176442

SITE ASSESSMENT REPORT
FOR
76TH & ALBANY
CHICAGO, COOK COUNTY, ILLINOIS
TDD: S05-9602-024
PAN: 6F2401SI

July 12, 1996

Prepared for:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Emergency and Enforcement Response Branch
77 West Jackson Boulevard
Chicago, Illinois 60604

Prepared by: _____ Date: 7/12/96
Todd Murphy, START Project Manager

Reviewed by: _____ Date: 7/12/96
Patrick Zwilling, Assistant START Program Manager

Approved by: _____ Date: 7/12/96
Thomas Kouris, START Program Manager

ecology and environment, inc.
111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415
International Specialists in the Environment

recycled paper

TABLE OF CONTENTS

Section		Page
1	INTRODUCTION	1-1
2	SITE BACKGROUND	2-1
3	SITE ASSESSMENT	3-1
4	ANALYTICAL RESULTS	4-1
5	DISCUSSION OF POTENTIAL THREATS	5-1
6	REMOVAL COST ESTIMATE	6-1

Appendix		Page
A	SITE PHOTOGRAPHS	A-1
B	ANALYTICAL DATA PACKAGE	B-1

LIST OF FIGURES

Figure		Page
2-1	Site Location Map	2-2
2-2	Site Features Map	2-3
3-1	Test Pit and Sample Location Map	3-4

LIST OF TABLES

Table		Page
3-1	Test Pit Descriptions and Sample Summary	3-3
4-1	Analytical Results	4-2

1. INTRODUCTION

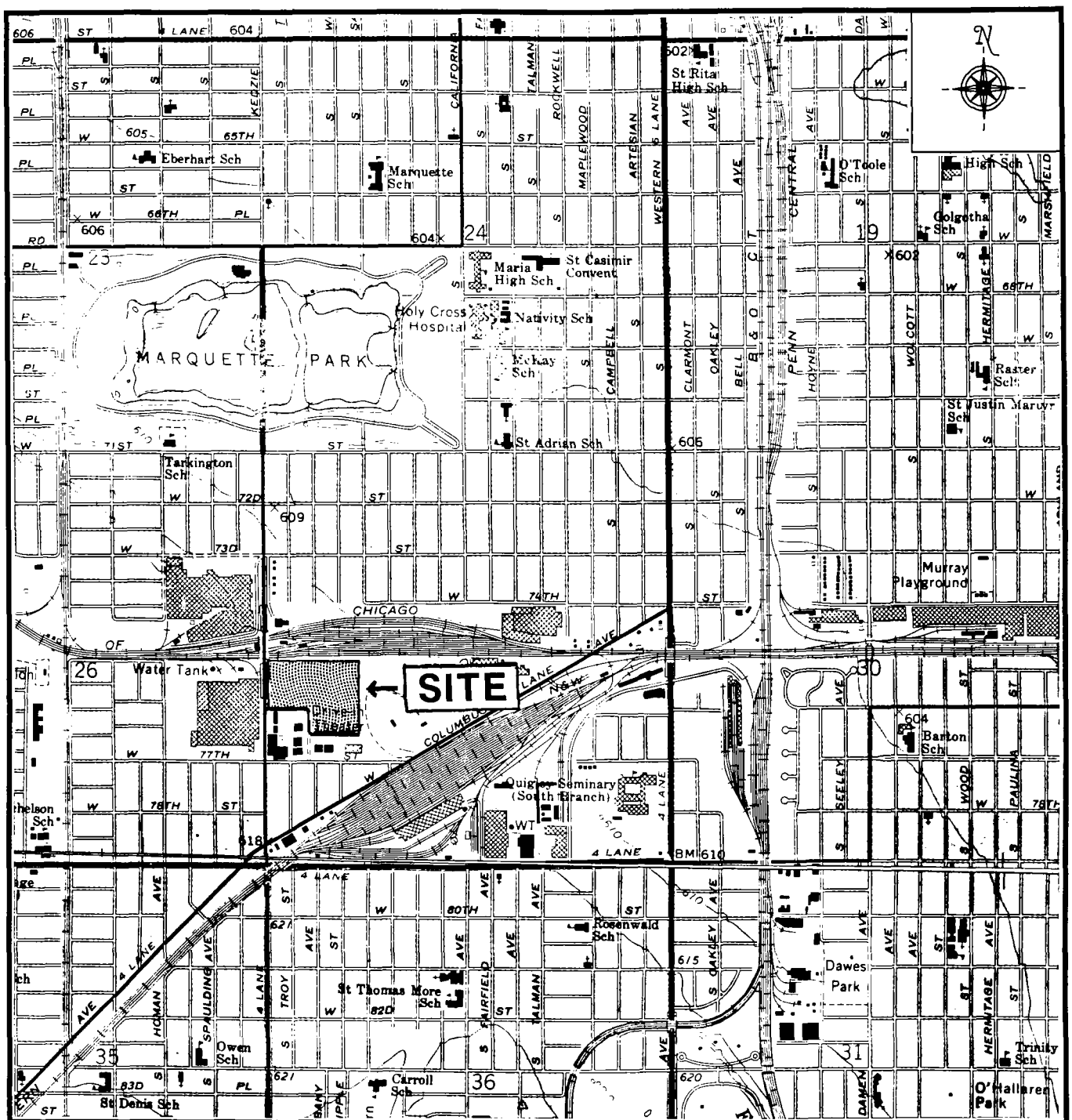
The Ecology and Environment, Inc. (E & E), Superfund Technical Assessment and Response Team (START) was tasked by the Emergency and Enforcement Response Branch (EERB) of the United States Environmental Protection Agency (U.S. EPA) to conduct a site assessment at the 76th & Albany site in Chicago, Cook County, Illinois, under Technical Direction Document (TDD) S05-9602-024. The site assessment was performed in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), and Title 40 of the Code of Federal Regulations (CFR) Section 300.415 Paragraph (b)(2) to evaluate on-site conditions and possible threats to human health, welfare, and the environment. This report summarizes these activities.

2. SITE BACKGROUND

The 76th & Albany site covers an area four city blocks square, located two blocks north of the end of Albany Street at 76th Street in Chicago, Cook County, Illinois (Figure 2-1). Coordinates for the site are latitude 41° 45' 20" North and longitude 87° 42' 08" West, as measured using a hand-held Global Positioning System (GPS) device.

Illegal refuse dumping has occurred on the northern and southern potions of the site. The northern portion of the site contains waste disposed in two distinct areas: the east area and the west area. The east area contains fill regions of unknown depths consisting of soil, auto fluff, and construction debris such as asphalt, bricks, concrete, metal, plastic, slag, wood, and roofing shingles. The west area contains a refuse pile approximately 15 by 30 feet in area and 5 feet high consisting principally of auto fluff. Both areas are vegetated. The southern portion of the site contains a fill area and pile of concrete debris.

On February 22, 1995, the Illinois Environmental Protection Agency (IEPA) initiated a cooperative effort with the City of Chicago for investigation and enforcement activities, including eventual remediation at the site. On December 13, 1995, a pre-enforcement conference was held between representatives of IEPA and one potentially responsible party (PRP), the Renella-Palumbo Company. The Renalla-Palumbo Company owns property adjacent to the west side of site. At this meeting, Renella-Palumbo committed to conduct sampling of the west area of the site.

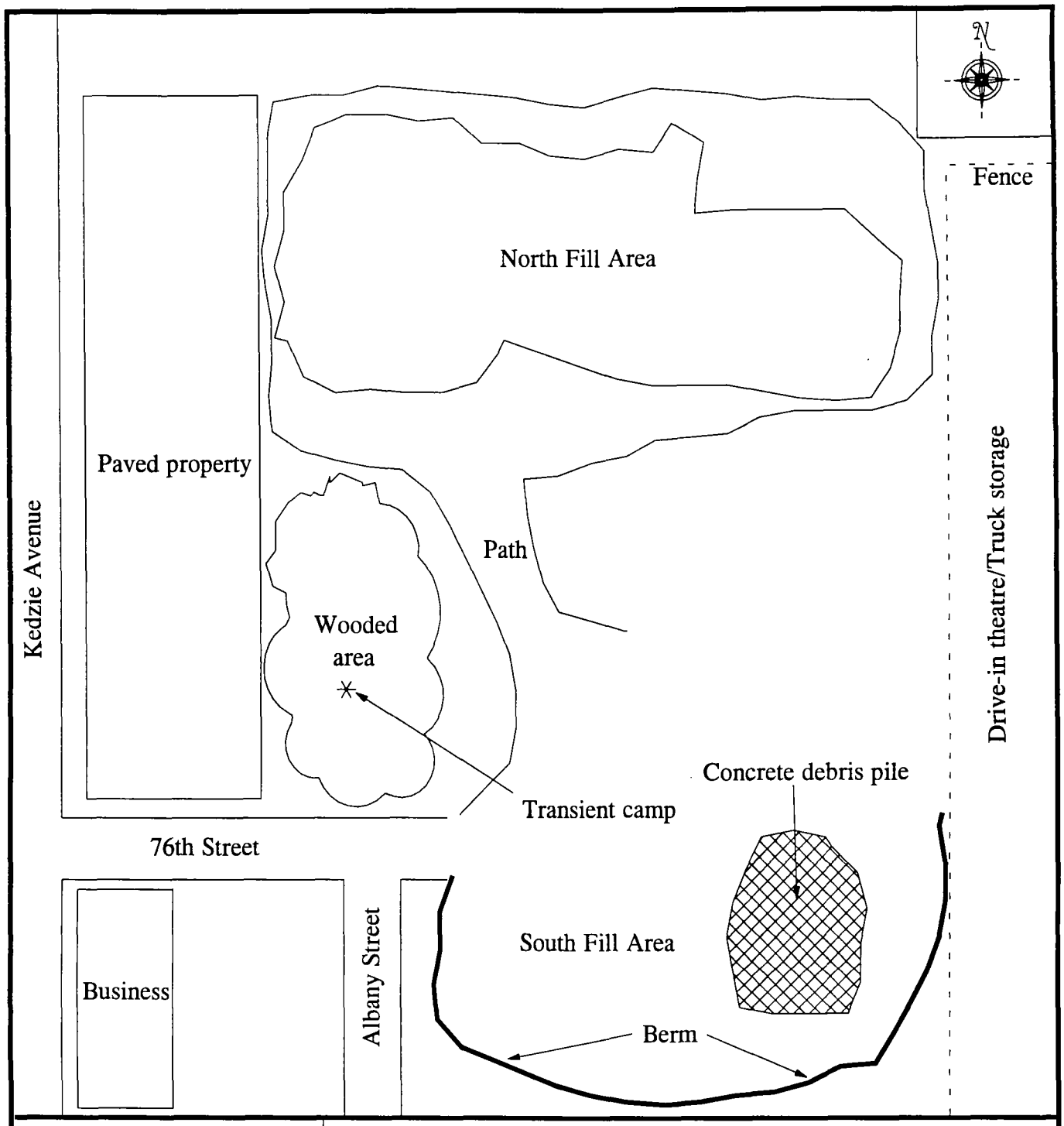


Quadrangle Location

ecology and environment, inc.

Region 5 - Superfund Technical Assessment and Response Team
33 North Dearborn Street, Chicago, Illinois 60602

TITLE: Site Features Map	FIGURE #: 2-1
SITE: 76th & Albany	SCALE: 1 in = 2,000 ft
CITY: Chicago STATE: Illinois	TDD: S05-9602-024
SOURCE: U.S.G.S. Topographical 7.5 Minute Series Englewood and Blue Island, Illinois Quadrangles	DATE: 1963 REVISED: 1980



ecology and environment, inc.

Region 5 - Superfund Technical Assessment and Response Team
33 North Dearborn Street, Chicago, Illinois 60602

TITLE: Site Features Map	FIGURE #: 2-2
SITE: 76th & Albany	SCALE: Not to Scale
CITY: Chicago STATE: Illinois	TDD: S05-9602-024
SOURCE: Ecology and Environment, Inc.	DATE: 1996 REVISED:

3. SITE ASSESSMENT

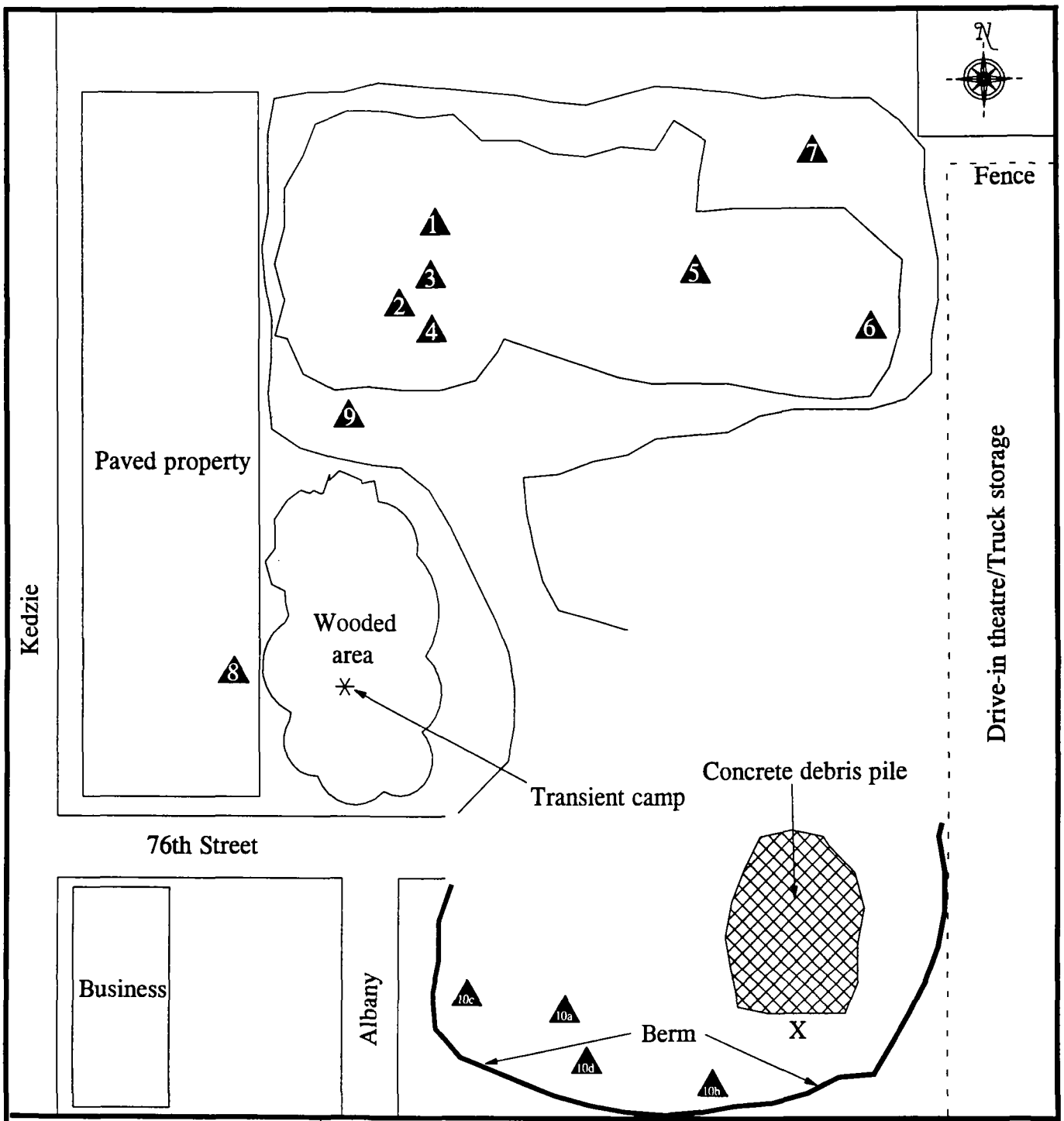
On March 15, 1996, U.S. EPA On-Scene Coordinator (OSC) Brad Benning and START members (STARTms) Karen Rydzewski and Todd Murphy conducted a site assessment of the 76th and Albany site. Prior to the assessment START had retained the services of R. Carlson and Sons, Inc., of Mokena, Illinois, for the excavation of test pits. Refer to Appendix A for photodocumentation of the site assessment. START conducted a reconnaissance of the site. A transient camp was observed in a wooded area on site, and several children walked on site during the site assessment.

Thirteen test pits were excavated using a Kobelco - Mark III SK 200 LC excavator. The test pits were approximately 8 feet long, 4 feet wide, and varied in depth between 5 and 20 feet, depending on the extent of the fill material encountered or on the ability of the excavator to penetrate the material (Table 3-1). The excavated material was placed in stockpiles, visually examined, and air monitored for volatile organic compounds (VOCs), oxygen, lower explosive limit (LEL), and radiation levels at several locations in the pile. A Photovac Microtip photoionization detector (PID) was used to measure VOCs. Oxygen and LEL were measured using a combustible gas indicator (CGI). A Victoreen Thyac III radiation detector with a sodium iodide probe was used to measure alpha, beta, and gamma radiation. The monitoring device detected no oxygen, LEL, or radiation level stockpile readings above background (upwind). Test pit coordinates were determined using a hand-held Trimble Navigation - Scout GPS device.

START collected soil samples from 11 of the 13 pits. The samples were collected using a stainless steel spoon and bowl to obtain a homogenized composite sample from five to 10 locations in the stockpiled soil. After collection of the samples, the test pits were backfilled. A composite surface soil sample (Sample 76-8) was also collected on the west end of an open asphalt-paved area on the Renella-Palumbo property. The sample was collected from approximately six to 10 locations in the area and consisted principally of auto fluff (Figure 3-1).

Samples 76-0, 76-1, 76-2, 76-6, 76-8 and 76-10 were picked up at the E & E Chicago

warehouse on March 18, 1996, by a representative of National Environmental Testing, Inc. (NET), Bartlett, Illinois. The samples were analyzed for polychlorinated biphenyls (PCBs), toxicity characteristic leachate procedure (TCLP) metals, VOCs, and semivolatile organic compounds (SVOCs) under analytical TDD S05-9602-814. Quality Assurance/Quality Control (QA/QC) level II data, with a seven-calendar-day verbal turnaround, and a 14-day hard copy, were requested. Samples 76-5, 76-7, and 76-9 were not analyzed at the direction of the OSC.



Legend

1 = Pit location/number

X = Dead tree

10a = Composite sample point

ecology and environment, inc.

Region 5 - Superfund Technical Assessment and Response Team
33 North Dearborn Street, Chicago Illinois 60602

TITLE: Test Pit and Sample Location Map	FIGURE #: 3-1
SITE: 76th & Albany	SCALE: Not to Scale
CITY: Chicago STATE: Illinois	TDD: S05-9602-024
SOURCE: Ecology and Environment, Inc.	DATE: 1996 REVISED:

Table 3-1

TEST PIT DESCRIPTIONS AND SAMPLE SUMMARY
76TH & ALBANY SITE
CHICAGO, COOK COUNTY, ILLINOIS
MARCH 15, 1996

Pit #	Sample Designation	Pit Depth (feet)	Pit Coordinates	PID readings (ppm above background)	Description of Excavated Material
1	76-1	18	N 41°45.371' W 87°41.994'	1-1.5	Soil, construction debris, water pockets
2	76-2	20	N 41°45.363' W 87°42.003'	12-16 (auto fluff)	Top ½: soil, concrete/wood debris. Lower ½: auto fluff
3	No Sample	10	N 41°45.367' W 87°41.994'	2	Soil, construction debris
4	No Sample	20	N 41°45.361' W 87°41.994'	2-4	Soil, concrete debris
5	76-5	20	N 41°45.375' W 87°41.925'	0 - 5	Sandy soil and large chunks of concrete (possibly barriers)
6	76-6/76-0 (duplicate)	20	N 41°45.365' W 87°41.891'	2 - 5	Soil, concrete/brick/wood debris
7	76-7	15	N 41°45.419' W 87°41.905'	0 - 10	Soil, concrete/brick/wood debris
8*	76-8	NA	N 41°45.292' W 87°42.137'	ND	Mostly auto fluff
9	76-9	20	N 41°45.356' W 87°42.047'	0	Black soil with rocks and sand, concrete/brick/wood debris
10a	76-10	6	N 41°45.294' W 87°41.965'	ND	Auto fluff, clay
10b	(composite of 10a-d)	5	N 41°45.235' W 87°41.949'	ND	Soil, auto fluff
10c**		NA	N 41°45.315' W 87°42.030'	ND	Auto fluff
10d		5	N 41°45.268' W 87°41.964'	ND	Auto fluff

Key:

NA = Not applicable.
N = Not determined.
ppm = Parts per million by volume.
* = "Pit 8" consisted of ~6-10 surface locations (see Figure 3-1).
** = "Pit 10c" consisted of an existing auto fluff pile.

Source: E & E, Field Logbook, 76th & Albany Site, March 15, 1996 (TDD: S05-9602-024).

4. ANALYTICAL RESULTS

A material is considered a hazardous waste if the concentration of any regulated parameter exceeds the regulatory limit for that parameter. The hazardous waste criteria of the Resource Conservation and Recovery Act (RCRA) under 40 CFR 261.24 set the regulatory limits for metals, VOCs, and SVOCs. Table 4-1 presents the analytical results for the samples collected during the site assessment. Analytical results show that Samples 76-2 and 76-10 had TCLP lead concentrations (19 and 35 milligrams per liter [mg/L], respectively) exceeding the regulatory limit of 5 mg/L. These results indicate that the material from these locations is considered to be a hazardous waste.

The regulatory limits for PCBs, as established by the Toxic Substances Control Act (TSCA), are 25 milligrams per kilogram (mg/kg) for removal and an action level of 50 mg/kg. Sample 76-2 was found to contain the PCB Aroclor-1242 at 30 mg/kg, and sample 76-10 contained Aroclor-1242 at 19 mg/kg. Refer to Appendix B for the analytical data package and QA/QC review.

Table 4-1

ANALYTICAL RESULTS
76TH & ALBANY SITE
CHICAGO, COOK COUNTY, ILLINOIS
MARCH 15, 1996

Parameter	Sample Designation					
	76-1	76-2	76-6	76-0[a]	76-8	76-10
TCLP Arsenic (mg/L)	ND	ND	ND	ND	ND	0.431
TCLP Barium (mg/L)	0.618	4.26	0.53	0.57	1.76	2.38
TCLP Cadmium (mg/L)	ND	0.18	ND	ND	0.126	0.218
TCLP Lead (mg/L)	0.3	19	ND	ND	4.11	35
Total Aroclor 1242 (mg/kg)	ND	30[b]	ND	ND	3.4[b]	19[b]
TCLP VOCs (mg/L)	ND	ND	ND	ND	ND	ND
TCLP SVOCs (mg/L)	ND	ND	ND	ND	ND	ND

Key:
a = Duplicate of sample 76-6.
b = Estimated value.
ND = Not detected.
TCLP = Toxicity Characteristics Leaching Procedure.
mg/L = Milligrams per liter.
mg/kg = Milligrams per kilogram.
VOCs = Volatile organic compounds.
SVOCs = Semivolatile organic compounds.

Source: National Environmental Testing, Inc., Bartlett, Illinois, March 26, 1996 (Analytical TDD: S05-9602-814).

5. DISCUSSION OF POTENTIAL THREATS

Conditions present at the 76th & Albany Site warrant removal actions as set forth in the NCP, CFR 300.415(b)(2). These conditions include, but are not limited to, the following:

- **Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants.** Lead was detected in two of the soil samples at concentrations much higher than the regulatory limit. Lead is considered a cumulative poison and poses an inhalation and ingestion hazard. Long-term exposure to lead can result in a build-up in the body, an effect known as bioaccumulation. Prolonged exposure to lead could result in kidney damage, anemia, and decreased fertility. Elevated lead exposure before or during pregnancy may cause birth defects. The site is unsecured. Two preteenaged boys were observed playing near one of the backfilled test pits during the site assessment.

- **Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.** Strong winds may carry lead dust to nearby residential areas, creating a potential health hazard.

6. REMOVAL COST ESTIMATE

Using aerial photographs taken on February 13, 1996, it has been estimated that 375,000 cubic yards (yd^3) of material should be removed from the 76th & Albany site. Some of the material contains lead at hazardous concentrations and will require treatment prior to disposal. Removal of the 375,000 yd^3 of material (nonhazardous and stabilized hazardous material) from the site to a permitted RCRA Subtitle D landfill would cost approximately $ 13,500,000. The methods and costs are explained as follows (note that this cost estimate does not include administrative or project management costs):

EXCAVATION

- Use of one CAT 350 or equivalent excavator to load 60 trucks per day with 15 yd^3 of material.
- 15 yd^3/load x 60 loads/day = 1,000 yd^3/day material removed.
- 375,000 yd^3/1,000 yd^3/day $\approx$ 375 days of excavation.
- 375 days x $ 2,000/day machine rental and labor = $ 750,000 total excavation cost.

TRANSPORTATION

- Use of 6 trucks to transport a total of 60 loads per day to a facility within 25 miles of Chicago.
- 375 days x 60 loads/day = 22,500 loads.
- $ 150/load x 22,500 loads = $ 3,375,000 total transportation cost.

TREATMENT OF LEAD-CONTAMINATED SOIL/AUTO FLUFF

- Assume 25% of the material is hazardous (high lead concentration) and requires

treatment/stabilization at a price of \$ 20/yd^3.

- \$ 20/yd^3 x (.25 x 3,375,000 yd^3) = \$1,875,000 for treatment/stabilization of hazardous waste.

DISPOSAL

- Disposal cost is estimated at \$ 20/yd^3 for nonhazardous material and stabilized material.
- \$ 20/yd^3 x 375,000 yd^3 = \$ 7,500,000 disposal cost.

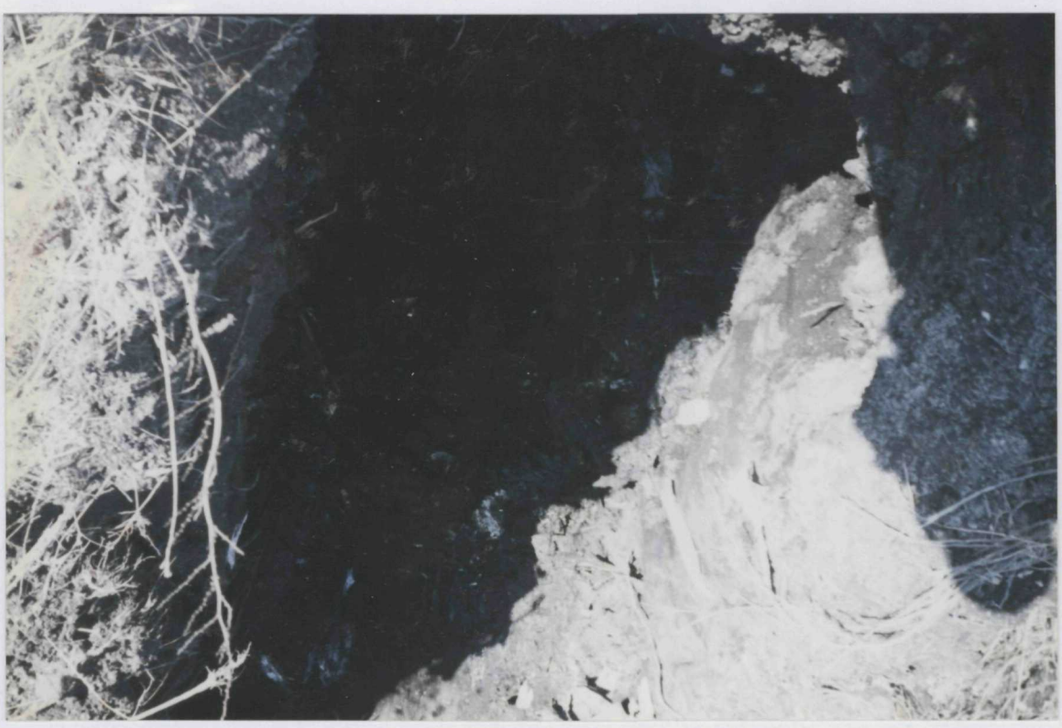
APPENDIX A

SITE PHOTOGRAPHS

MasterBrand BTM00033 M

SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 0855
LOCATION: Chicago, IL **DIRECTION:** NW **PHOTOGRAPHER:**K. Rydzewski
SUBJECT: Test Pit 1 excavated material.

SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 0855
LOCATION: Chicago, IL **DIRECTION:** NW **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Test Pit 1 sample (76-1) and excavated material.



SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 0855
LOCATION: Chicago, IL **DIRECTION:** NW **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Test Pit 1.

SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 0935
LOCATION: Chicago, IL **DIRECTION:** W **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Test Pit 2 excavated material.

SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 0935
LOCATION: Chicago, IL **DIRECTION:** NW **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Test Pit 2.

SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 0935
LOCATION: Chicago, IL **DIRECTION:** W **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Test Pit 2 sample (76-2) and excavated material.

MasterBrand BTM00033 M

SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 0950
LOCATION: Chicago, IL **DIRECTION:** Unknown **PHOTOGRAPHER:** K.Rydzewski
SUBJECT: Test Pit 3.

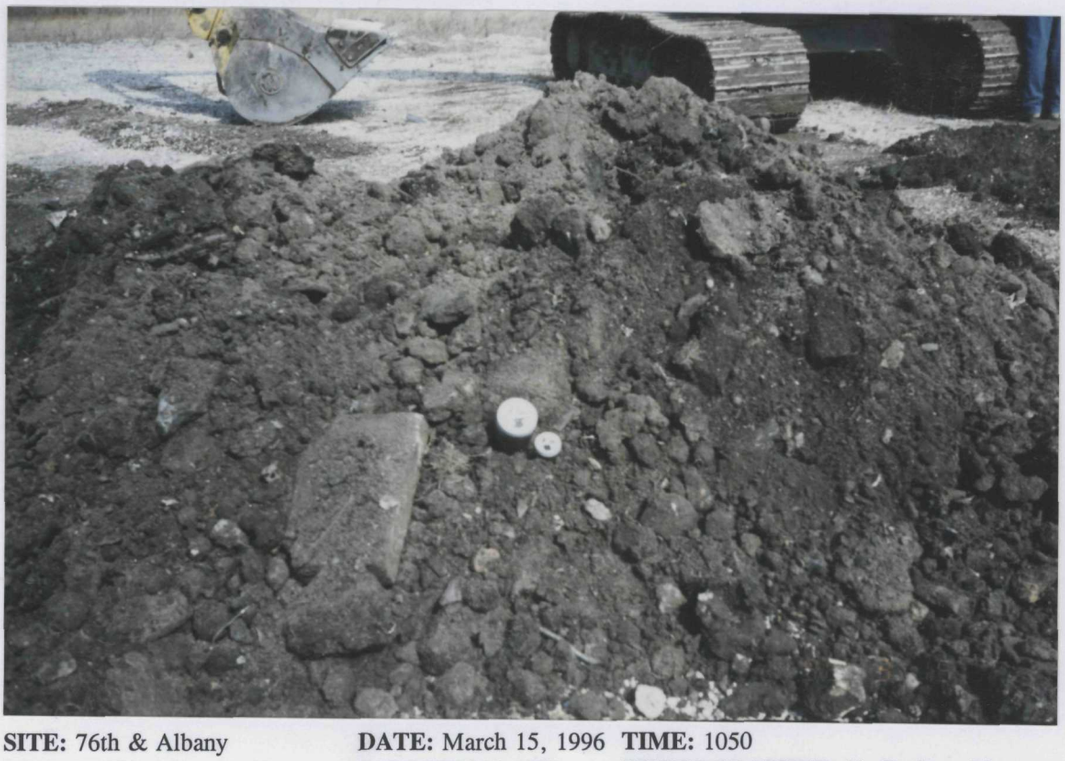
SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 0950
LOCATION: Chicago, IL **DIRECTION:** Unknown **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Test Pit 3 excavated material.

SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 1010
LOCATION: Chicago, IL **DIRECTION:** WSW **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Test Pit 4 excavated material.

SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 1010
LOCATION: Chicago, IL **DIRECTION:** Unknown **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Test Pit 4.

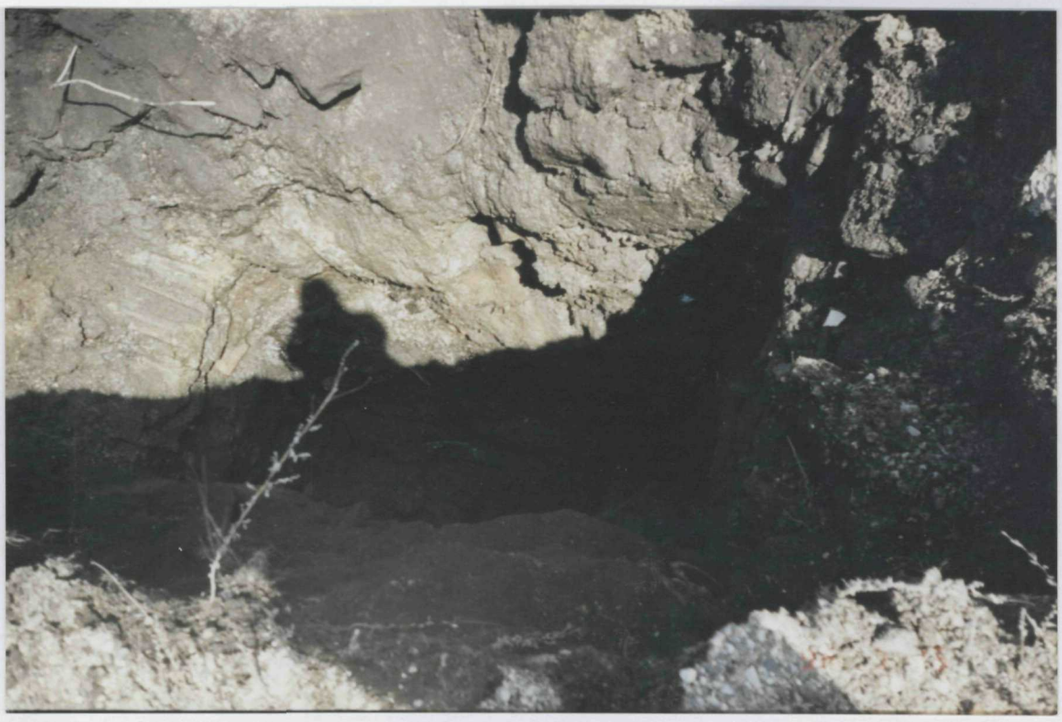
MasterBrand BTM00033 M

SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 1050
LOCATION: Chicago, IL **DIRECTION:** NW **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Test Pit 2 and surrounding test pits.



SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 1050
LOCATION: Chicago, IL **DIRECTION:** NW **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Test Pit 5 sample (76-5) and excavated material.

SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 1145
LOCATION: Chicago, IL **DIRECTION:** NW **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Test Pit 6.



SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 1145
LOCATION: Chicago, IL **DIRECTION:** NW **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Test Pit 6.

MasterBrand BTM00033 M

SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 1145
LOCATION: Chicago, IL **DIRECTION:** NW **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Test Pit 6.

SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 1152
LOCATION: Chicago, IL **DIRECTION:** NW **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Test Pit 6 sample (76-6), duplicate sample (76-0), and excavated material.

SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 1202
LOCATION: Chicago, IL **DIRECTION:** NNE **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Lower east fill area including Test Pit 7 excavation.

SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 1202
LOCATION: Chicago, IL **DIRECTION:** NNE **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Lower east fill area including Test Pit 7 excavation.

MasterBrand BTM00033 M

SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 1202
LOCATION: Chicago, IL **DIRECTION:** WSW **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Upper east fill area including Test Pit 1-3,5,6 excavations.

SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 1202
LOCATION: Chicago, IL **DIRECTION:** WSW **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Upper east fill area including Test Pit 1-4 excavations and edges of Test Pit 5 & 6 excavations.

SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 1207
LOCATION: Chicago, IL **DIRECTION:** N **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Test Pit 7.

SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 1207
LOCATION: Chicago, IL **DIRECTION:** N **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Test Pit 7 excavated material.

MasterBrand BTM00033 M

SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 1207
LOCATION: Chicago, IL **DIRECTION:** Unknown **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Test Pit 7 sample (76-7) and excavated material.

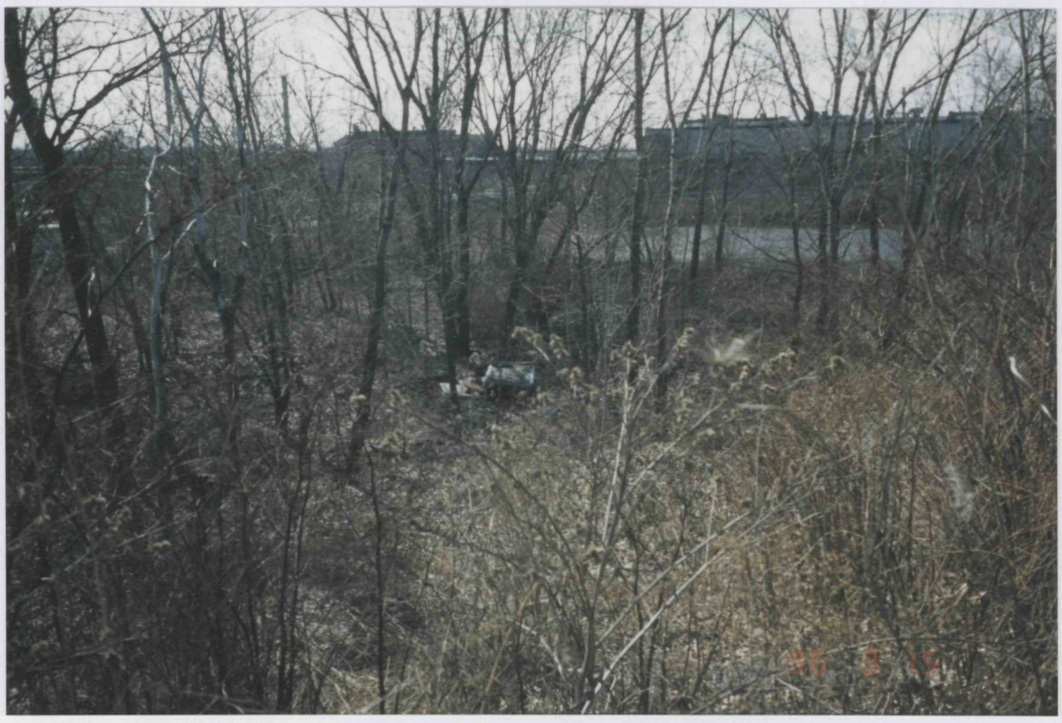
SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 1335
LOCATION: Chicago, IL **DIRECTION:** E **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Renella-Palumbo property composite soil sample (76-8) material.

SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 1336
LOCATION: Chicago, IL **DIRECTION:** NW **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Renalla-Palumbo property.

SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 1336
LOCATION: Chicago, IL **DIRECTION:** N **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Renalla-Palumbo property.

MasterBrand BTM00033 M

SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 1336
LOCATION: Chicago, IL **DIRECTION:** NE **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Renalla-Palumbo property.



SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 1336
LOCATION: Chicago, IL **DIRECTION:** Unknown **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Transient Shed.

SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 1400
LOCATION: Chicago, IL **DIRECTION:** E **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Test Pit 9.

SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 1400
LOCATION: Chicago, IL **DIRECTION:** NE **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Test Pit 9 excavated material.

MasterBrand BTM00033 M

SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 1405
LOCATION: Chicago, IL **DIRECTION:** NW **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Test Pit 9 sample (76-9) and excavated material.

SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** 1420
LOCATION: Chicago, IL **DIRECTION:** Unknown **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Test Pit 10a.

MasterBrand BTM00033 M

SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** Unknown
LOCATION: Chicago, IL **DIRECTION:** Unknown **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Unknown.

SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** Unknown
LOCATION: Chicago, IL **DIRECTION:** E **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Kobelco Mark III SK 200 LC Excavator with operator in west fill area.

SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** Unknown
LOCATION: Chicago, IL **DIRECTION:** Unknown **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: Unknown.

SITE: 76th & Albany **DATE:** March 15, 1996 **TIME:** Unknown
LOCATION: Chicago, IL **DIRECTION:** S **PHOTOGRAPHER:** K. Rydzewski
SUBJECT: West fill area concrete block pile.

APPENDIX B

ANALYTICAL DATA PACKAGE

ecology and environment, inc.
International Specialists in the Environment

111 West Jackson Boulevard
Chicago, Illinois 60604
Tel: (312) 663-9415, Fax: (312) 663-0791

M E M O R A N D U M

DATE: April 17, 1996

TO: Karen Rydzewski, START Project Manager, E & E, Chicago, Illinois

FROM: David Hendren, START Analytical Services Manager, E & E, Chicago, Illinois

THROUGH: Mary Jane Ripp, Assistant START Program Manager, E & E, Chicago, Illinois

SUBJECT: Organic Data Quality Review for Toxicity Characteristic Leaching Procedure (TCLP) Volatile Organic Compounds, 76th and Albany, Chicago, Cook County, Illinois

REFERENCE: Project TDD S05-9602-024 Analytical TDD S05-9602-814
Project PAN 6F2401SI Analytical PAN 6FAN01TA

The data quality assurance (QA) review of six soil samples collected from the 76th and Albany site is complete. The samples were collected on March 15, 1996, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The samples were submitted to NET Laboratories, Bartlett, Illinois, for analyses. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Methods 1311 and 8240.

Sample Identification

START Identification No.	Laboratory Identification No.
76-1	348230
76-2	348231
76-0	348232
76-6	348233
76-8	348234
76-10	348235

recycled paper

Data Qualifications:

I. Sample Holding Time: Acceptable

The samples were collected on March 15, 1996, and analyzed on March 25, 1996. This is within the 14-day holding time limit.

II. Gas Chromatography/Mass Spectrometry (GC/MS) Tuning: Acceptable

GC/MS tuning to meet ion abundance criteria using bromofluorobenzene (BFB) were acceptable and samples were analyzed within 12 hours of BFB tuning.

III. Calibrations:

- Initial Calibration: Acceptable

A five-point initial calibration was performed prior to analysis. All average response factors were greater than 0.05. The percent relative standard deviations (%RSDs) between response factors were less than 30% for all target compounds.

- Continuing Calibration: Acceptable

The percent differences of the response factors were less than 25%, as required for target compounds.

IV. Blank: Acceptable

A method blank was analyzed with the samples. No target compounds or contaminants were detected in the blank.

V. Internal Standards: Acceptable

The areas of the internal standards in the samples were within -50% to +100% of the associated calibration check standard. The retention time of the internal standard was within the 30-second control limit.

VI. Compound Identification: Not Applicable

There were no detected target compounds in the samples.

VII. Additional QC Checks: Acceptable

The recoveries of the surrogates used in the samples and blank were within laboratory-established guidelines.

VIII. Overall Assessment of Data for Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990), Data Validation Procedures, Section 5.0, VOAs By GC/MS analysis. Based upon the information provided, the data are acceptable for use.

ecology and environment, inc.
International Specialists in the Environment

111 West Jackson Boulevard
Chicago, Illinois 60604
Tel: (312) 663-9415, Fax: (312) 663-0791

M E M O R A N D U M

DATE: April 17, 1996

TO: Karen Rydzewski, START Project Manager, E & E, Chicago, Illinois

FROM: David Hendren, START Analytical Services Manager, E & E, Chicago, Illinois

THROUGH: Mary Jane Ripp, Assistant START Program Manager, E & E, Chicago, Illinois

SUBJECT: Organic Data Quality Review for Toxicity Characteristic Leaching Procedure (TCLP) Semivolatile Organic Compounds, 76th and Albany, Chicago, Cook County, Illinois

REFERENCE: Project TDD S05-9602-024 Analytical TDD S05-9602-814
Project PAN 6F2401SI Analytical PAN 6FAN01TA

The data quality assurance (QA) review of six soil samples collected from the 76th and Albany site is complete. The samples were collected on March 15, 1996, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The samples were submitted to NET Laboratories, Bartlett, Illinois, for analyses. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Methods 1311 and 8270.

Sample Identification

START Identification No.	Laboratory Identification No.
76-1	348230
76-2	348231
76-0	348232
76-6	348233
76-8	348234
76-10	348235

recycled paper

Data Qualifications:

I. Sample Holding Time: Acceptable

The samples were collected on March 15, 1996, extracted on March 22, 1996, and analyzed on March 25 and 26, 1996. This is within the 14-day holding time limit, from collection to extraction, and 40-day limit from extraction to analysis.

II. Gas Chromatography/Mass Spectrometry (GC/MS) Tuning: Acceptable

GC/MS tuning to meet ion abundance criteria using decafluorotriphenylphosphine (DFTPP) were acceptable and samples were analyzed within 12 hours of DFTPP tuning.

III. Calibrations:

- Initial Calibration: Acceptable

A five-point initial calibration was performed prior to analysis. All average response factors were greater than 0.05. The percent relative standard deviations (%RSDs) between response factors were less than 30% for all target compounds.

- Continuing Calibration: Acceptable

The percent differences of the response factors were less than 25%, as required for target compounds.

IV. Blank: Acceptable

A method blank was analyzed with the samples. No target compounds or contaminants were detected in the blank.

V. Internal Standards: Acceptable

The areas of the internal standards in the samples were within -50% to +100% of the associated calibration check standard. The retention time of the internal standard was within the 30-second control limit.

VI. Compound Identification: Not Applicable

There were no target compounds detected in the samples.

VII. Additional QC Checks: Acceptable

The recoveries of the surrogates used in the samples and blank were within laboratory-established guidelines.

VIII. Overall Assessment of Data for Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990), Data Validation Procedures, Section 4.0 BNAs By GC/MS analysis. Based upon the information provided, the data are acceptable for use.

ecology and environment, inc.
International Specialists in the Environment

111 West Jackson Boulevard
Chicago, Illinois 60604
Tel: (312) 663-9415, Fax: (312) 663-0791

M E M O R A N D U M

DATE: April 17, 1996

TO: Karen Rydzewski, START Project Manager, E & E, Chicago, Illinois

FROM: David Hendren, START Analytical Services Manager, E & E, Chicago, Illinois

THROUGH: Mary Jane Ripp, Assistant START Program Manager, E & E, Chicago, Illinois

SUBJECT: Data Quality Review for Polychlorinated Biphenyls (PCBs), 76th and Albany, Chicago, Cook County, Illinois

REFERENCE: Project TDD S05-9602-024 Analytical TDD S05-9602-814
Project PAN 6F2401SI Analytical PAN 6FAN01TA

The data quality assurance (QA) review of six soil samples collected from the 76th and Albany site is complete. The samples were collected on March 15, 1996, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The samples were submitted to NET Laboratories, Bartlett, Illinois, for analyses. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Methods 8080.

Sample Identification

START Identification No.	Laboratory Identification No.
76-1	348230
76-2	348231
76-0	348232
76-6	348233
76-8	348234
76-10	348235

recycled paper

Data Qualifications:

I. Sample Holding Time: Acceptable

The samples were collected on March 15, 1996, extracted on March 19, 1996, and analyzed between March 21 and 25, 1996. This is within the 14-day holding time limit, from collection to extraction, and 40-day limit from extraction to analysis.

II. Instrument Performance: Acceptable

The chromatographic resolution was adequate in the standard and sample chromatograms. Surrogate retention times were consistent in samples and standards.

III. Calibrations:

- Initial Calibration: Acceptable

A five-point initial calibration was performed prior to analysis. The percent relative standard deviations (%RSDs) between response factors were less than 20% for all PCBs.

- Continuing Calibration: Acceptable

The percent differences of the response factors were less than 15%, as required.

IV. Blank: Acceptable

A method blank was analyzed with the samples. No target compounds or contaminants were detected in the blank.

V. Compound Identification: Qualified

The laboratory did not perform confirmation analysis for detected PCBs; therefore, positive results have been qualified as "NJ" for this sample.

VI. Additional QC Checks: Acceptable

The recoveries of the surrogates used in the samples were within acceptable laboratory limits, except when interferences prevented proper detection.

VII. Overall Assessment of Data for Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990), Data Validation Procedures, Section 7.0, PCBs. Based upon the information provided, the data are acceptable for use, with the above-stated qualifications.

Data Qualifiers and Definitions:

NJ - Presumptive evidence of the presence of the material at an estimated quantity.

ecology and environment, inc.
International Specialists in the Environment

111 West Jackson Boulevard
Chicago, Illinois 60604
Tel: (312) 663-9415, Fax: (312) 663-0791

M E M O R A N D U M

DATE: April 17, 1996

TO: Karen Rydzewski, START Project Manager, E & E, Chicago, Illinois

FROM: David Hendren, START Analytical Services Manager, E & E, Chicago, Illinois

THROUGH: Mary Jane Ripp, Assistant START Program Manager, E & E, Chicago, Illinois

SUBJECT: Inorganic Data Quality Review for Toxicity Characteristic Leaching Procedure (TCLP) Metals, 76th and Albany, Chicago, Cook County, Illinois

REFERENCE: Project TDD S05-9602-024 Analytical TDD S05-9602-814
Project PAN 6F2401SI Analytical PAN 6FAN01TA

The data quality assurance (QA) review of six soil samples collected from the 76th and Albany site is complete. The samples were collected on March 15, 1996, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The samples were submitted to NET Laboratories, Bartlett, Illinois, for analyses. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Methods 1311 and 6000/7000.

Sample Identification

START Identification No.	Laboratory Identification No.
76-1	348230
76-2	348231
76-0	348232
76-6	348233
76-8	348234
76-10	348235

recycled paper

Data Qualifications:

I. Sample Holding Time: Acceptable

The samples were collected on March 15, 1996, and analyzed on March 26, 1996. Analysis for mercury was performed on March 25, 1996. This is within the six-month holding time limit (28 days for mercury).

II. Calibration:

- Initial Calibration: Acceptable

Recoveries for the initial calibration verification were within 90 to 110% (80 to 120% for mercury), as required. The correlation coefficient for mercury exceeded 0.995.

- Continuing Calibration: Acceptable

All analytes included in the continuing calibration verification standard were within 90 to 110% (80 to 120% for mercury), as required.

III. Blanks: Acceptable

Calibration and preparation blanks were analyzed with each analytical batch. No target analytes were detected in the blanks.

IV. Overall Assessment of Data For Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990) Data Validation Procedures, Section 3.0, Metallic Inorganic Parameters. Based upon the information provided, the data are acceptable for use.

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289-5445

ANALYTICAL REPORT

Mr. Dave Hendren
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

03/26/1996

Sample No. : 348230

NET Job No.: 96.01958

Sample Description: 76-1; Upper Part of Pile W
S05-9602-814; KJ5100

Date Taken: 03/15/1996
Time Taken: 08:50
IEPA Cert. No. 100221

Date Received: 03/18/1996
Time Received: 11:30
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep	Batch No. Run	Analytical Method
Solids, Total	76.2	%	03/21/1996	0.1	tdw		1498	2540 (4)
TCLP, ZHE Volatiles Prep	Leached		03/20/1996		kab	247		1311 (1)
TCLP Metals Extraction	Leached		03/20/1996		kab		436	1311 (1)
TCLP-Arsenic, ICP	<0.20	mg/L	03/26/1996	0.20	amj	1059	1697	6010 (1)
TCLP-Barium, ICP	0.618	mg/L	03/26/1996	0.020	amj	1059	1686	6010 (1)
TCLP-Cadmium, ICP	<0.010	mg/L	03/26/1996	0.010	amj	1059	1637	6010 (1)
TCLP-Chromium,ICP	<0.040	mg/L	03/26/1996	0.040	amj	1059	1631	6010 (1)
TCLP-Lead, ICP	0.300	mg/L	03/26/1996	0.080	amj	1059	1849	6010 (1)
TCLP-Mercury, CVAA	<0.0004	mg/L	03/25/1996	0.0004	mic		624	7470 (1)
TCLP-Selenium, ICP	<0.20	mg/L	03/26/1996	0.20	amj	1059	1503	6010 (1)
TCLP-Silver, AA	<0.040	mg/L	03/26/1996	0.040	mic	462	483	7760 (1)
TCLP Organic Prep	Leached		03/20/1996		kab		223	1311 (1)
Prep PCBs 8080 NonAqueous	extracted		03/19/1996		keh	260		3540A (1)
PCBs 8080 NonAqueous								
PCB-1016	<50	ug/Kg	03/21/1996	50	tls	260	309	8080 (1)
PCB-1221	<50	ug/Kg	03/21/1996	50	tls	260	309	8080 (1)
PCB-1232	<50	ug/Kg	03/21/1996	50	tls	260	309	8080 (1)
PCB-1242	<50	ug/Kg	03/21/1996	50	tls	260	309	8080 (1)
PCB-1248	<50	ug/Kg	03/21/1996	50	tls	260	309	8080 (1)
PCB-1254	<50	ug/Kg	03/21/1996	50	tls	260	309	8080 (1)
PCB-1260	<50	ug/Kg	03/21/1996	50	tls	260	309	8080 (1)
Surr: Tetrachloroxylene (TCX)	90.0	%	03/21/1996	31-128	tls	260	309	8080 (1)
Surr: Decachlorobiphenyl (DCB)	Masked	%	03/21/1996	29-128	tls	260	309	8080 (1)
Prep, BNA Extract (TCLP)	extracted		03/22/1996		keh	332		3500 (1)

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289-5445

ANALYTICAL REPORT

Mr. Dave Hendren
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

03/26/1996

Sample No. : 348230

NET Job No.: 96.01958

Sample Description: 76-1; Upper Part of Pile W
S05-9602-814; KJ5100

Date Taken: 03/15/1996
Time Taken: 08:50
IEPA Cert. No. 100221

Date Received: 03/18/1996
Time Received: 11:30
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run		Analytical Method
TCLP-ACID COMPOUNDS 8270								
TCLP-Cresols, Total	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-3-Methylphenol (m-cresol)	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-2-Methylphenol (o-Cresol)	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-4-Methylphenol (p-Cresol)	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-Pentachlorophenol	<0.50	mg/L	03/25/1996	0.50	rla	332	968	8270 (1)
TCLP-2,4,5-Trichlorophenol	<0.50	mg/L	03/25/1996	0.50	rla	332	968	8270 (1)
TCLP-2,4,6-Trichlorophenol	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
Surr: Phenol-d6	71.0	%	03/25/1996	10-94	rla	332	968	8270 (1)
Surr: 2-Fluorophenol	72.0	%	03/25/1996	21-100	rla	332	968	8270 (1)
Surr: 2,4,6-Tribromophenol	79.0	%	03/25/1996	10-123	rla	332	968	8270 (1)
TCLP-VOLATILES 8240								
TCLP-Benzene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Carbon Tetrachloride	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Chlorobenzene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Chloroform	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-1,4-Dichlorobenzene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-1,2-Dichloroethane	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-1,1-Dichloroethene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Methyl Ethyl Ketone	<0.40	mg/L	03/25/1996	0.40	llj	247	1402	8240 (1)
TCLP-Tetrachloroethene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Trichloroethene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Vinyl Chloride	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
Surr: 1,2-Dichloroethane-d4	100.6	%	03/25/1996	76-114	llj	247	1402	8240 (1)
Surr: Toluene-d8	100.4	%	03/25/1996	88-110	llj	247	1402	8240 (1)
Surr: Bromofluorobenzene	102.0	%	03/25/1996	86-115	llj	247	1402	8240 (1)

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289-5445

ANALYTICAL REPORT

Mr. Dave Hendren
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

03/26/1996

Sample No. : 348230

NET Job No.: 96.01958

Sample Description: 76-1; Upper Part of Pile W
S05-9602-814; KJ5100

Date Taken: 03/15/1996
Time Taken: 08:50
IEPA Cert. No. 100221

Date Received: 03/18/1996
Time Received: 11:30
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run		Analytical Method
TCLP BASE NEUTRAL COMPOUNDS								
TCLP-1,4-Dichlorobenzene	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-Hexachloroethane	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-Nitrobenzene	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-Hexachlorobutadiene	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-2,4-Dinitrotoluene	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-Hexachlorobenzene	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-Pyridine	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
Surr: Nitrobenzene-d5	72.0	%	03/25/1996	35-114	rla	332	968	8270 (1)
Surr: 2-Fluorobiphenyl	73.0	%	03/25/1996	43-116	rla	332	968	8270 (1)
Surr: Terphenyl-d14	73.0	%	03/25/1996	33-141	rla	332	968	8270 (1)

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289-5445

ANALYTICAL REPORT

Mr. Dave Hendren
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

03/26/1996

Sample No. : 348231

NET Job No.: 96.01958

Sample Description: 76-2; Upper Part of Pile W
S05-9602-814; KJ5100

Date Taken: 03/15/1996
Time Taken: 09:30
IEPA Cert. No. 100221

Date Received: 03/18/1996
Time Received: 11:30
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run		Analytical Method
Solids, Total	79.4	%	03/21/1996	0.1	tdw		1498	2540 (4)
TCLP, ZHE Volatiles Prep	Leached		03/20/1996		kab	247		1311 (1)
TCLP Metals Extraction	Leached		03/20/1996		kab		436	1311 (1)
TCLP-Arsenic, ICP	<0.20	mg/L	03/26/1996	0.20	amj	1059	1697	6010 (1)
TCLP-Barium, ICP	4.26	mg/L	03/26/1996	0.020	amj	1059	1686	6010 (1)
TCLP-Cadmium, ICP	0.180	mg/L	03/26/1996	0.010	amj	1059	1637	6010 (1)
TCLP-Chromium,ICP	<0.040	mg/L	03/26/1996	0.040	amj	1059	1631	6010 (1)
TCLP-Lead, ICP	19	mg/L	03/26/1996	0.080	amj	1059	1849	6010 (1)
TCLP-Mercury, CVAA	<0.0004	mg/L	03/25/1996	0.0004	mic		624	7470 (1)
TCLP-Selenium, ICP	<0.20	mg/L	03/26/1996	0.20	amj	1059	1503	6010 (1)
TCLP-Silver, AA	<0.040	mg/L	03/26/1996	0.040	mic	462	483	7760 (1)
TCLP Organic Prep	Leached		03/20/1996		kab		223	1311 (1)
Prep PCBs 8080 NonAqueous	extracted		03/19/1996		keh	260		3540A (1)
PCBs 8080 NonAqueous								
PCB-1016	<500	ug/Kg	03/22/1996	50	tls	260	310	8080 (1)
PCB-1221	<500	ug/Kg	03/22/1996	50	tls	260	310	8080 (1)
PCB-1232	<500	ug/Kg	03/22/1996	50	tls	260	310	8080 (1)
PCB-1242	30,000	ug/Kg	03/25/1996	50	tls	260	311	8080 (1)
PCB-1248	<5000	ug/Kg	03/25/1996	50	tls	260	311	8080 (1)
PCB-1254	<500	ug/Kg	03/22/1996	50	tls	260	310	8080 (1)
PCB-1260	<500	ug/Kg	03/22/1996	50	tls	260	310	8080 (1)
Surr: Tetrachloroxylene (TCX)	Masked	%	03/21/1996	31-128	tls	260	309	8080 (1)
Surr: Decachlorobiphenyl (DCB)	40.0	%	03/21/1996	29-128	tls	260	309	8080 (1)
Prep, BNA Extract (TCLP)	extracted		03/22/1996		keh	332		3500 (1)

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289-5445

ANALYTICAL REPORT

Mr. Dave Hendren
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

03/26/1996

Sample No. : 348231

NET Job No.: 96.01958

Sample Description: 76-2; Upper Part of Pile W
S05-9602-814; KJ5100

Date Taken: 03/15/1996
Time Taken: 09:30
IEPA Cert. No. 100221

Date Received: 03/18/1996
Time Received: 11:30
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run		Analytical Method
TCLP-ACID COMPOUNDS 8270								
TCLP-Cresols, Total	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-3-Methylphenol (m-cresol)	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-2-Methylphenol (o-Cresol)	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-4-Methylphenol (p-Cresol)	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-Pentachlorophenol	<0.50	mg/L	03/25/1996	0.50	rla	332	968	8270 (1)
TCLP-2,4,5-Trichlorophenol	<0.50	mg/L	03/25/1996	0.50	rla	332	968	8270 (1)
TCLP-2,4,6-Trichlorophenol	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
Surr: Phenol-d6	69.5	%	03/25/1996	10-94	rla	332	968	8270 (1)
Surr: 2-Fluorophenol	70.0	%	03/25/1996	21-100	rla	332	968	8270 (1)
Surr: 2,4,6-Tribromophenol	86.5	%	03/25/1996	10-123	rla	332	968	8270 (1)
TCLP-VOLATILES 8240								
TCLP-Benzene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Carbon Tetrachloride	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Chlorobenzene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Chloroform	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-1,4-Dichlorobenzene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-1,2-Dichloroethane	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-1,1-Dichloroethene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Methyl Ethyl Ketone	<0.40	mg/L	03/25/1996	0.40	llj	247	1402	8240 (1)
TCLP-Tetrachloroethene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Trichloroethene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Vinyl Chloride	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
Surr: 1,2-Dichloroethane-d4	99.6	%	03/25/1996	76-114	llj	247	1402	8240 (1)
Surr: Toluene-d8	101.0	%	03/25/1996	88-110	llj	247	1402	8240 (1)
Surr: Bromofluorobenzene	103.4	%	03/25/1996	86-115	llj	247	1402	8240 (1)

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289-5445

ANALYTICAL REPORT

Mr. Dave Hendren
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

03/26/1996

Sample No. : 348231

NET Job No.: 96.01958

Sample Description: 76-2; Upper Part of Pile W
S05-9602-814; KJ5100

Date Taken: 03/15/1996
Time Taken: 09:30
IEPA Cert. No. 100221

Date Received: 03/18/1996
Time Received: 11:30
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run		Analytical Method
TCLP BASE NEUTRAL COMPOUNDS								
TCLP-1,4-Dichlorobenzene	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-Hexachloroethane	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-Nitrobenzene	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-Hexachlorobutadiene	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-2,4-Dinitrotoluene	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-Hexachlorobenzene	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-Pyridine	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
Surr: Nitrobenzene-d5	74.0	%	03/25/1996	35-114	rla	332	968	8270 (1)
Surr: 2-Fluorobiphenyl	76.0	%	03/25/1996	43-116	rla	332	968	8270 (1)
Surr: Terphenyl-d14	88.0	%	03/25/1996	33-141	rla	332	968	8270 (1)

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289-5445

ANALYTICAL REPORT

Mr. Dave Hendren
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

03/26/1996

Sample No. : 348232

NET Job No.: 96.01958

Sample Description: 76-0; Upper Part of Pile E
S05-9602-814; KJ5100

Date Taken: 03/15/1996
Time Taken: 11:00
IEPA Cert. No. 100221

Date Received: 03/18/1996
Time Received: 11:30
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run		Analytical Method
Solids, Total	86.3	%	03/21/1996	0.1	tdw		1498	2540 (4)
TCLP, ZHE Volatiles Prep	Leached		03/20/1996		kab	247		1311 (1)
TCLP Metals Extraction	Leached		03/20/1996		kab		436	1311 (1)
TCLP-Arsenic, ICP	<0.20	mg/L	03/26/1996	0.20	amj	1059	1697	6010 (1)
TCLP-Barium, ICP	0.574	mg/L	03/26/1996	0.020	amj	1059	1686	6010 (1)
TCLP-Cadmium, ICP	<0.010	mg/L	03/26/1996	0.010	amj	1059	1637	6010 (1)
TCLP-Chromium,ICP	<0.040	mg/L	03/26/1996	0.040	amj	1059	1631	6010 (1)
TCLP-Lead, ICP	<0.080	mg/L	03/26/1996	0.080	amj	1059	1849	6010 (1)
TCLP-Mercury, CVAA	<0.0004	mg/L	03/25/1996	0.0004	mic		624	7470 (1)
TCLP-Selenium, ICP	<0.20	mg/L	03/26/1996	0.20	amj	1059	1503	6010 (1)
TCLP-Silver, AA	<0.040	mg/L	03/26/1996	0.040	mic	462	483	7760 (1)
TCLP Organic Prep	Leached		03/20/1996		kab		223	1311 (1)
Prep PCBs 8080 NonAqueous	extracted		03/19/1996		keh	260		3540A (1)
PCBs 8080 NonAqueous								
PCB-1016	<50	ug/Kg	03/21/1996	50	tls	260	309	8080 (1)
PCB-1221	<50	ug/Kg	03/21/1996	50	tls	260	309	8080 (1)
PCB-1232	<50	ug/Kg	03/21/1996	50	tls	260	309	8080 (1)
PCB-1242	<50	ug/Kg	03/21/1996	50	tls	260	309	8080 (1)
PCB-1248	<50	ug/Kg	03/21/1996	50	tls	260	309	8080 (1)
PCB-1254	<50	ug/Kg	03/21/1996	50	tls	260	309	8080 (1)
PCB-1260	<50	ug/Kg	03/21/1996	50	tls	260	309	8080 (1)
Surr: Tetrachloroxylene (TCX)	76.0	%	03/21/1996	31-128	tls	260	309	8080 (1)
Surr: Decachlorobiphenyl (DCB)	62.0	%	03/21/1996	29-128	tls	260	309	8080 (1)
Prep, BNA Extract (TCLP)	extracted		03/22/1996		keh	332		3500 (1)

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289-5445

ANALYTICAL REPORT

Mr. Dave Hendren
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

03/26/1996

Sample No. : 348232

NET Job No.: 96.01958

Sample Description: 76-0; Upper Part of Pile E
S05-9602-814; KJ5100

Date Taken: 03/15/1996
Time Taken: 11:00
IEPA Cert. No. 100221

Date Received: 03/18/1996
Time Received: 11:30
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run		Analytical Method
TCLP-ACID COMPOUNDS 8270								
TCLP-Cresols, Total	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-3-Methylphenol (m-cresol)	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-2-Methylphenol (o-Cresol)	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-4-Methylphenol (p-Cresol)	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-Pentachlorophenol	<0.50	mg/L	03/25/1996	0.50	rla	332	968	8270 (1)
TCLP-2,4,5-Trichlorophenol	<0.50	mg/L	03/25/1996	0.50	rla	332	968	8270 (1)
TCLP-2,4,6-Trichlorophenol	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
Surr: Phenol-d6	70.5	%	03/25/1996	10-94	rla	332	968	8270 (1)
Surr: 2-Fluorophenol	68.0	%	03/25/1996	21-100	rla	332	968	8270 (1)
Surr: 2,4,6-Tribromophenol	85.0	%	03/25/1996	10-123	rla	332	968	8270 (1)
TCLP-VOLATILES 8240								
TCLP-Benzene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Carbon Tetrachloride	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Chlorobenzene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Chloroform	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-1,4-Dichlorobenzene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-1,2-Dichloroethane	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-1,1-Dichloroethene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Methyl Ethyl Ketone	<0.40	mg/L	03/25/1996	0.40	llj	247	1402	8240 (1)
TCLP-Tetrachloroethene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Trichloroethene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Vinyl Chloride	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
Surr: 1,2-Dichloroethane-d4	106.0	%	03/25/1996	76-114	llj	247	1402	8240 (1)
Surr: Toluene-d8	101.8	%	03/25/1996	88-110	llj	247	1402	8240 (1)
Surr: Bromofluorobenzene	101.0	%	03/25/1996	86-115	llj	247	1402	8240 (1)

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289-5445

ANALYTICAL REPORT

Mr. Dave Hendren
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

03/26/1996

Sample No. : 348232

NET Job No.: 96.01958

Sample Description: 76-0; Upper Part of Pile E
S05-9602-814; KJ5100

Date Taken: 03/15/1996
Time Taken: 11:00
IEPA Cert. No. 100221

Date Received: 03/18/1996
Time Received: 11:30
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run		Analytical Method
TCLP BASE NEUTRAL COMPOUNDS								
TCLP-1,4-Dichlorobenzene	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-Hexachloroethane	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-Nitrobenzene	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-Hexachlorobutadiene	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-2,4-Dinitrotoluene	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-Hexachlorobenzene	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-Pyridine	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
Surr: Nitrobenzene-d5	84.0	%	03/25/1996	35-114	rla	332	968	8270 (1)
Surr: 2-Fluorobiphenyl	81.0	%	03/25/1996	43-116	rla	332	968	8270 (1)
Surr: Terphenyl-d14	90.0	%	03/25/1996	33-141	rla	332	968	8270 (1)

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289-5445

ANALYTICAL REPORT

Mr. Dave Hendren
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

03/26/1996

Sample No. : 348233

NET Job No.: 96.01958

Sample Description: 76-6; Upper Part of Pile E
S05-9602-814; KJ5100

Date Taken: 03/15/1996
Time Taken: 11:45
IEPA Cert. No. 100221

Date Received: 03/18/1996
Time Received: 11:30
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep	Batch No. Run	Analytical Method
Solids, Total	81.9	%	03/21/1996	0.1	tdw		1498	2540 (4)
TCLP, ZHE Volatiles Prep	Leached		03/20/1996		kab	247		1311 (1)
TCLP Metals Extraction	Leached		03/20/1996		kab		436	1311 (1)
TCLP-Arsenic, ICP	<0.20	mg/L	03/26/1996	0.20	amj	1059	1697	6010 (1)
TCLP-Barium, ICP	0.533	mg/L	03/26/1996	0.020	amj	1059	1686	6010 (1)
TCLP-Cadmium, ICP	<0.010	mg/L	03/26/1996	0.010	amj	1059	1637	6010 (1)
TCLP-Chromium,ICP	<0.040	mg/L	03/26/1996	0.040	amj	1059	1631	6010 (1)
TCLP-Lead, ICP	<0.080	mg/L	03/26/1996	0.080	amj	1059	1849	6010 (1)
TCLP-Mercury, CVAA	<0.0004	mg/L	03/25/1996	0.0004	mic		624	7470 (1)
TCLP-Selenium, ICP	<0.20	mg/L	03/26/1996	0.20	amj	1059	1503	6010 (1)
TCLP-Silver, AA	<0.040	mg/L	03/26/1996	0.040	mic	462	483	7760 (1)
TCLP Organic Prep	Leached		03/20/1996		kab		223	1311 (1)
Prep PCBs 8080 NonAqueous	extracted		03/19/1996		keh	260		3540A (1)
PCBs 8080 NonAqueous								
PCB-1016	<50	ug/Kg	03/21/1996	50	tls	260	309	8080 (1)
PCB-1221	<50	ug/Kg	03/21/1996	50	tls	260	309	8080 (1)
PCB-1232	<50	ug/Kg	03/21/1996	50	tls	260	309	8080 (1)
PCB-1242	<50	ug/Kg	03/21/1996	50	tls	260	309	8080 (1)
PCB-1248	<50	ug/Kg	03/21/1996	50	tls	260	309	8080 (1)
PCB-1254	<50	ug/Kg	03/21/1996	50	tls	260	309	8080 (1)
PCB-1260	<50	ug/Kg	03/21/1996	50	tls	260	309	8080 (1)
Surr: Tetrachloroxylene (TCX)	69.0	%	03/21/1996	31-128	tls	260	309	8080 (1)
Surr: Decachlorobiphenyl (DCB)	62.0	%	03/21/1996	29-128	tls	260	309	8080 (1)
Prep, BNA Extract (TCLP)	extracted		03/22/1996		keh	332		3500 (1)

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289-5445

ANALYTICAL REPORT

Mr. Dave Hendren
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

03/26/1996

Sample No. : 348233

NET Job No.: 96.01958

Sample Description: 76-6; Upper Part of Pile E
S05-9602-814; KJ5100

Date Taken: 03/15/1996
Time Taken: 11:45
IEPA Cert. No. 100221

Date Received: 03/18/1996
Time Received: 11:30
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run		Analytical Method
TCLP-ACID COMPOUNDS 8270								
TCLP-Cresols, Total	<0.10	mg/L	03/26/1996	0.10	rla	332	967	8270 (1)
TCLP-3-Methylphenol (m-cresol)	<0.10	mg/L	03/26/1996	0.10	rla	332	967	8270 (1)
TCLP-2-Methylphenol (o-Cresol)	<0.10	mg/L	03/26/1996	0.10	rla	332	967	8270 (1)
TCLP-4-Methylphenol (p-Cresol)	<0.10	mg/L	03/26/1996	0.10	rla	332	967	8270 (1)
TCLP-Pentachlorophenol	<0.50	mg/L	03/26/1996	0.50	rla	332	967	8270 (1)
TCLP-2,4,5-Trichlorophenol	<0.50	mg/L	03/26/1996	0.50	rla	332	967	8270 (1)
TCLP-2,4,6-Trichlorophenol	<0.10	mg/L	03/26/1996	0.10	rla	332	967	8270 (1)
Surr: Phenol-d6	80.0	%	03/26/1996	10-94	rla	332	967	8270 (1)
Surr: 2-Fluorophenol	73.0	%	03/26/1996	21-100	rla	332	967	8270 (1)
Surr: 2,4,6-Tribromophenol	65.5	%	03/26/1996	10-123	rla	332	967	8270 (1)
TCLP-VOLATILES 8240								
TCLP-Benzene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Carbon Tetrachloride	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Chlorobenzene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Chloroform	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-1,4-Dichlorobenzene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-1,2-Dichloroethane	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-1,1-Dichloroethene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Methyl Ethyl Ketone	<0.40	mg/L	03/25/1996	0.40	llj	247	1402	8240 (1)
TCLP-Tetrachloroethene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Trichloroethene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Vinyl Chloride	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
Surr: 1,2-Dichloroethane-d4	104.0	%	03/25/1996	76-114	llj	247	1402	8240 (1)
Surr: Toluene-d8	100.2	%	03/25/1996	88-110	llj	247	1402	8240 (1)
Surr: Bromofluorobenzene	101.0	%	03/25/1996	86-115	llj	247	1402	8240 (1)

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289-5445

ANALYTICAL REPORT

Mr. Dave Hendren
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

03/26/1996

Sample No. : 348233

NET Job No.: 96.01958

Sample Description: 76-6; Upper Part of Pile E
S05-9602-814; KJ5100

Date Taken: 03/15/1996
Time Taken: 11:45
IEPA Cert. No. 100221

Date Received: 03/18/1996
Time Received: 11:30
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run		Analytical Method
TCLP BASE NEUTRAL COMPOUNDS								
TCLP-1,4-Dichlorobenzene	<0.10	mg/L	03/26/1996	0.10	rla	332	967	8270 (1)
TCLP-Hexachloroethane	<0.10	mg/L	03/26/1996	0.10	rla	332	967	8270 (1)
TCLP-Nitrobenzene	<0.10	mg/L	03/26/1996	0.10	rla	332	967	8270 (1)
TCLP-Hexachlorobutadiene	<0.10	mg/L	03/26/1996	0.10	rla	332	967	8270 (1)
TCLP-2,4-Dinitrotoluene	<0.10	mg/L	03/26/1996	0.10	rla	332	967	8270 (1)
TCLP-Hexachlorobenzene	<0.10	mg/L	03/26/1996	0.10	rla	332	967	8270 (1)
TCLP-Pyridine	<0.10	mg/L	03/26/1996	0.10	rla	332	967	8270 (1)
Surr: Nitrobenzene-d5	95.0	%	03/26/1996	35-114	rla	332	967	8270 (1)
Surr: 2-Fluorobiphenyl	79.0	%	03/26/1996	43-116	rla	332	967	8270 (1)
Surr: Terphenyl-d14	82.0	%	03/26/1996	33-141	rla	332	967	8270 (1)

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289-5445

ANALYTICAL REPORT

Mr. Dave Hendren
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

03/26/1996

Sample No. : 348234

NET Job No.: 96.01958

Sample Description: 76-8; 7501 Kedzie
S05-9602-814; KJ5100

Date Taken: 03/15/1996
Time Taken: 13:35
IEPA Cert. No. 100221

Date Received: 03/18/1996
Time Received: 11:30
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run		Analytical Method
Solids, Total	95.7	%	03/21/1996	0.1	tdw		1498	2540 (4)
TCLP, ZHE Volatiles Prep	Leached		03/20/1996		kab	247		1311 (1)
TCLP Metals Extraction	Leached		03/20/1996		kab		436	1311 (1)
TCLP-Arsenic, ICP	<0.20	mg/L	03/26/1996	0.20	amj	1059	1697	6010 (1)
TCLP-Barium, ICP	1.76	mg/L	03/26/1996	0.020	amj	1059	1686	6010 (1)
TCLP-Cadmium, ICP	0.126	mg/L	03/26/1996	0.010	amj	1059	1637	6010 (1)
TCLP-Chromium,ICP	<0.040	mg/L	03/26/1996	0.040	amj	1059	1631	6010 (1)
TCLP-Lead, ICP	4.11	mg/L	03/26/1996	0.080	amj	1059	1849	6010 (1)
TCLP-Mercury, CVAA	<0.0004	mg/L	03/25/1996	0.0004	mic		624	7470 (1)
TCLP-Selenium, ICP	<0.20	mg/L	03/26/1996	0.20	amj	1059	1503	6010 (1)
TCLP-Silver, AA	<0.040	mg/L	03/26/1996	0.040	mic	462	483	7760 (1)
TCLP Organic Prep	Leached		03/20/1996		kab		223	1311 (1)
Prep PCBs 8080 NonAqueous	extracted		03/19/1996		keh	260		3540A (1)
PCBs 8080 NonAqueous								
PCB-1016	<500	ug/Kg	03/22/1996	50	tls	260	310	8080 (1)
PCB-1221	<500	ug/Kg	03/22/1996	50	tls	260	310	8080 (1)
PCB-1232	<500	ug/Kg	03/22/1996	50	tls	260	310	8080 (1)
PCB-1242	3,400	ug/Kg	03/25/1996	50	tls	260	311	8080 (1)
PCB-1248	<1000	ug/Kg	03/25/1996	50	tls	260	311	8080 (1)
PCB-1254	<500	ug/Kg	03/22/1996	50	tls	260	310	8080 (1)
PCB-1260	<500	ug/Kg	03/22/1996	50	tls	260	310	8080 (1)
Surr: Tetrachloroxylene (TCX)	89.0	%	03/21/1996	31-128	tls	260	309	8080 (1)
Surr: Decachlorobiphenyl (DCB)	52.0	%	03/21/1996	29-128	tls	260	309	8080 (1)
Prep, BNA Extract (TCLP)	extracted		03/22/1996		keh	332		3500 (1)

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289-5445

ANALYTICAL REPORT

Mr. Dave Hendren
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

03/26/1996

Sample No. : 348234

NET Job No.: 96.01958

Sample Description: 76-8; 7501 Kedzie
S05-9602-814; KJ5100

Date Taken: 03/15/1996
Time Taken: 13:35
IEPA Cert. No. 100221

Date Received: 03/18/1996
Time Received: 11:30
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run		Analytical Method
TCLP-ACID COMPOUNDS 8270								
TCLP-Cresols, Total	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-3-Methylphenol (m-cresol)	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-2-Methylphenol (o-Cresol)	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-4-Methylphenol (p-Cresol)	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-Pentachlorophenol	<0.50	mg/L	03/25/1996	0.50	rla	332	968	8270 (1)
TCLP-2,4,5-Trichlorophenol	<0.50	mg/L	03/25/1996	0.50	rla	332	968	8270 (1)
TCLP-2,4,6-Trichlorophenol	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
Surr: Phenol-d6	76.5	%	03/25/1996	10-94	rla	332	968	8270 (1)
Surr: 2-Fluorophenol	76.5	%	03/25/1996	21-100	rla	332	968	8270 (1)
Surr: 2,4,6-Tribromophenol	92.0	%	03/25/1996	10-123	rla	332	968	8270 (1)
TCLP-VOLATILES 8240								
TCLP-Benzene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Carbon Tetrachloride	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Chlorobenzene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Chloroform	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-1,4-Dichlorobenzene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-1,2-Dichloroethane	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-1,1-Dichloroethene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Methyl Ethyl Ketone	<0.40	mg/L	03/25/1996	0.40	llj	247	1402	8240 (1)
TCLP-Tetrachloroethene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Trichloroethene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Vinyl Chloride	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
Surr: 1,2-Dichloroethane-d4	102.4	%	03/25/1996	76-114	llj	247	1402	8240 (1)
Surr: Toluene-d8	104.0	%	03/25/1996	88-110	llj	247	1402	8240 (1)
Surr: Bromofluorobenzene	102.2	%	03/25/1996	86-115	llj	247	1402	8240 (1)

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289-5445

ANALYTICAL REPORT

Mr. Dave Hendren
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

03/26/1996

Sample No. : 348234

NET Job No.: 96.01958

Sample Description: 76-8; 7501 Kedzie
S05-9602-814; KJ5100

Date Taken: 03/15/1996
Time Taken: 13:35
IEPA Cert. No. 100221

Date Received: 03/18/1996
Time Received: 11:30
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run		Analytical Method
TCLP BASE NEUTRAL COMPOUNDS								
TCLP-1,4-Dichlorobenzene	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-Hexachloroethane	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-Nitrobenzene	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-Hexachlorobutadiene	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-2,4-Dinitrotoluene	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-Hexachlorobenzene	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-Pyridine	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
Surr: Nitrobenzene-d5	84.0	%	03/25/1996	35-114	rla	332	968	8270 (1)
Surr: 2-Fluorobiphenyl	81.0	%	03/25/1996	43-116	rla	332	968	8270 (1)
Surr: Terphenyl-d14	90.0	%	03/25/1996	33-141	rla	332	968	8270 (1)

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289-5445

ANALYTICAL REPORT

Mr. Dave Hendren
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

03/26/1996

Sample No. : 348235

NET Job No.: 96.01958

Sample Description: 76-10; Berm
S05-9602-814; KJ5100

Date Taken: 03/15/1996
Time Taken: 14:40
IEPA Cert. No. 100221

Date Received: 03/18/1996
Time Received: 11:30
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run		Analytical Method
Solids, Total	79.9	%	03/21/1996	0.1	tdw		1498	2540 (4)
TCLP, ZHE Volatiles Prep	Leached		03/20/1996		kab	247		1311 (1)
TCLP Metals Extraction	leached		03/20/1996		kab		436	1311 (1)
TCLP-Arsenic, ICP	0.431	mg/L	03/26/1996	0.20	amj	1059	1697	6010 (1)
TCLP-Barium, ICP	2.38	mg/L	03/26/1996	0.020	amj	1059	1686	6010 (1)
TCLP-Cadmium, ICP	0.218	mg/L	03/26/1996	0.010	amj	1059	1637	6010 (1)
TCLP-Chromium,ICP	<0.040	mg/L	03/26/1996	0.040	amj	1059	1631	6010 (1)
TCLP-Lead, ICP	35	mg/L	03/26/1996	0.080	amj	1059	1849	6010 (1)
TCLP-Mercury, CVAA	<0.0004	mg/L	03/25/1996	0.0004	mic		624	7470 (1)
TCLP-Selenium, ICP	<0.20	mg/L	03/26/1996	0.20	amj	1059	1503	6010 (1)
TCLP-Silver, AA	<0.040	mg/L	03/26/1996	0.040	mic	462	483	7760 (1)
TCLP Organic Prep	Leached		03/20/1996		kab		223	1311 (1)
Prep PCBs 8080 NonAqueous	extracted		03/19/1996		keh	260		3540A (1)
PCBs 8080 NonAqueous								
PCB-1016	<500	ug/Kg	03/22/1996	50	tls	260	310	8080 (1)
PCB-1221	<500	ug/Kg	03/22/1996	50	tls	260	310	8080 (1)
PCB-1232	<500	ug/Kg	03/22/1996	50	tls	260	310	8080 (1)
PCB-1242	19,000	ug/Kg	03/25/1996	50	tls	260	311	8080 (1)
PCB-1248	<2500	ug/Kg	03/25/1996	50	tls	260	311	8080 (1)
PCB-1254	<500	ug/Kg	03/22/1996	50	tls	260	310	8080 (1)
PCB-1260	<500	ug/Kg	03/22/1996	50	tls	260	310	8080 (1)
Surr: Tetrachloroxylene (TCX)	Masked	%	03/21/1996	31-128	tls	260	309	8080 (1)
Surr: Decachlorobiphenyl (DCB)	29.0	%	03/21/1996	29-128	tls	260	309	8080 (1)
Prep, BNA Extract (TCLP)	extracted		03/22/1996		keh	332		3500 (1)

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289-5445

ANALYTICAL REPORT

Mr. Dave Hendren
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

03/26/1996

Sample No. : 348235

NET Job No.: 96.01958

Sample Description: 76-10; Berm
S05-9602-814; KJ5100

Date Taken: 03/15/1996
Time Taken: 14:40
IEPA Cert. No. 100221

Date Received: 03/18/1996
Time Received: 11:30
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run		Analytical Method
TCLP-ACID COMPOUNDS 8270								
TCLP-Cresols, Total	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-3-Methylphenol (m-cresol)	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-2-Methylphenol (o-Cresol)	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-4-Methylphenol (p-Cresol)	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-Pentachlorophenol	<0.50	mg/L	03/25/1996	0.50	rla	332	968	8270 (1)
TCLP-2,4,5-Trichlorophenol	<0.50	mg/L	03/25/1996	0.50	rla	332	968	8270 (1)
TCLP-2,4,6-Trichlorophenol	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
Surr: Phenol-d6	73.0	%	03/25/1996	10-94	rla	332	968	8270 (1)
Surr: 2-Fluorophenol	75.0	%	03/25/1996	21-100	rla	332	968	8270 (1)
Surr: 2,4,6-Tribromophenol	90.5	%	03/25/1996	10-123	rla	332	968	8270 (1)
TCLP-VOLATILES 8240								
TCLP-Benzene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Carbon Tetrachloride	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Chlorobenzene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Chloroform	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-1,4-Dichlorobenzene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-1,2-Dichloroethane	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-1,1-Dichloroethene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Methyl Ethyl Ketone	<0.40	mg/L	03/25/1996	0.40	llj	247	1402	8240 (1)
TCLP-Tetrachloroethene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Trichloroethene	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
TCLP-Vinyl Chloride	<0.020	mg/L	03/25/1996	0.020	llj	247	1402	8240 (1)
Surr: 1,2-Dichloroethane-d4	101.4	%	03/25/1996	76-114	llj	247	1402	8240 (1)
Surr: Toluene-d8	102.4	%	03/25/1996	88-110	llj	247	1402	8240 (1)
Surr: Bromofluorobenzene	102.2	%	03/25/1996	86-115	llj	247	1402	8240 (1)

NATIONAL ENVIRONMENTAL TESTING, INC.

Bartlett Division
850 W. Bartlett Rd.
Bartlett, IL 60103
Tel: (708) 289-3100
Fax: (708) 289-5445

ANALYTICAL REPORT

Mr. Dave Hendren
ECOLOGY & ENVIRONMENT, INC
111 West Jackson Blvd.
Chicago, IL 60604

03/26/1996

Sample No. : 348235

NET Job No.: 96.01958

Sample Description: 76-10; Berm
S05-9602-814; KJ5100

Date Taken: 03/15/1996
Time Taken: 14:40
IEPA Cert. No. 100221

Date Received: 03/18/1996
Time Received: 11:30
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run		Analytical Method
TCLP BASE NEUTRAL COMPOUNDS								
TCLP-1,4-Dichlorobenzene	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-Hexachloroethane	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-Nitrobenzene	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-Hexachlorobutadiene	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-2,4-Dinitrotoluene	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-Hexachlorobenzene	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
TCLP-Pyridine	<0.10	mg/L	03/25/1996	0.10	rla	332	968	8270 (1)
Surr: Nitrobenzene-d5	81.0	%	03/25/1996	35-114	rla	332	968	8270 (1)
Surr: 2-Fluorobiphenyl	82.0	%	03/25/1996	43-116	rla	332	968	8270 (1)
Surr: Terphenyl-d14	90.0	%	03/25/1996	33-141	rla	332	968	8270 (1)