OPERABLE UNIT 1 REMEDIAL ACTION REPORT

Sunnyside Yard Queens, New York

March 11, 1998 (Revised April 9, 1998)

Prepared for:

National Railroad Passenger Corporation 30th Street Station 4th Floor South Philadelphia, Pennsylvania 19104

Prepared by:

REMEDIAL ENGINEERING, P.C. 1377 Motor Parkway Islandia, New York 11788

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1.0 INTRODUCTION

The National Railroad Passenger Corporation (Amtrak) owns property known as Sunnyside Yard (Yard), located at 39-29 Honeywell Street in Queens County, a borough of New York City, New York (Figure 1). A portion of the Yard has been designated by Amtrak for construction of a new High Speed Trainset Facility (HSTF) Service and Inspection (S&I) Building and its ancillary structures (i.e., the access road and utilities route, the parking area, the construction easement area which surrounds the building, and the construction laydown area). The Sunnyside Yard is listed as a Class II Site in the New York State Department of Environmental Conservation's (NYSDEC) Registry of Inactive Hazardous Waste Disposal Sites. As a result of the listing for the entire Yard, Amtrak, New Jersey Transit Corporation (NJTC), and the NYSDEC entered into an Order on Consent (OOC) Index #W2-0081-87-06 effective October 1989.

In accordance with the OOC, several investigations have been performed at the Yard including, but not limited to, remedial investigations, feasibility studies, and a risk assessment. Each of these investigations was performed by Roux Associates, Inc. (Roux Associates), an affiliate of Remedial Engineering, P.C. As a result of these investigations, areas of the Yard were identified where levels of contamination require remedial efforts. With the NYSDEC's concurrence, to accommodate the HSTF S&I Building construction schedule and still address remedial efforts sitewide in a timely and orderly manner, the Yard has been subdivided into six operable units (Figure 2). The operable units are described as follows:

- Operable Unit 1 (OU-1) designated as the soil above the water table within the footprint
 of the proposed HSTF S&I Building;
- Operable Unit 2 (OU-2) designated as the soil above the water table within the footprint
 of the HSTF S&I Building ancillary structures (i.e., the access road and utilities route,
 the parking area, the construction easement area which surrounds the building, and the
 construction laydown area);
- Operable Unit 3 (OU-3) designated as the soil and separate-phase petroleum accumulation above the water table in Area 1 of the Yard, as defined in the Phase I Remedial Investigation (RI) report;
- Operable Unit 4 (OU-4) designated as the soil above the water table in the remainder of the Yard;
- · Operable Unit 5 (OU-5) designated as the sewer system beneath the Yard; and

 Operable Unit 6 (OU-6) designated as the ground water including the saturated soil beneath the Yard.

Following the Operable Unit approach, a Feasibility Study (FS) was submitted for OU-1 (April 18, 1997) which involved the development and evaluation of alternatives to remediate carcinogenic polycyclic aromatic hydrocarbon (cPAH) impacted soil within OU-1.

A Proposed Remedial Action Plan (PRAP) was issued on June 9, 1997 to identify the preferred remedy for OU-1 as stated in the OU-1 FS, summarize other alternatives, and discuss the rationale for this preference. The PRAP was issued as a component of citizen participation activities. A public meeting was held on June 24, 1997 to explain the components of the PRAP and answer questions from the public. Following a public comment period, the Record of Decision (ROD) was issued on August 13, 1997, identifying OU-1 FS Alternative III - Asphalt and Concrete Removal, Soil Excavation, and Off-Site Disposal as the selected remedy for implementation. The OU-1 Remedial Design Report (Remedial Engineering, P.C., October 8, 1997) established the scope of work required to complete the selected remedy required in the ROD. The OU-1 Order on Consent, Index #W2-0081-97-06 was issued on February 9, 1998.

This document, the OU-1 Remedial Action Report, serves to summarize the activities performed to implement the NYSDEC-selected alternative to remediate the impacted soil above the water table within OU-1 (Drawing 1). The contents of this report describe the implementation of the OU-1 remedial action in accordance with the requirements of the approved OU-1 Remedial Design Report (which included Specifications, Drawings, a Health and Safety Plan, and a Contingency Plan). Additionally, NYSDEC correspondence containing comments regarding the initial submission of this document and Amtrak's response letter satisfying the OU-1 comments are included as Appendix A.

1.1 OU-1 Site Description and History

OU-1 is located in the northeastern portion of the Yard as shown in Figure 2. OU-1 measures approximately 790 feet in length and 60 feet in width, and is slightly over one acre in total area.

The topography of OU-1 is primarily level and gently slopes down from east to west along its length.

OU-1 and the surrounding Yard were originally owned and developed in the early 1900s by the Pennsylvania Tunnel and Terminal Company, a subsidiary of the Pennsylvania Railroad (later known as the Penn Central Transportation Company). On April 1, 1976, the Consolidated Rail Corporation (Conrail) acquired the Yard and the same day conveyed it to Amtrak. The Yard originally operated as a storage and maintenance facility for railroad rolling stock and currently functions primarily as a train maintenance and train makeup facility for electric locomotives and railroad cars for Amtrak and NJTC. OU-1 formerly housed an inspection pit/repair shed and a portion of a locomotive washer.

OU-1 operated as a portion of an active 105-acre rail yard and was formerly occupied by Wheel Tracks No. 1 and No. 2 and a portion of the Metroliner Shed and the No. 1 Engine House Track. Currently, the most readily apparent features of OU-1 are concrete and asphalt platforms, occasional concrete ruins, overhead electric catenary wires, and the ubiquitous presence of ballast. The railroad tracks and overhead electric catenary wires in the area to be excavated were removed by Amtrak prior to initiation of remediation activities.

OU-1 is located entirely within the boundaries of the Yard. Land use immediately adjacent to the Yard is almost exclusively mixed commercial and light industrial with surrounding residential areas located primarily to the south and east.

1.2 NYSDEC-Recommended Soil Cleanup Levels

Based on an evaluation of the Yard conditions, in a February 25, 1997 letter to Roux Associates, the NYSDEC and New York State Department of Health (NYSDOH) issued the following NYSDEC-recommended soil cleanup levels for the contaminants of concern at the Yard, including OU-1:

- Semivolatile organic compounds (SVOCs) 10 parts per million (ppm) for both surface and subsurface soil for total cPAHs;
- Lead 1,000 ppm for both surface and subsurface soil; and

Polychlorinated biphenyls (PCBs) - 25 ppm for both surface and subsurface soil.

The letter further acknowledged that while certain metals were found in soil throughout the Yard above the NYSDEC's Recommended Soil Cleanup Objectives (RSCOs), none (with the exception of lead) were present at levels high enough to require any remediation. Additionally, the letter did not specify NYSDEC-recommended soil cleanup levels for volatile organic compounds (VOCs) since no VOCs were detected at the Yard above the RSCOs.

2.0 QUALITY ASSURANCE OBJECTIVES

Quality assurance objectives were established in the OU-1 Remedial Design Report to verify that all remediation activities were implemented in accordance with the Contract Documents (i.e., the Specifications, Drawings, Health and Safety Plan, and Contingency Plan), thus performing remediation in conformance with the remedy selected in the ROD. For the duration of construction, the quality assurance objectives were achieved, in part, with the provision of full-time oversight of the Contractor's work activities by Roux Associates/Remedial Engineering. The responsibilities of Roux Associates/Remedial Engineering included:

- observing and reviewing progress of the Contractor from mobilization activities through completion of the project;
- conducting daily meetings with the Contractor each morning prior to initiation of the day's work activities to discuss the work to be performed;
- verifying the Contractor's use of appropriate construction practices and construction materials;
- requiring the Contractor to conform with the requirements of the Contract Documents;
- reporting to Amtrak any necessary modifications to the OU-1 Remedial Design Report and formally conveying those modifications to the NYSDEC for approval; and
- following appropriate sampling and analytical methods and procedures throughout the duration of the remediation work.

Additional quality assurance measures consist of:

- certification by a New York State-registered Professional Engineer to identify that all remediation activities were conducted in accordance with the Contract Documents; and
- the requirement for the Contractor to guarantee all work performed, and materials supplied, for a period of at least one year after completion of construction.

3.0 HEALTH AND SAFETY MEASURES

During OU-1 remediation activities, a full-time Site Safety Officer was present to perform health and safety monitoring at the work site for employees of Amtrak and Roux Associates/Remedial Engineering. Additional duties of the Site Safety Officer included:

- · observing equipment decontamination procedures;
- coordinating daily health and safety briefings with all OU-1 remediation personnel; and
- performing full-time work zone air monitoring using a photoionization detector and particulate meter.

During construction activities, Amtrak track safety procedures were followed which included protection provided by electric traction (ET) personnel and a track flagman. Although the overhead electric catenary lines were taken out of service in OU-1 during pre-construction activities, there was the potential for the excavator to come in contact with energized lines outside of OU-1, due to the extended reach of the machinery. The ET personnel were present to oversee activities near the overhead catenary lines, and if underground electrical cables were discovered in the excavation. A flagman was present throughout the duration of the project to warn of the approach of trains. This was an added safety precaution, as active tracks were within 25 feet of the work area.

All open excavations were surrounded with plastic safety fencing and caution tape in accordance with the Specifications. This precautionary procedure was followed to minimize the potential for injuries of OU-1 remediation personnel, as well as any Amtrak employees working in proximity to the excavation.

4.0 MODIFICATIONS TO THE OU-1 REMEDIAL DESIGN REPORT

During excavation activities, two concrete structures (i.e., inspection pits) were discovered that run east to west across the remediation area, each structure, including sidewalls, measuring approximately 14 feet wide by 70 feet long and up to four feet deep (Figure 3). Although it was anticipated that these inspection pits were present, it was not anticipated that they would be as large as they were. In addition, two unanticipated structures (i.e., drop table pits) were encountered that run in the north-south direction, each intersected by one of the inspection pits. Both of the drop table pits measure approximately 30 feet long by five feet wide by seven feet deep. All four of these structures were found to contain soil, fill material, and debris and material in all four were excavated in accordance with the Specifications and as described in Section 5.3. Profiles of the excavation area including the depths of the inspection and drop table pits are shown in Figure 3. The surveyed final depths of the excavation are shown on Drawing 1.

As indicated in Section 2.4 of the OU-1 Remedial Design Report, any subsurface concrete encountered during excavation activities was to be removed and staged prior to off-site disposal. However, due to the large size of the structures, Roux Associates/Remedial Engineering, P.C. requested in a letter to the NYSDEC dated December 18, 1997 (Appendix B), to leave these structures in place. This request was supported by the fact that the structures were found to be structurally intact (i.e., a barrier to downward migration of contaminants, if present) with no visible staining or other signs of contamination. The NYSDEC approved this request verbally with the provision that the concrete be sampled for the contaminants of concern at the Yard. Roux Associates/Remedial Engineering, P.C. formalized the concrete sampling protocol in a December 19, 1997 letter to the NYSDEC (Appendix C). Details pertaining to concrete sampling and analysis are discussed further in Section 5.6 of this report.

5.0 SUMMARY OF REMEDIATION ACTIVITIES

The following activities were performed as part of the OU-1 remediation, and are discussed in the sections below:

- pre-construction/mobilization activities;
- asphalt and concrete removal;
- soil excavation;
- preparation and use of staging areas and temporary storage tanks;
- post-excavation soil sampling;
- · post-excavation concrete sampling;
- disposal; and
- project closeout.

5.1 Pre-Construction/Mobilization Activities

Prior to OU-1 remediation activities, two active railroad tracks (Wheel Tracks No. 1 and No. 2) were present on the surface of OU-1. These tracks, which include rails, ties and ballast, were taken out of service and the rails and ties in the work area were removed by Amtrak personnel prior to Contractor mobilization. In addition to track work, catenary lines were also taken out of service in OU-1 and removed in the work area. Following removal of the tracks and catenary lines, Topo-Metrics, Inc. of Hauppauge, New York, a licensed land surveyor, was contracted to mark out the limits of the excavation area based on information in the OU-1 Remedial Design Report. These markers were used as the corners of the limit of excavation for the Contractor during concrete and asphalt removal, as well as soil excavation activities.

Once the above pre-construction activities were complete, mobilization of the Contractor's work force and equipment commenced. The earthwork equipment consisted of an excavator, 10-wheel dump truck, truck mounted pneumatic hoe-ram hammer, backhoe, and a front-end loader.

5.2 Asphalt and Concrete Removal

Following Contractor mobilization activities, all surface asphalt and concrete within the OU-1 remediation area was removed. Approximately two to three inches of asphalt, and eight to 12 inches of surface concrete were present. The asphalt was sawcut to the surveyed excavation limits, however, due to the thickness of the concrete, sawcutting could not be used to break up the material. As a result, the pneumatic hoe-ram hammer was used for the remaining concrete demolition. The demolished materials were removed using the excavator and front-end loader, and staged in a lined stockpile area prior to off-site disposal at a recycling facility. A total of 280 cubic yards of asphalt and concrete were removed from OU-1.

5.3 Soil Excavation

Following asphalt and concrete removal, the underlying soil was exposed. In addition to the soil, fill material and debris were also present in the excavation area. In accordance with the OU-1 Remedial Design Report, the vertical extent of the excavation (approximately 3 feet below land surface) extended to the water table, and did not include saturated soil. In addition, the intent of the remediation was to remove any visibly-contaminated soil even if it extended below the water table. However, visibly contaminated soil was not encountered during the remediation.

As noted in Section 4.0, during excavation, two subsurface concrete inspection pits were uncovered. Most of the material within these structures was removed using the excavator, however, Contractor personnel used shovels to remove all remaining soil, and the exposed concrete surfaces were broom-cleaned of any adhered soil.

Soil, fill material and debris were also encountered in the drop table pits to a depth of approximately eight feet below land surface (bls). The excavator and backhoe were able to remove the majority of this material. Contractor personnel with confined space entry training entered the drop table pits and removed the remaining material with shovels.

Electrical cables and conduits were found in the subsurface across the entire OU-1 remediation area. These cables were tested by Amtrak ET personnel, and deemed to be inactive. As directed by Amtrak's personnel and in accordance with their requirements, all electrical cables in the

excavation area were removed. The cables were segregated and staged for disposal along with the excavated soil and debris.

In areas outside of the inspection and drop table pits, soil was removed to a depth of approximately 3 feet bls. All final excavation depths are shown in Drawing 1. Approximately 472 tons of soil, fill material and debris were excavated and disposed as described in Section 5.7.

Liquid encountered in the drop table pits during soil excavation activities was pumped, discharged to a temporary tank and stored prior to sampling and disposal.

5.4 Preparation and Use of Staging Areas and Temporary Storage Tanks

A total of four staging areas were constructed for excavated soil and related debris. In each of the four soil staging areas, berms were formed on three sides, and the soil piles were sloped so any liquids leaching from the soil would collect within the bermed area. The berms were formed by mounding clean fill material on three sides on a layer of polyethylene sheeting. Another layer of sheeting was then placed over the fill, and a depression was formed where soil was placed. The soil staging areas were covered daily with a layer of polyethylene sheeting to prevent precipitation from entering the soil piles. The berms were used as a control when the front-end loader emptied the soil onto the staging areas and to prevent runoff in the event of precipitation. The asphalt and concrete was staged separately from the soil, on a layer of polyethylene sheeting in a fifth staging area.

A total of 2,450 gallons of liquid was pumped from the drop table pits and transferred to a 20,000-gallon storage tank located west of OU-1. This tank is used by Amtrak for other Yard operations besides work in OU-1, and will remain at the Yard. A liquid disposal characterization sample was collected on January 29, 1998. Analytical results for this sample have been included in Table 1 and the data package is included as Appendix D. The liquid was sampled for PCBs, RCRA characteristics (i.e., ignitability, corrosivity, reactivity), and total organic halogens. As shown in Table 1, the materials are not considered hazardous.

5.5 Post-Excavation Soil Sampling

Upon completion of all soil excavation activities, post-excavation soil sampling was performed to determine if further excavation, beyond the limits determined in the OU-1 Remedial Design Report, was necessary. Samples were collected from each side wall and bottom of the excavated area in accordance with the procedures presented in the OU-1 Remedial Design Report. The samples were analyzed by Industrial Corrosion Management, Inc. Laboratory (ICM) of Randolph, New Jersey, a New York State-certified laboratory. The post-excavation soil analysis was performed in accordance with NYSDEC 1995 Analytical Services Protocol (ASP) Method 95-2 and confirmed that all contaminated soil with total cPAH concentrations greater than 10 ppm was removed.

For soil sampling purposes, the excavated area was divided into north and south regions based upon the location of the inspection pits. Two composite soil samples were collected from the bottom of the excavation (i.e., B.W. and N.B.). Additionally, one composite soil sample was collected from each of the four sidewalls (i.e., N.W., S.W., E.W., W.W.) for a total of six composite post-excavation composite soil samples (Figure 4). Analytical results from the post-excavation sampling activities were provided by the laboratory in 48-hour turnaround time so that activities could proceed should additional excavation be warranted. The analytical results of the post-excavation soil samples indicated that concentrations of cPAHs ranged from not detected in the north sidewall sample to 4.72 ppm (i.e., 4,720 micrograms per kilogram) in the west sidewall sample, which are well below the NYSDEC-recommended soil cleanup level for OU-1. The analytical results are presented in Table 2 and the data package for all soil samples is included as Appendix E.

5.6 Post-Excavation Concrete Sampling

In accordance with the concrete sampling protocol contained in the December 19, 1997 correspondence to the NYSDEC from Remedial Engineering P.C. (Appendix C), and verbal approval by Mr. Hari Agrawal, P.E. of NYSDEC to Mr. Joseph Duminuco of Roux Associates on December 22, 1997, concrete chip sample composites were collected at 10-foot intervals along each of the inspection pits. Each composite sample consisted of material from each of the seven exposed concrete faces of the inspection pits. A total of seven composite samples were collected

along each inspection pit. One of the seven sample locations from each inspection pit coincided with the location of a drop table pit and, therefore, a composite sample was collected across each drop table pit also. One duplicate sample was collected for quality control purposes, resulting in a total of fifteen composite concrete samples (Figure 4).

Preliminary analytical results indicated an elevated PCB concentration in composite sample C-11.

Therefore, the NYSDEC requested that each of the seven locations which comprised composite sample C-11 be resampled as discrete chip samples and analyzed for PCBs.

The concrete samples were analyzed for one of more of the following: cPAHs using ASP 95-2; PCBs using ASP 95-3, and lead using the United States Environmental Protection Agency Contract Laboratory Statement of Work. Analytical results of the post-excavation concrete sampling (including the discrete concrete chip samples at C-11) indicate that none of the samples exceed their respective NYSDEC-recommended cleanup level for the contaminants of concern and, therefore, the concrete was left in place. The analytical results are presented in Table 3 and the data package for all concrete samples is included as Appendix F.

5.7 Disposal

Prior to disposal of the excavated soil, disposal characterization sampling was performed in accordance with requirements of the disposal facility. Composite samples were collected from the soil stockpiles. These samples were analyzed for cadmium, chromium, and lead using the toxicity characteristic leaching procedure, PCBs, and oil and grease. Analytical results for the soil disposal sampling activities are shown in Table 4, and the data package is included as Appendix G.

The soil was disposed at G.R.O.W.S., Inc. (Waste Management of Pennsylvania), an Amtrakapproved Resource Conservation and Recovery Act (RCRA) Subtitle D (non-hazardous) disposal facility located in Morrisville, Pennsylvania. Approximately 472 tons of soil and debris were disposed. Soil disposal manifests are included as Appendix H. The surface asphalt and concrete was hauled to Waste Management of New York, an Amtrakapproved facility located in Queens, New York for recycling. A total of 280 cubic yards of asphalt and concrete was disposed. Disposal records are included as Appendix I.

The liquid encountered in the drop table pits was disposed at Lancaster Oil, an Amtrak-approved facility located in Lancaster, Pennsylvania. A total of 2,450 gallons was disposed. Disposal records are included as Appendix J.

5.8 Project Closeout

Following completion of the remedial activities, the excavated area was resurveyed to determine final excavation depths and the limits of the remaining concrete structures (i.e., inspection and drop table pits). This survey is included as Appendix K. Roux Associates/Remedial Engineering staff prepared a punch list of outstanding items for the Contractor and once the work was completed a final inspection was performed. The final inspection of the remediated area of OU-1 was performed by a New York State-registered Professional Engineer to verify that the remediation had been completed in accordance with the OU-1 Remedial Design Report.

6.0 ANALYTICAL DATA QUALITY AND USABILITY

An evaluation of the analytical data was performed to determine the overall quality and usability of the confirmatory sample results for OU-1 generated by ICM. Fifteen composite concrete chip samples (including one duplicate), seven discrete concrete chip samples, six composite post-excavation soil samples, and six composite soil stockpile samples were collected by Roux Associates/Remedial Engineering. The soil stockpile sample results were not included as part of this data quality and usability assessment, as these samples were analyzed for disposal characterization only and the data packages were not intended for validation. The data quality and usability evaluation is included in Appendix L.

7.0 AS-BUILT DOCUMENTATION

In accordance with the OU-1 Remedial Design Report, Drawing 1 has been included as an as-built drawing. It shows the final condition of the OU-1 excavation in light of the changes to the remedial design which resulted from the discovery of the concrete trenches that were unknown at the time of the OU-1 Remedial Design Report submission. The drawing also includes final surveyed concrete and soil elevations within the excavation.

8.0 ENGINEER'S CERTIFICATION

Remedial Engineering, P.C. has completed this engineering report describing implementation of the remedy within OU-1 at the Amtrak Sunnyside Yard located at 39-29 Honeywell Street in Queens County, New York described in the ROD as Alternative III - Asphalt and Concrete Removal, Soil Excavation, and Off-Site Disposal. This engineering certification is being submitted to the NYSDEC, and Remedial Engineering, P.C. hereby certifies that the OU-1 Remedial Design was implemented, and construction activities were substantially completed in accordance with the intent of the NYSDEC-approved OU-1 Remedial Design Report dated October 8, 1997, and as described in this document.

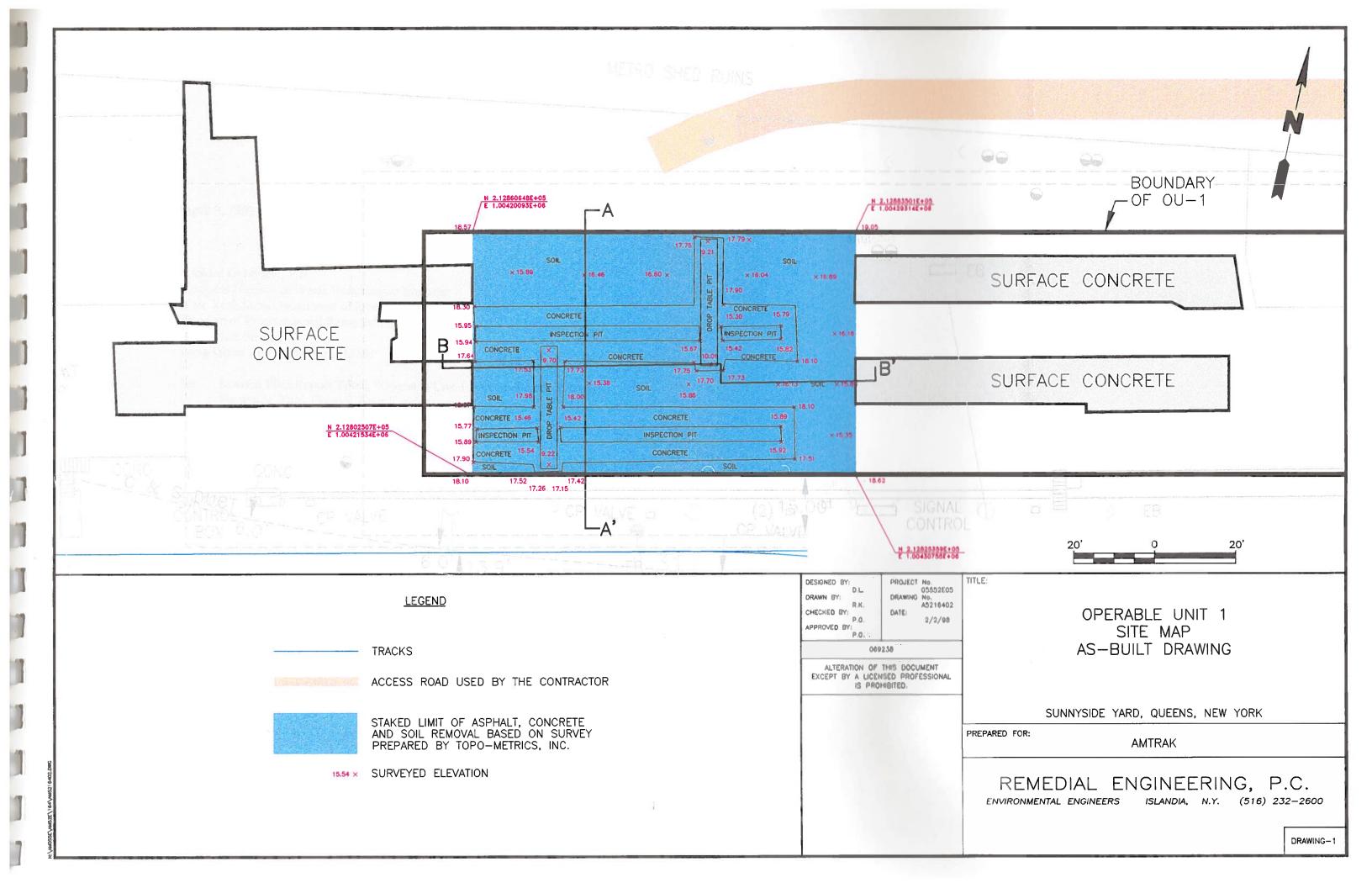
Respectfully Submitted,

ROUX ASSOCIATES, INC.

Joseph D. Duminuco Principal Hydrogeologist

REMEDIAL ENGINEERING, P.C.

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April 9, 1998

Richard Gardineer, P.E.
Regional Hazardous Waste Remediation Engineer
New York State Department of Environmental Conservation
Division of Environmental Remediation - Region 2
47-40 21st Street
Long Island City, New York 11101

Re: Revised Final Report Titled, "Operable Unit 1 Remedial Action Report" Sunnyside Yard, Queens, New York"

Dear Mr. Gardineer:

Enclosed please find one copy of the above-referenced document for your approval. This revised report addresses the NYSDEC comments of March 31, 1998 that pertain to work in Operable Unit 1 (OU-1). While requested by the NYSDEC but not related to the remedial action required for OU-1, an investigation of the portion of Amtrak's sewer system which passes beneath OU-1 and the adjacent saturated soil has been completed. The preliminary data which indicates concentrations of the contaminants of concern at the Yard ranging from not detected to well below the NYSDEC-recommended cleanup levels for soil, have been submitted to the NYSDEC. Following completion of required quality assurance/quality control review by the laboratory, a final data package will be issued and then validated to determine the usability of the data. At that time, an investigative report for this sewer and the saturated soil around the sewer (which are part of Operable Units 5 and 6) will be prepared and submitted to the NYSDEC for review.

With regard to the strict High Speed Trainset schedule for OU-1, we appreciate your prompt attention to the review of this document.

Richard Gardineer, P.E. April 9, 1998 Page 2

If you have any questions or if I can provide further assistance, please do not hesitate to call.

Sincerely,

REMEDIAL ENGINEERING, P.C.

ROUX ASSOCIATES, INC.

Peter J Gerbasi, P.E. Principal Engineer Joseph D. Duminuco Principal Hydrogeologist

Attachment

cc: H. Agrawal, P.E., NYSDEC

S. Ervolina, NYSDEC

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C. Warren, Esq., Robinson, Silverman, et al.

C. Rosenthal, Esq., Kalkines, Arky, Zall & Bernstein

Table 1. Summary of Liquid Disposal Sampling Analytical Results at OU-1, Sunnyside Yard, Queens, New York.

Sample Designation:	W-1		
Sample Date:	1/29/98		

2.0 U
4.0 U
2.0 U

Aroclor-1242 2.0 U Aroclor-1248 2.0 U

Aroclor-1254 2.0 U Aroclor-1260 2.0 U

General Chemistry (mg/L)

Total Organic Halogen	0.416
Reactivity - Cyanide	0.25 U
Reactivity - Sulfide	25 U
Corrosivity (pH Units)	8.06
Ignitability (degrees C)	100 boiled

μg/L - Micrograms per liter

mg/L - Milligrams per liter

U - Compound was analyzed for but not detected

Table 2. Summary of Post-Excavation Soil Sampling Analytical Results at OU-1, Sunnyside Yard, Queens, New York.

Samp	le Designation: Sample Date:	N.W. 12/22/97	S.W. 12/19/97	E.W. 12/22/97	W.W. 12/22/97	B.W. 12/19/97	N.B. 12/22/97
Parameter (Concentrations in μg/kg)	NYSDEC Recommended Cleanup Level						
Carcinogenic Polycyclic	Aromatic Hydroca				27.		
Benzo(a)anthracene	7-	350 U	79 J	31 J	960	18 J	20 J
Benzo(a)pyrene		350 U	45 J	390 U	790	350 U	370 U
		-0.2 -7 -6 -6 -1	the state of the s	20 20 20 20	N 202	Control Control	
Benzo(b)fluoranthene	-	350 U	110 J	100 J	1600	28 J	
Benzo(b)fluoranthene Benzo(k)fluoranthene	-	350 U 350 U	110 J 360 U	100 J 390 U	1600 360 U	28 J 350 U	40 J 370 U
Benzo(k)fluoranthene			5 E E E C . (1)	1.000.0		10000	40 J
Benzo(k)fluoranthene Chrysene	=	350 U	360 U	390 U	360 U	350 U	40 J 370 L
	=	350 U 350 U	360 U 70 J	390 U 38 J	360 U 840	350 U 350 U	40 J 370 U 20 J

μg/kg - Micrograms per kilogram

U - Compound was analyzed for but not detected

J - Estimated value

Bold - Detections of cPAHs are shown in bold

Table 3. Summary of Post-Excavation Concrete Sampling Analytical Results at OU-1, Sunnyside Yard, Queens, New York.

	Sample Designation: Sample Date:	C-1 12/19/97	C-1DUP 12/19/97	C-2 12/19/97	C-3 12/19/97	C-4 12/19/97
	NYSDEC Recommended Cleanup Level					
PCBs (µg/kg)			7.			
Aroclor-1016) me	33 U	33 U	33 U	33 U	33 U
Aroclor-1221		33 U	33 U	33 U	33 U	33 U
Aroclor-1232		33 U	33 U	33 U	33 U	33 U
Aroclor-1242		33 U	33 U	33 U	33 U	33 U
Aroclor-1248		33 U	33 U	33 U	33 U	33 U
Aroclor-1254		70	55	33 U	33 U	33 U
Aroclor-1260	-	140	140	91	33 U	33 U
Total Aroclors	25,000	210	195	91	0	0
Carcinogenic Polycyclic Ar	romatic					
Hydrocarbons (cPAHs) (µg	g/kg)					1000
Benzo(a)anthracene	40	38 J	98 J	91 J	330 U	330 U
Benzo(a)pyrene	-	38 J	110 J	55 J	330 U	330 U
Benzo(b)fluoranthene	<u> </u>	88 J	240 J	150 J	36 J	19 J
Benzo(k)fluoranthene	-	330 U	48 J	330 U	330 U	330 U
Chrysene	442	45 J	110 J	85 J	330 U	330 U
Dibenzo(a,h)anthracene	4	330 U	23 J	330 U	330 U	330 U
Indeno(1,2,3-cd)pyrene	- -	17 J	55 J	22 J	330 U	330 U
Total cPAH	s 10,000	226 J	684 J	403 J	36 J	19 J
Lead (mg/kg)		14.6	27.8	49	17	12

μg/kg - Micrograms per kilogram

mg/kg - Milligrams per kilogram

U - Compound was analyzed for but not detected

J - Estimated value

D - Sample diluted

Bold - Detections of cPAHS and PCBs are shown in bold

Table 3. Summary of Post-Excavation Concrete Sampling Analytical Results at OU-1, Sunnyside Yard, Queens, New York.

	Sample Designation: Sample Date:	C-5 12/19/97	C-6 12/19/97	C-7 12/19/97	C-8 12/19/97	C-9 12/19/97
	NYSDEC Recommended Cleanup Level					
4						_
PCBs (µg/kg)						
Aroclor-1016	-	33 U				
Aroclor-1221		33 U				
Aroclor-1232	-	33 U				
Aroclor-1242		33 U				
Aroclor-1248		33 U				
Aroclor-1254	-	33 U				
Aroclor-1260	12	33 U				
Total Aroclors	25,000	0	0	0	0	0
Carcinogenic Polycyclic Ar	omatic .					
Hydrocarbons (cPAHs) (µg	/kg)					
Benzo(a)anthracene		330 U	59 J	440	72 J	77 J
Benzo(a)pyrene	-	330 U	41 J	170 J	77 J	22 J
Benzo(b)fluoranthene	÷.	330 U	100 J	470	170 J	290 J
Benzo(k)fluoranthene	-	330 U				
Chrysene	-	330 U	56 J	340	80 J	120 J
Dibenzo(a,h)anthracene	- A	330 U	330 U	27 J	330 U	18 J
Indeno(1,2,3-cd)pyrene	*	330 U	330 U	50 J	31 J	39 J
Total cPAH	s 10,000	0	256 J	1,497 J	430 J	566 J
Lead (mg/kg)		7	11	10.8	16.1	50

μg/kg - Micrograms per kilogram

mg/kg - Milligrams per kilogram

U - Compound was analyzed for but not detected

J - Estimated value

D - Sample diluted

Bold - Detections of cPAHS and PCBs are shown in hold

Table 3. Summary of Post-Excavation Concrete Sampling Analytical Results at OU-1, Sunnyside Yard, Queens, New York.

a a	Sample Designation: Sample Date:	C-10 12/19/97	C-11 12/19/97	C-11A 3/16/98	C-11B 3/16/98	C-11C 3/16/98
-1	NYSDEC Recommended Cleanup Level					
PCBs (µg/kg)						
Aroclor-1016	-	33 U				
Aroclor-1221	-	33 U				
Aroclor-1232	4	33 U				
Aroclor-1242	-	33 U				
Aroclor-1248	12	33 U				
Aroclor-1254	-	33 U				
Aroclor-1260	=1	33 U	13000 DJ	33 U	33 U	33 U
Total Aroclors	25,000	0	13,000 DJ	0	0	0
Carcinogenic Polycyclic Ar	omatic .					
Hydrocarbons (cPAHs) (µg	/kg)					
Benzo(a)anthracene		20 J	180 J	NA	NA	NA
Benzo(a)pyrene	-	15 J	55 J	NA	NA	NA
Benzo(b)fluoranthene	-	33 J	380	NA	NA	NA
Benzo(k)fluoranthene	-	330 U	330 U	NA	NA	NA
Chrysene	O -	21 J	210 J	NA	NA	NA
Dibenzo(a,h)anthracene	-	330 U	43 J	NA	NA	NA
Indeno(1,2,3-cd)pyrene	-	330 U	88 J	NA	NA	NA
Total cPAH	s 10,000	89 J	956 J	0	0	0
Lead (mg/kg)		8	29	NA	NA.	NA

μg/kg - Micrograms per kilogram

mg/kg - Milligrams per kilogram

U - Compound was analyzed for but not detected

J - Estimated value

D - Sample diluted

Bold - Detections of cPAHS and PCBs are shown in bold

Table 3. Summary of Post-Excavation Concrete Sampling Analytical Results at OU-1, Sunnyside Yard, Queens, New York.

	Sample Designation: Sample Date:	C-11D 3/16/98	C-11E 3/16/98	C-11F 3/16/98	C-11G 3/16/98	C-12 12/19/97
	NYSDEC Recommended Cleanup Level					
PCBs (ug/kg)						
Aroclor-1016	C++	33 U				
Aroclor-1221	-	33 U				
Aroclor-1232	-	33 U				
Aroclor-1242	-	33 U				
Aroclor-1248	***	33 U				
Aroclor-1254		33 U				
Aroclor-1260		69	54	33 U	33 U	99
Total Aroclors	25,000	69	54	0	0	99
Carcinogenic Polycyclic Ar	omatic					
Hydrocarbons (cPAHs) (µg	(kg)					
Benzo(a)anthracene	-	NA	NA	NA	NA	89 J
Benzo(a)pyrene		NA	NA	NA	NA	84 J
Benzo(b)fluoranthene	-	NA	NA	NA	NA	170 J
Benzo(k)fluoranthene	÷ .	NA	NA	NA	NA	330 U
Chrysene	-	NA	NA	NA	NA	86 J
Dibenzo(a,h)anthracene	-	NA	NA	NA	NA	23 J
Indeno(1,2,3-cd)pyrene	L L Q T	NA	NA	NA	NA	65 J
Total cPAH	s 10,000	0	0	0	0	517 J
Lead (mg/kg)		NA	NA	NA	NA	57

μg/kg - Micrograms per kilogram

mg/kg - Milligrams per kilogram

U - Compound was analyzed for but not detected

J - Estimated value

D - Sample diluted

Bold - Detections of cPAHS and PCBs are shown in bold

Table 3. Summary of Post-Excavation Concrete Sampling Analytical Results at OU-1, Sunnyside Yard, Queens, New York.

	Sample Designation: Sample Date:	C-13 12/19/97	C-14 12/19/97
	NYSDEC Recommended Cleanup Level		
PCBs (µg/kg)			
Aroclor-1016		33 U	33 U
Aroclor-1221	-	33 U	33 U
Aroclor-1232	-	33 U	33 U
Aroclor-1242	-	33 U	33 U
Aroclor-1248	+	33 U	33 U
Aroclor-1254	- A-4	33 U	33 U
Aroclor-1260	1.	33 U	33 U
· Total Aroclors	25,000	0	0
Carcinogenic Polycyclic A	romatic		
Hydrocarbons (cPAHs) (µ	g/kg)		
Benzo(a)anthracene		160 J	410
Benzo(a)pyrene	-	44 J	160 J
Benzo(b)fluoranthene	-	310 J	500
Benzo(k)fluoranthene	-	330 U	330 U
Chrysene	-	160 J	300 J
Dibenzo(a,h)anthracene	-	27 J	330 U
ndeno(1,2,3-cd)pyrene	-	59 J	72 J
Total cPAI	Is 10,000	760 J	1,442 J
Lead (mg/kg)		195	10.9

µg/kg - Micrograms per kilogram

mg/kg - Milligrams per kilogram

U - Compound was analyzed for but not detected

J - Estimated value

D - Sample diluted

Bold - Detections of cPAHS and PCBs are shown in bold

Table 4. Summary of Disposal Sampling Analytical Results of Excavated Soil at OU-1, Sunnyside Yard, Queens, New York.

Sa	mple Designation: Sample Date:	SP-1 12/19/97	SP-2 12/19/97	SP-(1-2) 12/19/97	SP-3 12/22/97	SP-4 12/22/97	SP-(3-4) 12/22/97
	NYSDEC - Recommended Cleanup Level						
PCB Results (µg/kg)							
Aroclor-1016		150 U	27 U	NA	200 U	18 U	NA
Aroclor-1221	-	420 U	75 U	NA	580 U	50 U	NA
Aroclor-1232	-	240 U	43 U	NA	330 U	29 U	NA
Aroclor-1242	-	150 U	27 U	NA	200 U	18 U	NA
Aroclor-1248	C	180 U	32 U	NA	250 U	22 U	NA
Aroclor-1254	3++	210 U	38 U	NA	290 U	25 U	NA
Aroclor-1260	-	4,900	950	NA	4,400 U	24 J	NA
Total Aroclors	25,000	4,900	950	0	0	24 J	0
Toxicity Characteristic	Leaching Procedur	e Leachate A	nalysis (mg/L	1			
Cadmium		NA	NA	0.081	NA	NA	0.068
Chromium		NA	NA	0.022	NA	NA	0.010 U
Lead		NA	NA	0.388	NA	NA	2.18
Oil & Grease (mg/kg)		NA	NA	1,700	NA	NA	3,840

µg/kg - Micrograms per kilogram

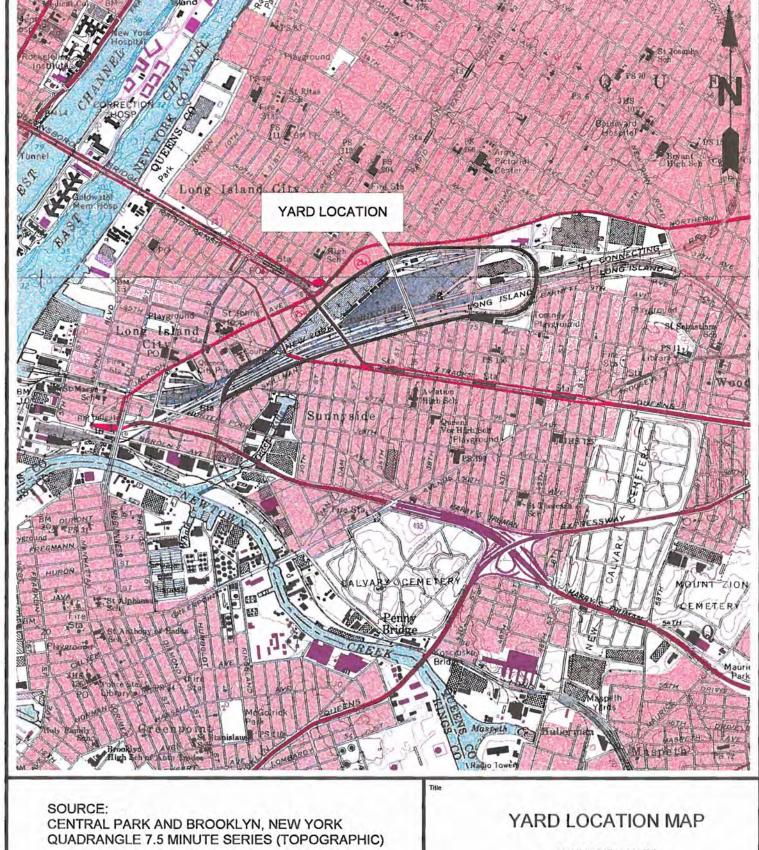
mg/kg - Milligrams per kilogram

mg/L - Milligrams per liter

U - Compound was analyzed for but not detected

J - Estimated value

NA - Not analyzed



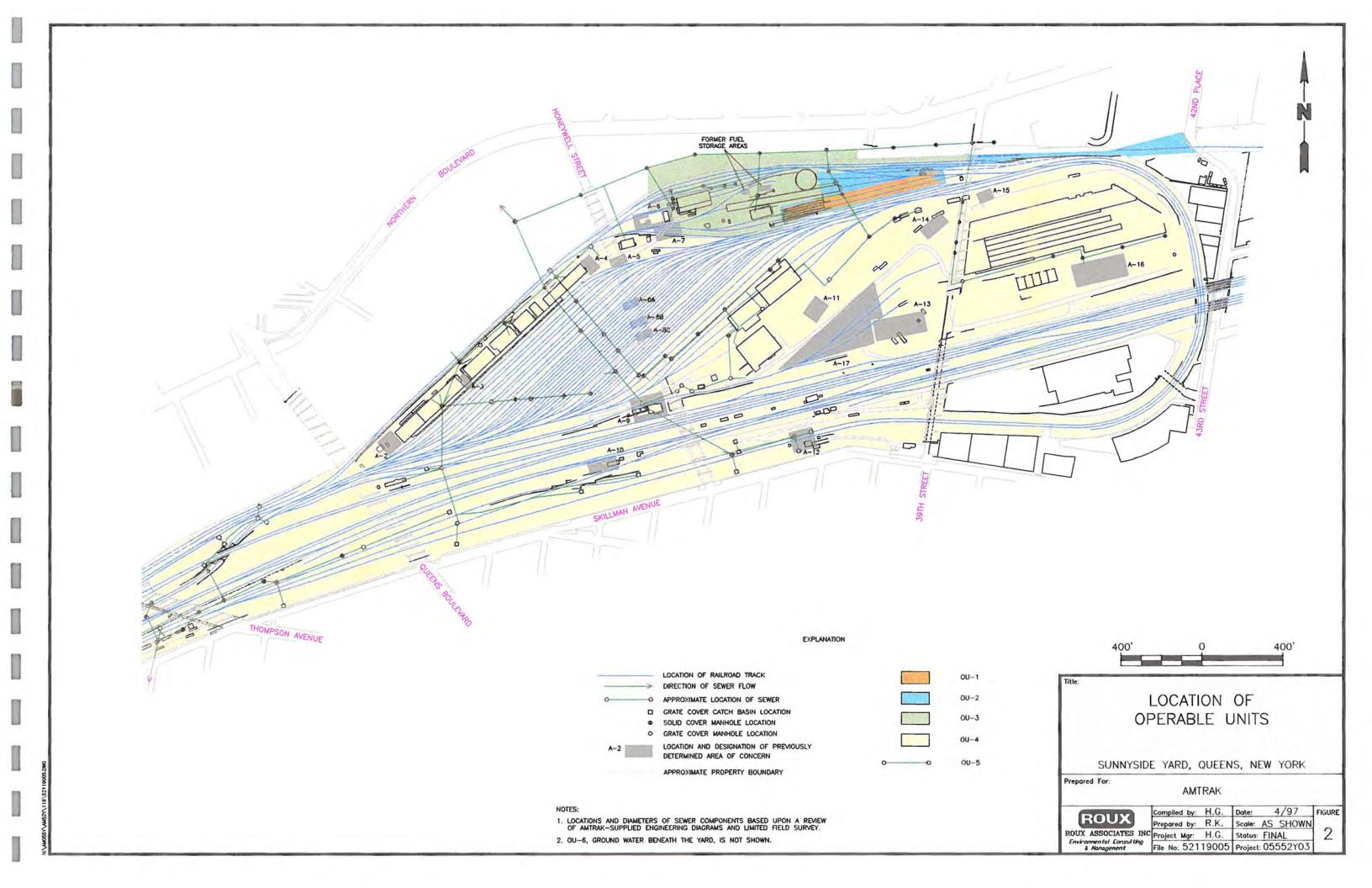
NEW YORK

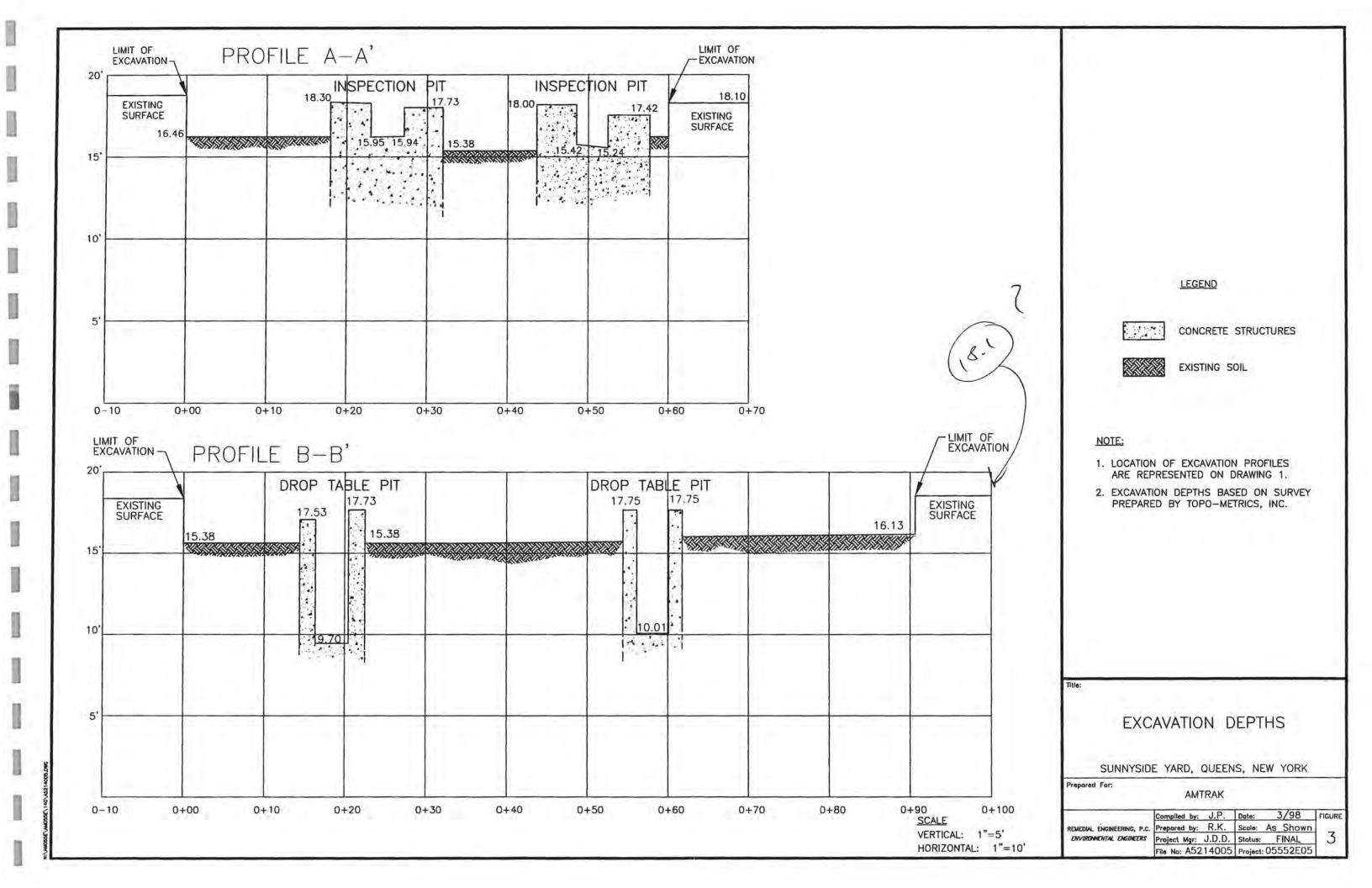
QUADRANGLE LOCATION SUNNYSIDE YARD 39-29 HONEYWELL STREET QUEENS, NEW YORK

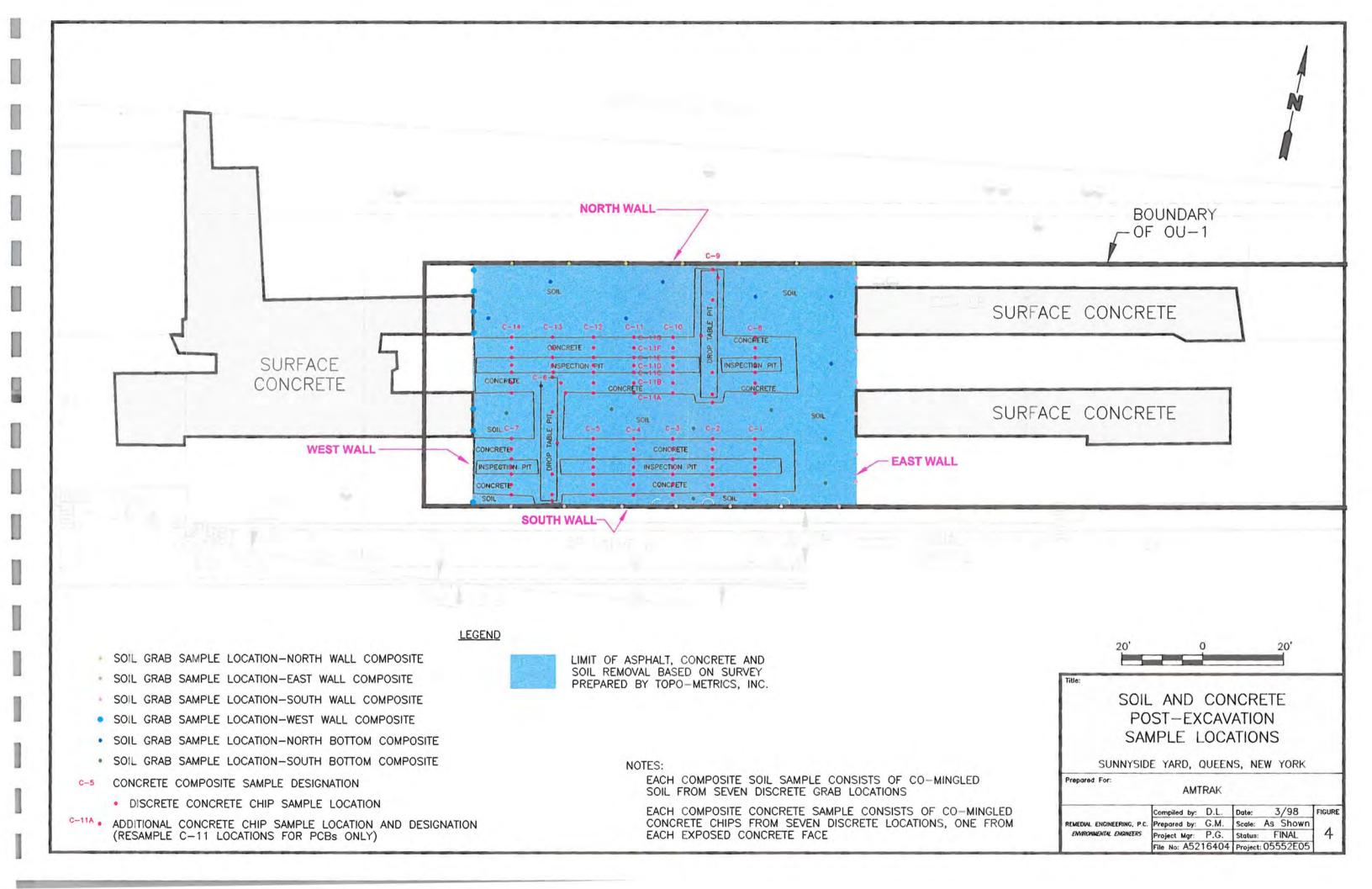
Prepared For

AMTRAK

DOLLY	Compiled by	10	Date	9/97	FIGURE
ROUX	Prepared by	RR.	Scale:	1"=2,000"	
ROUX ASSOCIATES INC	Project Mgr	J.D.	Status.	Final	1
& Management	File No.	A5214005	Project	05552E05	







APPENDIX A

March 31, 1998 NYSDEC Letter to Roux Associates, Inc. and April 6, 1998 Letter to the NYSDEC New York State Department of Environmental Conservation Division of Environmental Remediation, Region 2 47-40 21st Street Long Island City, New York 11101 (718) 482-4995 Fax: (718) 482-6358



John P. Cahill Commissioner

Commiss

March 31, 1998

Mr. Joseph Duminuco Principal Hydrogeologist Roux Associates, Inc. 1377 Motor Parkway Islandia, New York 11788

Re: Amtrak, Sunnyside Yard, Queens, New York Work Plan

Operable Unit 1 Remedial Design Completion Report



The Department has completed its review of the above referenced report, and has a few questions and concerns that must be resolved before the Report can be accepted by the Department. These are as follows:

- 1. The Record of Decision for OU 1 called for excavation of PAHs contaminated soils down to water table in a 95 ft. X 60 ft. area within the foot-print of the proposed High Speed Trainset Facility (HSTF) building. Prior to the commencement of fieldwork, the Department was not aware of the presence of any subsurface inspection pits and drop pits in this area. These pits, we understand, were excavated and cleaned to their concrete base. The cleanup involved excavation of saturated soils down to 8 ft. below surface and removal of 2450 gallons of contaminated water, both of which were found to be non-hazardous wastes. Since none of this work was planned or even anticipated, the Department would like the Report to clarify the following for the record:
 - i) What was the past use of these pits, and during what period were these pits in operation?
 - ii) When and why were these pits abandoned in place?
 - iii) The Report indicates that these pits were anticipated, why were then these pits not investigated during the Phase I or the Phase II RI, or as part of the OU 1 focused investigation?
 - iv) Was there ever a known problem of oil and/ or PCBs seeping into these pits, like the problem that existed in the Engine House pit or the Metro Shop pit?
 - v) Please discuss how many other pits existed at any time.
- 2. Please provide a map of sampling locations for all chip and soil sampling.
- Please provide results of the recent confirmatory chip sampling.

Mr. Joseph Duminuco Roux Associates, Inc. Page 2 of 2 March 31, 1998

- 4. Please provide the Land Surveyor's certification as to the surveyed locations.
- 5. Please include a sketch of the buried sewer pipe traversing the footprint of OU 1, show sampling locations, and include and discuss sampling results.
- 6. As we discussed, the title of the Report is a misnomer. We suggest calling it "Operable Unit 1 Remedial Action Report" would be more appropriate.

A quick resolution of the above comments and concerns will greatly expedite the Department's acceptance of the above referenced Report. If you have any questions, please contact me at 718 - 482-4909 or Mr. Richard Gardineer at 718 - 482- 4895 immediately.

Sincerely,

Hari O. Agrawal, P.E.\
Environmental Engineer

CC: Rosalie Rusinko
Richard Gardineer / file
Sal Ervolina, DER, Albany, 7010
Steve Bates, NYSDOH, Albany

REMEDIAL ENGINEERING, P.C. ENVIRONMENTAL ENGINEERS

1377 MOTOR PARKWAY SUITE 403 ISLANDIA, NEW YORK 11788 TEL (516) 232-2600 FAX (516) 232-9898

April 6, 1998

Hari O. Agrawal, P.E.
Environmental Engineer
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, New York 11101

Re: Response to the NYSDEC's March 31, 1998 Letter Regarding the Operable Unit 1 Remedial Design Completion Report Sunnyside Yard, Queens, New York

Dear Mr. Agrawal:

Roux Associates, Inc., on behalf of Amtrak, has reviewed the New York State Department of Environmental Conservation's (NYSDEC) March 31, 1998 letter to Joseph Duminuco of Roux Associates regarding the Operable Unit 1 Remedial Design Completion Report. This letter presents Amtrak's responses to the NYSDEC's comments. The format of this response letter consists of the NYSDEC's comment in italicized text, followed by Amtrak's response in standard text format. If you are in agreement with the responses in this letter we will incorporate them into the Completion Report and forward it to you immediately.

1. The Record of Decision for OU-1 called for excavation of PAHs contaminated soils down to water table in a 95 ft. X 60 ft. area within the foot-print of the proposed High Speed Trainset Facility (HSTF) building. Prior to the commencement of fieldwork, the Department was not aware of the presence of any subsurface inspection pits and drop pits in this area. These pits, we understand, were excavated and cleaned to their concrete base. The cleanup involved excavation of saturated soils down to 8 ft. below surface and removal of 2450 gallons of contaminated water, both of which were found to be non-hazardous wastes. Since none of this work was planned or even anticipated, the Department would like the Report to clarify the following for the record.

It is important to note that at least three documents reviewed by the NYSDEC before the commencement of the OU-1 remediation discussed the existence of the inspection pits. These documents include the Phase 2 Environmental Site Assessment Report, the OU-1 Feasibility Study Report, and the Remedial Design Report (RDR). A review of historical information did not document the existence of the droptable pits.

Hari O. Agrawal, P.E. April 6, 1998 Page 2

The NYSDEC's letter indicated that they understood the pits to contain saturated soil down to 8 feet below land surface, and 2450 gallons of contaminated water. It is important to note that the saturated soil was a result of surface runoff, not groundwater seepage and was only found in the deeper droptable pits. Once pumping of the droptable pits was accomplished, seepage of ground water did not occur. In addition, analysis of the water for disposal parameters did not detect any contamination. Off-site disposal of the clean dewatering effluent was performed to avoid any delays that might have resulted from seeking discharge to sewer approvals from NYSDEC and the New York City Department of Environmental Protection (NYCDEP).

The NYSDEC's letter also required clarification of the following five issues relating to the pits in OU-1:

i) What was the past use of these pits, and during what period were these pits in operation?

Historically, the performance of service and inspection (S&I) of railroad equipment at the Yard occurred in both the inspection and droptable pits. The function of the droptable pits was for changing the trucks (the wheel assembly) of railroad equipment. A determination of the period of use of the pits could not be made since there is no documentation of the start-up date. Only one of the inspection/droptable pits was in operation when Amtrak acquired the property in 1976.

ii) When and why were these pits abandoned in place?

Apparently, one inspection/droptable pit was abandoned prior to 1976. Abandonment of the remaining pit occurred in 1985 because it was no longer needed as a result of the construction of a new indoor running repair building on the south side of the Yard. Abandonment in place was the most economical option since the pits were of sufficient structural integrity for the intended future use (i.e., storage tracks).

iii) The Report indicates that these pits were anticipated, why then were these pits not investigated during the Phase I or the Phase II RI, or as part of the OU-I focused investigation?

The RI/FS process at the Yard commenced in 1990 and followed a NYSDEC-approved work plan. A review of historical information, aerial photo reviews and interviews with Yard personnel, determined 16 Areas of Concern (AOCs). Initial observations resulted in identification of a 17th AOC. As it is impractical to investigate every portion of any site, our efforts focused on the AOCs but contained other facility-wide sampling as well. There was no indication during scoping or initial field

observations by Roux Associates or the NYSDEC representative that these pits were AOCs. As stated in the RDR, the location of soil boring HST-2 was within one of the pits and the locations of several others were in the immediate vicinity of the pits.

iv) Was there ever a known problem of oil and/or PCBs seeping into these pits, like the problem that existed in the Engine House pit or the Metro Shop pit?

There is no evidence of known or suspected releases in these pits. In contrast to the Engine House and Metro Shop pits, the pits in OU-1 are located outside the separate-phase petroleum accumulation were also observed during the remediation to be water-tight. In addition, the soil and stormwater removed from the pits in OU-1 did not display evidence of petroleum compounds.

v) Please discuss how many other pits existed at any time.

Amtrak knows of no other pits in OU-1.

Please provide a map of sampling locations for all chip and soil sampling.

The revised report will include a map of concrete chip and soil sampling locations.

3. Please provide results of the recent confirmatory chip sampling.

The revised report will also include the results of recent confirmatory concrete chip samples.

4. Please provide the Land Surveyor's certification as to the surveyed locations.

The revised report will include the Land Surveyor's certification.

 Please include a sketch of the buried sewer pipe traversing the footprint of OU 1, show sampling locations, and include and discuss sampling results.

As we discussed, due to the time-critical relationship between the completion of this report and the loan closing date on May 1, 1998, Amtrak considers the sewer pipe beneath the footprint of OU-1 a separate issue and will be submitting a letter report to the NYSDEC relating to that issue shortly.

6. As we discussed, the title of the Report is a misnomer. We suggest calling it "Operable Unit I Remedial Action Report" would be more appropriate.

The "Operable Unit 1 Remedial Action Report" will be the new title.

Hari O. Agrawal, P.E. April 6, 1998 Page 4

We appreciate your prompt attention to the initial review and trust that the responses presented above are to the NYSDEC's satisfaction and will result in an expedited approval of the report. If you have any questions or require additional information, please call.

Sincerely,

ROUX ASSOCIATES, INC. Coupt I formand

Joseph D. Duminuco Principal Hydrogeologist

REMEDIAL ENGINEERING, P.C.

Peter J. Gerbasi, Principal Engineer

CC:

- R. Gardineer, P.E., NYSDEC
- R. Rusinko, Esq., NYSDEC
- S. Ervolina, P.E., NYSDEC
- S. Bates, NYSDOH
- J. Matthews, Amtrak
- R. Mohlenhoff, P.E., Amtrak
- C. Warren, Esq., Robinson, Silverman, et al
- C. Rosenthal, Esq., Kalkines, Arky et al.

APPENDIX B

December 18, 1997 Letter to the NYSDEC

REMEDIAL ENGINEERING, P.C. ENVIRONMENTAL ENGINEERS

1377 MOTOR PARKWAY SUITE 403 ISLANDIA, NEW YORK 11788 TEL (516) 232-2600 FAX (516) 232-9898

December 18, 1997

Richard Gardineer, P.E.
Regional Remediation Engineer
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, New York 11101

Re: Operable Unit 1 Remedial Design Report Sunnyside Yard, Queens, New York

Dear Mr. Gardineer:

Roux Associates, Inc. and Remedial Engineering, P.C., on behalf of the National Railroad Passenger Corporation (Amtrak), is writing this letter to notify you of a site condition which we believe represents a significant change to the remedial design currently being implemented as part of the Operable Unit 1 (OU-1) remedial action at the Sunnyside Yard (Yard). The condition that we have identified involves two large concrete channels that run through the OU-1 excavation area. It is our intention to leave these channels in place within OU-1 due to their large size (approximately 10 feet across by 4 feet deep) and the significant time delay and expense that Amtrak would incur should their removal be necessary.

Several factors that we have identified during the excavation activities support our request. These include:

- the channels extend into the water table, and no OU-1 soils exist beneath them;
- the material within the channels has been completely excavated within the OU-1 area;
- the channels are intact and were not found to have visible staining or other signs of contamination.

We acknowledge that Section 2.4 of the Operable Unit 1 Remedial Design Report states that if subsurface concrete is encountered, the Contractor would be directed to remove and stage this material prior to its disposal off-site. It must be noted, however, that our intent in this regard was to remove and dispose of any concrete that was contaminated, or prevented us from excavating contaminated soils, specifically, those soils within the unsaturated zone and any grossly contaminated soils within the

Mr. Richard Gardineer December 18, 1997 Page 2

saturated zone. One additional point is that the subject soils below these channels are saturated while the surrounding soils are clean in appearance, therefore, any residual contamination would be addressed by OU-6 at the site.

We hope that this letter will allow the NYSDEC to approve our request to leave these channels in place. If necessary, we will have our field staff show you the area so that you may verify the site conditions. Furthermore, as you requested, we are preparing a sampling plan for concrete chip samples from each channel which will be submitted to you under separate cover.

Please call if you have any questions or comments.

Sincerely,

REMEDIAL ENGINEERING, P.C.

Peter J. Gerbasi, P.E. Principal Engineer

ROUX ASSOCIATES, INC.

Joseph D. Duminuco Principal Hydrogeologist

cc: H. Agrawal, NYSDEC

R. Mohlenhoff, P.E., Amtrak

C. Warren, Esq., Robinson, et al.

H. Gregory, Roux Associates, Inc.

APPENDIX C

December 19, 1997 Letter to the NYSDEC

REMEDIAL ENGINEERING, P.C. ENVIRONMENTAL ENGINEERS

1377 MOTOR PARKWAY SUITE 403 ISLANDIA, NEW YORK 11788 TEL (516) 232-2600 FAX (516) 232-9898

December 19, 1997

Richard Gardineer, P.E.
Regional Remediation Engineer
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, New York 11101

Re: Protocol for Concrete Chip Samples in Operable Unit 1, Sunnyside Yard, Queens, New York

Dear Mr. Gardineer:

Roux Associates, Inc. and Remedial Engineering, P.C., on behalf of the National Railroad Passenger Corporation (Amtrak), has prepared the following protocols to collect concrete samples from two existing concrete channels located in the excavation area of Operable Unit 1 (OU-1), Sunnyside Yard, Queens, New York. As described in the December 18, 1997 correspondence from Remedial Engineering, P.C., these channels are intact and were not found to have visible staining or other signs of contamination.

The protocols described below include only the collection of concrete chip samples from the existing concrete channels. The guidelines and procedures for field and laboratory personnel to be followed to verify that the field activities undertaken are of sufficient quality (i.e., decontamination, sample custody and handling, etc.) are included in the approved "General Sampling And Analysis Plan to Support High Speed Trainset Facility Activities In Operable Unit 4" (August 6, 1997).

Concrete chip samples will be collected at 10 feet intervals in each of the two concrete channels (including the two drop pits). The concrete channels are approximately 10 feet wide by 4 feet deep and 70 feet long. The initial excavation into these channels will result in some of the concrete being removed; therefore, it is estimated that composite samples will be collected from six locations (every 10 feet) in each of the two channels, resulting in 12 composite samples submitted for analysis. The composite samples will be derived from seven sample points (each face) at every sampling location.

Richard Gardineer, P.E. December 19, 1997 Page 2

The chip samples will be collected using a decontaminated hammer or chisel. An effort will be made to avoid scattering pieces out of the sampling area boundary. The area will be chipped to approximately 1/8 inch and placed directly into the sample bottle. The composite samples will be homogenized in the laboratory.

The laboratory analyses will be performed by a certified laboratory using the NYSDEC Analytical Services Protocols (ASP). Samples will be analyzed for polycyclic aromatic hydrocarbons (PAHs) using ASP 95-2, polychlorinated biphenyls (PCBs) using ASP 95-3, and lead (ILMO4.0). Quality control samples, consisting of one field duplicate per 20 samples collected, will be submitted for analysis. Matrix spike (MS)/ matrix spike duplicate (MSD)/matrix spike blanks (MSB) will not be collected based on the concrete matrix; however the laboratory mandated MS/MSD/MSB may be used for data evaluation purposes.

Upon completion of the field investigation, Roux Associates will submit a report which presents the data and includes our findings and recommendations regarding the sample results.

Should you have any comments or questions, please do not hesitate to call.

Sincerely,

ROUX ASSOCIATES, INC.

Joseph D. Duminuco

Principal Hydrogeologist

REMEDIAL ENGINEERING, P.C.

Peter . Gerbasi, P.E.

Principal Engineer

APPENDIX D

1

Liquid Disposal Characterization Sampling Data Package INDUSTRIAL CORROSION MANAGEMENT, INC. 1152 Route 10

Randolph, NJ 07869 973-584-0330, FAX: 973-584-0515 FEBRUARY 4, 1998

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376

US EPA CLP Lab

PCB Results Analysis by Gas Chromatography

Lab Number: 282486

Client: ROUX ASSOCIATES, INC.
Sample source: AMTRAK SUNNY SIDE/05552Y05
Sample ID: AMTRAK W-1

Sample date: 01/29/98 Sampled by: At lab date: Customer 02/02/98 AQUEOUS Matrix:

Batch #: Extraction date:

QPC7521 02/03/98 500ml

Column used: Analysis date: Final Volume:

DB 1701/DB 608 02/04/98

10ml

Weight/Volume: Dilution Factor:

ANALYTE NAME	RESULT UG/L	METHOD BLANK RESULT UG/L	PRACTICAL QUANTITATION LIMIT UG/L	MINIMUM DETECTION LIMIT UG/L
Aroclor-1016	U	U	2.0	1.0
Aroclor-1221	Ü	U	4.0	2.8
Aroclor-1232	U	U	2.0	1.6
Aroclor-1242	U	U	2.0	1.0
Aroclor-1248	Ü	U	2.0	1.2
Aroclor-1254	Ü	U	2.0	1.4
Aroclor-1260	U	Ü	2.0	1.6

UG/L = micrograms/liter or ppb

Indicates a compound was analyzed for but not detected at the PQL Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit but greater than zero. Indicates that the analyte was found in the blank as well as the sample. It indicates possible/probable blank contamination.

ND: Not Determined.

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INDUSTRIAL CORROSION MANAGEMENT. INC. 1152 Route 10 Randolph, NJ 07869 973-584-0330, FAX: 973-584-0515

Certified for: NJ. PA. DE. CT. NY(DOH NJ #14116 NY #11376 US EPA CLP Lab

LABORATORY ANALYSIS All results are reported in mg/l (ppm) unless otherwise stated.

Lab Number:

ROUX ASSOCIATES, INC. AMTRAK SUNNY SIDE AMTRAK W-1 LIQUID (AQUEOUS) Client: Sample Source: Sample ID:

Sample matrix:

Sample date: Sampled by: At lab date:

01/29/98 Customer 02/02/98

MINIMUM DILUTION METHOD DETECTION ANALYSIS PARAMETER FACTOR RESULT BLANK LIMIT DATE

otal Organic Halogen (TOX) as Cl 5

0.416

0.010

02/03/98

< = Less than
> = Greater than U= Not detected, NA= Not applicable.

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INDUSTRIAL CORROSION MANAGEMENT, Inc.

1152 Route 10

Randolph, NJ 07869

973-584-0330 FEBRUARY 4, 1998 Certified for: NJ. PA. DE. CT, NY(DOH)

NJ #14116 NY #11376

US EPA CLP Lab

LABORATORY ANALYSIS

Lab Number:

282486

Client:

ROUX ASSOCIATES, INC.

Sample Source:

AMTRAK SUNNY SIDE

Sample ID: Sampling Date: AMTRAK W-1 01/29/98

Sampled by:

Customer

At Lab Date:

02/02/98

Percent Moisture = 100%

REACTIVITY

Results reported in mg/kg wet weight basis.

Only the cyanide or sulfide gases released under test conditions

are measured.

Parameter Result

MDL

Method B1ank

Analysis Date

Dilution Factor

Limit

Cyanide: Sulfide:

11* 11* 0.25 25

U

02/03/98 02/03/98 1

250mg HCN/kg 500mg H2S/kg

= Sample does not exhibit characteristics of Cyanide or Sulfide reactivity

CORROSIVITY (Measured in pH units)

Result

Analysis Date

8.06

02/03/98

IGNITABILITY

Flash point by Pensky Martens Closed Cup.

Result

Analysis Date: 02/03/98

Sample did not flash. Sample boiled @ 100 C

U= Not detected

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UCU 11

APPENDIX E

Post-Excavation Soil Sampling Data Package

EPA SAMPLE NO.

Lab Name:	ICM			_ c	ontract:		B-W
Lab Code:	ICM	Case	No.:		SAS No.:	SI	DG No.: C-1
Matrix: (soil/	water)	SOIL			Lab Sample	ID;	279875
Sample wt/ve	ol:	30.05	g/ml) G		Lab File ID:		J1869.D
Level: (low/r	med)	LOW			Date Receiv	ed:	12/22/97
% Moisture:	5.89	deca	nted:(Y/N)	N	Date Extract	ed:	12/26/97
Concentrate	d Extract	Volume: 50	(uL)		Date Analyz	ed:	12/30/97
Injection Vol	ume: 2	.0 (uL)			Dilution Fact	tor:	1.0
GPC Cleanu	p: (Y/N)	Y p	H: 7.39				

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
91-20-3	Naphthalene		350	U
91-57-6	2-Methylnaphthalene		350	U
208-96-8	Acenaphthylene		350	U
83-32-9	Acenaphthene		350	U
132-64-9	Dibenzofuran		350	U
86-73-7	Fluorene		350	U
85-01-8	Phenanthrene		22	J
120-12-7	Anthracene		350	U
206-44-0	Fluoranthene		32	J
129-00-0	Pyrene		28	J
56-55-3	Benzo[a]anthracene		18	J
218-01-9	Chrysene		350	U
205-99-2	Benzo[b]fluoranthene		28	J
207-08-9	Benzo[k]fluoranthene		350	U
50-32-8	Benzo[a]pyrene		350	U
193-39-5	Indeno[1,2,3-cd]pyrene		350	U
53-70-3	Dibenz[a,h]anthracene		350	U
191-24-2	Benzo[g,h,i]perylene		350	U

EPA SAMPLE NO.

E-W Contract: Lab Name: ICM SDG No.: C-1 Lab Code: ICM Case No.: SAS No.: Matrix: (soil/water) SOIL Lab Sample ID: 280000 Lab File ID: Sample wt/vol: 30.33 (g/ml) G J1870.D Date Received: 12/23/97 Level: (low/med) LOW % Moisture: 16.31 decanted:(Y/N) Date Extracted: 12/26/97 Concentrated Extract Volume: 500 Date Analyzed: 12/30/97 (uL) Injection Volume: 2.0 (uL) Dilution Factor: 1.0 GPC Cleanup: (Y/N) pH: 7.58

		CONCENTION	OIT OITI O.	
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
91-20-3	Naphthalene		390	U
91-57-6	2-Methylnaphthalene		390	U
208-96-8	Acenaphthylene		390	U
83-32-9	Acenaphthene		390	U
132-64-9	Dibenzofuran		390	U
86-73-7	Fluorene		390	U
85-01-8	Phenanthrene		390	U
120-12-7	Anthracene		390	U
206-44-0	Fluoranthene		34	J
129-00-0	Pyrene		31	J
56-55-3	Benzo[a]anthracene		31	J
218-01-9	Chrysene		38	J
205-99-2	Benzo[b]fluoranthene		100	J
207-08-9	Benzo[k]fluoranthene		390	U
50-32-8	Benzo[a]pyrene		390	U
193-39-5	Indeno[1,2,3-cd]pyrene		39	J
53-70-3	Dibenz[a,h]anthracene		20	J
191-24-2	Benzo[g,h,i]perylene		41	J

EPA SAMPLE NO.

Lab Name:	ICM			c	ontract:	N-B
Lab Code:	ICM		ase No.:		SAS No.: S	SDG No.: C-1
Matrix: (soil/	water)	SOIL			Lab Sample ID:	280003
Sample wt/v	ol:	30.23	(g/ml) G		Lab File ID:	J1873.D
Level: (low/r	med)	LOW			Date Received:	12/23/97
% Moisture:	10.3	8 d	ecanted:(Y/N)	N	Date Extracted:	12/26/97
Concentrate	d Extract	Volume:	500 (uL)		Date Analyzed:	12/30/97
Injection Vol	ume: 2	.0 (uL)			Dilution Factor:	1.0
GPC Cleanu	p: (Y/N)	Y	pH: 7.75			

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
91-20-3	Naphthalene	1	370	U
91-57-6	2-Methylnaphthalene		370	U
208-96-8	Acenaphthylene		370	U
83-32-9	Acenaphthene		370	U
132-64-9	Dibenzofuran		370	U
86-73-7	Fluorene		370	U
85-01-8	Phenanthrene		370	U
120-12-7	Anthracene		370	U
206-44-0	Fluoranthene		38	J
129-00-0	Pyrene		40	J
56-55-3	Benzo[a]anthracene		20	J
218-01-9	Chrysene		20	J
205-99-2	Benzo[b]fluoranthene		40	_ 3
207-08-9	Benzo[k]fluoranthene		370	U
50-32-8	Benzo[a]pyrene		370	U
193-39-5	Indeno[1,2,3-cd]pyrene		370	U
53-70-3	Dibenz[a,h]anthracene		370	U
191-24-2	Benzo[g,h,i]perylene		370	U

EPA SAMPLE NO.

ab Name:	ICM			_ (Contract:	N-VV
ab Code:	ICM	c	ase No.:		SAS No.:	DG No.: C-1
Matrix: (soil/	water)	SOIL			Lab Sample ID:	280001
Sample wt/ve	ol:	30.43	(g/ml) G		Lab File ID:	J1871.D
_evel: (low/r	med)	LOW			Date Received:	12/23/97
% Moisture:	6.29	de de	ecanted:(Y/N)	N	Date Extracted:	12/26/97
Concentrate	d Extract	Volume:	500 (uL)		Date Analyzed:	12/30/97
njection Vol	ume: 2	.0 (uL)			Dilution Factor:	1.0
CDC Cleanu	- WAN	V	AU. 74			

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
91-20-3	Naphthalene		350	U
91-57-6	2-Methylnaphthalene		350	U
208-96-8	Acenaphthylene		350	U
83-32-9	Acenaphthene		350	U
132-64-9	Dibenzofuran		350	U
86-73-7	Fluorene		350	U
85-01-8	Phenanthrene		350	U
120-12-7	Anthracene		350	U
206-44-0	Fluoranthene		350	U
129-00-0	Pyrene		350	U
56-55-3	Benzo[a]anthracene		350	U
218-01-9	Chrysene		350	U
205-99-2	Benzo[b]fluoranthene		350	U
207-08-9	Benzo[k]fluoranthene		350	U
50-32-8	Benzo[a]pyrene		350	U
193-39-5	Indeno[1,2,3-cd]pyrene		350	U
53-70-3	Dibenz[a,h]anthracene		350	U
191-24-2	Benzo[g,h,i]perylene		350	U

EPA SAMPLE NO.

Lab Name:	ICM				Contract:	3-44
Lab Code:	ICM	c	ase No.:		SAS No.: S	DG No.: C-1
Matrix: (soil/	water)	SOIL			Lab Sample ID:	279874
Sample wt/v	ol:	30.11	(g/ml) G		Lab File ID:	J1868.D
Level: (low/	med)	LOW			Date Received:	12/22/97
% Moisture:	6.62	d	ecanted:(Y/N)	N	Date Extracted:	12/26/97
Concentrate	d Extract	Volume:	500 (uL)		Date Analyzed:	12/30/97
Injection Vol	ume: 2	.0 (uL)			Dilution Factor:	1.0
GPC Cleanu	ip: (Y/N)	Y	pH: 7.8			

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
91-20-3	Naphthalene		360	U
91-57-6	2-Methylnaphthalene		360	U
208-96-8	Acenaphthylene		360	U
83-32-9	Acenaphthene		360	U
132-64-9	Dibenzofuran		360	U
86-73-7	Fluorene		360	U
85-01-8	Phenanthrene		100	J
120-12-7	Anthracene		28	J
206-44-0	Fluoranthene		180	J
129-00-0	Pyrene		150	J
56-55-3	Benzo[a]anthracene		79	J
218-01-9	Chrysene		70	J
205-99-2	Benzo[b]fluoranthene		110	J
207-08-9	Benzo[k]fluoranthene		360	U
50-32-8	Benzo[a]pyrene		45	J
193-39-5	Indeno[1,2,3-cd]pyrene		32	J
53-70-3	Dibenz[a,h]anthracene		360	U
191-24-2	Benzo[g,h,i]perylene		33	J

EPA SAMPLE NO.

Lab Name:	ICM			_ 0	Contract:	W-W
Lab Code:	ICM		Case No.:		SAS No.: S	DG No.: C-1
Matrix: (soil/	water)	SOIL			Lab Sample ID:	280002
Sample wt/v	ol:	30.13	(g/ml) G		Lab File ID:	J1872.D
Level: (low/	med)	LOW			Date Received:	12/23/97
% Moisture:	8.77		decanted:(Y/N)	N	Date Extracted:	12/26/97
Concentrate	d Extract	Volume	: 500 (uL)		Date Analyzed:	12/30/97

GPC Cleanup: (Y/N) Y pH: 7.39

Injection Volume: 2.0 (uL)

CONCENTRATION UNITS:

Dilution Factor: 1.0

		CONCENTION	OIT OITH TO.	
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
91-20-3	Naphthalene		280	J
91-57-6	2-Methylnaphthalene		200	J
208-96-8	Acenaphthylene	Y	110	J
83-32-9	Acenaphthene		410	
132-64-9	Dibenzofuran		250	J
86-73-7	Fluorene		390	
85-01-8	Phenanthrene		1400	
120-12-7	Anthracene		430	
206-44-0	Fluoranthene		600	
129-00-0	Pyrene		1300	
56-55-3	Benzo[a]anthracene		960	
218-01-9	Chrysene		840	
205-99-2	Benzo[b]fluoranthene		1600	
207-08-9	Benzo[k]fluoranthene	λ.	360	U
50-32-8	Benzo[a]pyrene		790	
193-39-5	Indeno[1,2,3-cd]pyrene		360	J
53-70-3	Dibenz[a,h]anthracene		170	J
191-24-2	Benzo[g,h,i]perylene		300	J

EPA SAMPLE NO.

Lab Name:	ICM			c	Contract:		W-WRE
Lab Code:	ICM	Ca	se No.:		SAS No.:	SDG N	No.: C-1
Matrix: (soil/	water)	SOIL			Lab Sample	ID: 2800	002RE
Sample wt/ve	ol:	30.13	(g/ml) G		Lab File ID:	J202	21.D
Level: (low/r	med)	LOW	V a line of		Date Receiv	ed: 12/2	23/97
% Moisture:	8.77	de	canted:(Y/N)	N	Date Extract	ted: 12/2	6/97
Concentrate	d Extract	Volume:	500 (uL)		Date Analyz	ed: 01/1	0/98
Injection Vol	ume: 2	.0 (uL)			Dilution Fac	tor: 1.0	
GPC Cleanu	p: (Y/N)	Y	pH: 7.39	-			

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
91-20-3	Naphthalene		270	J
91-57-6	2-Methylnaphthalene		190	J
208-96-8	Acenaphthylene		110	J
83-32-9	Acenaphthene		410	
132-64-9	Dibenzofuran		250	J
86-73-7	Fluorene		360	J
85-01-8	Phenanthrene		820	9
120-12-7	Anthracene		970	
206-44-0	Fluoranthene		750	
129-00-0	Pyrene		2200	Y
56-55-3	Benzo[a]anthracene		1700	
218-01-9	Chrysene		1700	
205-99-2	Benzo[b]fluoranthene		1800	V
207-08-9	Benzo[k]fluoranthene		360	U
50-32-8	Benzo[a]pyrene		720	
193-39-5	Indeno[1,2,3-cd]pyrene		430	
53-70-3	Dibenz[a,h]anthracene		210	J
191-24-2	Benzo[g,h,i]perylene		410	V

EPA SAMPLE NO.

SBLK32

Lab Name:	ICM			0	Contract:	- GDERGE
Lab Code:	ICM		ase No.:		SAS No.: S	DG No.: C-1
Matrix: (soil/	water)	SOIL			Lab Sample ID:	SBLK32
Sample wt/vo	ol:	30.03	(g/ml) G		Lab File ID:	J1867.D
Level: (low/r	med)	LOW			Date Received:	00/00/00
% Moisture:	0	d	ecanted:(Y/N)	N	Date Extracted:	12/26/97
Concentrate	d Extract	Volume:	500 (uL)		Date Analyzed:	12/30/97
Injection Vol	ume: 2	.0 (uL)			Dilution Factor:	1.0
GPC Cleanu	p: (Y/N)	Y	pH: 0			

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
91-20-3	Naphthalene		330	U
91-57-6	2-Methylnaphthalene	A	330	U
208-96-8	Acenaphthylene		330	U
83-32-9	Acenaphthene		330	U
132-64-9	Dibenzofuran		330	U
86-73-7	Fluorene		330	U
85-01-8	Phenanthrene		330	U
120-12-7	Anthracene		330	U
206-44-0	Fluoranthene		330	U
129-00-0	Pyrene		330	U
56-55-3	Benzo[a]anthracene		330	U
218-01-9	Chrysene		330	U
205-99-2	Benzo[b]fluoranthene		330	U
207-08-9	Benzo[k]fluoranthene		330	U
50-32-8	Benzo[a]pyrene		330	U
193-39-5	Indeno[1,2,3-cd]pyrene		330	U
53-70-3	Dibenz[a,h]anthracene		330	U
191-24-2	Benzo[g,h,i]perylene		330	U

EPA SAMPLE NO.

Lab Name:	ICM	44-			Contract:	SBLK36
Lab Code:	ICM		Case No.:		SAS No.:S	SDG No.: C-1
Matrix: (soil/	water)	SOIL			Lab Sample ID:	SBLK36
Sample wt/vo	ol:	30.01	(g/ml) G		Lab File ID:	J1874.D
Level: (low/r	med)	LOW			Date Received:	00/00/00
% Moisture:	0		decanted:(Y/N)	N	Date Extracted:	12/26/97
Concentrate	d Extract	Volume	: 1000 (uL)		Date Analyzed:	12/30/97
Injection Volu	ume: 2	0 (ul	_)		Dilution Factor:	1.0
GPC Cleanu	p: (Y/N)	N	pH: 0			

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
91-20-3	Naphthalene		330	U
91-57-6	2-Methylnaphthalene		330	U
208-96-8	Acenaphthylene		330	U
83-32-9	Acenaphthene		330	U
132-64-9	Dibenzofuran		330	U
86-73-7	Fluorene		330	U
85-01-8	Phenanthrene		330	U
120-12-7	Anthracene		330	U
206-44-0	Fluoranthene		330	U
129-00-0	Pyrene		330	U
56-55-3	Benzo[a]anthracene		330	U
218-01-9	Chrysene	1	330	U
205-99-2	Benzo[b]fluoranthene		330	U
207-08-9	Benzo[k]fluoranthene		330	U
50-32-8	Benzo[a]pyrene		330	U
193-39-5	Indeno[1,2,3-cd]pyrene		330	U
53-70-3	Dibenz[a,h]anthracene		330	U
191-24-2	Benzo[g,h,i]perylene		330	U

EPA SAMPLE NO.

E-WMS

Lab Name:	ICM				Contract:	
Lab Code:	ICM		Case No.:		SAS No.: S	DG No.: C-1
Matrix: (soil/	water)	SOIL	_		Lab Sample ID:	280000MS
Sample wt/ve	ol:	30.01	(g/ml) G		Lab File ID:	J1911.D
Level: (low/r	med)	LOW			Date Received:	12/23/97
% Moisture:	16.3	1 (lecanted:(Y/N)	N	Date Extracted:	12/26/97
Concentrate	d Extract	Volume:	500 (uL)		Date Analyzed:	01/04/98
Injection Vol	ume: 2	.0 (uL)			Dilution Factor:	1.0
GPC Cleanu	p: (Y/N)	Y	pH: 7.58			

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
91-20-3	Naphthalene	1-	400	U
91-57-6	2-Methylnaphthalene	()	400	U
208-96-8	Acenaphthylene		400	U
83-32-9	Acenaphthene		1800	
132-64-9	Dibenzofuran		400	U
86-73-7	Fluorene		400	U
85-01-8	Phenanthrene		400	U
120-12-7	Anthracene		400	U
206-44-0	Fluoranthene		400	U
129-00-0	Pyrene		2000	
56-55-3	Benzo[a]anthracene	The state of the s	59	J
218-01-9	Chrysene		72	J
205-99-2	Benzo[b]fluoranthene		290	J
207-08-9	Benzo[k]fluoranthene		400	U
50-32-8	Benzo[a]pyrene		100	J
193-39-5	Indeno[1,2,3-cd]pyrene		55	J
53-70-3	Dibenz[a,h]anthracene		29	J
191-24-2	Benzo[g,h,i]perylene		47	J

EPA SAMPLE NO.

E-WMSD

Lab Name:	ICM				Contract:	L-Williob
Lab Code:	ICM		Case No.:		SAS No.: S	DG No.: C-1
Matrix: (soil/	water)	SOIL			Lab Sample ID:	280000MSD
Sample wt/v	ol:	30.09	(g/ml) G		Lab File ID:	J1912.D
Level: (low/	med)	LOW			Date Received:	12/23/97
% Moisture:	16.3	1 d	ecanted:(Y/N)	N	Date Extracted:	12/26/97
Concentrate	d Extract	Volume:	500 (uL)		Date Analyzed:	01/04/98
Injection Vol	ume: 2	2.0 (uL)			Dilution Factor:	1.0
GPC Cleanu	p: (Y/N)	Y	pH: 7.58			

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	_ 0
91-20-3	Naphthalene	400	1 U
91-57-6	2-Methylnaphthalene	400	U
208-96-8	Acenaphthylene	400	U
83-32-9	Acenaphthene	1800	
132-64-9	Dibenzofuran	400	U
86-73-7	Fluorene	400	U
85-01-8	Phenanthrene	400	U
120-12-7	Anthracene	400	U
206-44-0	Fluoranthene	400	U
129-00-0	Pyrene	1900	
56-55-3	Benzo[a]anthracene	27	J
218-01-9	Chrysene	35	J
205-99-2	Benzo[b]fluoranthene	99	J
207-08-9	Benzo[k]fluoranthene	400	U
50-32-8	Benzo[a]pyrene	29	J
193-39-5	Indeno[1,2,3-cd]pyrene	400	U
53-70-3	Dibenz[a,h]anthracene	400	U
191-24-2	Benzo[g,h,i]perylene	400	U

APPENDIX F

Post-Excavation Concrete Sampling Data Package

EPA S	SAMPLE	NO
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ab Name: ICM_LABS		Contract:	C1
Tab Code: ICM	Case No.:	SAS No.:	SDG No.: C1
matrix (soil/water):	SOIL_	Lab Sam	mple ID: 279859
evel (low/med):	LOW	Date Re	eceived: 12/22/97

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony		Ξ		NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium		301		NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	14.6			P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

olor Before:	GREY	Clarity Before	: YELLOW	Texture: _
Color After:	CLOUDY	Clarity After:	CLEAR_	Artifacts: _
Comments:				

FORM I - IN

FDA	SAMPLE	MO
EPA	SAMPLE	NO.

ab Name: IC	M_LABS		Contract: _			CIDUP
Tab Code: IC	Ca	se No.:	SAS No.:	_		SDG No.: C1
Matrix (soil	/water): SOIL	2		Lal	b Samp	ple ID: 279860
evel (low/m	ned): LOW_	_		Da	te Red	ceived: 12/22/97
% Solids:	100.	0				
	Concentration	Units (ug,	/L or mg/kg dry	w	eight)	: MG/KG
	-				_	Tel
	CAS No.	Analyte	Concentration	C	Q	М
	7429-90-5	Aluminum		-		- NR
	7440-36-0	Antimony		-		NR NR
	7440-38-2	Arsenic		-		NR NR
	7440-38-2	Barium	-	-		- NR
		Beryllium	-	-		NR NR
	7440-43-9			-		NR NR
		Calcium		-		NR NR
	7440-47-3	Chromium				NR
	7440-48-4	Cobalt		-		NR
	7440-50-8	Copper		-		NR
	7439-89-6	Iron		-1		NR
	7439-92-1	Lead	27.8	-		P
	7439-95-4	Magnesium				NR
	7439-96-5	Manganese		-1.		NR
	7439-97-6	Mercury				NR
	7440-02-0	Nickel -		-		NR
	7440-09-7	Potassium				NR
	7782-49-2	Selenium				NR
	7440-22-4	Silver		= 1		NR
	7440-23-5	Sodium		-1		NR

Color Be	fore:	GREY	Clarity	Before:	YELLOW	Texture:
Comments		CLOUDY	Clarity	After:	CLEAR_	Artifacts:

Thallium

Vanadium

Zinc_ Cyanide_

7440-28-0

7440-62-2

7440-66-6

FORM I - IN

NR NR

NR

NR

7777	CAMPITE	NTO
HDA	SAMPLE	INCI

EACT (TOM) IIIC	d): LOW_			Dat	te Rec	eived: 12/22/97
0-144-	100.	0				
Solids:	100.	U.				
C	oncentration	Units (ug	/L or mg/kg dry	/ W	eight)	: MG/KG
	CAS No.	Analyte	Concentration	C	Q	м
	7429-90-5	Aluminum		-		NR
	7440-36-0	Antimony_		-		NR
	7440-38-2	Arsenic				NR
	7440-39-3	Barium				NR
	7440-41-7			-1-		NR
	7440-43-9					NR
	7440-70-2	Calcium		-1-		NR
	7440-47-3	Chromium				NR
	7440-48-4			F		NR
	7440-50-8	Copper				NR
	7439-89-6	Iron	*	-1		NR
	7439-92-1	Lead	48.9	-		P_
	7439-95-4	Magnesium				NR
	7439-96-5	Manganese		-		NR
	7439-97-6	Mercury		- -		NR
	7440-02-0	Nickel -				NR
	7440-09-7	The state of the s		-1.		NR
	7782-49-2	from the following the same and the same and		-		NR
	7440-22-4					NR
	7440-23-5					NR
	7440-28-0					NR
	7440-62-2	Vanadium		-1		NR
	7440-66-6	Zinc				NR
	Production of	Cyanide_				NR
		1				
olor Before:	GREY	Clarit	ty Before: YELI	LOW		Texture:
olor After:	CLOUDY	Clarit	ty After: CLE	AR		Artifacts:
omments:	WAY WEST		4. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	_		Charles A

FORM I - IN

EFA SAMELE NO	EPA	SAMPLE	NO.
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			SAS No.:			
rix (soil/w	rater): SOIL	_		Lal	o Sam	ple ID: 279862
el (low/med	LOW_	_		Dat	te Re	ceived: 12/22/9
olids:	100.	0				
			and the same as		1.	e decide
Co	ncentration	Units (ug,	/L or mg/kg dry	W	eight): MG/KG
	1					1
	CAS No.	Analyte	Concentration	С	Q	м
	7429-90-5	Aluminum		-		NR
1	7440-36-0	Antimony		-		NR
	7440-38-2	Arsenic		-1-		NR
	7440-39-3	Barium				NR
	7440-41-7					NR
	7440-43-9	Cadmium				NR
	7440-70-2	Calcium		-		NR
	7440-47-3	Chromium		-		NR
	7440-48-4	Cobalt				NR
	7440-50-8	Copper		-		NR
	7439-89-6	Iron				NR
	7439-92-1	Lead	17.3	-		P
	7439-95-4	Magnesium		-1		NR
	7439-96-5	Manganese				NR
	7439-97-6	Mercury				NR
	7440-02-0	Nickel				NR
	7440-09-7	Potassium				NR
	7782-49-2	Selenium				NR
	7440-22-4	Silver				NR
	7440-23-5	Sodium	1 = 1 = 1 = 1			NR
	7440-28-0					NR
	7440-62-2	Vanadium		Ξii		NR
	7440-66-6	Zinc		- 1		NR
		Cyanide_				NR
				_1.	_	-
or Before:	GREY	Clari	ty Before: YELI	LOW		Texture: _
	CLOUDY	G1 4 2 1	ty After: CLEA	AR		Artifacts:

FORM I - IN

ILM04.0

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EPA	CARE	DIT	TATO
EPA	SAM	PLIE	INC

ab Name: ICM_	LABS		Contract: _			C4
ab Code: ICM_	Ca	se No.:	SAS No.	_		SDG No.: C1_
watrix (soil/w	ater): SOIL	_		La	b Sam	ple ID: 279863
evel (low/med	l): LOW_	_		Da	te Re	ceived: 12/22/97
Solids:	100.	0				
Co	ncentration	Units (ug	/L or mg/kg dry	, w	eight): MG/KG
	CAS No.	Analyte	Concentration	C	Q	M
	7429-90-5	Aluminum		-		- NR
	7440-36-0	Antimony	-	-		- NR
	7440-38-2	Arsenic		-		- NR
	7440-39-3	Barium		-		- NR
	7440-33-3	Beryllium		-		NR NR
	7440-43-9	Cadmium		-		- NR
	7440-70-2	Calcium		-	_	- NR
	7440-47-3	Chromium		-	_	- NR
		Cobalt		-		NR NR
	7440-48-4	The state of the s		$\frac{1}{2}$	_	- NR
	7440-50-8	Copper		-		- NR
	7439-89-6	Iron	11.5	-		
	7439-92-1	Lead	11.5	-		P_NR
	7439-95-4	Magnesium		-		- NR
	7439-96-5	Manganese		-		- NR
	7439-97-6	Mercury_		-	_	— F 1 2 2 2 1
	7440-02-0	Nickel		-	-	_ NR
	7440-09-7	Potassium		-	-	_ NR
	7782-49-2	Selenium_		-		_ NR
	7440-22-4	Silver		-		_ NR
	7440-23-5	Sodium	<u> </u>	-		NR
	7440-28-0	Thallium_		-	-	_ NR
	7440-62-2	Vanadium_		_		NR
	7440-66-6	Zinc		_		_ NR
		Cyanide_		-		_ NR
Color Before:	CDEV	01000	THE BOFORD VET	-	,	Tortura
coror perore:	GREY	Clail	ty Before: YEL	JON	,	Texture:
Color After:	CLOUDY	Clarit	ty After: CLE	AR_		Artifacts:
Comments:						
Challettes:						

FORM I - IN

EDA	CAMDIE	NTO
LPA	SAMPLE	NU

ab Code: ICM_	Ca	se No.:	SAS No.:	_		SDG No.: C1
atrix (soil/w	ater): SOIL	<u>_</u>		Lal	Sam	ple ID: 279864
evel (low/med	l): LOW_	2		Dat	te Re	ceived: 12/22/97
Solids:	100.	0				
Co	ncentration	Units (ug,	/L or mg/kg dry	, we	eight): MG/KG
	CAS No.	Analyte	Concentration	С	Q	М
	7429-90-5	Aluminum				- NR
	7440-36-0		1	- -		- NR
	7440-38-2			-1-		NR
	7440-39-3			7		NR
	7440-41-7	The second secon				NR
	7440-43-9	The state of the s				NR
	7440-70-2					NR NR
	7440-47-3	Chromium				NR
	7440-48-4	Cobalt				NR
	7440-50-8	Copper				NR
	7439-89-6	Iron	2.4			NR
	7439-92-1	Lead	7.3			P_
	7439-95-4	Magnesium				NR
	7439-96-5	Manganese				NR
	7439-97-6	Mercury_				NR
	7440-02-0	Nickel				NR
	7440-09-7			_ _		NR
	7782-49-2					NR
	7440-22-4			2		_ NR
	7440-23-5					NR
	7440-28-0	Thallium_				NR
	7440-62-2	Vanadium_		_ _		_ NR
	7440-66-6	Zinc				_ NR
		Cyanide		- -		_ NR
	GREY	Clari	ty Before: YELI	OM	,	Texture:
olor Before:						

FORM I - IN

Lab Sample ID: 279866 Low							
Date Received: 12/22/9 Solids: 100.0 Concentration Units (ug/L or mg/kg dry weight): MG/KG CAS No. Analyte Concentration C Q M	ab Code: ICM_	Ca	se No.:	SAS No.	_		SDG No.: C1_
Cas No.	watrix (soil/w	ater): SOIL	<u> </u>		La	b Samp	le ID: 279866
Cas No.	evel (low/med): LOW_	<u></u>		Da	te Rec	eived: 12/22/97
Cas No.	k Solids:	100.	0				
CAS NO. Analyte Concentration C Q M 7429-90-5 7440-36-0 7440-38-2 7440-39-3 Antimony Arsenic NR 7440-38-2 7440-41-7 Bersim NR NR NR <				Determine de			Ababb
T429-90-5	Co	ncentration	Units (ug,	/L or mg/kg dry	W	eight)	: MG/KG
T429-90-5		F. p. p				1	Ti
NR NR NR NR NR NR NR NR		CAS No.	Analyte	Concentration	C	Q	М
7440-36-0 Antimony NR 7440-38-2 Arsenic NR 7440-39-3 Barium NR 7440-41-7 Beryllium NR 7440-43-9 Cadmium NR 7440-47-3 Chromium NR 7440-48-4 Cobalt NR 7439-89-6 Iron NR 7439-92-1 Lead 10.8 7439-95-4 Magnesium NR 7439-96-5 Manganese NR 7440-02-0 Nickel NR 7440-02-0 Nickel NR 7440-02-7 Potassium NR 7440-22-4 Silver NR 7440-22-5 Sodium NR 7440-28-0 Thallium NR 7440-66-6 Zinc NR 7440-66-6 Zinc NR		=	5.7		-		-
7440-38-2 Arsenic NR 7440-39-3 Barium NR 7440-41-7 Beryllium NR 7440-70-2 Cadmium NR 7440-47-3 Chromium NR 7440-48-4 Cobalt NR 7439-89-6 Iron NR 7439-92-1 Lead 10.8 7439-95-4 Magnesium NR 7439-97-6 Mercury NR 7440-02-0 Nickel NR 7440-02-0 Selenium NR 7440-23-5 Sodium NR 7440-23-5 Sodium NR 7440-66-6 Thallium NR 7440-66-6 NR NR		The state of the s			-		CT 2 2 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
7440-39-3 Barium NR 7440-41-7 Beryllium NR 7440-43-9 Cadmium NR 7440-47-3 Chromium NR 7440-48-4 Cobalt NR 7439-89-6 Iron NR 7439-95-1 Lead 10.8 7439-95-5 Magnesium NR 7439-97-6 Mercury NR 7440-02-0 Nickel NR 7440-02-7 Potassium NR 7440-22-4 Silver NR 7440-23-5 Sodium NR 7440-28-0 Thallium NR 7440-66-6 Zinc NR 7440-66-6 Zinc NR NR NR NR					-		
T440-41-7		The second of th			-		
7440-43-9 Cadmium NR 7440-70-2 Calcium NR 7440-47-3 Chromium NR 7440-48-4 Cobalt NR 7449-89-6 Copper NR 7439-92-1 Lead NR 7439-95-4 Magnesium NR 7439-97-6 Mercury NR 7440-02-0 Nickel NR 7440-09-7 Potassium NR 7440-22-4 Silver NR 7440-28-0 Thallium NR 7440-28-0 Thallium NR 7440-66-6 Zinc NR Cyanide NR					-	-	4 5 6 6 5
7440-70-2 Calcium NR 7440-47-3 Chromium NR 7440-48-4 Cobalt NR 7440-50-8 Copper NR 7439-89-6 Iron NR 7439-95-4 Magnesium NR 7439-96-5 Manganese NR 7440-02-0 Nickel NR 7440-09-7 Potassium NR 7440-22-4 Silver NR 7440-23-5 Sodium NR 7440-28-0 Thallium NR 7440-66-6 Zinc NR Cyanide NR					-		
7440-47-3 Chromium NR 7440-48-4 Cobalt NR 7440-50-8 Copper NR 7439-89-6 Iron NR 7439-92-1 Lead 10.8 P 7439-95-4 Magnesium NR 7439-97-6 Mercury NR 7440-02-0 Nickel NR 7440-09-7 Potassium NR 7782-49-2 Silver NR 7440-22-4 Silver NR 7440-23-5 Sodium NR 7440-66-6 Zinc NR 7440-66-6 Zinc NR Cyanide NR		The state of the s			-		
7440-48-4 Cobalt NR 7440-50-8 Copper NR 7439-89-6 Iron NR 7439-92-1 Lead 10.8 P 7439-95-4 Magnesium NR 7439-96-5 Manganese NR 7440-02-0 Nickel NR 7440-09-7 Potassium NR 7782-49-2 Selenium NR 7440-22-4 Silver NR 7440-23-5 Sodium NR 7440-28-0 Thallium NR 7440-66-6 Zinc NR Cyanide NR					-		110000000000000000000000000000000000000
7440-50-8 Copper NR 7439-89-6 Iron NR 7439-92-1 Lead 10.8 P_ 7439-95-4 Magnesium NR 7439-96-5 Manganese NR 7440-02-0 Nickel NR 7440-09-7 Potassium NR 7782-49-2 Selenium NR 7440-22-4 Silver NR 7440-28-0 Thallium NR 7440-62-2 Vanadium NR 7440-66-6 Zinc NR Cyanide NR			The state of the s		-		N 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
7439-89-6 Iron NR 7439-92-1 Lead 10.8 7439-95-4 Magnesium NR 7439-96-5 Manganese NR 7440-02-0 Nickel NR 7440-09-7 Potassium NR 7782-49-2 Selenium NR 7440-22-4 Silver NR 7440-28-0 Thallium NR 7440-66-6 Zinc NR Cyanide NR		A SALE PARTY AND RESIDENCE OF THE PARTY AND RESI					1 2 3 4 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
7439-92-1 Lead 10.8 P_ 7439-95-4 Magnesium NR 7439-96-5 Manganese NR 7440-02-0 Nickel NR 7440-09-7 Potassium NR 7782-49-2 Selenium NR 7440-22-4 Silver NR 7440-23-5 Sodium NR 7440-28-0 Thallium NR 7440-66-6 Zinc NR 7440-66-6 Zinc NR NR NR NR				-			The section of the se
7439-95-4 Magnesium NR 7439-96-5 Manganese NR 7440-02-0 Nickel NR 7440-09-7 Potassium NR 7782-49-2 Selenium NR 7440-22-4 Silver NR 7440-23-5 Sodium NR 7440-28-0 Thallium NR 7440-62-2 Vanadium NR 7440-66-6 Zinc NR Cyanide NR			No. of the last of	10.8			
7439-96-5 Manganese					7		
7439-97-6 Mercury NR 7440-02-0 Nickel NR 7440-09-7 Potassium NR 7782-49-2 Selenium NR 7440-22-4 Silver NR 7440-23-5 Sodium NR 7440-28-0 Thallium NR 7440-62-2 Vanadium NR 7440-66-6 Zinc NR Cyanide NR			The second secon				
7440-09-7 Potassium							NR
7782-49-2 Selenium NR NR NR NR NR NR NR N		7440-02-0	Nickel				NR
7440-22-4 Silver NR 7440-23-5 Sodium NR 7440-28-0 Thallium NR 7440-62-2 Vanadium NR 7440-66-6 Zinc NR Cyanide NR		7440-09-7	Potassium				NR
7440-23-5 Sodium NR NR NR NR NR NR NR N		7782-49-2	Selenium_				NR
7440-28-0 Thallium		7440-22-4					
7440-62-2 Vanadium							
7440-66-6 Zinc NR Cyanide NR							- 13 TO STORE 1
CyanideNR				14			6 C C C C C C C C C C C C C C C C C C C
		7440-66-6	The state of the s				1 1 2 4 3 1
Color Before: GREY Clarity Before: YELLOW Texture:			Cyanide				NR
Color Before: GREY Clarity Before: YELLOW Texture:					_1		
		CDEV	Claris	W Before, VELI	OW		Texture.

Comments:

FORM I - IN

ILM04.0

	EPA	SAMPLE	NO
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ab Name: ICM_	LABS		Contract: _			C8
ab Code: ICM_	ode: ICM Case No.:			SAS No.: SDG No.:		
watrix (soil/w	ater): SOIL	<u>u</u>		Lal	Samp	ole ID: 279867
evel (low/med	l): LOW_			Dat	te Rec	eived: 12/22/97
% Solids:	100.	0				
			East Court &	0		110 /200
Co	ncentration	Units (ug	/L or mg/kg dry	We	eignt)	: MG/KG
	CAS No.	Analyte	Concentration	С	Q	M
	7429-90-5	Aluminum				NR
	7440-36-0	Antimony		- -		NR NR
	7440-38-2	Arsenic		-1-		NR
	7440-39-3	Barium		-		NR
	7440-41-7	Beryllium			-	NR
	7440-43-9	Cadmium				NR
	7440-70-2	Calcium_				NR
	7440-47-3	Chromium_				NR
	7440-48-4	Cobalt		_ -		NR
	7440-50-8	Copper				NR
	7439-89-6	Iron				NR
	7439-92-1	Lead	16.1			P_ NR
	7439-95-4	Magnesium				
	7439-96-5	Manganese				NR NR
	7439-97-6 7440-02-0	Mercury_ Nickel				NR NR
	7440-02-0					NR NR
	7782-49-2	Selenium		- -		NR NR
	7440-22-4	Silver				NR NR
	7440-23-5	Sodium		-		NR NR
	7440-28-0	Thallium		F 1		NR
	7440-62-2	Vanadium				NR
	7440-66-6	Zinc		-		NR
		Cyanide		-		NR
Color Before:	GREY	Clari	ty Before: YEL	LOW		Texture:
Color After:	CLOUDY	Clari	ty After: CLE	AR_		Artifacts:
Comments:			and the same	1		
Ondients:						

FORM I - IN

EPA	SAMPLE	NO.

ab Co	de: ICM_	Ca	se No.:	SAS No.:	_		SDG No.: C1_
atrix	(soil/w	ater): SOIL			La	b Sam	ple ID: 279868
	/1 / ·				Da	to Bo	ceived: 12/22/9
evel	(Tow/med): LOW_	-		Da	LE RE	cerved: 12/22/3
Soli	ds:	100.	0				
		U.S. C. 134.4	22-12-12	Maria Maria Sana			
	Co	ncentration	Units (ug,	/L or mg/kg dry	y w	eight): MG/KG
		-					
		CAS No.	Analyte	Concentration	C	Q	М
		7429-90-5	Aluminum		-	_	- NR
		7440-36-0	Antimony		-		- NR
		7440-38-2	Arsenic		-		- NR
		7440-38-2	Barium	-	-		- NR
		7440-41-7	Beryllium		-	-	- NR
		7440-43-9	Cadmium	-	-		- NR
		7440-70-2	Calcium		-	_	- NR
		7440-70-2	Chromium		-		- NR
		7440-48-4	Cobalt		-		- NR
		7440-50-8			-		- NR
		7439-89-6	Copper		-	_	- NR
		7439-89-6	Lead	50.2	-	_	P P
		7439-95-4	Magnesium	50.2	-	_	NR NR
		7439-96-5			-		- NR
		7439-96-5	Manganese Mercury		-		- NR
		7440-02-0	Nickel		-		- NR
		7440-02-0	Potassium		-		- NR
		7782-49-2	Selenium		-		- NR
		7440-22-4	Silver		-	-	- NR
		7440-23-5	Sodium		-		- NR
		7440-23-5	Thallium		-	-	- NR
		7440-28-0	Vanadium_		-		- NR
		7440-62-2	Zinc		-		- NR
		1440-00-0	Cyanide		-	,	- NR
			cyanitae_		-		
Color	Before:	GREY	Clari	ty Before: YEL	LOW		Texture:
Color	After:	CLOUDY	Clari	ty After: CLE	AR		Artifacts:
				1000 10			

FORM I - IN

ILM04.0

EPA	SAMPLE	NO
111111		110

ab Name: ICM LABS		Contract:	C10
'ab Code: ICM	Case No.:		SDG No.: C1
matrix (soil/water):	SOIL_	Lab Sa	mple ID: 279869
evel (low/med):	LOW	Date R	eceived: 12/22/97
% Solids:	100.0		

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum		-		NR
7440-36-0	Antimony				NE
7440-38-2	Arsenic				NE
7440-39-3	Barium				NF
7440-41-7	Beryllium				NF
7440-43-9	Cadmium				NF
7440-70-2	Calcium	v =			NE
7440-47-3	Chromium		31		NE
7440-48-4	Cobalt				NE
7440-50-8	Copper				NF
7439-89-6	Iron				NF
7439-92-1	Lead	8.3			P
7439-95-4	Magnesium			*	NF
7439-96-5	Manganese				NF
7439-97-6	Mercury				NE
7440-02-0	Nickel				NE
7440-09-7	Potassium				NE
7782-49-2	Selenium		-		NE
7440-22-4	Silver				NE
7440-23-5	Sodium				NE
7440-28-0	Thallium				NE
7440-62-2	Vanadium		-1		NE
7440-66-6	Zinc				NF
	Cyanide		-1.		NE

Color Before:	GREY	Clarity Before:	YELLOW	Texture:
Color After:	CLOUDY	Clarity After:	CLEAR_	Artifacts:

FORM I - IN

TODA	CARADIT	BTO
P. PA	SAMPLE	N()

	34	A	C1 C 11-			CDC No. CT
ab Code: ICM_	Ca	se No.:	SAS NO.	-		SDG No.: Cl_
atrix (soil/w	ater): SOIL			La	b Sam	ple ID: 279870
sevel (low/med	l): LOW_	<u>.</u>		Da	te Re	ceived: 12/22/9
Solids:	100.	Ò				
Co	ncentration	Units (ug	/L or mg/kg dry	W	eight): MG/KG
						
	CAS No.	Analyte	Concentration	С	Q	м
	7429-90-5	Aluminum				NR
	7440-36-0	Antimony		-		NR NR
	7440-38-2	Arsenic		-		NR
	7440-39-3	Barium		~		NR
	7440-41-7	Beryllium		-1		NR
	7440-43-9	Cadmium				NR
	7440-70-2	Calcium		-		NR
	7440-47-3	Chromium		-1		NR
	7440-48-4	Cobalt		-		NR
	7440-50-8	Copper		3		NR
	7439-89-6	Iron		-1		NR
	7439-92-1	Lead	29.4	-		P
	7439-95-4	Magnesium		-		NR
	7439-96-5	Manganese				NR
	7439-97-6	Mercury		=		NR
	7440-02-0	Nickel				NR
	7440-09-7	Potassium				NR
	7782-49-2	Selenium	S. The second			NR
	7440-22-4					NR
	7440-23-5	Sodium				NR
	7440-28-0	Thallium				NR
	7440-62-2	Vanadium_				NR
	7440-66-6	Zinc				NR
		Cyanide_				NR
				1_1.		المال
Color Before:	GREY	Clari	ty Before: YEL	LOW		Texture:
Color After:	CLOUDY	Clari	ty After: CLE	AR_		Artifacts:
Comments:						
CHILLETTES:						

FORM I - IN

	- T. O. S. S. S. S. S. S. S. S. S.	
DDA	SAMPLE	RTO
P. PA	SAMPLIE	INC

C12

ab Name: ICM_	LABS		Contract: _			-
Jab Code: ICM_	Ca	se No.:	SAS No.	: _		SDG No.: Cl_
Matrix (soil/w	ater): SOIL	_		Lab	Sam	ple ID: 279871
evel (low/med	LOW	2		Dat	e Re	ceived: 12/22/97
% Solids:	100.	0				
Co	ncentration	Units (ug	/L or mg/kg dry	y we	eight): MG/KG
	CAS No.	Analyte	Concentration	С	Q	м
	7420 00 F	Aluminum				- NR
	7429-90-5					- NR
	7440-36-0	Antimony_				- NR
	7440-38-2	Arsenic_				- NR
	7440-39-3	Barium_			_	- NR
	7440-41-7	Beryllium Cadmium		- -		- NR
	7440-43-9					- NR
	7440-70-2	Calcium_		- -		- NR
	7440-47-3	Chromium_	-			
	7440-48-4	Cobalt				_ NR
	7440-50-8	Copper				_ NR
	7439-89-6	Iron	50.1			_ NR
	7439-92-1	Lead	57.1			P
	7439-95-4	Magnesium			_	_ NR
	7439-96-5	Manganese				_ NR
	7439-97-6	Mercury_				_ NR
	7440-02-0	Nickel		- -		_ NR
	7440-09-7					NR NR
	7782-49-2	Selenium_		- -		_ NR
	7440-22-4			- -		_ NR
	7440-23-5	Sodium		- -		NR NR
	7440-28-0	Thallium_				_ NR
	7440-62-2	Vanadium_				_ NR
	7440-66-6					NR
		Cyanide		- -		_ NR
Color Before:	GREY	Clari	ty Before: YEL	LOW		Texture:
Color After:	CLOUDY	Clari	ty After: CLE	AR_		Artifacts:
Comments:						

FORM I - IN

ILM04.0

EPA	SAMPLE	NO.
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ab Name: ICM_	LABS		Contract: _			-
ab Code: ICM_	Ca	se No.:	SAS No.	-	-	SDG No.: C1_
atrix (soil/w	ater): SOIL	2		La	b Sam	ple ID: 279872
evel (low/med): LOW_	_		Da	te Re	ceived: 12/22/9
Solids:	100.	0				
Co	ncentration	Units (ug	/L or mg/kg dry	W	eight): MG/KG
	CAS No.	Analyte	Concentration	c	Q	м
	7429-90-5	Aluminum		-	_	NR
	7440-36-0	Antimony		-		- NR
	7440-38-2	Arsenic	=======================================	-		- NR
	7440-39-3	Barium		-		- NR
	7440-41-7	Beryllium		-		- NR
	7440-43-9	Cadmium		-		NR
	7440-70-2	Calcium		-		NR
	7440-47-3	Chromium		-		NR
	7440-48-4	Cobalt		-		NR
	7440-50-8	Copper		-		NR
	7439-89-6	Iron		-		NR
	7439-92-1	Lead	195	-		P
	7439-95-4	Magnesium		-		NR
	7439-96-5	Manganese		-		NR
	7439-97-6	Mercury		-		NR
	7440-02-0	Nickel		-		NR
	7440-09-7	Potassium		-		NR
	7782-49-2	Selenium				NR
	7440-22-4					NR
	7440-23-5	Sodium				NR
	7440-28-0	Thallium		3		NR
	7440-62-2	Vanadium				NR
	7440-66-6	Zinc	(-	7.45,-1	NR
		Cyanide_				NR
color Before:	GREY	Clari	ty Before: YEL	LOW	0	Texture:
olor After:	CLOUDY	Clari	ty After: CLE	AR_		Artifacts:
omments:						
Comments:	CLOUDY	Clari	ty After: CLE	AR_	-	Artifacts:

FORM I - IN

U.S. EPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA	SAMPLE	NO.

ab Code: ICM_	Ca	se No.:	SAS No.:	0		SDG No.: C1_
trix (soil/w	ater): SOIL			La	b Sam	ple ID: 279873
		-			Nall.	
evel (low/med): LOW_	÷-		Da	te Re	ceived: 12/22/9
Solids:	100.	0				
Co	ncentration	Units (ug	/L or mg/kg dry	, w	eight	· MG/KG
CO		onics (ug)	E Or mg/ng dr)		019.10	,,
	CAS No.	Analyte	Concentration	C	Q	м
	7429-90-5	Aluminum		-	_	- NR
	7440-36-0					NR
	7440-38-2		-			NR
	7440-39-3			-		NR
	7440-41-7					NR
	7440-43-9					NR
	7440-70-2	Calcium				NR
	7440-47-3					NR
	7440-48-4					NR
	7440-50-8	Copper				NR
	7439-89-6	Iron		7		NR
	7439-92-1	Lead	10.9	=		_ P_
	7439-95-4	Magnesium		\equiv		NR
	7439-96-5	Manganese				NR
	7439-97-6	Mercury				NR
	7440-02-0	Nickel				NR
	7440-09-7	Potassium				NR
	7782-49-2	Selenium			-30	NR
	7440-22-4			(T)		NR
	7440-23-5					NR
	7440-28-0					NR
	7440-62-2	Vanadium		T.		NR
	7440-66-6	Zinc				NR
		Cyanide_				NR
olor Before:	GREY	Clari	ty Before: YELI	LOW		Texture:
			ty After: CLEA	AR		Artifacts:

FORM I - IN

EPA SAMPLE NO.

Lab Name:	ICM		Contract:	C-1
Lab Code:	ICM	Case No.:	SAS No.:	SDG No.: C-1
Matrix: (soil/	water)	SOIL	Lab Sample ID:	279859
Sample wt/v	ol:	30.09 (g/ml) G	Lab File ID:	J1875.D
Level: (low/	med)	LOW	Date Received:	12/22/97
% Moisture:	0	decanted:(Y/N)	N Date Extracted:	12/26/97
Concentrate	d Extract	Volume: 1000 (uL)	Date Analyzed:	12/31/97
Injection Vol	ume: 2	2.0 (uL)	Dilution Factor:	1.0

GPC Cleanup: (Y/N) N pH: 0

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
91-20-3	Naphthalene	i	27	J
91-57-6	2-Methylnaphthalene		330	U
208-96-8	Acenaphthylene		330	U
83-32-9	Acenaphthene		330	U
132-64-9	Dibenzofuran		330	U
86-73-7	Fluorene		330	U
85-01-8	Phenanthrene		60	J
120-12-7	Anthracene		330	U
206-44-0	Fluoranthene		84	J
129-00-0	Pyrene		93	J
56-55-3	Benzo[a]anthracene		38	J
218-01-9	Chrysene		45	J
205-99-2	Benzo[b]fluoranthene		88	J
207-08-9	Benzo[k]fluoranthene		330	U
50-32-8	Benzo[a]pyrene		38	J
193-39-5	Indeno[1,2,3-cd]pyrene		17	J
53-70-3	Dibenz[a,h]anthracene		330	U
191-24-2	Benzo[g,h,i]perylene		17	J

EPA SAMPLE NO.

Lab Name:	ICM		(Contract:	G-1DUP
Lab Code:	ICM	Case No.:		SAS No.: S	DG No.: C-1
Matrix: (soil/	water)	SOIL		Lab Sample ID:	279860
Sample wt/v	ol:	30.07 (g/ml) G		Lab File ID:	J1876.D
Level: (low/r	med)	LOW		Date Received:	12/22/97
% Moisture:	0	decanted:(Y/N)	N	Date Extracted:	12/26/97
Concentrate	d Extract	Volume: 1000 (uL)		Date Analyzed:	12/31/97
Injection Vol	ume: 2	.0 (uL)		Dilution Factor:	1.0
GPC Cleanu	n: /V/M)	N nH: 0			

		G 711 G 511 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
91-20-3	Naphthalene		50	J
91-57-6	2-Methylnaphthalene		29	J
208-96-8	Acenaphthylene		49	J
83-32-9	Acenaphthene		54	J
132-64-9	Dibenzofuran		50	J
86-73-7	Fluorene		55	J
85-01-8	Phenanthrene		220	J
120-12-7	Anthracene		52	J
206-44-0	Fluoranthene		230	J
129-00-0	Pyrene		280	J
56-55-3	Benzo[a]anthracene		98	J
218-01-9	Chrysene		110	J
205-99-2	Benzo[b]fluoranthene		240	J
207-08-9	Benzo[k]fluoranthene		48	J
50-32-8	Benzo[a]pyrene		110	J
193-39-5	Indeno[1,2,3-cd]pyrene		55	J
53-70-3	Dibenz[a,h]anthracene		23	J
191-24-2	Benzo[g,h,i]perylene		55	J

EPA SAMPLE NO.

Lab Name:	ICM		Contract:	C-2
Lab Code:	ICM	Case No.:	SAS No.:	SDG No.: C-1

 Matrix: (soil/water)
 SOIL
 Lab Sample ID: 279861

 Sample wt/vol:
 30.05 (g/ml) G
 Lab File ID: J1877.D

 Level: (low/med)
 LOW
 Date Received:
 12/22/97

 % Moisture:
 0
 decanted:(Y/N)
 N
 Date Extracted:
 12/26/97

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/31/97

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 0

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
91-20-3	Naphthalene		56	J
91-57-6	2-Methylnaphthalene		33	J
208-96-8	Acenaphthylene		19	J
83-32-9	Acenaphthene		61	J
132-64-9	Dibenzofuran		65	J
86-73-7	Fluorene		66	J
85-01-8	Phenanthrene		350	
120-12-7	Anthracene		67	J
206-44-0	Fluoranthene		280	J
129-00-0	Pyrene		270	J
56-55-3	Benzo[a]anthracene		91	J
218-01-9	Chrysene		85	J
205-99-2	Benzo[b]fluoranthene		150	J
207-08-9	Benzo[k]fluoranthene		330	U
50-32-8	Benzo[a]pyrene		55	J
193-39-5	Indeno[1,2,3-cd]pyrene		21	J
53-70-3	Dibenz[a,h]anthracene		330	U
191-24-2	Benzo[g,h,i]perylene		19	J

EPA SAMPLE NO.

Lab Name:	ICM			c	Contract:	
Lab Code:	ICM	(Case No.:		SAS No.: S	DG No.: C-1
Matrix: (soil/	water)	SOIL			Lab Sample ID:	279862
Sample wt/ve	ol:	30.11	(g/ml) G		Lab File ID:	J1878.D
Level: (low/r	med)	LOW			Date Received:	12/22/97
% Moisture:	0		lecanted:(Y/N)	N	Date Extracted:	12/26/97
Concentrate	d Extract	Volume:	1000 (uL)		Date Analyzed:	12/31/97
Injection Vol	ume: 2	.0 (uL)			Dilution Factor:	1.0
GPC Cleanu	p: (Y/N)	N	pH: 0			

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
91-20-3	Naphthalene		330	U
91-57-6	2-Methylnaphthalene		330	U
208-96-8	Acenaphthylene		330	U
83-32-9	Acenaphthene	20 - 20 - 0 L	330	U
132-64-9	Dibenzofuran		330	U
86-73-7	Fluorene		330	U
85-01-8	Phenanthrene	9	330	U
120-12-7	Anthracene		330	U
206-44-0	Fluoranthene		27	J
129-00-0	Pyrene		27	J
56-55-3	Benzo[a]anthracene		330	U
218-01-9	Chrysene		330	U
205-99-2	Benzo[b]fluoranthene		26	J
207-08-9	Benzo[k]fluoranthene		330	U
50-32-8	Benzo[a]pyrene		330	U
193-39-5	Indeno[1,2,3-cd]pyrene		330	U
53-70-3	Dibenz[a,h]anthracene		330	U
191-24-2	Benzo[g,h,i]perylene		330	U

EPA SAMPLE NO.

C-4

Contract: SAS No.: SDG No.: C-1

Matrix: (soil/water) SOIL Lab Sample ID: 279863

Case No.:

 Sample wt/vol:
 30.13
 (g/ml)
 G
 Lab File ID:
 J1879.D

 Level:
 (low/med)
 LOW
 Date Received:
 12/22/97

% Moisture: 0 decanted:(Y/N) N Date Extracted: 12/26/97

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/31/97

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 0

Lab Name:

Lab Code:

ICM

ICM

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
91-20-3	Naphthalene		330	U
91-57-6	2-Methylnaphthalene		330	U
208-96-8	Acenaphthylene		330	U
83-32-9	Acenaphthene		330	U
132-64-9	Dibenzofuran		330	U
86-73-7	Fluorene		330	U
85-01-8	Phenanthrene		330	U
120-12-7	Anthracene		330	U
206-44-0	Fluoranthene	4	330	U
129-00-0	Pyrene		330	U
56-55-3	Benzo[a]anthracene		330	U
218-01-9	Chrysene		330	U
205-99-2	Benzo[b]fluoranthene		19	J
207-08-9	Benzo[k]fluoranthene		330	U
50-32-8	Benzo[a]pyrene		330	U
193-39-5	Indeno[1,2,3-cd]pyrene		330	U
53-70-3	Dibenz[a,h]anthracene		330	U
191-24-2	Benzo[g,h,i]perylene		330	U

EPA SAMPLE NO.

Lab Name:	ICM			Contract:	C-5
Lab Code:	ICM	Case No.:		SAS No.: S	DG No.: C-1
Matrix: (soil/	water)	SOIL		Lab Sample ID:	279864
Sample wt/v	ol:	30.19 (g/ml) G		Lab File ID:	J1880.D
Level: (low/r	med)	LOW		Date Received:	12/22/97
% Moisture:	0	decanted:(Y/N)	N	Date Extracted:	12/26/97
Concentrate	d Extract	Volume: 1000 (uL)		Date Analyzed:	12/31/97
Injection Vol	ume: 2	.0 (uL)		Dilution Factor:	1.0
GPC Cleanu	p: (Y/N)	N pH; 0			

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
91-20-3	Naphthalene		330	U
91-57-6	2-Methylnaphthalene		330	U
208-96-8	Acenaphthylene		330	U
83-32-9	Acenaphthene		19	J
132-64-9	Dibenzofuran		330	U
86-73-7	Fluorene		20	J
85-01-8	Phenanthrene		41	J
120-12-7	Anthracene	Τ,	330	U
206-44-0	Fluoranthene		20	J
129-00-0	Pyrene	i	330	U
56-55-3	Benzo[a]anthracene		330	U
218-01-9	Chrysene		330	U
205-99-2	Benzo[b]fluoranthene		330	U
207-08-9	Benzo[k]fluoranthene		330	U
50-32-8	Benzo[a]pyrene		330	U
193-39-5	Indeno[1,2,3-cd]pyrene		330	U
53-70-3	Dibenz[a,h]anthracene	-1-	330	U
191-24-2	Benzo[g,h,i]perylene	τ.	330	U

EPA SAMPLE NO.

C-6

Lab Name:	ICM				Contract:	C-6
Lab Code:	ICM		Case No.:		SAS No.: S	DG No.: C-1
Matrix: (soil/	water)	SOIL	_		Lab Sample ID:	279865
Sample wt/v	ol:	30.2	(g/ml) G		Lab File ID:	J1881.D ·
Level: (low/r	med)	LOW			Date Received:	12/22/97
% Moisture:	0		decanted:(Y/N)	N	Date Extracted:	12/26/97
Concentrate	d Extract	Volume:	1000 (uL)		Date Analyzed:	12/31/97
Injection Vol	ume: 2	.0 (uL			Dilution Factor:	1.0
GPC Cleanu	p: (Y/N)	N	pH: 0			

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
91-20-3	Naphthalene		330	U
91-57-6	2-Methylnaphthalene		330	U
208-96-8	Acenaphthylene		17	J
83-32-9	Acenaphthene		24	J
132-64-9	Dibenzofuran		20	J
86-73-7	Fluorene		39	J
85-01-8	Phenanthrene		150	J
120-12-7	Anthracene		34	J
206-44-0	Fluoranthene		150	J
129-00-0	Pyrene		150	J
56-55-3	Benzo[a]anthracene		59	J
218-01-9	Chrysene		56	J
205-99-2	Benzo[b]fluoranthene		100	J
207-08-9	Benzo[k]fluoranthene		330	U
50-32-8	Benzo[a]pyrene		41	J
193-39-5	Indeno[1,2,3-cd]pyrene		330	U
53-70-3	Dibenz[a,h]anthracene		330	U
191-24-2	Benzo[g,h,i]perylene		330	U

EPA SAMPLE NO.

C-7 Lab Name: ICM Contract: ICM SAS No.: SDG No.: C-1 Lab Code: Case No.: Matrix: (soil/water) SOIL Lab Sample ID: 279866 Sample wt/vol: 30.07 (g/ml) G Lab File ID: J1882.D Level: (low/med) LOW Date Received: 12/22/97 Date Extracted: 12/26/97 % Moisture: 0 decanted:(Y/N) Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/31/97

Injection Volume: 2.0 (uL)

GPC Cleanup: (Y/N) N pH: 0

CONCENTRATION UNITS:

Dilution Factor: 1.0

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	_ Q
91-20-3	Naphthalene	400	1
91-57-6	2-Methylnaphthalene	310	J
208-96-8	Acenaphthylene	59	J
83-32-9	Acenaphthene	670	
132-64-9	Dibenzofuran	760	
86-73-7	Fluorene	690	
85-01-8	Phenanthrene	2600	
120-12-7	Anthracene	380	
206-44-0	Fluoranthene	1400	1
129-00-0	Pyrene	1300	1220
56-55-3	Benzo[a]anthracene	440	1
218-01-9	Chrysene	340	1
205-99-2	Benzo[b]fluoranthene	470	
207-08-9	Benzo[k]fluoranthene	330	U
50-32-8	Benzo[a]pyrene	170	J
193-39-5	Indeno[1,2,3-cd]pyrene	50) 1
53-70-3	Dibenz[a,h]anthracene	27	J
191-24-2	Benzo[g,h,i]perylene	37	J

EPA SAMPLE NO.

Lab Name:	ICM		(Contract:	C-8
Lab Code:	ICM	Case No.:		SAS No.: S	DG No.: C-1
Matrix: (soil/	water)	SOIL		Lab Sample ID:	279867
Sample wt/v	ol:	30.09 (g/ml) G		Lab File ID:	J1883.D
Level: (low/r	med)	LOW		Date Received:	12/22/97
% Moisture:	0	decanted:(Y/N)	N	Date Extracted:	12/26/97
Concentrate	d Extract	Volume: 1000 (uL)		Date Analyzed:	12/31/97
Injection Vol	ume: 2	.0 (uL)		Dilution Factor:	1.0
GPC Cleanu	p: (Y/N)	N pH: 0			

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
91-20-3	Naphthalene	-	28	J
91-57-6	2-Methylnaphthalene		330	U
208-96-8	Acenaphthylene		22	J
83-32-9	Acenaphthene	- 57	17	J
132-64-9	Dibenzofuran		16	J
86-73-7	Fluorene		15	J
85-01-8	Phenanthrene		84	J
120-12-7	Anthracene		28	J
206-44-0	Fluoranthene		100	J
129-00-0	Pyrene		150	J
56-55-3	Benzo[a]anthracene		72	J
218-01-9	Chrysene		80	J
205-99-2	Benzo[b]fluoranthene		170	J
207-08-9	Benzo[k]fluoranthene		330	U
50-32-8	Benzo[a]pyrene		77	J
193-39-5	Indeno[1,2,3-cd]pyrene		31	J
53-70-3	Dibenz[a,h]anthracene	- 1	330	U
191-24-2	Benzo[g,h,i]perylene		31	J

EPA SAMPLE NO.

Lab Name:	ICM			(Contract:	C-OKE
Lab Code:	ICM	C	ase No.:		SAS No.: S	SDG No.: C-1
Matrix: (soil/	water)	SOIL			Lab Sample ID:	279867RE
Sample wt/vo	ol:	30.09	(g/ml) G		Lab File ID:	J2023.D
Level: (low/r	ned)	LOW			Date Received:	12/22/97
% Moisture:	0	de	canted:(Y/N)	N	Date Extracted:	12/26/97
Concentrated	d Extract	Volume:	1000 (uL)		Date Analyzed:	01/10/98
Injection Volu	ume: 2	.0 (uL)			Dilution Factor:	1.0
GPC Cleanu	p: (Y/N)	N	pH: 0			

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
91-20-3	Naphthalene		28	J
91-57-6	2-Methylnaphthalene		330	U
208-96-8	Acenaphthylene		21	J
83-32-9	Acenaphthene		17	J
132-64-9	Dibenzofuran		16	J
86-73-7	Fluorene		13	J
85-01-8	Phenanthrene		84	J
120-12-7	Anthracene		26	J
206-44-0	Fluoranthene		92	J
129-00-0	Pyrene		230	J
56-55-3	Benzo[a]anthracene		66	J
218-01-9	Chrysene		75	J
205-99-2	Benzo[b]fluoranthene		190	J
207-08-9	Benzo[k]fluoranthene		330	U
50-32-8	Benzo[a]pyrene		72	J
193-39-5	Indeno[1,2,3-cd]pyrene		40	J
53-70-3	Dibenz[a,h]anthracene		330	U
191-24-2	Benzo[g,h,i]perylene		42	J

EPA SAMPLE NO.

Lab Name:	ICM			_ c	Contract:	C-9
Lab Code:	ICM	C	ase No.:		SAS No.:	SDG No.: C-1
Matrix: (soil/	water)	SOIL			Lab Sample ID:	279868
Sample wt/vo	ol:	30.11	(g/ml) G		Lab File ID:	J1914.D
Level: (low/r	ned)	LOW			Date Received:	12/22/97
% Moisture:	0	de	ecanted:(Y/N)	N	Date Extracted:	12/26/97
Concentrated	Extract	Volume:	1000 (uL)		Date Analyzed:	01/04/98
Injection Volu	ıme: 2	.0 (uL)			Dilution Factor:	1.0
GPC Cleanu	p: (Y/N)	N	pH: 0	+		

		001102111111111		
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
91-20-3	Naphthalene	-	330	U
91-57-6	2-Methylnaphthalene		330	U
208-96-8	Acenaphthylene		35	J
83-32-9	Acenaphthene		330	U
132-64-9	Dibenzofuran		330	U
86-73-7	Fluorene		330	U
85-01-8	Phenanthrene		45	J
120-12-7	Anthracene		33	J
206-44-0	Fluoranthene		330	U
129-00-0	Pyrene		160	J
56-55-3	Benzo[a]anthracene		77	J
218-01-9	Chrysene		120	J
205-99-2	Benzo[b]fluoranthene		290	J
207-08-9	Benzo[k]fluoranthene	A A	330	U
50-32-8	Benzo[a]pyrene		22	J
193-39-5	Indeno[1,2,3-cd]pyrene		39	J
53-70-3	Dibenz[a,h]anthracene		18	J
191-24-2	Benzo[g,h,i]perylene		30	J

EPA SAMPLE NO.

C-10 Lab Name: ICM Contract: Lab Code: ICM Case No.: SAS No.: SDG No.: C-1 Lab Sample ID: 279869 Matrix: (soil/water) SOIL Sample wt/vol: 30.02 (g/ml) G Lab File ID: J1888.D Date Received: 12/22/97 Level: (low/med) LOW 0 % Moisture: decanted:(Y/N) N Date Extracted: 12/26/97 Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/01/98 Dilution Factor: 1.0 Injection Volume: 2.0 (uL) GPC Cleanup: (Y/N) pH: 0

		CONCENTRATION UNITS:		
CAS NO.	COMPOUND	(ug/L or ug/Kg)	JG/KG	Q
91-20-3	Naphthalene		31	J
91-57-6	2-Methylnaphthalene		330	U
208-96-8	Acenaphthylene		330	U
83-32-9	Acenaphthene		330	U
132-64-9	Dibenzofuran		330	U
86-73-7	Fluorene		330	U
85-01-8	Phenanthrene		49	J
120-12-7	Anthracene		330	U
206-44-0	Fluoranthene		63	J
129-00-0	Pyrene		45	J
56-55-3	Benzo[a]anthracene		20	J
218-01-9	Chrysene		21	J
205-99-2	Benzo[b]fluoranthene		33	J
207-08-9	Benzo[k]fluoranthene		330	U
50-32-8	Benzo[a]pyrene		15	J
193-39-5	Indeno[1,2,3-cd]pyrene		330	U
53-70-3	Dibenz[a,h]anthracene		330	U
191-24-2	Benzo[g,h,i]perylene		330	U

EPA SAMPLE NO.

C-11

Lab Name:	ICM				Contract:	
Lab Code:	ICM		Case No.:		SAS No.:	SDG No.: C-1
Matrix: (soil/	water)	SOIL	_		Lab Sample ID	279870
Sample wt/vo	ol:	30.06	(g/ml) G		Lab File ID:	J1889.D
Level: (low/r	med)	LOW			Date Received	: 12/22/97
% Moisture:	0		lecanted:(Y/N)	N	Date Extracted	: 12/26/97
Concentrate	d Extract	Volume:	1000 (uL)		Date Analyzed	: 01/01/98
Injection Vol	ume: 2	.0 (uL)			Dilution Factor	: 1.0
GPC Cleanu	p: (Y/N)	N	pH: 0			

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
91-20-3	Naphthalene		97	J
91-57-6	2-Methylnaphthalene		74	J
. 208-96-8	Acenaphthylene		55	J
83-32-9	Acenaphthene		130	J
132-64-9	Dibenzofuran		110	J
86-73-7	Fluorene		130	J
85-01-8	Phenanthrene		470	
120-12-7	Anthracene		110	J
206-44-0	Fluoranthene		370	
129-00-0	Pyrene		390	
56-55-3	Benzo[a]anthracene		180	J
218-01-9	Chrysene	T.	210	J
205-99-2	Benzo[b]fluoranthene	L. L.	380	
207-08-9	Benzo[k]fluoranthene		330	U
50-32-8	Benzo[a]pyrene		55	J
193-39-5	Indeno[1,2,3-cd]pyrene		88	J
53-70-3	Dibenz[a,h]anthracene		43	J
191-24-2	Benzo[g,h,i]perylene		88	J

EPA SAMPLE NO.

Lab Name:	ICM		Contract:	C-12
Lab Code:	ICM	Case No.:	SAS No.: S	DG No.: C-1
Matrix: (soil/	water)	SOIL	Lab Sample ID:	279871
Sample wt/v	ol:	30.04 (g/ml) G	Lab File ID:	J1890.D
Level: (low/	med)	LOW	Date Received:	12/22/97
% Moisture:	0	decanted:(Y/N) N	Date Extracted:	12/26/97
Concentrate	d Extract	Volume: 1000 (uL)	Date Analyzed:	01/01/98
njection Vol	ume: 2	.0 (uL)	Dilution Factor:	1.0
GPC Cleanu	n. (Y/N)	N pH 0		

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
91-20-3	Naphthalene	-	17	J
91-57-6	2-Methylnaphthalene		330	U
208-96-8	Acenaphthylene		34	J
83-32-9	Acenaphthene		22	J
132-64-9	Dibenzofuran		330	U
86-73-7	Fluorene		19	J
85-01-8	Phenanthrene		140	J
120-12-7	Anthracene		48	J
206-44-0	Fluoranthene		200	J
129-00-0	Pyrene		190	J
56-55-3	Benzo[a]anthracene		89	J
218-01-9	Chrysene		86	J
205-99-2	Benzo[b]fluoranthene		170	J
207-08-9	Benzo[k]fluoranthene		330	U
50-32-8	Benzo[a]pyrene		84	J
193-39-5	Indeno[1,2,3-cd]pyrene		65	J
53-70-3	Dibenz[a,h]anthracene		23	J
191-24-2	Benzo[g,h,i]perylene		79	J

EPA SAMPLE NO.

Lab Name:	ICM		(Contract:	C-13
Lab Code:	ICM	Case No.:		SAS No.: S	DG No.: C-1
Matrix: (soil/	water)	SOIL		Lab Sample ID:	279872
Sample wt/ve	ol:	30 (g/ml) G		Lab File ID:	J1891.D
Level: (low/r	med)	LOW		Date Received:	12/22/97
% Moisture:	. 0	decanted:(Y/N)	N	Date Extracted:	12/26/97
Concentrate	d Extract	Volume: 1000 (uL)		Date Analyzed:	01/01/98
Injection Vol	ume: 2	.0 (uL)		Dilution Factor:	1.0
GPC Cleanu	p: (Y/N)	N pH: 0			

		CONCENTRATION UNITS.		
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
91-20-3	Naphthalene		29	J
91-57-6	2-Methylnaphthalene		22	J
208-96-8	Acenaphthylene		26	J
83-32-9	Acenaphthene		88	J
132-64-9	Dibenzofuran		60	J
86-73-7	Fluorene		92	J
85-01-8	Phenanthrene		360	
120-12-7	Anthracene		75	J
206-44-0	Fluoranthene		370	
129-00-0	Pyrene		410	
56-55-3	Benzo[a]anthracene		160	J
218-01-9	Chrysene		160	J
205-99-2	Benzo[b]fluoranthene		310	J
207-08-9	Benzo[k]fluoranthene		330	U
50-32-8	Benzo[a]pyrene		44	J
193-39-5	Indeno[1,2,3-cd]pyrene		59	J
53-70-3	Dibenz[a,h]anthracene		27	J
191-24-2	Benzo[g,h,i]perylene		61	J

EPA SAMPLE NO.

160

72

330

63

U

Lab Name:	ICM	WIVOLATILE ORGANICS	Contract:	C-14
Lab Code:	ICM	Case No.:	SAS No.:	SDG No.: C-1
Matrix: (soil/	water)	SOIL	Lab Sample	ID: 279873
Sample wt/v	ol:	30.3 (g/ml) G	Lab File ID:	J1892.D
Level: (low/	med)	LOW	Date Receiv	red: 12/22/97
% Moisture:		decanted:(Y/N)	N Date Extract	ted: 12/26/97
Concentrate				ed: 01/01/98
Injection Vol		0 (uL)	Dilution Fact	
GPC Cleanu		N pH: 0		
			CONCENTRATI	ON UNITS:
CAS N	0.	COMPOUND	(ug/L or ug/Kg)	UG/KG Q
91-20	1-3	Naphthalene		770
91-57	-6	2-Methylnaphthaler	ne	340
208-9	6-8	Acenaphthylene		78 J
83-32	2-9	Acenaphthene		500
132-6	4-9	Dibenzofuran		460
86-73	1-7	Fluorene		630
85-01	-8	Phenanthrene		1600
120-1	2-7	Anthracene		330
206-4	4-0	Fluoranthene		1200
129-0	0-0	Pyrene		990
56-55	i-3	Benzo[a]anthracen	e	410
218-0	11-9	Chrysene		300 J
205-9	9-2	Benzo[b]fluoranther	ne	500
207-0	R-Q	Renzolklifluoranther	ne	330 11

Benzo[a]pyrene

Indeno[1,2,3-cd]pyrene

Dibenz[a,h]anthracene

Benzo[g,h,i]perylene

50-32-8

193-39-5

53-70-3

191-24-2

EPA SAMPLE NO.

C-1MS

Lab Name:	ICM			c	Contract:	0.1110
Lab Code:	ICM	0	ase No.:		SAS No.: S	DG No.: C-1
Matrix: (soil/	water)	SOIL	_		Lab Sample ID:	279859MS
Sample wt/v	ol:	30.04	(g/ml) G		Lab File ID:	J1895.D
Level: (low/r	med)	LOW			Date Received:	12/22/97
% Moisture:	0	d	ecanted:(Y/N)	N	Date Extracted:	12/26/97
Concentrate	d Extract	Volume:	1000 (uL)		Date Analyzed:	01/01/98
Injection Vol	ume: 2	.0 (uL)			Dilution Factor:	1.0
GPC Cleanu	ip: (Y/N)	N	pH: 0			

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q	
91-20-3	Naphthalene		50	J	
91-57-6	2-Methylnaphthalene		330	U	
208-96-8	Acenaphthylene		21	J	
83-32-9	Acenaphthene		1700		
132-64-9	Dibenzofuran		21	J	
86-73-7	Fluorene		18	J	
85-01-8	Phenanthrene		120	J	
120-12-7	Anthracene		24	J	
206-44-0	Fluoranthene		140	J	
129-00-0	Pyrene		1800		
56-55-3	Benzo[a]anthracene		61	J	
218-01-9	Chrysene		71	J	
205-99-2	Benzo[b]fluoranthene		130	J	
207-08-9	Benzo[k]fluoranthene		330	U	
50-32-8	Benzo[a]pyrene		58	J	
193-39-5	Indeno[1,2,3-cd]pyrene		33	J	
53-70-3	Dibenz[a,h]anthracene				
191-24-2	Benzo[g,h,i]perylene		35	J	

EPA SAMPLE NO.

C-1MSD

Lab Name:	ICM				Contract:	
Lab Code:	ICM	c	ase No.:		SAS No.:	SDG No.: C-1
Matrix: (soil/	water)	SOIL			Lab Sample ID:	279859MSD
Sample wt/ve	ol:	30.1	(g/ml) G		Lab File ID:	J1896.D
Level: (low/r	med)	LOW			Date Received:	12/22/97
% Moisture:	0	d	ecanted:(Y/N)	N	Date Extracted:	12/26/97
Concentrate	d Extract	Volume:	1000 (uL)		Date Analyzed:	01/01/98
Injection Vol	ume: 2	.0 (uL)			Dilution Factor:	1.0
GPC Cleanu	p: (Y/N)	N	pH: 0			

		CONCENTIALITICATION CALLED		
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
91-20-3	Naphthalene		330	U
91-57-6	2-Methylnaphthalene		330	U
208-96-8	Acenaphthylene		330	U
83-32-9	Acenaphthene		1600	
132-64-9	Dibenzofuran		330	U
86-73-7	Fluorene		330	U
85-01-8	Phenanthrene		22	J
120-12-7	Anthracene		330	U
206-44-0	Fluoranthene		330	U
129-00-0	Pyrene		1700	
56-55-3	Benzo[a]anthracene	A-	330	U
218-01-9	Chrysene		19	J
205-99-2	Benzo[b]fluoranthene		41	J
207-08-9	Benzo[k]fluoranthene		330	U
50-32-8	Benzo[a]pyrene		17	J
193-39-5	Indeno[1,2,3-cd]pyrene		330	U
53-70-3	Dibenz[a,h]anthracene		330	U
191-24-2	Benzo[g,h,i]perylene		330	U

EPA SAMPLE NO.

Lab Name:	ICM			c	Contract:	BLANK SPIKE
Lab Code:	ICM		Case No.:		SAS No.:S	DG No.: C-1
Matrix: (soil/	water)	SOIL			Lab Sample ID:	BLANK SPIKE
Sample wt/v	ol:	30	(g/ml) G		Lab File ID:	J1910.D
Level: (low/r	med)	LOW			Date Received:	00/00/00
% Moisture:	0		lecanted:(Y/N)	N	Date Extracted:	12/26/97
Concentrate	d Extract	Volume:	500 (uL)		Date Analyzed:	01/04/98
Injection Vol	ume: 2	.0 (uL)			Dilution Factor:	1.0
GPC Çleanu	ip: (Y/N)	Y	pH: 0			

CAS NO.	S NO. COMPOUND		UG/KG	Q
91-20-3	Naphthalene		330	U
91-57-6	2-Methylnaphthalene		330	U
208-96-8	Acenaphthylene		330	U
83-32-9	Acenaphthene		1400	
132-64-9	Dibenzofuran		330	U
86-73-7	Fluorene		330	U
85-01-8	Phenanthrene		330	U
120-12-7	Anthracene		330	U
206-44-0	Fluoranthene		330	U
129-00-0	Pyrene		1600	
56-55-3	Benzo[a]anthracene		330	U
218-01-9	Chrysene		330	U
205-99-2	Benzo[b]fluoranthene		330	U
207-08-9	Benzo[k]fluoranthene		330	U
50-32-8	Benzo[a]pyrene		330	U
193-39-5	Indeno[1,2,3-cd]pyrene		330	U
53-70-3	Dibenz[a,h]anthracene		330	U
191-24-2	Benzo[g,h,i]perylene	330	U	

EPA SAMPLE NO.

BLANK SPIKE

Lab Name:	ICM			(Contract:	_ DEFINITION INCE
Lab Code:	ICM	0	ase No.:		SAS No.:	SDG No.: C-1
Matrix: (soil/	water)	SOIL			Lab Sample ID	BLANK SPIKE
Sample wt/v	ol:	30	(g/ml) G		Lab File ID:	J1894.D
Level: (low/	med)	LOW			Date Received:	00/00/00
% Moisture:	0	d	ecanted:(Y/N)	N	Date Extracted	: 12/26/97
Concentrate	d Extract	Volume:	1000 (uL)		Date Analyzed:	01/01/98
Injection Vol	ume: 2	.0 (uL)			Dilution Factor:	1.0
GPC Cleanu	ip: (Y/N)	N	pH: 0	2		

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
91-20-3	Naphthalene	- I	330	U
91-57-6	2-Methylnaphthalene		330	U
208-96-8	Acenaphthylene		330	U
83-32-9	Acenaphthene		1700	
132-64-9	Dibenzofuran		330	U
86-73-7	Fluorene		330	U
85-01-8	Phenanthrene		330	U
120-12-7	Anthracene		330	U
206-44-0	Fluoranthene		330	U
129-00-0	Pyrene		1600	
56-55-3	Benzo[a]anthracene		330	U
218-01-9	Chrysene		330	U
205-99-2	Benzo[b]fluoranthene		330	U
207-08-9	Benzo[k]fluoranthene		330	U
50-32-8	Benzo[a]pyrene		330	U
193-39-5	Indeno[1,2,3-cd]pyrene		330	U
53-70-3	Dibenz[a,h]anthracene		330	U
191-24-2	Benzo[g,h,i]perylene		330	U

EPA SAMPLE NO.

Lab Name:	ICM			Contract:	QA/QC
Lab Code:	ICM	Case No.:		SAS No.: S	DG No.: C-1
Matrix: (soil/	water)	SOIL		Lab Sample ID:	QA/QC
Sample wt/v	ol:	30 (g/ml)	G	Lab File ID:	J1913.D
Level: (low/r	med)	LOW		Date Received:	00/00/00
% Moisture:	0	decanted:(Y	(/N) N	Date Extracted:	12/26/97
Concentrate	d Extract	Volume: 500	(uL)	Date Analyzed:	01/04/98
Injection Vol	ume: 2	2.0 (uL)		Dilution Factor:	1.0
GPC Cleanu	n: (Y/N)	Y pH: 0			

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q	
91-20-3	Naphthalene	Ī	700		
91-57-6	2-Methylnaphthalene		700		
208-96-8	Acenaphthylene		730		
83-32-9	Acenaphthene		730		
132-64-9	Dibenzofuran		750		
86-73-7	Fluorene		760		
85-01-8	Phenanthrene		660		
120-12-7	Anthracene		650	Y.	
206-44-0	Fluoranthene		660	i	
129-00-0	Pyrene		790	ĺ	
56-55-3	Benzo[a]anthracene		730		
218-01-9	Chrysene		680		
205-99-2	Benzo[b]fluoranthene		1000		
207-08-9	Benzo[k]fluoranthene		940		
50-32-8	Benzo[a]pyrene		820		
193-39-5	Indeno[1,2,3-cd]pyrene				
53-70-3	Dibenz[a,h]anthracene 470				
191-24-2	Benzo[g,h,i]perylene 360				

EPA SAMPLE NO.

Lab Name:	ICM			c	Contract:	QA/QC
Lab Code:	ICM		ase No.:		SAS No.:	SDG No.: C-1
Matrix: (soil/	water)	SOIL			Lab Sample ID	: QA/QC
Sample wt/v	ol:	30	(g/ml) G		Lab File ID:	J1893.D
Level: (low/r	med)	LOW			Date Received	1: 00/00/00
% Moisture:	0	d	ecanted:(Y/N)	N	Date Extracted	i: 12/26/97
Concentrate	d Extract	Volume:	1000 (uL)		Date Analyzed	: 01/01/98
Injection Vol	ume: 2	.0 (uL)			Dilution Factor	: 1.0
GPC Cleanu	p: (Y/N)	N	pH: 0			

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG Q
91-20-3	Naphthalene	780
91-57-6	2-Methylnaphthalene	770
208-96-8	Acenaphthylene	790
83-32-9	Acenaphthene	790
132-64-9	Dibenzofuran	790
86-73-7	Fluorene	830
85-01-8	Phenanthrene	720
120-12-7	Anthracene	720
206-44-0	Fluoranthene	740
129-00-0	Pyrene	800
56-55-3	Benzo[a]anthracene	820
218-01-9	Chrysene	790
205-99-2	Benzo[b]fluoranthene	1100
207-08-9	Benzo[k]fluoranthene	900
50-32-8	Benzo[a]pyrene	860
193-39-5	Indeno[1,2,3-cd]pyrene	600
53-70-3	Dibenz[a,h]anthracene	620
191-24-2	Benzo[g,h,i]perylene	530

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C-1	
C-1	

ab Name: ICM

Contract:

Lab Code: ICM Case No.:

SAS No.: SDG No.: C-1

atrix: (soil/water) SOLID

Lab Sample ID: 279859

Frample wt/vol: 30.1 (g/mL) G Lab File ID: HA2863

% Moisture: 0. decanted: (Y/N) N

Date Received: 12/22/97

xtraction: (SepF/Cont/Sonc) SONC

Date Extracted: 12/26/97

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/30/97

njection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Į.
12674-11-2-	33.	U	
11104-28-2Aroclor-1221 11141-16-5Aroclor-1232		33.	ü
53469-21-9Aroclor-1242		33.	U
12672-29-6Aroclor-1248 11097-69-1Aroclor-1254		33. 70.	U
11096-82-5-	Aroclor-1260	140.	

1D PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C-1DUP

ab Name: ICM

Contract:

Lab Code: ICM Case No.:

SAS No.:

SDG No.: C-1

atrix: (soil/water) SOLID

rample wt/vol: 30.1 (g/mL) G

Lab Sample ID: 279860 Lab File ID: HA2864

Moisture: 0. decanted: (Y/N) N

Date Received: 12/22/97

xtraction: (SepF/Cont/Sonc) SONC

Date Extracted: 12/26/97

Concentrated Extract Volume: 10000 (uL)

Date Analyzed: 12/30/97

njection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH:

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg Q

CAS NO.	COMPOUND	(ug/L or ug/Kg) ug/Kg	Ç
	Aroclor-1016	33.	U
	Aroclor-1221	33.	U
53469-21-9	Aroclor-1242	33.	Ū
	Aroclor-1248	33.	Ū
·	Aroclor-1254	140.	

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C-2

ab Name: ICM Contract:

Lab Code: ICM Case No.: SAS No.: SDG No.: C-1

atrix: (soil/water) SOLID Lab Sample ID: 279861

mample wt/vol: 30.1 (g/mL) G Lab File ID: HA2865

Moisture: 0. decanted: (Y/N) N Date Received: 12/22/97

xtraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/26/97

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/30/97

njection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	(
12674-11-2- 11104-28-2- 11141-16-5- 53469-21-9- 12672-29-6- 11097-69-1- 11096-82-5-	Aroclor-1221 Aroclor-1232 Aroclor-1242 Aroclor-1248	33. 33. 33. 33. 33. 33. 91.	מממממ

PESTICIDE ORGANICS ANALYSIS DATA SHEET

ab Name: ICM

Contract:

C-3

Lab Code: ICM

Case No.:

SAS No.:

SDG No.: C-1

atrix: (soil/water) SOLID

Lab Sample ID: 279862

rample wt/vol:

30.0 (g/mL) G

Lab File ID: HA2866

Moisture: 0. decanted: (Y/N) N

Date Received: 12/22/97

xtraction: (SepF/Cont/Sonc) SONC

Date Extracted: 12/26/97

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/30/97

njection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/Kg Q CAS NO. COMPOUND

12674-11-2Aroclor-1016	33.	U
1104-28-2Aroclor-1221	33.	U
1141-16-5Aroclor-1232	33.	U
3469-21-9Aroclor-1242	33.	U
2672-29-6Aroclor-1248	33.	U
1097-69-1Aroclor-1254	33.	U
.1096-82-5Aroclor-1260	33.	U

EPA SAMPLE NO.

PESTICIDE ORGANICS ANALYSIS DATA SHEET

C-4

ab Name: ICM

Contract:

Lab Code: ICM Case No.:

SAS No.:

SDG No.: C-1

atrix: (soil/water) SOLID

Lab Sample ID: 279863

cample wt/vol:

30.0 (g/mL) G

Lab File ID: HA2867

0. decanted: (Y/N) N

Date Received: 12/22/97

xtraction: (SepF/Cont/Sonc) SONC

Date Extracted: 12/26/97

Date Analyzed: 12/30/97

njection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Concentrated Extract Volume: 10000 (uL)

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: (ug/I, or ug/Kg) ug/Kg

NO.	COMPOUND	(ug/L or ug	/Kg) ug/Kg	Q
4-11-2	-Aroclor-1016		33.	U
	-Aroclor-1221		33.	U
1-16-5	-Aroclor-1232		33.	U
9-21-9	-Aroclor-1242		33.	U
	-Aroclor-1248		. 33.	U
	-Aroclor-1254		33.	U
6-82-5	-Aroclor-1260		33.	U

PESTICIDE ORGANICS ANALYSIS DATA SHEET

C-5

ab Name: ICM

Contract:

Lab Code: ICM Case No.:

SAS No.: SDG No.: C-1

atrix: (soil/water) SOLID

Lab Sample ID: 279864

Cample wt/vol: 30.0 (g/mL) G

Lab File ID: HA2868

Moisture: 0. decanted: (Y/N) N

Date Received: 12/22/97

xtraction: (SepF/Cont/Sonc) SONC

Date Extracted: 12/26/97

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/31/97

njection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: ____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/Kg Q

12674-11-2Aroclor-1016	33.	U
11104-28-2Aroclor-1221	33.	U
11141-16-5Aroclor-1232	33.	U
53469-21-9Aroclor-1242	33.	U
12672-29-6Aroclor-1248	33.	U
11097-69-1Aroclor-1254	33.	U
11096-82-5Aroclor-1260	33.	U

EPA SAMPLE NO.

C-6

ab Name: ICM

Contract:

ab Code: ICM Case No.: SAS No.:

SDG No.: C-1

atrix: (soil/water) SOLID

Lab Sample ID: 279865

ample wt/vol: 30.0 (g/mL) G

Lab File ID: HA2869

Moisture: 0. decanted: (Y/N) N

Date Received: 12/22/97

xtraction: (SepF/Cont/Sonc) SONC

Date Extracted: 12/26/97

Concentrated Extract Volume: 10000 (uL)

Date Analyzed: 12/31/97

njection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/Kg Q

12674-11-2Aroclor-1016	33.	U
11104-28-2Aroclor-1221	33.	U
11141-16-5Aroclor-1232	33.	U
53469-21-9Aroclor-1242	33.	U
12672-29-6Aroclor-1248	33.	U
11097-69-1Aroclor-1254	33.	U
11096-82-5Aroclor-1260	33.	U

EPA SAMPLE NO.

ab Name: ICM Contract:

Lab Code: ICM Case No.: SAS No.: SDG No.: C-1

atrix: (soil/water) SOLID Lab Sample ID: 279866

rample wt/vol: 30.1 (g/mL) G Lab File ID: HA2870

6 Moisture: 0. decanted: (Y/N) N Date Received: 12/22/97

xtraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/26/97

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/31/97

njection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/Kg Q

12674-11-2Aroclor-1016	33.	U
11104-28-2Aroclor-1221	33.	U
11141-16-5Aroclor-1232	33.	U
53469-21-9Aroclor-1242	33.	U
12672-29-6Aroclor-1248	33.	U
11097-69-1Aroclor-1254	33.	U
11096-82-5Aroclor-1260	33.	U

C-8

ab Name: ICM

Contract:

Lab Code: ICM Case No.:

SAS No.:

SDG No.: C-1

. atrix: (soil/water) SOLID

Lab Sample ID: 279867

Gample wt/vol: 30.1 (g/mL) G

Lab File ID: HA2871

Moisture: 0. decanted: (Y/N) N

Date Received: 12/22/97

xtraction: (SepF/Cont/Sonc) SONC

Date Extracted: 12/26/97

Concentrated Extract Volume: 10000 (uL)

Date Analyzed: 12/31/97

njection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO. COMPOUND

pH: ____

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/Kg Q

12674-11-2Aroclor-1016	33.	U
11104-28-2Aroclor-1221	33.	U
11141-16-5Aroclor-1232	33.	U
53469-21-9Aroclor-1242	33.	U
12672-29-6Aroclor-1248	33.	U
11097-69-1Aroclor-1254	33.	U
11096-82-5Aroclor-1260	33.	U

EPA SAMPLE NO.

C-9

ab Name: ICM

Contract:

Lab Code: ICM Case No.: SAS No.:

SDG No.: C-1

atrix: (soil/water) SOLID

Lab Sample ID: 279868

rample wt/vol: 30.1 (g/mL) G

Lab File ID: HA2872

Moisture: 0. decanted: (Y/N) N Date Received: 12/22/97

xtraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/26/97

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/31/97

njection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2-	Aroclor-1016	33.	U
11104-28-2-	Aroclor-1221	33.	U
1141-16-5Aroclor-1232		33.	U
3469-21-9Aroclor-1242		33.	U
12672-29-6Aroclor-1248		33.	U
11097-69-1-	11097-69-1Aroclor-1254		U
11096-82-5-	Aroclor-1260	33.	U

EPA SAMPLE NO.

C-10

ab Name: ICM

Contract:

Fab Code: ICM Case No.: SAS No.: SDG No.: C-1

.atrix: (soil/water) SOLID

Lab Sample ID: 279869

Tample wt/vol: 30.1 (g/mL) G Lab File ID: HA2873

6 Moisture: 0. decanted: (Y/N) N Date Received: 12/22/97

xtraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/26/97

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/31/97

njection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

		kg) ug/kg	
Aroclor-1016		33.	U
Aroclor-1221		33.	U
Aroclor-1232		33.	U
Aroclor-1242		33.	U
		33.	U
		33.	U
Aroclor-1260		33.	U
	Aroclor-1232	Aroclor-1221 Aroclor-1232 Aroclor-1242 Aroclor-1248 Aroclor-1254	Aroclor-1221 33. Aroclor-1232 33. Aroclor-1242 33. Aroclor-1248 33. Aroclor-1254 33.

Contract:

Lab Code: ICM Case No.: SAS No.: SDG No.: C-1

ab Name: ICM

atrix: (soil/water) SOLID Lab Sample ID: 279870

rample wt/vol: 30.1 (g/mL) G Lab File ID: HA2874

Moisture: 0. decanted: (Y/N) N Date Received: 12/22/97

xtraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/26/97

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/31/97

njection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) ug/Kg Q U 12674-11-2----Aroclor-1016 33. 11104-28-2-----Aroclor-1221 U 33. U 11141-16-5-----Aroclor-1232 33. 53469-21-9-----Aroclor-1242 33. U 33. U 12672-29-6-----Aroclor-1248 11097-69-1----Aroclor-1254 U 33. 11096-82-5-----Aroclor-1260 8400. E

ab Name: ICM

Contract:

C-11 DL

Lab Code: ICM Case No.:

SAS No.:

SDG No.: C-1

atrix: (soil/water) SOLID

Lab Sample ID: 279870

Tample wt/vol: 30.1 (g/mL) G

Lab File ID: HA2881

Moisture: 0. decanted: (Y/N) N

Date Received: 12/22/97

Date Extracted: 12/26/97

Concentrated Extract Volume: 10000 (uL)

xtraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 12/31/97

njection Volume: 1.0 (uL)

Dilution Factor: 50.0

GPC Cleanup: (Y/N) N pH: ____

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO. COMPOUND

(ug/L or ug/Kg) ug/Kg Q

	F 1 1 1 - 1 2 2 2 -	0.7
12674-11-2Aroclor-1016	1700.	U
11104-28-2Aroclor-1221	1700.	U
11141-16-5Aroclor-1232	1700.	U
53469-21-9Aroclor-1242	1700.	U
12672-29-6Aroclor-1248	1700.	U
11097-69-1Aroclor-1254	1700.	U
11096-82-5Aroclor-1260	13000.	D

EPA SAMPLE NO.

C-11A

ab Name: ICM

Contract:

SAS No.:

SDG No.: C-11A

atrix: (soil/water) SOIL

Lab Code: ICM Case No.:

Lab Sample ID: 285748

cample wt/vol: 30.4 (g/mL) G

Lab File ID: HA3605

. Moisture: 0. decanted: (Y/N) N

Date Received: 03/17/98

Date Extracted: 03/17/98

Concentrated Extract Volume: 10000 (uL)

xtraction: (SepF/Cont/Sonc) SONC

njection Volume: 1.0 (uL)

Date Analyzed: 03/26/98

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/Kg Q

12674-11-2Aroclor-1016	33.	U
11104-28-2Aroclor-1221	33.	U
11141-16-5Aroclor-1232	33.	U
53469-21-9Aroclor-1242	33.	U
12672-29-6Aroclor-1248	33.	U
11097-69-1Aroclor-1254	33.	U
11096-82-5Aroclor-1260	33.	U

EPA SAMPLE NO.

C-11B

ab Name: ICM

Contract:

Lab Code: ICM Case No.: SAS No.:

atrix: (soil/water) SOIL

Lab Sample ID: 285749

cample wt/vol: 30.0 (g/mL) G

Lab File ID: HA3606

Moisture: 0. decanted: (Y/N) N

Date Received: 03/17/98

SDG No.: C-11A

xtraction: (SepF/Cont/Sonc) SONC

Date Extracted: 03/17/98

njection Volume: 1.0 (uL)

Date Analyzed: 03/26/98

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

Concentrated Extract Volume: 10000 (uL)

11096-82-5-----Aroclor-1260

pH:

Sulfur Cleanup: (Y/N) N

33.

33.

U

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) ug/Kg Q 33. 12674-11-2----Aroclor-1016 U 11104-28-2----Aroclor-1221 33. U 11141-16-5-----Aroclor-1232 33. U 53469-21-9----Aroclor-1242 33. U 12672-29-6-----Aroclor-1248 33. U 11097-69-1-----Aroclor-1254 U

C-11C

ab Name: ICM Contrac

Lab Code: ICM Case No.: SAS No.: SDG No.: C-11A

atrix: (soil/water) SOIL Lab Sample ID: 285750

cample wt/vol: 30.2 (g/mL) G Lab File ID: HA3607

Moisture: 0. decanted: (Y/N) N Date Received: 03/17/98

xtraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/17/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/26/98

njection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/Kg Q

12674-11-2Aroclor-1016	33.	U
11104-28-2Aroclor-1221	33.	U
11141-16-5Aroclor-1232	33.	U
53469-21-9Aroclor-1242	33.	U
12672-29-6Aroclor-1248	33.	U
11097-69-1Aroclor-1254	33.	U
11096-82-5Aroclor-1260	33.	U

EPA SAMPLE NO.

C-11D

ab Name: ICM

Contract:

Lab Code: ICM

Case No.:

SAS No.:

SDG No.: C-11A

atrix: (soil/water) SOIL

Lab Sample ID: 285751

cample wt/vol:

30.2 (g/mL) G

Lab File ID: HA3610

. Moisture: 0. decanted: (Y/N) N

Date Received: 03/17/98

Date Extracted: 03/17/98

Date Analyzed: 03/27/98

xtraction: (SepF/Cont/Sonc) SONC

Concentrated Extract Volume: 10000 (uL)

njection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO. COMPOUND

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/Kg Q

12674-11-2-	Aroclor-1016	33.	U
11104-28-2-		33.	U
11141-16-5-	Aroclor-1232	33.	U
53469-21-9-	Aroclor-1242	33.	U
12672-29-6-	Aroclor-1248	33.	U
11097-69-1-	Aroclor-1254	33.	U
11096-82-5-	Aroclor-1260	69.	- 11

1D

EPA SAMPLE NO.

PESTICIDE ORGANICS ANALYSIS DATA SHEET

ab Name: ICM Contract: C-11E

Lab Code: ICM Case No.:

SAS No.: SDG No.: C-11A

.atrix: (soil/water) SOIL

Lab Sample ID: 285752

^ample wt/vol: 30.1 (g/mL) G

Lab File ID: HA3611

Moisture: 0. decanted: (Y/N) N Date Received: 03/17/98

xtraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/17/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/27/98

njection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH:

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/Kg Q

12674-11-2Aroclor-1016	33.	U
11104-28-2Aroclor-1221	33.	U
11141-16-5Aroclor-1232	33.	U
53469-21-9Aroclor-1242	33.	U
12672-29-6Aroclor-1248	33.	U
11097-69-1Aroclor-1254	33.	U
11096-82-5Aroclor-1260	54.	1

C-11F

ab Name: ICM Contract:

SAS No.: SDG No.: C-11A

atrix: (soil/water) SOIL Lab Sample ID: 285753

cample wt/vol: 30.1 (g/mL) G Lab File ID: HA3612

Moisture: 0. decanted: (Y/N) N Date Received: 03/17/98

xtraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/17/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/27/98

njection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

COMPOUND CAS NO. (ug/L or ug/Kg) ug/Kg Q 12674-11-2----Aroclor-1016 33. U 11104-28-2----Aroclor-1221 33. U 11141-16-5-----Aroclor-1232 33. U 53469-21-9-----Aroclor-1242 33. U 12672-29-6----Aroclor-1248 33. U 11097-69-1----Aroclor-1254 33. U 11096-82-5----Aroclor-1260 U 33.

C-11G

ab Name: ICM Contract:

atrix: (soil/water) SOIL Lab Sample ID: 285754

"ample wt/vol: 30.4 (g/mL) G Lab File ID: HA3618

% Moisture: 0. decanted: (Y/N) N Date Received: 03/17/98

xtraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/17/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/27/98

njection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/Kg Q

12674-11-2Aroclor-1016	33.	U
11104-28-2Aroclor-1221	33.	U
11141-16-5Aroclor-1232	33.	U
53469-21-9Aroclor-1242	33.	U
12672-29-6Aroclor-1248	33.	U
11097-69-1Aroclor-1254	33.	U
11096-82-5Aroclor-1260	33.	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C-12

ab Name: ICM

Contract:

Lab Code: ICM

Case No.:

SAS No.:

SDG No.: C-1

atrix: (soil/water) SOLID

Lab Sample ID: 279871

Cample wt/vol:

30.1 (g/mL) G

Lab File ID: HA2878

Moisture: 0. decanted: (Y/N) N

Date Received: 12/22/97

xtraction: (SepF/Cont/Sonc) SONC

Date Extracted: 12/26/97

Concentrated Extract Volume: 10000 (uL)

Date Analyzed: 12/31/97

njection Volume: 1.0 (uL)

Dilution Factor:

GPC Cleanup: (Y/N) N pH:

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/Kg

Q

12674-11-2Aroclor-1016	33.	U
11104-28-2Aroclor-1221	33.	U
11141-16-5Aroclor-1232	33.	U
53469-21-9Aroclor-1242	33.	U
12672-29-6Aroclor-1248	33.	U
11097-69-1Aroclor-1254	33.	U
11096-82-5Aroclor-1260	99.	

C-13

ab Name: ICM

Contract:

-ab Code: ICM

Case No.:

SAS No.:

SDG No.: C-1

..atrix: (soil/water) SOLID

Lab Sample ID: 279872

fample wt/vol: 30.1 (g/mL) G

Lab File ID: HA2879

Date Received: 12/22/97

xtraction: (SepF/Cont/Sonc) SONC

Date Extracted: 12/26/97

Concentrated Extract Volume: 10000 (uL)

njection Volume: 1.0 (uL)

Date Analyzed: 12/31/97

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

CAS NO. COMPOUND

pH:

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg O

2112 112 5		(49/2 02 49/49/	-3/3	
12674-11-2	Aroclor-1016		33.	U
	Aroclor-1221		33.	U
11141-16-5	Aroclor-1232		33.	U
53469-21-9	Aroclor-1242		33.	U
11141-16-5Aroclor-1232 53469-21-9Aroclor-1242 12672-29-6Aroclor-1248			33.	U
	Aroclor-1254		33.	U
11096-82-5	Aroclor-1260		33.	U

ab Name: ICM

Contract:

C-14

Lab Code: ICM Case No.:

SAS No.: SDG No.: C-1

.atrix: (soil/water) SOLID

Lab Sample ID: 279873

cample wt/vol:

30.1 (g/mL) G Lab File ID: HA2880

Moisture: 0. decanted: (Y/N) N Date Received: 12/22/97

xtraction: (SepF/Cont/Sonc) SONC

Date Extracted: 12/26/97

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/31/97

njection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO. COMPOUND

(ug/L or ug/Kg) ug/Kg Q

12674-11-2Aroclor-1016	33.	U
11104-28-2Aroclor-1221	33.	U
11141-16-5Aroclor-1232	33.	U
53469-21-9Aroclor-1242	33.	U
12672-29-6Aroclor-1248	33.	U
11097-69-1Aroclor-1254	33.	U
11096-82-5Aroclor-1260	33.	U

PBLK41

Lab Name: ICM

Contract:

ab Code: ICM Case No.: SAS No.: SDG No.: C-1

Matrix: (soil/water) SOLID

Lab Sample ID: PBLK41

ample wt/vol:

30.0 (g/mL) G

Lab File ID: HA2884

% Moisture: 0. decanted: (Y/N) N

Date Received: 00/00/00

Date Extracted: 12/30/97

xtraction: (SepF/Cont/Sonc) SONC

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/31/97

njection Volume: 1.0 (uL)

Dilution Factor: 1.0

CPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
12674-11-2-	Aroclor-1016	33.	U
11104-28-2Aroclor-1221		33.	U
11104-28-2Aroclor-1221 11141-16-5Aroclor-1232 53469-21-9Aroclor-1242		33.	U
11104-28-2Aroclor-1221 11141-16-5Aroclor-1232 53469-21-9Aroclor-1242		33.	U
		33.	U
	Aroclor-1254	33.	U
11096-82-5-	Aroclor-1260	33.	U

Lab Name: ICM Contract:

ab Code: ICM Case No.: SAS No.: SDG No.: C-1

Matrix: (soil/water) WATER Lab Sample ID: PIBLK01

ample wt/vol: 1000.0 (g/mL) ML Lab File ID: HA2599

% Moisture: _____ decanted: (Y/N)___ Date Received: 00/00/00

xtraction: (SepF/Cont/Sonc) SEPF Date Extracted: 00/00/00

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/15/97

njection Volume: 1.0 (uL) Dilution Factor: 1.0

CPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

319-84-6alpha-BHC	.025	U
319-85-7beta-BHC	.025	U
319-86-8delta-BHC	.025	U
58-89-9gamma-BHC (Lindane)	.025	U
76-44-8Heptachlor	.025	U
309-00-2Aldrin	.025	U
1024-57-3Heptachlor epoxide	.025	U
959-98-8Endosulfan I	.025	U
60-57-1Dieldrin	.050	U
72-55-94,4'-DDE	.050	U
72-20-8Endrin	.050	U
33213-65-9Endosulfan II	.050	U
72-54-84,4'-DDD	.050	U
1031-07-8Endosulfan Sulfate	.050	U
50-29-34,4'-DDT	.050	U
72-43-5Methoxychlor	.25	U
53494-70-5Endrin ketone	.050	U
7421-93-4Endrin aldehyde	.050	U
5103-71-9alpha-Chlordane	.025	U
5103-74-2gamma-Chlordane	.025	U
8001-35-2Toxaphene	2.5	U
12674-11-2Aroclor-1016	.50	U
11104-28-2Aroclor-1221	.50	U
11141-16-5Aroclor-1232	.50	U
53469-21-9Aroclor-1242	.50	U
12672-29-6Aroclor-1248	.50	U
11097-69-1Aroclor-1254	.50	U
11096-82-5Aroclor-1260	.50	U

Contract:

CONCENTRATION INITES.

ab Code: ICM Case No.: SAS No.: SDG No.: C-1

Lab Name: ICM

Matrix: (soil/water) WATER Lab Sample ID: PIBLK02

ample wt/vol: 1000.0 (g/mL) ML Lab File ID: HA2612

% Moisture: _____ decanted: (Y/N)___ Date Received: 00/00/00

xtraction: (SepF/Cont/Sonc) SEPF Date Extracted: 00/00/00

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/16/97

njection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

202 27 1	V m 1930.6 Cate 7	10	T.,
	alpha-BHC	.025	U
	beta-BHC	.025	ū
	delta-BHC	.025	U
	gamma-BHC (Lindane)	.025	U
	Heptachlor	.025	U
	Aldrin	.025	U
	Heptachlor epoxide	.025	U
	Endosulfan I	.025	U
	Dieldrin	.050	U
	4,4'-DDE	.050	U
	Endrin	.050	U
	Endosulfan II	.050	U
	4,4'-DDD	.050	U
	Endosulfan Sulfate	.050	U
	4,4'-DDT_	.050	U
72-43-5	Methoxychlor	.25	U
	Endrin ketone	.050	U
	Endrin aldehyde	.050	U
	alpha-Chlordane	.025	U
5103-74-2	gamma-Chlordane	.025	U
	Toxaphene	2.5	U
	Aroclor-1016	.50	U
	Aroclor-1221	.50	U
11141-16-5	Aroclor-1232	.50	U
53469-21-9	Aroclor-1242	-50	U
12672-29-6	Aroclor-1248	.50	U
11097-69-1	Aroclor-1254	.50	U
11096-82-5	Aroclor-1260	.50	U

Contract:

PIBLK03

Tab Code: ICM Case No.: SAS No.: SDG No.: C-1

Matrix: (soil/water) WATER Lab Sample ID: PIBLK03

ample wt/vol: 1000.0 (g/mL) ML Lab File ID: HA2621

ab Name: ICM

% Moisture: _____ decanted: (Y/N)___ Date Received: 00/00/00

xtraction: (SepF/Cont/Sonc) SEPF Date Extracted: 00/00/00

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/16/97

njection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO. COMPOUND CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L Q

319-84-6----alpha-BHC .025 U
319-85-7----beta-BHC .025 U

319-86-8-----delta-BHC U .025 58-89-9-----gamma-BHC (Lindane) .025 U 76-44-8-----Heptachlor____ .025 U 309-00-2----Aldrin .025 U 1024-57-3-----Heptachlor epoxide .025 U 959-98-8-----Endosulfan I_____ .025 U 60-57-1-----Dieldrin .050 U 72-55-9----4,4'-DDE .050 U 72-20-8-----Endrin .050 U 33213-65-9-----Endosulfan II U .050 72-54-8----4,4'-DDD U .050 1031-07-8-----Endosulfan Sulfate U .050 50-29-3----4,4'-DDT .050 U .25 72-43-5----Methoxychlor U 53494-70-5-----Endrin ketone U .050 7421-93-4----Endrin aldehyde U .050 5103-71-9----alpha-Chlordane U .025 5103-74-2----gamma-Chlordane .025 U 8001-35-2-----Toxaphene 2.5 U 12674-11-2----Aroclor-1016 .50 U 11104-28-2-----Aroclor-1221 .50 U 11141-16-5-----Aroclor-1232 U .50 .50 53469-21-9----Aroclor-1242 U .50 12672-29-6-----Aroclor-1248 U 11097-69-1----Aroclor-1254 .50 U 11096-82-5-----Aroclor-1260 U .50

PIBLK04 ab Name: ICM Contract:

SAS No.: SDG No.: C-1 ab Code: ICM Case No.:

Matrix: (soil/water) WATER Lab Sample ID: PIBLK04

1000.0 (g/mL) ML Lab File ID: HA2634 ample wt/vol:

Date Received: 00/00/00 decanted: (Y/N)___ % Moisture:

xtraction: (SepF/Cont/Sonc) SEPF Date Extracted: 00/00/00

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/17/97

njection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) ug/L

319-84-6alpha-BHC	.025	U
319-85-7beta-BHC	.025	U
319-86-8delta-BHC	.025	U
58-89-9gamma-BHC (Lindane)	.025	U
76-44-8Heptachlor	.025	U
309-00-2Aldrin	.025	U
1024-57-3Heptachlor epoxide	.025	U
959-98-8Endosulfan I	.025	U
60-57-1Dieldrin	.050	U
72-55-94,4'-DDE	.050	U
72-20-8Endrin	.050	U
33213-65-9Endosulfan II	.050	U
72-54-84,4'-DDD	.050	U
1031-07-8Endosulfan Sulfate	.050	U
50-29-34,4'-DDT	.050	U
72-43-5Methoxychlor_	.25	U
53494-70-5Endrin ketone	.050	U
7421-93-4Endrin aldehyde	.050	U
5103-71-9alpha-Chlordane	.025	U
5103-74-2gamma-Chlordane	.025	U
8001-35-2Toxaphene	2.5	U
12674-11-2Aroclor-1016	.50	U
11104-28-2Aroclor-1221	.50	U
11141-16-5Aroclor-1232	.50	U
53469-21-9Aroclor-1242	.50	U
12672-29-6Aroclor-1248	.50	U
11097-69-1Aroclor-1254	.50	U
11096-82-5Aroclor-1260	.50	U

PIBLK05

EPA SAMPLE NO

ab Name: ICM Contract:

ab Code: ICM Case No.: SAS No.: SDG No.: C-1

Matrix: (soil/water) WATER Lab Sample ID: PIBLK05

ample wt/vol: 1000.0 (g/mL) ML Lab File ID: HA2637

Moisture: _____ decanted: (Y/N)___ Date Received: 00/00/00

xtraction: (SepF/Cont/Sonc) SEPF Date Extracted: 00/00/00

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/17/97

njection Volume: 1.0 (uL) Dilution Factor: 1.0

CPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

319-84-6alpha-BHC	.025	U
319-85-7beta-BHC	.025	U
319-86-8delta-BHC	.025	U
58-89-9gamma-BHC (Lindane)	.025	U
76-44-8Heptachlor	.025	U
309-00-2Aldrin	.025	U
1024-57-3Heptachlor epoxide	.025	U
959-98-8Endosulfan I	.025	U
60-57-1Dieldrin	.050	U
72-55-94,4'-DDE	.050	U
72-20-8Endrin	.050	U
33213-65-9Endosulfan II	.050	U
72-54-84,4'-DDD	.050	U
1031-07-8Endosulfan Sulfate	.050	U
50-29-34,4'-DDT_	.050	U
72-43-5Methoxychlor_	. 25	U
53494-70-5Endrin ketone	.050	U
7421-93-4Endrin aldehyde	.050	U
5103-71-9alpha-Chlordane	.025	U
5103-74-2gamma-Chlordane	.025	U
8001-35-2Toxaphene	2.5	U
12674-11-2Aroclor-1016	.50	U
11104-28-2Aroclor-1221	.50	U
11141-16-5Aroclor-1232	.50	U
53469-21-9Aroclor-1242	.50	U
12672-29-6Aroclor-1248	.50	U
11097-69-1Aroclor-1254	.50	U
11096-82-5Aroclor-1260	.50	U

PIBLK06 Lab Name: ICM Contract:

SDG No.: C-1 ab Code: ICM Case No.: SAS No.:

Lab Sample ID: PIBLK06 Matrix: (soil/water) WATER

1000.0 (g/mL) ML Lab File ID: HA2651 ample wt/vol:

% Moisture: _____ decanted: (Y/N)___ Date Received: 00/00/00

xtraction: (SepF/Cont/Sonc) SEPF Date Extracted: 00/00/00

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/18/97

njection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.		ONCENTRATION UNITS: ug/L or ug/Kg) ug/L	C
319-84-6	alpha-BHC	.025	U
319-85-7	beta-BHC	.025	U
	delta-BHC	.025	U
	gamma-BHC (Lindane)		U
76-44-8	Heptachlor	.025	U
	Aldrin	.025	U
1024-57-3	Heptachlor epoxide	.025	U
	Endosulfan I	.025	U
	Dieldrin	.050	U
	4,4'-DDE	.050	U
	Endrin	.050	U
	Endosulfan II	.050	U
	4,4'-DDD	.050	U
1031-07-8	Endosulfan Sulfate	.050	U
	4,4'-DDT	.050	U
72-43-5	Methoxychlor	.25	U
53494-70-5	Endrin ketone	.050	U
	Endrin aldehyde	.050	U
5103-71-9	alpha-Chlordane	.025	U
	gamma-Chlordane	.025	U
	Toxaphene	2.5	U
	Aroclor-1016	.50	U
	Aroclor-1221	.50	U
	Aroclor-1232	.50	U
	Aroclor-1242	.50	U
	Aroclor-1248	.50	U
	Aroclor-1254	.50	U
11096-82-5-	Aroclor-1260	.50	U

EPA SAMPLE NO.

PIBLK07

ab Name: ICM Contract:

SAS No.: SDG No.: C-1 Case No.: ab Code: ICM

Matrix: (soil/water) WATER Lab Sample ID: PIBLK07

Lab File ID: HA2664 ample wt/vol: 1000.0 (g/mL) ML

Date Received: 00/00/00 % Moisture: decanted: (Y/N)

xtraction: (SepF/Cont/Sonc) SEPF Date Extracted: 00/00/00

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/18/97

Dilution Factor: njection Volume: 1.0 (uL) 1.0

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) ug/L

319-84-6alpha-BHC	.025	U
319-85-7beta-BHC	.025	U
319-86-8delta-BHC	.025	U
58-89-9gamma-BHC (Lindane)	.025	U
76-44-8Heptachlor	.025	U
309-00-2Aldrin	.025	U
1024-57-3Heptachlor epoxide	.025	U
959-98-8Endosulfan I	.025	U
60-57-1Dieldrin	.050	U
72-55-94,4'-DDE	.050	U
72-20-8Endrin	.050	U
33213-65-9Endosulfan II	.050	U
72-54-84,4'-DDD	.050	U
1031-07-8Endosulfan Sulfate	.050	U
50-29-34,4'-DDT	.050	U
72-43-5Methoxychlor	.25	U
53494-70-5Endrin ketone	.050	U
7421-93-4Endrin aldehyde	.050	U
5103-71-9alpha-Chlordane	.025	U
5103-74-2gamma-Chlordane	.025	U
8001-35-2Toxaphene	2.5	U
12674-11-2Aroclor-1016	.50	U
11104-28-2Aroclor-1221	.50	U
11141-16-5Aroclor-1232	.50	U
53469-21-9Aroclor-1242	.50	U
12672-29-6Aroclor-1248	.50	U
11097-69-1Aroclor-1254	.50	U
11096-82-5Aroclor-1260	.50	U

EPA SAMPLE NO.

PIBLK08

ab Name: ICM Contract:

ab Code: ICM Case No.:

SAS No.:

SDG No.: C-1

Matrix: (soil/water) WATER

Lab Sample ID: PIBLK08

ample wt/vol: 1000.0 (g/mL) ML Lab File ID: HA2676

% Moisture: decanted: (Y/N)

Date Received: 00/00/00

xtraction: (SepF/Cont/Sonc) SEPF

Date Extracted: 00/00/00

Concentrated Extract Volume: 10000 (uL)

Date Analyzed: 12/19/97

njection Volume: 1.0 (uL)

Dilution Factor:

1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO. COMPOUND

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Q

		13/11 21/11	
319-84-6	alpha-BHC	.025	U
	beta-BHC	.025	and the second second
	delta-BHC	.025	
	gamma-BHC (Lindane)	.025	The same of the sa
76-44-8	Heptachlor	.025	
309-00-2	Aldrin	.025	
	Heptachlor epoxide	.025	
	Endosulfan I	.025	
	Dieldrin	.050	
	4,4'-DDE	.050	
	Endrin	.050	100
	Endosulfan II	.050	100
	4,4'-DDD	.050	
	Endosulfan Sulfate	.050	
	4,4'-DDT	.050	
	Methoxychlor	.25	
	Endrin ketone	.050	
7421-93-4	Endrin aldehyde	.050	
5103-71-9	alpha-Chlordane	.025	100
5103-74-2	gamma-Chlordane	.025	
8001-35-2	Toxaphene	2.5	
	Aroclor-1016	.50	
	Aroclor-1221	.50	
	Aroclor-1232	.50	10.7
	Aroclor-1242	.50	
	Aroclor-1248	.50	
	Aroclor-1254	.50	
	Aroclor-1260		- P. C.

PIBLK09

Lab Name: ICM

Contract:

ab Code: ICM Case No.:

SAS No.:

SDG No.: C-1

Matrix: (soil/water) WATER

Lab Sample ID: PIBLK09

ample wt/vol: 1000.0 (g/mL) ML

Lab File ID: HA2690

% Moisture: decanted: (Y/N)

Date Received: 00/00/00

xtraction: (SepF/Cont/Sonc) SEPF

Date Extracted: 00/00/00

Concentrated Extract Volume: 10000 (uL)

Date Analyzed: 12/19/97

njection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

	(13/2)	-3/ -3/ -3/ -	
319-84-6	alpha-BHC	. 025	U
	beta-BHC	.025	U
	delta-BHC	.025	U
	gamma-BHC (Lindane)	.025	U
76-44-8	Heptachlor	.025	U
	Aldrin	.025	U
1024-57-3	Heptachlor epoxide	.025	U
	Endosulfan I	.025	U
	Dieldrin	.050	U
72-55-9	4,4'-DDE	.050	U
	Endrin	.050	U
33213-65-9	Endosulfan II	.050	U
72-54-8	4,4'-DDD	.050	U
1031-07-8	Endosulfan Sulfate	.050	U
50-29-3	4,4'-DDT	.050	U
72-43-5	Methoxychlor	. 25	U
53494-70-5	Endrin ketone	.050	U
7421-93-4	Endrin aldehyde	.050	U
5103-71-9	alpha-Chlordane	.025	U
5103-74-2	gamma-Chlordane	.025	U
8001-35-2	Toxaphene	2.5	U
	Aroclor-1016	.50	U
	Aroclor-1221	.50	U
	Aroclor-1232	.50	U
	Aroclor-1242	.50	U
	Aroclor-1248	.50	U
	Aroclor-1254	.50	U
11096-82-5	Aroclor-1260	.50	U

PIBLK10 Contract:

CONCENTRATION UNITS:

Lab Name: ICM

ab Code: ICM Case No.: SAS No.: SDG No.: C-1

Matrix: (soil/water) WATER Lab Sample ID: PIBLK10

ample wt/vol: 1000.0 (g/mL) ML Lab File ID: HA2692

% Moisture: _____ decanted: (Y/N)____ Date Received: 00/00/00

xtraction: (SepF/Cont/Sonc) SEPF Date Extracted: 00/00/00

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/21/97

_njection Volume: 1.0 (uL) Dilution Factor: 1.0

TPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

11096-82-5-----Aroclor-1260

		(ug/L or ug/Kg) ug/L	Q
319-85-7	alpha-BHC beta-BHC delta-BHC	.025 .025 .025	ם ח
	gamma-BHC (Lindane		Ü
309-00-2	Aldrin	.025	ū
959-98-8	Heptachlor epoxide	.025	U
	Dieldrin 4,4'-DDE	.050	U
72-20-8	Endrin	.050	U
72-54-8	4,4'-DDD	.050	U
50-29-3	Endosulfan Sulfate	e050 .050	n n
	Methoxychlor	.25	Ü
7421-93-4	Endrin aldehyde	.050	U
5103-74-2	alpha-Chlordane	.025	U
	Toxaphene	2.5	n
	Aroclor-1221 Aroclor-1232	.50	n n
53469-21-9	Aroclor-1242	.50	U
	Aroclor-1248	.50	U

U

EPA SAMPLE NO.

PIBLK11

ab Name: ICM Contract:

SAS No.: SDG No.: C-1 ab Code: ICM Case No.:

Lab Sample ID: PIBLK11 Matrix: (soil/water) WATER

ample wt/vol: 1000.0 (g/mL) ML Lab File ID: HA2706

% Moisture: _____ decanted: (Y/N)___ Date Received: 00/00/00

xtraction: (SepF/Cont/Sonc) SEPF Date Extracted: 00/00/00

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/22/97

njection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L

319-84-6alpha-BHC	.025	U
319-85-7beta-BHC	.025	U
319-86-8delta-BHC	.025	U
58-89-9gamma-BHC (Lindane)	.025	U
76-44-8Heptachlor	.025	U
309-00-2Aldrin	.025	U
1024-57-3Heptachlor epoxide	.025	U
959-98-8Endosulfan I	.025	U
60-57-1Dieldrin	.050	U
72-55-94,4'-DDE	.050	U
72-20-8Endrin	.050	U
33213-65-9Endosulfan II	.050	U
72-54-84,4'-DDD	.050	U
1031-07-8Endosulfan Sulfate	.050	U
50-29-34,4'-DDT	.050	U
72-43-5Methoxychlor_	.25	U
53494-70-5Endrin ketone	.050	U
7421-93-4Endrin aldehyde	.050	U
5103-71-9alpha-Chlordane	.025	U
5103-74-2gamma-Chlordane	.025	U
8001-35-2Toxaphene	2.5	U
12674-11-2Aroclor-1016	.50	U
11104-28-2Aroclor-1221	.50	U
11141-16-5Aroclor-1232	.50	U
53469-21-9Aroclor-1242	,50	U
12672-29-6Aroclor-1248	.50	U
11097-69-1Aroclor-1254	.50	U
11096-82-5Aroclor-1260	.50	U

PIBLK12

Lab Name: ICM Contract:

ab Code: ICM Case No.: SAS No.: SDG No.: C-1

Matrix: (soil/water) WATER Lab Sample ID: PIBLK12 ample wt/vol: 1000.0 (g/mL) ML Lab File ID: HA2719

% Moisture: _____ decanted: (Y/N)___ Date Received: 00/00/00

xtraction: (SepF/Cont/Sonc) SEPF Date Extracted: 00/00/00

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/22/97

njection Volume: 1.0 (uL) Dilution Factor: 1.0

CPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q .025 U 319-84-6----alpha-BHC 319-85-7----beta-BHC .025 U 319-86-8-----delta-BHC .025 U 58-89-9----gamma-BHC (Lindane) U .025 76-44-8-----Heptachlor____ U .025 309-00-2----Aldrin .025 U 1024-57-3-----Heptachlor epoxide .025 U 959-98-8-----Endosulfan I_____ .025 U

60-57-1----Dieldrin .050 U .050 72-55-9----4,4'-DDE U .050 33213-65-9-----Endosulfan II 72-20-8-----Endrin U .050 U 72-54-8----4,4'-DDD .050 U 1031-07-8-----Endosulfan Sulfate .050 U .050 50-29-3----4,4'-DDT U 72-43-5----Methoxychlor U .25 53494-70-5----Endrin ketone .050 U 7421-93-4----Endrin aldehyde .050 U 5103-71-9----alpha-Chlordane .025 U

5103-74-2----gamma-Chlordane .025 U 8001-35-2----Toxaphene 2.5 U 12674-11-2----Aroclor-1016 .50 U 11104-28-2----Aroclor-1221 .50 U 11141-16-5-----Aroclor-1232 U .50 .50 53469-21-9-----Aroclor-1242 U 12672-29-6-----Aroclor-1248 .50 U 11097-69-1----Aroclor-1254 .50 U 11096-82-5-----Aroclor-1260 U .50

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PIBLK13

ab Name: ICM

Contract:

SAS No.: SDG No.: C-1

Matrix: (soil/water) WATER

ab Code: ICM Case No.:

Lab Sample ID: PIBLK13

ample wt/vol: 1000.0 (g/mL) ML

CAS NO.

Lab File ID: HA2731

% Moisture: decanted: (Y/N)___

Date Received: 00/00/00

xtraction: (SepF/Cont/Sonc) SEPF

Date Extracted: 00/00/00

Concentrated Extract Volume: 10000 (uL)

Date Analyzed: 12/23/97

njection Volume: 1.0 (uL)

COMPOUND

Dilution Factor: 1.0

CPC Cleanup: (Y/N) N pH: ____

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

319-84-6alpha-BHC	.025	U
319-85-7beta-BHC	.025	U
319-86-8delta-BHC	.025	U
58-89-9gamma-BHC (Lindane)	.025	U
76-44-8Heptachlor	.025	U
309-00-2Aldrin	.025	U
1024-57-3Heptachlor epoxide	.025	U
959-98-8Endosulfan I	.025	U
60-57-1Dieldrin	.050	U
72-55-94,4'-DDE	.050	U
72-20-8Endrin	.050	U
33213-65-9Endosulfan II	.050	U
72-54-84,4'-DDD	.050	U
1031-07-8Endosulfan Sulfate	.050	U
50-29-34,4'-DDT	.050	U
72-43-5Methoxychlor	.25	U
53494-70-5Endrin ketone	.050	U
7421-93-4Endrin aldehyde	.050	U
5103-71-9alpha-Chlordane	.025	U
5103-74-2gamma-Chlordane	.025	U
8001-35-2Toxaphene	2.5	U
12674-11-2Aroclor-1016	.50	U
11104-28-2Aroclor-1221	.50	U
11141-16-5Aroclor-1232	.50	U
3469-21-9Aroclor-1242	.50	Ū
12672-29-6Aroclor-1248	.50	Ū
11097-69-1Aroclor-1254	.50	U
11096-82-5Aroclor-1260	.50	U

PIBLK14 ab Name: ICM Contract:

ab Code: ICM Case No.: SAS No.: SDG No.: C-1

Matrix: (soil/water) WATER Lab Sample ID: PIBLK14

ample wt/vol: 1000.0 (g/mL) ML Lab File ID: HA2739

% Moisture: _____ decanted: (Y/N)___ Date Received: 00/00/00

xtraction: (SepF/Cont/Sonc) SEPF Date Extracted: 00/00/00

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/23/97

Dilution Factor: 1.0 njection Volume: 1.0 (uL)

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.		CONCENTRATION UNITS: OMPOUND (ug/L or ug/Kg) ug/L				
	alpha-BHC	.025	ŭ			
	delta-BHC	.025	U			
	gamma-BHC (Lindane)	.025	U			
	Heptachlor	.025	U			
	Aldrin	.025	U			
1024-57-3	Heptachlor epoxide	.025	U			
	Endosulfan I	.025	U			
60-57-1	Dieldrin	.050	U			
72-55-9	4,4'-DDE	.050	U			
	Endrin	.050	U			
	Endosulfan II	.050	U			
72-54-8	4,4'-DDD	.050	U			
	Endosulfan Sulfate	.050	U			
50-29-3	4,4'-DDT	.050	U			
	Methoxychlor_	.25	U			
	Endrin ketone	.050	U			
	Endrin aldehyde	_ .050	U			
5103-71-9	alpha-Chlordane	.025	U			
5103-74-2	gamma-Chlordane	.025	U			
	Toxaphene	2.5	U			
	Aroclor-1016	.50	U			
	Aroclor-1221	.50	U			
	Aroclor-1232	.50	U			
	Aroclor-1242	.50	U			
	Aroclor-1248	.50	U			
	Aroclor-1254	.50	U			
11096-82-5	Aroclor-1260	.50	U			

CC 989

PIBLK15

Lab Name: ICM Contract:

ab Code: ICM Case No.: SAS No.: SDG No.: C-1

Matrix: (soil/water) WATER Lab Sample ID: PIBLK15

ample wt/vol: 1000.0 (g/mL) ML Lab File ID: HA2742

Date Received: 00/00/00 % Moisture: decanted: (Y/N)

xtraction: (SepF/Cont/Sonc) SEPF Date Extracted: 00/00/00

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/24/97

njection Volume: 1.0 (uL) Dilution Factor: 1.0

pH: ____ Sulfur Cleanup: (Y/N) N GPC Cleanup: (Y/N) N

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

319-84-6alpha-BHC	.025	U
319-85-7beta-BHC	.025	U
319-86-8delta-BHC	.025	U
58-89-9gamma-BHC (Lindane)	.025	U
76-44-8Heptachlor	.025	U
309-00-2Aldrin	.025	U
1024-57-3Heptachlor epoxide	.025	U
959-98-8Endosulfan I	.025	U
60-57-1Dieldrin	.050	U
72-55-94,4'-DDE	.050	U
72-20-8Endrin	.050	U
33213-65-9Endosulfan II	.050	U
72-54-84,4'-DDD	.050	U
1031-07-8Endosulfan Sulfate	.050	U
50-29-34,4'-DDT	.050	U
72-43-5Methoxychlor	.25	U
53494-70-5Endrin ketone	.050	U
7421-93-4Endrin aldehyde	.050	U
5103-71-9alpha-Chlordane	.025	U
5103-74-2gamma-Chlordane	.025	U
8001-35-2Toxaphene	2.5	U
12674-11-2Aroclor-1016	.50	U
11104-28-2Aroclor-1221	.50	U
11141-16-5Aroclor-1232	.50	U
53469-21-9Aroclor-1242	.50	U
12672-29-6Aroclor-1248	.50	U
11097-69-1Aroclor-1254	.50	U
11096-82-5Aroclor-1260	.50	U

EPA SAMPLE NO.

PIBLK16

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ab Name: ICM Contract:

SAS No.: ab Code: ICM Case No.: SDG No.: C-1

Lab Sample ID: PIBLK16 Matrix: (soil/water) WATER

Lab File ID: HA2756 1000.0 (g/mL) ML ample wt/vol:

Date Received: 00/00/00 % Moisture: decanted: (Y/N)___

Date Extracted: 00/00/00 xtraction: (SepF/Cont/Sonc) SEPF

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/25/97

njection Volume: 1.0 (uL) Dilution Factor: 1.0

PC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

> CONCENTRATION UNITS: CAS NO. (ug/L or ug/Kg) ug/L COMPOUND

319-84-6	alpha-BHC	.025	U
	beta-BHC	.025	U
	delta-BHC	.025	U
58-89-9	gamma-BHC (Lindane)	.025	U
	Heptachlor	.025	U
309-00-2		.025	U
1024-57-3	Heptachlor epoxide	.025	U
	Endosulfan I	.025	U
60-57-1	Dieldrin	.050	U
72-55-9	4,4'-DDE	.050	U
	Endrin	.050	U
33213-65-9	Endosulfan II	.050	U
	4,4'-DDD	.050	U
	Endosulfan Sulfate	.050	U
	4,4'-DDT	.050	U
	Methoxychlor	.25	U
53494-70-5	Endrin ketone	.050	U
	Endrin aldehyde	.050	U
5103-71-9	alpha-Chlordane	.025	U
5103-74-2	gamma-Chlordane	.025	U
8001-35-2	Toxaphene	2.5	U
	Aroclor-1016	.50	U
	Aroclor-1221	.50	U
	Aroclor-1232	.50	U
	Aroclor-1242	.50	Ū
	Aroclor-1248	.50	U
	Aroclor-1254		Ū
	Aroclor-1260	.50	Ū

Contract: PIBLK17

ab Code: ICM Case No.: SAS No.: SDG No.: C-1

Matrix: (soil/water) WATER Lab Sample ID: PIBLK17

ample wt/vol: 1000.0 (g/mL) ML Lab File ID: HA2770

Lab Name: ICM

% Moisture: _____ decanted: (Y/N)___ Date Received: 00/00/00

xtraction: (SepF/Cont/Sonc) SEPF Date Extracted: 00/00/00

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/25/97

njection Volume: 1.0 (uL) Dilution Factor: 1.0

CPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO. COMPOUND CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/L Q

319-84-6alpha-BHC	.025	U
319-85-7beta-BHC	.025	U
319-86-8delta-BHC	.025	U
58-89-9gamma-BHC (Lindane)	.025	U
76-44-8Heptachlor	.025	U
309-00-2Aldrin	.025	U
1024-57-3Heptachlor epoxide	.025	U
959-98-8Endosulfan I	.025	U
60-57-1Dieldrin	.050	U
72-55-94,4'-DDE	.050	U
72-20-8Endrin	.050	U
33213-65-9Endosulfan II	.050	U
72-54-84,4'-DDD	.050	U
1031-07-8Endosulfan Sulfate	.050	U
50-29-34,4'-DDT	.050	U
72-43-5Methoxychlor_	.25	U
53494-70-5Endrin ketone	.050	U
7421-93-4Endrin aldehyde	.050	U
5103-71-9alpha-Chlordane	.025	U
5103-74-2gamma-Chlordane	.025	U
8001-35-2Toxaphene	2.5	U
12674-11-2Aroclor-1016	.50	U
11104-28-2Aroclor-1221	.50	U
11141-16-5Aroclor-1232	.50	U
53469-21-9Aroclor-1242	.50	U
12672-29-6Aroclor-1248	.50	U
11097-69-1Aroclor-1254	.50	U
11096-82-5Aroclor-1260	.50	U

PIBLK18

Lab Name: ICM

Contract:

ab Code: ICM Case No.: SAS No.: SDG No.: C-1

Matrix: (soil/water) WATER Lab Sample ID: PIBLK18

ample wt/vol: 1000.0 (g/mL) ML Lab File ID: HA2782

% Moisture: _____ decanted: (Y/N)___ Date Received: 00/00/00

xtraction: (SepF/Cont/Sonc) SEPF Date Extracted: 00/00/00

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/26/97

_njection Volume: 1.0 (uL) Dilution Factor: 1.0

TPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

319-84-6	alpha-BHC	.025	U
	beta-BHC	.025	U
319-86-8	delta-BHC	.025	U
58-89-9	gamma-BHC (Lindane)	.025	U
	Heptachlor	.025	U
309-00-2	Aldrin	.025	U
1024-57-3	Heptachlor epoxide	.025	U
	Endosulfan I	.025	U
60-57-1	Dieldrin	.050	U
72-55-9	4,4'-DDE	.050	U
72-20-8	Endrin	.050	U
33213-65-9	Endosulfan II	.050	U
	4,4'-DDD	.050	U
1031-07-8	Endosulfan Sulfate	.050	U
	4,4'-DDT	.050	U
72-43-5	Methoxychlor	.25	U
53494-70-5	Endrin ketone	.050	U
	Endrin aldehyde	.050	U
	alpha-Chlordane	.025	U
	gamma-Chlordane	.025	U
	Toxaphene	2.5	U
	Aroclor-1016	.50	U
	Aroclor-1221	.50	U
	Aroclor-1232	.50	U
	Aroclor-1242 ·	.50	U
	Aroclor-1248	.50	U
	Aroclor-1254	.50	U
11096-82-5	Aroclor-1260	.50	U

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PIBLINIS	
	PIBLK19

ab Name: ICM

Contract:

ab Code: ICM Case No.: SAS No.: SDG No.: C-1

Matrix: (soil/water) WATER

Lab Sample ID: PIBLK19

Lab File ID: HA2787

ample wt/vol: 1000.0 (g/mL) ML

Date Received: 00/00/00

% Moisture: _____ decanted: (Y/N)___

xtraction: (SepF/Cont/Sonc) SEPF

Date Extracted: 00/00/00

Concentrated Extract Volume: 10000 (uL)

Date Analyzed: 12/27/97

njection Volume: 1.0 (uL)

Dilution Factor:

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS.

		concentration oner.	
CAS NO.	COMPOUND	(ug/L or ug/Kg) ug/L	Q

319-84-6alpha-BHC	.025	U
319-85-7beta-BHC	.025	U
319-86-8delta-BHC	.025	U
58-89-9gamma-BHC (Lindane)	.025	U
76-44-8Heptachlor	.025	U
309-00-2Aldrin	.025	U
1024-57-3Heptachlor epoxide	.025	U
959-98-8Endosulfan I	.025	U
60-57-1Dieldrin	.050	U
72-55-94,4'-DDE	.050	U
72-20-8Endrin	.050	U
33213-65-9Endosulfan II	.050	U
72-54-84,4'-DDD	.050	U
1031-07-8Endosulfan Sulfate	.050	U
50-29-34,4'-DDT	.050	U
72-43-5Methoxychlor	. 25	U
53494-70-5Endrin ketone	.050	U
7421-93-4Endrin aldehyde	.050	U
5103-71-9alpha-Chlordane	.025	U
5103-74-2gamma-Chlordane	.025	U
8001-35-2Toxaphene	2.5	U
12674-11-2Aroclor-1016	.50	U
11104-28-2Aroclor-1221	.50	U
11141-16-5Aroclor-1232	.50	U
53469-21-9Aroclor-1242 .	.50	U
12672-29-6Aroclor-1248	.50	U
11097-69-1Aroclor-1254	.50	U
11096-82-5Aroclor-1260	.50	U

PIBLK20

Lab Name: ICM

Contract:

ab Code: ICM Case No.: SAS No.: SDG No.: C-1

Matrix: (soil/water) WATER

Lab Sample ID: PIBLK20

ample wt/vol: 1000.0 (g/mL) ML

Lab File ID: HA2801

% Moisture: decanted: (Y/N)___

Date Received: 00/00/00

xtraction: (SepF/Cont/Sonc) SEPF

Date Extracted: 00/00/00

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/27/97

njection Volume: 1.0 (uL)

Dilution Factor: 1.0

CPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

CAS NO.	COMPOUND (ug,	L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	.025	U
	beta-BHC	.025	U
319-86-8	delta-BHC	.025	U
58-89-9	gamma-BHC (Lindane)	.025	U
	Heptachlor	.025	U
309-00-2	Aldrin	.025	U
	Heptachlor epoxide	.025	U
959-98-8	Endosulfan I	.025	U
	Dieldrin	.050	U
	4,4'-DDE	.050	U
	Endrin	.050	U
	Endosulfan II	.050	U
72-54-8	4,4'-DDD	.050	U
	Endosulfan Sulfate	.050	U
	4,4'-DDT	.050	U
	Methoxychlor	.25	U
53494-70-5	Endrin ketone	.050	U
7421-93-4	Endrin aldehyde	.050	U
5103-71-9	alpha-Chlordane	.025	U
5103-74-2	gamma-Chlordane	.025	U
	Toxaphene	2.5	U
	Aroclor-1016	.50	U
	Aroclor-1221	.50	U
	Aroclor-1232	.50	U
	Aroclor-1242	.50	U
	Aroclor-1248	.50	U
	Aroclor-1254	.50	U
11096-82-5	Aroclor-1260	.50	U

PIBLK21

ab Name: ICM Contract:

Tab Code: ICM Case No.: SAS No.: SDG No.: C-1

matrix: (soil/water) WATER Lab Sample ID: PIBLK21

ample wt/vol: 1000.0 (g/mL) ML Lab File ID: HA2815

% Moisture: _____ decanted: (Y/N)___ Date Received: 00/00/00

xtraction: (SepF/Cont/Sonc) SEPF Date Extracted: 00/00/00

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/28/97

njection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:
CAS NO. COMPOUND (ug/L or ug/Kg) ug/L

319-84-6alpha-BHC	.025	U
319-85-7beta-BHC	.025	U
319-86-8delta-BHC	.025	U
58-89-9gamma-BHC (Lindane)	.025	U
76-44-8Heptachlor	.025	U
309-00-2Aldrin	.025	U
1024-57-3Heptachlor epoxide	.025	U
959-98-8Endosulfan I	.025	U
60-57-1Dieldrin	.050	U
72-55-94,4'-DDE	.050	U
72-20-8Endrin	.050	U
33213-65-9Endosulfan II	.050	U
72-54-84,4'-DDD	.050	U
1031-07-8Endosulfan Sulfate	.050	U
50-29-34,4'-DDT_	.050	U
72-43-5Methoxychlor_	.25	U
53494-70-5Endrin ketone	.050	U
7421-93-4Endrin aldehyde	.050	U
5103-71-9alpha-Chlordane	.025	U
5103-74-2gamma-Chlordane	.025	U
8001-35-2Toxaphene	2.5	U
12674-11-2Aroclor-1016	.50	U
11104-28-2Aroclor-1221	.50	U
11141-16-5Aroclor-1232	.50	U
53469-21-9Aroclor-1242	.50	U
12672-29-6Aroclor-1248	.50	U
11097-69-1Aroclor-1254	.50	U
11096-82-5Aroclor-1260	.50	U

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Lab Name: ICM Contract:

ab Code: ICM Case No.: SAS No.: SDG No.: C-1

Matrix: (soil/water) WATER Lab Sample ID: PIBLK22

ample wt/vol: 1000.0 (g/mL) ML Lab File ID: HA2823

% Moisture: _____ decanted: (Y/N)___ Date Received: 00/00/00

xtraction: (SepF/Cont/Sonc) SEPF Date Extracted: 00/00/00

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/29/97

njection Volume: 1.0 (uL) Dilution Factor: 1.0

CPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

		CONCENTRATION UNITS:	
CAS NO.	COMPOUND	(ug/L or ug/Kg) ug/L	Q

Anne verein		-3, -3, -3,	
319-84-6-	alpha-BHC	.025	U
	beta-BHC	.025	U
	delta-BHC	.025	U
	gamma-BHC (Lindane)	.025	U
	Heptachlor	.025	U
	Aldrin	.025	U
1024-57-3-	Heptachlor epoxide	.025	U
	Endosulfan I	.025	U
	Dieldrin	.050	U
72-55-9-	4,4'-DDE	.050	U
	Endrin	.050	U
33213-65-9-	Endosulfan II	.050	U
72-54-8-	4,4'-DDD	.050	U
1031-07-8-	Endosulfan Sulfate	.050	U
	4,4'-DDT	.050	U
72-43-5-	Methoxychlor	.25	U
53494-70-5-	Endrin ketone	.050	U
7421-93-4-	Endrin aldehyde	.050	U
	alpha-Chlordane	.025	U
5103-74-2-	gamma-Chlordane	.025	U
	Toxaphene	2.5	U
	Aroclor-1016	.50	U
	Aroclor-1221	.50	U
	Aroclor-1232	.50	U
	Aroclor-1242	.50	U
	Aroclor-1248	.50	U
	Aroclor-1254	.50	U
11096-82-5-	Aroclor-1260	.50	U
			_ :

PIBLK23

ab Name: ICM Contract:

COMPOUND

ab Code: ICM Case No.: SAS No.: SDG No.: C-1

ratrix: (soil/water) WATER Lab Sample ID: PIBLK23

mample wt/vol: 1000.0 (g/mL) ML Lab File ID: HA2833

% Moisture: _____ decanted: (Y/N)___ Date Received: 00/00/00

xtraction: (SepF/Cont/Sonc) SEPF Date Extracted: 00/00/00

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/29/97

njection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Q

CAS NO. .025 319-84-6----alpha-BHC U 319-85-7----beta-BHC .025 U 319-86-8-----delta-BHC .025 U 58-89-9----gamma-BHC (Lindane) .025 IJ 76-44-8-----Heptachlor .025 U 309-00-2----Aldrin .025 U 1024-57-3-----Heptachlor epoxide .025 U 959-98-8-----Endosulfan I .025 U 60-57-1-----Dieldrin .050 U 72-55-9----4,4'-DDE U .050 72-20-8----Endrin U .050 33213-65-9----Endosulfan II .050 U 72-54-8----4,4'-DDD U .050 1031-07-8-----Endosulfan Sulfate U .050 50-29-3----4,4'-DDT .050 U 72-43-5----Methoxychlor .25 U 53494-70-5----Endrin ketone U .050 7421-93-4-----Endrin aldehyde .050 U 5103-71-9----alpha-Chlordane U .025 5103-74-2----gamma-Chlordane U .025 8001-35-2----Toxaphene U 2.5 12674-11-2----Aroclor-1016 .50 U 11104-28-2----Aroclor-1221 .50 U 11141-16-5-----Aroclor-1232 .50 U 53469-21-9-----Aroclor-1242 U .50 12672-29-6-----Aroclor-1248 U .50 11097-69-1-----Aroclor-1254 .50 U 11096-82-5-----Aroclor-1260 U .50

Contract:

ab Code: ICM Case No.: SAS No.: SDG No.: C-1

_ab Name: ICM

matrix: (soil/water) WATER Lab Sample ID: PIBLK24

ample wt/vol: 1000.0 (g/mL) ML Lab File ID: HA2847

% Moisture: decanted: (Y/N) Date Received: 00/00/00

xtraction: (SepF/Cont/Sonc) SEPF Date Extracted: 00/00/00

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/30/97

njection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L Q

319-84-6alpha-BHC	.025	U
319-85-7beta-BHC	.025	U
319-86-8delta-BHC	.025	U
58-89-9gamma-BHC (Lindane)	.025	U
76-44-8Heptachlor	.025	U
309-00-2Aldrin	.025	U
1024-57-3Heptachlor epoxide	.025	U
959-98-8Endosulfan I	.025	U
60-57-1Dieldrin	.050	U
72-55-94,4'-DDE	.050	U
72-20-8Endrin	.050	U
33213-65-9Endosulfan II	.050	U
72-54-84,4'-DDD	.050	U
1031-07-8Endosulfan Sulfate	.050	U
50-29-34,4'-DDT	.050	U
72-43-5Methoxychlor_	.25	U
53494-70-5Endrin ketone	.050	U
7421-93-4Endrin aldehyde	.050	U
5103-71-9alpha-Chlordane	.025	U
5103-74-2gamma-Chlordane	.025	U
8001-35-2Toxaphene	2.5	U
12674-11-2Aroclor-1016	.50	U
11104-28-2Aroclor-1221	.50	U
11141-16-5Aroclor-1232	.50	U
53469-21-9Aroclor-1242	.50	U
12672-29-6Aroclor-1248	.50	ū
11097-69-1Aroclor-1254	.50	U
11096-82-5Aroclor-1260	.50	U

PIBLK25 ab Name: ICM Contract:

Case No.: SAS No.: SDG No.: C-1 ab Code: ICM

Matrix: (soil/water) WATER Lab Sample ID: PIBLK25

ample wt/vol: 1000.0 (g/mL) ML Lab File ID: HA2861

% Moisture: _____ decanted: (Y/N)___ Date Received: 00/00/00

xtraction: (SepF/Cont/Sonc) SEPF Date Extracted: 00/00/00

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/30/97

njection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

CAS NO. COMPOUND Q 319-84-6----alpha-BHC .025 U .025 319-85-7----beta-BHC U 319-86-8-----delta-BHC .025 U 58-89-9----gamma-BHC (Lindane)____ .025 U 76-44-8----Heptachlor .025 U 309-00-2----Aldrin .025 U 1024-57-3-----Heptachlor epoxide_____ .025 U 959-98-8-----Endosulfan I .025 U 60-57-1-----Dieldrin .050 U 72-55-9----4,4'-DDE .050 U 72-20-8----Endrin .050 U 33213-65-9-----Endosulfan II .050 U 72-54-8----4,4'-DDD .050 U 1031-07-8-----Endosulfan Sulfate .050 U 50-29-3----4,4'-DDT .050 U 72-43-5----Methoxychlor . 25 U .050 53494-70-5----Endrin ketone U 7421-93-4-----Endrin aldehyde .050 U 5103-71-9----alpha-Chlordane .025 U .025 5103-74-2----gamma-Chlordane U 8001-35-2----Toxaphene 2.5 U 12674-11-2----Aroclor-1016 U .50 11104-28-2----Aroclor-1221 .50 U 11141-16-5-----Aroclor-1232 .50 U 53469-21-9-----Aroclor-1242 U .50 12672-29-6-----Aroclor-1248 .50 U 11097-69-1-----Aroclor-1254 U .50 11096-82-5-----Aroclor-1260 U .50

PIBLK26

EPA SAMPLE NO.

ab Name: ICM Contract:

SAS No.: SDG No.: C-1 ab Code: ICM Case No.:

Matrix: (soil/water) WATER Lab Sample ID: PIBLK26

ample wt/vol: 1000.0 (g/mL) ML Lab File ID: HA2875

Moisture: _____ decanted: (Y/N)___ Date Received: 00/00/00

xtraction: (SepF/Cont/Sonc) SEPF Date Extracted: 00/00/00

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/31/97

_njection Volume: 1.0 (uL) Dilution Factor: 1.0

TPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q

		3,3,3, -	
319-84-6	alpha-BHC	.025	U
319-85-7	beta-BHC	.025	U
	delta-BHC	.025	U
	gamma-BHC (Lindane)	.025	U
76-44-8	Heptachlor	.025	U
309-00-2		.025	U
	Heptachlor epoxide	.025	U
	Endosulfan I	.025	U
	Dieldrin	.050	U
	4,4'-DDE	.050	U
	Endrin	.050	U
	Endosulfan II	.050	U
72-54-8	4,4'-DDD	.050	U
1031-07-8	Endosulfan Sulfate	.050	U
	4,4'-DDT	.050	U
72-43-5	Methoxychlor	.25	U
53494-70-5	Endrin ketone	.050	U
7421-93-4	Endrin aldehyde	.050	U
5103-71-9	alpha-Chlordane	.025	U
5103-74-2	gamma-Chlordane	.025	U
8001-35-2	Toxaphene	2.5	U
	Aroclor-1016	.50	U
	Aroclor-1221	.50	U
	Aroclor-1232	.50	U
	Aroclor-1242	.50	U
	Aroclor-1248	.50	U
	Aroclor-1254	.50	U
11096-82-5	Aroclor-1260	.50	U

PESTICIDE ORGANICS ANALYSIS DATA SHEET

PIBLK27

Contract:

Lab Name: ICM Contra

ab Code: ICM Case No.: SAS No.: SDG No.: C-1

Matrix: (soil/water) WATER Lab Sample ID: PIBLK27

ample wt/vol: 1000.0 (g/mL) ML Lab File ID: HA2889

% Moisture: ____ decanted: (Y/N)__ Date Received: 00/00/00

xtraction: (SepF/Cont/Sonc) SEPF Date Extracted: 00/00/00

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/31/97

njection Volume: 1.0 (uL) Dilution Factor: 1.0

TPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO. COMPOUND CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L Q

319-84-6alpha-BHC	.025	U
319-85-7beta-BHC	.025	U
319-86-8delta-BHC	.025	U
58-89-9gamma-BHC (Lindane)	.025	U
76-44-8Heptachlor	.025	U
309-00-2Aldrin	.025	U
1024-57-3Heptachlor epoxide	.025	U
959-98-8Endosulfan I	.025	U
60-57-1Dieldrin	.050	U
72-55-94,4'-DDE	.050	U
72-20-8Endrin	.050	U
33213-65-9Endosulfan II	.050	U
72-54-84,4'-DDD	.050	U
1031-07-8Endosulfan Sulfate	.050	U
50-29-34,4'-DDT	.050	U
72-43-5Methoxychlor	.25	U
53494-70-5Endrin ketone	.050	U
7421-93-4Endrin aldehyde	.050	U
5103-71-9alpha-Chlordane	.025	U
5103-74-2gamma-Chlordane	.025	U
8001-35-2Toxaphene	2.5	U
12674-11-2Aroclor-1016	.50	U
11104-28-2Aroclor-1221	.50	U
11141-16-5Aroclor-1232	.50	U
53469-21-9Aroclor-1242	.50	U
12672-29-6Aroclor-1248	.50	U
11097-69-1Aroclor-1254	.50	U
11096-82-5Aroclor-1260	.50	U

Contract:

Matrix: (soil/water) WATER Lab Sample ID: PIBLK28

ample wt/vol: 1000.0 (g/mL) ML Lab File ID: HA2896

Lab Name: ICM

% Moisture: ____ decanted: (Y/N)__ Date Received: 00/00/00

xtraction: (SepF/Cont/Sonc) SEPF Date Extracted: 00/00/00

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/01/98

njection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L		Q
319-85-7-	alpha-BHC	.02	5 U	1

319-84-6alpha-BHC	.025	U
319-85-7beta-BHC	.025	U
319-86-8delta-BHC	.025	U
58-89-9gamma-BHC (Lindane)	.025	U
76-44-8Heptachlor	.025	U
309-00-2Aldrin	.025	U
1024-57-3Heptachlor epoxide	.025	Ū
959-98-8Endosulfan I	.025	U
60-57-1Dieldrin	.050	U
72-55-94,4'-DDE	050	Ū
72-20-8Endrin	.050	U
33213-65-9Endosulfan II	.050	Ū
72-54-84,4'-DDD	.050	Ü
1031-07-8Endosulfan Sulfate	050	Ü
50-29-34,4'-DDT		Ū
72-43-5Methoxychlor	25	Ü
53494-70-5Endrin ketone	050	Ü
7421-93-4Endrin aldehyde	050	U
5103-71-9alpha-Chlordane	.025	Ū
5103-74-2gamma-Chlordane	.025	U
8001-35-2Toxaphene	2.5	Ü
12674-11-2Aroclor-1016	.50	Ü
11104-28-2Aroclor-1221	.50	Ü
11141-16-5Aroclor-1232	50	U
53469-21-9Aroclor-1242	.50	Ü
12672-29-6Aroclor-1248	.50	Ü
11097-69-1Aroclor-1254	.50	Ü
11097-69-1Aroclor-1254	50	Ü
11000 02 0 4444 ALOCIOI-1200		U

Lab Name: ICM Contract:

ab Code: ICM Case No.: SAS No.: SDG No.: C-1

Matrix: (soil/water) WATER Lab Sample ID: PIBLK29

ample wt/vol: 1000.0 (g/mL) ML Lab File ID: HA2899

% Moisture: _____ decanted: (Y/N)___ Date Received: 00/00/00

xtraction: (SepF/Cont/Sonc) SEPF Date Extracted: 00/00/00

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/12/98

njection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.

CONCENTRATION UNITS:

COMPOUND (ug/L or ug/Kg) ug/L Q

319-84-6----alpha-BHC .025 U .025 319-85-7----beta-BHC U .025 319-86-8-----delta-BHC U 58-89-9----gamma-BHC (Lindane) .025 U 76-44-8-----Heptachlor .025 U .025 309-00-2----Aldrin U 1024-57-3-----Heptachlor epoxide .025 U 959-98-8----Endosulfan I .025 U 60-57-1----Dieldrin .050 U 72-55-9----4,4'-DDE .050 U 72-20-8-----Endrin .050 U 33213-65-9-----Endosulfan II .050 U 72-54-8----4,4'-DDD .050 U 1031-07-8----Endosulfan Sulfate .050 U 50-29-3----4,4'-DDT .050 U 72-43-5----Methoxychlor U . 25 53494-70-5----Endrin ketone .050 U 7421-93-4----Endrin aldehyde .050 U 5103-71-9----alpha-Chlordane .025 U 5103-74-2----gamma-Chlordane .025 U 8001-35-2----Toxaphene 2.5 U 12674-11-2-----Aroclor-1016 .50 U 11104-28-2----Aroclor-1221 .50 U .50 11141-16-5-----Aroclor-1232 U 53469-21-9-----Aroclor-1242 .50 U 12672-29-6-----Aroclor-1248 .50 U

11097-69-1-----Aroclor-1254

11096-82-5-----Aroclor-1260

.50

.50

U

U

Contract:

CONCENTRATION UNITS:

ab Code: ICM Case No.: SAS No.: SDG No.: C-1

Matrix: (soil/water) WATER Lab Sample ID: PIBLK30

ample wt/vol: 1000.0 (g/mL) ML Lab File ID: HA2911

Lab Name: ICM

% Moisture: _____ decanted: (Y/N)___ Date Received: 00/00/00

xtraction: (SepF/Cont/Sonc) SEPF Date Extracted: 00/00/00

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/12/98

njection Volume: 1.0 (uL) Dilution Factor: 1.0

CPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO. COMPOUND (ug/L or ug/Kg) ug/L Q .025 319-84-6----alpha-BHC .025 319-85-7----beta-BHC U 319-86-8-----delta-BHC .025 U 58-89-9-----qamma-BHC (Lindane) .025 U 76-44-8-----Heptachlor .025 U 309-00-2----Aldrin .025 U 1024-57-3-----Heptachlor epoxide .025 U 959-98-8-----Endosulfan I U .025 60-57-1-----Dieldrin .050 U 72-55-9----4,4'-DDE U .050 U 72-20-8----Endrin .050 33213-65-9-----Endosulfan II U .050 72-54-8----4,4'-DDD .050 U 1031-07-8-----Endosulfan Sulfate U .050 50-29-3----4,4'-DDT .050 U .25 72-43-5----Methoxychlor U 53494-70-5----Endrin ketone .050 U 7421-93-4----Endrin aldehyde .050 U 5103-71-9----alpha-Chlordane .025 U 5103-74-2----gamma-Chlordane .025 U 8001-35-2----Toxaphene 2.5 U 12674-11-2----Aroclor-1016 .50 U .50 11104-28-2----Aroclor-1221 U 11141-16-5-----Aroclor-1232 .50 U .50 53469-21-9-----Aroclor-1242 U 12672-29-6-----Aroclor-1248 .50 U 11097-69-1-----Aroclor-1254 .50 U 11096-82-5----Aroclor-1260 .50 U

1042

EPA SAMPLE NO.

C-1 MS

ab Name: ICM

Contract:

ab Code: ICM Case No.:

SAS No.:

SDG No.: C-1

Matrix: (soil/water) SOLID

Lab Sample ID: 279859

ample wt/vol:

30.0 (g/mL) G Lab File ID: HA2909

% Moisture: 0. decanted: (Y/N) N Date Received: 12/22/97

xtraction: (SepF/Cont/Sonc) SONC

Date Extracted: 12/30/97

Concentrated Extract Volume: 10000 (uL)

Date Analyzed: 01/12/98

njection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: ____

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/Kg Q

58-89-9gamma-BHC (Lindane)	13.	
76-44-8Heptachlor	13.	
309-00-2Aldrin	15.	4
60-57-1Dieldrin	32.	1
72-20-8Endrin	38.	-1
50-29-34,4'-DDT	39.	
12674-11-2Aroclor-1016	33.	U
11104-28-2Aroclor-1221	33.	U
11141-16-5Aroclor-1232	33.	U
53469-21-9Aroclor-1242	33.	U
12672-29-6Aroclor-1248	33.	U
11097-69-1Aroclor-1254	140.	1
11096-82-5Aroclor-1260	290.	1

EPA SAMPLE NO.

C-1 MSD

ab Name: ICM Contract:

ab Code: ICM Case No.: SAS No.: SDG No.: C-1

Matrix: (soil/water) SOLID Lab Sample ID: 279859

ample wt/vol: 30.0 (g/mL) G Lab File ID: HA2910

% Moisture: 0. decanted: (Y/N) N Date Received: 12/22/97

xtraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/30/97

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/12/98

njection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/Kg Q

58-89-9gamma-BHC (Lindane)	11.	1	
76-44-8Heptachlor	12.	1	
309-00-2Aldrin	12.		
60-57-1Dieldrin	26.		
72-20-8Endrin	31.		
50-29-34,4'-DDT	32.	- 10	
12674-11-2Aroclor-1016	33.	U	
11104-28-2Aroclor-1221	33.	U	
11141-16-5Aroclor-1232	33.	U	
53469-21-9Aroclor-1242	33.	U	
12672-29-6Aroclor-1248	33.	U	
11097-69-1Aroclor-1254	78.		P
11096-82-5Aroclor-1260	170.	10	

BLK SP Contract:

CONCENTRATION UNITS:

Lab Name: ICM

SAS No.: SDG No.: C-1 ab Code: ICM Case No.:

Matrix: (soil/water) SOLID Lab Sample ID: BLK SP

ample wt/vol: 30.0 (g/mL) G Lab File ID: HA2901

% Moisture: 0. decanted: (Y/N) N Date Received: 12/22/97

xtraction: (SepF/Cont/Sonc) SONC Date Extracted: 12/30/97

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 01/12/98

_njection Volume: 1.0 (uL) Dilution Factor: 1.0

TPC Cleanup: (Y/N) N pH: ____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	(ug/L or	ug/Kg)	ug/Kg	Q
309-00-2 60-57-1 72-20-8 50-29-3 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1	gamma-BHC (L:HeptachlorAldrinEndrinAroclor-1016Aroclor-1221Aroclor-1232Aroclor-1242Aroclor-1248Aroclor-1254	indane)		19. 18. 17. 39. 45. 40. 33. 33. 33. 33.	מממממ

EPA SAMPLE NO.

QA QC

ab Name: ICM Contract:

ab Code: ICM

Case No.:

SDG No.: C-1 SAS No.:

Matrix: (soil/water) SOLID Lab Sample ID: QA QC

30.1 (g/mL) G ample wt/vol: Lab File ID: HA2886

Moisture: 0. decanted: (Y/N) N Date Received: 12/22/97

Date Extracted: 12/30097 xtraction: (SepF/Cont/Sonc) SONC

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/31/97

njection Volume: 1.0 (uL) Dilution Factor: 1.0

CPC Cleanup: (Y/N) N Sulfur Cleanup: (Y/N) N pH:

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) ug/Kg 0 340. 12674-11-2----Aroclor-1016 33. 11104-28-2-----Aroclor-1221 U 11141-16-5-----Aroclor-1232 33. U 53469-21-9----Aroclor-1242 33. U 12672-29-6----Aroclor-1248 33. U 11097-69-1-----Aroclor-1254 33. U 11096-82-5----Aroclor-1260 400.

APPENDIX G

Soil Disposal Characterization Sampling Data Package

INDUSTRIAL CORROSION MANAGEMENT, INC. 1152 Route 10 Randolph, NJ 07869 973-584-0330, FAX: 973-584-0515 DECEMBER 30, 1997

Certified for: NJ, PA, DE, CT, NY(DOH) NJ #14116 NY #11376 US EPA CLP Lab

PCB Results Analysis by Gas Chromatography

Lab Number: 279880

Client: ROUX ASSOCIATES, INC. Sample source: AMTRAK OU-1/05552Y05 Sample ID: SP-1

Sample ID: SP-1
Sample date: 12/19/97
Sampled by: Customer
At lab date: 12/22/97
Matrix: SOIL

Batch #: QPC7445 Extraction date: 12/26/97 Weight/Volume: 20g Dilution Factor: 5 Column used: DB 1701/DB 608
Analysis date: 12/30/97
Final Volume: 50ml
Sample Moisture: 15.69%

ANALYTE NAME	RESULT UG/KG	METHOD BLANK RESULT UG/KG	PRACTICAL QUANTITATION LIMIT UG/KG	MINIMUM DETECTION LIMIT UG/KG
Aroclor-1016	II.	Ü	300	150
Aroclor-1221	Ü	Ŭ	590	420
Aroclor-1232	Ū	Ü	300	240
Aroclor-1242	Ü	U	300	150
Aroclor-1248	U	U	300	180
Aroclor-1254	U	U	300	210
Aroclor-1260	4900	U	300	240

UG/KG = micrograms/kilogram or ppb
Results are in ug/kg, they are reported on a dry weight basis.

U: Indicates a compound was analyzed for but not detected at the PQL J: Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit but greater than zero.

specified detection limit but greater than zero.

B: Indicates that the analyte was found in the blank as well as the sample. It indicates possible/probable blank contamination.

ND: Not Determined.

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INDUSTRIAL CORROSION MANAGEMENT, INC. 1152 Route 10 Randolph, NJ 07869 973-584-0330, FAX: 973-584-0515 DECEMBER 30, 1997

Certified for: NJ, PA, DE, CT, NY(DOH) NJ #14116 NY #11376 US EPA CLP Lab

PCB Results Analysis by Gas Chromatography

Lab Number: 279881

ROUX ASSOCIATES, INC. Client: Sample source: AMTRAK OU-1/05552Y05 Sample ID: SP-2

12/19/97 Sample date: Sampled by: Customer At lab date: 12/22/97 Matrix: SOIL

QPC7445 Batch #: Extraction date: 12/26/97 Weight/Volume: 20g Dilution Factor:

DB 1701/DB 608 Column used: Analysis date: 12/29/97 10ml Final Volume:

Sample Moisture: 6.88%

METHOD PRACTICAL MINIMUM BLANK QUANTITATION DETECTION RESULT RESULT LIMIT LIMIT ANALYTE NAME UG/KG UG/KG UG/KG UG/KG Aroclor-1016 U 54 Aroclor-1221 110 75 U U Aroclor-1232 TT U 54 43 Aroclor-1242 U 54 27 54 Aloclor-1248 U U 32 Aroclor-1254 U U 54 38 Aroclor-1260 950

UG/KG = micrograms/kilogram or ppb
Results are in ug/kg, they are reported on a dry weight basis.

Indicates a compound was analyzed for but not detected at the PQL Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit but greater than zero. Indicates that the analyte was found in the blank as well as the sample. It indicates possible/probable blank contamination.

ND: Not Determined.

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INDUSTRIAL CORROSION MANAGEMENT, INC.

1152 Route 10 Randolph, NJ 07869 973-584-0330, FAX: 973-584-0515 DECEMBER 29, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)

NJ #14116 NY #11376

US EPA CLP Lab

TOXICITY CHARACTERISTIC LEACHING PROCEDURE

Leachate Analysis

Lab Number:

279882

Client:

ROUX ASSOCIATES, INC. AMTRAK 0U-1/05552Y05 SP-(1-2)

12/19/97

Sample source: Sample ID: Sample date: Sampled by: At lab date:

Customer 12/22/97 12/24/97

TCLP Ext. Date: Results in mg/L.

Parameter	Sample Result	Method Blank Analysis	Minimum Detection Limit	Dilution Factor	Analysis Date
Cadmium	0.081	U	0.010	1	12/26/97
Chromium	0.022	U	0.010	1	12/26/97
Lead	0.388	U	0.050	1	12/26/97

U = Not Detected

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ROB

INDUSTRIAL CORROSION MANAGEMENT, INC. 1152 Route 10 Randolph, NJ 07869 973-584-0330, FAX: 973-584-0515 DECEMBER 29, 1997

Certified for: NJ, PA, DE, CT, NY(DOH) NJ #14116 NY #11376 US EPA CLP Lab

LABORATORY ANALYSIS

All results are reported in mg/kg (ppm) dry weight basis unless otherwise stated.

Lab Number: 279882

Client: ROUX ASSOCIATES, INC.
Sample Source: AMTRAK OU-1/05552Y05
Sample ID: SP-(1-2)
Sample matrix: SOIL

Sample Source: AFRICAN OF Sample ID: SP-(1-2)
Sample matrix: SOIL 12/19/97
Sampled by: Customer At lab date: 12/22/97
% Moisture: 9.61%

PARAMETER DILUTION RESULT BLANK DETECTION ANALYSIS DATE

DILUTION RESULT BLANK DETECTION ANALYSIS DATE

DILUTION DETECTION ANALYSIS DATE

< = Less than
> = Greater than
U= Not detected, NA= Not applicable.

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1152 Route 10

Randolph, NJ 07869 973-584-0330, FAX: 973-584-0515 DECEMBER 31, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376

US EPA CLP Lab

PCB Results Analysis by Gas Chromatography

Lab Number:

280004

Client:

ROUX ASSOCIATES, INC. Sample source: Amtrack S Syd/05552Y05

Sample ID: Sample date: SP-3 12/22/97 Customer

Sampled by: At lab date:

Matrix:

12/23/97 SOIL

Batch #: Extraction date: Weight/Volume:

Dilution Factor:

QPC7443 12/29/97 30g 10

Column used: Analysis date: Final Volume:

DB 1701/DB 608 12/30/97

100ml Sample Moisture: 18.97%

ANALYTE NAME	RESULT UG/KG	METHOD BLANK RESULT UG/KG	PRACTICAL QUANTITATION LIMIT UG/KG	MINIMUM DETECTION LIMIT UG/KG
Aroclor-1016		11	410	200
Aroclor-1221	Ü	Ü	820	580
Aroclor-1232	Ū	Ŭ	410	330
Aroclor-1242	Ü	U	410	200
Aroclor-1248	U	U	410	250
Aroclor-1254	U	U	410	290
Aroclor-1260	4400	U	410	330

UG/KG = micrograms/kilogram or ppb
Results are in ug/kg, they are reported on a dry weight basis.

Indicates a compound was analyzed for but not detected at the PQL Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit but greater than zero. Indicates that the analyte was found in the blank as well as the sample. It indicates possible/probable blank contamination.

ND: Not Determined.

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INDUSTRIAL CORROSION MANAGEMENT, INC. 1152 Route 10

Randolph, NJ 07869

973-584-0330, FAX: 973-584-0515 DECEMBER 30, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376 US EPA CLP Lab

PCB Results Analysis by Gas Chromatography

280005 Lab Number:

ROUX ASSOCIATES, INC. Client: Sample source: Amtrack S Syd/05552Y05 Sample ID: SP-4

12/22/97 Sample date: Sampled by: At lab date: Customer 12/23/97 Matrix: SOIL

QPC7443 Batch #: Extraction date: 12/29/97 Weight/Volume: 30g Dilution Factor:

Column used: Analysis date: Final Volume: DB 1701/DB 608 12/29/97

10ml Sample Moisture: 7.23%

ANALYTE NAME	RESULT UG/KG	METHOD BLANK RESULT UG/KG	PRACTICAL QUANTITATION LIMIT UG/KG	MINIMUM DETECTION LIMIT UG/KG	
Aroclor-1016	U	U	36	18	
Aroclor-1221	U	U	72	50	
Aroclor-1232	U	U	36	29	
Aroclor-1242	Ü	U	36	18	
Aroclor-1248	Ü	U	36	22	
Aroclor-1254	U	U	36	25	
Aroclor-1260	24J	U	36	29	

UG/KG = micrograms/kilogram or ppb
Results are in ug/kg, they are reported on a dry weight basis.

Indicates a compound was analyzed for but not detected at the PQL Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the

specified detection limit but greater than zero.
Indicates that the analyte was found in the blank as well as the sample. It indicates possible/probable blank contamination.

ND: Not Determined.

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INDUSTRIAL CORROSION MANAGEMENT, INC.

1152 Route 10

Randolph, NJ 07869 973-584-0330, FAX: 973-584-0515 DECEMBER 29, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)

NJ #14116 NY #11376

US EPA CLP Lab

TOXICITY CHARACTERISTIC LEACHING PROCEDURE

Leachate Analysis

Lab Number:

280006

Client: Sample source:

ROUX ASSOCIATES, INC. Amtrack OU-1/05552Y05

Sample ID:

SP-(3.4)12/22/97

Sample date: Sampled by: At lab date:

Customer 12/23/97

TCLP Ext. Date: 12/24/97

Results in mg/L.

Parameter	Sample Result	Method Blank Analysis	Minimum Detection Limit	Dilution Factor	Analysis Date
Cadmium	0.068	U	0.010	1	12/26/97
Chromium	U	U	0.010	1	12/26/97
Lead	2.18	U	0.050	1	12/26/97

U = Not Detected

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INDUSTRIAL CORROSION MANAGEMENT. INC. 1152 Route 10 Randolph. NJ 07869 973-584-0330. FAX: 973-584-0515 DECEMBER 29. 1997

Certified for: NJ. PA. DE. CT. NY(DOH NJ #14116 NY #11376 US EPA CLP Lab

LABORATORY ANALYSIS

All results are reported in mg/kg (ppm) dry weight basis unless otherwise stated.

Lab Number: 280006

ROUX ASSOCIATES, INC. Amtrack OU-1/05552Y05

Client: Sample Source: Sample ID: Sample matrix: SP-(3,4) SOIL 12/22/97 Sample date: Sampled by: At lab date: % Moisture: Customer 12/23/97 15.75%

MINIMUM DILUTION METHOD DETECTION ANALYSIS PARAMETER FACTOR RESULT BLANK LIMIT

uil & Grease 1 3840 U 300 12/24/97

< = Less than
> = Greater than

U= Not detected, NA= Not applicable.

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APPENDIX H

Soil Disposal Records

1000 New Ford Mill Road Morrisville, PA 19067

(215) 736-9400 (215) 736-9475 Laboratory

	NON-HAZARDOUS WASTE MANIFEST
1.	Generator of Waste (must be filled in by producer) EPA I.D. No
	Pick-up Address 39-29 Honeywell St. Long Island City WY (State) Telephone Number: 212 630-7695 SIC No. Waste Stream Identification: This manifest represents a non-hazardous waste as per E.P.A. and PA D.E.R. regulations
t.	Tons: Cubic Yards: Other (Specify): Name of Waste NON HAZARDOUS SOLY, NON D.O.T. REGULATED Special Handling Instructions, if any: PILE
-	PROFILE/WASTE STREAM I.D. NUMBER: 338178M
pac.	is to certify that the above named materials are properly classified, described, kaged, marked, and labeled and are in proper condition for transportation according pplicable state and federal law. The wastes were consigned to the transporter ned. I certify that the foregoing is true and correct to the best of my knowledge. Signature: Signature: Signature:
2.	Hauler of Waste (must be filled-in by hauler) EPA I.D. No. COMPANY NAME: TSD ADDRESS: WAYNE N. T Pick-up Date: 1/30/98 Truck No. 3/ Vehicle Lic. No. T4E 225

The above described waste was picked up and hauled by me to the disposal facility named below and was accepted. I certify under penalty of perjury that the foregoing

3. Disposer of Waste (must be filled-in by disposer) CIRCLE ONE:

G.R.O.W.S., INC. 1513 Bordentown Road Morrisville, PA 19067 Permit #100148

is true and correct.

T.R.R.F. 200 Bordentown Road Tullytown, PA 19007 Permit #101494

Waste subject to this manifest was delivered by the above hauler to this disposal facility and accepted on______(DISP

Signature of authorized agent and title:

Signature of authorized agent and title:

(DISPOSAL DATE)

CUSTOMER SERVICE 1-8005778-1979-

914378 DATE: 01/30/98 TIME: 14:29-15:08

CUSTOMER: 665

CLEAN HARBORS ENVIRONMENTAL-EDISON

PROFILE: 338178N HAULER:

TRUCK: 0031 WASTE: CON CONTAMINATED SOIL -MANIFEST: 25918

NATIONAL RAILROAD PASSENGER CONTAM. SOIL/SITE CLEA PCT WGT/VO ORIGIN NEW JERSEY 100 6560

GROSS: 100160 LBS

TARE: 34560 LBS

NET: 65600 LBS 32.80 TONS

TONS DUMPED TODAY: 56. NO

SIGN

WASTE MANAGEMENT OF PENNSYLVANIA, INC. 1000 New Ford Mill Road Morrisville, PA 19067

(215) 736-9400 (215) 736-9475 Laboratory

_	NON-HAZARDOUS	WASTE MANIFEST 484931	
1.	Generator of Waste (must be filled in by pro	ducer) EPA I.D. No	395
	Company Name: (Print or Type) Amtrak Nat	ional Railroad Passenger Corp.	
	Pick-up Address 39-29 Honeywell St. (No.) (Street)	Long Island City	NY (Signe)
	Telephone Number: 212 630-7695	SIC No	
	Waste Stream Identification:This manifest repre	sents a non-hazardous waste as per E.P.A. ar	nd PA D.E.R. regulations
	Tons: 22 Cubic Yards:	Other (Specify)):
	Name of Waste NON HAZARDOUS SOIL	, NON D.O.T. RECULATED	
	Special Handling Instructions, if any: OPS P	n.e	
	PROFILE/WASTE STREAM I.D. NUMBER:	338178N	
_	Hauler of Waste (must be filled-in by hauler)	Signature: Man (Name and	
2.	Hauler of Waste (must be filled-in by hauler)	EPA I.D. No	
	COMPANY NAME: (aud))	
	ADDRESS: 3.10 P.		
	Pick-up Date: 1/2)/93 Truck No	Vehicle Lic. N	0. A(3117)
	The above described waste was picked named below and was accepted. I certify is true and correct. Signature of authorized agent and title:		
3.	Disposer of Waste (must be filled-in by dispo	ser) CIRCLE ONE:	
- 10	G.R.O.W.S., INC. 1513 Bordentown Road Morrisville, PA 19067 Permit #100148	T.R.R.F. 200 Bordentown Road Tullytown, PA 19007 Permit #101494	* *
.	Waste subject to this manifest was delivered facility and accepted on	1 17 (1)	osal DISPOSAL DATE
	Signature of authorized agent and title:	- CXVIII	

4-

CUSTOMER SERVICE 1-300-778-NC47

913419

DATE: 01/27/98

TME: 11:21-12:05

CLEAN HARBORS ENVIRONMENTAL-EDISON

HAULER:

PROFILE: 338178N

TRUCK: 20C3

WASTE: CON CONTAMINATED SOIL -

MANIFEST: 25923

NATIONAL RAILROAD PASSENGER CONTAM. BOIL/SITE CLEA

DRIGIN NEW JERSEY PCT WGT/VOL 100 48401

GROSS: 76140 LBS

TARE: 27740 LBS

NET: 48400 LBS 24.20 TONS

TONS DUMPED TODAY:

162.04

0015566 REMARKS

WASTE MANAGEMENT OF PENNSYLVANIA, INC. 1000 New Ford Mill Road Morrisville, PA 19067

) 736-9400) 736-9475 Laboratory NON-HAZARDOU	JS WASTE MANIFEST 384931					
1.	Generator of Waste (must be filled in by producer) EPA I.D. No. NVD078516895						
	Company Name: (Print or Type) Amtrak National Railroad Passenger Corp.						
	Pick-up Address 39-29 Honeywell St.						
	Telephone Number: 212 630-7695 SIC No						
		Other (Specify):					
	Name of Waste NON HAZARDOUS SOIL, NON D.O.T. REGULATED						
	Special Handling Instructions, if any: OPS PILE						
	PROFILE/WASTE STREAM I.D. NUMBER:	338178N					
2.	Signature: Mal Mr. (Name and Title) Hauler of Waste (must be filled-in by hauler) EPA I.D. No. COMPANY NAME: Cocs Name and Title)						
	ADDRESS: 8_{13}						
	Pick-up Date: 1/7-18 Truck No.	. 04 Vehicle Lic. No. AC 1336					
	The above described waste was picked up and hauled by me to the disposal facility named below and was accepted. I certify under penalty of perjury that the foregoing is true and correct. Signature of authorized agent and title:						
3.	Disposer of Waste (must be filled-in by disp	poser) CIRCLE ONE:					
	G.R.O.W.S., INC. 1513 Bordentown Road Morrisville, PA 19067 Permit #100148	T.R.R.F. 200 Bordentown Road Tullytown, PA 19007 Permit #101494					
3	Waste subject to this manifest was delivered facility and accepted on	ed by the above hauler to this disposal (DISPOSAL DATE					

Signature of authorized agent and title:_

CUSTOMER SERVICE 1-300-778-NC5-

913416

DATE: 01/27/98

IME: 11:18-12:03

100

524

CUSTOMER: 665

CLEAN HARBORS ENVIRONMENTAL-EDISON

HAULER: PROFILE: 338178N

TRUCK: 0004 WASTE: CON CONTAMINATED SOIL - MANIFEST: 25914

NATIONAL RAILROAD PASSENGER CONTAM, SOIL/SITE CLEA
ORIGIN PCT WGT/VI

NEW JERSEY

GROSS: 80520 LBS

TARE: 28100 LBS

NET: 52420 LBS = 26.21 TONS

TONS DUMPED TODAY: 137.84

0015566 REMARKS SIGN ALL

WASTE MANAGEMENT OF PENNSYLVANIA, INC. 1000 New Ford Mill Road Morrisville, PA 19067

(215) 736-9400 (215) 736-9475 Laboratory

		MS4931					
1.	Generator of Waste (must be filled in by producer) EPA I.D. No. xxxxxxxxxx						
	Company Name: (Print or Type) Amtrak National Reilroad Passenger Corp.						
	Pick-up Address 39-29 Honeywell St. (No.) (Street) Telephone Number: 212 630-7695	Long Island City	(State)				
	Telephone Number: 212 630-7695	SIC No					
	Waste Stream Identification: This manifest represents a non-hazardo	ous waste as per E.P.A. and F	PA D.E.R. regulations				
	Tons: 22 Cubic Yards:	Other (Specify):_					
	Name of Waste NON HAZARDOUS SOIL, NON D.O.T. R	ECULATED					
1	Special Handling Instructions, if any: ops pile						
	DOCTI E JUA COR CORDEAN LO MUNDED		1				
1	PROFILE/ WASTE STREAM I.D. NUMBER: 338178N		-				
Date 2.	Hauler of Waste (must be filled-in by hauler) EPA I.D. No.	(Name and Ti	tle)				
	COMPANY NAME: Coastile						
	ADDRESS: Br. 5 2 R		Neg.				
	Pick-up Date: 130196 Truck No. 04	Vehicle Lic. No.	ACBOE				
	The above described waste was picked up and hauled named below and was accepted. I certify under penalty is true and correct. Signature of authorized agent and title:	d by me to the disp of perjury that the	osal facility foregoing				
	Signature of authorized agent and title:						
3.	Disposer of Waste (must be filled-in by disposer) CIRCL	E ONE:	-11				
	G.R.O.W.S., INC. T.R.R.F.		weeks y so				
/		ntown Road	W as set				
(Permit #100148 Permit #10		r - ∀ " - 65 - 4				
	Waste subject to this manifest was delivered by the above facility and accepted on		al SPOSAL DATE)				
	Signature of authorized agent and title:	al lah	- 19				

914244

DATE: 01/30/98

TIME: 10:20-10:

CUSTOMER: 665

CLEAN HARBORS ENVIRONMENTAL-EDISON

HAULER.

PROFILE: 338178N

TRUCK: 0004 WASTE: CON CONTAMINATED SOIL - MANIFEST: 25920

NATIONAL RAILROAD PASSENGER CONTAM. SOIL/SITE CLE ORIGIN

NEW JERSEY

PCT WGT/ 100

75160 LBS

TARE: 27960 LBS

NET: 47200 LBS

TONS DUMPED TODAY:

23.60

with the second of the second

0015566 REMARKS

WASTE MANAGEMENT OF PENNSYLVANIA, INC. 1000 New Ford Mill Road

Morrisville, PA 19067

(215) 736-9400

(215) 736-9475 Laboratory

1. Generator of Waste (must be filled in by producer) EPA I.D. No. :::TDG28516895 Company Name: (Print or Type)	()	NON-HAZ	ARDOUS WAS	STE MANIFEST	S4931		
Pick-up Address 39-29 Honeywell St. Long Teland City NY (State) Telephone Number: 212 630-7695 SIC No. Waste Stream Identification: This manifest represents a non-hazardous waste as per E.P.A. and PA.D.E.R. regulations Tons: ZZ Cubic Yards: Other (Specify): Name of Waste NON HAZARDOUS SOIL, NON D.O.T. REGULATED Special Handling Instructions, if any: OBS PILE PROFILE/WASTE STREAM I.D. NUMBER: 338178N This is to certify that the above named anateticals are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to applicable state and federal law. The wastes were consigned to the transporter named. I certify that the foregoing is true and correct to the best of my knowledge. Date: 128/98 Signature: half foregoing is true and correct to the best of my knowledge. 2. Hauler of Waste (must be filled in by hauler) EPA I.D. No. ADDRESS: 125/17 Truck No. 19 Vehicle Lic. No. Absulpt The above described waste was picked up and hauled by me to the disposal facility named below and was accepted. I certify under penalty of perjury that the foregoing is true and correct. Signature of authorized agent and title: 18 M.	1.	Generator of Waste (must be filled in by producer) EPA I.D. No::YDG78516895					
Telephone Number: 212 630-7695 Waste Stream Identification: This manifest represents a non-hazardous waste as per E.P.A. and PAD.E.R. regulations Tons: ZZ Cubic Yards: Other (Specify): Name of Waste NON HAZARDOUS SOIL, NON D.O.T. REGULATED Special Handling Instructions, if any: OPS PILE PROFILE/WASTE STREAM I.D. NUMBER: 338178N This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to applicable state and federal law. The wastes were consigned to the transporter named. I certify that the foregoing is true and correct to the best of my knowledge. Date: 128/98 Signature: No. 149 Pick-up Date: 125/97 Truck No. 149 Vehicle Lic. No. Absulpt Televander of authorized agent and title: No. Absulpt Televander of A		Company Name: (Print or Type)_4	ntrak National	Railroad Passenge	r Corp.		
Waste Stream Identification: This manifest represents a non-hazardous waste as per E.P.A. and PADE.R. regulations Tons: ZZ Cubic Yards: Other (Specify): Name of Waste NON BAZARDOUS SOIL, NON D.O.T. REGULATED Special Handling Instructions, if any: OPS PILE PROFILE/WASTE STREAM I.D. NUMBER: 338178N This is to certify that the above named anateticis are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to applicable state and federal law. The wastes were consigned to the transporter named. I certify that the foregoing is true and correct to the best of my knowledge. Date: U2B/9B Signature: Ask How No. How Instruction according to applicable state and federal law. The wastes were consigned to the transporter named. I certify that the foregoing is true and correct to the best of my knowledge. Date: U2B/9B Signature: Ask How No. How No. How Instruction is true and correct to the best of my knowledge. 2. Hauler of Waste (must be filled in by hauler) EPA I.D. No. Hard Total Company NAME: UM No. How No.		Pick-up Address 39-29 Honeywell (No.) (Street)	St.			NY (State)	
Name of Waste NON RAZARDOUS SOIL, NON D.O.T. RECULATED Special Handling Instructions, if any: OPS PILE PROFILE/WASTE STREAM I.D. NUMBER: 338178N This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to applicable state and federal law. The wastes were consigned to the transporter named. I certify that the foregoing is true and correct to the best of my knowledge. Date: 1/26/98 Date: 1/26/98 COMPANY NAME: WM Signature: No. 1/26 Pick-up Date: 1/25/97 Truck No. 1/27 Truck No. 1/27 Pick-up Date: 1/25/97 Truck No. 1/27 Truck No. 1/27 The above described waste was picked up and hauled by me to the disposal facility named below and was accepted. I certify under penalty of perjury that the foregoing is true and correct. Signature of authorized agent and title: No. 1/26 3. Disposer of Waste (must be filled-in by disposer) CIRCLE ONE: T.R.F. 200 Bordentown Road Morrisville, PA 19067 Permit # 100148 Waste subject to this manifest was delivered by the above hauler to this disposal facility and accepted on (DISPOSAL DATE)		Telephone Number: 212 630-7695	+	SIC N	Vo		
Name of Waste NON HAZARDOIDS SOTIL, NON D.O.T. RECULATED Special Handling Instructions, if any:OPS_PTILE PROFILE/WASTE STREAM I.D. NUMBER:		Waste Stream Identification: This m	anifest represents a	non-hazardous waste as pe	r E.P.A. and PA I	D.E.R. regulations	
PROFILE/WASTE STREAM I.D. NUMBER: 338178N This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to applicable state and federal law. The wastes were consigned to the transporter named. I certify that the foregoing is true and correct to the best of my knowledge. Date: 128/98 Signature: 128/98 Line 128/98 Signature: 128/98 COMPANY NAME: 128/98 ADDRESS: 128/97 Truck No. 128/98 Pick-up Date: 128/97 The above described waste was picked up and hauled by me to the disposal facility named below and was accepted. I certify under penalty of perjury that the foregoing is true and correct. Signature of authorized agent and title: 188/188. Signature of authorized agent and title: 188/188. T.R.R.F. 200 Bordentown Road Morrisville, PA 19067 Permit #100148 Waste subject to this manifest was delivered by the above hauler to this disposal facility and accepted on (DISPOSAL DATE)		Tons: 27 Cubic	Yards:	Other (Specify):		
PROFILE/WASTE STREAM I.D. NUMBER: 338178N This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to applicable state and federal law. The wastes were consigned to the transporter named. I certify that the foregoing is true and correct to the best of my knowledge. Date: 128/98 Signature:		Name of Waste NON HAZARI	OUS SOIL, NON	D.O.T. REGULATED			
This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to applicable state and federal law. The wastes were consigned to the transporter named. I certify that the foregoing is true and correct to the best of my knowledge. Date: 128 98		Special Handling Instructions, if an	y: OPS PILE				
packaged, marked, and labeled and are in proper condition for transportation according to applicable state and federal law. The wastes were consigned to the transporter named. I certify that the foregoing is true and correct to the best of my knowledge. Date: 128/98 Signature: half for the foregoing is true and correct to the best of my knowledge. 2. Hauler of Waste (must be filled-in by hauler) EPA I.D. No. 14-14-38 COMPANY NAME: 11-14-14-15 Pick-up Date: 125/97 Truck No. 19-14-14-15 The above described waste was picked up and hauled by me to the disposal facility named below and was accepted. I certify under penalty of perjury that the foregoing is true and correct. Signature of authorized agent and title: 15-13 Bordentown Road Morrisville, PA 19067 Permit #100148 Waste subject to this manifest was delivered by he above hauler to this disposal facility and accepted on (DISPOSAL DATE)		PROFILE/WASTE STREAM I.D. NU	MBER: 3	38178N			
The above described waste was picked up and hauled by me to the disposal facility named below and was accepted. I certify under penalty of perjury that the foregoing is true and correct. Signature of authorized agent and title: G.R.O.W.S., INC. 1513 Bordentown Road Morrisville, PA 19067 Permit #100148 Waste subject to this manifest was delivered by the above hauler to this disposal facility and accepted on (DISPOSAL DATE)	to and the state of the state o	Hauler of Waste (must be filled-in bed) COMPANY NAME: WM IN ADDRESS: Wilson is true.	Sign Hauler) EPA	e consigned to the ct to the best of my mature: halk	transporter knowledge (Name and Title)		
G.R.O.W.S., INC. 1513 Bordentown Road Morrisville, PA 19067 Permit #100148 Waste subject to this manifest was delivered by the above hauler to this disposal facility and accepted on (DISPOSAL DATE)		The above described waste was named below and was accepted.	I certify unde	nd hauled by me to er penalty of perjury M(Guic	the dispos y that the fo	al facility regoing	
Waste subject to this manifest was delivered by he above hauler to this disposal facility and accepted on (DISPOSAL DATE)	3.	Disposer of Waste (must be filled-in	by disposer)	CIRCLE ONE:			
facility and accepted on (DISPOSAL DATE)	(1513 Bordentown Road Morrisville, PA 19067	2	200 Bordentown Road fullytown, PA 19007	İ	10 X	
Signature of authorized agent and title:			delivered by	e above hauler to t			
		Signature of authorized agent and	title:	Miday/el			

LLGTD MEH: -05

LLEAN HARBORS ENVISONMENTAL-EDISON

--- UI = 1

JASTE: CON "ONTIMINATED SOIL -700h: .009

MONIFEST: 15931 NATIONAL RAILROAD PASSENGER CONTAM. BOIL/SITE CLER

PRETE TAITEN

ORIGIN NEW JERSEY PCT WGT/VC 100

GROSS: 89800 LBS

TARE: 26000 LBS

NET: 63800 LBS = 31.90 TONS

TONS DUMPED TODAY:

0015566 REMARKS SIGN

Document Refer No. 97 25927

(215) 736-9400 (215) 736-9475 Laboratory

NON-HAZARDOUS WASTE MANIFEST MS4931

-		TOTO 75 51 6 9 0				
1.	Generator of Waste (must be filled in by prod					
	Company Name: (Print or Type) Amtrak National Railroad Passenger Corp.					
	Pick-up Address 39-29 Honeywell St.	Long Island City				
	Telephone Number: 212 630-7695	(City) SIC No.	(State)			
		ents a non-hazardous waste as per E.P.A. and	PA D.E.R. regulations			
	22	Other (Specify):	-30			
	Name of Waste NON HAZARDOUS SOIL,	NON D.O.T. REGULATED				
	Special Handling Instructions, if any: OPS PI	LE				
-	PROFILE/WASTE STREAM I.D. NUMBER:	338178N				
2.	Hauler of Waste (must be filled-in by hauler) COMPANY NAME: HAGE ENTY					
	ADDRESS: WAS HINTON, N.J					
	Pick-up Date: 1/28/78 Truck No	.7 Vehicle Lic. No.	T202KG			
	The above described waste was picked unamed below and was accepted. I certify is true and correct. Signature of authorized agent and title:	ip and hauled by me to the displant that the	oosal facility foregoing			
3.	Disposer of Waste (must be filled in by dispose	ser) CIRCLE ONE:				
.*	G.R.O.W.S., INC. 1513 Bordentown Road Morrisville, PA 19067 Permit #100148	T.R.R.F. 200 Bordentown Road Tullytown, PA 19007 Permit #101494	- · · · · · · · · · · · · · · · · · · ·			
	Waste subject to this manifest was delivered	by the above hauler to this dispo	sal			
	facility and accepted on		ISPOSAL DATE			
	Signature of authorized agent and title:	malaltall				

DATE: 11/28/98 TME: _1:30-13:26

JUSTOMER: OBE

CLEAN HARBORS ENVIRONMENTAL-EDISON

HAULEP:

PROFILE: 338178N

TRUCK: MOOT

WASTE: CON CONTAMINATED SOIL -

MANIFEST: 25927

NATIONAL RAILROAD PASSENGER CONTAM, SOIL/SITE CLEA

ORIGIN NEW JERSEY POT WGT/VOL 100 49140

GROSS: 81520 LBS

TARE: 32380 LBS

24.57 TONS NET: 49140 LBS

TONS DUMPED TODAY:

270.960

0015566

REMARKS

VASTE MANAGEMENT OF PENNSYLVANIA, INC. 1000 New Ford Mill Road Morrisville, PA 19067

(215) 736-9400 (215) 736-9475 Laboratory

NON-HAZARDOUS	WASTE MANIFES	ST :: :: :: :: :: :: :: :: :: :: :: :: ::

-					
1.	Generator of Waste (must be filled in by producer) EPA I.D. No				
	Company Name: (Print or Type) Amerak National Re	ailroad Passenger Corp.			
	Pick-up Address 39-29 Honeywell St.	Long Island City			
	Telephone Number: 212 630-7695		(State)		
	Waste Stream Identification: This manifest represents a nor		PA D.E.R. regulations		
	17	Other (Specify):_	4		
			6.		
	Name of Waste NON HAZARDOUS SOIL, NON D	O.T. REGULATED			
	Special Handling Instructions, if any: OPS PILE				
	PROFILE/WASTE STREAM I.D. NUMBER: 338:	178N	A second		
	ned. I certify that the foregoing is true and correct to As Agent for Antimo Signal	ture: Nall Low (Name and To	1		
2.	Hauler of Waste (must be filled-in by hauler) EPA I.I	D. No. JA 448			
	COMPANY NAME: H	K14			
	ADDRESS: Washington 115				
	Pick-up Date: 1/28/98 Truck No. 19		TITY HK		
	The above described waste was picked up and named below and was accepted. I certify under ris true and correct. Signature of authorized agent and title:				
3.	Disposer of Waste (must be filled-in by disposer)	CIRCLE ONE:			
	1513 Bordentown Road 200 Morrisville, PA 19067 Tully	R.F. Bordentown Road rtown, PA 19007 mit #101494			
	Waste subject to this manifest was delivered by the				
	facility and accepted on 3 1/2 8	196 1 (DI	SPOSAL DATE)		
	Signature of authorized agent and title:	My last Lab "			
_					

ST - M/26 +8 1:33-12:00

CLEAN MARBORS ENVIRONMENTAL-EDISON

Malu Line

PROF . 3. 338172N

TRUCK: 9197 WASTE: CON CONTAMINATED SOIL -

MANIFEST: L5930

NATIONAL RAILROAD PASSENGER CONTAM. COIL SITE CLEA ORIGIN

PCT WGT/VOL

NEW JERSEY

100 49206

GROSS: 81860 LBS

TARE: 32660 LBS

NET: 49200 LBS

24.60 TONS

TONS DUMPED TODAY:

197.45

0015566

REMARKS

WASTE MANAGEMENT OF PENNSYLVANIA, INC. 1000 New Ford Mill Road Morrisville, PA 19067

(215) 736-9400 (215) 736-9475 Laboratory

NON-HAZARDOUS	WASTE MANIFEST	
HOMINAMIDOOD	WHOLL MULTINI TO	MS4931

	TOTT IN LED COO WILD I	MS4931
1.	Generator of Waste (must be filled in by producer)	EPA I.D. No. ::YD078516895
	Company Name: (Print or Type) Antrak National R	ailroad Passenger Corp.
	Pick-up Address 39-29 Honeywell St.	Long Island City NY (City) (State)
	Telephone Number: 212 630-7695	
	Waste Stream Identification: This manifest represents a nor	n-hazardous waste as per E.P.A. and PA D.E.R. regulations
	Tons: 22 Cubic Yards:	Other (Specify):
	Name of Waste NON RAZARDOUS SOIL, NON D	.O.T. REGULATED
	Special Handling Instructions, if any: OPS PILE	
-	PROFILE/WASTE STREAM I.D. NUMBER: 338	178N
nan	replicable state and federal law. The wastes were of the following is true and correct to the following is true and the following is true and correct to the following is true and correct to the following is true and the	o the best of my knowledge.
2.	Hauler of Waste (must be filled-in by hauler) EPA I.I	D. No
	COMPANY NAME: SISK Trucking	T.A.K.
	ADDRESS: LBD; N	
	Pick-up Date: 1/28/98 Truck No. 11	Vehicle Lic. No. Ac 4018
	The above described waste was picked up and named below and was accepted. I certify under ris true and correct. Signature of authorized agent and title:	
3.	Disposer of Waste (must be filled-in by disposer)	CIRCLE ONE:
	1513 Bordentown Road 200 Morrisville, PA 19067 Tully	.R.F. Bordentown Road ytown, PA 19007 mit #101494
	Waste subject to this manifest was delivered by the facility and accepted on	above hauler to this disposal ODISPOSAL DATE
	Signature of authorized agent and title:	gold Tob

913710

DATE: 01/28/98 TIME: 11:40-12:08

1970WER. DAS

LEPN HARBORS ENVIRONMENTAL-EDISON

- MULL - F 1

PROFILE: 338176M

'RULK: 0011

WASTE: CON CONTAMINATED SOIL -

MANIFEST: 35929

NATIONAL RAILROAD PASSENGER CONTAM. SOIL/SITE CLEA

PCT WGT/VOL

ORIGIN NEW JERSEY

100 60860

GROSS: 87520 LBS

TARE: 26660 LBS

NET: 60860 LBS = 30.43 TONS

TONS DUMPED TODAY:

146.57) Side

0015566 REMARKS

SIGN

E

WASTE MANAGEMENT OF PENNSYLVANIA, INC. 1000, New Ford Mill Road Morrisville, PA 19067

(215) 736-9400 (215) 736-9475 Laboratory

NON-HAZARDOUS WASTE MANIFEST MS4931

1.	Generator of Waste (must be filled in by producer) EPA I.D. No. NYD078516895				
	Company Name: (Print or Type) Amtrak Nat:	ional Railroa	d Passenger Corp.		
	Pick-up Address 39-29 Honeywell St.		Long Island City	NY	
	Telephone Number: 212 630-7695		SIC No	(State)	
	Waste Stream Identification: This manifest repres	sents a non-hazardo	ous waste as per E.P.A. and P	A D.E.R. regulation	
	Tons: ZZ Cubic Yards:				
	Name of Waste NON HAZARDOUS SOIL				
	Special Handling Instructions, if any: OPS P				
	PROFILE/WASTE STREAM I.D. NUMBER:				
	THOTIEE WASTE STIEAN I.D. NOMBER.	330176R			
2.	Hauler of Waste (must be filled-in by hauler)		traile and the		
۷.	COMPANY NAME: Trucking				
	ADDRESS: LALI NI				
	Pick-up Date: 1/29/98 Truck No.	2 -		00 8	
	The above described waste was picked to				
	named below and was accepted. I certify				
	is true and correct. Signature of authorized agent and title:		24	· · · · · · · · · · · · ·	
3.	Disposer of Waste (must be filled-in by dispo	ser) CIRCI	E ONE:	n grati	
	G.R.O.W.S., INC.	T.R.R.F.		المواسق الهوات -	
(1513 Bordentown Road Morrisville, PA 19067 Permit #100148				
				al lacence of the second	
	Waste subject to this manifest was delivered facility and accepted on	28/98		al SPOSAL DATE	
	Signature of authorized agent and title:	nd	0/20	The later with	
	the second of th	2.5s. Y. 16.1bs.	4. 1	CANAGE	

LANDFILL (MAIL TO GENERATOR)

913709 DATE: 01/28/98

TIME: 11:38-12:08

CUSTOMER: 665

CLEAN HARBORS ENVIRONMENTAL-EDISON

HAULER:

PROFILE: 338178N

TRUCK: ØRLS

WASTE: CON CONTAMINATED SOIL -

MANIFEST: 25928

NATIONAL RAILROAD PASSENGER

CONTAM. SOIL/SITE CLEA PCT

NEW JERSEY

100

GROSS:

78800 LBS

26240 LBS

52560 LBS

TONS DUMPED TODAY:

172.85

institutional training primitive days a marketic consideration to the training properties and the constitution of the constitu

Document Refer No. 97 25917

(215) 736-9400 (215) 736-9475 Laboratory

	NON-HAZARDOUS	WASIE MANIFEST MS4931	
1.	Generator of Waste (must be filled in by prod	ducer) EPA I.D. No. <u>nyn078516895</u>	
	Company Name: (Print or Type) Amtrak Nati	onal Railroad Passenger Corp.	
	Pick-up Address 30 29 Hone well St.	Long Island City	(State)
	Telephone Number: 212 630-7695		444
	Waste Stream Identification:This manifest repres	ents anon-hazardous waste as per E.P.A. and I	PA D.E.R. regulations
	Tons: 22 Cubic Yards:		
	Name of Waste NON HAZARDOUS SOIL.	NON D.O.T. REGULATED	
	Special Handling Instructions, if any: ops pr	ILE -	
	PROFILE/WASTE STREAM I.D. NUMBER:	338178N	1
Date		mane did 11	(tle)
2.	Hauler of Waste (must be filled-in by hauler)	EPA I.D. No.	
	COMPANY NAME: Cocst live		
	ADDRESS: Bushel P		-
	Pick-up Date: 1/18/198 Truck No	Vehicle Lic. No.	AC3190
	The above described waste was picked unamed below and was accepted. I certify to		
	is true and correct. Signature of authorized agent and title:	4 22.	1
_		7	g week to give
3.	Disposer of Waste (must be filled-in by dispose	War We Wall &	1 801 4 1706
	G.R.O.W.S., INC. 1513 Bordentown Road	T.R.R.F. 200 Bordentown Road	and Mills
	Morrisville, PA 19067 Rermit #100148	Tullytown, PA 19007 Permit #101494	The second second
	Waste subject to this manifest was delivered	by-the/above/hauler to this dispos	
	7 december 1	1170160	
	facility and accepted on	1 1 1/2	al SPOSAL DATE)

CUSTOMER SERVICE 1-800-778-9797

913693

DATE: 01/28/98 TIME: .1:09-11:40

CUSTOMER: 365

CLEAN HARBORS ENVIRONMENTAL-EDISON

HAULER:

PROFILE: 338178N

TRUCK. 2003

WASTE: CON CONTAMINATED SOIL -

MANIFEST: 25917 CONTAM. SOIL/SITE CLEA

NATIONAL RAILROAD PASSENGER ORIGIN

PCT WGT/VOL

NEW JERSEY

100 47960

GROSS:

76220 LBS

TARE:

28260 LBS

NET:

47960 LBS = 23,98 TONS

TONS DUMPED TODAY:

116.14

0015566

REMARKS

SIGN

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WASTL MANAGEMENT OF PENNSYLVANIA, INC. 1000 New Ford Mill Road Morrisville, PA 19067 *

(215) 736-9400 (215) 736-9475 Laboratory

	NON-HAZARL	OUS WASIE MA	INIFEST MS4931	
1.	Generator of Waste (must be filled in b	y producer) EPA I	.D. No. NYD078516895	
	Company Name: (Print or Type) Amtrak	National Railro	ad Passenger Corp.	
	Pick-up Address 39-29 Honeywell St.		Long Island City	NY
	Telephone Number: 212 630-7695		SIC No	(State)
	Waste Stream Identification: This manifes	st represents a non-hazar	dous waste as per E.P.A. and	PA D.E.R. regulations
	Tons: 22 Cubic Yard	ds:	Other (Specify):_	
	Name of Waste NON HAZARDOUS	SOIL. NON D.O.T.	REGULATED	
	Special Handling Instructions, if any:a	PS PILE		
	PROFILE/WASTE STREAM I.D. NUMBE	R: 338178N		-10
Date 2.	Hauler of Waste (must be filled-in by ho		(Name and 1	
	ADDRESS: WS	9		
• •	1 7	No3	Vehicle Lic. No.	As 009B
	The above described waste was pic named below and was accepted. I ce is true and correct. Signature of authorized agent and title:	ertify under petial	ed by me to the disp ty of perjury that the	oosal facility foregoing
3.	Disposer of Waste (must be filled-in by	disposer) CIRO	CLE ONE:	·
ol.	G.B.O.W.S., INC. 1513 Bordentown Road Morrisville, PA 19067 Permit #100148	T.R.R.F. 200 Bord	dentown Road , PA 19007	
	Waste subject to this manifest was deliv	vered by the above	~~ ~ .	
•	facility and accepted on Signature of authorized agent and title:		OUP	ISPOSAL DATE)

CUSTOMER SERVICE 1-800-778-9797

DATE: 01/27/98 TIME: 11:17-12:02

CUSTOMER: 665

CLEAN HARBORS ENVIRONMENTAL-EDISON

HAULER:

PROFILE: 338178N

TRUCK: 0003

WASTE: CON CONTAMINATED SOIL -

MANIFEST: 25913

NATIONAL RAILROAD PASSENGER CONTAM. SOIL/SITE CLEA PCT WGT/VO

ORIGIN NEW JERSEY

100 4640

GROSS: 72600 LBS

TARE: 26200 LBS

NET: 46400 LBS

23.20 TONS

TONS DUMPED TODAY:

111.63

0015566 REMARKS

THE WOOD OF THE SERVICE SERVICE SERVICE SERVICE SERVICES SERVICES AND
WASTE MANAGEMENT OF PENNSYLVANIA, INC. 1000'New Ford Mill Road Morrisville, PA 19067

(215) 736-9400 (215) 736-9475 Laboratory

NON-HAZARDOUS WASTE MANIFEST MS4931

-				
1.	Generator of Waste (must be filled in by pr	oducer) EPA I.D. 1	No. NYD078516895	
	Company Name: (Print or Type) Amerak Nat	ional Railroad P	assenger Corp.	
	Pick-up Address 39-29 Honeywell St. (No.)	Lo	ng Island City	NY (State)
	Telephone Number: 212 630-7695		SIC No.	
	Waste Stream Identification: This manifest repr	esents a non-hazardous	waste as per E.P.A. and P	A D.E.R. regulations
	Tons: 22 Cubic Yards: _		Other (Specify):_	
	Name of Waste NON HAZARDOUS SOTI	, NON D.O.T. REG	ULATPD	
	Special Handling Instructions, if any: OPS_1	PILE		
	PROFILE/WASTE STREAM I.D. NUMBER:	338178N		
	ned. I certify that the foregoing is true and $A > A$			je.
Date	e: 1/27/98	gerth-Amt	Marine and Tit	le)
Date 2.	Hauler of Waste (must be filled-in by haule)		(Name and 11)	le)
_	Hauler of Waste (must be filled-in by haule	r) EPA I.D. No	(Name and 11)	le)
_	Hauler of Waste (must be filled-in by hauler COMPANY NAME: TAK/DASH Truck	r) EPA I.D. No	(Name and 11)	le)
_	Hauler of Waste (must be filled-in by haule	r) EPA I.D. No	JA-445	
_	Hauler of Waste (must be filled-in by haule: COMPANY NAME: TAK/DASH Truck ADDRESS: Ladi, N.J.	up and hauled h	Vehicle Lic. No.	AC 2547/A
_	Hauler of Waste (must be filled-in by hauler COMPANY NAME: TAK/DASH Truck ADDRESS: Lai, N.J. Pick-up Date: 1-27-98 Truck No.: The above described waste was picked named below and was accepted. I certify is true and correct.	up and hauled h	Vehicle Lic. No.	AC 2547/A
2.	Hauler of Waste (must be filled-in by hauler COMPANY NAME: TAK DASH Truck ADDRESS: Lati, N.J. Pick-up Date: 1-27-98 Truck No.: The above described waste was picked named below and was accepted. I certify is true and correct. Signature of authorized agent and title:	up and hauled h	Vehicle Lic. No. of perjury that the Driver ONE: wn Road 19007	AC 2547/A
2.	Hauler of Waste (must be filled-in by hauler COMPANY NAME: TAK DASH Truck ADDRESS: Ladi, N.J. Pick-up Date: 1-27-98 Truck No.: The above described waste was picked named below and was accepted. I certify is true and correct. Signature of authorized agent and title: Disposer of Waste (must be filled-in by disposer of Waste	up and hauled hauler penalty of the control of the	Vehicle Lic. No. Vehicle Lic. No. Oy me to the disposition of perjury that the ONE: Wn Road 19007 94 uler to this disposition	AC 2547/A

CUSTOMER SERVICE 1-800-778-9797

913414

DATE: 01/27/98

TIME: 11:16-12:02

CUSTOMER: 665

CLEAN HARBORS ENVIRONMENTAL-EDISON

HAULER:

PROFILE: 338178N

TRUCK: 0002

WASTE: CON CONTAMINATED SOIL -

NATIONAL RAILROAD PASSENGER

ORIGIN

NEW JERSEY

the state of the second state of the second
MANIFEST: 25932

CONTAM. SOIL/SITE CLEA

PCT WGT/VOL

100 54760

GROSS: 85720 LBS

TARE: 30960 LBS

NET: 54760 LBS

27:38 TONS

TONS DUMPED TODAY:

the set there and the

88.43

0015566 REMARKS

STEN

I

WASTE MANAGEMENT OF PENNSYLVANIA, INC. 1000 New Ford Mill Road Morrisville, PA 19067

(215) 736-9400 (215) 736-9475 Laboratory

NON-HAZARDOUS WASTE MANIFEST MS4931

1.	Generator of Waste (n	nust be filled in by pro	ducer) EPA I.D. No	NYD078516895	
	Company Name: (Print or Type) Amtrak National Railroad Passenger Corp.				
	Pick-up Address 39-2	9 Honeywell St.	Long	Island City	NY
		(Street)		SIC No	(State)
		ation: This manifest repres			A D.E.R. regulations
	100				
	Tons: 22	Cubic Yards:		ther (Specify):	
	Name of Waste	NON HAZARDOUS SOIL	NON D.O.T. REGUI	ATED	
	Special Handling Instr	uctions, if any: OPS P	ILB		
	PROFILE/WASTE STRI	EAM I.D. NUMBER:	338178N		
Date	Hauler of Waste (must	As Agent for Am	Signature://w	MA How (Name and Till	ē) .
۷.					
	COMPANY NAME:	1) 17	trucking.		
	ADDRESS: Wus				
	Pick-up Date: 1/27/	98 Truck No	197	/ehicle Lic. No.7	174 H
	The above describe named below and wo is true and correct. Signature of authorized		under penalty of r	me to the dispo perjury that the	osal facility foregoing
3.	Disposer of Waste (my	st be filled-in by dispo	ser) · CIRCLE OI	NE:	(Sec.) 5-31.2 (2
/	G.R.O.W.S., INC.	()	T.R.R.F.		
	1513 Bordentown Ro Morrisville, PA 19067		200 Bordentown		46
1	Permit #100148	*	Permit #101494		7-73
2	Waste subject to this m	nanifest was delivered	by the above hou	er to this dispose	al Janes
	facility and accepted of		-6/70		SPOSAL DATE
	Signature of authorize	d agent and title:	- William		M 24 1
				12	

LANDFILL (MAIL TO GENERATOR)

CUSTOMER SERVICE 1-800-778-976-

913403

DATE: 01/27/98

TIME: 10:57-11:27

CUSTOMER: 665

CLEAN HARBORS ENVIRONMENTAL-EDISON

HAULER:

MANIFEST: 25916

TRUCK: 0197 WASTE CON CONTAMINATED SOIL -

NATIONAL RAILROAD PASSENGER CONTAM. SOIL/SITE CLEA

PROFILE: 338178N

ORIGIN

PCT WGT/VOL

NEW JERSEY

100 56600

89080 LBS GROSS:

TARE: 32480 LBS

NET: 56600 LBS

TONS DUMPED TODAY:

water the court

61.05

0015566

REMARKS

the second that the second of
(215) 736-9400

Morrisville, PA 19067

(215) 736-9475 Laboratory

NON-HAZARDOUS WASTE MANIFEST MS4931

	C	D.M.				
1.	Generator of Waste (must be filled in by producer) EPA I.D. No. NTD078516895					
	Company Name: (Print or Type) Amtrak National Railro	ad Passenger Corp.				
	Pick-up Address 39-29 Honeywell St.	Long Island City	NY (State)			
	Telephone Number: 212 630-7695	SIC No	(Sidie)			
	Waste Stream Identification: This manifest represents a non-hazard	dous waste as per E.P.A. and P	A D.E.R. regulations.			
	Tons: 22 Cubic Yards:					
	Name of Waste NON HAZARDOUS SOIL. NON D.O.T.	REGULATED				
	Special Handling Instructions, if any: OPS PILE					
	PROFILE/WASTE STREAM I.D. NUMBER: 338178N					
	pplicable state and lederal law. The wastes were consigned. I certify that the foregoing is true and correct to the As Agent for Antrak Signature:		je:			
2.		Ì	1			
	COMPANY NAME: TSD					
	ADDRESS: WAYNE N.J.					
è	Pick-up Date: 1/29/98 Truck No. 37	Vehicle Lic. No. 2	AB/SON			
,	The above described waste was picked up and haule named below and was accepted. I certify under penaltis true and correct. Signature of authorized agent and title:	ed by me to the disport ty of perjury that the	osal facility foregoing			
3.	Disposer of Waste (must be filled-in by disposer) CIRC	LE ONE:	· 建作 心脏			
	G.R.O.W.S., INC. T.R.R.F.		e-transfer			
		entown Road , PA 19007				
			al survivor			
,	Waste subject to this manifest was delivered by the above facility and accepted on		SPOSAL DATE)			
	Signature of authorized agent and title:	Thulkoll	el			

CUSTOMER SERVICE 1-800-778-9797

914020

DATE: 01/29/98

TIME: 12:18-12:49

CUSTOMER: -65

CLEAN HARBORS ENVIRONMENTAL-EDISON

HAULER:

PROFILE: 338178N

TRUCK: 0037 U

WASTE: CON CONTAMINATED SOIL -

MANIFEST: 25926 CONTAM. SOIL/SITE CLEA

NATIONAL RAILROAD PASSENGER

PCT WGT/VOL

100

DRIGIN

GROSS: 75400 LB

TARE: 25300 LBS

NET: 50100 LBS

DE TONS

TONS DUMPED TODAY:

229.75

0015566

REMARKS

SIGN

Contemporary and the authority of the contemporary committee and the contemporary of the

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WASTE MANAGEMENT OF PENNSYLVANIA, INC. 1000 New Ford Mill Road Morrisville, PA 19067

(215) 736-9400 (215) 736-9475 Laboratory

NON-HAZARDOUS WASTE MANIFEST WEAR	NON-HAZARDOUS	WASTE	MANIFEST	MS493
-----------------------------------	---------------	-------	----------	-------

	TON-TIMEMILE COD WIT	MS4931	(article)
1.	Generator of Waste (must be filled in by produc	er) EPA I.D. No. <u>NYD078516895</u>	
	Company Name: (Print or Type) Amtrak Nationa	1 Railroad Passenger Corp.	-1
	Pick-up Address 39-29 Honeywell St.	Long Island City	NY (State)
	Telephone Number: 212 630-7695	SIC No	(oldle)
	Waste Stream Identification: This manifest represents	a non-hazardous waste as per E.P.A. and I	PA D.E.R. regulations.
	Tons: Cubic Yards:	Other (Specify):_	
	Name of Waste NON HAZARDOUS SOIL, NO	N D.O.T. REGULATED	· ·
	Special Handling Instructions, if any: OPS PILE		
	PROFILE/WASTE STREAM I.D. NUMBER:	338178N	
Date	Hauler of Waste (must be filled-in by hauler) EP	gnature: Mallu Houn (Name and To	tle)
	COMPANY NAME: / >D		
	ADDRESS: WAYNE N.	4	C22.20.*
	Pick-up Date: 1/29/98 Truck No	Vehicle Lic. No.	793841
	The above described waste was picked up of named below and was accepted. I certify und is true and correct. Signature of authorized agent and title:	er penalty of peniury that the	osal facility foregoing
3.	Disposer of Waste (must be filled in by disposer)	CIRCLE ONE:	-144 Ge * 71
(G.R.O.W.S., INC. 1513 Bordentown Road Morrisville, PA 19067 Permit #100148	T.R.R.F. 200 Bordentown Road Tullytown, PA 19007 Permit #101494	
	Waste subject to this manifest was delivered by facility and accepted on		sposal date)
96	Signature of authorized agent and title:	1 . Julas	Park

CUSTOMER SERVICE 1-800-778-9797

914063

DATE: 01/29/98

TIME: 13:31-14:11

CUSTOMER: 665

TRUCK: 0417

CLEAN HARBORS ENVIRONMENTAL-EDISON

HAULER:

WASTE: CON CONTAMINATED SOIL -

NATIONAL RAILROAD PASSENGER

ORIGIN

NEW JERSEY

PROFILE: 338178N

MANIFEST: 25924 CONTAM. SOIL/SITE CLEA

PCT WGT/V 100 449

GROSS: 75940 LBS

TARE: 31040 LBS

NET: 44900 LBS

22.45 TONS

TONS DUMPED TODAY:

278.26

0015566 REMARKS ______ SIGN _____

THE SHEET OF THE PROPERTY OF THE PROPERTY OF THE STATE OF THE PARTY OF THE SHEET OF THE PARTY OF

WASTE MANAGEMENT OF PENNSYLVANIA, INC. 3000 New Ford Mill Road Morrisville, PA 19067

(215) 736-9400 (215) 736-9475 Laboratory

1.	Generator of Waste (must be filled in by produce	r) EPA I.D. No. <u>NYD078516895</u>			
	Company Name: (Print or Type) Amtrak National Railroad Passenger Corp.				
	Pick-up Address 39-29 Honeywell St. (No.) (Street)	Long Island City NY			
	Telephone Number: 212 630-7695				
	Waste Stream Identification:This manifest represents a	non-hazardous waste as per E.P.A. and PA D.E.R. regulations			
	Tons: 22 Cubic Yards:	Other (Specify):			
	Name of Waste NON HAZARDOUS SOIL, NON	D.O.T. REGULATED			
	Special Handling Instructions, if any: OPS PILE				
	PROFILE/WASTE STREAM I.D. NUMBER: 3:	38178N			
	e: 1/28 As MENTER Sig	mature. I land III u. TU Pa			
2.	Hauler of Waste (must be filled-in by hauler) EPA COMPANY NAME: (NHD)				
_	Hauler of Waste (must be filled-in by hauler) EPA COMPANY NAME: (0, +1, (N+D) ADDRESS: Bassel Pa	I.D. No.			
_	Hauler of Waste (must be filled-in by hauler) EPA COMPANY NAME: (NHD) ADDRESS: Bassel Pa Pick-up Date: 1128/19 Truck No. 02 The above described waste was picked up an named below and was accepted. I certify under	I.D. No. Vehicle Lic. No. BC 138 F			

G. R. O. W. S. INC. CUSTOMER SERVICE 1-800-778-9797

913691

DATE: 01/28/99

TIME: 11:04-11:27

CUSTOMER: 665

CLEAN HARBORS ENVIRONMENTAL-EDISON

HAULER:

Library Calcal Co.

MANIFEST: 259156

TRUCK: 0004

WASTE: CON CONTAMINATED SOIL -

CONTAM. SOIL/SITE CLEA

PROFILE: 338178N

NATIONAL RAILROAD PASSENGER ORIGIN

PCT WGT/VOL

NEW JERSEY

100 56660

GROSS: 84840 LBS

TARE:

28180 LBS

NET:

56660 LBS

28. 33 TONS

· 1996年, 1990年 1996年 19

TONS DUMPED TODAY:

60.26

0015566

REMARKS

SIGN

н

(215) 736-9400 (215) 736-9475 Laboratory

NON-HAZARDOUS WASTE MANIFEST MS4931

	17/87/34/34/34		
1.	Generator of Waste (must be filled in by pro	oducer) EPA I.D. No. NYD078516	895
	Company Name: (Print or Type) Amtrak Nat	ional Railroad Passenger Corp	
	Pick-up Address 39-29 Honeywell St.	Long Island Cit	
	(No.) (Street) Telephone Number: 212 630-7695	(City) SIC No	(State)
	Waste Stream Identification: This manifest repre	esents a non-hazardous waste as per E.P.A.	and PA D.E.R. regulations
	Tons: 27 Cubic Yards: _		
	Name of Waste NON HAZARDOUS SOIT	, NON D.O.T. REGULATED	
	Special Handling Instructions, if any: OPS 1	TLE	
	PROFILE/WASTE STREAM I.D. NUMBER:	338178N	
	Hauler of Waste (must be filled-in by hauler COMPANY NAME:	(Name o	and Title)
	Pick-up Date: 1/29/98 Truck No.	114 Vahiala Lia I	4 4 4 T T
	The above described waste was picked named below and was accepted. I certify is true and correct. Signature of authorized agent and title:	up and hauled by me to the d	lisposal facility
3.	Disposer of Waste (must be filled-in by dispo	oser) CIRCLE ONE:	A STATE OF THE STA
	G.R.O.W.S., INC. 1513 Bordentown Road Morrisville, PA 19067 Permit #100148	T.R.R.F. 200 Bordentown Road Tullytown, PA 19007 Permit #101494	-2
	Waste subject to this manifest was delivered facility and accepted on	by the above hauler to this dis	posal (DISPOSAL DATE)
	Signature of authorized agent and title:	Py Fens Hu	्र व्यवस्थाः ।

CUSTOMER SERVICE 1-800-778-9757

DATE: 01/29/98

TIME: 12:17-12:49

CUSTOMER: 665

CLEAN HARBORS ENVIRONMENTAL-EDISON

HAULER:

PROFILE: 338178N

TRUCK: 0114

WASTE: CON CONTAMINATED SOIL -

MANIFEST: 25925

NATIONAL RAILROAD PASSENGER CONTAM. SOIL/SITE CLEA

PCT WGT/V

ORIGIN NEW JERSEY

492 100

GROSS: 75600 LBS

26320 LBS TARE:

49280 LBS

TONS DUMPED TODAY:

204.70

0015566

REMARKS

The same of the second
WASTE MÂNAGEMENT OF PENNSYLVANIA, INC. 1000 New Ford Mill Road Morrisville, PA 19067

(215) 736-9400 (215) 736-9475 Laboratory

J1! ..

		NON-HAZARDOUS WAS	TE MANIFEST MS4931		
1.	Generator of Waste (m	ust be filled in by produce	e) EPA I.D. No. <u>NYD0785168</u>	95	
	Company Name: (Print or Type) Amerak National Railroad Passenger Corp.				
	Pick-up Address 39-29	Honeywell St.	Long Island City	NY (State)	
		2 630-7695		(Sidie)	
	Waste Stream Identifica	ation:This manifest represents a	non-hazardous waste as per E.P.A. a	and PA D.E.R. regulation	
	Tons:	Cubic Yards:	Other (Specify	·):	
	Name of Waste	NON HAZARDOUS SOIL, NON	D.O.T. REGULATED		
	Special Handling Instru	actions, if any: OPS PTLE			
-	PROFILE/WASTE STRE	AM I.D. NUMBER: 3:	38178N		
2.		be filled-in by hauler) EPA	I.D. No	1007	
	COMPANY NAME:	750			
	ADDRESS:				
	Pick-up Date: 1/29	7/98 Truck No. 126	Vehicle Lic. N	10. TJF 179	
	The above described named below and was is true and correct. Signature of authorized	d waste was picked up are s accepted. I certify unde agent and title:	nd hauled by me to the d r penalty of perjury that t	isposal facility he foregoing	
3.	Disposer of Waste (mus	t be filled-in by disposer)	CIRCLE ONE:	week to the second	
	G.R.O.W.S., INC. 1513 Bordentown Roa Morrisville, PA 19067 Permit #100148	T 2	R.R.F. 00 Bordentown Road ullytown, PA 19007 ermit #101494		
	Waste subject to this ma	anifest was delivered by th	e above hauler to this disp	oosal (DISPOSAL DATE	
	Signature of authorized	agent and title:	La Ford	18m	

CUSTOMER SERVICE 1-800-778-9797

914107

DATE: 01/29/98

TIME: 14:48-15:27

CUSTOMER: 665

CLEAN HARBORS ENVIRONMENTAL-EDISON

HAULER:

PROFILE: 338178N

TRUCK: 0126 WASTE: CON CONTAMINATED SOIL - MANIFEST: 25921

MATIONAL RAILROAD PASSENGER CONTAM. SOIL/SITE CLEA

ORIGIN

100

NEW JERSEY

34560 LBS

NET: 47980 LBS

TONS DUMPED TODAY:

302.25

REMARKS

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APPENDIX I

Asphalt and Concrete Disposal Records

□ Varick Ave.	731
Waste Managemen	nt of New York - Hauler Ticket
no. /). 17 97 Manifest	No. 24216
Dalla / A Marian	an decid
	Broker CLEAN HANG
Amount Hauled 10 1/1	Dump Site 73PC
24/1	Trailer # Van
Truck # 244	Van D Flatber
7:10	Time Departed3.50
Time Arrived 3:26	
Signature of Supervisor	loaded Weight
1	Empty Weight
Signature of Driver	Net Weight
	11-11-
X/Ox/	KEI/UC/101
NON	REDUCTION
NON	KENUCION
NON	KENUCION
NON.	KENUCION
NON-	KENUCION
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□ Varick Ave.	
□ Varick Ave. Waste Managemen	t of New York - Hauler Ticket
□ Varick Ave. Waste Management Date /)-) > 97 Manifest	t of New York - Hauler Ticket No. 24213
□ Varick Ave. Waste Management Date /)-) > 97 Manifest	t of New York - Hauler Ticket No. 24213
Waste Management Date 12 97 Manifest Hauler WM GMY	t of New York - Hauler Ticket No. 24213 Broker (LAN Flanks
Waste Management Date 12 97 Manifest Hauler WM GMY	t of New York - Hauler Ticket No. 24213
Waste Management Date 12 97 Manifest Hauler WM GMY	t of New York - Hauler Ticket No. 24213 Broker (LAN Flanks
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Waste Management Date 12 97 Manifest Hauler AM AMOUNT Hauled 46 (1)	t of New York - Hauler Ticket No. 24213 Broker (LAN Flanks
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Waste Management Date /)-)- 97 Manifest Hauler // // // Amount Hauled // /// Truck # 7 (/ (/ // //) Time Arrived / // // // // Signature of Supervisor /// // // // // // // // // // // // /	t of New York - Hauler Ticket No. 24213 Broker (
Waste Management Date /)-)-97 Manifest Hauler // // // Amount Hauled // /// Truck # 2 (/// Time Arrived /2-00	t of New York - Hauler Ticket No. 24213 Broker (

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ount Hauled Hog		mp Site 73	
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Waste Manag		York - Hauler	□ 73 Pic
Waste Manag	anifest #	No. 2	73 Picket 24218
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Waste Manag	anifest #Broi	NO. 2	73 Picket 24218
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Waste Manage the 12 97 Minuter W M C1 and Minuter Min	anifest #Broi	NO. 2 ker <u>CLEAR</u> Dump Site 7 ler #	Ticket 24218 HAA Con
Waste Manage to 19 97 Minuter W. 19 97 M	anifest #Broi	No. 2 ker	Ticket 24218 HAA Con Flatbed 72 5
Waste Manage Arrived 9-00 gnature of Supervisor	anifest #Broi	No. 2 ker	Ticket 24218 HAA Con Flatbed 72 5
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	S	ignature of Driver	* 	Net Weight_	· /48
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□ 73 Place

at of New York - Hauler Ticket

	No. 24211	
Hauler imachy	Broker Clar Huichans	-
Amount Hauled / Cy O5	Dump Site 73 /K	_
Truck # 252	Trailer # 19 Van Flatbed	-
Time Arrived 200	Time Departed	-
Signature of Supervisor	Loaded Weight	_
Signature of Driver	Empty WeightNet Weight	_
Loit 11%	min to builtonoing	12.
		4- 17

APPENDIX J

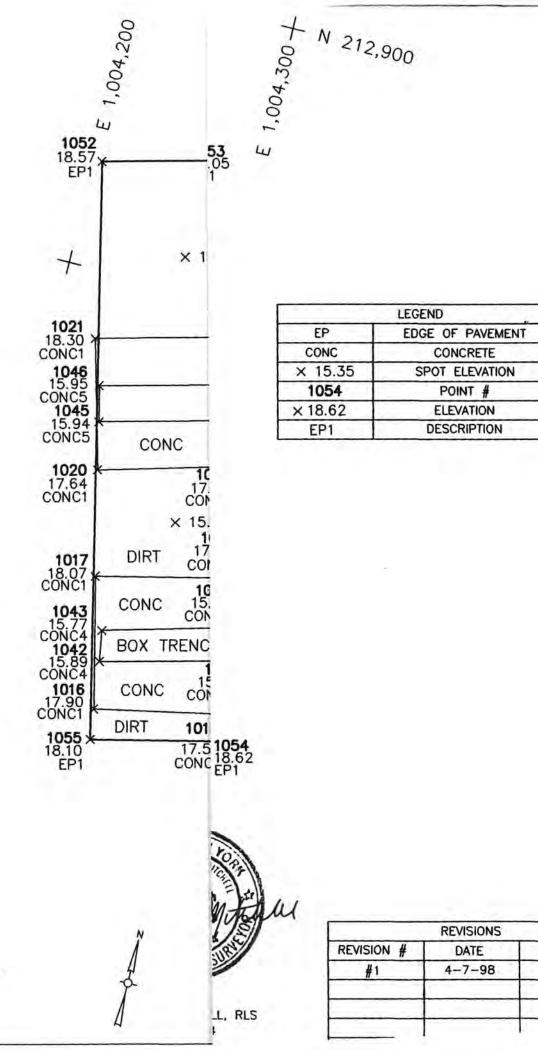
Liquid Disposal Records

Attno Larry from: Jeff

					WORK O	HDER NO. 31	
OCUMENT NO				L OF LADING	7	TKC#3:	21
RANSPORTER	1 Cle	an Har	bors Env. Services,	Inc	_ VEHICLE ID	# ME 61	4/11
PAID#	MAD	039322	250		_ TRANS. 1 PH	ONE 781-849	-1800
RANSPORTER	2				_ VEHICLE ID	#	
PAID#	,				_ TRANS. 2 PH	IONE	
Mail to: Na 400 W. 315	tional R	ailroa th flo	d Passenger Corp. or, NY, NY, 10062	Attn: Rich	Mohlenhoff (212) 630-62	15
DESIGNATED	FACILITY			SHIPPER	ailroad Pass	anger Corn	
Lancaster 0 FACILITY EPA PAD98726674	ID #			SHIPPER ER	ASID #	enger corp.	
ADDRESS 1062 Old Ma		bo.	*	ADDRESS 39-29 Honey			
CITY	inieim ei	KE	STATE ZIP	CITY			IP .
Lancaster			PA 17661	Long Island	o City	NY I	1161 UNIT
NO. & SIZE	TYPE	НМ		ON OF MATERIAL	.s	QUANTITY 5	WT/VOL
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			G.	÷,			
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SPECIAL HAN	DLING INS	STRUCT	TIONS IN CA	SE OF SPILL. E	OIKE AND CONT Y, CALL: 1-8	AIN. 00-645-8265	
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SHIPPER HS	A PRI	Maha	k Sulanh Ja	Site	4/1	DA Z	19/198
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TRANSPORT	PRI	NT		SIGN	1, 1	, DA	ATE'
TRANSPORTE							

APPENDIX K

Final Survey



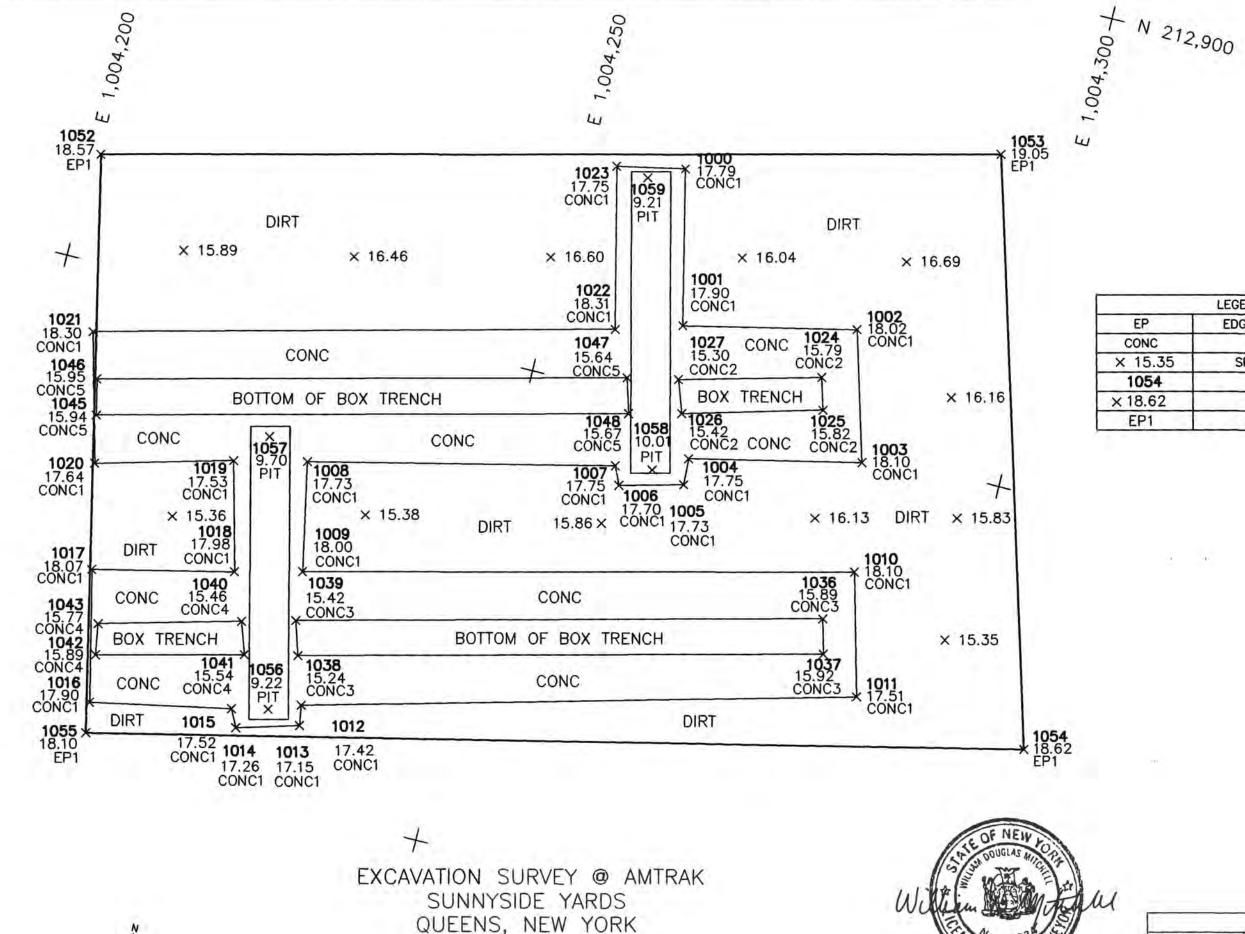
INITIALS

JRM

Topographic Map Prepared by TOPO-METRICS, INC. 60 Enter Lane HAUPPAUCE, NY 11768

N 212,800 +

N 212,850



SCALE 1'' = 10'

50

SURVEYED BY: WILLIAM D. MITCHELL, RLS NY LIC. NO. 49834

	REVISIONS	
REVISION #	DATE	INITIALS
#1	4-7-98	JRM

LEGEND

EDGE OF PAVEMENT

CONCRETE

SPOT ELEVATION

POINT #

ELEVATION

DESCRIPTION

Copographic Map Prepared by TOPO-METRICS, INC.

N 212,850

N 212,800

APPENDIX L

Analytical Data Quality and Usability Evaluation

DATA QUALITY AND USABILITY

An evaluation of the overall quality and usability of the data generated by Industrial Corrosion Management, Inc. (ICM) of Randolph, New Jersey for Operable Unit 1 at Sunnyside Yard, Queens, New York, is addressed below. Fifteen composited concrete chip samples (including one duplicate), seven discrete concrete chip samples, six composited post-remediation soil samples, and six composited stockpile samples were collected. The composited concrete chip samples were analyzed for polycyclic aromatic hydrocarbons (PAHs) (New York State Department of Environmental Conservation [NYSDEC] Analytical Services protocol 'ASP] 95-2), polychlorinated biphenyls (PCBs) (NYSDEC ASP 95-3), and lead (USEPA Contract Laboratory Statement of Work). The discrete concrete chip samples were analyzed for PCBs only (NYSDEC ASP 95-3). The soil samples were analyzed for PAHs using NYSDEC ASP 95-2.

1.0 DATA REVIEW

The data review is presented by sampling parameter and evaluates the following criteria based on the laboratory documentation provided:

- holding times;
- Gas Chromatograph/Mass Spectroscopy (GC/MS) instrument performance check;
- initial calibration;
- continuing calibration;
- blanks;
- surrogate spikes;
- · matrix spikes/matrix spike duplicates (MS/MSD) and matrix spike blanks;
- sample duplicates (inorganics);
- · laboratory control samples; and
- internal standards.

Data were reviewed for laboratory precision, accuracy, and completeness in accordance with the National Functional Guidelines for Organic Data Review, and the National Functional Guidelines for Inorganic Data Review, as well as the NYSDEC Standard Operating Procedures.

1.1 Polycyclic Aromatic Hydrocarbons

Holding times were met for all sample processing. Initial and continuing calibration standards were within the required limits. Sample matrix spikes and duplicates were performed on samples C-1 and E.W. All recoveries and duplicate correlation values were within recommended limits. The matrix spike blanks were also within the recommended limits. Method blanks and instrument performance checks were compliant with the protocol requirements. Surrogate recoveries and standard area responses/retention times were within the recommended limits with the exceptions noted below.

Sample Number	Compound (Surrogate)	% Recovery	Control Limits
C-12	2,4,6-tribromophenol	6	19-122
C-13	2,4,6-tribromophenol	i	19 -122
C-14	2,4,6-tribromophenol	12	19-122
C-8RE	2,4,6-tribromophenol	3305	19-122
W.WRE	terphenyl-d14	148	18-137
C-1DupRE	terphenyl-d14	192	18-137
C-8RE	terphenyl-d14	184	18-137

Data are not qualified with respect to surrogate recovery unless two or more semivolatile surrogates within the same fraction are out of specification. However, because 2,4,6-tribromophenol was recovered at less than 10 percent in samples C-12 and C-13, only the acid extractable compounds need to be qualified. As the acid extractable compounds are not required for this project, no action is required.

The semivolatile analysis of samples W.W, C-1Dup and C-8 produced depressed responses for internal standards indicating a matrix effect. These samples were reanalyzed and produced the same depressed responses. Detected values for these samples should be qualified as estimated and reported detection limits for these samples should be considered estimated, possibly biased low.

1.2 Polychlorinated Biphenyls

Holding times were met for all sample processing. Method blank, initial and continuing calibration standards were compliant with protocol requirements. Sample matrix spikes and duplicates were performed on samples C-1 and C-11C. All recoveries and duplicate correlation values were within recommended limits in sample C-1. In C-11C, all recoveries and duplicate correlation values were within recommended limits with the following exceptions.

Sample Number	Analyte	Percent Recovery	Control Units
C-11C	Aldrin	135 (MS)	34-132
C-11C	Endrin	30 (MS)	42-139
C-11C	4,4'-DDT	136 (MS)	23-134
C-11C	Heptachlor	34 (MSD)	35-130

Matrix spike blank and quality control check standard recoveries were within the required range. Surrogate standard recoveries met protocol requirements with the exceptions provided below.

Sample	Compound	% Recovery	Control Limits
C-4	Tetrachloro-m-xylene (TCX)	189	30-150
	Decachlorobiphenyl (DCB)	158	30-150
C-9	TCX	158	30-150
C-11DL	DCB	0/4410*	30-150
C-13	DCB	163/153*	30-150
	TCX	173/184*	30-150

^{*} Both columns

The high recoveries of these surrogates indicates a high bias due to co-eluting interferences. All detected PCBs in the samples listed above are qualified as estimated; nondetects are not qualified.

1.3 Lead

All protocol requirements for sample processing and quality control were evaluated and were found to be compliant and acceptable.

2.0 OVERALL DATA QUALITY/USABILITY ASSESSMENT

Based upon the evaluation of the data, and a review of laboratory and field quality assurance/quality control, the chemical data generated have generally met the data quality objectives established for the sampling.

2.1 Precision

The overall precision review was based upon laboratory and field duplicate samples. It should be noted that the results are expected to exhibit variability due to the difficulty in collecting identical field samples based on the concrete chips being intact. A review of laboratory duplicate samples, as measured by the sample duplicate (lead) and MS/MSD results demonstrates adequate reproduction of all sample results when detectable concentrations of analytes were present.

A review of field duplicate results demonstrates that acceptable precision was determined where sample concentration exceeded five times the Contract Required Quantitation/Detection Limit. For PCBs, the Relative Percent Difference for duplicate sample C-1 was 24% for Aroclor-1254 which indicates adequate duplication.

2.2 Accuracy

The accuracy of the chemical data generated was reviewed based on the results for holding times, laboratory control samples, calibration criteria, spiked samples, and surrogate standards. Based upon this review, the accuracy of the chemical analyses is acceptable.

2.3 Completeness

The data completeness as measured by the percentage of overall usable data is considered acceptable based on the data review.