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ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES

PRELIMINARY SITE ASSESSMENT

Witmer Road Site
City of Niagara Falls

Site No. 932027
Niagara County

Prepared for:

New York State Department of Environmental Conservation

50 Wolf Road, Albany, New York 12233
Thomas C. Jorling, *Commissioner*

Division of Hazardous Waste Remediation
Michael J. O'Toole, Jr., *Director*

By:
E.C. JORDAN CO.
Portland, Maine

March 1991

NYSDEC CONTRACT NO. D002472

NYSDEC WORK ASSIGNMENT NO. D002472-6

E.C. JORDAN CO.

FINAL DRAFT REPORT

TASK 1: DATA RECORDS SEARCH AND ASSESSMENT
PRELIMINARY SITE ASSESSMENT

WITMER ROAD SITE
SITE NO. 932027
NIAGARA COUNTY

MARCH 1991

Submitted By:

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1.0 EXECUTIVE SUMMARY

The Witmer Road Site, Site No. 932027, is a 1-acre area in the Town of Niagara, Niagara County, New York. The site is located off Witmer Road and is bordered to the south by James Avenue, a "paper road" -- proposed for development, but never constructed (Figure 1). From the early 1950s to late 1965, the Witmer Road disposal site reportedly was used to dump various types of waste including (1) lime clean-outs from the International Mineral and Chemical Company, (2) wastes from air pollution control equipment owned and operated by Airco Alloys, and (3) slag materials from the Vanadium Corporation (NCHD, 1982).

It has been reported that the City of Niagara Falls operated two refuse burning pits on the site. Paper, furniture, and wood debris reportedly were burned in these pits and the resulting ash was disposed of off-site. The old refuse burn pits operated by the City of Niagara have been backfilled and are now covered by junk automobiles in the Kachinoski junk yard. The Witmer Road Site is currently used as a scrap yard (Engineering-Science, 1986).

Potential property owners include Mr. Adolph Kachinoski of Kach's Scrap Company, Mr. Ryding of the Sartarian Company, Mr. Garlock, Mr. Bresko, Mr. Clark, and Mr. Burtwell. Some of these property owners either own or have parcels abutting portions of the Witmer Road Site. Previous ownership of the Witmer Road Site cannot be determined until current ownership of the site is better defined.

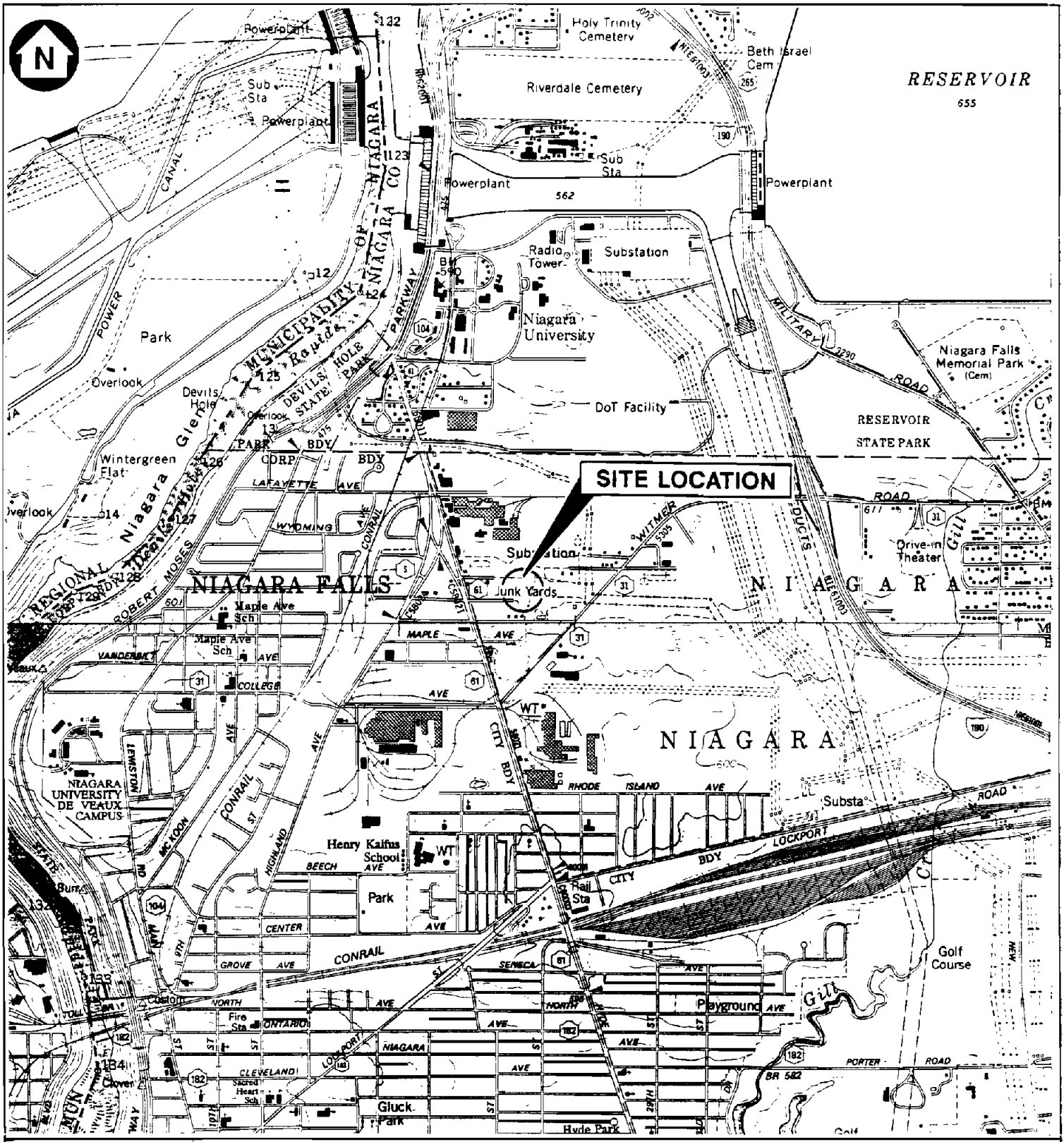
In 1982, the U.S. Geological Survey (USGS) collected two soil samples from the Witmer Road Site. Analysis of these samples revealed the presence of volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and unidentified hydrocarbons (USGS, 1982). During 1984, the New York State Department of Health (NYSDOH) collected and analyzed groundwater samples from five private wells northeast of the site (NYSDOH, 1984). Data were available for three wells. These samples contained low concentrations (i.e., below 6 micrograms per liter [µg/L]) of VOCs. It is not known whether these wells are located up- or downgradient of the site. In 1987, NUS Corporation (NUS), a U.S. Environmental Protection Agency (USEPA) contractor, collected four soil samples from the site. VOCs, SVOCs, pesticides, and polychlorinated biphenyls (PCBs) were detected in these samples. PCBs were detected at concentrations of 320 and 800 micrograms per kilogram (µg/kg) (Appendix D). In 1990, during a site walkover, Jordan personnel observed mounds of fill material and exposed piles of waste on the site. The waste appeared to be a combination of slag and ash. In addition, Jordan personnel observed approximately 12 to 14 unlabeled and open, and 10 to 15 partially buried 55-gallon waste containers. A tar-like substance and residual liquid were observed in these containers.

Information collected and reviewed by the E.C. Jordan Co. (Jordan) was insufficient to document the disposal of hazardous waste at this site or to determine whether the site poses a significant threat to public health and the environment. Therefore, Jordan cannot recommend changing the classification of the Witmer Road Site on the New York State Registry of Inactive Hazardous Waste Sites.

To obtain data to confirm or deny hazardous waste disposal, Preliminary Site Assessment (PSA) Task 3 activities should be initiated. Jordan recommends sampling the waste piles, the residual tar-like substance, the liquid in the 55-gallon containers, and the soil beneath the waste containers, and analyzing these for the USEPA Target Compound List (TCL) of organic and inorganic compounds, and for characteristics of Extraction Procedure (EP) toxicity, ignitability, corrosivity, and reactivity. These data will be used to determine hazardous waste characteristics and to identify hazardous constituents.

Based on the results of PSA Task 3 activities, the New York State Department of Environmental Conservation (NYSDEC) will decide whether PSA Task 4 activities should be initiated to determine whether the wastes present a significant threat to public health or the environment. Should Task 4 activities be required, Jordan recommends sampling the nearby private wells and analyzing these samples for the TCL, or at a minimum, compounds detected in PSA Task 3 activities. In addition, downgradient monitoring wells should be installed, sampled, and analyzed for the USEPA TCL to determine if New York State ambient and drinking water standards have been exceeded. Hydrogeological information gained during the installation of downgradient wells will be evaluated to define groundwater flow from the site. This information will be assessed to determine the potential threat of groundwater contamination to nearby private wells.

A legal title search should also be conducted for the Witmer Road disposal area and abutting properties to identify current and previous owners. A field survey should be conducted to identify and clearly establish property boundaries.



SOURCE: N.Y.S. DEPARTMENT OF TRANSPORTATION, NIAGARA FALLS AND LEWISTON QUADRANGLE DATED 1989 AND 1976, RESPECTIVELY, 7.5 MINUTE SERIES

SITE NO: 932027
LOCATION: CITY OF NIAGARA FALLS
NIAGARA COUNTY

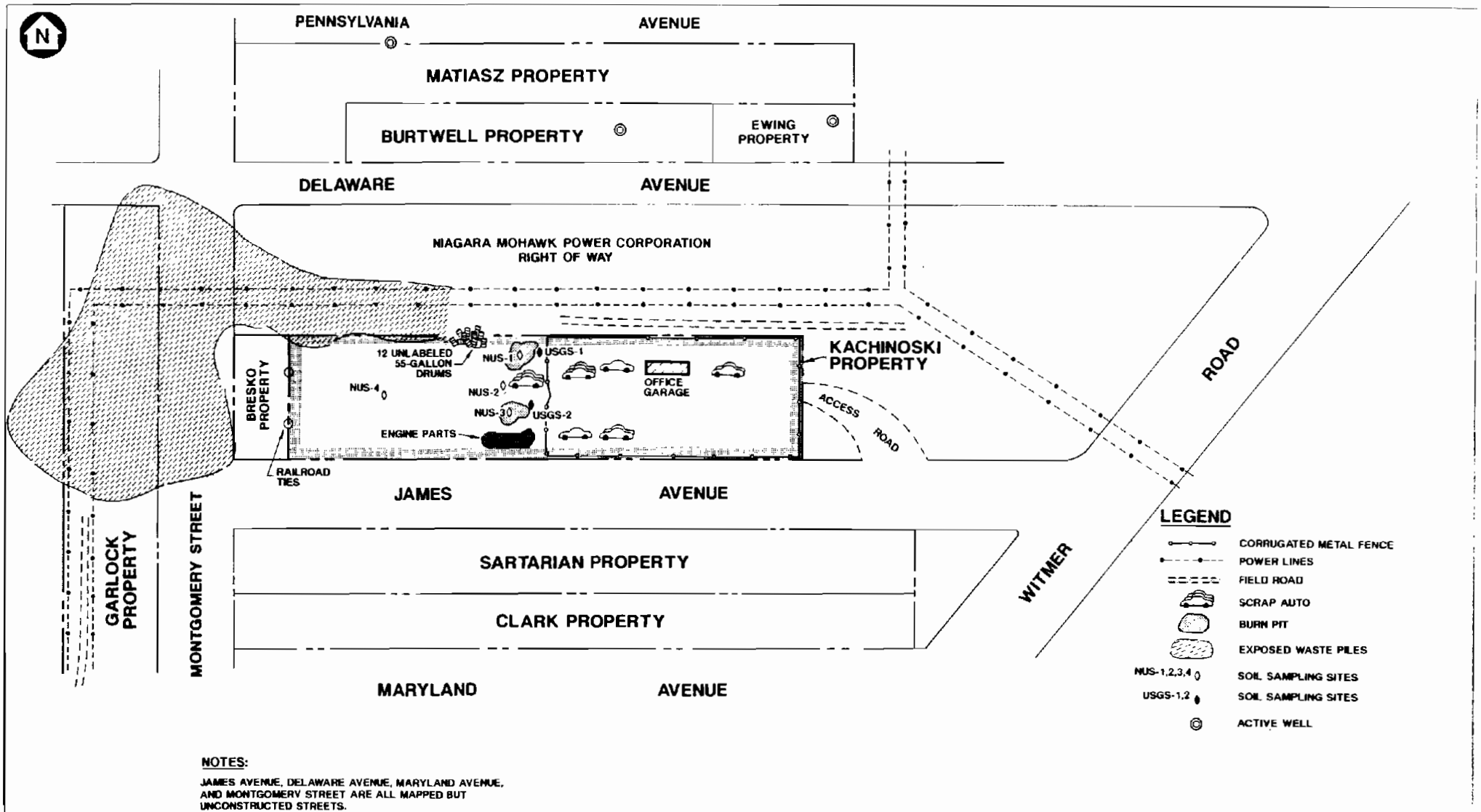
SCALE IN FEET

0 2000 4000

FIGURE 1
SITE LOCATION MAP
WITMER ROAD SITE
PRELIMINARY SITE ASSESSMENT
NEW YORK STATE DEC

ECJORDANCO

6291-30



NOTES:

JAMES AVENUE, DELAWARE AVENUE, MARYLAND AVENUE, AND MONTGOMERY STREET ARE ALL MAPPED BUT UNCONSTRUCTED STREETS.

NOT TO SCALE

FIGURE 2
SITE SKETCH MAP
WITMER ROAD SITE
PRELIMINARY SITE ASSESSMENT
NEW YORK STATE DEC

E.C. JORDAN CO.

6291-30

SOURCE: TOWN OF NIAGARA TAX MAP NO. 130.15

FIGURE 3
PROPERTY TAX MAP
WITMER ROAD SITE
PRELIMINARY SITE ASSESSMENT
NEW YORK STATE DEC

6291-30

EC JORDAN CO

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS WASTE REMEDIATION

Copy—REGION
Copy—DEE
Copy—DOH
Copy—PREPARER

ADDITIONS/CHANGES TO REGISTRY OF INACTIVE HAZARDOUS WASTE DISPOSAL SITES

1. SITE NAME	2. SITE NO.	3. TOWN	4. COUNTY
Witmer Road	932027	Town of Niagara	Niagara

5. REGION	6. CLASSIFICATION	7. ACTIVITY
9	Current 2a /Proposed ____	☐ Add ☐ Reclassify ☐ Delist ☒ Modify ____

8a. DESCRIBE LOCATION OF SITE (Attach U.S.G.S. Topographic Map showing site location).

The Witmer Road Site is located at 400 Witmer Road, in the Town of Niagara, Niagara County, New York.

b. Quadrangle Niagara Falls c. Site Latitude 43°07'19" Longitude 79°02'41" d. Tax Map Number 130.15

9a BRIEFLY DESCRIBE THE SITE (Attach site plan showing disposal/sampling locations)

The site is bordered by scrap yards to the north, south, and west, and Witmer Road to the east. Original topography was flat, however due to waste deposits, surface topography is undulating. Site is not secure.

b. Area 1 acres c. EPA ID Number NYD980509459 d. PA/SI ☒ Yes ☐ No

e. Completed: ☒ Phase I ☐ Phase II ☐ PSA ☐ Sampling

10. BRIEFLY LIST THE TYPE AND QUANTITY OF THE HAZARDOUS WASTE AND THE DATES THAT IT WAS DISPOSED OF AT THIS SITE

No hazardous waste disposal was documented at this site. The site walkover revealed several piles of exposed wastes and numerous 55-gallon containers. Approximately 10 to 15 of these waste containers had a solid, black, tar-like substance inside and approximately 12 to 14 drums contained rainwater and unknown residuals.

11a. SUMMARIZED SAMPLING DATA ATTACHED

☐ Air ☐ Groundwater ☐ Surface Water ☐ Soil ☐ Waste ☐ EP Tox ☐ TCLP.

b. List contravened parameters and values

No sampling was performed for this Preliminary Site Assessment Task 1.

12. SITE IMPACT DATA

a. Nearest surface water: Distance 1.4 mi Direction West Classification AA

b. Nearest groundwater: Depth 10 ft. Flow Direction West ☐ Sole Source ☒ Primary ☐ Principal

c. Nearest water supply: Distance 400 ft. Direction North Active ☒ Yes ☐ No

d. Nearest building: Distance 100 ft. Direction East Use Office (garage)

e. Crops or livestock on site? ☐ Yes ☒ No

f. Exposed hazardous waste? ☐ Yes ☐ No Unknown

g. Controlled site access? ☐ Yes ☒ No

h. Documented fish or wildlife mortality? ☐ Yes ☒ No

i. Impact on special status fish or wildlife resource? ☐ Yes ☒ No

j. Within a State Economic Development Zone? ☐ Yes ☒ No

k. For Class 2a: Code 5b Health Model Score No

l. For Class 2: Priority Category ____

m. HRS Score No

n. Significant Threat ☐ Yes ____ ☐ No ☒ Unknown

13. SITE OWNER'S NAME	14. ADDRESS	15. TELEPHONE NUMBER
Mr. Kachinoski Mr. Ryding; Mr. Burtwell;	Kach's Auto Service 4800 Witmer Rd. Niagara Falls, NY	(716) 282-3455

16. PREPARER Mr. Bresko

Roger Bondeson — Environmental Scientist, E.C. Jordan Co.
Name, Title and Organization

March 6, 1991 — Roger Bondeson
Date — Signature

17. APPROVED

____
Name, Title and Organization

____ — ____
Date — Signature

2.0 PURPOSE

The purpose of a PSA is to provide the information necessary for NYSDEC to adequately categorize a site according to the following classifications:

Class 2 - Hazardous waste sites presenting a significant threat to the public health or the environment.

Class 3 - Hazardous waste sites not presenting a significant threat to the public health or the environment.

Delist - Sites where hazardous waste disposal is not documented.

PSA Task 1, Data Records Search and Assessment, was conducted at the Witmer Road Site, Site No. 932027 in the Town of Niagara, Niagara County, New York, by Jordan personnel under the NYSDEC Superfund Standby Contract (Contract No. D002472, Work Assignment No. D002472-6).

The Witmer Road Site is a suspected inactive hazardous waste site recognized by NYSDEC. This site is currently classified as Class 2a because there is insufficient information to document hazardous waste disposal and/or assess the significance of potential risks to public health or the environment.

3.0 SCOPE OF WORK

PSA Task 1 consists of two data-gathering activities: a file review/records search and a site walkover. Specific activities performed for the Witmer Road Site under these functions are described in the following subsections.

3.1 File Reviews

The Jordan project team began collecting information on the Witmer Road Site at the NYSDEC Central Office in Albany, New York, during the week of June 25, 1990. In addition, Jordan personnel reviewed files and obtained site information at the NYSDOH, the USGS, the U.S. Fish and Wildlife Service, the New York State Department of Transportation, and the New York State Geological Survey.

During the weeks of July 16 and 23, 1990, the Jordan team collected additional information on property ownership, land use, wetlands, and critical habitats from regional sources. The following agencies and county offices were visited:

- New York State Department of
  Environmental Conservation
  Region 9
  584 Delaware Avenue
  Buffalo, NY 14202

- New York State Department of
  Environmental Conservation
  Region 9
  600 Delaware Avenue
  Buffalo, NY 14202

- New York State Department of Health
  Western Regional Office
  584 Delaware Avenue
  Buffalo, NY 14202

- Niagara County Health Department
  Environmental Health Services
  10th and East Falls Street
  Niagara Falls, NY 14302

The following individuals were interviewed:

Paul Dicky
Public Health Engineer
Niagara County Health Department
10th and East Falls Street
Niagara Falls, New York
(716) 284-3128

Jim Wilding
Environmental Engineer II
New York State Department of Environmental Conservation
Region 9
600 Delaware Avenue
Buffalo, New York 14414
(716) 847-4585

3.2 Site Walkover

On July 19, 1990, a site walkover was conducted at the Witmer Road Site. The following individuals participated:

Name	Title	Affiliation
Roger Bondeson	Environmental Scientist	E.C. Jordan Co.
Cathy Lanois	Environmental Scientist	E.C. Jordan Co.
Jim Wilding	Environmental Engineer II	NYSDEC Region 9
Sri Maddineni	Environmental Engineer II	NYSDEC Central
Bill Kachinoski	Property Manager	Kach's Auto Service

The site tour began at 1:30 p.m. Before entering the site, the field team calibrated a photoionization detector to monitor ambient air quality during the inspection. The resulting data were used to confirm that worker health was protected and safety procedures could be instituted if concentrations were detected above background levels. No readings above background levels were observed during the site visit.

A site sketch illustrating the waste disposal areas and abutting properties is shown in Figure 2. The site walkover began on the eastern side of the Kachinoski property. Numerous used automobiles, engines, engine parts, gasoline tanks, and tires were observed on-site. Stained soils were also observed in the disposal areas.

West of the Kachinoski property, as marked by railroad ties, Jordan personnel observed mounds of fill material and exposed piles of waste. The waste piles extended under the Niagara Mohawk Power Corporation lines to a metal fence at the boundary of another scrap yard, owned by Mr. Garlock. The exposed waste piles form an "L"-shaped mound along the power line right-of-way. The waste was chalky-white, had a granular texture, and appeared to be a combination of ash and slag. Along the northern border of the Kachinoski property and the Niagara Mohawk Power Corporation right-of-way, Jordan personnel observed approximately 12 to 14 unlabeled, open 55-gallon containers standing upright. Jordan personnel observed rainwater and unknown residual liquids in these containers. Approximately 10 to 15 partially buried 55-gallon containers were also observed in this area, containing a solid black pitch or tar-like substance.

The Witmer Road disposal area is easily accessed through unsecured field roads located on the western, southern, and eastern areas of the disposal site. Portions of the abutting scrap yards are fenced; however, the roads traversing the area are not fenced or gated, allowing easy access to the site.

Photographs of the site were taken to be included in the site file. The inspection was completed at 3:30 p.m.

4.0 SITE ASSESSMENT

The following subsections describe the information obtained during the records search, interviews, and site walkover of the Witmer Road Site.

4.1 Site History

Because property boundaries are not well marked, ownership of the Witmer Road disposal area is uncertain. Potential property owners include (Town of Niagara, 1990):

- Mr. Adolph Kachinoski - Kach's Scrap Company
- Mr. Ryding - Sartarian Company
- Mr. Garlock - Garlock scrap yard
- Mr. Bresko
- Mr. Clark
- Mr. Burtwell

In addition, the Town of Niagara owns the "paper roads" and the Niagara Mohawk Power Corporation owns right-of-ways for overhead power lines. Some of these property owners either own or have parcels abutting portions of the Witmer Road Site.

From the early 1950s to late 1965, the Witmer Road disposal site reportedly was used to dump various types of waste including lime clean-outs from the International Mineral and Chemical Company, wastes from air pollution control equipment owned and operated by Airco Alloys, and slag materials from the Vanadium Corporation (Niagara County Health Department, 1982). The City of Niagara Falls reportedly operated two refuse burning pits on the Kachinoski property. Paper, furniture, and wood debris reportedly were burned in these pits and the resulting ash was disposed of off-site. Burning operations ceased in the 1960s due to citizen complaints of odor and smoke (Engineering-Science, 1986).

Aerial photographs dated 1951, 1958, 1966, and 1977 show that the Witmer Road disposal area has undergone many changes in the last 30 years (Appendix C). In 1951, the Witmer Road disposal site was heavily vegetated and undeveloped -- with the exception of a junk yard south of the site. In 1958, the site had been cleared of vegetation and worked by heavy machinery. By 1966, a portion of the site had been developed into a junk yard.

In 1977, exposed areas were still visible; however, most of the site was beginning to show evidence of revegetation. Several other scrap yards appeared to be operating in the vicinity of the Witmer Road disposal area (Niagara County Soil and Water Conservation District, 1951, 1958, 1966, and 1977).

A deed review at the Niagara County Registry of Deeds shows that a portion of the Witmer Road property was owned by C. Edgar Allen in

1958. In 1960, Mr. Allen sold the property to George W. Wehrmeyer and Raymond R. Simons. This property consisted of Lots 24-40 (Figure 3). According to the deed review, Adolph L. Kachinoski purchased property (i.e., Lots 24-40) from George W. Wehrmeyer and Raymond R. Simons in October 1965. Mr. Adolf Kachinoski has operated this property as a junk yard from 1965 to the present.

The Witmer Road disposal area may also include properties owned by abutting scrap yard operators, and right-of-ways owned by the Town of Niagara and the Niagara Mohawk Power Corporation. Site ownership, as understood from the file review, is illustrated in Figure 3. The old refuse burn pits operated by the City of Niagara Falls have been back-filled and are now covered by junk automobiles in the Kachinoski junk yard. The Witmer Road Site is currently used as a scrap yard. There was no evidence of scavenger dumping on the Witmer Road Site at the time of the site walkover.

4.2 Site Topography

The Witmer Road Site is located at 4800 Witmer Road in the Town of Niagara, Niagara County, New York. Before any disposal activities occurred, the ground surface of the site was relatively flat. Surface topography is currently altered by several mounds of waste materials. Weeds, brush, shrubs, and sparse grasses are growing throughout the disposal area; however, some areas have remained void of growth.

Topography of the Witmer Road disposal area, including portions of the Kachinoski and Bresko properties, is undulating, indicating the presence of buried waste piles. The disposal area is bordered on the south by the Sartarian scrap yard, to the west by the Garlock scrap yard, to the north by Burtwell scrap yard, and to the east by Kach's Auto Service and Witmer Road (see Figure 2).

4.3 Site Hydrology

The following paragraphs describe what is known about the hydrologic setting at the Witmer Road Site. Soils on the Witmer Road Site consist of the Odessa-Lakemont-Ovid association which are somewhat poorly to very poorly drained reddish soils (Engineering-Science, 1986). Surficial geology at the Witmer Road Site is not well documented; however, soil borings from the Hyde Park Landfill study (Bergeron, 1984) and on-site borings drilled by USGS in 1982 provide a general indication of the soil profile. The USGS borings were drilled near the old burn pits on the Kachinoski property. The general soil profile is as follows:

Feet Below Ground Surface	Soil Description
0 to 2	Fill and waste materials
2 to 5	Clay and silts
5 to 10	Reddish silt and gray clay
approximately 10	Bedrock

Bedrock is expected to be Lockport Dolomite. No groundwater was encountered above bedrock in the USGS borings. According to information in the Hyde Park Landfill Study, groundwater flow is expected to be west toward the Niagara River. The Hyde Park Landfill is located approximately 1,400 feet north of the Witmer Road Site. The depth to groundwater is expected to be 15 feet (Bergeron, 1984).

The permeability of the unsaturated zone is expected to be 10^{-4} to 10^{-8} centimeters per second (cm/sec) and the permeability of the Lockport Dolomite bedrock is expected to be 10^{-4} to 10^{-8} cm/sec (Engineering-Science, 1986).

Most residents in the vicinity of the Witmer Road Site are served by a public water system that obtains drinking water from the Niagara River. According to information provided by the Town of Niagara Water Department, there were six residences with private drinking water wells located on Pennsylvania and Delaware avenues approximately 400 feet northeast of the site. Three of these residences have been connected to public water and no longer use the wells. The remaining three, all located on Delaware Avenue, still use well water. Owners of these properties are Mr. Ewing, Mr. Burtwell, and Mr. Matiasz (Town of Niagara Water Department, 1990).

It is important to note that Delaware and Pennsylvania avenues are also "paper roads" that were never constructed. Access to the Mataisz, Burtwell, and Ewing residences is via a gravel road locally referred to as Delaware Avenue. Although the Matiasz residence is located on Pennsylvania Avenue, the property is accessed via Delaware Avenue.

4.4 Contamination Assessment

In 1982, USGS collected soil samples from borings placed adjacent to the old burning pits (see Figure 2). Laboratory analysis of these samples detected copper, VOCs, SVOCs, and unknown hydrocarbons at concentrations between 22.9 and 4,160 µg/kg (USGS, 1982). However, these data are questionable because sample holding times were exceeded and surrogate recoveries were above or below acceptable limits. No background soil samples were collected by the USGS.

In 1984, NYSDOH collected groundwater samples from five private drinking water wells located along Delaware and Pennsylvania avenues. Data were available for three of these samples. Low concentrations of VOCs (i.e., below 6 µg/L) were detected in these samples (Table 1) (NYSDOH, 1984 and 1985). These concentrations are below New York State drinking water standards, with the exception of trichloroethylene, which was detected at 6 µg/L in the Webber well on Pennsylvania Avenue. Because of limited information about well specifications and groundwater flow in this area, Jordan cannot determine whether these contaminants are attributable to the Witmer Road Site, the Hyde Park Landfill, or other potential sources.

In July 1987, NUS conducted a Site Investigation of the Witmer Road Site for USEPA and collected four soil samples in the refuse pits and surrounding areas (see Figure 2). NUS is under contract to USEPA to conduct a Preliminary Assessment of the Witmer Road Site. According to the USEPA Region II office, the NUS report will be finalized in early 1991. The soil sample analysis revealed detectable concentrations of metals, VOCs, SVOCs, pesticides, and PCBs. Levels of PCBs (i.e., 320 to 800 µg/kg) were less than 50 milligrams per kilogram (mg/kg), at which PCBs are defined as hazardous under 6 NYCRR 371. Lead was detected at levels of 162 to 577 mg/kg and chromium was detected at levels of 48 to 393 mg/kg. A copy of the NUS Corporation sampling results is attached as Appendix D.

TABLE 1
CONTAMINANT CONCENTRATIONS IN PRIVATE WELLS

WITMER ROAD SITE
PRELIMINARY SITE ASSESSMENTS

WELL OWNER	CHEMICAL NAME/CONCENTRATION	NYSDOH STANDARD
Mr. & Mrs. Frank Webber 2705 Pennsylvania Avenue Niagara Falls, New York 14305	trans-1,2-dichloroethene 6-µg/L trichloroethylene-6 µg/L benzene-1 µg/L	5 µg/L 5 µg/L 5 µg/L
Mr. & Mrs. Victor Untulis 2645 Pennsylvania Avenue Niagara Falls, New York 14305	dichloromethane-1 µg/L, trans-1,2-dichloroethene-2 µg/L trichloroethylene-2 µg/L benzene-1 µg/L	5 µg/L 5 µg/L 5 µg/L 5 µg/L
Mrs. John LaChance 2633 Pennsylvania Avenue Niagara Falls, New York 14305	trans-1,2 dichloroethene-2 µg/L trichloroethylene-2 µg/L benzene-1 µg/L	5 µg/L 5 µg/L 5 µg/L

NOTE: Samples collected November 14, 1984
NYSDOH - New York State Department of Health
µG/l = micrograms per liter

5.0 ASSESSMENT OF DATA ADEQUACY AND RECOMMENDATIONS

5.1 Hazardous Waste Deposition

Information collected and reviewed by Jordan personnel was insufficient to document the disposal of hazardous waste at the Witmer Road Site as defined by New York State regulations (6 NYCRR 371). However, soil sample analysis by USGS and NUS indicate that hazardous substances may be present in soils collected at the site. Jordan personnel observed a solid pitch or tar-like substance in 10 to 15 unlabeled 55-gallon containers, and rainwater and unknown residual liquids in 12 to 14 containers. This site has been used for several years by area industries and the City of Niagara Falls to dispose of or burn a variety of wastes.

5.2 Significant Threat Determination

The threat to public health and the environment from the Witmer Road Site is unknown. Water samples collected in 1984 by NYSDOH from five private residences showed low levels of VOCs. Data was only available for three of the five wells sampled. The levels of organics detected in these wells were below NYSDOH drinking water standards with the exception of trichloroethylene, which was detected at 6 μg/L in one well located on Pennsylvania Avenue (see Subsection 4.4). The wells located on Pennsylvania Avenue are no longer in use as these residences have been connected to public water. The other wells, located on Delaware Avenue, approximately 400 feet northeast of the site, are still in use. Because groundwater flow and hazardous waste deposition of the Witmer Road Site are unknown, the threat to the drinking water wells on Delaware Avenue is unknown.

Soil data collected by USGS and NUS indicate the presence of copper, VOCs, SVOCs, and unknown hydrocarbons in the soils adjacent to the old refuse pits located on the Kachinoski property. The accuracy of these data is unknown because holding times were exceeded and surrogate recoveries were above or below acceptance limits. Although metals, VOCs, SVOCs, and PCBs were detected in the soils, there are no standards to compare these data and assess the threat to public health and the environment. PCBs were detected below levels considered to be hazardous (i.e., 50 mg/kg) (NUS Corporation, 1987).

The Witmer Road Site is easily accessed via power line easements and field roads. This presents a potential for direct contact with and exposure to potentially contaminated soils. Given the types of waste reportedly on the site, inhalation of contaminated particulates is not likely; however, the wastes should be characterized to further assess the potential threat to public health and the environment.

The nearest wetland larger than 5 acres is more than two miles away and there are no critical habitats, endangered species, or national wildlife refuges within one mile of the site (Sneider and Wilkinson, 1985). The Niagara River, which supplies public drinking water, is 1.4 miles west of the site.

5.3 Recommendations

Information collected and reviewed by Jordan personnel was insufficient to document the disposal of hazardous waste at this site or to determine whether the site poses a significant threat to public health and the environment. Therefore, Jordan cannot recommend changing the classification of the Witmer Road Site on the New York State Registry of Inactive Hazardous Waste Sites.

To obtain data to confirm or deny hazardous waste disposal, PSA Task 3 activities should be initiated. Jordan recommends sampling the waste piles, the residual tar-like substance, the residual liquid in the containers; and the soil beneath the containers, and analyzing these for the USEPA TCL and for characteristics of EP toxicity, ignitability, corrosivity, and reactivity. These data also will be used to determine hazardous waste characteristics and identify hazardous constituents.

Based on the results of PSA Task 3 activities, NYSDEC will decide whether PSA Task 4 activities should be initiated to determine whether any wastes present a significant threat to public health or the environment. Should Task 4 activities be required, Jordan recommends sampling the nearby private wells and analyzing these samples for the TCL, or at a minimum, compounds detected in PSA Task 3 activities. In addition, downgradient monitoring wells should be installed, sampled, and analyzed for the TCL to determine whether groundwater exceeds ambient and drinking water standards. Hydrogeologic data from these wells also will define groundwater flow. This information will be used to assess the potential threat of groundwater contamination in private wells. A legal title search should be conducted for each property owner on or near the disposal site to determine current and previous ownership of the disposal area. Field surveys should be conducted to mark property boundaries.

GLOSSARY OF ACRONYMS AND ABBREVIATIONS

cm/sec	centimeters per second
EP	Extraction Procedure
NYCRR	New York Code of Rules and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NUS	NUS Corporation
mg/kg	milligrams per kilogram
PCB	polychlorinated biphenyl
PSA	Preliminary Site Assessment
SVOC	semivolatile organic compounds
TCL	Target Compound List
µg/L	micrograms per liter
µg/kg	micrograms per kilogram
USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geologic Survey
VOC	volatile organic compounds

APPENDIX A

REFERENCES

REFERENCES

Bergeron, M.P., 1984. "Analysis of Groundwater Flows in Vicinity of Hyde Park Landfill, Niagara Falls, New York"; U.S. Geological Survey Administrative Report.

Engineering-Science, 1986. "Engineering Investigations at Inactive Hazardous Waste Sites, Phase I Investigation, Witmer Road Site, Site Number 932027"; prepared for New York State Department of Environmental Conservation, Division of Solid and Hazardous Waste; January 1986.

Kachinoski, Bill, 1990. Operator of Kach's Auto Service, 4800 Witmer Road, Niagara Falls, New York, 14305; Personal Communication with Roger Bondeson, E.C. Jordan Co., Portland, Maine.

New York State Department of Environmental Conservation (NYSDEC), Division of Hazardous Waste Remediation, Central Office, Albany, New York; Contact: Sri Maddineni.

New York State Department of Environmental Conservation NYSDEC), Region 9, Division of Solid and Hazardous Waste, 584 Delaware Avenue, Buffalo, New York; Contact: Jim Wilding.

New York State Department of Health (NYSDOH), Western Regional Office, 584 Delaware Avenue, Buffalo, New York; Contact: Cameron O'Connor.

New York State Department of Health (NYSDOH), 1984. "Well Water Analysis of Five Private Wells on Pennsylvania and Delaware Avenues, town of Niagara"; Albany, New York.

New York State Department of Health (NYSDOH), 1985. Corning Tower, The Governor Nelson A. Rockefeller Empire State Plaza, Albany, New York. Correspondence with Victor Untulis, Mrs. John LaChance, and Frank Webber; Dated February 22, 1985.

New York State Department of Transportation, 1989. Topographic Map, Niagara Falls Quadrangle.

Niagara County Health Department, 10th and East Falls Street, Niagara Falls, New York; Contact: Paul Dickey.

REFERENCES
(Continued)

Niagara County Health Department (NCHD), 1982. "Preliminary Investigation and Profile Reports for Twenty-Six Suspected Industrial Disposal Sites in Niagara County, New York"; Niagara Falls, New York; March, 1982.

Niagara County Registry of Deeds, Niagara County Clerk, 175 Hawley Street, Lockport, New York 14094.

Niagara County Soil and Water Conservation District, Farm and Home Center, 4487 Lake Avenue, Lockport, New York 14094; Contact: Richard Tillman.

NUS Corporation, 1987. "Potential Hazardous Waste Site Inspection Report, Witmer Road Site"; prepared for EPA Region II, Edison, New Jersey; July 21, 1987.

Sneider, Jim, and Mike Wilkinson, New York State Department of Environmental Conservation, Division of Fish and Wildlife, 1985. Personal communication with Engineering Science, 1/10/85 to 1/11/85.

Town of Niagara, Tax Assessors Office, 7105 Lockport Road, Niagara Falls, New York 14304.

Town of Niagara, Water Department, 7105 Lockport Road, New York 14304; Contact: Velma Rafferty.

U.S. Department of Agriculture (USDA) Soil and Water Conservation District, Niagara County, 4487 Lake Avenue, Lockport, New York, 14094; Aerial Photographs 10/14/51, Map Number ARE-5H-153, 8/2/58; ARE-IV-24, 6/12/66; ARE 2-GG-50, 1/77; 36063-177-91.

U.S. Geological Survey (USGS), 1982. "Draft Report of Preliminary Evaluation of Chemical Migration to the Niagara River from Hazardous Waste Disposal Sites in Erie and Niagara Counties, 1983."

APPENDIX B

SITE INSPECTION REPORT
(USEPA FORM 2070-13)

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

EPA

I. IDENTIFICATION

01 STATE	01 SITE NUMBER
New York	D980509459

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Witmer Road Site	Witmer Road at Maryland Avenue

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG. DIST
Niagara	New York	14305	Niagara	063	36

09 COORDINATES LATITUDE	LONGITUDE	10 TYPE OF OWNERSHIP (Check one)
43° 07′ 19″	79° 02′ 41″	X A. PRIVATE _ B. FEDERAL _____ _ C. STATE _ D. COUNTY _ E. MUNICIPAL _ F. OTHER _____ _ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
7 / 19 / 90 (MONTH DAY YEAR)	X ACTIVE _ INACTIVE	1940's (BEGINNING YEAR) | Present (ENDING YEAR) ____ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)
_ A. EPA _ B. EPA CONTRACTOR _____ (Name of firm) _ C. MUNICIPAL _ D. MUNICIPAL CONTRACTOR _____ (Name of firm)
_ E. STATE X F. STATE CONTRACTOR E.C. Jordan Co. (Name of firm) _ G. OTHER _____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
Roger L. Bondeson	Environmental Scientist	E.C. Jordan Co.	(207) 775-5401
09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
Kathy Lanois	Environmental Scientist	E.C. Jordan Co.	(617) 246-6606
			( )
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO.
			( )
Bill Kachinoski	Site Manager	4800 Witmer Road Niagara Falls, New York 14305	(716) 282-3455
			( )
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
X PERMISSION ☐ WARRANT	1:30 pm	Sunny, 85° F, - 90° F

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Sri Maddineni	New York State Department of Environmental Conservation	(518) 457-0638

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Roger L. Bondeson		E.C. Jordan Co.	(207) 775-5401	7/19/90 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION	
01 STATE	01 SITE NUMBER
New York	D980509459

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- X A. SOLID
- X B. POWDER, FINES
- X C. SLUDGE
- _ D. OTHER _____ (Specify)
- _ E. SLURRY
- _ F. LIQUID
- _ G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

- TONS: unknown
- CUBIC YARDS: unknown
- NO. OF DRUMS: unknown

03 WASTE CHARACTERISTICS (Check all that apply)

- X A. TOXIC
- _ B. CORROSIVE
- _ C. RADIOACTIVE
- _ D. PERSISTENT
- _ E. SOLUBLE
- _ F. INFECTIOUS
- X G. FLAMMABLE
- _ H. IGNITABLE
- _ I. HIGHLY VOLATILE
- _ J. EXPLOSIVE
- _ K. REACTIVE
- _ L. INCOMPATIBLE
- _ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			• Unknown quantities of burned refuse ash,
OLW	OILY WASTE			suspected slag and lime. Clean-out
SOL	SOLVENTS			possible containing chromium.
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			• Seven priority and 5 nonpriority
IOC	INORGANIC CHEMICALS			organics in soil
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	suspected		• Chromium in clean-out waste

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04/STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
OCC	benzene	71-43-2	unknown	8.8	ug/kg in soil
OCC	1,1,1,TCA	71-55-6	unknown	22.9[1]	ug/kg in soil
OCC	trichloroethene	79-01-6	unknown	detectable	ug/kg in soil
OCC	fluoranthene	206-44-0	unknown	detectable	ug/kg in soil
OCC	naphthalene	91-20-3	unknown	detectable	ug/kg in soil
OCC	bis(2-ethylhexyl)	117-81-7	unknown	104[1,2]	ug/kg in soil
OCC	pyrene	129-0-00	unknown	detectable	ug/kg in soil
OCC	carbon disulfide	75-15-0	unknown	38.4	ug/kg in soil
OCC	2-methylnaphthalene	91-57-6	unknown	detectable	ug/kg in soil
OCC	dibenzofuran	43047-99-0	unknown	detectable	ug/kg in soil
MES	chromium	7440-47-3	unknown	393	mg/kg in soil
MES	copper	7440-50-8	unknown	2.0-332	mg/kg in soil
		[1]holding time	exceeded before	analysis	
		[2]surrogate	recoveries were	above or below	acceptance levels

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Preliminary Site Assessment Report, March 1991, E.C. Jordan Co., and references cited therein.

EPA	POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT *PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS*	I. IDENTIFICATION	
		01 STATE New York	01 SITE NUMBER D980509459

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 X A. GROUNDWATER CONTAMINATION — 02 _ OBSERVED (DATE: _____) X POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: < 10 — 04 NARRATIVE DESCRIPTION

Unlined pit may allow contaminants to migrate to groundwater.

01 _ B. SURFACE WATER CONTAMINATION — 02 _ OBSERVED (DATE: _____) X POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

N/A

01 _ C. CONTAMINATION OF AIR — 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

N/A

01 _ D. FIRE/EXPLOSIVE CONDITIONS — 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

01 X E. DIRECT CONTACT — 02 _ OBSERVED (DATE: _____) X POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Access to site is unrestricted and there are several exposed waste piles.

01 X F. CONTAMINATION OF SOIL — 02 _ OBSERVED (DATE: _____) X POTENTIAL _ ALLEGED
03 ACREAGE POTENTIALLY AFFECTED: 10-100 — 04 NARRATIVE DESCRIPTION

Soil contamination has been documented by NUS Corporation Site Investigation, July, 1987. Volatiles, semi-volatiles, and pesticides have been detected. PCB's have been detected at levels less than 50 ppm.

01 X G. DRINKING WATER CONTAMINATION — 02 _ OBSERVED (DATE: _____) X POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: < 10 — 04 NARRATIVE DESCRIPTION

There are three drinking water wells located 400 feet northeast of the site.

01 _ H. WORKER EXPOSURE/INJURY — 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Unknown

01 _ I. POPULATION EXPOSURE/INJURY — 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Unknown

EPA	POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT *PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS*	I. IDENTIFICATION 01 STATE: New York 01 SITE NUMBER: D980509459

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 _ J. DAMAGE TO FLORA — 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
04 NARRATIVE DESCRIPTION

Unknown

01 _ K. DAMAGE TO FAUNA — 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)

Unknown

01 _ L. CONTAMINATION OF FOOD CHAIN — 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
04 NARRATIVE DESCRIPTION

Unknown

01 X M. UNSTABLE CONTAINMENT OF WASTES (Spills/Runoff/Standing liquids, Leaking drums) — 02 X OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Site is not covered or lined.

01 _ N. DAMAGE TO OFFSITE PROPERTY — 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Unknown

01 _ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 _ OBSERVED (DATE: _____) _ POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

N/A

01 X P. ILLEGAL/UNAUTHORIZED DUMPING — 02 _ OBSERVED (DATE: _____) X POTENTIAL _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Site access is not restricted and grounds are not supervised.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

Industrial wastes suspected to have been disposed on-site, groundwater and soils may be contaminated by wastes on-site.

III. TOTAL POPULATION POTENTIALLY AFFECTED: 10 - 100

IV. COMMENTS

There is no documentation of hazardous waste deposition. Several piles of exposed wastes were observed. Numerous unlabeled 55-gallon containers containing a tar-like substance and other drums containing rainwater and unknown residuals were also observed.

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Preliminary Site Assessment Report, March 1991, E.C. Jordan Co., and references cited therein.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION	
01 STATE	01 SITE NUMBER
New York	D980509459

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
_ A. NPDES				
_ B. UIC				
_ C. AIR				
_ D. RCRA				
_ E. RCRA INTERIM STATUS				
_ F. SPCC PLAN				
_ G. STATE (specify)				
_ H. LOCAL (specify)				
_ I. OTHER (specify)				
X J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
_ A. SURFACE IMPOUNDMENT		
_ B. PILES		
_ C. DRUMS, ABOVE GROUND		
_ D. TANK, ABOVE GROUND		
_ E. TANK, BELOW GROUND		
_ F. LANDFILL		
_ G. LANDFARM		
X H. OPEN DUMP	unknown	unknown
_ I. OTHER (specify)		

04 TREATMENT (check all that apply)
- _ A. INCINERATION
- _ B. UNDERGROUND INJECTION
- _ C. CHEMICAL/PHYSICAL
- _ D. BIOLOGICAL
- _ E. WASTE OIL PROCESSING
- _ F. SOLVENT RECOVERY
- _ G. OTHER RECYCLING/RECOVERY
- _ H. OTHER (specify)

05 OTHER
- X A. BUILDINGS ONSITE

06 AREA OF SITE

Approx. 1 (acres)

07 COMMENTS

The site has been used as a dumping area since the 1940's to dispose of wastes including refuse, construction debris, lime clean-outs, large non-combustible items, slag, and dust collected from air pollution control devices.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (check one)

_ A. ADEQUATE, SECURE _ B. MODERATE X C. INADEQUATE, POOR _ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

Uncontrolled dumping of materials onto the ground has occurred at the site since the 1940's. Wastes are not covered and site is not lined.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: X YES _ NO

02 COMMENTS

The sita is not secured or fenced to prevent unauthorized entry.

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Preliminary Site Assessment Report, March 1991, E.C. Jordan Co., and references cited therein.

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

EPA

PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	01 SITE NUMBER
New York	D980509459

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (check as applicable)

	SURFACE	WELL
COMMUNITY	A. X	A. _
NON-COMMUNITY	B. _	B. X

02 STATUS

ENDANGERED	AFFECTED	MONITORED
A. _	B. _	C. _
D. X	E. _	F. _

03 DISTANCE TO SITE

A. 1.4 (mi)
B. 400 ft. (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (check one)

_ A. ONLY SOURCE FOR DRINKING
X B. DRINKING (other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available)
_ C. COMMERCIAL INDUSTRIAL IRRIGATION (Limited other sources available)
_ D. NOT USED, UNUSABLE

02 POPULATION SERVED BY GROUNDWATER < 10

03 DISTANCE TO NEAREST DRINKING WATER WELL 400 ft. (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
≈ 15 (ft)	southwest	≈ 15 (ft)	Unknown (gpd)	_ YES X NO

09 DESCRIPTION OF WELLS (including usage, depth, and location relative to population and buildings)

No industrial wells. Numerous observation wells for PASNY Landfill Study 1984, Reservoir Power Projects, Hyde Park.

10 RECHARGE AREA		11 DISCHARGE AREA	
_ YES _ NO	COMMENTS - Unknown	_ YES _ NO	COMMENTS - Unknown

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

X A. RESERVOIR, RECREATION DRINKING WATER SOURCE
_ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES
_ C. COMMERCIAL INDUSTRIAL
_ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
Niagara River	_	1.4 (mi)
	_	(mi)
	_	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 8,972 NO. OF PERSONS	B. 28,897 NO. OF PERSONS	C. 51,745 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION

0.0 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE

> 10,000

04 DISTANCE TO NEAREST OFF-SITE BUILDING

0.0 (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within written vicinity of site, e.g., rural, village, densely populated urban area)

Area is a commercial/industrial section of Niagara Falls with scattered clusters of older homes.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

PART 6 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	01 SITE NUMBER
New York	D980509459

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

_ A. 10^{-6} - 10^{-8} cm/sec X B. 10^{-4} - 10^{-6} cm/sec _ C. 10^{-4} - 10^{-3} cm/sec _ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one) - Lockport Dolomite

_ A. IMPERMEABLE (less than 10^{-6} cm/sec) X B. RELATIVELY IMPERMEABLE (10^{-4} - 10^{-6} cm/sec) _ C. RELATIVELY PERMEABLE (10^{-2} - 10^{-4} cm/sec) _ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL Ph	
≈ 15 (ft)	unknown (ft)	Unknown	

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE		
		SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
9 (in)	2.1 (in)	2.4 %	southwest	2.7 %

09 FLOOD POTENTIAL

SITE IS IN > 500 YEAR FLOODPLAIN

10 _ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTAURINE OTHER

A. > 2.0 (mi) B. > 1.0 (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

Migratory Birds > 1.0 (mi)

ENDANGERED SPECIES: Aquila Chrysaetos, Haligaeetus Leucocep and Fallco Peregrenes

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS PRIME AG LAND	AGRICULTURAL LANDS AG LAND
A. 0.0 (mi)	B. 1.3 (mi)	C. >2 (mi)	D. >2 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

Disposal site consists of previously existing "burn pits" for municipal garbage. Pits have been filled in and are now surrounded by scrap yards. Ground surface is relatively flat and poorly drained. Weeds and brush are growing throughout the one acre site.

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Preliminary Site Assessment Report, March 1991, E.C. Jordan Co., and references cited therein.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION	
01 STATE	01 SITE NUMBER
New York	D980509459

II. SAMPLES TAKEN - No samples collected for this PSA Task 1.

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER			
SURFACE WATER			
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL			
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
HNU	HNU meter readings were taken during the site inspections and all readings
	were less than 1 ppm.

IV. PHOTOGRAPHS AND MAPS

01 TYPE X GROUND _ AERIAL

02 IN CUSTODY OF New York State Department of Environmental Conservation
(Name of organization or individual)

03 MAPS
X YES
_ NO

04 LOCATION OF MAPS
Sri Maddineni, New York State Department of Environmental Conservation, Albany, New York

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

No other field data were collected for this PSA Task 1.

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Preliminary Site Assessment Report, March 1991, E.C. Jordan Co., and references cited therein.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION	
01 STATE: New York	01 SITE NUMBER: D980509459

II. CURRENT OWNER(S)			PARENT COMPANY (If applicable)		
01 NAME: Kach's Scrap Co. c/o Adolf Kachinoski		02 D+B NUMBER	08 NAME		09 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.): 4737 Chester Avenue		04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)		11 SIC CODE
05 CITY: Niagara Falls	06 STATE: New York	07 ZIP CODE: 14305	12 CITY	13 STATE	14 ZIP CODE
01 NAME: Mr. Ryding		02 D+B NUMBER	08 NAME		09 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.): James Ave and Witmer		04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)		11 SIC CODE
05 CITY: Niagara Falls	06 STATE: New York	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE
01 NAME: Mr. Burtwell		02 D+B NUMBER	08 NAME		09 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.): Delaware and Witmer		04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)		11 SIC CODE
05 CITY: Niagara Falls	06 STATE: New York	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE
01 NAME: Mr. Garlock		02 D+B NUMBER	08 NAME		09 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.): Maryland Avenue		04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)		11 SIC CODE
05 CITY: Niagara Falls	06 STATE: New York	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE

III. PREVIOUS OWNER(S) (List most recent first)			IV. REALTY OWNER(S) (If applicable; list most recent first)		
01 NAME		02 D+B NUMBER	01 NAME		02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
01 NAME		02 D+B NUMBER	01 NAME		02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	D3 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
01 NAME		02 D+B NUMBER	01 NAME		02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Preliminary Site Assessment Report, March 1991, E.C. Jordan Co., and references cited therein.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION	
01 STATE: New York	01 SITE NUMBER: D980509459

II. CURRENT OPERATOR (Provide if different from owner)

01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER

OPERATOR'S PARENT COMPANY (If applicable)

10 NAME	11 D+B NUMBER
12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE
14 CITY	15 STATE / 16 ZIP CODE

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)

01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER

PREVIOUS OPERATOR'S PARENT COMPANIES (If applicable)

10 NAME	11 D+B NUMBER
12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE
14 CITY	15 STATE / 16 ZIP CODE

01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER

10 NAME	11 D+B NUMBER
12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE
14 CITY	15 STATE / 16 ZIP CODE

01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER

10 NAME	11 D+B NUMBER
12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE
14 CITY	15 STATE / 16 ZIP CODE

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Preliminary Site Assessment Report, March 1991, E.C. Jordan Co., and references cited therein.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION	
01 STATE	01 SITE NUMBER
New York	D980509459

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	No hazardous wastes are generated on-site. Site has been used for scavenger dumping of wastes.
05 CITY	06 STATE / 07 ZIP CODE	

III. OFF-SITE GENERATOR(s)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Preliminary Site Assessment Report, March 1991, E.C. Jordan Co., and references cited therein.

EPA	POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 10 - PAST RESPONSE ACTIVITIES	I. IDENTIFICATION 01 STATE: New York	01 SITE NUMBER: D980509459

II. PAST RESPONSE ACTIVITIES

01 04	A. WATER SUPPLY CLOSED DESCRIPTION N/A	02 DATE	03 AGENCY
01 04	B. TEMPORARY WATER SUPPLY PROVIDED DESCRIPTION N/A	02 DATE	03 AGENCY
01 04	C. PERMANENT WATER SUPPLY PROVIDED DESCRIPTION N/A	02 DATE	03 AGENCY
01 04	D. SPILLED MATERIAL REMOVED DESCRIPTION N/A	02 DATE	03 AGENCY
01 04	E. CONTAMINATED SOIL REMOVED DESCRIPTION N/A	02 DATE	03 AGENCY
01 04	F. WASTE REPACKAGED DESCRIPTION N/A	02 DATE	03 AGENCY
01 04	G. WASTE DISPOSED ELSEWHERE DESCRIPTION N/A	02 DATE	03 AGENCY
01 04	H. ON SITE BURIAL DESCRIPTION N/A	02 DATE	03 AGENCY
01 04	I. IN SITU CHEMICAL TREATMENT DESCRIPTION N/A	02 DATE	03 AGENCY
01 04	J. IN SITU BIOLOGICAL TREATMENT DESCRIPTION N/A	02 DATE	03 AGENCY
01 04	K. IN SITU PHYSICAL TREATMENT DESCRIPTION N/A	02 DATE	03 AGENCY
01 04	L. ENCAPSULATION DESCRIPTION N/A	02 DATE	03 AGENCY
01 04	M. EMERGENCY WASTE TREATMENT DESCRIPTION N/A	02 DATE	03 AGENCY
01 04	N. CUTOFF WALLS DESCRIPTION N/A	02 DATE	03 AGENCY
01 04	O. EMERGENCY DIKING/SURFACE WATER DIVERSION DESCRIPTION N/A	02 DATE	03 AGENCY
01 04	P. CUTOFF TRENCHES/SUMP DESCRIPTION N/A	02 DATE	03 AGENCY
01 04	Q. SUBSURFACE CUTOFF WALL DESCRIPTION N/A	02 DATE	03 AGENCY

EPA	POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 10 - PAST RESPONSE ACTIVITIES	I. IDENTIFICATION 01 STATE: New York 01 SITE NUMBER: D980509459

II. PAST RESPONSE ACTIVITIES (Continued)

01 _ R. BARRIER WALLS CONSTRUCTED 04 DESCRIPTION N/A	02 DATE _____	03 AGENCY _____
01 _ S. CAPPING/COVERING 04 DESCRIPTION N/A	02 DATE _____	03 AGENCY _____
01 _ T. BULK TANKAGE REPAIRED 04 DESCRIPTION N/A	02 DATE _____	03 AGENCY _____
01 _ U. GROUT CURTAIN CONSTRUCTED 04 DESCRIPTION N/A	02 DATE _____	03 AGENCY _____
01 _ V. BOTTOM SEALED 04 DESCRIPTION N/A	02 DATE _____	03 AGENCY _____
01 _ W. GAS CONTROL 04 DESCRIPTION N/A	02 DATE _____	03 AGENCY _____
01 _ X. FIRE CONTROL 04 DESCRIPTION N/A	02 DATE _____	03 AGENCY _____
01 _ Y. LEACHATE TREATMENT 04 DESCRIPTION N/A	02 DATE _____	03 AGENCY _____
01 _ Z. AREA EVACUATED 04 DESCRIPTION N/A	02 DATE _____	03 AGENCY _____
01 _ 1. ACCESS TO SITE RESTRICTED 04 DESCRIPTION N/A	02 DATE _____	03 AGENCY _____
01 _ 2. POPULATION RELOCATED 04 DESCRIPTION N/A	02 DATE _____	03 AGENCY _____
01 _ 3. OTHER REMEDIAL ACTIVITIES 04 DESCRIPTION	02 DATE _____	03 AGENCY _____

Burning of garbage no longer being practiced. Pits are closed and filled with earth and scrap.

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Preliminary Site Assessment Report, March 1991, E.C. Jordan Co., and references cited therein.

EPA	POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 11 - ENFORCEMENT INFORMATION	I. IDENTIFICATION	
		01 STATE New York	01 SITE NUMBER D980509459

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION X YES _ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

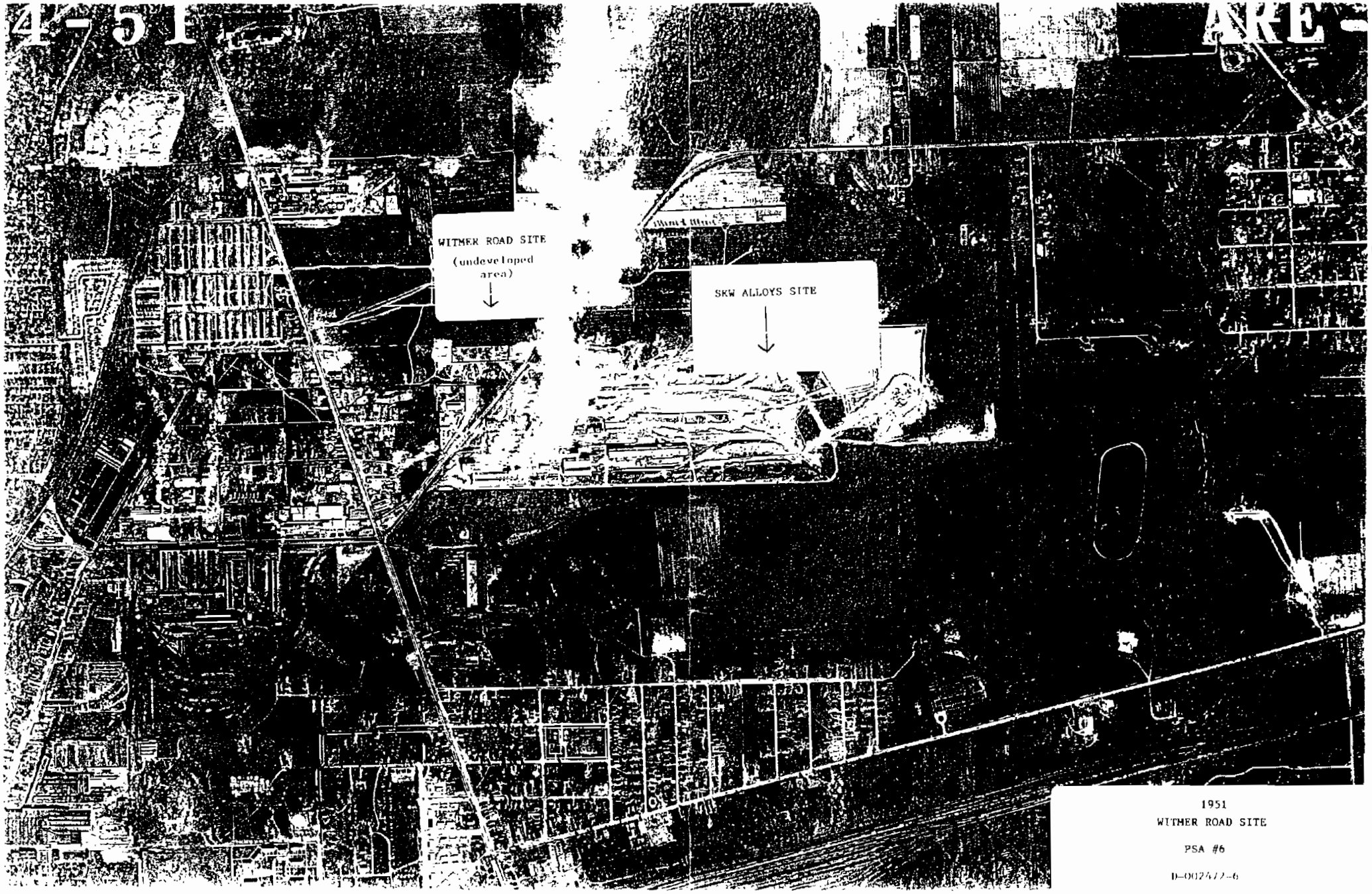
Phase I Study by Engineering-Science, January 1986, Phase I study by NUS Corporation for USEPA, July 21, 1987.

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Preliminary Site Assessment Report, March 1991, E.C. Jordan Co., and references cited therein.

APPENDIX C

AERIAL PHOTOGRAPHS

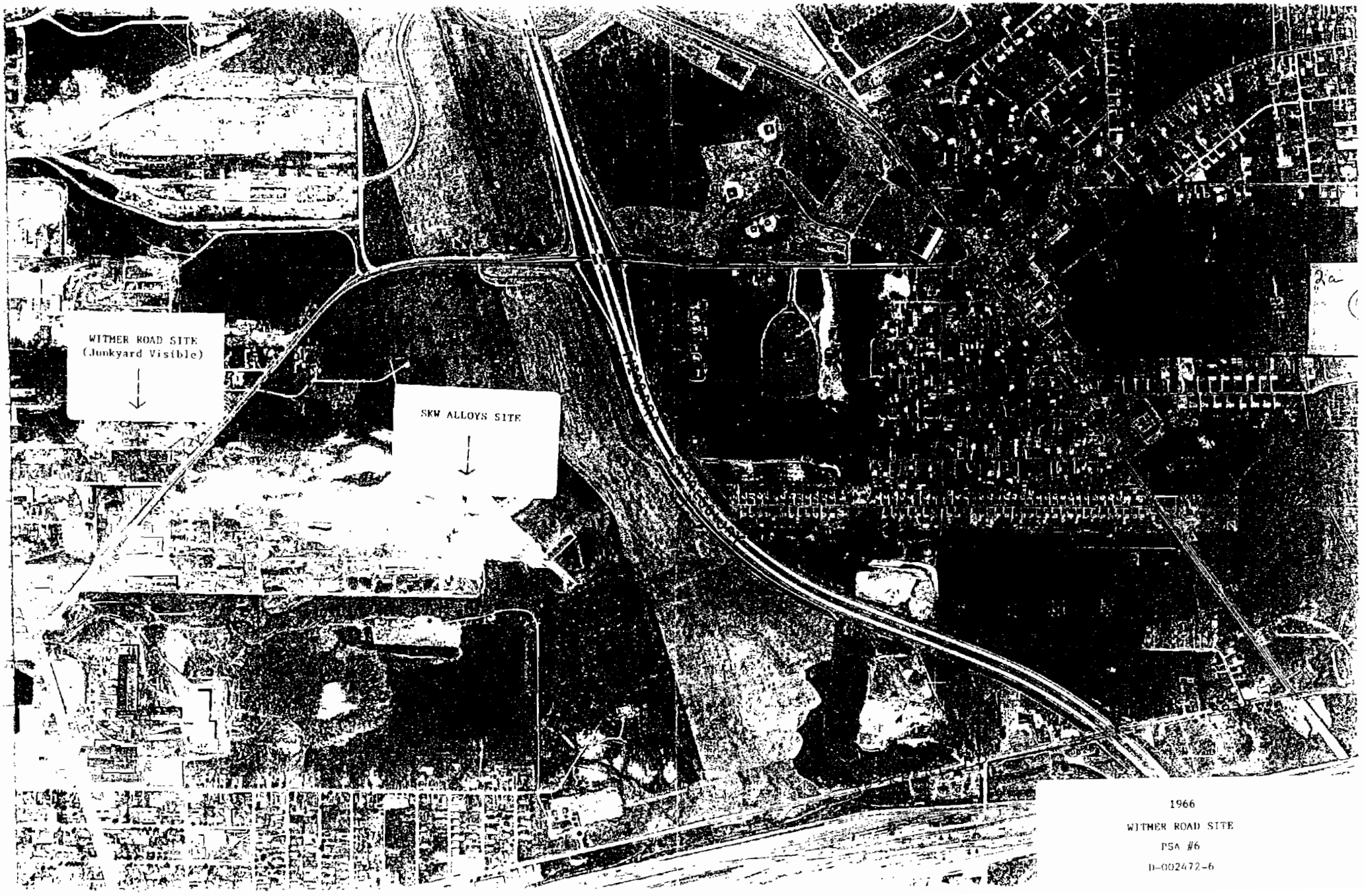


1951
WITHER ROAD SITE

PSA #6

D-002472-6

1958
WITMER ROAD SITE
PSA #6
D-002472-6

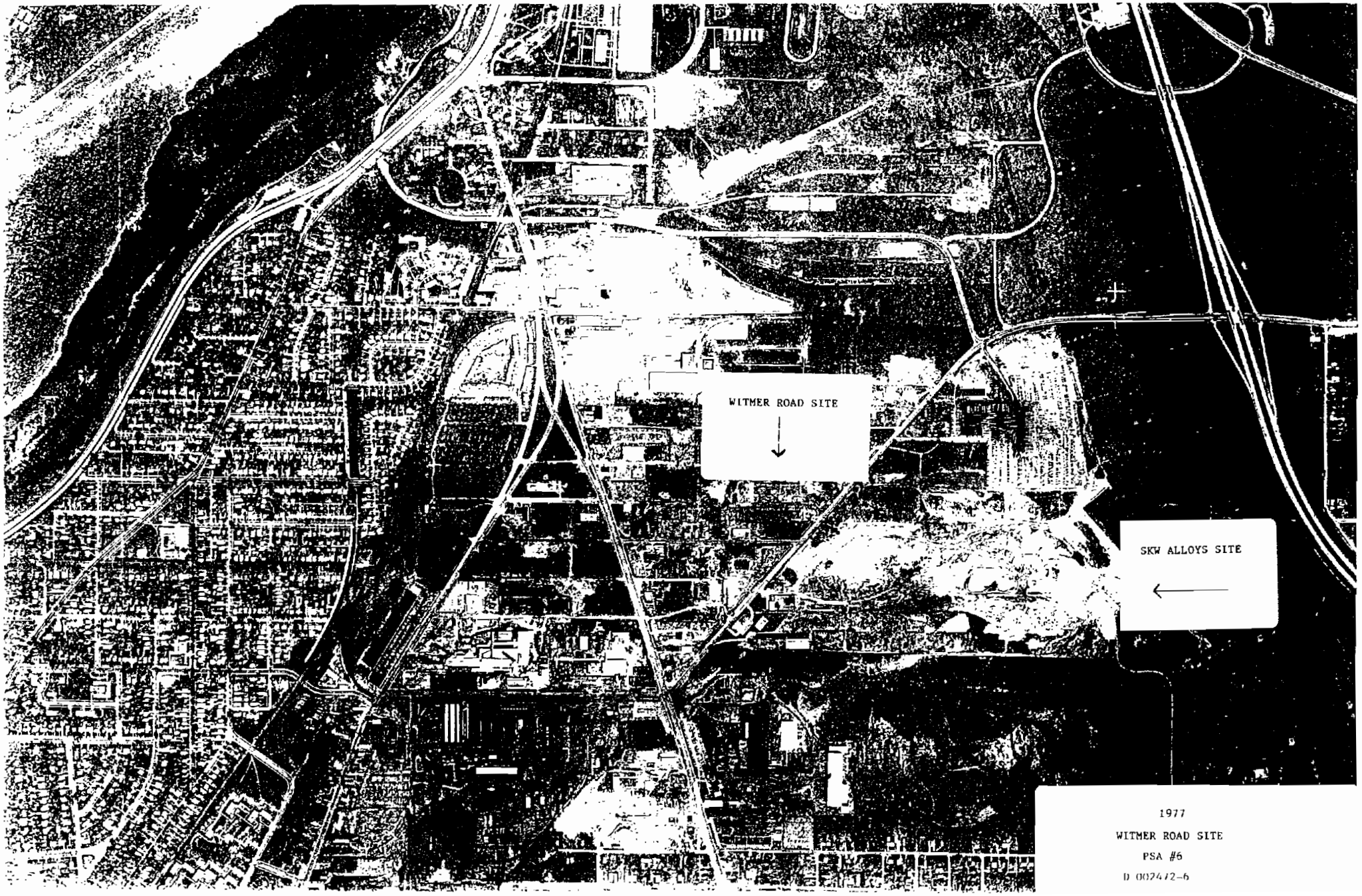


1966

WITHER ROAD SITE

PSA #6

D-002472-6



1977

WITMER ROAD SITE

PSA #6

D 002472-6

APPENDIX D

NUS CORPORATION SOIL SAMPLE RESULTS

ANALYTICAL DATA
NAME: WITMER ROAD
SAMPLING DATE: JULY 21, 1987
CASE NUMBER: 7667

VOLATILES

SAMPLE NUMBER	NYU7-S1	NYU7-S2	NYU7-S3	NYU7-S4	NYU7-BLK1	NYU7-RIN1
TRAFFIC REPORT NUMBER	BK-797	BK-796	BK-799	BK-800	BK-904	BK-905
MATRIX	SOIL	SOIL	SOIL	SOIL	WATER	WATER
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/L	UG/L
Chloromethane						
Bromomethane						
Vinyl Chloride						
Chloroethane						
Methylene Chloride	Q	Q	Q		Q	Q
Acetone	Q	Q	Q			Q
Carbon Disulfide						
1,1-Dichloroethene						
1,1-Dichloroethane						
Trans-1,2-Dichloroethene						
Chloroform					15	13
1,2-Dichloroethane						
2-Butanone					52	91
1,1,1-Trichloroethane						
Carbon Tetrachloride						
Vinyl Acetate						
Bromodichloromethane						
1,2-Dichloropropane						
Trans-1,3-Dichloropropene						
Trichloroethene						
Dibromochloromethane						
1,1,2-Trichloroethane						
Benzene						
Cis-1,3-Dichloropropene						
2-Chloroethylvinylether						
Bromoform						
2-Hexanone						
4-Methyl-2-Pentanone						
Tetrachloroethene						
1,1,2,2-Tetrachloroethane						
Toluene		Q			8	10
Chlorobenzene						
Ethylbenzene		14				
Styrene						
Total Xylenes		89	5 J			

NOTES TO ORGANICS DATA:
Blank space - compound analyzed for but not detected
Q - analysis did not pass EPA QA/QC requirements
J - compound present below contract-specific detection limits, but above instrument detection limit
B - compound found in laboratory blank as well as the sample, and indicates possible/probable blank contamination
E - estimated value due to the presence of interference

ANALYTICAL DATA
NAME: WITMER ROAD
SAMPLING DATE: JULY 21, 1987
CASE NUMBER: 7667

SEMI-VOLATILES						
SAMPLE NUMBER	NYU7-S1	NYU7-S2	NYU7-S3	NYU7-S4	NYU7-BLK1	NYU7-RIN1
TRAFFIC REPORT NUMBER	BK-797	BK-798	BK-799	BK-800	BK-905	BK-905
MATRIX	SOIL	SOIL	SOIL	SOIL	WATER	WATER
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/L	UG/L
Phenol						
Bis(2-Chloroethyl)Ether						
2-Chlorophenol						
1,3-Dichlorobenzene						
1,4-Dichlorobenzene						
Benzyl Alcohol						
1,2-Dichlorobenzene						
2-Methylphenol						
Bis(2-Chloroisopropyl)Ether						
4-Methylphenol						
N-Nitroso-Di-n-Propylamine						
Hexachloroethane						
Nitrobenzene						
Isophorone						
2-Nitrophenol						
2,4-Dimethylphenol						
Benzoic Acid						
Bis(2-Chloroethoxyl)Methane						
2,4-Dichlorophenol						
1,2,4-Trichlorobenzene						
Naphthalene			350 J			
4-Chloroaniline						
Hexachlorobutadiene						
4-Chloro-3-Methylphenol						
2-Methylnaphthalene			490			
Hexachlorocyclopentadiene						
2,4,6-Trichlorophenol						
2,4,5-Trichlorophenol						
2-Chloronaphthalene						
2-Nitroaniline						
Dimethyl Phthalate			810			
Acenaphthylene						

ANALYTICAL DATA
NAME: WITMER ROAD
SAMPLING DATE: JULY 21, 1987
CASE NUMBER: 7667

SEMI-VOLATILES

SAMPLE NUMBER	NYU7-S1	NYU7-S2	NYU7-S3	NYU7-S4	NYU7-BLK1	NYU7-RIN1
TRAFFIC REPORT NUMBER	BK-797	BK-798	BK-799	BK-800	BK-905	BK-905
MATRIX	SOIL	SOIL	SOIL	SOIL	WATER	WATER
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/L	UG/L
3-Nitroaniline						
Acenaphthene						
2,4-Dinitrophenol						
4-Nitrophenol						
Dibenzofuran						
2,4-Dinitrotoluene						
2,6-Dinitrotoluene						
Diethylphthalate						
4-Chlorophenylphenyl ether						
Fluorene						
4-Nitroaniline						
4,6-Dinitro-2-Methylphenol						
N-Nitrosodiphenylamine						
4-Bromophenylphenyl ether						
Hexachlorobenzene						
Pentachlorophenol						
Phenanthrene	400 J		360	1100		
Anthracene	100 JX		190 J	280 JX		
Di-n-Butylphthalate	Q		Q	Q		
Fluoranthene	430 J		1600	2200		
Pyrene	440		1500			
Butylbenzylphthalate	800		8700	960		
3,3'-Dichlorobenzidine						
Benzo(a)Anthracene	260 J		780	1600		
Bis(2-Ethylhexyl)Phthalate	1500		5900	1100		
Chrysene	350 J		2500	1800		
Di-n-Octyl Phthalate						
Benzo(b)Fluoranthene	390 JX		1100 X	4000		
Benzo(k)Fluoranthene	330 JX		1500 X			
Benzo(a)Pyrene	320 J		920	2000		
Indeno(1,2,3-cd)Pyrene			810	1400		
Dibenzo(a,h)Anthracene						
Benzo(ghi)Perylene			1100	1100		

NOTES TO ORGANICS DATA:

Blank space - compound analyzed for but not detected
Q - analysis did not pass EPA QA/QC requirements
J - compound present below contract-specified detection limits, but above instrument detection limit
B - compound found in laboratory blank as well as the sample, and indicates possible/probable blank contamination
E - estimated value due to the presence of interference
NR - analysis not required

ANALYTICAL DATA
NAME: WITMER ROAD
SAMPLING DATE: JULY 21, 1987
CASE NUMBER: 7667

PESTICIDES/PCBs

SAMPLE NUMBER	NYU7-S1	NYU7-S2	NYU7-S3	NYU7-S4	NYU7-BLK1	NYU7-RIN1
TRAFFIC REPORT NUMBER	BK-797	BK-798	BK-799	BK-800	BK-905	BK-905
MATRIX	SOIL	SOIL	SOIL	SOIL	WATER	WATER
UNITS	UG/KG	UG/KG	UG/KG	UG/KG	UG/L	UG/L
Alpha-BHC						
Beta-BHC			95			
Delta-BHC						
Gamma-BHC (Lindane)						
Heptachlor						
Aldrin						
Heptachlor Epoxide				27		
Endosulfan I						
Dieldrin				31 J		
4,4'-DDE						
Endrin						
Endosulfan II						
4,4'-DDD						
Endosulfan sulfate						
4,4'-DDT						
Methoxychlor						
Endrin Ketone						
Chlordane						
Toxaphene						
Aroclor-1016						
Aroclor-1221						
Aroclor-1232						
Aroclor-1242						
Aroclor-1248						
Aroclor-1254						
Aroclor-1260	320 J		800			

NOTES TO ORGANICS DATA:

Blank space - compound analyzed for but not detected
Q - analysis did not pass EPA QA/QC requirements
J - compound present below contract-specified detection limits, but above instrument detection limit
B - compound found in laboratory blank as well as the sample, and indicates possible/probable blank contamination
E - estimated value due to the presence of interference
NR - analysis not required

ANALYTICAL DATA
NAME: WITMER ROAD SITE
SAMPLING DATE: 7/21/87
CASE: 7667

INORGANICS

SAMPLE NUMBER	NYU7-S1	NYU7-S2	NYU7-S3	NYU7-S4	NYU7-RIN1	NYU7-BLK1
TRAFFIC REPORT NUMBER	MBK690	MBK691	MBK692	MBK693	MBK697	N/A
MATRIX	SOIL	SOIL	SOIL	SOIL	WATER	N/A
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	ug/L	N/A
Aluminum	5860E	7860E	7470E	14500E		NR
Antimony	21E	25E	21E	14E		NR
Arsenic	Q	Q				NR
Barium	135	251	212	451	J	NR
Beryllium	J	J	J	J		NR
Cadmium	Q	7.9E	Q	Q		NR
Calcium	66700E	62300E	78700E	119000E		NR
Chromium	48	92	211	393		NR
Cobalt	J	J	J	J		NR
Copper	49	119	103	332	J	NR
Iron	34800E	72400E	33000E	24900E	102	NR
Lead	162	337	320	577		NR
Magnesium	78200	57200	83500	30300		NR
Manganese	640	815	822	505	J	NR
Mercury			0.1E	20E		NR
Nickel	Q	Q	Q	Q		NR
Potassium	1010	1180	1190	J		NR
Selenium						NR
Silver						NR
Sodium	J	J	J	J		NR
Thallium						NR
Vanadium	17	33	27	30		NR
Zinc	268E	1050E	899E	711E	58	NR

NOTES:
Blank space - compound analyzed for but not detected
Q - analysis did not pass QA/QC requirements
J - compound present below contract-specified detection limits, but above instrument detection limits
E - value estimated due to laboratory interference
B - compound found in laboratory blank as well as the sample, indicates possible/probable blank contamination
NR - analysis not required

Excerpts from the 1982 U.S.G.S. Report entitled "Draft Report of Preliminary Evaluation of Chemical Migration to the Niagara River from Hazardous Waste Disposal Sites in Erie and Niagara Counties".

Table . --Analyses of substrate samples from Witmer Road, site 90, Niagara Falls, N.Y. (Locations shown in fig. . Concentrations are in ug/Kg; dashes indicate that constituent or compound was not found, LT indicates it was found but below the quantifiable detection limit.)

	Sample number and depth below land surface (ft)	
	1	2
First sampling (06-29-82)		6.5
Inorganic constituents		
Copper	2,000	28,000†
Iron	1,200,000	1,400,000
Mercury	--	--

	Sample number	
Second sampling (05-25-83)	1A	2A
Inorganic constituent		
Molecular sulfur[1]	--	450
Organic compounds		
Priority pollutants		
Benzene	--	3.8
1,1,1-Trichloroethane	22.9**	--
Trichloroethene	LT	--
Fluoranthene	LT*	--
Naphthalene	LT*	--
Bis(2-ethylhexl)phthalate	*104**	--
Pyrene	LT*	--
Nonpriority pollutants		
Carbondisulfide	--	38.4
Dibenzofuran	LT*	--
2-Methylnaphthalene	LT*	--
2-Octadecanol[1]	--	630*
2-Methyl(s)-1-dodecanol[1]	--	1,300*
Unknown hydrocarbons[1]	16,750*	4,160*

[1] Tentative identification based on comparison with the National Bureau of Standards (NBS) library. No external standard was available. Concentration reported is semiquantitative and is based only on an internal standard. GC/MS spectra were examined and interpreted by GC/MS analysts.

† Exceeds concentrations in samples taken from undisturbed soils in the Niagara Falls area.

* Holding time exceeded before GC/MC acid- and base-neutral extractable compounds were extracted.

** Surrogate recoveries were above or below the acceptance limit.

(U.S. Geol. Survey, 1983)

90. WITMER ROAD SITE #932027

REF-15

General information and chemical-migration potential

The Witmer Road site is located in the town of Niagara and is shown on plate 3.

The site contains an unknown quantity of incinerator residue from open burning. The site is presently occupied by a scrapyard.

The potential for contaminant migration is probably minimal, but additional field work and sampling would be needed to confirm this.

Geologic Information

The U.S. Geological Survey drilled two test borings on the site in 1982; the locations are shown in fig. ____. The geologic logs are as follows:

Borehole No.	Depth (ft)	Description
1	0 - 6.5	Black topsoil, reddish, sand clay at bottom. NOTE: Tried split spoon with hydraulic, got in about 1 ft.
	6.5 - 7.1	Clay, sandy, reddish.
	7.0 - 8.7	Split spoon - sand, red, some yellow particles, ashes.
	8.7 - 9.0	Split spoon--Sand, red, some yellow particles, ashes bit ex at 9.0 ft. SAMPLE: 7.0 ft.
2	0 - 4.0	Topsoil.
	4.0 - 7.5	Limestone (dolomite), light gray, mealy ash.
	7.5 - 10.0	Sand, reddish, clayey. SAMPLE: 6.5 ft.

Hydrologic information

No ground water was encountered; it is probably confined to the fractured bedrock.

Chemical information

Two soil samples were collected and analyzed for copper, iron, mercury, and organic compound. The results are given in table____. The concentration of copper in sample 2 exceeded concentrations from undisturbed sites not effected by waste-disposal practices. There were seven organic priority pollutants found, most at concentrations below 25 ug/kg. There were five organic nonpriority pollutants and some unknown hydrocarbons found.