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SITE ID 311: SAWMILL CREEK DUMP SITE
TOWN OF CLAY, NEW YORK

PRELIMINARY SITE ASSESSMENT

Onondaga Lake Project
Task 6: Preliminary Site Assessments

Site No. 734030-002
Work Assignment Number D003060-27

Prepared by

GZA GeoEnvironmental
364 Nagel Drive
Buffalo, NY 14225

in association with

TAMS Consultants, Inc.
655 Third Avenue
New York, NY 10017

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1.0 EXECUTIVE SUMMARY

1.1 BACKGROUND SUMMARY

This document presents the results of the Preliminary Site Assessment (PSA) investigation for the Sawmill Creek Dump Site (Site) located in the Town of Clay, Onondaga County, New York (see Figure 1, Site Location). The Site is under investigation because of the illegal disposal of drums, compressed gas cylinders, paint cans, mill scale, metal grindings, solvent and tar buckets, scrap metal, wood and municipal solid wastes which were discovered at the Site.

The Site is located in the Woodard Industrial Park northeast of Steelway Boulevard in the Town of Clay, New York. The property is bordered to the north and south by wooded land, to the west by commercial property belonging to Trinet Essential Facilities X, Inc. and Thomas Medaj, and to the east by the Sawmill Creek beyond which are Conrail railroad tracks (see Figure 2, Site Plan).

The Site, formerly occupied by a metal cutting and recycling facility, consists of approximately 30 acres which are vacant.

The USEPA Superfund Technical Assessment and Response Team (START) conducted two previous studies at the Sawmill Creek Dump Site; including a Site Assessment Report dated September 8, 1997 and a Drum Sampling and Removal Summary dated October 23, 1997. These studies are discussed in Section 3.2. See Appendix B for copies of the two START reports.

The objective of the PSA was to gather and present the information necessary to:

- Evaluate the nature and location of sources of hazardous substances/wastes remaining on Site;
- Evaluate the existing surface and subsurface conditions in the vicinity of the known former source areas and potential source areas and investigate the nature and degree of identified contamination within these areas;
- Define and evaluate potential migration pathways relative to identified contamination at or in the vicinity of potential source areas; and
- Identify any Interim Remedial Measures (IRMs) that may be needed to address specific problems recognized at or in the vicinity of potential source areas.

The PSA focused primarily on the impacts of potentially hazardous materials that have been disposed at the Site. The presence of hazardous waste and a determination of a potential threat to the environment was assessed based on existing data from USEPA and NYSDEC and the analytical test results from the samples collected in June and July, 1998 during the PSA. The scope of work completed is discussed in Section 3.0. The analytical sample test results are discussed in Section 4.6.

1.2 PRESENCE OF HAZARDOUS WASTE

The presence of hazardous waste is defined in Title 6 of the New York Code of Rules and Regulations (6NYCRR), Part 371. Categories of hazardous waste include listed hazardous waste, characteristic hazardous waste and polychlorinated biphenyl (PCB) hazardous waste.

This PSA included an evaluation for the presence of hazardous waste at the Site. The USEPA START study and this NYSDEC study focused on the drum wastes, waste and debris piles, surface and subsurface soils, groundwater, surface water and sediments at the Site and in Sawmill Creek. Analytical test results are summarized in Section 4.6.

Based on the USEPA START report, hazardous waste was identified at the Site in October 1997. A portion of the drums sampled contained "flammable" waste based on field test kits. In addition, PCB hazardous waste (PCBs at a concentration of 50 parts per million (ppm) or greater) was identified in a sample from stained soil near a waste pile in an area designated by the NYSDEC as Area B. Disposed wastes included 605 pounds of chrome bearing liquid hazardous waste according to information provided by USEPA (DeAngelis, personal communication, 1999).

Toxicity characteristic leaching procedure (TCLP) data from testing done for the eight RCRA metals from on-Site samples of the waste piles collected in 1997 and 1998 were below the hazardous waste threshold. This indicates the waste is not hazardous for the parameters tested. However, leachable metals were detected within the same order-of-magnitude as the hazardous waste threshold. For example, lead was detected at 1,130 parts per billion (ppb) compared to the lead hazardous waste threshold of 5,000 ppb.

1.3 PRESENCE OF SIGNIFICANT THREAT

The presence of a significant threat to the public health or the environment is defined in 6 NYCRR Part 375. Significant threat may be established by analytical data that show that hazardous waste has been disposed on-Site and the released concentrations exceed accepted environmental standards and guidance values. During this PSA, analytical data were evaluated by comparing the results to NYSDEC standards and/or guidance values and by comparing on-Site and downgradient concentrations to published or measured background/upgradient data.

Analytical data from samples collected from drum contents, waste and debris piles, surface soils, and sediments indicate that compounds were detected at concentrations exceeding NYSDEC standards and/or guidance values. Thus, the presence of a significant threat has been established at the Site.

The drums/containers and stained soils were removed from the Site. However, waste piles and debris piles remain on-Site. These piles contain levels of volatile organic compounds (VOCs), metals, semi-volatile organic compounds (SVOCs), and PCBs that could represent a threat to human health from direct contact. In addition, it is possible that over time these contaminants could impact surface soils, groundwater, surface water/sediments, and biota at and near the Site.

Some surficial soil samples are contaminated with VOCs, SVOCs, PCBs and inorganics above NYSDEC recommended soil cleanup objectives (RSCOs).

Groundwater data are not conclusive regarding a significant threat to the environment. Further discussion is provided in the text.

Surface water data contained exceedances, but for two relatively innocuous metals (aluminum and iron), and thus no significant threat is apparent.

Sediment sample data from this study suggest that upgradient contamination exists. However, there were sediment samples from Sawmill Creek near source Area A that had metals detected at concentrations significantly above background and in excess of NYSDEC sediment criteria.

2.0 INTRODUCTION

2.1 PURPOSE

This report presents the results of the Preliminary Site Assessment (PSA) completed by GZA GeoEnvironmental of New York (GZA) and TAMS Consultants, Inc. (TAMS) at the Sawmill Creek Dump Site (Onondaga Lake Project Site ID 311) located in the Town of Clay, Onondaga County, New York. The field component of this PSA was completed for the New York State Department of Environmental Conservation (NYSDEC) under NYSDEC Immediate Investigation Work Assignment (IIWA) No. D003060-20 under the TAMS/GZA Superfund Standby Contract. The data analysis and report preparation was completed under Task 6 (PSAs) of the Onondaga Lake Project Work Assignment No. D003060-27. The Site is under investigation in response to suspected hazardous waste and hazardous substance disposal at the Site.

This PSA investigation included the following tasks:

- Task 1 Record Search and Site Inspection;
- Task 2 Site Work Plan Preparation;
- Task 3A Preliminary Activities;
- Task 3B Initial Site Studies;
- Task 4 Subsurface Investigation/Environmental Sampling;
- Task 5 Draft Report; and
- Task 6 Final Report.

A review of records and a site visit was completed by the NYSDEC as Task 1 of this PSA. Findings of this work were included within Section 2.0 of the Preliminary Site Assessment Work Plan (PSAWP; NYSDEC, April 1998). A draft PSAWP was completed by NYSDEC as Task 2. The PSAWP was finalized (NYSDEC April, 1998) as part of Task 3A, along with the completion of the Site Health and Safety Plan (HASP; NYSDEC, February 1998) and Quality Assurance Project Plan (QAPjP; NYSDEC, February 1998). PSA field activities (Task 4) were completed in June and July 1998. This draft PSA report presents information collected during Tasks 1 through 4.

3.0 SCOPE OF WORK

The field work was completed by the NYSDEC with assistance from TAMS' subcontractors, including GZA (field engineer/geologist), Larsen Engineers (site survey) and Applied Earth Technologies (drillers) during certain tasks as noted in the text between June 1 and July 7, 1998.

3.1 INTRODUCTION

Site investigation work tasks completed to date by NYSDEC and USEPA include the following:

- Existing Well Assessment and Decommission;
- Drum Survey;
- Surface Soil Sampling;
- Test Boring and Monitoring Well Installations;
- Monitoring Well Development;
- Water Level Survey;

- Test Pits;
- Environmental Testing;
  - Drum Samples
  - Waste Pile Samples
  - Test Pit Samples
  - Surface Soil Samples
  - Soil Boring Samples
  - Groundwater Samples
  - Surface Water Samples
  - Sediment Samples
- Preparation of this PSA Report.

The work completed is described in the following sections. The Work Plan was modified in the field as needed, with the approval of the NYSDEC Project Manager. Modifications are noted in the text of this report. Air monitoring was conducted as specified in the Site HASP. In general, air monitoring was conducted in the breathing zone during intrusive work activities. Community air monitoring (background air monitoring) was completed during the drum sampling.

This report has been prepared in accordance with the limitations presented in Appendix A. A NYSDEC representative was on-Site for the majority of the field work. Field procedures and laboratory quality assurance and quality control procedures were specified in the NYSDEC QAPjP. Laboratory work was performed by H2M Labs in June and July 1998, and data validation was performed by URS/Greiner in April 1999.

3.2 INITIAL SITE STUDIES

3.2.1 Existing Well Assessment and Decommission

This task included an assessment of the suitability of the two existing on-Site wells by NYSDEC. These wells were identified during the Site Assessment work activities in September 1997, one in the northern central portion of the Site and the other adjacent to the former metal shearing building. No information was available indicating date of installation, type or details of construction, and purpose of well installation. See Figure 2 for existing monitoring well locations.

Well assessment of the two monitoring wells included locating, identifying, measuring the water level, and observing the condition of each of the wells. The air above and within the monitoring well riser pipe was screened for the presence of organic vapors

using a photoionization detector (PID), HNu PI-101. The PID did not detect organic vapors in the two existing wells. The northern well (near Area A) was determined to be unsuitable for use by NYSDEC.

As per NYSDEC approval, Applied Earth Technologies (AET) decommissioned the northern-most well on June 4, 1998 with a rubber tired backhoe (Kobelco TLK-760). The metal casing and an approximate 8 foot section of 4 inch diameter, PVC screen and riser were removed. AET filled the excavation with a mixture of cement and bentonite grout to the ground surface. GZA and NYSDEC observed well decommissioning.

The southern monitoring well remains on-Site and was not used by NYSDEC for groundwater sampling or the water level survey.

3.2.2 Interviews and Additional Historical Review

Additional information regarding the Site was obtained by NYSDEC from the Town of Clay and from NYSDEC and USEPA files. The information obtained has been included as appropriate in this report (e.g., Section 4.1 herein).

3.2.3 Drum Survey

A drum survey was completed as part of the initial site reconnaissance on September 3, 1997 by the NYSDEC Level B Team and the USEPA Superfund Technical Assessment and Response Team (START). USEPA collected samples of containerized (drums) wastes for hazardous waste categorization, which identified the presence of flammable and combustible wastes at the Site. See Appendix B for the START Site Assessment Report (Weston, September 1997) which contains the hazardous waste characterization of drum contents. The USEPA data indicate that the drummed materials generally consisted of paints and adhesives.

During the period of September 30 through October 3, 1997, USEPA performed consolidation, over-packing and additional sampling of the containerized wastes and visibly-impacted soils. Approximately twenty-six 85-gallon drums were used for over-packing of waste drums and surface soils proximate to the drums. Approximately sixteen 85-gallon drums were used for lab-packing of 5-gallon and 1-gallon containers. Additionally, stained soils were removed from an area of about 30 ft by 30 ft to a depth of 2 inches from Area A. Stained soils apparently resulted from waste pile leakage. Black stained surface soils were removed from an area of about 5 ft by 5 ft to a depth of 2 inches from Area B at the location of PCB contamination. The soils were excavated and packed in several 85-gallon drums. See Appendix B for the START Drum Sampling and Removal Summary (Weston, October 1997).

The NYSDEC collected drum solid and liquid samples at the same time as the USEPA's drum sampling effort for analytical testing including Target Compound List (TCL) and Target Analyte List (TAL) parameters as discussed in Section 3.4.1.

3.3 SUBSURFACE INVESTIGATION

The subsurface activities at the Site took place during June 1 through July 7, 1998.

3.3.1 Test Boring and Monitoring Well Installation

Subsurface conditions were investigated by completing eight test borings. Six of the borings were completed as monitoring wells. The monitoring wells were completed in the overburden. Soil boring and monitoring well installations logs are included in Appendix C.

Soil borings and monitoring well installation activities were performed by AET between June 1 and June 4, 1998 and are identified as MW/SB-1 through MW/SB-6. Borings SB-7 and SB-8 are soil borings only. The borings were advanced to the weathered shale bedrock and/or refusal. See Figure 3 for boring/well locations.

The location and depths of the monitoring wells were selected by the NYSDEC to assess the groundwater conditions at the Site as follows:

- MW-1- Upgradient location;
- MW-2- Upgradient location;
- MW-3- Downgradient of concrete foundation;
- MW-4- Downgradient of Area B;
- MW-5- Downgradient of Area A; and
- MW-6- Northern portion of Site adjacent to the ponded area.

AET used a truck mounted CME 55 drill rig, utilizing 4¼-inch inside diameter (ID) hollow stem augers (HSA) for the borings. Bedrock coring was not done. Overburden samples were obtained by driving a $1^3/_8$-inch ID by 24-inch long split spoon sampler 24 inches with a 140-pound hammer falling 30 inches, in general accordance with ASTM D1586 (Standard Penetration Test).

Soil samples were classified by a GZA geologist in the field using visual observations and following the Burmeister soil description procedure. A log of each boring was prepared with stratification lines, blow counts, sample identification, sample depth interval, recovery and date.

Representative portions of the overburden samples collected were placed in new glass jars with a screw top lid. The top of the jar was labeled with the job name, boring and sample number and the number of blows per each 6-inch sample interval.

The headspace of each overburden sample jar was screened using a PID. The PID was calibrated in accordance to the manufacturer's requirements using isobutylene equivalent to 60 ppm benzene in air. Prior to screening, the samples were placed at 60 to 70 degrees Fahrenheit for approximately 30 to 60 minutes. A hole was made in the lid of the sample jar and 30 ml of sample air was withdrawn from the headspace using a gas tight syringe. The test sample was immediately injected into the PID and the peak sustained response (i.e., >1 ppm) was recorded on the boring logs. A syringe blank was run between test samples to check whether extraneous contamination was carried over.

Several samples collected from SB-8 had PID readings ranging to 90 ppm. Sample S-3 (4.0'-4.2') from SB-2, and S-3 (4.0'-5.0') from SB-6, both exhibited a level of 2 ppm organic vapors above background. The headspace screening on the remaining soil samples screened did not indicate detectable levels of organic vapors.

The auger spoils were visually observed for signs of contamination and screened with a PID for total organic vapors. No visual signs of contamination were observed in the soil boring auger spoils. Organic vapors, above background, were only detected in auger spoils from boring SB-8. The auger spoils from SB-1 through SB-7 were placed on the ground near the completed boreholes as per NYSDEC approval. The spoil from SB-8 was placed in the borehole as per NYSDEC approval, since a well was not installed there.

Monitoring wells were constructed of 2-inch ID flush coupled polyvinyl chloride (PVC) riser and screen. The well screens were set to straddle the groundwater table which was determined to be from about 5 to 7 feet below ground surface. The screens consisted of 10 foot-long sections of machine slotted PVC pipe.

The assembled screen (#10 slot size) and riser were placed in the borehole. A sand filter was placed around the well screen such that the sand extended a minimum of approximately 1 foot above the top of the screen. A minimum 1 foot layer of bentonite pellets was placed above the sand filter and allowed to hydrate. A mixture of cement/bentonite was placed above the bentonite seal extending to a minimum 1 foot below the ground surface. The monitoring wells were completed by placing a locking steel stick-up casing (4-inch diameter) over the riser. Concrete was placed in the borehole around the protective casing and sloped away from the casing. Well installation logs are included in Appendix C.

3.3.2 Monitoring Well Development

Monitoring wells were developed to remove fines and develop a filter pack. The wells were developed by pumping and bailing groundwater from the well to remove sediments. Measurements of specific conductance, pH, temperature and turbidity were made (using a Horiba U-10 Water Checker) after each well volume of water was removed. See Appendix C for well development logs and instrument calibration logs. The goal of the development was to obtain consistent measurements of pH (within 0.2 standard units),

specific conductance and temperature (each within 10 percent), and to obtain a turbidity measurement less than 50 NTU. A minimum of three well volumes were removed from each well or until the well "ran dry". Purge water was screened and disposed of in accordance with the PSAWP.

3.3.3 Water Level Survey

A professional land surveyor (Larsen Engineers) was subcontracted by TAMS to measure the vertical and horizontal locations of the new monitoring wells, surface water/sediment sample locations, test pit locations, waste pile samples, selected site features and the limits of the property. Vertical measurements were referenced to the 1929 National Geodetic Vertical Datum (NGVD). The Site Plan prepared by Larsen Engineers was submitted to the NYSDEC at the conclusion of the IIWA (TAMS, July 1998), and is incorporated in the figures in this report.

Two rounds of water level measurements were completed (June 5, 1998 and July 6, 1998). The water level measurements included measuring the depth of water within the monitoring wells from a monitoring point of known elevation established at the top of the well riser. Wells were allowed to equilibrate a minimum of 24 hours after purging or sampling, prior to measuring the water level. A summary of water level elevations is included as Table 1. A groundwater contour plan using the July 6, 1998 water level measurements is shown in Figure 4.

3.3.4 Test Pits

Six test pits were excavated to explore areas of potentially buried waste identified at the Site. The test pits were excavated in areas of the Site that had surface metal and debris.

A rubber tired Kobelco TKL-760 backhoe was used to complete the test pits. Material was excavated in lifts and placed on the ground adjacent to the test pit. GZA prepared test pit logs for each of the test pits. Test pits were excavated to a depth of approximately 2 feet below ground surface. Excavations were backfilled with the excavated material. The metal and debris was generally piled on top of the ground surface and not found buried below the ground surface. Test pit logs are included in Appendix C.

3.4 ENVIRONMENTAL SAMPLING

During the initial site activities in September and October 1997, NYSDEC collected surface soil samples, drum liquid samples and drum solid samples at the Site in the vicinity of the source areas identified as Areas A and B. These samples were submitted to Chemtech Consulting Group (CCG) in Englewood, New Jersey. The drum sampling and surface soil sampling data were not validated.

Additionally, NYSDEC collected soil and water samples for analytical analysis during the IIWA sampling conducted from June 1 through July 7, 1998 from monitoring wells, soil borings, test pits, waste piles, sediments and surface water. These samples were submitted to H2M Labs, Inc. located in Melville, New York, under subcontract to TAMS, for analytical testing as part of this PSA. The sampling program for the Site is summarized in Table 2. Sample locations are identified on Figure 3. An overview of the sample collection/analysis is presented in this section and the data are presented in Section 4.6.

The validated Form Is are not included in this report as per NYSDEC approval; rather, printouts from the Onondaga Lake Project database are included (Tables 3A through 3I and Appendix D). Samples were analyzed in accordance with New York State Analytical Services Protocol (ASP) methods. Analytical data from the sampling effort conducted between June 1 and July 7, 1998 were validated by URS-Greiner, under subcontract to TAMS.

3.4.1 Drum Samples

Two areas of drums were observed by NYSDEC and START during the USEPA sampling and removal action in September 1997 from apparent source Areas A and B. Approximately thirty 55-gallon drums were observed at the Site in addition to approximately fifty 1-gallon pails, twenty 10-gallon pails, and ten 5-gallon pails.

START initially made visual observations of the outside of the drums to assess the condition of the drums. START then used a PID, combustible gas indicator and a Ludlum Radiation meter to assess the environment around the drums. Measurements above background were not detected. The inside of the drums was also assessed for the presence of liquid or solids.

The USEPA sampling of drum material methods and parameters were chosen solely to support disposal of the materials and not necessarily to determine the full nature of the contaminants. The USEPA data indicated the container contents to be hazardous waste materials generally composed of paints and adhesives. The NYSDEC collected split samples of drum material for laboratory analysis.

Based on the field screenings and visual observations conducted by START, NYSDEC collected seventeen drum solid samples identified as SM-01 through SM-17 and eight drum liquid samples identified as SM-18, SM-19, SM-20, SM-22, SM-25, SM-26, SM-29 and SM-31 around source Areas A and B.

Each of the 17 drum solid samples were analyzed for:

- Target Compound List Volatile Organic Compounds (TCL -VOCs);
- Target Compound List Semi-Volatile Organic Compounds (TCL -SVOCs); and
- Target Analyte List Metals plus Cyanide (TAL -Metals plus Cyanide).

Each of the eight drum liquid samples were analyzed for:

- TCL -VOCs;
- TCL -SVOCs;
- TCL -Polychlorinated biphenyls (PCBs); and
- TAL -Metals plus Cyanide.

3.4.2 Surface Soil Samples

Fifteen surface soil samples were collected by the NYSDEC on September 23, 1997 at locations around the apparent source Areas A and B including areas beneath drums and around potentially impacted soils.

Each of the surface soil samples were analyzed for the following:

- TCL -VOCs;
- TCL -SVOCs;
- TCL -Pesticides;
- TCL -PCBs; and
- TAL -Metals plus cyanide.

3.4.3 Waste Pile Samples

Four waste pile samples were collected by the NYSDEC. One sample was collected on October 1, 1997 during the initial Site activities and identified as TP-1. Three other waste pile samples (WP-1, WP-2 and WP-3) were collected on June 3, 1998 and identified as B975-21, B975-20 and B975-23, respectively. The sample locations were identified by NYSDEC and are shown on Figure 3. Waste pile samples were collected using a stainless steel spoon and transferred from the spoon into the analytical laboratory-supplied sample containers. The four waste pile samples collected were tested for the presence of TCLP metals.

In addition to TCLP metals, the waste pile sample collected from WP-3 (B975-23) on June 3, 1998 was tested for:

- TCL -VOCs;
- TCL -SVOCs;
- TCL -Pesticides;
- TCL -PCBs; and
- TAL -Metals plus Cyanide.

3.4.4 Test Pit Samples

Six subsurface soil samples were collected from the test pits excavated on June 4, 1998 for analytical testing. The test pits were excavated to assess potential areas of buried waste and metal that were identified during the START/NYSDEC Site Assessment. No waste was observed to be buried below ground surface at any of the test pit locations. Test pit samples were collected by NYSDEC from the excavation with the backhoe bucket. A stainless steel spoon was used to transfer the soil to containers supplied by the analytical laboratory.

Analytical samples were collected from test pit locations TP-1, TP-2, TP-3, TP-4 and TP-6. The test pits were performed in the areas of piled fill and debris material. The analytical sample from TP-1 (B975-25) was collected from soil located approximately 1 foot below the fill/debris material surface. One TP-2 sample (B975-26) was collected from approximately 6 inches to 12 inches below the observed crusher run stone below grade, and a second sample (B975-27) was collected from soil within the fill/debris material. The TP-3 sample (B975-28) was collected from a fill/debris zone located above the observed crusher run stone layer. The TP-4 sample (B975-29) was collected from the middle of the debris zone. The TP-6 sample (B975-22) was collected from an area adjacent to the soil boring SB-8 location from soil below the crusher run stone layer with a peak PID reading of 150 ppm. No analytical sample was collected from TP-5 since the material was similar to that observed in test pits TP-1, TP-2, and TP-3.

The six soil samples collected from TP-1, TP-2 (two samples), TP-3, TP-4 and TP-6 were analyzed for the following:

- TCL -VOCs;
- TCL -SVOCs;
- TCL -Pesticides;
- TCL -PCBs; and
- TAL -Metals plus Cyanide.

The sample from TP-4 was also analyzed for TCLP metals. An additional soil sample from TP-4, designated TP-4B, was collected on July 7, 1998 and analyzed for hazardous waste classification (reactivity, pH, and flashpoint).

3.4.5 Soil Boring Samples

Seven subsurface soil samples were collected from the eight soil borings for analytical testing. The samples were collected on June 2, 3, and 4, 1998. The soil borings were done to assess potential areas of contamination in the overburden and also to allow the installation of six groundwater monitoring wells. Soil samples were collected by NYSDEC from the soil boring split spoon with a stainless steel spoon and transferred to containers supplied by the analytical laboratory as specified in the QAPjP.

Soil samples were collected from:

- SB-1 at a depth of 10 to 12 feet below ground surface (bgs);
- SB-2 was collected from 6 to 8 feet bgs;
- SB-3 was collected from 8 to 10 feet bgs:
- SB-4 was collected from 5 to 8 feet bgs;
- SB-5 was collected from 6 to 8 feet bgs;
- SB-6 was collected from 5 to 7 feet bgs; and
- SB-8 was collected from 2 to 4 feet bgs.

The seven soil boring samples (identified as B975-31, B975-19, B975-17, B975-14, B975-24, B975-18 and B975-01, respectively) were analyzed for the following:

- TCL -VOCs;
- TCL -SVOCs;
- TCL -Pesticides;
- TCL -PCBs; and
- TAL -Metals plus Cyanide.

3.4.6 Groundwater Samples

Groundwater sampling was completed by the NYSDEC. Initially, the volume of water within each well was calculated by knowing the total well depth and measuring the depth to water. A minimum of three well volumes of water were then evacuated from the well or until the well ran dry. This was done using a dedicated HDPE bailer. Measurements of pH, specific conductance and temperature were made after each well volume was removed. These measurements were compared with previous measurements made during well development. In addition, turbidity was also measured to provide an indication of the amount of suspended sediment within the sample. The samples were placed into laboratory-supplied containers and transported to the analytical laboratory in accordance with the procedures and Chain-of-Custody requirements in the QAPjP.

Six groundwater samples, one from each monitoring well (MW-1 through MW-6), were collected between July 6 and 7, 1998 as part of this PSA. This sampling and analysis was done to assess the presence of Site-related contamination within the overburden water table.

Each groundwater sample was submitted for analysis for the following:

- TCL -VOCs;
- TCL -SVOCs;
- TCL -Pesticides;
- TCL -PCBs; and
- TAL -Metals plus Cyanide.

One trip blank was collected and submitted to H2M Labs for VOC analysis along with the groundwater samples.

3.4.7 Surface Water/Sediment Samples

A total of seven paired sets of surface water and sediment samples were collected at locations SW/SED-1, SW/SED-2, SW/SED-3, SW/SED-5, SW/SED-6, SW/SED-7 and SW/SED-8. The surface water samples from these locations were identified on the chain of custody as B975-02, B975-04, B975-06, B975-15, B975-08, B975-10, and B975-12, respectively. The sediment samples were identified as B975-03, B975-05, B975-07, B975-16, B975-09, B975-11 and B975-13. In addition, only a sediment sample was collected at location SED-4 (identified as B975-30). See Figure 3 for surface water and sediment sample locations.

The purpose of these samples was to assess contaminants migrating from the Site off-Site into Sawmill Creek, a tributary of Onondaga Lake, as follows.

- Samples from SW/SED-1 and SW/SED-2 were collected north of Area A from a tributary to Sawmill Creek, and west of SW/SED-3.
- Samples from SW/SED-3 were collected from an off-Site location in Sawmill Creek to establish apparent background conditions, upstream of the confluence with the ditch draining the northern portion of the Site.
- The sediment sample from SED-4 was collected in Sawmill Creek near Area A; no surface water was collected from this location.

- Samples from SW/SED-5 and SW/SED-8 were collected in Sawmill Creek from apparent downgradient locations of the Site. Location SW/SED-7 was in Sawmill Creek just upstream of the drainage ditch from the Niagara Mohawk Power Corporation's Seventh North Street Facility (Site ID 231). Location SW/SED-8 was just downstream of the ditch (see Figure 3).

Surface water samples were collected by lowering a laboratory-clean non-preserved analytical container into the standing water and allowing it to fill. The water was then transferred from the non-preserved container to the various containers to be filled.

Sediment samples were collected from Sawmill Creek using a stainless steel spoon. The depth of sample collection is suspected to be between 0 to 6 inches. Samples were transferred from the spoon into the analytical laboratory-supplied sample containers.

Each of the surface water and sediment samples were analyzed for the following:

- TCL -VOCs;
- TCL -SVOCs;
- TCL -Pesticides;
- TCL -PCBs; and
- TAL -Metals plus Cyanide.

In addition, sediment samples from SW/SED-3, SED-4, SW/SED-5, SW/SED-6, SW/SED-7, and SW/SED-8 were analyzed for total organic carbon (TOC) and percent solids.

Two trip blanks were collected (June 2 and 3, 1998) and submitted to H2M Labs for VOC analysis along with the surface water samples.

3.5 REPORT PREPARATION

This draft PSA report was prepared to present a summary of the Site conditions and provide a description of the field work completed, as well as to present the results and interpretations of the environmental data.

4.0 SITE ASSESSMENT

4.1 SITE HISTORY

The Sawmill Creek Dump Site is a vacant and abandoned property located in the Woodard Industrial Park area about 300 feet northeast of Steelway Boulevard in the Town of Clay, New York. Sawmill Creek, located adjacent to the Site on the east, is a tributary to Onondaga Lake and is a Class C waterbody. The property is currently owned by Jordan Industries (JI). Mr. Len Vigodda is the owner of JI.

During the NYSDEC record search, it was determined that the Site was formerly farm land until the mid 1960s. From the mid 1960s to the 1980s, the Site was reportedly owned by the Smith Caffrey Steel Company. The activity at the Site during this period is unknown. In the mid 1980s, the Site was purchased for development by NEL Trading, Inc. of which Mr. Len Vigodda was President. The NYSDEC found an undated, unsigned summary of planned operations for Site development, and a 1987 NY State Full Environmental Assessment Form signed by Mr. Vigodda (Appendix C of the PSAWP NYSDEC, 1998). This summary indicated that NEL Trading, Inc. purchased the assets and business of Marleys of Syracuse and planned on moving the scrap metal recycling operation to the Sawmill Creek Site. A 1988 letter from the Town of Clay indicated that "a lot of scrap is coming from the old Solvay Process (Allied) plant along with continued clean-up at the old Marley's site" near Oil City.

A member of the local media discovered 55-gallon drums, compressed gas cylinders, paint cans and buckets, metal scaling, solvent and tar buckets, scrap metal, wood and municipal solid wastes illegally disposed of throughout the Site in June 1997. This discovery prompted the initial Site reconnaissance on September 3, 1997 by the USEPA START and NYSDEC Level B Team.

4.2 SITE DESCRIPTION

The Site consists of an approximate 30-acre vacant parcel surrounded by relatively flat land consisting of railroad tracks, and wooded and swampy land. An access road extends from the end of Steelway Boulevard to the southern portion of the Site. Access to the Site is restricted by a metal gate at the entrance of the Liverpool Recycling Facility located southwest of the Site. The concrete foundation of a former steel cutting facility and associated power house is located in the southern portion of the Site.

During the NYSDEC/START Site Assessment in 1997, several 55-gallon drums were observed in the central portion of the Site in addition to several waste piles and berms. These drums were observed to be mostly full and some were observed to be bulged. No labels were noted indicating the contents of the drums with the exception of one reading "Link Belt Hydraulic Oil", however the contents were determined to be a kerosene type of flammable liquid. These drums were condensed, containerized and removed from the Site by the end of the investigation.

The Site is covered primarily with sparse vegetation including brush, wooded and swampy areas. Several active and in-active railroad spurs are located on the Site that service the former metal cutting facility and commercial properties located adjacent to the Site on the west. Several piles of fill material, construction and demolition debris, and solid waste are located in the eastern and northern portion of the Site. These waste piles are elevated up to approximately six feet above the ground surface.

Sawmill Creek is located adjacent to the Site on the east and flows in a southerly direction approximately two miles to Onondaga Lake (see Figure 1). A swampy area is located along the northern portion of the Site with drainage eastward towards Sawmill Creek. The NYSDEC PSAWP determined that the drainage of Woodard Industrial Park had undergone modifications in 1970 with drainage towards the east to Sawmill Creek.

Two apparent source areas were observed by NYSDEC and START. The two areas were located along the eastern edge of the Site and identified as Areas A and B. The START Report indicated thirty 55-gallon drums, fifty 1-gallon pails, twenty 10-gallon buckets, ten 5-gallon buckets, waste piles, debris piles and stained soils were identified in these source areas. The drum contents hazardous waste characterization included in the START Site Assessment Report is contained in Appendix B of this report.

Two groundwater monitoring wells were observed at the Site as discussed in Section 3.2.1.

4.3 SITE VICINITY

The Sawmill Creek Dump Site is located northeast of Steelway Boulevard in an area designated as the Woodard Industrial Park in the Town of Clay, New York. The Site is located in the northern portion of Onondaga County. The general vicinity of the Site is commercial/light industrial land with some residential and vacant land nearby. The Site property consists of approximately 30 acres of vacant land which appears to be abandoned. As of 1997, the Site property was reportedly bordered to the north and south by wooded land. Property abutting the western portion of the Site consists of commercial/light industrial land including a trucking terminal/warehouse owned by Trinet Essential Facilities and the Liverpool Recycling facility reportedly owned by Mr. Thomas Medaj. Sawmill Creek and Conrail railroad tracks are located east of the Site, beyond which is land occupied by Niagara Mohawk Power Corporation.

4.4 REGIONAL ENVIRONMENTAL SETTING

This regional information was developed from a Soil Survey of Onondaga County, New York published by the United States Department of Agriculture, Soil Conservation Service.

4.4.1 Regional Geology and Soils

The Sawmill Creek Dump Site is located approximately 2 miles north of Onondaga Lake. The Site soils generally consist of Niagara Silt Loam and some Lockport and Brockport Silty Clay Loams.

The Niagara series soils is reported to consist of deep, somewhat poorly drained, medium textured soils that have a medium to high content of lime. These soils were formed in relatively stone-free glacial-lake deposits of silt and very fine sand and moderate amounts of clay. They are on moderately low plains from which runoff is slow or from which they receive runoff or seepage from adjacent higher lying soils.

The Lockport and Brockport silty clay loam consists of a mixture of the Lockport and Brockport series soils. The Lockport soils are moderately deep, somewhat poorly drained, moderately fine-textured soils that formed in a residue of mixed glacial till and soft red clay shale. These soils are on relatively low uplands where relief is influenced by the underlying bedrock. The Brockport soils are similar to the Lockport soils; however, the area formed in a residue of soft greenish-gray clay shale.

The regional bedrock geology is reported to consist of shale of the Vernon Formation.

4.4.2 Regional Groundwater

Regional groundwater from the bedrock is not used by private homeowners. The surrounding areas are believed to be connected to the municipal water system.

4.4.3 Regional Surface Water Hydrology

Regional surface water flow is generally toward Onondaga Lake located south of the Site. Sawmill Creek generally flows from the north to the south towards Onondaga Lake (see Figure 3). Drainage ditches along Steelway Boulevard were observed flowing eastward toward Sawmill Creek. A drainage channel from the Niagara Mohawk property (Seventh North Street Facility), located east of the Site, was observed flowing into Sawmill Creek at the southeast corner of the Site.

4.5 SITE ENVIRONMENTAL SETTING

4.5.1 Site Geology and Soils

The Site geology is generally consistent with the regional geology. The Site stratigraphy consists of an approximate 25-foot layer of fill and natural soils underlain by weathered shale. Competent bedrock was not encountered in the soil borings.

The fill material at the Site consists primarily of a thin layer of silty sand material underlain by a one-foot thick layer of coarse gravel material. Waste piles observed at the Site were apparently placed on the ground surface. No waste material was observed buried below the apparent natural ground surface. The fill thickness at the borings and test pits ranged from 0 to 2 feet.

Natural overburden generally consists of a silt and sand material which ranged in depth from 17 feet to 26 feet below ground surface.

The bedrock underlying the Site is shown to be the Vernon Shale (SUNY, 1913). Weathered shale was encountered approximately 25 feet below ground surface. The weathered shale was sampled with a split spoon sampler and augured by hollow stem augers. The weathered shale resembled a clayey silt soil with horizontal bedding. Competent bedrock was not encountered at the Site.

4.5.2 Site Groundwater

Groundwater was identified approximately 5 to 7 feet below ground surface throughout the Site. A groundwater contour plan (Figure 4) was prepared using the water level data from the six on-Site wells installed during this study based on the July 6, 1998 data. Groundwater generally appears to flow from west to east with possible northerly or southerly components. The June 5, 1998 water level data also support a west to east flow direction.

4.5.3 Site Surface Water Hydrology

Site topography generally controls runoff patterns at the Site. Generally, overland flow travels west to east on the Site towards Sawmill Creek, located east of the Site. The drainage channel on the northern portion of the Site appears to be blocked by waste piles resulting in ponding. The southern portion of the property drains to a drainage channel located along Steelway Boulevard which is connected to Sawmill Creek.

4.6 ANALYTICAL RESULTS

Environmental samples were collected by the NYSDEC and analyzed by both Chemtech Consultant Group (1997 samples) and H2M Labs, Inc. (1998 samples). Testing was completed as generally specified in the QAPjP for the 1998 sampling activities. A summary of samples collected and analytical testing completed is included as Table 2. A summary of analytical results (detected compounds only) is included as Tables 3A through 3I. A printout of the analytical data from the NYSDEC/TAMS Onondaga Lake Project database is included in Appendix D.

The following is a discussion of the analytical test results. A Site plan showing the sample locations is included as Figure 3.

During this PSA, analytical data were evaluated by comparing the results to NYSDEC standards, criteria or guidance values (SCGs). Site background metal concentrations were not determined for this study, therefore inorganic concentration data were compared to SCGs. Acetone and 2-butanone are common laboratory contaminants, and their reported presence is often an artifact of the analytical process.

Analytical testing from drum liquids, drum solids and surface soils was performed by Chemtech Consulting Group. These data were not validated. Additionally, two existing monitoring wells were observed on the Site, however their installation date, type and purpose are unknown. No prior groundwater analytical data was available for review. One well was decommissioned and the remaining well was excluded from the groundwater sampling.

4.6.1 Drum Sample Results

The USEPA START conducted field test screening of the drums/containers and stained soils. The results indicated that "flammable", "combustible", and PCB hazardous waste was potentially present at the Site. Stained soil near a waste pile at Area B exhibited a PCB concentration of over 50 ppm based on a field test kit. In addition, the USEPA provided information that chrome bearing liquid hazardous waste (605 pounds) was disposed from the Site (DeAngelis, personal communication, 1999).

Drum Solid Samples

Seventeen drum solid samples, SM-1 through SM-17, were collected by the NYSDEC from source areas A and B on September 30, and October 1, 1997. Drum solids were analyzed for VOCs, SVOCs, and inorganics (metals and cyanide). A summary of detected compounds is provided in Table 3A.

Drum samples SM-4, SM-7, and SM-8 were not analyzed for VOCs or inorganics due to insufficient sample quantity. Drum sample SM-9 was tested twice; however, VOC results could not be obtained.

VOCs

VOCs were detected in the 13 drum solid samples tested. Nine of the samples had relatively high concentrations. For example, drum sample SM-14 had xylene detected at 13,800,700 ppb (approximately 1.4%) and toluene detected at 8,447,000 ppb (approximately 0.8%).

SVOCs

SVOCs were detected in the 17 drum solid samples with concentrations ranging as high as 42,400 ppb (di-n-octylphthalate in SM-9). Naphthalene was detected in 15 of the 17 samples at concentrations up to 24,600 ppb (SM-2).

Inorganics

There was insufficient sample received for inorganic analysis on drum samples SM-4, SM-7, SM-8, SM-10, SM-13, and SM-17. Inorganics were detected in eleven drum solid samples tested. Chromium was detected at elevated concentrations in many of the samples (up to 34,300 ppm in SM-3). Lead and zinc were also detected at elevated concentrations.

Drum Liquid Sample Results

Eight liquid samples identified as SM-18, SM-19, SM-20, SM-22, SM-25, SM-26, SM-29 and SM-31 were collected from the drums. Drum liquids were analyzed for VOCs, SVOCs, PCBs, and inorganics (metals and cyanide). A summary of detected compounds is provided in Table 3B.

These "liquid" results are questionable as the concentration units were provided in microgram per kilogram (ug/kg) for PCBs/pesticides and inorganics, but in microgram per liter (ug/L) for VOCs and SVOCs. The laboratory did not provide an explanation for the disparity in the reporting of units. As such, these data, which were not validated, have been deemed unusable for this report.

4.6.2 Waste Pile Sample Results

Waste pile samples were collected from three locations at the Site by the NYSDEC on June 3, 1998. The waste pile samples are identified as B975-20 (WP-2), B975-21 (WP-1), and B975-23 (WP-3). The samples were collected above the ground surface in the piled waste. Additionally, one waste pile sample identified as WP-1 was collected on October 1, 1997 during previous Site activities. The four waste pile samples were analyzed for TCLP metals, and compared to the New York State standards for hazardous waste characteristics (6NYCRR Part 371). In addition to TCLP analysis, WP-3 was analyzed for TCL and TAL parameters and the data were compared to the NYSDEC Recommended Soil Cleanup Objectives (RSCOs) and Eastern United States Background (EUSB) levels[1]. A summary of waste pile sample data is provided in Table 3C.

[1] Recommended Soil Cleanup Objectives (RSCOs) and Eastern United States Background levels (EUSBs) were obtained from the NYSDEC TAGM 4046 dated January 24, 1994. RSCOs and EUSBs are not published for all compounds.

VOCs

Carbon disulfide and 1,1,1-trichloroethane were each detected at concentrations of 2 ppb in WP-3 which are well below the NYSDEC RSCO values of 2700 ppb and 800 ppb, respectively.

SVOCs

Several SVOCs, primarily polynuclear aromatic hydrocarbons (PAHs), were detected in the WP-3 sample with concentrations ranging up to 9,200 ppb. SVOCs detected at concentrations higher than NYSDEC RSCOs include: benzo(a)anthracene, chrysene, benzo(b)flouranthene, benzo(k)flouranthene, benzo(a)pyrene, and indeno(1,2,3-cd)pyrene. The remainder of the detected SVOCs do not exceed the NYSDEC RSCO levels.

Pesticides and PCBs

Dieldrin was detected at 190 ppb at WP-3 which is above the NYSDEC RSCO of 44 ppb. Additionally, PCBs (Aroclor-1248, 1254 and 1260) were detected at concentrations of 15,000 ppb, 12,000 ppb and 8,400 ppb, respectively. These concentrations are significantly higher than the NYSDEC RSCO value of 1,000 ppb for surface soils. No other pesticides or PCB Aroclors were detected in the waste pile sample.

TCLP Metals

Analytical test results from the four waste pile samples analyzed for TCLP metals were compared to the toxicity characteristic levels. Barium, cadmium, chromium, lead, mercury, selenium and silver were detected in the four waste pile samples. However, none of the detected compounds exceeded the toxicity characteristic hazardous waste thresholds (6NYCRR Part 371). The samples from WP-2 and WP-3 were observed to have higher concentrations of metals than those of both WP-1 samples.

Inorganics

The WP-3 sample was analyzed for inorganic parameters (metals and cyanide) and compared to NYSDEC RSCO and EUSB levels. Compounds exceeding the RSCO/EUSB values include: arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, mercury, nickel, selenium and zinc. No NYSDEC RSCO and EUSB values for antimony, silver and cyanide were available.

4.6.3 Test Pit Sample Results

Test pits were excavated at the location of debris/waste piles on the Site. Test pit samples were collected by NYSDEC on June 4, 1998 from five of six test pit locations for a total of six environmental samples. The six test pit samples are identified as B975-22 and B975-25 through B975-29. Two test pit samples were collected from a location identified as TP-2. One sample (B975-26) was collected from subsurface soils and the other sample (B975-27) was collected above the former ground surface in the fill material of the pile. Each sample was analyzed for VOCs, SVOCs, pesticides, PCBs and inorganics (metals and cyanide). An additional test pit sample, identified as Test Pit-4B, was collected by NYSDEC on July 7, 1998 and tested for hazardous waste characterization parameters including: flashpoint, pH, reactivity and total solids.

A summary of test pit sample data is provided in Table 3D. Test pit sample results were compared to the NYSDEC RSCOs and EUSB levels.

VOCs

Several VOCs were detected in the test pit samples. VOC concentrations ranged up to 600 ppb. The NYSDEC RSCO of 300 ppb for 2-butanone and 200 ppb for acetone was exceeded at TP-6 (600 ppb and 270 ppb, respectively). The remaining VOC concentrations did not exceed the NYSDEC RSCOs.

SVOCs

Several SVOCs were detected in the six test pit samples tested. The concentrations ranged up to 2,100 ppb (chrysene at TP-2). NYSDEC RSCOs were exceeded at five of the six sample locations. The highest concentrations were generally detected at TP-2 and TP-3.

Pesticides and PCBs

Pesticides were detected in test pit samples TP-2 (above ground surface), TP-3 and TP-4. Dieldrin was detected at a concentration of 48 ppb at TP-3 which exceeds the NYSDEC RSCO value of 44 ppb. The remaining pesticide concentrations did not exceed the NYSDEC RSCOs.

PCBs were detected in test pit samples TP-1, TP-2 (above ground surface), TP-3 and TP-4. Aroclor-1242 was detected at a concentration of 1,100 ppb at TP-3. Aroclor-1254 was detected at concentrations of 1,900 ppb and 2,700 ppb at TP-2 (above ground surface) and TP-3, respectively. These three PCB concentrations exceed NYSDEC RSCO value of 1,000 ppb for surface soils. The remaining PCB concentrations did not exceed the NYSDEC RSCO.

Inorganics

Inorganic concentrations were detected in the six test pit samples and were compared to the NYSDEC RSCO and EUSB levels. The RSCO and EUSB values were exceeded for the following metals: arsenic, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, magnesium, mercury, nickel, vanadium, and zinc.

The sample from TP-4 was analyzed for TCLP metals. Only barium (1,170 ppb) and selenium (23 ppb) were detected. These concentrations do not exceed the TCLP hazardous waste threshold levels.

Additionally, test pit sample TP-4B, collected on July 7, 1998, was analyzed for hazardous waste characterization (pH, reactivity, and flashpoint). The pH was reported as 9.6 units, flashpoint was reported as greater than 60° Celsius and the sample was reported as not reactive with water, cyanide or sulfide. Thus, the sample was determined to be a non-hazardous waste.

4.6.4 Surface Soil Sample Results

Surface soil samples were collected from 15 locations in the source areas by the NYSDEC on September 23, 1997. The samples were collected from locations under drums and in stained soils from Areas A and B. The samples were analyzed for VOCs, SVOCs, pesticides, PCBs and inorganics (metals and cyanide). The sample results were compared to the NYSDEC RSCOs and EUSB levels. A summary of detected compounds is provided in Table 3E.

VOCs

VOCs were detected in the 15 surface soil samples at lower concentrations than the drum samples (see Table 3A). For example, surface soil VOC concentrations ranged up to 87 ppb, compared to the drum samples with VOC concentrations up to 13,800,700 ppb. VOC concentrations in surface soil did not exceed the NYSDEC RSCOs.

SVOCs

SVOCs were detected in 13 of the 14 surface soil samples. Surface soil test results for SM-14 were not included in the reviewed Chemtech sample SVOC results. GZA contacted Chemtech for the SM-14 sample results. At the time of this report, Chemtech has not responded with the sample results. The detected compound concentrations reported ranged up to 2,600 ppb. SVOC results from SM-2, SM-6, SM-10, SM-11, SM-13 and SM-15 indicated several compounds exceeded NYSDEC RSCOs.

Pesticides and PCBs

Concentrations of pesticides were detected at six of the 15 surface soils samples and ranged as high as 21 ppb (heptachlor at SM-13). The surface soil pesticide concentrations reported did not exceed NYSDEC RSCOs.

PCB Aroclor-1254 was detected in three of the 15 surface soil samples. The concentrations ranged up to 11,000 ppb. Results from surface soil sample SM-3 and SM-4 exceeded the NYSDEC RSCO of 1,000 ppb.

Inorganics

Inorganics were detected in the 15 surface soil samples. The NYSDEC RSCO and EUSB values were exceeded for the following metals: arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron lead, magnesium, mercury, nickel and zinc. The inorganic concentrations reported for the 15 surface soil samples were generally within the same order-of-magnitude at the sample locations.

Surficial soil data from the Site indicate that the total concentration for cadmium, chromium, lead and mercury are more than 20 times the TCLP hazardous waste threshold (6NYCRR Part 371) in some samples. This is based on comparing the bulk soil concentrations (in mg/kg or ppm) to TCLP thresholds (in mg/L or ppm). This suggests the possibility that some surficial soils could be a hazardous waste.

4.6.5 Soil Boring Results

Soil samples were collected in June 1998 from seven of eight soil boring locations for a total of seven environmental samples. A summary of soil boring data is provided in Table 3F. Soil boring results were compared to the NYSDEC RSCO and EUSB levels.

VOCs

VOCs were detected in six of the seven soil boring samples. The concentrations were generally low and ranged up to 280 ppb. None of the reported VOC concentrations exceeded the NYSDEC RSCO values.

SVOCs

SVOCs were detected in two of the seven soil boring samples (SB-1 and SB-8). The concentrations were generally low and ranged up to 650 ppb. None of the SVOC concentrations exceeded the NYSDEC RSCO values.

Pesticides and PCBs

Pesticides were detected in one of the soil boring samples (SB-8). The detected compounds include endrin, 4,4'-DDD and endosulfan sulfate. The concentrations were generally low and ranged up to 4.7 ppb. These concentrations are below the RSCO values. No other pesticides were detected in the other six soil boring samples.

PCB Aroclor-1254 was detected at boring SB-8 from a depth of 2 to 4 feet at a concentration of 380 ppb. This concentration is below the RSCO value of 10,000 ppb for PCBs in subsurface soils. No other PCB compounds were detected in the remaining six soil boring samples.

Inorganics

The detected metals were compared to the NYSDEC RSCO and EUSB levels. The reported inorganic concentrations that exceeded the NYSDEC RSCO and EUSB levels in the seven soil boring samples include: arsenic, beryllium, calcium, chromium, copper, iron, magnesium, mercury, nickel and zinc. Boring SB-6, located north of the apparent source areas, had inorganic concentrations generally equal to or higher than concentrations from samples collected in or around the source areas (except for SB-8).

4.6.6 Groundwater Sample Results

Six groundwater samples from monitoring wells were collected by the NYSDEC on July 6 and 7, 1998 as part of this PSA. One sample was collected from each of the six monitoring wells. A summary of detected compounds is provided in Table 3G.

Groundwater sample results were compared to NYSDEC Class GA criteria. Wells MW-1, MW-2 and MW-6 appear to be upgradient of the apparent on-Site source areas based on the expected groundwater flow pattern (i.e., toward the east or Sawmill Creek). However, the groundwater samples from these wells, particularly MW-6, typically exhibited higher metal concentrations than the other groundwater samples. Thus, it is unclear whether background conditions have been established for the Site.

VOCs

The VOCs detected in groundwater samples include: methylene chloride, acetone, 2-butanone, and toluene. The concentrations detected ranged up to 6 ppb. The NYSDEC Class GA groundwater standards for the detected compounds were not exceeded.

SVOCs

Two SVOCs were detected in the groundwater samples: bis(2-ethylhexyl) phthalate and di-n-butylphthalate. Bis(2-ethylhexyl) phthalate was detected at well MW-3 at a concentration of 15 ppb, exceeding the NYSDEC Class GA groundwater standard of 5 ppb. No other SVOC compounds exceeded the NYSDEC Class GA groundwater standards or criteria.

Pesticides and PCBs

Pesticides and PCBs were not detected in the six groundwater samples.

Inorganics

The NYSDEC Class GA groundwater standards and guidance values were exceeded for the following detected inorganics: chromium, iron, magnesium, manganese, sodium, and thallium. There are no NYSDEC Class GA groundwater standards for the following detected metals: aluminum, calcium, cobalt, potassium and vanadium. The turbidity of the groundwater samples was generally greater than 50 NTU, indicating that samples contained elevated levels of sediment (NYSDEC groundwater sampling notes, 1998). Elevated sediment levels in groundwater samples commonly results in higher inorganic concentrations.

The concentration of chromium detected at well MW-6 was 55.8 ppb, slightly greater than the criterion of 50 ppb. The thallium concentration detected at MW-1 (2 ppb) is above the criterion of 0.5 ppb. The groundwater from the six wells had iron, manganese, magnesium and sodium levels above the Class GA criteria. Some of the metal compounds detected at levels above the Class GA standards were determined to be higher at the apparent upgradient wells (MW-6, MW-1 and MW-2), which may indicate potential migration of metals onto the Site from an upgradient source or may be indicative of natural conditions in the Site vicinity.

4.6.7 Sediment Sample Results

A total of seven paired sets of surface water and sediment samples were collected at locations SW/SED-1, SW/SED-2, SW/SED-3, SW/SED-5, SW/SED-6, SW/SED-7, and SW/SED-8. Additionally, one sediment sample was collected at location SED-4 (a water sample was not collected at SED-4). The sample pair SW/SED-3 is considered to be a background or upgradient location. The sediment sample results are discussed in this section and the surface water sample results are discussed in Section 4.6.8. Surface water/sediment sample locations are shown on Figure 3.

The purpose of these samples was to assess whether contaminants are migrating from an on-Site source into Sawmill Creek.

Eight sediment samples were collected on June 1, 2 and 4, 1998 from locations SED-1 through SED-8. A summary of the detected compounds is presented in Table 3H.

Sediment sample results were compared to values in the NYSDEC Division of Fish and Wildlife, Technical Guidance for Screening Contaminated Sediments, March 1998 (NYSDEC sediment criteria). Table 1 of the NYSDEC sediment criteria was used for the organics and Table 2 was used for the inorganics (low-effect levels).

Samples from SED-3 through SED-8 were also tested for total organic carbon (TOC). SED-8 was reported as having the lowest TOC value of 19,400 mg/kg (1.9%). This value was used to conservatively calculate the NYSDEC Benthic Aquatic Life Chronic Toxicity (BALCT) Site-specific sediment criteria. TOC ranged from 1.9 % to 10 %.

VOCs

Low levels of VOCs were detected at four of the eight sediment locations. Concentrations ranged up to 90 ppb. No NYSDEC BALCT sediment criteria are available for the detected compounds: acetone, chloromethane, 2-butanone, 4-methyl-2-pentanone, toluene, or xylene. No VOCs were detected at the upgradient sediment sample location (SED-3).

SVOCs

SVOCs were detected at six of the eight sediment locations (SED-1 through SED-6). Concentrations ranged up to 1,100 ppb (fluoranthene at SED-4). NYSDEC BALCT sediment criteria are available for the detected compounds phenanthrene, fluoranthene and bis(2-ethylhexyl) phthalate. None of these three detected compounds exceeded the NYSDEC BALCT sediment criteria. NYSDEC BALCT sediment criteria are not available for the remaining detected SVOCs.

Several compounds were detected in the upgradient sediment sample (SED-3) which may indicate potential migration of SVOCs from an upgradient source. Additionally, SED-4, located adjacent to source Area A was reported as having higher SVOC concentrations than that of the SED-3 upgradient sample. This indicates that SVOC compounds are potentially migrating into Sawmill Creek from source Area A. SVOCs were not detected in the sediment samples downstream of the Site (SED-7 and SED-8).

Pesticides and PCBs

Pesticides were detected at SED-4; dieldrin at 2.9 ppb and endrin ketone at 5.7 ppb. No NYSDEC BALCT sediment criteria are available for these two pesticides. No pesticides were detected in any of the other seven sediment samples.

PCBs were detected in two sediment samples analyzed (SED-1 and SED-2). Aroclor-1254 was detected at a concentration of 280 ppb at SED-1 and 61 ppb at SED-2. The PCB compounds detected from the sediment samples did not exceed the NYSDEC BALCT value of 374 ppb (calculated based on 1.9% TOC).

Inorganics

Eight sediment samples were analyzed for TAL metals and cyanide. Inorganic exceedances of the NYSDEC lowest-effect level (LEL) sediment criteria include: arsenic, cadmium, chromium, copper, iron, lead, manganese, mercury, nickel, silver and zinc. There are no NYSDEC LEL sediment criteria for aluminum, barium, beryllium, calcium, cobalt, magnesium, potassium, selenium, sodium, thallium, vanadium and cyanide. Cadmium, chromium, copper, lead, nickel and zinc were found in the upstream sediment sample (SED-3) at levels greater than the NYSDEC sediment criteria indicating the potential migration of metals from an upgradient source.

Concentrations of chromium, lead, nickel and zinc at SED-3 were greater than the concentrations at all other stations. However, concentrations higher than both the NYSDEC sediment criteria and the upstream sample (SED-3) were identified in the other sediment samples including; arsenic, copper, iron, manganese, mercury and silver. This indicates the potential migration of these metals from on-Site source Areas A and/or B into Sawmill Creek.

4.6.8 Surface Water Results

Surface water samples were collected from seven locations for a total of seven environmental samples on June 1 and 2, 1998. A summary of the detected compounds is provided in Table 3I.

Surface water sample results were compared to NYSDEC Surface Water Class C standards and/or upstream concentrations (SW-3). Surface water standards for select metals were calculated using a Site-specific average hardness of 300 milligrams equivalent $CaCO_3$ per liter (mg/L).

VOCs

VOCs were not detected in the seven surface water samples analyzed.

SVOCs

SVOCs were not detected in the seven surface water samples analyzed.

Pesticides and PCBs

Heptachlor epoxide was detected at 0.028 ppb at SW-8. No NYSDEC surface water criterion is available for heptachlor epoxide. SW-8 is located on Sawmill Creek, downstream of a tributary to the Sawmill Creek. This tributary originates from a source east of the Site. No other pesticides or PCBs were detected in any of the other surface water samples.

Inorganics

The seven surface water samples were analyzed for TAL metals and cyanide. The detected inorganics were compared to the NYSDEC Class C standards. Class C standards were exceeded for aluminum and iron. There are no Class C standards for the following detected metals: antimony, barium, calcium, magnesium, manganese, potassium and sodium.

The standard for aluminum (100 ppb) was exceeded at six sample locations. Concentrations at these six locations ranged from 116 ppb (SW-1) up to 1,600 ppb (SW-8). The standard for iron (300 ppb) was exceeded at six sample locations, ranging from 460 ppb (SW-5) up to 2,810 ppb (SW-2).

4.7 SUMMARY OF RESULTS

The chemical test results are summarized below relative to expected migration/exposure pathways.

Source Areas - Formerly, there were drums/containers and stained soils on-Site. Hazardous waste was identified in the drums (liquid hazardous waste for chromium). Screening level data also suggested that some wastes may have been ignitable and PCB hazardous waste. The drums and contaminated soil wastes were removed.

Currently, there are waste and debris piles at the Site. The results from the waste and debris piles indicate that VOCs (2-butanone and acetone), several SVOCs (PAHs), PCBs and inorganics such as chromium exceed NYSDEC RSCOs.

Surficial soils at the Site contained SVOCs (PAHs), PCBs and inorganics at concentrations exceeding NYSDEC RSCOs. Only select inorganics exceed the NYSDEC RSCOs in the subsurface soil samples.

The USEPA removal of the drummed wastes and stained soils has significantly lowered the threat that this Site poses to the environment. However, residual contamination exists in the waste and debris piles and surficial soils. Therefore, the wastes on-Site could present a continuing source for the air and surface water/sediment pathway. Most of these compounds are not relatively mobile in groundwater.

Since there is unrestricted access to the Site wastes and soils, human and biota contact to the contaminants can occur.

Air pathway - Surficial soil samples show the presence of VOCs, SVOCs, PCBs, and inorganics that could migrate as particulates in air. Therefore, the air pathway could transport contamination off-Site via particulate migration. However, gas (VOCs) migration is not considered significant.

Groundwater pathway - Groundwater samples tested did not contain levels of organics above groundwater standards with the exception of bis (2-ethylhexyl) phthalate at 15 ppb. Inorganics were detected above groundwater standards; however, this condition may be attributable to an upgradient source, ambient groundwater or elevated sediment in the groundwater samples. [Note: The apparent upgradient wells showed higher levels of select inorganics than the wells near the apparent source areas.]

Surface water/sediment pathway - Surface water samples contained two relatively innocuous metals above surface water standards (aluminum and iron). The sediment samples were contaminated with inorganics and SVOCs (PAHs) at concentrations exceeding guidance criteria. An upstream sample contained the highest levels for some of the exceedances suggesting an upstream source for the detected compounds. However, results from Sawmill Creek closer to source Area A contained elevated levels of some of the exceedances, compared to the upstream sample.

5.0 CONCLUSIONS AND RECOMMENDATIONS

This section presents the conclusions and recommendations for the Preliminary Site Assessment (PSA) for the Sawmill Creek Dump Site, located in the Town of Clay, Onondaga County, New York. This PSA was completed for the NYSDEC by GZA, TAMS, and other subcontractors (drillers, surveyors, laboratory, and data validator) under the Immediate Investigation Work Assignment No. D003060-20, and under Task 6 (PSAs) of the Onondaga Lake Project Work Assignment No D003060-27.

The Sawmill Creek Dump Site is an approximate 30-acre vacant and abandoned property located in the Woodard Industrial Park area in the Town of Clay, New York. Sawmill Creek, located adjacent to the Site on the east, is a tributary to Onondaga Lake and is a Class C waterbody.

The Site was discovered in June 1997 as containing 55-gallon drums, compressed gas cylinders, paint cans and buckets, metal scaling, solvent and tar buckets, scrap metal, construction and demolition (C&D) debris, wood and municipal solid wastes illegally disposed of throughout the Site. This discovery prompted the initial Site reconnaissance on September 3, 1997 by the USEPA START and the NYSDEC Level B Team.

The START hazardous waste categorization of drum contents identified flammable and combustible wastes to be mostly waste paints and adhesives. Additionally, an area of apparent stained soil designated by NYSDEC as Area B was identified as having PCB contamination. The drums and contaminated soils from the apparent source Areas A and B were removed from the Site by the USEPA. Prior to removal, NYSDEC collected samples of drum solids and drum liquids for analytical analysis. The sample data for the drum contents indicate high levels of VOCs, SVOCs and inorganics. Additional sampling was performed by NYSDEC in June and July 1998.

5.1 CONCLUSIONS

Based on the PSA investigation, the following conclusions are presented.

Source Areas - Formerly, there were drums/containers and stained soils on-Site. Hazardous waste was identified in some of the drums (liquid hazardous waste for chromium). Screening level data also suggested that some wastes may have been ignitable and/or PCB hazardous waste. These wastes have been removed.

Currently, there are waste and debris piles at the Site. The analytical results from the waste and debris piles indicate that VOCs (2-butanone and acetone), several SVOCs (PAHs), PCBs and inorganics such as chromium exceed NYSDEC RSCOs.

Surficial soils at the Site contained SVOCs (PAHs), PCBs and inorganics at concentrations exceeding NYSDEC RSCOs. Surficial soil data from the Site indicate that the total concentration for cadmium, chromium, lead and mercury are more than 20 times the TCLP hazardous waste threshold (6NYCRR Part 371) in some samples. This suggests the possibility that some surficial soils could be a hazardous waste.

The USEPA removal of the drummed wastes and stained soils has significantly lowered the threat that this Site poses to the environment. However, residual contamination exists in the waste and debris piles and surficial soils. Therefore, the wastes on-Site could present a continuing source for the air and surface water/sediment pathway. Most of these compounds are relatively immobile in groundwater. Since there is unrestricted access to the Site wastes and soils, human and biota contact to the contaminants can occur.

Air pathway - The air pathway could transport contamination off-Site via particulate migration. However, gas (VOCs) migration is not considered significant.

Groundwater pathway - Groundwater could be a contaminant pathway; however, the compounds detected (e.g., inorganics) are relatively immobile in groundwater. Furthermore, groundwater in the vicinity of the Site is not used for human consumption. Inorganics such as chromium and zinc were detected at high concentrations in the waste piles and the test pit soils; however, they were either not detected in the groundwater samples or were detected at concentrations less that the Class GA criteria.

Surface water/sediment pathway - Surface water and sediment could be a significant migration pathway. Although, there is evidence of some upstream contamination, samples collected in Sawmill Creek adjacent to the source areas exhibited elevated concentrations above the upstream sample for PCBs and select inorganics.

5.2 RECOMMENDATIONS

The START sampling and testing did identify hazardous waste at the Site. Additionally, the presence of a significant threat was established based on exceedances of NYSDEC recommended soil cleanup objectives and sediment criteria for the existing wastes, surficial soils, and the sediment chemical data. Therefore, the following recommendations should be considered.

- To prevent further migration of contaminants from the apparent source areas, existing waste piles and debris piles should be removed from the Site and properly disposed or properly contained on the Site. Additional surface soil sampling should be conducted at the Site to define the lateral and vertical extent of soil contamination.

- Additional sediment samples should be collected from the on-Site ditch and Sawmill Creek to better define on-Site and/or potential upgradient sources of contamination.

- An additional round of groundwater sampling should be conducted at the Site. Consideration for reducing the sediment loading in the groundwater samples should be made. Furthermore, if the inorganics are elevated in the groundwater in wells MW-2 or MW-6, a monitoring well should be installed upgradient to assess the possible presence of upgradient inorganic contamination.

6.0 REFERENCES

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TABLES

Table 1

Summary of Groundwater and Surface Water Elevations

Monitoring Point Identification	Ground Surface Elevation	Top of Riser Elevation	Surface Water Elevation 6/8/98	Date: 6/5/98		Date: 7/6/98	
				Depth	Elevation	Depth	Elevation
Units	ft, NGVD	ft, NGVD	ft, NGVD	ft	ft, NGVD	ft	ft, NGVD
MW-1	424.0	425.70	-	4.26	421.44	5.46	420.24
MW-2	425.0	426.98	-	6.64	420.34	6.16	420.82
MW-3	424.0	425.89	-	6.55	419.34	6.22	419.67
MW-4	425.6	427.69	-	7.77	419.92	7.54	420.15
MW-5	424.0	426.32	-	6.98	419.34	6.72	419.60
MW-6	425.2	428.57	-	8.02	420.55	7.35	421.22
SW-1	-		421.9	-	-	-	-
SW-2	-		419.9	-	-	-	-
SW-3	-		420.0	-	-	-	-
SW-5	-		419.2	-	-	-	-
SW-6	-		418.9	-	-	-	-
SW-7	-		417.8	-	-	-	-
SW-8	-		417.6	-	-	-	-

Notes:

1) Survey information provided by Larsen Engineers, P.E.,L.S., P.C.

2) Elevations based on the 1929 adjusted NGVD.

3) Depth measurements referenced to the top of the PVC riser for monitoring wells.

4) Surface water measurements made by the surveyors, Larsen Engineers.

MW= Monitoring Well

SW= Surface Water

Table 2
Analytical Testing Program Summary

Location	Lab Identifier	Date Sampled	Matrix	TCL VOCs	SVOCs	TCL PCBs	TCL Pest	TAL Metals	TOC	Reactivity pH, Flash Pt. Total solids	TCLP Metals
Drum Samples											
Drum SM-1	SM-1	9/30/97	Drum Solids	1	1			1			
Drum SM-2	SM-2	9/30/97	Drum Solids	1	1			1			
Drum SM-3	SM-3	9/30/97	Drum Solids	1	1			1			
Drum SM-4	SM-4	9/30/97	Drum Solids	1	1			1			
Drum SM-5	SM-5	9/30/97	Drum Solids	1	1			1			
Drum SM-6	SM-6	9/30/97	Drum Solids	1	1			1			
Drum SM-7	SM-7	9/30/97	Drum Solids	1	1			1			
Drum SM-8	SM-8	9/30/97	Drum Solids	1	1			1			
Drum SM-9	SM-9	9/30/97	Drum Solids	1	1			1			
Drum SM-10	SM-10	9/30/97	Drum Solids	1	1			1			
Drum SM-11	SM-11	9/30/97	Drum Solids	1	1			1			
Drum SM-12	SM-12	9/30/97	Drum Solids	1	1			1			
Drum SM-13	SM-13	9/30/97	Drum Solids	1	1			1			
Drum SM-14	SM-14	9/30/97	Drum Solids	1	1			1			
Drum SM-15	SM-15	9/30/97	Drum Solids	1	1			1			
Drum SM-16	SM-16	9/30/97	Drum Solids	1	1			1			
Drum SM-17	SM-17	9/30/97	Drum Solids	1	1			1			
Drum SM-18	SM-18	9/30/97	Drum Liquids	1	1	1		1			
Drum SM-19	SM-19	9/30/97	Drum Liquids	1	1	1		1			
Drum SM-20	SM-20	9/30/97	Drum Liquids	1	1	1		1			
Drum SM-22	SM-22	9/30/97	Drum Liquids	1	1	1		1			
Drum SM-25	SM-25	9/30/97	Drum Liquids	1	1	1		1			
Drum SM-26	SM-26	9/30/97	Drum Liquids	1	1	1		1			
Drum SM-29	SM-29	9/30/97	Drum Liquids	1	1	1		1			
Drum SM-31	SM-31	10/1/97	Drum Liquids	1	1	1		1			
Total				25	25	8	0	25	0	0	0
Waste Pile Samples											
WP-1	B975-21	6/3/98	Waste								1
WP-2	B975-20	6/3/98	Waste								1
WP-3	B975-23	6/3/98	Waste	1	1	1	1	1			1
WP-1	WP1	10/1/97	Waste								1
Total				1	1	1	1	1	0	0	4
Test Pit Samples											
Test Pit 1	B975-25	6/4/98	Soil	1	1	1	1	1			
Test Pit 2	B975-26	6/4/98	Soil	1	1	1	1	1			
Test Pit 2	B975-27	6/4/98	Soil	1	1	1	1	1			
Test Pit 3	B975-28	6/4/98	Soil	1	1	1	1	1			
Test Pit 4	B975-29	6/4/98	Soil	1	1	1	1	1			1
Test Pit 6	B975-22	6/4/98	Soil	1	1	1	1	1			
Test Pit 4	Test Pit 4-B	7/6/98	Soil							1	
Total				6	6	6	6	6	0	1	1
Surface Soil Samples											
SM1	0923-SAWM-01	9/23/97	Soil	1	1	1	1	1			
SM2	0923-SAWM-02	9/23/97	Soil	1	1	1	1	1			
SM3	0923-SAWM-03	9/23/97	Soil	1	1	1	1	1			
SM4	0923-SAWM-04	9/23/97	Soil	1	1	1	1	1			
SM5	0923-SAWM-05	9/23/97	Soil	1	1	1	1	1			
SM6	0923-SAWM-06	9/23/97	Soil	1	1	1	1	1			
SM7	0923-SAWM-07	9/23/97	Soil	1	1	1	1	1			
SM8	0923-SAWM-08	9/23/97	Soil	1	1	1	1	1			
SM9	0923-SAWM-09	9/23/97	Soil	1	1	1	1	1			
SM10	0923-SAWM-10	9/23/97	Soil	1	1	1	1	1			
SM11	0923-SAWM-11	9/23/97	Soil	1	1	1	1	1			
SM12	0923-SAWM-12	9/23/97	Soil	1	1	1	1	1			
SM13	0923-SAWM-13	9/23/97	Soil	1	1	1	1	1			
SM14	0923-SAWM-14	9/23/97	Soil	1	1	1	1	1			
SM15	0923-SAWM-15	9/23/97	Soil	1	1	1	1	1			
Total				15	15	15	15	15	0	0	0
Soil Boring Samples											
SB-1	B975-31	6/4/98	Soil	1	1	1	1	1			
SB-2	B975-19	6/3/98	Soil	1	1	1	1	1			
SB-3	B975-17	6/2/98	Soil	1	1	1	1	1			

Table 2
Analytical Testing Program Summary

Location	Lab Identifier	Date Sampled	Matrix	TCL VOCs	SVOCs	TCL PCBs	TCL Pest	TAL Metals	TOC	Reactivity pH, Flash Pt. Total solids	TCLP Metals
SB-4	B975-14	6/2/98	Soil	1	1	1	1	1			
SB-5	B975-24	6/3/98	Soil	1	1	1	1	1			
SB-6	B975-18	6/3/98	Soil	1	1	1	1	1			
SB-8	B975-01	6/1/98	Soil	1	1	1	1	1			
Total				7	7	7	7	7	0	0	0
Groundwater Samples											
MW-1	MW1	7/6/98	Groundwater	1	1	1	1	1			
MW-2	MW2	7/6/98	Groundwater	1	1	1	1	1			
MW-3	MW3	7/6/98	Groundwater	1	1	1	1	1			
MW-4	MW4	7/6/98	Groundwater	1	1	1	1	1			
MW-5	MW5	07/07/1998	Groundwater	1	1	1	1	1			
MW-6	MW6	7/6/98	Groundwater	1	1	1	1	1			
Trip	TRIPBLANK	7/7/99	Water	1							
Total				7	6	6	6	6	0	0	0
Sediment Samples											
SED-1	B975-03	6/1/98	Sediment	1	1	1	1	1			
SED-2	B975-05	6/1/98	Sediment	1	1	1	1	1			
SED-3	B975-07	6/1/98	Sediment	1	1	1	1	1	1		
SED-4	B975-30	6/4/98	Sediment	1	1	1	1	1	1		
SED-5	B975-16	6/2/98	Sediment	1	1	1	1	1	1		
SED-6	B975-09	6/2/98	Sediment	1	1	1	1	1	1		
SED-7	B975-11	6/2/98	Sediment	1	1	1	1	1	1		
SED-8	B975-13	6/2/98	Sediment	1	1	1	1	1	1		
Total				8	8	8	8	8	6	0	0
Surface Water Samples											
SW-1	B975-02	6/1/98	Surface Water	1	1	1	1	1			
SW-2	B975-04	6/1/98	Surface Water	1	1	1	1	1			
SW-3	B975-06	6/1/98	Surface Water	1	1	1	1	1			
SW-5	B975-15	6/2/98	Surface Water	1	1	1	1	1			
SW-6	B975-08	6/2/98	Surface Water	1	1	1	1	1			
SW-7	B975-10	6/2/98	Surface Water	1	1	1	1	1			
SW-8	B975-12	6/2/98	Surface Water	1	1	1	1	1			
Trip	Trip Blank	6/2/98	Water	1							
Trip	Trip Blank	6/3/98	Water	1							
Total				9	7	7	7	7	0	0	0
Total All Sample				78	75	58	50	75	6	1	5
Total Water Samples				16	13	13	13	13	0	0	0
Total Drum Samples				25	25	8	0	25	0	0	0
Total Waste Pile Samples				1	1	1	1	1	0	0	4
Total Soil Samples				29	29	29	29	29	0	1	5
Total Sediment Samples				8	8	8	8	8	6	0	0

Notes:

TCLP - Toxicity Characteristic Leaching Procedure.
TCL = Target Compound List.
PCB = Polychlorinated Biphenyls.
TOC = Total Organic Carbon

VOC = Volatile Organic Compounds
SVOCs - Semi-Volatile Organic Compounds
TAL = Target Analyte List
Flash Pt. = Flash Point
Pest = Pesticide

Table 3A
Summary of Drum Solids Sample Data
Detected Compounds Only

Location	SM-1			SM-2			SM-3			SM-4			SM-5			SM-6			SM-7			SM-8			SM-9			SM-10			SM-11			SM-12			SM-13			SM-14			SM-15			SM-16			SM-17		
Sample Identification																																																		
Sample Date	09/30/97	D	Q	09/30/97	D	Q	09/30/97	D	Q	09/30/97	D	Q	09/30/97	D	Q	09/30/97	D	Q	09/30/97	D	Q	09/30/97	D	Q	09/30/97	D	Q	09/30/97	D	Q	09/30/97	D	Q	09/30/97	D	Q	09/30/97	D	Q	09/30/97	D	Q	09/30/97	D	Q	09/30/97	D	Q	09/30/97	D	Q
Volatile Organic	ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg		
Methylene Chloride	6200		J	57000		JD	6300			--			1600			2000			--			--			--			72600		D		62500	UD		62500	UD	9700			8000			6000		J	4900			1300		
Trichloroethene	6600				6250	UD		6300	U	--				630	U		630	U	--			--			--				62500	UD		62500	UD		62500	UD		6300			6300	U		6300	U		630	U		630	U
Toluene	1343500		D	6837600		ED	980300		D	--			10000			15000			--			--			--			5464600		ED	5727500		ED	6279600		ED	5205800		ED	8447000		ED	6614800		ED	3300				630	U
Ethylbenzene	130700			2323900		D	78500			--				630	U	2400			--			--			--			674300		D	1315400		D	1305400		D	218200			7197500		ED	221000			7800				630	U
n-Propylbenzene	6200		J	271000		D	8500			--				630	U		630	U	--			--			--			62600		D	135900		D	100600		D	22800			170200			22400			930				630	U
1,3,5- Trimethylbenzene	15100			765400		D	25300			--			1100			870			--			--			--			185100		D	320000		D	226800		D	67300			2371800		D	66500			2400				630	U
1,2,4-Trimethylbenzene	35900			1745100		D	63500			--			1900			1600			--			--			--			400500		D	706000		D	503000		D	150000			4679900		ED	144000			6400				630	U
4-Isopropyltoluene		6300	U	139000		D		6300	U	--				630	U		630	U	--			--			--				62500	UD	54500		JD		62500	UD	18500			133100			18900				630	U		630	U
tert-Butylbenzene		6300	U		6250	UD		6300	U	--				630	U		630	U	--			--			--				62500	UD		62500	UD		62500	UD		6300		8600				6300	U		630	U		630	U
1,2-Dichlorobenzene		6300	U	166800		D	5500		J	--				630	U		630	U	--			--			--				62500	UD		62500	UD		62500	UD		6300			6300	U		6300	U		630	U		630	U
Isopropylbenzene		6300	U	107600		D		6300	U	--				630	U		630	U	--			--			--				62500	UD	70600		D	57900		JD	10400			73400			9900				630	U		630	U
Naphthalene	16000			486100		D	35800			--			3900			1900			--			--			--			70900		D	248800		D	123500		D	43400			122300			37700			2500				630	U
Xylene (total)	1578600		D	7910500		ED	287600			--			2100			9400			--			--			--			1203800		D	2755600		ED	2420400		D	774800			13800700		ED	1552500		D	15700				630	U
Trichlorofluoromethane		6300	U		6250	UD	15300		B	--				630	U		630	U	--			--			--				62500	UD		62500	UD		62500	UD		6300		9100		B	11800		B		630	U		630	U
Semi-Volatile Organic	ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg		
2-Methylphenol	410		J		330	U		330	U		3300	U		33000	U		3300	U		33000	U		3300	U		3300	U		330	U		330	U		330	U		330	U		3300	U		3300	U		330	U		330	U
Naphthalene	4400			24600		D	6300		D	10300			4300		J		3300	U	15400		J	2000		J	13900			2000		J	12700		E	4300		E	9800		JD	15900			850			1100		J		330	U
4-Chloro-3-methylphenol	380		J		330	U		330	U		3300	U		33000	U		3300	U		33000			3300	U		3300	U		330	U		330	U		330	U		330	U		3300	U		3300	U		330	U		330	U
2-Methylnaphthalene	380		J	6600		D	1200		JD	1600		J		33000	U		3300	U		33000			3300	U	3200		J	10600		E	700			4200		JD	1200		J	220		J		3300	U		330	U
Acenaphthylene		3300	U		330	U		330	U		3300	U		33000	U		3300	U		33000			3300	U		3300	U	580				330	U		330	U		330	U		330	U		3300	U		3300	U		330	U
2,4-Dinitrophenol		3300	U		330	U		330	U		3300	U		33000	U		3300	U		33000			3300	U	44		J		330	U		330	U		330	U		330	U		3300	U		3300	U		330	U		330	U
Dibenzofuran		3300	U		330	U		330	U		3300	U		33000	U		3300	U		33000			3300	U		3300	U	520				330	U		330	U	470				330	U		3300	U		330	U		330	U
Diethylphthalate		3300	U		330	U	47		J		3300	U		33000	U		3300	U		33000			3300	U		3300	U		330	U		330	U		330	U		330	U		3300	U		3300	U		330	U		330	U
Fluorene		3300	U	68		J		330	U		3300	U		33000	U		3300	U		33000			3300	U		3300	U	1100				330	U		330	U	270		J		3300	U		3300	U		330	U		330	U
N-Nitrosodiphenylamine (1)		3300	U	610			56		J		3300	U		33000	U		3300	U		33000			3300	U		3300	U		330	U		330	U		330	U	490				3300	U		3300	U		330	U		330	U
Phenanthrene		3300	U	160		J		330	U		3300	U	17400		J		3300	U		33000			3300	U	380		J	13200		D	4500		E		330	U	1000				3300	U		3300	U		330	U		330	U
Anthracene		3300	U		330	U		330	U		3300	U		33000	U		3300	U		33000			3300	U		3300	U	830				330	U		330	U		330	U			3300	U		3300	U		330	U		330	U
Di-n-butylphthalate	880		J	590				330	U		3300	U		33000	U		3300	U		33000			3300	U		3300	U		330	U		330	U	480				330	U			3300	U		3300	U		330	U		330	U
Fluoranthene		3300	U		330	U		330	U		3300	U	17600		J		3300	U		33000			3300	U		3300	U	18300		D		330	U		330	U		330	U			3300	U		3300	U		330	U		330	U
Pyrene		3300	U		330	U		330	U		3300	U	11000		J		3300	U		33000			3300	U		3300	U	9400		D		330	U		330	U		330	U			3300	U		3300	U		330	U		330	U
Butylbenzylphthalate		3300	U		330	U		330	U		3300	U		33000	U		3300	U		33000			3300	U		3300	U	51		J		330	U	6400		E		330	U	420			590		J		330	U		330	U
Benzo(a)anthracene		3300	U		330	U		330	U		3300	U	5400		J		3300	U		33000			3300	U		3300	U	7300		D		330	U		330	U		330	U			3300	U		3300	U		330	U		330	U
Chrysene		3300	U		330	U		330	U		3300	U	8600		J		3300	U		33000			3300	U		3300	U	10400		D		330	U		330	U		330	U			3300	U		3300	U		330	U		330	U
bis(2-Ethylhexyl)phthalate		3300	U	1900		JD	240		J	500		J	10400		J	5700				33000		920		J	24700			4200		JD	280		J	98		J		330	U	620		J	4000		D		3300	U	48		J			
Di-n-octylphthalate		3300	U		330	U		330	U	1400		J		33000	U	9400				33000		1600		J	42400			6600		UD	360				330	U		330	U	2400		J		330	U		3300	U		330	U
Benzo(b)fluoranthene		3300	U		330	U		330	U		3300	U	5100		J		3300	U		33000			3300	U		3300	U	6000		JD		330	U		330	U		330	U			3300	U		3300	U		330	U		330	U
Benzo(k)fluoranthene		3300	U		330	U		330	U		3300	U	4300		J		3300	U		33000			3300	U		3300	U	5500		JD		330	U		330	U		330	U			3300	U		3300	U		330	U		330	U
Benzo(a)pyrene		3300	U		330	U		330	U		3300	U		33000	U		3300	U		33000			3300	U		3300	U	4500		JD		330	U		330	U		330	U			3300	U		3300	U		330	U		330	U
Indeno(1,2,3-cd)pyrene		3300	U		330	U		330	U		3300	U		33000	U		3300	U		33000			3300	U		3300	U	2400		JD		330	U		330	U		330	U			3300	U		3300	U		330	U		330	U
Dibenz(a,h)anthracene		3300	U		330	U		330	U		3300	U		33000	U		3300	U		33000			3300	U		3300	U	1700				330	U		330	U		330	U			3300	U		3300	U		330	U		330	U
Benzo(g,h,i)perylene		3300	U		330	U		330	U		3300	U	3400		J		3300	U		33000			3300	U		3300	U	2500		JD		330	U		330	U		330	U			3300	U		3300	U		330	U		330	U
Inorganics	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Aluminum	3130			2610			876			--			3930			2780			--			--			884			--			3600			708			--			6.2		B	18.1			788			--					
Antimony		0.79	U	19.8			142			--			1.4		B	27.4			--			--			11.9			--			42.4			16.1			--				0.8	U	0.14			1.7		B	--					
Arsenic		1.2	U	10.1			35.3			--			1.7		B	11.4			--			--			3.1			--			12.8			8.5			--				1.2	U	0.06				1.2	U	--					
Barium	11300			207			8870			--			548			7540			--			--			11900			--			2240			2850			--			2.1		B	24			44.4			--					
Beryllium		0.2	U	0.21		B	0.24		B	--				0.2	U	0.2		B	--			--				0.19	U	--			0.24		B		0.2	U	--				0.2	U	0		B		0.2	U	--					
Cadmium	1			0.4		B	6.4			--				0.2	U	1.1			--			--				0.19	U	--			4.7			6.8			--				0.2	U	0		B		0.2	U	--					
Calcium	2610			55100			34900			--			69300			76300			--			--			8820			--			60400			5810			--			1460			329			369			--					
Chromium	65.6			3960			34300			--			98.4			5330			--			--			2180			--			6980			5450			--			1.6		B	28.1			355			--					
Cobalt	20.2			74.2			45.9			--			103			104			--			--			44.2			--			49.1			55.2			--			50.1			0.36			209			--					
Copper	4.2		B	10.3			12.9			--			81.1			273			--			--			4.8		B	--			13.4			39.7			--			7.4			0.46			253			--					
Iron	7970			24000			49400			--			36000			29300			--			--			56500			--			34500			50300			--			204			198			4520			--					
Lead	1140			2270			29600			--			239			6720			--			--			587			--			14600			4940			--			122			201			2700			--					
Magnesium	17700			17100			4760			--			19300			6360			--			--			4810			--			9050			2700			--			53		B	52.4			33.8		B	--					
Manganese	121			236			164			--			341			168			--			--			90.2			--			322			136			--			23.6			1.7			24.6			--					
Mercury		0.1	U	0.13			0.24			--				0.1	U		0.1	U	--			--				0.1	U	--				0.1	U	0.13			--				0.09	U		0.1	U		0.1	U	--					
Nickel	4.5		B	8.1			10.6			--			14.9			8.4			--			--			5.1		B	--			32.3			18.8			--				0.2	U	0.11			2.5		B	--					
Potassium	313		B	2550			11300			--			1300			2400			--			--			798		B	--			3070			1370			--			8.9		B	12.6			19.3		B	--					
Selenium	1.4				0.6	U		0.6	U	--				0.59	U		0.6	U	--			--				0.58	U	--				0.59	U	0.99		B	--			1.8			0	U	1.1			--					
Silver	0.39		B	0.54		B	1.1		B	--			0.56		B	0.47		B	--			--			0.3		B	--			0.81		B	1.5		B	--			1.3		B	0		B		0.2	U	--					
Sodium	519		B	576		B	570		B	--			830			708		B	--			--			394		B	--			1050			175		B	--			104		B	4.1		B	177		B	--					
Thallium		1.2	U		1.2	U		1.2	U	--				1.2	U		1.2	U	--			--				1.2	U	--				1.2	U		1.2	U	--				1.2	U		0.01	U		1.2	U	--					
Vanadium	2.6		B	2.4		B		0.2	U	--			8.5		B		0.2	U	--			--			0.45		B	--				0.2	U		0.2	U	--				0.2	U		0	U	0.22		B	--					
Zinc	54700			9550			62100			--			6550			10300			--			--			3180			--			48800			232000			--			12.9			121			48.2			--					
Cyanide	0.51			0.92			1.3			--			3.8			1.3			--			--			0.82			--			2.4				0.4	U	--			0.43		B	0.78				0.4	U	--					

1. Sample locations with detected compounds only are shown in this table.
2. Blank = Indicates compound was not detected.
3. "--" = not tested.
4. Analytical testing completed by Chemtech Consulting Group.
5. Laboratory Qualifier (third party validation not performed), D= Reported method detection limit; Q= Qualifier; J= Estimated value; R= Rejected test; NJ= Estimated Value Presumed present;
   B (for inorganics)=Value is less than contract required limit but greater than instrument detection limit, D = compound detection at secondary dilution factor.
6. UG/KG or UG/L = Parts per billion; MG/KG= Parts per million.
7.Drum solid samples were not analyzed for PCBs.

Table 3B
Summary of Drum Liquid Sample Data
Detected Compounds Only

Note: These data are questionable due to the reporting of concentration units in microgram per liter for PCBs/Pesticides and SVOCs, but microgram per kilogram for the VOCs and milligram per kilogram for inorganics (i.e., suggesting that some portions of samples were tested as a liquid and others, as a solid).

Location	SM-18			SM-19			SM-20			SM-22			SM-25			SM-26			SM-29			SM-31		
Sample Identification																								
Sample Date	9/30/97	D	Q	9/30/97	D	Q	9/30/97	D	Q	9/30/97	D	Q	9/30/97	D	Q	9/30/97	D	Q	9/30/97	D	Q	10/1/97	D	Q
Volatile Organic	ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg		
Methylene Chloride	22000		B		630	U		630	U	9700		B	7300		B	8000		B		630	U	29700		B
Chloroform		6300	U		630	U		630	U	5600		J	7000			6200		J		630	U		6300	U
Benzene		6300	U		630	U		630	U		6300	U	12300				6300	U		630	U		6300	U
Tetrachloroethene		6300	U		630	U		630	U		6300	U		6300	U		6300	U		630	U	10800		
Toluene	67000				630	U		630	U		6300	U	84300		D	19400			1100			7302400		ED
Ethylbenzene	74200				630	U		630	U		6300	U	255500		D		6300	U	1400			8476900		ED
1,2,4-Trimethylbenzene	1445500		E		630	U		630	U		6300	U	2360900		D	12800			5200			2214900		D
1,3,5- Trimethylbenzene	398500		E		630	U		630	U		6300	U	744900		D		6300	U	1900			1084400		D
Isopropylbenzene		6300	U		630	U		630	U		6300	U	190000				6300	U		630	U	528000		D
4-Isopropyltoluene		6300	U		630	U		630	U		6300	U	646100		D		6300	U	1500			227600		
Naphthalene	1122700		E		630	U		630	U		6300	U	1726500		D	63400			2300			833600		D
1,2,3-Trichloropropane		6300	U		630	U		630	U		6300	U		6300	U		6300	U		630	U	25200		
n-Propylbenzene	193200				630	U		630	U		6300	U	437000		D		6300	U	1200			807300		D
Xylene (total)	165800				630	U		630	U		6300	U	1106000		D	5100		J	4800			19579700		ED
Semi-Volatile Organic	ug/L			ug/L			ug/L			ug/L			ug/L			ug/L			ug/L			ug/L		
Naphthalene		10	U		10	U		10	U		10	U		10	U		10	U		10	U	610		D
2-Methylnaphthalene		10	U		10	U		10	U		10	U		10	U		10	U		10	U	26		JD
Dimethylphthalate		10	U		10	U	3.1		J		10	U		10	U		10	U		10	U		10	U
bis(2-Ethylhexyl)phthalate		10	U		10	U		10	U		10	U		10	U		10	U		10	U	4.6		J
Di-n-octylphthalate		10	U		10	U		10	U		10	U		10	U		10	U		10	U	9.3		J
PCBs	ug/L			ug/L			ug/L			ug/L			ug/L			ug/L			ug/L			ug/L		
PCBs were not detected in these samples.																								
Inorganics	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Aluminum	607		B	113		B	7.1		B	24.4		B	1000		B	92.1		B	1.5		B	51.1		B
Antimony		112	U		11	U		0.83	U		7.5	U		256	U		4.1	U		0.79	U		5	U
Arsenic		167	U		16.6	U		1.2	U		11.3	U		385	U		6.1	U		1.2	U		7.5	U
Barium	57.2		B	7.3		B	0.74		B	2.9		B	122		B	34.8		B	0.3		B	22.5		B
Beryllium		27.9	U		2.8	U		0.21	U		1.9	U		64.1	U		1	U		0.2	U		1.3	U
Cadmium		27.9	U		2.8	U		0.21	U		1.9	U		64.1	U	1.1		B		0.2	U		1.3	U
Calcium	27500		B	8170		B	3430			1590		B	52800		B	1610		B	171		B	3850		B
Chromium	156		B	14.9		B	1.3		B	10.3		B	376		B	11.4			1		B	34.8		
Cobalt		55.8	U		5.5	U		0.21	U		3.8	U		128	U		2.0	U		0.4	U	195		
Copper	488		B	49.8		B	2.9		B	21.5		B	646		B	141			2.4		B	40.1		
Iron	5480		B	5670		B	381			452			834000			3220			80.6			507		
Lead	132			36.4			3			15.3			278			98.2			0.69			50.5		
Magnesium	6670		B	662		B	36.1		B	284		B	99900		B	264		B	33		B	344		B
Manganese	58		B	26.1		B	2.1		B	6.3		B	1770			39.7			0.74		B	3.4		B
Mercury		14.1	U		1.4	U		0.11	U		0.88	U		30.3	U		0.49	U		0	U		0.64	U
Nickel	110		B	10.4		B	0.62		B	5.7		B	318		B	8.7		B	0.63		B	4.5		B
Potassium	1290		B	176		B	17.5		B	101		B	3720		B	33.3		B	9.5		B	190		B
Selenium		83.7	U		8.3	U		0.62	U	13.2				192	U		3	U		0.59	U	4.5		B
Silver		27.9	U		2.8	U		0.21	U		1.9	U	69.2		B	1.5		B	0.24		B	3.9		B
Sodium	19700		B	1600		B	139		B	930		B	29000		B	522		B	107		B	4600		B
Thallium		167	U		16.6	U		1.2	U		11.3	U		385	U		6.1	U		1.2	U		7.5	U
Vanadium		27.9	U		2.8	U		0.21	U		1.9	U		64.1	U		1	U		0.2	U		1.3	U
Zinc	383		B	66.6			6.4			21.4		B	1330			757			2.6		B	1450		
Cyanide		27.9	U		2.8	U		0.21	U	9.2				133	U		2.1	U		0	U	7.7		

1. Sample locations with detected compounds only are shown in this table.
2. Blank = Indicates compound was not detected.
3. "--" = not tested.
4. Analytical testing completed by Chemtech Consulting Group.
5. Laboratory Qualifier (third party validation not performed), D= Reported method detection limit; Q= Qualifier; J= Estimated value; R= Rejected test; NJ= Estimated Value Presumed present; NJ= Estimated Value Presumed present; B=Value is less than contract required limit but greater than instrument detection limit; D = compound detection at secondary dilution factor.
6. UG/KG or UG/L = Parts per billion; MG/KG= Parts per million.

Table 3C
Summary of Waste Pile Sample Data
Detected Compounds Only

Location	TCLP Haz	WP-1			WP-2			WP-3			WP-1		
Sample Identification	Waste	B975-21			B975-20			B975-23			WP1		
Sample Date	Criteria	06/03/98	D	Q	06/03/98	D	Q	06/03/98	D	Q	10/01/97	D	Q
Metals (TCLP)	ug/L	ug/L			ug/L			ug/L			ug/L		
Barium	100,000	565		B	2760		B	2400		B	19.5		B
Cadmium	1,000		0.8	U	329			631				1	U
Chromium	5,000		1.4	U	192		B	22.9		B	3.8		B
Lead	5,000		1	U	1040			1130				2	U
Mercury	200		0.1	U	23.4		B	0.16		B		0.2	U
Selenium	1,000	31.3		B	16.3		B	6.8		B		5	U
Silver	5,000		10	UJ		10	UJ		10	UJ	3.7		B
Location	TAGM							WP-3					
Sample Identification	4046							B975-23					
Sample Date	RSCO							06/03/98	D	Q			
Volatile Organic	ug/kg							ug/kg					
Carbon Disulfide	2700	--			--			2		J	--		
1,1,1-Trichloroethane	800	--			--			2		J	--		
Semi-Volatile Organic	ug/kg							ug/kg					
Naphthalene	13000	--			--			1300			--		
4-Chloroaniline	220	--			--			51		J	--		
2-Methylnaphthalene	36400	--			--			470			--		
Acenaphthylene	41000	--			--			1300			--		
Acenaphthene	50000	--			--			1200			--		
Dibenzofuran	6200	--			--			920			--		
Fluorene	50000	--			--			1400			--		
Phenanthrene	50000	--			--			8700		D	--		
Anthracene	50000	--			--			2200			--		
Fluoranthene	50000	--			--			9200		D	--		
Pyrene	50000	--			--			9200		D	--		
Butylbenzylphthalate	50000	--			--			1300			--		
Benzo(a)anthracene	224	--			--			4600		D	--		
Chrysene	400	--			--			4800		D	--		
bis(2-Ethylhexyl)phthalate	50000	--			--			1800			--		
Di-n-octylphthalate	50000	--			--			73		J	--		
Benzo(b)fluoranthene	1100	--			--			5000		D	--		
Benzo(k)fluoranthene	1100	--			--			3700		JD	--		
Benzo(a)pyrene	61	--			--			5100		D	--		
Indeno(1,2,3-cd)pyrene	3200	--			--			6600		D	--		
Carbazole	NSG	--			--			1200			--		
Benzo(g,h,i)perylene	50000	--			--			7900		D	--		
PCB's/ Pesticides	ug/kg							ug/kg					
Dieldrin	44	--			--			190		D	--		
Aroclor-1248	1000	--			--			15000		J	--		
Aroclor-1254	1000	--			--			12000		D	--		
Aroclor-1260	1000	--			--			8400		D	--		
Inorganics	mg/kg							mg/kg					
Aluminum [10]	33000	--			--			3960			--		
Antimony	NSG	--			--			26.2		J	--		
Arsenic	7.5	--			--			28.2		J	--		
Barium	300	--			--			475			--		
Beryllium	0.16	--			--			0.17		B	--		
Cadmium	1	--			--			35.2			--		
Calcium [10]	130-35000	--			--			47700			--		
Chromium	10	--			--			318			--		
Cobalt	30	--			--			47.2			--		
Copper	25	--			--			1050			--		
Iron	2000	--			--			277000			--		
Lead [9]	200-500	--			--			1480		J	--		
Magnesium [10]	100-5000	--			--			5660			--		
Manganese [10]	50-5000	--			--			1810			--		
Mercury	0.1	--			--			11.5		J	--		
Nickel	13	--			--			210			--		
Potassium [10]	8500-43000	--			--			301		B	--		
Selenium	2	--			--			19			--		
Silver	NSG	--			--			10			--		
Sodium [10]	6000-8000	--			--			339		B	--		
Vanadium	150	--			--			77.5			--		
Zinc	20	--			--			5740		J	--		
Cyanide	NSG	--			--			1.1			--		

1. Sample locations with detected compounds only are shown in this table.
2. Blank = Indicates compound was not detected.
3. "--" = not tested.
4. Analytical testing completed by H2M Labs, Inc. (1998 samples) and Chemtech (1997 samples).
5. D= Reported method detection limit; Q= Qualifier; J= Estimated value; U = indicated the compound was tested for, but not detected; B (for inorganics) = Value is less than CRDL but greater than IDL; D= compound detection at secondary dilution factor.
6. ug/kg or ug/L = Parts per billion; mg/kg= Parts per million.
7. NSG = No standard or guidance value, RSCO = Recommended soil cleanup objective (NYSDEC TAGM 4046, 1994).
8. Shading indicates standard or guidance exceedance.
9. Background values for lead in metropolitan or suburban areas or near highways typically range from 200-500 ppm.
10. Eastern USA Background concentration used for inorganics that do not have a NYSDEC RSCO.
11. TCLP Haz Waste Criteria = TCLP Hazardous Waste Threshold Value (NYSDEC 6NYCRR Part 371).

Table 3D
Summary of Test Pit Soil Sample Data
Detected Compounds Only

Location	TAGM	TP-1			TP-2			TP-2			TP-3			TP-4			TP-6			TP-4		
Sample Identification	4046	B975-25			B975-26			B975-27			B975-28			B975-29			B975-22			TP-4B		
Sample Date	RSCO	06/04/98	D	Q	06/04/98	D	Q	06/04/98	D	Q	06/04/98	D	Q	06/04/98	D	Q	06/04/98	D	Q	07/06/98	D	Q
Volatile Organic	ug/kg	ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg		
Acetone	200	22		J	7		J		28	U		11	U		11	UJ	270		J	--		
Carbon Disulfide	2700	2		J		12	U		11	UJ		11	U		11	UJ		12	U	--		
1,2-Dichloroethane	100		12	U		12	U	11		J		11	U		11	UJ		12	U	--		
2-Butanone	300		12	UJ		12	U	71		J		11	UJ		11	UJ	600		J	--		
1,1,1-Trichloroethane	800		12	U		12	U	11		R		11	U	1		J		12	U	--		
4-Methyl-2-Pentanone	1000		12	UJ		12	UJ		11	UJ		11	UJ		11	UJ	130		J	--		
Toluene	1500	300		J	15			34		J	380		J	170		J	190			--		
Ethylbenzene	5500	4		J		12	U	9		J	2		J	7		J	20			--		
Xylene (total)	1200	27			13			210.0		J	43		J	56		J	530			--		
Semi-Volatile Organic	ug/kg	ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg					
2-Methylphenol	100		400	U		410	U		360	U		360	U		370	U	190		J	--		
4-Methylphenol	900		400	U		410	U		360	U		360	U		370	U	500			--		
Naphthalene	13000		400	U		410	U	250		J	140		J		370	U	53		J	--		
2-Methylnaphthalene	36400		400	U		410	U	130		J	65		J		370	U		390	U	--		
Dimethylphthalate	2000		400	U		410	U	200		J	110		J	110		J		390	U	--		
Acenaphthylene	41000		400	U		410	U	190		J	180		J	56		J		390	U	--		
Acenaphthene	50000		400	U		410	U	410			100		J		370	U		390	U	--		
Dibenzofuran	6200		400	U		410	U	220		J	67		J		370	U		390	U	--		
Fluorene	50000		400	U		410	U	280		J	98		J		370	U		390	U	--		
Phenanthrene	50000	180		J		410	U	2500			870			220		J		390	U	--		
Anthracene	50000		400	U		410	U	990			430			130		J		390	U	--		
Di-n-butylphthalate	8100	340		J	250		J	990			770			230		J	220		J	--		
Fluoranthene	50000	200		J	51		J	3100		D	1300			320		J		390	U	--		
Pyrene	50000	160		J	52		J	2900			1200			510		J		390	U	--		
Butylbenzylphthalate	50000		400	U		410	U	510			1100				370	UJ		390	U	--		
Benzo(a)anthracene	224	94		J		410	U	1900			670			210		J		390	U	--		
Chrysene	400	120		J		410	U	2100			830			250		J		390	U	--		
bis(2-Ethylhexyl)phthal	50000	72		J	91		J	2500			2900		J	960		J	110		J	--		
Benzo(b)fluoranthene	1100	82		J		410	U	1700			770			150		J		390	U	--		
Benzo(k)fluoranthene	1100	71		J		410	U	1100			520			180		J		390	U	--		
Benzo(a)pyrene	61	65		J		410	U	1700			710			180		J		390	U	--		
Indeno(1,2,3-cd)pyren	3200	59		J		410	U	1800			830			320		J		390	U	--		
Dibenz(a,h)anthracene	14		400	U		410	U	970			460				370	U		390	U	--		
Carbazole	NSG		400	U		410	U	510			190		J		370	U		390	U	--		
Benzo(g,h,i)perylene	50000	63		J		410	U	2100			950			380				390	U	--		
PCB's/ Pesticides	ug/kg	ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg					
beta-BHC	200		2	U		2.1	U	4.7		JN	16				1.9	U		2	U	--		
Endosulfan I	900		2	U		2.1	U	53		J		1.8	U	6.2		JN		2	U	--		
Dieldrin	44		3.9	U		4.1	U	26		J	48		J		3.6	U		3.9	U	--		
4,4'-DDE	2100		3.9	U		4.1	U	26		JN	37		JN	6		JN		3.9	U	--		
Endosulfan II	900		3.9	U		4.1	U		3.6	U	13		JN		3.6	U		3.9	U	--		
Endrin ketone	NSG		3.9	U		4.1	U	10		JN	23		JN		3.6	U		3.9	U	--		
gamma-Chlordane	540		2	U		2.1	U	25		JN	46		JN	2		JN		2	U	--		
Aroclor-1242	1000		39.0	U		41.0	U	430			1100		J	180		J		39.0	U	--		
Aroclor-1248	1000		39.0	U		41.0	U		36.0	UJ		36.0	UJ		36.0	UJ		39.0	U	--		
Aroclor-1254	1000		39.0	U		41.0	U	1900		J	2700		J	400				39.0	U	--		
Aroclor-1260	1000	30		J		41.0	U	960		J		36.0	UJ		36.0	UJ		39.0	U	--		
Inorganics	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg					
Aluminum [10]	33000	9220			8940			4030			12000			6640			12700			--		
Antimony	NSG		0.74	UJ		0.77	U	3		J	14.4		J	5.8		J		0.7	U	--		
Arsenic	7.5	3.2			3.8		J	7.5		J	29.3		J	34		J	6.9		J	--		
Barium	300	106			99.2			201			213			69.3			73.8			--		
Beryllium	0.16	0.46		B	0.47		B	0.28		B	0.23		B	0.23		B	0.63		B	--		

Table 3D
Summary of Test Pit Soil Sample Data
Detected Compounds Only

Location	TAGM	TP-1			TP-2			TP-2			TP-3			TP-4			TP-6			TP-4		
Sample Identification	4046	B975-25			B975-26			B975-27			B975-28			B975-29			B975-22			TP-4B		
Sample Date	RSCO	06/04/98	D	Q	06/04/98	D	Q	06/04/98	D	Q	06/04/98	D	Q	06/04/98	D	Q	06/04/98	D	Q	07/06/98	D	Q
Cadmium	1	0.17		B	0.13		B	4.9		B	21.9		B		3.3	U	0.16		B	--		
Calcium [10]	130-35000	10700		J	3420		J	222000		J	40700		J	19200		J	6040		J	--		
Chromium	10	13			11.6			58.6			2160			1030			16.7			--		
Cobalt	30	7.6		B	6.9		B	10		B	43.2		J	37.8		J	20.3		J	--		
Copper	25	25.9		J	16.5		J	3620		J	1130		J	1520		J	64.6		J	--		
Iron	2000	14300			13400			48900			514000			513000			23900			--		
Lead [9]	200-500	11.7		J	11.1		J	452		J	361		J	100		J	13.9		J	--		
Magnesium [10]	100-5000	4990		J	2490		J	29400		J	5690		J	2600		J	8680		J	--		
Manganese [10]	50-5000	227		J	219		J	572		J	3850		J	4350		J	474		J	--		
Mercury	0.1	0.25			0.11		B	4.7			4.7			0.81			0.06		B	--		
Nickel	13	14.9		J	11.8		J	45.3		J	402		J	371		J	30.7		J	--		
Potassium [10]	8500-43000	672		B	563		B	922		B	208		B	279		B	1350			--		
Silver	NSG	0.21		B	0.26		B	2.2				0.13	U		0.1	U	0.51		B	--		
Sodium [10]	6000-8000	83.4		B	61.4		B	1300			421		B	249		B	406		B	--		
Thallium	NSG	1.2		B	1		B	3.6		B	38.4		B	44.4		B	1.7		B	--		
Vanadium	150	14.6		J	15.3		J	18.1		J	418		J	46.3		J	17.5		J	--		
Zinc	20	53.9		J	44.6		J	1870		J	9360		J	905		J	91.1		J	--		
Cyanide	NSG		0.3	U		0.31	U		0.3	U		0.27	U		0.3	U		0.3	U	--		
Metals (TCLP)	ug/L	ug/L			ug/L			ug/L			ug/L			ug/L			ug/L					
Barium	100000	--			--			--			--			1170		B	--			--		
Selenium	1000	--			--			--			--			23		B	--			--		
Hazardous Waste Characterization																						
Flash Point	<60 ^{0} C	--			--			--			--			--			--			> 60 degrees C		
pH (corrosivity)	<2, >12.5	--			--			--			--			--			--			9.6 units		
Reactivity to water		--			--			--			--			--			--			No		
Reactivity to cyanide		--			--			--			--			--			--			No <100mg/kg		
Reactivity to sulfide		--			--			--			--			--			--			No <100mg/kg		
Total Solids		--			--			--			--			--			--			98.70%		

1. Sample locations with detected compounds only are shown in this table.
2. Blank = Indicates compound was not detected.
3. "--" = not tested.
4. Analytical testing completed by H2M Labs, Inc.
5. D= Reported method detection limit; Q= Qualifier; J= Estimated value; U = indicated the compound was tested for, but not detected;
   B (for inorganics) = Value is less than CRDL but greater than IDL; D= compound detection at secondary dilution factor.
6. ug/kg or ug/L = Parts per billion; mg/kg= Parts per million.
7. NSG = No standard or guidance value, RSCO = Recommended soil cleanup objective.
8. Shading indicates standard or guidance exceedance.
9. Background values for lead in metropolitan or suburban areas or near highways typically range from 200-500 ppm.
10. Eastern USA Background concentration used for inorganics that do not have a NYSDEC RSCO.

Table 3E
Summary of Surface Soil Sample Data
Detected Compounds Only

Location	TAGM	SM-1			SM-2			SM-3			SM-4			SM-5			SM-6			SM-7			SM-8			SM-9			SM-10			SM-11			SM-12			SM-13			SM-14			SM-15		
Sample Identification	4046																																												
Sample Date	RSCO	09/23/97	D	Q	09/23/97	D	Q	09/23/97	D	Q	09/23/97	D	Q	09/23/97	D	Q	09/23/97	D	Q	09/23/97	D	Q	09/23/97	D	Q	09/23/97	D	Q	09/23/97	D	Q	09/23/97	D	Q	09/23/97	D	Q	09/23/97	D	Q	09/23/97	D	Q	09/23/97	D	Q
Volatile Organic	ug/kg	ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg		
Chloromethane	NSG	4.7		J		5.5	U		5.4	U		5.9	U	2.7		J		6	U		7.3	U		9.6	U	3.3		J		5.5	U		5.4	U		10	U	1.6		J		6.1	U		5.1	U
Methylene Chloride	NSG	20			4.5		J	43			49			51			25			32			23			38			21			31			65			40			59			87		
Tetrachloroethene	1400	2.5		J	3.1		J	1.9		J	2		J	3.5		J	2.7		J	5		J	3.9		J	2.7		J	2.3		J	2.5		J	5.1		J	2.8		J		6.1	U	2.1		J
Toluene	1500		5.8	U		5.5	U			J		5.9	U		8.2	U	1.5		J		7.3	U		9.6	J		6	U		5.5	U		5.4	J		10	U		5.7	U	1.4		J		5.1	U
Ethylbenzene	5500		5.8	U		5.5	U		5.4	U		5.9	U		8.2	U		6	U		7.3	U		9.6	U		10	U		5.5	U	1.3		J		10	U		5.7	U					5.1	U
Xylene (total)	1200		5.8	U		5.5	U		5.4	U		5.9	U	6.2		J		6	U	5.6		J		9.6	U		10	U		5.5	U		5.4	U		10	U		5.7	U		6.1	U		5.1	U
1,4-Dichlorobenzene	8500		5.8	U		5.5	U		5.4	U		5.9	U		8.2	U		6	U		7.3	U	4.3		J	1.6		J		5.5	U		5.4	U	10	U		5.7	U		6.1	U		5.1	U
Trichlorofluoromethane	NSG		5.8	U		5.5	U	56				5.9	U		8.2	U		6	U		7.3	U	4.3		J		6	U		5.5	U		5.4	U	9.8		J		5.7	U		6.1	U		5.1	U
Semi-Volatile Organic	ug/kg	ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg		
2-Methylphenol	100	81		J		360	U		360	U		390	U		540	U		400	U		480	U		630	U		400	U		360	U		350	U		690	U		370	U					340	U
Naphthalene	13000		380	U		360	U		360	U		390	U		540	U		400	U		480	U		630	U		400	U		360	U	56		J		690	U		370	U		190		J		
2-Methylnaphthalene	36400		380	U		360	U		360	U		390	U		540	U		400	U		480	U		630	U		400	U		360	U		350	U		690	U		370	U		86		J		
Acenaphthylene	41000		380	U		360	U		360	U		390	U		540	U		400	U		480	U		630	U		400	U		360	U		350	U		690	U		370	U		110		J		
2,6-Dinitrotoluene	1000	56		J		360	U		360	U		390	U		540	U		400	U		480	U		630	U		400	U		360	U		350	U		690	U		370	U					340	U
Acenaphthene	50000		380	U		360	U		360	U		390	U		540	U	60		J		480	U		630	U		400	U		360	U	110		J		690	U	58		J	210		J		
Dibenzofuran	6200		380	U		360	U		360	U		390	U		540	U		400	U		480	U		630	U		400	U		360	U	52		J		690	U		370	U	170		J		
Fluorene	50000		380	U		360	U		360	U		390	U		540	U	54		J		480	U		630	U		400	U		360	U	86		J		690	U	50		J	250		J		
Phenanthrene	50000		380	U	150		J	270		J	190		J		540	U	550			56		J		630	U	64		J	76		J	830				690	U	480			1600				
Anthracene	50000		380	U	46		J	160		J	59		J		540	U	200		J		480	U		630	U	58		J		360	U	200		J		690	U	120		J	440				
Di-n-butylphthalate	8100		380	U		360	U		360	U		390	U		540	U		400	U		480	U		630	U	550				360	U		350	U		690	U		370	U					340	U
Fluoranthene	50000		380	U	270		J	260		J	210		J		540	U	1100			110		J	120			400	U	210		J	860				690	U	620			1400				
Pyrene	50000	44		J	540			1000			550			57		J	1300			130		J	130		J	86		J	250		J	1700				690	U	680			2600				
Butylbenzylphthalate	50000	120		J				500			400				540	U	62		J		480	U		630	U		400	U		360	U	150		J		690	U	74		J	150		J		
Benzo(a)anthracene	224		380	U	130		J	160		J	130		J		540	U	620				480	U		630	U		400	U	130		J	460				690	U	250		J	630				
Chrysene	400		380	U	170		J	240		J	190		J		540	U	660			67		J	70		J		400	U	170		J	570				690	U	360		J	1000				
bis(2-Ethylhexyl)phthalate	50000	1000						2200			1300			110		J	170		J		480	U		630	J	94		J		360	U	870				690	J	230		J	390				
Di-n-octylphthalate	50000	370		J	1900				360	U	290		J		540	U		400	U		480	U		630	U		400	U		360	U		350	U		690	U		370	U					340	U
Benzo(b)fluoranthene	1100		380	U		360	U		360	U		390	U		540	U	1400				480	U		630	U		400	U	440			470				690	U	610			990				
Benzo(k)fluoranthene	1100		380	U	560			690				390	U		540	U		400	U	100		J	150		J		400	U		360	U	520				690	U		370	U		1000				
Benzo(a)pyrene	61		380	U	230		J		360	U		390	U		540	U	610			55		J		630	U		400	U	190		J	340		J		690	U	190		J	900				
Indeno(1,2,3-cd)pyrene	3200		380	U	96		J		360	U		390	U		540	U	150		J		480	U		630	U		400	U	53		J	150		J		690	U	70		J	270		J		
Dibenz(a,h)anthracene	14		380	U		360	U		360	U		390	U		540	U	58		J		480	U		630	U		400	U		360	U		350	U		690	U		370	U					340	U
Carbazole	NSG		380	U		360	U		360	U		390	U		540	U	210		J		480	U		630	U		400	U	61		J	270		J		690	U	150		J	670				
Benzo(g,h,i)perylene	50000		380	U		360	U		360	U		390	U		540	U	170		J		480	U		630	U		400	U	63		J	240		J		690	U	82		J	320		J		
PCB's/ Pesticides	ug/kg	ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg		
alpha-BHC	1100		1.9	U		1.8	U		1.8	U		2	U		2.7	U		2	U		2.4	U		3.2	U		2	U		1.8	U		1.8	U		3.5	U		1.9	U		2.1	U	0.64			JP
beta-BHC	200		1.9	U		1.8	U		1.8	U		2	U		2.7	U		2	U		2.4	U		3.2	U		2	U		1.8	U		1.8	U		3.5	U		1.9	U	9.2				1.7	U
gamma-BHC(Lindane)	60		1.9	U		1.8	U		1.8	U		2	U		2.7	U		2	U		2.4	U		3.2	U		2	U		1.8	U	2.3		P		3.5	U	3		P		2.1	U		1.7	U
Heptachlor	100		1.9	U		1.8	U		1.8	U		2	U		2.7	U		2	U		2.4	U		3.2	U		2	U		1.8	U		1.8	U		3.5	U	21		P		2.1	U		1.7	U
Aldrin	41		1.9	U		1.8	U		1.8	U		2	U		2.7	U	3.5		P		2.4	U		3.2	U	0.93		JP		1.8	U	4.4		P		3.5	U		1.9	U	6.9		P		1.7	U
Endrin	100		3.9	U		3.7	U		3.6	U		3.9	U		5.5	U		4.8	U		4.8	U		6.4	U		4	U		3.7	U	0.84		JP		6.9	U		3.8	U		4.1	U		3.4	U
Aroclor-1254	1000		39.0	U		37.0	U	11000		D	9100		D	530		P		48.0	U		48.0	U		64.0	U		40.0	U		37.0	U		36.0	U		69.0	U		38.0	U		41.0	U		34.0	U
Inorganics	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Aluminum [10]	33000	4620			5460			4810			6920			7940			5880			17400			12900			9620			2600			5830			21400			5690			10700			6730		
Antimony	NSG	4		B	2.6		B	2.9		B	4.5		B	4.2		B	29.7			1.5		B	2.2		B		0.92	U		0.83	U	8.1		B		1.6	U	7		B	2.3		B	7		B
Arsenic	7.5	6.3			8.1			5.2			10.6			5.9			7.6			5.7			10.1			10.2			22.4			16.6			4.1			9.2			13.2			26.6		
Barium	300	438			210			190			361			223			266			117			168			134			68.2			334			207			375			114			813		
Beryllium	0.16	0.27		B	0.27		B	0.38		B	0.34		B	0.44		B	0.35		B	0.74		B	0.62		B	0.47		B	0.29		B	0.38		B	0.96		B	0.31		B	0.49		B	0.35		B
Cadmium	1	5.9			1.4			1.9			57.6			8.3			3.1			2.2				0.38	U		0.23	U		0.21	U	4.6				2.3			5.8				0.23	U	29.1		
Calcium [10]	130-35000	152000			159000			177000			113000			119000			192000			17700			37900			71400			48900			165000			21300			251000			102000			74100		
Chromium	10	151			60.7			34.3			97.4			53.8			71			28.6			180			938			583			194			185			68.1			44			415		
Cobalt	30	21.2			44			8.8		B	20.7			12.3		B	13			16.2			20.6			16.9			27.4			24.7			18.2		B	16.7			12.3			46.9		
Copper	25	236			193			121			547			300			234			110			258			495			1160			510			245			263			164			1290		
Iron	2000	50700			62300			28100			88400			30100			55100			31100			108000			151000			489000			79500			32300			64700			43700			292000		
Lead [9]	200-500	525			299			179			420			426			379			62			211			366			176			972			275			410			131			1890		
Magnesium [10]	100-5000	18700			25300			26700			17200			17200			22100			9610			15700			12400			7330			16300			14000			19200			26200			6950		
Manganese [10]	50-5000	1350			687			352			874			561			513			360			949			1380			2740			748			287			526			524			1810		
Mercury	0.1	2.2			2.1			1.4			3.5			6			3.3			0.81			26			3.1			1.5			4.3				0.21	U	3.4			1.7			177		
Nickel	13	61			47.1			37.8			130			54.8			62.2			48			93.9			175			262			97.1			167			58			38.7			232		
Potassium [10]	8500-43000	1390			1860			1930			1760			2510			2280			4100			3360			2030			390		B	2000			3330			1650			3910			1080		
Selenium	2		0.69	U		0.65	U		0.63	U		0.68	U	0.97		B		0.71	U	1.4		B		1.2	U		0.69	U		0.63	U		0.64	U		1.2	U		0.68	U		0.07	U		0.61	U
Silver	NSG	1.4		B	1.3		B	1.3		B	2		B	2.6		B	1.1		B	1.5		B	0.58		B	0.74		B	1.4		B	1		B	0.92		B	1.3		B	0.25		B	12.3		
Sodium [10]	6000-8000	672		B	751		B	604		B	1250			535		B	863		B	277		B	311		B	299		B	236		B	2580			320		B	1320			453		B	675		B
Thallium	NSG		1.4	U		1.3	U		1.3	U	3.1				1.9	U	1.8		B		1.7	U	5.5				1.4	U		1.3	U		1.3	U		2.4	U		1.4	U		1.4	U		1.2	U
Vanadium	150	30.4			20.1			16.7			26.6			26.6			21.6			34.6			38.8			30			28			20.1			37.5			15.6			28.6			63.1		
Zinc	20	1320			1740			577			2770			1920			1040			1050			1040			514			379			958			2490			4730			286			3860		
Cyanide	NSG		0.46	U		0.44	U		0.43	U		0.46	U		0.65	U		0.48	U		0.57	U		0.77	U		0.48	U		0.44	U		0.43	U		0.82	U		0.45	U		0.49	U	0.66		

1. Sample locations with detected compounds only are shown in this table.
2. Blank = Indicates compound was not detected. Sample SM-14 SVOC analysis was unavailable for review.
3. "--" = not tested.
4. Analytical testing completed by Chemtech Consulting Group.
5. D= Reported method detection limit; Q= Qualifier; J= Estimated value; U = indicated the compound was tested for, but not detected;
   B (for inorganics) = Value is less than CRDL but greater than IDL; D= compound detection at secondary dilution factor.
6. ug/kg or ug/L = Parts per billion; mg/kg= Parts per million.
7. NSG = No standard or guidance value, RSCO = Recommended soil cleanup objective.
8. Shading indicates standard or guidance exceedance.
9. Background values for lead in metropolitan or suburban areas or near highways typically range from 200-500 ppm.
10. Eastern USA Background concentration used for inorganics that do not have a NYSDEC RSCO.

Table 3F
Summary of Soil Boring Sample Data
Detected Compounds Only

Location	TAGM	SB-1			SB-2			SB-3			SB-4			SB-5			SB-6			SB-8		
Sample Identification	4046	B975-31			B975-19			B975-17			B975-14			B975-24			B975-18			B975-01		
Sample Date	RSCO	06/04/98	D	Q	06/03/98	D	Q	06/02/98	D	Q	06/02/98	D	Q	06/03/98	D	Q	06/03/98	D	Q	06/01/98	D	Q
Volatile Organic	ug/kg	ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg		
Acetone	200		23	UJ		12	UJ		13	UJ	36		J	18		J	40		J	36		J
Carbon Disulfide	2700		23	UJ		12	U	2		J		12	U		12	U		12	U		12	U
Chloroform	300		23	UJ		12	U	2		J		12	U		12	U		12	U		12	U
2-Butanone	300	18		J		12	U		12	U	4		J		12	UJ		12	UJ	3		J
4-Methyl-2-Pentanone	1000	2		J		12	UJ		12	UJ		12	UJ		12	UJ		12	UJ		12	UJ
Tetrachloroethene	1400		23	UJ		12	U	2		J		12	U		12	U		12	U		12	U
Toluene	1500	280		J		12	U	2		J	2		J		12	U		12	U	3		J
Chlorobenzene	1700		23	UJ		12	U	1		J		12	U		12	U		12	U	5		J
Ethylbenzene	5500	3		J		12	U		12	U		12	U		12	U		12	U		12	U
Xylene (total)	1200	20		J		12	U		12	U		12	U		12	U		12	U	2		J
Semi-Volatile Organic	ug/kg	ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg		
Di-n-butylphthalate	8100	650		J		400	U		410	U		390	U		390	U		390	U		800	U
Fluoranthene	50000		750	UJ		400	U		410	U		390	U		390	U		390	U	89		JD
Pyrene	50000		750	UJ		400	U		410	U		390	U		390	U		390	U	86		JD
bis(2-Ethylhexyl)phthalate	50000	160		J		400	U		410	U		390	U		390	U		390	U	620		JD
PCB's/ Pesticides	ug/kg	ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg		
Endrin	100		7.4	UJ		4	U		4	U		3.8	U		3.9	U		3.9	U	3.7		JN
4,4'-DDD	2900		7.4	UJ		4	U		4	U		3.8	U		3.9	U		3.9	U	4.7		JN
Endosulfan sulfate	1000		7.4	UJ		4	U		4	U		3.8	U		3.9	U		3.9	U	3.9		JN
Aroclor-1254	10000		74	UJ		40	U		40	U		38	U		39	U		39	U	380		
Metals	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Aluminum [10]	33000	5320		J	4390			3320			3030			2720			10800			12400		
Antimony	NSG		1.4	UJ	2.3		J		0.76	UJ		0.72	UJ		0.45	UJ	0.83		J		0.74	UJ
Arsenic	7.5	2.8		J	4.1		J	4.2			1.6		B	1.9		B	3.3			12.6		
Barium	300	91.5		J	32.2		B	27.5		B	19.2		B	24.2		B	106			78.6		
Beryllium	0.16	0.28		J	0.26		B	0.24		B	0.17		B	0.15		B	0.5		B	0.58		B
Calcium [10]	130-35000	81400		J	37200			1830			10200			27800			4840			21700		
Chromium	10	11.7		J	8.9			5.5			3.1			6			17.4			16		
Cobalt	30	6.8		J	3.4		B	4.4		B	2.8	2	B	2.9		B	9.4		B	16.8		
Copper	25	23.5		J	11.3			14.6			9.8			10.9			26.1			580		
Iron	2000	12000		J	9990			13200			7200			6770			19000			28600		
Lead [9]	200-500	6.1		J	3.9		J	4.1		J	1.6			2.7		J	8.1		J	34.4		J
Magnesium [10]	100-5000	23700		J	16400			1280			2000			10200			5180			14000		
Manganese [10]	50-5000	483		J	189			57.9			204			298			350			760		
Mercury	0.1		0.11	UJ	0.16		J		0.059	U		0.05	U		0.059	U		0.069	J	0.095		B
Nickel	13	14.4		J	8.9		B	8.1		B	5.6		B	7.1		B	19.8			32.9		
Potassium [10]	8500-43000	1040		J	629		B	247		B	386		B	393		B	971		B	923		B
Selenium	2		0.9	UJ	0.68		B		0.49	U		0.46	U	0.77		B	1.1		B		0.48	U
Silver	NSG		0.27	UJ	0.72		B	0.32		B		0.14	U		0.071	U		0.071	U	0.59		B
Sodium [10]	6000-8000	291		J	113		B	40.7		B	40.8		B	72.5		B	145		B	97.9		B
Thallium	NSG		0.81	UJ	0.78		B	0.77		B	0.45		B		0.45	U		0.45	U	2.3		B
Vanadium	150	11.2		J	11.8		B	12.8			5.9		B	6.5		B	23.9			16.8		
Zinc	20	37.5		J	28.2		J	26.6			14.2			18.5		J	49.3		J	255		

1. Sample locations with detected compounds only are shown in this table.
2. Blank = Indicates compound was not detected.
3. "--" = not tested.
4. Analytical testing completed by H2M Labs, Inc.
5. D= Reported method detection limit; Q= Qualifier; J= Estimated value; U = indicated the compound was tested for, but not detected; B (for inorganics) = Value is less than CRDL but greater than IDL; D= compound detection at secondary dilution factor.
6. ug/kg or ug/L = Parts per billion; mg/kg= Parts per million.
7. NSG = No standard or guidance value, RSCO = Recommended soil cleanup objective.
8. Shading indicates standard or guidance exceedance.
9. Background values for lead in metropolitan or suburban areas or near highways typically range from 200-500 ppm.
10. Eastern USA Background concentration used for inorganics that do not have a NYSDEC RSCO.

Table 3G
Summary of Groundwater Sample Data
Detected Compounds Only

Location	NYSDEC Class GA	MW-1			MW-2			MW-3			MW-4			MW-5			MW-6			Trip Blank		
Sample Date	Standard/Guidance	07/06/98	D	Q	07/06/98	D	Q	07/06/98	D	Q	07/06/98	D	Q	07/07/98	D	Q	07/06/98	D	Q	07/06/98	D	Q
Volatile Organic	ug/L	ug/L			ug/L			ug/L			ug/L			ug/L			ug/L			ug/L		
Methylene Chloride	5 (standard)	1		J		10	U		10	U		10	U		10	U		10	U		10	U
Acetone	50 (standard)	3		J	1		J	6		J	2		J	3		J	2		J		10	U
2-Butanone	NSG		10	U		10	U	3		J		10	U		10	U	1		J		10	U
Toluene	5 (standard)		10	UJ		10	UJ	2		J		10	UJ		10	UJ	2		J		10	U
Semi-Volatile Organic	ug/L	ug/L			ug/L			ug/L			ug/L			ug/L			ug/L					
Di-n-butylphthalate	50 (standard)	2		J	2		J		10	U		10	U		10	U		10	U	--		
bis(2-Ethylhexyl)phthalate	5 (standard)	2		J	2		J	15			3		J	2		J	1		J	--		
PCB's/ Pesticides	ug/L	ug/L			ug/L			ug/L			ug/L			ug/L			ug/L					
																				--		
Inorganics	ug/L	ug/L			ug/L			ug/L			ug/L			ug/L			ug/L					
Aluminum	NSG	3010			26100			1970			8780			19000			38500			--		
Arsenic	25 (standard)		1.4	U	10.8			3.5		B	11.8			10			14.7			--		
Barium	1000 (standard)	144		B	317			372			471			368			363			--		
Beryllium	3 (guidance)	1.2		B	1.4		B		0.2	U	0.42		B	0.95		B	1.7		B	--		
Cadmium	5 (standard)	1.2		B	0.68		B	0.36		B		0.3	U	0.47		B	0.68		B	--		
Calcium	NSG	209000			358000			287000			157000			283000			301000			--		
Chromium	50 (standard)	6.2		B	40		J	10		J	24.2		J	30.4		J	55.8		J	--		
Cobalt	NSG	11.8		B	18.5		B	6.5		B	10		B	17.7		B	27.4		B	--		
Copper	200 (standard)	12.6		B	49.6			8.2		B	26.6			56.6			72.6			--		
Iron	300 (standard)	8150			44900			34300			17600			45100			67500			--		
Lead	25 (standard)	6.2			14.8		J	3.3			11.2		J	12.6		J	23.3		J	--		
Magnesium	35000 (guidance)	63600			124000			77600			55000			99100			112000			--		
Manganese	300 (standard)	4190			2460			2290			4830			3180			5150			--		
Mercury	0.7 (standard)	0.21			0.15		B		0.1	U		0.1	U		0.1	U	0.22			--		
Nickel	100 (standard)	18.7		B	35.4		B	15.8		B	23.2		B	29.9		B	65.9			--		
Potassium	NSG	2810		B	10800		J	1330		B	3470		B	7570		J	13500		J	--		
Selenium	10 (standard)		2	U	2.9		B		2	U	3.3		B		2	U		2	U	--		
Silver	50 (standard)	0.72		B		0.6	U		0.6	U		0.6	U		0.6	U		1	B	--		
Sodium	20000 (standard)	23500			102000			21900	10	U	58100			44900			81200			--		
Thallium	0.5 (guidance)	2		B		1.8	U		1.8	U		1.8	U		1.8	U		1.8	U	--		
Vanadium	NSG	6.2		B	49		B	4		B	15.9		B	35.2		B	70.8			--		
Zinc	2000 (guidance)	101			104			36.5			57.6			94.2			232			--		
Cyanide	200 (standard)		10	U		10	U	49.5				10	U		10	U		10	U	--		

1. Sample locations with detected compounds only are shown in this table.
2. Blank = Indicates compound was not detected.
3. "--" = not tested.
4. Analytical testing completed by H2M Labs, Inc.
5. D= Reported method detection limit; Q= Qualifier; J= Estimated value; U = indicated the compound was tested for, but not detected; B (for inorganics) = Value is less than CRDL but greater than IDL.
6. ug/kg or ug/L = Parts per billion; mg/kg= Parts per million.
7. NSG = No standard or guidance value.
8. Shading indicates standard or guidance exceedance.

Table 3H
Summary of Sediment Sample Data
Detected Compounds Only

Location	NYSDEC	SED-1			SED-2			SED-3			SED-4			SED-5			SED-6			SED-7			SED-8		
Sample Identification	Sediment	B975-03			B975-05			B975-07			B975-30			B975-16			B975-09			B975-11			B975-13		
Sample Date	Criteria	06/01/98	D	Q	06/01/98	D	Q	06/01/98	D	Q	06/04/98	D	Q	06/02/98	D	Q	06/02/98	D	Q	06/02/98	D	Q	06/02/98	D	Q
Volatile Organic	ug/kg	ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg		
Chloromethane	NSG		15	UJ		16	U		17	U		24	UJ	29		J		14	UJ		13	U		12	UJ
Acetone	NSG		15	UJ		16	UJ		17	UJ		29	UJ	90		J		14	UJ		13	UJ	26		J
2-Butanone	NSG		15	UJ		16	U		17	U	23		J	35		J		14	UJ		13	U	5		J
4-Methyl-2-Pentanone	NSG		15	UJ		16	UJ		17	UJ	11		J		38	UJ		14	UJ		13	UJ		12	UJ
Toluene	NSG		15	U		16	U		17	U	11		J	12		J		14	U		13	U		12	U
Xylene (total)	NSG		15	U	8		J		17	U	17		J		38	UJ		14	U		13	U		12	U
Semi-Volatile Organic	ug/kg	ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg		
Phenanthrene	2328	320		JD	340		JD	92		JD	520		J		2600	UJ		450	U		430	U		800	U
Anthracene	NSG		1000	U		1300	U		890	U	130		J		2600	UJ		450	U		430	U		800	U
Di-n-butylphthalate	NSG		1000	U		1300	U		890	U	790		J		2600	UJ		450	U		430	U		800	U
Fluoranthene	19788	590		JD	860		JD	180		JD	1100		J	360		J	71		J		430	U		800	U
Pyrene	NSG	420		JD	740		JD	200		JD	970		J	350		J	56		J		430	U		800	U
Benzo(a)anthracene	NSG	240		JD	280		JD	91		JD	390		J		2600	UJ		450	U		430	U		800	U
Chrysene	NSG	320		JD	450		JD	100		JD	640		J	270		J		450	U		430	U		800	U
bis(2-Ethylhexyl)phthalate	3670		1000	U	270		JD	250		JD	470		J		2600	UJ		450	U		430	U		800	U
Benzo(b)fluoranthene	NSG	250		JD	440		JD	120		JD	720		J	300		J		450	U		430	U		800	U
Benzo(k)fluoranthene	NSG	240		JD	460		JD	160		JD	530		J		2600	UJ		450	U		430	U		800	U
Benzo(a)pyrene	NSG	250		JD	470		JD	140		JD	580		J		2600	UJ		450	U		430	U		800	U
Indeno(1,2,3-cd)pyrene	NSG	210		JD	420		JD	160		JD	840		J		2600	UJ		450	U		430	U		800	U
Dibenz(a,h)anthracene	NSG		1000	U		1300	U		890	U	340		J		2600	UJ		450	U		430	U		800	U
Benzo(g,h,i)perylene	NSG	240		JD	570		JD	200		JD	1100		J	290		J		450	U		430	U		800	U
PCB's/ Pesticides	ug/kg	ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg			ug/kg		
Dieldrin	NSG		5.2	U		6.3	U		4.4	U	2.9		JN		13	UJ		4.5	U		4.2	U		3.9	U
Endrin ketone	NSG		5.2	U		6.3	U		4.4	U	5.7		JN		13	UJ		4.5	U		4.2	U		3.9	U
Aroclor-1254	374	280			61				44.0	U		78.0	UJ		130	UJ		45.0	U		42.0	U		39.0	U
Inorganics	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Aluminum	NSG	9950			12600			8160			16800		J	11600		J	5820			6690			5380		
Arsenic	6	3.8			5.5			3			6.3		J	10		J	3.5			4			4.5		
Barium	NSG	110			111			89.6			150		J	159		J	63.5			95.4			78.8		
Beryllium	NSG	0.66		B	0.62		B	0.39		B	0.89		J	0.62		J	0.32		B	0.38		B	0.33		B
Cadmium	0.6		0.094	U	0.47		B	5.1			3.9		J	3.3		J		0.081	U		0.077	U		0.072	U
Calcium	NSG	5100			20500			13600			21400		J	41800		J	23100			30800			33800		
Chromium	26	14.1			20.9			174			77.2		J	62		J	26.3			8.9			7.2		
Cobalt	NSG	8.7		B	16.7		B	7		B	19.4		J	18.3		J	7		B	7.2		B	6.5		B
Copper	16	16.7			67.6			43.3			282		J	144		J	29			22.7			49		
Iron	20000	19200			24800			13900			30400		J	30500		J	11500			14600			12600		
Lead	31	17.2		J	52.8		J	437		J	187		J	141		J	18.8		J	7.7		J	8		J
Magnesium	NSG	3850			14300			8970			15400		J	20600		J	11000			8330			14600		
Manganese	460	290			254			163			375		J	1030		J	234			367			417		
Mercury	0.15	0.13		B	0.22			0.083		B	0.18		J	0.27		J		0.059	U	0.087		B	0.079		B
Nickel	16	14.5			29.9			109			93.9		J	61.2		J	17.7			11.7			9.8		
Potassium	NSG	667		B	1240		B	765		B	1960		J	1340		J	572		B	666		B	529		B
Silver	1	0.45		B	0.89		B	0.26		B	1.7		J	1.7		J	0.22		B	0.28		B	0.2		B
Sodium	NSG	86.8		B	163		B	102		B	286		J	223		J	101		B	87.5		B	128		B
Thallium	NSG	1.5		B	2.2		B	1.1		B	2		J		1.4	UJ		0.49	U	1.3		B	0.87		B
Vanadium	NSG	21.7			25.5			14.5			30.5		J	25.1		J	12		B	13.2			10.5		B
Zinc	120	77.3			277			2820		J	1130		J	1340		J	159			46.2			42.5		
Total Organic Compound		mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Total Solids (%)		--			--			74.60%			42.50%			25.90%			74.10%			78.20%			83.60%		
TOC (mg/kg)		--			--			27200			60800			100000			40300			37300			19400		

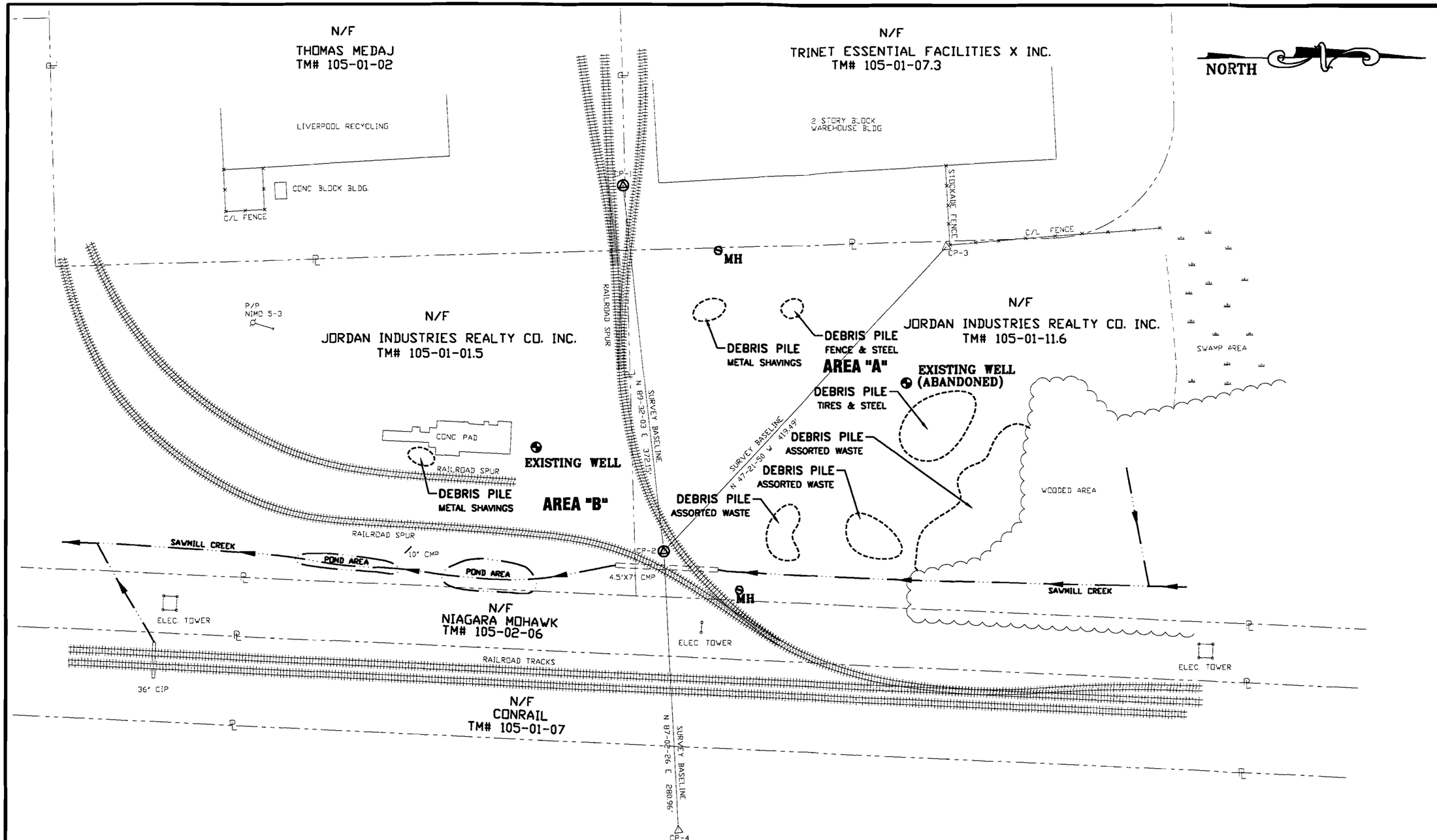
1. Sample locations with detected compounds only are shown in this table.
2. Blank = Indicates compound was not detected.
3. "--" = not tested.
4. Analytical testing completed by H2M Labs, Inc.
5. D= Reported method detection limit; Q= Qualifier; J= Estimated value; U = indicated the compound was tested for, but not detected;
   B (for inorganics) = Value is less than CRDL but greater than IDL; D= compound detection at secondary dilution factor, N= presumptive evidence of compound.
6. ug/kg or ug/L = Parts per billion; mg/kg= Parts per million.
7. NSG = No standard or guidance value.
8. Sediment criteria for organics calculated using TOC value of 19,400 mg/kg, metals criteria based on "Lowest Effect Level" (NYSDEC, 1998).
9. Shading indicates standard or guidance exceedance.

Table 3I
Summary of Surface Water Sample Data
Detected Compounds Only

Location	NYSDEC	SW-1			SW-2			SW-3			SW-5			SW-6			SW-7			SW-8			Trip Blank			Trip Blank		
Sample Identification	Class C	B975-02			B975-04			B975-06			B975-15			B975-08			B975-10			B975-12								
Sample Date	Standard/Guidance	06/01/98	D	Q	06/01/98	D	Q	06/01/98	D	Q	06/02/98	D	Q	06/02/98	D	Q	06/02/98	D	Q	06/02/98	D	Q	06/02/98	D	Q	06/03/98	D	Q
Volatile Organic	ug/L	ug/L			ug/L			ug/L			ug/L			ug/L			ug/L			ug/L			ug/L			ug/L		
Semi-Volatile Organic	ug/L	ug/L			ug/L			ug/L			ug/L			ug/L			ug/L			ug/L			ug/L			ug/L		
																							--			--		
PCB's/ Pesticides	ug/L	ug/L			ug/L			ug/L			ug/L			ug/L			ug/L			ug/L								
Heptachlor epoxide	NSG		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U		0.05	U	0.028		J	--			--		
Inorganics	ug/L	ug/L			ug/L			ug/L			ug/L			ug/L			ug/L			ug/L								
Aluminum	100	116		B	631		J	399		J	312		J	166		B	96.8		B	1600		J	--			--		
Arsenic	150		1.4	U	1.5		B		1.4	U		1.4	U	1.5		B	1.9		B	2.9		B	--			--		
Barium	100 [10]	53.5		B	51.7		B	160		B	38		B	44.1		B	49.1		B	76		B	--			--		
Cadmium	5[9]		0.3	U	0.46		B	0.32		B		0.3	U		0.3	U		0.3	U		0.3	U	--			--		
Calcium	NSG	39400			67900			31100			40000			39100			42400			69500			--			--		
Chromium	182 [8]		0.6	U		0.6	U	0.77		B		0.6	U		0.6	U		0.6	U	1.6		B	--			--		
Cobalt	5		2	U	4.4		B		2	U		2	U		2	U		2	U		2	U	--			--		
Copper	23 [8]	2.6		B	14.7		B	9.6		B	5.9		B	4.3		B	3.7		B	9.6		B	--			--		
Iron	300	226			2810			592			460			605			637			2310			--			--		
Lead	12	1.6		B	4.2			5.4			3.2			5.1			2.1		B	6.1			--			--		
Magnesium	35,000 [10]	5080			14000			4300		B	6490			6750			8150			13100			--			--		
Manganese	300 [10]	39.4			492			161			81.4			80.2			131			201			--			--		
Mercury	0.0026		0.1	U	0.11		B		0.1	U		0.1	U		0.1	U		0.1	U		0.1	U	--			--		
Nickel	132 [8]		2.8	U	9.3		B	3.9		B	3		B		2.8	U		2.8	U	3.8		B	--			--		
Potassium	NSG	2020		B	3730		B	1520		B	1620		B	1840		B	2150		B	2330		B	--			--		
Selenium	4.6		2	U		2	U		2	U		2	U	2.1		B		2	U	2.5		B	--			--		
Sodium	NSG	11000			12600			5630			9860			15600			19700			43100			--			--		
Vanadium	14		1.8	U		1.8	U		1.8	U		1.8	U		1.8	U		1.8	U	3.2		B	--			--		
Zinc	210 [9]	59.6		J	149		J	80.3		J	52.8		J	45.1		J	32.8		J	52.6		J	--			--		

1. Sample locations with detected compounds only are shown in this table.
2. Blank = Indicates compound was not detected.
3. "--" = not tested.
4. Analytical testing completed by H2M Labs, Inc.
5. D= Reported method detection limit; Q= Qualifier; J= Estimated value; U = Indicated the compound was tested for, but not detected;
   B (for inorganics) = Value is less than CRDL but greater than IDL.
6. ug/kg or ug/L = Parts per billion; mg/kg= Parts per million.
7. NSG = No standard or guidance value.
8. Water criteria for select metals calculated using hardness of 300 mg/equiv of CaCO3 per liter.
9. Shading indicates standard or guidance exceedance.
10. Class A standard (Class C standard not available).

FIGURES



LEGEND:

- ⚠ G.P.S. MONUMENT
- ⊖ SANITARY SEWER MANHOLE

AREA "A" SOURCE CONTAMINATION AREAS CONTAINING DRUMS, STAINED SOILS AND WASTE PILES AS DESIGNATED BY NYSDEC

NOTES:

1. BASE MAP ADAPTED FROM A PLAN ENTITLED, "SAWMILL CREEK DUMP SITE;TOWN OF CLAY, COUNTY OF ONONDAGA, STATE OF NEW YORK;SITE PLAN", PREPARED BY LARSEN ENGINEERS, DATED JULY 1998.
2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES, SAMPLE LOCATIONS AND SUBSURFACE EXPLORATIONS SHOULD BE CONSIDERED APPROXIMATE.

DESCRIPTION | BY | DATE

DRAWN BY: DEW

DATE: MAY 1999

GZA GeoEnvironmental of New York

REV No.

SCALE IN FEET

0 50 100 200

NEW YORK STATE D.E.C.

SAWMILL CREEK DUMPSITE

WOODARD INDUSTRIAL PARK

STEELWAY BOULEVARD

TOWN OF CLAY, NEW YORK

PRELIMINARY SITE ASSESSMENT

SITE PLAN

PROJECT No. 55232.1

FIGURE No. 2

NORTH

LIVERPOOL RECYCLING

CONC BLOCK BLDG.

C/L FENCE

2 STORY BLOCK WAREHOUSE BLDG

STOCKADE FENCE

C/L FENCE

P/P NIMO 3-3

RAILROAD SPUR

MW/SB-2

WP-1

WP-3

SW/SED-1

DEBRIS PILE
METAL SHAVINGS

DEBRIS PILE
FENCE & STEEL

SM-9

SWAMP AREA

SM-8

MW/SB-6

MW/SB-1

DEBRIS PILE
TIRES & STEEL

CONC. PAD

WP-2

SM-15

RAILROAD SPUR

DEBRIS PILE
ASSORTED WASTE

AREA "A"

TP-5

SM-1

SM-2

TP-6

SW/SED-2

DEBRIS PILE
ASSORTED WASTE

SM-5

SM-3

SB-8

SM-10

TP-4

SM-7

WOODED AREA

DEBRIS PILE
METAL SHAVINGS

AREA "B"

MW/SB-3

DEBRIS PILE
ASSORTED WASTE

SM-6

SM-4

TP-2

TP-3

SM-14

SB-7

MW/SB-4

TP-1

SM-13

MW/SB-5

SM-11

SM-12

SW/SED-7

SAWMILL CREEK

SW/SED-8

POND AREA

10' CMP

SW/SED-6

POND AREA

45"X71" CMP

SW/SED-5

SED-4

SAWMILL CREEK

SW/SED-3

ELEC. TOWER

ELEC TOWER

RAILROAD TRACKS

ELEC. TOWER

36" CIP

LEGEND:

- APPROXIMATE LOCATION OF TEST BORING WITH MONITORING WELL INSTALLED
- APPROXIMATE LOCATION OF TEST BORING
- APPROXIMATE LOCATION OF TEST PIT
- APPROXIMATE LOCATION OF SURFACE WATER/ SEDIMENT SAMPLE
- APPROXIMATE LOCATION OF WASTE PILE SAMPLE
- APPROXIMATE LOCATION OF SURFACE SOIL SAMPLE BASED ON NYSDEC SAMPLING MAP DATED 9/23/97 (NOT SURVEYED)

AREA "A" SOURCE CONTAMINATION AREAS CONTAINING DRUMS, STAINED SOILS AND WASTE PILES AS DESIGNATED BY NYSDEC

NOTES:

1. BASE MAP ADAPTED FROM A PLAN ENTITLED, "SAWMILL CREEK DUMP SITE;TOWN OF CLAY, COUNTY OF ONONDAGA, STATE OF NEW YORK;SITE PLAN", PREPARED BY LARSEN ENGINEERS, DATED JULY 1998.
2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES, SAMPLE LOCATIONS AND SUBSURFACE EXPLORATIONS SHOULD BE CONSIDERED APPROXIMATE.

REV No.	DESCRIPTION	BY	DATE

DRAWN BY: DEW

DATE: MAY 1999

SCALE IN FEET

0 50 100 200

GZA GeoEnvironmental of New York

NEW YORK STATE D.E.C.

SAWMILL CREEK DUMPSITE

WOODARD INDUSTRIAL PARK

STEELWAY BOULEVARD

TOWN OF CLAY, NEW YORK

PRELIMINARY SITE ASSESSMENT

SAMPLE LOCATION MAP

PROJECT No. 55232.1

FIGURE No. 3

NORTH

LIVERPOOL RECYCLING

CONC BLOCK BLDG.

C/L FENCE

3 STORY BLOCK WARE-HOUSE BLDG.

STOCKADE FENCE

C/L FENCE

P/P NIMO 5-3

RAILROAD SPUR

MW/SB-2 (420.8)

SW-1 (421.9)

SWAMP AREA

421

420.5

MW/SB-1 (420.2)

CONC. PAD

RAILROAD SPUR

MW/SB-6 (421.2)

SW-2 (419.9)

WOODED AREA

420

MW/SB-3 (419.7)

SW-7 (417.8)

SW-8 (417.6)

SAWMILL CREEK

POND AREA

10' CMP

SW-6 (418.9)

POND AREA

MW/SB-4 (420.2)

45"X71" CMP

SW-5 (419.2)

MW/SB-5 (419.6)

SW-3 (420.0)

SAWMILL CREEK

ELEC. TOWER

ELEC. TOWER

RAILROAD TRACKS

ELEC. TOWER

36" CIP

LEGEND:

- MW/SB-2 (420.8) — APPROXIMATE LOCATION AND DESIGNATION OF TEST BORING WITH MONITORING WELL INSTALLED
- APPROXIMATE GROUNDWATER ELEVATION (SEE NOTE 3)
- 420 — APPROXIMATE LOCATION OF GROUNDWATER ELEVATION CONTOUR LINE
- SW-1 (421.9) — APPROXIMATE LOCATION AND DESIGNATION OF SURFACE WATER SAMPLE
- APPROXIMATE SURFACE WATER ELEVATION (SEE NOTE 4)

NOTES:

1. BASE MAP ADAPTED FROM A PLAN ENTITLED, "SAWMILL CREEK DUMP SITE;TOWN OF CLAY, COUNTY OF ONONDAGA, STATE OF NEW YORK;SITE PLAN", PREPARED BY LARSEN ENGINEERS, DATED JULY 1998.
2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES, SAMPLE LOCATIONS AND SUBSURFACE EXPLORATIONS SHOULD BE CONSIDERED APPROXIMATE.
3. GROUNDWATER ELEVATIONS SHOWN ARE BASED ON MEASUREMENTS MADE BY NYSDEC PERSONNEL ON 7/6/98.
4. SURFACE WATER ELEVATIONS SHOWN ARE BASED ON MEASUREMENTS MADE BY LARSEN ENGINEERS ON 6/8/98.
5. ELEVATION MEASURED IN FEET, NGVD.

REV No.	DESCRIPTION	BY	DATE

DRAWN BY: DEW

DATE: MAY 1999

SCALE IN FEET: 0 50 100 200

GZA GeoEnvironmental of New York

NEW YORK STATE D.E.C.

SAWMILL CREEK DUMPSITE

WOODARD INDUSTRIAL PARK

STEELWAY BOULEVARD

TOWN OF CLAY, NEW YORK

PRELIMINARY SITE ASSESSMENT

GROUNDWATER CONTOUR PLAN

PROJECT No. 55232.1

FIGURE No. 4

GZA GeoEnvironmental of New York — 1999

APPENDIX A

LIMITATIONS

LIMITATIONS

1. The observations described in this report were made under the conditions stated therein. The conclusions presented in the report were based solely upon the services described herein, and not on scientific tasks or procedures beyond the scope of described services.

2. In preparing this report, GZA/TAMS has relied on certain information provided by state and local officials and other parties referenced therein, and on information contained in the files of state and/or local agencies available at the time of the PSA. GZA/TAMS did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of the PSA.

3. Water level readings have been made in the observation wells at the times and under the conditions stated. However, it must be noted that fluctuations in the level of groundwater may occur due to variations in rainfall and other factors different from those prevailing at the time measurements were made.

4. This report is based in part upon various types of chemical data and is contingent upon their validity. These data have been reviewed and interpretations made in the report. It should be noted that variations in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, past disposal practices, the passage of time, and other factors.

5. Chemical analyses have been performed for specific parameters during the course of this PSA, as described in the text. However, it should be noted that additional chemical constituents not searched for during the current study (e.g., dioxins) may be present in soil, surface water, sediment and/or groundwater at the site.

6. The generalized soil profile described in the text is intended to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized and have been developed based on widely-spaced explorations and interpretation between samples collected; actual soil transitions are probably more gradual. For specific information, refer to the borings logs.

APPENDIX B

USEPA START REPORTS

Roy F. Weston, Inc.
Federal Programs Division
Suite 201
1090 King Georges Post Road
Edison, New Jersey 08837-3703
908-225-6116 • Fax 908-225-7037

SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM
EPA CONTRACT 68-W5-0019

8 September 1997

Mr. Chris Jimenez, TM
Response and Prevention Branch
U.S. EPA, Region II
2890 Woodbridge Ave.
Edison NJ 08837

CONTRACT NO.: 68-W5-0019
TDD NO.: 02-97-08-0012
DOCUMENT CONTROL NO.: START-02-F-01322
SUBJECT: SAWMILL CREEK - SITE ASSESSMENT REPORT

Dear Mr. Jimenez:

On 3 September 1997, the Superfund Technical Assessment and Response Team (START) was mobilized to the Sawmill Creek site located in Liverpool, Onondaga County, New York. Upon arrival START conducted the following activities:

Prior to site entry, background air monitoring readings were conducted. The background levels established were 0.0 units on the Organic Vapor Analyzer (OVA); 0.0 units on the Photoionization Detector (PID); 0% LEL and 20.5% O_2 on the Combustible Gas Indicator (CGI), and 0.01 milli-Rem per hour (mR/hr) on the Victoreen 440 Radiation Meter.

At 1300 hours, an initial Level B site entry was conducted using the HNu PID with 10.2 eV probe, OVA, CGI, and Victoreen 440 Radiation Meter. No significant readings above background were observed in the breathing space within the hot zone.

At 1330 hours, START performed photo documentation in the hot zone, and prepared a site diagram (Figure 1). In addition, approximately 30 55-gallon drums, 50 one-gallon pails, 20 10-gallon pails, and 10 5-gallon pails were identified outside in the hot zone. The 55-gallon drums were scattered and the one-gallon pails were piled up to 4 feet high and 20 feet across.

No drums contained labels in Area A. Two drums, HC-5 and HC-7, had the numbers 19 and 21, respectively, in yellow spray paint. HC-13 in Area B contained the label, "Link Belt hydraulic oil", however, this was a kerosene type of flammable liquid.

WESTON

At 1600 hours a Clor-N-Soil kit was implemented at a soil stained location adjacent to the waste pile in Area B (Figure 1). The result indicated a concentration over 50 ppm of PCB.

At approximately 1400 hours, START members initiated drum sampling. Eleven drums and two poly 5-gallon containers were sampled and field tested. The results of field test screening are attached and summarized:

SAMPLE #	DESCRIPTION	HAZCAT RESULT
HC-01	One layer, hard gray solid	Flammable
HC-02	One layer, rubbery gray solid	Flammable
HC-03	One layer, brittle rust color solid	Combustible
HC-04	One layer, rubbery brown solid	Flammable
HC-05	One layer, brittle gray solid	Non-flammable
HC-06	One layer, brittle gray solid	Flammable
HC-07	One layer, viscous red gel	Flammable
HC-08	One layer, brown solid	Combustible
HC-09	One layer, red/gray resin-solid	Flammable
HC-10	One layer, thick red syrup like, liquid resin	Flammable
HC-11	One layer, white and gray crystal like solid	Non-flammable
HC-12	One layer, white and orange red crystal like solid	Non-flammable
HC-13	One layer, clear liquid	Flammable

WESTON

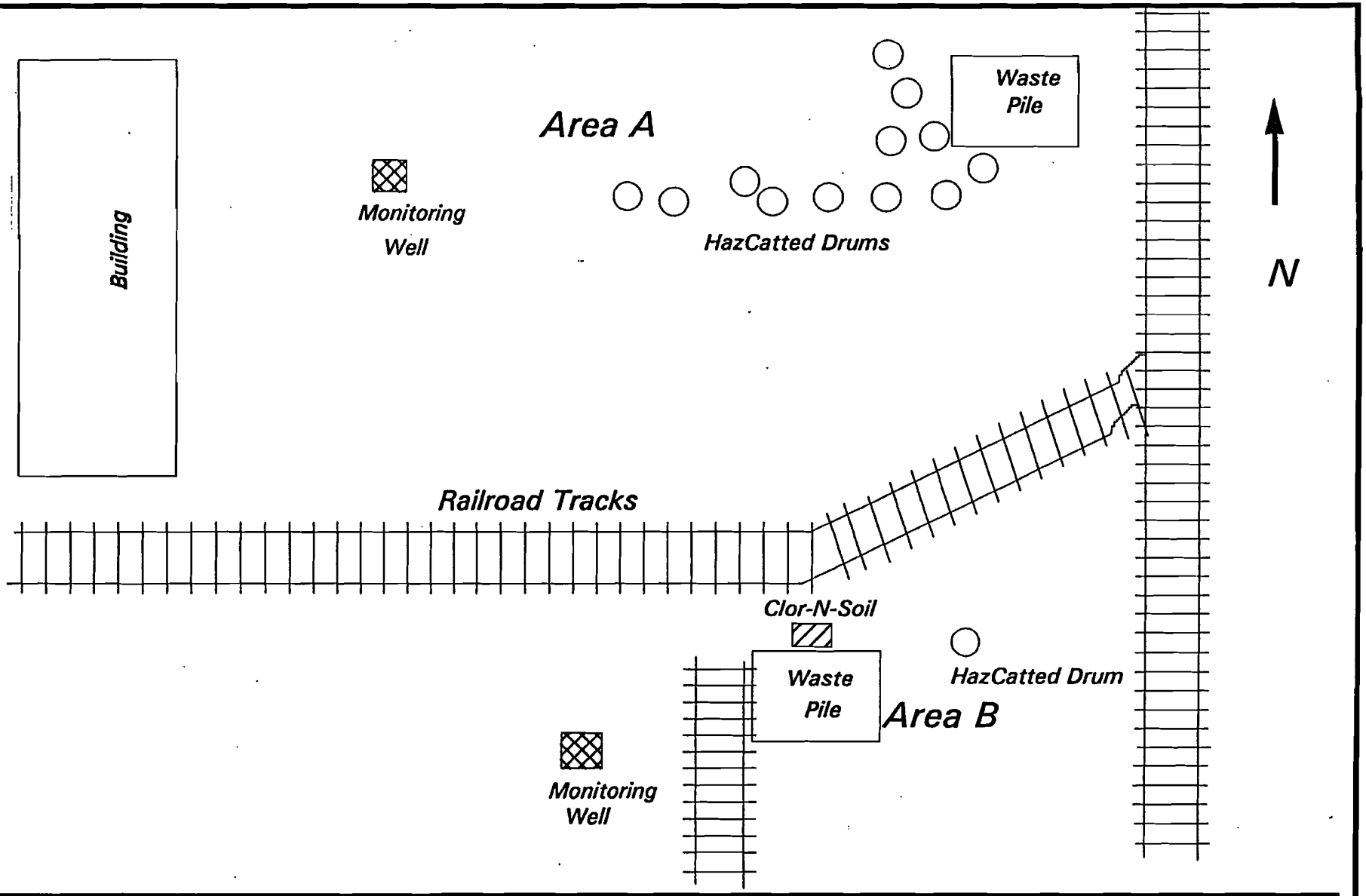
At 1830 hours, START members departed the site.

If you have any question regarding this matter, please feel free to contact me at (732) 225-6116.

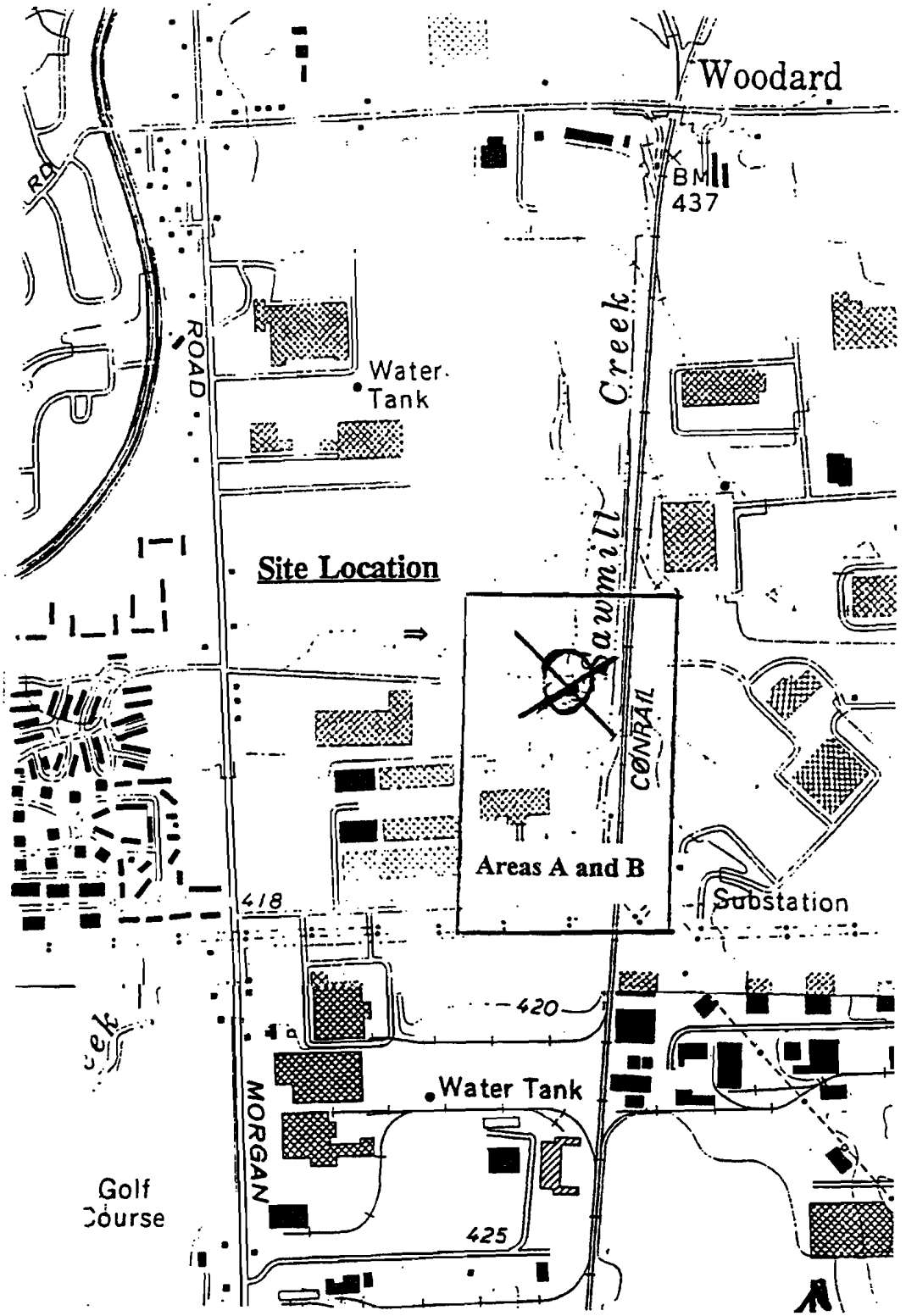
Very truly yours,

ROY F. WESTON, INC.

Gene P. Fowler
Project Manager



WESTON MANAGERS DESIGNERS/CONSULTANTS Roy F. Weston, Inc. FEDERAL PROGRAMS DIVISION	EPA TM Chris Jimenez	Figure 1 Site Map
IN ASSOCIATION WITH RESOURCE APPLICATION, Inc. C.C. JOHNSON & MALHOTRA, P.C., R.E. SARRIERA ASSOCIATES, PRC ENVIRONMENTAL MANAGEMENT, AND GRB ENVIRONMENTAL SERVICES, INC.	START PM Gene P. Fowler	SITE Sawmill Creek



Roy F. Weston, Inc.
FEDERAL PROGRAMS DIVISION

EPA PM
C. Jimenez

Figure 2

START PM
G. Fowler

Sawmill Creek site

IN ASSOCIATION WITH RESOURCE APPLICATION, Inc.
C.C. JOHNSON & MALHOTRA, P.C., R.E. SARRIERA ASSOCIATES,
PRC ENVIRONMENTAL MANAGEMENT, AND GRB ENVIRONMENTAL SERVICES, INC.

Roy F. Weston, Inc.
Federal Programs Division
Suite 201
1090 King Georges Post Road
Edison, New Jersey 08837-3703
908-225-6116 • Fax 908-225-7037

SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM
EPA CONTRACT 68-W5-0019

October 23, 1997

Mr. Greg DeAngelis, TM
Response and Prevention Branch
U.S. EPA, Region II
2890 Woodbridge Ave.
Edison NJ 08837

CONTRACT NO.: 68-W5-0019
TDD NO.: 02-97-09-0020
DOCUMENT CONTROL NO.: START-02-F-01390
SUBJECT: DRUM SAMPLING AND REMOVAL SUMMARY - ~~Crouse/Hinds~~ site

Dear Mr. DeAngelis,

On September 30, 1997, the Superfund Technical Assessment and Response Team (START) was mobilized to the ~~Crouse - Hinds~~ site located in the Town of Clay, Onondaga County, New York.

Site acitvities were conducted from September 30 to October 3, 1997 and consisted of the following:

- START performed photo documentation, maintained the site log book, and air monitored during drum sampling and removal.

- Prior to site entry, background air monitoring was conducted. The background levels established were 0.6 units on the Organic Vapor Analyzer (OVA); 0.6 units on the Hnu Photoionization Detector (PID); 0% LEL and 20.5% O_2 on the Combustible Gas Indicator (CGI); and 5 Micro-Rem per hour (MR/hr) on the Ludlum Radiation Meter.

- Air monitoring during site entry was conducted using the OVA, Hnu PID with 10.2 eV probe, CGI, and the Ludlum Radiation Meter. No significant readings above background were observed in the breathing zone. Drum samples were collected by the ERRS contractors in Level B PPE. Overpack drums arrived on site and the ERRS contractors began overpacking sampled drums (Table 1).

- On October 1, 1997, overpacking was completed and labpacking began. Sixteen 85-gallon drums were labpacked (Table 2) by the ERRS contractors. Labpack drums SM LP 01 - 10 and drum SM 31 (liquid composite sample SMCS-5), constitute containers (< 5-gallon) of liquid paints and adhesives. Labpack drums SM LP 11 - 16 and drum SM 30 (solid composite sample #SMCS-4), contain solid waste paint-related material, and original crushed

metal cans. Hazcatting conducted by ERRS was positive for oxidizers in labpacked drums SM LP 01 - SM LP 10.

- On October 2, 1997, the ERRS contractors excavated black stained soil in Areas A and B (Figure 1). The black stained surface soil (30' x 30' x 2") in Area A is leakage from the waste pile. The black stained surface soil (5' x 5' x 2") in Area B was excavated from the location of the Clor-N-Soil test that was implemented during the Site Assessment (Figure 2) on September 3, 1997. Excavated soil from Area A was drummed into seven new 55-gallon drums numbered SM OP 34-40. Excavated soil from Area B was drummed into one 55-gallon drum, (SM OP 32). All labpacked and overpacked drums were stored in the drum storage trailer that was staged on site.

- ERRS collected a soil sample (SM 32) from SM OP 32 and and analyzed it on site with a Clor-N-Soil kit. The result showed less than 50 ppm of PCBs. ERRS collected 17 5-gallon and 40 55-gallon empty drums from Areas A and B and staged them alongside the drum storage trailer.

- On October 3, 1997, site activity was completed. START and ERRS demobilized from the site.

If you have any questions please do not hesitate to call me at (732) 225-6116.

Very truly yours,

ROY F. WESTON, INC.

Gene P. Fowler
Project Manager

Enclosure

cc: TDD File

TABLE 1:
OVERPACK DRUM LOG
CROUSE - HINDS SITE
SEPTEMBER 30, 1997

DRUM OVERPACK #	ACTUAL DRUM	CONTENTS	MATRIX	COMPOSITE (BULK) SAMPLE #
SM 01 OP	SM 01	SM 01	Solid	SMCS-1
SM 02 OP	SM 05	SM 02, 05, and 06	Solid	SMCS-1
SM 03 OP	SM 03	SM 03, 11, and 16	Solid	SMCS-1
SM 04 OP	SM 04	SM 04 and 17	Solid	SMCS-1
SM 07 OP	SM 07	SM 07	Solid	SMCS-1
SM 08 OP	SM 08	SM 08 and 13	Liquid	SMCS-1
SM 09 OP	SM 09	SM 09 and 10	Solid	SMCS-1
SM 12 OP	SM 12	SM 12 and 15	Solid	SMCS-1
SM 14 OP	SM 14	SM 14	Liquid	SMCS-1
SM 18 OP	SM 18	SM 18	Liquid	SMCS-2
*SM 19 OP	NR	SM 19, 20, 25, and 26	Gel	SMCS-3
*SM 22 OP	NR	SM 22	Liquid	SMCS-3
SM 27 OP	SM 27	SM 27	Gel	SMCS-1
SM 28 OP	SM 28	SM 28	Solid	SMCS-1
SM 29 OP	SM 29	SM 29	Solid	SMCS-3
SM 30 OP	NR	Solid waste paint, related material, and original metal cans	Solid	SMCS-4
SM 31 OP	NR	Liquid waste paint from multiple containers	Liquid	SMCS-5

DRUM OVERPACK #	ACTUAL DRUM	CONTENTS	MATRIX	COMPOSITE (BULK) SAMPLE #
*SM 32 OP	NR	SM 32 Excavated soil at Clor-N-Soil location	Solid	NR
*SM 33 OP	SM 33 (30 gallon contaner)	SM 33 (30 gallon container)	Gel	NR
*SM 34 OP	NR	Excavated soil from Area A	Solid	NR
*SM 35 OP	NR	Excavated soil from Area A	Solid	NR
*SM 36 OP	NR	Excavated soil from Area A	Solid	NR
*SM 37 OP	NR	Excavated soil from Area A	Solid	NR
*SM 38 OP	NR	Excavated soil from Area A	Solid	NR
*SM 39 OP	NR	Excavated soil from Area A	Solid	NR
*SM 40 OP	NR	Excavated soil from Area A	Solid	NR

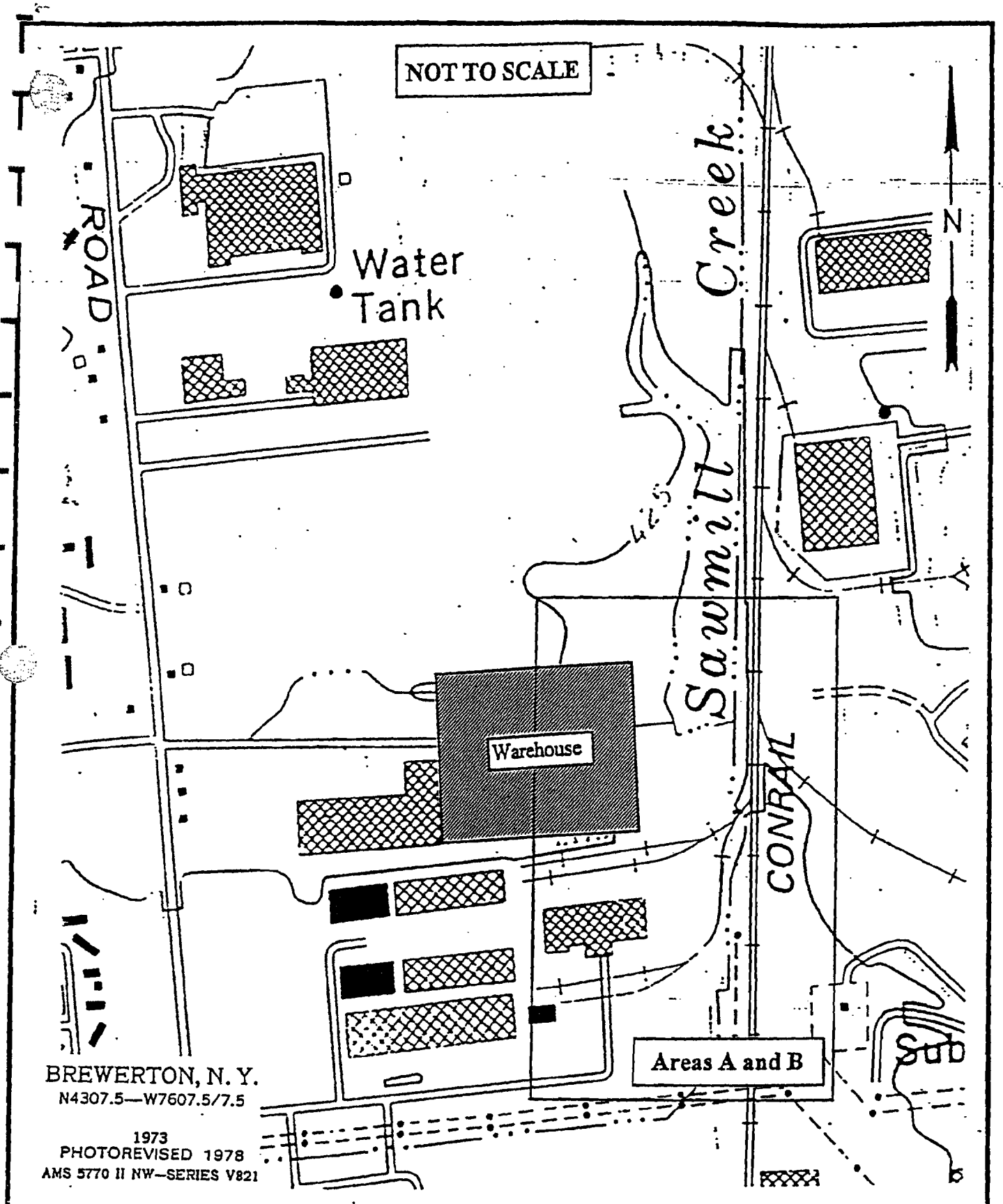
All Overpacked (OP) drum #s are 85-gallon except otherwise noted (*).
*** - 55-gallon drum.**

NR - Not Required

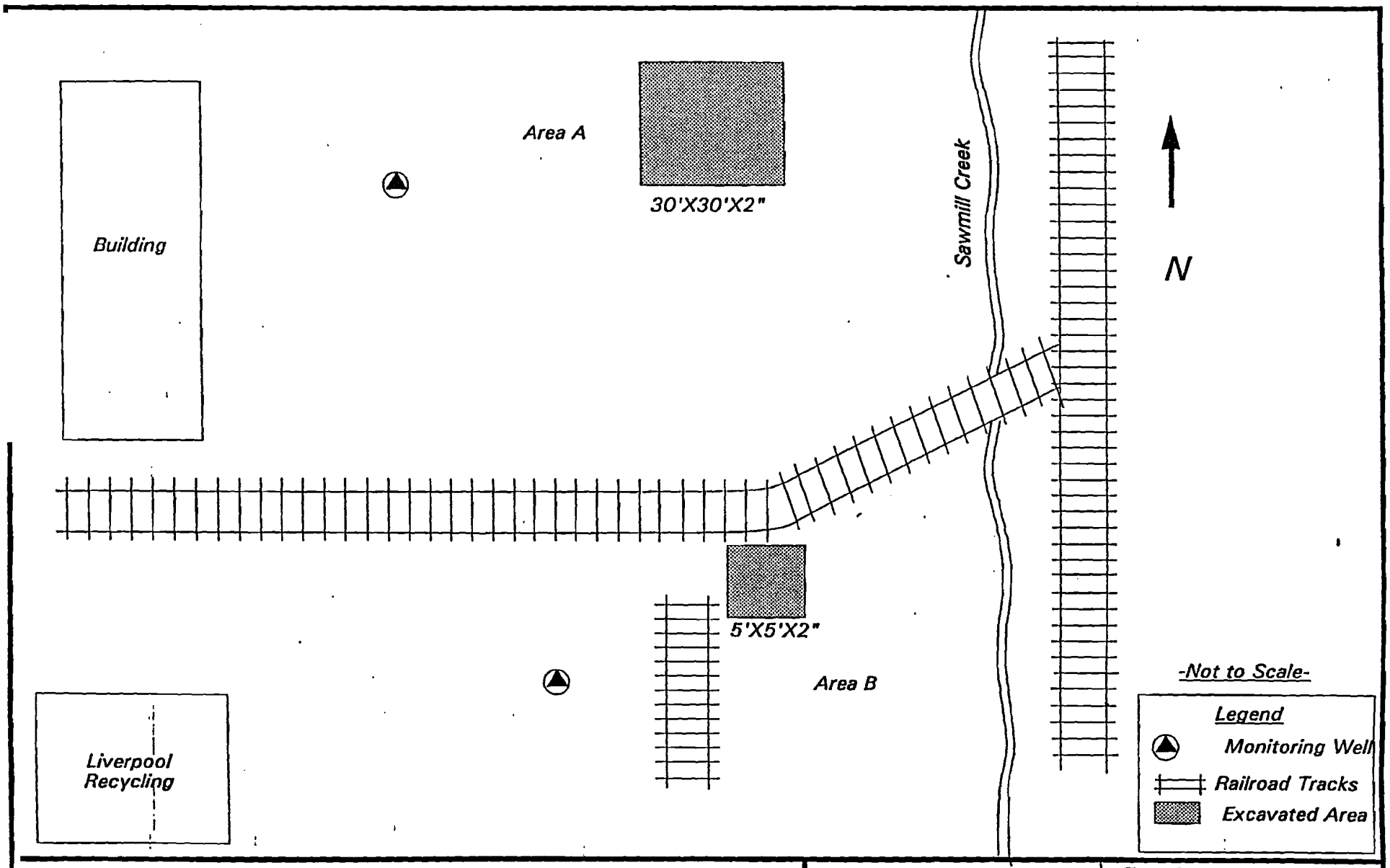
TABLE 2:
LABPACK DRUM LOG
CROUSE - HINDS SITE
OCTOBER 1, 1997

DRUM LABPACK #	CONTENTS	MATRIX	DESCRIPTION
SM LP 01	4 5-gallon and 24 1-gallon containers	Liquid	Paints and adhesives
SM LP 02	4 5-gallon and 24 1-gallon containers	Liquid	Paints and adhesives
SM LP 03	6 1-gallon, 4 5-gallon, and 2 quart containers	Liquid	Paints and adhesives
SM LP 04	1 30-gallon and 3 5-gallon containers	Liquid	Paints and adhesives
SM LP 05	7 5-gallon containers	Liquid	Paints and adhesives
SM LP 06	7 5-gallon containers	Liquid	Paints and adhesives
SM LP 07	7 5-gallon containers	Liquid	Paints and adhesives
SM LP 08	7 5-gallon containers	Liquid	Paints and adhesives
SM LP 09	6 5-gallon containers	Liquid	Paints and adhesives
SM LP 10	5 5-gallon containers	Liquid	Paints and adhesives
SM LP 11	Waste paint, related material, and original crushed metal cans	Solid	Waste paint, related material, and original crushed metal cans
SM LP 12	"	Solid	"
SM LP 13	"	Solid	"
SM LP 14	"	Solid	"
SM LP 15	"	Solid	"
SM LP 16	"	Solid	"

All Labpacked (LP) drum #s are 85-gallon



WESTON MANAGERS DESIGNERS/CONSULTANTS **Roy F. Weston, Inc.** **FEDERAL PROGRAMS DIVISION**	EPA TM G. DeAngelis	Figure 1
IN ASSOCIATION WITH RESOURCE APPLICATION, Inc. C.C. JOHNSON & MALHOTRA, P.C., R.E. SARRIERA ASSOCIATES, PRC ENVIRONMENTAL MANAGEMENT, AND GRB ENVIRONMENTAL SERVICES, INC.	START PM G. Fowler	Crouse–Hinds Site



WESTON MANAGERS DESIGNERS/CONSULTANTS

Roy F. Weston, Inc.
FEDERAL PROGRAMS DIVISION

IN ASSOCIATION WITH RESOURCE APPLICATIONS, INC.
C.C. JOHNSON & MALHOTRA, P.C., R.E. SARRIERA ASSOCIATES,
PRC ENVIRONMENTAL MANAGEMENT, AND GRB ENVIRONMENTAL SERVICES, INC.

EPA TM Gregory DeAngelis	Figure 2 Site Map
START PM Gene P. Fowler	SITE Crouse-Hinds

APPENDIX C

FIELD LOGS- JUNE 1998

SOIL BORING AND MONITORING WELL LOGS

GZA GeoEnvironmental of New York
364 Nagel Drive, Buffalo, New York

SAWMILL CREEK DUMP SITE
Town of Clay, New York

BORING No. SB-1
SHEET 1 OF 1
FILE No. 55232
CHECKED BY MW

CONTRACTOR	Applied Earth Technologies	BORING LOCATION	See Location Plan
DRILLER	Kevin Hawkins	GROUND SURFACE ELEV.	424.0' DATUM NGVD-29
START DATE:	6/4/98 END DATE: 6/4/98	GZA GEOENVIRONMENTAL REPRESENTATIVE	D. Troy

WATER LEVEL DATA				
DATE	TIME	WATER	CASING	NOTES
6/4/98	PM	7.50'	NONE	BGS
6/5/98	AM	4.26	PVC	BMP
6/8/98	AM	6.16	PVC	BMP

TYPE OF DRILL RIG	CME 55
CASING SIZE AND DIAMETER	41/4" Hollow Stem Auger
OVERBURDEN SAMPLING METHOD	ASTM D1586
ROCK DRILLING METHOD	N/A

DEPTH	SAMPLE BLOWS (/6")	NO.	DEPTH (FT)	N-VALUE /RQD %	RECOVERY (%)	SAMPLE DESCRIPTION	WELL INSTALLATION DIAGRAM	WELL INSTALLATION DESCRIPTION	OVM (ppm)
	6	S-1	0-1.3	78	25	SM - Very dense, dark brown f/c		Protective Casing	ND
1	28					SAND and Silt, little Gravel, moist,		Cement/grout (1.5' bgs)	
	50/3					tr. wood fragments			
2									
	24	S-2	2-4	70	80	GM- Very dense, gray, GRAVEL		Bentonite Chips	ND
3	30					and Sand, some Silt, moist.		1.5 ' to 3.5 ' bgs.	
	40					ML - Hard, reddish brown Clayey			
4	28					SILT, little f/c Sand, moist.			
	32	S-3	4-5	NA	80			2" I.D. PVC well	ND
5	25							riser, 0 to 5.5' bgs.	
	11	S-4	5-7	19	75				ND
6	10								
	9								
7	8								
	7	S-5	7-9	18	80	SM - Medium dense, brown, f.			ND
8	10					SAND, and Silt, moist to wet.			
	8								
9	8								
	8	S-6	9-10	NA	90	Grades to:...gray.		# 3 and # 1 well sand	
10	14							3.5' to 16.0' bgs.	ND
	10	S-7	10-12	14	90	Grades to:...brown.			ND
11	8							2" I.D. PVC #10	
	6							slot well screen	
12	8							5.5' to 15.5' bgs	
	7	S-8	12-14	16	80				ND
13	8								
	8								
14	10								
	6	S-9	14-16	16	80				ND
15	9								
	7								
16	8								
						Bottom of Boring at 16.0 feet.			
17									
18									

S - Split Spoon Sample
C - Rock Core Sample

NOTES:
1) HNu PI - 101 organic vapor meter used to screen soil samples. Meter was calibrated to the equivalent of 58 ppm Isobutylene in air.
2) BMP equals Below Monitoring Point (425.70') and BGS equals Below Ground Surface (424.0').
3) Aluminum protective casing is approximately 2-3 feet above ground surface.

General Notes:
1) Stratification lines represent approximate boundary between soil types; transitions may be gradual.
2) Water level readings have been made at times and under conditions stated; fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

GZA GeoEnvironmental of New York
364 Nagel Drive, Buffalo, New York

SAWMILL CREEK DUMP SITE
Town of Clay, New York

BORING No. SB-2
SHEET 1 OF 1
FILE No. 55232
CHECKED BY MW

CONTRACTOR	Applied Earth Technologies	BORING LOCATION	See Location Plan
DRILLER	Kevin Hawkins	GROUND SURFACE ELEV.	425.0' DATUM NGVD-29
START DATE: 6/3/98	END DATE: 6/3/98	GZA GEOENVIRONMENTAL REPRESENTATIVE	D. Troy

WATER LEVEL DATA				
DATE	TIME	WATER	CASING	NOTES
6/3/98	PM	7.50'	NONE	BGS
6/5/98	AM	6.64	PVC	BMP
6/8/98	AM	7.02	PVC	BMP

TYPE OF DRILL RIG	CME 55
CASING SIZE AND DIAMETER	41/4" Hollow Stem Auger
OVERBURDEN SAMPLING METHOD	ASTM D1586
ROCK DRILLING METHOD	N/A

DEPTH	SAMPLE BLOWS (/6")	NO.	DEPTH (FT)	N-VALUE /RQD %	RECOVERY (%)	SAMPLE DESCRIPTION	WELL INSTALLATION DIAGRAM	WELL INSTALLATION DESCRIPTION	OVM (ppm)
	6	S-1	0-2	51	75	Dark brown topsoil and roots.		Protective Casing	ND
1	18					SP - Very dense, red-brown, f/c SAND, some Gravel, little Silt, moist.		Cement/grout (1.5' bgs)	
	23								
2	24								
	26	S-2	2-4	71	0			Bentonite Chips 1.5 ' to 3.5 ' bgs.	ND
3	33								
	38								
4	50								
	50/1	S-3	4-4.2	NA	100	Grades to:... and Silt, trace Gravel.		2" I.D. PVC well riser, 0 to 5.5' bgs.	2
5	-								
	-								
6	-								
	16	S-4	6-8	39	85	ML - Dense, br. SILT, some f/m Sand, moist.			ND
7	18								
	21								
8	20								
	13	S-5	8-10	32	80	SM - Dense, fine SAND and Silt, wet.			ND
9	16							# 1 well sand 3.5' to 16.0' bgs.	
	16								
10	18								
	6	S-6	10-12	20	75	Grades to:...medium dense.			ND
11	8							2" I. D. PVC #10 slot well screen 5.5' to 15.5' bgs.	
	12								
12	12								
	3	S-7	12-14	10	50				ND
13	4								
	6								
14	5								
	3	S-8	14-16	12	75				ND
15	6								
	6								
16	5								
						Bottom of Boring at 16 feet.			
17									
18									

S - Split Spoon Sample
C - Rock Core Sample

NOTES:
1) HNu PI - 101 organic vapor meter used to screen soil samples. Meter was calibrated to the equivalent of 58 ppm Isobutylene in air.
2) BMP equals Below Monitoring Point (426.98') and BGS equals Below Ground Surface (425.0').
3) Aluminum protective casing is approximately 2-3 feet above ground surface.

General Notes:
1) Stratification lines represent approximate boundary between soil types; transitions may be gradual.
2) Water level readings have been made at times and under conditions stated; fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

GZA GeoEnvironmental of New York
364 Nagel Drive, Buffalo, New York

SAWMILL CREEK DUMP SITE
Town of Clay, New York

BORING No. SB-3
SHEET 1 OF1
FILE No. 55232
CHECKED BY MW

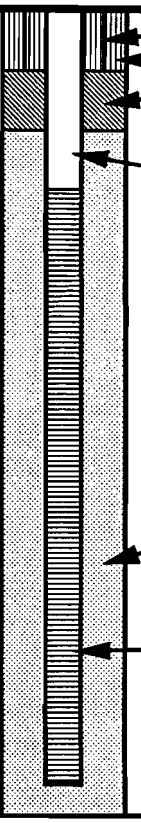
CONTRACTOR	Applied Earth Technologies	BORING LOCATION	See Location Plan
DRILLER	Kevin Hawkins	GROUND SURFACE ELEV.	424.0' DATUM NGVD-29
START DATE: 6/2/98	END DATE: 6/2/98	GZA GEOENVIRONMENTAL REPRESENTATIVE	D. Troy

WATER LEVEL DATA

DATE	TIME	WATER	CASING	NOTES
6/2/98	PM	5.00	NONE	BGS
6/5/98	AM	6.55	PVC	BMP
6/8/98	AM	6.81	PVC	BMP

TYPE OF DRILL RIG	CME 55
CASING SIZE AND DIAMETER	41/4" Hollow Stem Auger
OVERBURDEN SAMPLING METHOD	ASTM D1586
ROCK DRILLING METHOD	N/A

DEPTH	SAMPLE BLOWS (/6")	NO.	DEPTH (FT)	N-VALUE /RQD %	RECOVERY (%)	SAMPLE DESCRIPTION	OVM (ppm)
1	13	S-1	0-2	53	60	SW - Very dense, brown, f/c SAND, some Gravel some Silt, moist	ND
	39						
	14					Grades to:...gray.	
2	18						
	9	S-2	2-4	23	45	ML - Very Stiff, red brown, Clayey SILT, little Sand, little Gravel, moist.	ND
3	13						
	10						
4	10						
	8	S-3	4-5	10	25	SW - Medium dense, brown f/c SAND, some Silt, trace Gravel, moist.	ND
5	10						
	-						
6	-						
	3	S-4	6-8	14	80	ML - Medium dense, gray, SILT, trace Organics, wet.	ND
7	6						
	8					Grades to:...red brown and f Sand.	
8	12						
	10	S-5	8-10	18	80	Grades to:...some f Sand.	ND
9	10						
	8						
10	12						
	13	S-6	10-12	28	75	Grades to:...gray.	ND
11	14						
	14						
12	20						
	8	S-7	12-13.5	20	75		ND
13	10						
	10						
14						Bottom of Boring at 13.5 feet.	
15							
16							
17							
18							



S - Split Spoon Sample
C - Rock Core Sample

NOTES:
1) HNu PI - 101 organic vapor meter used to screen soil samples. Meter was calibrated to the equivalent of 58 ppm Isobutylene in air.
2) BMP equals Below Monitoring Point (425.89') and BGS equals Below Ground Surface (424.0').
3) Aluminum protective casing is approximately 2-3 feet above ground surface.

General Notes:
1) Stratification lines represent approximate boundary between soil types; transitions may be gradual.
2) Water level readings have been made at times and under conditions stated; fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

GZA GeoEnvironmental of New York
364 Nagel Drive, Buffalo, New York

SAWMILL CREEK DUMP SITE
Town of Clay, New York

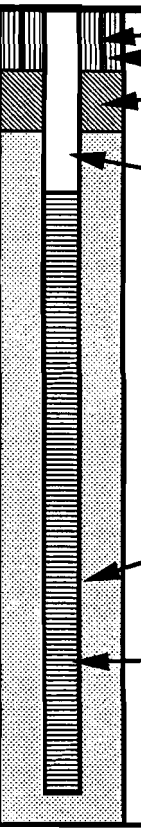
BORING No. SB-4
SHEET 1 OF 1
FILE No. 55232
CHECKED BY MW

CONTRACTOR	Applied Earth Technologies	BORING LOCATION	See Location Plan
DRILLER	Kevin Hawkins	GROUND SURFACE ELEV.	425.6' DATUM NGVD-29
START DATE: 6/2/98	END DATE: 6/2/98	GZA GEOENVIRONMENTAL REPRESENTATIVE	D. Troy

WATER LEVEL DATA

DATE	TIME	WATER	CASING	NOTES
6/2/98	PM	5.00	NONE	BGS
6/5/98	AM	7.77	PVC	BMP
6/8/98	AM	8.00	PVC	BMP

TYPE OF DRILL RIG	CME 55
CASING SIZE AND DIAMETER	41/4" Hollow Stem Auger
OVERBURDEN SAMPLING METHOD	ASTM D1586
ROCK DRILLING METHOD	N/A

DEPTH	BLOWS (/6")	NO.	DEPTH (FT)	N-VALUE /RQD %	RECOVERY (%)	SAMPLE DESCRIPTION	WELL INSTALLATION DIAGRAM	WELL INSTALLATION DESCRIPTION	OVM (ppm)
	13	S-1	0-2	77	20	SM - Hard, brown f/c SAND and		Protective Casing	ND
1	31					Clayey SILT, little Gravel, moist.		Cement/grout (1.0' bgs)	
	46							Bentonite Chips	
2	40							1.0' to 2.0' bgs.	
	6	S-2	2-4	14	60	Grades to:...stiff.			ND
3	8							2" I.D. PVC well	
	6							riser, 0 to 3.0' bgs.	
4	8								
	11	S-3	4-5	NA	75	Grades to:...trace Gravel.			ND
5	9								
	4	S-4	5-7	34	75	Grades to:...dense.			
6	19								
	15					ML - Hard, CLAY and SILT, little			ND
7	19					Sand, little Gravel, wet.			
	10	S-5	7-9	15	50	ML - Very stiff, Clayey SILT, trace			
8	8					organics, wet.			
	7								ND
9	12							# 2 well sand	
	12	S-6	9-11	35	75	SM - Dense, brown SILT and SAND,		2.0' to 13.5' bgs.	
10	17					trace Gravel, wet.			
	18								ND
11	24							2" I.D. PVC #10	
	8	S-7	11-13	20	80	Grades to: ... medium dense,		slot well screen	
12	10					some Silt		3.0' to 13.0' bgs.	
	10								ND
13	10					Grades to:...gray.			
14						Bottom of Boring at 13.5ft			
15									
16									
17									
18									

S - Split Spoon Sample
C - Rock Core Sample

NOTES:
1) HNu PI - 101 organic vapor meter used to screen soil samples. Meter was calibrated to the equivalent of 58 ppm Isobutylene in air.
2) BMP equals Below Monitoring Point (427.69') and BGS equals Below Ground Surface (425.6').
3) Aluminum protective casing is approximately 2-3 feet above ground surface.

General Notes:
1) Stratification lines represent approximate boundary between soil types; transitions may be gradual.
2) Water level readings have been made at times and under conditions stated; fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

GZA GeoEnvironmental of New York
364 Nagel Drive, Buffalo, New York

SAWMILL CREEK DUMP SITE
Town of Clay, New York

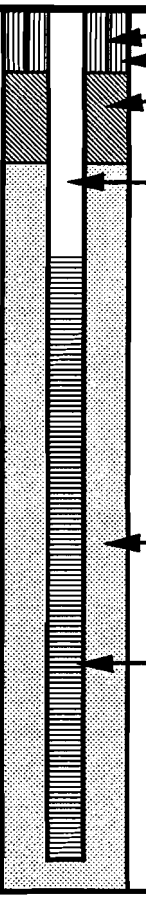
BORING No. SB-5
SHEET 1 OF 1
FILE No. 55232
CHECKED BY MW

CONTRACTOR	Applied Earth Technologies	BORING LOCATION	See Location Plan
DRILLER	Kevin Hawkins	GROUND SURFACE ELEV.	424.0' DATUM NGVD-29
START DATE: 6/3/98	END DATE: 6/3/98	GZA GEOENVIRONMENTAL REPRESENTATIVE	D. Troy

WATER LEVEL DATA				
DATE	TIME	WATER	CASING	NOTES
6/3/98	PM	6.00	NONE	BGS
6/5/98	AM	6.98	PVC	BMP
6/8/98	AM	7.28	PVC	BMP

TYPE OF DRILL RIG	CME 55
CASING SIZE AND DIAMETER	41/4" Hollow Stem Auger
OVERBURDEN SAMPLING METHOD	ASTM D1586
ROCK DRILLING METHOD	N/A

DEPTH	SAMPLE BLOWS (/6")	NO.	DEPTH (FT)	N-VALUE /RQD %	RECOVERY (%)	SAMPLE DESCRIPTION	OVM (ppm)
	6	S-1	0-2	15	40	ML - Very stiff, brown,Clayey SILT,	ND
1	7					some Sand, little Gravel, moist.	
	8						
2	8						
	7	S-2	2-4	17	50		ND
3	8						
	9						
4	9						
	7	S-3	4-5	NA	50	Grades to: ... SILT and CLAY,	ND
5	5					trace Sand	
	6	S-4	5-7	13	80		ND
6	6						
	7						
7	6						
	6	S-5	7-9	17	80	SM - Medium dense, brown,	ND
8	8					SAND, some Silt, trace organics,	
	9					wet.	
9	10						
	7	S-6	9-10	NA	80		ND
10	12						
	6	S-7	10-12	14	75		ND
11	6						
	8						
12	7					ML - Very stiff, brown, Clayey SILT	
	13	S-8	12-14	29	75	and Sand, wet.	ND
13	13						
	16						
14	17						
	21	S-9	14-14.5	21	75	Grades to:...trace Organics, wet.	ND
15						Bottom of Boring at 14.5 feet.	
16							
17							
18							



WELL INSTALLATION DIAGRAM

WELL INSTALLATION DESCRIPTION

S - Split Spoon Sample
C - Rock Core Sample

NOTES:
1) HNu PI - 101 organic vapor meter used to screen soil samples. Meter was calibrated to the equivalent of 58 ppm Isobutylene in air.
2) BMP equals Below Monitoring Point (426.32') and BGS equals Below Ground Surface (424.0').
3) Aluminum protective casing is approximately 2-3 feet above ground surface.

General Notes:
1) Stratification lines represent approximate boundary between soil types; transitions may be gradual.
2) Water level readings have been made at times and under conditions stated; fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

GZA GeoEnvironmental of New York
364 Nagel Drive, Buffalo, New York

SAWMILL CREEK DUMP SITE
Town of Clay, New York

BORING No. SB-6
SHEET 1 OF 1
FILE No. 55232
CHECKED BY MW

CONTRACTOR	Applied Earth Technologies	BORING LOCATION	See Location Plan
DRILLER	Kevin Hawkins	GROUND SURFACE ELEV.	425.0' DATUM NGVD-29
START DATE: 6/2/98	END DATE: 6/3/98	GZA GEOENVIRONMENTAL REPRESENTATIVE	D. Troy

WATER LEVEL DATA				
DATE	TIME	WATER	CASING	NOTES
6/3/98	AM	3.00	NONE	BGS
6/5/98	AM	6.98	PVC	BMP
6/8/98	AM	8.38	PVC	BMP

TYPE OF DRILL RIG	CME 55
CASING SIZE AND DIAMETER	41/4" Hollow Stem Auger
OVERBURDEN SAMPLING METHOD	ASTM D1586
ROCK DRILLING METHOD	N/A

DEPTH	SAMPLE BLOWS (/6")	NO.	DEPTH (FT)	N-VALUE /RQD %	RECOVERY (%)	SAMPLE DESCRIPTION	WELL INSTALLATION DIAGRAM	WELL INSTALLATION DESCRIPTION	OVM (ppm)
	9	S-1	0-2	17	75	Dark brown topsoil and roots.			
1	9					ML - Medium dense, brown SILT,		Protective Casing	ND
	8					little f/c Sand, trace Gravel, moist.		Cement/grout (1.0' bgs)	
2	7							Bentonite Chips	
	6	S-2	2-4	14	50	SM -medium dense,brown, f		1.0' to 2.0' bgs.	
3	6					SAND, some Silt, moist.			ND
	8							2" I.D. PVC well	
4	7							riser, 0 to 2.5' bgs.	
	4	S-3	4-5	NA	5				ND
5	4								
	2	S-4	5-7	7	75	ML - Medium, brown, SILT &			2
6	3					CLAY, wet.			
	4					SM - Loose, red-brown, f SAND			
7	10					and Silt, trace organics, wet.			
	6	S-5	7-9	15	90	Grades to:...medium dense.			ND
8	9								
	6								
9	7							#1 well sand	
	7	S-6	9-10	NA	90	Grades to:...gray.		2.0' to 13.0' bgs.	ND
10	7								
	4	S-7	10-12	15	50	ML - very stiff, brown, Clayey SILT,			ND
11	6					little Sand, trace Gravel, wet.		2" I.D. PVC #10	
	9							slot well screen	
12	10							2.5' to 12.5' bgs.	
	10	S-8	12-12.6	10	75	SM - Medium dense, brown, SILT			ND
13	-					and SAND, wet.			
						Bottom of Boring at 13 ft			
14									
15									
16									
17									
18									

S - Split Spoon Sample
C - Rock Core Sample

NOTES:
1) HNu PI - 101 organic vapor meter used to screen soil samples. Meter was calibrated to the equivalent of 58 ppm Isobutylene in air.
2) BMP equals Below Monitoring Point (428.57') and BGS equals Below Ground Surface (425.0').
3) Aluminum protective casing is approximately 2-3 feet above ground surface.

General Notes:
1) Stratification lines represent approximate boundary between soil types; transitions may be gradual.
2) Water level readings have been made at times and under conditions stated; fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

GZA GeoEnvironmental of New York
364 Nagel Drive, Buffalo, New York

SAWMILL CREEK DUMP SITE
Town of Clay, New York

BORING No. SB-7
SHEET 1 OF 2
FILE No. 55232
CHECKED BY MW

CONTRACTOR	Applied Earth Technologies	BORING LOCATION	See Location Plan
DRILLER	Kevin Hawkins	GROUND SURFACE ELEVATION	425.6' DATUM NGVD-29
START DATE: 6/1/98	END DATE: 6/1/98	GZA GEOENVIRONMENTAL REPRESENTATIVE	D. Troy

WATER LEVEL DATA				
DATE	TIME	WATER	CASING	NOTES
6/1/98	PM	6.0'	NONE	BGS

TYPE OF DRILL RIG	CME 55
CASING SIZE AND DIAMETER	41/4" Hollow Stem Auger
OVERBURDEN SAMPLING METHOD	ASTM D1586
ROCK DRILLING METHOD	N/A

DEPTH	SAMPLE					SAMPLE DESCRIPTION	WELL INSTALLATION DIAGRAM	WELL INSTALLATION DESCRIPTION	OVM (ppm)
	BLOWS (/6")	NO.	DEPTH (FT)	N-VALUE /RQD %	RECOVERY (%)				
	17	S-1	0-1.3	NA	15	ML - Red-brown, SILT & CLAY,		No well installation	ND
1	19					some Gravel, some Sand, moist.		Soil boring only.	
	29/0.3'								
2									
	17	S-2	2-4	40	20	Grades to:...hard, brown.			ND
3	21								
	19								
4	21								
	24	S-3	4-5	NA	10				ND
5	19								
	7	S-4	5-7	13	75	SP - Medium dense, brown f/c			ND
6	7					SAND, little Silt, trace Gravel,			
	6					moist to wet.			
7	9								
	9	S-5	7-9	14	80				ND
8	9								
	5								
9	10					Layer of Clay and Silt (8.5-9')			
	9	S-6	9-11	21	80				ND
10	11								
	10								
11	11								
	16	S-7	11-13	27	85				ND
12	16								
	11					Grades to:...gray.			
13	10								
	9	S-8	13-14	NA	90				ND
14	11								
	3	S-9	14-16	8	75	Grades to:....loose.			ND
15	3								
	5								
16	6								
	5	S-10	16-18	10	90				ND
17	5								
	5								
18	5								
	6	S-11	18-20	11	90	Grades to:..medium dense.			ND
19	5								
	6								
20	7								
	WOH	S-12	20-22	11	80				ND
21	1								
	10								
22	14								

See notes on page 2.

CONTRACTOR	Applied Earth Technologies	BORING LOCATION	See Location Plan
DRILLER	Kevin Hawkins	GROUND SURFACE ELEVATION	425.6' DATUM NGVD-29
START DATE: 6/1/98	END DATE: 6/1/98	GZA GEOENVIRONMENTAL REPRESENTATIVE	D. Troy

WATER LEVEL DATA				
DATE	TIME	WATER	CASING	NOTES
6/1/98	PM	6.0'	NONE	BGS

TYPE OF DRILL RIG	CME 55
CASING SIZE AND DIAMETER	41/4" Hollow Stem Auger
OVERBURDEN SAMPLING METHOD	ASTM D1586
ROCK DRILLING METHOD	N/A

DEPTH	SAMPLE BLOWS (/6")	NO.	DEPTH (FT)	N-VALUE /RQD %	RECOVERY (%)	SAMPLE DESCRIPTION	WELL INSTALLATION DIAGRAM	WELL INSTALLATION DESCRIPTION	OVM (ppm)
	10	S-13	22-24	8	90	Grades to:...loose.			ND
23	4								
	4					ML - Medium, brown, SILT & CLAY			
24	6					trace Sand, trace Gravel, wet.			
	8	S-14	24-26	20	90	Grades to:...very stiff.			ND
25	8								
	12								
26	18					Grey weathered SHALE bedrock.			
						Bottom of Boring at 26 feet.			
27						Auger refusal			
28									
29									
30									
31									
32									
33									
34									
35									
36									
37									
38									

S - Split Spoon Sample
C - Rock Core Sample

NOTES: 1) HNu PI - 101 organic vapor meter used to screen soil samples. Meter was calibrated to the equivalent of 58 ppm isobutylene in air.

General Notes: 1) Stratification lines represent approximate boundary between soil types; transitions may be gradual.
2) Water level readings have been made at times and under conditions stated; fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

See notes on page 2.

GZA GeoEnvironmental of New York
364 Nagel Drive, Buffalo, New York

SAWMILL CREEK DUMP SITE
Town of Clay, New York

BORING No. SB-8
SHEET 1 OF 1
FILE No. 55232
CHECKED BY MW

CONTRACTOR	Applied Earth Technologies	BORING LOCATION	See Location Plan
DRILLER	Kevin Hawkins	GROUND SURFACE ELEVATION	423.7' DATUM NGVD-29
START DATE: 6/1/98	END DATE: 6/1/98	GZA GEOENVIRONMENTAL REPRESENTATIVE	D. Troy

WATER LEVEL DATA				
DATE	TIME	WATER	CASING	NOTES
6/1/98	PM	6.0'	NONE	BGS

TYPE OF DRILL RIG	CME 55
CASING SIZE AND DIAMETER	41/4" Hollow Stem Auger
OVERBURDEN SAMPLING METHOD	ASTM D1586
ROCK DRILLING METHOD	N/A

DEPTH	SAMPLE BLOWS (/6")	NO.	DEPTH (FT)	N-VALUE /RQD %	RECOVERY (%)	SAMPLE DESCRIPTION	WELL INSTALLATION DIAGRAM	WELL INSTALLATION DESCRIPTION	OVM (ppm)
	13	S-1	0-2	18	20	SW - Medium dense, brown,		No well installation	90
1	10					SAND, some Gravel, some Silt,		Soil boring only.	
	8					moist.			
2	9								
	7	S-2	2-4	20	25	CL - Very stiff, Silty CLAY, trace			15
3	10					Gravel, trace Sand, moist.			
	10								
4	8								
	9	S-3	4-6	16	5				6
5	8								
	8								
6	9								
	2	S-4	6-8	10	75	Grades to:...stiff.			ND
7	4								
	6								
8	2								
	6	S-5	8-10	14	100				6
9	7								
	7								
10	8								
	12	S-6	10-12	35	15	Grades to:...hard, some Sand, wet.			1
11	15								
	20								
12	21								
	20	S-7	12-14	59	0	No recovery			ND
13	22								
	37								
14	50/4								
	36	S-8	14-16	62	50				ND
15	26								
	36								
16	50/5								
	49	S-9	16-16.9	50+	20				ND
17	50/3								
						Bottom of Boring at 16.9 feet.			
18						Auger refusal			

S - Split Spoon Sample
C - Rock Core Sample

NOTES: 1) HNu PI - 101 organic vapor meter used to screen soil samples. Meter was calibrated to the equivalent of 58 ppm Isobutylene in air.

General Notes:
1) Stratification lines represent approximate boundary between soil types; transitions may be gradual.
2) Water level readings have been made at times and under conditions stated; fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

TEST PIT LOGS

TEST PIT LOG

Project Description:	Sawmill Creek Dump Site	Test Pit No:	TP-1
Project Location:	Town of Clay NY	Time:	8:30
GZA Representative:	D. Troy	File No:	55232
Contractor:	Applied Earth Technologies	Date:	06/04/1998
		Weather:	Sunny, Windy and Cool
Operator:	Paul Mandigo	Ground Elevation:	Not Available.
Make:	Kobelco Model: TLK-760		

Depth (ft)	Sample No.	Sample Depth	Description	PID
+4				
+3				
+2			Debris pile consists of rusted metal fragments, wood, soil, tires and some plastic debris approximately 3 feet above ground surface.	ND
+1				ND
G.S.				ND
-1			Dark brown GRAVEL, some fine Sand and Silt, moist. Woven geotextile observed below Gravel.	ND
-2			Dark brown SILT and CLAY, some fine Sand, little Gravel, moist	ND
-3			End of test pit 2 feet below ground surface.	
-4				
-5				

Remarks:

1) The air space above the soil was screened with a HNu as the soils were excavated from the test pit. The HNu did not detect any volatile organic compounds. No visible or olfactory signs of contamination noted.

2) G.S. equals ground surface.

3) Analytical soil samples were collected by NYSDEC from test pit excavations.

4) HN PI -101 organic vapor meter used to screen excavated soil. Meter was calibrated to the equivalent of 58 ppm Isobutylene in air.

TEST PIT LOG

Project Description:	Sawmill Creek Dump Site	Test Pit No:	TP-2
Project Location:	Town of Clay NY	Time:	9:00
GZA Representative:	D. Troy	File No:	55232
Contractor:	Applied Earth Technologies	Date:	06/04/1998
		Weather:	Sunny, Windy and Cool
Operator:	Paul Mandigo	Ground Elevation:	Not Available.
Make:	Kobelco Model: TLK-760		

Depth (ft)	Sample No.	Sample Depth	Description	PID
+4				
+3				
+2			Debris pile consists of rusted metal fragments, wood, soil, tires and some plastic debris approximately 3 feet above ground surface.	ND
+1				ND
G.S.				ND
-1			Dark brown GRAVEL, some fine to coarse Sand little Silt, moist.	ND
-2			Dark brown Clayey SILT, little fine Sand, trace Gravel, moist.	ND
-3			End of test pit 2 feet below ground surface.	
-4				
-5				

Remarks:

1) The air space above the soil was screened with a HNu as the soils were excavated from the test pit. The HNu did not detect any volatile organic compounds. No visible or olfactory signs of contamination noted.

2) G.S. equals ground surface.

3) Analytical soil samples were collected by NYSDEC from test pit excavations.

4) HNu PI -101 organic vapor meter used to screen excavated soil. Meter was calibrated to the equivalent of 58 ppm Isobutylene in air.

TEST PIT LOG

Project Description:	Sawmill Creek Dump Site	Test Pit No:	TP-3
Project Location:	Town of Clay NY	Time:	9:50
GZA Representative:	D. Troy	File No:	55232
Contractor:	Applied Earth Technologies	Date:	06/04/1998
		Weather:	Sunny, Windy and Cool
Operator:	Paul Mandigo	Ground Elevation:	Not Available.
Make:	Kobelco Model: TLK-760		

Depth (ft)	Sample No.	Sample Depth	Description	PID
+4				
+3				
+2				
+1			Debris pile consists of rusted metal, wood, soil, tires and some plastic debris from approximately 2 feet above ground surface.	ND
G.S.				ND
-1			Dark brown, GRAVEL, some fine to coarse Sand, little Silt, moist.	ND
-2			Brown, Clayey SILT, little fine to coarse Sand, trace Gravel, Organics, moist.	ND
-3			End of test pit 2 feet below ground surface.	
-4				
-5				

Remarks:

1) The air space above the soil was screened with a HNu as the soils were excavated from the test pit. The HNu did not detect any volatile organic compounds. No visible or olfactory signs of contamination noted.

2) G.S. equals ground surface.

3) Analytical soil samples were collected by NYSDEC from test pit excavations.

4) HNu PI -101 organic vapor meter used to screen excavated soil. Meter was calibrated to the equivalent of 58 ppm Isobutylene in air.

TEST PIT LOG

Project Description:	Sawmill Creek Dumpsite	Test Pit No:	TP-4
Project Location:	Town of Clay NY	Time:	10:20
GZA Representative:	D. Troy	File No:	55232
Contractor:	Applied Earth Technologies	Date:	06/04/1998
		Weather:	Sunny, Windy and Cool
Operator:	Paul Mandigo	Ground Elevation:	Not Available.
Make:	Kobelco Model: TLK-760		

Depth (ft)	Sample No.	Sample Depth	Description	PID
+4				
+3			Debris pile consists of metal scaling and some welding rods approximately 3.5 feet above ground surafce. Material very difficult to dig up with backhoe.	ND
+2				ND
+1				ND
G.S.				ND
-1			Dark brown, GRAVEL, some fine to coarse Sand, little Silt, moist.	ND
-2			Brown, Clayey SILT, little fine to coarse Sand, trace Organics, moist.	ND
-3			End of test pit 2 feet below ground surface.	
-4				
-5				

Remarks:

1) The air space above the soil was screened with a HNu as the soils were excavated from the test pit. The HNu did not detect any volatile organic compounds. No visible or olfactory signs of contamination noted.

2) G.S. equals ground surface.

3) Analytical soil samples were collected by NYSDEC from test pit excavations.

4) HNu PI -101 organic vapor meter used to screen excavated soil. Meter was calibrated to the equivalent of 58 ppm Isobutylene in air.

TEST PIT LOG

Project Description:	Sawmill Creek Dump Site	Test Pit No:	TP-5
Project Location:	Town of Clay NY	Time:	11:05
GZA Representative:	D. Troy	File No:	55232
Contractor:	Applied Earth Technologies	Date:	06/04/1998
		Weather:	Sunny, Windy and Cool
Operator:	Paul Mandigo	Ground Elevation:	Not Available.
Make:	Kobelco Model: TLK-760		

Depth (ft)	Sample No.	Sample Depth	Description	PID
+4				
+3			Debris pile consists of rusted metal fragments, wood, soil, tires and some plastic debris approximately 4 feet above ground surface.	ND
+2				ND
+1				ND
G.S.				ND
-1			Dark brown, Clayey SILT, some fine to coarse Sand, little Gravel, moist.	ND
-2				ND
-3			End of test pit 2 feet below ground surface.	
-4				
-5				

Remarks:

1) The air space above the soil was screened with a HNu as the soils were excavated from the test pit. The HN did not detect any volatile organic compounds. No visible or olfactory signs of contamination noted.

2) G.S. equals ground surface.

3) Analytical soil samples were collected by NYSDEC from test pit excavations.

4) HNu PI -101 organic vapor meter used to screen excavated soil. Meter was calibrated to the equivalent of 58 ppm Isobutylene in air.

TEST PIT LOG

Project Description:	Sawmill Creek Dump Site	Test Pit No:	TP-6
Project Location:	Town of Clay NY	Time:	11:30
GZA Representative:	D. Troy	File No:	55232
Contractor:	Applied Earth Technologies	Date:	06/04/1998
		Weather:	Sunny, Windy and Cool
Operator:	Paul Mandigo	Ground Elevation:	Not Available.
Make:	Kobelco Model: TLK-760		

Depth (ft)	Sample No.	Sample Depth	Description	PID
+4				
+3				
+2				
+1				
G.S.			No debris pile above ground surface.	
-1			Gray to dark brown GRAVEL, some fine to coarse Sand, little Silt, moist.	150 ppm
-2			Brown, Clayey SILT, little fine to coarse Sand, trace rounded Gravel, moist.	100 ppm
-3			End of test pit 2 feet below ground surface.	
-4				
-5				

Remarks:

1) The air space above the soil was screened with a HNu as the soils were excavated from the test pit. The HNu detected high levels of volatile organic compounds. A strong odor of volatile organic compounds was observed during excavation.

2) G.S. equals ground surface.

3) Analytical soil samples were collected by NYSDEC from test pit excavations.

4) HNu PI -101 organic vapor meter used to screen excavated soil. Meter was calibrated to the equivalent of 58 ppm Isobutylene in air.

WELL DEVELOPMENT LOGS

TABLE 1
SAWMILL CREEK DUMP SITE
Town of Clay, New York
Monitoring Well Development
Summary of Field Measurements

Location	Volume (Gallons)	pH (Standard Units)	Conductivity (uMhos/cm)	Turbidity (NTU)	Temperature (C)	Date of Water Level	Depth to Wate BMP (ft)	Remarks
SB-1	2.0	8.09	0.338	>999	13.7	6/5/98	4.26	Began well development at 10:00
	4.0	8.11	0.396	822	12.9			on 6/ 5/98 for 2 hours.
	6.0	8.09	0.424	118	13.3	6/8/98	6.16	No PID detection
	8.0	8.15	0.413	105	12.9			Monitoring Point Elevation = 425.70'
	10.0	8.14	0.416	33	12.8			
	11.0	8.16	0.458	30	12.3			
	12.0	8.07	0.472	46	12.5			
SB-2	2.5	7.7	1.23	>999	13.8	6/5/98	6.64	Began well development at 12:40
	4.0	7.43	1.37	678	13.2			on 6/5/98 for two hours.
	6.0	7.24	1.63	310	12.7	6/8/98	7.02	No PID detection
	8.0	7.24	1.69	410	12.5			Monitoring Point Elevation = 426.98'
	10.0	7.19	1.66	310	12.6			
	11.0	7.17	1.68	340	12.6			
	14.0	7.15	1.71	282	12.6			
SB-3	2.5	6.87	1.63	822	13.8	6/5/98	6.55	Began well development at 11:30
	4.0	6.68	1.66	246	13.8			on 6/8/98 for two hours.
	5.0	6.87	1.69	137	13.5	6/8/98	6.81	No PID detection
	6.0	6.93	1.73	206	13.5			Monitoring Point Elevation = 425.89'
	9.0	6.75	1.84	148	13.8			
	11.0	6.61	1.86	238	13.6			
SB-4	1.5	6.84	1.24	>999	13.9	6/5/98	7.77	Began well development at 17:45
	3.0	6.93	1.33	200	14.3			on 6/8/98 for two hours.
	4.0	6.93	1.30	135	14.0	6/8/98	8.00	No PID detection
	5.0	6.89	1.31	130	13.7			Monitoring Point Elevation = 427.69'
	6.0	6.95	1.31	225	14.0			
	7.0	6.93	1.32	177	13.8			
	8.0	6.91	1.32	95	13.6			
	9.0	6.88	1.31	40	13.4			
SB-5	2.0	7.15	1.22	>999	10.9	6/5/98	6.98	Began well development at 13:55
	3.0	7.12	1.26	>999	11.0			on 6/8/98 for two hours.
	4.0	7.11	1.25	>999	10.8	6/8/98	7.28	No PID detection
	5.0	6.98	1.30	>999	11.8			Monitoring Point Elevation = 426.32'
	5.5	7.00	1.23	>999	13.1			
	6.0	6.96	1.33	882	12.8			
	6.5	6.89	1.36	386	12.5			
	7.0	6.92	1.37	257	13.3			
SB-6	1.0	7.16	1.27	>999	11.7	6/5/98	8.02	Began well development at 14:50
	2.0	7.07	1.26	>999	11.5			on 6/5/98 for two hours.
	2.5	7.15	1.25	714	10.9	6/8/98	8.38	PID reading of 4 ppm.
	3.5	7.19	1.25	328	11.6			Monitoring Point Elevation = 428.57'
	4.0	7.10	1.26	868	12.2			
	4.5	7.16	1.25	940	12.1			
	5.5	7.17	1.27	544	13.3			
	6.0	6.97	1.27	471	13.0			
	6.5	7.14	1.31	198	12.9			
	7.0	7.04	1.32	164	12.9			
	7.5	7.06	1.32	169	13.0			

NOTES:
1) HNu PID-101 organic vapor meter used to screen monitoring wells. Meter was calibrated to the equivalent of 58 ppm Isobutylene in air.
2) Horiba Water Quality Checker U-10 used for all water measurements. Meter was calibrated at the start and end of each day.
3) BMP equals Below Monitoring Point. Monitoring point to be surveyed by Larsen Engineers.
4) Wells were pumped dry between measurements. Time between readings was approximately 15 minutes for all wells. Full well recharge was not achieved between readings.

CALIBRATION LOGS

Turbidity Meter Calibration Worksheet

Project: Sawmill Creek Dump Site
Immediate Investigation Work Assignment
GZA File : 55232

Location: Town of Clay, New York
Sample Collection Date: 6/5/98 and 6/8/98

Turbidity Meter Model: Horiba Water Quality Checker U-10

Calibration (1)

Date	Target Value (2) (uMhos/cm)	Actual Reading (uMhos/cm)	Analyst's Initials	Remarks
06/05/1998	0.0	0.0	DJT	Calibration was conducted before and after well development with the same results.
06/08/1998	0.0	0.0	DJT	Calibration was conducted before and after well development with the same results.

Notes:

1) Calibration done in accordance with manufacturers recommendations
2) Target value of standards provided by manufacturer.

Conductivity Meter Calibration Worksheet

Project: Sawmill Creek Dump Site Immediate Investigation Work Assignment	**GZA File :** 55232
Location: Town of Clay, New York	**Sample Collection Date:** 6/5/98 and 6/8/98

Conductivity Meter Model: Horiba Water Quality Checker U-10

Calibration (1)

Date	Temperature (C)	Target Value (2) (uMhos/cm)	Actual Reading (uMhos/cm)	Analyst's Initials	Remarks
06/05/1998	25	4.49	4.49	DJT	Calibration was conducted before and after well development with the same results.
06/08/1998	25	4.49	4.49	DJT	Calibration was conducted before and after well development with the same results.

Notes:

1) Calibrations done in accordance with manufacturers recommendations and is completed by adjusting the meter to a standard of known specific conductance. The standard is selected to be as close to the sample measurement as possible.
2) Target value is the specific conductance of the standard solution.

pH Meter Calibration Worksheet

Project: Sawmill Creek Dump Site Immediate Investigation Work Assignment	**GZA File :** 55232
Location: Town of Clay, New York	**Sample Collection Date:** 6/5/98 and 6/8/98

pH Meter Model: Horiba Water Quality Checker U-10

Calibration (1)

Date	Set Points (2) (pH units)	Target Value (3) (pH units)	Actual Reading (4) (pH units)	Analyst's Initials	Remarks
06/05/1998	4.00	4.00	4.01	DJT	Calibration was conducted before and after well development with the same results.
06/08/1998	4.00	4.00	4.01	DJT	Calibration was conducted before and after well development with the same results.

Notes:

1) These calibrations were done in accordance with the NYSDOH's Environmental Laboratory Approval Program (ELAP manual, item 231 revised as of April 1, 1986)

2) For a one point calibration, the set point is the pH of the standard buffer solution used to initially calibrate the meter. For a two point calibration, the set points are the pH of the standard buffers used to calibrate the slope of the pH meter.

3) For a one point calibration, the target values are the pH of the standard buffers used to check the slope of the pH meter. For a two point calibration, the target value is the pH of the standard buffer used to check the initial calibration.

4) The accepted accuracy for the readings using as a one point calibration is +/- 0.2 pH units. The accepted accuracy for the actual reading using a two point calibration is +/- 0.05 pH units of the target value.

APPENDIX D

ANALYTICAL DATA FROM

ONONDAGA LAKE PROJECT DATABASE

WASTE/TEST PIT SAMPLES

Sawmill Creek Dump Site
Volatiles
Waste/Test Pit Samples

Location	TP-1	TP-2 (0.2-0.3 m)	TP-2	TP-3	TP-4	TP-6	WP-3
Field ID	B975-25	B975-26	B975-27	B975-28	B975-29	B975-22	B975-23
Date Collected	06/04/98	06/04/98	06/04/98	06/04/98	06/04/98	06/04/98	06/03/98
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	12 UJ	12 U	11 UJ	11 UJ	11 UJ	12 U	11 UJ
Bromomethane	12 U	12 U	11 UJ	11 U	11 UJ	12 U	11 U
Vinyl chloride	12 U	12 U	11 UJ	11 U	11 UJ	12 U	11 U
Chloroethane	12 UJ	12 U	11 UJ	11 UJ	11 UJ	12 U	11 UJ
Methylene chloride	12 U	12 U	11 U	11 U	11 UJ	12 U	11 U
Acetone	22 J	7 J	28 U	11 U	11 UJ	270 JD	11 UJ
Carbon disulfide	2 J	12 U	11 UJ	11 U	11 UJ	12 U	2 J
1,1-Dichloroethene	12 U	12 U	11 UJ	11 U	11 UJ	12 U	11 U
1,1-Dichloroethane	12 U	12 U	11 UJ	11 U	11 UJ	12 U	11 U
1,2-Dichloroethene (Total)	12 U	12 U	11 UJ	11 U	11 UJ	12 U	11 U
2-Butanone	12 UJ	12 UJ	71 J	11 UJ	11 UJ	600 JD	11 UJ
Chloroform	12 U	12 U	11 UJ	11 U	11 UJ	12 U	11 U
1,2-Dichloroethane	12 U	12 U	11 J	11 U	11 UJ	12 U	11 U
1,1,1-Trichloroethane	12 U	12 UJ	11 R	11 U	1 J	12 UJ	2 J
Carbon Tetrachloride	12 U	12 U	11 R	11 U	11 UJ	12 U	11 U
Bromodichloromethane	12 U	12 U	11 R	11 U	11 UJ	12 U	11 U
1,2-Dichloropropane	12 U	12 U	11 R	11 U	11 UJ	12 U	11 U
Cis-1,3-dichloropropene	12 U	12 U	11 R	11 U	11 UJ	12 U	11 U
Trichloroethene	12 U	12 U	11 R	11 U	11 UJ	12 U	11 U
Benzene	12 U	12 U	11 R	11 U	11 UJ	12 U	11 U
Dibromochloromethane	12 U	12 U	11 R	11 U	11 UJ	12 U	11 U
Trans-1,3-dichloropropene	12 U	12 U	11 R	11 U	11 UJ	12 U	11 U
1,1,2-Trichloroethane	12 U	12 U	11 R	11 U	11 UJ	12 U	11 U
Bromoform	12 U	12 U	11 R	11 U	11 UJ	12 U	11 U
4-Methyl-2-pentanone	12 UJ	12 UJ	11 UJ	11 UJ	11 UJ	130 JD	11 UJ
2-Hexanone	12 UJ	12 UJ	11 UJ	11 UJ	11 UJ	12 UJ	11 UJ
Tetrachloroethene	12 U	12 UJ	11 UJ	11 UJ	11 UJ	12 UJ	11 UJ
1,1,2,2-Tetrachloroethane	12 U	12 U	11 UJ	11 UJ	11 UJ	12 U	11 UJ
Toluene	300 J	15	34 J	380 J	170 J	190	11 UJ
Chlorobenzene	12 U	12 U	11 UJ	11 UJ	11 UJ	12 U	11 UJ
Ethylbenzene	4 J	12 U	9 J	2 J	7 J	20	11 UJ
Styrene	12 U	12 U	11 UJ	11 UJ	11 UJ	12 U	11 UJ
Xylene (Total)	27	13	210 J	43 J	56 J	530	11 UJ

Sawmill Creek Dump Site
Semivolatiles
Waste/Test Pit Samples

Location	TP-1	TP-2 (0.2-0.3 m)	TP-2	TP-3	TP-4	TP-6	WP-3
Field ID	B975-25	B975-26	B975-27	B975-28	B975-29	B975-22	B975-23
Date Collected	06/04/98	06/04/98	06/04/98	06/04/98	06/04/98	06/04/98	06/03/98
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Phenol	400 U	410 U	360 U	360 U	370 U	390 U	370 U
Bis(2-chloroethyl)ether	400 U	410 U	360 U	360 U	370 U	390 U	370 U
2-Chlorophenol	400 U	410 U	360 U	360 U	370 U	390 U	370 U
1,3-Dichlorobenzene	400 U	410 U	360 U	360 U	370 U	390 U	370 U
1,4-Dichlorobenzene	400 U	410 U	360 U	360 U	370 U	390 U	370 U
1,2-Dichlorobenzene	400 U	410 U	360 U	360 U	370 U	390 U	370 U
2-Methylphenol	400 U	410 U	360 U	360 U	370 U	190 J	370 U
2,2'-Oxybis(1-chloropropane)	400 U	410 U	360 U	360 U	370 U	390 U	370 U
4-Methylphenol	400 U	410 U	360 U	360 U	370 U	500	370 U
N-nitroso-di-n-propylamine	400 U	410 U	360 U	360 U	370 U	390 U	370 U
Hexachloroethane	400 U	410 U	360 U	360 U	370 U	390 U	370 U
Nitrobenzene	400 U	410 U	360 U	360 U	370 U	390 U	370 U
Isophorone	400 U	410 U	360 U	360 U	370 U	390 U	370 U
2-Nitrophenol	400 U	410 U	360 U	360 U	370 U	390 U	370 U
2,4-Dimethylphenol	400 U	410 U	360 U	360 U	370 U	390 U	370 U
Bis(2-chloroethoxy)methane	400 U	410 U	360 U	360 U	370 U	390 U	370 U
2,4-Dichlorophenol	400 U	410 U	360 U	360 U	370 U	390 U	370 U
1,2,4-Trichlorobenzene	400 U	410 U	360 U	360 U	370 U	390 U	370 U
Naphthalene	400 U	410 U	250 J	140 J	370 U	53 J	1300
4-Chloroaniline	400 U	410 U	360 U	360 U	370 U	390 U	51 J
Hexachlorobutadiene	400 U	410 U	360 U	360 U	370 U	390 U	370 U
4-Chloro-3-methylphenol	400 U	410 U	360 U	360 U	370 U	390 U	370 U
2-Methylnaphthalene	400 U	410 U	130 J	65 J	370 U	390 U	470
Hexachlorocyclopentadiene	400 UJ	410 UJ	360 UJ	360 UJ	370 UJ	390 UJ	370 UJ
2,4,6-Trichlorophenol	400 U	410 U	360 U	360 U	370 U	390 U	370 U
2,4,5-Trichlorophenol	990 U	1000 U	900 U	910 U	920 U	980 U	920 U
2-Chloronaphthalene	400 U	410 U	360 U	360 U	370 U	390 U	370 U
2-Nitroaniline	990 U	1000 U	900 U	910 U	920 U	980 U	920 U
Dimethylphthalate	400 U	410 U	200 J	110 J	110 J	390 U	370 U
Acenaphthylene	400 U	410 U	190 J	180 J	56 J	390 U	1300
2,6-Dinitrotoluene	400 U	410 U	360 U	360 U	370 U	390 U	370 U
3-Nitroaniline	990 U	1000 U	900 U	910 U	920 U	980 U	920 U

Sawmill Creek Dump Site
Semivolatiles
Waste/Test Pit Samples

Location	TP-1	TP-2 (0.2-0.3 m)	TP-2	TP-3	TP-4	TP-6	WP-3
Field ID	B975-25	B975-26	B975-27	B975-28	B975-29	B975-22	B975-23
Date Collected	06/04/98	06/04/98	06/04/98	06/04/98	06/04/98	06/04/98	06/03/98
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Acenaphthene	400 U	410 U	410	100 J	370 U	390 U	1200
2,4-Dinitrophenol	990 UJ	1000 UJ	900 UJ	910 UJ	920 UJ	980 UJ	920 UJ
4-Nitrophenol	990 U	1000 U	900 U	910 U	920 U	980 U	920 U
Dibenzofuran	400 U	410 U	220 J	67 J	370 U	390 U	920
2,4-Dinitrotoluene	400 U	410 U	360 U	360 U	370 U	390 U	370 U
Diethylphthalate	400 U	410 U	360 U	360 U	370 U	390 U	370 U
Fluorene	400 U	410 U	280 J	98 J	370 U	390 U	1400
4-Chlorophenyl-phenyl ether	400 U	410 U	360 U	360 U	370 U	390 U	370 U
4-Nitroaniline	990 U	1000 U	900 U	910 U	920 U	980 U	920 U
4,6-Dinitro-2-methylphenol	990 UJ	1000 UJ	900 UJ	910 UJ	920 UJ	980 UJ	920 UJ
N-Nitrosodiphenylamine(1)	400 U	410 U	360 U	360 U	370 U	53 U	370 U
4-Bromophenyl-phenyl ether	400 U	410 U	360 U	360 U	370 U	390 U	370 U
Hexachlorobenzene	400 U	410 U	360 U	360 U	370 U	390 U	370 U
Pentachlorophenol	990 U	1000 U	900 U	910 U	920 U	980 U	920 U
Phenanthrene	180 J	410 U	2500	870	220 J	390 U	8700 D
Anthracene	400 U	410 U	990	430	130 J	390 U	2200
Carbazole	400 U	410 U	510	190 J	370 U	390 U	1200
Di-n-butylphthalate	340 J	250 J	990	770	230 J	220 J	370 U
Fluoranthene	200 J	51 J	3100 D	1300	320 J	390 U	9200 D
Pyrene	160 J	52 J	2900	1200	510 J	390 U	9200 D
Butylbenzylphthalate	400 U	410 U	510	1100	370 UJ	390 U	1300
Benzo(a)anthracene	94 J	410 U	1900	670	210 J	390 U	4600 D
3,3-Dichlorobenzidine	400 U	410 U	360 U	360 U	370 UJ	390 U	370 U
Chrysene	120 J	410 U	2100	830	250 J	390 U	4800 D
Bis(2-ethylhexyl)phthalate	72 J	91 J	2500	2900 J	960 J	110 J	1800
Di-n-octylphthalate	400 U	410 U	360 U	360 U	370 U	390 U	73 J
Benzo(b)fluoranthene	82 J	410 U	1700	770	150 J	390 U	5000 D
Benzo(k)fluoranthene	71 J	410 U	1100	520	180 J	390 U	3700 JD
Benzo(a)pyrene	65 J	410 U	1700	710	180 J	390 U	5100 D
Indeno(1,2,3-cd)pyrene	59 J	410 U	1800	830	320 J	390 U	6600 D
Dibenz(a,h)anthracene	400 U	410 U	970	460	370 U	390 U	370 U
Benzo(g,h,i)perylene	63 J	410 U	2100	950	380	390 U	7900 D

Sawmill Creek Dump Site
Pesticides/PCBs
Waste/Test Pit Samples

Location	TP-1	TP-2 (0.2-0.3 m)	TP-2	TP-3	TP-4	TP-6	WP-3
Field ID	B975-25	B975-26	B975-27	B975-28	B975-29	B975-22	B975-23
Date Collected	06/04/98	06/04/98	06/04/98	06/04/98	06/04/98	06/04/98	06/03/98
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
alpha-BHC	2 U	2.1 U	1.8 U	1.8 U	1.9 U	2 U	190 U
beta-BHC	2 U	2.1 U	4.7 JN	16	1.9 U	2 U	190 U
delta-BHC	2 U	2.1 U	1.8 U	1.8 U	1.9 U	2 U	190 U
gamma-BHC (Lindane)	2 U	2.1 U	1.8 U	1.8 U	1.9 U	2 U	190 U
Heptachlor	2 U	2.1 U	1.8 U	1.8 U	1.9 U	2 U	190 U
Aldrin	2 U	2.1 U	1.8 U	1.8 U	1.9 U	2 U	190 U
Heptachlor epoxide	2 U	2.1 U	1.8 U	1.8 U	1.9 U	2 U	190 U
Endosulfan I	2 U	2.1 U	53 J	1.8 U	6.2 JN	2 U	190 U
Dieldrin	3.9 U	4.1 U	26 J	48 J	3.6 U	3.9 U	190 D
4,4'-DDE	3.9 U	4.1 U	26 JN	37 JN	6 JN	3.9 U	360 U
Endrin	3.9 U	4.1 U	3.6 U	3.6 U	3.6 U	3.9 U	360 U
Endosulfan II	3.9 U	4.1 U	3.6 U	13 JN	3.6 U	3.9 U	360 U
4,4'-DDD	3.9 U	4.1 U	3.6 U	3.6 U	3.6 U	3.9 U	360 U
Endosulfan sulfate	3.9 U	4.1 U	3.6 U	3.6 U	3.6 U	3.9 U	360 U
4,4'-DDT	3.9 U	4.1 U	3.6 U	3.6 U	3.6 U	3.9 U	360 U
Methoxychlor	20 U	21 U	18 U	18 U	19 U	20 U	1900 U
Endrin ketone	3.9 U	4.1 U	10 JN	23 JN	3.6 U	3.9 U	360 U
Endrin aldehyde	3.9 U	4.1 U	3.6 U	3.6 U	3.6 U	3.9 U	360 U
alpha-Chlordane	2 U	2.1 U	1.8 U	1.8 U	1.9 U	2 U	190 U
gamma-Chlordane	2 U	2.1 U	25 JN	46 JN	2 JN	2 U	190 U
Toxaphene	200 U	210 U	180 U	180 U	190 U	200 U	19000 U
Aroclor-1016	39 U	41 U	36 UX	36 UX	36 UX	39 U	3600 U
Aroclor-1221	80 U	83 U	72 UJ	73 UJ	74 UJ	79 U	7400 U
Aroclor-1232	39 U	41 U	36 UJ	36 UJ	36 UJ	39 U	3600 U
Aroclor-1242	39 U	41 U	430	1100 J	180 J	39 U	3600 U
Aroclor-1248	39 U	41 U	36 UJ	36 UJ	36 UJ	39 U	15000 J
Aroclor-1254	39 U	41 U	1900 J	2700 J	400	39 U	12000 D
Aroclor-1260	30 J	41 U	960 J	36 UJ	36 U	39 U	8400 D

Sawmill Creek Dump Site
Metals
Waste/Test Pit Samples

Location	TP-1	TP-2 (0.2-0.3 m)	TP-2	TP-3	TP-4	TP-6	WP-3
Field ID	B975-25	B975-26	B975-27	B975-28	B975-29	B975-22	B975-23
Date Collected	06/04/98	06/04/98	06/04/98	06/04/98	06/04/98	06/04/98	06/03/98
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Aluminum	9220	8940	4030	12000	6640	12700	3960
Antimony	0.74 UJ	0.77 UJ	3 J	14.4 J	5.8 J	0.73 UJ	26.2 J
Arsenic	3.2	3.8 J	7.5 J	29.3 J	34 J	6.9 J	28.2 J
Barium	106	99.2	201	213	69.3	73.8	475
Beryllium	0.46 B	0.47 B	0.28 B	0.23 B	0.23 B	0.63 B	0.17 B
Cadmium	0.17 B	0.13 B	4.9 B	21.9 B	3.3 U	0.16 B	35.2
Calcium	10700 J	3420 J	222000 J	40700 J	19200 J	6040 J	47700
Chromium	13	11.6	58.6	2160	1030	16.7	318
Cobalt	7.6 B	6.9 B	10 B	43.2 J	37.8 J	20.3 J	47.2
Copper	25.9 J	16.5 J	3620 J	1130 J	1520 J	64.6 J	1050
Iron	14300	13400	48900	514000	513000	23900	277000
Lead	11.7 J	11.1 J	452 J	361 J	100 J	13.9 J	1480 J
Magnesium	4990 J	2490 J	29400 J	5690 J	2600 J	8680 J	5660
Manganese	227 J	219 J	572 J	3850 J	4350 J	474 J	1810
Mercury	0.25	0.11 B	4.7	4.7	0.81	0.06 B	11.5 J
Nickel	14.9 J	11.8 J	45.3 J	402 J	371 J	30.7 J	210
Potassium	672 B	563 B	922 B	208 B	279 B	1350	301 B
Selenium	0.48 U	0.5 U	2.2 U	21.8 U	22.1 U	0.47 U	19
Silver	0.21 B	0.26 B	2.2	0.13 U	0.13 U	0.51 B	10
Sodium	83.4 B	61.4 B	1300	421 B	249 B	406 B	339 B
Thallium	1.2 B	1 B	3.6 B	38.4 B	44.4 B	1.7 B	4.2 U
Vanadium	14.6 J	15.3 J	18.1 J	418 J	46.3 J	17.5 J	77.5
Zinc	53.9 J	44.6 J	1870 J	9360 J	905 J	91.1 J	5740 J
Cyanide	0.3 U	0.31 U	0.27 U	0.27 U	0.28 U	0.29 U	1.1

Sawmill Creek Dump Site
TCLP Metals
Waste/Test Pit Samples

Location	WP-1	WP-2	WP-3	TP-4
Field ID	B975-21	B975-20	B975-23	B975-29
Date Collected	06/03/98	06/03/98	06/03/98	06/04/98
Units	ug/L	ug/L	ug/L	ug/L
Arsenic	3 U	1.5 U	1.5 U	1.5 U
Barium	565 B	2760 B	2400 B	1170 B
Cadmium	0.8 U	329	631	0.6 U
Chromium	1.4 U	192 B	22.9 B	0.4 U
Lead	1 U	1040	1130	1.4 B
Mercury	0.1 U	23.4 B	0.16 B	0.1 U
Selenium	31.3 B	16.3 B	6.8 B	23 B
Silver	10 UJ	10 UJ	10 UJ	10 UJ

GROUNDWATER SAMPLES

Sawmill Creek Dump Site
Volatiles
Groundwater Samples

Location	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
Field ID	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
Date Collected	07/06/98	07/06/98	07/06/98	07/06/98	07/06/98	07/06/98
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chloromethane	10 U	10 U	10 U	10 U	10 U	10 U
Bromomethane	10 U	10 U	10 U	10 U	10 U	10 U
Vinyl chloride	10 U	10 U	10 U	10 U	10 U	10 U
Chloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride	1 J	10 U	10 U	10 U	10 U	10 U
Acetone	3 J	1 J	6 J	2 J	3 J	2 J
Carbon disulfide	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethene	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethane	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloroethene (Total)	10 U	10 U	10 U	10 U	10 U	10 U
2-Butanone	10 U	10 U	3 J	10 U	10 U	1 J
Chloroform	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloroethane	10 U	10 U	10 U	10 U	10 U	10 U
1,1,1-Trichloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Carbon Tetrachloride	10 U	10 U	10 U	10 U	10 U	10 U
Bromodichloromethane	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloropropane	10 U	10 U	10 U	10 U	10 U	10 U
Cis-1,3-dichloropropene	10 U	10 U	10 U	10 U	10 U	10 U
Trichloroethene	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Dibromochloromethane	10 U	10 U	10 U	10 U	10 U	10 U
Trans-1,3-dichloropropene	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Bromoform	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	10 U	10 U	10 U	10 U	10 U	10 U
Tetrachloroethene	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Toluene	10 UJ	10 UJ	2 J	10 UJ	10 UJ	2 J
Chlorobenzene	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Ethylbenzene	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Styrene	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Xylene (Total)	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ

Sawmill Creek Dump Site
Semivolatiles
Groundwater Samples

Location	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
Field ID	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
Date Collected	07/06/98	07/06/98	07/06/98	07/06/98	07/06/98	07/06/98
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Phenol	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-chloroethyl)ether	10 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol	10 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U
2,2'-Oxybis(1-chloropropane)	10 U	10 U	10 U	10 U	10 U	10 U
4-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U
N-nitroso-di-n-propylamine	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Nitrobenzene	10 U	10 U	10 U	10 U	10 U	10 U
Isophorone	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitrophenol	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-chloroethoxy)methane	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloroaniline	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	10 U	10 U	10 U	10 U	10 U	10 U
2,4,6-Trichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	25 U	25 U	25 U	25 U	25 U	25 U
2-Chloronaphthalene	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitroaniline	25 U	25 U	25 U	25 U	25 U	25 U
Dimethylphthalate	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10 U	10 U	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U	10 U
3-Nitroaniline	25 U	25 U	25 U	25 U	25 U	25 U

Sawmill Creek Dump Site
Semivolatiles
Groundwater Samples

Location	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
Field ID	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
Date Collected	07/06/98	07/06/98	07/06/98	07/06/98	07/06/98	07/06/98
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acenaphthene	10 U	25 U	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	25 U	10 U	25 U	25 U	25 U	25 U
4-Nitrophenol	25 U	25 U	25 U	25 U	25 U	25 U
Dibenzofuran	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U	10 U
Diethylphthalate	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	10 U	10 U	10 U	10 U	10 U	10 U
4-Chlorophenyl-phenyl ether	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitroaniline	25 U	25 U	25 U	25 U	25 U	25 U
4,6-Dinitro-2-methylphenol	25 U	25 U	25 U	25 U	25 U	25 U
N-Nitrosodiphenylamine(1)	10 U	10 U	10 U	10 U	10 U	10 U
4-Bromophenyl-phenyl ether	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol	25 U	25 U	25 U	25 U	25 U	25 U
Phenanthrene	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10 U	10 U	10 U	10 U	10 U	10 U
Carbazole	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-butylphthalate	2 J	2 J	10 U	10 U	10 U	10 U
Fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	10 U	10 U	10 U	10 U	10 U	10 U
Butylbenzylphthalate	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)anthracene	10 U	10 U	10 U	10 U	10 U	10 U
3,3-Dichlorobenzidine	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-ethylhexyl)phthalate	2 J	2 J	15	3 J	2 J	1 J
Di-n-octylphthalate	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10 U	10 U	10 U	10 U	10 U	10 U

Sawmill Creek Dump Site
Pesticides/PCBs
Groundwater Samples

Location	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
Field ID	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
Date Collected	07/06/98	07/06/98	07/06/98	07/06/98	07/06/98	07/06/98
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
alpha-BHC	0.05 UJ	0.05 UJ	0.05 U	0.05 U	0.05 UJ	0.05 UJ
beta-BHC	0.05 UJ	0.05 UJ	0.05 U	0.05 U	0.05 UJ	0.05 UJ
delta-BHC	0.05 UJ	0.05 UJ	0.05 U	0.05 U	0.05 UJ	0.05 UJ
gamma-BHC (Lindane)	0.05 UJ	0.05 UJ	0.05 U	0.05 U	0.05 UJ	0.05 UJ
Heptachlor	0.05 UJ	0.05 UJ	0.05 U	0.05 U	0.05 UJ	0.05 UJ
Aldrin	0.05 UJ	0.05 UJ	0.05 U	0.05 U	0.05 UJ	0.05 UJ
Heptachlor epoxide	0.05 UJ	0.05 UJ	0.05 U	0.05 U	0.05 UJ	0.05 UJ
Endosulfan I	0.05 UJ	0.05 UJ	0.05 U	0.05 U	0.05 UJ	0.05 UJ
Dieldrin	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ
4,4'-DDE	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ
Endrin	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ
Endosulfan II	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ
4,4'-DDD	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ
Endosulfan sulfate	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ
4,4'-DDT	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ
Methoxychlor	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ
Endrin ketone	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ
Endrin aldehyde	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ
alpha-Chlordane	0.05 UJ	0.05 UJ	0.05 U	0.05 U	0.05 UJ	0.05 UJ
gamma-Chlordane	0.05 UJ	0.05 UJ	0.05 U	0.05 U	0.05 UJ	0.05 UJ
Toxaphene	5 UJ	5 UJ	5 U	5 U	5 UJ	5 UJ
Aroclor-1016	1 UJ	1 UJ	1 U	1 U	1 UJ	1 UJ
Aroclor-1221	2 UJ	2 UJ	2 U	2 U	2 UJ	2 UJ
Aroclor-1232	1 UJ	1 UJ	1 U	1 U	1 UJ	1 UJ
Aroclor-1242	1 UJ	1 UJ	1 U	1 U	1 UJ	1 UJ
Aroclor-1248	1 UJ	1 UJ	1 U	1 U	1 UJ	1 UJ
Aroclor-1254	1 UJ	1 UJ	1 U	1 U	1 UJ	1 UJ
Aroclor-1260	1 UJ	1 UJ	1 U	1 U	1 UJ	1 UJ

Sawmill Creek Dump Site
Metals
Groundwater Samples

Location	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
Field ID	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
Date Collected	07/06/98	07/06/98	07/06/98	07/06/98	07/06/98	07/06/98
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Aluminum	3010	26100	1970	8780	19000	38500
Antimony	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Arsenic	1.4 U	10.8	3.5 B	11.8	10	14.7
Barium	144 B	317	372	471	368	363
Beryllium	1.2 B	1.4 B	0.21 U	0.42 B	0.95 B	1.7 B
Cadmium	1.2 B	0.68 B	0.36 B	0.31 U	0.47 B	0.68 B
Calcium	209000	358000	287000	157000	283000	301000
Chromium	6.2 B	40 J	10 J	24.2 J	30.4 J	55.8 J
Cobalt	11.8 B	18.5 B	6.5 B	10 B	17.7 B	27.4 B
Copper	12.6 B	49.6	8.2 B	26.6	56.6	72.6
Iron	8150	44900	34300	17600	45100	67500
Lead	6.2	14.8 J	3.3	11.2 J	12.6 J	23.3 J
Magnesium	63600	124000	77600	55000	99100	112000
Manganese	4190	2460	2290	4830	3180	5150
Mercury	0.21	0.15 B	0.1 U	0.1 U	0.1 U	0.22
Nickel	18.7 B	35.4 B	15.8 B	23.2 B	29.9 B	65.9
Potassium	2810 B	10800 J	1330 B	3470 B	7570 J	13500 J
Selenium	2 U	2.9 B	2 U	3.3 B	2 U	2 U
Silver	0.72 B	0.61 U	0.61 U	0.61 U	0.61 U	1 B
Sodium	23500	102000	21900	58100	44900	81200
Thallium	2 B	1.8 U	1.8 U	1.8 U	1.8 B	1.8 U
Vanadium	6.2 B	49 B	4 B	15.9 B	35.2 B	70.8
Zinc	101	104	36.5	57.6	94.2	232
Cyanide	10 U	10 U	49.5	10 U	10 U	10 U

Sawmill Creek Dump Site
Volatiles
Blanks

Sample	Tripblank	Tripblank	Tripblank
Date Collected	06/02/98	06/03/98	07/06/98
Units	ug/L	ug/L	ug/L
Chloromethane	10 U	10 U	10 U
Bromomethane	10 U	10 U	10 U
Vinyl chloride	10 U	10 U	10 U
Chloroethane	10 U	10 U	10 U
Methylene chloride	10 U	10 U	10 U
Acetone	10 U	10 U	10 U
Carbon disulfide	10 U	10 U	10 U
1,1-Dichloroethene	10 U	10 U	10 U
1,1-Dichloroethane	10 U	10 U	10 U
1,2-Dichloroethene (Total)	10 U	10 U	10 U
2-Butanone	10 U	10 U	10 U
Chloroform	10 U	10 U	10 U
1,2-Dichloroethane	10 U	10 U	10 U
1,1,1-Trichloroethane	10 U	10 U	10 U
Carbon Tetrachloride	10 U	10 U	10 U
Bromodichloromethane	10 U	10 U	10 U
1,2-Dichloropropane	10 U	10 U	10 U
Cis-1,3-dichloropropene	10 U	10 U	10 U
Trichloroethene	10 U	10 U	10 U
Benzene	10 U	10 U	10 UJ
Dibromochloromethane	10 U	10 U	10 U
Trans-1,3-dichloropropene	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U	10 U
Bromoform	10 U	10 U	10 U
4-Methyl-2-pentanone	10 U	10 U	10 U
2-Hexanone	10 U	10 U	10 U
Tetrachloroethene	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U
Toluene	10 U	10 U	10 UJ
Chlorobenzene	10 U	10 U	10 UJ
Ethylbenzene	10 U	10 U	10 UJ
Styrene	10 U	10 U	10 UJ
Xylene (Total)	10 U	10 U	10 UJ

SURFACE WATER SAMPLES

Sawmill Creek Dump Site
Volatiles
Surface Water Samples

Location	SW-1	SW-2	SW-3	SW-5	SW-6	SW-7	SW-8
Field ID	B975-02	B975-04	B975-06	B975-15	B975-08	B975-10	B975-12
Date Collected	06/01/98	06/01/98	06/01/98	06/02/98	06/02/98	06/02/98	06/02/98
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chloromethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromomethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Vinyl chloride	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon disulfide	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloroethene (Total)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Butanone	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,1-Trichloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon Tetrachloride	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromodichloromethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloropropane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Cis-1,3-dichloropropene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trichloroethene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trans-1,3-dichloropropene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromoform	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Tetrachloroethene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Toluene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Styrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Xylene (Total)	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Sawmill Creek Dump Site
Semivolatiles
Surface Water Samples

Location	SW-1	SW-2	SW-3	SW-5	SW-6	SW-7	SW-8
Field ID	B975-02	B975-04	B975-06	B975-15	B975-08	B975-10	B975-12
Date Collected	06/01/98	06/01/98	06/01/98	06/02/98	06/02/98	06/02/98	06/02/98
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Phenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-chloroethyl)ether	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,2'-Oxybis(1-chloropropane)	10 U	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
4-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U
N-nitroso-di-n-propylamine	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nitrobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Isophorone	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitrophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-chloroethoxy)methane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloroaniline	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
2,4,6-Trichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	25 U	25 U	25 U	25 U	25 U	25 U	25 U
2-Chloronaphthalene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitroaniline	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Dimethylphthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
3-Nitroaniline	25 U	25 U	25 U	25 U	25 U	25 U	25 U

Sawmill Creek Dump Site
Semivolatiles
Surface Water Samples

Location	SW-1	SW-2	SW-3	SW-5	SW-6	SW-7	SW-8
Field ID	B975-02	B975-04	B975-06	B975-15	B975-08	B975-10	B975-12
Date Collected	06/01/98	06/01/98	06/01/98	06/02/98	06/02/98	06/02/98	06/02/98
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Acenaphthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	25 UJ	25 UJ	25 UJ	25 UJ	25 UJ	25 UJ	25 UJ
4-Nitrophenol	25 UJ	25 U	25 U	25 U	25 U	25 U	25 U
Dibenzofuran	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Diethylphthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chlorophenyl-phenyl ether	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitroaniline	25 U	25 U	25 U	25 U	25 U	25 U	25 U
4,6-Dinitro-2-methylphenol	25 U	25 U	25 U	25 U	25 U	25 U	25 U
N-Nitrosodiphenylamine(1)	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Bromophenyl-phenyl ether	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol	25 U	25 UJ	25 UJ	25 UJ	25 UJ	25 UJ	25 UJ
Phenanthrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbazole	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-butylphthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Butylbenzylphthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)anthracene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
3,3-Dichlorobenzidine	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-ethylhexyl)phthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-octylphthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10 U	10 U	10 U	10 U	10 U	10 U	10 U

Sawmill Creek Dump Site
Pesticides/PCBs
Surface Water Samples

Location	SW-1	SW-2	SW-3	SW-5	SW-6	SW-7	SW-8
Field ID	B975-02	B975-04	B975-06	B975-15	B975-08	B975-10	B975-12
Date Collected	06/01/98	06/01/98	06/01/98	06/02/98	06/02/98	06/02/98	06/02/98
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
alpha-BHC	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
beta-BHC	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
delta-BHC	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
gamma-BHC (Lindane)	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Heptachlor	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Aldrin	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Heptachlor epoxide	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.028 J
Endosulfan I	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Dieldrin	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDE	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan II	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDD	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endosulfan sulfate	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
4,4'-DDT	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Methoxychlor	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Endrin ketone	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Endrin aldehyde	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
alpha-Chlordane	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
gamma-Chlordane	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Toxaphene	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Aroclor-1016	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Aroclor-1221	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Aroclor-1232	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Aroclor-1242	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Aroclor-1248	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Aroclor-1254	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Aroclor-1260	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Sawmill Creek Dump Site
Metals
Surface Water Samples

Location	SW-1	SW-2	SW-3	SW-5	SW-6	SW-7	SW-8
Field ID	B975-02	B975-04	B975-06	B975-15	B975-08	B975-10	B975-12
Date Collected	06/01/98	06/01/98	06/01/98	06/02/98	06/02/98	06/02/98	06/02/98
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Aluminum	116 B	631 J	399 J	312 J	166 B	96.8 B	1600 J
Antimony	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U
Arsenic	1.4 U	1.5 B	1.4 U	1.4 U	1.5 B	1.9 B	2.9 B
Barium	53.5 B	51.7 B	160 B	38 B	44.1 B	49.1 B	76 B
Beryllium	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cadmium	0.3 U	0.46 B	0.32 B	0.3 U	0.3 U	0.3 U	0.3 U
Calcium	39400	67900	31100	40000	39100	42400	69500
Chromium	0.6 U	0.6 U	0.77 B	0.6 U	0.6 U	0.6 U	1.6 B
Cobalt	2 U	4.4 B	2 U	2 U	2 U	2 U	2 U
Copper	2.6 B	14.7 B	9.6 B	5.9 B	4.3 B	3.7 B	9.6 B
Iron	226	2810	592	460	605	637	2310
Lead	1.6 B	4.2	5.4	3.2	5.1	2.1 B	6.1
Magnesium	5080	14000	4300 B	6490	6750	8150	13100
Manganese	39.4	492	161	81.4	80.2	131	201
Mercury	0.1 U	0.11 B	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nickel	2.8 U	9.3 B	3.9 B	3 B	2.8 U	2.8 U	3.8 B
Potassium	2020 B	3730 B	1520 B	1620 B	1840 B	2150 B	2330 B
Selenium	2 U	2 U	2 U	2 U	2.1 B	2 U	2.5 B
Silver	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Sodium	11000	12600	5630	9860	15600	19700	43100
Thallium	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
Vanadium	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	3.2 B
Zinc	59.6 J	149 J	80.3 J	52.8 J	45.1 J	32.8 J	52.6 J
Cyanide	10 U	10 U	10 U	10 U	10 U	10 U	10 U

SEDIMENT SAMPLES

Sawmill Creek Dump Site
Volatiles
Sediment Samples

Location	SD-1	SD-2	SD-3	SD-4	SD-5	SD-6	SD-7	SD-8
Field ID	B975-03	B975-05	B975-07	B975-30	B975-16	B975-09	B975-11	B975-13
Date Collected	06/01/98	06/01/98	06/01/98	06/04/98	06/02/98	06/02/98	06/02/98	06/02/98
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	15 UJ	16 U	17 U	24 UJ	29 J	14 UJ	13 U	12 UJ
Bromomethane	15 U	16 UJ	17 UJ	24 UJ	38 UJ	14 U	13 UJ	12 U
Vinyl chloride	15 U	16 UJ	17 UJ	24 UJ	38 UJ	14 U	13 UJ	12 U
Chloroethane	15 UJ	16 U	17 U	24 UJ	38 UJ	14 UJ	13 U	12 UJ
Methylene chloride	15 U	16 U	17 U	24 UJ	38 UJ	14 U	13 U	12 U
Acetone	15 UJ	16 UJ	17 UJ	29 UJ	90 J	14 UJ	13 UJ	26 J
Carbon disulfide	15 U	16 U	17 U	24 UJ	38 UJ	14 U	13 U	12 U
1,1-Dichloroethene	15 U	16 U	17 U	24 UJ	38 UJ	14 U	13 U	12 U
1,1-Dichloroethane	15 U	16 U	17 U	24 UJ	38 UJ	14 U	13 U	12 U
1,2-Dichloroethene (Total)	15 U	16 U	17 U	24 UJ	38 UJ	14 U	13 U	12 U
2-Butanone	15 UJ	16 U	17 U	23 J	35 J	14 UJ	13 U	5 J
Chloroform	15 U	16 U	17 U	24 UJ	38 UJ	14 U	13 U	12 U
1,2-Dichloroethane	15 U	16 U	17 U	24 UJ	38 UJ	14 U	13 U	12 U
1,1,1-Trichloroethane	15 U	16 U	17 U	24 UJ	38 UJ	14 U	13 U	12 U
Carbon Tetrachloride	15 U	16 U	17 U	24 UJ	38 UJ	14 U	13 U	12 U
Bromodichloromethane	15 U	16 U	17 U	24 UJ	38 UJ	14 U	13 U	12 U
1,2-Dichloropropane	15 U	16 U	17 U	24 UJ	38 UJ	14 U	13 U	12 U
Cis-1,3-dichloropropene	15 U	16 U	17 U	24 UJ	38 UJ	14 U	13 U	12 U
Trichloroethene	15 U	16 U	17 U	24 UJ	38 UJ	14 U	13 U	12 U
Benzene	15 U	16 U	17 U	24 UJ	38 UJ	14 U	13 U	12 U
Dibromochloromethane	15 U	16 U	17 U	24 UJ	38 UJ	14 U	13 U	12 U
Trans-1,3-dichloropropene	15 U	16 U	17 U	24 UJ	38 UJ	14 U	13 U	12 U
1,1,2-Trichloroethane	15 U	16 U	17 U	24 UJ	38 UJ	14 U	13 U	12 U
Bromoform	15 U	16 U	17 U	24 UJ	38 UJ	14 U	13 U	12 U
4-Methyl-2-pentanone	15 UJ	16 UJ	17 UJ	11 J	38 UJ	14 UJ	13 UJ	12 UJ
2-Hexanone	15 UJ	16 UJ	17 UJ	24 UJ	38 UJ	14 UJ	13 UJ	12 UJ
Tetrachloroethene	15 U	16 U	17 U	24 UJ	38 UJ	14 U	13 U	12 U
1,1,2,2-Tetrachloroethane	15 U	16 U	17 U	24 UJ	38 UJ	14 U	13 U	12 U
Toluene	15 U	16 U	17 U	11 J	12 J	14 U	13 U	12 U
Chlorobenzene	15 U	16 U	17 U	24 UJ	38 UJ	14 U	13 U	12 U
Ethylbenzene	15 U	16 U	17 U	24 UJ	38 UJ	14 U	13 U	12 U
Styrene	15 U	16 U	17 U	24 UJ	38 UJ	14 U	13 U	12 U
Xylene (Total)	15 U	8 J	17 U	17 J	38 UJ	14 U	13 U	12 U

Sawmill Creek Dump Site
Semivolatiles
Sediment Samples

Location	SD-1	SD-2	SD-3	SD-4	SD-5	SD-6	SD-7	SD-8
Field ID	B975-03	B975-05	B975-07	B975-30	B975-16	B975-09	B975-11	B975-13
Date Collected	06/01/98	06/01/98	06/01/98	06/04/98	06/02/98	06/02/98	06/02/98	06/02/98
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Phenol	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
Bis(2-chloroethyl)ether	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
2-Chlorophenol	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
1,3-Dichlorobenzene	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
1,4-Dichlorobenzene	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
1,2-Dichlorobenzene	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
2-Methylphenol	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
2,2'-Oxybis(1-chloropropane)	1000 UJ	1300 U	890 U	780 UJ	2600 UJ	450 UJ	430 UJ	800 U
4-Methylphenol	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
N-nitroso-di-n-propylamine	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
Hexachloroethane	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
Nitrobenzene	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
Isophorone	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
2-Nitrophenol	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
2,4-Dimethylphenol	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
Bis(2-chloroethoxy)methane	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
2,4-Dichlorophenol	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
1,2,4-Trichlorobenzene	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
Naphthalene	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
4-Chloroaniline	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
Hexachlorobutadiene	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
4-Chloro-3-methylphenol	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
2-Methylnaphthalene	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
Hexachlorocyclopentadiene	1000 UJ	1300 UJ	890 UJ	780 UJ	2600 UJ	450 UJ	430 UJ	800 UJ
2,4,6-Trichlorophenol	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
2,4,5-Trichlorophenol	2600 U	3200 U	2200 U	2000 UJ	6400 UJ	1100 U	1100 U	2000 U
2-Chloronaphthalene	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
2-Nitroaniline	2600 U	3200 U	2200 U	2000 UJ	6400 UJ	1100 U	1100 U	2000 U
Dimethylphthalate	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
Acenaphthylene	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
2,6-Dinitrotoluene	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
3-Nitroaniline	2600 U	3200 U	2200 U	2000 UJ	6400 UJ	1100 U	1100 U	2000 U

Sawmill Creek Dump Site
Semivolatiles
Sediment Samples

Location	SD-1	SD-2	SD-3	SD-4	SD-5	SD-6	SD-7	SD-8
Field ID	B975-03	B975-05	B975-07	B975-30	B975-16	B975-09	B975-11	B975-13
Date Collected	06/01/98	06/01/98	06/01/98	06/04/98	06/02/98	06/02/98	06/02/98	06/02/98
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Acenaphthene	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
2,4-Dinitrophenol	2600 UJ	3200 UJ	2200 UJ	2000 UJ	6400 UJ	1100 U	1100 UJ	2000 UJ
4-Nitrophenol	2600 U	3200 U	2200 U	2000 UJ	6400 UJ	1100 U	1100 U	2000 U
Dibenzofuran	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
2,4-Dinitrotoluene	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
Diethylphthalate	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
Fluorene	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
4-Chlorophenyl-phenyl ether	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
4-Nitroaniline	2600 U	3200 U	2200 U	2000 UJ	6400 UJ	1100 U	1100 U	2000 U
4,6-Dinitro-2-methylphenol	2600 U	3200 UJ	2200 UJ	2000 UJ	6400 UJ	1100 U	1100 U	2000 UJ
N-Nitrosodiphenylamine(1)	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
4-Bromophenyl-phenyl ether	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
Hexachlorobenzene	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
Pentachlorophenol	2600 U	3200 U	2200 U	2000 UJ	6400 UJ	1100 U	1100 U	2000 U
Phenanthrene	320 JD	340 JD	92 JD	520 J	2600 UJ	450 U	430 U	800 U
Anthracene	1000 U	1300 U	890 U	130 J	2600 UJ	450 U	430 U	800 U
Carbazole	1000 U	1300 U	890 U	160 J	2600 UJ	450 U	430 U	800 U
Di-n-butylphthalate	1000 U	1300 U	890 U	790 J	2600 UJ	450 U	430 U	800 U
Fluoranthene	590 JD	860 JD	180 JD	1100 J	360 J	71 J	430 U	800 U
Pyrene	420 JD	740 JD	200 JD	970 J	350 J	56 J	430 U	800 U
Butylbenzylphthalate	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
Benzo(a)anthracene	240 JD	280 JD	91 JD	390 J	2600 UJ	450 U	430 U	800 U
3,3-Dichlorobenzidine	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
Chrysene	320 JD	450 JD	100 JD	640 J	270 J	450 U	430 U	800 U
Bis(2-ethylhexyl)phthalate	1000 U	270 JD	250 JD	470 J	2600 UJ	450 U	430 U	800 U
Di-n-octylphthalate	1000 U	1300 U	890 U	780 UJ	2600 UJ	450 U	430 U	800 U
Benzo(b)fluoranthene	250 JD	440 JD	120 JD	720 J	300 J	450 U	430 U	800 U
Benzo(k)fluoranthene	240 JD	460 JD	160 JD	530 J	2600 UJ	450 U	430 U	800 U
Benzo(a)pyrene	250 JD	470 JD	140 JD	580 J	2600 UJ	450 U	430 U	800 U
Indeno(1,2,3-cd)pyrene	210 JD	420 JD	160 JD	840 J	2600 UJ	450 U	430 U	800 U
Dibenz(a,h)anthracene	1000 U	1300 U	890 U	340 J	2600 UJ	450 U	430 U	800 U
Benzo(g,h,i)perylene	240 JD	570 JD	200 JD	1100 J	290 J	450 U	430 U	800 U

Sawmill Creek Dump Site
Pesticides/PCBs
Sediment Samples

Location	SD-1	SD-2	SD-3	SD-4	SD-5	SD-6	SD-7	SD-8
Field ID	B975-03	B975-05	B975-07	B975-30	B975-16	B975-09	B975-11	B975-13
Date Collected	06/01/98	06/01/98	06/01/98	06/04/98	06/02/98	06/02/98	06/02/98	06/02/98
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
alpha-BHC	2.7 U	3.3 U	2.3 U	4 UJ	6.6 UJ	2.3 U	2.2 U	2 U
beta-BHC	2.7 U	3.3 U	2.3 U	4 UJ	6.6 UJ	2.3 U	2.2 U	2 U
delta-BHC	2.7 U	3.3 U	2.3 U	4 UJ	6.6 UJ	2.3 U	2.2 U	2 U
gamma-BHC (Lindane)	2.7 U	3.3 U	2.3 U	4 UJ	6.6 UJ	2.3 U	2.2 U	2 U
Heptachlor	2.7 U	3.3 U	2.3 U	4 UJ	6.6 UJ	2.3 U	2.2 U	2 U
Aldrin	2.7 U	3.3 U	2.3 U	4 UJ	6.6 UJ	2.3 U	2.2 U	2 U
Heptachlor epoxide	2.7 U	3.3 U	2.3 U	4 UJ	6.6 UJ	2.3 U	2.2 U	2 U
Endosulfan I	2.7 U	3.3 U	2.3 U	4 UJ	6.6 UJ	2.3 U	2.2 U	2 U
Dieldrin	5.2 U	6.3 U	4.4 U	2.9 JN	13 UJ	4.5 U	4.2 U	3.9 U
4,4'-DDE	5.2 U	6.3 U	4.4 U	7.8 UJ	13 UJ	4.5 U	4.2 U	3.9 U
Endrin	5.2 U	6.3 U	4.4 U	7.8 UJ	13 UJ	4.5 U	4.2 U	3.9 U
Endosulfan II	5.2 U	6.3 U	4.4 U	7.8 UJ	13 UJ	4.5 U	4.2 U	3.9 U
4,4'-DDD	5.2 U	6.3 U	4.4 U	7.8 UJ	13 UJ	4.5 U	4.2 U	3.9 U
Endosulfan sulfate	5.2 U	6.3 U	4.4 U	7.8 UJ	13 UJ	4.5 U	4.2 U	3.9 U
4,4'-DDT	5.2 U	6.3 U	4.4 U	7.8 UJ	13 UJ	4.5 U	4.2 U	3.9 U
Methoxychlor	27 U	33 U	23 U	40 UJ	66 UJ	23 U	22 U	20 U
Endrin ketone	5.2 U	6.3 U	4.4 U	5.7 JN	13 UJ	4.5 U	4.2 U	3.9 U
Endrin aldehyde	5.2 U	6.3 U	4.4 U	7.8 UJ	13 UJ	4.5 U	4.2 U	3.9 U
alpha-Chlordane	2.7 U	3.3 U	2.3 U	4 UJ	6.6 UJ	2.3 U	2.2 U	2 U
gamma-Chlordane	2.7 U	3.3 U	2.3 U	4 UJ	6.6 UJ	2.3 U	2.2 U	2 U
Toxaphene	270 U	330 U	230 U	400 UJ	660 UJ	230 U	220 U	200 U
Aroclor-1016	52 U	63 U	44 U	78 UJ	130 UJ	45 U	42 U	39 U
Aroclor-1221	100 U	130 U	90 U	160 UJ	260 UJ	90 U	86 U	80 U
Aroclor-1232	52 U	63 U	44 U	78 UJ	130 UJ	45 U	42 U	39 U
Aroclor-1242	52 U	63 U	44 U	78 UJ	130 UJ	45 U	42 U	39 U
Aroclor-1248	52 U	63 U	44 U	78 UJ	130 UJ	45 U	42 U	39 U
Aroclor-1254	280	61	44 U	78 UJ	130 UJ	45 U	42 U	39 U
Aroclor-1260	52 U	63 U	44 U	78 UJ	130 UJ	45 U	42 U	39 U

Sawmill Creek Dump Site
Metals
Sediment Samples

Location	SD-1	SD-2	SD-3	SD-4	SD-5	SD-6	SD-7	SD-8
Field ID	B975-03	B975-05	B975-07	B975-30	B975-16	B975-09	B975-11	B975-13
Date Colle	06/01/98	06/01/98	06/01/98	06/04/98	06/02/98	06/02/98	06/02/98	06/02/98
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Aluminum	9950	12600	8160	16800 J	11600 J	5820	6690	5380
Antimony	0.97 UJ	1.2 UJ	0.83 UJ	1.5 UJ	2.4 UJ	0.84 UJ	0.79 UJ	0.74 UJ
Arsenic	3.8	5.5	3	6.3 J	10 J	3.5	4	4.5
Barium	110	111	89.6	150 J	159 J	63.5	95.4	78.8
Beryllium	0.66 B	0.62 B	0.39 B	0.89 J	0.62 J	0.32 B	0.38 B	0.33 B
Cadmium	0.094 U	0.47 B	5.1	3.9 J	3.3 J	0.081 U	0.077 U	0.072 U
Calcium	5100	20500	13600	21400 J	41800 J	23100	30800	33800
Chromium	14.1	20.9	174	77.2 J	62 J	26.3	8.9	7.2
Cobalt	8.7 B	16.7 B	7 B	19.4 J	18.3 J	7 B	7.2 B	6.5 B
Copper	18.7	67.6	43.3	282 J	144 J	29	22.7	48
Iron	19200	24800	13900	30400 J	30500 J	11500	14600	12600
Lead	17.2 J	52.8 J	437 J	187 J	141 J	18.8 J	7.7 J	8 J
Magnesiu	3850	14300	8970	15400 J	20600 J	11000	8330	14600
Manganes	290	254	163	375 J	1030 J	234	367	417
Mercury	0.13 B	0.22	0.083 B	0.18 J	0.27 J	0.059 U	0.087 B	0.079 B
Nickel	14.5	29.9	109	93.9 J	61.2 J	17.7	11.7	9.8
Potassium	667 B	1240 B	765 B	1960 J	1340 J	572 B	666 B	529 B
Selenium	0.63 U	0.77 U	0.54 U	0.94 UJ	1.5 UJ	0.54 U	0.51 U	0.48 U
Silver	0.45 B	0.89 B	0.26 B	1.7 J	1.7 J	0.22 B	0.28 B	0.2 B
Sodium	86.8 B	163 B	102 B	286 J	223 J	101 B	87.5 B	128 B
Thallium	1.5 B	2.2 B	1.1 B	2 J	1.4 UJ	0.49 U	1.3 B	0.87 B
Vanadium	21.7	25.5	14.5	30.5 J	25.1 J	12 B	13.2	10.5 B
Zinc	77.3	277	2820 J	1130 J	1340 J	159	46.2	42.5
Cyanide	0.78 U	0.96 U	0.67 U	0.59 UJ	1.9 UJ	0.67 U	0.64 U	0.6 U

Sawmill Creek Dump Site
Other Parameters
Sediment/Waste Samples

Parameter	Units	SD-3	SD-5	SD-6	SD-7	SD-8	SD-4	TP-4
Field ID		B975-07	B975-16	B975-09	B975-11	B975-13	B975-30	TEST PIT 4-B
Date Collected		06/01/98	06/02/98	06/02/98	06/02/98	06/02/98	06/04/98	07/06/98
Total organic carbon	mg/kg	27200	100000	40300	37300	19400	60800	
Total solids	%	74.6	25.9	74.1	78.2	83.6	42.5	98.7
Flash point	degC							60 >
pH	pH							9.6
Reactivity (Water)								0 U
Reactivity (Cyanide)	mg/kg							100 U
Reactivity (Sulfide)	mg/kg							100 U

SOIL SAMPLES

Sawmill Creek Dump Site
Volatiles
Soil Samples

Location	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6	SB-8
Field ID	B975-31	B975-19	B975-17	B975-14	B975-24	B975-18	B975-01
Date Collected	06/04/98	06/03/98	06/02/98	06/02/98	06/03/98	06/03/98	06/01/98
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Depth (m)	3-3.7	1.8-2.4	2.4-3	1.5-2.4	1.8-2.4	1.5-2.1	0.6-1.2
Chloromethane	23 UJ	12 UJ	12 U	12 U	12 UJ	12 UJ	12 U
Bromomethane	23 UJ	12 U	12 UJ	12 UJ	12 U	12 U	12 UJ
Vinyl chloride	23 UJ	12 U	12 UJ	12 UJ	12 U	12 U	12 UJ
Chloroethane	23 UJ	12 UJ	12 U	12 U	12 UJ	12 UJ	12 U
Methylene chloride	23 UJ	12 U	12 U	12 U	12 U	12 U	12 U
Acetone	23 UJ	12 UJ	13 UJ	36 J	18 J	40 J	36 J
Carbon disulfide	23 UJ	12 U	2 J	12 U	12 U	12 U	12 U
1,1-Dichloroethene	23 UJ	12 U	12 U	12 U	12 U	12 U	12 U
1,1-Dichloroethane	23 UJ	12 U	12 U	12 U	12 U	12 U	12 U
1,2-Dichloroethene (Total)	23 UJ	12 U	12 U	12 U	12 U	12 U	12 U
2-Butanone	18 J	12 U	12 U	4 J	12 UJ	12 UJ	3 J
Chloroform	23 UJ	12 U	2 J	12 U	12 U	12 U	12 U
1,2-Dichloroethane	23 UJ	12 U	12 U	12 U	12 U	12 U	12 U
1,1,1-Trichloroethane	23 UJ	12 U	12 U	12 U	12 U	12 U	12 U
Carbon Tetrachloride	23 UJ	12 U	12 U	12 U	12 U	12 U	12 U
Bromodichloromethane	23 UJ	12 U	12 U	12 U	12 U	12 U	12 U
1,2-Dichloropropane	23 UJ	12 U	12 U	12 U	12 U	12 U	12 U
Cis-1,3-dichloropropene	23 UJ	12 U	12 U	12 U	12 U	12 U	12 U
Trichloroethene	23 UJ	12 U	12 U	12 U	12 U	12 U	12 U
Benzene	23 UJ	12 U	12 U	12 U	12 U	12 U	12 U
Dibromochloromethane	23 UJ	12 U	12 U	12 U	12 U	12 U	12 U
Trans-1,3-dichloropropene	23 UJ	12 U	12 U	12 U	12 U	12 U	12 U
1,1,2-Trichloroethane	23 UJ	12 U	12 U	12 U	12 U	12 U	12 U
Bromoform	23 UJ	12 U	12 U	12 U	12 U	12 U	12 U
4-Methyl-2-pentanone	2 J	12 UJ	12 UJ	12 UJ	12 UJ	12 UJ	12 UJ
2-Hexanone	23 UJ	12 UJ	12 UJ	12 UJ	12 UJ	12 UJ	12 UJ
Tetrachloroethene	23 UJ	12 U	2 J	12 U	12 U	12 U	12 U
1,1,2,2-Tetrachloroethane	23 UJ	12 U	12 U	12 U	12 U	12 U	12 U
Toluene	280 J	12 U	2 J	2 J	12 U	12 U	3 J
Chlorobenzene	23 UJ	12 U	1 J	12 U	12 U	12 U	5 J
Ethylbenzene	3 J	12 U	12 U	12 U	12 U	12 U	12 U
Styrene	23 UJ	12 U	12 U	12 U	12 U	12 U	12 U
Xylene (Total)	20 J	12 U	12 U	12 U	12 U	12 U	2 J

Sawmill Creek Dump Site
Semivolatiles
Soil Samples

Location	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6	SB-8
Field ID	B975-31	B975-19	B975-17	B975-14	B975-24	B975-18	B975-01
Date Collected	06/04/98	06/03/98	06/02/98	06/02/98	06/03/98	06/03/98	06/01/98
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Depth (m)	3-3.7	1.8-2.4	2.4-3	1.5-2.4	1.8-2.4	1.5-2.1	0.6-1.2
Phenol	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
Bis(2-chloroethyl)ether	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
2-Chlorophenol	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
1,3-Dichlorobenzene	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
1,4-Dichlorobenzene	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
1,2-Dichlorobenzene	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
2-Methylphenol	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
2,2'-Oxybis(1-chloropropane)	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
4-Methylphenol	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
N-nitroso-di-n-propylamine	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
Hexachloroethane	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
Nitrobenzene	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
Isophorone	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
2-Nitrophenol	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
2,4-Dimethylphenol	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
Bis(2-chloroethoxy)methane	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
2,4-Dichlorophenol	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
1,2,4-Trichlorobenzene	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
Naphthalene	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
4-Chloroaniline	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
Hexachlorobutadiene	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
4-Chloro-3-methylphenol	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
2-Methylnaphthalene	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
Hexachlorocyclopentadiene	750 UJ	400 UJ	410 UJ	390 UJ	390 UJ	390 UJ	800 UJ
2,4,6-Trichlorophenol	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
2,4,5-Trichlorophenol	1900 UJ	1000 U	1000 U	970 U	990 U	990 U	2000 U
2-Chloronaphthalene	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
2-Nitroaniline	1900 UJ	1000 U	1000 U	970 U	990 U	990 U	2000 U
Dimethylphthalate	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
Acenaphthylene	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
2,6-Dinitrotoluene	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
3-Nitroaniline	1900 UJ	1000 U	1000 U	970 U	990 U	990 U	2000 U
Acenaphthene	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U

Sawmill Creek Dump Site
Semivolatiles
Soil Samples

Location	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6	SB-8
Field ID	B975-31	B975-19	B975-17	B975-14	B975-24	B975-18	B975-01
Date Collected	06/04/98	06/03/98	06/02/98	06/02/98	06/03/98	06/03/98	06/01/98
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Depth (m)	3-3.7	1.8-2.4	2.4-3	1.5-2.4	1.8-2.4	1.5-2.1	0.6-1.2
2,4-Dinitrophenol	1900 UJ	1000 UJ	1000 UJ	970 UJ	990 UJ	990 UJ	2000 UJ
4-Nitrophenol	1900 UJ	1000 U	1000 UJ	970 UJ	990 U	990 U	2000 U
Dibenzofuran	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
2,4-Dinitrotoluene	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
Diethylphthalate	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
Fluorene	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
4-Chlorophenyl-phenyl ether	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
4-Nitroaniline	1900 UJ	1000 U	1000 U	970 U	990 U	990 U	2000 U
4,6-Dinitro-2-methylphenol	1900 UJ	1000 UJ	1000 U	970 U	990 UJ	990 UJ	2000 UJ
N-Nitrosodiphenylamine(1)	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
4-Bromophenyl-phenyl ether	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
Hexachlorobenzene	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
Pentachlorophenol	1900 UJ	1000 U	1000 U	970 U	990 U	990 U	2000 U
Phenanthrene	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
Anthracene	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
Carbazole	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
Di-n-butylphthalate	650 J	400 U	410 U	390 U	390 U	390 U	800 U
Fluoranthene	750 UJ	400 U	410 U	390 U	390 U	390 U	89 JD
Pyrene	750 UJ	400 U	410 U	390 U	390 U	390 U	86 JD
Butylbenzylphthalate	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
Benzo(a)anthracene	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
3,3-Dichlorobenzidine	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
Chrysene	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
Bis(2-ethylhexyl)phthalate	160 J	400 U	410 U	390 U	390 U	390 U	620 JD
Di-n-octylphthalate	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
Benzo(b)fluoranthene	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
Benzo(k)fluoranthene	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
Benzo(a)pyrene	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
Indeno(1,2,3-cd)pyrene	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
Dibenz(a,h)anthracene	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U
Benzo(g,h,i)perylene	750 UJ	400 U	410 U	390 U	390 U	390 U	800 U

Sawmill Creek Dump Site
Pesticides/PCBs
Soil Samples

Location	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6	SB-8
Field ID	B975-31	B975-19	B975-17	B975-14	B975-24	B975-18	B975-01
Date Collected	06/04/98	06/03/98	06/02/98	06/02/98	06/03/98	06/03/98	06/01/98
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Depth (m)	3-3.7	1.8-2.4	2.4-3	1.5-2.4	1.8-2.4	1.5-2.1	0.6-1.2
alpha-BHC	3.8 UJ	2 U	2.1 U	2 U	2 U	2 U	2 U
beta-BHC	3.8 UJ	2 U	2.1 U	2 U	2 U	2 U	2 U
delta-BHC	3.8 UJ	2 U	2.1 U	2 U	2 U	2 U	2 U
gamma-BHC (Lindane)	3.8 UJ	2 U	2.1 U	2 U	2 U	2 U	2 U
Heptachlor	3.8 UJ	2 U	2.1 U	2 U	2 U	2 U	2 U
Aldrin	3.8 UJ	2 U	2.1 U	2 U	2 U	2 U	2 U
Heptachlor epoxide	3.8 UJ	2 U	2.1 U	2 U	2 U	2 U	2 U
Endosulfan I	3.8 UJ	2 U	2.1 U	2 U	2 U	2 U	2 U
Dieldrin	7.4 UJ	4 U	4 U	3.8 U	3.9 U	3.9 U	3.9 U
4,4'-DDE	7.4 UJ	4 U	4 U	3.8 U	3.9 U	3.9 U	3.9 U
Endrin	7.4 UJ	4 U	4 U	3.8 U	3.9 U	3.9 U	3.7 JN
Endosulfan II	7.4 UJ	4 U	4 U	3.8 U	3.9 U	3.9 U	3.9 U
4,4'-DDD	7.4 UJ	4 U	4 U	3.8 U	3.9 U	3.9 U	4.7 JN
Endosulfan sulfate	7.4 UJ	4 U	4 U	3.8 U	3.9 U	3.9 U	3.9 J
4,4'-DDT	7.4 UJ	4 U	4 U	3.8 U	3.9 U	3.9 U	3.9 U
Methoxychlor	38 UJ	20 U	21 U	20 U	20 U	20 U	20 U
Endrin ketone	7.4 UJ	4 U	4 U	3.8 U	3.9 U	3.9 U	3.9 U
Endrin aldehyde	7.4 UJ	4 U	4 U	3.8 U	3.9 U	3.9 U	3.9 U
alpha-Chlordane	3.8 UJ	2 U	2.1 U	2 U	2 U	2 U	2 U
gamma-Chlordane	3.8 UJ	2 U	2.1 U	2 U	2 U	2 U	2 U
Toxaphene	380 UJ	200 U	210 U	200 U	200 U	200 U	200 U
Aroclor-1016	74 UJ	40 U	40 U	38 U	39 U	39 U	39 U
Aroclor-1221	150 UJ	81 U	82 U	78 U	79 U	79 U	80 U
Aroclor-1232	74 UJ	40 U	40 U	38 U	39 U	39 U	39 U
Aroclor-1242	74 UJ	40 U	40 U	38 U	39 U	39 U	39 U
Aroclor-1248	74 UJ	40 U	40 U	38 U	39 U	39 U	39 U
Aroclor-1254	74 UJ	40 U	40 U	38 U	39 U	39 U	380
Aroclor-1260	74 UJ	40 U	40 U	38 U	39 U	39 U	39 U

Sawmill Creek Dump Site
Metals
Soil Samples

Location	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6	SB-8
Field ID	B975-31	B975-19	B975-17	B975-14	B975-24	B975-18	B975-01
Date Collected	06/04/98	06/03/98	06/02/98	06/02/98	06/03/98	06/03/98	06/01/98
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Depth (m)	3-3.7	1.8-2.4	2.4-3	1.5-2.4	1.8-2.4	1.5-2.1	0.6-1.2
Aluminum	5320 J	4390	3320	3030	2720	10800	12400
Antimony	1.4 UJ	2.3 J	0.76 UJ	0.72 UJ	0.45 UJ	0.83 J	0.74 UJ
Arsenic	2.8 J	4.1 J	4.2	1.6 B	1.9 B	3.3	12.5
Barium	91.5 J	32.2 B	27.5 B	19.2 B	24.2 B	106	78.6
Beryllium	0.28 J	0.26 B	0.24 B	0.17 B	0.15 B	0.5 B	0.58 B
Cadmium	0.14 UJ	0.072 U	0.074 U	0.07 U	0.071 U	0.071 U	0.072 U
Calcium	81400 J	37200	1830	10200	27800	4840	21700
Chromium	11.7 J	8.9	5.5	3.1	6	17.4	16
Cobalt	6.8 J	3.4 B	4.4 B	2.8 B	2.9 B	9.4 B	16.8
Copper	23.5 J	11.3	14.6	9.8	10.9	26.1	580
Iron	12000 J	9990	13200	7200	6770	19000	28600
Lead	6.1 J	3.9 J	4.1 J	1.6	2.7 J	8.1 J	34.4 J
Magnesium	23700 J	16400	1280	2000	10200	5180	14000
Manganese	483 J	189	57.9	204	298	350	760
Mercury	0.11 UJ	0.16 J	0.059 U	0.05 U	0.059 U	0.069 J	0.095 B
Nickel	14.4 J	8.9 B	8.1 B	5.6 B	7.1 B	19.8	32.9
Potassium	1040 J	629 B	247 B	386 B	393 B	971 B	923 B
Selenium	0.9 UJ	0.68 B	0.49 U	0.46 U	0.77 B	1.1 B	0.48 U
Silver	0.27 UJ	0.72 B	0.32 B	0.14 U	0.071 U	0.071 U	0.59 B
Sodium	291 J	113 B	40.7 B	40.8 B	72.5 B	145 B	97.9 B
Thallium	0.81 UJ	0.78 B	0.77 B	0.45 B	0.45 U	0.45 U	2.3 B
Vanadium	11.2 J	11.8 B	12.8	5.9 B	6.5 B	23.9	16.8
Zinc	37.5 J	28.2 J	25.6	14.2	18.5 J	49.3 J	255
Cyanide	0.56 UJ	0.6 U	0.61 U	0.58 U	0.59 U	0.59 U	0.6 U