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OPERABLE UNIT 1 REMEDIAL ACTION REPORT

Sunnyside Yard Queens, New York

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Sunnyside Yard Queens, New York

March 11, 1998 (Revised April 9, 1998)

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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,

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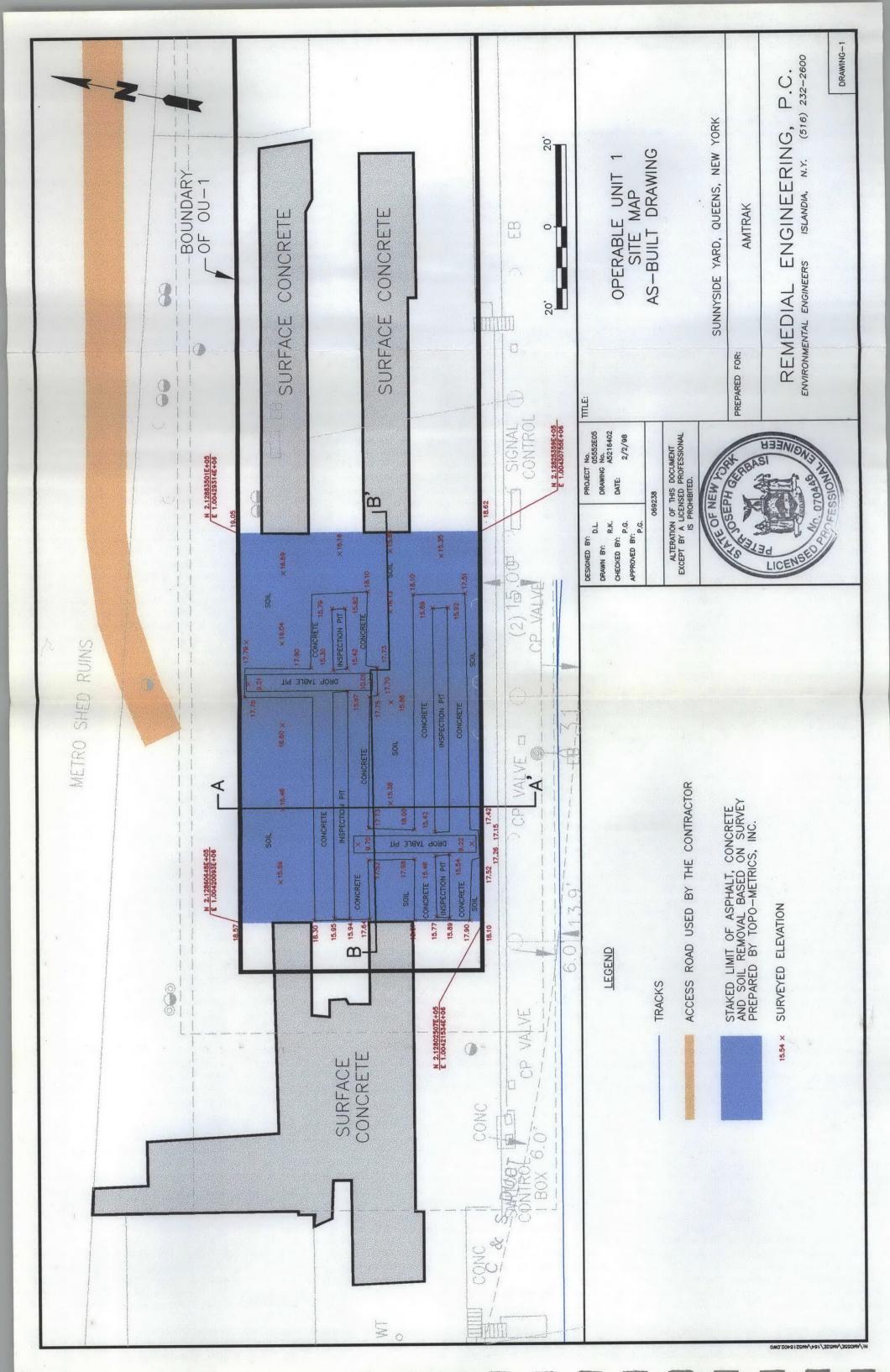


Table 1. Summary of Liquid Disposal Sampling Analytical Results at OU-1, Sunnyside Yard, Queens, New York.

	Sample Designation: Sample Date:	W-1 1/29/98			
			•		
PCB Resu	ılts (µg/L)				
Aroclor-1	016	2.0 U			
Aroclor-1	221	4.0 U			
Aroclor-1	232	2.0 U			
Aroclor-1	242	2.0 U			
Aroclor-1	248	2.0 U			
Aroclor-1	254	2.0 U			
Aroclor-1	260	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.

Зашр	le Designation:	N.W.	S.W.	E.W.	W.W.	B.W.	N.B.
	Sample Date:	12/22/97	12/19/97	12/22/97	12/22/97	12/19/97	12/22/97
	NYSDEC						
Parameter	Recommended						
(Concentrations in $\mu g/kg$)	Cleanup Level						
Carcinogenic Polycyclic	tromatic 11yaroca			21 7	0.0	10 T	20.1
- · · · ·	tromatic hydroca						
Benzo(a)anthracene	 	350 U 350 U	15) (µg/кg) 79 Ј 45 Ј	31 J 390 U	960 790	18 J 350 U	20 J 370 U
Benzo(a)anthracene Benzo(a)pyrene	 	350 U	79 J 45 J				
Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene	 	350 U 350 U	79 J	390 U	790	350 U	370 U
Benzo(a)anthracene Benzo(a)pyrene	 	350 U 350 U 350 U	79 J 45 J 110 J	390 U 100 J	790 1600	350 U 28 J	370 U 40 J
Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene	 	350 U 350 U 350 U 350 U	79 J 45 J 110 J 360 U	390 U 100 J 390 U	790 1600 360 U	350 U 28 J 350 U	370 U 40 J 370 U
Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene	 	350 U 350 U 350 U 350 U 350 U	79 J 45 J 110 J 360 U 70 J	390 U 100 J 390 U 38 J	790 1600 360 U 840	350 U 28 J 350 U 350 U	370 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)						
Aroclor-1016		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 A	romatic					
Hydrocarbons (cPAHs) (µ	g/kg)					
Benzo(a)anthracene		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		88 J	240 J	150 J	36 J	19 J
Benzo(k)fluoranthene	. 	330 U	48 J	330 U	330 U	330 U
Chrysene		45 J	110 J	85 J	330 U	330 U
Dibenzo(a,h)anthracene		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 cPAI	Hs 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					
PCBs (µg/kg)						
Aroclor-1016		33 U				
Aroclor-1221		33 U				
Aroclor-1232		33 U				
Aroclor-1242		33 U	33 U	33 U	33 U	· 33 U
Aroclor-1248		33 U				
Aroclor-1254		33 U				
Aroclor-1260		33 U				
Total Aroclors	25,000	0	0	0	0	0
Carcinogenic Polycyclic A	<u>romatic</u>					
Hydrocarbons (cPAHs) (μ	g/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		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 cPAF	ds 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 bold

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

	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
	NYSDEC Recommended Cleanup Level					
PCBs (μg/kg)					1.00	
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		33 U	13000 DJ	33 U	33 U	33 U
Total Aroclors	25,000	0	13,000 DJ	0	0	0
Carcinogenic Polycyclic A	<u>romatic</u>					
Hydrocarbons (cPAHs) (μ	g/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		21 J	210 J	NA	NA	NA
Dibenzo(a,h)antirracene		330 U	43 J	NA	NA	NA
Indeno(1,2,3-cd)pyrene		330 U	88 J	NA	NA	NA
Total cPAF	Is 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 (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		69	54	33 U	33 U	99
Total Aroclors	25,000	69	54	0	0	99
Carcinogenic Polycyclic A	romatic					
Hydrocarbons (cPAHs) (με	<u>g/kg)</u>					
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		NA	NA	NA	NA	65 J
Total cPAH	Is 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
	•	12,13,73	12/12/37
	NYSDEC		
	Recommended Cleanup Level		
	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		33 U	33 U
Aroclor-1260	~~	33 U	33 U
Total Aroclors	25,000	0	0
Carcinogenic Polycyclic A	Aromatic		
Hydrocarbons (cPAHs) (J	ug/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
Indeno(1,2,3-cd)pyrene		59 J	72 J
Total cPA	Hs 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.

S	ample Designation: Sample Date: NYSDEC - Recommended Cleanup Level	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
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		180 U	32 U	NA	250 U	22 U	NA
Aroclor-1254		210 U	38 U	NA	290 U	25 U	NA
Aroclor-1260		4,900	950	NA	4,400 U	24 J	NA
Total Aroclo	rs 25,000	4,900	950	0	0	24 J	0
Toxicity Characteristi	c Leaching Procedur	e Leachate A	nalysis (mg/L)			
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

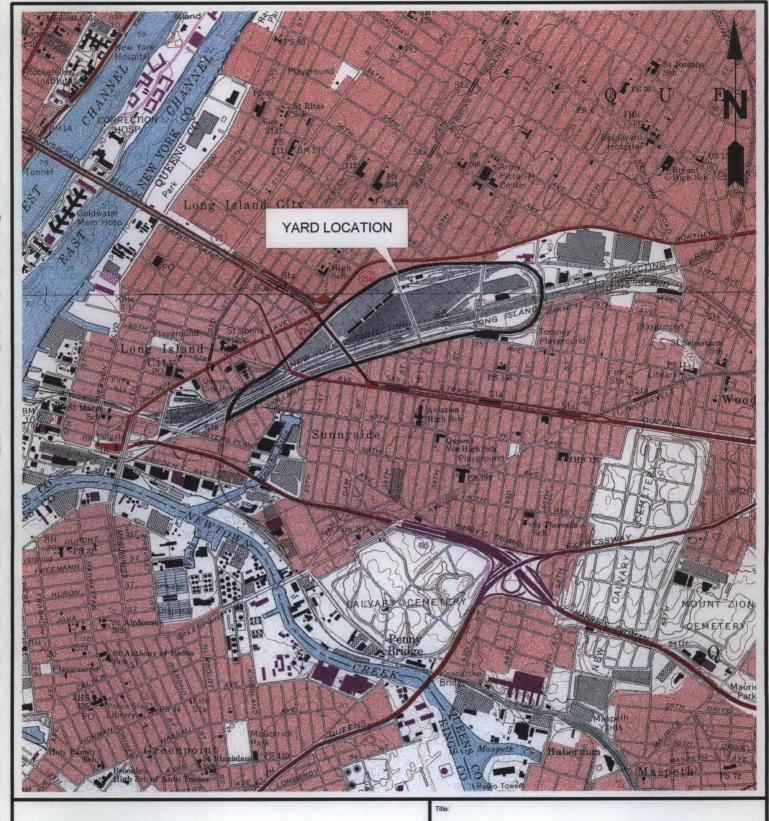
mg/kg - Milligrams per kilogram

mg/L - Milligrams per liter

U - Compound was analyzed for but not detected

J - Estimated value

NA - Not analyzed



SOURCE: CENTRAL PARK AND BROOKLYN, NEW YORK QUADRANGLE 7.5 MINUTE SERIES (TOPOGRAPHIC)



YARD LOCATION MAP

SUNNYSIDE YARD 39-29 HONEYWELL STREET QUEENS, NEW YORK

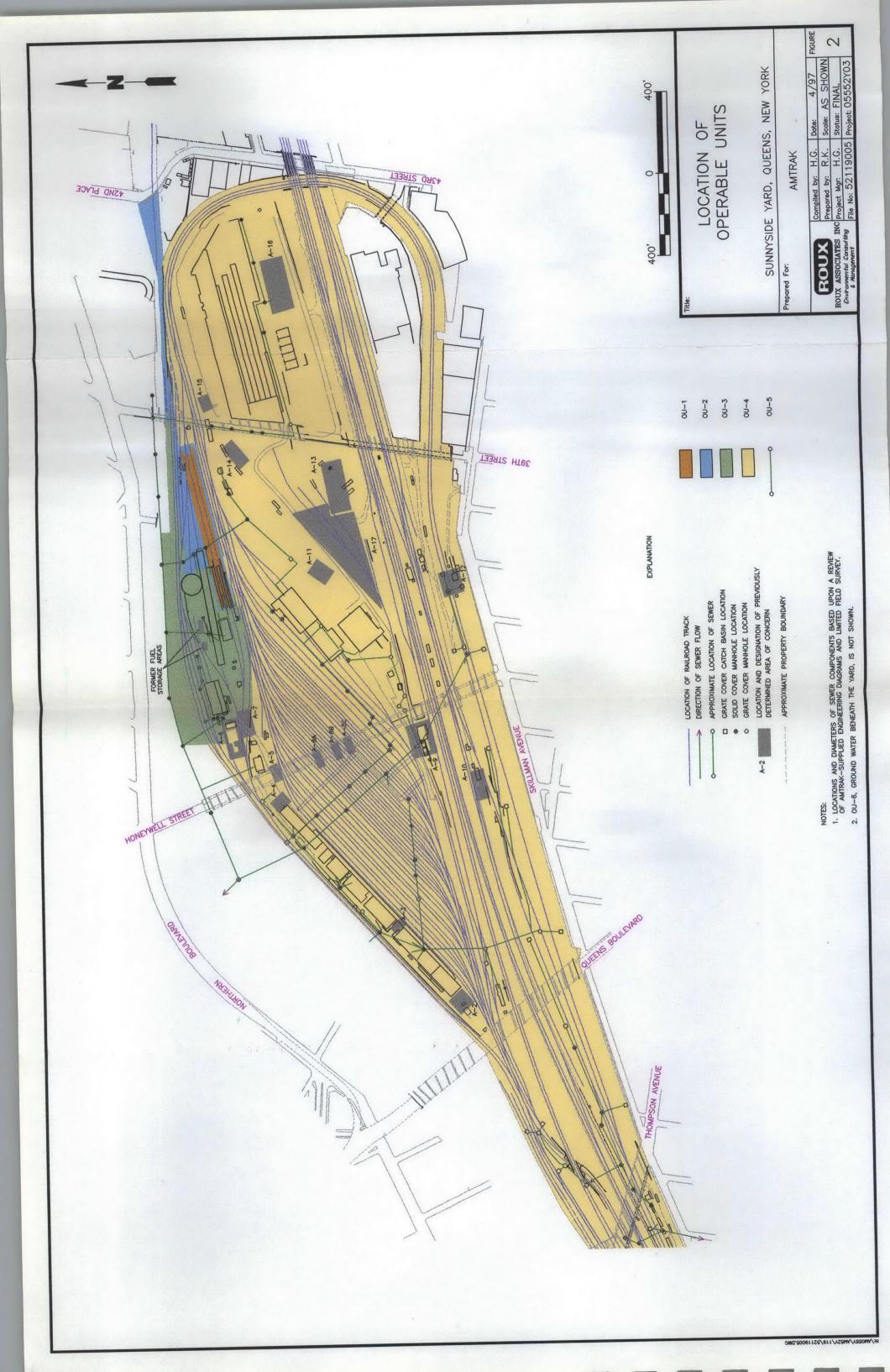
Prepared For:

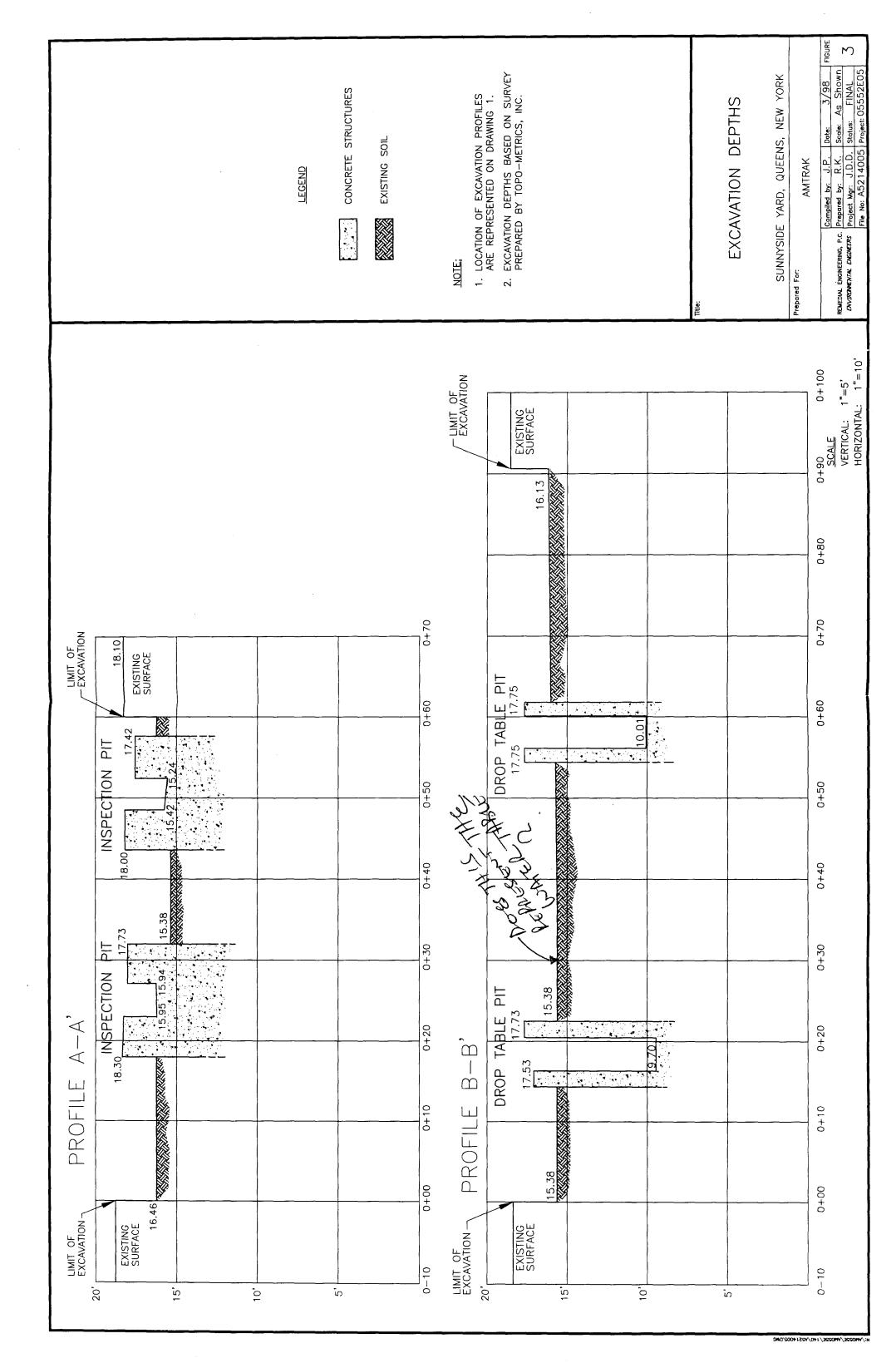
AMTRAK

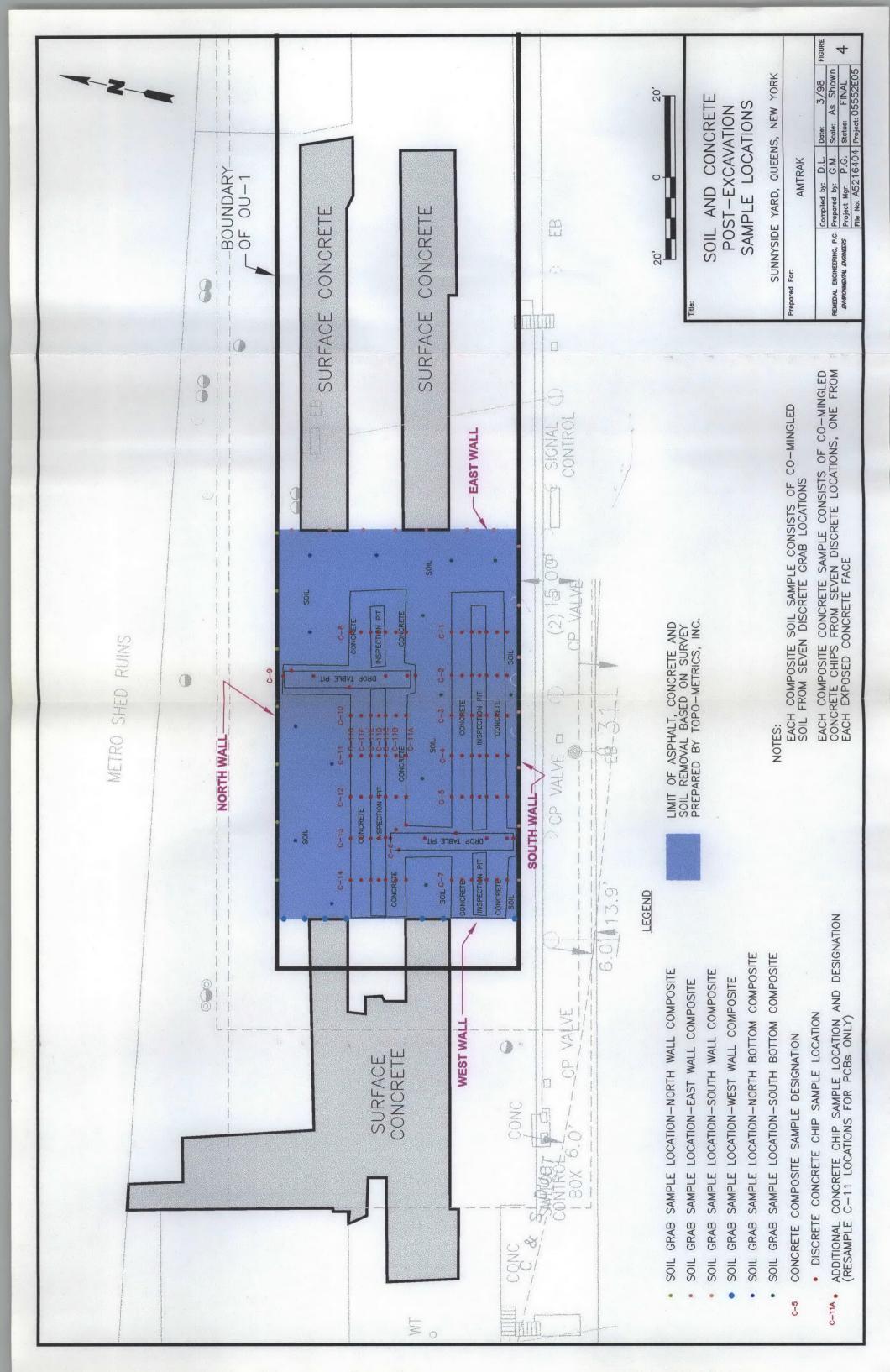
Final 05552E05 FIGURE

1

Committee of the later of the l				
ROLLX	Compiled by:	J.D.	Date:	9/97
HUUX	Prepared by:	R.R.	Scale:	1"=2,000"
ROUX ASSOCIATES INC	Project Mgr:	J.D.	Status:	Final
& Management	File No: A	5214005	Project:	05552E0







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

Dear Mr. Duninuco:

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.
- 3. 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.

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-1 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.

2. 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.

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.

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 1 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.

Joseph D. Duminuco Principal Hydrogeologist

REMEDIAL ENGINEERING, P.C.

Peter J. Gerbasi P.I Principal Engineer

1 Interpar 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. Germai (A)

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.

Joseph D. Dumuncope

Peter L. Gerbasi, P.E.

Principal Engineer

APPENDIX D

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: Customer
At lab date: 02/02/98
Matrix: 02/02/98 Matrix:

AQUEOUS

Batch #: Extraction date: Weight/Volume:

QPC7521 02/03/98 Column used: DB 1701/DB 608
Analysis date: 02/04/98
Final Volume: 10ml

500ml

Dilution Factor:

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

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 U:

J: 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.

INDUSTRIAL CORROSION MANAGEMENT, INC.

Thomas Mancuso, Lab Mgr. Copyright ICM, Inc., 1998.

All rights reserved.

DAV

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:

282486

Client: Sample Source: Sample ID:

ROUX ASSOCIATES, INC. AMTRAK SUNNY SIDE

Sample matrix:

AMTRAK W-1 LIQUID (AQUEOUS)

01/29/98

Sample date: Sampled by: At lab date:

Customer 02/02/98

PARAMETER

DILUTION

MINIMUM METHOD DETECTION BLANK

ANALYSIS DATE

FACTOR RESULT

LIMIT

otal Organic Halogen (TOX) as Cl 5

0.416

U

0.010

02/03/98

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

> INDUSTRIAL CORROSION MANAGEMENT, INC. Thomas Mancuso, Lab Mgr.

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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

Sampling Date Sampled by:

01/29/98 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 Blank	Analysis Date	Dilution Factor	Limit	
* =	Juli Tuc.	U *	0.25 25 hibit ch	U U aracteris	02/03/98 02/03/98 tics of Cya	1 1 nide or Sulf	250mg HCN/kg 500mg H2S/kg ide reactivity	

CORROSIVITY (Measured in pH units)

Result

Analysis Date

8.06

02/03/98

IGNITABILITY

Result

Flash point by Pensky Martens Closed Cup. Analysis Date: 02/03/98

Sample did not flash. Sample boiled @ 100 C

U= Not detected

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APPENDIX E

Post-Excavation Soil Sampling Data Package

EPA SAMPLE NO.

_ab Name:	ICM			c	i Contract:		B-W
_ab Code:	ICM		case No.:		SAS No.:	SI	DG No.: <u>C-1</u>
Matrix: (soil/\	water)	SOIL			Lab Sampl	e ID:	279875
Sample wt/ve	ol:	30.05	(g/ml) <u>G</u>		Lab File ID	:	J1869.D
Level: (low/r	med)	LOW			Date Rece	ived:	12/22/97
% Moisture:	5.89	d	ecanted:(Y/N)	N	Date Extra	cted:	12/26/97
Concentrate	d Extract	Volume:	500 (uL)		Date Analy	zed:	12/30/97
njection Vol	ume: 2	.0 (uL)			Dilution Fa	ctor:	1.0
GPC Cleanu	p: (Y/N)	Y	pH: <u>7.39</u>				
					CONCENTRA	TION !	UNITS:
CAS NO	D .	COM	POUND		(ug/L or ug/Kg)	UG	G/KG Q
91-20	-3	Nar	ohthalene				350 U

ONO NO.	COMI COMB	(ug/L or ug/rtg)	00/10	•
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	1	18	J
218-01-9	Chrysene		350	U
205-99-2	Benzo[b]fluoranthene	Į.	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.

Lab Name:	ICM			C	ontract:	E-W
Lab Code:	ICM	c	ase No.:		SAS No.:	SDG No.: C-1
Matrix: (soil/	water)	SOIL			Lab Sample ID:	280000
Sample wt/vo	ol:	30.33	(g/ml) G		Lab File ID:	J1870.D
Level: (low/r	ned)	LOW			Date Received:	12/23/97
% Moisture:	16.3	31 de	ecanted:(Y/N)	N	Date Extracted:	12/26/97
Concentrated	d Extract	Volume:	500 (uL)		Date Analyzed:	12/30/97
Injection Volu	ume: 2	2.0 (uL)			Dilution Factor:	1.0
GPC Cleanu	p: (Y/N)	Y	pH: <u>7.58</u>	_		

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	Ų
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	1	41	J

EPA SAMPLE NO.

Lab Name:	ICM			С	ontract:	N-B
Lab Code:	ICM	C	ase No.:		SAS No.: S	SDG No.: C-1
Matrix: (soil/\	water)	SOIL			Lab Sample ID:	280003
Sample wt/vo	ol:	30.23	(g/ml) G		Lab File ID:	J1873.D
Level: (low/r	med)	LOW			Date Received:	12/23/97
% Moisture:	10.38	<u>3</u> d	ecanted:(Y/N)	N	Date Extracted:	12/26/97
Concentrated	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	_		
					CONCENTRATION	UNITS:
0.40.110	_	0014	DOLIND		(0///0

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
91-20-3	Naphthalene		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	i	20	J
205-99-2	Benzo[b]fluoranthene		40	J
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		C	Contract:	N-W
_ab Code:	ICM	Case No.:		SAS No.: S	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
Level: (low/r	med)	LOW		Date Received:	12/23/97
% Moisture:	6.29	decanted:(Y/N)	N	Date Extracted:	12/26/97
Concentrate	d Extract	Volume: 500 (uL)		Date Analyzed:	12/30/97
njection Vol	ume: <u>2</u>	.0 (uL)		Dilution Factor:	1.0
GPC Cleanu	ip: (Y/N)	Y pH: 7.4	_		

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	1	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	Ų
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		Co	ontract:	S-W
Lab Code:	ICM	Case No.:		SAS No.:S	DG No.: <u>C-1</u>
Matrix: (soil/v	water)	SOIL		Lab Sample ID:	279874
Sample wt/vo	ol:	30.11 (g/ml) G		Lab File ID:	J1868.D
Level: (low/r	med)	LOW		Date Received:	12/22/97
% Moisture:	6.62	decanted:(Y/N)	N	_ Date Extracted:	12/26/97
Concentrated	d Extract '	Volume: 500 (uL)	İ	Date Analyzed:	12/30/97
Injection Volu	ume: <u>2.</u>	0 (uL)		Dilution Factor:	1.0
GPC Cleanu	p: (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	Ū
191-24-2	Benzo[g,h,i]perylene		33	J

EPA SAMPLE NO.

Lab Name:	ICM			C	ontract:	W-W
Lab Code:	ICM	C	ase No.:		SAS No.:	SDG No.: C-1
Matrix: (soil/	water)	SOIL			Lab Sample ID:	280002
Sample wt/v	ol:	30.13	(g/ml) <u>G</u>		Lab File ID:	J1872.D
Level: (low/	med)	LOW			Date Received:	12/23/97
% Moisture:	8.77	<u>'</u> de	ecanted:(Y/N)	N	Date Extracted:	12/26/97
Concentrate	d Extract	Volume:	500 (uL)		Date Analyzed:	12/30/97
Injection Vol	lume: 2	.0 (uL)			Dilution Factor:	1.0
GPC Cleanu	лр: (Y/N)	Υ	pH: 7.39			

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		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	1	1600	
207-08-9	Benzo[k]fluoranthene		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.

720

430

210

410

Lab Name:	ICM		Contract:	W-WF	₹E
Lab Code:	ICM	Case No.:	SAS No.: S	DG No.: C-1	
Matrix: (soil/	water)	SOIL	Lab Sample ID:	280002RE	
Sample wt/v	ol:	30.13 (g/ml) G	Lab File ID:	J2021.D	
Level: (low/r	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:	01/10/98	
Injection Vol	ume: 2.	0 (uL)	Dilution Factor:	1.0	_
GPC Cleanu	ıp: (Y/N)	Y pH: 7.39			
			CONCENTRATION	LIMITO	
CAS NO	٥.	COMPOUND		G/KG	Q
91-20	-3	Naphthalene		270	J
91-57	-6	2-Methylnaphthalene	1	190	J
208-9	6-8	Acenaphthylene	i	110	J
83-32	-9	Acenaphthene		410	
132-6	4-9	Dibenzofuran		250	J
86-73	-7	Fluorene		360	J
85-01	-8	Phenanthrene		820	
120-1	2-7	Anthracene		970	
206-4	4-0	Fluoranthene	:	750	
129-0	0-0	Pyrene		2200	
56-55	-3	Benzo[a]anthracene		1700	
. 218-0	1-9	Chrysene	i	1700	
205-9	9-2	Benzo[b]fluoranthene		1800	
207-0	8-9	Benzo[k]fluoranthene		360	Ü

Benzo[a]pyrene

Indeno[1,2,3-cd]pyrene

Dibenz[a,h]anthracene

Benzo[g,h,i]perylene

50-32-8

53-70-3

191-24-2

193-39-5

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK32

Lab Name:	ICM			c	Contract:	
Lab Code:	ICM_	0	Case No.:		SAS No.:	SDG No.: C-1
Matrix: (soil/v	water)	SOIL			Lab Sample II	D: SBLK32
Sample wt/vo	ol:	30.03	(g/ml) G		Lab File ID:	J1867.D
Level: (low/r	med)	LOW			Date Received	d: <u>00/00/00</u>
% Moisture:	0	d	lecanted:(Y/N)	N	Date Extracte	d: <u>12/26/97</u>
Concentrated	d Extract	Volume:	500 (uL)		Date Analyzed	d: 12/30/97
Injection Volu	ume: 2	.0 (uL)			Dilution Facto	r: <u>1.0</u>
GPC Cleanu	p: (Y/N)	Υ	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		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.

SBLK36 Lab Name: **ICM** Contract: SAS No.: SDG No.: C-1 Lab Code: ICM Case No.: Matrix: (soil/water) SOIL Lab Sample ID: SBLK36 Sample wt/vol: 30.01 (g/ml) G Lab File ID: J1874.D Level: (low/med) LOW Date Received: 00/00/00 0 % Moisture: decanted:(Y/N) Date Extracted: 12/26/97 Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/30/97 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	i	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	Ū
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.

	E-WMS
00/	2 N = 1

Lab Name:	ICM				Contr	act:	
Lab Code:	ICM		ase No.:		_ SA	S No.:	SDG No.: C-1
Matrix: (soil/v	water)	SOIL				Lab Sample ID	: 280000MS
Sample wt/vo	ol:	30.01	(g/ml)	G		Lab File ID:	J1911.D
Level: (low/r	med)	LOW				Date Received	12/23/97
% Moisture:	16.31	<u> </u>	ecanted:(`	Y/N)	N	Date Extracted	12/26/97
Concentrated	d Extract	Volume:	500	(uL)		Date Analyzed	01/04/98
Injection Volu	ume: 2.	0 (uL)				Dilution Factor:	1.0
GPC Cleanu	p: (Y/N)	Υ	рH: 7	.58			

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q	
91-20-3	Naphthalene	!	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		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			Co	ntract:	L-WINSD
Lab Code:	ICM	Ca	ase No.:	{	SAS No.:	SDG No.: C-1
Matrix: (soil/v	water)	SOIL			Lab Sample ID	280000MSD
Sample wt/vo	ol:	30.09	(g/ml) G		Lab File ID:	J1912.D
Level: (low/r	med)	LOW	_		Date Received	12/23/97
% Moisture:	16.3	<u>1</u> de	canted:(Y/N)	N	Date Extracted	12/26/97
Concentrated	d Extract	Volume:	500 (uL)		Date Analyzed:	01/04/98
Injection Volu	ume: <u>2</u>	.0 (uL)			Dilution Factor:	1.0
GPC Cleanu	p: (Y/N)	Υ	pH: 7.58	_		

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
91-20-3	Naphthalene		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		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

1

EPA	SAMPLE	NO.
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Cas No.)		INORGANIC A	ANALYSES DATA S	SHE	ET	,
ab Name: ICM_LABS							C1
Lab Sample ID: 279859 Date Received: 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 7440-38-2 Arsenic 7440-39-3 Barium 7440-41-7 Beryllium 7440-47-3 Cadmium 7440-47-3 Chromium 7440-48-4 Cobalt 7440-98-6 Iron 7439-92-1 Lead 7439-95-1 Magnesium 7439-95-1 Magnesium 7439-95-1 Magnesium 7439-96-6 Marcury 7439-97-6 Mercury 7440-09-7 Potassium 7440-09-7 Potassium 7440-22-4 Silver 7440-23-5 Sodium 7440-23-5 Sodium 7440-23-5 Sodium 7440-66-6 Zinc Cyanide Color After: CLOUDY Clarity After: CLEAR Artifacts:	ab Name: ICM_	LABS		Contract: _			
Date Received: 12/22/97 Date Received: 1	Tab Code: ICM_	Ca	se No.:	SAS No.	: _		SDG No.: C1
Cas No.	matrix (soil/w	ater): SOIL	·		La	b Samp	le ID: 279859
CAS No.	evel (low/med	l): LOW_	_		Da	te Rec	eived: 12/22/97
CAS No.	% Solids:	100.	0				
T429-90-5	Co	ncentration	Units (ug	/L or mg/kg dry	7 W	eight)	: MG/KG
T429-90-5							T., 1
7440-36-0		CAS NO.	Analyte	Concentration		Q	IVI
7440-38-2		7429-90-5	Aluminum		_		NR
7440-39-3							NR
7440-41-7							. 1 1
7440-43-9		7440-39-3			_]		• • • •
7440-70-2 Calcium		7440-41-7	Beryllium		_		• 1
7440-47-3			· · · · · · · · · · · · · · · · · · ·		_		• 1
7440-48-4]		• ! !
7440-50-8			_				·
7439-89-6 Iron		1			_		• 1 1
7439-92-1]		.
7439-95-4					_		. 1
7439-96-5		f .					
7439-97-6		!	_		-		
7440-02-0					-		.]
7440-09-7					-		. 1 1
7782-49-2 Selenium					-		• 1
7440-22-4							. 1
7440-23-5 Sodium		1					· I I
7440-28-0 7440-62-2 7440-66-6 Zinc Cyanide Color Before: GREY Clarity Before: YELLOW Color After: CLOUDY Clarity After: CLEAR Artifacts:					-		
7440-62-2 Vanadium					-	_ 	.
7440-66-6 Zinc NR NR NR NR NR Cyanide Color Before: GREY Clarity Before: YELLOW Texture: Color After: CLOUDY Clarity After: CLEAR_ Artifacts:		i i			-		• 1 1
Color Before: GREY Clarity Before: YELLOW Texture: Color After: CLOUDY Clarity After: CLEAR_ Artifacts:		7440-66-6			_		• ! !
Color After: CLOUDY Clarity After: CLEAR_ Artifacts:			Cyanide_		_		NR
Color After: CLOUDY Clarity After: CLEAR_ Artifacts:	Color Before	GREY	Clarit	v Before: VFI	.∩₩		Texture.
<u> </u>			32422	-,			
Comments:	Color After:	CLOUDY	Clarit	ty After: CLEA	AR_		Artifacts:
	Comments:						
					 		

1 INORGANIC ANALYSES DATA SHEET

EPA	SAMPLE	NT()
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SAS No.: SDG No.: Clarity After: CLEAR STAGE No.: SDG No.: Clarity After: CLEAR STAGE No.: SDG No.: Clarity After: CLEAR STAGE No. SDG No.: Clarity After: CLEAR STAGE No. SDG No.: Clarity After: CLEAR Artifacts: Cloudy Clarity A	ab Name: ICM_	LABS		Contract: _			C1DUP
Date Received: 12/22/9 Solids: 100.0					:		SDG No.: Cl
Concentration Units (ug/L or mg/kg dry weight): MG/KG CAS No.	watrix (soil/w	ater): SOIL	_		Lak	Samp:	le ID: 279860
Cas No.	evel (low/med	l): LOW_	_		Dat	ce Rec	eived: 12/22/97
CAS No.	% Solids:	100.	0				
T429-90-5	Co	ncentration	Units (ug	/L or mg/kg dry	y we	eight)	: MG/KG
7440-36-0		CAS No.	Analyte	Concentration	С	Q	M
7440-36-0		7429-90-5	Aluminum		- -		NR
7440-38-2					- -		1 1
T440-39-3		4			- -		1 1
T440-41-7		1			- -		, ,
7440-43-9					- -		1
7440-70-2					- -		1 1
7440-47-3		•			- -		1 1
7440-48-4					- -		1 1
7440-50-8		1	_		- -		1 1
7439-89-6 7439-92-1 7439-95-4 Magnesium 7439-96-5 Manganese 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 Cyanide Color Before: GREY Clarity Before: YELLOW Clarity After: CLEAR Artifacts:		1			- -		1 1
7439-92-1		•			- -		1 1
7439-95-4 Magnesium				27.8	- -		, i
7439-96-5		1			- -		NR
7439-97-6 Mercury NR NR NR NR NR NR NR N		· ·	, –		- -		1 1
7440-02-0		1			- -		t l
7440-09-7					- -		1 3
7440-22-4		7440-09-7	Potassium		- -		1 1
7440-22-4		7782-49-2	Selenium		- -		NR
7440-23-5 Sodium NR NR NR NR NR NR NR N		7440-22-4			- -		1
7440-28-0 Thallium NR Vanadium NR					_ -		
7440-66-6 Zinc NR NR NR NR NR NR NR N		7440-28-0	Thallium_				NR
Color Before: GREY Clarity Before: YELLOW Texture: Color After: CLOUDY Clarity After: CLEAR_ Artifacts:		7440-62-2	Vanadium_				NR
Color Before: GREY Clarity Before: YELLOW Texture: Color After: CLOUDY Clarity After: CLEAR_ Artifacts:		7440-66-6					NR
Color After: CLOUDY Clarity After: CLEAR_ Artifacts:			Cyanide		- -		NR
Color After: CLOUDY Clarity After: CLEAR_ Artifacts:	Color Before:	GREY	Clarit	Ly Before: YELI	ZOM - I -		Texture:
<u> </u>	Color After	CIOUDA		_			
Comments:		3 2 0021	CIGIT	of Alecer. Cher	 \`—		
	Comments:						

1 TNORGANIC ANALYSES DATA SHEET

TITI	CANADIT	NT/
HIPA	SAMPLE	10(1)

•		INORGANIC A	ANALYSES DATA S	SHEET	
ab Name: ICM_	T.ARC		Contract:		C2
and Name. ICM_	шарь				
יab Code: ICM_	Ca	se No.:	SAS No.:		SDG No.: C1
Matrix (soil/w	ater): SOIL	-		Lab Sampl	e ID: 279861
	LOW_	-		Date Rece	eived: 12/22/97
% Solids:	100.	0			
Co	ncentration	Units (ug	L or mg/kg dry	weight):	MG/KG
-a	CAS No.	Analyte	Concentration	C Q	M
	7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-70-2 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-92-1	Aluminum_ Antimony_ Arsenic_ Barium_ Beryllium Cadmium_ Calcium_ Chromium_ Cobalt_ Copper Iron_ Lead_	48.9		NR NR NR NR NR NR NR NR NR NR NR NR
	7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-09-7 7782-49-2 7440-22-4 7440-23-5 7440-28-0 7440-62-2 7440-66-6	Magnesium Manganese Mercury_ Nickel_ Potassium Selenium_ Silver_ Sodium_ Thallium_ Vanadium_ Zinc_			NR
Color Before:	GREY	Cyanide	Ly Before: YELI		NR Texture:
Color After:	Cronda——		ty After: CLEA		Artifacts:

INORGANIC ANALYSES DATA SHEET

EPA	SAMPLE	NO.
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ab Name: ICM_	LABS		Contract:			C3
ab Code: ICM_		se No.:	SAS No.:	: _		SDG No.: Cl
atrix (soil/w	ater): SOIL	_		La	ıb Samp	le ID: 279862
evel (low/med	l): LOW_	_		Da	te Rec	eived: 12/22/97
Solids:	100.	0				
Co	oncentration	Units (ug	/L or mg/kg dry	. <i>T</i> Tai	reight)	· MG/KG
	. —————	Onico (ag)	or mg/mg dry	· ··		
	CAS No.	Analyte	Concentration	С	Q	M
	7429-90-5	Aluminum		-		NR
	7440-36-0	Antimony_		_		NR
	7440-38-2	Arsenic				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			_		NR
	7440-50-8	Copper		_		NR
	7439-89-6	Iron		_		NR
	7439-92-1	Lead	17.3	_		P_
	7439-95-4	Magnesium		_		NR
	7439-96-5	Manganese				NR
	7439-97-6	Mercury		_		NR
	7440-02-0	Nickel				NR
	7440-09-7	Potassium				NR
	7782-49-2	_				NR
•	7440-22-4	Silver		-		NR
	7440-23-5			-		NR NR
	7440-28-0	Vanadium		-		NR NR
	7440-62-2	Zinc		-		NR NR
	7440-00-6	Cyanide				NR NR
		cyanitae		-		INK
olor Before:	GREY	Clarit	ty Before: YELI	JOM.	ī	Texture:
	CLOUDY	Clarit	y After: CLEA	AR		Artifacts:
olor After:					-	

1 INORGANIC ANALYSES DATA SHEET

FDA	SAMPLE	NO
CPA	DAMPLE	INO.

ah Name. TCM	T.ARC		Contract: _			C4
ab Name: ICM_	LIADS		concrace			, , I
ab Code: ICM_	Ca	se No.:	SAS No.	: _		SDG No.: C1_
atrix (soil/w	•	-		La	b Samp	le ID: 279863
evel (low/med	i): LOW_	_		Da	te Rec	eived: 12/22/97
Solids:	100.	0				
Co	oncentration	Units (ug,	/L or mg/kg dry	y 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 NR
	7440-39-3	Barium		- -		NR NR
	7440-39-3			- -		NR
	7440-43-9	_		- -		NR NR
	7440-70-2	Calcium		$ - \cdot$		NR
	7440-47-3	Chromium		- -	·	NR NR
	7440-48-4	Cobalt		- -		NR
	7440-50-8	Copper_		- -		NR NR
-	7439-89-6	Iron		- -		NR NR
	7439-89-8	Lead	11.5	- -		
	7439-95-4	Magnesium		- -		P_ NR
	7439-96-5	Manganese		- -		NR NR
	7439-97-6	Mercury_		- -		NR NR
	7440-02-0	Nickel		- -		NR NR
	7440-02-0			-		
	7782-49-2			- -		NR NR
	7440-22-4			- -	**	
	7440-22-4			- -		NR
	7440-23-5	Thallium		- -		NR
	7440-28-0	Vanadium		- -		NR
	7440-62-2	Zinc		- -		NR
	/440-66-6			-		NR
		Cyanide				NR
olor Before:	GREY	Clarit	y Before: YELI	OM		Texture:
olor After:	CLOUDY	Clarit	ty After: CLEA	AR_		Artifacts:
omments:						
Comments:						

1 : INORGANIC ANALYSES DATA SHEET

EPA	SAMPLE	NO
11111	DETAIL THE	TIO.

ab Name: ICM_L	ABS		Contract:			C5
Tab Code: ICM		se No.:	SAS No.	:		SDG No.: Cl_
Matrix (soil/wa						le ID: 279864
evel (low/med)	: LOW	_		Dat	te Rec	eived: 12/22/97
% Solids:	100.0	0				·
Con	ncentration	Units (ug	/L or mg/kg dry	7 W	eight)	: MG/KG
	CAS No.	Analyte	Concentration	С	Q	М
	7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-70-2 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-92-1	Aluminum_ Antimony_ Arsenic_ Barium_ Beryllium Cadmium_ Calcium_ Chromium_ Cobalt_ Copper_ Iron_ Lead	7.3			NR
	7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-09-7 7782-49-2 7440-23-5 7440-28-0 7440-62-2 7440-66-6	Magnesium Manganese Mercury_ Nickel_ Potassium Selenium_ Silver_ Sodium_ Thallium_ Vanadium_ Zinc_ Cyanide_				NR N
Color Before:	GREY	Clarit	y Before: YELI	.OW		Texture:
	CLOUDY		ty After: CLEA			Artifacts:

1 TNORGANIC ANALYSES DATA SHEET

DEN DAMETTE MO	EPA	SAMPLE	NO
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		INORGANIC A	ANALYSES DATA S	SHE	ET	1
ab Name: ICM_	LABS		Contract:			C6
						CDC No . C1
'ab Code: ICM_	Ca	se No.:	SAS NO.			SDG No.: C1
Watrix (soil/w	ater): SOIL	_		Lal	b Samp	ple ID: 279865
evel (low/med	LOW_	_		Dat	te Red	ceived: 12/22/97
% Solids:	100.	0				
Co	ncentration	Units (ug,	/L or mg/kg dry	y w	eight)	: MG/KG
	CAS No.	Analyte	Concentration	C	Q	M
	7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-47-3 7440-48-4 7440-50-8 7439-95-4 7439-95-4 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-02-0 7440-23-5	Aluminum_ Antimony_ Arsenic_ Barium Beryllium Cadmium_ Calcium Chromium Cobalt_ Copper_ Iron_ Lead Magnesium Manganese Mercury_ Nickel_ Potassium Selenium Silver_ Sodium	10.7			NR N
	7440-28-0	Thallium_		_ -		NR NR
	7440-62-2 7440-66-6	Vanadium_ Zinc		- -		NR NR
		Cyanide		- -		NR
	l	I		I_I_		_
Color Before:	GREY	Clarit	ty Before: YELI	OW		Texture:
Color After:	CLOUDY	Clarit	ty After: CLEA	AR_		Artifacts:
Comments:						
					, ' ,	

1 INORGANIC ANALYSES DATA SHEET

E.PA	SAMPLE	NO

ab Name: ICM_1	LABS		Contract:		C7
†ab Code: ICM_	Cas	se No.:	SAS No.	:	SDG No.: Cl
watrix (soil/wa	ater): SOIL	_		Lab Sampl	le ID: 279866
evel (low/med)): LOW_	_		Date Rece	eived: 12/22/97
% Solids:	100.0				
Cor	ncentration	Units (ug	L or mg/kg dry	y weight):	: MG/KG
	CAS No.	Analyte	Concentration	C Q	М
	7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-47-3 7440-50-8 7439-89-6 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-02-0 7440-23-5 7440-23-5 7440-28-0 7440-66-6	Calcium_Chromium_Cobalt_Copper_Iron_Lead_Magnesium Manganese Mercury_Nickel_Potassium Selenium_			NR N
Color Before:	GREY	Clarit	y Before: YELI	-0W	Texture:
Color After:	CLOUDY		y After: CLEA		Artifacts:
Comments:					

1 INORGANIC ANALYSES DATA SHEET

EPA	SAMPLE	NO.

C	Cas er): SOIL_ LOW 100.0	se No.:	SAS No.	: _ La Da	b Samp	
evel (low/med): Solids: Conc.	LOW	Units (ug/		Da	te Rec	eived: 12/22/97
Solids: Conc.	100.0 entration AS No.	Units (ug/				
Conc.	entration AS No.	Units (ug/		y w	eight)	: MG/KG
C. 7	AS No.			y w	eight)	: MG/KG
7		Analyte				
į.	420 00 E		Concentration	c	Q	M
· · · · · · · · · · · · · · · · · · ·		27		- .		NID
• 1/				- -		NR NR
	440-36-0 440-38-2	Antimony_ Arsenic		- -		NR NR
,	440-39-3	Barium		- -		NR NR
	440-41-7			-		NR NR
F	440-43-9	•		- :		NR
1	440-70-2	Calcium		-		NR
!	440-47-3	Chromium		-		NR
	440-48-4			[-]:		NR
1	440-50-8	Copper		-		NR
Į.	439-89-6	Iron		- :		NR
,	439-92-1	Lead	16.1	-		P
	439-95-4	Magnesium		- :		NR
7	439-96-5	Manganese		-		NR
7	439-97-6	Mercury		-		NR
7	440-02-0	Nickel				NR
7	440-09-7	Potassium				NR
7	782-49-2	Selenium_				NR
7	440-22-4					NR
	440-23-5	Sodium				NR
1	440-28-0			1_1.		NR
	440-62-2	Vanadium_		_ .		NR
7	440-66-6	Zinc		_ .		NR
		Cyanide		- -		NR
Color Before: G	REY	Clarit	y Before: YEL	LOW		Texture:
color After: C	LOUDY	Clarit	ty After: CLE	AR_		Artifacts:
comments:						<u></u>

1 INORGANIC ANALYSES DATA SHEET

מסים	SAMPLE	MO
DE M	SAME	INO

Lab Name TOM I	I ADC		Contract:		C9 .
Lab Name: ICM_I	LIADS		Concract:		1
Lab Code: ICM_	Cas	se No.:	SAS No.:		SDG No.: C1
Matrix (soil/wa	ater): SOIL	_		Lab Samp	le ID: 279868
Level (low/med)): LOW	_		Date Rece	eived: 12/22/97
% Solids:	100.0)			
Cor	ncentration	Units (ug,	L or mg/kg dry	y weight):	: MG/KG
	CAS No.	Analyte	Concentration	C Q	М
	7429-90-5	Aluminum			NR
	7440-36-0	Antimony_			NR
	1	Arsenic			NR
		Barium			NR
	7440-41-7				NR
		Cadmium_			NR
		Calcium_		-	NR
		Chromium_		-	NR ND
	1	Cobalt			NR
	7440-50-8 7439-89-6	Copper			NR
	7439-89-6	Iron Lead	50.2	-	NR
		Magnesium	50.2	-	P_ NR
	1	Manganese		-	NR
		Mercury		-	NR NR
		Nickel			NR NR
	1	Potassium		-	NR
	7782-49-2				NR
	7440-22-4			_	NR
,	7440-23-5			_	NR
	7440-28-0	Thallium		-	NR
	I.	Vanadium		-	NR
	7440-66-6	Zinc			NR
		Cyanide			NR
Color Before:	GREY	Clarit	y Before: YELI	LOW	Texture:
Color After:	CLOUDY	Clarit	y After: CLEA	AR_	Artifacts:
Comments:					

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TNORGANTC	ANALYSES	DATA	SHEET

INORGA	ANIC ANALYSES DATA SHEET	1
		C10
ab Name: ICM_LABS	Contract:	

EPA SAMPLE NO.

'ab Code: ICM___ Case No.: ____ SAS No.: ___ SDG No.: Cl___

Lab Sample ID: 279869 matrix (soil/water): SOIL_

evel (low/med): LOW__ Date Received: 12/22/97

% Solids: 100.0

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

CAS No.	Analyte	Concentration	С	Q	M
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	8.3			P_
7439-95-4	Magnesium				NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury		_		NR
7440-02-0	Nickel		_		NR
7440-09-7	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
ļ			l	l	

- 84	Color	Before:	GREY	Clarity	Before:	YELLOW	Texture:	
£-(¥	Color	After:	CLOUDY	Clarity	After:	CLEAR_	Artifacts:	
***	Commen	its:						
Transp								_ -
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1 : TNORGANIC ANALYSES DATA SHEET

EPA	SAMPLE	NO.
1		

	•	INORGANIC A	ANALISES DATA	SHE	121	1
Lab Name: ICM	T.ABS		Contract:			C11
_						
Lab Code: ICM_	Cas	se No.:	SAS No.	: _		SDG No.: C1
Matrix (soil/w	ater): SOIL	_		La	b Samp	le ID: 279870
Level (low/med): LOW	_		Da	ite Rec	eived: 12/22/97
k Solids:	100.	0				
Со	ncentration	Units (ug,	/L or mg/kg dry	y w	reight)	: MG/KG
	CAS No.	Analyte	Concentration	С	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	29.4	1_1		P_
	7439-95-4	, ,		-		NR
	7439-96-5	Manganese		_		NR
	7439-97-6	·		[_[NR
	7440-02-0			_		NR
	7440-09-7	· ·		_		NR
	7782-49-2	· —		[_[NR
	7440-22-4	Silver		-		NR
	7440-23-5	Sodium		_		NR
	7440-28-0	Thallium_		1-1		NR
	7440-62-2	Vanadium_		_		NR
	7440-66-6	Zinc		-		NR
		Cyanide		-		NR
Color Before:	GREY	Clarit	ty Before: YELI	LOW	1	Texture:
Color After:	CLOUDY	Clari	ty After: CLE	AR_	_	Artifacts:
Comments:						
						

1 INORGANIC ANALYSES DATA SHEET

EPA	SAMPLE	NO.	

ab Name: ICM_LABS		Contract:	C12
Tab Code: ICM	Case No.:	SAS No.:	SDG No.: Cl
.Matrix (soil/water):	SOIL_	Lab Samp	le ID: 279871
<pre>_evel (low/med):</pre>	LOW	Date Rece	eived: 12/22/97
% Solids:	100.0		

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

					
CAS No.	Analyte	Concentration	С	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	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	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

Color Be	fore: GR	EY	Clarity	Before:	YELLOW	Texture:
Color Af	ter: CL	OUDY	Clarity	After:	CLEAR_	Artifacts:
Comments	:					

FORM I - IN

ILM04.0

1 INORGANIC ANALYSES DATA SHEET

EDV	CAMDI.E	MO
EPA	SAMPLE	NO

		THOKGANIC I	ANALISES DATA	oner	a 1	1
Lab Name: ICM	LABS		Contract:			C13
Lab Code: ICM						SDG No.: Cl
Lab Code: ICM_	Ca.	se No	SAB NO.	•		556 NO CI
Matrix (soil/v	water): SOIL	-		Lab	Samp?	le ID: 279872
Level (low/med	i): LOW_	_		Dat	e Rece	eived: 12/22/97
% Solids:	100.	0				
Co	oncentration	Units (ug	/L or mg/kg dry	y we	eight)	: MG/KG
	CAS No.	Analyte	Concentration	С	Q	М
	7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-95-4 7439-95-4 7439-97-6 7440-02-0 7440-02-0 7440-22-4 7440-23-5 7440-28-0 7440-66-6	Aluminum_ Antimony_ Arsenic_ Barium_ Beryllium Cadmium_ Calcium_ Chromium_ Cobalt_ Copper_ Iron_ Lead_ Magnesium Manganese Mercury_ Nickel_ Potassium Selenium_ Silver_ Sodium_ Thallium_ Vanadium_ Zinc_ Cyanide_	195			NR N
Color Before:	GREY	Clarit	y Before: YELI	ZOM		Texture:
Color After:	CLOUDY	Clarit	y After: CLEA	AR_		Artifacts:
Comments:						
						

1 INORGANIC ANALYSES DATA SHEET

	~		270
EPA	SA	MPLE	NO.

	INORGANIC .	ANALYSES DATA S	SHE	ET	,
Lab Name: ICM LABS		Contract:			C14
Jab Name: Ten_Habb					_ I I
Tab Code: ICM	ase No.:	SAS No.	: _	<u></u>	SDG No.: Cl
Matrix (soil/water): SOI	L_		La	b Samp	ole ID: 279873
Level (low/med): LOW	<u> </u>		Da	te Rec	eived: 12/22/97
% Solids: 100	. 0				
Concentration	n Units (ug	/L or mg/kg dry	y w	eight)	: MG/KG
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum		-		NR
7440-36-0	1 4				NR
7440-38-2			_		NR
7440-39-3			_		NR
7440-41-7	4		_		NR
7440-43-9			-		NR
7440-70-2			-		NR
7440-47-3 7440-48-4	_		-		NR
7440-46-4	·		-		NR NR
7439-89-6	<u>++</u>		-		NR NR
7439-89-8		10.9	-	<u></u>	- 1 1
7439-95-4			-		P_ NR
7439-96-5	1 -		-		NR
7439-97-6	, -				NR
7440-02-0			-		NR
•	Potassium		-		NR
7782-49-2			-		NR
7440-22-4	_		-	·	NR
7440-23-5			-		NR
7440-28-0			-		NR
7440-62-2			-		NR
7440-66-6			-		NR
	Cyanide				NR
1			_		.
Color Before: GREY	Clari	ty Before: YELI	OZOM	ſ	Texture:
Color After: CLOUDY	Clari	ty After: CLEA	AR_		Artifacts:
Comments:					

EPA SAMPLE NO.

C-1 Contract: Lab Name: ICM SAS No.: SDG No.: C-1 ICM Case No.: Lab Code: Lab Sample ID: 279859 Matrix: (soil/water) SOIL Sample wt/vol: 30.09 (g/ml) G Lab File ID: J1875.D Level: (low/med) LOW Date Received: 12/22/97 % Moisture: 0 decanted:(Y/N) Ν 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		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.

_ab Name:	ICM			C	contract:	С	-1DUP
_ab Code:	ICM	C	ase No.:		SAS No.:	SDG No.:	C-1
Matrix: (soil/	water)	SOIL			Lab Sample ID	279860	
Sample wt/v	ol:	30.07	(g/mi) G		Lab File ID:	J1876.D	
_evel: (low/	med)	LOW			Date Received	12/22/97	
% Moisture:	0	d	ecanted:(Y/N)	N	Date Extracted	1: 12/26/97	
Concentrate	d Extract	Volume:	1000 (uL)		Date Analyzed	: 12/31/97	
njection Vol	lume: <u>2</u>	.0 (uL)			Dilution Factor	: 1.0	
GPC Cleanu	p: (Y/N)	N	pH: <u>0</u>	_			
					CONCENTRATIO	N UNITS:	
CAS N	O. ,	COM	POUND		(ug/L or ug/Kg)	JG/KG	Q
91-20)-3	Nap	hthalene			50	J

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	ı	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		C	ontract:	
Lab Code:	ICM	Case No.:		SAS No.: S	SDG No.: C-1
Matrix: (soil/v	vater)	SOIL		Lab Sample ID:	279861
Sample wt/vo	ol:	30.05 (g/ml) G		Lab File ID:	J1877.D
Level: (low/n	ned)	LOW		Date Received:	12/22/97
% Moisture:	0	decanted:(Y/N)	N	Date Extracted:	12/26/97
Concentrated	d Extract	Volume: <u>1000</u> (uL)		Date Analyzed:	12/31/97
Injection Volu	ıme: 2	.0 (uL)		Dilution Factor:	1.0
GPC Cleanu _l	p: (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	į.	330	U
191-24-2	Benzo[g,h,i]perylene	1	19	J

EPA SAMPLE NO.

Lab Name:	ICM	C-3				
Lab Code:	ICM Case No.:			SAS No.: S	SDG No.: C-1	
Matrix: (soil/\	water)	SOIL		Lab Sample ID:	279862	
Sample wt/v	ol:	30.11 (g/ml) G		Lab File ID:	J1878.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: <u>1000</u> (uL)		Date Analyzed:	12/31/97	
Injection Vol	ume: <u>2</u>	.0 (uL)		Dilution Factor:	1.0	
GPC Cleanu	p: (Y/N)	NpH: 0				

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
91-20-3	Naphthalene		330	U
91-57-6	2-Methylnaphthalene		330	Ū
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		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

FORM I SV-1

OLM03.0

EPA SAMPLE NO.

330

330

330

330

U

U

0_			C-4
Lab Name: ICM		Contract:	U-4
Lab Code: ICM	Case No.:	SAS No.: SI	OG No.: C-1
Matrix: (soil/water)	SOIL	Lab Sample ID:	279863
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	2.0 (uL)	Dilution Factor:	1.0
GPC Cleanup: (Y/N)	N pH: 0		
		CONCENTRATION	JNITS:
CAS NO.	COMPOUND	(ug/L or ug/Kg) UG	
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		330 U
205-99-2	Benzo[b]fluoranthene		19 J
207-08-9	Benzo[k]fluoranthene		330 U

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.

_ab Name:	ICM	ICM Contract:						
_ab Code:	ICM	с	ase No.:		SAS No.: S	SDG No.: C-1		
Matrix: (soil/	water)	SOIL	<u> </u>		Lab Sample ID:	279864		
Sample wt/v	ol:	30.19	(g/ml) G		Lab File ID:	J1880.D		
_evel: (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:	<u>1000</u> (uL)		Date Analyzed:	12/31/97		
njection 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		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		330	U
206-44-0	Fluoranthene		20	J
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.

_ab Name:	ICM			c	Contract:	
_ab Code:	ICM	Ca	ase No.:		SAS No.:S	DG No.: C-1
Matrix: (soil/v	vater)	SOIL	_		Lab Sample ID:	279865
Sample wt/vo	ol:	30.2	(g/ml) G		Lab File ID:	J1881.D
_evel: (low/n	ned)	LOW			Date Received:	12/22/97
% Moisture:	0	de	ecanted:(Y/N)	N	Date Extracted:	12/26/97
Concentrated	d Extract	Volume:	1000 (uL)		Date Analyzed:	12/31/97
njection Volu	ıme: <u>2</u>	.0 (uL)			Dilution Factor:	1.0
GPC Cleanui	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	Ū
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	Ū
191-24-2	Benzo[g,h,i]perylene		330	U

EPA SAMPLE NO.

Lab Name:	ICM		Contract:			
Lab Code:	ICM	Case I	No.:	SAS	S No.: S	SDG No.: C-1
Matrix: (soil/v	water)	SOIL			Lab Sample ID:	279866
Sample wt/vo	ol:	30.07 (9	ı/ml) G		Lab File ID:	J1882.D
Level: (low/n	ned)	LOW			Date Received:	12/22/97
% Moisture:	0	decant	ted:(Y/N)	N	Date Extracted:	12/26/97
Concentrated	d Extract	Volume: 100	0(uL)		Date Analyzed:	12/31/97
Injection Volu	ume: <u>2</u>	.0 (uL)			Dilution Factor:	1.0
GPC Cleanu	p: (Y/N)	N pH	I: 0			

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
91-20-3	Naphthalene		400	
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	
129-00-0	Pyrene		1300	
56-55-3	Benzo[a]anthracene		440	
218-01-9	Chrysene		340	
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	J
53-70-3	Dibenz[a,h]anthracene		27	J
191-24-2	Benzo[g,h,i]perylene		37	J

EPA SAMPLE NO.

_ab Name:	ICM			c	ontract:	
_ab Code:	ICM	Cas	se No.:		SAS No.: S	SDG No.: C-1
Matrix: (soil/	water)	SOIL	·		Lab Sample ID:	279867
Sample wt/vo	ol:	30.09	(g/ml) G		Lab File ID:	J1883.D
_evel: (low/r	med)	LOW	_		Date Received:	12/22/97
% Moisture:	0	dec	canted:(Y/N)	N	Date Extracted:	12/26/97
Concentrate	d Extract	Volume: 1	000 (uL)		Date Analyzed:	12/31/97
njection 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		28	J
91-57-6	2-Methylnaphthalene		330	U
208-96-8	Acenaphthylene		22	J
83-32-9	Acenaphthene		17	J
132-64-9	Dibenzofuran	ii	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		330	U
191-24-2	Benzo[g,h,i]perylene		31	J

Acenaphthene

Dibenzofuran

Phenanthrene

Fluoranthene

Benzo[a]anthracene

Benzo[b]fluoranthene

Benzo[k]fluoranthene

Indeno[1,2,3-cd]pyrene

Dibenz(a,h)anthracene

Benzo[g,h,i]perylene

Benzo[a]pyrene

Anthracene

Fluorene

Pyrene

Chrysene

132-64-9

86-73-7

85-01-8

120-12-7

206-44-0

129-00-0

56-55-3

218-01-9

205-99-2

207-08-9

50-32-8

193-39-5

53-70-3

191-24-2

EPA SAMPLE NO.

17

16

13

84

26

92

230

66

75

190

330

72

40

330

42

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C-8RE Lab Name: ICM Contract: SDG No.: C-1 Case No.: SAS No.: Lab Code: ICM Lab Sample ID: 279867RE Matrix: (soil/water) SOIL Lab File ID: 30.09 (g/ml) G J2023.D Sample wt/vol: LOW Date Received: 12/22/97 Level: (low/med) 0 % Moisture: decanted:(Y/N) Date Extracted: 12/26/97 Concentrated Extract Volume: 1000 (uL) Date Analyzed: 01/10/98 Injection Volume: 2.0 (uL) Dilution Factor: 1.0 GPC Cleanup: (Y/N) N pH: 0 **CONCENTRATION UNITS:** CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 91-20-3 28 Naphthalene 91-57-6 330 2-Methylnaphthalene 208-96-8 Acenaphthylene 21 83-32-9

EPA SAMPLE NO.

Lab Name:	ICM		Contract:	C-9
Lab Code:	ICM	Case No.:	SAS No.:	SDG No.: C-1
Matrix: (soil/	water)	SOIL	Lab Samp	le ID: 279868
Sample wt/vo	ol:	30.11 (g/ml) G	Lab File I	D: <u>J1914.D</u>
Level: (low/r	med)	LOW	Date Rece	eived: <u>12/22/97</u>
% Moisture:	0	decanted:(Y/N)	N Date Extra	acted: 12/26/97
Concentrate	d Extract	Volume: 1000 (uL)	Date Analy	yzed: <u>01/04/98</u>
Injection Vol	ume: 2	.0 (uL)	Dilution Fa	actor: 1.0
GPC Cleanu	in: (V/NI)	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		35	J
83-32-9	Acenaphthene		330	U
132-64-9	Dibenzofuran		330	Ū
86-73-7	Fluorene		330	U
85-01 - 8	Phenanthrene	ı	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		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

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA	SAMP	LE NO
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Lab Name:	ICM		c	ontract:	C-10
Lab Code:	ICM	Case No.:		SAS No.: S	DG No.: C-1
Matrix: (soil/	water)	SOIL		Lab Sample ID:	279869
Sample wt/v	ol:	30.02 (g/ml) G		Lab File ID:	J1888.D
Level: (low/ı	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: <u>2</u>	.0 (uL)		Dilution Factor:	1.0
GPC Cleanu	ıp: (Y/N)	NpH: 0			

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

380

330

55

88

43

88

U

J

J

J

	OL	WII VOLY (TILL OTTO) (IT	NOO / NV NET OIO B/ N/ OI NE			C-11	
Lab Name:	ICM		Contract:				
Lab Code:	ICM	Case No.:	SAS No.:	SD	G No.:	C-1	
Matrix: (soil/	water)	SOIL	Lab Sample	e ID: 2	79870		
Sample wt/v	ol:	30.06 (g/ml) G	G Lab File ID	- : J	1889.D		
Level: (low/	med)	LOW	Date Recei	ved: 1	2/22/97	,	
% Moisture:	ŕ	decanted:(Y/I	N) N Date Extra	cted: 1	2/26/97	,	
Concentrate	d Extract		ıL) Date Analy	zed: 0	1/01/98	3	
Injection Vol	ume: 2	.0 (uL)	Dilution Fac	ctor: 1	.0		
GPC Cleanu	ıp: (Y/N)	N pH: 0		_			
			CONCENTRAT	LION III	NITS:		
CAS NO	Э.	COMPOUND	(ug/L or ug/Kg)			Q	
91-20	-3	Naphthalene			97	J	
91-57		2-Methylnaphth	alene		74	J	
208-9	6-8	Acenaphthylene			55	J	
83-32	-9	Acenaphthene			130	J	
132-6	4-9	Dibenzofuran	!		110	J	
86-73	-7	Fluorene			130	J	
85-01	-8	Phenanthrene			470		
120-1	2-7	Anthracene			110	J	
206-4	4-0	Fluoranthene			370		
129-0	0-0	Pyrene			390		
56-55	-3	Benzo[a]anthrac	cene		180	J	
218-0	1-9	Chrysene			210	J	

Benzo[b]fluoranthene

Benzo[k]fluoranthene

Indeno[1,2,3-cd]pyrene

Dibenz[a,h]anthracene

Benzo[g,h,i]perylene

Benzo[a]pyrene

205-99-2

207-08-9

50-32-8

193-39-5

53-70-3

191-24-2

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name:	ICM				C	ontract:	
Lab Code:	ICM		Case No.:			SAS No.:	SDG No.: C-1
Matrix: (soil/v	water)	SOIL				Lab Sample ID:	279871
Sample wt/vo	ol:	30.04	(g/ml) <u>G</u>		Lab File ID:	J1890.D
Level: (low/n	ned)	LOW				Date Received:	12/22/97
% Moisture:	0		decanted:	(Y/N)	N	Date Extracted	12/26/97
Concentrated	d Extract	Volume:	1000	(uL)		Date Analyzed:	01/01/98
Injection Volu	ıme: <u>2</u>	.0 (uL)			Dilution Factor:	1.0
GPC Cleanu	p: (Y/N)	Ν	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	Ų
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.

C-13

_ab Name:	ICM		c	ontract:	0-10
_ab Code:	ICM	Case No.:		SAS No.: S	DG No.: C-1
Matrix: (soil/v	water)	SOIL		Lab Sample ID:	279872
Sample wt/vo	ol:	30 (g/ml) G		Lab File ID:	J1891.D
Level: (low/r	ned)	LOW		Date Received:	12/22/97
% Moisture:	0	decanted:(Y/N)	N	Date Extracted:	12/26/97
Concentrated	d Extract	Volume: 1000 (uL)		Date Analyzed:	01/01/98
njection 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	!	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	1	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.

C-14

_ab Name:	ICM		Contract:				
_ab 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	
_evel: (low/r	med)	LOW			Date Received	: 12/22/97	
% Moisture:	0	de	ecanted:(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	ip: (Y/N)	N	pH: 0				

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
91-20-3	Naphthalene		770	:
91-57-6	2-Methylnaphthalene		340	
208-96-8	Acenaphthylene	:	78	J
83-32-9	Acenaphthene		500	
132-64-9	Dibenzofuran		460	
86-73-7	Fluorene		630	1
85-01-8	Phenanthrene		1600	:
120-12-7	Anthracene		330	
206-44-0	Fluoranthene		1200	
129-00-0	Pyrene		990	i
56-55-3	Benzo[a]anthracene		410	
218-01-9	Chrysene		300	J
205-99-2	Benzo[b]fluoranthene		500	
207-08-9	Benzo[k]fluoranthene		330	U
50-32-8	Benzo[a]pyrene		160	J
193-39-5	Indeno[1,2,3-cd]pyrene		72	J
53-70-3	Dibenz[a,h]anthracene		330	U
191-24-2	Benzo[g,h,i]perylene		63	J

EPA SAMPLE NO.

C-1MS

Lab Name:	ICM			c	ontract:	
Lab Code:	ICM		Case No.:		SAS No.: S	SDG No.: <u>C-1</u>
Matrix: (soil/v	water)	SOIL			Lab Sample ID:	279859MS
Sample wt/vo	ol:	30.04	(g/ml) <u>G</u>		Lab File ID:	J1895.D
Level: (low/n	med)	LOW			Date Received:	12/22/97
% Moisture:	0		decanted:(Y/N)	N	Date Extracted:	12/26/97
Concentrated	d Extract	Volume:	1000 (uL)		Date Analyzed:	01/01/98
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		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		330	U
191-24-2	Benzo[g,h,i]perylene		35	J

EPA SAMPLE NO.

C-1MSD

Lab Name:	ICM		ontract:	_			
Lab Code:	ICM	ICM Case No.:			SAS No.: S	DG No.: C-1	
Matrix: (soil/	water)	SOIL			Lab Sample ID:	279859MSD	
Sample wt/v	ol:	30.1	(g/ml) <u>G</u>		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: <u>2</u>	.0 (uL)			Dilution Factor:	1.0	
GPC Cleanu	p: (Y/N)	N	pH: 0	No.			

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	Ū
206-44-0	Fluoranthene		330	U
129-00-0	Pyrene		1700	
56-55-3	Benzo[a]anthracene		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.

BLANK SPIKE

ab Name:	ICM			C	ontract:	_	
ab Code: ICM		Case No.:		SAS No.: SI		DG No.: <u>C-1</u>	
Matrix: (soil/v	water)	SOIL			Lab Sample ID:	BLANK SPIKE	
Sample wt/vo	ol:	30	(g/ml) G		Lab File ID:	J1910.D	
_evel: (low/r	med)	LOW			Date Received:	00/00/00	
% Moisture:	0	de	ecanted:(Y/N)	N	Date Extracted:	12/26/97	
Concentrated	d Extract	Volume:	500 (uL)		Date Analyzed:	01/04/98	
njection Volu	ume: <u>2</u>	.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		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	i	330	U
206-44-0	Fluoranthene		330	U
129-00-0	Pyrene	·	1600	
56-55-3	Benzo[a]anthracene	1	330	U
218-01-9	Chrysene		330	U
205-99-2	Benzo[b]fluoranthene	!	330	U
207-08-9	Benzo[k]fluoranthene		330	Ū
50-32-8	Benzo[a]pyrene	:	330	U
193-39-5	Indeno[1,2,3-cd]pyrene	1	330	U
53-70-3	Dibenz[a,h]anthracene	!	330	U
191-24-2	Benzo[g,h,i]perylene		330	U

EPA SAMPLE NO.

t. .	1014			_	No 4 4.		BLAN	K SPIKE
Lab Name:	ICM			<u> </u>	Contract:		. L	
Lab Code:	ICM	c	ase No.:		SAS No.:	SI	DG No.: 0	D-1
Matrix: (soil/v	vater)	SOIL			Lab Sam	ple ID:	BLANK S	PIKE
Sample wt/vo	oi:	30	(g/ml) G		Lab File I	D:	J1894.D	· .
Level: (low/n	ned)	LOW			Date Rec	eived:	00/00/0	0
% Moisture:	0	d	ecanted:(Y/N)	N	Date Extr	acted:	12/26/97	
Concentrated	Extract '	Volume:	1000 (uL)		Date Ana	lyzed:	01/01/98	
Injection Volu	ıme: 2.	0 (uL)			Dilution F	actor:	1.0	
GPC Cleanu			0 :Ha					
•				-				
					CONCENTRA	ATION I	UNITS:	
CAS NO).	COM	POUND		(ug/L or ug/K	g) <u>UG</u>	S/KG	Q
91-20-	3	Nap	hthalene				330	U
91-57-	6	2-M	ethylnaphthalene	;			330	U
208-96	S-8	Ace	Acenaphthylene				330	U
83-32-	.9	Ace	naphthene			1700		
132-64	1-9	Dibe	enzofuran				330	U
86-73-	7	Fluc	rene				330	U
85-01-	8	Phe	nanthrene				330	U
120-12	2-7	Anth	racene				330	U
206-44	1-0	Fluc	ranthene				330	U
129-00)-0	Pyre	ene				1600	
56-55-	3	Ben	zo[a]anthracene				330	U
218-01	1-9	Chr	sene				330	U
205-99	9-2	Ben	zo[b]fluoranthene	€			330	U
207-08	3-9	Ben	zo[k]fluoranthene	<u> </u>			330	U
50-32-	8	Ben	zo[a]pyrene				330	U
193-39	9-5	Inde	no[1,2,3-cd]pyre	ne			330	U
53-70-		Dibe	enz[a,h]anthracer	ne			330	U
191-24	1-2	Ben	zo[g,h,i]perylene		i		330	U

1B SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

470

360

Lab Name:	ICM		Contra	ct:	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/ve	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	.0 (uL)		Dilution Factor:	1.0
GPC Cleanu	p: (Y/N)	Y pH: 0			
			CO	NCENTRATION	LINITS:
CAS NO	Ο.	COMPOUND			G/KG Q
91-20	-3	Naphthalene			700
91-57	-6	2-Methylnaphthalen	ie		700
208-9	6-8	Acenaphthylene			730
83-32		Acenaphthene		į	730
132-6		Dibenzofuran			750
86-73		Fluorene			760
85-01	-8	Phenanthrene		:	660
120-1		Anthracene			650
206-4		Fluoranthene		+	660
129-0		Pyrene			790
56-55		Benzo[a]anthracene			730
218-0		Chrysene			680
205-9		Benzo[b]fluoranther	ne	i	1000
207-0		Benzo[k]fluoranther		<u></u>	940
50-32		Benzo[a]pyrene			820
193-3		Indepol 2 3-cdlpyr	ene		450

Dibenz[a,h]anthracene

Benzo[g,h,i]perylene

53-70-3

191-24-2

1B SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QA/QC

_ab Name:	ICM			C	ontract:	
_ab Code:	ICM	Ca	se 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:	J1893.D
_evel: (low/r	med)	LOW			Date Received:	00/00/00
% Moisture:	0	de	canted:(Y/N)	N	Date Extracted:	12/26/97
Concentrate	d Extract	Volume:	1000 (uL)		Date Analyzed:	01/01/98
njection Vol	ume: <u>2</u>	.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		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	

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: 279859

Tample 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

CONCENTRATION UNITS:

CAS NO. COMPOUND	(ug/L or ug/Kg) ug/Kg	×
12674-11-2Aroclor-1016 11104-28-2Aroclor-1221 11141-16-5Aroclor-1232 53469-21-9Aroclor-1242 12672-29-6Aroclor-1248 11097-69-1Aroclor-1254 11096-82-5Aroclor-1260	33. 33. 33. 33. 33. 70. 140.	ממממ

C-1DUP

ab Name: ICM

Contract:

Lab Code: ICM Case No.:

SAS No.:

SDG No.: C-1

atrix: (soil/water) SOLID

Lab Sample ID: 279860

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

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:

CAS NO. COMPOUND

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

Q

12674-11-2Aroclor-1016 11104-28-2Aroclor-1221 11141-16-5Aroclor-1232 53469-21-9Aroclor-1242 12672-29-6Aroclor-1248 11097-69-1Aroclor-1254 11096-82-5Aroclor-1260	33. 33. 33. 33. 33. 33. 55.	מממט
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FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

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

Cample 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

CONCENTRATION UNITS:

CAS NO.

COMPOUND

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

Q

11097-69-1Aroclor-1254 33. U 11096-82-5Aroclor-1260 91.
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C-3

ab Name: ICM

Contract:

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

atrix: (soil/water) SOLID

Lab Sample ID: 279862

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

Lab File ID: HA2866

 $_{\circ}$ 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:

CAS NO. COMPOUND

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

12674-11-2Aroclor-1016 11104-28-2Aroclor-1221 11141-16-5Aroclor-1232 53469-21-9Aroclor-1242 12672-29-6Aroclor-1248 11097-69-1Aroclor-1254 11096-82-5Aroclor-1260	33. 33. 33. 33. 33.	ם מ מ מ מ מ
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PESTICIDE ORGANICS ANALYSIS DATA SHEET

ab Name: ICM Contract: C-4

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

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: ____

CAS NO. COMPOUND

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

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

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

FORM I PEST

C-6

ab Name: ICM

Contract:

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

atrix: (soil/water) SOLID

Lab Sample ID: 279865

rample 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 0

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

ab Name: ICM Contract:

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

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

mample 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

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

ab Name: ICM Contract:

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

f 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 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 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.

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

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

cample wt/vol: 30.1 (g/mL) G Lab File ID: HA2872

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

12672-29-6Aroclor-1248 33. U 11097-69-1Aroclor-1254 33. U 11096-82-5Aroclor-1260 33. U	11097-69-1Aroclor-1254	33.	ט ט ט ט ט ט
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PESTICIDE ORGANICS ANALYSIS DATA SHEET

C-10

ab Name: ICM

Contract:

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

.atrix: (soil/water) SOLID

Lab Sample ID: 279869

ample 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

njection Volume: 1.0 (uL)

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/31/97 Dilution Factor: 1.0

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

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO. COMPOUND

(ua/L or ua/Ka) ua/Ka

(15),	z or ug/ng/ ug/ng	×
12674-11-2Aroclor-1016 11104-28-2Aroclor-1221 11141-16-5Aroclor-1232 53469-21-9Aroclor-1242 12672-29-6Aroclor-1248 11097-69-1Aroclor-1254 11096-82-5Aroclor-1260	33. 33. 33. 33. 33. 33.	מטטט

C-11

ab Name: ICM

Contract:

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

SDG No.: C-1

atrix: (soil/water) SOLID

Lab Sample ID: 279870

"ample 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

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_ 33.	U
33.	U
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	33. 33. 33. 33.

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EPA SAMPLE NO.

PESTICIDE ORGANICS ANALYSIS DATA SHEET

C-11 DL

ab Name: ICM

Contract:

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

atrix: (soil/water) SOLID

Lab Sample ID: 279870

"cample wt/vol: 30.1 (g/mL) G Lab File ID: HA2881

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: 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

0

12674-11-2Aroclor-1016 11104-28-2Aroclor-1221 11141-16-5Aroclor-1232 53469-21-9Aroclor-1242 12672-29-6Aroclor-1248 11097-69-1Aroclor-1254 11096-82-5Aroclor-1260	1700. 1700. 1700. 1700. 1700. 1700. 13000.	ם ח ח ח ח ח ח ח ח ח ח ח ח ח ח ח ח ח ח ח
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EPA SAMPLE NO.

C-11A

ab Name: ICM

Contract:

Lab Code: ICM Case No.:

SAS No.:

SDG No.: C-11A

atrix: (soil/water) SOIL

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

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

0

•		
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.:

SDG No.: C-11A

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

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 11104-28-2Aroclor-1221 11141-16-5Aroclor-1232 53469-21-9Aroclor-1242 12672-29-6Aroclor-1248 11097-69-1Aroclor-1254	33. 33. 33. 33. 33. 33.	ם ח ח ח
		ָ ט ט

EPA SAMPLE NO.

ab Name: ICM Contract:

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

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

6 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. Q COMPOUND (ug/L or ug/Kg) ug/Kg 33. U 12674-11-2----Aroclor-1016 11104-28-2----Aroclor-1221 33. U 11141-16-5-----Aroclor-1232 33. U U 53469-21-9----Aroclor-1242 33. 12672-29-6-----Aroclor-1248 U 33. 11097-69-1-----Aroclor-1254 33. U 11096-82-5----Aroclor-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

gample wt/vol: 30.2 (g/mL) G

Lab File ID: HA3610

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

Date Received: 03/17/98

* xtraction: (SepF/Cont/Sonc) SONC

Date Extracted: 03/17/98

CAS NO.

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

njection Volume: 1.0 (uL)

COMPOUND

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

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

EPA SAMPLE NO.

C-11E

ab Name: ICM

Contract:

Lab Code: ICM

Case No.:

SAS No.:

SDG No.: C-11A

latrix: (soil/water) SOIL

Lab Sample ID: 285752

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

Lab File ID: HA3611

∘ o 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

Q

GPC Cleanup: (Y/N) N pH:

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

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

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

EPA SAMPLE NO.

C-11F

ab Name: ICM

Contract:

Lab Code: ICM

Case No.:

SAS No.:

SDG No.: C-11A

atrix: (soil/water) SOIL

Lab Sample ID: 285753

30.1 (g/mL) G

cample wt/vol:

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:

CAS NO.

COMPOUND

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

Q

12674-11-2Aroclor-1016 11104-28-2Aroclor-1221 11141-16-5Aroclor-1232 53469-21-9Aroclor-1242 12672-29-6Aroclor-1248 11097-69-1Aroclor-1254 11096-82-5Aroclor-1260	33. 33. 33. 33. 33. 33. 33.	ט ט ט ט ט ט ט ט ט ט ט ט ט ט ט ט ט ט ט	
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EPA SAMPLE NO.

C-11G

ab Name: ICM

Contract:

Lab Code: ICM

Case No.:

SAS No.:

SDG No.: C-11A

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

12674-11-2Aroclor-1016 11104-28-2Aroclor-1221 11141-16-5Aroclor-1232 53469-21-9Aroclor-1242 12672-29-6Aroclor-1248 11097-69-1Aroclor-1254 11096-82-5Aroclor-1260		ט ט ט ט ט
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1D EPA SAMPLE NO. PESTICIDE ORGANICS ANALYSIS DATA SHEET

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

"ample 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: 1.0

GPC Cleanup: (Y/N) N

pH:____

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO COMPOUND (ua/L or ua/Ka) ua/Ka

CAS NO.	COMPOUND	(ug/II OI ug/kg	/ ug/kg	`
				1
	Aroclor-1016		33.	ΙŪ
11104-28-2	Aroclor-1221		33.	U
11141-16-5	Aroclor-1232		33.	lυ
53469-21-9	Aroclor-1242		33.	ט
	Aroclor-1248		33.	Ū
	Aroclor-1254		33.	Ū
	Aroclor-1260		99.	1

C-13

ab Name: ICM Contract:

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

..atrix: (soil/water) SOLID Lab Sample ID: 279872

ample wt/vol: 30.1 (g/mL) G Lab File ID: HA2879

% 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 11104-28-2Aroclor-1221 11141-16-5Aroclor-1232 53469-21-9Aroclor-1242 12672-29-6Aroclor-1248 11097-69-1Aroclor-1254 11096-82-5Aroclor-1260	33. 33. 33. 33. 33. 33.	ם ם ם ם ם
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EPA SAMPLE NO.

C-14

ab Name: ICM

Contract:

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

Latrix: (soil/water) SOLID

Lab Sample ID: 279873

Tample 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	
11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1	Aroclor-1016 Aroclor-1221 Aroclor-1232 Aroclor-1242 Aroclor-1248 Aroclor-1254		33. 33. 33. 33. 33. 33.	מממממ	

LEA SAMELE NO.

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

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

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

CONCENTRATION UNITS:

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

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

12674-11-2Aroclor-1016	33. 33. 33. 33. 33.	מממממ	_
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Lab Name: ICM

Contract:

PIBLK01

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) NpH:Sulfur Cleanup:(Y/N) N

CONCENTRATION UNITS:

CAS NO. COMPOUND

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

Q

		T
319-84-6alpha-BHC	.025	ט
319-85-7beta-BHC	.025	lυ
319-86-8delta-BHC	.025	lυ
58-89-9gamma-BHC (Lindane)	.025	Ū
76-44-8Heptachlor	.025	Ū
309-00-2Aldrin	.025	Ū
1024-57-3Heptachlor epoxide	.025	Ū
959-98-8Endosulfan I	.025	Ū
60-57-1Dieldrin	.050	Ū
72-55-94,4'-DDE	.050	Ū
72-20-8Endrin	.050	Ū
33213-65-9Endosulfan II	.050	Ū
72-54-84,4'-DDD	.050	Ū
1031-07-8Endosulfan Sulfate	.050	Ū
50-29-34,4'-DDT	.050	Ū
72-43-5Methoxychlor	.25	Ū
53494-70-5Endrin ketone	.050	Ū
7421-93-4Endrin aldehyde	.050	Ū
5103-71-9alpha-Chlordane	.025	Ū
5103-74-2gamma-Chlordane	.025	U
8001-35-2Toxaphene	2.5	Ū
12674-11-2Aroclor-1016	.50	U
11104-28-2Aroclor-1221	.50	U
11141-16-5Aroclor-1232	.50	Ū
53469-21-9Aroclor-1242	.50	Ū
12672-29-6Aroclor-1248	.50	Ū
11097-69-1Aroclor-1254	.50	Ū
11096-82-5Aroclor-1260	.50	Ū
t to the second of the second		

PIBLK02

_ab Name: ICM

Contract:

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

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

CONCENTRATION UNITS:

CAS NO. COMPOUND

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

Q

PIBLK03

Lab Name: ICM Contract:

ab 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

% 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

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

		
319-84-6alpha-BHC	.025	U
319-85-7beta-BHC	.025	Ū
319-86-8delta-BHC	.025	U
58-89-9gamma-BHC (Lindane)	.025	Ū
76-44-8Heptachlor	.025	U
309-00-2Aldrin	.025	lΰ
1024-57-3Heptachlor epoxide	.025	lΰ
959-98-8Endosulfan I	.025	Ü
60-57-1Dieldrin	.050	Ü
72-55-94,4'-DDE	.050	U
72-33-94,4 -DDE	.050	1 -
33213-65-9Endosulfan II		U
	.050	U
72-54-84,4'-DDD	.050	U
1031-07-8Endosulfan Sulfate	.050	Ŭ
50-29-34,4'-DDT	.050	U
72-43-5Methoxychlor	.25	Ŭ
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	Ū

				PIBLK04
Lab	Name:	ICM	Contract:	

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

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

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

% 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

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

CONCENTRATION UNITS:

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

	COMPOUND (UG/II C	or ug/kg/ ug/h	Q
76-44-8 309-00-2 1024-57-3 959-98-8 60-57-1 72-55-9 72-20-8 3213-65-9 72-54-8 1031-07-8 50-29-3 72-43-5 5103-71-9 5103-74-2 8001-35-2 12674-11-2 11104-28-2 1141-16-5 53469-21-9	alpha-BHCbeta-BHCdelta-BHCgamma-BHC (Lindane)HeptachlorAldrinHeptachlor epoxideEndosulfan IDieldrin4,4'-DDEEndrinEndosulfan II4,4'-DDDEndosulfan Sulfate4,4'-DDTMethoxychlorEndrin ketoneEndrin aldehydealpha-Chlordanegamma-Chlordane	.025 .025 .025 .025 .025 .025 .025 .025	ממממממממממממממממממממממ

EPA SAMPLE NO.

PIBLK05

_ab Name: ICM

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

हे 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

ajection 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 319-85-7beta-BHC 319-86-8delta-BHC 58-89-9gamma-BHC (Lindane) 76-44-8Heptachlor 309-00-2Aldrin 1024-57-3Heptachlor epoxide 959-98-8Endosulfan I 60-57-1Dieldrin 72-55-94,4'-DDE 72-20-8Endrin 33213-65-9Endosulfan II 72-54-84,4'-DDD 1031-07-8Endosulfan Sulfate 50-29-34,4'-DDT 72-43-5Methoxychlor 53494-70-5Endrin ketone 7421-93-4Endrin aldehyde 5103-71-9alpha-Chlordane 5103-74-2gamma-Chlordane 8001-35-2Toxaphene 12674-11-2Aroclor-1016 11104-28-2Aroclor-1221	.025 .025 .025 .025 .025 .025 .025 .050 .050	ממממממממממממממממ
5103-74-2gamma-Chlordane 8001-35-2Toxaphene 12674-11-2Aroclor-1016	.025	n n

Lab Name: ICM

Contract:

PIBLK06

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

Matrix: (soil/water) WATER

Lab Sample ID: PIBLK06

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

% 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

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

319-84-6alpha-BHC 319-85-7beta-BHC 319-86-8delta-BHC 58-89-9gamma-BHC (Lindane) 76-44-8Heptachlor 309-00-2Aldrin 1024-57-3Heptachlor epoxide 959-98-8Endosulfan I 60-57-1Dieldrin 72-55-94,4'-DDE 72-20-8Endosulfan II 72-54-84,4'-DDD 1031-07-8Endosulfan Sulfate 50-29-34,4'-DDT 72-43-5Methoxychlor 53494-70-5Endrin ketone 7421-93-4Endrin aldehyde 5103-71-9alpha-Chlordane 5103-74-2gamma-Chlordane 8001-35-2Toxaphene 12674-11-2Aroclor-1212 11141-16-5Aroclor-1222 11141-16-5Aroclor-1242 12672-29-6Aroclor-1248 11097-69-1Aroclor-1254 11096-82-5Aroclor-1250	.025 .025 .025 .025 .025 .025 .025 .050 .050	מממממממממממממממממממממממ
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EPA SAMPLE NO.

PIBLK07 யab Name: ICM Contract:

ab Code: ICM Case No.:

SAS No.:

SDG No.: C-1

Matrix: (soil/water) WATER

Lab Sample ID: PIBLK07

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

% 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

CONCENTRATION UNITS:

CAS NO. COMPOUND

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

Q

		т
319-84-6alpha-BHC 319-85-7beta-BHC 319-86-8delta-BHC 58-89-9gamma-BHC (Lindane) 76-44-8Heptachlor 309-00-2Aldrin 1024-57-3Heptachlor epoxide 959-98-8Endosulfan I 60-57-1Dieldrin 72-55-94,4'-DDE 72-20-8Endrin 33213-65-9Endosulfan II 72-54-84,4'-DDD 1031-07-8Endosulfan Sulfate 50-29-34,4'-DDT 72-43-5Methoxychlor 53494-70-5Endrin ketone 7421-93-4Endrin aldehyde 5103-71-9alpha-Chlordane 5103-74-2gamma-Chlordane 8001-35-2Toxaphene 12674-11-2Aroclor-1221	.025 .025 .025 .025 .025 .025 .025 .050 .050	ממממממממממממממממממ
5103-74-2gamma-Chlordane 8001-35-2Toxaphene 12674-11-2Aroclor-1016	.025 2.5 .50	ט ט

EPA SAMPLE NO.

pIBLK08

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: ____ Sulfur Cleanup: (Y/N) N

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

1D EPA SAMPLE NO.

PIBLK09

→ab 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

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

PIBLK10

Lab Name: ICM

Contract:

CAS NO. COMPOUND

11104-28-2-----Aroclor-1221

53469-21-9----Aroclor-1242

12672-29-6-----Aroclor-1248

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

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

11141-16-5-----Aroclor-1232

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

- PC 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 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_____ IJ .025 309-00-2----Aldrin ΙU .025 1024-57-3-----Heptachlor epoxide U .025 959-98-8-----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 ľŪ 72-54-8----4,4'-DDD .050 U 1031-07-8-----Endosulfan Sulfate_____ .050 U 50-29-3----4,4'-DDT U .050 72-43-5-----Methoxychlor_____ .25 U 53494-70-5----Endrin ketone U .050 7421-93-4----Endrin aldehyde_____ U .050 5103-71-9----alpha-Chlordane .025 5103-74-2----gamma-Chlordane____ .025 U 8001-35-2----Toxaphene 2.5 IJ 12674-11-2-----Aroclor-1016 U

EPA SAMPLE NO.

pIBLK11 Contract:

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

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

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 Q

319-84-6----alpha-BHC .025 IJ 319-85-7-----beta-BHC 319-86-8-----delta-BHC 58-89-9-----gamma-BHC (Lindane) 319-85-7----beta-BHC .025 U $319-86-8----delta-BH\overline{C}$.025 U U .025 U .025 U .025 .025 U .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 1031-07-8-----Endosulfan Sulfate .050 U .050 U 50-29-3----4,4'-DDT .050 U 72-43-5-----Methoxychlor_____ .25 U 7421-93-4----Endrin ketone_______ 53494-70-5----Endrin ketone .050 U 7421-93-4----Endrin aluenydd 5103-71-9----alpha-Chlordane U .050 .025 U .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 .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 U .50

PIBLK12

walab 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

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

CONCENTRATION UNITS:

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

	PIBLK14	
Contract:		

__ab Name: ICM

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

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

		T
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	lυ
60-57-1Dieldrin	.050	U
72-55-94,4'-DDE	.050	ט
72-20-8Endrin	.050	บ
33213-65-9Endosulfan II	.050	Ū
72-54-84,4'-DDD	.050	Ū
1031-07-8Endosulfan Sulfate	.050	Ū
50-29-34,4'-DDT	.050	Ū
72-43-5Methoxychlor	.25	ĺΰ
53494-70-5Endrin ketone	.050	Ū
7421-93-4Endrin aldehyde	.050	Ū
5103-71-9alpha-Chlordane	.025	Ū
5103-74-2gamma-Chlordane	.025	Ū
8001-35-2Toxaphene	2.5	υ
12674-11-2Aroclor-1016	.50	Ū
11104-28-2Aroclor-1221	.50	Ū
11141-16-5Aroclor-1232	.50	Ü
53469-21-9Aroclor-1242	.50	Ü
12672-29-6Aroclor-1248	.50	Ü
11097-69-1Aroclor-1254	.50	Ü
11096-82-5Aroclor-1260	.50	Ü
1100101 1200		

PIBLK15

~ ∟ab 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

% 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: 12/24/97

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

319-84-6alpha-BHC .025 U 319-85-7beta-BHC .025 U 319-86-8delta-BHC .025 U	OMPOUND (ug/L or ug/Kg) ug/L Q
76-44-8Heptachlor 309-00-2Aldrin 1024-57-3Heptachlor epoxide 959-98-8Endosulfan I 60-57-1Dieldrin 72-55-9	eta-BHC .025 U emma-BHC (Lindane) .025 U eptachlor .025 U ldrin .025 U eptachlor epoxide .025 U eptachlor epoxide .025 U ndosulfan I .050 U ieldrin .050 U idosulfan II .050 U ndosulfan Sulfate .050 U ndosulfan Sulfate .050 U ethoxychlor .050 U ethoxychlor .050 U ndrin ketone .050 U ndrin aldehyde .050 U lpha-Chlordane .025 U oxaphene 2.5 U roclor-1016 .50 U roclor-1221 .50 U roclor-1242 .50 U roclor-1248 .50 U roclor-1254 .50 U

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EPA SAMPLE NO.

PESTICIDE ORGANICS ANALYSIS DATA SHEET

PIBLK16

Lab Name: ICM

Contract:

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

Matrix: (soil/water) WATER

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

% Moisture: ____ decanted: (Y/N)____

Date Received: 00/00/00

Lab Sample ID: PIBLK16

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

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

CONCENTRATION UNITS:

CAS NO. COMPOUND

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

Q

319-84-6	alpha-BHC	.025	U
	beta-BHC	— .025 .025	υ
	delta-BHC	<u> </u>	υ
	gamma-BHC (Lindane)	— . 025 . 025	Ū
76-44-8	Heptachlor	025	U
309-00-2	Aldrin	.025	Ü
	Heptachlor epoxide	— .025 .025	Ü
	Endosulfan I	— .025 .025	Ü
	Dieldrin	.050	υ
	4,4'-DDE	— .050 .050	Ü
72-20-8		 	ט
	Endrin Endosulfan II		4 -
		.050	U
	4,4'-DDD	.050	Ü
	Endosulfan Sulfate	.050	U
	4,4'-DDT	.050	Ū
	Methoxychlor	.25	Ŭ
	Endrin ketone	.050	Ŭ
	Endrin aldehyde	.050	ט
	alpha-Chlordane	.025	U
	gamma-Chlordane	.025	U
	Toxaphene	2.5	U
	Aroclor-1016	.50	U
11104-28-2	Aroclor-1221	<u> </u>	U
11141-16-5	Aroclor-1232	<u> </u>	U
53469-21-9	Aroclor-1242 ·		U
12672-29-6	Aroclor-1248	.50	U
11097-69-1	Aroclor-1254	 .50	U
11006 00 E	Aroclor-1260	.50	lτι

PIBLK17

¬⊥ab Name: ICM

Contract:

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

% 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

CONCENTRATION UNITS:

CAS NO. COMPOUND

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

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

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

CAS NO.	COMPOUND	CONCENTRATION (ug/L or ug		Q
319-85-7 319-86-8 58-89-9 76-44-8 309-00-2 1024-57-3 959-98-8 60-57-1 72-55-9 72-20-8 33213-65-9 72-54-8 1031-07-8 50-29-3 72-43-5 53494-70-5 7421-93-4 5103-71-9 5103-74-2 8001-35-2 1104-28-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1	Heptachlor epo Endosulfan I_ Dieldrin_ 4,4'-DDE	lfatede	.025 .025 .025 .025 .025 .025 .025 .025	ממממממממממממממממממממממ

PIBLK19

ுab Name: ICM

Contract:

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

Matrix: (soil/water) WATER Lab Sample ID: PIBLK19

ample wt/vol: 1000.0 (g/mL) ML Lab File ID: HA2787

% 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

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

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

319-84-6----alpha-BHC .025 U 319-85-7----beta-BHC .025 U 319-86-8-----delta-BHC 319-86-8-----delta-BHC (Lindane)_____ .025 U 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_____ U .025 60-57-1-----Dieldrin U .050 72-55-9----4,4'-DDE U .050 72-20-8----Endrin .050 U 33213-65-9----Endosulfan II____ IJ .050 72-54-8----4,4'-DDD .050 U 1031-07-8----Endosulfan Sulfate U .050 50-29-3----4,4'-DDT ΙU .050 72-43-5----Methoxychlor U . 25 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 .50 U 53469-21-9-----Aroclor-1242____. U .50 12672-29-6-----Aroclor-1248 .50 U 11097-69-1----Aroclor-1254 .50 U 11096-82-5-----Aroclor-1260 .50 U

EPA SAMPLE NO.

Lab Name: ICM

Contract:

PIBLK20

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

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

CONCENTRATION	UNITS:
(ua/I or ua/Ko	T) 1107/T

	-BHC			T
319-84-6alpha 319-85-7beta- 319-86-8beta- 319-86-8gamma 76-44-8Hepta 309-00-2Aldri 1024-57-3Hepta 959-98-8Endos 60-57-1Dielo 72-55-94,4'- 72-20-8Endos 72-54-8Endos 50-29-34,4'- 72-43-5Metho 53494-70-5Endri 5103-74-2Bndri 5103-74-2	-BHC (Linda chlor n chlor epoxiulfan I rin DDE n ulfan Sulfa DDT xychlor n ketone n aldehyde -Chlordane -Chlordane hene or -1016 or -1221 or -1232 or -1242 or -1254	ite	.025 .025 .025 .025 .025 .025 .025 .025	ממממממממממממממממממממממ

EPA SAMPLE NO.

PIBLK21 ab Name: ICM Contract: ab 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 Date Extracted: 00/00/00 xtraction: (SepF/Cont/Sonc) SEPF 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 Q 319-84-6----alpha-BHC .025 U 319-85-7----beta-BHC .025 U 319-86-8-----delta-BHC .025 U .025 U 76-44-8-----Heptachlor____ .025 U 309-00-2----Aldrin U .025 1024-57-3-----Heptachlor epoxide_____ .025 U 959-98-8----Endosulfan I_____ U .025 60-57-1-----Dieldrin U .050

72-55-9----4,4'-DDE____ .050 U .050 72-20-8----Endrin 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 U .050 U . 25 U .050 7421-93-4----Endrin aldehyde_____ U .050 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 .50 U 11097-69-1-----Aroclor-1254 U .50 11096-82-5-----Aroclor-1260 U .50

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PIBLK22

~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

Dilution Factor: 1.0

njection Volume: 1.0 (uL)

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

CONCENTRATION UNITS:

CAS NO. COMPOUND

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

0

C110 110.	(49/11/0	i dg/kg/ dg/i	×
319-85-7 319-86-8 58-89-9 76-44-8 309-00-2 1024-57-3 959-98-8 72-55-9 72-54-8 1031-07-8 50-29-3 72-43-5 5103-71-9 5103-74-2 8001-35-2 1104-28-2 11104-28-2 53469-21-9	alpha-BHCbeta-BHCdelta-BHC (Lindane)HeptachlorAldrinHeptachlor epoxideEndosulfan IDieldrin4,4'-DDEEndrin4,4'-DDDEndosulfan Sulfate4,4'-DDTMethoxychlorEndrin ketoneEndrin aldehydealpha-Chlordanegamma-ChlordaneToxapheneAroclor-1212Aroclor-1242	.025 .025 .025 .025 .025 .025 .025 .025	מממממממממממממממממממממ
53469-21-9 12672-29-6 11097-69-1			

EPA SAMPLE NO.

_ab Name: ICM Contract: PIBLK23

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

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

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

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

_ab Name: ICM Contract:

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

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

CAS NO.	COMPOUND	(ug/L or ug	/Kg) ug/L	Q
319-85-7 319-86-8 58-89-9 76-44-8 309-00-2 1024-57-3 959-98-8 60-57-1 72-55-9 72-20-8 33213-65-9 72-54-8 1031-07-8 50-29-3 72-43-5 53494-70-5 7421-93-4 5103-71-9 5103-74-2 8001-35-2 12674-11-2 1104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1	alpha-BHCbeta-BHCdelta-BHCgamma-BHC (LindHeptachlorAldrinHeptachlor epoxEndosulfan IDieldrin4,4'-DDEEndrin4,4'-DDDEndosulfan Sulf4,4'-DDTMethoxychlorEndrin ketoneEndrin aldehydealpha-Chlordanegamma-Chlordanegamma-ChlordaneAroclor-1221Aroclor-1232Aroclor-1248Aroclor-1254Aroclor-1254	fate	.025 .025 .025 .025 .025 .025 .025 .025	מממממממממממממממממממממ
1100002	11100101 1200		.1	1 1

CONCENTRATION UNITS:

EPA SAMPLE NO.

_ab Name: ICM Contract: PIBLK25

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

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:

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

319-84-6----alpha-BHC_____ .025 319-85-7----beta-BHC U 319-86-8----delta-BHC .025 U 319-86-8-----delta-BHC 58-89-9----gamma-BHC (Lindane)_____ U .025 76-44-8----Heptachlor_ U .025 U .025 U .025 959-98-8----Endosulfan I_____ .025 U 60-57-1-----Dieldrin .050 U 72-55-9----4,4'-DDE____ .050 U 72-20-8----Endrin .050 Ŭ 33213-65-9-----Endosulfan II_____ .050 U 72-54-8----4,4'-DDD .050 U 1031-07-8----Endosulfan Sulfate U .050 50-29-3----4,4'-DDT .050 U 72-43-5-----Methoxychlor 53494-70-5-----Endrin ketone U . 25 U .050 7421-93-4----Endrin aldehyde_____ U .050 5103-71-9----alpha-Chlordane____ .025 U 5103-74-2----gamma-Chlordane_____ .025 U 8001-35-2----Toxaphene U 2.5 12674-11-2----Aroclor-1016 U .50 11104-28-2----Aroclor-1221 U .50 11141-16-5-----Aroclor-1232 U .50 53469-21-9-----Aroclor-1242 .50 U 12672-29-6-----Aroclor-1248 .50 U 11097-69-1----Aroclor-1254 U .50 11096-82-5-----Aroclor-1260 U .50

EPA SAMPLE NO.

PIBLK26 _Lab Name: ICM Contract:

ab Code: ICM Case No.:

SAS No.:

SDG No.: C-1

Matrix: (soil/water) WATER

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

Lab Sample ID: PIBLK26

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

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

_njection Volume: 1.0 (uL)

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

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	Ū
319-86-8delta-BHC	.025	Ū
58-89-9gamma-BHC (Lindane)	.025	Ū
76-44-8Heptachlor	.025	Ū
309-00-2Aldrin	.025	<u> </u>
1024-57-3Heptachlor epoxide	.025	Ū
959-98-8Endosulfan I	.025	Ū
60-57-1Dieldrin	.050	Ū
72-55-94,4'-DDE	.050	Ū
72-20-8Endrin	.050	Ü
33213-65-9Endosulfan II	.050	Ü
72-54-84,4'-DDD	.050	Ü
1031-07-8Endosulfan Sulfate	.050	Ü
50-29-34,4'-DDT	.050	Ū
72-43-5Methoxychlor	.25	บ
53494-70-5Endrin ketone	.050	Ü
7421-93-4Endrin aldehyde	.050	lΰ
5103-71-9alpha-Chlordane	.025	U
5103-74-2gamma-Chlordane	.025	Ŭ
8001-35-2Toxaphene	2.5	Ιΰ
12674-11-2Aroclor-1016	.50	Ü
11104-28-2Aroclor-1221	.50	Ü
11141-16-5Aroclor-1232	.50	Ū
53469-21-9Aroclor-1242	.50	Ü
12672-29-6Aroclor-1248	.50	Ü
11097-69-1Aroclor-1254	.50	Ü
11096-82-5Aroclor-1260	.50	LΩ .
1100101 1200	.50	

PIBLK27

Lab Name: ICM

Contract:

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

xtraction: (SepF/Cont/Sonc) SEPF

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

Date Extracted: 00/00/00

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

njection Volume: 1.0 (uL) Dilution Factor: 1.0

CONCENTRATION UNITS:

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

CAS NO.	COMPOUND	(ug/L or	ug/Kg)	ug/L	Q
319-85-7 319-86-8 58-89-9 76-44-8 309-00-2 1024-57-3 959-98-8 60-57-1 72-55-9 72-20-8 3213-65-9 72-54-8 1031-07-8 50-29-3 72-43-5 53494-70-5 7421-93-4 5103-71-9 5103-74-2 1104-28-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1	alpha-BHCbeta-BHCdelta-BHCgamma-BHC (LindaHeptachlorAldrinHeptachlor epoxiEndosulfan IDieldrin4,4'-DDEEndrin4,4'-DDDEndosulfan Sulfa4,4'-DDTMethoxychlorEndrin ketoneEndrin aldehydealpha-Chlordanegamma-Chlordanegamma-ChlordaneToxapheneAroclor-1232Aroclor-1248Aroclor-1254Aroclor-1260	ite		.025 .025 .025 .025 .025 .025 .025 .025	מממממממממממממממממממממ
					l

PIBLK28
Contract:

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

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

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

% 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

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

EPA SAMPLE NO.

pIBLK29
Lab Name: ICM Contract:

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

CONCENTRATION UNITS:

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

319-84-6alpha-BHC	.025	U
319-85-7beta-BHC	025	Ü
319-86-8delta-BHC	025	Ū
58-89-9gamma-BHC (Lindane)	025	
76-44-8Heptachlor		U
309-00-2Aldrin	.025	U
1024 57 2 Hontoohlan anadda	.025	U
1024-57-3Heptachlor epoxide	.025	U
959-98-8Endosulfan I	.025	U
60-57-1Dieldrin	.050	U
72-55-9 - 4,4'-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	Ū
5103-74-2gamma-Chlordane	.025	Ü
8001-35-2Toxaphene	2.5	Ü
12674-11-2Aroclor-1016	50	บี
11104-28-2Aroclor-1221	50	υ
11141-16-5Aroclor-1232	_ 	1
53469-21-9Aroclor-1242	.50	U
12672-29-6Aroclor-1248	.50	U
	.50	U
11097-69-1Aroclor-1254	.50	U
11096-82-5Aroclor-1260	50	U
	_	

PIBLK30 шаb Name: ICM Contract:

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

% 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

CAS NO.	COMPOUND	(ug/L or ug/Kg)		Q
319-84-6	alpha-BHC		.025	מ

319-84-6alpha-BHC	.025	U
319-85-7beta-BHC	.025	Ū
319-86-8delta-BHC	.025	U
58-89-9gamma-BHC (Lindane)	.025	Ū
76-44-8Heptachlor	.025	Ü
309-00-2Aldrin	.025	Ū
1024-57-3Heptachlor epoxide	— .025	lΰ
959-98-8Endosulfan I	.025	lΰ
60-57-1Dieldrin	— :023 :050	מ
72-55-94,4'-DDE	— .050 .050	บี
72-20-8Endrin	050	ט U
33213-65-9Endosulfan II	050	מ
72-54-84,4'-DDD	— .050 .050	Ü
1031-07-8Endosulfan Sulfate	— .050 .050	Ü
50-29-34,4'-DDT	— .050 .050	_
72-43-5Methoxychlor		Ü
53494-70-5Endrin ketone	.25	U
53494-70-5Endrin Ketone	.050	U
7421-93-4Endrin aldehyde	.050	U
5103-71-9alpha-Chlordane	.025	Ū
5103-74-2gamma-Chlordane	.025	Ŭ
8001-35-2Toxaphene	2.5	ū
12674-11-2Aroclor-1016	.50	U
11104-28-2Aroclor-1221	.50	U
11141-16-5Aroclor-1232	.50	U
53469-21-9Aroclor-1242		U
12672-29-6Aroclor-1248		U
11097-69-1Aroclor-1254	.50	ט
11096-82-5Aroclor-1260	.50	ט

1042

EPA SAMPLE NO.

C-1 MS

_ab Name: ICM

Contract:

SDG No.: C-1

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

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

عربيرانده Date Extracted: 12/30/97

xtraction: (SepF/Cont/Sonc) SONC

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) 76-44-8Heptachlor 309-00-2Aldrin 60-57-1Dieldrin 72-20-8Endrin 50-29-34,4'-DDT 12674-11-2Aroclor-121 11141-16-5Aroclor-1232 53469-21-9Aroclor-1242 12672-29-6Aroclor-1248 11097-69-1Aroclor-1254 11096-82-5Aroclor-1260	13. 13. 15. 32. 38. 39. 33. 33. 33. 33. 140. 290.	ם ח ה ה
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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

Date Extracted: 12/30/97

xtraction: (SepF/Cont/Sonc) SONC

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

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: ICM Contract:

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

"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

CONCENTRATION UNITS:

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

58-89-9gamma-BHC (Lindane)	19.	
76-44-8Heptachlor	18.	
309-00-2Aldrin	[17.	
60-57-1Dieldrin	39.	
72-20-8Endrin	[45.	
50-29-34,4'-DDT	40.	
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.	lυ

EPA SAMPLE NO.

QA QC

_ab Name: ICM

Contract:

ab Code: ICM Case No.:

SAS No.:

SDG No.: C-1

Matrix: (soil/water) SOLID

Lab Sample ID: QA QC

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

Lab File ID: HA2886

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

Date Received: 12/22/97

*xtraction: (SepF/Cont/Sonc) SONC

Date Extracted: 12/30097

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/Kq) ug/Kq

Q

12674-11-2Aroclor-1016 11104-28-2Aroclor-1221 11141-16-5Aroclor-1232 53469-21-9Aroclor-1242 12672-29-6Aroclor-1248 11097-69-1Aroclor-1254 11096-82-5Aroclor-1260	340. 33. 33. 33. 33. 33. 400.	ם ח ח ח	_
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APPENDIX G

Soil Disposal Characterization Sampling Data Package

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

Matrix:

SOIL

Aroclor-1016

Aroclor-1221

Aroclor-1232

Aroclor-1242

Aroclor-1248 Aroclor-1254 Aroclor-1260

210

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

METHOD PRACTICAL MINIMUM BLANK QUANTITATION DETECTION RESULT RESULT LIMIT LIMIT ANALYTE NAME UG/KG UG/KG UG/KG UG/KG U 300 U 590 420 ם מ מ 300 240 300 300 300 150 180

300

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

U

U

U

U

IJ

4900

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.

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

Client:

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

Sample ID:

SP-2

Sample date:

12/19/97

Sampled by: At lab date: Customer 12/22/97

Matrix:

SOIL

Batch #: Extraction date:

Weight/Volume:

Dilution Factor:

QPC7445 12/26/97

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

20g

Final Volume: Sample Moisture:

10ml 6.88%

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

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. J:

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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VAG

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 OU-1/05552Y05 SP-(1-2)

Sample ID:

Sample source:

Sample date:

12/19/97

Sampled by:

Customer 12/22/97

At lab date: TCLP Ext. Date:

12/24/97

Results in mg/L.

Parameter	Sample Result	Method Blank Analysis	Minimum Detection Limit	Dilution Factor	Analysis Date
Cadmium	0.081	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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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: Sample Source:

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

Sample ID: Sample matrix:

SOIL

Sample date: Sampled by: At lab date: % Moisture:

12/19/97 Customer

12/22/97 9.61%

1

PARAMETER

DILUTION FACTOR

MINIMUM METHOD DETECTION

ANALYSIS

RESULT BLANK LIMIT

DATE

Oil & Grease

1700

U

280

12/24/97

< = 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: Sampled by:

SP-3 12/22/97 Customer

At lab date: Matrix:

12/23/97 SOIL

Batch #: Extraction date:

Weight/Volume:

Dilution Factor:

QPC7443

12/29/97 30g

Column used:

DB 1701/DB 608 12/30/97

10

Analysis date: Final Volume: Sample Moisture:

100ml 18.97%

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

 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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ROB

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:

280005

Client:

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

Sample ID: SP-4

Sample date:

12/22/97

Sampled by: At lab date: 12/23/97

Customer

Matrix:

Batch #: Extraction date: Weight/Volume: QPC7443 $\tilde{1}2/29/97$ Analysis date: Final Volume:

DB 1701/DB 608

12/29/97 10ml Sample Moisture: 7.23%

Dilution Factor:

30g

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	Ū	U	36	18
Aroclor-1248	Ū	U	36	22
Aroclor-1254	U	U	36	25
Aroclor-1260	2 4 J	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 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.

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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1152 Route 10

Randolph, NJ 07869

973-584-0330, FAX: 973-584-0515

NJ #14116 NY #11376

DECEMBER 29, 1997

US EPA CLP Lab

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

TOXICITY CHARACTERISTIC LEACHING PROCEDURE

Leachate Analysis

Lab Number:

280006

Client:

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

Sample source: Sample ID:

SP-(3,4)

Sample date: Sampled by: 12/22/97 Customer

At lab date:

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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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:

280006

Client: Sample Source:

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

Sample ID: Sample matrix:

Sample date: Sampled by: At lab date: % Moisture:

SP-(3,4) SOIL 12/22/97 Customer 12/23/97 15.75%

PARAMETER	DILUTION FACTOR		METHOD	MINIMUM DETECTION LIMIT	ANALYSIS DATE
⊸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

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

(215) 736-9400

(215) 736-9475 Laboratory

NON-HAZARDOUS WASTE MANIFEST	4931
------------------------------	------

1.	Generator of Waste (must be filled in by produc	er) EPA I.D. No. <u> </u>	
	Company Name: (Print or Type) Amerak National	al Railroad Passenger Corp.	
	Pick-up Address 39-29 Honewell St. (No:) (Street)	Long Island 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. regulation	ons.
	Tons: 2-2 Cubic Yards:	Other (Specify):	
ź	Name of Waste NON HAZARDOUS SOIL, NO	ON D.O.T. REGULATED	
į	Special Handling Instructions, if any: OPS PILE		· ·
	PROFILE/WASTE STREAM I.D. NUMBER:	338178N	
pacl	is to certify that the above named materials are taged, marked, and labeled and are in proper oplicable state and federal law. The wastes we ed. I certify that the foregoing is true and correct the state of the st	r condition for transportation according ere consigned to the transporter	
2.	Hauler of Waste (must be filled-in by hauler) EP.	'A I.D. No	_
	COMPANY NAME: 750		
	ADDRESS: WAYNE N.	<u> </u>	
	Pick-up Date: 1/30/98 Truck No	3 / Vehicle Lic. No. 74E 223	<u>Z</u>
	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: RBa	der penalty of perjury that the foregoing	
3.	Disposer of Wasto (must be filled-in by disposer)	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 facility and accepted on	the above hauler to this disposal (DISPOSAL DAT	E)
	Signature of authorized agent and title:		

CUSTOMER SERVICE 1-8005778 19797

914378 DATE: 01/30/98

TIME: 14:29-15:08

CUSTOMER: 665

CLEAN HARBORS ENVIRONMENTAL-EDISON

PROFILE: 338178N HAULER:

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

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

ORIGIN

NEW JERSEY

100 65600

GROSS: 100160 LBS

TARE: 34560 LBS

NET: 65600 LBS = 32.80 TONS

TONS DUMPED TODAY: 56.40

REMARKS

P.Bans ____ I E

THE PLANT OF THE PARTY THE RESERVE WHEN THE PROPERTY OF THE PARTY OF T

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VASTE 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
	Camara Manara (Dai	Sant and Thomas I have I be a second	_

	Company Name: (Print or Type) Amtrak Nati	Ional Railroad Passenger Corp.
	Pick-up Address 39-29 Honeywell St.	Long Island City NY
	Telephone Number: 212 630-7695	Long Island City NY (State) SIC No.
		ents a non-hazardous waste as per E.P.A. and PA D.E.R. regulations.
	•	Other (Specify):
	Name of Waste NON HAZARDOUS SOIL,	
	Special Handling Instructions, if any: OPS PI	
	PROFILE/WASTE STREAM I.D. NUMBER:	·
pack to ar nam	is to certify that the above named materials aged, marked, and labeled and are in prophicable state and lederal law. The wastes ed. I certify that the foregoing is true and contains the state of the state and contains the state of the stat	per condition for transportation accolding were consigned to the transporter
Date	1/27/98	Signature: (Name and Title)
2.	Hauler of Waste (must be filled-in by hauler)	EPA I.D. No.
	COMPANY NAME: (aust)	
	ADDRESS & 12 P	
	Pick-up Date: 1/2)/98 Truck No	Vehicle Lic. No. A(3)177
	named below and was accepted. I certify to is true and correct. Signature of authorized agent and title:	up and hauled by me to the disposal facility under penalty of perjury that the 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 facility and accepted on	by the above hauler to this disposal (DISPOSAL DATE)
	Signature of authorized agent and title:	

CUSTOMER SERVICE 1-800-778-9797

913419

DATE: 01/27/98

TME: 11:81-18:05

CUSTOMER: 865

CLEAN HARBORS ENVIRONMENTAL-EDISON

HAULER:

TRUCK: 0003 WASTE: CON CONTAMINATED SOIL -

NATIONAL RAILROAD PASSENGER CONTAM. BOIL/SITE CLEA

ORIGIN

NEW JERSEY

MANIFEST: 25923

PROFILE: 338178N

PCT WGT/VOL

100 48400

GROSS: 76140 LBS

TARE: 27740 LBS

NET: 48400 LBS

AND THE RESIDENCE OF THE PROPERTY OF THE PARTY OF THE PAR

THE CONTRACT OF THE PROPERTY OF THE PARTY OF

TONS DUMPED TODAY:

162.04

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 MS4931

1.	Generator of Waste (must be filled in by prod	ducer) EPA I.D. No. <u>NYD078516895</u>	
	Company Name: (Print or Type) Amtrak Natio	onal Railroad Passenger Corp.	
	Pick-up Address 39-29 Honeywell St. (Street)	Long Island City	NY (State)
	Telephone Number: 212 630-7695		
	Waste Stream Identification: This manifest representation	ents a non-hazardous 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 PI	<u>T</u>	
	PROFILE/WASTE STREAM I.D. NUMBER:	338178N	
pack o ar nam	is to certify that the above named materials taged, marked, and labeled and are in properlicable state and federal law. The wastes ed. I certify that the foregoing is true and constant $\frac{A_{S}}{A_{S}}$	per condition for transportation a were consigned to the transporte orrect to the best of my knowledg	ccording er ge.
		tivame and 11	le)
2.	Hauler of Waste (must be filled-in by hauler)		
	COMPANY NAME: Coest In (N	40)	
	ADDRESS: B, s/s/ P2		
	Pick-up Date: 177-78 Truck No.	Vehicle Lic. No.	PC 1395
	The above described waste was picked unamed below and was accepted. I certify us true and correct. Signature of authorized agent and title:		
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	/ F4	al SPOSAL DATE)
-	facility and accepted on	(S) LLO	SPOSAL DAIE)
		₩V 7 -	

CUSTOMER SERVICE 1-800 5778-579

913416

DATE: 01/27/98 IME: 11:18-12:03

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/VOL

NEW JERSEY

100 52421

GROSS: 80520 LBS

TARE: 28100 LBS

26.21 TONS NET: 52420 LBS

TONS DUMPED TODAY:

137.84

0015566 REMARKS

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 pro	oducer) EPA I.D. No. <u>wyn078516895</u>	
	Company Name: (Print or Type) Amtrak Nat	ional Railroad Passenger Corp.	
	Pick-up Address 39-29 Honeywell St. (Street)	Long Island City	(State)
	Telephone Number: 212 630-7695		(Sigle)
	Waste Stream Identification: This manifest repre	esents a non-hazardous waste as per E.P.A. and	PA D.E.R. regulations.
	Tons: 22 Cubic Yards: _		•
2	Name of Waste NON HAZARDOUS SOIL	, NON D.O.T. REGULATED	*
	Special Handling Instructions, if any: OPS P	ILE	
,	PROFILE/WASTE STREAM I.D. NUMBER:	338178N	
oacl o a ram	is to certify that the above named material taged, marked, and labeled and are in proplicable state and federal law. The waste ed. I certify that the foregoing is true and $\frac{1}{29/98}$	oper condition for transportation is were consigned to the transport correct to the best of my knowled	according er lge.
2.	Hauler of Waste (must be filled-in by hauler		
	COMPANY NAME: Coastin		· · · · · · · · · · · · · · · · · · ·
	ADDRESS: Br. 5 1 B		***
	Pick-up Date: \(\square\) \(\square\) Truck No.	OU Vehicle Lic. No.	ACBOE
	The above described waste was picked named below and was accepted. I certify is true and correct. Signature of authorized agent and title:	under penalty of perjury that the	
3.	Disposer of Waste (must be filled in by disp	oser) CIRCLE ONE:	and the second
	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		sal (ISPOSAL DATE)
	Signature of authorized agent and title:	ndel fob	
			Service Control of Con

914244

DATE: 01/30/98

TIME: 10:20-10:47

CUSTOMER: 665

CLEAN HARBORS ENVIRONMENTAL-EDISON

HAULER:

PROFILE: 338178N

TRUCK: 0004

WASTE: CON CONTAMINATED SOIL - MANIFEST: 25920

NATIONAL RAILROAD PASSENGER CONTAM. SOIL/SITE CLEA

ORIGIN NEW JERSEY PCT WGT/V 100 472

GROSS: 75160 LBS

NET: 47200 LBS 23.60 TONS

TONS DUMPED TODAY:

23.60

ØØ15566 REMARKS

LANGE CONTRACTOR OF THE CONTRACTOR OF THE PROPERTY OF THE CONTRACTOR OF THE CONTRACT

A CONTRACTOR OF THE PROPERTY O

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
	Company Name: (Print or Type) Amtrak National Railroad Passenger Corp.
	Pick-up Address 39-29 Honeywell St. Long Island City NY (State) (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: 22 Cubic Yards: Other (Specify):
	Name of Waste Non HAZARDOUS SOIL, NON D.O.T. REGULATED
	Special Handling Instructions, if any: OPS PTLE
	PROFILE/WASTE STREAM I.D. NUMBER: 338178N
oacl o aj nam	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.
Date	e: 1/28/98 As Agent for Antrak Signature: halk for Mane and Title)
2.	Hauler of Waste (must be filled-in by hauler) EPA I.D. No.
	COMPANY NAME: WM 1/2 pary & 5m
	ADDRESS: WAShington NT
	ADDRESS: Wilsh instan NT Pick-up Date: 12817 Truck No. #9 Vehicle Lic. No. Ab 444-7
	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 disposer) 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 he above hauler to this disposal facility and accepted on (DISPOSAL DATE
	Signature of authorized agent and title:

- 5 . ISTE TTT: 01/23/93 TAME: 11:07--11:32

CUSTOMER: 365

CLEAN HARBORS ENVIEGNMENTAL-EDISON

144UL 37 :

PROFILE. TESITEN

78UCK: 3009

WASTE: CON CONTAMINATED SOIL -

MONIFEST: 19931

NATIONAL RAILROAD PASSENGER CONTAM. SOIL/SITE CLEA

ORIGIN

POT WGT/VOL

NEW JERSEY

100 6380

GROSS: 89800 LBS

TARE: 26000 LBS

NET: 63800 LBS

31.90 TONS

TONS DUMPED TODAY:

92.16

The state of the s

SIGN 0015566 REMARKS

Document Refer No. 97 25927

WASTE MANAGEMENT OF PENNSYLVANIA, INC. 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. NYD078516895
	Company Name: (Print or Type) Amtrak National Railr	oad Passenger Corp.
	Pick-up Address 39-29 Honeywell St.	Long Island City NY (State)
	Telephone Númber: 212 630-7695	(Oily)
	Waste Stream Identification: This manifest represents a non-haze	ardous waste as per E.P.A. and PA D.E.R. regulations.
	Tons: 22 Cubic Yards:	
	Name of WasteNON HAZARDOUS SOIL, NON D.O.1	. REGULATED
	Special Handling Instructions, if any: OPS PILE	
	PROFILE/WASTE STREAM I.D. NUMBER: 3381781	· .
pacl to a nam	is to certify that the above named materials are proper caged, marked, and labeled and are in proper conditionable state and federal law. The wastes were considered. I certify that the foregoing is true and correct to the state of the stat	on for transportation according igned to the transporter e best of my knowledge.
2.	Hauler of Waste (must be filled-in by hauler) EPA I.D. N	0
	COMPANY NAME: HAGGERTY	
	ADDRESS: WAS HIMTON, N.J.	
	Pick-up Date: 1/2 8/98 Truck No7	Vehicle Lic. No. 7202KG
	The above described waste was picked up and had named below and was accepted. I certify inder per is true and correct. Signature of authorized agent and title:	alled by me to the disposal facility alty of perfuty that the foregoing
3.	Disposer of Waste (must be filled-in by disposer) CIR	CLE ONE:
	↑ Morrisville, PA-19067	dentown Road n, PA 19007 #101494
	Waste subject to this manifest was delivered by the abortacility and accepted on	ye hauler to this disposal (DISPOSAL DATE)
	Signature of authorized agent and title:	male of the

013746

DATE: 01/29/98

TIME: LE:36-13:28

CUSTOMER: -65

CLEAN HARBORS ENVIRONMENTAL-EDISON

BOLLER:

TRUCK: 0007

WASTE: CON CONTAMINATED SOIL -NATIONAL RAILROAD PASSENGER CONTAM, SOIL/SITE CLEA

ORIGIN

NEW JERSEY

MANIFEST: 25927

PROFILE: 338178N

WGT/VOL PCT 49140 100

GROSS:

81520 LBS

TARE: 32380 LBS

49140 LBS NET:

24.57 TONS

TONS DUMPED TODAY:

270.960

THE CONTRACTOR OF THE PROPERTY
ØØ15566

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 :1S4931
1.	Generator of Waste (must be filled in by prod	ducer) EPA I.D. No. <u>FYD078516895</u>
	Company Name: (Print or Type) Amerak Nati	onal Railroad Passenger Corp.
	Pick-up Address 39-29 Honeywell St.	Long Island City NY (City) (State)
	Telephone Number: 212 630-7695	SIC No.
	Waste Stream Identification: This manifest representation	ents 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.	
	Special Handling Instructions, if any: OPS PI	LE
	PROFILE/WASTE STREAM I.D. NUMBER:	338178N
pack	is to certify that the above named materials aged, marked, and labeled and are in propoplicable state and federal law. The wastes ed. I certify that the foregoing is true and co	per condition for transportation according were consigned to the transporter prect to the best of my knowledge.
Date	1/28/98 As Agent for 1.	Signature: Mulle Journal (Name and Title)
2.	Hauler of Waste (must be filled-in by hauler)	
	ADDRESS: Washington M	Tucking
	ADDRESS: Washington 11	
	Pick-up Date: 1/28/98 Truck No	197 Vehicle Lic. No. 7774 HKA
	The above described waste was picked unamed below and was accepted. I certify us true and correct. Signature of authorized agent and title:	ap and hauled by me to the disposal facility under penalty of perjury that the foregoing
3.	Disposer of Waste (must be filled in by dispos	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 lacility and accepted on	by the above hauler to this disposal (DISPOSAL DATE)
	Signature of authorized agent and title:	Andred Lab

* 0137**63**

18TE: 01/26/98

TIME: 11:32-12:09

JUSTOMER: 565

CLEAN HAPBORS ENVIRONMENTAL-EDISON

HAULEA:

PROFILE. B38178N

TRUCK: 0197 WASTE: CON CONTAMINATED SOIL -

MANIFEST: 25930

NATIONAL RAILROAD PASSENGER CONTAM. SOIL/SITE CLEA

ORIGIN NEW JERSEY PCT WGT/VOL 100 49200

GROSS: 81860 LBS

TARE: 32660 LBS

= 24.60 TONS NET: 49200 LBS

TONS DUMPED TODAY:

197.45

ØØ15566 REMARKS

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

Document Refer No. 97 25929

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) EP.	A I.D. No. <u>NYD078516895</u>
	Company Name: (Print or Type) Amtrak National Rail	lroad Passenger Corp.
	Pick-up Address 39-29 Honeywell St.	Long Island City NY
	Telephone Number: 212 630-7695	
	Waste Stream Identification: This manifest represents a non-ho	zardous waste as per E.P.A. and 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 PILE	
	PROFILE/WASTE STREAM I.D. NUMBER: 338178	BN
pacl to a nam	is to certify that the above named materials are propkaged, marked, and labeled and are in proper condipplicable state and federal law. The wastes were conted. I certify that the foregoing is true and correct to the state of t	ition for transportation according isigned to the transporter the best of my knowledge.
2.	Hauler of Waste (must be filled-in by hauler) EPA I.D.	No
	COMPANY NAME: SISK Trucking	TAK.
	ADDRESS: LBD; NJ.	
	Pick-up Date: 1/28/99 Truck No. 1/28/99 Truck No	Vehicle Lic. No. Ac4018 ruled by me to the disposal facility
3.	Disposer of Waste (must be filled in by disposer) CI	RCLE ONE:
	Morrisville, PA 19067 / Tullyto	F. ordentown Road wn, PA 19007 #101494
	Waste subject to this manifest was delivered by the abstacility and accepted on	ove hauler to this disposal (DISPOSAL DATE)
	Signature of authorized agent and title:	geled pol

913710 DATE: 01/28/98 TIME: 11:40-12:08

JUSTOMER: 665

TLEAN HARBORS ENVIRONMENTAL-EDISON

HAULEF:

PROFILE: 338176N

TRUCK: 001) WASTE: CON CONTAMINATED SOIL -

MANIFEST: 35929

NATIONAL RAILROAD PASSENGER

CONTAM. SOIL/SITE CLEA

ORIGIN

PCT WGT/VOL

NEW JERSEY

100 60860

GROSS: 87520 LBS

TARE: 26660 LB**S**

NET: 60860 LBS

30.43 TONS

TONS DUMPED TODAY:

ØØ15566 REMARKS

SIGN

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Service was the first the first of the first of the service of the

BUT IN THE RESERVE OF THE PROPERTY OF THE PROP

1000 New Ford Mill Road Morrisville, PA 19067

(215) 736-9400

(215) 736-9475 Laboratory

	NO	N-HAZARDOUS	WASTE MAN	IFEST MS4931	
1.	Generator of Waste (must be	e filled in by pro	ducer) EPA I.D	. No. <u>NYD078516895</u>	
	Company Name: (Print or T	pe) Amtrak Nati	onal Railroad	Passenger Corp.	<u> </u>
	Pick-up Address 39-29 Hon	eywell St. (Street)		Long Island City (City)	NY (State)
	Telephone Number: 212 63			•	
	Waste Stream Identification:	This manifest repres	ents a non-hazardo	us waste as per E.P.A. and P.	A D.E.R. regulations
•	Tons: 22	Cubic Yards:		Other (Specify):	•
	Name of Waste	HAZARDOUS SOIL,	NON D.O.T. R	REGULATED	
	Special Handling Instruction	s, if any: OPS P I	LE	· · · · · · · · · · · · · · · · · · ·	
	PROFILE/WASTE STREAM I	.D. NUMBER:	338178N		
pac to a nam	is to certify that the above to kaged, marked, and labeled pplicable state and federal hed. I certify that the foregoined. I set 1/28/98	l and are in pro aw. The wastes	per condition were consign orrect to the b	for transportation a ed to the transporte sest of my knowledge	ccording r re.
2.	Hauler of Waste (must be fil	led-in by hauler)	EPA I.D. No		
	COMPANY NAME:	Trucking			
	ADDRESS: N				Cherry Congress Congress
	Pick-up Date: 1/28/98	Truck No	3	Vehicle Lic. No.	PPOB OF
	The above described wa	ste was nicked i	in and hauled	d by me to the dispo	seal facility

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

Signature of authorized agent and title:

G.R.O.W.Ś., 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

CIRCLE ONE:

Waste subject to this manifest was delivered by the above hauler to this disposal facility and accepted on ______ (DISPOSAL DATE

named below and was accepted. I certify under penalty of persury that the foregoing

Signature of authorized agent and title:_

G. R. O. W. S. INC. CUSTOMER SERVICE 1-800-778-9797

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

ORIGIN

PCT WGT/VOL

NEW JERSEY

GROSS:

TARE:

78800 LBS

26240 LBS

NET:

52560 LBS 📻

26. PA. TONS

The state of the s

THE RESIDENCE OF THE PARTY OF T

TONS DUMPED TODAY:

172.85

0015566 REMARKS SIGN

H

52560

1000 New Ford Mill Road Morrisville, PA 19067

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

NON-HAZARDOUS WASTE MANIFEST WS4931

l.	Generator of Waste (must be filled in by producer) EPA	I.D. No. <u>NYD078516895</u>	
	Company Name: (Print or Type) Amtrak National Rails	road Passenger Corp.	
	Pick-up Address 30_29 Honeywell St. (No.)	Long Island City	NY_
	Telephone Number: 212 630-7695		(State)
	Waste Stream Identification: This manifest represents a non-haz	ardous 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.		
	Special Handling Instructions, if any: ops pile		· · · · · · · · · · · · · · · · · · ·
	PROFILE/WASTE STREAM I.D. NUMBER: 3381781	N	1
o ar	is to certify that the above named materials are proper taged, marked, and labeled and are in proper condit oplicable state and federal law. The wastes were consed. I certify that the foregoing is true and correct to the	ion for transportation ac signed to the transporter ne best of my knowledg	ccording
Date	1/28/98 As Agentlan Amtrak Signature	: Multhe Home and Title	<u> </u>
2.	Hauler of Waste (must be filled-in by hauler) EPA I.D. N	Vo	
	COMPANY NAME: Cost live		<u> </u>
	ADDRESS: Bushel D		
	Pick-up Date: 1/28/98 Truck No. 03	Vehicle Lic. No. 1	163190
	The above described waste was picked up and har named below and was accepted. I certify under penis true and correct. Signature of authorized agent and title:	uled by me to the dispo alty of perjury that the f	sal facility oregoing
3.		RCLE ONE:	
s	G.R.O.W.S., INC. 1513 Bordentown Road T.R.R.F	rdentown Road vn, PA 19007	
orin Des _u a	Waste subject to this manifest was delivered by-the abordacility and accepted on	1 / / 2 / / .	l POSAL DATE)
	Signature of authorized agent and title:	yebel/ela	
	·		

CUSTOMER SERVICE 1-800-778 1NC

913693

DATE: 01/28/98

TIME: _1:09-11:40

CUSTOMER: 665

CLEAN HARBORS ENVIRONMENTAL-EDISON

HAULER:

PROFILE: 338178N

TRUCK: 0003

WASTE: CON CONTAMINATED SOIL -

MANIFEST: 25917

NATIONAL RAILROAD PASSENGER

CONTAM. SOIL/SITE CLEA

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

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

Morrisville, PA 19067 * -

NON-HAZARDOUS WASTE MANIFEST MS4931

Document Refer No. 97 25913

l.	Generator of Waste (must be filled in by produce	er) EPA I.D. No. NYD078516895	
	Company Name: (Print or Type) Amtrak National	Railroad Passenger Corp.	
	Pick-up Address 39-29 Honeywell St. (No.) (Street)	Long Island City	
	Telephone Number: 212 630-7695	(City) SIC No	(State)
	Waste Stream Identification: This manifest represents of	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, NO	D.O.T. REGULATED	
	Special Handling Instructions, if any: OPS PILE		
	PROFILE/WASTE STREAM I.D. NUMBER:	38178N	
pacl to a nam	is to certify that the above named materials are taged, marked, and labeled and are in proper policable state and federal law. The wastes were ted. I certify that the foregoing is true and correct the certify that the foregoing is true and correct the certify that the foregoing is true and correct the certify that the foregoing is true and correct the certify that the foregoing is true and correct the certific that the foregoing is true and correct the certific that the certi	condition for transportation ac e consigned to the transporter	cording
2.	Hauler of Waste (must be filled-in by hauler) EPA	I.D. No	
	COMPANY NAME: TAK Treking		
	ADDRESS: Ladi NS		
* .e	Pick-up Date: 1/23/98 Truck No. 3	Vehicle Lic. No.	6 009B
•	The above described waste was picked up a named below and was accepted. I certify under is true and correct. Signature of authorized agent and title:	nd hauled by me to the disposer penalty of perjury that the fo	sal facility
3.	Disposer of Waste (must be filled-in by disposer)	CIRCLE ONE:	
at vijit	1513 Bordentown Road Morrisville, PA 19067	T.R.R.F. 200 Bordentown Road Tullytown, PA 19007 Permit #101494	
	Waste subject to this manifest was delivered by the facility and accepted on	(DIS	POSAL DATE

CUSTOMER SERVICE 1-800-778-9797

913415

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 ORIGIN

WGT/VOL

NEW JERSEY

46400 100

GROSS:

TARE:

26200 LBS

46400 LBS

TONS DUMPED TODAY:

111.63

0015566

REMARKS

SIGN

TO SELECTION OF THE PROPERTY O

TO SECURE OF THE SECURE OF THE PARTY 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	15045W

1.	Generator of Waste (must be filled in by producer) EPA I.D. No. <u>hypo78516895</u>				
	Company Name: (Print or Typ	oe) <u>Amtrak Natio</u>	nal Railroad	Passenger Corp.	
	Pick-up Address 39-29 Honey	well St.		Long Island City	(State)
	Telephone Number: 212 630-				(Sidie)
	Waste Stream Identification:	This manifest represe	nts a non-hazardou	as waste as per E.P.A. and I	PA D.E.R. regulations.
	Tons: 22 (Cubic Yards:	· .	Other (Specify):_	• .
	Name of Waste Non H	AZARDOUS SOIL,	NON D.O.T. RI	EGULATED	
	Special Handling Instructions	, if any:_ ops_pil	<u> </u>		
	PROFILE/WASTE STREAM I.I	O. NUMBER:	338178N		
pac to a nan	is to certify that the above no kaged, marked, and labeled pplicable state and federal landled. I certify that the foregoind et al.	and are in prop w. The wastes v g is true and co	er condition vere consigne rrect to the b	for transportation of ed to the transporte	according er
Date ——	9: 1/2/// <i>0</i>		Signature:	(Name and Ti	itle)
2.	Hauler of Waste (must be fille			JA-445	
	COMPANY NAME: TAK/		'g		
	ADDRESS: Lodi,	_			
	Pick-up Date: 1-27-98 The above described wast named below and was acce is true and correct. Signature of authorized agent	e was picked up pted. I certify u	and hauled	by me to the disp	osal facility
3.	Disposer of Waste (must be fil	led-in by dispose	er) CIRCLI	E ONE:	
	G.R.O.W.S., INC. 1513 Bordentown Road Morrisville, PA 19067 Permit #100148 Waste subject to this manifest facility and accepted on Signature of authorized agent		T.R.R.F. 200 Borden Tullytown, F Permit #101 y the above h	A 19007 1494 nauler to this dispos	al ISPOSAL DATE)

CUSTOMER SERVICE 1-800-778-9797

913414

DATE: 01/27/98 TIME: 11:16-12:02

CUSTOMER: 665

CLEAN HARBORS ENVIRONMENTAL-EDISON

HAULER:

SE PROFILE: 338178N

TRUCK: 0002

WASTE: CON CONTAMINATED SOIL -

_MANIFEST: 25932

NATIONAL RAILROAD PASSENGER
ORIGIN

CONTAM. SOIL/SITE CLEA

PCT WGT/VOL

100

NEW JERSEY

GROSS:

85720 LBS

TARE:

30960 LBS

NET:

54760 LBS

27:38 IDNS

TONS DUMPED TODAY:

88.43

· **00**15566

REMARKS

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54760

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	e filled in by pro	oducer) EPA I.I). No. NYD07851689	5
	Company Name: (Print or Ty	ype) <u>Amtrak Nat</u>	ional Railroa	i Passenger Corp.	
	Pick-up Address 39-29 Hon	eywell St.		Long Island City	NY (Control)
,	Telephone Number: 212 63			SIC No	(State)
	Waste Stream Identification:	This manifest repre	esents a non-hazardo	ous waste as per E.P.A. and	PA D.E.R. regulations.
. 1	Tons: 22	Cubic Yards:		Other (Specify):	·
	Name of Waste	HAZARDOUS SOLI	NON D.O.T.	REGULATED	
	Special Handling Instruction	is, if any: OPS 1	PILE		
	PROFILE/WASTE STREAM I	.D. NUMBER:	338178N	. 24	
pacl to a nam	is to certify that the above reaged, marked, and labeled pplicable state and federal led. I certify that the foregoing the state of the	l and are in pro law. The wastes	oper condition s were consigr correct to the l	for transportation led to the transport of my knowled	according ter
—			Digitature 22	(Name and	Title)
2.	Hauler of Waste (must be fil	Í		•	,
	COMPANY NAME: Has	Prity -	Lucker	9	
	ADDRESS: Washin	1'	<u> </u>	<u>/</u>	<u> </u>
-	Pick-up Date: 1/27/98	Truck No	197	Vehicle Lic. No	T174 HA
	The above described wa named below and was accist true and correct. Signature of authorized age	epted. I certify	under penalty	d by me to the dis of perjury that the	posal facility e foregoing
3.	Disposer of Waste (must be	filled in by dispo	oser) CIRCI	E ONE:	्यु मे <mark>क्क्स्स्ट्रिस्स १८ सम्बद्धाः स्ट</mark>
	G.R.O.W.S., INC. 1513 Bordentown Road Morrisville, PA 19067 Permit #100148		T.R.R.F. 200 Borde Tullytown, Permit #10		
	Waste subject to this manifer facility and accepted on	st was delivered	by the above		osal DISPOSAL DATE)
	Signature of authorized age	nt and title:			Say a series of the series
				andre in the state of the state	<u>andria. Liferantino di la carante di Augusta di la carante di l</u>

LANDFILL (MAIL TO GENERATOR)

CUSTOMER SERVICE 1-8005778-8767

913403

DATE: 01/27/98

PROFILE: 338178N

CONTAM. SOIL/SITE CLEA

PCT

100

MANIFEST: 25916

TIME: 10:57-11:27

CUSTOMER: 665

CLEAN HARBORS ENVIRONMENTAL-EDISON

HAULER:

TRUCK: 0197

WASTE CON CONTAMINATED SOIL -

NATIONAL RAILROAD PASSENGER

ORIGIN

NEW JERSEY

GROSS: 89080 LBS

TARE: 32480 LBS

NET: 56600 LBS

PA 30 TONG

TONS DUMPED TODAY:

61.05

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WGT/VOL

56600

0015566 REMARKS

SIGN

WASTE MÂNAGEMENT OF PENNSYLVANIA. INC.

Document Refer No. 97 25926

1090 New Ford Mill Road Morrisville, PA 19067

(215) 736-9400

(215) 736-9475 Laboratory

PROFILE/WASTE STREAM I.D. NUMBER:

NON-HAZARDOUS WASIE MAN	MS4931	
Generator of Waste (must be filled in by producer) EPA I.	D. No. <u>nyd078516895</u>	
Company Name: (Print or Type) Amtrak National Railros	id Passenger Corp.	···
Pick-up Address 39-29 Honeywell St.	Long Island City (City)	NY (State)
Telephone Number: 212 630-7695	SIC No	
Waste Stream Identification: This manifest represents a non-hazard	ous waste as per E.P.A. and P	A D.E.R. regulations
Tons: 22 Cubic Yards:	_ Other (Specify):	• .
Name of Waste NON HAZARDOUS SOIL, NON D.O.T.	REGULATED	<u> </u>
Special Handling Instructions, if any: OPS PILE	. <i>.</i>	

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 lederal law. The wastes were consigned to the transporter named. I certify that the foregoing is true and correct to the best of my knowledge. AS AGENT Re Amtra.

Signature: Hauler of Waste (must be filled-in by hauler) EPA I.D. No.__ COMPANY NAME: ADDRESS: Vehicle Lic. No. AB/SON Truck No. _ Pick-up Date: 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 disposer) CIRCLE ONE:

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

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

Waste subject to this manifest was delivered by the above hauler to this disposal facility and accepted on_ (DISPOSAL DATE)

Signature of authorized agent and title:

G. R. O. W. S., INC. CUSTOMER SERVICE 1-800-778-9797

914020

DATE: 01/29/98 TIME: 12:18-12:49

CUSTOMER: 565

CLEAN HARBORS ENVIRONMENTAL-EDISON

HAULER:

*** PROFILE: 338178N

MANIFEST: 25926

TRUCK: 0037

WASTE: CON CONTAMINATED SOIL - NATIONAL RAILROAD PASSENGER

CONTAM. SOIL/SITE CLEA

DRIGIN

PCT WGT/VOL 100 50100

GROSS: 75400 LBS

TARE: 25300 LBS

NET: 50100 LBS

25.05 TONS

TONS DUMPED TODAY:

229.75

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0015566 REMARKS _____

SIGN

AND BUILDING
I

1000 New Ford Mill Road Morrisville, PA 19067

(215) 736-9400

(215) 736-9475 Laboratory

,		NON-HAZARDOU	JS WASTE MANIFE	ST MS4931	ر معدر پرس
1.	Generator of Waste (m	ust be filled in by p	oroducer) EPA I.D. N	o. <u>NYD078516895</u>	
	Company Name: (Print	or Type) Amtrak N	itional Railroad Pa	ssenger Corp.	
	Pick-up Address 39-29	Honeywell St.	Lon	ig Island City (City)	NY
	Telephone Number: 21	(5)(50)		SIC No	(State)
	Waste Stream Identifica	ation:This manifest rep	oresents a non-hazardous wo	aste as per E.P.A. and P.	A D.E.R. regulations.
	Tons: 22	Cubic Yards:		Other (Specify):_	•
	Name of Waste	NON HAZARDOUS SO	IL, NON D.O.T. REGU	TATED	
	Special Handling Instru	actions, if any: OPS	PILE		· · · · · · · · · · · · · · · · · · ·
	PROFILE/WASTE STRE	AM I.D. NUMBER:	338178N		
pack to aj nam	is to certify that the abcaged, marked, and lalcoplicable state and leded. I certify that the for	beled and are in peral law. The wast regoing is true and	proper condition for es were consigned	transportation a to the transporte	ccording r re.
2.	Hauler of Waste (must	be filled-in by haul	er) EPA I.D. No		
	COMPANY NAME:	750	·	·	
	ADDRESS:	WAYNE	NJ		
	Pick-up Date: 1/29/98	Truck No	•	Vehicle Lic. No.	79384/
	The above described named below and was is true and correct. Signature of authorized	d waste was picke s accepted. I certi	fy under penalty of		
3.	Disposer of Waste (mus	t be filled-in by dis	poser) CIRCLE C	NE:	e egiperen bet ekker. Karan
	G.R.O.W.S., INC. 1513 Bordentown Ros Morrisville, PA 19067 Permit #100148	X	T.R.R.F. 200 Bordentow Tullytown, PA Permit #101494	19007	
	Waste subject to this management of the facility and accepted of		ed by the above hau		ol SPOSAL DATE)
	Signature of authorized	agent and title:	plane	Julkoll	and the second
, iğ	The first of the second second	ar grand in the contract of th		Albert Lukeria 🕻 🗀 1922.	THE PROPERTY OF THE

G. R. O. W. S.. INC. CUSTOMER SERVICE 1-800-778-9797

914063

DATE: 01/29/98

TIME: 13:31-14:11

100

CUSTOMER: 665

CLEAN HARBORS ENVIRONMENTAL-EDISON

HAULER:

PROFILE: 338178N

TRUCK: 0417

WASTE: CON CONTAMINATED SOIL -

MANIFEST: 25924

NATIONAL RAILROAD PASSENGER CONTAM. SOIL/SITE CLEA ORIGIN

PCT WGT/VOI

44901

NEW JERSEY

GROSS: 75940 LBS

31040 LBS TARE:

NET: 44900 LBS

₹22.45 TONS

TONS DUMPED TODAY:

278.26

0015566 REMARKS SIGN

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Morrisville, PA 19067

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

NON-HAZARDOUS WASTE MANIFEST

<u>l</u> .	Generator of Waste (must b	e filled in by pro	ducer) EPA I.D.	No. <u>NYD078516895</u>	
	Company Name: (Print or T	ype) Amerak Nari	onal Railroad P	assenger Corp.	· · · · · · · · · · · · · · · · · · ·
	Pick-up Address 39-29 Hone	ywell St. (Street)	Lo	ng Island City (City)	NY (State)
	Telephone Number: 212 630				
	Waste Stream Identification	This manifest repres	sents a non-hazardous	waste as per E.P.A. and F	PA D.E.R. regulations.
	Tons: 22	Cubic Yards:	·	Other (Specify):_	· · · · · · · · · · · · · · · · · · ·
	Name of Waste	HAZARDOUS SOIL.	NON D.O.T. REG	ULATED	· .
	Special Handling Instruction	ns, if any: ops PI	LE		
	PROFILE/WASTE STREAM	I.D. NUMBER:	338178N		
to a nam	raged, marked, and labeled policable state and federal ed. I certify that the foregoing the state and labeled ed. I certify that the foregoing the state and labeled ed.	law. The wastes	were consigned	d to the transporte	er ge.
2.	Hauler of Waste (must be fi	lled-in by hauler)	EPA I.D. No		
	COMPANY NAME: Const	-line (NHT)		· · · · · · · · · · · · · · · · · · ·
	ADDRESS: Build	Pa			
	Pick-up Date: 128/19 The above described wo named below and was accist true and correct. Signature of authorized age	aste was picked repted. I certify	up and hauled	by me to the disp	osal facility
3.	Disposer of Waste (must be	filled-in by dispo		ONE:	
(G.R.O.W.S., INC. 1513 Bordentown Road Morrisville, PA 19067 Permit #100148		T.R.R.F. 200 Bordent Tullytown, PA Permit #1014	\ 19007 (95)
	Waste subject to this manife facility and accepted on Signature of authorized age	1-28-9Y	by the above he	(DI	al SPOSAL DATE)
			445		and the second s

G. R. O. W. S. 1NC. CUSTOMER SERVICE 1-800-778-9797

913691 DATE: 01/28/98

TIME: 11:04-11:27

CUSTOMER: 665

CLEAN HARBORS ENVIRONMENTAL-EDISON

HAULER:

PROFILE: 338178N

TRUCK: 0004

WASTE: CON CONTAMINATED SOIL -

MANIFEST: 259156

NATIONAL RAILROAD PASSENGER CONTAM. SOIL/SITE CLEA

ORIGIN

WGT/VOL PCT 56660

NEW JERSEY

100

GROSS:

84840 LBS

TARE:

28180 LBS

NET:

56660 LBS

28.33 TONS

TONS DUMPED TODAY:

60.26

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The control of the co

A CONTRACTOR OF THE PROPERTY O

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 produc	cer) EPA I.D. No. <u>NYD078516895</u>			
	Company Name: (Print or Type) Amtrak National Railroad Passenger Corp.				
	Pick-up Address 39-29 Honeywell St. (Street)	Long Island City NY			
	Telephone Number: 212 630-7695	, care,			
	Waste Stream Identification: This manifest represent	ts 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, N	NON D.O.T. REGULATED			
	Special Handling Instructions, if any: OPS PILE	<u>B</u>			
	PROFILE/WASTE STREAM I.D. NUMBER:	338178N			
pack to a	is to certify that the above named materials a taged, marked, and labeled and are in proper oplicable state and federal law. The wastes we ed. I certify that the foregoing is true and corrections of the control of th	er condition for transportation according ere consigned to the transporter rect to the best of my knowledge.			
2.	Hauler of Waste (must be filled-in by hauler) EF	PA I.D. No.			
	COMPANY NAME: T.S.D				
	ADDRESS: WAYNE N.J.				
-	Pick-up Date: 1/29/98 Truck No	and hauled by me to the disposal facility			
3.	Disposer of Waste (must be filled-in by disposer	r) CIRCLE ONE:			
te Kalendari	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	the above hauler to this disposal (DISPOSAL DATE)			
: 1	Signature of authorized agent and title:	fage the			

CUSTOMER SERVICE 0: W00 = 778 INC

914019

DATE: 01/29/98

TIME: 12:17-12:49

CUSTOMER: 665

CLEAN HARBORS ENVIRONMENTAL-EDISON

HAULER:

PROFILE: 338178N

TRUCK: Ø114

WASTE: CON CONTAMINATED SOIL -

MANIFEST: 25925

NATIONAL RAILROAD PASSENGER CONTAM. SOIL/SITE CLEA * ORIGIN

WGT/VO

NEW JERSEY

4928

GROSS: 75600 LBS

TARE:

26320 LBS

NET: 49280 LBS

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TONS DUMPED TODAY:

0015566

1000 New Ford Mill Road Morrisville, PA 19067

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

NON-HAZARDOUS WASTE MANIFEST MS4931

l.	Generator of Waste (must be filled	in by producer	EPA I.D. No. NYD0785	16895
	Company Name: (Print or Type)_Am	rak National	Railroad Passenger Co	rp.
	Pick-up Address 39-29 Honeywell (Street)	St.	Long Island C	try NY
	Telephone Number: 212 630-7695			(State)
	Waste Stream Identification: This m	anifest represents a r	non-hazardous waste as per E.P	.A. and PA D.E.R. regulations
	Tons: Cubic	Yards:	Other (Spe	cify):
•	Name of Waste	OUS SOIL, NON	D.O.T. REGULATED	
	Special Handling Instructions, if an	y: ops pile		
	PROFILE/WASTE STREAM I.D. NU	MBER: 33	8178N	
pacl to a	is to certify that the above named taged, marked, and labeled and coplicable state and federal law. The ed. I certify that the foregoing is to	are in proper of the wastes were the and correct	ondition for transported consigned to the transit to the best of my known ature:	ation according
2.	Hauler of Waste (must be filled-in b	oy hauler) EPA	I.D. No	
	COMPANY NAME: 7.50			· ·
	ADDRESS: WAYNE	15		:
	Pick-up Date: 1/29/98 Tr	ruck No. 126	• Vehicle Li	c. No. TTF 179
	The above described waste was named below and was accepted. is true and correct. Signature of authorized agent and	I certify under		
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	2º Ti	R.R.F. 00 Bordentown Road ullytown, PA 19007 ermit #101494	
	Waste subject to this manifest was facility and accepted on	delivered by th	e above hauler to this	disposal (DISPOSAL DATE)
	Signature of authorized agent and	title:	La For	de de

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 CONTAM. SOIL/SITE CLEA

NATIONAL RAILROAD PASSENGER

PCT WGT/VOL

ORIGIN NEW JERSEY

A Later Control

100 47980

GROSS: 82540 LBS

TARE: 34560 LBS

NET: 47980 LBS

TONS DUMPED TODAY:

302, 25

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REMARKS

APPENDIX I

Asphalt and Concrete Disposal Records

□ Varick Ave.	
Waste Management of New	
Date / 27.97 Manifest #	No. 24216
Hauler 511 17 OF MY Bro	oker CIFAN HAR!
Amount Hauled 10115	Dump Site 73PC
Amount nation	iler# D Van D Flatbe
Truck # 244 Tra	√ Van □ Flatbe
Time Arrived 2:26Tim	o Departed3.50
Signature of Supervisor	Loaded Weight
	Empty Weight
Signature of Driver	Net Weight
1/2/ 00	DesTrail
NON REI	WOLLON .
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<u></u>	
· · · · · · · · · · · · · · · · · · ·	
√	□ 73 5
√	
□ Varick Ave. Waste Management of New	□ 73 8 York - Hauler Ticket
□ Varick Ave. Waste Management of New Date /)-) 2 9 7 Manifest #	No. 24213
□ Varick Ave. Waste Management of New Date /)-) □ 97 Manifest #	York - Hauler Ticket No. 24213 No. 4446
Waste Management of New Date 1)-) 97 Manifest # Broid Manual Hauled 4 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	York - Hauler Ticket No. 24213 No. 4446
Waste Management of New Date 1)-) 97 Manifest # Broid Manual Hauled 4 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	York - Hauler Ticket No. 24213 No. 4446
Waste Management of New Date /) -) - 9 7 Manifest # Hauler / / Brok Amount Hauled / / ///) D Truck # 7 // / Trail	York - Hauler Ticket No. 24213 The state of the state o
Waste Management of New Date /)-) 97 Manifest # Hauler U M & M Broi Amount Hauled / M Trail Firme Arrived / COM COM Time	York - Hauler Ticket No. 24213 The state of the state o
Waste Management of New Date /)-) 97 Manifest # Hauler U M & M Broi Amount Hauled / M Trail Firme Arrived / COM COM Time	York - Hauler Ticket No. 24213 ter (/ / / / / / / / / / / / / / / / / /
Waste Management of New Date /)-)- 97 Manifest #	York - Hauler Ticket No. 24213 ter ////// tump Site /// Ovan Flatbed Departed 2:/// Loaded Weight
Waste Management of New Date 1)- 2 9 7 Manifest # Hauler 1 9 8 Follow Amount Hauled 9 9 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	York - Hauler Ticket No. 24213 Ker / ///// Jump Site /// Van Flatbed Departed / Loaded Weight Empty Weight Net Weig

<u>; </u>

☐ Varick Ave.	**************************************	□ 73 Place
Waste Management of	New York -	Hauler Ticket
Date / 3 9 7 Manifest #		No. 24218
Hauler W. M. OF X/	Broker	LEAN HAB COR!
Amount Hauled 40 40 5	Dump Site	-73 PC
Truck #	Traller #	04
Time Arrived 9-00	Time Departed	923
Signature of Supervisor		Loaded Weight
Signature of Driver	25	Empty Weight
NON REL	DucTion	

□ Varick Ave.	p 73 Place
Waste Management	of New York - Hauler Ticket
Date 12-22-97 Manifest #	No. 24210
Hauler 13th of MY	Broker Clash harter
Amount Hauled COS	Dump Site 72 PL
Truck # 23 2	
0.74	/ □ Van □ Flatbed
Signature of Supervisor	Loaded Weight
Ω / C	Empty Weight
Signature of Driver Bro	ten Concrete.

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	to trament of	New York	ilera	.7.
	Hagomon or	TOTAL STATE	alot.	
	Manifest #	N.	J. Z	
	4	4-14-42 T		
Company of the Compan		Broker // CA	1 1/80 /	ca s
Hauler		_ BIONEI CLEAR	4 MALL	
Amount Pi		Dump Site	130	<u> </u>
				A CONTRACT
Truck #		Trailer #	74 3	-
20 11 10 CK W	1960 and 1960 and 1960	4	Van DEla	bed
		J. A. S. P.		1
			7:2	
Time Arrive		Time Departed	130	The second second
Signature of		Load	ed Weight	
		***	The same of the	Marie Control
		Empl	y Weight	A CONTRACTOR OF THE PARTY OF TH
Signature of		Maria Wal	Weight	
Signature of		*	1.507	
	- (may 2)			
		EDUT10	N Take	
		The second second	S. C. DES. S. C. BERT ST.	· · · · · · · · · · · · · · · · · · ·

73 Place

at of New York - Hauler Ticket

		No. 2	4211
Hauler ac Ny	Broker _	Clar HR	chani
Amount Hauled 16 CLOS	Dump	Site 73 /K	
Truck # 252	Trailer #	7/9 Van	☐ Flatbed
Time Arrived 200	Time Dep	paned135_	
Signature of Supervisor	1	Loaded Wei	age of
Signature of Driver		Empty WeightNet Weight_	
Wait I'm	11 - 4-09	Jank Lo	ROILA

APPENDIX J

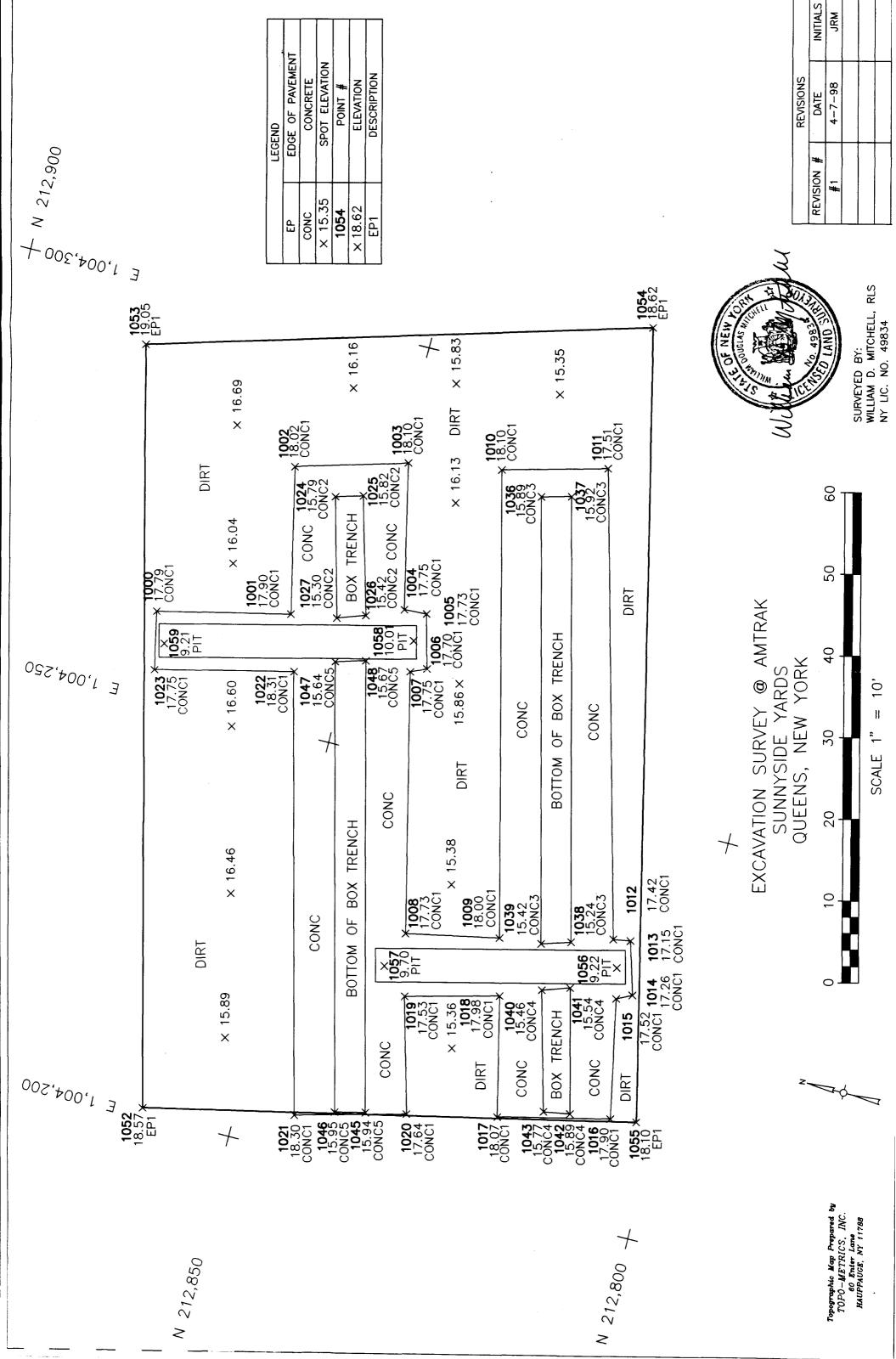
Liquid Disposal Records

AttNo Larry from: Jeff

						WORK C	RDER NO.	31
DOCUMENT NO	o. 363	01		STRAIGHT BILL	OF LADING	•	TRUME	321
TRANSPORTER	R1 Cle	an Hari		Services, In			- •	
EPA ID #	MAD	Ø393222	250					•
TRANSPORTER	a 2		117,					
EPA ID #						_ TRANS. 2 PH	ONE	
Mail to:Na 400 W. 31S	tional R	ailroad	d Passeng	er Corp.	Attn: Rich			
DESIGNATED			, 1,1,1,1,1,	10002	SHIPPER	ionizemioti (212/ 030-(7213
Lancaster C	111				National Rai	ilroad Passe	enger Corp.	
FACILITY EPA PAD98726674	ID #				SHIPPER EPA	5ID #		
ADDRESS	abala bi	1			ADDRESS			
1862 01d Ma	inneim Pi	<u>ke</u>	STATE	ZIP	39-29 Honey	well St.	07475	
Lancaster			PA_	17601	Long Island	C.t.	STATE	ZIP 11101
CONTAINERS						J	TOTAL	UNIT
NO. & SIZE	TYPE	НМ	A		OF MATERIALS	<u> </u>	QUANTITY	WT/VOL
Dix 6000	TT		AUSED OF	IL AND WATER O.T. REGULATE	D)		X2450	<u>C</u>
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			E.					
			F.					
			G.		•			
			Н.					
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desc	ribed, paci	kaoed. m	arked and	labeled and are in	e above named n proper condition	naterials are pr o for transporta	operly classification	ied, Rito
the	applicable	regulatio	ns of the D	epartment of Trai	nsportation.	, ioi ii allopolia		g 1.0
					. 1	^ . <i>/</i>		
SHIPPER HS	PRIN	7.66	4.1		SRCN	del	C	PATE 198
TRANSPORTE	PA	J.	1 FAVA	1	SIGN	178	2 5	ATE
	PRI	AL CARROL	u wy	4	SIGN	o my		AII 198
TRANSPORTE	R 2 PRW	NE.	7		SIGN	11	, 	DATE
RECEIVED BY		Joff	- Eu	IOU	JIGIY ///	IBM (1)		2-11-98

APPENDIX K

Final Survey



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	1	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	C-4 Tetrachloro-m-xylene (TCX)		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.