00258	Manganese	SW-846 7460	1	05/02/2001 10:22	Rosalind D. Ernest	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	04/27/2001 09:33	Denise K. Conners	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3596193

Collected:04/19/2001 12:40 by CB

Account Number: 01401

Submitted: 04/20/2001 15:55
Reported: 05/04/01 at 10:04 PM
Discard: 5/19/01
MW-11 Filtered Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

11-FI SDG#: AMR02-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00254	Iron	7439-89-6	17.1	0.500	mg/l	10
00258	Manganese	7439-96-5	1.86	0.0120	mg/l	1

This sample was filtered in the lab for dissolved metals.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00254	Iron	SW-846 7380	1	04/30/2001 11:15	Rosalind D. Ernest	10
00258	Manganese	SW-846 7460	1	05/02/2001 10:23	Rosalind D. Ernest	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	04/27/2001 09:33	Denise K. Conners	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3596194

Collected:04/19/2001 13:10 by CB

Account Number: 01401

Submitted: 04/20/2001 15:55
Reported: 05/04/01 at 10:04 PM
Discard: 5/19/01
MW-12 Filtered Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

12-FI SDG#: AMR02-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00254	Iron	7439-89-6	0.174	0.0500	mg/l	1
00258	Manganese	7439-96-5	3.19	0.0300	mg/l	2.5

This sample was filtered in the lab for dissolved metals.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00254	Iron	SW-846 7380	1	04/30/2001 11:15	Rosalind D. Ernest	1
00258	Manganese	SW-846 7460	1	05/02/2001 10:26	Rosalind D. Ernest	2.5
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	04/27/2001 09:33	Denise K. Conners	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3596195

Collected:04/19/2001 10:45 by CB

Account Number: 01401

Submitted: 04/20/2001 15:55
Reported: 05/04/01 at 10:04 PM
Discard: 5/19/01
MW-3 Filtered Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

3--FI SDG#: AMR02-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00254	Iron	7439-89-6	0.753	0.0500	mg/l	1
00258	Manganese	7439-96-5	0.438	0.0120	mg/l	1

This sample was filtered in the lab for dissolved metals.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00254	Iron	SW-846 7380	1	04/30/2001 11:16	Rosalind D. Ernest	1
00258	Manganese	SW-846 7460	1	05/02/2001 10:26	Rosalind D. Ernest	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	04/27/2001 09:33	Denise K. Conners	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3596196

Collected:04/19/2001 09:30 by CB

Account Number: 01401

Submitted: 04/20/2001 15:55
Reported: 05/04/01 at 10:04 PM
Discard: 5/19/01
MW-14 Filtered Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

14-FI SDG#: AMR02-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00254	Iron	7439-89-6	7.62	0.250	mg/l	5
00258	Manganese	7439-96-5	0.946	0.0120	mg/l	1

This sample was filtered in the lab for dissolved metals.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00254	Iron	SW-846 7380	1	04/30/2001 11:20	Rosalind D. Ernest	5
00258	Manganese	SW-846 7460	1	05/02/2001 10:27	Rosalind D. Ernest	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	04/27/2001 09:33	Denise K. Conners	1

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3596197

Collected:04/19/2001 10:00 by CB

Account Number: 01401

Submitted: 04/20/2001 15:55
Reported: 05/04/01 at 10:04 PM
Discard: 5/19/01
MW-8A Filtered Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

8A-FI SDG#: AMR02-09*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00254	Iron	7439-89-6	17.0	0.500	mg/l	10
00258	Manganese	7439-96-5	0.481	0.0120	mg/l	1

This sample was filtered in the lab for dissolved metals.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00254	Iron	SW-846 7380	1	04/30/2001 11:22	Rosalind D. Ernest	10
00258	Manganese	SW-846 7460	1	05/02/2001 10:27	Rosalind D. Ernest	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	04/27/2001 09:33	Denise K. Conners	1

Lancaster Laboratories
Where quality is a science.

Quality Control Summary

Client Name: IT Corporation- PA Group Number: 759688
Reported: 05/04/01 at 10:04 PM

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 011170820001	Sample number(s): 3596189-3596197							
Iron	N.D.	.05	mg/l	104		88-111		
Manganese	N.D.	.012	mg/l	104		90-108		

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 011170820001	Sample number(s): 3596189-3596197								
Iron	99	93	80-120	6	20	0.0620 J	0.0750 J	19 (1)	20
Manganese	103	99	85-111	4	20	N.D.	0.0150 J	200* (1)	20

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

Analysis Request/Environmental Services Chain of Custody

Lancaster Laboratories
Where quality is a science.

For Lancaster Laboratories use only
Acct. # 1401 Sample # 3596174-84
3596189-97

Please print. Instructions on reverse side correspond with circled numbers.

(1) Client: IT Corporation Acct. #:
Project Name/#: Amtrak/13030177 PWSID #:
Project Manager: Steve Baggett P.O.#
Sampler: CRAIG BRUSE/MIKE SMITH Quote #:
Name of state where samples were collected: DE

For lab use only
FSC:
SCR #: 1151426

(2) (3) (4) (5)

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Water: GW	Other	Total # of containers	Total Dissolved Iron	Manganese	CO_2, pH, Alkalinity & Alkalinity 4.5, Sulfate	TPH-DRO 8015B	Nitrite Nitrogen	Nitrate Nitrogen	Methane	D1550 VOCs	METALS MDL	Remarks	(6) Temperature of samples upon receipt (if requested)
MW-2	4/19/01	11:40	X			GW	9	8	X	X	X	X	X	X	X				
MW-3 13	4/19/01	11:10	X			GW	9	8	X	X	X	X	X	X	X				
MW-4	4/19/01	10:20	X			GW	9	8	X	X	X	X	X	X	X				
~~MW-5~~						GW		8	X	X	X	X	X	X				CB	
~~MW-6~~						GW		8	X	X	X	X	X	X				CB	
~~MW-7~~						GW		8	X	X	X	X	X	X				CB	
MW-8	4/19/01	9:45	X			GW	9	8	X	X	X	X	X	X	X				
~~MW-9~~						GW		8	X	X	X	X	X	X				CB	
~~MW-10~~						GW		8	X	X	X	X	X	X				CB	
MW-11	4/19/01	12:40	X			GW	9	8	X	X	X	X	X	X	X			3-4.5 C ice 4/20/01	

(7) **Turnaround Time Requested** (TAT) (please circle): Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax
Phone #: Fax #:

(8) **Data Package Options** (please circle if requested)
QC Summary Type VI (Raw Data)
Type I (Tier I) GLP
Type II (Tier II) Other
Type III (NJ Red. Del.)
Type IV (CLP)

SDG Complete? Yes No

Site-specific QC required? Yes No
(If yes, indicate QC sample and submit triplicate volume.)
Internal Chain of Custody required? Yes No

(9)

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	4/19/01	4:15	[signature]	4/20/01	11:15
[signature]	4/20/01	15:55			
			T. Larson	4/20/01	1555

Analysis Request/Environmental Services Chain of Custody

Lancaster Laboratories
Where quality is a science.

For Lancaster Laboratories use only
Acct. # 1401 Sample # 3596174-84
3596189-97

Please print. Instructions on reverse side correspond with circled numbers.

Client: IT Corporation Acct. #:
Project Name/#: Amtrak/13D30177 PWSID #:
Project Manager: Steve Baggett P.O.#
Sampler: CRAIG BRUDE/MIKE SMITH Quote #:
Name of state where samples were collected: DE

For lab use only
FSC:
SCR #: 11514260

Sample Identification	Date Collected	Time Collected	Grab (3)	Composite	Soil (4)	Water (GW)	Other	Total # of containers	Total/Dissolved Iron	CO_2, pH, Alkalinity 4.3, Alkalinity 4.5, Sulfate	TPH-DRO 8015B	Nitrite Nitrogen	Nitrate Nitrogen	Methane	Δ 3350 METALS MAPE	Remarks	Temperature of sample upon receipt (if requested) (6)
MW-12	4/19/01	1:10	X			GW	9	8	X	X	X	X	X	X	X		
MW-~~13~~ 3 CB	4/19/01	10:45	X			GW	9	8	X	X	X	X	X	X	X		
MW-14	4/19/01	9:30	X			GW	9	8	X	X	X	X	X	X	X		
~~MW-15~~						GW		8	X	X	X	X	X	X		CB	
~~MW-16~~						GW		8	X	X	X	X	X	X		CB	
~~MW-17~~						GW		8	X	X	X	X	X	X		CB	
MW#8A	4/19/01	10:00	X					9	X	X	X	X	X	X	X		
TRIP BLANK	4/19/01		X					2									
																3-4.5°C HAZ 4/20/01	

Turnaround Time Requested (TAT) (please circle): Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax
Phone #: Fax #:

Data Package Options (please circle if requested)
QC Summary Type VI (Raw Data)
Type I (Tier I) GLP
Type II (Tier II) Other
Type III (NJ Red. Del.)
Type IV (CLP)

SDG Complete? Yes No

Site-specific QC required? Yes No
(If yes, indicate QC sample and submit triplicate volume.)
Internal Chain of Custody required? Yes No

Relinquished by:	Date	Time	Received by:	Date	Time (9)
[signature]	4/19/01	4:15	[signature]	4/20/01	11:15
[signature]	4/20/01	15:37			
			T. [signature]	4/20/01	1555

Appendix F.2

August 2, 2001 Analytical Data

Lancaster Laboratories
Where quality is a science.

ANALYTICAL RESULTS

Prepared for:

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

610-241-5000

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 772741. Samples arrived at the laboratory on Friday, August 03, 2001. The PO# for this group is 170347.

Client Description	Lancaster Labs Number
MW-12 Grab Groundwater Sample	3660558
MW-13 Grab Groundwater Sample	3660559
MW-14 Grab Groundwater Sample	3660560
MW-8A Grab Groundwater Sample	3660561
MW-2 Grab Groundwater Sample	3660562
MW-3 Grab Groundwater Sample	3660563
MW-4 Grab Groundwater Sample	3660564
MW-8 Grab Groundwater Sample	3660565
MW-11 Grab Groundwater Sample	3660566
Influent Grab Groundwater Sample	3660567
Trip Blank Water Sample	3660568
Storage Blank Water Sample	3660569

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO	IT Corporation-PA	Attn: Mr. Steve Baggett
1 COPY TO	Data Package Group	

Lancaster Laboratories
Where quality is a science.

Questions? Contact your Client Services Representative
De Brooks at (717) 656-2300.

Respectfully Submitted,

Max E. Snavely
Sr. Chemist

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3660558

Collected:08/02/2001 17:20

Account Number: 01401

Submitted: 08/03/2001 13:45
Reported: 08/21/2001 at 07:07
Discard: 09/05/2001
MW-12 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

12LLL SDG#: AMR03-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08269	TPH-DRO by 8015B	n.a.	0.20	0.10	mg/l	1
	According to the SW-846 8015B method, the quantitation for Diesel Range Organics was performed by peak area comparison of the sample pattern to that of our #2 Fuel Oil reference standard (between C10 and C28 normal hydrocarbons). Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.					
00254	Iron	7439-89-6	57.7	1.00	mg/l	20
00258	Manganese	7439-96-5	4.94	0.0600	mg/l	5
00200	pH	n.a.	6.28	0.010		1
00201	Alkalinity to pH 8.3	n.a.	N.D.	0.41	mg/l	1
00202	Alkalinity to pH 4.5	n.a.	250.	0.41	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	0.054	0.015	mg/l	1
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	mg/l	1
00228	Sulfate	14808-79-8	N.D.	1.5	mg/l	5
00238	Free Carbon Dioxide	n.a.	262.	0.41	mg/l	1
07105	Volatile Headspace Hydrocarbon					
07106	Methane	74-82-8	7,300.	400.	ug/l	200

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08269	TPH-DRO by 8015B	SW-846 8015B	1	08/07/2001 18:27	Tracy A. Cole	1
00254	Iron	SW-846 7380	1	08/07/2001 10:01	Rosalind D. Ernest	20
00258	Manganese	SW-846 7460	1	08/08/2001 10:55	Damary S. Valentin	5
00200	pH	EPA 150.1	1	08/06/2001 19:15	Luz M. Groff	1
00201	Alkalinity to pH 8.3	EPA 310.1	1	08/08/2001 19:29	Elaine F. Stoltzfus	1
00202	Alkalinity to pH 4.5	EPA 310.1	1	08/08/2001 19:29	Elaine F. Stoltzfus	1
00219	Nitrite Nitrogen	EPA 353.2	1	08/04/2001 10:45	Mark A. Buckwalter	1
00220	Nitrate Nitrogen	EPA 353.2	1	08/08/2001 13:26	Mark A. Buckwalter	1
00228	Sulfate	EPA 300.0	1	08/04/2001 17:24	Brad M. La Placa	5

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3660558

Collected:08/02/2001 17:20

Account Number: 01401

Submitted: 08/03/2001 13:45
Reported: 08/21/2001 at 07:07
Discard: 09/05/2001
MW-12 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

12LLL SDG#: AMR03-01

00238	Free Carbon Dioxide	SM-18 4500CO2	1	08/08/2001 19:29	Elaine F. Stoltzfus	1
07105	Volatile Headspace Hydrocarbon	SW-846 8015B, modified	1	08/08/2001 18:07	Lisa A. Johnson	200
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	08/06/2001 17:00	Liana C. Jones	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	08/06/2001 16:45	Julie T. Vuong	1

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3660559

Collected:08/02/2001 17:00

Account Number: 01401

Submitted: 08/03/2001 13:45
Reported: 08/21/2001 at 07:07
Discard: 09/05/2001
MW-13 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

13XAM SDG#: AMR03-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08269	TPH-DRO by 8015B	n.a.	3.8	0.20	mg/l	2
	According to the SW-846 8015B method, the quantitation for Diesel Range Organics was performed by peak area comparison of the sample pattern to that of our #2 Fuel Oil reference standard (between C10 and C28 normal hydrocarbons). The reporting limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.					
00254	Iron	7439-89-6	54.9	1.00	mg/l	20
00258	Manganese	7439-96-5	0.480	0.0120	mg/l	1
00200	pH	n.a.	6.15	0.010		1
00201	Alkalinity to pH 8.3	n.a.	N.D.	0.41	mg/l	1
00202	Alkalinity to pH 4.5	n.a.	123.	0.41	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	0.035 J	0.015	mg/l	1
	This sample was originally analyzed within the 48 hour holding time for nitrite, however the result obtained was greater than the result obtained for nitrate. The nitrite analysis was repeated past the holding time to obtain the reported result.					
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	mg/l	1
00228	Sulfate	14808-79-8	N.D.	1.5	mg/l	5
00238	Free Carbon Dioxide	n.a.	174.	0.41	mg/l	1
07105	Volatile Headspace Hydrocarbon					
07106	Methane	74-82-8	11,000.	200.	ug/l	100

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08269	TPH-DRO by 8015B	SW-846 8015B	1	08/09/2001 16:34	Tracy A. Cole	2
00254	Iron	SW-846 7380	1	08/07/2001 10:07	Rosalind D. Ernest	20
00258	Manganese	SW-846 7460	1	08/08/2001 10:56	Damary S. Valentin	1
00200	pH	EPA 150.1	1	08/06/2001 19:15	Luz M. Groff	1
00201	Alkalinity to pH 8.3	EPA 310.1	1	08/08/2001 19:29	Elaine F. Stoltzfus	1
00202	Alkalinity to pH 4.5	EPA 310.1	1	08/08/2001 19:29	Elaine F. Stoltzfus	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3660559

Collected:08/02/2001 17:00

Account Number: 01401

Submitted: 08/03/2001 13:45
Reported: 08/21/2001 at 07:07
Discard: 09/05/2001
MW-13 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

13XAM SDG#: AMR03-02

00219	Nitrite Nitrogen	EPA 353.2	2	08/09/2001 11:28	Matthew J. Mercer	1
00220	Nitrate Nitrogen	EPA 353.2	1	08/08/2001 13:27	Mark A. Buckwalter	1
00228	Sulfate	EPA 300.0	1	08/04/2001 17:38	Brad M. La Placa	5
00238	Free Carbon Dioxide	SM-18 4500CO2	1	08/08/2001 19:29	Elaine F. Stoltzfus	1
07105	Volatile Headspace Hydrocarbon	SW-846 8015B, modified	1	08/08/2001 18:38	Lisa A. Johnson	100
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	08/06/2001 17:00	Liana C. Jones	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	08/06/2001 16:45	Julie T. Vuong	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3660560

Collected:08/02/2001 13:55

Account Number: 01401

Submitted: 08/03/2001 13:45
Reported: 08/21/2001 at 07:07
Discard: 09/05/2001
MW-14 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

14XAM SDG#: AMR03-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08269	TPH-DRO by 8015B	n.a.	8.1	1.0	mg/l	10
	According to the SW-846 8015B method, the quantitation for Diesel Range Organics was performed by peak area comparison of the sample pattern to that of our #2 Fuel Oil reference standard (between C10 and C28 normal hydrocarbons). The reporting limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.					
	Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.					
00254	Iron	7439-89-6	27.1	1.00	mg/l	20
00258	Manganese	7439-96-5	0.448	0.0120	mg/l	1
00200	pH	n.a.	6.25	0.010		1
00201	Alkalinity to pH 8.3	n.a.	N.D.	0.41	mg/l	1
00202	Alkalinity to pH 4.5	n.a.	154.	0.41	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	0.063	0.015	mg/l	1
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	mg/l	1
00228	Sulfate	14808-79-8	5.7	1.5	mg/l	5
00238	Free Carbon Dioxide	n.a.	173.	0.41	mg/l	1
07105	Volatile Headspace Hydrocarbon					
07106	Methane	74-82-8	6,500.	200.	ug/l	100

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08269	TPH-DRO by 8015B	SW-846 8015B	1	08/07/2001 20:36	Tracy A. Cole	10
00254	Iron	SW-846 7380	1	08/07/2001 10:08	Rosalind D. Ernest	20
00258	Manganese	SW-846 7460	1	08/08/2001 10:57	Damary S. Valentin	1
00200	pH	EPA 150.1	1	08/06/2001 19:15	Luz M. Groff	1
00201	Alkalinity to pH 8.3	EPA 310.1	1	08/08/2001 19:29	Elaine F. Stoltzfus	1
00202	Alkalinity to pH 4.5	EPA 310.1	1	08/08/2001 19:29	Elaine F. Stoltzfus	1

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Lancaster Laboratories Sample No. WW 3660560

Collected:08/02/2001 13:55

Account Number: 01401

Submitted: 08/03/2001 13:45
Reported: 08/21/2001 at 07:07
Discard: 09/05/2001
MW-14 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

14XAM SDG#: AMR03-03

00219	Nitrite Nitrogen	EPA 353.2	1	08/04/2001 10:48	Mark A. Buckwalter	1
00220	Nitrate Nitrogen	EPA 353.2	1	08/08/2001 13:28	Mark A. Buckwalter	1
00228	Sulfate	EPA 300.0	1	08/04/2001 17:53	Brad M. La Placa	5
00238	Free Carbon Dioxide	SM-18 4500CO2	1	08/08/2001 19:29	Elaine F. Stoltzfus	1
07105	Volatile Headspace Hydrocarbon	SW-846 8015B, modified	1	08/08/2001 18:48	Lisa A. Johnson	100
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	08/06/2001 17:00	Liana C. Jones	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	08/06/2001 16:45	Julie T. Vuong	1

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Lancaster Laboratories Sample No. WW 3660561

Collected:08/02/2001 15:20

Account Number: 01401

Submitted: 08/03/2001 13:45
Reported: 08/21/2001 at 07:07
Discard: 09/05/2001
MW-8A Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

8AAXM SDG#: AMR03-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08269	TPH-DRO by 8015B	n.a.	19.	1.0	mg/l	10
	According to the SW-846 8015B method, the quantitation for Diesel Range Organics was performed by peak area comparison of the sample pattern to that of our #2 Fuel Oil reference standard (between C10 and C28 normal hydrocarbons). The reporting limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.					
	Due to the nature of the sample matrix, the surrogate standard recovery is above the range of specifications.					
	Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.					
00254	Iron	7439-89-6	60.7	2.00	mg/l	40
00258	Manganese	7439-96-5	0.358	0.0120	mg/l	1
00200	pH	n.a.	6.12	0.010		1
00201	Alkalinity to pH 8.3	n.a.	N.D.	0.41	mg/l	1
00202	Alkalinity to pH 4.5	n.a.	127.	0.41	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	0.042 J	0.015	mg/l	1
	This sample was originally analyzed within the 48 hour holding time for nitrite, however the result obtained was greater than the result obtained for nitrate. The nitrite analysis was repeated past the holding time to obtain the reported result.					
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	mg/l	1
00228	Sulfate	14808-79-8	6.9	1.5	mg/l	5
00238	Free Carbon Dioxide	n.a.	193.	0.41	mg/l	1
07105	Volatile Headspace Hydrocarbon					
07106	Methane	74-82-8	11,000.	400.	ug/l	200

Laboratory Chronicle

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Lancaster Laboratories Sample No. WW 3660561

Collected:08/02/2001 15:20

Account Number: 01401

Submitted: 08/03/2001 13:45
Reported: 08/21/2001 at 07:07
Discard: 09/05/2001
MW-8A Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

8AAXM SDG#: AMR03-04

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08269	TPH-DRO by 8015B	SW-846 8015B	1	08/07/2001 20:57	Tracy A. Cole	10
00254	Iron	SW-846 7380	1	08/07/2001 10:13	Rosalind D. Ernest	40
00258	Manganese	SW-846 7460	1	08/08/2001 10:57	Damary S. Valentin	1
00200	pH	EPA 150.1	1	08/06/2001 19:15	Luz M. Groff	1
00201	Alkalinity to pH 8.3	EPA 310.1	1	08/08/2001 19:29	Elaine F. Stoltzfus	1
00202	Alkalinity to pH 4.5	EPA 310.1	1	08/08/2001 19:29	Elaine F. Stoltzfus	1
00219	Nitrite Nitrogen	EPA 353.2	2	08/09/2001 11:31	Matthew J. Mercer	1
00220	Nitrate Nitrogen	EPA 353.2	2	08/10/2001 13:30	Tonya M. Beck	1
00228	Sulfate	EPA 300.0	1	08/04/2001 18:08	Brad M. La Placa	5
00238	Free Carbon Dioxide	SM-18 4500CO2	1	08/08/2001 19:29	Elaine F. Stoltzfus	1
07105	Volatile Headspace Hydrocarbon	SW-846 8015B, modified	1	08/08/2001 18:17	Lisa A. Johnson	200
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	08/06/2001 17:00	Liana C. Jones	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	08/06/2001 16:45	Julie T. Vuong	1

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Lancaster Laboratories Sample No. WW 3660562

Collected:08/02/2001 17:00

Account Number: 01401

Submitted: 08/03/2001 13:45
Reported: 08/21/2001 at 07:07
Discard: 09/05/2001
MW-2 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

2AAM- SDG#: AMR03-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08269	TPH-DRO by 8015B	n.a.	1.6	0.094	mg/l	1
	According to the SW-846 8015B method, the quantitation for Diesel Range Organics was performed by peak area comparison of the sample pattern to that of our #2 Fuel Oil reference standard (between C10 and C28 normal hydrocarbons).					
	Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.					
00254	Iron	7439-89-6	62.1	1.00	mg/l	20
00258	Manganese	7439-96-5	0.941	0.0120	mg/l	1
00200	pH	n.a.	6.16	0.010		1
00201	Alkalinity to pH 8.3	n.a.	N.D.	0.41	mg/l	1
00202	Alkalinity to pH 4.5	n.a.	79.5	0.41	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	0.099	0.015	mg/l	1
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	mg/l	1
00228	Sulfate	14808-79-8	2.5 J	1.5	mg/l	5
00238	Free Carbon Dioxide	n.a.	110.	0.41	mg/l	1
07105	Volatile Headspace Hydrocarbon					
07106	Methane	74-82-8	5,400.	200.	ug/l	100

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08269	TPH-DRO by 8015B	SW-846 8015B	1	08/07/2001 20:14	Tracy A. Cole	1
00254	Iron	SW-846 7380	1	08/07/2001 10:15	Rosalind D. Ernest	20
00258	Manganese	SW-846 7460	1	08/08/2001 10:57	Damary S. Valentin	1
00200	pH	EPA 150.1	1	08/06/2001 19:15	Luz M. Groff	1
00201	Alkalinity to pH 8.3	EPA 310.1	1	08/08/2001 19:29	Elaine F. Stoltzfus	1
00202	Alkalinity to pH 4.5	EPA 310.1	1	08/08/2001 19:29	Elaine F. Stoltzfus	1
00219	Nitrite Nitrogen	EPA 353.2	1	08/04/2001 10:50	Mark A. Buckwalter	1
00220	Nitrate Nitrogen	EPA 353.2	1	08/08/2001 13:31	Mark A. Buckwalter	1
00228	Sulfate	EPA 300.0	1	08/04/2001 18:23	Brad M. La Placa	5

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Lancaster Laboratories Sample No. WW 3660562

Collected:08/02/2001 17:00

Account Number: 01401

Submitted: 08/03/2001 13:45
Reported: 08/21/2001 at 07:07
Discard: 09/05/2001
MW-2 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

2AAM- SDG#: AMR03-05

00238	Free Carbon Dioxide	SM-18 4500CO2	1	08/08/2001 19:29	Elaine F. Stoltzfus	1
07105	Volatile Headspace Hydrocarbon	SW-846 8015B, modified	1	08/08/2001 18:59	Lisa A. Johnson	100
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	08/06/2001 17:00	Liana C. Jones	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	08/06/2001 16:45	Julie T. Vuong	1

Analysis Report

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Lancaster Laboratories Sample No. WW 3660563

Collected:08/02/2001 16:10

Account Number: 01401

Submitted: 08/03/2001 13:45
Reported: 08/21/2001 at 07:07
Discard: 09/05/2001
MW-3 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

3-AMT SDG#: AMR03-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08269	TPH-DRO by 8015B	n.a.	0.50	0.097	mg/l	1
	According to the SW-846 8015B method, the quantitation for Diesel Range Organics was performed by peak area comparison of the sample pattern to that of our #2 Fuel Oil reference standard (between C10 and C28 normal hydrocarbons). Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.					
00254	Iron	7439-89-6	34.9	1.00	mg/l	20
00258	Manganese	7439-96-5	1.19	0.0120	mg/l	1
00200	pH	n.a.	6.52	0.010		1
00201	Alkalinity to pH 8.3	n.a.	N.D.	0.41	mg/l	1
00202	Alkalinity to pH 4.5	n.a.	338.	0.41	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	0.079	0.015	mg/l	1
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	mg/l	1
00228	Sulfate	14808-79-8	9.7	1.5	mg/l	5
00238	Free Carbon Dioxide	n.a.	204.	0.41	mg/l	1
07105	Volatile Headspace Hydrocarbon					
07106	Methane	74-82-8	8,600.	200.	ug/l	100

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08269	TPH-DRO by 8015B	SW-846 8015B	1	08/07/2001 18:48	Tracy A. Cole	1
00254	Iron	SW-846 7380	1	08/07/2001 10:16	Rosalind D. Ernest	20
00258	Manganese	SW-846 7460	1	08/08/2001 10:58	Damary S. Valentin	1
00200	pH	EPA 150.1	1	08/06/2001 19:15	Luz M. Groff	1
00201	Alkalinity to pH 8.3	EPA 310.1	1	08/08/2001 19:29	Elaine F. Stoltzfus	1
00202	Alkalinity to pH 4.5	EPA 310.1	1	08/08/2001 19:29	Elaine F. Stoltzfus	1
00219	Nitrite Nitrogen	EPA 353.2	1	08/04/2001 10:52	Mark A. Buckwalter	1
00220	Nitrate Nitrogen	EPA 353.2	1	08/08/2001 13:32	Mark A. Buckwalter	1
00228	Sulfate	EPA 300.0	1	08/04/2001 18:38	Brad M. La Placa	5

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Lancaster Laboratories Sample No. WW 3660563

Collected:08/02/2001 16:10

Account Number: 01401

Submitted: 08/03/2001 13:45
Reported: 08/21/2001 at 07:07
Discard: 09/05/2001
MW-3 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

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West Chester PA 19380

3-AMT SDG#: AMR03-06

00238	Free Carbon Dioxide	SM-18 4500CO2	1	08/08/2001 19:29	Elaine F. Stoltzfus	1
07105	Volatile Headspace Hydrocarbon	SW-846 8015B, modified	1	08/08/2001 19:09	Lisa A. Johnson	100
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	08/06/2001 17:00	Liana C. Jones	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	08/06/2001 16:45	Julie T. Vuong	1

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Lancaster Laboratories Sample No. WW 3660564

Collected:08/02/2001 15:50

Account Number: 01401

Submitted: 08/03/2001 13:45
Reported: 08/21/2001 at 07:07
Discard: 09/05/2001
MW-4 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

4AMT- SDG#: AMR03-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08269	TPH-DRO by 8015B	n.a.	18.	1.0	mg/l	10
	According to the SW-846 8015B method, the quantitation for Diesel Range Organics was performed by peak area comparison of the sample pattern to that of our #2 Fuel Oil reference standard (between C10 and C28 normal hydrocarbons). The reporting limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.					
	Due to the nature of the sample matrix, the surrogate standard recovery is above the range of specifications.					
	Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.					
00254	Iron	7439-89-6	70.0	2.00	mg/l	40
00258	Manganese	7439-96-5	0.263	0.0120	mg/l	1
00200	pH	n.a.	6.17	0.010		1
00201	Alkalinity to pH 8.3	n.a.	N.D.	0.41	mg/l	1
00202	Alkalinity to pH 4.5	n.a.	155.	0.41	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	0.043 J	0.015	mg/l	1
	This sample was originally analyzed within the 48 hour holding time for nitrite, however the result obtained was greater than the result obtained for nitrate. The nitrite analysis was repeated past the holding time to obtain the reported result.					
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	mg/l	1
00228	Sulfate	14808-79-8	N.D.	1.5	mg/l	5
00238	Free Carbon Dioxide	n.a.	210.	0.41	mg/l	1
07105	Volatile Headspace Hydrocarbon					
07106	Methane	74-82-8	14,000.	200.	ug/l	100

Laboratory Chronicle

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3660564

Collected:08/02/2001 15:50

Submitted: 08/03/2001 13:45
Reported: 08/21/2001 at 07:07
Discard: 09/05/2001
MW-4 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

Account Number: 01401

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

4AMT- SDG#: AMR03-07

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08269	TPH-DRO by 8015B	SW-846 8015B	1	08/07/2001 21:40	Tracy A. Cole	10
00254	Iron	SW-846 7380	1	08/07/2001 10:16	Rosalind D. Ernest	40
00258	Manganese	SW-846 7460	1	08/08/2001 10:58	Damary S. Valentin	1
00200	pH	EPA 150.1	1	08/06/2001 19:15	Luz M. Groff	1
00201	Alkalinity to pH 8.3	EPA 310.1	1	08/08/2001 19:29	Elaine F. Stoltzfus	1
00202	Alkalinity to pH 4.5	EPA 310.1	1	08/08/2001 19:29	Elaine F. Stoltzfus	1
00219	Nitrite Nitrogen	EPA 353.2	2	08/09/2001 11:33	Matthew J. Mercer	1
00220	Nitrate Nitrogen	EPA 353.2	2	08/10/2001 13:34	Tonya M. Beck	1
00228	Sulfate	EPA 300.0	1	08/04/2001 19:23	Brad M. La Placa	5
00238	Free Carbon Dioxide	SM-18 4500CO2	1	08/08/2001 19:29	Elaine F. Stoltzfus	1
07105	Volatile Headspace Hydrocarbon	SW-846 8015B, modified	1	08/08/2001 19:19	Lisa A. Johnson	100
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	08/06/2001 17:00	Liana C. Jones	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	08/06/2001 16:45	Julie T. Vuong	1

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Lancaster Laboratories Sample No. WW 3660565

Collected:08/02/2001 14:55

Account Number: 01401

Submitted: 08/03/2001 13:45
Reported: 08/21/2001 at 07:07
Discard: 09/05/2001
MW-8 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

8AMTE SDG#: AMR03-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08269	TPH-DRO by 8015B	n.a.	40.	4.8	mg/l	50
	According to the SW-846 8015B method, the quantitation for Diesel Range Organics was performed by peak area comparison of the sample pattern to that of our #2 Fuel Oil reference standard (between C10 and C28 normal hydrocarbons). The reporting limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.					
	Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.					
00254	Iron	7439-89-6	95.3	2.00	mg/l	40
00258	Manganese	7439-96-5	0.362	0.0120	mg/l	1
00200	pH	n.a.	6.18	0.010		1
00201	Alkalinity to pH 8.3	n.a.	N.D.	0.41	mg/l	1
00202	Alkalinity to pH 4.5	n.a.	171.	0.41	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	0.064	0.015	mg/l	1
	This sample was originally analyzed within the 48 hour holding time for nitrite, however the result obtained was greater than the result obtained for nitrate. The nitrite analysis was repeated past the holding time to obtain the reported result.					
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	mg/l	1
00228	Sulfate	14808-79-8	22.8	1.5	mg/l	5
00238	Free Carbon Dioxide	n.a.	226.	0.41	mg/l	1
07105	Volatile Headspace Hydrocarbon					
07106	Methane	74-82-8	21,000.	400.	ug/l	200

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08269	TPH-DRO by 8015B	SW-846 8015B	1	08/08/2001 13:48	Tracy A. Cole	50

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Lancaster Laboratories Sample No. WW 3660565

Collected:08/02/2001 14:55

Account Number: 01401

Submitted: 08/03/2001 13:45
Reported: 08/21/2001 at 07:07
Discard: 09/05/2001
MW-8 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

8AMTE SDG#: AMR03-08

00254	Iron	SW-846 7380	1	08/07/2001 10:17	Rosalind D. Ernest	40
00258	Manganese	SW-846 7460	1	08/08/2001 10:58	Damary S. Valentin	1
00200	pH	EPA 150.1	1	08/06/2001 19:15	Luz M. Groff	1
00201	Alkalinity to pH 8.3	EPA 310.1	1	08/08/2001 19:29	Elaine F. Stoltzfus	1
00202	Alkalinity to pH 4.5	EPA 310.1	1	08/08/2001 19:29	Elaine F. Stoltzfus	1
00219	Nitrite Nitrogen	EPA 353.2	2	08/09/2001 11:34	Matthew J. Mercer	1
00220	Nitrate Nitrogen	EPA 353.2	2	08/10/2001 13:35	Tonya M. Beck	1
00228	Sulfate	EPA 300.0	1	08/04/2001 19:38	Brad M. La Placa	5
00238	Free Carbon Dioxide	SM-18 4500CO2	1	08/08/2001 19:29	Elaine F. Stoltzfus	1
07105	Volatile Headspace Hydrocarbon	SW-846 8015B, modified	1	08/08/2001 18:28	Lisa A. Johnson	200
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	08/06/2001 17:00	Liana C. Jones	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	08/06/2001 16:45	Julie T. Vuong	1

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Lancaster Laboratories Sample No. WW 3660566

Collected:08/02/2001 17:40

Account Number: 01401

Submitted: 08/03/2001 13:45
Reported: 08/21/2001 at 07:08
Discard: 09/05/2001
MW-11 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

11AMT SDG#: AMR03-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08269	TPH-DRO by 8015B	n.a.	2.0	0.099	mg/l	1
	According to the SW-846 8015B method, the quantitation for Diesel Range Organics was performed by peak area comparison of the sample pattern to that of our #2 Fuel Oil reference standard (between C10 and C28 normal hydrocarbons). Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.					
00254	Iron	7439-89-6	63.2	2.00	mg/l	40
00258	Manganese	7439-96-5	2.26	0.0120	mg/l	1
00200	pH	n.a.	6.19	0.010		1
00201	Alkalinity to pH 8.3	n.a.	N.D.	0.41	mg/l	1
00202	Alkalinity to pH 4.5	n.a.	115.	0.41	mg/l	1
00219	Nitrite Nitrogen	14797-65-0	0.042 J	0.015	mg/l	1
	This sample was originally analyzed within the 48 hour holding time for nitrite, however the result obtained was greater than the result obtained for nitrate. The nitrite analysis was repeated past the holding time to obtain the reported result.					
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	mg/l	1
00228	Sulfate	14808-79-8	2.6 J	1.5	mg/l	5
00238	Free Carbon Dioxide	n.a.	149.	0.41	mg/l	1
07105	Volatile Headspace Hydrocarbon					
07106	Methane	74-82-8	6,100.	200.	ug/l	100

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08269	TPH-DRO by 8015B	SW-846 8015B	1	08/07/2001 19:53	Tracy A. Cole	1
00254	Iron	SW-846 7380	1	08/07/2001 10:18	Rosalind D. Ernest	40
00258	Manganese	SW-846 7460	1	08/08/2001 10:59	Damary S. Valentin	1
00200	pH	EPA 150.1	1	08/06/2001 19:15	Luz M. Groff	1
00201	Alkalinity to pH 8.3	EPA 310.1	1	08/08/2001 19:29	Elaine F. Stoltzfus	1

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Lancaster Laboratories Sample No. WW 3660566

Collected:08/02/2001 17:40

Submitted: 08/03/2001 13:45
Reported: 08/21/2001 at 07:08
Discard: 09/05/2001
MW-11 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

Account Number: 01401

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

11AMT SDG#: AMR03-09

00202	Alkalinity to pH 4.5	EPA 310.1	1	08/08/2001 19:29	Elaine F. Stoltzfus	1
00219	Nitrite Nitrogen	EPA 353.2	2	08/09/2001 11:35	Matthew J. Mercer	1
00220	Nitrate Nitrogen	EPA 353.2	2	08/10/2001 13:36	Tonya M. Beck	1
00228	Sulfate	EPA 300.0	1	08/04/2001 19:52	Brad M. La Placa	5
00238	Free Carbon Dioxide	SM-18 4500CO2	1	08/08/2001 19:29	Elaine F. Stoltzfus	1
07105	Volatile Headspace Hydrocarbon	SW-846 8015B, modified	1	08/08/2001 19:30	Lisa A. Johnson	100
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	08/06/2001 17:00	Liana C. Jones	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	08/06/2001 16:45	Julie T. Vuong	1

Lancaster Laboratories
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Lancaster Laboratories Sample No. WW 3660567

Collected:08/02/2001 17:35

Account Number: 01401

Submitted: 08/03/2001 13:45
Reported: 08/21/2001 at 07:08
Discard: 09/05/2001
Influent Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

INFDR SDG#: AMR03-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08269	TPH-DRO by 8015B	n.a.	24.	1.0	mg/l	10

According to the SW-846 8015B method, the quantitation for Diesel Range Organics was performed by peak area comparison of the sample pattern to that of our #2 Fuel Oil reference standard (between C10 and C28 normal hydrocarbons).
The reporting limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.

Due to the nature of the sample matrix, the surrogate standard recovery is above the range of specifications.

Sufficient sample volume was not available to perform a MS/MSD for this analysis. Therefore, a LCS/LCSD was performed to demonstrate precision and accuracy at a batch level.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08269	TPH-DRO by 8015B	SW-846 8015B	1	08/08/2001 12:52	Tracy A. Cole	10
07003	Extraction - DRO (Waters)	SW-846 3510C	1	08/06/2001 16:45	Julie T. Vuong	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3660568

Collected: n.a.

Submitted: 08/03/2001 13:45
Reported: 08/21/2001 at 07:08
Discard: 09/05/2001
Trip Blank Water Sample
Amtrak - Wilmington, DE/13030177

Account Number: 01401

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

TBAMT SDG#: AMR03-11TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit	Units	Dilution Factor
07105	Volatile Headspace Hydrocarbon						
07106	Methane	74-82-8	5.	J	2.	ug/l	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
07105	Volatile Headspace Hydrocarbon	SW-846 8015B, modified	1	08/06/2001 21:09	Lisa A. Johnson	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3660569

Collected:08/03/2001 16:00 by LAB

Account Number: 01401

Submitted: 08/03/2001 13:45
Reported: 08/21/2001 at 07:08
Discard: 09/05/2001
Storage Blank Water Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

SBAMT SDG#: AMR03-12SB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit	Units	Dilution Factor
07105	Volatile Headspace Hydrocarbon						
07106	Methane	74-82-8	4.	J	2.	ug/l	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
07105	Volatile Headspace Hydrocarbon	SW-846 8015B, modified	1	08/06/2001 21:20	Lisa A. Johnson	1

Lancaster Laboratories
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Quality Control Summary

Client Name: IT Corporation- PA
Reported: 08/21/01 at 07:08 AM

Group Number: 772741

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 01216105101A	Sample number(s): 3660558,3660560,3660562-3660563							
Nitrite Nitrogen	N.D.	.015	mg/l	100		90-110		
Batch number: 01216211101B	Sample number(s): 3660558-3660566							
Sulfate	N.D.	.3	mg/l	99		89-110		
Batch number: 012180008A	Sample number(s): 3660558-3660566,3660568-3660569							
Methane	N.D.	2.	ug/l	103		80-120		
Batch number: 012180009A	Sample number(s): 3660558-3660567							
TPH-DRO by 8015B	N.D.	.1	mg/l	95	94	53-126	1	20
Batch number: 01218020001A	Sample number(s): 3660558,3660565							
pH				100	100	98-102	0	1
Batch number: 01218020001B	Sample number(s): 3660559-3660564,3660566							
pH				100	100	98-102	0	1
Batch number: 012180820004	Sample number(s): 3660558-3660566							
Iron	N.D.	.05	mg/l	99		88-111		
Manganese	N.D.	.012	mg/l	102		90-108		
Batch number: 01220020202A	Sample number(s): 3660558-3660566							
Alkalinity to pH 4.5				100		98-103		
Batch number: 01220106102B	Sample number(s): 3660558-3660560,3660562-3660563							
Nitrate Nitrogen	N.D.	.04	mg/l	103		89-110		
Batch number: 01221105101A	Sample number(s): 3660559,3660561,3660564-3660566							
Nitrite Nitrogen	N.D.	.015	mg/l	100		90-110		
Batch number: 01222106101A	Sample number(s): 3660561,3660564-3660566							
Nitrate Nitrogen	N.D.	.04	mg/l	99		89-110		

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 01216105101A	Sample number(s): 3660558,3660560,3660562-3660563								
Nitrite Nitrogen	99		90-110			N.D.	N.D.	200* (1)	6
Batch number: 01216211101B	Sample number(s): 3660558-3660566								
Sulfate	99		90-110			2.6 J	2.6 J	1 (1)	2
Batch number: 012180008A	Sample number(s): 3660558-3660566,3660568-3660569								
Methane	102	97	78-116	4	20				

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
Lancaster Laboratories, Inc.
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PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

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Quality Control Summary

Client Name: IT Corporation- PA
Reported: 08/21/01 at 07:08 AM

Group Number: 772741

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 01218020001A	Sample number(s): 3660558,3660565								
pH						6.61	6.62	0	2
Batch number: 01218020001B	Sample number(s): 3660559-3660564,3660566								
pH						6.15	6.15	0	2
Batch number: 012180820004	Sample number(s): 3660558-3660566								
Iron	(2)	(2)	80-120	6	20	4.16	5.90	35*	20
Manganese	110	106	85-111	2	20	0.392	0.414	5	20
Batch number: 01220020202A	Sample number(s): 3660558-3660566								
Alkalinity to pH 8.3						N.D.	N.D.	0 (1)	3
Alkalinity to pH 4.5	102	75	50-137	8*	3	467.	483.	4*	3
Batch number: 01220106102B	Sample number(s): 3660558-3660560,3660562-3660563								
Nitrate Nitrogen	97		90-110			N.D.	N.D.	0 (1)	6
Batch number: 01221105101A	Sample number(s): 3660559,3660561,3660564-3660566								
Nitrite Nitrogen	99		90-110			N.D.	N.D.	0 (1)	6
Batch number: 01222106101A	Sample number(s): 3660561,3660564-3660566								
Nitrate Nitrogen	94	110	90-110	15*	2	N.D.	N.D.	13* (1)	6

Surrogate Quality Control

Analysis Name: Volatile Headspace Hydrocarbon
Batch number: 012180008A

	Propene
3660558	108
3660559	101
3660560	103
3660561	109
3660562	109
3660563	107
3660564	94
3660565	100
3660566	96
3660568	98
3660569	96
Blank	92
LCS	91
MS	100
MSD	105
Limits:	52-125

Analysis Name: TPH-DRO by 8015B

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

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Quality Control Summary

Client Name: IT Corporation- PA
Reported: 08/21/01 at 07:08 AM

Group Number: 772741

Surrogate Quality Control

Batch number: 012180009A

	Orthoterphenyl
3660558	89
3660559	134
3660560	96
3660561	265*
3660562	94
3660563	95
3660564	364*
3660565	102
3660566	104
3660567	250*
Blank	79
LCS	94
LCSD	94
Limits:	52-158

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

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ANALYTICAL RESULTS

Prepared for:

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

610-241-5000

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 772745. Samples arrived at the laboratory on Friday, August 03, 2001. The PO# for this group is 170347.

Client Description	Lancaster Labs Number
MW-12 Grab Groundwater Sample	3660575
MW-13 Grab Groundwater Sample	3660576
MW-14 Grab Groundwater Sample	3660577
MW-8A Grab Groundwater Sample	3660578
MW-2 Grab Groundwater Sample	3660579
MW-3 Grab Groundwater Sample	3660580
MW-4 Grab Groundwater Sample	3660581
MW-8 Grab Groundwater Sample	3660582
MW-11 Grab Groundwater Sample	3660583

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO	IT Corporation-PA	Attn: Mr. Steve Baggett
1 COPY TO	Data Package Group	

Lancaster Laboratories
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Questions? Contact your Client Services Representative
De Brooks at (717) 656-2300.

Respectfully Submitted,

Max E. Snavely
Sr. Chemist

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

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Lancaster Laboratories Sample No. WW 3660575

Collected:08/02/2001 17:20

Account Number: 01401

Submitted: 08/03/2001 15:45
Reported: 08/21/2001 at 07:09
Discard: 09/05/2001
MW-12 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

12FIL SDG#: AMR04-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00254	Iron	7439-89-6	8.44	0.500	mg/l	10
00258	Manganese	7439-96-5	4.44	0.0600	mg/l	5

This sample was filtered in the lab for dissolved metals.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00254	Iron	SW-846 7380	1	08/14/2001 08:32	Jessica L. Boyd	10
00258	Manganese	SW-846 7460	1	08/14/2001 09:55	Jessica L. Boyd	5
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	08/11/2001 08:10	Denise K. Conners	1

Analysis Report

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Lancaster Laboratories Sample No. WW 3660576

Collected:08/02/2001 17:00

Account Number: 01401

Submitted: 08/03/2001 15:45
Reported: 08/21/2001 at 07:09
Discard: 09/05/2001
MW-13 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

13FIL SDG#: AMR04-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00254	Iron	7439-89-6	7.61	0.500	mg/l	10
00258	Manganese	7439-96-5	0.489	0.0120	mg/l	1

This sample was filtered in the lab for dissolved metals.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00254	Iron	SW-846 7380	1	08/14/2001 08:34	Jessica L. Boyd	10
00258	Manganese	SW-846 7460	1	08/14/2001 09:57	Jessica L. Boyd	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	08/11/2001 08:10	Denise K. Conners	1

Lancaster Laboratories
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Lancaster Laboratories Sample No. WW 3660577

Collected:08/02/2001 13:55

Account Number: 01401

Submitted: 08/03/2001 15:45
Reported: 08/21/2001 at 07:09
Discard: 09/05/2001
MW-14 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

14FIL SDG#: AMR04-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00254	Iron	7439-89-6	13.7	0.500	mg/l	10
00258	Manganese	7439-96-5	0.464	0.0120	mg/l	1

This sample was filtered in the lab for dissolved metals.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00254	Iron	SW-846 7380	1	08/14/2001 08:47	Jessica L. Boyd	10
00258	Manganese	SW-846 7460	1	08/14/2001 09:58	Jessica L. Boyd	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	08/11/2001 08:10	Denise K. Conners	1

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Lancaster Laboratories Sample No. WW 3660578

Collected:08/02/2001 15:20

Submitted: 08/03/2001 15:45
Reported: 08/21/2001 at 07:09
Discard: 09/05/2001
MW-8A Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

Account Number: 01401

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

8AFIL SDG#: AMR04-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00254	Iron	7439-89-6	25.7	1.00	mg/l	20
00258	Manganese	7439-96-5	0.367	0.0120	mg/l	1

This sample was filtered in the lab for dissolved metals.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00254	Iron	SW-846 7380	1	08/14/2001 08:51	Jessica L. Boyd	20
00258	Manganese	SW-846 7460	1	08/14/2001 09:59	Jessica L. Boyd	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	08/11/2001 08:10	Denise K. Conners	1

Lancaster Laboratories
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Lancaster Laboratories Sample No. WW 3660579

Collected:08/02/2001 17:00

Account Number: 01401

Submitted: 08/03/2001 15:45
Reported: 08/21/2001 at 07:09
Discard: 09/05/2001
MW-2 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

2AFIL SDG#: AMR04-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00254	Iron	7439-89-6	18.2	1.00	mg/l	20
00258	Manganese	7439-96-5	0.811	0.0120	mg/l	1

This sample was filtered in the lab for dissolved metals.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00254	Iron	SW-846 7380	1	08/14/2001 08:52	Jessica L. Boyd	20
00258	Manganese	SW-846 7460	1	08/14/2001 10:00	Jessica L. Boyd	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	08/11/2001 08:10	Denise K. Conners	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3660581

Collected:08/02/2001 15:50

Account Number: 01401

Submitted: 08/03/2001 15:45
Reported: 08/21/2001 at 07:09
Discard: 09/05/2001
MW-4 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

4AFIL SDG#: AMR04-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00254	Iron	7439-89-6	27.6	1.00	mg/l	20
00258	Manganese	7439-96-5	0.281	0.0120	mg/l	1

This sample was filtered in the lab for dissolved metals.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00254	Iron	SW-846 7380	1	08/14/2001 08:54	Jessica L. Boyd	20
00258	Manganese	SW-846 7460	1	08/14/2001 10:01	Jessica L. Boyd	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	08/11/2001 08:10	Denise K. Conners	1

Analysis Report

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. WW 3660583

Collected:08/02/2001 17:40

Account Number: 01401

Submitted: 08/03/2001 15:45
Reported: 08/21/2001 at 07:09
Discard: 09/05/2001
MW-11 Grab Groundwater Sample
Amtrak - Wilmington, DE/13030177

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

11FIL SDG#: AMR04-09*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00254	Iron	7439-89-6	24.4	1.00	mg/l	20
00258	Manganese	7439-96-5	2.24	0.0120	mg/l	1

This sample was filtered in the lab for dissolved metals.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00254	Iron	SW-846 7380	1	08/14/2001 08:59	Jessica L. Boyd	20
00258	Manganese	SW-846 7460	1	08/14/2001 10:02	Jessica L. Boyd	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	08/11/2001 08:10	Denise K. Conners	1

Lancaster Laboratories
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Quality Control Summary

Client Name: IT Corporation- PA
Reported: 08/21/01 at 07:09 AM

Group Number: 772745

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 012230820001	Sample number(s): 3660575-3660583							
Iron	N.D.	.05	mg/l	105		88-111		
Manganese	N.D.	.012	mg/l	103		90-108		

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 012230820001	Sample number(s): 3660575-3660583								
Iron	98	102	80-120	5	20	N.D.	N.D.	0 (1)	20
Manganese	91	96	85-111	5	20	N.D.	N.D.	0 (1)	20

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

MEMBER ACIL
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PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Appendix G

NPDES Permit Requirements

B.1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning the effective date and lasting through expiration date, the permittee is authorized to discharge from point source 001[1] the quantity and quality of effluent specified below:

Parameter	Effluent Limitations						Monitoring Requirements [2]	
	Load			Concentration			Measurement Frequency	Sample Type
	Daily Average	Daily Maximum	Units	Daily Average	Maximum Instantaneous	Units		
Flow	N/A			N/A		gpm	Instantaneous [3]	Estimated [4]
Oil and Grease	N/A			10.0	15 .0	mg/L	Quarterly	Grab
pH	N/A			The pH shall be between 6.0 and 9.0 at all times.		S.U.	Semi-Annually	Grab
Surfactants	N/A					mg/L	Semi-Annually	Grab
PCBs	There shall be no discharge of PCBs [7]					ng/L	None	Grab
Discharges of storm water associated with industrial activity shall be free of floating solids, sludge deposits, debris, oil sheen and scum to the MEP[5] Non-Storm Water Discharges are prohibited. The discharges shall not cause scouring or erosion.								

The timing of sampling shall allow for two full days of standard operating activities to occur at the facility since the last rainfall event that resulted in run-off from the facility. A sample from a representative[6] storm water discharge shall be taken at the location of the Outfall 001[1] in accordance with the monitoring requirements specified above. No sample shall be taken under circumstances having the potential to endanger a person taking the sample.

---

[1] See "Discharge Description" on page 2 of this permit.

[2] Report "nondetected" testing results on the discharge monitoring report (DMR) as "<" and the applicable test MDL. For example, if Surfactants is "nondetected" using a test method with an MDL of 10 ug/L, report "< 10 ug/L" on the DMR.

[3] The instantaneous flow rate shall be recorded at each time a sample is taken for each specific parameter.

[4] Determine the flow of storm water discharge at the time the sample is taken. A reading from a rain gauge taken at the time of sampling can be substituted for an estimate of flow.

[5] Maximum Extent Practicable (MEP) - means to complete an objective or requirement of the permit, to a level which bears the most benefit from an environmental standpoint but not to a level that is physically or economically unattainable, or that would jeopardize human health or safety, or that would prohibit the conductance of work at the facility or site.

[6] Storm water must discharge for at least 15 minutes and the sample must be taken within the first half hour of discharge in order to be representative.

[7] Refer to Special Condition D. - "PCB Monitoring".

B.3 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning the effective date and lasting through expiration date, the permittee is authorized to discharge from point sources 003 [1] and 004[1] the quantity and quality of effluent specified below:

Parameter	Effluent Limitations						Monitoring Requirements [2]	
	Load			Concentration				
	Daily Average	Daily Maximum	Units	Daily Average	Maximum Instanta-neous	Units	Measurement Frequency	Sample Type
PCBs	There shall be no discharge of PCBs					N/A	None	N/A
Discharges of storm water associated with industrial activity shall be free of floating solids, sludge deposits, debris, oil sheen and scum to the MEP[5] Non-Storm Water Discharges are prohibited. The discharges shall not cause scouring or erosion.								

[1] See "Discharge Description" on page 2 of this permit.

[5] Maximum Extent Practicable (MEP) - means to complete an objective or requirement of the permit, to a level which bears the most benefit from an environmental standpoint but not to a level that is physically or economically unattainable, or that would jeopardize human health or safety, or that would prohibit the conductance of work at the facility or site.

B.4 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning the effective date and lasting through expiration date, the permittee is authorized to discharge from point sources 005[1] the quantity and quality of effluent specified below:

Parameter	Effluent Limitations						Monitoring Requirements [2]	
	Load			Concentration			Measurement Frequency	Sample Type
	Daily Average	Daily Maximum	Units	Daily Average	Maximum Instanta-neous	Units		
Flow	N/A			N/A		gpm	Instantaneous [3]	Estimated [4]
Oil and Grease	N/A			10.0	15 .0	mg/L	Semi-Annually	Grab
pH	N/A			The pH shall be between 6.0 and 9.0 at all times.		S.U.	Semi-Annually	Grab
Surfactants	N/A					mg/L	Semi-Annually	Grab
PCBs	There shall be no discharge of PCBs					ng/L	Annually	Grab
Discharges of storm water associated with industrial activity shall be free of floating solids, sludge deposits, debris, oil sheen and scum to the MEP[5] Non-Storm Water Discharges are prohibited. The discharges shall not cause scouring or erosion.								

The timing of sampling shall allow for two full days of standard operating activities to occur at the facility since the last rainfall event that resulted in run-off from the facility. A sample from a representative[6] storm water discharge shall be taken at the location of the 005[1] in accordance with the monitoring requirements specified above . No sample shall be taken under circumstances having the potential to endanger a person taking the sample.

---

[1] See "Discharge Description" on page 2 of this permit.

[2] Report "nondetected" testing results on the discharge monitoring report (DMR) as "<" and the applicable test MDL. For example, if Surfactants is "nondetected" using a test method with an MDL of 10 ug/L, report "< 10 ug/L" on the DMR.

[3] The instantaneous flow rate shall be recorded at each time a sample is taken for each specific parameter.

[4] Determine the flow of storm water discharge at the time the sample is taken. A reading from a rain gauge taken at the time of sampling can be substituted for an estimate of flow.

[5] Maximum Extent Practicable (MEP) - means to complete an objective or requirement of the permit, to a level which bears the most benefit from an environmental standpoint but not to a level that is physically or economically unattainable, or that would jeopardize human health or safety, or that would prohibit the conductance of work at the facility or site.

[6] Storm water must discharge for at least 15 minutes and the sample must be taken within the first half hour of discharge in order to be representative.

[7] Refer to Special Condition D. - **"PCB Monitoring"**.

B.5 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning the effective date and lasting through expiration date, the permittee is authorized to discharge from point sources 006[1] the quantity and quality of effluent specified below:

Parameter	Effluent Limitations						Monitoring Requirements [2]	
	Load			Concentration			Measurement Frequency	Sample Type
	Daily Average	Daily Maximum	Units	Daily Average	Maximum Instanta-neous	Units		
Flow	N/A			N/A		gpm	Instantaneous [3]	Estimated [4]
Oil and Grease	N/A			10.0	15 .0	mg/L	Semi-Annually	Grab
pH	N/A			The pH shall be between 6.0 and 9.0 at all times.		S.U.	Semi-Annually	Grab
Surfactants	N/A					mg/L	Semi-Annually	Grab
PCBs	There shall be no discharge of PCBs					ng/L	Annually	Grab
Discharges of storm water associated with industrial activity shall be free of floating solids, sludge deposits, debris, oil sheen and scum to the MEP[5] Non-Storm Water Discharges are prohibited. The discharges shall not cause scouring or erosion.								

The timing of sampling shall allow for two full days of standard operating activities to occur at the facility since the last rainfall event that resulted in run-off from the facility. A sample from a representative[6] storm water discharge shall be taken at the location of the Outfall 006 in accordance with the monitoring requirements specified above . No sample shall be taken under circumstances having the potential to endanger a person taking the sample.

[1] See "Discharge Description" on page 2 of this permit.

[2] Report "nondetected" testing results on the discharge monitoring report (DMR) as "<" and the applicable test MDL. For example, if Surfactants is "nondetected" using a test method with an MDL of 10 ug/L, report "< 10 ug/L" on the DMR.

[3] The instantaneous flow rate shall be recorded at each time a sample is taken for each specific parameter.

[4] Determine the flow of storm water discharge at the time the sample is taken. A reading from a rain gauge taken at the time of sampling can be substituted for an estimate of flow.

[5] Maximum Extent Practicable (MEP) - means to complete an objective or requirement of the permit, to a level which bears the most benefit from an environmental standpoint but not to a level that is physically or economically unattainable, or that would jeopardize human health or safety, or that would prohibit the conductance of work at the facility or site.

[6] Storm water must discharge for at least 15 minutes and the sample must be taken within the first half hour of discharge in order to be representative

[7] Refer to Special Condition D. - "PCB Monitoring".

B.6 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning the effective date and lasting through expiration date, the permittee is authorized to discharge from point sources 007[1] the quantity and quality of effluent specified below:

Parameter	Effluent Limitations						Monitoring Requirements [2]	
	Load			Concentration				
	Daily Average	Daily Maximum	Units	Daily Average	Maximum Instanta-neous	Units	Measurement Frequency	Sample Type
Flow	N/A			N/A		gpm	Instantaneous [3]	Estimated [4]
Oil and Grease	N/A			10.0	15 .0	mg/L	Semi -Annually	Grab
pH	N/A			The pH shall be between 6.0 and 9.0 at all times.		S.U.	Semi-Annually	Grab
Surfactants	N/A					mg/L	Semi-Annually	Grab
PCBs	There shall be no discharge of PCBs					ng/L	Annually	Grab
Trichloroethylene	N/A					mg/L	Annually	Grab
Discharges of storm water associated with industrial activity shall be free of floating solids, sludge deposits, debris, oil sheen and scum to the MEP[5] Non-Storm Water Discharges are prohibited. The discharges shall not cause scouring or erosion.								

The timing of sampling shall allow for two full days of standard operating activities to occur at the facility since the last rainfall event that resulted in run-off from the facility. A sample from a representative[6] storm water discharge shall be taken at the location of the Outfall 007 in accordance with the monitoring requirements specified above. No sample shall be taken under circumstances having the potential to endanger a person taking the sample.

[1] See "Discharge Description" on page 2 of this permit.
[2] Report "nondetected" testing results on the discharge monitoring report (DMR) as "<" and the applicable test MDL. For example, if Surfactants is "nondetected" using a test method with an MDL of 10 ug/L, report "< 10 ug/L" on the DMR.
[3] The instantaneous flow rate shall be recorded at each time a sample is taken for each specific parameter.
[4] Determine the flow of storm water discharge at the time the sample is taken. A reading from a rain gauge taken at the time of sampling can be substituted for an estimate of flow.
[5] Maximum Extent Practicable (MEP) - means to complete an objective or requirement of the permit, to a level which bears the most benefit from an environmental standpoint but not to a level that is physically or economically unattainable, or that would jeopardize human health or safety, or that would prohibit the conductance of work at the facility or site.
[6] Storm water must discharge for at least 15 minutes and the sample must be taken within the first half hour of discharge in order to be representative.
[7] Refer to Special Condition D. - "PCB Monitoring".

Appendix H

Western Drainage Ditch Analytical Data

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3585263

Collected:04/04/2001 10:20 by SM

Account Number: 01401

Submitted: 04/05/2001 18:20
Reported: 04/17/01 at 10:22 AM
Discard: 5/2/01
WD-1 (0-.5) Grab Soil Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

WD1-0

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	74.2	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
02729	Custom TPH with Ranges(soil)					
00179	C10-C28	n.a.	81,000.	5,400.	mg/kg	200
00193	>C28-C40	n.a.	< 5,400.	5,400.	mg/kg	200
02730	Total TPH	n.a.	81,000.	5,400.	mg/kg	200
	The quantitation limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.					
	Accurate surrogate recoveries could not be determined due to the dilution required for analysis of the sample.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 6,600.	6,600.	ug/kg	100
01496	PCB-1221	11104-28-2	< 6,600.	6,600.	ug/kg	100
01497	PCB-1232	11141-16-5	< 6,600.	6,600.	ug/kg	100
01498	PCB-1242	53469-21-9	< 6,600.	6,600.	ug/kg	100
01499	PCB-1248	12672-29-6	< 6,600.	6,600.	ug/kg	100
01500	PCB-1254	11097-69-1	< 6,600.	6,600.	ug/kg	100
01501	PCB-1260	11096-82-5	45,000.	6,600.	ug/kg	100
	Due to the nature of the sample matrix, a reduced aliquot was used for analysis. The Limits of Quantitation (LOQ's) were raised accordingly. Accurate surrogate recoveries could not be determined due to the dilution required for analysis of the sample.					

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor

Lancaster Laboratories
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Lancaster Laboratories Sample No. SW 3585263

Collected:04/04/2001 10:20 by SM

Account Number: 01401

Submitted: 04/05/2001 18:20
Reported: 04/17/01 at 10:22 AM
Discard: 5/2/01
WD-1 (0-.5) Grab Soil Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

WD1-0

00111	Moisture	EPA 160.3 modified	1	04/10/2001 19:27	Justin M. Bowers	1
02729	Custom TPH with Ranges(soil)	SW-846 8015B, modified	1	04/11/2001 23:15	Robert G. Brown	200
01216	PCBs in Solids	SW-846 8082	1	04/09/2001 10:28	Michele D. Hamilton	100
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	04/06/2001 15:30	Luis E. Villamil	1
07004	Extraction - DRO (Soils)	SW-846 3550B	1	04/10/2001 08:30	Kenneth A. Yingst	1

Lancaster Laboratories
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Lancaster Laboratories Sample No. SW 3585264

Collected:04/04/2001 10:40 by SM

Account Number: 01401

Submitted: 04/05/2001 18:20
Reported: 04/17/01 at 10:23 AM
Discard: 5/2/01
WD-1 (1.5-2) Grab Soil Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

WD1-1

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	75.2	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
02729	Custom TPH with Ranges(soil)					
00179	C10-C28	n.a.	13,000.	1,400.	mg/kg	50
00193	>C28-C40	n.a.	< 1,400.	1,400.	mg/kg	50
02730	Total TPH	n.a.	13,000.	1,400.	mg/kg	50
	The quantitation limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.					
	Accurate surrogate recoveries could not be determined due to the dilution required for analysis of the sample.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 6,900.	6,900.	ug/kg	100
01496	PCB-1221	11104-28-2	< 6,900.	6,900.	ug/kg	100
01497	PCB-1232	11141-16-5	< 6,900.	6,900.	ug/kg	100
01498	PCB-1242	53469-21-9	< 6,900.	6,900.	ug/kg	100
01499	PCB-1248	12672-29-6	< 6,900.	6,900.	ug/kg	100
01500	PCB-1254	11097-69-1	< 6,900.	6,900.	ug/kg	100
01501	PCB-1260	11096-82-5	32,000.	6,900.	ug/kg	100
	Due to the nature of the sample matrix, a reduced aliquot was used for analysis. The Limits of Quantitation (LOQ's) were raised accordingly.					

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	04/10/2001 19:27	Justin M. Bowers	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3585264

Collected:04/04/2001 10:40 by SM

Account Number: 01401

Submitted: 04/05/2001 18:20
Reported: 04/17/01 at 10:23 AM
Discard: 5/2/01
WD-1 (1.5-2) Grab Soil Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

WD1-1

02729	Custom TPH with Ranges(soil)	SW-846 8015B, modified	1	04/12/2001 00:04	Robert G. Brown	50
01216	PCBs in Solids	SW-846 8082	1	04/09/2001 11:23	Michele D. Hamilton	100
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	04/06/2001 15:30	Luis E. Villamil	1
07004	Extraction - DRO (Soils)	SW-846 3550B	1	04/10/2001 08:30	Kenneth A. Yingst	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3585265

Collected:04/04/2001 10:50 by SM

Account Number: 01401

Submitted: 04/05/2001 18:20
Reported: 04/17/01 at 10:23 AM
Discard: 5/2/01
WD-1 (3.5-4) Grab Soil Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

WD1-3

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	40.6	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
02729	Custom TPH with Ranges(soil)					
00179	C10-C28	n.a.	2,800.	120.	mg/kg	10
00193	>C28-C40	n.a.	190.	120.	mg/kg	10
02730	Total TPH	n.a.	3,000.	120.	mg/kg	10
	The quantitation limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.					
	Accurate surrogate recoveries could not be determined due to the dilution required for analysis of the sample.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 290.	290.	ug/kg	10
01496	PCB-1221	11104-28-2	< 290.	290.	ug/kg	10
01497	PCB-1232	11141-16-5	< 290.	290.	ug/kg	10
01498	PCB-1242	53469-21-9	< 290.	290.	ug/kg	10
01499	PCB-1248	12672-29-6	< 290.	290.	ug/kg	10
01500	PCB-1254	11097-69-1	< 290.	290.	ug/kg	10
01501	PCB-1260	11096-82-5	2,100.	290.	ug/kg	10

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	04/10/2001 19:27	Justin M. Bowers	1
02729	Custom TPH with Ranges(soil)	SW-846 8015B, modified	1	04/12/2001 00:54	Robert G. Brown	10
01216	PCBs in Solids	SW-846 8082	1	04/09/2001 11:42	Michele D. Hamilton	10

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3585265

Collected:04/04/2001 10:50 by SM

Account Number: 01401

Submitted: 04/05/2001 18:20
Reported: 04/17/01 at 10:23 AM
Discard: 5/2/01
WD-1 (3.5-4) Grab Soil Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

WD1-3

00819	Solid Sample Pesticide Extract	SW-846 3550B	1	04/06/2001 15:30	Luis E. Villamil	1
07004	Extraction - DRO (Soils)	SW-846 3550B	1	04/10/2001 08:30	Kenneth A. Yingst	1

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Lancaster Laboratories Sample No. SW 3585266

Collected:04/04/2001 12:20 by SM

Account Number: 01401

Submitted: 04/05/2001 18:20
Reported: 04/17/01 at 10:23 AM
Discard: 5/2/01
WD-2 (0-0.5) Grab Soil Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

WD2-0

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	78.8	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
02729	Custom TPH with Ranges(soil)					
00179	C10-C28	n.a.	73,000.	3,300.	mg/kg	100
00193	>C28-C40	n.a.	3,300.	3,300.	mg/kg	100
02730	Total TPH	n.a.	76,000.	3,300.	mg/kg	100
	The quantitation limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.					
	Accurate surrogate recoveries could not be determined due to the dilution required for analysis of the sample.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 8,000.	8,000.	ug/kg	100
01496	PCB-1221	11104-28-2	< 8,000.	8,000.	ug/kg	100
01497	PCB-1232	11141-16-5	< 8,000.	8,000.	ug/kg	100
01498	PCB-1242	53469-21-9	< 8,000.	8,000.	ug/kg	100
01499	PCB-1248	12672-29-6	< 8,000.	8,000.	ug/kg	100
01500	PCB-1254	11097-69-1	< 8,000.	8,000.	ug/kg	100
01501	PCB-1260	11096-82-5	21,000.	8,000.	ug/kg	100
	Accurate surrogate recoveries could not be determined due to the dilution required for analysis of the sample. Due to the nature of the sample matrix, a reduced aliquot was used for analysis. The Limits of Quantitation (LOQ's) were raised accordingly.					

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3585266

Collected:04/04/2001 12:20 by SM

Account Number: 01401

Submitted: 04/05/2001 18:20
Reported: 04/17/01 at 10:23 AM
Discard: 5/2/01
WD-2 (0-0.5) Grab Soil Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

WD2-0

00111	Moisture	EPA 160.3 modified	1	04/10/2001 19:27	Justin M. Bowers	1
02729	Custom TPH with Ranges(soil)	SW-846 8015B, modified	1	04/12/2001 01:43	Robert G. Brown	100
01216	PCBs in Solids	SW-846 8082	1	04/09/2001 12:01	Michele D. Hamilton	100
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	04/06/2001 15:30	Luis E. Villamil	1
07004	Extraction - DRO (Soils)	SW-846 3550B	1	04/10/2001 08:30	Kenneth A. Yingst	1

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Where quality is a science.

Lancaster Laboratories Sample No. SW 3585267

Collected:04/04/2001 12:40 by SM

Account Number: 01401

Submitted: 04/05/2001 18:20
Reported: 04/17/01 at 10:23 AM
Discard: 5/2/01
WD-2 (1.5-2) Grab Soil Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

WD2-1

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	70.4	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
02729	Custom TPH with Ranges(soil)					
00179	C10-C28	n.a.	47,000.	2,400.	mg/kg	100
00193	>C28-C40	n.a.	< 2,400.	2,400.	mg/kg	100
02730	Total TPH	n.a.	47,000.	2,400.	mg/kg	100
	The quantitation limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.					
	Accurate surrogate recoveries could not be determined due to the dilution required for analysis of the sample.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 1,100.	1,100.	ug/kg	20
01496	PCB-1221	11104-28-2	< 1,100.	1,100.	ug/kg	20
01497	PCB-1232	11141-16-5	< 1,100.	1,100.	ug/kg	20
01498	PCB-1242	53469-21-9	< 1,100.	1,100.	ug/kg	20
01499	PCB-1248	12672-29-6	< 1,100.	1,100.	ug/kg	20
01500	PCB-1254	11097-69-1	< 1,100.	1,100.	ug/kg	20
01501	PCB-1260	11096-82-5	5,700.	1,100.	ug/kg	20

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	04/10/2001 19:27	Justin M. Bowers	1
02729	Custom TPH with Ranges(soil)	SW-846 8015B, modified	1	04/12/2001 02:32	Robert G. Brown	100
01216	PCBs in Solids	SW-846 8082	1	04/09/2001 12:19	Michele D. Hamilton	20

MEMBER ACIL
Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3585267

Collected:04/04/2001 12:40 by SM

Account Number: 01401

Submitted: 04/05/2001 18:20
Reported: 04/17/01 at 10:23 AM
Discard: 5/2/01
WD-2 (1.5-2) Grab Soil Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

WD2-1

00819	Solid Sample Pesticide Extract	SW-846 3550B	1	04/06/2001 15:30	Luis E. Villamil	1
07004	Extraction - DRO (Soils)	SW-846 3550B	1	04/10/2001 08:30	Kenneth A. Yingst	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3585268

Collected:04/04/2001 13:00 by SM

Account Number: 01401

Submitted: 04/05/2001 18:20
Reported: 04/17/01 at 10:23 AM
Discard: 5/2/01
WD-2 (3.5-4) Grab Soil Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

WD2-3

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	47.5	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
02729	Custom TPH with Ranges(soil)					
00179	C10-C28	n.a.	8,800.	670.	mg/kg	50
00193	>C28-C40	n.a.	< 670.	670.	mg/kg	50
02730	Total TPH	n.a.	8,800.	670.	mg/kg	50
	The quantitation limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.					
	Accurate surrogate recoveries could not be determined due to the dilution required for analysis of the sample.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 650.	650.	ug/kg	20
01496	PCB-1221	11104-28-2	< 650.	650.	ug/kg	20
01497	PCB-1232	11141-16-5	< 650.	650.	ug/kg	20
01498	PCB-1242	53469-21-9	< 650.	650.	ug/kg	20
01499	PCB-1248	12672-29-6	< 650.	650.	ug/kg	20
01500	PCB-1254	11097-69-1	< 650.	650.	ug/kg	20
01501	PCB-1260	11096-82-5	2,500.	650.	ug/kg	20
	Due to the nature of the sample matrix, a reduced aliquot was used for analysis. The Limits of Quantitation (LOQ's) were raised accordingly.					

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	04/10/2001 19:27	Justin M. Bowers	1

Lancaster Laboratories
Where quality is a science.

Lancaster Laboratories Sample No. SW 3585268

Collected:04/04/2001 13:00 by SM

Account Number: 01401

Submitted: 04/05/2001 18:20
Reported: 04/17/01 at 10:23 AM
Discard: 5/2/01
WD-2 (3.5-4) Grab Soil Sample
Amtrak - Wilmington, DE

IT Corporation- PA
1220 Ward Avenue, Suite 300
West Chester PA 19380

WD2-3

02729	Custom TPH with Ranges(soil)	SW-846 8015B, modified	1	04/12/2001 03:21	Robert G. Brown	50
01216	PCBs in Solids	SW-846 8082	1	04/09/2001 12:38	Michele D. Hamilton	20
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	04/06/2001 15:30	Luis E. Villamil	1
07004	Extraction - DRO (Soils)	SW-846 3550B	1	04/10/2001 08:30	Kenneth A. Yingst	1

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Lancaster Laboratories Sample No. SW 3585269

Collected:04/04/2001 14:20 by SM

Account Number: 01401

Submitted: 04/05/2001 18:20
Reported: 04/17/01 at 10:23 AM
Discard: 5/2/01
WD-3 (0-.5) Grab Soil Sample
Amtrak - Wilmington, DE

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West Chester PA 19380

WD3-0

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	83.4	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
02729	Custom TPH with Ranges(soil)					
00179	C10-C28	n.a.	150,000.	8,400.	mg/kg	200
00193	>C28-C40	n.a.	< 8,400.	8,400.	mg/kg	200
02730	Total TPH	n.a.	150,000.	8,400.	mg/kg	200
	The quantitation limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.					
	Accurate surrogate recoveries could not be determined due to the dilution required for analysis of the sample.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 10,000.	10,000.	ug/kg	100
01496	PCB-1221	11104-28-2	< 10,000.	10,000.	ug/kg	100
01497	PCB-1232	11141-16-5	< 10,000.	10,000.	ug/kg	100
01498	PCB-1242	53469-21-9	< 10,000.	10,000.	ug/kg	100
01499	PCB-1248	12672-29-6	< 10,000.	10,000.	ug/kg	100
01500	PCB-1254	11097-69-1	< 10,000.	10,000.	ug/kg	100
01501	PCB-1260	11096-82-5	43,000.	10,000.	ug/kg	100
	Due to the nature of the sample matrix, a reduced aliquot was used for analysis. The Limits of Quantitation (LOQ's) were raised accordingly.					

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	04/10/2001 19:27	Justin M. Bowers	1

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Where quality is a science.

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WD3-0

02729	Custom TPH with Ranges(soil)	SW-846 8015B, modified	1	04/12/2001 05:00	Robert G. Brown	200
01216	PCBs in Solids	SW-846 8082	1	04/09/2001 12:56	Michele D. Hamilton	100
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	04/06/2001 15:30	Luis E. Villamil	1
07004	Extraction - DRO (Soils)	SW-846 3550B	1	04/10/2001 08:30	Kenneth A. Yingst	1

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WD3-3

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Units	Dilution Factor
00111	Moisture	n.a.	39.0	0.50	% by wt.	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The result reported above is on an as-received basis.					
02729	Custom TPH with Ranges(soil)					
00179	C10-C28	n.a.	770.	57.	mg/kg	5
00193	>C28-C40	n.a.	76.	57.	mg/kg	5
02730	Total TPH	n.a.	850.	57.	mg/kg	5
	The quantitation limits were raised because sample dilution was necessary to bring target compounds into the calibration range of the system.					
01216	PCBs in Solids					
01495	PCB-1016	12674-11-2	< 28.	28.	ug/kg	1
01496	PCB-1221	11104-28-2	< 28.	28.	ug/kg	1
01497	PCB-1232	11141-16-5	< 28.	28.	ug/kg	1
01498	PCB-1242	53469-21-9	< 28.	28.	ug/kg	1
01499	PCB-1248	12672-29-6	< 28.	28.	ug/kg	1
01500	PCB-1254	11097-69-1	< 28.	28.	ug/kg	1
01501	PCB-1260	11096-82-5	100.	28.	ug/kg	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00111	Moisture	EPA 160.3 modified	1	04/10/2001 19:27	Justin M. Bowers	1
02729	Custom TPH with Ranges(soil)	SW-846 8015B, modified	1	04/12/2001 06:38	Robert G. Brown	5
01216	PCBs in Solids	SW-846 8082	1	04/09/2001 13:34	Michele D. Hamilton	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	04/06/2001 15:30	Luis E. Villamil	1
07004	Extraction - DRO (Soils)	SW-846 3550B	1	04/10/2001 08:30	Kenneth A. Yingst	1

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