The electronic version of this file/report should have the file name:

Type of document.Spill Number.Year-Month.File *Year-Year* or Report name.pdf

letter._____._____-_____.File spillfile___.pdf

report.hw915050.1988-05-31.SITE INSPECTION REPORT.pdf

Project Site numbers will be proceeded by the following:

Municipal Brownfields - b
Superfund - hw
Spills - sp
ERP - e
VCP - v
BCP - c

non-releasable - put .nf.pdf
Example: letter.sp9875693.1998-01.Filespillfile.nf.pdf

FIELD INVESTIGATION TEAM ACTIVITIES AT UNCONTROLLED HAZARDOUS SUBSTANCES FACILITIES — ZONE I

NUS CORPORATION
SUPERFUND DIVISION

02-8704-02-SR
REV. NO. 0

FINAL DRAFT
SITE INSPECTION REPORT
SPAULDING FIBRE COMPANY
TONAWANDA, NEW YORK

PREPARED UNDER

TECHNICAL DIRECTIVE DOCUMENT NO. 02-8704-02
CONTRACT NO. 68-01-7346

FOR THE

ENVIRONMENTAL SERVICES DIVISION
U.S. ENVIRONMENTAL PROTECTION AGENCY

MAY 31, 1988

NUS CORPORATION
SUPERFUND DIVISION

SUBMITTED BY

STANLEY B. SHULFER
PROJECT MANAGER

REVIEWED/APPROVED BY

RONALD M. NAMAN
FIT OFFICE MANAGER

Contents

Section

SECTION 1

SITE INSPECTION REPORT EXECUTIVE SUMMARY

NUS CORPORATION

02-8704-02-SR
Rev. No. 0

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
EXECUTIVE SUMMARY

Spaulding Fibre Co. **Site Name**	NYD000848440 **EPA Site ID Number**
310 Wheeler Street Tonawanda, New York 14150 **Address**	02-8704-02 **TDD Number**

SITE DESCRIPTION

The Spaulding Fibre Company is a privately owned facility located at 310 Wheeler Street, Tonawanda, Erie County, New York. This active plant has been located in this commercial/industrial and residential area since 1911. The 50-acre facility manufactures circuit board and similar insulated materials for the electronics industry. The manufacturing process generates a mixture of liquid phenolic resin and solvent waste and solid and powdery grinding and cutting wastes. The latter include asbestos, glass, zinc chloride, and phenolic wastes. Seven hundred and fifty drums of waste were landfilled, and may have been punctured or leaking prior to burial. The solid waste was reportedly bagged and landfilled. Several lagoons were reported excavated and backfilled with clean fill. Incinerator ash and other waste are also spread around the site. Stained soil and walls near the empty drum storage area indicate further soil contamination. New York State Department of Environmental Conservation (NYSDEC) files indicate that excessive amounts of phenol and other wastes were released into the storm sewers, which emptied into the Niagara River.

There is no groundwater use in the area, with the exception of three industrial wells to the south. Sample results from monitoring wells installed by Spaulding Fibre Company contractors indicate groundwater contamination. Several site inspections by the NYSDEC recorded numerous waste disposal problems.

(CONTINUED)

Prepared by: Stanley B. Shulfer **Date:** 05/31/88
of NUS Corporation

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
EXECUTIVE SUMMARY
CONTINUED

SITE DESCRIPTION

A site inspection was conducted by FIT on April 28 and 29, 1987. Several soil auger holes had readings above background with an OVA flame ionization detector. The highest reading was 350 ppm, occurring near the drum landfill. The two monitoring wells were sampled, and two surface water samples were collected to evaluate waste migration through the groundwater and storm sewers, respectively. Eight soil samples were collected to evaluate lagoon, landfill, and possible spill or leakage areas.

All soil samples except for NYR9-S4 and NYR9-S8 had high concentrations of at least one contaminant. Phenol and Di-n-butyl phthalate were found in several samples, with concentrations as high as 910 ppm and 240 ppm, respectively. Most contaminants were semivolatile. Noted exceptions were the PCBs Aroclor 1248 and Aroclor 1254. The groundwater and surface water samples did not contain any contaminants above the detection limits. The empty drum storage pad and liquid chemical transfer pad areas had evidence of spillage in the contaminated and stained soils nearby.

The site inspection results indicate a fire/explosion hazard and the potential for waste migration off site due to contaminated soils from surface to a 2-foot depth. This creates a potential direct contact hazard, should contaminants migrate off site.

SECTION 2

ENVIRONMENTAL PROTECTION AGENCY FORM 2070-13

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

I. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY 0000848440

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)
Spaulding Fibre Company

02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
310 Wheeler Street

03 CITY
Tonawanda

04 STATE | 05 ZIP CODE | 06 COUNTY | 07 COUNTY CODE | 08 CONG DIST.
NY | 14150 | Erie | 029 | 31

09 COORDINATES
LATITUDE: 43° 00' 20". N
LONGITUDE: 078° 53' 11". W

10 TYPE OF OWNERSHIP (Check one)
X A. PRIVATE _ B. FEDERAL _ C. STATE
_ D. COUNTY _ E. MUNICIPAL _ F. OTHER
_ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION: 04 / 29 / 87 (MONTH DAY YEAR)
02 SITE STATUS: X ACTIVE _ INACTIVE
03 YEARS OF OPERATION: 1911 (BEGINNING YEAR) /Still acitve (ENDING YEAR) _ UNKNOWN

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

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
Alan Cherepon	Geologist	NUS Corporation	(201) 225-6160
09 OTHER INSPECTORS	**10 TITLE**	**11 ORGANIZATION**	**12 TELEPHONE NO.**
Brian Pedersen	Chemical Engineer	NUS Corporation	(201) 225-6160
Pauline Doherty	Biologist	NUS Corporation	(201) 225-6160
Bill Schnitzerling	Environmental Scientist	NUS Corporation	(201) 225-6160
Mike Bauman	Geologist	NUS Corporation	(201) 225-6160
Randy Rice	Geologist	NUS Corporation	(201) 225-6160

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO.
Greg Stubbs		310 Wheeler St., Tonawanda, New York 14150	(716) 692-2000

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
X PERMISSION _ WARRANT	0900	Rainy to overcast, 45°-50°F, 10-20 mph wind with gusts to 40 mph.

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Amy Brochu	U.S. Environmental Protection Agency	(201) 906-6802

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Stanley B. Shulfer	U.S. EPA	NUS Corporation	(201) 225-6160	05/31/88 (MONTH DAY YEAR)

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

I. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY 0000848440

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

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

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

TONS	40
CUBIC YARDS	1181
NO. OF DRUMS	1250

03 WASTE CHARACTERISTICS (Check all that apply)

- X A. TOXIC
- _ B. CORROSIVE
- _ C. RADIOACTIVE
- X D. PERSISTENT
- X E. SOLUBLE
- _ F. INFECTIOUS
- X G. FLAMMABLE
- X H. IGNITABLE
- X 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			
OLW	OILY WASTE			
SOL	SOLVENTS	1250	55-gallon drums	Phenol resins and solvents
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS	40	Tons	Solid waste: includes phenol, asbestos, glass, zinc chloride, and spauldite dust from cuttings.
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			Zinc chloride and possible cadmium-bearing waste was reportedly entombed in a concrete pit inside the plant building.
MES	HEAVY METALS	1181	yds^3	

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

CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
OCC	Phenol	108-95-2	drummed and landfilled	910,000	ug/kg
OCC	Di-n-butyl phthalate	84-74-2	drummed and landfilled	240,000	ug/kg
SOL	Toluene	108-88-3	drummed and landfilled	120	ug/kg
OCC	Phenanthrene	85-01-8	landfilled	13,000	ug/kg
OCC	Fluoranthene	206-44-0	landfilled	15,000	ug/kg
OCC	Pyrene	129-00-0	landfilled	7,400	ug/kg
OCC	Benzo(a)anthracene	56-55-3	landfilled	9,400	ug/kg
OCC	Bis(2-ethylhexyl)phthalate	117-81-7	landfilled	29,000	ug/kg
OCC	Chrysene	218-01-9	landfilled	8,200	ug/kg
OCC	Benzo(b)fluoranthene	205-99-2	landfilled	9,700	ug/kg
OCC	Benzo(k)fluoranthene	207-08-9	landfilled		

(See Attachment)

FEEDSTOCKS (See Appendix for Cas Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS	Phenol	108-95-2	FDS	Formaldehyde	50-00-0
FDS	Cresol	1319-77-3	FDS	Analine Oil	62-53-3
FDS	Methanol	67-56-1	FDS	Toluene	108-88-3
FDS	Ethyl Alcohol	64-17-5	FDS		

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

Phase I - Preliminary Investigation of the Spaulding Fibre Company, Inc. Recra Research, Inc., November, 1983.
Report on Spaulding Fibre Company, Inc. Interagency Task Force on Hazardous Wastes, 1979.
Industrial waste sites at Spaulding Fibre Company, Inc. Spaulding Fibre Company, Inc., December 13, 1983.
Unsigned letters from Robert Mitrey, NYSDEC to Jack Kehoe, Spaulding Fibre Company, 8/30/87, and 9/11/78.
NUS Corp. Region 2 FIT site inspection conducted on April 28 and 29, 1988, TDD No. 02-8704-02.

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

CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
PSD	Aroclor 1248	12672-29-6	landfilled	5,640	ug/kg
PSD	Aroclor 1254	11097-69-1	landfilled	2,910	ug/kg
OCC	2,4-Dimethylphenol	105-67-9	landfilled	150,000	ug/kg
OCC	4-Methylphenol	106-44-5	landfilled	71,000	ug/kg
OCC	2-Methylphenol	95-48-7	landfilled	28,000	ug/kg
OCC	Acenaphthene	83-32-9	landfilled	2,400	ug/kg
OCC	Dibenzofuran	132-64-9	landfilled	1,700	ug/kg
OCC	Fluorene	86-73-7	landfilled	2,100	ug/kg
OCC	Anthracene	120-12-7	landfilled	8,900	ug/kg
OCC	Benzo(a)pyrene	50-32-8	landfilled	6,800	ug/kg
OCC	Benzene	71-43-2	landfilled	230	ug/kg
OCC	Indeno(1,2,3-cd)Pyrene	193-39-5	landfilled	2,500	ug/kg
OCC	Benzo(g,h,i)Perylene	191-24-2	landfilled	1,900	ug/kg
SOL	Methylene Chloride	75-09-2	landfilled	17J	ug/kg
SOL	Acetone	67-64-1	landfilled	360	ug/kg
OCC	1,1,1-Trichloethane	71-55-6	landfilled	10J	ug/kg
OCC	Benzoic Acid	65-85-0	landfilled	18,000	ug/kg
OCC	Naphthalene	91-20-3	landfilled	3,000J	ug/kg
OCC	2-Methyl naphthalene	91-57-6	landfilled	4,300J	ug/kg
OCC	Dibenzo(a,h)Anthracene	53-70-3	landfilled	860J	ug/kg
MES	Antimony	7440-36-0	landfilled	[50]	ug/L
MES	Arsenic	7440-38-2	landfilled	40	ug/kg
MES	Beryllium	7440-41-7	landfilled	[2]	ug/kg
MES	Calcium	7440-70-2	landfilled	78900	ug/L
MES	Cobalt	7440-48-4	landfilled	[20]	ug/kg
MES	Iron	7439-89-6	landfilled	76300E	ug/kg
MES	Magnesium	7439-95-4	landfilled	77200	ug/L
MES	Manganese	7439-96-5	landfilled	1090E	ug/kg
MES	Nickel	7440-02-0	landfilled	593E	ug/kg
MES	Sodium	7440-23-5	landfilled	39600	ug/L
MES	Zinc	7440-66-6	landfilled	30300E	ug/kg
MES	Copper	7440-50-8	landfilled	25,400E	ug/kg
MES	Lead	7439-92-1	landfilled	1,150	ug/kg
MES	Mercury	7439-97-6	landfilled	2.66E	ug/kg
MES	Tin	7440-31-5	landfilled	366	ug/kg
MES	Cadmium	7440-43-9	landfilled	70	ug/kg
MES	Zinc	7440-66-6	landfilled	30,300E	ug/kg

J - Compound present below contract-specified detection limits, but above instrument detection limits.
[ ]- Compound present below contract-specified detection limits, but above instrument detection limits.
E - Value estimated due to laboratory interference.

The following hazardous substances were reported disposed of on site by Phase I - Preliminary Investigation of the Spaulding Fibre Company, Inc. and Industrial Waste Sites at Spaulding Fibre Company, Inc.

OCC	Phenol	108-95-2	drummed and landfilled	Unknown
OCC	Formaldehyde	50-00-0	drummed and landfilled	Unknown
OCC	Dibutyl phthalate	84-74-2	drummed and landfilled	Unknown
OCC	Aniline Oil	62-53-3	drummed and landfilled	Unknown
OCC	Cresol	1319-77-3	drummed and landfilled	Unknown
SOL	Methanol	67-56-1	drummed and landfilled	Unknown
SOL	Ethyl Alcohol	64-17-5	drummed and landfilled	Unknown
OCC	Butyoctal phthalate	999	drummed and landfilled	Unknown
OCC	Toluene	108-88-3	drummed and landfilled	Unknown
IOC	Asbestos	1332-21-4	bagged and landfilled	Unknown
IOC	Zinc Chloride	1036-19-52	drummed and landfilled	Unknown
OCC	Epichlorohydrin	106-89-8	drummed and landfilled	Unknown
OCC	Bisphenol - A	167-55-43	drummed and landfilled	Unknown
OCC	Methyl-Ethyl - Ketone	78-93-3	drummed and landfilled	Unknown
MES	Cadmium	7440-43-9	Entombed	Unknown

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 X A. GROUNDWATER CONTAMINATION | 02 OBSERVED (DATE:) | X POTENTIAL | _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0 | 04 NARRATIVE DESCRIPTION

Groundwater is only used for industrial purposes and is not suitable for drinking due to hydrogen sulfide concentrations. There are only 3 remaining industrial wells in the area. Monitoring wells were installed and sampled by a Spaulding contractor. There were no contaminants that could be attributed to the facility due to the lack of a true upgradient well. Contaminants detected by Spaulding in 1983 in both 40-foot wells included phenol, formaldehyde, ethyl alcohol, methyl ethyl ketone, and toluene. FIT site inspection sampling results found no contaminants in the two monitoring wells on site.

01. X B. SURFACE WATER CONTAMINATION | 02 OBSERVED (DATE:) | X POTENTIAL | X ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 75,538 | 04 NARRATIVE DESCRIPTION

Storm drainage ditches on site empty into storm sewers which flow into the Niagara River, where drinking water intakes are within 1 mile of the site. Files from the NYSDEC indicate that the Spaulding Company was responsible for excessive release of phenolic, suspended, and colored wastes into storm sewers. FIT site inspection sampling results found low concentrations of contaminants in the surface water of the storm drainage ditch on site.

01 X C. CONTAMINATION OF AIR | 02 OBSERVED (DATE:) | X POTENTIAL | _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 175,395 | 04 NARRATIVE DESCRIPTION

There are no reports of air contamination at the site, but a potential exists due to the improper burial of volatile wastes. Air monitoring during the site inspection resulted in readings up to 350 ppm on an OVA flame ionization detector inside a soil auger hole; however, no readings above background occurred downwind.

01. X D. FIRE/EXPLOSIVE CONDITIONS | 02 OBSERVED (DATE:) | X POTENTIAL | _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 36,050 | 04 NARRATIVE DESCRIPTION
A potential fire/explosive condition exists on site due to inadequate housekeeping. Numerous areas of spillage, indicated by stained soil and contaminated soil, were noted during site inspection. The OVA flame ionization detector recorded high readings of volatile organic compounds in the vicinity of the empty drum storage area.

01. X E. DIRECT CONTACT | 02 OBSERVED (DATE:) | X POTENTIAL | _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 16,966 | 04 NARRATIVE DESCRIPTION

During the site inspection by FIT, stained soil and signs of chemical spills were noted in the empty drum storage area. Readings of up to 350 ppm on an OVA flame ionization detector occurred at the soil sample locations, and soil analysis shows high concentrations of numerous contaminants. There are numerous references in NYSDEC files to improper waste disposal. Excessive amounts of phenol and other wastes were discharged into storm sewers that discharge into the Niagara River. Drinking water intakes are 1 mile from the site. The surrounding population within 1 mile could potentially come into direct contact with the waste.

01 X F. CONTAMINATION OF SOIL | 02 X OBSERVED (DATE: April 28, 1987) | _ POTENTIAL | _ ALLEGED
03 AREA POTENTIALLY AFFECTED: 50 (ACRES) | 04 NARRATIVE DESCRIPTION

During the site inspection by FIT, stained soil and signs of chemical spills were noted in the empty drum storage area. Soil samples contained high concentrations of numerous contaminants. Readings of up to 350 ppm on an OVA flame ionization detector occurred at the soil sample locations near the drum landfill, where the soil contained a yellow waste. NYSDEC files also indicate stained soils.

01. X G. DRINKING WATER CONTAMINATION | 02 OBSERVED (DATE:) | X POTENTIAL | _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 75,538 | 04 NARRATIVE DESCRIPTION

There is a potential for drinking water contamination due to improperly buried wastes on site. The groundwater is reportedly contaminated, but there are no private or community wells in the area. NYSDEC files indicate that excessive amounts of phenol and other wastes were being released into the storm sewers, which discharge into the Niagara River within 1 mile upstream of surface water intakes. All storm drainage ditches empty into the storm sewers where waste from contaminated soils could potentially migrate to the surface water. Analysis of samples collected during the FIT 2 site inspection indicated that there were low concentrations of contaminants in one surface water sample taken from an on-site storm drainage ditch.

01 X H. WORKER EXPOSURE/INJURY | 02 OBSERVED (DATE:) | X POTENTIAL | _ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: 320 | 04 NARRATIVE DESCRIPTION

There are no reports of worker exposure/injury, but a potential exists due to the large amount of improperly buried wastes on site, and also contaminants detected in soil on site by Region 2 FIT site inspection.

01 X I. POPULATION EXPOSURE/INJURY | 02 OBSERVED (DATE:) | X POTENTIAL | _ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 175,395 | 04 NARRATIVE DESCRIPTION

There is a potential for population exposure/injury due to the large amount of improperly buried wastes on site. There is also a potential for waste migration through storm sewers to water intakes in the Niagara River. Soil sample analysis indicates high concentrations of numerous contaminants on site.

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

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

There is a potential for damage to flora due to the improper burial of wastes on site. Contaminants have been detected in the groundwater and soils. NYSDEC files indicate excessive releases of phenol and other wastes into the storm sewers, which empty into the Niagara River. Flora may become damaged by bioaccumulating contaminants which may migrate from the site.

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

There is a potential for damage to fauna, should they bioaccumulate ingested waste which migrated from the site. Contaminants have been detected in the groundwater and soils, and NYSDEC files mention excessive amounts of phenol and other wastes released into storm sewers which empty into the Niagara River. Runoff from the site still goes through the storm sewers and into the Niagara River, where potential waste migration could damage fauna.

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

There is a potential for contamination of the food chain should waste migrate through the storm sewers and into the Niagara River. Fish in the river may ingest and bioaccumulate contaminants in the water.

01 X M. UNSTABLE CONTAINMENT OF WASTES — 02 X OBSERVED (DATE: August 30, 1978) _ POTENTIAL _ ALLEGED
(Spills/runoff/standing liquids/leaking drums)
03 POPULATION POTENTIALLY AFFECTED: 16,966 — 04 NARRATIVE DESCRIPTION

During the FIT site inspection, stained soils and signs of chemical spills were observed near the empty drum storage area. Readings of up to 350 ppm on an OVA flame ionization detector. While soil augering into yellow waste, the field investigation team observed readings of up to 350 ppm on an OVA flame ionization detector. NYSDEC files noted leaking and possibly punctured drums landfilled on site.

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

Allegations by the NYSDEC noted excessive releases of phenol and other wastes into the storm sewers, which empty into the Niagara River. Monitoring wells on site have also shown contaminant migration through the groundwater.

01 X O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 X OBSERVED (DATE: April 28, 1987) _ POTENTIAL X ALLEGED
04 NARRATIVE DESCRIPTION

Allegations by the NYSDEC noted that excessive amounts of phenol and other wastes were being discharged into the storm sewers. Analyses of surface water and soil samples collected during the site inspection indicate that low concentrations of contaminants are migrating into the storm drainage ditch which flows into the storm sewers.

01 X P. ILLEGAL/UNAUTHORIZED DUMPING — 02 X OBSERVED (DATE: August 30, 1978) _ POTENTIAL _ ALLEGED
04 NARRATIVE DESCRIPTION

NYSDEC files noted leaking and possibly punctured drums being landfilled on site, and ordered that all landfilling on site should cease. There was also a mention of unidentified waste spread on the ground near the landfill. Analyses of soil samples collected during the site inspection indicate high concentrations of numerous contaminants on site.

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

The old lagoons which held grinding wastes were reportedly excavated and backfilled with clean fill, but contaminants may have migrated away from the lagoons. There are other areas of unspecified wastes and spills which may be hazardous. The area near the smoke stack was also reported to have some cadmium and zinc waste stored nearby. As the plant is very large, covering 50 acres, and old, having been active since 1911, other waste disposal areas may exist on site.

III. TOTAL POPULATION POTENTIALLY AFFECTED: 175,395

IV. COMMENTS

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

Phase I - Preliminary Investigation of the Spaulding Fibre Company, Inc. Recra Research, Inc., November, 1983.
Report on Spaulding Fibre Company, Inc. Interagency Task Force on Hazardous Wastes, 1979.
Industrial waste sites at Spaulding Fibre Company, Inc. Spaulding Fibre Company, Inc., December 13, 1983.
Unsigned letters from Robert Mitrey, NYSDEC; to Jack Kehoe, Spaulding Fibre Company, 8/30/87, and 9/11/78.
NUS Corp. Region 2 FIT site inspection conducted on April 28 and 29, 1987, TDD No. 02-8704-02.
General Sciences Corporation. Draft Graphical Exposure Modeling System (GEMS). Landover, Maryland, 1986.

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

I. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY 0000848440

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
X A. NPDES	NY0002364	6/28/74		
_ B. UIC				
X C. AIR	(See Attachments A and B)	Unknown	Unknown	
_ D. RCRA				
_ E. RCRA INTERIM STATUS				
X F. SPCC PLAN				Implemented in the summer of 1974.
_ G. STATE (Specify)				
X H. LOCAL (Specify)	202	12/01/85	12/01/88	City of Tonawanda Industrial Sewer Connection Permit
_ I. OTHER (Specify)				
_ J. NONE				

III. SITE DESCRIPTION

01 Storage/Disposal (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE	04 TREATMENT (Check all that apply)	05 OTHER
_ A. SURFACE IMPOUNDMENT			X A. INCINERATION	X A. BUILDINGS ON SITE
_ B. PILES			_ B. UNDERGROUND INJECTION	
X C. DRUMS, ABOVE GROUND	500	55-gal. drums	_ C. CHEMICAL/PHYSICAL	
_ D. TANK, ABOVE GROUND			_ D. BIOLOGICAL	06 AREA OF SITE
_ E. TANK, BELOW GROUND			_ E. WASTE OIL PROCESSING	
X F. LANDFILL	*	see comments below	_ F. SOLVENT RECOVERY	
_ G. LANDFARM			_ G. OTHER RECYCLING/RECOVERY	50 (Acres)
_ H. OPEN DUMP			_ H. OTHER (Specify)	
X I. OTHER Concrete pit (Specify)	1181	cubic yards		

07 COMMENTS

1. 750 55-gallon drums containing solvent and phenol resin wastes
2. 40 tons of polyethylene bags containing "Spauldite" dust (containing asbestos)
3. Unspecified amount of incinerator ash and other wastes

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.

There are reports in NYSDEC Files that 750 drums of solvents and phenol resins are buried on site. The drums were supposedly punctured, and other drums were noted as leaking on the ground near the landfill. An unidentified waste was reported spread on the ground near the landfill. There are also an asbestos landfill and several excavated and filled-in lagoons. There were indications of feedstock spillage in the liquid chemical transfer pad area and possible inadequate spill control for large feedstock storage tanks.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: _ YES X NO

02 COMMENTS

The majority of the waste is landfilled on an active site, which is surrounded by a chain link fence. There were allegations by the NYSDEC that phenol and other waste were improperly discharged into the storm sewers. Also, soil samples indicate high concentrations of numerous contaminants which could potentially migrate off site.

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

Phase I - Preliminary Investigation of the Spaulding Fibre Company, Inc. Recra Research, Inc., November, 1983.
Report on Spaulding Fibre Company, Inc. Interagency Task Force on Hazardous Wastes, 1979.
Industrial waste sites at Spaulding Fibre Company, Inc. Spaulding Fibre Company, Inc., December 13, 1983.
Unsigned letters from Robert Mitrey, NYSDEC, to Jack Kehoe, Spaulding Fibre Company, 8/30/87, and 9/11/78.
NUS Corporation Region 2 FIT site inspection conducted on April 28 and 29, 1987, TDD No. 02-8704-02.
U.S. EPA Region 2, RCRA Files.

ATTACHMENT A

EXISTING ENVIRONMENTAL PERMITS*

9-015949	New York State Certificate to Operate Air Contamination Source
9-015950	New York State Certificate to Operate Air Contamination Source
9-015951	New York State Certificate to Operate Air Contamination Source
9-015952	New York State Certificate to Operate Air Contamination Source
9-016235	New York State Certificate to Operate Air Contamination Source
9-015956	New York State Certificate to Operate Air Contamination Source
9-015803	New York State Certificate to Operate Air Contamination Source
9-016234	New York State Certificate to Operate Air Contamination Source
9-015953	New York State Certificate to Operate Air Contamination Source
9-015954	New York State Certificate to Operate Air Contamination Source
9-015955	New York State Certificate to Operate Air Contamination Source
9-016241	New York State Certificate to Operate Air Contamination Source
9-016242	New York State Certificate to Operate Air Contamination Source
9-016243	New York State Certificate to Operate Air Contamination Source
9-016244	New York State Certificate to Operate Air Contamination Source
9-016245	New York State Certificate to Operate Air Contamination Source
9-016246	New York State Certificate to Operate Air Contamination Source
9-016236	New York State Certificate to Operate Air Contamination Source
9-016237	New York State Certificate to Operate Air Contamination Source
9-016238	New York State Certificate to Operate Air Contamination Source
9-016239	New York State Certificate to Operate Air Contamination Source
9-016240	New York State Certificate to Operate Air Contamination Source

*Source - U.S. EPA Region 2 RCRA Files.

ATTACHMENT B

NYSDEC AIR PERMITS*

Permit No.	Permitted Unit	Issue Date	Expiration Date
00001	South Fuel Oil Tank	03/07/84	04/01/90
00002	North Fuel Oil Tank	03/07/84	04/01/90
00003	Rag Shed West Phenol Tank	03/07/84	04/01/90
00004	Rag Shed Central Cresylic Tank	03/07/84	04/01/90
00005	Rag Shed East Cresylic S Tank	03/07/84	04/01/90
00006	Resin-Making Formaldehyde Storage Tank	03/07/84	04/01/90
00007	Underground Caustic Tank	03/07/84	04/01/90
00008	Underground Toluene Tank	03/07/84	04/01/90
00009	Underground Methanol Tank (East)	03/07/84	04/01/90
00010	Underground Methanol Tank (West)	03/07/84	04/01/90
00011	Ethanol Tank	03/07/84	04/01/90
00012	Methanol Tank	03/07/84	04/01/90
00013	Grinding Oil Tank	03/07/84	04/01/90
008-0	Rag Cutter Wet Scrubber	01/01/82	05/01/91
01800	Spauldite Saws & Sanders Baghouse	01/01/82	05/01/91
01801	SEM Saws & Sanders Baghouse	01/01/82	05/01/91
0181A	Cyclone (backup to baghouse)	01/01/82	05/01/91
501-0	Fibre Tube Grinder Electrostatic Precipitator	01/01/82	05/01/91
502-0	Fibre Tube Dip Tank	01/01/82	05/01/91
503-0	Fibre Tube Dip Tank	01/01/82	05/01/91
504-0	Fibre Tube Grinder Electrostatic Precipitator	01/01/82	05/01/91
529-0	Mezzanine Resin Tanks Exhaust	01/01/82	05/01/91
543-0	Washer Chest	01/01/82	05/01/91
544-0	Washer Chest	01/01/82	05/01/91
545-0	Washer Chest	01/01/82	05/01/91
546-0	Washer Chest	01/01/82	05/01/91
547-0	Washer Chest	01/01/82	05/01/91
02DEH	No. 2 Treater Exit Exhaust	05/30/85	04/01/90
03DEH	No. 3 Treater Exit Exhaust	05/30/85	04/01/90
04DEH	No. 4 Treater Exit Exhaust	05/30/85	04/01/90
43DEE	Treater Room Ceiling Exhaust	05/30/85	09/01/90
43WEE	Treater Room Ceiling Exhaust	05/30/85	09/01/90
04000	Four-Inch Press	03/19/85	04/01/90
06000	Six-Inch Press	03/19/85	04/01/90
16000	No. 16 Press	03/19/85	04/01/90
53800	No. 1 Boiler	01/01/82	05/01/91
53900	No. 2 Boiler	01/01/82	05/01/91
54000	No. 3 Boiler	01/01/82	05/01/91
54100	No. 4 Boiler	01/01/82	05/01/91
54200	Incinerator	01/01/82	05/01/91
55500	No. 5 Treater	12/01/82	05/01/91

*Source - Letter and background files, from Greg Stubbs, Spaulding Fibre, to Alan J. Cherepon, NUS Corp., May 28, 1987.

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY D000848440

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)

	SURFACE	WELL	02 STATUS ENDANGERED	AFFECTED	MONITORED	03 DISTANCE TO SITE
COMMUNITY	A. X	B. _	A. _	B. _	C. _	A. 1.0 (mi)
NON-COMMUNITY	C. _	D. _	D. _	E. _	F. _	B. _____ (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

_ A. ONLY SOURCE FOR DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available)

_ B. DRINKING

X C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available)

_ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER: 0

03 DISTANCE TO NEAREST DRINKING WATER WELL: N/A (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
10 (ft)	North	10 (ft)	Unknown (gpd)	_ YES X NO

09 DESCRIPTION OF WELLS (Including useage, depth, and location relative to population and buildings)

There are no drinking water supply wells within 3 miles of the site. Groundwater is only used for industrial purposes due to hydrogen sulfide concentrations. The only industrial wells are in solution cavity zones in gypsiferous sections of the Camillus Shale. These wells range in depth from 120 to 140 feet. Two monitoring wells were installed on site at a depth of 40 feet. These wells are in the top of the Camillus Shale. There is also a perched water table at the top of the clayey glacial till.

10 RECHARGE AREA	COMMENTS	11. DISCHARGE AREA	COMMENTS
X YES _ NO	All soil samples and borings on site encountered clayey silt, which is relatively impermeable and prevents appreciable recharge.	_ YES X NO	

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		0.7 (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	02 DISTANCE TO NEAREST POPULATION
A. 16,966 NO. OF PERSONS	B. 36,050 NO. OF PERSONS	C. 98,010 NO. OF PERSONS	0 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE	04 DISTANCE TO NEAREST OFF-SITE BUILDING
13,296	0.02 (mi)

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

The site is located in a densely populated urban area in the suburbs of northern Buffalo. Commercial/industrial and residential properties are situated next to each other. The total population within a 4-mile radius is 175,395.

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

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

Reddish-brown clayey-silty glacial till overlain with fill material.

02 PERMEABILITY OF BEDROCK (Check one)

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

Fractured and solution cavitied Camillus Shale.

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH
29 (ft)	10 (ft)	Unknown

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
8 (in)	2.1 (in)	1 %	North	0.4 %

09 FLOOD POTENTIAL 10

SITE IS IN 500 YEAR FLOODPLAIN SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE		OTHER	
A. > 2	(mi)	B. > 1	(mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

> 1 (mi)

ENDANGERED SPECIES: not applicable

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 (mi)	B. residential 0.02 (mi)	C. > 2 (mi)	D. > 1 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

The site is on a gently northward-dipping plain, approximately 0.7 mile southeast of the Niagara River, and south of Ellicott Creek.

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

Phase I - Preliminary Investigation of the Spaulding Fibre Company, Inc. Recra Research, Inc., November, 1983.
Report on Spaulding Fibre Company, Inc. Interagency Task Force on Hazardous Wastes, 1979.
Industrial waste sites at Spaulding Fibre Company, Inc. Spaulding Fibre Company, Inc., December 13, 1983.
Unsigned letters from Robert Mitrey, NYSDEC, to Jack Kehoe, Spaulding Fibre Company, 8/30/87, and 9/11/78.
Three-mile vicinity map including U.S. Department of the Interior, Geological Survey Topographic Map, 7.5 minute series quadrangles, "Tonawanda West, NY",1980; "Tonawanda East, NY", 1980; "Buffalo, Northeast, NY",1965; and "Buffalo, Northwest, NY",1965.
NUS Corporation Region 2 FIT site inspection conducted on April 28 and 29, 1987, TDD No. 02-8704-02.
SI/HRS Report for Tonawanda Incinerator, TDD No. 02-8603-30A, NUS Corporation Region 2 FIT, August 28, 1986.

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER	2	Inorganics sent to:	
SURFACE WATER	2	Mack Laboratories 2199 Dartmore Avenue Pittsburgh, PA 15210 Attn: Jim Cicilliano	Results received 11/16/87.
WASTE			
AIR			
RUNOFF		Organics sent to:	
SPILL		Cambridge Analytical Assoc. 1106 Commonwealth Avenue Boston, MA 02215 Attn: Sharon Waler	
SOIL	8		Results received 11/16/87.
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
Air Monitoring	Air monitoring was conducted using an OVA flame ionization detector. Readings up to 350 ppm were recorded during the soil augering of sample NYR9-S2, from 2 to 4 ft, and of up to 7 ppm on the soil sample at the surface. No downwind readings above background were recorded.

IV. PHOTOGRAPHS AND MAPS

01 TYPE X GROUND _ AERIAL 02 IN CUSTODY OF NUS Corporation FIT 2,
(Name of organization or individual)

03 MAPS 04 LOCATION OF MAPS

X YES
_ NO

NUS Corporation FIT 2 Project Files, Edison, N.J.

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

Field notebook 0060, filed under TDD No. 02-8704-02, written and photographic documentation of all field activities.

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

NUS Corporation Region 2 FIT site inspection conducted on April 28 and 29, 1987, TDD No. 02-8704-02.

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

I. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY 0000848440

II. CURRENT OWNER(S) | **PARENT COMPANY (If applicable)**

01 NAME	02 D + B NUMBER	08 NAME	09 D + B NUMBER
Spaulding Fibre Co.			
03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD#, etc.)	11 SIC CODE
310 Wheeler Street			
05 CITY / 06 STATE / 07 ZIP CODE		12 CITY / 13 STATE / 14 ZIP CODE	
Tonawanda NY 14150			

01 NAME	02 D + B NUMBER	08 NAME	09 D + B NUMBER
03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD#, etc.)	11 SIC CODE
05 CITY / 06 STATE / 07 ZIP CODE		12 CITY / 13 STATE / 14 ZIP CODE	

01 NAME	02 D + B NUMBER	08 NAME	09 D + B NUMBER
03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD#, etc.)	11 SIC CODE
05 CITY / 06 STATE / 07 ZIP CODE		12 CITY / 13 STATE / 14 ZIP CODE	

01 NAME	02 D + B NUMBER	08 NAME	09 D + B NUMBER
03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD#, etc.)	11 SIC CODE
05 CITY / 06 STATE / 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
Monogram Industries			
03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE
1299 Ocean Avenue			
05 CITY / 06 STATE / 07 ZIP CODE		05 CITY / 06 STATE / 07 ZIP CODE	
Santa Monica CA 90401			

01 NAME	02 D + B NUMBER	01 NAME	02 D + B NUMBER
Spaulding Family			
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	
NH			

01 NAME	02 D + B NUMBER	01 NAME	02 D + B NUMBER
John A. Pohl			
03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE
(farm land)			
05 CITY / 06 STATE / 07 ZIP CODE		05 CITY / 06 STATE / 07 ZIP CODE	
Tonawanda NY 14150			

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

NUS Corporation Region 2 FIT site inspection conducted on April 28 and 29, 1987, TDD No. 02-8704-02.
Letter and background file from Gregory Stubbs, Spaulding Fibre Company, to Alan J. Cherepon, NUS Corporation Region 2 FIT, May 28, 1987.

1. IDENTIFICATION
01 STATE 02 SITE NUMBER
NY 0000848440

II. CURRENT OPERATOR(S) | OPERATOR'S PARENT COMPANY (If applicable)

01 NAME	02 D + B Number	10 NAME	11 D + B NUMBER
03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD#, etc.)	13 SIC CODE
05 CITY 06 STATE	07 ZIP CODE	14 CITY 15 STATE	16 ZIP CODE
08 YEARS OF OPERATION 09 NAME OF OWNER			

III. PREVIOUS OPERATOR(S) (List most recent first: Provide only if different from owner) | PREVIOUS OPERATOR'S PARENT COMPANIES (If applicable)

01 NAME	02 D + B Number	10 NAME	11 D + B NUMBER
03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD#, etc.)	13 SIC CODE
05 CITY 06 STATE	07 ZIP CODE	14 CITY 15 STATE	16 ZIP CODE
08 YEARS OF OPERATION 09 NAME OF OWNER			

01 NAME	02 D + B Number	10 NAME	11 D + B NUMBER
03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD#, etc.)	13 SIC CODE
05 CITY 06 STATE	07 ZIP CODE	14 CITY 15 STATE	16 ZIP CODE
08 YEARS OF OPERATION 09 NAME OF OWNER			

01 NAME	02 D + B Number	10 NAME	11 D + B NUMBER
03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD#, etc.)	13 SIC CODE
05 CITY 06 STATE	07 ZIP CODE	14 CITY 15 STATE	16 ZIP CODE
08 YEARS OF OPERATION 09 NAME OF OWNER			

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

II ON-SITE GENERATOR

01 NAME

02 D + B NUMBER

Spaulding Fibre Co.
03 STREET ADDRESS (P.O. Box, RFD#, etc.)

04 SIC CODE

310 Wheeler Street
05 CITY

06 STATE

07 ZIP CODE

Tonawanda

NY

14150

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
Niagara Sanitation Co. 03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE	Hyman Barrel Company 03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE
1050 Military Road, P.O. Box 9 05 CITY 06 STATE	07 ZIP CODE	878 South Division Street 05 CITY 06 STATE	07 ZIP CODE
Kenmore NY		Buffalo NY	

01 NAME	02 D + B NUMBER	01 NAME	02 D + B NUMBER
Wheatfield Warehouse, Inc. 03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE	BFI 03 STREET ADDRESS (P.O. Box, RFD#, etc.)	04 SIC CODE
493 Wheatfield Street 05 CITY 06 STATE	07 ZIP CODE	05 CITY 06 STATE	07 ZIP CODE
North Tonawanda NY			

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

Phase I - Preliminary Investigation of the Spaulding Fibre Company, Inc. Recra Research, Inc., November, 1983.
Report on Spaulding Fibre Company, Inc. Interagency Task Force on Hazardous Wastes, 1979.
Industrial waste sites at Spaulding Fibre Company, Inc. Spaulding Fibre Company, Inc., December 13, 1983.
Unsigned letters from Robert Mitrey, NYSDEC, to Jack Kehoe, Spaulding Fibre Company, 8/30/87, and 9/11/78.
NUS Corporation Region 2 FIT site inspection conducted on April 28 and 29, 1987, TDD No. 02-8704-02.

II. PAST RESPONSE ACTIVITIES

01 R. BARRIER WALLS CONSTRUCTED 02 DATE: 03 AGENCY:
04 DESCRIPTION

No Previous History

01 S. CAPPING/COVERING 02 DATE: 03 AGENCY:
04 DESCRIPTION

A drum landfill and asbestos/grinding waste landfill were reportedly capped with the local clayey till.

01 T. BULK TANKAGE REPAIRED 02 DATE: 03 AGENCY:
04 DESCRIPTION

No Previous History

01 U. GROUT CURTAIN CONSTRUCTED 02 DATE: 03 AGENCY:
04 DESCRIPTION

No Previous History

01 V. BOTTOM SEALED 02 DATE: 03 AGENCY:
04 DESCRIPTION

No Previous History

01 W. GAS CONTROL 02 DATE: 03 AGENCY:
04 DESCRIPTION

No Previous History

01 X. FIRE CONTROL 02 DATE: 03 AGENCY:
04 DESCRIPTION

No Previous History

01 Y. LEACHATE TREATMENT 02 DATE: 03 AGENCY:
04 DESCRIPTION

No Previous History

01 Z. AREA EVACUATED 02 DATE: 03 AGENCY:
04 DESCRIPTION

No Previous History

01 1. ACCESS TO SITE RESTRICTED 02 DATE: 03 AGENCY:
04 DESCRIPTION

No Previous History

01 2. POPULATION RELOCATED 02 DATE: 03 AGENCY:
04 DESCRIPTION

No Previous History

01 3. OTHER REMEDIAL ACTIVITIES 02 DATE: 03 AGENCY:
04 DESCRIPTION

No Previous History

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

Phase I - Preliminary Investigation of the Spaulding Fibre Company, Inc. Recra Research, Inc., November, 1983.
Report on Spaulding Fibre Company, Inc. Interagency Task Force on Hazardous Wastes, 1979.
Industrial waste sites at Spaulding Fibre Company, Inc. Spaulding Fibre Company, Inc., December 13, 1983.
Unsigned letters from Robert Mitrey, NYSDEC, to Jack Kehoe, Spaulding Fibre Company, 8/30/87, and 9/11/78.

II. PAST RESPONSE ACTIVITIES

01 ___ A. WATER SUPPLY CLOSED — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

No Previous History
01 ___ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

No Previous History
01 ___ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

No Previous History
01 ___ D. SPILLED MATERIAL REMOVED — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

No Previous History
01 X E. CONTAMINATED SOIL REMOVED — 02 DATE: 1972 — 03 AGENCY: _____
04 DESCRIPTION
In 1972, lagoons containing phenol and grinding waste were excavated. The excavated material was reportedly disposed of at Seaway Landfill. NYSDEC Files report that this was properly done.

01 ___ F. WASTE REPACKAGED — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

No Previous History
01 X G. WASTE DISPOSED ELSEWHERE — 02 DATE: 1972 — 03 AGENCY: _____
04 DESCRIPTION

Contents of lagoons excavated and disposed of at Seaway Landfill.
01 X H. ON SITE BURIAL — 02 DATE: February 1978 — 03 AGENCY: _____
04 DESCRIPTION
The drum landfill contains an estimated 750 drums of phenolic resins, solvents, and possibly other wastes. The asbestos landfill contains asbestos, phenol, and glass. There is also a concrete-lined pit inside the plant which contains zinc chloride and possibly cadmium. Other waste is reportedly buried on site.
01 X I. IN SITU CHEMICAL TREATMENT — 02 DATE: 1972 to 1978 — 03 AGENCY: _____
04 DESCRIPTION

Zinc chloride water is treated at the plant wastewater treatment system.
01 ___ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

No Previous History
01 ___ K. IN SITU PHYSICAL TREATMENT — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION
Boiler ash and incinerator ash was spread around the plant property. Waste oil was originally incinerated on site.

01 X L. ENCAPSULATION — 02 DATE: February 1978 — 03 AGENCY: _____
04 DESCRIPTION

Zinc hydroxide waste was encapsulated in a concrete pit inside the plant.
01 ___ M. EMERGENCY WASTE TREATMENT — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

No Previous History
01 ___ N. CUTOFF WALLS — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

No Previous History
01 ___ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

No Previous History
01 ___ P. CUTOFF TRENCHES/SUMP — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

No Previous History
01 ___ Q. SUBSURFACE CUTOFF WALL — 02 DATE: _____ — 03 AGENCY: _____
04 DESCRIPTION

No Previous History

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION X YES _ NO

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

The Spaulding Fibre Company has been responsible for numerous improper waste handling procedures, with the oldest citation occurring in 1958. This involved the alleged release of phenol and other wastes into the sewer system, which emptied directly into the Niagara River. Also, a letter from the NYSDEC dated August 30, 1978 noted improper waste dumping practices on site which caused the immediate halting of all on-site disposal, noting that continued disposal would be in violation of part 360 of the environmental conservation law. A complaint, compliance order was served to Spaulding Fibre on May 31, 1984, for violations of 40 CFR S 265.112 (closure plan deficiences) and 40 CFR S 265.142 (closure cost estimates did not contain sufficient information). Other actions are as follows:

- NYSDEC Order of Consent File No. 86-399-1711
- U.S. EPA Docket No. 11 TSCA-PCB-86-0241
- U.S. Coast Guard Case No. 1D-017/86
- NYSDEC Uniform Appearance Ticket No. 121251

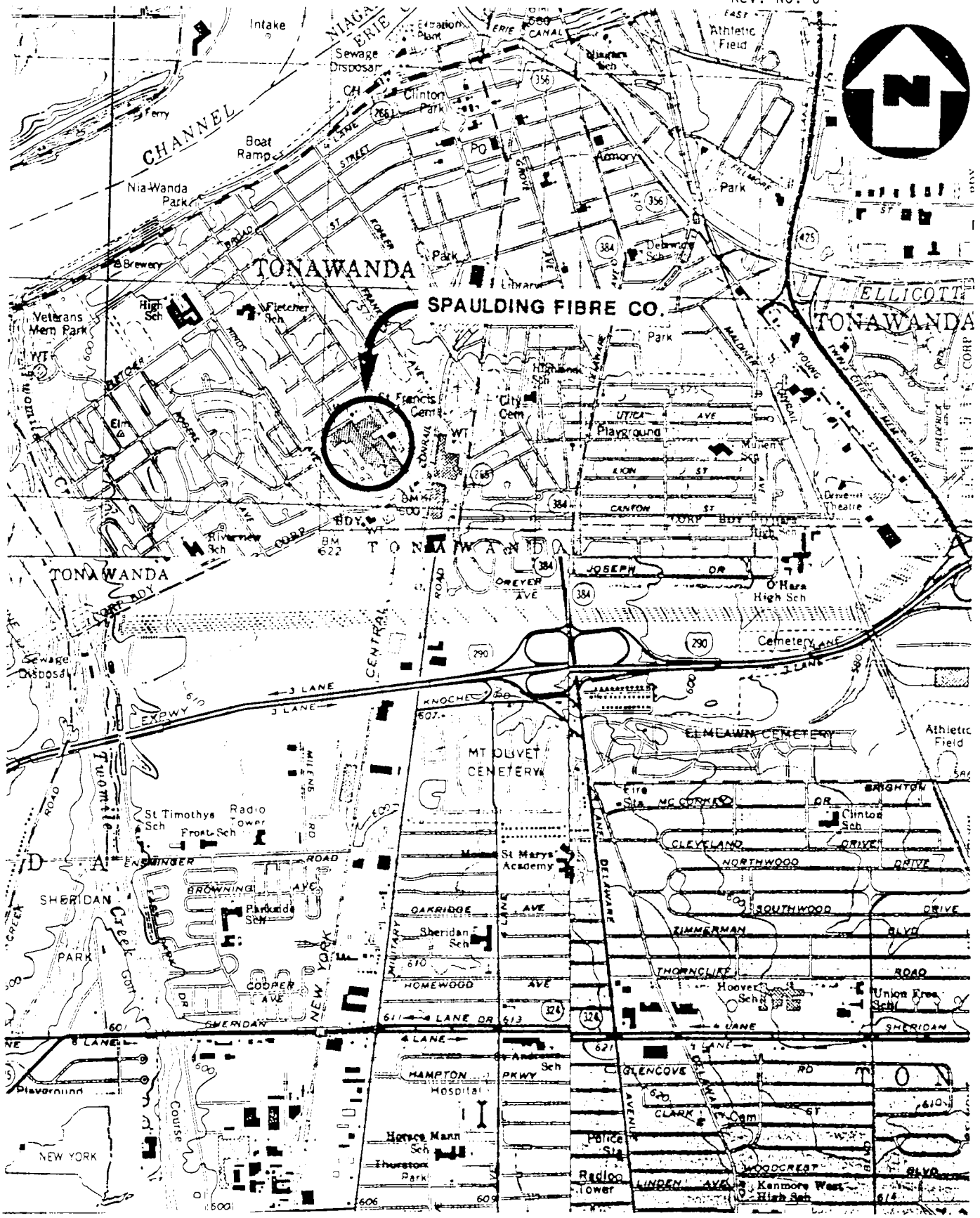
III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, report)

Phase I - Preliminary Investigation of the Spaulding Fibre Company, Inc. Recra Research, Inc., November, 1983.
Report on Spaulding Fibre Company, Inc. Interagency Task Force on Hazardous Wastes, 1979.
Industrial waste sites at Spaulding Fibre Company, Inc. Spaulding Fibre Company, Inc., December 13, 1983.
Unsigned letters from Robert Mitrey, NYSDEC, to Jack Kehoe, Spaulding Fibre Company, 8/30/87, and 9/11/78.
U.S. EPA, Region 2, RCRA Files.
Letter and background file, from Gregory Stubbs, Spaulding Fibre Company, to Alan J. Cherepon, NUS Corporation, May 28, 1987.

SECTION 3

MAPS AND PHOTOGRAPHS

SPAULDING FIBRE COMPANY
TONAWANDA, NEW YORK
CONTENTS



(QUAD) TONAWANDA WEST, N.Y.

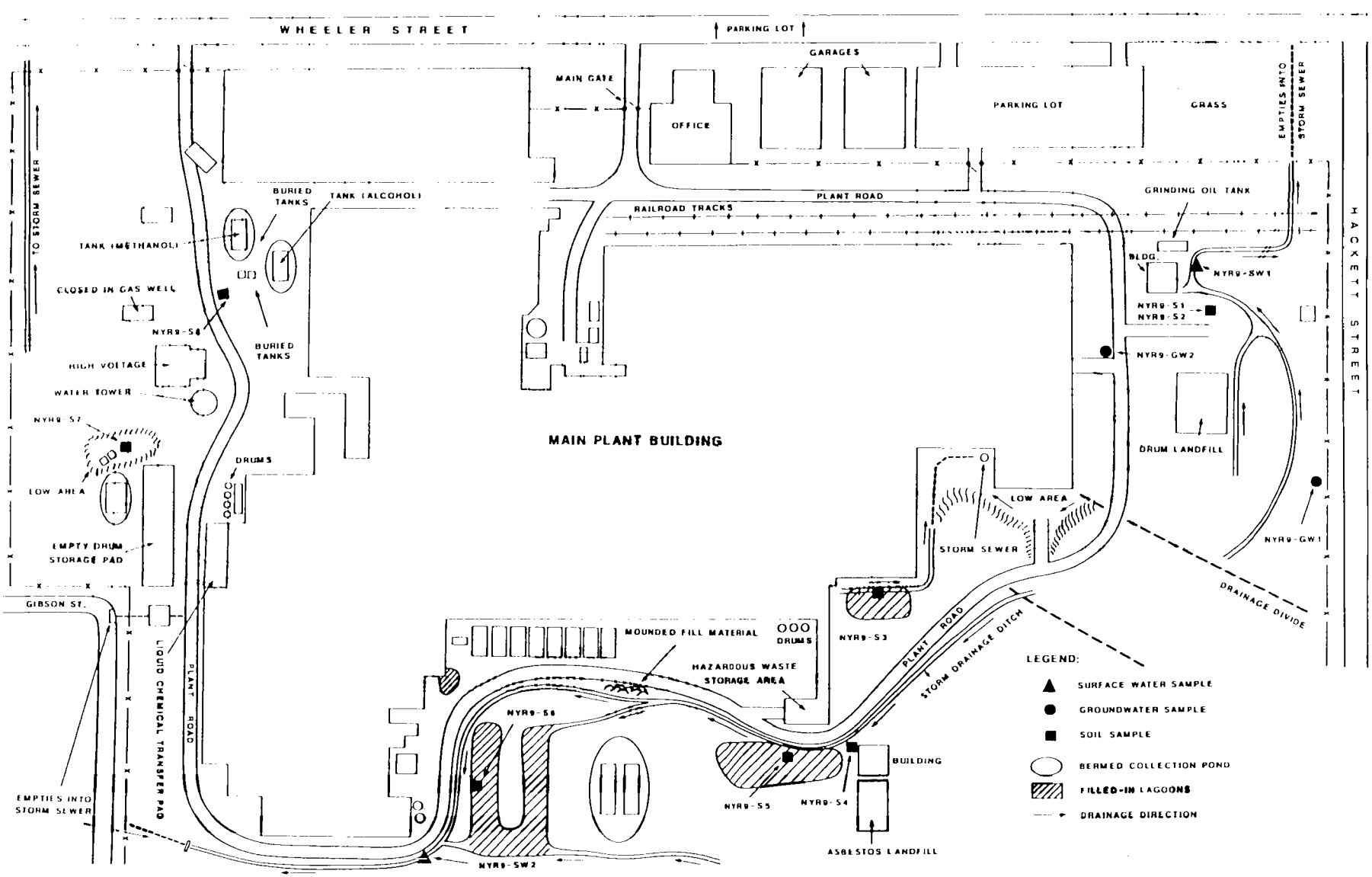
FIGURE 1

SITE LOCATION MAP

SPAULDING FIBRE CO., TONAWANDA, N.Y.

SCALE: 1"=2000'

NUS CORPORATION



SAMPLE LOCATION MAP

SPAULDING FIBRE COMPANY, TONAWANDA, N.Y.

(NOT TO SCALE)

FIGURE 2

NUS CORPORATION

02-8704-02-SR
Rev. No. 0

EXHIBIT A

PHOTOGRAPH LOG

SPAULDING FIBRE COMPANY
TONAWANDA, NEW YORK
TDD NO. 02-8704-02
APRIL 28 and 29, 1987

SPAULDING FIBRE COMPANY
TONAWANDA, NEW YORK
TDD NO. 02-8704-02
APRIL 28, 1987

PHOTOGRAPH INDEX

ALL PHOTOGRAPHS TAKEN BY ALAN J. CHEREPON

Photo Number	Description	Time
1P-1	Chemical distribution pad for trucks, across from empty drum storage area, north side of the plant. Photo direction - east.	1330
1P-2	Empty drum storage area on the north side of the plant. Photo direction - northeast.	1332
1P-3	Methanol and alcohol storage tanks on the north side of the plant. Photo direction - east.	1340
1P-4	View of chemical transfer pad and empty drum storage area, with large storage tank behind. This photo shows dip and surface runoff going to the right (north). Photo direction - west.	1341
1P-5	The southwest side of the plant, showing the hazardous waste storage building in the center, and the asbestos landfill behind the building on the left. Photo direction - northwest.	1350
1P-6	Surface water sample NYR9-SW1, drainage ditch behind the grinding oil tank, south of the drum landfill, on the south side of the plant. Sampler: Bill Schnitzerling. Photo direction - northwest.	1455
1P-7	Surface water sample NYR9-SW2, drainage ditch near the U-shaped lagoon on the west side of the plant. Sampler: Bill Schnitzerling.	1535
1P-8	Groundwater sample NYR9-GW1 (well A) near the fence by Hackett Street, on the south side of the plant. Samplers: Bill Schnitzerling and Mike Bauman.	1650
1P-9	Groundwater sample NYR9-GW2 (well B) near the south side of the plant building. Samplers: Bill Schnitzerling and Mike Bauman.	1715

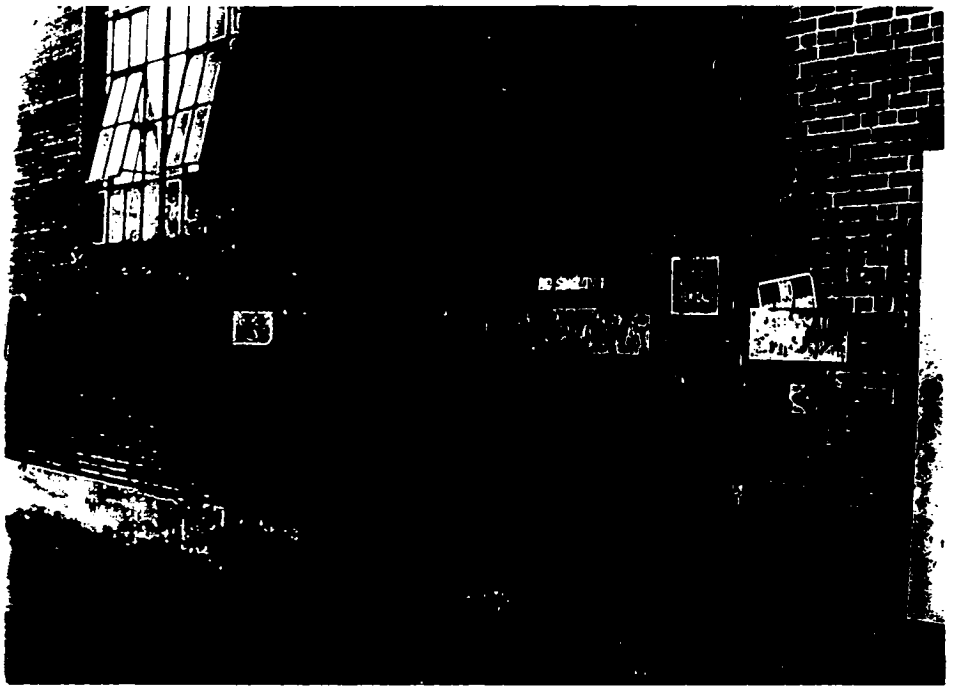
SPAULDING FIBRE COMPANY
TONAWANDA, NEW YORK
TDD NO. 02-8704-02
APRIL 29, 1987

PHOTOGRAPH INDEX

ALL PHOTOGRAPHS TAKEN BY ALAN J. CHEREPON

Photo Number	Description	Time
1P-10	Soil sample NYR9-S4, auger sample from 0-2 feet, aongside the building south of the hazardous waste storage building. Samplers: Randy Rice and Bill Schnitzerling. Photo direction - east.	1230
1P-11	Soil sample NYR9-S5, auger sample from 0-2 feet, filled-in lagoon north of the asbestos landfill on the west side of the plant. Sampler: Randy Rice.	1315
1P-12	Soil sample NYR9-S6, auger from 0-2 feet, U-shaped lagoon on the west side of the plant. Sampler: Bill Schnitzerling.	1335
1P-13	Soil sample NYR9-S7, auger sample from 0-2 feet, low area next to drain coversnorth of the empty drum storage area, on the north side of the plant. Samplers: Randy Rice and Bill Schnitzerling.	1430
1P-14	Soil sample NYR9-S8, auger sample from 0-2 feet, near methanol and alcohol storage tanks on the north side of the plant. Sampler: Bill Schnitzerling. Photo direction - northeast.	1500
1P-15	Panoramic view of the plant as seen from near the train tracks, east of the parking lot, east of the plant on Wheeler Street. Photo direction - west.	1525

SPAULDING FIBRE COMPANY, TONAWANDA, NEW YORK

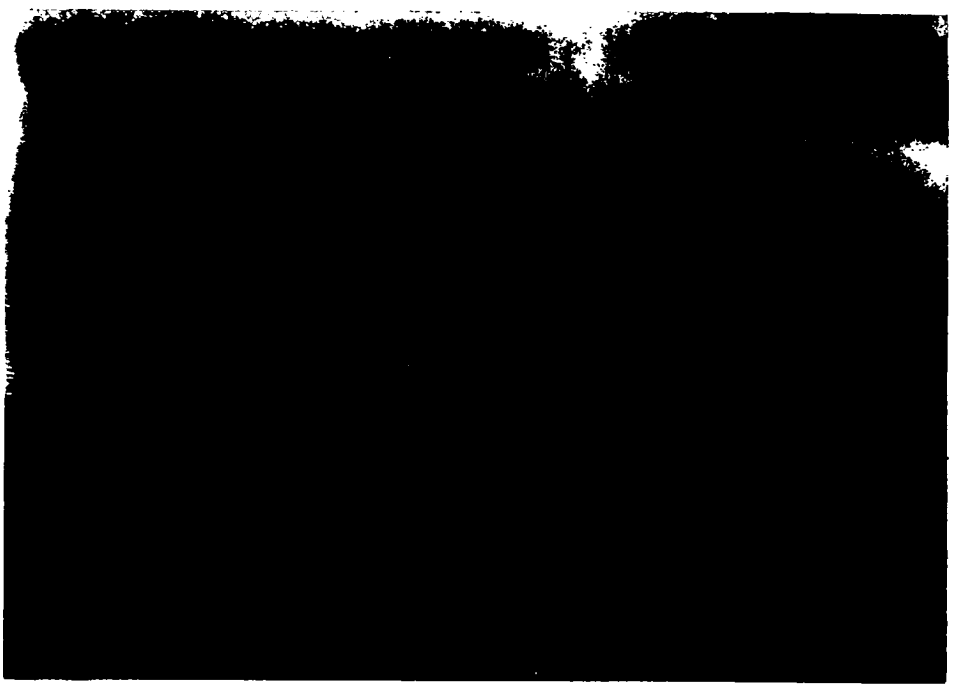


1P-1 April 28, 1987 1330
Chemical distribution pad for trucks, across from empty drum storage area, north side of the plant.
Photo direction - east.
Photographer: Alan J. Cherepon

1P-2 April 28, 1987 1332
Empty drum storage area on the north side of the plant.
Photo direction - northeast.
Photographer: Alan J. Cherepon

SPAULDING FIBRE COMPANY, TONAWANDA, NEW YORK

1P-3 April 28, 1987 1340
Methanol and alcohol storage tanks on the north side of the plant. Photo direction - east.
Photographer: Alan J. Cherepon



1P-4 April 28, 1987 1341
View of chemical transfer pad and empty drum storage area, with large storage tank behind. This photo shows dip and surface runoff going to the right (north). Photo direction - west.
Photographer: Alan J. Cherepon

SPAULDING FIBRE COMPANY, TONAWANDA, NEW YORK

1P-5 April 28, 1987 1350
The southwest side of the plant, showing the hazardous waste storage building in the center, and the asbestos landfill behind the building on the left. Photo direction - northwest.
Photographer: Alan J. Cherepon

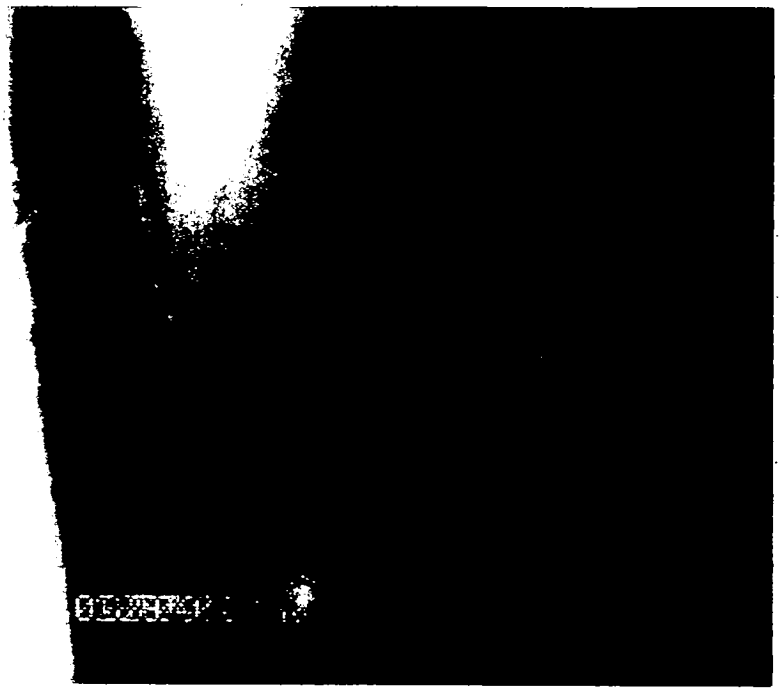
1P-6 April 28, 1987 1455
Surface water sample NYR9-SW1, drainage ditch behind the grinding oil tank, south of the drum landfill, on the south side of the plant. Sampler: Bill Schnitzerling Photo direction northwest. Photographer: Alan J. Cherepon

SPAULDING FIBRE COMPANY, TONAWANDA, NEW YORK

1P-7 April 28, 1987 1535
Surface water sample NYR9-SW2, drainage ditch near the U-shaped lagoon on the west side of the plant. Sampler: Bill Schnitzerling
Photographer: Alan J. Cherepon

1P-8 April 28, 1987 1650
Groundwater sample NYR9-GW1 (well A) near the fence by Hackett Street, on the south side of the plant. Samplers: Bill Schnitzerling and Mike Bauman.
Photographer: Alan J. Cherepon

SPAULDING FIBRE COMPANY, TONAWANDA, NEW YORK

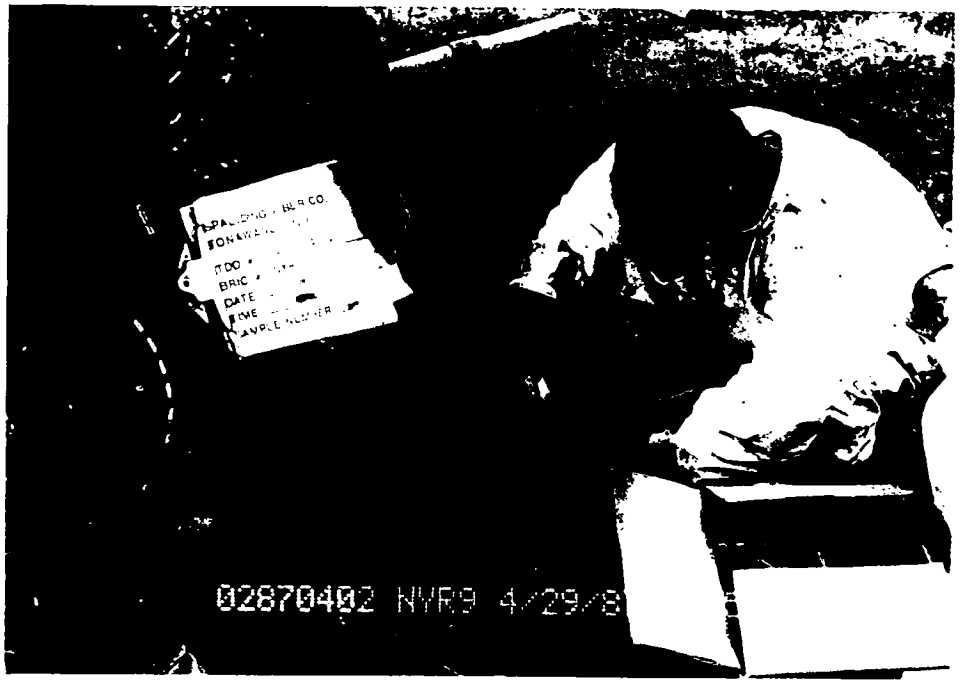


1P-9 April 28, 1987 1715
Groundwater sample NYR9-GW2 (well B) near the south side of the plant building. samplers: Bill Schnitzerling and Mike Bauman
Photographer: Alan J. Cherepon

1P-10 April 29, 1987 1230
Soil sample NYR9-S4, auger from 0-2 feet, alongside the building south of the hazardous waste storage building. Samplers: Randy Rice and Bill Schnitzerling.
Photographer: Alan J. Cherepon

SPAULDING FIBRE COMPANY, TONAWANDA, NEW YORK

1P-11 April 29, 1987 1315
Soil sample NYR9-S5, auger sample from 0-2 feet, filled-in lagoon north of the asbestos landfill on the west side of the plant. Sampler: Randy Rice
Photographer: Alan J. Cherepon



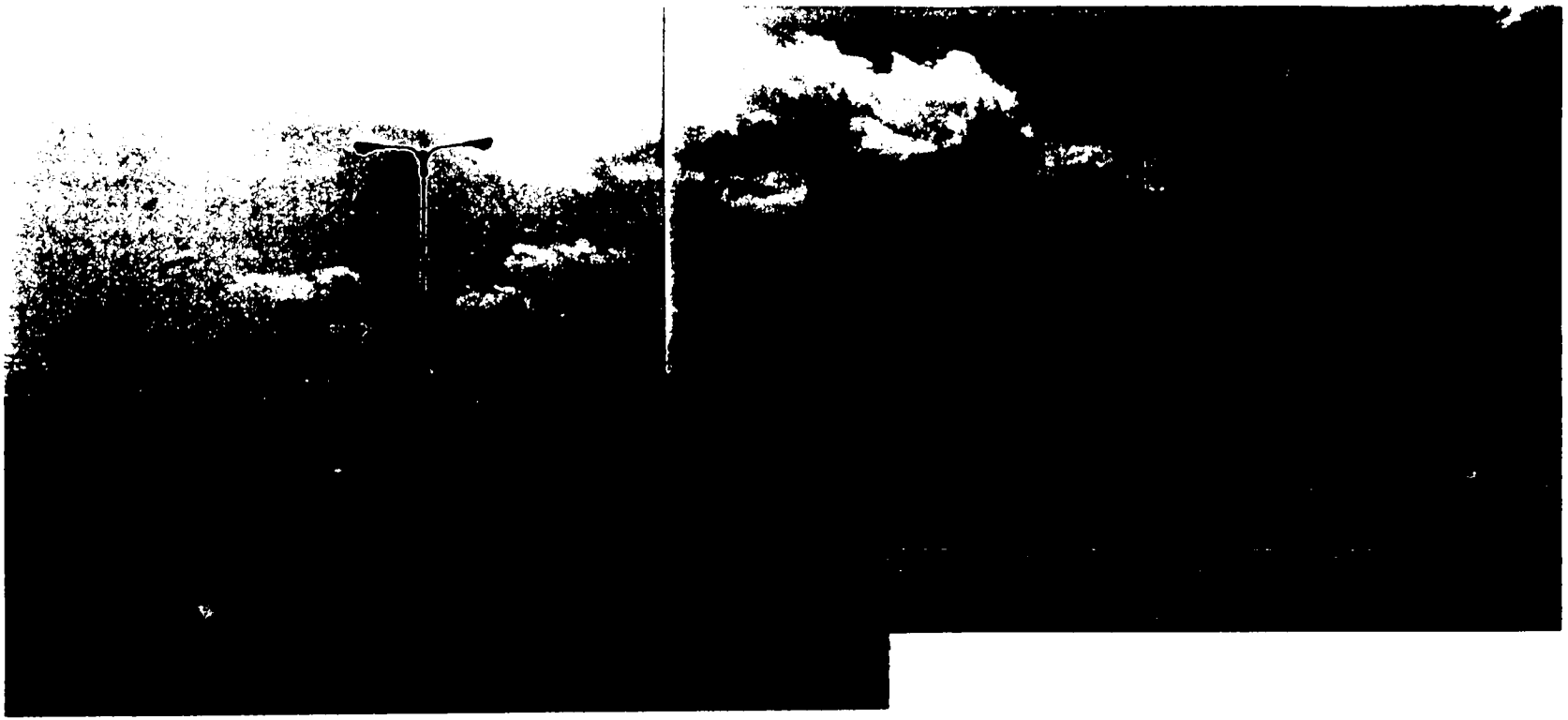
1P-12 April 29, 1987 1335
Soil sample NYR9-S6, auger from 0-2 feet, U-shaped lagoon on the west side of the plant. Sampler Bill Schnitzerling
Photographer: Alan J. Cherepon

SPAULDING FIBRE COMPANY, TONAWANDA, NEW YORK

1P-13 April 29, 1987 1430
Soil sample NYR9-S7, auger sample from 0-2 feet, low area next to drain covers north of the empty drum storage area, on the north side of the plant. Samplers: Randy Rice and Bill Schnitzerling
Photographer: Alan J. Cherepon

1P-14 April 29, 1987 1500
Soil sample NYR9-S8, auger sample from 0-2 feet, near methanol and alcohol storage tanks on the north side of the plant. Sampler: Bill Schnitzerling. Photo direction - northeast.
Photographer: Alan J. Cherepon

SPAULDING FIBRE COMPANY, TONAWANDA, NEW YORK



1P-15 April 29, 1987 1525

Panoramic view of the plant as seen from near the train tracks, east of the parking lot, east of the plant on Wheeler Street. Photo direction - west.
Photographer: Alan J. Cherepon.

SECTION 4

BIBLIOGRAPHY OF INFORMATION SOURCES

BIBLIOGRAPHY OF INFORMATION SOURCES

	SOURCE	LOCATION
1.	Phase I - Preliminary Investigation of the Spaulding Fibre Company, Inc. Recra Research, Inc., November, 1983.	NUS Corp. Edison, N.J.
2.	Report on Spaulding Fibre Company, Inc. Interagency Task Force on Hazardous Wastes, 1979.	NUS Corp. Edison, N.J.
3.	Field Notebook No. 0060, Spaulding Fibre Company, TDD No. 02-8704-02, Site Inspection, NUS Corp. Region 2 FIT, Edison, New Jersey, April 28 and 29, 1987.	NUS Corp. Edison, N.J.
4.	Project Note from Alan Cherepon, NUS Corp., to Project File - Spaulding Fibre Co., TDD No. 02-8704-02, March 8, 1988.	NUS Corp. Edison, N.J.
5.	Industrial waste sites at Spaulding Fibre Company, Inc. Spaulding Fibre Company, Inc., December 13, 1983.	NUS Corp. Edison, N.J.
6.	LaSala, A.M. Jr., Groundwater Resources of the Erie-Niagara Basin, New York, New York State Water Resources Commission Basin Planning Report ENB-3, 1968.	NUS Corp. Edison, N.J.
7.	Uncontrolled hazardous waste site ranking system. A user's manual, 40 CFR, Part 300, Appendix A, 1986.	NUS Corp. Edison, N.J.
8.	Unsigned letters from Robert Mitrey, NYSDEC, to Jack Kehoe, Spaulding Fibre Company, August 30, 1987 and September 11, 1978.	NUS Corp. Edison, N.J
9.	New York State Atlas of Community Water System Sources, Erie-Niagara Counties, New York State Department of Health, 1982.	NUS Corp. Edison, N.J.
10.	Telecon Note: Conversation between J. Whittney, Erie County Soil Conservation Service, and Alan J. Cherepon, NUS Corporation, May 21, 1987.	NUS Corp. Edison, N.J.
11.	Three-mile vicinity map including of U.S. Department of the Interior, Geological Survey Topographic Maps, 7.5 minute series, quadrangles "Tonawanda East, New York", 1980; "Tonawanda West, New York", 1980; "Buffalo Northwest, New York", 1965; and "Buffalo Northeast, New York", 1965.	NUS Corp. Edison, N.J.
12	New York State Department of Environmental Conversation, Division of Fish and Wildlife, Bureau of Wildlife, Significant Habitat Unit, Significant Habitat Overlay Map, Buffalo, December 31, 1985.	NUS Corp. Edison, N.J.

BIBLIOGRAPHY OF INFORMATION SOURCES

	SOURCE	LOCATION
13	Endangered and threatened wildlife and plants, 50 CFR 17.11 and 17.12. January 1, 1986.	NUS Corp. Edison, N.J.
14.	Telecon Note: Conversation between the North Tonawanda Water Department and Alan J. Cherepon, NUS Corp., May 11, 1987.	NUS Corp. Edison, N.J.
15.	Telecon Note: Conversation between David Haley, Lockport Water Department, and Alan J. Cherepon, NUS Corp., May 11, 1987.	NUS Corp. Edison, N.J.
16.	U.S. Department of Agriculture, Soil Conversation Service Important Farmland and Prime Farmland maps of New York, 1977, 1979.	NUS Corp. Edison, N.J.
17.	U.S. Department of the Interior, National Register, Computer printout of historic places and National Natural Landmarks for New York State, 1987.	NUS Corp. Edison, N.J.
18.	Sax, N.I., Dangerous properties of industrial materials. 6 Ed. New York, Van Nostrand Reinhold Co., 1984.	NUS Corp. Edison, N.J.
19.	General Sciences Corp., Graphical Exposure Modeling System (GEMS). Landover, Maryland, 1986.	NUS Corp. Edison, N.J.
20.	Water Quality Management Program. Report 13: Groundwater Problems/Analysis. Erie and Niagra Counties Regional Planning Board, October, 1978.	NUS Corp. Edison, N.J.
21.	Buehler, E.J. and I. H. Tesmer. Geologic Map of Erie County, New York Bedrock Geology, 1963.	NUS Corp. Edison, N.J.
22.	Letter and background files from Gregory Stubbs, Spaulding Fibre Company, to Alan J. Cherepon, NUS Corp., May 28, 1987.	NUS Corp. Edison, N.J.
23.	U.S. EPA Contract Laboratory Program, Cambridge Analytical Associates, Case No. 7204, Laboratory Analyses from NUS Region 2 FIT Site Inspection conducted on April 28 and 29, 1987.	NUS Corp. Edison, N.J.
24.	U.S. EPA Contract Laboratory Program, Mack Laboratories, Case No. 7204, Laboratory Analyses from NUS Region 2 FIT Site Inspection conducted on April 28 and 29, 1987.	NUS Corp. Edison, N.J.

SECTION 5

PRESS RELEASE SUMMARY

SUMMARY STATEMENT
SPAULDING FIBRE COMPANY
TONAWANDA, ERIE COUNTY, NEW YORK

The Spaulding Fibre Company is a privately owned, active, 50-acre facility located in Tonawanda, Erie County, New York. The plant has been in operation since 1911, in a commercial/industrial and residential area. This plant's main products are circuit boards and other insulated materials for the electronics industry.

The manufacturing process produces a mixture of phenolic resin and solvent liquid waste, wastewater treatment filter cake and sludge, incinerator ash, and waste oil. There is a drum landfill containing 750 drums of liquid waste, and a solid waste landfill. Several lagoons were reportedly excavated and filled in with clean fill. Incinerator ash and possibly other wastes were spread around the company property. Zinc and possible cadmium waste was entombed inside the plant.

New York State Department of Environmental Conservation (NYSDEC) inspection files document numerous waste disposal problems, including leaking drums, unknown waste spread around the site, excessive amounts of phenolic and other wastes released into storm sewers, and improper burial of waste. During the period 1985 to 1987, the United States Environmental Protection Agency (U.S.EPA) and NYSDEC cited several violations of Resource Conservation and Recovery Act, Toxic Substances Control Act, and New York State Solid Waste and Hazardous Waste regulations.

Due to high concentrations of hydrogen sulfide, groundwater use in the area is limited to three industrial wells near the Niagara River. The greatest potential for waste migration is through an on-site storm sewer which empties into the Niagara River. The outfall from the storm sewer is upstream from three surface water intakes in the Niagara River.

SECTION 6

BACKGROUND INFORMATION

REFERENCE NO. 1

November 28, 1983

New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12232

Attention: Mr. Norman H. Nosenchuck, P.E.
Director - Division of Solid Waste

RE: PHASE I - PRELIMINARY INVESTIGATION OF THE SPAULDING FIBRE COMPANY INC.

Dear Mr. Nosenchuck:

Attached, please find our Phase I - Preliminary Investigation of the above referenced site. These activities have been carried out under the New York State "Superfund" legislation.

Pertinent information regarding this site is summarized below.

Spaulding Fibre Company (Site #915050-d) is located at 310 Wheeler Street, Tonawanda, Erie County, New York. The general area can be characterized as urban/industrial with private residents occupying property adjacent to the plant on three sides. Accessibility to the plant property is limited by chain link fence and a 24 hour guard.

Primarily the company manufactures products for the electrical and electronics industry such as circuit board material. The processes used a the plant generate solid and liquid waste containing toxics such as phenol, formaldehyde, toluol and cresol. Prior to 1977 and after 1978 these materials were disposed of off site at various locations. Between 1977 and 1978 the company operated two (2) landfills on the plant property one (1) for bagged solid waste and one (1) for drummed liquid waste. Sampling of monitoring wells in place near the liquid landfill has verified contamination with phenol above the NYSDEC groundwater standard.

The entire area is serviced by municipal water drawn from the Niagara River. Groundwater from the bedrock shale aquifer is used for industrial purposes, however, high hydrogen sulfide content prohibits domestic use. The unconsolidated material overlying bedrock is moderately permeable consisting of till and silty clay to approximately seventy (70) foot depth.

In compiling the hazard ranking score, the Spalding Fibre Company was found to have a score for S_m equal to 21.0. However, because some route rating factors, due to data inadequancies, involve a certain degree of subjectivity a range for the S_m score was developed and found to be 16.0 to 25.0.

Remedial action suggested as appropriate to this site to be carried out in Phase II - Field Investigations is summarized in Section 7.0 of the attached report. The total cost of the proposed work is $30,660.28.

Should you have any questions or require additional information, please feel free to contact me directly.

Sincerely,

RECRA RESEARCH, INC.

Richard S. Crouch

SPAULDING FIBRE COMPANY, INC.

NEW YORK STATE SUPERFUND
PHASE I SUMMARY REPORT

FINAL

November 28, 1983

Prepared By:

Recra Research, Inc.
4248 Ridge Lea Road
Amherst, New York 14226

For:

New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233-0001

SPAULDING FIBRE COMPANY, INC.

NEW YORK STATE SUPERFUND

PHASE I SUMMARY REPORT

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

1.0 EXECUTIVE SUMMARY

Spaulding Fibre Company, Inc. is located at 310 Wheeler Street, Tonawanda, Erie County, New York. The general area can be characterized as urban/industrial with private residents occupying property adjacent to the plant on three sides. Accessibility to the plant property is limited by chain link fence and a 24 hour guard.

Primarily the company manufactures products for the electrical and electronics industry such as circuit board material. The processes used at the plant generate solid and liquid waste containing toxics such as phenol, formaldehyde, toluol and cresol. Prior to 1977 and after 1978 these materials were disposed of off site at various locations. Between 1977 and 1978 the company operated two (2) landfills on the plant property one (1) for bagged solid waste and one (1) for drummed liquid waste. Sampling of monitoring wells in place near the liquid landfill has verified contamination with phenol above the NYSDEC groundwater standard.

The entire area is serviced by municipal water drawn from the Niagara River. Groundwater from the bedrock shale aquifer is used for industrial purposes, however, high hydrogen sulfide content prohibits domestic use. The unconsolidated material overlying bedrock is moderately permeable consisting of till and silty clay to approximately seventy (70) foot depth.

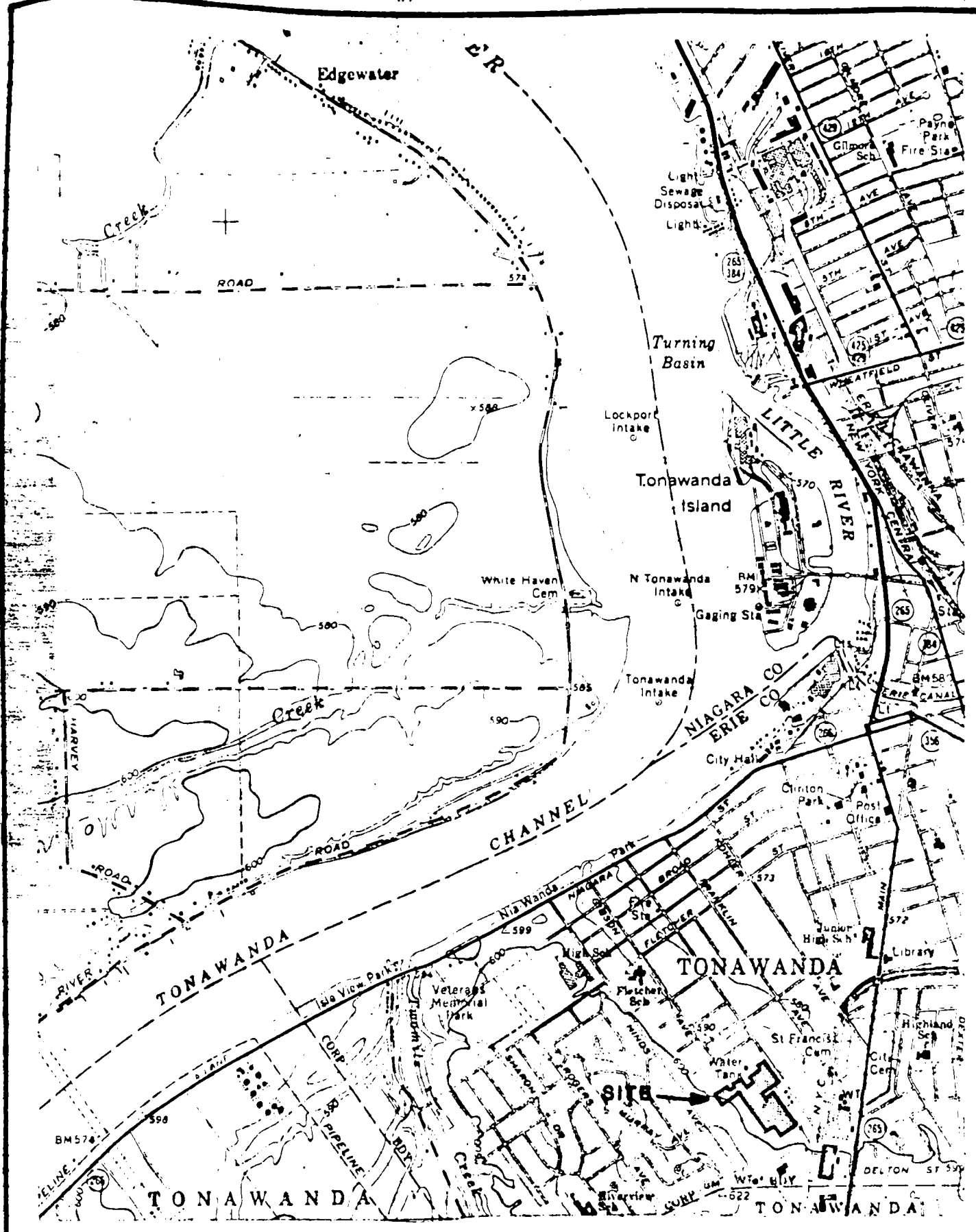
NY 915050-D
(new # NYD 000 824440)

2.0 SITE DESCRIPTION

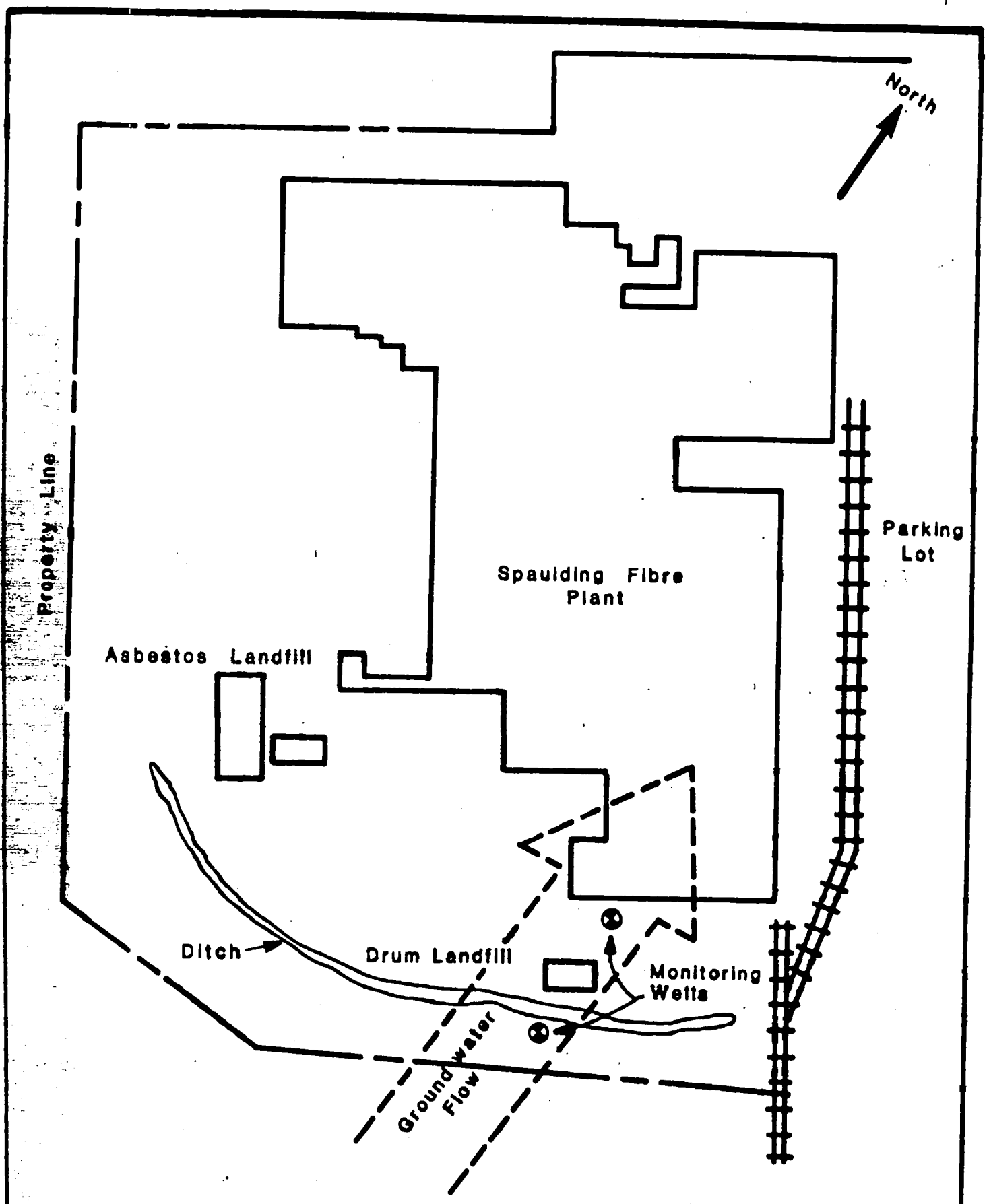
Spaulding Fibre Company, Inc. occupies approximately fifty (50) acres of land in an urban/industrial area on the southern boundary of the City of Tonawanda (Figure 1). The plant property is bounded on three (3) sides by private residents. Accessibility to the site is limited by chain link fence and a 24-hour guard.

Topography of the area is basically flat with a shallow east-west running ditch and a mound created by landfilling being the only surface features present.

Of the fifty (50) acre total, approximately 1.5 acres have been used for two landfills. These areas are located toward the southern corner of the plant property (fig. 2). The site is grass covered in all unused areas except above the landfill containing the bagged solid waste. This area is reported to have been covered recently with an additional six (6) inch clay cap (ref. 29).



USGS Topographical Map7.5' Tonawanda W. Quad. 1965	VICINITY MAP SPAULDING FIBRE CO. INC.	Figure 1



Not To Scale	SITE MAP SPAULDING FIBRE	Figure 2

10

4.0 SITE HISTORY

Spaulding Fibre Company, Inc. is a division of Monogram Industries of California. The company began operation in Tonawanda, New York in 1911. Basic manufacturing processes employed at this plant include paper making, condensation, polymerization, resin carrier saturating, high pressure laminating, vulcanizing filament (1960 to 1977), and fabrication (1939 to 1973). The products manufactured by this company are largely for the electrical industry. These products include vulcanized fibre, thermosetting laminates, paper filawound glass tubing (1960-1977), and fabrication of fibre and laminates (1939-1973). The waste generated from these processes and products are scrap vulcanized fibre, vulcanized fibre sheet, thermosetting plastic, zinc sulfate and diatomaceous earth, zinc hydroxide filter cake, waste oil, asbestos, glass dust, waste varnishes, fabrication grindings and waters of reaction containing phenol, formaldehyde, solvents, and cresylic (Ref. 16).

All combustible waste was incinerated at the plant up until 1969. During this time the grinding waste, which consisted of 50% phenolic resin and 50% asbestos or glass dust, had been lagooned. These lagoons have since been excavated and the excavated material has been disposed of. The names of the haulers and the location of disposal are unknown.

From 1969 to 1974, wastes were hauled by Wheatfield Warehouses Incorporated of North Tonawanda. The waste hauled by this firm included

scrap vulcanized fibre, vulcanized fibre sheet, and thermosetting plastic and trimmings. These materials were disposed of at Seaway Industrial Park and an unspecified area of what is now known as the Lasalle Expressway in Niagara Falls, New York.

Since 1972 Niagara Sanitation has hauled the solid wastes and Booth Oil Company, Incorporated hauls the waste oils. Waters of reaction are incinerated at the Spaulding Fibre plant.

During the period 1977 to 1978 Spaulding Fibre operated two (2) landfill areas on the Company property. These landfills are at present inactive, however, the materials disposed of are still in place on the site. One landfill contains approximately 750 drums of liquid waste. The other landfill contains approximately 20 tons of solid waste. The drummed liquid waste at the site contains phenol, formaldehyde, dibutyl phthalate, aniline oil, cresol, toluol, methanol, ethyl alchol, buty octal phthalate, and toluene. The solid waste, which is generated by a glass "Spauldite" grinding operation at the plant, consists of phenol, asbestos, glass and zinc chloride. This material had been double bagged in polyethylene and buried in clay pits to a depth of fifteen (15) feet (Ref. 3).

5.0 SITE DATA

5.1 Site Area Surface Features

5.1.1 Topography and Drainage - The topography in the area of Spaulding Fibre can generally be characterized as flat. Surface features are typical of a glacial lake plain environment. Topography in the immediate area is mainly the result of urban development. Slope of the area has been determined, from the U.S.G.S. Tonawanda West gradrangle, to be approximately .5% (10 ft/2000 ft) to the north (Ref. 15). The nearest downslope water surface is the Niagara River northwest of the site which is a "Class A" (special international boundary) water resource (Ref. 24). Runoff may, however, enter Two Mile Creek west of the site before reaching the Niagara River. Storm sewers for Tonawanda would most likely prevent surface runoff of any distance.

5.1.2 Environmental Setting - The Spaulding Fibre plant is located in a densely populated urban area. There are no protected wetlands, critical habitats of endangered species or wildlife refuges in the vicinity of the site. The Niagara River, Two Mile

Creek and Tonawanda Creek are the only nearby surface waters and are approximately .5 miles from the site (Ref. 15).

5.2 Site Hydrogeology

5.2.1 Geology - Bedrock beneath the Spaulding Fibre site is the Camillus Shale of the Salina Group and is encountered at approximately 40 feet below the ground surface. This unit consists mainly of gray shale, however, considerable amounts of gray limestone and dolomite are found interbedded in the unit. Gypsum and anhydrite are present within the beds of shale and many occurences are found to be up to five (5) feet thick. Overall thickness of the Camillus shale is approximately 400 feet. Regional dip of the bedrock is to the south at approximately .5° (Ref. 23).

5.2.2 Soils - The unconsolidated material overlying bedrock in the area is mainly clayey lake sediments and dense glacial till. Boring logs taken at the Spaulding site detail the soil profile to twenty (20) feet as; fill to four (4) feet over .5 foot of silty clay lake sediments resting on very dense silty clay loam glacial till (Ref. 19). Calspan Corporation of Cheektowaga, New York

determined the permeability of these materials ranged from 2.0×10^{-5} to 2.3×10^{-7} cm/sec (Ref. 26). The surficial soil has been characterized as urban by the Soil Conservation Service.

5.2.3 Groundwater - Groundwater wells are not frequently used in the area around Spaulding Fibre and those that are in use are for industrial purposes. Well depths range from 101 feet to 375 feet and draw water from the Camillus shale bedrock aquifer. Yields of wells in this unit are extremely high due to the large storage capacity created by the dissolving of interbedded gypsum. However, the quality of water drawn from this aquifer is poor due to the high hydrogen sulfide content (Ref. 23). The high groundwater table is reported to be perched in the uppermost fill layer above clay at a depth of approximately four (4) feet. Groundwater flow is in a northerly direction toward the Niagara River and the Erie Canal (Ref. 19).

5.3 Previous Sampling and Analysis

5.3.1 Groundwater Quality Data - Groundwater monitoring wells are in place near the drummed liquid landfill with one (1) well upstream and one (1) well

downstream of groundwater flow. These are shallow wells at approximately thirty-four (34) foot depth and are screened in the glacial till. Analysis for phenol, antimony and COD has been done biannually since 1978 by Acts Testing Labs, Inc. In November, 1982, Spaulding was advised that monitoring for antimony should be discontinued and monitoring for THO should be initiated. Phenol has been found in excess of NYSDEC standards in both the upstream and the downstream wells (Ref. 1). In some cases the levels of phenol were found to be higher in the upstream than the downstream well, however, this may be due to groundwater mounding as a result of the release of overburden pressure by excavating for the landfill. There has been no known testing of groundwater quality for other than the above mentioned parameters.

5.3.2 Surface Water Quality Data - There is no surface water quality data for the site.

5.3.3 Air Quality Data - There is no air quality data for the site.

ACTS TESTING LABS, INC.

3900 Broadway • Buffalo, N.Y. 14227-1192 • (716) 684-3300

TECHNICAL REPORT

October 19, 1982

Mr. Leonard Oseekey
SPAULDING FIBRE COMPANY

OBJECT:

Analysis of two wastewater samples received from Spaulding Fibre Company, 310 Wheeler Street, Buffalo, New York on October 12, 1982.

RESULTS:

	10/11/82 Landfill Well By Fence (O)	10/11/82 Landfill Well By Building (P)
Phenols	LT 0.03	LT 0.03
Antimony	LT 0.002	LT 0.002
COD	LT 1.0	14.0

LT = Less Than

The above results are reported as milligrams per liter (mg/l).

EXPERIMENTAL:

All analyses were conducted according to procedures listed in "Standard Methods for the Examination of Water and Wastewater", 15th Edition, 1980.

ACTS TESTING LABS, INC.

Thomas Knickerbocker
Environmental Laboratory
Coordinator

ACTS TESTING LABS, INC.

Daniel P. Murtha, Ph.D.
Laboratory Director

tm

17

ACTS TESTING LABS, INC.

3900 Broadway • Buffalo, N. Y. 14227 • (716) 684-3300

TECHNICAL REPORT April 8, 1981

Mr. Leonard Oscekey
SPAULDING FIBRE COMPANY

OBJECT:

Analysis of two wastewater samples received from Spaulding Fibre Company, 310 Wheeler Street, Buffalo, New York on March 26, 1981.

RESULTS:

	Well A	Well B
Phenol	0.21	0.26
Antimony	LT 0.005	LT 0.005
Chemical Oxygen Demand	7.7	11.5

The above results are reported as milligrams per liter (mg/l).

LT = Less Than

EXPERIMENTAL:

The analyses were performed according to the most recently published guidelines of Title 40, Code of Federal Regulations, Section 136.3, "Identification of Test Procedures", December 1, 1976.

ACTS TESTING LABS, INC.

Elmer K. Gerbracht
Laboratory Director

af

ACTS TESTING LABS, INC.

3900 Broadway • Buffalo, N. Y. 14227 • (716) 684-3300

TECHNICAL REPORT November 7, 1980

. Leonard Osecky
AULDING FIBRE COMPANY

BJECT:

nlysis of two wastewater samples received from Spaulding bre Company, 310 Wheeler Street, Buffalo, New York on tober 23, 1980.

SULTS:

	Well A	Well B
Phenol	LT 0.03	LT 0.03
Antimony	LT 0.002	LT 0.002
Chemical Oxygen Demand	18.8	55.6

e above results are reported as milligrams per liter g/l).

T = Less Than

XPERIMENTAL:

he analyses were performed according to the most recently ublished guidelines of Title 40, Code of Federal Regula- ions, Section 136.3 "Identification of Test Procedures", December 1, 1976.

ACTS TESTING LABS, INC.

Angelo M. Fatta

Angelo M. Fatta, Ph.D.
Technical Director

af

ACIS TESTING LABS, INC.

3900 Broadway • Buffalo, N. Y. 14227 • (716) 684-3300

19

TECHNICAL REPORT

May 28, 1980.

Mr. Leonard Oseekey
Spaulding Fibre Company

OBJECT:

Analysis of two well water samples received from Spaulding Fibre Co., 310 Wheeler Street, Tonawanda, New York on May 15, 1980.

RESULTS:

	Well #1	Well #2
COD, mg/l	7.9	19.9
Phenol, mg/l	0.23	0.19
Antimony, mg/l	<0.001	<0.001

<= less than

EXPERIMENTAL:

The analyses were performed according to the most recently published guidelines of Title 40, Code of Federal Regulations, Section 136.3 "Identification of Test Procedures", December 1, 1976.

A.M. Fatta, Ph.D.
Technical Director

AMF/sih

20

ACIS TESTING LABS, INC.

3900 Broadway • Buffalo, N. Y. 14227 • (716) 684-3300

TECHNICAL REPORT 9-699 January 3, 1980

Mr. Leonard Oseekey
Spaulding Fibre Company

OBJECT:

Analysis of two well samples received from Spaulding Fibre Company, 310 Wheeler Street, Tonawanda, New York on 12/20/79 at 8:00 AM.

RESULTS:

	Well #A	Well #B
COD, mg/l	19.8	32.2
Phenol, mg/l	0.07	0.08
Antimony, mg/l	<0.005	<0.005

< = less than

EXPERIMENTAL:

The analyses were performed according to the most recently published guidelines of Title 40, Code of Federal Regulations, Section 136.3 "Identification of Test Procedures", December 1, 1976.

Richard Gessner

Richard C. Gessner
Laboratory Manager

RCG/sih

NCIS TESTING LABS, INC.

455 Cayuga Road • Buffalo, NY 14225 • 716-634-8221

TECHNICAL REPORT 9-542 October 3, 1979

Mr. L. Oseekey
Spaulding Fibre Company

OBJECT:

Analysis of two well samples received from Spaulding Fibre Company, 310 Wheeler Street, Tonawanda, New York on 9/20/79 at 8:00 A.M.

RESULTS:

	Well #1	Well #2
COD, mg/l	24.4	50.1
Phenol, mg/l	0.15	0.08
Antimony, mg/l	<0.005	<0.005

< = less than

EXPERIMENTAL:

The analyses were performed according to the most recently published guidelines of Title 40, Code of Federal Regulations, Section 136.3 "Identification of Test Procedures", December 1, 1976.

Richard C. Gessner,
Laboratory Manager

RCG/dk

NUS CORPORATION
SUPERFUND DIVISION

PROJECT NOTES

TO: READER DATE: 5/31/88

FROM: STANLEY SHULFER COPIES:

SUBJECT: SPAULDING FIBRE COMPANY

REFERENCE:

PAGES # 23 - 27 WERE COPIED FROM POOR QUALITY ORIGINALS.

THE FOLLOWING PAGES WERE NON-LEGIBLE AT THE TIME OF FILMING

ACIS TESTING LABS, INC.

495 Cayuga Road • Buffalo, N.Y. 14225 • 716 [illegible]

TECHNICAL REPORT 0-458 August 9, 1978

Mr. L. Osecky
Spaulding Fibre Company

OBJECTIVE

RESULTS

EXPERIMENTAL

AW/KR

24

ACIS TESTING LABS, INC.

455 Cayuga Road • Buffalo, N.Y. 14225 • 716-631-3221

TECHNICAL REPORT 9-302 May 30, 1979

L. Osceckey
ulding Fibre Company

ECT:

ysis of two well samples received from Spaulding Fibre Company
Wheeler Street, Tonawanda, New York on May 7, 1979.

ULTS:

COD mg/l

Phenol mg/l

Ammonia mg/l

ess than

MENTS:

nalyses
ed
on

ACIS TESTING LABS. INC.

455 Cayuga Road • Buffalo, NY [illegible]

TECHNICAL REPORT 9-181

Mr. L. Oseckey
Spaulding Fibre Company

OBJECT:

Analysis of [illegible]

RESULTS:

26

ACIS TESTING LABS, INC.

455 Cayuga Road [illegible] NY [illegible]

TECHNICAL REPORT 9-005 [illegible] January 1, 197[illegible]

Mr. L. Oseekey
Spaulding Fibre Company

OBJECT:

Analysis of two [illegible]
Company [illegible]
8:00AM.

RESULTS:

COD, mg/l
Phenol, [illegible]
Antimony, mg/l

EXPERIMENTAL:

The [illegible]
published [illegible]
section [illegible]
Method [illegible]
solution [illegible]

ACIS TESTING LABS, INC.
455 Cayuga Road • Buffalo, N.Y. 14225 • (716) 681-2211

TECHNICAL REPORT 785-528

November 29, 1978

Mr. L Oscekoy
Spaulding Fibre Company

OBJECT

RESULTS

AMF/RB

END OF

NON-LEGIBLE

PAGES

5.3.4 Other Analytical Data - There has been no other reported testing other than that previously mentioned.

APPENDIX A

REFERENCES

1. NYSDEC Memorandum, Peter Buechi, 2/11/83 in reference to Acts Testing Labs Technical Reports.

2. NYSDEC Industrial Waste Survey, DEC Interviewer John E. Ianotti 11/10/76.

3. Letter from: NYSDEC Region 9 Mr. Robert Hitrey to: Spaulding Fibre Mr. Jack Kehoe, 9/11/78/

4. Spaulding Fibre Trial Notes and Workpapers available at DEC Region 9 Solid Waste Dept.

5. NYSDEC Information Dossier 79.2, April 11, 1979

6. NYSDEC Industrial Chemical Survey Part 1, January 26, 1977.

7. NYSDEC Hazardous Waste Disposal Sites Reports, Ronald Tramontano, April 15, 1980.

8. NYSDEC Facility Inspection Form, D. Tamol, 8/22/78.

9. Letter from: Spaulding Fibre Mr. Jack Kehoe to: NYSDEC Mr. Robert J. Mitrey, P.E., Sept. 12, 1978.

10. Letter From: Spaulding Fibre, Mr. Jack Kehoe To: Environmental Conservation Dept. Bureau of Water Resources, Mr. Anthony T. Voell P.E. Chief, August 31, 1978.

11. Memo, Spaulding Fibre Disposal Area Inspection, Donald Tamol, Anthony T. Voell, August 25, 1978.

12. Environmental Assessment Part III, Spaulding Fibre Co. Project No. 15534, Handwritten notes.

13. Letter From: NYSDEC Region 9 Mr. Robert J. Mitrey, to: Spaulding Fibre Mr. Jack Kehoe, August 30, 1978.

14. ECDEP Report, Spaulding Fibre - #915050 - (a, b, and c), October 1981.

15. U.S. Geological Survey, Topographic Map, Tonawanda North Quadrangle, 1965.

16. Waste Disposal Sites, Interagency Task Force on Hazardous Wastes, March 1979.

17. Letters From: Spaulding Fibre, Mr. L. F. Oseeky, to: Mr. John McMahan, P.E. In reference to Acts Testing Labs Technical Reports. October 21, 1982, January 21, 1982, April 9, 1981, November 12, 1980.

18. NYS Water Resources Commission, Erie-Niagara Basin Groundwater Resources, ENB-3. 1973

19. Earth Dimensions Inc., Soils Report and Test Borings and Logs, September 27, 1978.

20. Interagency Task Force on Hazardous Wastes, Information Sheet. Oct. 30, 1978.

21. Computer Printout Data Sheet, Spaulding Fibre Co., Inc. 1978

22. Notes taken from DEC Region 9 Spaulding Fibre File, 4/15/83.

23. Geology of Erie County New York, Edward J. Buehler and Irving H. Tesmer, Buffalo Society of Natural Sciences Bulletin, Vol 21 No. 3 Buffalo 1963.

24. Codes, Rules and Regulations of the State of New York, Vol 6C, Section 837.4, pg. 1605. 1966

25. HRS Mitre, July 16, 1982.

26. **Letter** from Richard P. Leonard, Environmental Science Department, **Calspan** Corp. 11/9/78.

27. **Notes** taken from application for treatment of an industrial hazardous waste stream September 28, 1983. Document available at DEC Region 9

28. **Site** visit and personal interview with Ken Kasprzak, Spaulding Fibre site representative, June 6, 1983.

Estimated Size: 50 acres/1.5 acres used for landfilling.

Hazardous Waste Disposed?: Yes

Type and Quantity of Hazardous Waste: Approximately 750 drums of liquid industrial wastes, mostly resins and some solvents. 20 tons of solid industrial waste containing phenolic resins and asbestos.

Present Owner: Monogram Industries, Inc., Santa Monica California.

Time Period Site Was Used: 1977 to 1978

Site Status: Inactive

Types of Samples: Groundwater. Found to have phenol above standards.

Remedial Action: None

Status of Legal Action: None

Permits Issued: Unknown

Assessment of Environmental Problems: Site is surrounded on three sides by private residents.

Assessment of Health Problems: None known

Person Completing This form: Andre J. LaPres, Recra Research, Inc.

Date: June 6, 1983

APPENDIX B

HAZARDOUS WASTE SITE REPORT

REVISED

Code: N

Site Code: 915050-d

Name of Site: Spaulding Fibre Co., Inc.

Region: 9

County: Erie

Town/City: Tonawanda

Street Address: 310 Wheeler St., Tonawanda, N.Y. 14150

Status of Site:

- 2 Inactive landfills. Located in an urban/industrial area. Used for disposal of liquid and solid industrial waste containing phenolic resins. Site drains through municipal storm sewers to the Niagara River. Approximately 70 feet of moderately permeable soil overlying bedrock.
- Urban/industrial high residential area. Flat topography.
- Nearest dwelling within 500 feet of landfills.
- Nearest water body: Niagara River. Approximately 1 mile north
- Nearest water supply: Municipal water supply drawn from the Niagara River.
- Approximately 4 feet to seasonal high water table.
- Soil type: Urban fill

Type of Site: Landfill

REFERENCE NO. 2

INTERAGENCY TASK FORCE ON HAZARDOUS WASTES
P.O. Box 501
Niagara Falls, New York 14302
(716) 285-3057

I. General Information

1. Company Name Spaulding Fibre Company, Inc.

Mailing Address 310 Wheeler Street, Tonawanda, New York 14150
Street City State Zip

Present Plant Location [^] Same as Above

Street City State Zip

2. If Subsidiary or Division, Name of Parent Company Monogram Industries

3. Person Responsible for Present Plant Operations Richard Hunter
Name

V.P. Manager of Operations 716-692-2000
Title Telephone

4. Person Answering this Questionnaire Leonard Oseekey
Name

Manager Plant Engineering 716-692-2000
Title Telephone

II. Company History

1. Date Company Founded 1873

Date and State of Incorporation 1/8/1920 State of New Hampshire

Date Company Began Operations in Erie or Niagara County 1911

2. Other Company Names since 1930 (specify time periods) None

3. Other Plant Locations in Erie or Niagara County since 1930 (specify locations and time periods) None

4. Names of Companies Acquired which have Operated Plants in Erie or Niagara County since 1930 (specify name of company, date of acquisition, location of plant, and periods of operation). None

Company Personnel

1. Identify all plant managers from 1930 to present, indicate years of service in that position, last known address and telephone number.

2. Identify all plant purchasing agents from 1930 to present. Indicate years of service in that position, last known address and telephone number.

3. Identify all plant personnel with supervisory responsibility for treatment or disposal of industrial wastes from 1930 to present. Indicate years of service, last known address and telephone number.

Industrial Waste Production, Treatment and Disposal

	Dates
1. Processes Used at Plant (1930-1975)	
a. Paper Manufacture	a. 1930 to present
b. Vulcanized Fibre (sheet and tube)	b. 1930 to present
c. Thermosetting Laminates (sheet and tube)	c. 1930 to present
d. Filawound Glass Winding	d. 1960 - 1977
e. Fabrication of above materials	e. 1930 - 1973
2. Products (1930-1975)	
a. Vulcanized Fibre (sheet and tube)	a. 1930 to present
b. Thermosetting Laminates (sheet and tube)	b. 1930 to present
c. Filawound Glass Tubing	c. 1960 to 1977
d. Paper	d. 1930 to present
e. Fabrication of fibre and laminates	e. 1930 to 1973
3. On Site Waste Treatment (1930-1975)	
a. Vulcanized fibre (incineration)	a. 1930 to 1969
b. Thermosetting Plastics (incineration)	b. 1930 to 1969
c. Fabrication Grindings - lagooned	c. 1930 to 1972
d.	d.
e.	e.

4. List all Waste Haulers since 1930 including Your Company

Name Niagara Sanitation Company, Inc.

Address 1050 Military Road (Street), P. O. Box 9, Kenmore (City), New York (State)

Telephone 693-5185

Name Wheatfield Warehouse, Inc.

Address 493 Wheatfield Street (Street), North Tonawanda (City), New York (State)

Telephone 692-8967

Identify all Treatment or Disposal Sites in Erie or Niagara County used since 1930 (use separate sheet for each site).

a. Name of Site See Attached Sheets

b. Location

c. Owner or Operator

d. Time Period Site was Used

e. Describe Waste Types Treated or Disposed at this Site	Physical State	Total Quantity	Type of Container, If Any
(1) Vulcanized Fibre Sheet	Rolls	Not Segregated Past records of what was incinerated at plant until incinerator shut down was avg. of 12 tons/day x 5 days/wk. x 7 years = 21000 tons.	None
Vulcanized Fibre	Grinding Dust		None
(2) Thermosetting Plastic	Trimmings		None
Thermosetting Plastic	Dust		None
(3)			
(4)		Incineration was stopped in early '69.	
(5)			

f. Wastes Were [X] land disposed [ ] incinerated [ ] reclaimed [ ] treated [ ] other (specify)

g. Names of waste haulers including your company transporting such wastes to this site, if a disposal site.

Wheatfield Warehouses, Inc. 692-8967
Name Telephone

493 Wheatfield Street, North Tonawanda, New York
Street City State

Time Periods such Hauler Transported to this Site 1969 to 1972

Niagara Sanitation Company, Inc. 693-5185
Name Telephone

1050 Military Road, P. O. Box 9, Kenmore, New York
Street City State

Time Periods such Hauler Transported to this Site 1972 to ~~1974~~ present 1978

h. List Names and Addresses of other Companies using this Site, if a disposal site.

Unknown by this firm.
Name of Company

Street City State

Time Periods such Other Company Used this Site

Sources of Information

Please indicate the sources of all information set forth in response to Questions IV. 4 and IV. 5 above. (Specify names of individuals and sources).

The information supplied came from Purchase Orders issued by Spaulding Fibre Company to the two vendors who hauled waste from plant.

Present Conditions

In our waste heat boilers we incinerate the following and recover the heat as steam:

1. Waters of Reaction -- approximately 6500 gallons weekly of the water of reaction from resin making are incinerated. The waters of reaction contain phenol, solvents, formaldehyde, cresylic and water.

2. Burnable Solid Waste - Saw trimmings from laminated sheets and dust are pulverized and incinerated in our waste heat boilers - approximately 40,000 pounds/month.

On Site Burial

In February of 1978 a group of trenches 15'-0 deep were dug on the south end of the plant and approximately 750+ drums were buried and covered with 3 ft. of top fill. The burial was done in solid clay. We ceased burying drums in September 1978. Since that time test wells were installed upstream and downstream of this land fill site and monitoring has commenced on the underground water flow for phenol, antimony and COD.

During the fall of 1977 trenches were dug on the west side of the plant, and asbestos and glass dust encapsulated in polyethylene bags were buried and covered with land fill. This practice stopped in September 1978. Since that time we have retained the services of Krehbiel & Hall Consulting Engineers and filed for a permit to permit the continuation of onsite disposal by burying approximately 20 tons of dust.

Drum Disposal - Scrap barrels are disposed of by Hyman Barrel Company, 878 South Division Street, Buffalo, New York.

Spaulding
Fibre Company, Inc.
Subsidiary of Monogram Industries, Inc.

Industrial Plastics Division
310 Wheeler Street Tonawanda New York 14150
716-692-2000

III. Company Personnel

1. Plant Managers

Name/Last Known Address/Phone	Years of Service
Richard Hunter 310 Wheeler Street Tonawanda, New York 14150 716-692-2000	7/16/76 to present
Eugene Krohn 29C Coolbrook Court East Amherst, New York 14051 716-688-5576	11/26/73 to 7/16/76
Richard Deininger (Deceased)	2/73 to 2/75
Robert Didion 73 Wellington Drive East Amherst, New York 14150 716-632-8794	10/8/70 to 12/73
Leslie Towle 235 Willow Ridge Drive Tonawanda, New York 14150 716-692-8915	11/1/68 to 11/1/70
John Ludemann 265 Cottonwood Drive Williamsville, New York 14221 716-633-6240	7/13/64 to 11/1/68
Walter Jackson 71 Burwell Avenue Lancaster, New York 716-RE-4390 683-4390	1/60 to 10/63

Hat Wheat War N. Ton Niaga Boot

Spaulding
Fibre Company, Inc.
Subsidiary of Monogram Industries, Inc

Industrial Plastics Division
3 [illegible] Street Tonawanda New York [illegible]
716-[illegible]

Name/Last Known Address/Phone	Years of Service
R. F. Oleksiak 65 Rollingwood Williamsville, New York 14221	4/13/53 - 2/25/64 (Plt.Mg 2/25/64 - 10/1/70 (Pres.)
C. C. Steck (Deceased)	1924-1942 (Gen.Mgr.) 1942-1960 (President)

2. Purchasing Agents

Albert Hardleben (Deceased)	1921 - 1959
Walter Greiser 140 Meadow Lane Kenmore, New York 14223	4/1/42 - 6/19/59 (In Purchasing Dept. last few years of his employment)
William Hutchins Durham, New Hampshire	6/59 - 1/69
William C. Ross 1275 Sweeney Street North Tonawanda, New York 716-693-3413	1958 - Asst. P.A. 7/65 - 1/75 P. A.

3. Plant Personnel With Supervisory Responsibility For Treatment Or Disposal of Industrial Wastes

Clifford Taylor (Deceased)	1941 - 1970
Raymond Chase (Deceased)	2/11/29 - 2/26/60

Ha
Wheat
War
N. Ton
Niaga
Boot
9

Spaulding
Fibre Company, Inc.
Subsidiary of Monogram Industries, Inc

Industrial Plastics Division
[illegible] Wheeler Street Tonawanda New York [illegible]
716-692 2000

5. Identify all Treatment or Disposal Sites in Erie or Niagara County Used Since 1930

a. Name of Site: Seaway Land Fill

b. Location: River Road, Town of Tonawanda

c. Owner or Operator: James Sandanato

d. Time Period Site was Used: ~~1965~~ - 1974
1969

Hay
Wheat
War
N. Ton
Niaga
Boot
n9

Spaulding
Fibre Company, Inc.
Subsidiary of Monogram Industries, Inc

Industrial Plastics Division
310 Wheeler Street, Tonawanda, New York 14150
716-692-2007

Name/Last Known Address/Phone	Years of Service
Roger Davies Akron, Ohio	1956 - 1969
Wilbur Merk 1360 Emery Road East Aurora, New York 716-652-5259	3/1/67 - 4/12/76
John Kehoe 59 Winkler Drive Grand Island, New York 14072 716-773-5874	1/5/77 - 9/22/78
Leonard Oseekey 4750 Helenwood Drive Williamsville, New York 716-634-8322	3/31/58 - present

Hay
wheat
War
N. Ton
Niaga
Boot
'9

Spaulding
Fibre Company, Inc.
Subsidiary of Monogram Industries, Inc

Industrial Plastics Division
[illegible] Wheeler Street, Tonawanda, New York [illegible]
716 [illegible]

5. Identify all Treatment or Disposal Sites in Erie or Niagara County Used Since 1930

a. Name of Site: Niagara Recycling

b. Location: 56 & Pine, Niagara Falls, N.Y.

c. Owner or Operator: Newco Waste System, Inc.

d. Time Period Site Was Used: 1974 - present

Hau
wheat
Wat
N. Ton
Niaga
Boot

INTERAGENCY TASK FORCE ON HAZARDOUS WASTES
M.P.O. BOX 561
Niagara Falls, New York 14302
(716) 285-3057

October 31, 1978

Mr. Richard Hunter, Vice President
Manager or Operations
Spaulding Fibre Company, Inc.
310 Wheeler Street
Tonawanda, New York 14150

Dear Mr. Hunter:

This is to acknowledge our receipt yesterday of your completed questionnaire. Thank you for your prompt response. Mr. John Iannotti of this Task Force will be calling you in the near future to review any questions he may have about your company's disposal activities.

Very truly yours,

Peter J. Millock

Peter J. Millock
Director
Interagency Task Force on Hazardous Wastes

PJM/pb

Hau
'79 Wheat War N. Ton
Niaga
Boot

INTERAGENCY TASK FORCE ON HAZARDOUS WASTES

Checklist

Name of Company Spaulding Fibre

Telephone Number 692-2000

		Date
Introductory Letter Sent	✓	10/4
Questionnaire Sent	✓	10/6
Initial Telephone Call	✓	10/11
Meeting Arranged	✓	10/23
Appointment Confirmed in Writing	✓	10/23
DEC Hazardous Waste Questionnaire Read	✓	10/24
DEC Industrial Chemical Survey Print-out Read	✓	10/24
DEC File Reviewed	✓	10/31
DEC Personnel Consulted	✓	10/31
County File Reviewed	✓	10/24
County Personnel Consulted	✓	10/24
Initial Meeting	✓	10/25
Completed Questionnaire Received	✓	10/30
Receipt of Questionnaire Acknowledged	✓	10/31
Questionnaire Reviewed	✓	11/8
Meeting on Questionnaire	✓	11/17
Interviews with Former Employees	—	
Interviews with Present Employees	—	
Interviews with Other Persons	—	
Other Reports Consulted	—	
Summary Report Written	—	

Hau

wheat
Wat
N. Tow

Niaga

Boot

9

Hauler	Dates Used	Wastes Removed	Location of Site	Status
Wheatfield Warehouse, Inc. N. Tonawanda, N.Y.	1969-72	vulcanized fibre vulcanized fibre sheet thermosetting plastic trimmings & dust	Seaway LaSalle expwy area	
Niagara Sanitation	1972-78	same as above + zinc hydroxide sludge & zinc sulphate filter cake	Niagara Recycling	
Booth Oil	-	waste oil	Booth Oil	

(11) Insulating Fibers Co. City Tonawanda – Erie
Emp. 1973 SIC 3072

Papers 56 T/wk
Plastics 80
Adhesives 16
Coatings 8
160 T/wk = 8,320 T/yr = 7.28 Thousand T/yr
Coal 100,000 gal/yr
Y-S

(11A) American Standard American Glass Co Buffalo – Erie
Emp. 250 SIC 3351

Paper .9 T/wk
Wood 1.6
Plastics 2.7
Corrugated 12.6
Ashes 150
168.0 T/wk = 1,715 T/yr = 2.29 T/thousand gal
Evaporation = 100 gal/day = 26,000 gal/yr
Coal 30,000 gal/yr
Y-S

(11A) Buffalo Tissue Co. Buffalo Erie
Emp. 1200 SIC 2621

Paper 49 T/wk
Chemicals 21 T/wk
Metals 5 T/wk
Coatings 33 T/wk
108 T/wk = 5610 T/yr = 4.67 T/thousand gal
Coal 35,000,000 gal/yr
Y-S

1972 E/N Camp SW Study

LaSalle Arterial

Spaulding - Scrap
Laminates

Phil Lambert | Isaac Walton League
Nov. 4 - time
Planning Session - 10:00 A.M
open mtg - 1:PM
Located at Lord Amherst Motel - Exit 50
NEWCO, SCA,

↓ put in special category

Spaulding Fibre

see xerox copies

had ~1150 emp 1971-72

~750 emp 1973 → much → to New Hamp.

32 North Niagara Street
Tonawanda City, New York

February 9, 1967

City of Tonawanda
Division of Engineering
North Niagara Street
Tonawanda, New York 14150

Attention: Mr. Perry Wilson

Re: Spaulding Fibre Dump Site
Two Mile Creek Road
City of Tonawanda, New York

Dear Mr. Wilson:

On January 19, 1967 Mr. Leo C. Aronica, a representative of this office, made a routine inspection of the above dump site.

It was noted from the report that at the time of the inspection an unidentified person with a truck, but who stated he was a scavenger, was looking for salvageable material. At the same time our Mr. Aronica noted that six or seven loads of material consisting of paper, large flat pieces of plastic, plastic tubing as well as shavings and chips together with office waste paper, some milk cartons, dixie cups, orange peels and fruit were noted on the ground.

While the garbage was very minimal in the amount of material being dumped, you will recall that permission to use this site was granted for hard material only. Therefore, we wish to call the above conditions to your attention, and would appreciate your following through to see that only the allowable material is being dumped and that the material is being compacted and covered daily.

Thank you for your attention in this matter, and if we can be of any service or assistance to you please do not hesitate to call on us.

Very truly yours,

James F. Stubbs,
District Supervisor

JFS:bh

CC: Mr. Roesser
File
Circ. File

MEMORANDUM

March 4, 1958

To: Dr. Bukowski - Erie County Health Dept. Att: Mr. Roesser
From: D. B. Stevens
Subject: Waste Disposal Plans - Spaulding Fibre Company, City of Tonawanda

In passing I wish to comment on your memorandum of February 7, 1958 on this subject. With reference to the removal of phenols from the plant effluent, it is my understanding that all of the phenolic wastes are now collected at the plant and then sent to the Durez Plastic Division of the Hooker Electrochemical Company for process and that they are no longer discharged from the plant. If this system is not in operation, we would like to be so informed.

It was my impression that the Savealls for which these plans were prepared were to remove the colored wastes from the plant effluent which is now a source of pollution to the Niagara River.

cc: Dr. Dean

D128

SPAULDING FIBRE COMPANY, INC.

City of Tonawanda

Products: Hard vulcanized fibre sheets and tubes
Laminated phenolic sheets, tubes and rods

Employees: About 1150

Sanitary Wastes: The sanitary wastes are combined with the process wastes and discharged to the City of Tonawanda storm drains leading to the Niagara River.

Industrial Wastes: The principal components of the industrial wastes which are objectionable are phenolic compounds, solids and highly colored materials.

Industrial Waste Treatment: The phenol bearing wastes are collected in storage tanks and discharged over an 18 to 24 hour period to reduce slug loads on the receiving waters.

Other Pertinent Data: The plant wastes were originally discharged to the city sanitary sewers laid in Gibson and Wheeler Streets. Later, storm water drains were laid in these streets, and in 1954 the City of Tonawanda diverted the wastes originating at Spaulding Fibre from the sanitary sewers into the Gibson Street storm water drain leading to the Niagara River.

Receiving Waters: Niagara River, Class "A-Special" (International Boundary Waters)

Effects of Discharge on Stream: Raw sewage, phenolic compounds, floating solids, settleable solids and highly colored wastes are all in contravention of the standards ESTABLISHED FOR THESE WATERS.

Abatement Plan: (1) Arrangements satisfactory to the Water Pollution Control Board should be made to provide means for recovery or treatment of the phenolic wastes. (2) Install necessary facilities for efficient recovery of settleable suspended solids from mill wastes. (3) Develop a methodfor reducing color in the plant wastes. (4) Plans for all treatment units necessary to carry out items 1, 2 and 3 should be submitted to the Water Pollution Control Board for approval and then constructed in accordance with approved plans. (5) The sanitary sewage should be collected in a separate system and discharged to the municipal sanitary sewerage system. (6) The company should work out with the Water Pollution Control Board arrangements for effluent sampling, maintenance of operating records and periodic reporting to the Water Pollution Control Board.

Spaulding Wanted to know if caustic to tnt plant in 1950's
Response was no.

Spaulding
Fibre Company, Inc.
Subsidiary of Monogram Industries Inc
Industrial Plastics Division

August 12, 1976

Mr. Gerald M. Hansler, P.E.
Regional Administrator, Region II
U.S. Environmental Protection Agency
26 Federal Plaza,
New York, New York 10007

RE: NPDES Permit Number NY 0002364
Spaulding Fibre Company, Inc.
Tonawanda, New York 14150

Dear Mr. Hansler:

This letter shall serve as a formal request by Spaulding Fibre Company, Inc. for modification of NPDES Permit Number NY 0002364 dated June 28, 1974, as modified February 14, 1975, for the Tonawanda, New York facility of Spaulding Fibre Company, Inc. This request for modification concerns only the soluble zinc parameter of the Permit. It is requested that the soluble zinc limit in PART I.A(1) page 2 of 770 (1700) kg/day (pounds/day) - net daily average be extended to July 1, 1977. This is commensurate with the Federal Law for the implementation of best practical treatment. Approval of the above would also change the effective date in PART I A(2) page 3 and PART I B(1A) page 6 from December 1, 1976 to July 1, 1977. We further request that the schedule for zinc limit progress reports under B(1B) page 6 be changed from October 31, 1976 to January 1, 1977 and March 31, 1977.

The primary reason for this request is Spaulding Fibre Company, Inc.'s inability to make any progress on zinc control for the past 14 weeks and apparently in the foreseeable future due to a strike at the Tonawanda facility occurring on May 10, 1976. At the present time the Company and Union are at an impasse. All work involved in achieving the zinc limit has and will be suspended during this period.

The major items of progress completed to date toward meeting the zinc limit are:

a. the elimination of the cutdown fibre operation with its batch fibre leaching operation.

Continued.....

b. the closeup of all condensate tanks vented to atmosphere to a zero wind discharge condition.

c. the tapping of the heavy brine system to a closed countercurrent system with closure of the sump under the vacuum system.

d. repair and closure of the walls in the brine tube leach areas.

e. evaluation of a demister to eliminate in the evaporator.

f. evaluation of a two stage separator on the evaporator in tandem with the mist eliminator in (e).

g. the design of a precipitation - clarification system for treatment of brine bearing waters.

h. the investigation and evaluation of filters for use in washing out leach tanks, brine chloride storage tanks and final equipment to enable liquid recycle with solid sludge removal.

Should you have any questions or wish to discuss this request, we stand ready at anytime to meet with you. We are looking forward to your favorable consideration of this permit modification request.

Sincerely,

R. ... Prabhu
Corporate Vice President
of Technical Services

RAP/mm

bcc: T. J. Bernard
J. M. Conners
S. Friedman
R. A. Hunter
S. H. Kelly
W. A. Kennel
L. Oberkey

October 23, 1978

Mr. Oseekey
Spaulding Fibre Company, Inc.
319 Wheeler Street
Tonawanda, New York 14150

Dear Mr. Oseekey:

This is to confirm our meeting on October 25, 1978 at 10:00 a.m. at your facility to discuss the Interagency Task Force questionnaire on Hazardous Wastes.

If any conflicts arise, please call me at 285-3057 and we will arrange another mutually convenient time.

Very truly yours,

John E. Iannotti
Interagency Task Force on Hazardous Wastes

JEI/pb

ARY AND RECOMMENDATIONS

Violations and/or Problems	Recommended Action
Firm has requested (8-12-76) extension of interim zinc limits until July 1977, no response from EPA yet. Request appears reasonable due to strike.	

Comments

SPCC plan could not be located — Firm requested to review plan and distribute copies (or summary) to plant security, maintenance as well as management.

Chromate presently used in an unidentified cooling water system. Concentrations in discharges should be re-examined following connection to municipal sewers.

Inspector Signature: Richard Sweeney

Name: Richard Sweeney

Title: Sr. Sanitarian

Date: 9-28-76

M60 deionized condenser water

condenser to replace evaporation → zinc → to be precipitated as sludge → recovery or disposal unknown

1) retort down system eliminated
2) continuous feeding process
3) tube – 10 lines @ 9 tubes

non-contact = chill rolls, compressors, air conditioning condensers in zinc recovery.

fabrication dept – moved out, sawing & sanding area okay with solids going to incinerator

→ incinerator clean burning – no ash
compactor – pallets, scrap paper, trim from fiber machine

→ laminate – cutting fume to incinerator ⇒ 15% fuel

Boiler water treatment = salt/phosphate = shutdown to K line.

Plant C – discharge less than 0.5 Cr – water treatment system

merged HP281
H237
0301
SL360

5. Q. Do you have a Spill Prevention Control and Countermeasure Plan, as required by 40CFR, Part 112?
   A. Yes. Plan, drawing and certification enclosed.

6. Q. On what date was your SPCC Plan fully implemented?
   A. Summer 1974.

7. Q. If your SPCC Plan is not yet fully implemented.....
   A. The Plan is fully implemented.

8. Q. What is the name and telephone number of the operator of your facility?
   A. Richard Hunter, V.P. & General Manager, Tel. 716-692-2000.

9. Q. Are any substances other than oil stored at your facility?
   A. Yes. They are:

1 - 12000 Gallon	Above Ground Tank	Phenol Distillate
1 - 15000 Gallon	Above Ground Tank	Ethyl Alcohol
1 - 15000 Gallon	Above Ground Tank	Methanol
1 - 15000 Gallon	Below Ground Tank	Methanol
2 - 15000 Gallon	Below Ground Tank	Toluene & Methanol
1 - 15000 Gallon	Below Ground Tank	50% Caustic

Very truly yours,

John A. Kehoe
Project Engineer

mm

Enclosures

cc: R. Speed, N.Y.S. D.E.C., Buffalo
I. A. Hoekstra, E.C. D.E.Q., Buffalo

SPAULDING FIBRE Co.
TONAWANDA, N.Y.

SCHEMATIC OF PRINCIPLE FIBRE VULCANIZATION PROCESSES

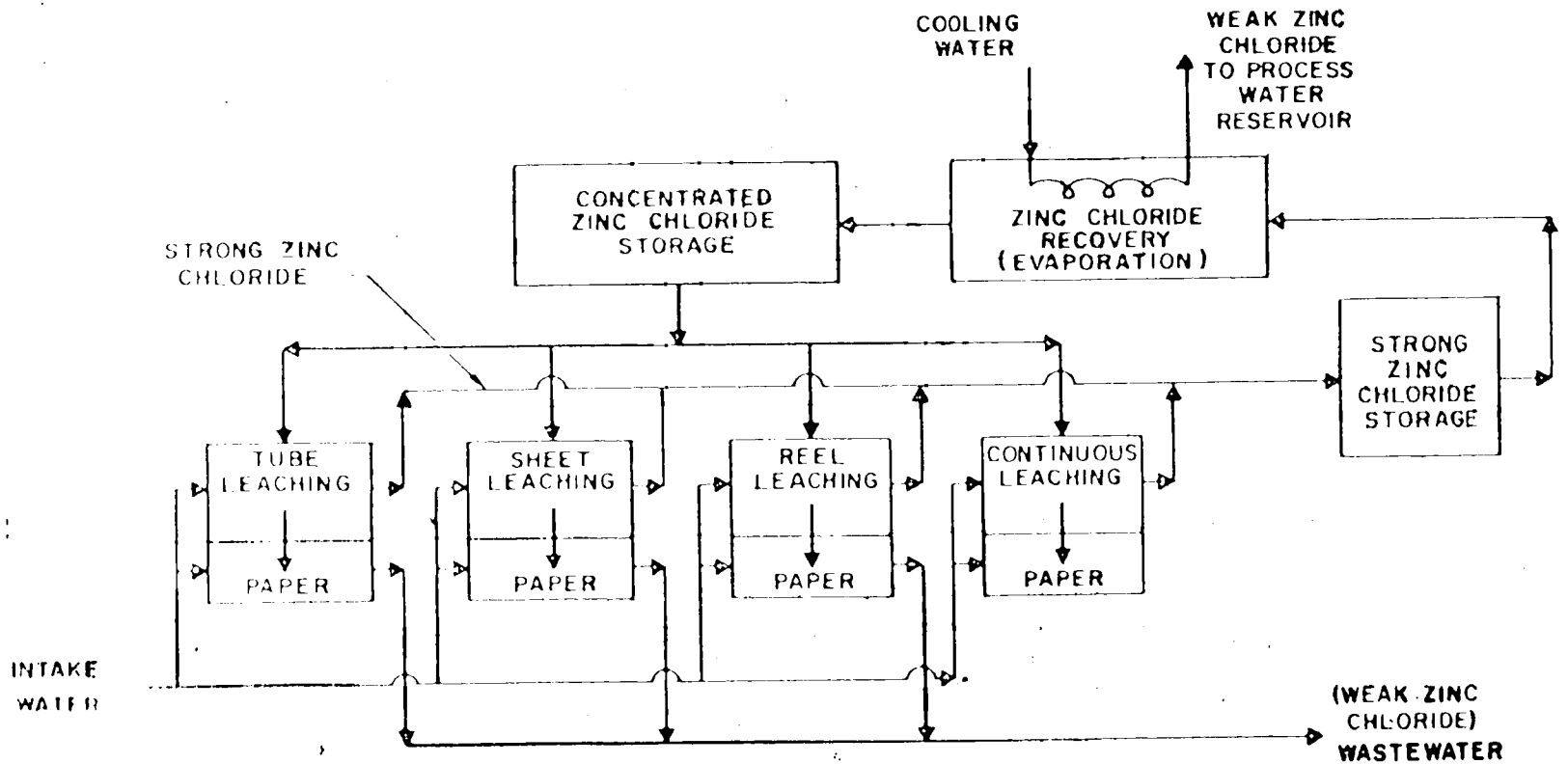


FIGURE 3

SPAULDING FIBRE Co.
TONAWANDA, N.Y.

SCHEMATIC OF PRINCIPLE FIBRE VULCANIZATION PROCESSES

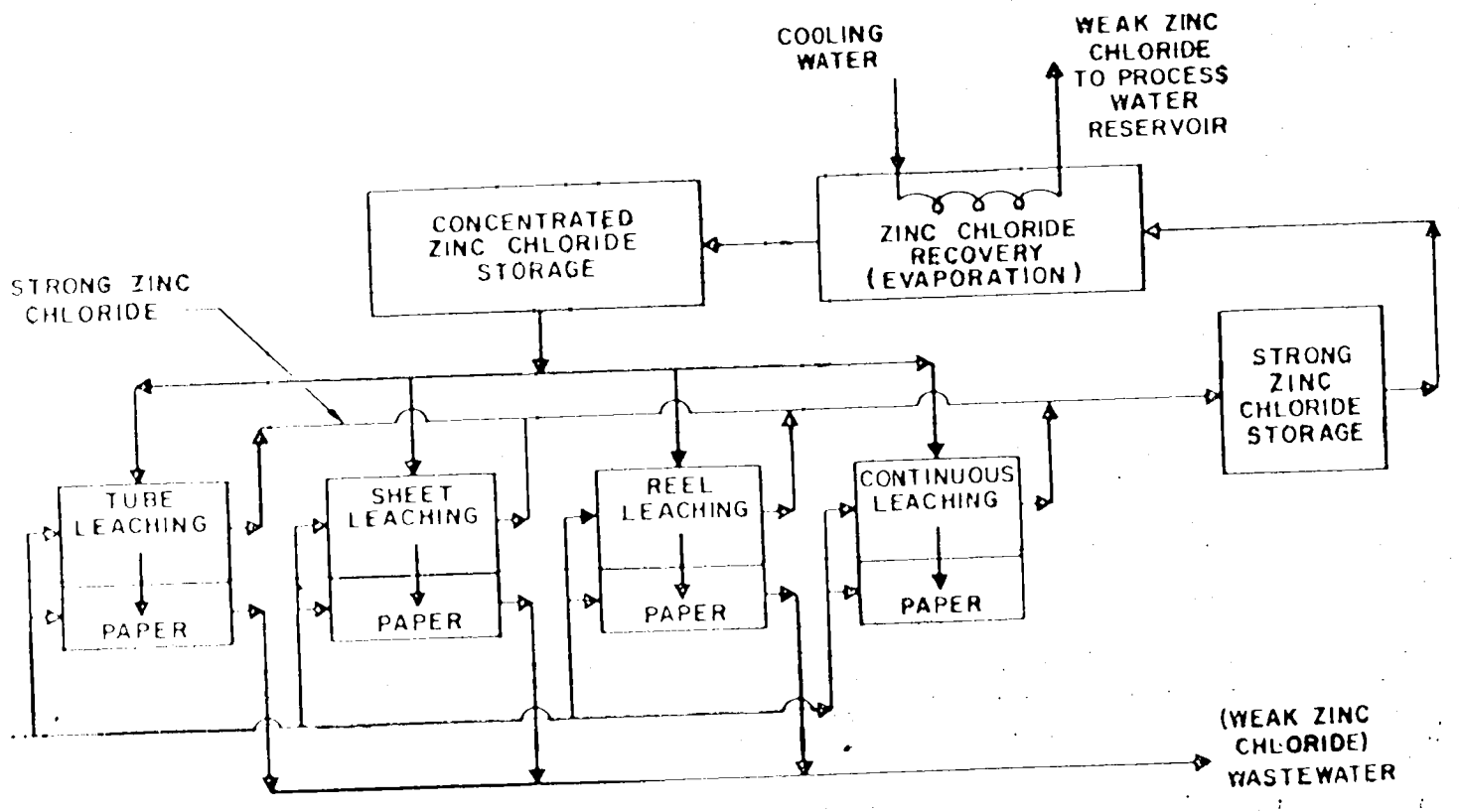
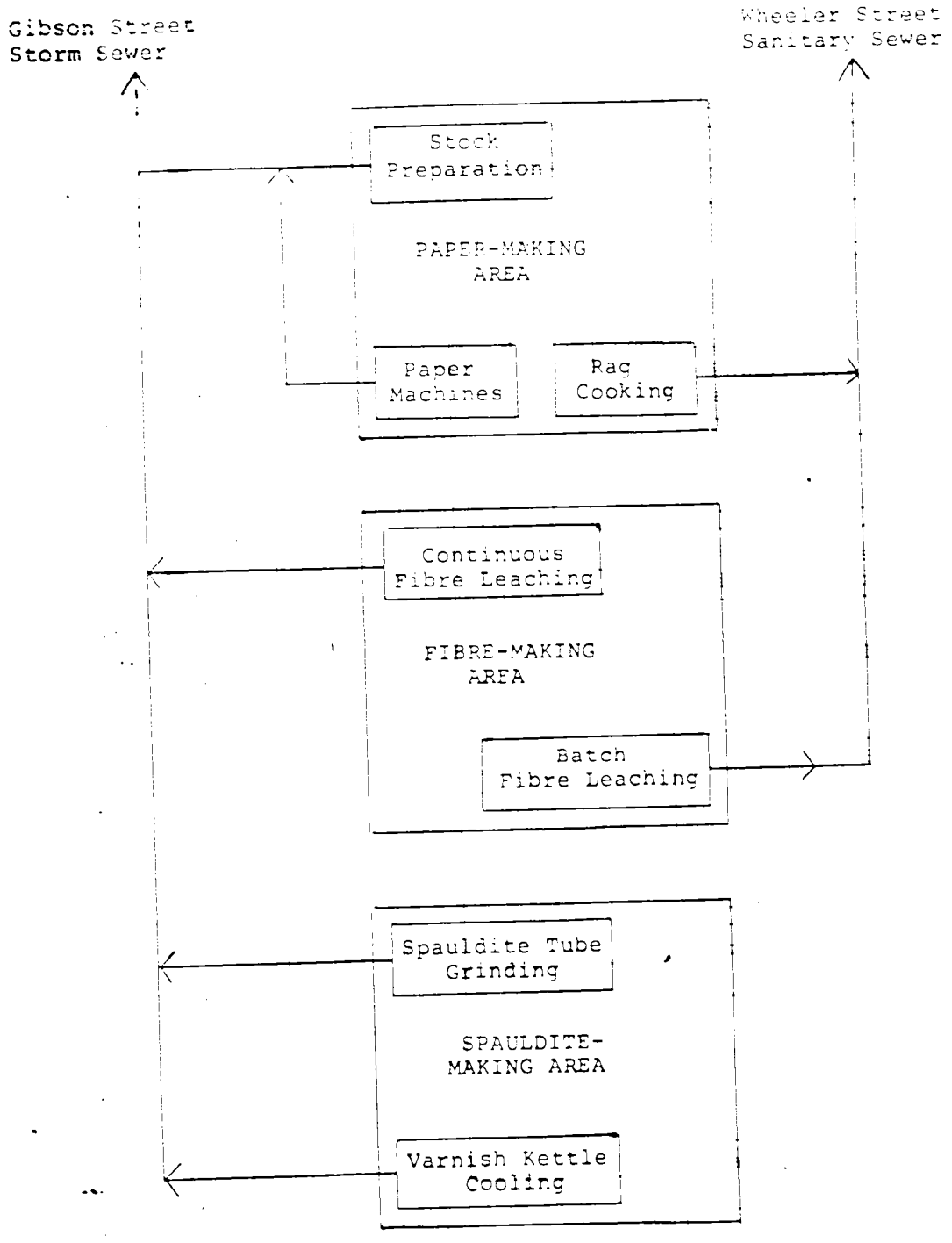
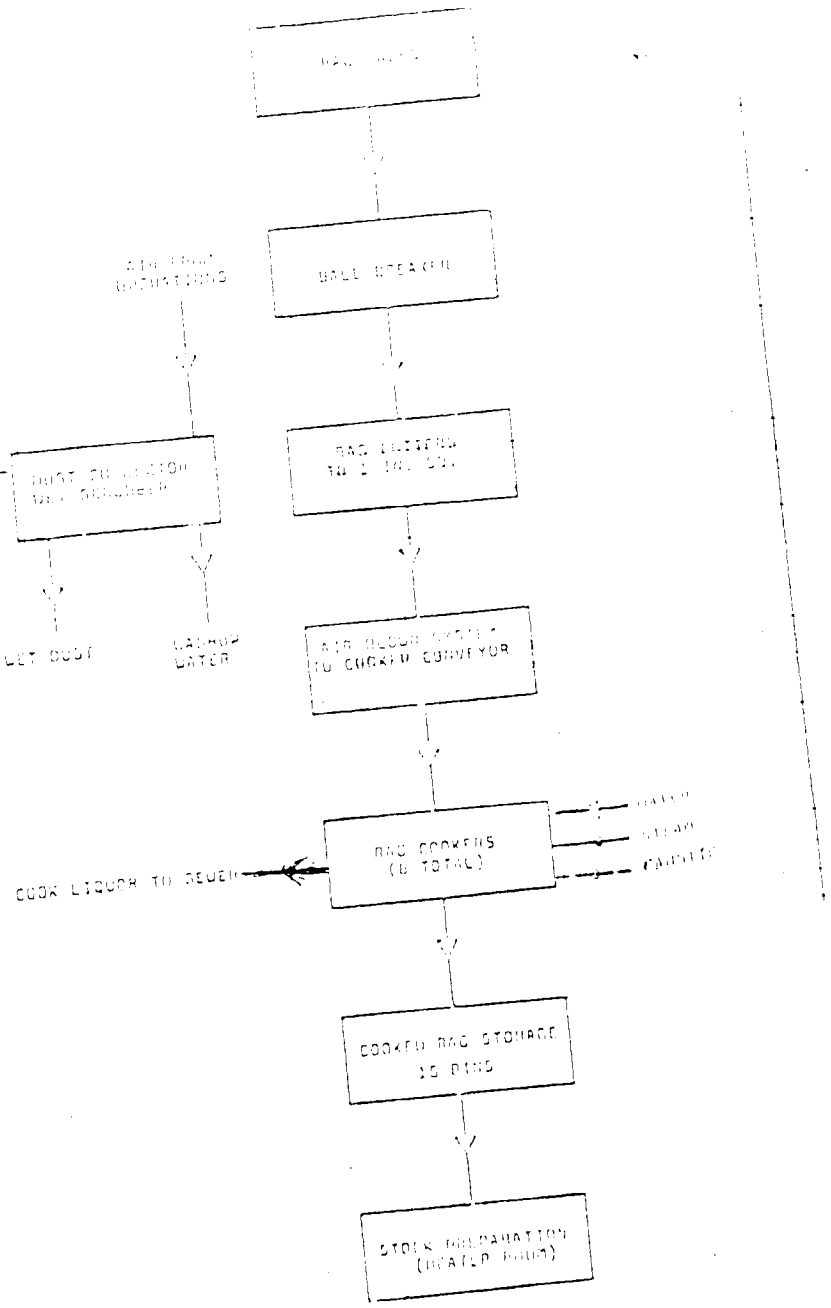


FIGURE 3


Gibson Street
Storm Sewer
Wheeler Street
Sanitary Sewer
Stock Preparation
PAPER-MAKING AREA
Paper Machines
Rag Cooking
Continuous Fibre Leaching
FIBRE-MAKING AREA
Batch Fibre Leaching
Spauldite Tube Grinding
SPAULDITE-MAKING AREA
Varnish Kettle Cooling


BALE BREAKER
RAG COOKERS
(6 TOTAL)
COOKED RAG STORAGE
10 BINS

Spaulding
Fibre Company, Inc.

November 6, 1972

Mr. Robert L. Hannaford
Division of Pure Waters
New York State Department of
Environmental Conservation
Albany, New York 12201

Dear Mr. Hannaford:

As we discussed by phone on October 31, 1972, neither John Connors nor I received your letter of October 2, 1972 regarding the specific questions you had on Spaulding's "Industrial Waste Treatment Facility Engineering Report (Part I)". I am now in possession of the copy you forwarded to me as a result of our phone conversation and will answer your letter instead of John Connors.

New incinerator - the solid waste incinerator and boiler is designed to burn most of the solid waste generated in this plant including scrap vulcanized fibre. Pilot studies performed by the vendor showed that all air pollution codes will be met without a scrubber. The system is nearing completion and does not include a scrubber, so that this new process is not a source of water pollution since it does not generate an aqueous effluent.

Finishing operation - as you are aware via your presence at the joint meeting with EPA in New York City on November 2, 1972, our entire fabricating operation is being removed from this location and being transferred to New Hampshire. Also our Spauldite Tube Department which presently generates the phenol discharge is being transferred to New Hampshire.

Rag pulping - Spaulding's contract with the City commits us to a load based on the use of wood pulp rather than rag cooking. Our detailed studies of the proposed regional plant capacity at startup versus input shows excess plant capacity. If at startup for technical and/or financial reasons we may wish to process some rags, we will pay for the flow and loading on the basis of the contract. If and when the excess capacity of the plant is no longer available to handle the added load due to our rag processing, we will go to pulp (stop rag cooking) and the flow and loading for which we have committed to the City.

Continued.....

December 21, 1971

Spaulding Fiber Co.
310 Wheeler Street
Tonawanda, New York 14150

Telephone: 692-2000

Re: Survey of PCB's in Erie County

Personnel: Mr. Dick Preibisch
Vice President

He told me that the only plasticizer they use is dibutyl phthallate. He added that they were aware of the ecological hazards of PCB's and they never use them.

For the record, I would like to mention that 25 per cent of PCB, if added to phthallate esters, sometimes enhances the final properties of the produced plastics.

Fuad Ibrashi, P.E.
Sr. Public Health Engineer

Annual review items

1) Sewer maintenance

2) Wood preservative based on total retention

3) Laminate forming & shipping – filter solids & recycle

4) Cooling – gpm & – recycle,

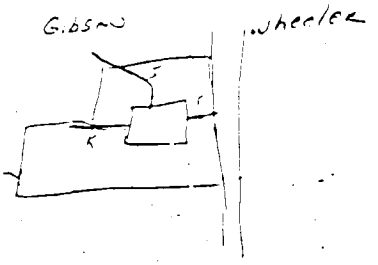
Spill prevention control & countermeasure – request for EPA for extension to July, 1977. August 12, 1976 to Hamilton progress reports from March 1977

Water maintenance program in progress

continuous agitation recycle

municipal water (about may 1978) force main to town from city

Mississippi line to be completed at end of October.



non-contact cooling

F line monitor – will be abandoned or stored

I line – process oxygen eff

Chapter amperes, recorder, recorder

K – storm + cooling + CEN blowdown

Barometric condensers – gone in slow-dig which is recycled

Spanking Fire

mtg already answered questions. I had
see new sheet

Nidy Sanitation - 2 nr sulphate sludge
(cake)
Fr Atl sludge

10/27/78 – Spaulding Fibre Company –

1) include on site incineration: – H_2O of Rxn

2) waste oil – South Lungs on
Delta tires brought in

2 sites

2 on site disposal – drum waste named
phenol 1.3 ppm
antimony < 0.1 ppm
COD 300+ ppm
both since 1977 – 1978 – installed 2 monitoring wells – 1 down gradient
1 other on site → asbestos buried 1977-78 Feb. Cinows
polyethylene bag 3 tons/wk

weak H_2O w/ 2 nd (< 3 40) → goes to on site w.w. trt where 2 N precipitates out as 2 N OH → in bldg pit
3 to 3 1/2 wks
concrete 100' x 8' - 1
2 N + dist earth – from pulverized
3 ft 3/wk / 400 lb/wk pres 2
Bristol, Pa lagoons –
↓ ~ 10 mil/day sulfate
boxes set dumped around plant

wrote to E.C. & said okay

DEC.

La Salle expwy
↗ scrap laminates, trim heavy
wheat field hauled 1960-77 → Seaway used to mark waste.
Via Sanitation 1977-78 including 2 N OH
& filter cake

before 1960 – burned all solids & scraps
to grade to level & bury including 2 N

10/31/72 – Spalding Fibre

10/5/62 letter from Carl Bernhardt
said " all wash phenols do not go to acue
evaporator but are collected & sold to Dura

memo from Dr. Burkowski – ECHD to D.B. Stevens
3/4/58 saying phenols collected & sold to Dura

inspection report 9/7/72 by R. Sweeney.
Said zinc sulphate sludge to Niag Sanitation.
report 9/27/76 - said no zn sludge

have storage tanks for steam distillate, ethanol, methanol(?)
toluene & methanol mix, 50% caustic.

Spaulding Fibre - Tonawanda

Tonawanda (1) 1974 typo 1978

Seaway 1965 - 74
1969 - 74 (Ebsco Tonawanda)

Spaulding dump site - 2 mile north road - not on land fill claim out from 2 ponds - ponds gunking - world offs

(2) Wheatfield hauled to LaSalle expwy - scrap vulcanize fibre - solid mtl - his own site During Yanoff probable owner hauled in bulk style - not indicates no liquid wastes to Ebsco

(3) Niagara Sanitation - (1) trimmings of glass & asbestos / Spaulding thermosetting old phenolic mill impregnated w/ resin → cresylic, melamine, phenolic like of trim phenolic → ground up to burn
(2) broken pallets
(3) refuse
(4) fibre, trimmings from cutters
15-ft³/day → (5) gunkings from fibre tube & saw trimmings ~~of fiberoil~~ - primarily cellulose not H₂O soluble
used to haul in sludge
filter press cake - ZnO, H₂
ZnSO₄
from '72 - mid '78 dead earth
waste oil → burned on site primarily

P/A - not necessary because waste managed on site

Spaulding Fibre

11/28 - R.F. Oleksiak - could not find his phone number in directory, wrong address?

11/29 - John Ludemann - unable to reach - no answer

11/29 - Leslie Towle - wrong number from questionnaire

11/29 - Walter Jackson - P/M - 1960-63 - never available before 6:30 P.M.
683-4390

11/29 - Roger Davies (R. Davies 794-0481) - No answer

11/29 Walter Jackson

used for many years, not many tons waste generated

S.W. practices

phenolics - incinerated on site

fibres dumped on-site (trimmings) to leach and out

trimmings from spauldite, - incinerated

could not burn → vulcanized fibre = edge from trimmings taken to leach out in fields -

only thing dumped on-site from Railroad track west - area dumped

NO other areas on plant property

is it lagoon cleaned out?

November 9, 1978

Mr. L. Oseakey, Manager
Plant Engineering
Spaulding Tire Company, Inc.
310 Wheeler Street
Tonawanda, New York 14150

Dear Mr. Oseekey:

I have reviewed the completed questionnaire you recently submitted to us and have the following comments:

1. What wastes were hauled to Seaway Landfill between 1965-74 and who hauled them there?

2. What wastes were disposed of in the area now known as LaSalle expressway and who hauled them there?

3. What wastes are currently or have been hauled by Niagara Sanitation?

I will be calling you shortly to arrange a meeting at which we can discuss these and other questions that may arise.

Very truly yours,

John E. Iannotti

JEI/kkk

REFERENCE NO. 3

.0022 F
02-8704-02

NUS CORPORATION

II

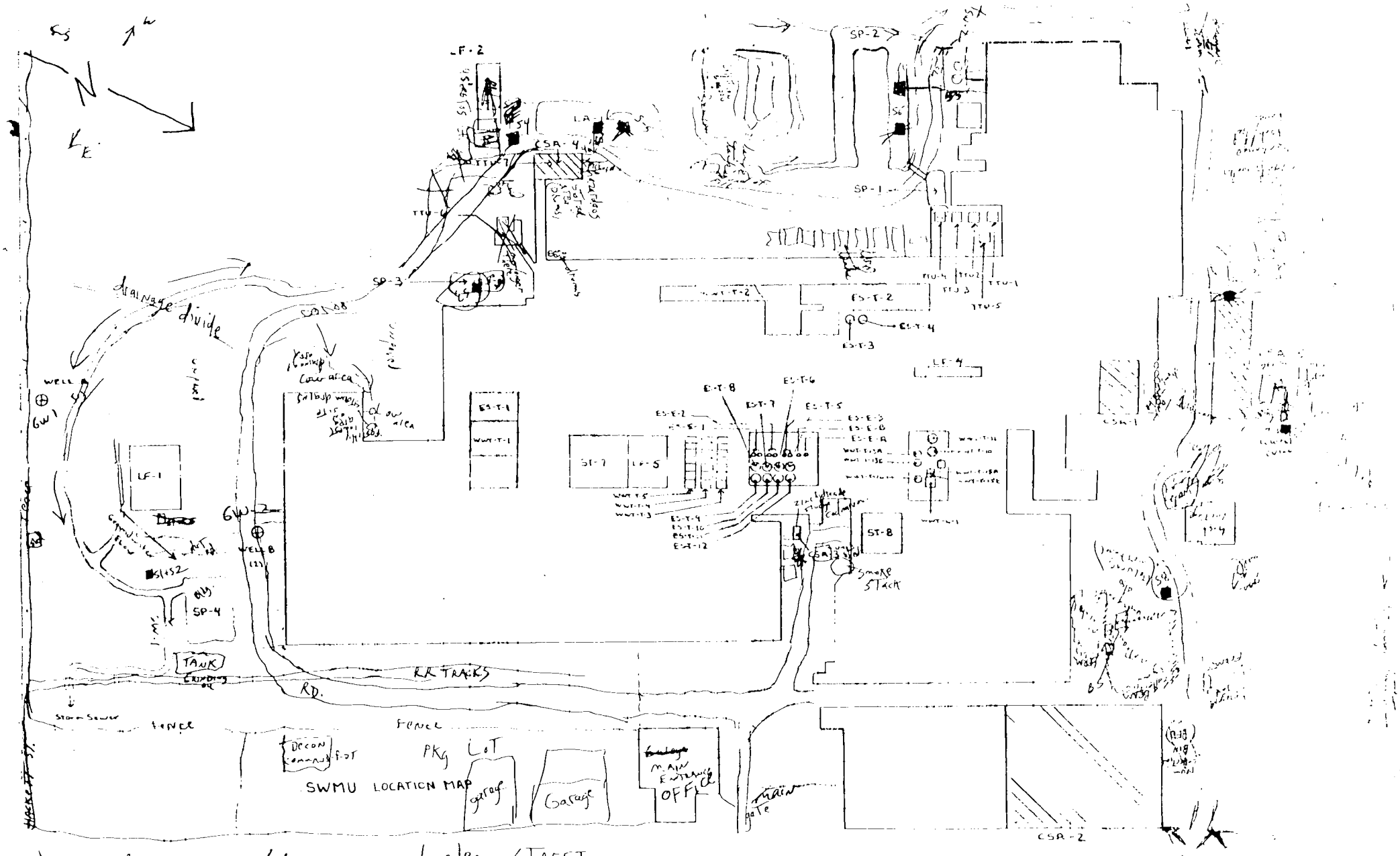
0060

TABLE OF CONTENTS

Gerald V Gilbert 5/4/87

Alan J. Chereson 5/4/87

2 (back side)



Alan J. Thompson 4/28/87
4/29/87

Gerald V. Gillard 5/4/87

THE FOLLOWING PAGES WERE NON-LEGIBLE AT THE TIME OF FILMING

02-8701-02/10KR1 4/28/87 3

SPAULDING FIBRE CO.
SITE INSPECTION

0818 Called office, spoke with Buddy LeBoe. Told him situation about feeding hydrogen for EVA - HHN not working. Tested fine at office, not in field. He said to call back later if any problems, call Jack Mostyn co

0840 ARRIVE AT SPAULDING FIBRE, MET WITH MR. STUBBS who said it was OK to do our work today. I told him we needed to call our office and try to get some sort of decision on our instruments.
Called office, spoke with Diane Trube and Buddy LeBoe. They said to get as much of Recon done as possible before hydrogen ran out of CBA and do rest of work on level B respirators.
Gave MR. Stubbs copy of LETTER with questions for him about site. He answered some, but said EPA had his entire file. Should get from them. He said he'd just give a recap of site

0920 we went to drive around site, MR. STUBBS pointed out various areas. He said the company is now privately owned by 4 principals. 320 employees, 3 shifts, no guards except on weekends. Other data at EPA
0940 finished driving around, got recap from MR. STUBBS

0945 Begin setting up decon area.

1000 Feed regulator for filling CBA with Hydrogen. Emptied can of liquid nitrogen

1020 A. Chapman + D. Pederson DROVE TO PURITAN-BENNETT in Kansas to get hydrogen master cylinder.

1040 ARRIVE AT PURITAN-BENNETT. After talking with MAT. CO. rep. told us to wait till after 4 pm from EPA. Thanked him.

1110 Back at site, set up things ready to go [illegible] Cleaning up, doing work + safety audit

92-870-0[illegible]/NYRP

1145 - Going To Lake Breeze

1147 - Holding Safety meeting; Brian Pedersen - SSC

Alan J. Cleaver	Alan J. Cleaver	OVA-K
Brian Pedersen	Brian Pedersen	469782
Pauline Young	Pauline Young	
Mike Cummins	Mike Cummins	HNu - H
Rudy Rice	Rudy Rice	469746
Bill Schlichting	Bill Schlichting	Radiation MINI-Alert 428522

Discussed weather conditions - Camp, slippery, lookout for plant traffic, Trucks

Solvent Spread, Resins, Drum landfill, Ponds, Lagoons, Wetlands and drainage areas to storm sewers and Spokane Ave Overfall

1200 Sun East Sun access rd on South side of Drive to fill jerrycan for Recon Team.

1200 A human on the moon Reading 65530
Bill Schlichting 42857
Water level 5.6' in monitor well prior to pumping
No readings on OVA, will take 22 l gals for 3 vols.
Pumping - surface broken at well, use GAC
PC 4" well 40 l/min

1220 OFF air / getting more gals cleaned up
1233 back AIR, after pumping drawdown at 5.7' water level - from top of casing, pumped 22 gals total
Water level 4.4' above ground. N/A HR Readings OVA 1 Units Vol/Ly

02-8704-0276 Photo #1 AIR MONITORING at well 5
1245 - going along DITCH to get AIR MONITORING
1300 AIR MONITORING Activities. JF

1320 Empty DRUM STORAGE AREA, SOME open on top, gave OFF scale reading on OVA. Drums had ACINTOL (All at heads) ~ 500 DRUMS ON GROUND, some open. Phenolic Resins. FLAMMABLE

1330 Photo 2, chemical distribution pad for TRUCKS, direction, East.

1332 Photo 3, empty DRUM storage AREA

1340 Photo 4 methanol, Alcohol storage Tank area.

no Reading, except ~ ½ ppm on Methanol area.

Finished with Recon, M. Bauman off air.

1341 Photo 5, rear of Plant showing storage (empty) storage area

1350 photo 6, rear of Plant, showing hazardous waste storage area center

1352 getting set up to evacuate well #5. hose did not seem to go down to 40, but hit bottom.

1405 Began evacuation with Teflon pump. Pumped dry after ~ 7 gallons. will let RECHARGE over night, only, sheen, down hole

1410 Stopped raining

1415 calling office To Find out IF OK To Sample Tomorrow also. Mike Young said it is already set up to sample Tomorrow also. just Check Drills + coolers To make sure we have enough STUFF. Told him we'll do all waters Today, will get soils Tomorrow. He said Fine.

Diane Tubb said To get Time sheets in first Thing when we get back.

Bill Schnitzer ling - call pick - 201-251-4280, ~8pm
Talked with Jeff Kaye also.

1430 Finished with Chemical to office

1435 Tried evacuating well 3 (nearBy) again only had ~4 gals come out. will let recharge longer Going To do SW-1 + SW-2 first.

1450 Began Sampling SW-1

1455 Photo 7 + 8 - SW-1, ditch near Drum Landfill
Photo direction - N-NW.
Bill Schnitzerling Sampler
Mike Bauman - assistant

SW-1 is ~40' west of railroad Tracks and 120' South of MAIN Building, in ditch near Trees by grinding of Tank.

1500 Taking samples back To Mixing area.

1515 looking For good area To Take water sample in ditch on other side of plant, where it flows into storm sewers.

1530 Found area in rear of plant near V-shaped ditch from Acid Cleaning Tanks. Allan + Theresa 41/2 site

1533 Begin Sampling SW-2

1535 Photo 9 - SW-2, near U-shaped lagoon, drainage ditch near telephone poles, prior to emptying into sewers. Bill Schnitzerling + Mike Bauman - Samplers.

1540 Finished Sampling SW-2. Back To Decon area To drop samples off.

1545 Back at Monitor well B, Trying To evacuate more water.. only ½ gallon - 1 gallon came out Total ~ 10 - 11 gallons

1605 Decided To let well B recharge before Sampling. will begin evacuating well A by Fence.

1623 Begin evacuating well A. Have only went down To ~ 30' hit bottom

1640 end evacuation of well A, pumped 25 gallons from well. will let recharge a little before Sampling. well water clear at first, then began silting up. will let samples begin pumping from bottom slit.

1645 Begin Sampling GW-1 (well A)

1650 Photo 10, GW-1 (well A) near fence Samplers — Bill Schnitzerling + Mike Bauman

1710 Begin Sampling GW-2 (well B) near bldg.

1715 Photo 11 - GW-2, Samplers Bill Schnitzerling + Mike Bauman, Brian Petersen - Recorder

1725 Finished with well GW-2 (B). Cleaning up area. Going back To decon Gate closed + locked, had To drive To main gate Stopped To check disposal area near smokestack. will take soil samples There Tomorrow.

1737 Back at Decon with GW-1 + GW-2.

02-9709-02/0429

1740 - A. Cherepon + B. Pedersen arrive (driving) ground site to add features to site map, and determine soil sample locations for the next day.

1830 Finished with map + locations

1855 cleaning up Decon area, loading Trucks, checked SMO MATERIALS - coolers, OK for shipping. Drop off coolers.

1900 leave site for Fed Ex.

1930 Drop samples off at Fed Ex.

Cornell V. Cherepon 7-14-97

Glenn D. Pederson 7/22/97

2-8704-02/NY29 4/29/87

SPAULDING FIBRE CO.
SITE INSPECTION - day Two

0820 - Called office, spoke with Joe Mayo - gave him SMO data for shipping of samples.

0840 - Filled up Trucks with gas.

0900 - Arrived on site, getting set up. going to talk with [illegible] Stubbs. office receptionist said he'd meet us in parking lot at command post.

0930 B. Pedersen - SSO, conducting safety meeting. went over hazards, chemicals on site, must wear Dust Fox dust mask while soil samplings. Don't kick up dirt, be carefull.

Alan T Clasgow	Alan C Clasgow	- FM
BRIAN Pedersen	Brian Pedersen	- SSO
Pauline Young	Pauline Young	- SMO
Mike Bauman	Michael Baumgardt	- Decon
Randy Rice	Randy Rice	- Sampler
Bill Schutzenling	Bill Schutzenling	- sampler

Weather : OVERCAST, ~ 40°F, ~10mph wind From South.

Changes in work plan: No stainless steel bowls for mixing samples, will mix on clean, unused garbage bags

0950 Begin ~~Sam~~ ATC 4/29/87 Augering for S-1, augered 2', on NORTHWEST side of Drum landfill Having problems with some rocks, moved to other place. ~~Fill 2 - 1.8, then [illegible] ~2' of mottled clay - brown gray, tan, cream, some cinders.~~

Too much rock! ~~Fill material - dark brown, stones, cinders, small pieces of flat gray shale.~~

~~S[illegible] ~100' W-SW of Bldg. side near well 3 (GW-2) and ~200' S-SE of [illegible] near tracks. [illegible] deeper [illegible]~~ ATC 4/29/87

10 ~~10 Finished with S-1 after moving to several spots.~~

02-87/04-07/A;24

1040 Photo 12, S1, on East side of dirt rd, South-SW side of Ross Landfill. (West)
1140' from bldg. near well B (CW-2), and 135' from corner of bldg. Lead SAMPLERS: R. Rice + B. Schmeerbach
DK. BROWN FILL, cinders, pieces of ~~gray~~ shale. - 0 - 1.8'
1.8 - 2' mottled clay, Brown, some reddish brown tint.
1045 begin auguring for S2, getting air readings in side hole, nothing on top of soil surface. only in hole up to 35 ppm on OVA, Strong breeze from SW keeping breathing zone clear.
Some yellow colored mottles at ~ 3'. Getting stronger readings on OVA, up to 3-4 and as closer, eyes, reading instrument on scale going on air - evacuated area to put on SCBA's due to readings in breathing zone.
1055 Randy Rice had to dress down to use restroom
Sampling personnel on air
RANDY RICE - SCBA # 165530
Bill Schmeerbach - SCBA # 215551

1120 Resume sampling on air
1125 on AIR
getting more yellowish mottles
OVA readings up to 300 - 350 ppm in hole, down to 4'
1130 Photo # 13, S2, 2-4', same location as S1.
Samplers - B. Schmeerbach + R. Rice.
1135 off air, Finished sampling S2.
putting on dust for to clean up site.

1145 Taking samples S1 - S2 and sample equipment to decon, going to S3.

1150 Begin sampling S3, side of old filled in lagoon and WEST side of plant, small drainage ditch north side and up from low area of plant. Collected [illegible]

02-870N-02/mykq

1155 Down to 1', dark brown fill, cinders, coal, round old RR ties. Getting clay at ~1', mottled reddish brown, some black, some yellowish streaking.
OVA had up to 8 ppm to 10 ppm in hole, wetting in breathing zone.

1209 Photo #14, S3, soil from 0-2' composite, old lagoonal area. Samplers: R. Rice + B. Schnitzer/mw.
Sample S3 is ~32' from bldg corner and 18' from Bldg. (SW of)
1215 Finished Sampling S-3.
RC 4/24/97

1220 Begin Sampling S4, 30' from NE corner of Bldg. near hazardous storage area + Landfill for Asbestos, and 17' from side of Bldg.

1230 Photo 15, S4, soil from 0-2' on side of Bldg. across (SE of haz. storage Bldg.) from plant and North of Asbestos Landfill.
Samplers: R. Rice + B. Schnitzer/mw.
Photo direction - North.

1232 Finished with S4. Noticed an oily metallic sheen on water in drainage ditch near sample location at bend in road.

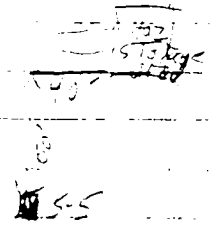
1235 Back at decon area. will decon samples + sampling equipment + personnel, and get more gloves!

Cassie Colley 5/4/97

1300 Finished with decontaminating, had to decon all gloves. Ran out of Extran, will use buty/ to Vitons as we used Extran to decon between holes. ... Hales

02-8704-02 / Nyes

1305 Begin augering S5, 60' from (SW of) Haz. waste storage bldg. and 40' NW of corner of same bldg. sketch. Location of old lagoon.



1315 Photo 16. Soil sample S5, 0'-2' auger composite. Samplers: R. Rice + B. Schnitzer[illegible], had readings up to 3-4 ppm on OVA in hole, no readings out of hole.

Wind shifted, out of west ~ 20 mph, ~ 40°F, Gusts of wind up to ~ 40 mph

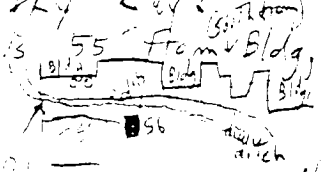
Dark brown, crudely, rocky fill 0-1'.
Mottled clay - reddish brown/gray 1-2', some wood in lok also.

1317 Finished with S5.

1323 Begin augering S6, U-shaped lagoon area on SW/[illegible] side of site, swampy area along east road + large tank

0-1' mottled clay - reddish brown, streaks of Tan + brown.
1-2' dark mottled tan streaks 4/23/87, some gray, green clay clay (from)

Sketch



1335 Photo #17, soil sample S6, soil composite from 0-2', Samplers - R. Rice + B. Schnitzer[illegible], Gilbert 5/4/87 Photo location - E. Th. (Gerald Thurman 5/4/87)

1350 back at decon, Ready to get deconned sampling Tools and gloves. DRAWing sketch and Finishing notes on last sample location.

1405 Begin Augering for S7, behind empty drum storage area and large tank, next to grades which appear to catch runoff and leakage from berm around large tank. ~¼ of entry Fill dk brown. 1¾ ft Mottled clay, gray brown - red/brown. Sample area is Lowest elevation. Up drainage - runoff for this portion of plant would flow this way.
up to 1 pan on OVA in hole; nothing in cuttings.

1430 Photo 18, Soil sample S7, in low area north of Large Tank behind empty drum area, next to graded tops for drainage?. Sampling: B. Schuetzenberg + R. Rice. B. Pedersen holding Placard. Photo direction - southeast.

1435 Photo 19 - Sample area at S7, showing more of area where sample taken from.

1440 Finished with S7.

1445 Begin Augering S8, next to & by large metal + plastic tanks

0 - ½' reddish brown Fill, cinders, gravel, and many bottles, looks like landfill for bottles. From old dump which might have been graded for Flare pad bottles dumped
½ - 2' clay, mottled gray brown, reddish brown, tan, some green streaks/surfaces, coal, rocks.

OVA getting up to 4 ppm in hole, nothing above.
(another update - sunny, ~50°F, ~10 mph wind from south)

1500 Photo #20 of SS, near Hrchol + Methanol TANKS. Samples B. Schnitzerling + R. Rice @ 2nd layer. Photo direction - NE.

1505 - Finished with SS.

1510 Back at Decon area, will decon samples, tools, and people, and pack everything up. Finished with Sampling.

1515 A. Chelgren went to office of SPAULDING FIBRE CO. To give map showing sample locations to MR. STUBBS.

1525 Photo #21 + 22 - panoramic view of plant from across Wheeler STREET, near RR TRACKS, Facing west.

1535 Back at Decon area. Noted houses and businesses, Restaurants within 100' of site. Landfill, possibly city, South of site ~ ½ mile. Checking SMO paperwork + samples before packing.

1600 leaving site for Federal Express

1620 leaving Federal Express after dropping off coolers

1640 Back at hotel.

NOTE about SITE: since clay was encountered in all borings, it is possible most contaminants are migrating as surface or near surface run off.

Randall Gilbert Jr. - Adam A. Thereson 11-9-87

END

OF

ILLEGIBLE

PAGES

02-8704-02/NYR9

SMO DATA CASE # 7204

4/28/87 2 ORGANIC Coolers TO: CAMBRIDGE ANALYTICAL ASSOC
AIRBILL # 349802578 6 1106 Commonwealth AVE
BOSTON, MA. 02215
ATTN: Sharon WALER

1 INORganic Cooler TO:
AIRBILL # 34980 25790 MACK LABS
2199 DARTMORE AVE.
PITTSBURGH, PA. 15210
ATTN: JIM CICILIANO

ALL AQUEOUS Samples SENT on 4/28/87

Sample #	ORGANIC. TRAFFIC RPT #	INORganic TRAFFIC RPT. #
NYR9-BL1	BF 429	MBF-484
NYR9-GW1	BK-238	MBJ 137
NYR9-GW2	BK 239	MBJ 292
NYR9-SW1	BC 084	MBF 490
NYR9-SW2	BC 085	MBJ 192

4/29/87 SENT TO SAME LABS AS PREVIOUS DAY
1 ORganic / 1 INORganic Cooler
ORganic - AIRBILL # 34980 25764
INorganic - AIRBILL # 34980 25775

SAmple #	organic TRAFFIC RPT #	INorganic TRAFFIC RPT. #
NYR9-S1	BK 240	MBF 480

Gerald V. Gillis
5/18/87 M. Gillis - 5/18/87

OZ-8704-02/NYR9

Only Soils + 4 VOA's Aqueous blank shipped on 4/29/87

Sample #	Organic Traffic Rpt. #	Inorganic Traffic Rpt. #
NYR9-52	BK 241	MBF 481
NYR9-53	BF 427	MBF 482
NYR9-54	BF 428	MBF 483
NYR9-55	BC 080	MBF 496
NYR9-56	BC 081	MBF 487
NYR9-57	BC 082	MBF 488
NYR9-58	BK 249	MBI 590
NYR9-BL2	BC 083	N/A

Gerald V. Gillard 5/8/87

Alan Scherpa 5/8/87

REFERENCE NO. 4

NUS CORPORATION
SUPERFUND DIVISION

PROJECT NOTES

02-8704-02

TO: Project File - Spaulding Fibre Co. DATE: 3/8/88

FROM: Alan J. Cherepon COPIES:

SUBJECT: ~~File Note~~ Additional Note for Fieldnotebook. 3/8/88

REFERENCE:

During the site inspection, it was observed that a high chain-link fence surrounded the site completely, with gates that were either locked or guarded by company personnel, and there was a security system at the plant, with all gates locked after 5pm and before 8am. This observation was not noted in the Fieldbook at the time of inspection as an oversight, but is being documented now to enable this information to be used in the scoring of the accessibility of the waste at the site.

It was also noted that the plant site was mostly flat with only small slope changes for storm drainage ditches or loading areas near the plant building. The Topographic map shows a very gradual slope of Topography in the area of the plant.

REFERENCE NO. 5

INDUSTRIAL WASTE SITES

AT

SPAULDING FIBRE COMPANY, INC.

INDUSTRIAL PLASTICS DIVISION

310 WHEELER STREET

TONAWANDA, NEW YORK 14150

DECEMBER 13, 1983

BY: SPAULDING FIBRE COMPANY, INC.

INDEX

1. BACKGROUND

Spaulding Fibre Company, Inc.'s Industrial Plastics Division located at 310 Wheeler Street, Tonawanda, New York, County of Erie has two (2) inactive disposal waste sites on its property. One (1) is listed under NYSDEC site code as #915050-b and the other as #915050-c. The 915050-b site contains approximately 750 - 55 gallon drums of resin and was used from February 1978 to September 1978. The 915050-c site contains approximately 40 tons (7,500 cubic yards) of Spauldite® dust in polyethylene bags and was used from the fall of 1977 to September 1978.

The manufacture of Spauldite® brand high pressure industrial laminate involves the use of a reinforcing web in a resin matrix. The reinforcing webs used at this facility during the 1977 and 1978 time period were: cellulose paper, asbestos paper, woven cotton fabric (linen and canvas), woven asbestos fabric and woven glass fabric. These continuous webs are dipped in a thermosetting liquid resin (adhesive) system and cured (dried) to a B-stage or prepreg condition. Several sheets of B-state are then placed in a press where heat (300-365°F) and pressure (1000-1500 psi) are used to fuse the individual B-stage plies into one homogeneous mass with a thickness determined by the weight (number of plies) put into the press. Since the resins used are all thermosetting the chemical reaction that takes

place is irreversible and the resin is permanently cured (set). An analysis of our production records indicate that the average product mix is 95% phenolic, 2% epoxy and 3% melamine laminate. All the sheets are saw trimmed and most are sawed into thirds or halves. About 5-10% of the laminates are also surface sanded for various reasons such as close thickness tolerance control, roughened surface for bonding, etc. It is the saw and sanding dust that was bagged and disposed of in the dust area #915050-c. This material is solid, inert, water insoluble and non-volatile.

As stated, liquid resin systems are used to impregnate and/or coat the reinforcing webs. It is the tank heels and cleanup residual material that is in the drums in area #915050-b. These systems are thermosetting and have the catalyst in them so that they will polymerize to their cured (C-stage) form. The polymerization process is a chemical reaction that is temperature dependent. The reaction rate doubles for each 10°C increase in temperature. These resins cure at 50 to 300 seconds at 300°F. Since these reactions are condensation polymerization in nature, the by-product is water. The last drum was disposed of in #915050-b in September 1978, over five (5) years ago. We would fully expect that these materials have solidified in that time period. The raw chemicals in these systems are: phenol, formaldehyde, cresylic

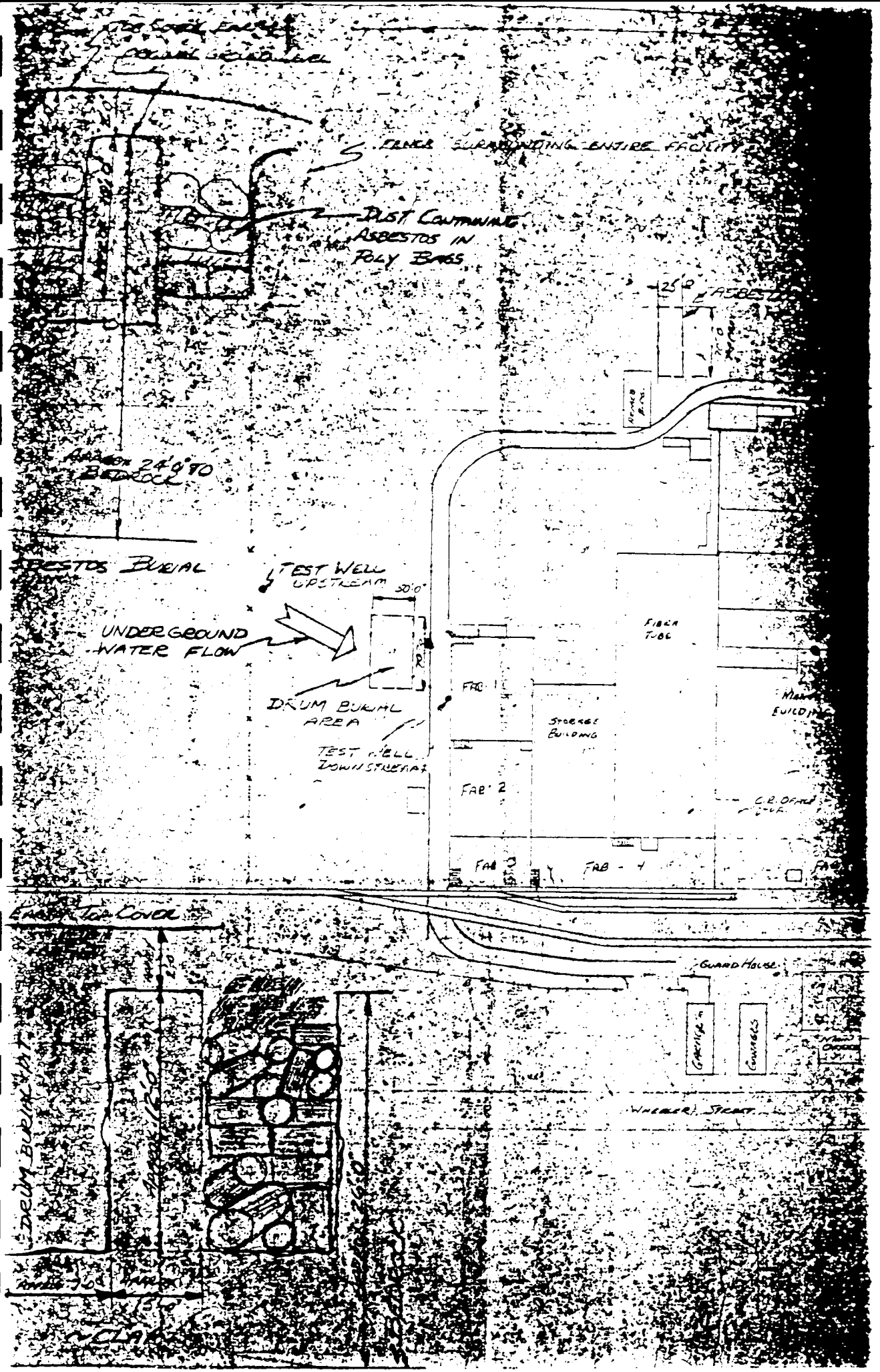
acid, dibutyl phthalate, butyl octyl phthalate, aniline, epichlorohydrin, bisphenol-A, methanol, toluol, methyl-ethyl-ketone and ethyl alcohol.

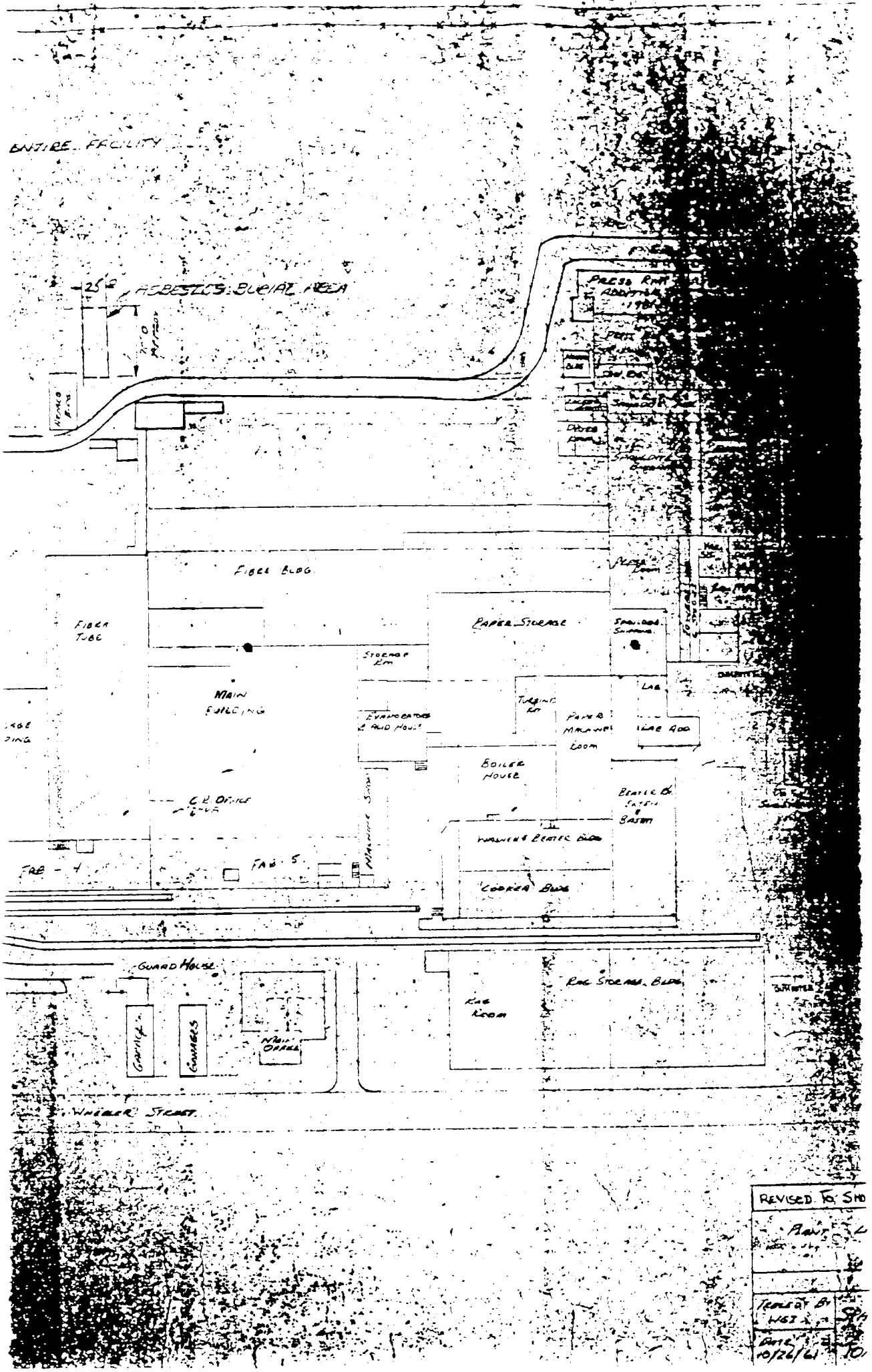
2. DUMP LOCATION AND DESIGN

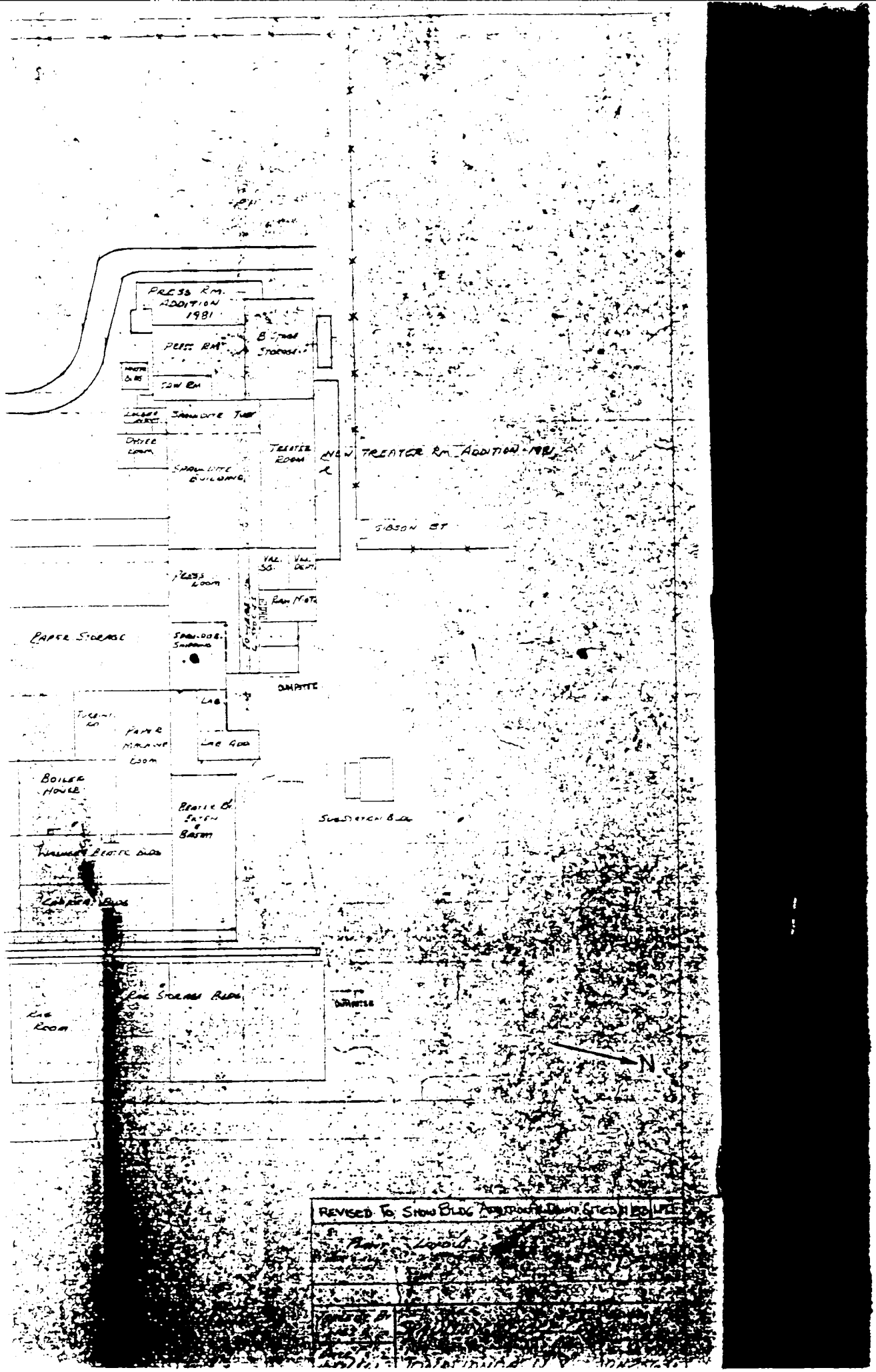
The original 1961 blueprint of the Spaulding buildings and property updated as of November 1983 shows the location, dimensions and vertical section design of the dump sites.

The dust site has a mounded cover approximately 25 x 70 feet. This site contains two (2) trenches 6 x 40 feet and one (1) trench 6 x 20 feet. The bottom of the trenches is ten (10) feet below ground level and twelve (12) feet below the mounded cap. There is approximately four (4) feet of cover on top of the bagged dust. The bags of dust are in layers with each layer covered with earth.

The drum site has a mounded cover 50 x 70 feet containing trenches seven (7) feet wide. The drums are positioned in a randomed manner in the trenches with about four (4) feet of earth cover.


FENCE SURROUNDING ENTIRE FACILITY
DIRT COVERING ASBESTOS IN POLY BAGS
ASBESTOS BURIAL
TEST WELL UPSTREAM
UNDERGROUND WATER FLOW
DRUM BURIAL AREA
TEST WELL DOWNSTREAM
FAB 1
FAB 2
FAB 3
FAB - 4
STORAGE BUILDING
FIBER TUBE
GUARD HOUSE
GARAGE
CHANGERS
WHEELER STREET
EARTH FOR COVER
DRUM BURIAL AREA


ENTIRE FACILITY
ASBESTOS BURIAL AREA
FIBER BLDG.
FIBER TUBE
PAPER STORAGE
MAIN BUILDING
BOILER HOUSE
C.R. OFFICE
FAB - 4
FAB - 5
GUARD HOUSE
RAW STORAGE BLDG.
WHEELER STREET
REVISED TO SHO
PLANT
DATE 10/26/61


PRESS RM. ADDITION 1981
PRESS RM.
SAW RM.
OFFICE
TESTER ROOM
NEW TESTER RM. ADDITION - 1981
GIBSON ST.
PAPER STORAGE
LAB
BOILER HOUSE
N

3. DATA

A. USGS Test Borings - 1982

1. Site 915050a (lagoon to collect Spauldite® tube wet grinding waste containing phenol)

Lagoons were excavated 1972 and filled with clean material. The excavated material was disposed of at Seaway Landfill. NYDEC reports that this area has been properly closed.

Well No.	Depth (ft)	Description
1	0 - 0.5	Topsoil
	0.1 - 1.5	Clay, red, intermixed with gravel, extremely tight
		SOIL SAMPLE: 2 - 3.5 ft.
2	0 - 5.5	Clay, red, tight, dry, with layers of gravel
	5.5 - 7.0	Clay, red, wet
	7.0 - 11.5	Clay, red, tight, dry
	11.5 - 16.5	Clay, red, tight, dry
		SOIL SAMPLE: 5.5 - 7.0 ft.
3	0 - 5.0	Clay, reddish, tight, dry, some gravel
	5.0 - 5.5	Clay, reddish, wet
	5.5 - 26.5	Clay, reddish, dry
		SOIL SAMPLE: 5 - 5.5 ft.

Well No.	Depth (ft)	Description
4	0 - 0.5	Topsoil
	0.5 - 3.5	Clay, reddish, tight, dry
	3.5 - 4.5	Clay, reddish, damp
	4.5 - 16.5	Same as above but with gravel layers.
		SOIL SAMPLE: 3.5 - 4.5

As indicated, soil samples were collected from each boring at depths ranging from 2 - 7 feet. No phenols were reported in these samples. ?

B. Earth Dimensions, Inc. Test Borings - 1978

Attached are copies of these boring data plus a summation letter dated September 27, 1978 by Mr. Donald W. Owens, Soil Scientist for Earth Dimensions, Inc.

EARTH DIMENSIONS, INC.

Soil Investigations and Natural Resource Assessments

797 Center Street • East Aurora, New York 14052 • (716) 655-1717

September 27, 1978

Mr. David Weber
Krehbiel Associates, Inc.
1655 Niagara Falls Boulevard
Tonawanda, New York 14150

RE: SOILS REPORT - SPAULDING FIBRE

Dear David:

Three soil borings were augered September 22, 1978 near the eastern and southern side of the buildings of Spaulding Fibre in the City of Tonawanda. The placement sites were located by David Weber of Krehbiel Associates.

The soils were logged at these sites based on split spoon samples taken from every major horizon. In addition, undisturbed soil samples were collected in Shelby tubes from two depths at each bore site for permeability laboratory tests.

A thin mantle of clayey lake sediment was described as the surficial original sediment at all three sites. This mostly stone free sediment rested on a silty clay loam (CLAYEY-SILT) dense glacial till containing some stone fragments. The lower boundary of this very impervious clayey mantle ranged from 3.0 to 4.5 feet below the surface. A silty lake sediment layer was a transition zone between the clayey lake sediment and glacial till in boring #3.

The (CLAYEY-SILT) dense glacial till, sometimes called "hardpan" is very high in silt with moderate (about 25 to 35%) amount of clay and low content (less than 15%) of sand. This till is very uniform, even in the distribution of the stone fragments which is estimated to be less than 15%. Water movement through this dense zone is also very slow.

Water tends to perch above the clayey lake sediment as was the case in soil boring #1 with the water seeping into the bore hole from the more permeable industrial waste cap. This surficial perched water table usually disappears in late spring reappearing in fall except after intense summer thunderstorms or extended wet periods. The permanent water table was below sampling depth, though the moisture content did increase with depth in borings #2 and #3.

Prepared by:

Donald W. Owens
Soil Scientist

DWO/dew
6I78

EARTH DIMENSIONS, INC.

Test Borings and Logs
787 Center Street • East Aurora, New York 14052 • (716) [illegible]

HOLE NO 1 SURF ELEV

PROJECT Spaulding Fibre Co., Inc. LOCATION
City of Tonawanda 100 Wheeler Street

CLIENT Wehbeh Associates, Inc. DATE STARTED 9/22/78 COMPLETED 9/22/7

SAMPLE NO.	BLOWS ON SAMPLER	DESCRIPTION & CLASSIFICATION	WATER TABLE & REMARKS
		Moist, reddish-brown SILTY-CLAY fill, very firm	Water rapidly seeped into bore hole from the man deposited fill mantle.
1	8 6 6	Extremely moist to wet black cinders, reddish-brown SILTY-CLAY and industrial wastes, very friable to firm, in 3 to 6 inch layers.	
2	27	Moist, reddish-brown silty clay (CLAYEY-SILT) with less than 5% gravel, massive soil structure, extremely firm (stiff)	Fill to four feet over 3 foot thick lake sediment resting on very dense silty glacial to end of boring. The original approximate 4 feet of clayey lake surficial material was removed.
	Shelby tube sample #1		
		Moist, reddish-brown, silty clay loam (CLAYEY-SILT) with 5 to 10% subangular, gray, hard shale and dolomitic gravel, massive soil structure, extremely firm, slightly plastic. This deposit is very compact and uniform.	
3	27 45 50	101	
4	33 WH		NP - not taken due to Shelby tube samples taken at this depth and below.
	Shelby tube 2		
5	27 [illegible]	66	(Note change in scale between 10 and 15 feet with sample 4 secured between 14.5 and 15.0 feet)
	50 4250	95	Water table at 11.5 feet below surface at completion.
6		Boring completed at 20.0 feet	

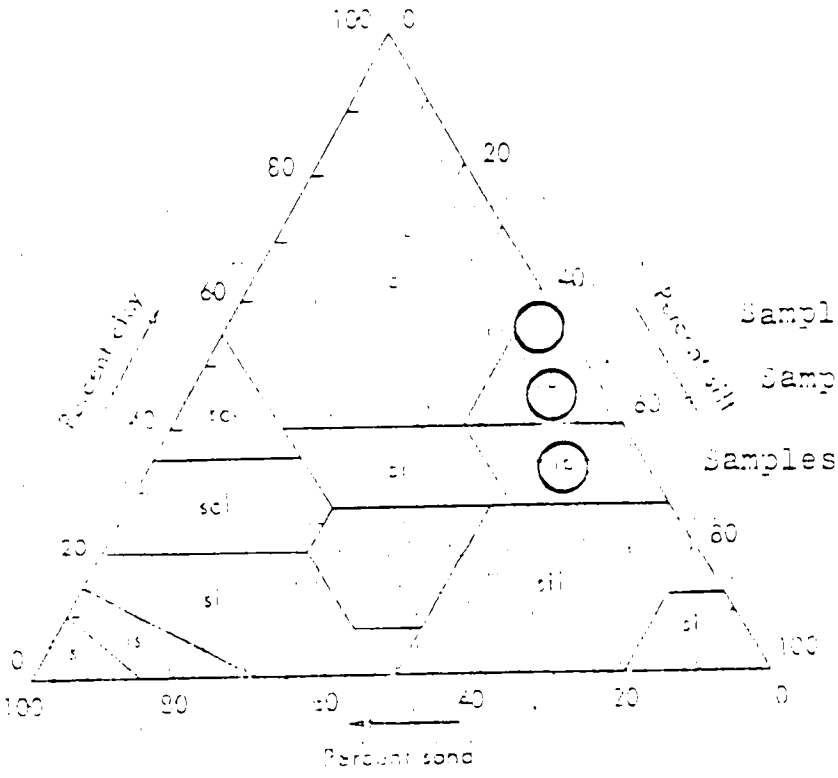
N = NUMBER OF BLOWS TO DRIVE 2 " SPOON 12 " WITH 140 lb. WT. FALLING 30 " PER BLOW.

LOGGED BY Owens A. [illegible]

THE FOLLOWING PAGES WERE NON-LEGIBLE AT THE TIME OF SCANNING

HOLE #1

6175



c	Clay
sc	Sandy clay
sicl	Silty clay loam
cl	Clay loam
sil	Silt loam
si	Sandy loam
l	Loamy sand

EARTH DIMENSIONS, INC.

Test Borings and Logs
787 Center Street • East Aurora, New York 14052 • [illegible]

HOLE NO 2 SURF ELEV

PROJECT Spaulding Fibre Co., Inc.
City of Tonawanda
LOCATION [illegible] Wheeler Street

CLIENT Crandall Associates, Inc.
DATE STARTED 9/22/76 COMPLETED 9/22/76

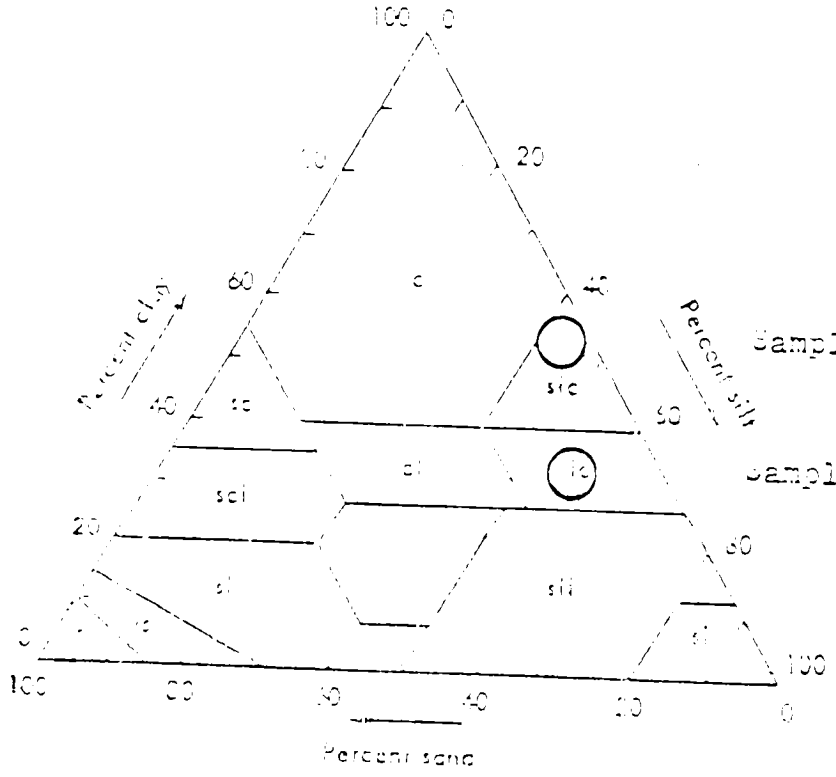
SAMPLE NO	BLOWS ON SAMPLER	DESCRIPTION & CLASSIFICATION	WATER TABLE & REMARKS
		Extremely moist, black, cinder fill, very friable	
		Moist, black, silt loam (CLAYEY-SILTY) topsoil	
1	27 | 9 | 44 | 50	Moist, distinctly mottled, reddish-brown SILTY-CLAY, with gray vertical dessication cracks, extremely firm (stiff), plastic	Clayey lake sediments to 2 feet over dense, silty clay loam glacial till to end of boring.
2	8 | 12 | 17	Moist, reddish-brown silty clay loam (CLAYEY-SILT) with 10 to 15% subangular hard dolomite and shale gravels and occasional cobble, massive soil structure, extremely firm, slightly plastic.	N/A-not taken due to Shelby tube samples taken at this depth and below.
		Shelby tube sample #1	
3	83 | 55/6 | 101		(Note scale change between 10.0 and 15.0 feet.)
		---grades downward to-14.0 feet---	
4	12 | 17		(Sample #4 taken at 14.5 to 15.0' depths)
		Shelby tube sample #2	
		Moist, brown, silty clay loam (CLAYEY-SILT) with 10 to 15% subangular hard dolomite and shale gravel, massive soil structure, firm, slightly plastic	No water at completion
5	17 | 24/4 | 20/5		
		Boring completed at 20 feet	

N = NUMBER OF BLOWS TO DRIVE 2 " SPOON 12 " WITH 140 lb. WT. FALLING 30 " PER BLOW.

LOGGED BY [illegible]

Case #2:

6278



Sample #1

Samples #2-5

c Clay
sic Silty clay
sc Sandy clay
cl Clay loam
sicl Silty clay loam
scl Sandy clay loam
l Loam
sil Silt loam
si Silt
sl Sandy loam
s Sand
ls Loamy sand

EARTH DIMENSIONS, INC.

[illegible] Building [illegible]
[illegible] Center Street • East Aurora, New York 14052 • [illegible]

HOLE NO. [illegible] SURF ELEV. _____

PROJECT Spaulding Fibre Co., Inc.
City of Tonawanda

LOCATION [illegible] Wheeler Street

CLIENT Vanderbilt Associates, Inc.

DATE STARTED 9/22/78 COMPLETED 9/22/78

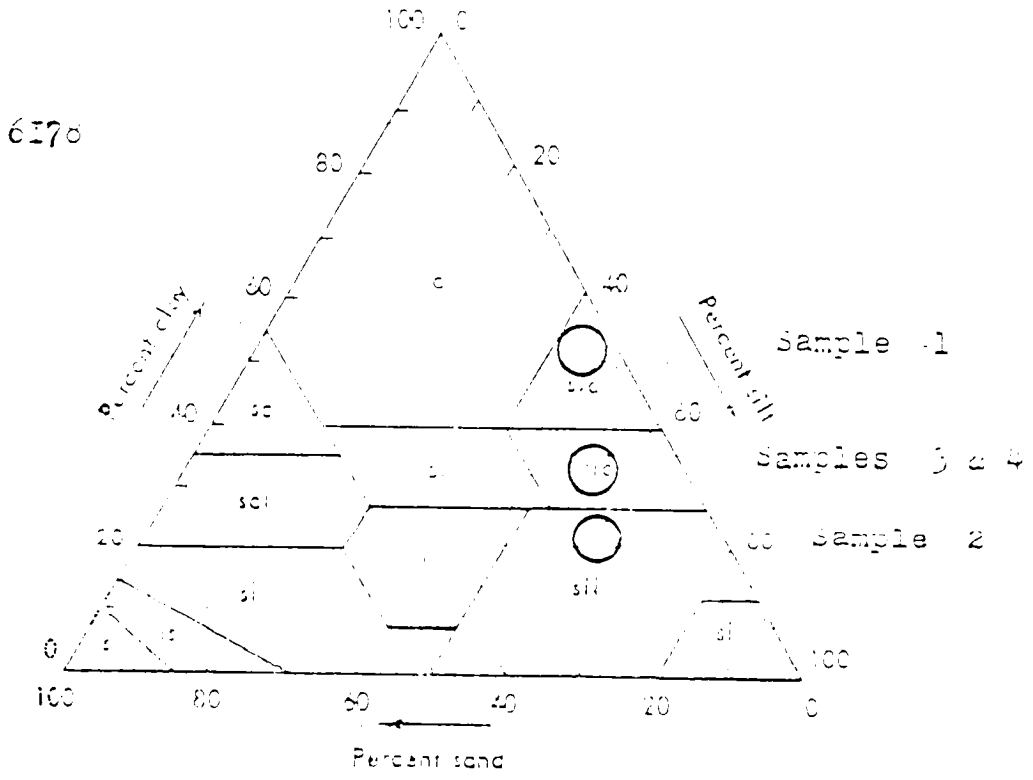
SAMPLE NO	BLOWS ON SAMPLER	DESCRIPTION & CLASSIFICATION	WATER TABLE & REMARKS
		Moist, black, silt loam (CLAYEY-SILT) topsoils, very friable	
S	12 20 2	Moist, distinctly mottled, reddish brown, SILTY-CLAY with gray dessication cracks, very firm	
1		------clear transition to----------	Clayey and silty lake sediments to 6 feet over dense, silty clay loam glacial till to end of boring
		Moist, reddish-brown, heavy, silt loam (CLAYEY-SILT), thinly bedded firm, non-plastic, nonsticky	
Shelby tube sample #1		-------clear transition to--------	
		Moist, reddish-brown SILTY CLAY loam (CLAYEY-SILT) with 10 to 15% subangular, hard, gray shale and dolomite gravels, massive soil structure, extremely firm	
18	21 40 61		
3			
		------grades downward to----------	
		Moist, to extremely moist, brown silty clay loam (CLAYEY-SILT) with 10 to 15% subangular, gray hard shale and dolomite gravels, massive soil structure, firm.	
Shelby tube sample #2			
1	17 22		
4			

Continued on page 2...

N = NUMBER OF BLOWS TO DRIVE 2 " SPOON 12 " WITH 140 lb. WT. FALLING 30 " PER BLOW.

LOGGED BY [illegible]

6278



c	Clay	scl	Sandy clay loam
sic	Silty clay	cl	Clay loam
sc	Sandy clay	sicl	Silty clay loam
l	Loam	sil	Silt loam
sl	Sandy loam	si	Silt
fsl	Fine sandy loam	s	Sand
vfsl	Very fine sandy loam	ls	Loamy sand

Fig. 5-2 Soil textural classes and their particle size limits. (Adapted from Soil Survey Staff, 1951)

EARTH DIMENSIONS, INC.

[illegible] and Lake
[illegible] Center Street • East Aurora, New York [illegible] • [illegible]

CLIENT 3 continued

SURF ELEV. _____

PROJECT Spaulding Fiber Co., Inc.
City of Tonawanda

LOCATION
[illegible] Wheeler Street

AGENT Mehnert Associates, Inc.

DATE STARTED 3/22/78 COMPLETED 3/22/78

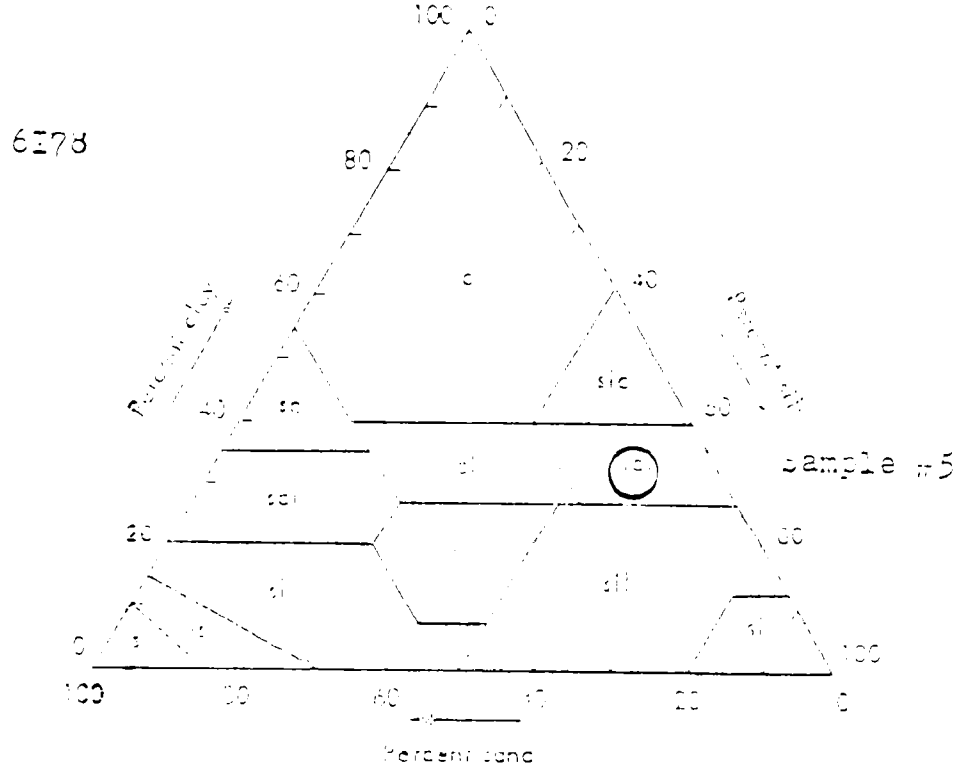
NO.	BLOWS ON SAMPLER	DESCRIPTION & CLASSIFICATION	WATER TABLE & REMARKS
12	2-24-29-53	(Same horizon as described at the bottom of page 1 of 2)	Water table 9.5 feet below surface at completion
		Boring completed at 20 feet	

NUMBER OF BLOWS TO DRIVE 2 " SPOON 12 " WITH 140 lb. WT. FALLING 30 " PER BLOW

LOGGED BY [illegible]

Hole #1 - Continued:

6378



c	Clay
sic	Silty clay
sc	Sandy clay
cl	Clay loam
scl	Sandy clay loam
sil	Silt loam
l	Loam
si	Silt
s	Sand

cl	Clay loam
scl	Sandy clay loam
sil	Silt loam
l	Loam
si	Silt
s	Sand

END OF

NON-LEGIBLE

PAGES

C. Calspan Corporation Soil Permeability Coefficients (k) - 1978

Shelby tube samples were taken from two (2) depths at each of the three (3) bore sites augered September 22, 1978 by Earth Dimensions, Inc. and cited in B. above. These samples were tested by Calspan Corporation for natural soil permeability coefficient with the following results:

Test Boring	Sample Zone (ft)	Permeability Coefficient (cm/sec)
1	4.5 - 5.5	$k = 1.06 \times 10^{-7}$
	15 - 17	$k = 2.1 \times 10^{-7}$
2	5 - 6	$k = 2.0 \times 10^{-5}$
	15 - 17	$k = 2.3 \times 10^{-7}$
3	3.5 - 4.5	$k = 2.2 \times 10^{-5}$
	14.5 - 15.5	$k = 1.4 \times 10^{-6}$

D. Aerial Photograph Review and Interpretation

1951, 1961, 1972 and 1978 aerial photos were reviewed with the following observations:

1951 - Some activity was noted in the area of Site 915050c. The soil appears to have been disturbed and some piles of material or containers were noted in this area.

1961 - Continued activity noted at Site 915050c. A depression, possibly a pit was evident in the general area of 915050a. No deposition of material evident.

1972 - Extensive accumulations of material and disturbance of soils noted in the area of Sites 915050 a, b, and c. Also apparent storage of material noted next to the building in the northeastern corner of property.

1978 - Only minor activity noted at Site 915050b. No determination possible on the type of activity.

The aerial photo review generally confirms reported disposal activity by Spaulding Fibre.

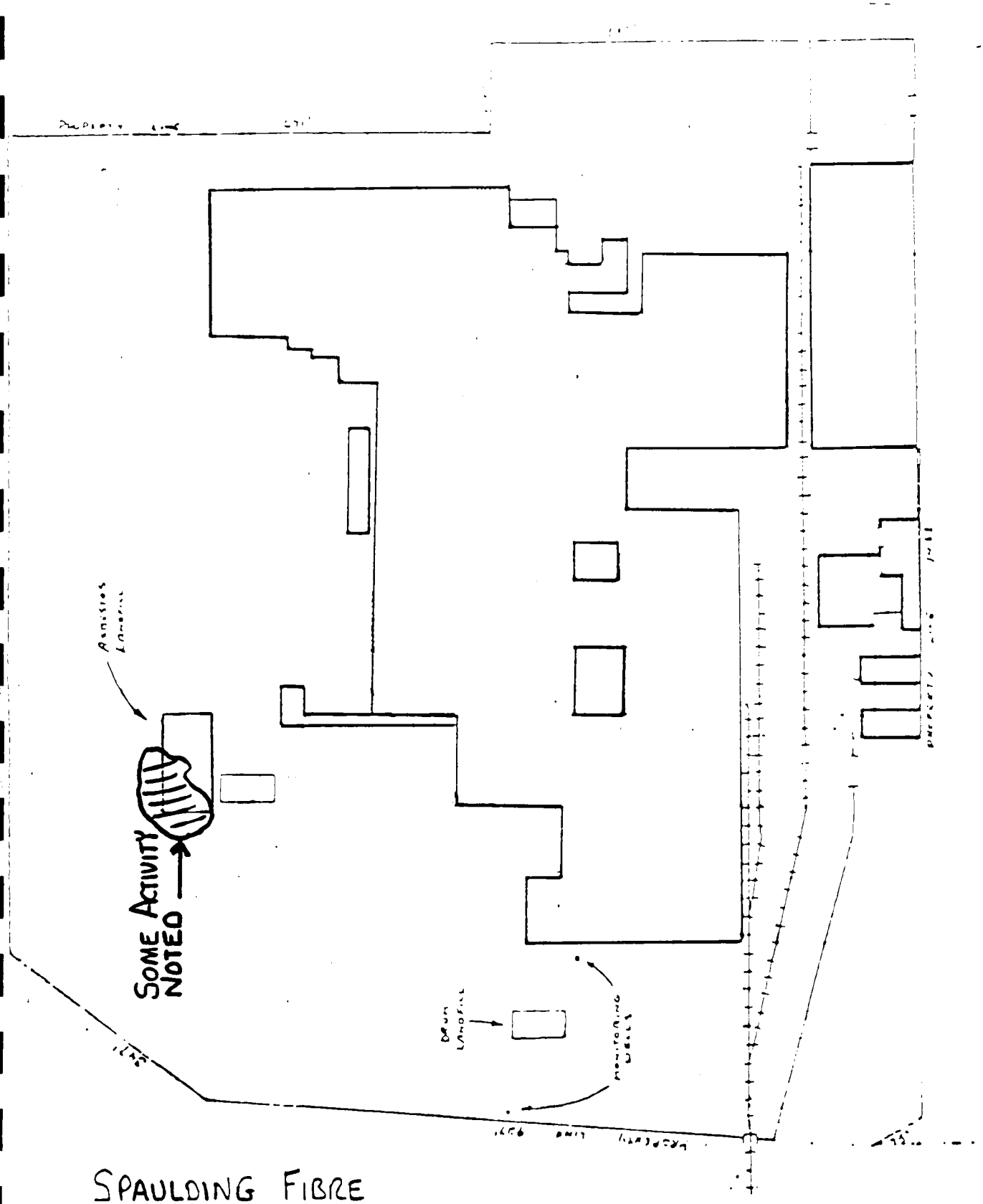
E. Town of Tonawanda Hydrogeologic Investigation By Thomson Associates - July 1983

This information was reviewed because of the proximity of this site to Spaulding Fibre (approximately 1/4 miles south).

An executive summary on Page 7 of this report indicates that the Tonawanda Landfill areas overlay thick glacial till deposits with low vertical and horizontal permeability. The unconsolidated deposits were described as between 56 and 95.5

feet thick and consisting primarily of a red-brown silty clay glacial till. These materials were tested and showed a mean vertical and horizontal hydraulic conductivity of 1.7×10^{-6} cm/sec and 1×10^{-5} cm/sec respectively.

This data generally confirms the soil data reported by Krehbiel and USGS for the Spaulding Fibre site.



SPAULDING FIBRE

1951 [redacted] - AERIAL PHOTO INTERP.

AVDELL - DEC-1983

F. Spaulding Fibre Gas Well Log Information - 1978

Spaulding Fibre Company, Inc. installed three (3) gas wells on its property in 1978. The following is an excerpt from the drilling logs:

Well #1 (Water Tower Area - North Side of Property)

Depth (ft)	Description
0 - 24	Fill and glacial debris
24 - 170	Salina

Well #2 (Hines Street - Hackett Street - Southwest Corner of Property)

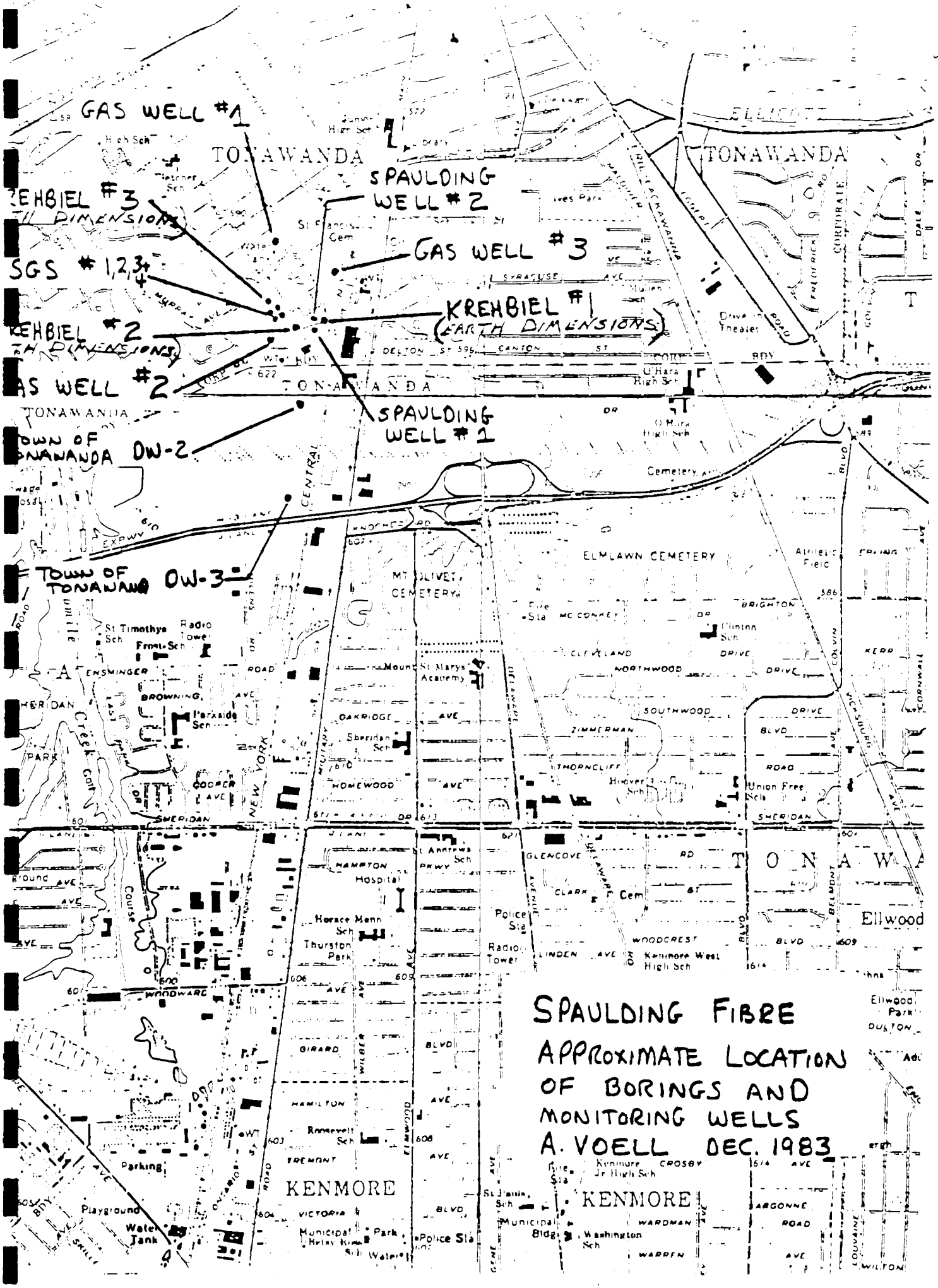
Depth (ft)	Description
0 - 28	Fill and glacial till
28 - 202	Salina

Well #3 (Parking Lot Across Wheeler Street - East Side of Property)

Depth (ft)	Description
0 - 34	Glacial fill
34 - 196	Salina

G. Spaulding Fibre Company, Inc. Abandoned Water Well

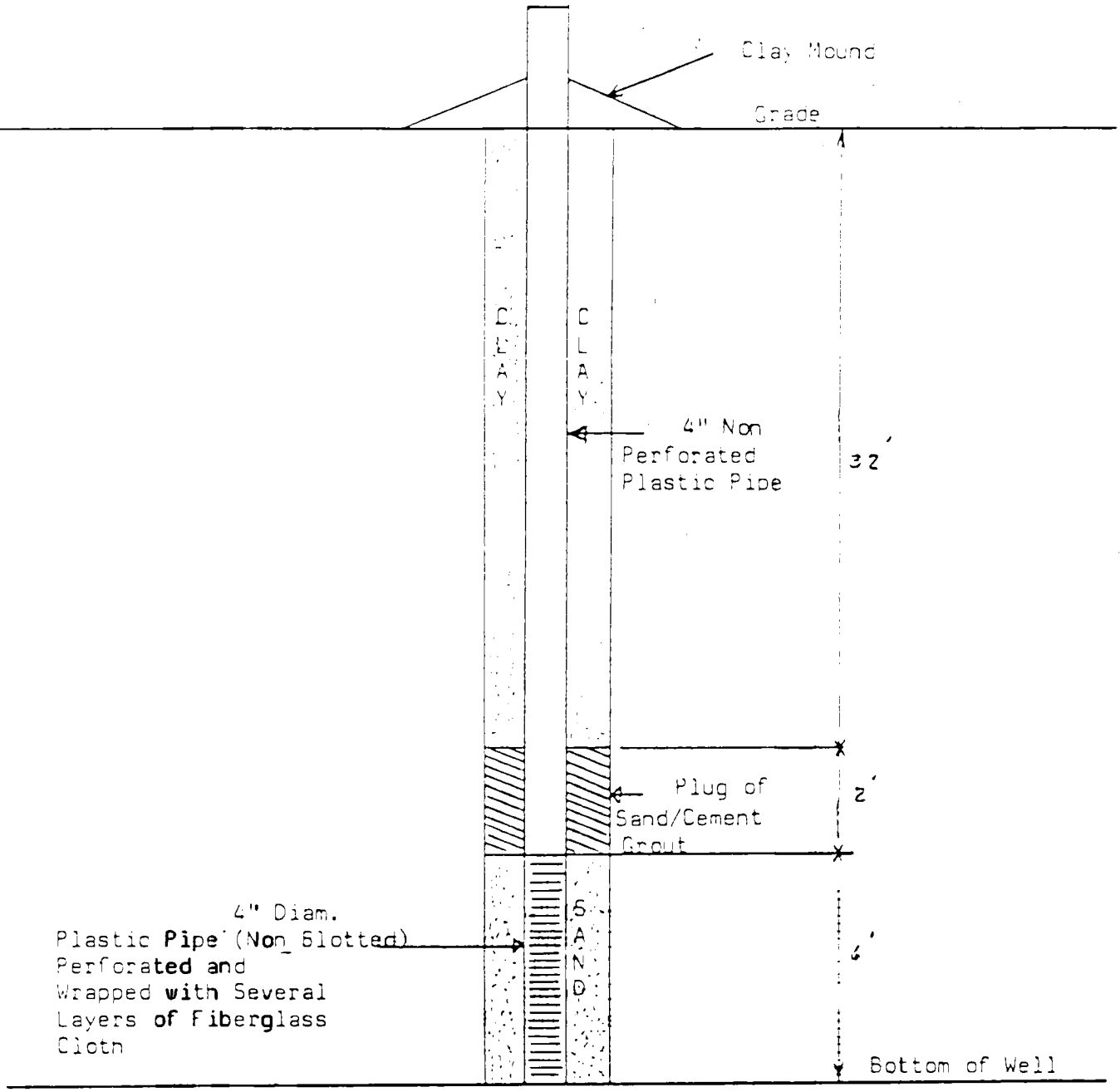
On the Spaulding property is an abandoned water well. This well was measured on December 6, 1983 for well depth and water level. The well is twenty-six (26) feet deep from ground level and the water level was at twenty-four (24) feet below the ground level.


GAS WELL #1
SPAULDING WELL #2
KREHBIEL #3
(EARTH DIMENSIONS)
SGS #1,2,3
GAS WELL #3
KREHBIEL #1
(EARTH DIMENSIONS)
KREHBIEL #2
(EARTH DIMENSIONS)
GAS WELL #2
SPAULDING WELL #1
TOWN OF TONAWANDA OW-2
TOWN OF TONAWANDA OW-3
TONAWANDA
ELLICOTT
ELMLAWN CEMETERY
MT. OLIVET CEMETERY
KENMORE
Ellwood
SPAULDING FIBRE
APPROXIMATE LOCATION
OF BORINGS AND
MONITORING WELLS
A. VOELL DEC. 1983

H. Well Monitoring Results - 11/23/78 through 9/29/83

Pittsburgh Testing Lab, 605 Young Street, Tonawanda, New York was contacted to put in two (2) monitoring wells, one upstream and one downstream of the drum dump site (915050b). These wells were put in October 6-7, 1978. The driller's log shows that both wells were sunk to a depth of forty (40) feet below grade. Four (4) inch plastic pipe was used with the bottom six (6) feet perforated and wrapped with fiberglass cloth. The bottom six (6) feet was backfilled with sand then with two (2) feet of cement grout on top of the sand and the thirty-two (32) feet remainder backfilled with the excavated material. The upstream well core was dry for the top thirteen (13) feet and damp from fourteen (14) to forty (40) feet. The well was left open overnight and filled with water to 1.4 feet below the surface. The downstream well filled with water to two (2) feet below grade at the end of the drill.

Following are the test results since 11/23/78.



Water Wells 1 & 2 Installed 10-6, 7-1978

BF-8276

SAMPLE DATE	DIELDRIN		ENDRIN		TOC	
	UP	DOWN	UP	DOWN	UP	DOWN
11-22-78	K.25	K.10	K.01	K.01	175	89
1-25-79	.22	.09	K.01	K.01	75	59
2-22-79	.07	.23	K.01	K.01	28.8	76
5-17-79	.15	.24	K.1	K.1	93	38.8
8-18-79	.04	.03	K.1	K.1	26.5	49.1
9-20-79	.15	.08	K.005	K.005	24.4	50.1
12-20-79	.07	.08	K.005	K.005	19.8	32.2
5-15-80	.23	.10	K.001	K.001	7.9	19.9
10-23-80	K.03	K.03	K.002	K.002	18.5	55.6
3-26-81	.21	.26	K.005	K.005	7.7	11.5
12-10-81	K.03	K.03	K.002	K.002	<5	<5
10-12-82	K.03	K.03	K.002	K.002	<1.0	14
	DEF 11/10/82		[illegible]		[illegible]	
				LINDANE*		
			UP	DOWN		
5-17-83	K.03	K.03	.0082*	.013*	16.0	53.5
9-29-83	K.03	K.03	K.01	K.01	100.0	5.2

* EXPRESSED AS LINDANE

I. Expended Well Testing - November December 1988

As a result of NYSDEC's decision to go to Phase II for both the dust and drum sites, it was decided to gather additional data from the test wells. This involved analyzing for additional chemicals and analyzing to a lower sensitivity level. The results are in table form.

SAMPLE DATE	11/23/83		12/1/83		12/6/83	
PARAMETER	UP STREAM	DOWN STREAM	UP STREAM	DOWN STREAM	UP STREAM	DOWN STREAM
nol	<2	<2	<2	<2		
sols	<5	<5	<5	<5		
utyl Phthalate	<15	<15	<15	<15		
yl Octyl nthalate	<20	<20	<20	<20		
maldehyde	5	30	14	10	3.4	8.3
hyl Alcohol	3	11	2	2	2.9	2.9
yl Alcohol	13	8	13	13	1.5	2.4
hyl Ethyl Ketone	6	3	5	6	5.8	6.2
uene	9	3	13	9	3.4	5.1

ES: 1. Analysis by ACTS TESTING LABS, INC. using 606, 602, 604 EPA methods.
2. All results in parts per billion.

J. EP Toxicity Tests Spauldite® Dust - November 1983

A sample of Spauldite® dust was composited according to our average product mix as described under the section headed BACKGROUND i.e. 95% phenolic, 2% epoxy and 3% melamine. This sample was tested according to the EP toxicity test with the following results:

PARAMETER	DUST SAMPLE RESULT	EPA MAXIMUM CONCENTRATION
Arsenic	0.014 ppm	5.0 ppm
Barium	0.2 ppm	100.0 ppm
Cadmium	<0.01 ppm	1.0 ppm
Chromium	<0.01 ppm	5.0 ppm
Lead	<0.1 ppm	5.0 ppm
Mercury	<0.002 ppm	0.2 ppm
Selenium	<0.002 ppm	1.0 ppm
Silver	<0.01 ppm	5.0 ppm
Phenol	<2 ppb	NA
o-Cresol	<5 ppb	NA
p,m-Cresol	<5 ppb	NA
Dibutyl Phthalate	5910 ppb	NA
Butyl Octyl Phthalate	2270 ppb	NA
Formaldehyde	<0.8 ppb	NA
Methyl Alcohol	<0.3 ppb	NA
Ethyl Alcohol	15 ppb	NA
Methyl Ethyl Ketone	3 ppb	NA
Toluene	7 ppb	NA

4. SUMMARY AND CONCLUSIONS

1. Considerable data has already been accumulated in connection with the dump sites on Spaulding Fibre Company, Inc.'s property.
2. This data indicates that:
   a. there has been no evidence of contaminant leaching from the sites or of groundwater contamination,
   b. the geology of the soil in the area shows a reddish brown silty glacial till down to and below the water table. This is firm, uniform and impermeable,
   c. soil natural permeability coefficients (k) range from 2.0×10^{-5} to 2.1×10^{-7} cm/sec.,
   d. EP toxicity tests on Spauldite® dust do not show the material to be a hazardous waste as as defined by RCRA.
3. In view of the data, it is felt that Phase II work at the sites is not required, but that the on-going monitoring program be continued.

REFERENCE NO. 6

Many domestic-supply wells penetrate from 1 foot to a few feet into the soluble rocks and produce small but adequate yields. On the other hand, industrial wells that were intended to produce large supplies of water give a truer picture of the water-supply potential of the rocks. Data on industrial wells show that the Camillus Shale will yield as much as 1,200 gpm and the limestone unit as much as 300 gpm and probably more. But the data also show that the rocks produce low yields at places. This is shown by such wells as 301-848-1 which was drilled to obtain a large supply for an industry but which yielded only 30 gpm. The water-bearing zones obviously are unevenly distributed through the rocks. Factors that control the occurrence of the water-bearing zones cannot be evaluated at the present time to the extent necessary to predict exactly where the zones occur.

The Lockport Dolomite is the least productive unit of the soluble rocks. Within the Erie-Niagara basin yields of wells in the Lockport range from about 4 to 90 gpm. Depth of the wells range from 20 to 70 feet. Most of the deeper wells were drilled where the depth to bedrock is greatest. Domestic-supply wells generally are finished in the fracture zone at the rock surface or in a bedding joint within the uppermost 30 feet of the rock. It is usually not necessary to drill deeper into the Lockport if only a small supply is needed.

Drilling deeper in an attempt to intersect additional bedding-plane openings at depth would provide higher yields but, generally, at the expense of lower water levels and therefore higher pump lifts. Johnston (1964) collected data on a much larger number of wells along the outcrop belt of the Lockport Dolomite than were inventoried in the Erie-Niagara basin. He found that wells drawing water from the lower 40 feet of the Lockport (the northern part of the outcrop area) yield from 1/2 to 20 gpm and have an average yield of 7 gpm. Wells finished in the upper part of the Lockport (the southern part of the outcrop area) yield from 2 to 110 gpm and have an average yield of 31 gpm. Yields of as much as 50 or 100 gpm are possible from the Lockport in the Erie-Niagara basin but would be exceptional.

CAMILLUS SHALE

Bedding and lithology

The Camillus Shale lies above the Lockport Dolomite and crops out to the south of where the dolomite is exposed. Exposures of the Camillus Shale are rare in the Erie-Niagara basin because of the low relief of the outcrop area and the cover of glacial deposits. Geologists who have studied the Camillus in the study basin agree that it consists mostly of gray shale. (For example, see Buehler and Tesmer, 1963, p. 29-30.) Subsurface data, on the other hand, indicate that a considerable amount of gray limestone and dolomite is interbedded with the shale. Along with these carbonates, gypsum comprises a significant part of the Camillus Shale. Some of the gypsum beds are as much as 5 feet thick. Gypsum also occurs in the Camillus as thin lenses and veins. Table 1,

Table 1.--Log of a gypsum-mine slope near Clarence Center

(Site 300-839-A)

Log	Depth below land surface (feet)
Topsoil, subsoil, gravel and clay.....	0-25.5
Soft gray limestone mixed with clay.....	25.5-27.5
Soft dark-gray limestone.....	27.5-29.5
Soft shaly limestone, thin bedded.....	29.5-38.0
Crushed dark-gray limestone interbedded with 2-inch seams of brown limestone.....	38.0-40.8
Dark-gray limestone interbedded with seams of gypsum 1 1/2 to 3 inches thick.....	40.8-43.6
Hard gray limestone interbedded with thin streaks of gypsum 1/8 to 1/2 inch thick.....	43.6-45.1
Soft gray limestone.....	45.1-49.1
Hard gray limestone interbedded with thin streaks of gypsum.....	49.1-52.1
Hard gray limestone.....	52.1-57.6
Gypsum.....	57.6-58.3
Brown limestone.....	58.3-59.3
Gray limestone.....	59.3-61.3
Soft, crumbly green-gray material (shale).....	61.3-64.3
Mottled rock rich in gypsum.....	64.3-65.1
Soft brown limestone.....	65.1-65.7
Cap rock -- hard dark-gray limestone.....	65.7-66.8
Soft shaly material.....	66.8-66.9
Gypsum.....	66.9-71.4

which is a log compiled during construction of a mine slope, illustrates the occurrence of gypsum and the predominance of carbonate rocks in some parts of the Camillus.

Though the Camillus dips southward at approximately 40 feet to the mile, the dip is not uniform. Gypsum miners say the formation "rolls," to describe the gentle folding of its beds. The formation is marked by broad, low folds with amplitudes of a few feet and spacings of a few hundred feet between crests. The fold axes generally are east-west.

Water-bearing openings

The extensive beds of gypsum make the Camillus Shale unique among the shale formations of the basin. The importance of the gypsum lies in its solubility; gypsum is far more soluble than the enclosing rocks, whether shale, dolomite, or limestone. Where gypsum has been dissolved, openings exist for the passage and storage of water.

The effect of the solution of gypsum on the water-bearing properties of the Camillus Shale (and other rocks) can be readily appreciated. Where the topmost beds of the Camillus crop out at the base of the falls of Murder Creek at Akron, the Camillus seems to be an impermeable shale. If one judged the water-bearing properties of the Camillus on the basis of this outcrop alone, he would be wrong. Yields of water wells and drainage into gypsum mines prove that large volumes of water do move through the Camillus.

Clues to the nature of the water-bearing openings in the Camillus can be obtained by considering some of the circumstances where large volumes of water were obtained. About 1885, the Buffalo Cement Company located a 4-foot thick bed of gypsum only 43 feet below land surface by test drilling in Buffalo on Main Street near Williamsville. A shaft was sunk with the intention of beginning a subsurface mining operation, but when the gypsum was struck the shaft was flooded with ground water. The report is that "..... a pump with a capacity of 2,000 gallons per minute failed to make any impression upon it [the water] and the attempt was abandoned" (Newland and Leighton, 1920, 209-210).

In 1964, a gypsum mine near Clarence Center received an unexpected inflow of ground water. Several hundred gallons of water per minute continuously enters the mine at a place about midway down the entry slope. This water is pumped out by a drainage system diagrammatically shown in figure 6. Ordinarily, only small seeps occur in the remainder of the mine from roof bolts and small cracks in the roof. At a distance of more than a mile from the entry slope, the working face intersected an unplugged drill hole. Water poured into the mine at an alarming rate until the hole was plugged with much effort.

Large-yield wells, such as those at Tonawanda and North Tonawanda, obtain water from thin intervals of gypsum-bearing rock. The gypsum in the Camillus Shale obviously is related to the occurrence of large quantities of water. Gypsum is a highly soluble mineral and is

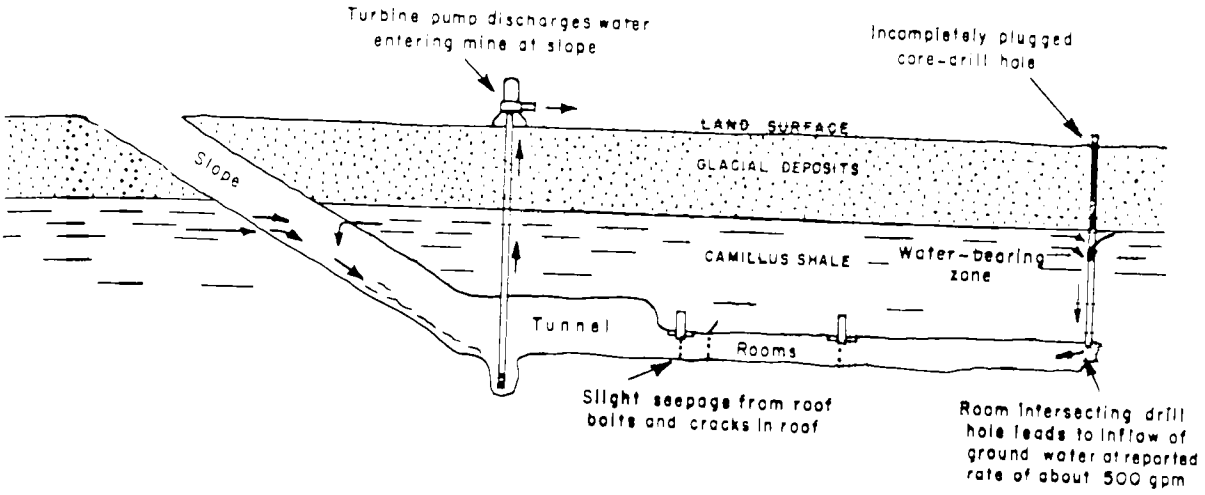


Figure 6.--Occurrence of ground water in the Camillus Shale at a gypsum mine near Clarence Center.

dissolved by circulating ground water faster than are the enclosing rocks. Very likely the openings in the Camillus that yield copious amounts of water were formed by the solution of gypsum by ground water. The water-bearing zones are mainly horizontal because most of the gypsum occurs in horizontal beds and thin zones of gypsiferous shale and dolomite. Only those gypsum zones actually exposed to circulating ground water can be widened by solution. The gypsum must be in contact with an open fracture through which the water can move. If no open fracture exists, the gypsum cannot be dissolved. The occurrence of ground water at the gypsum mine shown in figure 6 is a further illustration. The 4 1/2-foot thick bed that is mined at a depth of 66.9 feet (table 1) is dry because of the lack of vertical fractures to transmit water to it.

The solution-widened water-bearing zones occur at various depths and stratigraphic horizons in the Camillus. The existence of such zones is borne out by well data. For instance, wells 303-850-1 and -2 are 90 feet apart and obtain water from the same 2- to 3-foot thick zone at a depth of 67 to 68 feet. Such zones may be continuous for as much as 1 or 2 miles but information is not available on the extent of individual zones. The gypsum occurs principally in lenticular beds. The thicker beds may be 3 or 4 miles in lateral extent. The thinner beds can be expected to be much smaller in extent.

A zone of fracturing and solution extending several feet below the rock surface yields relatively small but sufficient water supplies for domestic use. This zone appears to be present throughout the area and is unrelated to stratigraphic position.

Hydrologic and hydraulic characteristics

The Camillus Shale forms a low topographic trough split down the axi by Tonawanda Creek. Ground water that enters the formation discharges mainly to the creek. Little water is discharged to the small, barely incised streams on the Camillus. These streams are dry much of the year.

Coefficients of transmissibility given in table 2 were computed for the Camillus Shale on the basis of specific capacities of wells penetrati a considerable thickness of the aquifer, by the method described by Walto (1962, p. 12-13).

Table 2.--Specific-capacity tests of wells finished in the Camillus Shale

Well number	Pumping rate (gpm)	Duration of pumping (hours) e: estimated	Drawdown (feet)	Specific capacity (gpm/ft)	Coefficient of transmissi-bility (gpd/ft)
a/ 258-853-1	1,090	e8	53	21	40,000
-2	90	--	22	4	7,000
258-855-1	500	e8	17	29	55,000
-2	1,000	e8	26	38	70,000
-3	1,500	e8	38	39	70,000
303-850-1	700	24	10	70	--
-2	660	e8	8	83	--

a/ Well also penetrates water-bearing zone in Lockport Dolomite.

The large specific capacities of wells 303-850-1 and -2 probably result in part from recharge induced from Sawyer Creek. Measurements of recovery of water levels in well 303-850-1 were made when well 303-850-2 was shut down after a year of continuous pumping. From these data, a coefficient of transmissibility of about 80,000 per foot and a coefficier of storage of 0.025 were computed. The computed transmissibility is abo half the transmissibility that would have been indicated from specific capacity if recharge were not induced from Sawyer Creek.

Yields of wells

The Camillus Shale is by far the most productive bedrock aquifer in the area. Except in the vicinity of Buffalo and Tonawanda, where industrial wells produce from 300 to 1,200 gpm, no attempt has been made to obtain large supplies from the formation. However, the inflow of water to gypsum mines near Clarence Center and Akron indicate that large supplies are not necessarily restricted to the Buffalo and the Tonawanda area. Two examples of large flows of water encountered in gypsum mining have already been mentioned. Pumpage from gypsum mines near Clarence Center (including the mine mentioned previously) is substantial. The water pumped is discharged to Got Creek. On July 2, 1963, the creek had a flow of 2.1 mgd (million gallons per day) about half a mile downstream from the mines, that was due almost entirely to the pumpage. Water for industrial use is pumped from a flooded, abandoned gypsum mine at Akron. This pumpage, at a rate of 500 to 700 gpm, has had no appreciable effect on the water level in the mine.

Probably the larger solution openings are most common in discharge areas near Tonawanda Creek and its tributaries and near the Niagara River; the flow of ground water becomes concentrated as it approaches the streams to which it discharges. Other discharge areas, such as low-lying swampy areas and headwaters of small streams that have perennial flow, are likely places to drill wells.

LIMESTONE UNIT

Bedding and lithology

The term "limestone unit" in this report is applied to a sequence of limestone and dolomite overlying the Camillus Shale. The limestone unit includes the Bertie Limestone at the base, the Akron Dolomite, and the Onondaga Limestone at the top. The lithology and thickness of these units are shown in figure 7. The Bertie Limestone and the Akron Dolomite are Silurian in age and are separated from the overlying Onondaga Limestone of Devonian age by an unconformity or erosional contact.

The Bertie Limestone is mainly dolomite and dolomitic limestone but contains interbedded shale particularly in the thin-bedded lower part of the formation. The middle part is brown, massive dolomite, and the upper part is gray dolomite and shale whose beds are of variable thickness. The total thickness of the formation is about 55 feet (Buehler and Tesmer, 1963, p. 30-31).

The Akron Dolomite is composed of greenish-gray and buff dolomite beds varying from a few inches to about a foot in thickness. The upper contact of the Akron is erosional and is often marked by remnants of shallow stream channels. Thin lenses of sandy sediments lie in the bottoms of some channels. The thickness of the formation is generally between 7 and 9 feet (Buehler and Tesmer, 1963, p. 33-34).

-2	do.	do.		Drl			--								
258-813-1	do.	M. Loveland	--	Drl	11.7	3	--	Shale	900	8.1	6-26-63	--	--	A	
-2	do.	do.	--	Drl	11	6	--	do.	900	12.1	6-26-63	Sw	--	U	Anal, iron, temp 49.0

Well number	County	Owner	Year completed	Type of well	Depth of well (feet)	Diameter (inches)	Depth to bedrock (feet)	Water-bearing material	Altitude above sea level (feet)	Water level		Method of lift	Estimated pumpage or flow (gallons per day)	Use	Remarks
										Below land surface (feet)	Date				
258-815-1	Genesee	F. Peck	--	Drl	31	6	--	Shale	920	8.1	6-26-63	Sw	50	D	Anal, iron; temp 49.0, yield 12 gpm (r).
258-822-1	do.	E. Lewis	1964	Drl	41.6	6	41.6	Sand	870	9.1	8-19-64	Sw	400	Ag	Anal, H_2S; yield 11 gpm (r).
258-827-1	do.	E. Powenski	1952	Drl	36.5	6	a34	Limestone	835	31.3	8-19-64	Jet	250	D	H_2S; yield 7 gpm (r).
258-833-1	Erie	B. Fields	1960	Drl	62.6	6	a13	do.	775	p22.7	8-18-64	Sub	300	D	Anal.
258-837-1	do.	R. Bowman	1956	Drl	76.2	6	a22	do.	740	19.4	8-18-64	Jet	300	D	Do.
258-843-1	do.	W. Voss	--	Drl	62	8	--	Camillus Shale	615	Flow	--	--	5,000	A	Anal; H_2S; temp 50.8, 8-14-64; flows about 5 gpm at LS.
258-853-1	do.	Linde Div., Union Carbide Corp.	1944	Drl	r375	8	87	Camillus Shale and Lockport Dolomite	600	r,p115	1944	Tur	--	U	H_2S; drilled to 130-ft depth in 1943 and deepened in 1944; "black" water entering from Lockport Dolomite after deepening made well unusable; yield 3,000 gpm (r); pumping test, 1,090 gpm, dd 53 ft.
-2	do.	do.	1944	Drl	r375	8	86	do.	600	r,p82	1944	Tur	--	U	H_2S; drilled to 157-ft depth in 1943 and deepened in 1944, water obtained at 90 ft from a gypsiferous zone in Camillus Shale and "black" water at 312 ft from the Lockport Dolomite which was first penetrated at 288 ft; yield from upper water-bearing zone 90 gpm, dd 22 ft; lower zone was not tested.
258-855-1	do.	Dunlop Tire & Rubber Co.	1943	Drl	r137	12	69	Camillus Shale	590	p36	10-27-52	Tur	--	I	H_2S; pumping rate 1,000 gpm (r); pumping test 500 gpm, swl 36 ft, dd 17 ft; this well and well 258-855-2 yield a combined total of 600,000 gpd.
-2	do.	do.	1943	Drl	r139.7	--	71	do.	590	p54.3	7-16-64	Tur	--	I	H_2S; pumping rate about 1,000 gpm (r), pumping test 1,000 gpm, swl 36 ft, dd 26 ft; this well and well 258-855-1 yield a combined total of 600,000 gpd.
-3	do.	do.	1952	Drl	r120	--	--	do.	592	p39	10-27-52	Tur	--	I	H_2S; pumping test 1,500 gpm, swl 39 ft, dd 38 ft.
259-809-1	Genesee	O-AT-KA Milk Products Cooperative, Inc.	1963	Drl	r60	20, 16	--	Sand and gravel	890	r15	4-27-62	Tur	1,000,000	I	Anal; screen, 13 1/8-inch diameter, 10 ft of 60-slot, 10 ft of 125-slot, from 40-60 ft; pumping rate about 1,200 gpm (r); pumping test 600 gpm, swl 15 ft, dd 1.5 ft (r).
-2	do.	City of Batavia	1963	Drl	r69	16	--	do.	890	14.0	5- 8-63	Tur	--	PS	Anal; H_2S; screen, 16-inch telescope, 125-slot, 52.9-69 ft; pumping rate 1,000 gpm.
-3	do.	do.	1962	Drl	54.1	8	--	do.	890	11.7	5- 6-63	--	--	T	Depth 61 ft (r); screen, 6-inch diameter, 100-slot, from 51-61 ft, pumping test 235 gpm, swl 18.3 ft, dd 0.5 ft (r), OW.
-4	do.	O-AT-KA Milk Products Cooperative, Inc.	1963	Drl	52.2	8	--	do.	890	p13.0	5- 7-63	--	--	T	
-5	do.	City of Batavia	1962	Drl	60.2	8	--	do.	890	13.7	5- 8-63	--	400,000	T	Depth 70 ft (r), screen, 6-inch diameter, 100-slot, from 60-70 ft, pumping test (r), 235-259 gpm, swl 18.5 ft, dd 0.5 ft after 24 hours discharge.
-6	do.	do.	1963	Drl	r75	16	--	do.	895	r14.2	5-27-63	Tur	--	PS	Screen, 16-inch diameter; test pumped at 1,000 gpm.
-7	do.	do.	1963	Drl	r60	8	--	do.	890	r13.7	2-15-62	--	400,000	X, T	H_2S (r); pumping test 200 gpm, swl 13.7 ft, dd 4.4 ft after 24 hours discharge.
259-817-1	do.	D. Beals	1960	Drl	r33	--	--	do.	865	r3	1960	Sw	100	D	Anal; H_2S; yield 4 gpm (r).
259-818-1	do.	Bitterman Bros., Inc.	--	Drl	18.3	12, 6	--	do.	--	6.6	9-17-63	Sw	--	C, D	
259-820-1	do.	A. Winters	1960	Drl	22.6	6	--	Limestone	880	7.4	9-17-63	Sw	500	C, D	
259-822-1	do.	J. Daley	1956	Drl	70	6	--	Sand	900	27.1	8-19-64	Jet	200	D	Anal; H_2S.

REFERENCE NO. 7

Uncontrolled Hazardous Waste Site Ranking System

A Users Manual
(HW-10)

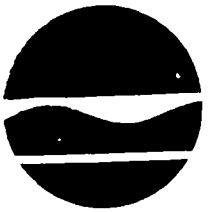
Originally Published in
the July 16, 1982, *Federal Register*

United States
Environmental Protection
Agency

1984

REFERENCE NO. 8

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



Peter A. A. Berle,
Commissioner

August 30, 1978

Jack Kehoe, Project Engineer
Spaulding Fibre Company Inc.
Industrial Plastics Division
310 Wheeler Street
Tonawanda, NY 14150

Re: Industrial Waste Disposal Area
Tonawanda (T) Erie County
Inspection Date: 8/24/78
Inspection Time: 12:30 p.m.

Dear Mr. Kehoe:

Representing the Solid Waste Unit of the Department of Environmental Conservation Robert Long made an inspection of all industrial refuse disposal areas located on the Spaulding Fibre Company property at the above noted date and time. Accompanying Mr. Long at the time of the inspection was Mr. R. Sweeney, Senior Sanitarian, Pure Waters Unit and yourself. As a result of that inspection, the following industrial waste problems were identified:

1. Dumping in an open trench on thesite were several plastic bags containing asbestos and glass waste along with a quantity of zinc hydroxide and diatametous earth. Surface water was also present in the bottom of the trench.

2. Adjacent to the open trench and stockpiles on the ground were 50-60 steel drums filled with scrap resin waste eg. epoxy. Several of these drums were leaking their contents onto the immediate area. Also it was noted that 700 steel drums containing a similar waste, had been buried in trenches nearby. These drums supposedly had been punctured and then covered over with five feet of soil material.

3. Located within 3-4' of the open trench was a large quantity of unidentified material which had been spread directly on the ground. No information was available for this material. You are to immediately inform this office as to the composition of this material.

4. A completed waste disposal area located at the end of the facility has been covered with soil and graded. As indicated, this area was used for the disposal of asbestos and glass waste. The trench method of operation has been used in this area. Soil erosion was evident in this area indicating a necessity for final grading and seeding of the area.

5. Located directly adjacent to the incinerator building were a number of large holding tanks used for waste oil storage. An excessive amount of oil and water spillage was evident in this area due to poor control measures. Although a soil berm exists around the perimeter of these tanks, much of the spillage has occurred outside this area. At the time of the inspection, waste waters were being discharged directly on the ground in close proximity to the oil storage area.

6. On the Gibson Street side of the facility an area was being used for the storage of empty steel drums. An excessive amount of leakage was found in this area, with much of the immeidate soils saturated with the liquids.

The remedial action necessary for the rectification of these conditions cannot be determined by this office until we receive a complete analysis of all wastes generated at the Spaulding Fibre Company Facility. Enclosed are an Application for Treatment or Disposal of an Industiral or Hazardous Waste Stream and a Leaching Potential Test Report which are to be completed and returned to this office within ten (10) days.

Until we receive these forms from your office and are able to analyze the contents, you are directed to cease all disposal of industrial wastes on the Spaulding Fibre Company premises. To do otherwise will be in violation of Part 360 of the Environmental Conservation Law.

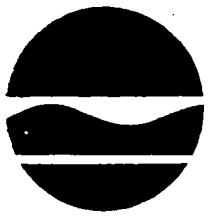
If you have any questions regarding the above, feel free tocontact me at 842-3837.

Very truly yours,

Robert J. Mitrey, P.E.
Regional Solid Waste Engineer

RJM:dd
Enclosure

New York State Department of Environmental Conservation
584 Delaware Avenue Buffalo, New York 14202



Peter A. A. Berle,
Commissioner

#23

September 11, 1978

Mr. Jack Kehoe, Project Engineer
Spaulding Fibre Company, Inc.
Industrial Plastics Division
310 Wheeler Street
Tonawanda, New York 14150

Dear Mr. Kehoe:

Sapulding Fibre Industrial Disposal Area

This is to confirm the meeting held on Sept. 6 as referenced above between you and the writer. The following was discussed regarding your industrial wastes:

1. There is presently a 85'x85'x4' deep concrete pit that is being used for the deposit of zinc hydroxide. You are advised to inform this office as to the exact composition of this material and how long it will be stored in this facility. As you stated, you are looking into the possibility of financial recovery from this operation.

2. The second industrial waste discussed was the disposal of polyethylene bags containing 50% phenolic resins and 50% glass or asbestos. It was agreed that on or before September 27 you would forward to this office test results on the leachability of this material and also a permeability test on the soil to be used in the area of excavation. Previously this material was placed into two ply polyethylene bags and buried in clay pits to a depth of 15' with the top 3-5' covered with clay. Presently these bags are being stored in a warehouse awaiting approval from this Department for their final disposition.

3. The third industrial waste discussed was that of 700 drums containing certain chemicals (see attached letter) on an area of one half acre located on your industrial property. You were advised to initiate a sampling program to determine whether or not any of these chemicals are leaching into the groundwater. It was agreed that by September 20 you would submit a letter to this office outlining your sampling program. This is to include three monitoring wells if you are unable to determine the correct direction of flow of the groundwater. If the direction is known and can be proven, then only two wells will be necessary, one well upgradient of the disposal area and one well downgradient. On or before October 4, these wells are to be placed and the sampling program

to be begun. Sampling should be undertaken for phenols, antimony and TOC or COD.

Lastly, it was discussed that you would submit to this office the final disposition of any future burial of chemical wastes. You stated these barrels would be stored in another warehouse until you determine your final method of disposal which will possibly be hauled to a secure landburial.

Again, you were informed that you are not to bury any industrial waste on your property until permits have been received by this office.

If you have any questions on the above, please call this office at 716/842-3837.

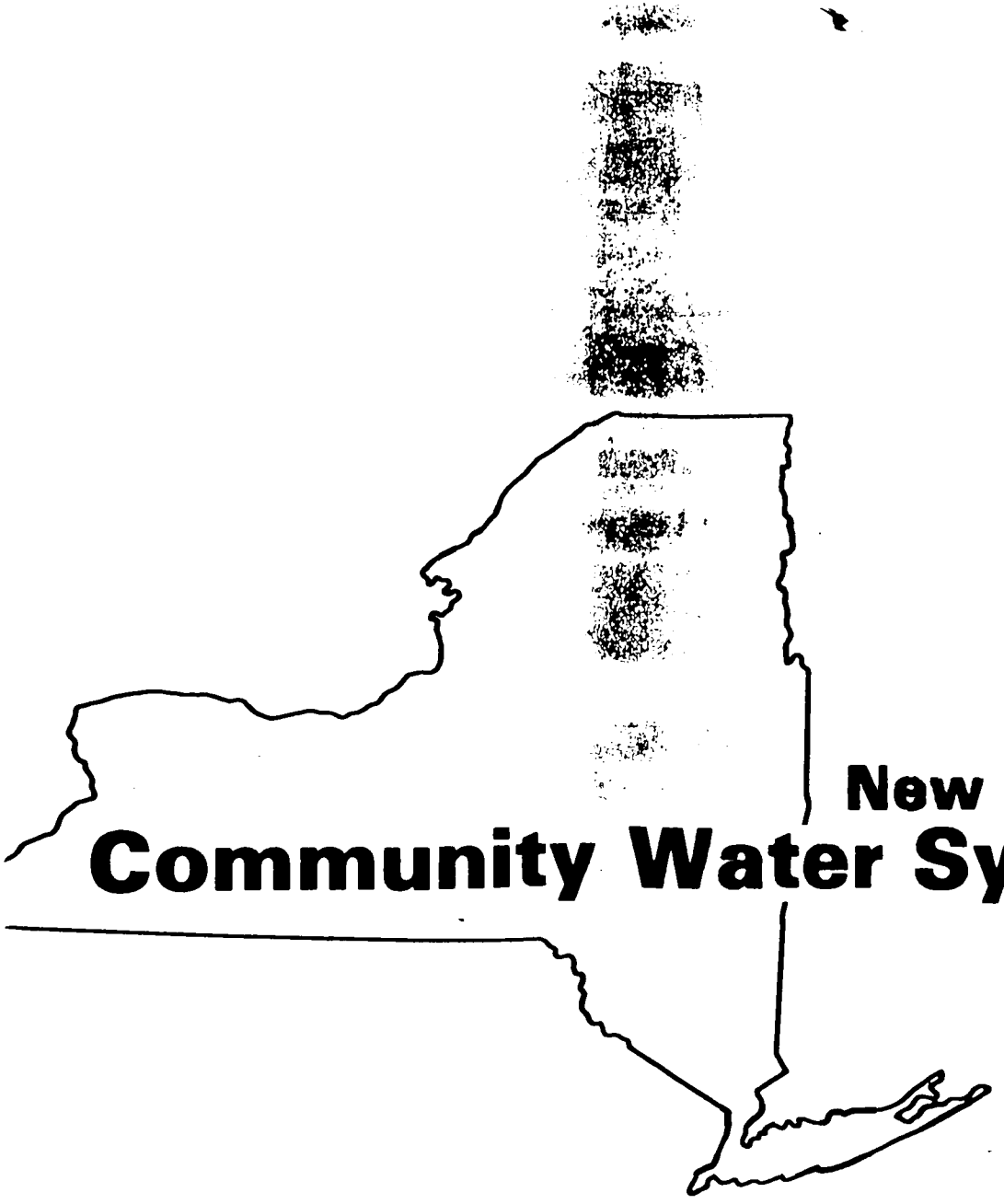
Very truly yours,

Robert J. Mitrey, P.E.
Regional Solid Waste Engineer

RJM:egb
Att.

cc: E.C.D.E.P.

REFERENCE NO. 9



New York State Atlas of Community Water System Sources 1982

NEW YORK STATE DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL PROTECTION
BUREAU OF PUBLIC WATER SUPPLY PROTECTION

ERIE COUNTY

ID NO	COMMUNITY WATER SYSTEM	POPULATION	SOURCE
Municipal Community			
	Akron Village (See No 1 Wyoming Co, Page 10).	3640	
1	Alden Village.	3460.	Wells
2	Angola Village.	8500.	Lake Erie
3	Buffalo City Division of Water.	357870.	Lake Erie
4	Caffee Water Company.	210.	Wells
5	Collins Water District #3.	704.	Wells
6	Collins Water Districts #1 and #2.	1384.	Wells
7	Erie County Water Authority (Sturgeon Point Intake).	375000.	Lake Erie
8	Erie County Water Authority (Van DeWater Intake).	NA.	Niagara River - East Branch
9	Grand Island Water District #2.	9390.	Niagara River
10	Holland Water District.	1670.	Wells
11	Lawtons Water Company.	138.	Wells
X 12	Lockport City (Niagara Co).		Niagara River - East Branch
13	Niagara County Water District (Niagara Co).		Niagara River - West Branch
14	Niagara Falls City (Niagara Co).		Niagara River - West Branch
15	North Collins Village.	1500.	Wells
X 16	North Tonawanda City (Niagara Co).		Niagara River - West Branch
17	Orchard Park Village.	3671.	Pipe Creek Reservoir
18	Springville Village.	4169.	Wells
X 19	Tonawanda City.	18538.	Niagara River - East Branch
20	Tonawanda Water District #1.	91269.	Niagara River
21	Wanakah Water Company.	10750.	Lake Erie
Non Municipal Community			
22	Aurora Mobile Park.	125.	Wells
23	Bush Gardens Mobile Home Park.	270.	Wells
24	Circle B Trailer Court.	50.	Wells
25	Circle Court Mobile Park.	125.	Wells
26	Creekside Mobile Home Park.	120.	Wells
27	Donnelly's Mobile Home Court.	99.	Wells
28	Gowanda State Hospital.	NA.	Clear Lake
29	Hillside Estates.	160.	Wells
30	Hunters Creek Mobile Home Park.	150.	Wells
31	Knox Apartments.	NA.	Wells
32	Maple Grove Trailer Court.	72.	Wells
33	Millgrove Mobile Park.	100.	Wells
34	Perkins Trailer Park.	75.	Wells
35	Quarry Hill Estates.	400.	Wells
36	Springville Mobile Park.	114.	Wells
37	Springwood Mobile Village.	132.	Wells
38	Taylors Grove Trailer Park.	39.	Wells
39	Valley View Mobile Court.	42.	Wells
40	Villager Apartments.	NA.	Wells

NIAGARA COUNTY

ID NO	COMMUNITY WATER SYSTEM	POPULATION	SOURCE
Municipal Community			
	Lockport City (See No 12, Erie Co).	25000	
1	Middleport Village.	2000	Wells (Springs)
	Niagara County Water District (See No 13, Erie Co).	48	
2	Niagara Falls City (See also No 14 Erie Co).	77384	Niagara River - East Branch
	North Tonawanda City (See No 16 Erie Co).	36000	
Non-Municipal Community			
3	Country Estates Mobile Village.	28	Wells

LOCATION OF COMMUNITY WATER SYSTEM SOURCES-1982

NEW YORK STATE DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL PROTECTION
BUREAU OF PUBLIC WATER SUPPLY PROTECTION

ERIE and NIAGARA COUNTIES

REFERENCE NO. 10

NUS CORPORATION

CONTROL NO. | DATE | TIME

DISTRIBUTION NUS CORPORATION PROJECT FILES - SHOULDING FARE

BETWEEN: JOHN WHITTNEY | OF: ERIE COUNTY SOIL CONSERVATION SERVICE | PHONE: (716) 652-5400

AND: ALAN J CHEREPON NUS

DISCUSSION:

MR. WHITTNEY RETURNED MY CALL FROM LAST WEEK. I ASKED HIM IF THERE WERE ANY PRIME AGRICULTURAL OR AGRICULTURAL LAND IN USE WITHIN THE PAST 5 YEARS WITHIN 3 MILES OF TONAWANDA, FROM ROUGHLY THE CENTER OF TOWN. HE SAID NO, THERE WAS NO ACTIVE FARMING, EXCEPT FOR GARDENS AT HOMES, AND GOLF COURSES AS WELL BUT NO ACTIVE FARMING.

ACTION ITEMS:

REFERENCE NO. 11

NUS CORPORATION

TITLE: THREE MILE VICINITY MAP

SITE :

SPAULDING FIBRE CO.
TONAWANDA, N.Y.

DATE : 10/12/87

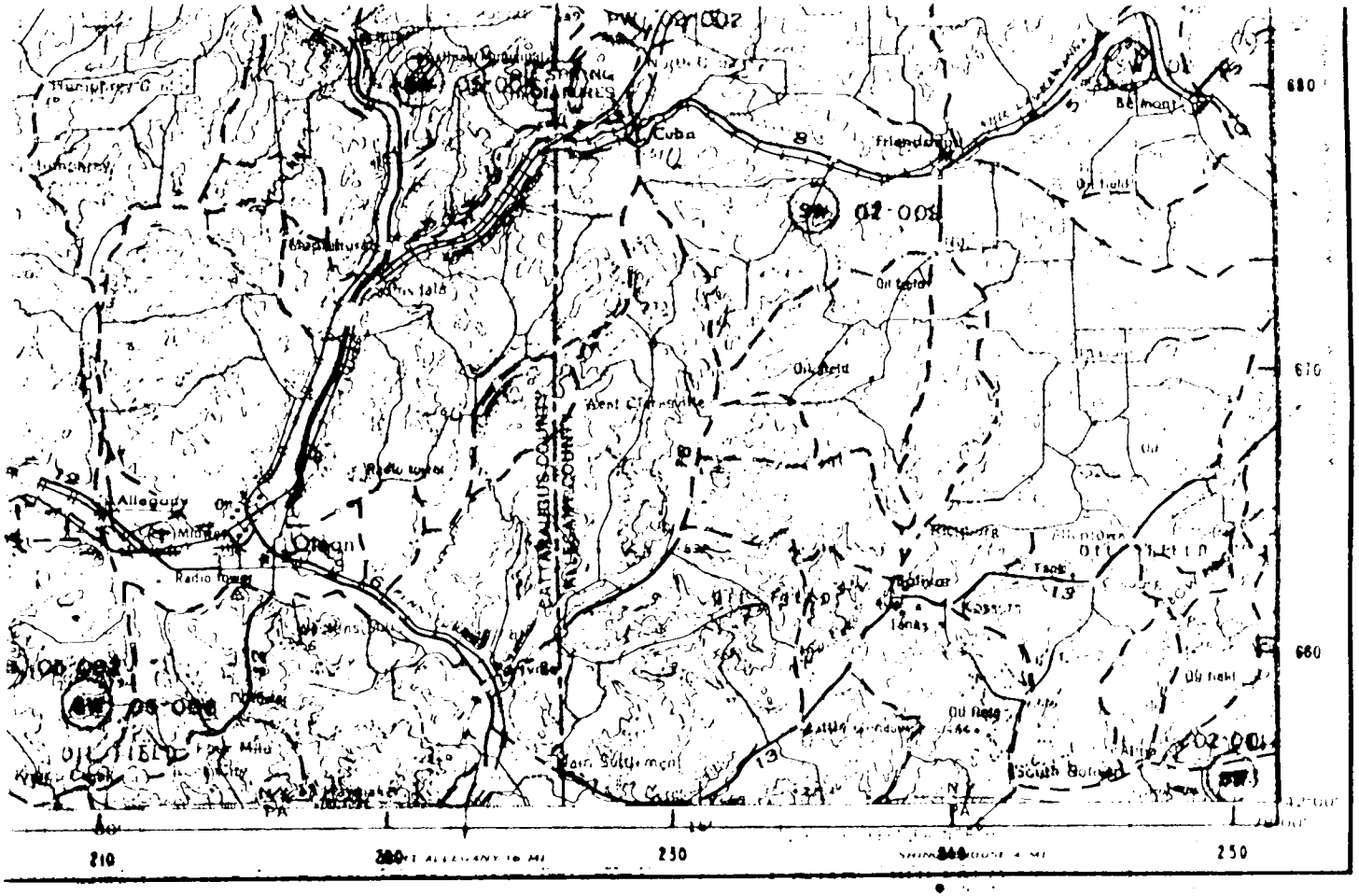
TDD : 02-8704-02

QUAD : TONAWANDA WEST, N.Y.

FIGURE NUMBER:

SCALE: 1"= 2000'

REFERENCE NO. 12



BUFFALO 1 2346

SIGNIFICANT HABITAT OVERLAY NO. 1 OF 2

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

DIVISION OF FISH AND WILDLIFE
BUREAU OF WILDLIFE

PREPARED FOR: SIGNIFICANT HABITAT UNIT
WILDLIFE RESOURCES CENTER
DELMAR, NEW YORK 12054
(518) 457-5782

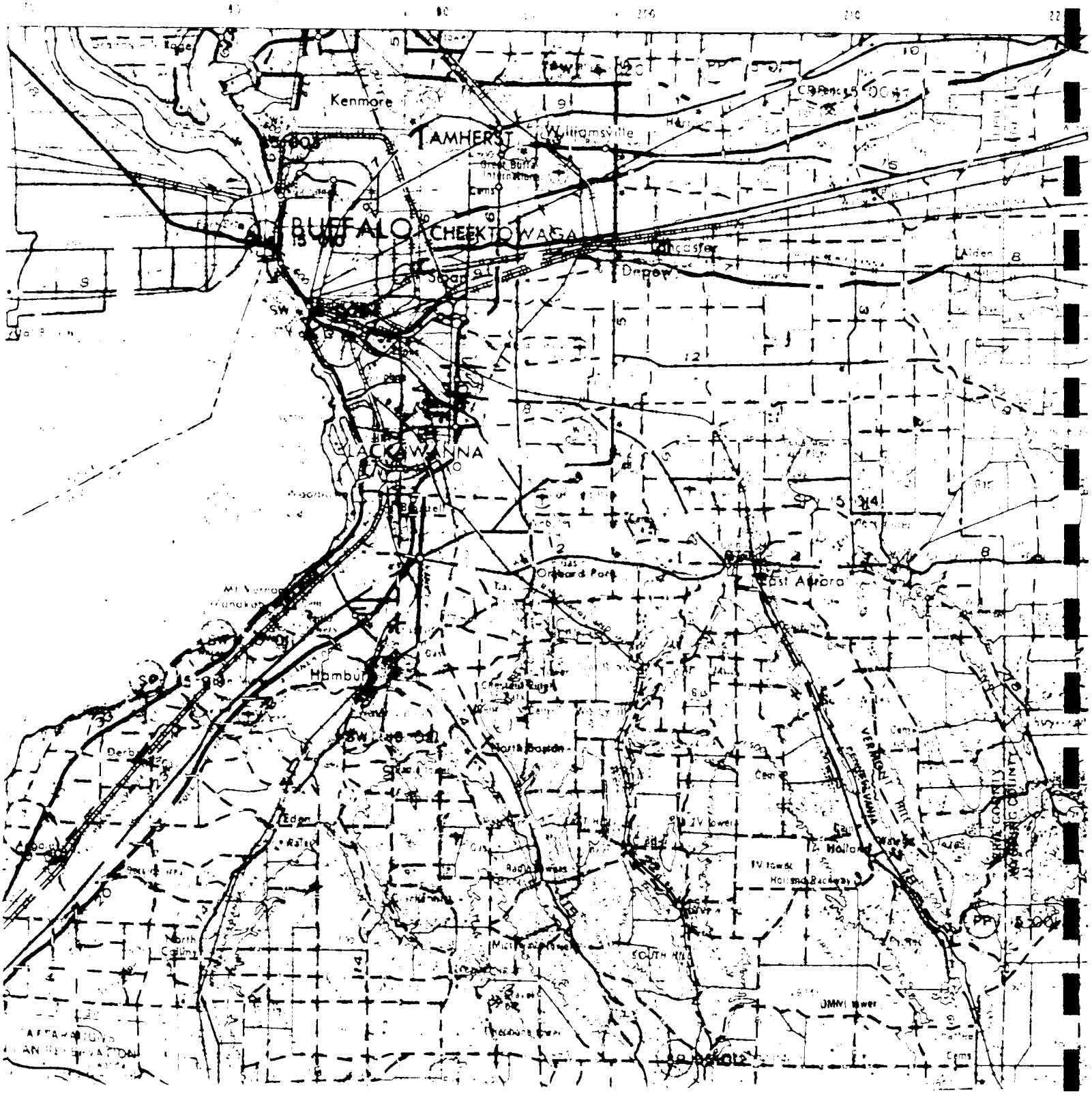
PREPARED BY: HABITAT INVENTORY UNIT

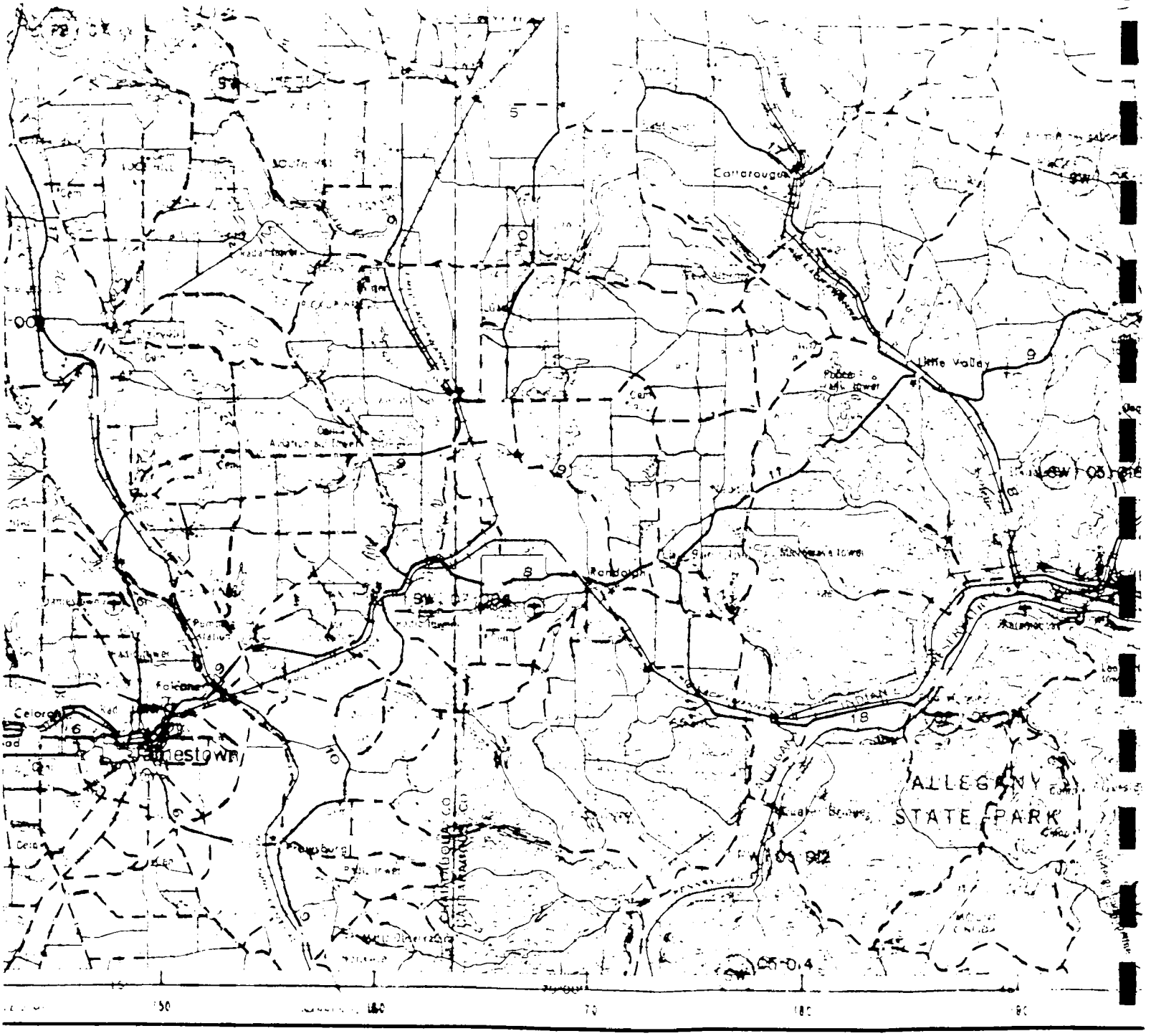
QUAD: BUFFALO

SCALE: 1:250,000 PA.; U. S.; ONT., CAN.

AUGUST, 1980

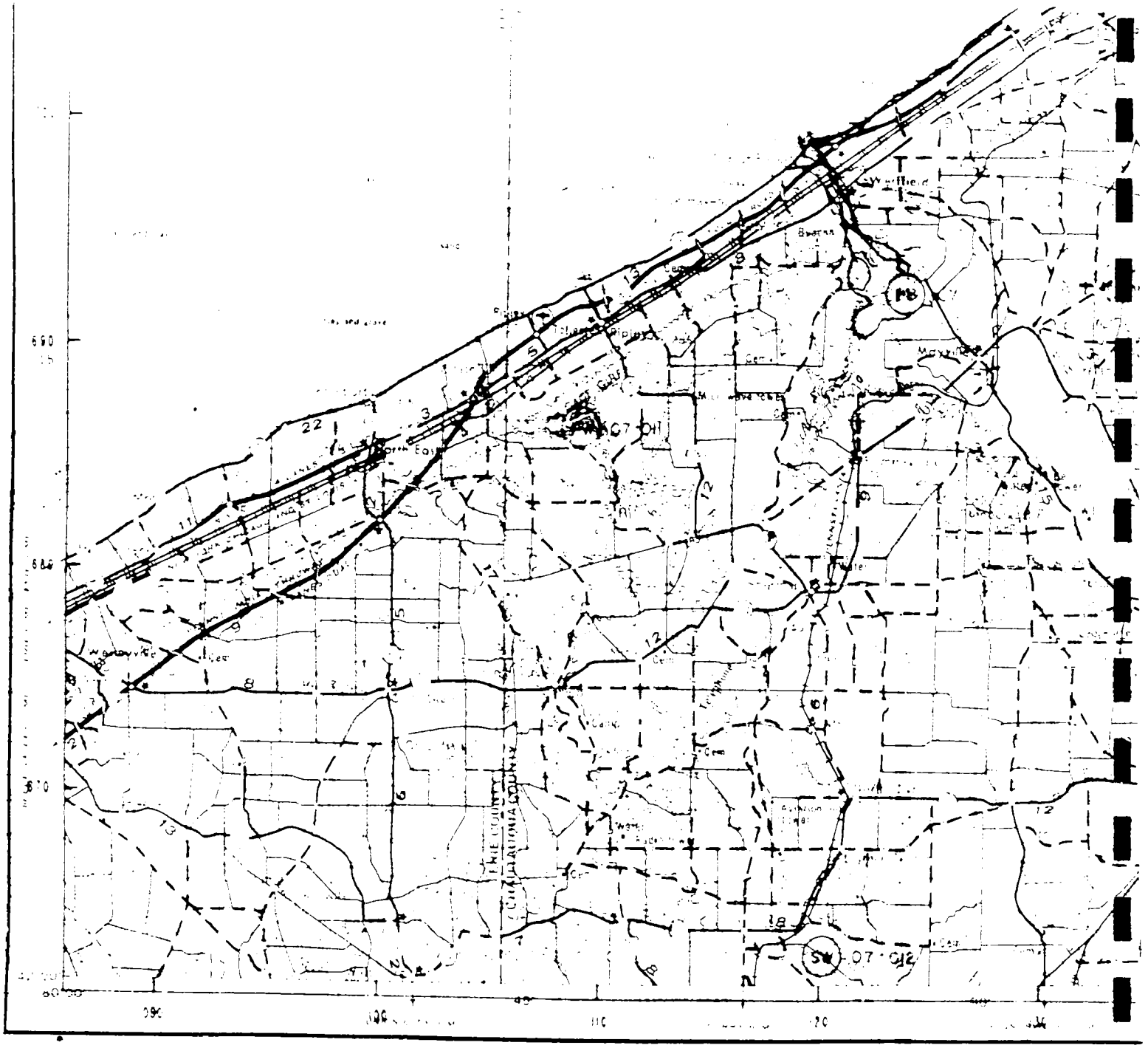
REVISED: 12/31/85


Kenmore
AMHERST
Williamsville
BUFFALO
CHEEKTOWAGA
Depew
Lancaster
Alden
LACKAWANNA
Orchard Park
East Aurora
Hamburg
VERMONT
SOUTH HILL



Scale 1:250,000

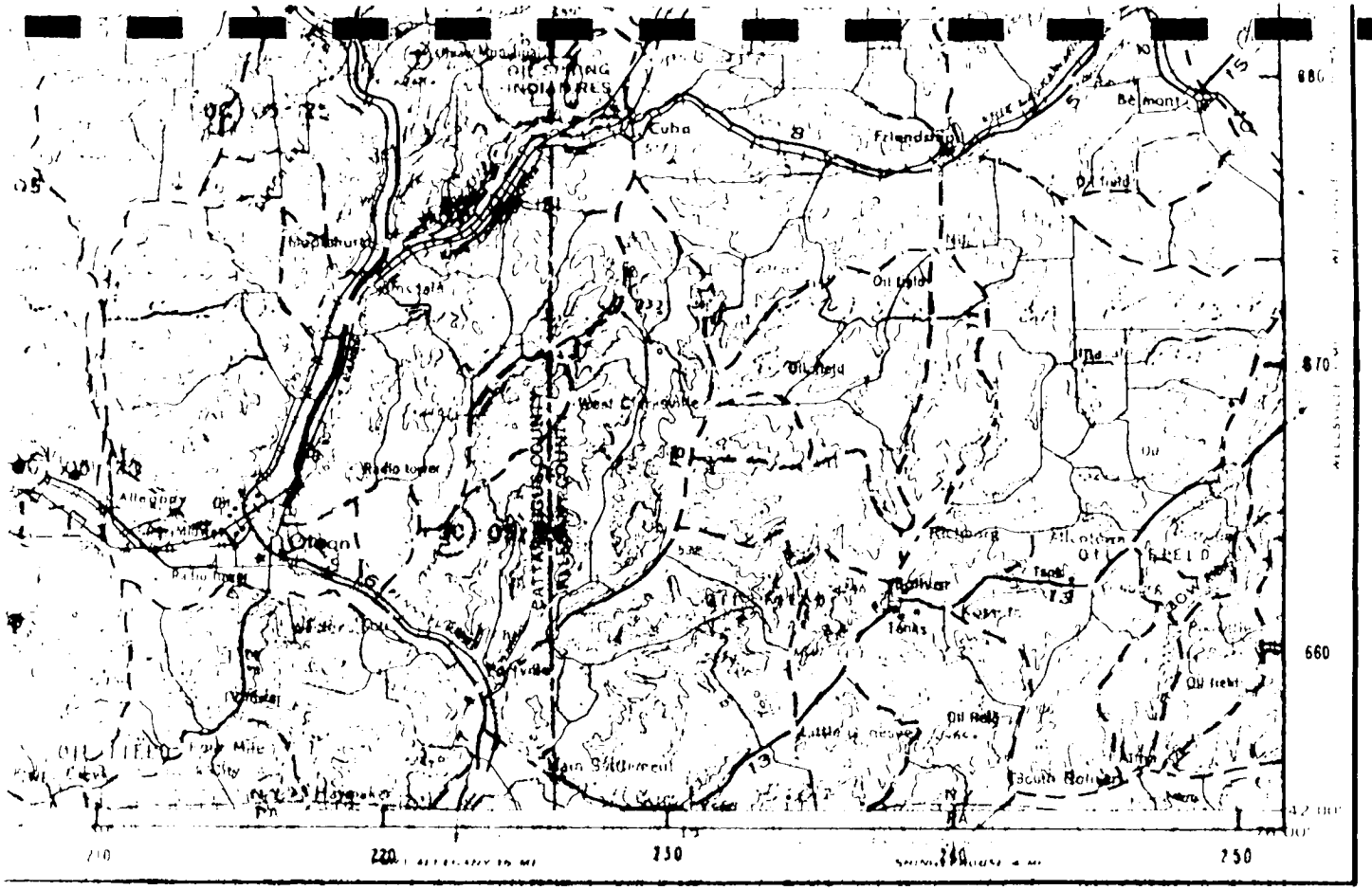
FOR SALE BY U.S. GEOLOGICAL SURVEY, RESTON, VIRGINIA 22092



KEY

- SW — SIGNIFICANT FOR WILDLIFE
- SP — SIGNIFICANT FOR PLANTS
- SB — SIGNIFICANT FOR WILDLIFE AND PLANTS
- PW — POTENTIALLY SIGNIFICANT FOR WILDLIFE
- PP — POTENTIALLY SIGNIFICANT FOR PLANTS
- PB — POTENTIALLY SIGNIFICANT FOR WILDLIFE AND PLANTS
- OT — OTHER e.g. UNIQUE GEOLOGICAL FORMATIONS

BOSTON
RICHMOND
EVANSTON
Hialeah



SIGNIFICANT HABITAT OVERLAY NO. 2 OF 2

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

DIVISION OF FISH AND WILDLIFE
BUREAU OF WILDLIFE

PREPARED FOR: SIGNIFICANT HABITAT UNIT
WILDLIFE RESOURCES CENTER
DELMAR, NEW YORK 12054
(518) 457-5782

PREPARED BY: HABITAT INVENTORY UNIT

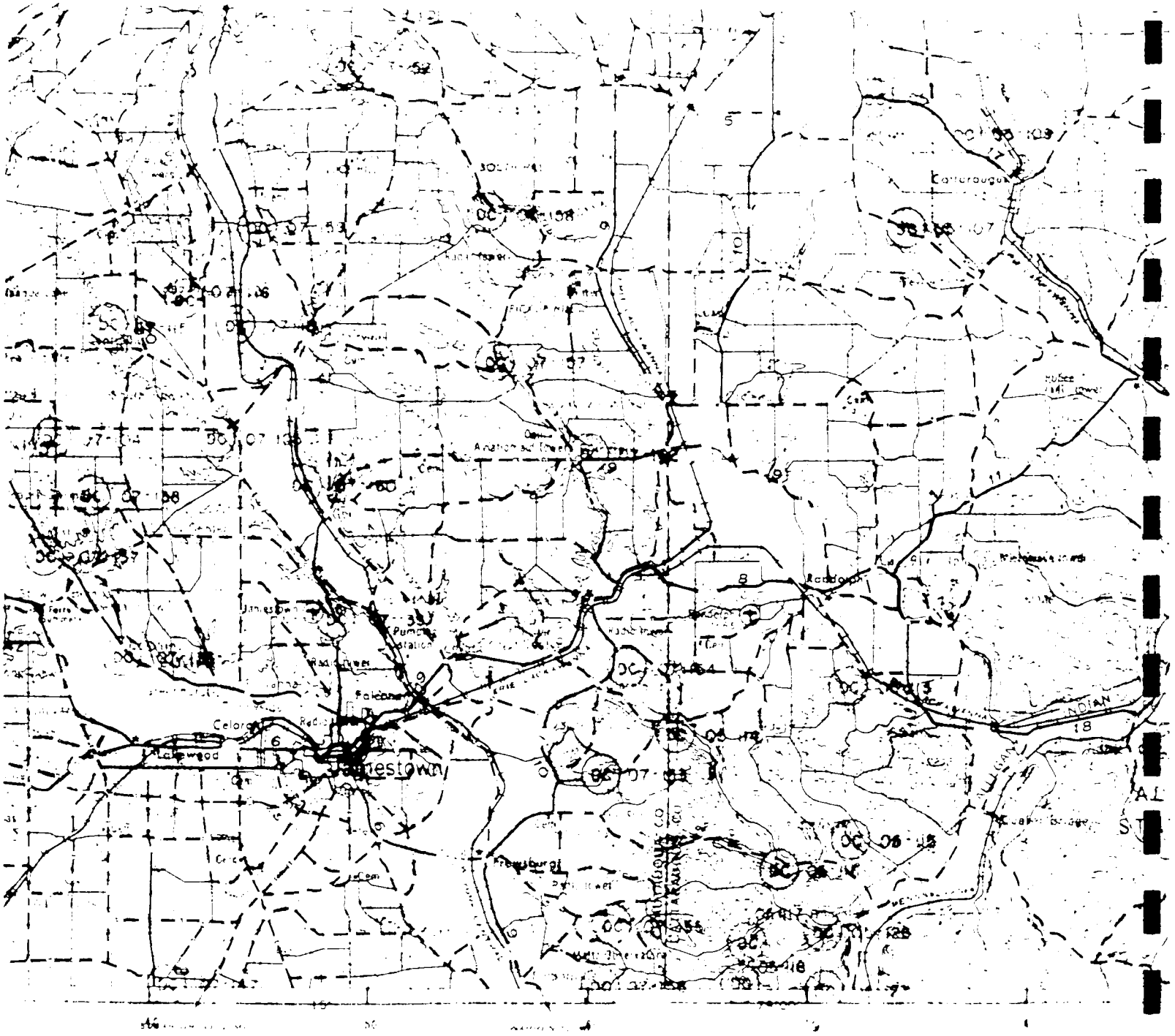
QUAD: BUFFALO

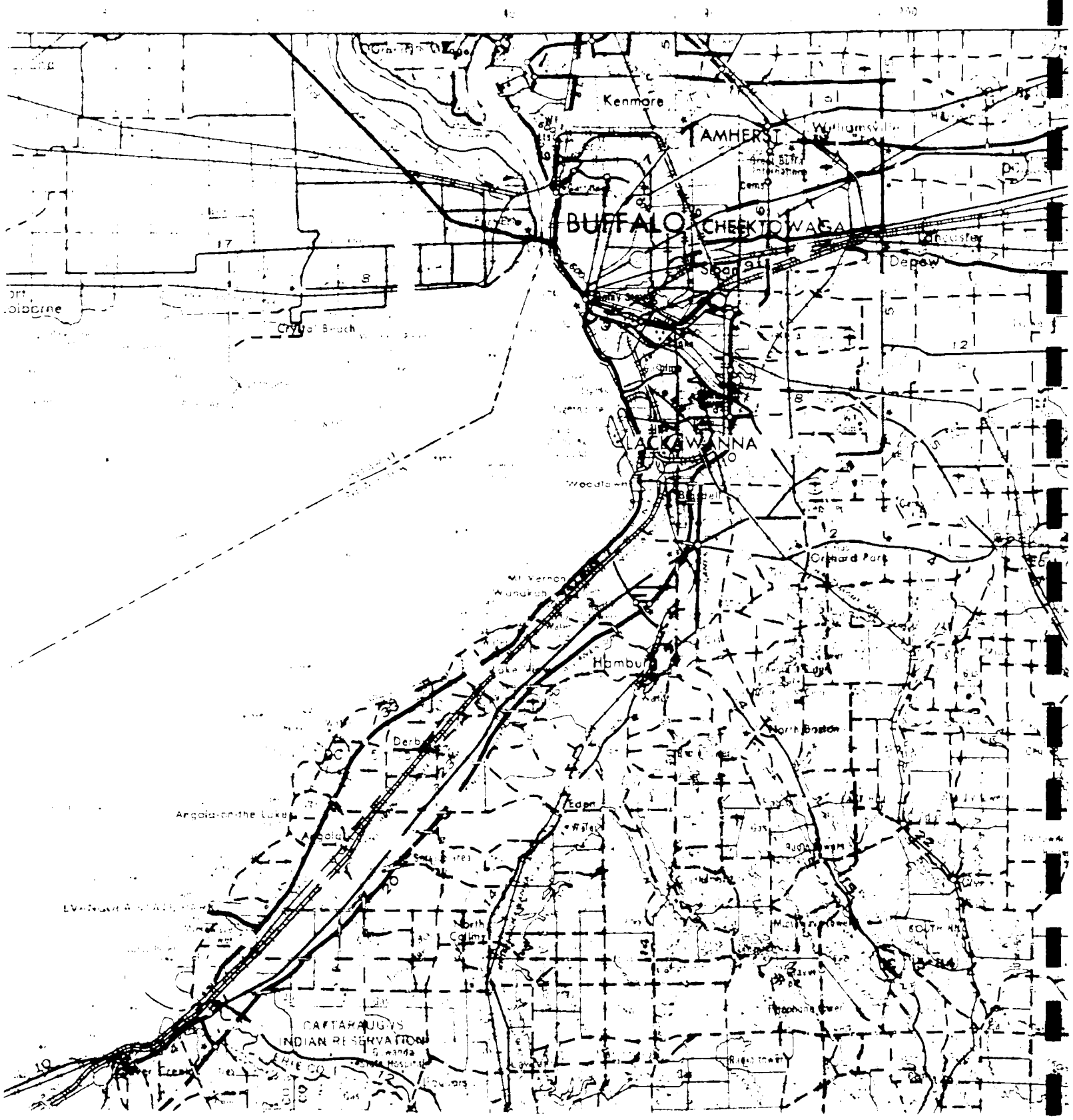
SCALE: 1:250,000 BUFFALO, N.Y.; PA.; U.S.; ONT.; CAN.

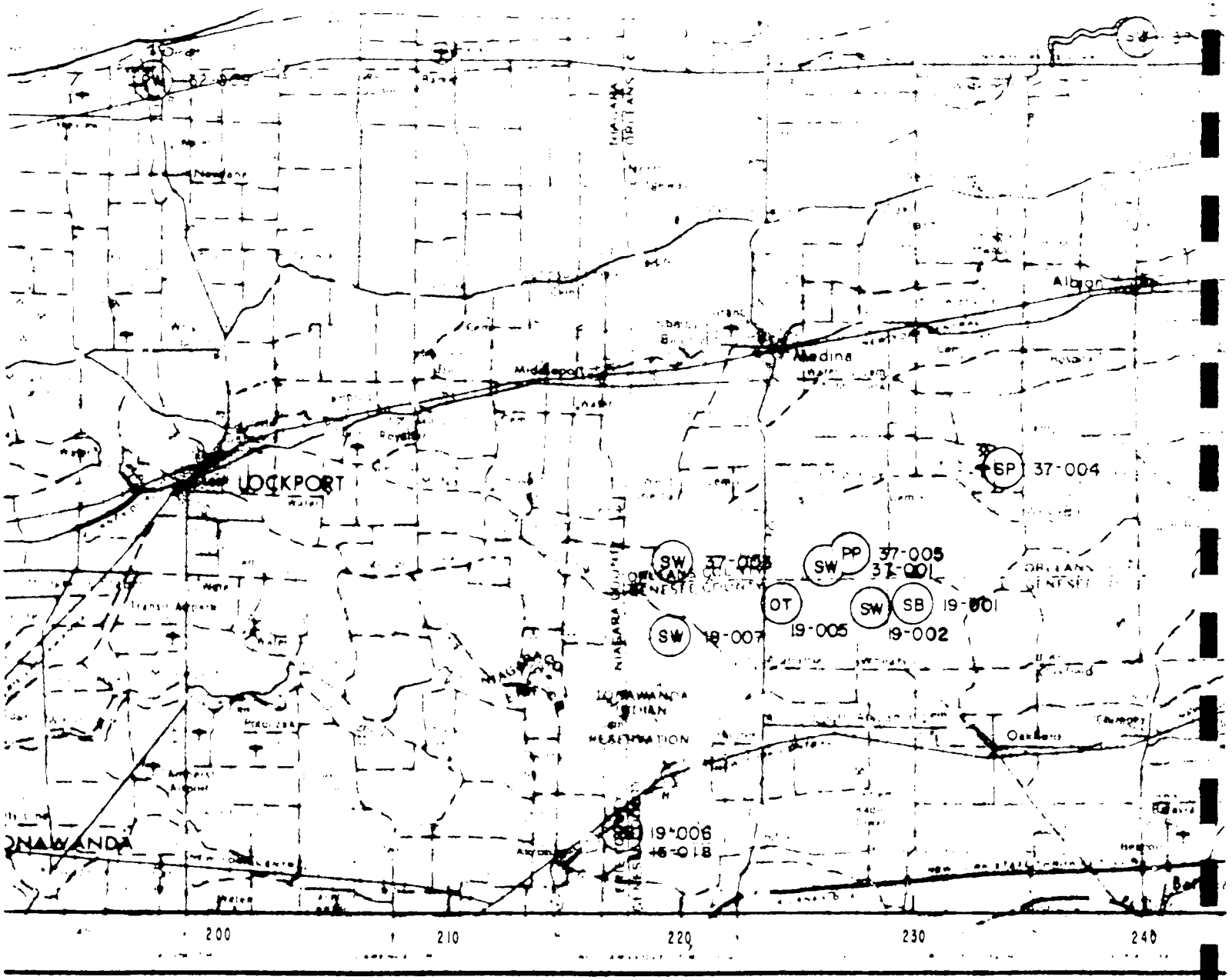
AUGUST, 1980

REVISED: 12/31/85

BUFFALO 1 2346


Jamestown
Scale 1:250,000
KEY


Kenmore
AMHERST
BUFFALO
CHEEKTOWAGA
Depew
LACKAWANNA
Orchard Park
Hamburg
Angola-on-the-Lake
CATTARAUGUS
INDIAN RESERVATION



SIGNIFICANT HABITAT OVERLAY NO. 1 OF 2

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

DIVISION OF FISH AND WILDLIFE
BUREAU OF WILDLIFE

PREPARED FOR: SIGNIFICANT HABITAT UNIT
WILDLIFE RESOURCES CENTER
DELMAR, NEW YORK 12054
(518) 457-5782

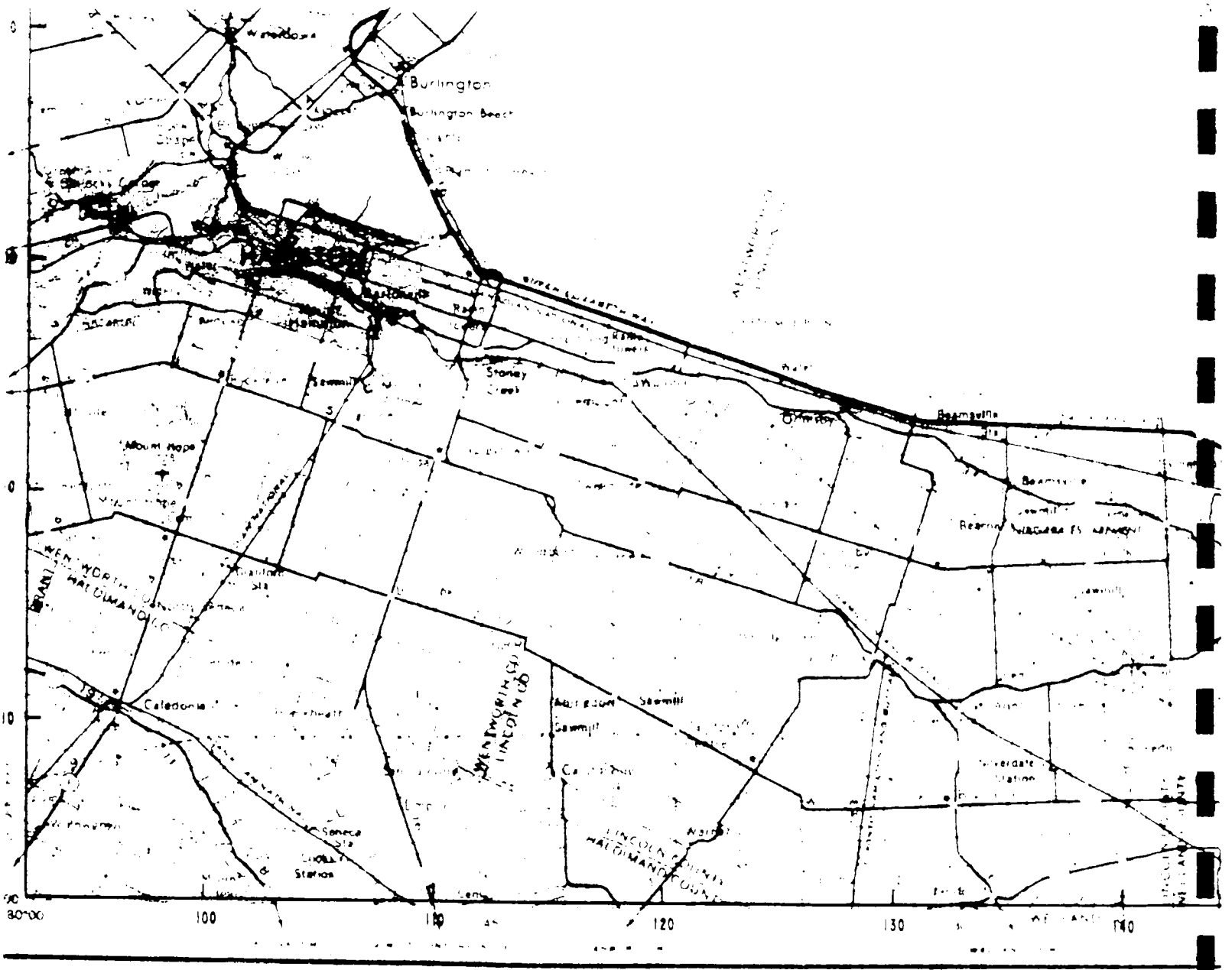
PREPARED BY: HABITAT INVENTORY UNIT

QUAD: TORONTO

SCALE: 1:250,000

AUGUST, 1980

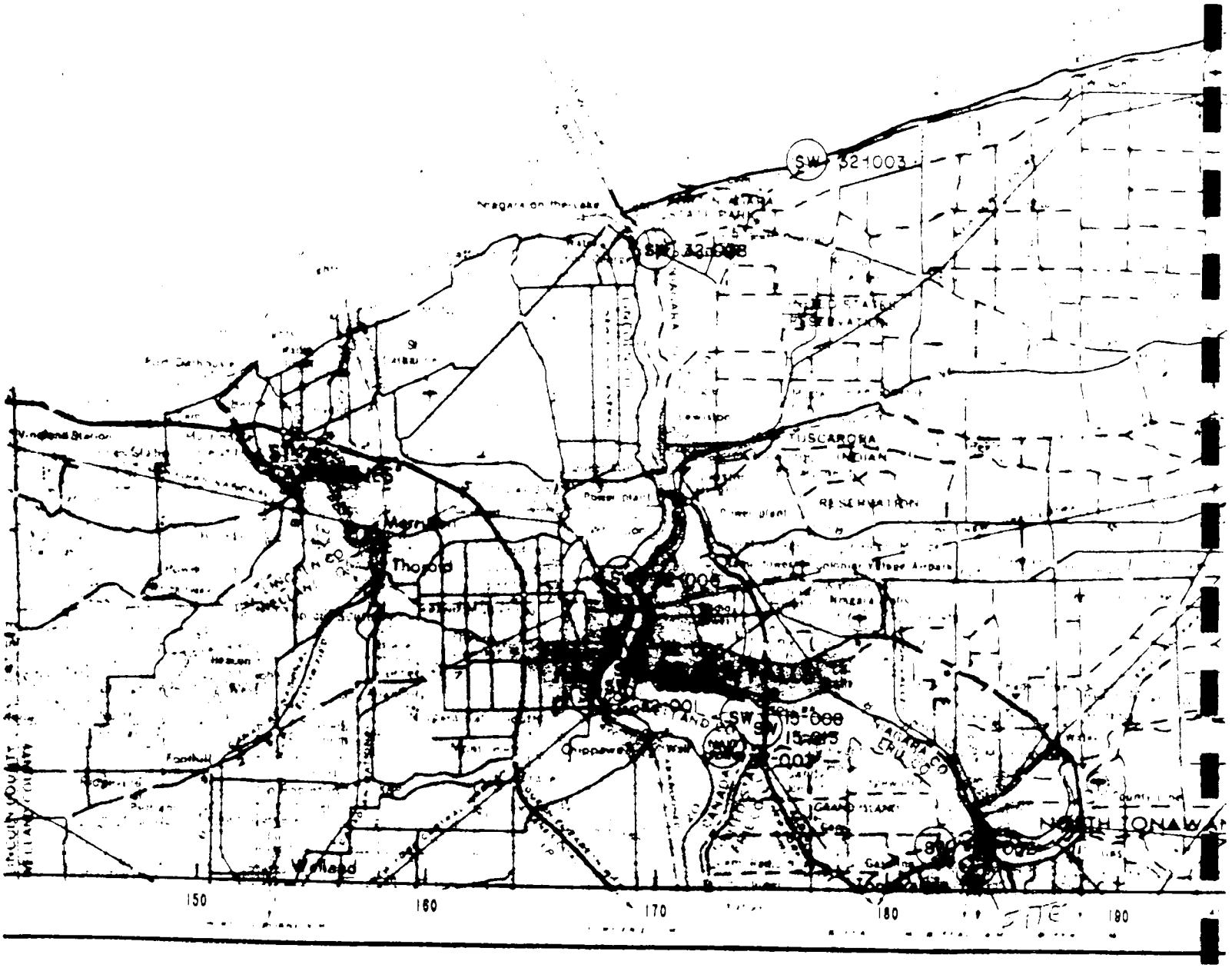
REVISED: 11/6/85

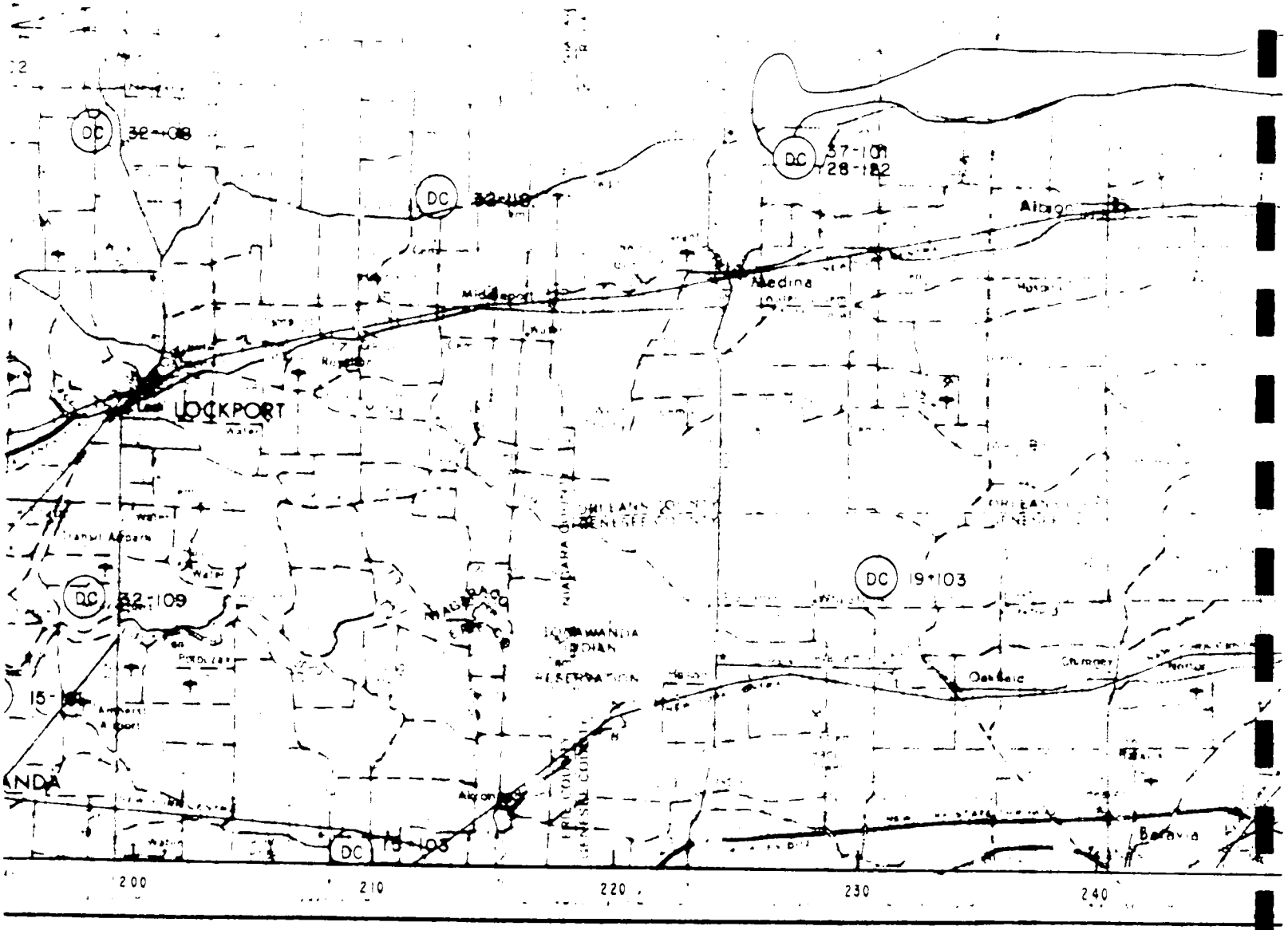


KEY

BOSTON
RICHMOND
EVANSTON

- (SW) SIGNIFICANT FOR WILDLIFE
- (SP) SIGNIFICANT FOR PLANTS
- (SB) SIGNIFICANT FOR WILDLIFE AND PLANTS
- (PW) POTENTIALLY SIGNIFICANT FOR WILDLIFE
- (PP) POTENTIALLY SIGNIFICANT FOR PLANTS
- (PB) POTENTIALLY SIGNIFICANT FOR WILDLIFE AND PLANTS
- (OT) OTHER (e.g. UNIQUE GEOLOGICAL FORMATIONS)


SW 321003
SW 321008
TUSCARORA INDIAN RESERVATION
Thorold
Welland
NORTH ONAWA
150
160
170
180
180



SIGNIFICANT HABITAT OVERLAY NO. 2 OF 2

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

DIVISION OF FISH AND WILDLIFE
BUREAU OF WILDLIFE

PREPARED FOR: SIGNIFICANT HABITAT UNIT
WILDLIFE RESOURCES CENTER
DELMAR, NEW YORK 12054
(518) 457-5782

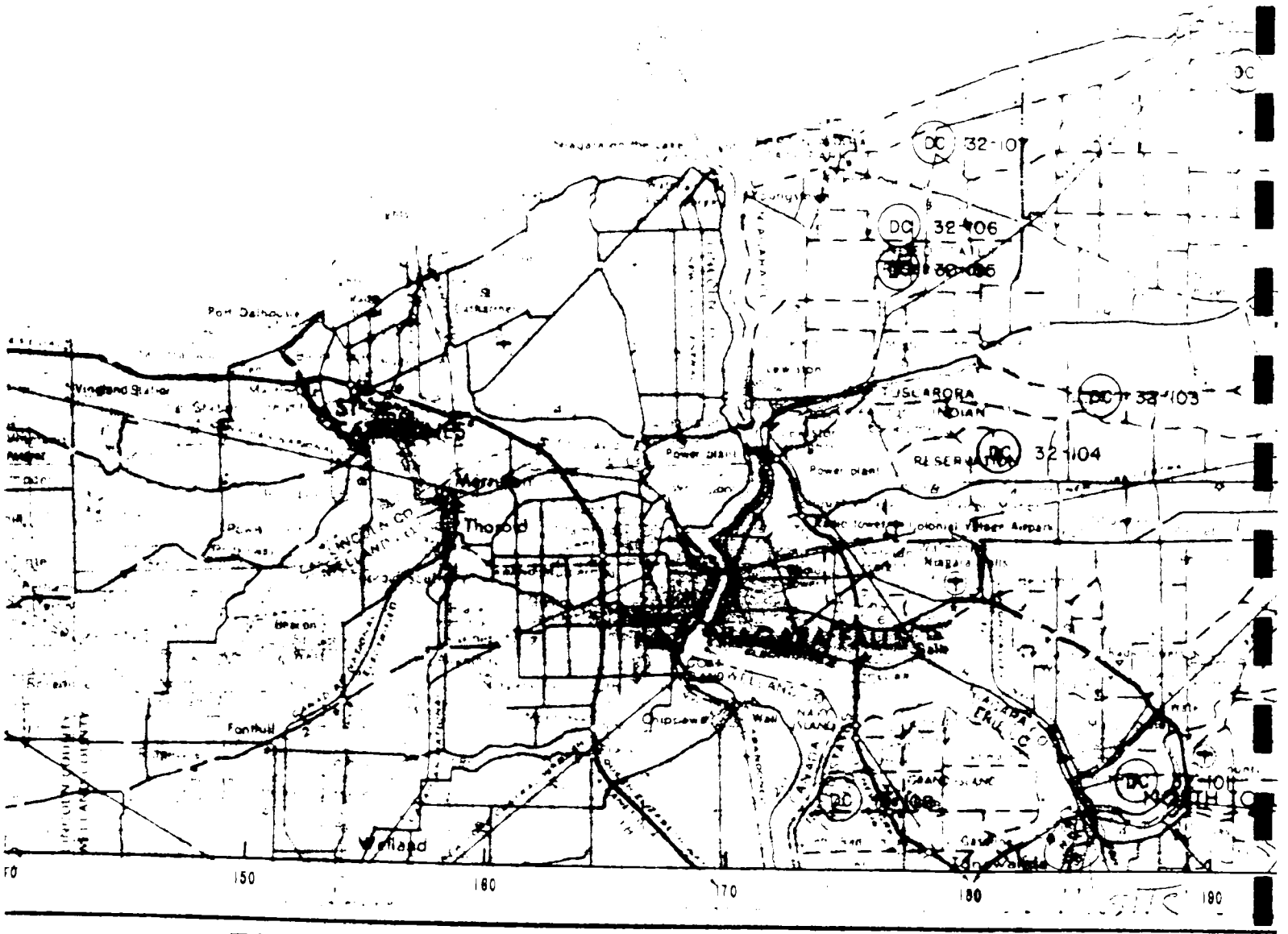
PREPARED BY: HABITAT INVENTORY UNIT

QUAD: TORONTO

SCALE: 1:250,000

AUGUST, 1980

REVISED: 11/6/85



KEY

(DC) DEER CONCENTRATION AREA IN USE

(DN) DEER CONCENTRATION AREA NOT IN USE

(DA) DEER CONCENTRATION AREA - AERIAL SURVEY

REFERENCE NO. 13

ENDANGERED AND THREATENED

WILDLIFE AND PLANTS

JANUARY 1, 1986

50 CFR 17.11 and 17.12

Department of the Interior
U.S. Fish and Wildlife Service

REFERENCE NO. 14

NUS CORPORATION 0012-C
02-8704-02

CONTROL NO: 02-8704-02 | DATE: 5/11/87 | TIME: 1130

DISTRIBUTION: NUS CORPORATION PROJECT FILES - SPAULDING FIBRE CO.

BETWEEN: NORTH TONAWANDA WATER DEPT. | OF: NORTH TONAWANDA N.Y. | PHONE: (716) 695-5531

AND: ALAN J. CHEREPON

NUS:

DISCUSSION:

How many people are serviced by the water intake in the Niagara River?

~ 34,000 people

ACTION ITEMS:

REFERENCE NO. 15

NUS CORPORATION 0013.C
02-3704.02

TELECON NOTE

CONTROL NO: 02-8704-02 | DATE: 5/11/87 | TIME: 1525

DISTRIBUTION: NUS CORPORATION PROJECT FILES - SAUGUDING FIBRE CO.

BETWEEN: DAVID HALEY | OF: LOCKPORT WATER DEPT. - Public Works. | PHONE: (716) 439-6600

AND: ALAN J. CHEREPON | NUS

DISCUSSION:

How many people are served by the water intake in the Niagara River?

~ 24,000 people.

ACTION ITEMS:

Tonawanda has 18 538

North Tonawanda has 34,000

Lockport has 24 000

76,538 people served by the Three (3) surface water intakes on the Niagara River within 3 miles downstream of the site.

NUS 067 REVISED 0581

REFERENCE NO. 16

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

IMPORTANT FARMLAND OF NEW YORK

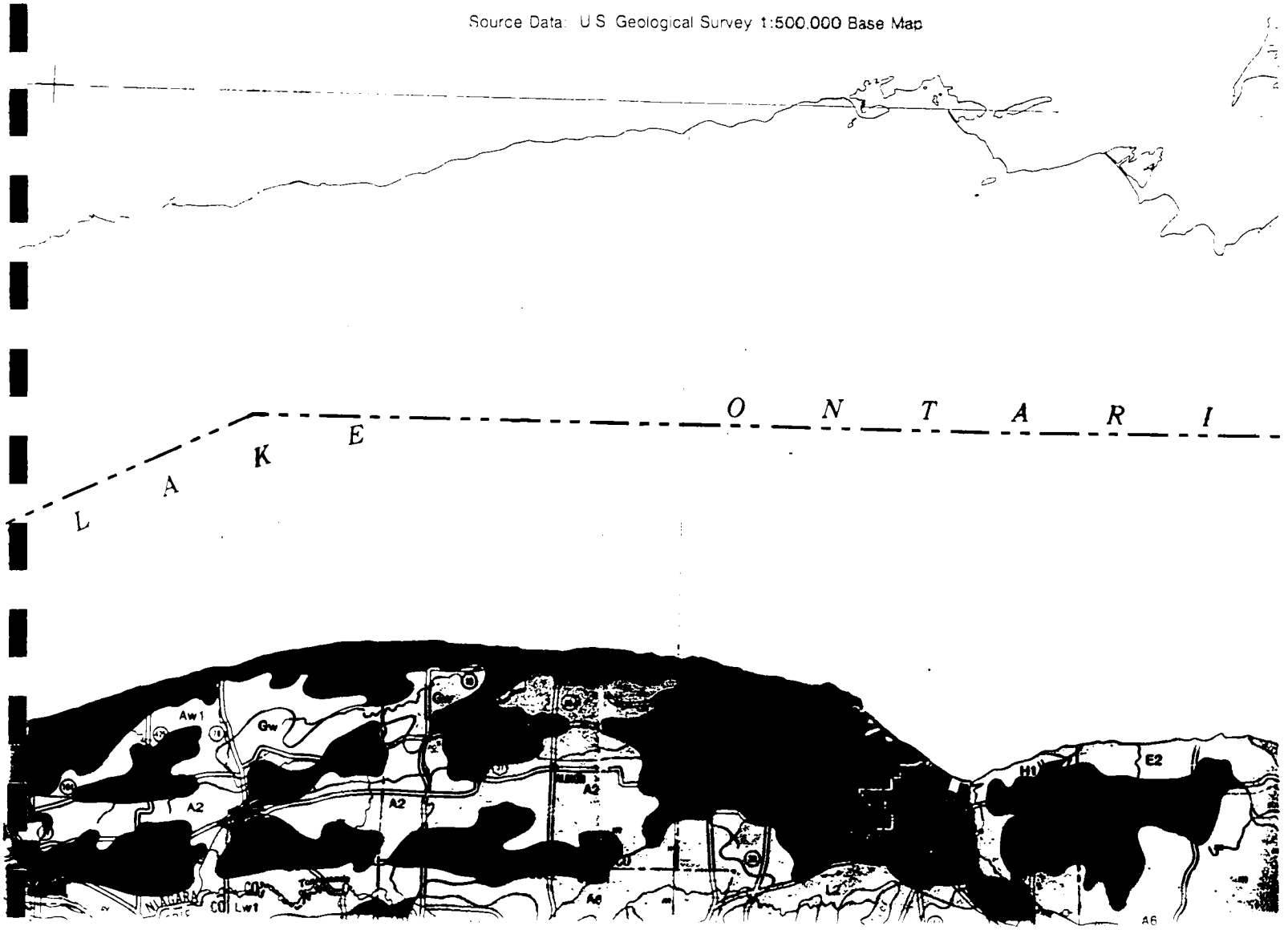
INTERPRETATIONS DERIVED FROM GENERAL SOIL MAP COMPILED BY CORNELL UNIVERSITY AGRICULTURAL EXPERIMENT STATION
CONSTRUCTED 1977 BY CARTOGRAPHIC DIVISION, SOIL CONSERVATION SERVICE, U.S. DEPARTMENT OF AGRICULTURE

AUGUST 1977

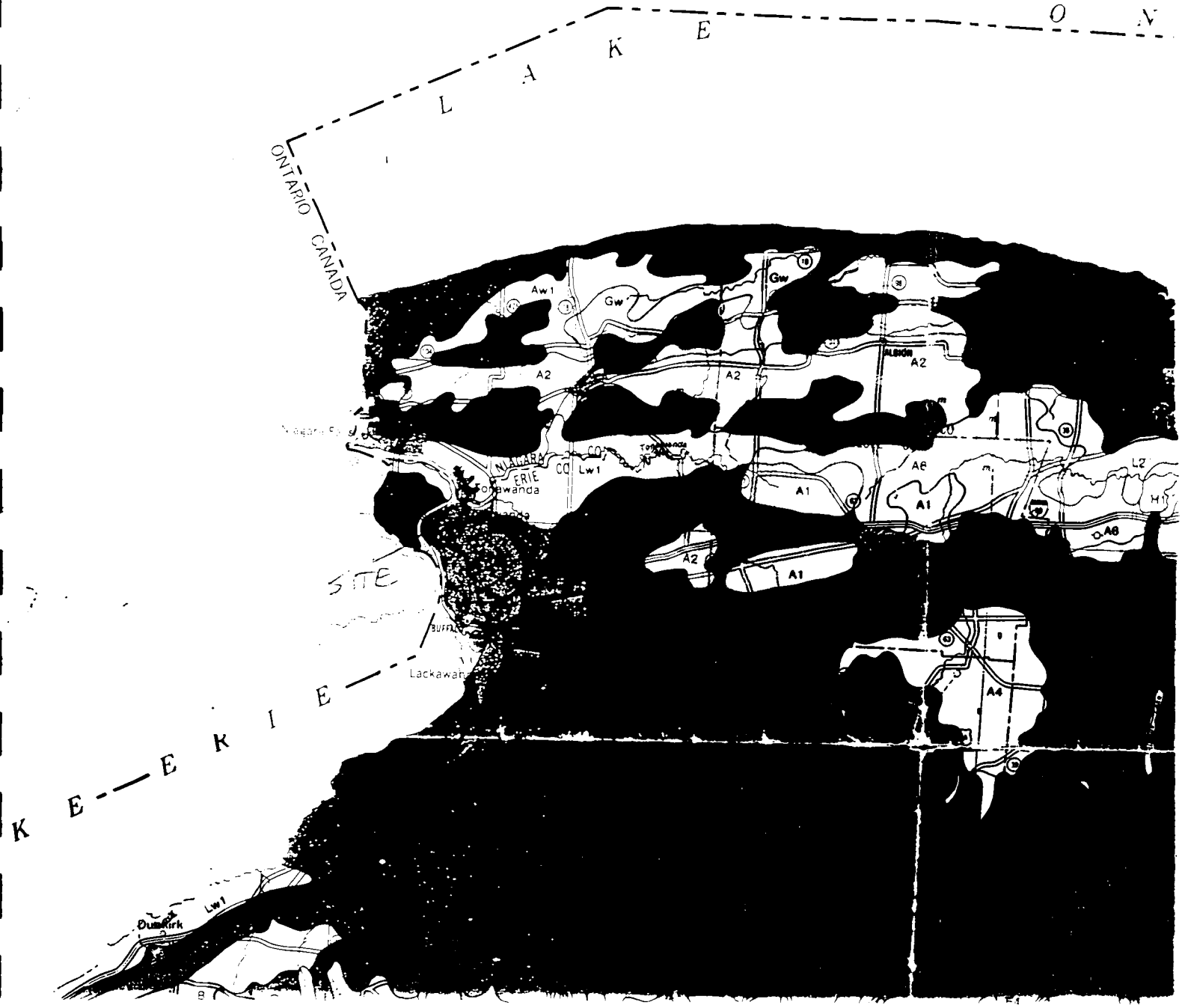
Scale 1: 750,000

1 Inch Equals Approximately 12 Miles

Source Data: U.S. Geological Survey 1:500,000 Base Map



Source Data: U.S. Geological Survey, 1:500,000



3. Lake and Marine Sediments

- [illegible] dominant

L1 Glenmer areas

L2 Schodack areas

LE Williamson-Ira areas

Hudson areas

Lw - *Ochraqualfs or Haplaquepts dominant*

Lw1 Canandaigua areas

Kingsbury areas

Niagara areas

Odessa and Rhinebeck areas

Swanton-Rhinebeck areas

Kingsbury-Hogansburg areas

Kingsbury-Rock outcrop areas

4. Organic Deposits

M - *Histosols dominant*

Carlisle and Palms areas

5. Miscellaneous Units

R - *Rock outcrop dominant*

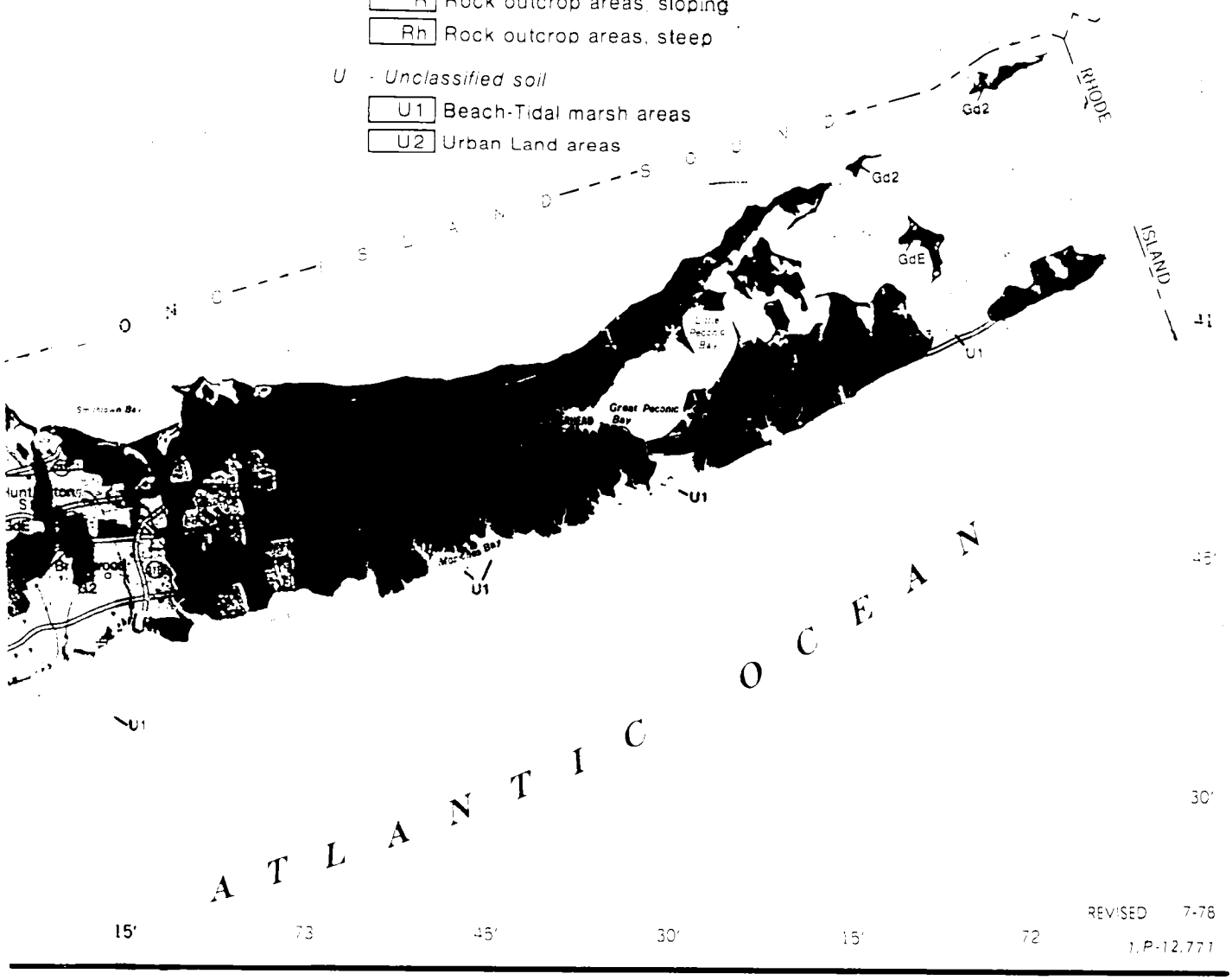
R Rock outcrop areas, sloping

Rh Rock outcrop areas, steep

U - *Unclassified soil*

U1 Beach-Tidal marsh areas

U2 Urban Land areas



REVISED 7-76

I.P-12.771

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

PRIME FARMLAND OF NEW YORK

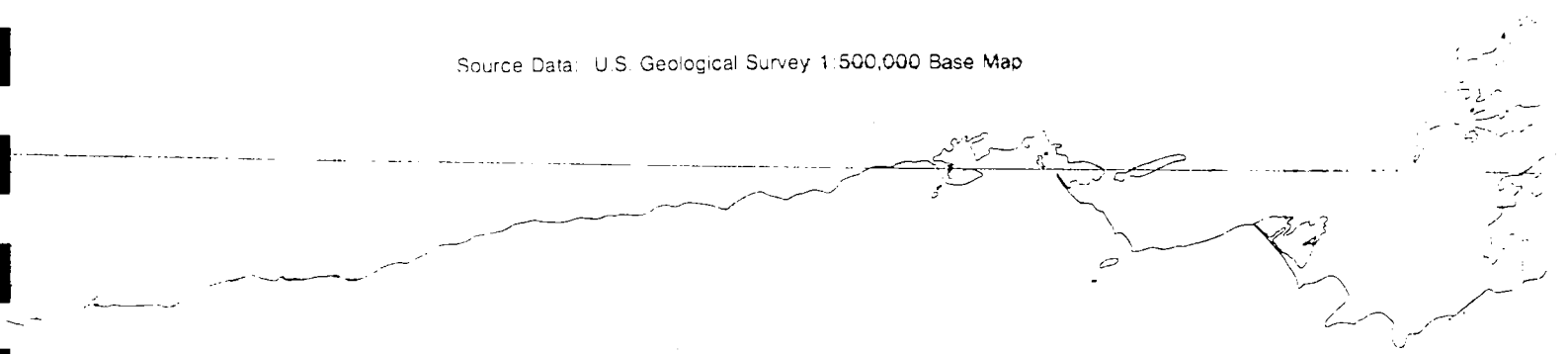
INTERPRETATIONS DERIVED FROM GENERAL SOIL MAP COMPILED BY CORNELL UNIVERSITY AGRICULTURAL EXPERIMENT STATION
CONSTRUCTED 1977 BY CARTOGRAPHIC DIVISION, SOIL CONSERVATION SERVICE, U.S. DEPARTMENT OF AGRICULTURE

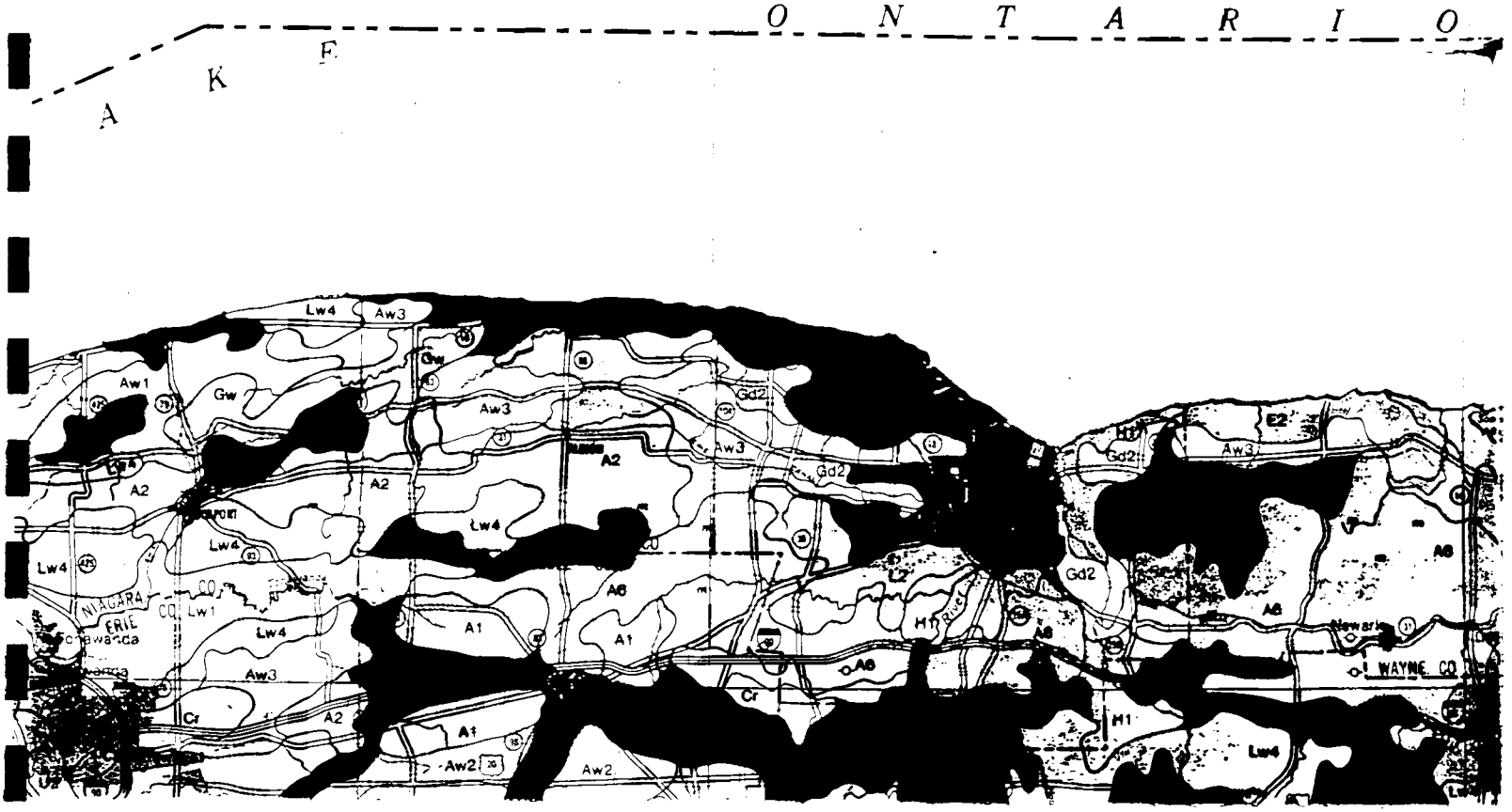
AUGUST 1979

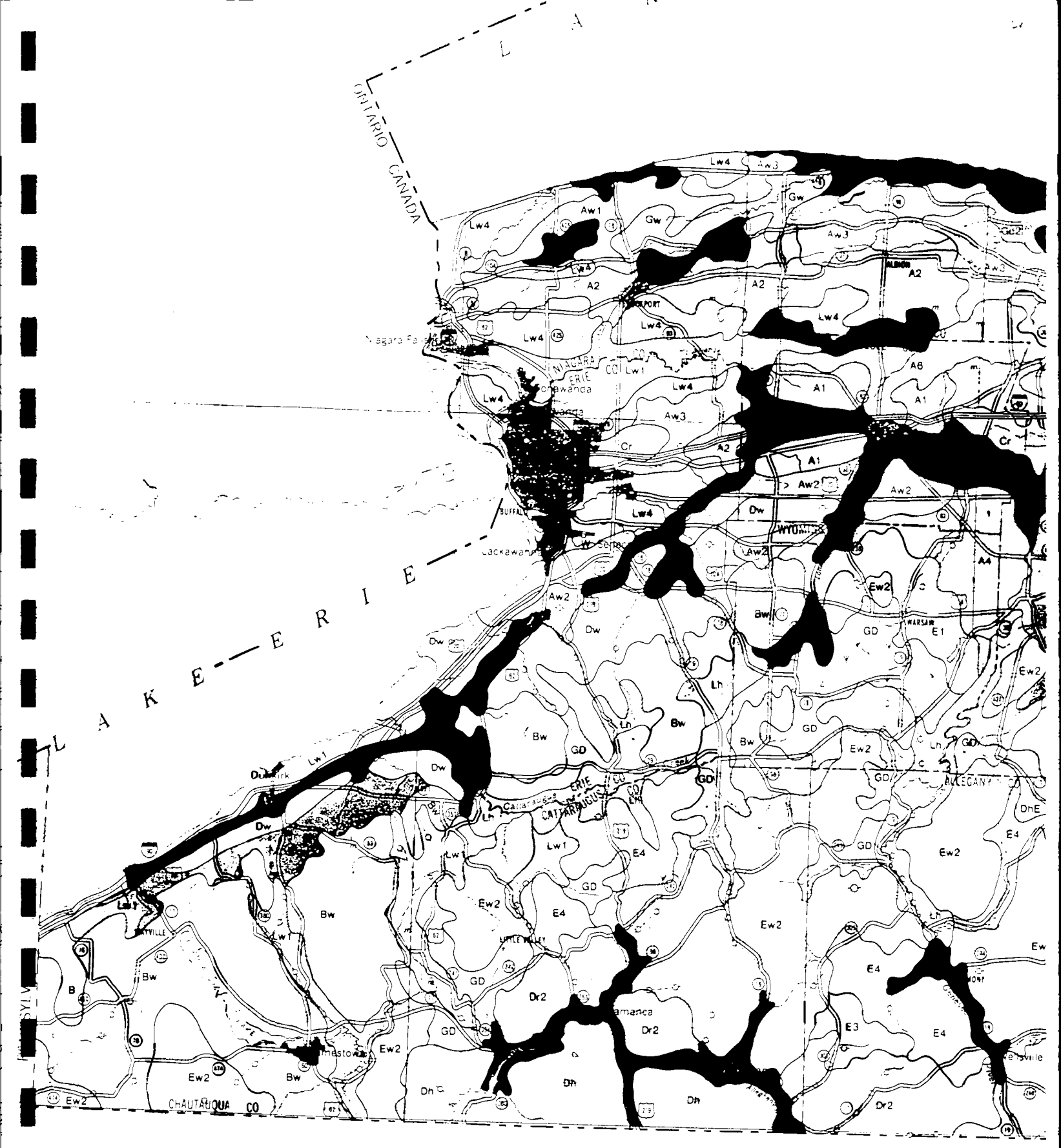
Scale 1:750,000

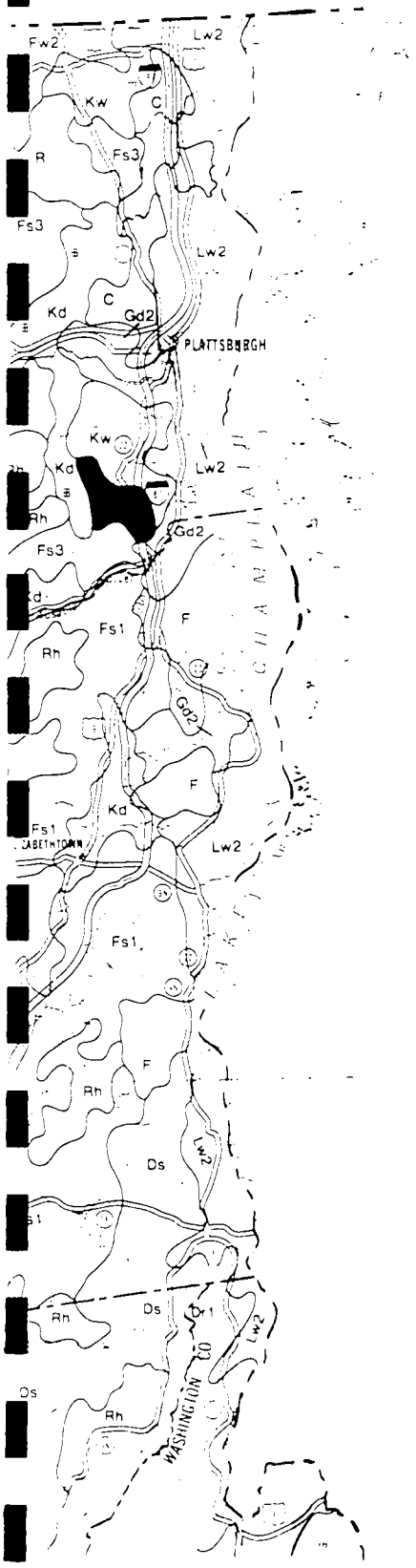
1 Inch Equals Approximately 12 Miles

Source Data: U.S. Geological Survey 1:500,000 Base Map






ONTARIO CANADA
LAKE ERIE
NIAGARA CO
ERIE CO
CHAUTAUQUA CO
CATTARAUGUS CO
ALLEGANY CO
WYOMING CO
Lw4
Aw3
Gw
Aw1
A2
Lw1
A1
Aw2
Dw
Cr
A4
Ew2
Bw
GD
Lh
E1
E4
DhE
Dr2
Dh
E3



LEGEND

Map Symbol — Name

1. **Glacial Till**

A · *Hapludalfs dominant*

- A1 Cazenovia and Mohawk areas
- A2 Hilton areas
- Honeoye areas
- A4 Lansing areas
- Madrid areas
- A6 Ontario areas

Aw · *Ochraqualfs dominant*

- Aw1 Appleton areas
- Aw2 Burdett and Darien areas
- Aw3 Ovid areas

B · *Fragiudalfs dominant*

- B Langford areas

Bw · *Fragiaqualfs dominant*

- Bw Erie areas

C · *Eutrochrepts dominant*

- C Nellis areas
- Cr Farmington areas
- CLw1 Hogansburg-Swanton areas
- CLw2 Pittsfield-Rhinebeck areas

D · *Dystrochrepts dominant*

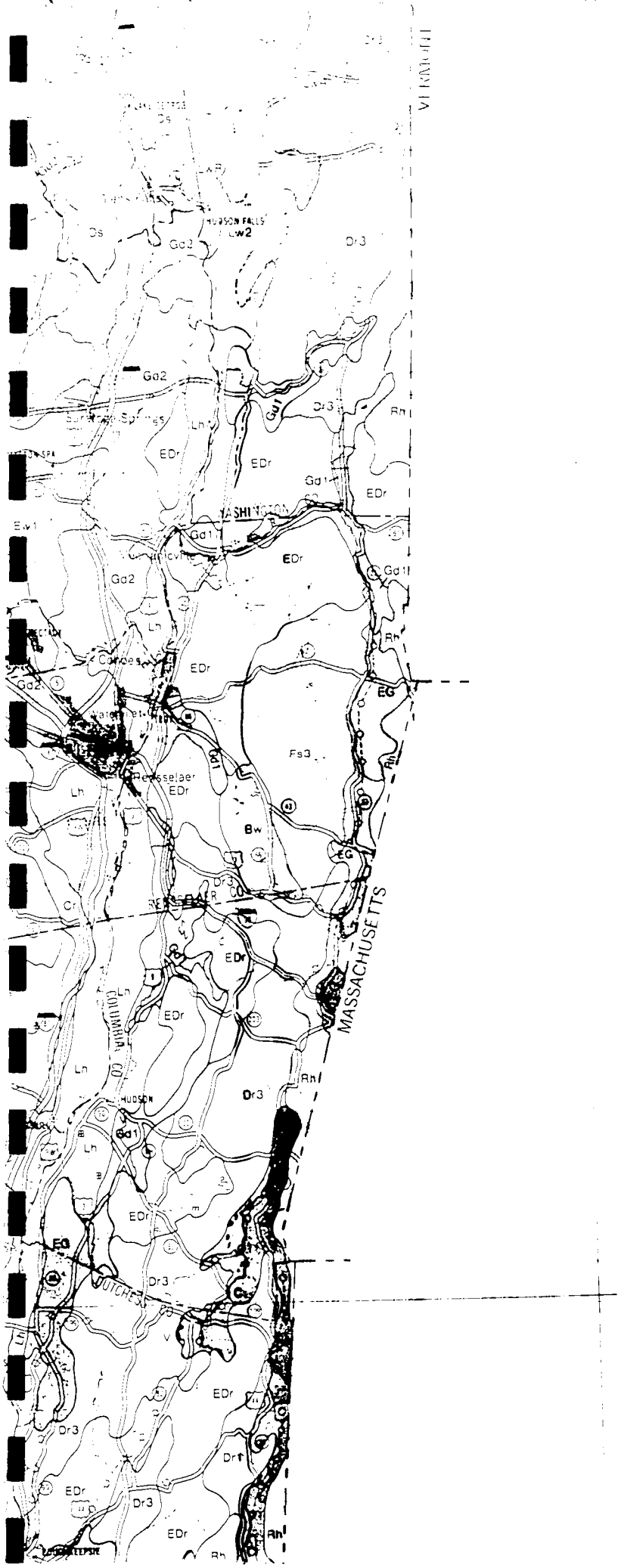
- D Charlton areas
- Dh Muskingum areas
- DhE Lordstown-Mardin areas
- Dr1 Hollis areas
- Dr2 Lordstown and Oquaga areas
- Dr3 Nassau areas
- Ds Charlton, Paxton, and Essex areas, very stony

Dw · *Haplaquepts dominant*

- Dw Fremont and Hornell areas

E · *Fragiochrepts dominant*

- E1 Bath areas
- E2 Ira areas



E2 areas
E3 Lackawanna areas
E4 Marsh areas
E5 Sodus areas
EDr Bernardston-Nassau areas
EG Bernardston-Hoosic areas
Es Lackawanna and Wurtsboro areas, very stony

Ew - Fragiaquepts dominant

Ew1 Mosherville areas
Ew2 Volusia areas

F - Haplorthods, Fragiorthods, or very stony Fragiaquods d

F Empeyville areas
Fs1 Becket, Berkshire, and Potsdam areas, very stony
Fs2 Westbury and Coveytown areas, very stony
Fs3 Worth areas, very stony

Fw - Fragiaquods and frigid Fragiaquepts dominant

Fw1 Camroden areas
Fw2 Westbury and Brayton areas

2. Glacial Outwash and Deltaic Sand

G - Dystrochrepts dominant

Chenango and Blasdell areas
Haven and Riverhead areas
GD Chenango-Valois and Howard-Madrid areas

Gd - Udipsamments, sandy skeletal Dystrochrepts or loamy skeletal Eutrochrepts dominant

Gd1 Alton and Hoosic areas
Gd2 Colonie, Plymouth and Windsor areas
GdE Plymouth-Montauk areas

Gw - Psammaquents or Haplaquepts dominant

Gw Minoa and Stafford areas

H - Hapludalfs dominant

Arkport areas
Howard areas
Palmyra areas

Kd - Haplorthods dominant

Kd Colton and Adams areas

Kw - Haplaquods dominant

Kw Naumburg areas

3. Lake and Marine Sediments

L - Hapludalfs or silty Fragiochrepts dominant

Collamer areas
Schoharie areas
Williamson-Ira areas
Lh Hudson areas

Lw - Ochraqualfs or Haplaquepts dominant

Lw1 Canandaigua areas
Lw2 Kingsbury areas
Niagara areas
Odessa and Rhinebeck areas
Lw5 Swanton-Rhinebeck areas

REFERENCE NO. 17

Dangerous Properties of Industrial Materials

Sixth Edition

N. IRVING SAX

Assisted by:

Benjamin Feiner/Joseph J. Fitzgerald/Thomas J. Haley/Elizabeth K. Weisburger

VNR VAN NOSTRAND REINHOLD COMPANY

NEW YORK CINCINNATI TORONTO LONDON MELBOURNE

REFERENCE NO. 18

Reference No. 84002371

Mulhern House — Listed 09/29/84
(Wappingers Falls MRA)
14-16 Market St
Reference No. 84002376

Wappingers Falls Historic District — Listed 09/29/84
(Wappingers Falls MRA)
Roughly bounded by South Ave., Elm, Main, Park, Walker, Market, and McKinley Sts
Reference No. 84002380

Erie County

Buffalo

17--21 Emerson Place Row — Listed 03/19/86
(Masten Neighborhood Rows TR)
17--21 Emerson Pl
Reference No. 86000689

33--61 Emerson Place Row — Listed 03/19/86
(Masten Neighborhood Rows TR)
33--61 Emerson Pl
Reference No. 86000691

Albright-Knox Art Gallery — Listed 05/27/71
(Albright Art Gallery)
1285 Elmwood Ave., in Delaware Park
Reference No. 71000538

Allentown Historic District — Listed 04/21/80
Off NY 384
Reference No. 80002605

Blessed Trinity Roman Catholic Church Buildings — Listed 08/03/79
317 LeRoy Ave
Reference No. 79001579

Buffalo Gas Light Company Works — Listed 09/01/76
(Jackson Plant;National Fuel Gas Company)
249 W. Genesee St.
Reference No. 76001215

Buffalo Main Light — Listed 07/19/84
(U.S. Coast Guard Lighthouses and Light Stations on the Great Lakes TR)
Buffalo River
Reference No. 84002383

Buffalo North Breakwater South End Light — Listed 08/04/83
(U.S. Coast Guard Lighthouses and Light Stations on the Great Lakes TR)
Buffalo Harbor
Reference No. 83001669

Buffalo State Asylum for the Insane — Listed 06/24/86
(State Lunatic Asylum,Buffalo Psychiatric Center)
400 Forest Ave
Reference No. 86003557

Buffalo State Hospital — Listed 01/12/73
(Buffalo State Asylum)
400 Forest Ave
Reference No. 73001186

Buffalo and Erie County Historical Society — Listed 04/23/80
(New York State Pavilion,Pan American Exposition)
25 Nottingham Ct
Reference No. 80002606

County and City Hall — Listed 05/24/76
(Old Erie County Hall)
95 Franklin St
Reference No. 76001216

Delaware Avenue Historic District — Listed 01/17/74
W side of Delaware Ave. between North and Bryant Sts
Reference No. 74001232

Dorsheimer, William, House — Listed 11/[illegible]/[illegible]
(Percival G. Bixby & Co. Building)
434 Delaware Ave

Reference No. 80002607	
Durham Memorial A M E. Zion Church	Listed
(St. Luke's A M E. Zion Church)	09/15/83
174 E. Eagle St	
Reference No. 83001670	
Fosdick-Masten Park High School	Listed
Masten Ave. and E. North St	06/30/81
Reference No. 83001672	
Lafayette High School	Listed
370 Lafayette Ave	12/03/80
Reference No. 80002608	
Laurel and Michigan Avenues Row	Listed
(Masten Neighborhood Rows TR)	03/19/86
1335--1345 Michigan Ave	
Reference No. 86000688	
Macedonia Baptist Church	Listed
(Michigan Street Baptist Church)	02/12/74
511 Michigan Ave.	
Reference No. 74001233	
Martin, D. D., House Complex	Listed
(George Barton House;Gardener's Cottage;See Also Martin	12/30/75
, Darwin D., House)	
(Olmstead Parks and Parkways TR (AD))	
123 Jewett Pkwy	
Reference No. 75001185	
Martin, Darwin D., House	Listed
(Martin, Darwin D., House National Historic Landmark;Se	05/24/86
e Also:Martin House Complex)	
125 Jewett Pkwy.	
Reference No. 86000160	
New York Central Terminal	Listed
(Buffalo Central Terminal)	09/07/84
495 Paderewski Dr.	
Reference No. 84002389	
Parkside East Historic District	Listed
(See Also:Martin House Complex)	10/17/86
(Olmsted Parks and Parkways TR)	
Roughly bounded by Parkside Ave., Amherst St., Colvin A	
ve., NY Central RR tracks, Main St., and Humboldt Ave	
Reference No. 86002817	
Parkside West Historic District	Listed
(Olmsted Parks and Parkways TR)	12/10/86
Roughly bounded by Amherst St., Nottingham Terrace, Mid	
dlesex Rd., and Delaware Ave	
Reference No. 86003372	
Pierce Arrow Factory Complex	Listed
Elmwood and Great Arrow Aves	10/01/74
Reference No. 74001234	
Prudential Building	Listed
(Guaranty Building)	03/30/73
Church and Pearl Sts.	
Reference No. 73001187	
Shea's Buffalo Theater	Listed
(The Buffalo Theater)	05/06/79
646 Main St.	
Reference No. 79001186	
South Buffalo North Side Light	Listed
(U.S. Coast Guard Lighthouses and Light Stations on the	08/04/81
Great Lakes TR)	
Buffalo Harbor	
Reference No. 83001673	
St. Andrew's Evangelical Lutheran Church Complex	Listed
(Deliverance Temple of God & Christ)	6/ /87
Sherman and Peckham Sts	
Reference No. 83001674	
Theodore Roosevelt Inaugural National [illegible]	

(Wilcox,Ansley,House)
641 Delaware Ave
Reference No. 66000516

U.S. Post Office — Listed 03/16/7[illegible]
(Federal Office Building)
121 Ellicott St
Reference No. 72000839

USS THE SULLIVANS (DD-537) — Listed 01/14/86
1 Naval Cove Park
Reference No. 86000085

West Village Historic District — Listed 05/06/80
Roughly bounded by S. Elmwood Ave., Chippewa, Georgia, Prospect, Carolina and Tracy Sts
Reference No. 80002610

Woodlawn Avenue Row — Listed 03/19/86
(Masten Neighborhood Rows TR)
75--81 Woodlawn Ave
Reference No. 86000690

Young Men's Christian Association Central Building — Listed 09/08/83
45 W. Mohawk St.
Reference No. 83001676

Cheektowaga

Chapel Of Our Lady Help Of Christians — Listed 12/14/78
(Maria Hilf Chapel)
4125 Union Rd.
Reference No. 78001851

Clarence Center

Eshelman, J., and Company Store — Listed 05/06/82
(The Square Deal Store)
6000 Goodrich Rd
Reference No. 82003356

East Aurora

Fillmore, Millard, House — Listed 05/30/74
24 Shearer Ave
Reference No. 74001235

Roycroft Campus — Listed 11/08/74
(Roycroft Campus National Historic Landmark)
Main and W. Grove Sts.
Reference No. 74001236

Hamburg Vicinity

Kleis Site — Listed 04/[illegible]0/79
(NYSDHP Unique Site No. A029-15-0013,U.B. 224,Edn 1-2)
Address Restricted
Reference No. 79001580

Irving

Thomas Indian School — Listed 01/[illegible]5/73
(Thomas Asylum of Orphan and Destitute Indian Children)
NY 438 on Cattaraugus Reservation
Reference No. 73001188

Kenmore

Eberhardt Mansion — Listed 09/08/[illegible]3
2746 Delaware Ave
Reference No. 83001671

North Collins Vicinity

Camel Hexadecagon Barn — Listed 09/[illegible]/84
(Central Plan Dairy Barns of New York TR)
Shirley Rd
Reference No. 84002386

Orchard Park

Johnson-Jolls Complex — Listed 0[illegible]/[illegible]/[illegible]
(Dr. Willard B. Jolls House)
S-4287 S. Buffalo St
Reference No. 80002611

West Seneca

Eaton Site — Listed [illegible]
(NYSDHP Unique Site no. A-0[illegible]-35-0003,Buffalo E, Bgt., 4)

, & U B 221)
Address Restricted
Reference No. 79001581

Williamsville
Williamsville Water Mill Complex — Listed 09/22/83
56 and 60 Spring St
Reference No. 83001675

Essex County
Adirondack State Forest Preserve
Adirondack Forest Preserve — Listed 10/15/66
NE New York State
Reference No. 66000891

Crown Point
Fort St. Frederic — Listed 10/15/66
Jct. of NY 8 and 9N
Reference No. 66000517
Fort Crown Point — Listed 11/24/68
(Fort Amherst,Fort St. Frederic)
Crown Point Reservation, SW of Lake Champlain Bridge an
d NY 8
Reference No. 68000033

Elizabethtown
Hand-Hale Historic District — Listed 03/05/79
River and Maple Sts
Reference No. 79001582

Essex Vicinity
Church of the Nazarene — Listed 06/19/73
(Boquet Chapel)
W of Essex on NY 22
Reference No. 73001189
Octagonal Schoolhouse — Listed 01/17/73
On Rte. 22 in Bouquet
Reference No. 73001190

Essex and Vicinity
Essex Village Historic District — Listed 05/[illegible]/79
Town of Essex and surroundings on W bank of Lake Champl
ain
Reference No. 75001187

Ironville
Ironville Historic District — Listed 12/[illegible]/74
Area surrounding Ironville including Furnace St. and Pe
nfield Pond
Reference No. 74001237

Keeseville
Dougle-Span Metal Pratt Truss Bridge — Listed 05/[illegible]/83
[Keeseville Village MRA]
AuSable St.
Reference No. 83001665
Keeseville Historic District — Listed 05/[illegible]/83
[Keeseville Village MRA]
Roughly bounded by Vine, Chesterfield, Clinton, Hill, P
leasant, Front, and Beech Sts
Reference No. 83001666
Rembrandt Hall — Listed 05/20/83
[Keeseville Village MRA]
Clinton St.
Reference No. 83001677
Tomlinson House — Listed 05/[illegible]/83
[Keeseville Village MRA]
Kent St.
Reference No. 83001678

Lake Placid
Brown, John, Farm
John Brown Rd.
Reference No. 72000840

Newcomb Vicinity
Camp Santanoni

REFERENCE NO. 19

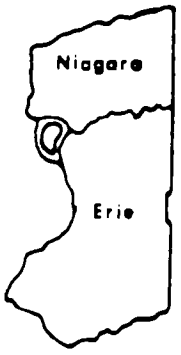
spaulding fiber

Lat: 43°00'20"N Long: 78°53'11"W

Data List of Dataset: NYR9 Number of Records = 6

REC #	POP	HOUSE	DISTANCE	SECTOR
1	387	200	0.400000	1
2	5189	1833	0.810000	1
3	11190	4139	1.60000	1
4	19084	7125	3.30000	1
5	61960	22636	4.80000	1
6	77385	28970	6.40000	1

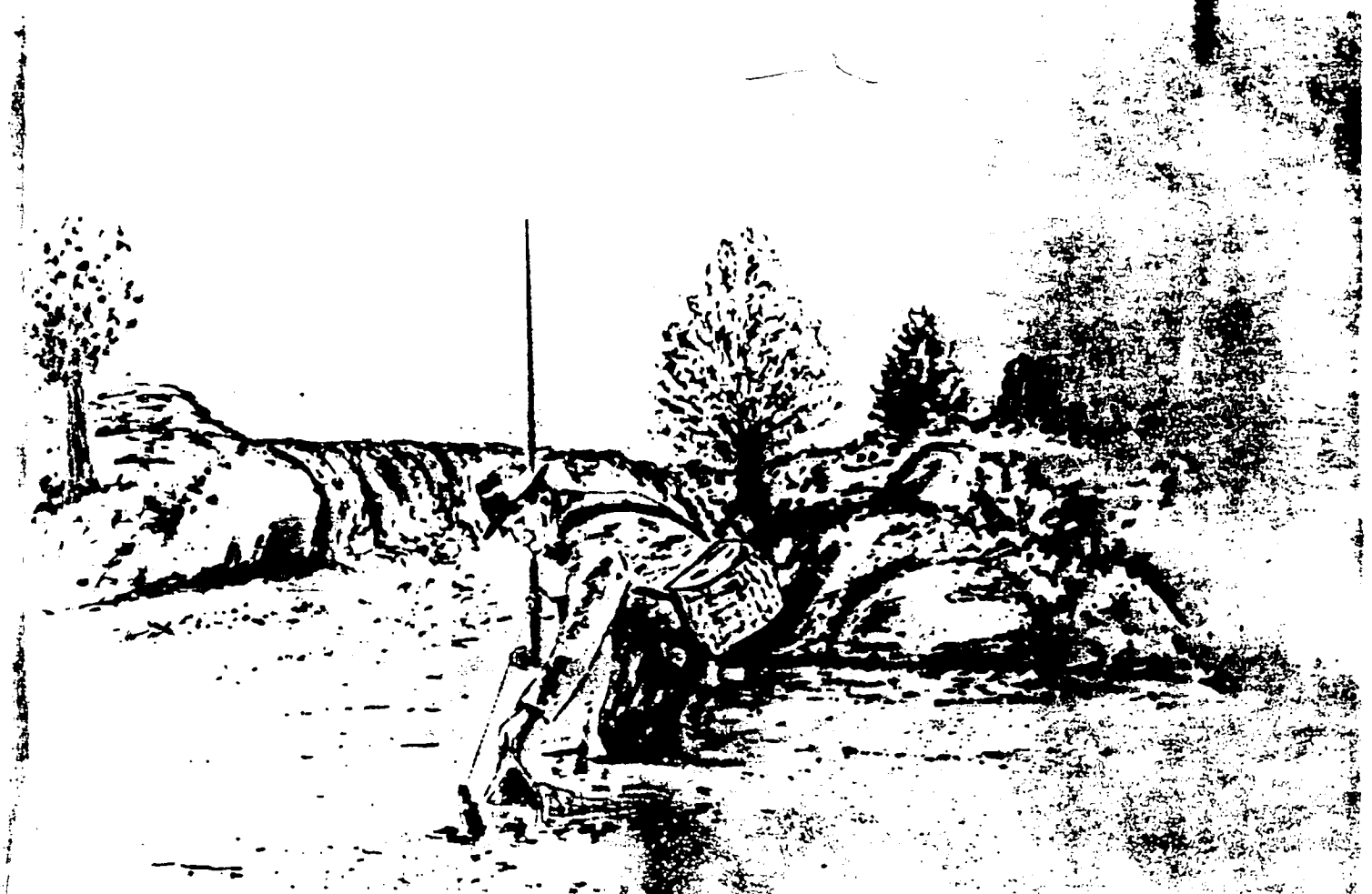
REFERENCE NO. 20



208 WATER QUALITY MANAGEMENT PROGRAM

Report 13

GROUND WATER PROBLEMS / ANALYSIS



ERIE AND NIAGARA COUNTIES REGIONAL PLANNING BOARD

OCTOBER 1978

portions (thick-bedded) of the aquifer. These layers are characterized by single fractures, which do not produce as much water as the zones.

Vertical fractures are unimportant except in the few top feet of the rock. They do aid in transfer of water from one zone to another although this effect would tend to decrease with depth due to the pressure closing of the vertical fractures.

Because the water-bearing zones in the Lockport Dolomite are more or less confined within the rock unit, the system may be regarded as artesian. As such, a water table does not really exist for this aquifer.

Yields of wells tapping the upper and middle parts of the Lockport average 31 gpm (gallons per minute). Wells tapping the lower 40 feet of the unit average 7 gpm. Yields are greatest near the Niagara River above Niagara Falls. This is due to induced infiltration from the river which is evidenced from water quality data. Yields from these wells may be as high as 2000 gpm. It appears that vertical fractures form avenues through which river water can readily infiltrate. As such, high yield wells tend to cluster around these fracture zones.

Because the aquifer is not water-bearing throughout its thickness, permeability values serve little useful purpose. It is better instead, to present the ease with which water moves through the aquifer as a function of the total thickness of the unit. This is accomplished by the use of the coefficient of transmissibility (T) and is simply the product of the permeability and the saturated thickness of the aquifer. Transmissibility values can be found directly from well tests in this type of system whereas permeability cannot. Units for T are given as gallons per day per foot of thickness of the aquifer (gpd/ft). T-values for the Lockport Dolomite range from 330 gpd/ft to 68,000 gpd/ft. The latter represents the optimum value for the aquifer. A T-value of 2,300 gpd/ft is probably most representative of the upper part of the aquifer and 330 gpd/ft is probably characteristic of the lower part.

The natural quality of the water can be described as highly mineralized. Hardness is a major problem; a result of high concentrations of $CaSO_4$ and $Ca\ HCO_3$. The uppermost water-bearing zone has been known to yield salt brines in local areas. The origin of these brines is not considered to be man-induced but is rather a result of conditions present at the time the rock was deposited.

C. CAMILLUS SHALE

The Camillus Shale consists of approximately 400 feet of thin-bedded to massive mudstone. Large amounts of gypsum are present in beds up to five feet thick and also in the lenses and veins.

This formation is hydrologically unique among the shale units in the region. Normally, because of its fine grain size and compact nature, shale does not yield much water to wells (typically less than 5 gpm). The Camillus Shale, however, is a significant water-bearing unit in this area due to the large amounts of gypsum contained in the formation. Because of its highly soluble nature, gypsum is easily removed by percollating ground waters, resulting in solution openings which are capable of storing large amounts of water.

This means, of course, that, like the Lockport Dolomite, water is found in localized zones within the unit rather than throughout the entire extent and thickness of the formation. Some of the thicker beds of gypsum may be expected to have a latteral extent of 3 to 4 miles.

Water reaches these zones by percolation through vertical fractures. The situation is therefore similar to the Lockport Dolomite, in which the primary function of vertical fractures is for recharge. Yields of successful wells tapping the Camillus Shale range from 300 gpm to 1,200 gpm. These large yields are due to the large amounts of water which are contained in the solution openings of the formation.

Ground water flow through the aquifer is toward Tonawanda Creek which is the major discharge point for this formation (Figure 13-5). Because of pumping effects, induced infiltration is occurring from Sawyer Creek along localized reaches.

Normal transmissibility values (T), range from 40,000 to 70,000 gpd/ft. In some areas, T is as low as 7,000 gpd/ft. This wide range in values is not dependent upon geographic location, but rather is a function of whether a given well intersects significant water-bearing openings. Low T-values can be expected where openings are not intersected.

D. LIMESTONE UNIT

For hydrologic purposes, the Bertie, Akron, and Onodaga Formations can be collectively considered as a single aquifer, herein referred to as the Limestone Unit.

The total thickness of this southward dipping unit is roughly 174 feet, but variations occur locally. The composition, from the base to the top, consists of dolomite, dolomitic limestone with interbedded shale, greenish-grey and buff dolomite, limestone and cherty limestone.

The water-bearing characteristics are similar to the Lockport Dolomite. The greater solubility of this unit, however, has resulted in a more pronounced solution widening of the fractures. Principal zones of discharge are at the base of the unit where is contacts the Camillus shale, and a shaly zone about 20 feet above the base.

REFERENCE NO. 21

Sc

Camillus Shale
Gray shale containing large amounts of gypsum

Contact

Inferred Contact

GEOLOGIC MAP OF ERIE COUNTY, NEW YORK BEDROCK GEOLOGY

by Edward J. Buehler and Irving H. Tesmer

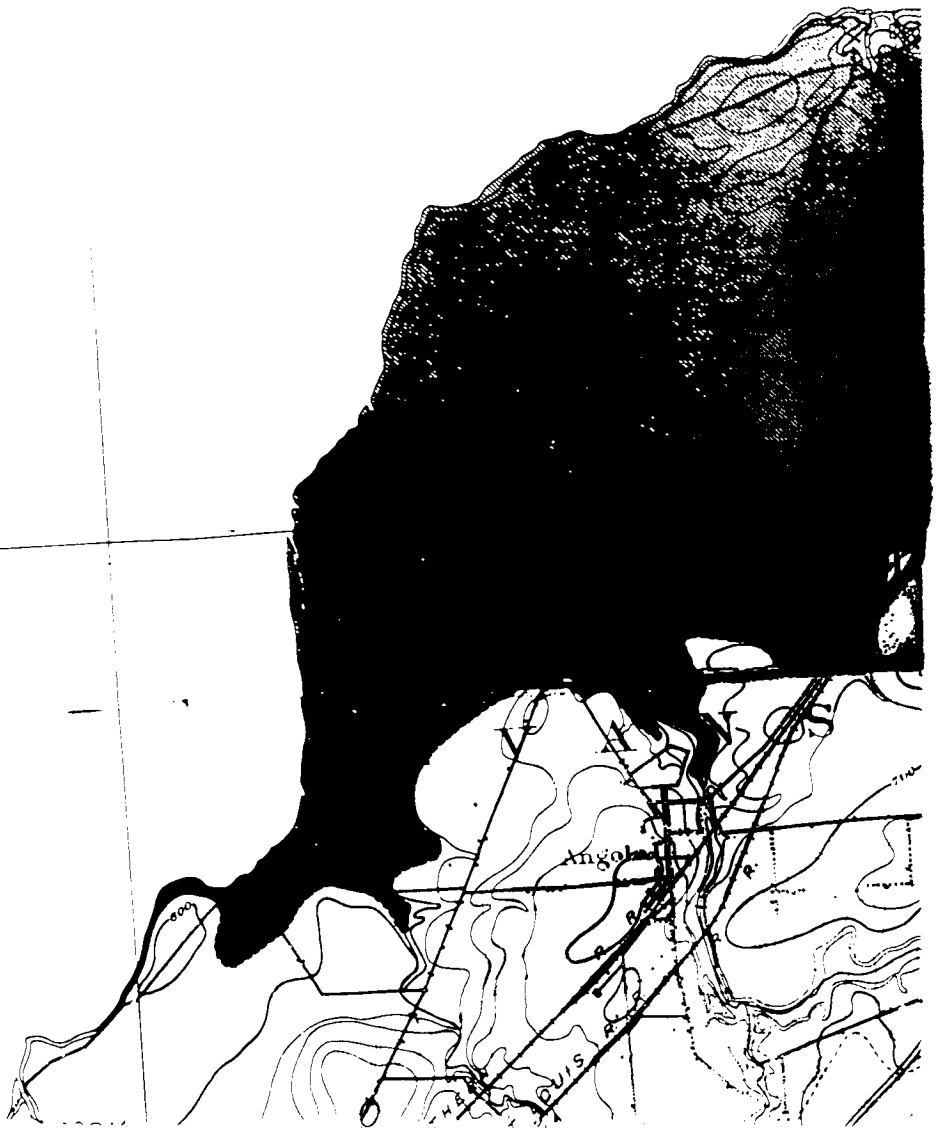
1963

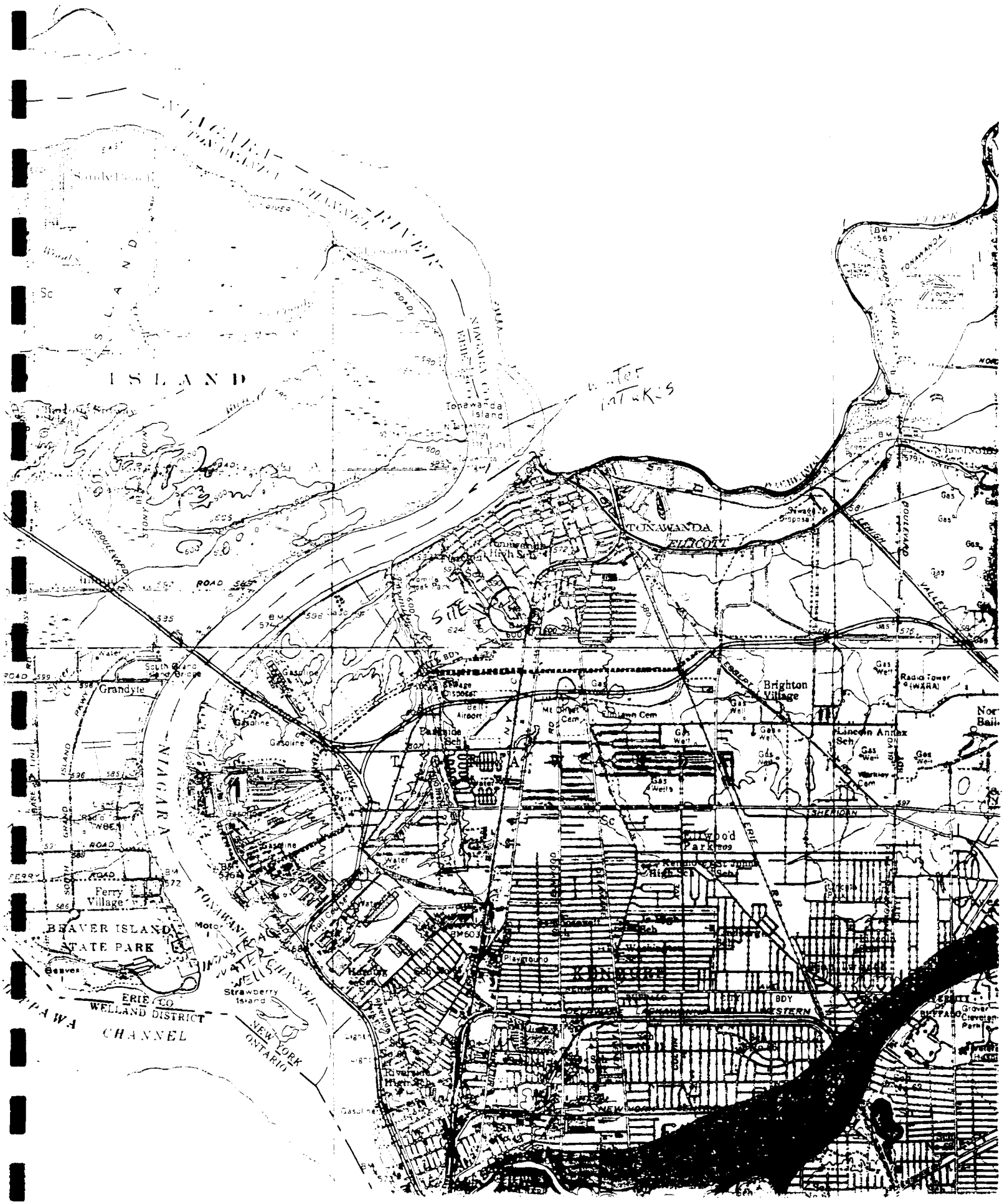
Scale 1:250,000

0 1 2 3 4 Miles

CONTOUR INTERVAL 20 FEET

BULLETIN, VOL. 21, NO. 3




ISLAND
Tonawanda Island
TONAWANDA
KENMORE
Grandyte
Ferry Village
BEAVER ISLAND STATE PARK
Strawberry Island
Brighton Village
Kenmore East Senior High Sch
Riverview High Sch
Lincoln Annex Sch
Parkside Sch
Bell Airport
Mt Olivet Cem
Elmlawn Cem
Kensington Park
Playground
Gasoline
Water
Gas Wells
Radio Tower (WKBW)
NIAGARA
TONAWANDA
ERIE CO
WELLAND DISTRICT
CHANNEL
NEW YORK
ONTARIO
ELLICOTT
SITE
WATER WORKS

REFERENCE NO. 22

0027-C
02-9704-02

Spaulding Fibre Company, Inc.

Industrial Plastics Division
310 Wheeler Street, Tonawanda, New York 14151-5101
716-692-2000

May 28, 1987

RECEIVED
JUN 01 1987
NUS CORPORATION
REGION II
SENT TO

Mr. Alan J. Cherepon
NUS Corporation
Raritan Plaza III
Fieldcrest Avenue
Edison, New Jersey 08837

Dear Mr. Cherepon:

RE: Spaulding Fibre Co., Inc., Site Inspection 4/28/87 - 4/29/87

In response to your letter of April 22, 1987, I have attempted to answer those questions which were not previously answered in the submittal to Mr. Stanley Siegel of the USEPA dated March 13, 1987.

Spaulding Fibre Co., Inc., has been located at this site from 1911 till the present. Prior to Spaulding purchasing the site in 1911, the site was farm land owned by John A. Pohl. If further documentation is required, title surveys are available.

The only past response activities by regulatory agencies I am aware of is the New York State Superfund Phase I Survey of the site by the New York State Department of Environmental Conservation in 1983.

Enclosed are copies of past regulatory enforcement actions as follows:

1. NYSDEC Order of Consent File No. 86-39 9-1711
2. USEPA Docket No. II RCRA-84-0240
3. USEPA Docket No. II TSCA-PCB-86-0241
4. U.S. Coast Guard Case No. ID-017/86
5. NYSDEC Uniform Appearance Ticket No. 121251

These are all the enforcement actions I am aware of. You may want to check with the regulatory agencies to verify. To the best of my knowledge all of these actions were satisfied by Spaulding Fibre Co., Inc.

Enclosed is a list of Spaulding Fibre's environmental permits.

Enclosed is a copy of the results of the most recent OSHA inspection conducted 2/19/87 - 3/11/87 and a copy of the results of the most recent RCRA inspection conducted 1/23/87 by the NYSDEC.

The remainder of your questions should have been answered in the submittal to the USEPA.

If you should have any further questions, please contact me at (716) 692-2000 extension 461.

Sincerely,

Gregory A. Stubbs

Gregory A. Stubbs
Environmental Compliance Analyst

mm

Enclosures

STATE OF NEW YORK : DEPARTMENT OF ENVIRONMENTAL CONSERVATION

In the Matter of the Violations of Article 17 of the Environmental Conservation Law (ECL) by

SPAULDING FIBRE COMPANY, INDUSTRIAL PLASTICS DIVISION
310 Wheeler Street
Tonawanda, New York 14150

(Erie County)

Respondent

ORDER ON CONSENT

FILE NO. 86-39 9-1711

WHEREAS:

1. Pursuant to Environmental Conservation Law Sections 17-0301 and 17-0303, the Department has adopted water quality standards for the State of New York and administers State Pollutant Discharge Elimination System permits.

2. Respondent owns, operates and/or maintains control of facilities in the State of New York subject to ECL Article 17; to wit its outfalls 001 and 003 SPDES Permit No. NY0002364 located at the Wheeler Street plant in the City of Tonawanda, New York, Erie County.

3. Respondent has a valid State Pollutant Discharge Elimination System (SPDES) Permit No. NY0002364 providing for discharge of effectively treated waste to the waters of the State. That permit sets standards for any discharge from Respondent's facilities, and requires that the permittee shall have met certain standards. Respondent has violated this permit in that it has discharged zinc from outfall 003 in excess of permit requirements [cf Part 754.4(b) of 6NYCRR], as documented in its Daily Monitoring Report dated September-November, 1985 and in Department sampling conducted on November 6-7, 1985 and January 7, 15, and 30, 1986.

4. Respondent has affirmatively waived its rights to a hearing on these matters as provided by law and has consented to the issuing and entering of this Order pursuant to the provisions of ECL Article 17 and has agreed to be bound by the provisions, terms, and conditions contained herein.

NOW, having considered this matter and being duly advised, it is ORDERED:

I. THAT immediately upon service of a conformed copy of this Order upon Respondent, Respondent shall be bound as hereinafter provided.

II. In respect to the aforesaid alleged violations, there is hereby imposed upon Respondent a civil penalty in the amount of Two Thousand Five Hundred Dollars ($2,500.00) which is to be suspended on condition that Respondent satisfactorily completes the actions as specified in Schedule A.

III. THAT Respondent shall immediately be bound by the terms and conditions as set forth in "Schedule A" attached to this Order.

IV. THAT all further non-permitted discharges by Respondent in contravention of the aforementioned standards shall constitute continuing violations of the ECL, and an action for further penalties for future violations will be instituted by the Department if the Respondent fails to adhere to and fully comply with its permit conditions and Schedule A.

V. THAT should there by any unusual or extraordinary occurrences or deviation from normal operating procedures which does or may contribute to a potentially hazardous condition, or which violates any condition or provision of any permit heretofore or hereafter issued to the Respondent by the Department or which violates any of the terms and conditions of "Schedule A," the Respondent shall within 24 hours notify the Department at 600 Delaware Avenue, Buffalo, New York 14202-1073,

(716) 847-4590, and within five (5) days after such occurrence submit to the Department a report detailing the circumstances and causes of the occurrence, remedial actions and steps taken to prevent recurrence.

VI. THAT for the purpose of insuring compliance with this Order, duly authorized representatives of the State of New York shall be permitted access to inspect the facilities being constructed, owned, operated, maintained, and/or controlled by the Respondent for the purpose of inspecting the discharge therefrom of any liquid, refuse, or other waste to take samples of any discharge, liquid, refuse, or other waste and for the purpose of determining the status of compliance with the terms of this Order and "Schedule A" and with State law and regulation.

VII. THAT all reports and submissions herein required shall be made to the Principal Water Quality Engineer of the Region 9 office of the Department at 600 Delaware Avenue, Buffalo, New York 14202-1073.

VIII. THAT any change in this Order or 'Schedule A" shall not be made or become effective except as specifically set forth by written order of the Commissioner, such written order being made either upon written application of the Respondent or upon the Commissioner's own findings after an opportunity to be heard has been given to Respondent or pursuant to the summary abatement provisions of the Environmental Conservation Law.

IX. THAT the provisions, terms, and conditions of this Order and "Schedule A" shall be deemed to bind Respondent, its officers, directors,

agents, servants, employees, successors and assigns, and all persons, firms, and corporations acting under or for it, including but not limited to those who may carry on any or all of the operations now being conducted by Respondent.

DATED: Buffalo, New York
April 23, 1986

HENRY G. WILLIAMS, Commissioner
New York State Department of
Environmental Conservation

John J. Spagnoli
Regional Director

SCHEDULE A

Respondent shall on or before the indicated dates:

1.	Submit an approvable Engineering Report detailing causes of noncompliance regarding zinc loadings at outfalls 001 and 003 including remedial measures to be taken.	May 1, 1986
2.	Complete remedial work.	June 1, 1986
3.	Achieve compliance with permit limitations.	June 1, 1986
4.	Implement non-structural measures specified by Best Management Practices Plan.	June 1, 1986

Consent by Respondent

Respondent hereby consents to the issuing and entering of the foregoing Order, waives its right to a hearing herein as provided by law, and agrees to be bound by the provisions, terms and conditions contained therein.

Respondent Spaulding Fibre Company, Inc.

By Richard A Preibisch

Title Vice President Technology

Date April 15, 1986

(Seal)

Corporate

State of New York)
County of Erie)

On this 15th day of April, 1986, before me personally came Richard A. Preibisch to me known, who being by me duly sworn did depose and say that he resides at 160 Glen Ave., Williamsville, New York that he is the Vice Pres. of Spaulding Fibre the corporation described in and which executed the foregoing instrument; and that he signed his name as authorized by said corporation.

Marilyn J. Crittenden
NOTARY PUBLIC

MARILYN J. CRITTENDEN
Notary Public, State of New York
Qualified in Erie County
My Commission Expires March 30, 1987

Individual

State of)
County of)

On this day of , 19 , before me came , to me known and known to me to be the individual described in and who executed the foregoing consent and he duly acknowledged to me that he executed the same.

NOTARY PUBLIC

Sirs:

The within is a true copy of a duly executed COMPLAINT, COMPLIANCE ORDER, AND NOTICE OF OPPORTUNITY FOR HEARING which is on file in the Regional Office of the U.S. Environmental Protection Agency, Region II.

Docket No. II RCRA-84-0240

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION II

In the Matter of

SPAULDING FIBRE COMPANY, INC.
NYD002104404
Tonawanda, New York 14150

Respondent.

Proceeding Under Section 3008 of the Solid Waste Disposal Act, as amended.

COMPLAINT, COMPLIANCE ORDER, AND NOTICE OF OPPORTUNITY FOR HEARING WITH NOTICE OF ENTRY

Conrad Simon
Director
Air & Waste Management Division
United States Environmental Protection Agency
Region II
26 Federal Plaza
New York, New York 10278

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II

In the Matter of SPAULDING FIBRE COMPANY, INC. NYD002104404 Tonawanda, New York 14150	COMPLAINT, COMPLIANCE ORDER, AND NOTICE OF OPPORTUNITY FOR HEARING
Respondent.	Docket No. II RCRA-84-0240
Proceeding Under Section 3008 of the Solid Waste Disposal Act, as amended.	

COMPLAINT

This administrative proceeding is instituted pursuant to Section 3008 of the Solid Waste Disposal Act, as amended, 42 U.S.C. §6901 et seq. ("the Act"). [Note: Among the statutes amending the Act is the Resource Conservation and Recovery Act, 90 Stat. 2795, P.L. 94-580 (1976).]

The Director of Air and Waste Management Division of the U.S. Environmental Protection Agency (EPA), Region II, Complainant in this proceeding, has determined that Respondent, SPAULDING FIBRE COMPANY, INC. has violated Section 3004 of the Act, 42 U.S.C. §6924, and the regulations promulgated thereunder, as hereinafter specified:

1. Respondent owns and operates a facility located at:

310 Wheeler Street
Tonawanda, New York 14150

2. By notification dated August 7, 1980, Respondent informed EPA that it conducts activities at the facility involving "hazardous waste," as that term is defined in Section 1004(5) of the Act, 42 U.S.C. §6903(5) and in 40 CFR §261.3. By application dated November 12, 1980, Respondent requested a permit to conduct its hazardous waste activities.

3. On or about March 21, 1984, a record review of the facility's closure plan/cost estimate was conducted by a duly-designated representative of EPA pursuant to Section 3007 of the Act, 42 U.S.C. §6927. Said record review was conducted for the purpose of enforcing the EPA regulations for hazardous waste

management, 40 CFR Part 265 (published in 45 Fed. Reg. 33073 et seq., May 19, 1980, and as later amended), promulgated pursuant to Subtitle C of the Act, 42 U.S.C. §6921 et seq.

4. The above-referenced review revealed that Respondent's facility was being used for the generation and storage of hazardous waste.

5. 40 CFR Part 265 sets interim status standards for hazardous waste treatment, storage, and disposal facilities. These standards apply until final administrative disposition of permit applications with respect to these facilities has been made. No such final disposition has been made with respect to your facility, and thus the standards of Part 265 apply thereto.

6. 40 CFR §265.112(a) sets forth the elements that must be included in a closure plan. On or about September 28, 1983 the Respondent submitted a closure plan to EPA for review. The review established that Respondent's closure plan did not provide any information on the thermal treatment unit, removal procedures, the type of sampling and analyses to be conducted, sampling locations, decontamination, and other required elements of §265.112. Respondent was therefore in violation of 40 CFR §265.112. A specific list of deficiencies and/or omissions is attached hereto.

7. 40 CFR §265.142 requires that the owner or operator of a hazardous waste facility must have a written estimate of the costs of closing the facility. On or about September 28, 1983 the respondent submitted a closure cost estimate to EPA for review. The review established that Respondent's closure cost estimate did not provide sufficient information in order to meet the requirements of this Section. Respondent was therefore in violation of CFR §265.142.

PROPOSED CIVIL PENALTY

In view of the above-cited violations, and pursuant to the authority of Section 3008 of the Act, Complainant herewith proposes the assessment of a civil penalty in the amount of $8,000.00 against SPAULDING FIBRE COMPANY, INC. for the violations specified hereinabove as follows:

-for the violation of 40 CFR §265.112:	$ 7,000.00
-for the violation of 40 CFR §265.142:	$ 1,000.00
Total:	$ 8,000.00

COMPLIANCE ORDER

Based upon the foregoing, and pursuant to the authority of Section 3008 of the Act, Complainant herewith issues the following Compliance Order against Respondent herein:

1. Respondent shall, within thirty (30) days of the effective date of this Compliance Order, submit a closure plan sufficient to meet the requirements of 40 CFR §265.112; and a cost estimate sufficient to meet the requirements of 40 CFR §265.142.

NOTICE OF LIABILITY FOR ADDITIONAL CIVIL PENALTIES

Pursuant to the terms of Section 3008(a)(3) of the Act, a violator failing to take corrective action within the time specified in a Final Compliance Order is liable for a civil penalty of up to $25,000 for each day of continued noncompliance. Such continued noncompliance may also result in suspension or revocation of any permits issued to the violator pursuant to the authority of the Act.

NOTICE OF OPPORTUNITY TO REQUEST A HEARING

As provided in Section 3008(b) of the Act, and in accordance with EPA's Consolidated Rules of Practices Governing the Administrative Assessment of Civil Penalties and the Revocation or Suspension of Permits, 40 CFR Part 22, 45 Fed. Reg. 24360 (April 9, 1980) (a copy of which accompanies this Complaint, Compliance Order, and Notice of Opportunity for Hearing), you have the right to request a hearing to contest any material fact set out in the Complaint, or to contest the appropriateness of the proposed penalty, or the terms of the Compliance Order. (Consistent with the provisions of Section 3008(b) of the Act, the hearing provided will be noticed and open to the general public, should you specifically request such a public hearing. In the absence of such a specific request, however, public notice of a scheduled hearing will not be published.)

To avoid being found in default, and having the proposed civil penalty assessed and the Compliance Order confirmed without further proceedings, you must file a written answer to the Complaint, which may include a request for a hearing. Your answer (if any) must be addressed to the Regional Hearing Clerk, U.S. Environmental Protection Agency, Region II, 26 Federal Plaza, New York, New York 10278, and must be filed within thirty (30) days of your receipt of this Complaint, Compliance Order, and Notice of Opportunity for Hearing. Your answer must clearly and directly admit, deny or explain each of the factual allegations contained in the Complaint, and should contain (1) a clear statement of the facts which constitute the grounds of your defense, and (2) a concise statement of the contentions which you intend to place in issue at the hearing.

The denial of any material fact, or the raising of any affirmative defense, will be construed as a request for a hearing. Failure to deny any of the factual allegations in the Complaint will be deemed to constitute an admission of the undenied allegations. Your failure to file a written answer within thirty (30) days of receipt of this instrument will be deemed to represent your admission of all facts alleged in the Complaint, and a

waiver of your right to a formal hearing to contest any of the facts alleged by the Complainant. Your default will result in the final issuance of the Compliance Order, and assessment of the proposed civil penalty, without further proceedings.

INFORMAL SETTLEMENT CONFERENCE

Whether or not you request a hearing, the EPA encourages settlement of this proceeding consistent with the provisions of the Act. At an informal conference with a representative of the Complainant you may comment on the charges and provide whatever additional information you feel is relevant to the disposition of this matter, including any actions you have taken to correct the violation, and any other special circumstances you care to raise. The Complainant has the authority to modify the amount of the proposed penalty, where appropriate, to reflect any settlement agreement reached with you in such conference, or to recommend that any or all of the charges be dismissed, if the circumstances so warrant. Your request for an informal conference and other questions that you may have regarding this Complaint, Compliance Order, and Notice of Opportunity for Hearing should be directed to:

Judith Meritz, (212) 264-1196

Please note that a request for an informal settlement conference does not extend the thirty (30) day period during which a written answer and request for a hearing must be submitted. The informal conference procedure may be pursued as an alternative to or simultaneously with the adjudicatory hearing procedure. However, no penalty reduction will be made simply because such a conference is held. Any settlement which may be reached as a result of such conference will be embodied in a written Consent Agreement and Final Compliance Order to be issued by the Regional Administrator of EPA, Region II, and signed by you or your representative. Your signing of such Consent Agreement would constitute a waiver of your right to request a hearing on any matter stipulated to therein.

RESOLUTION OF THIS PROCEEDING WITHOUT HEARING OR CONFERENCE

Instead of filing an answer requesting a hearing or requesting an informal settlement conference, you may choose to comply with the terms of the Compliance Order, and to pay the proposed penalty. In that case, payment should be made by sending to the Regional Hearing Clerk, EPA, Region II, a cashier's or certified check in the amount of the penalty specified in the "Proposed Civil Penalty" section of this instrument. Your check must be made payable to the Treasurer of the United States of America.

DATED: New York, New York

COMPLAINANT:

Conrad Simon

CONRAD SIMON
Director
Air and Waste Management Division
Environmental Protection Agency
Region II

TO: Richard G. Hunter
Vice President/General Manager
SPAULDING FIBRE COMPANY, INC.
310 Wheeler Street
Tonawanda, New York 14150

cc: Laurens Vernon
Compliance Counsel
New York State Department of Environmental Conservation

David Mafrici
Bureau of Hazardous Waste Operations
New York State Department of Environmental Conservation

CERTIFICATE OF SERVICE

This is to certify that on the 31st day of May, 1984 I served a true and correct copy of the foregoing Complaint by certified mail to Richard G. Hunter, 310 Wheeler Street, Tonawanda, New York 14150. I handcarried the original foregoing Complaint to the Regional Hearing Clerk.

Victoria L McDonald

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II

In the Matter of SPAULDING FIBRE COMPANY, INC. Respondent. Proceeding Under Section 16 of the Toxic Substances Control Act.	CONSENT AGREEMENT AND FINAL ORDER Docket No. II TSCA-PCB-86-0241

PRELIMINARY STATEMENT

This civil administrative proceeding for the assessment of a penalty was instituted pursuant to Section 16(a) of the Toxic Substances Control Act (TSCA), 15 U.S.C. §2615(a). The Complainant in this proceeding, the Director of Environmental Services Division, Region II, United States Environmental Protection Agency ("EPA"), issued a Complaint and Notice of Opportunity for Hearing to Respondent, Spaulding Fibre Company, Inc. (Respondent), on September 30, 1985.

The Complaint charged Respondent with a violation of Section 6(e) of TSCA, 15 U.S.C. §2605(e), and the regulations promulgated pursuant to that Section, 40 CFR Part 761, relating to polychlorinated biphenyls ("PCBs"), and Section 15 of TSCA, 15 U.S.C. §2614.

FINDING OF FACT

1. Respondent is a "person" within the meaning of 40 CFR 761.3, and operates a facility located at 310 Wheeler Street, Tonawanda, New York, where "PCB Transformers" (as that term is defined at 40 CFR 761.3) are used. Respondent is subject to regulation pursuant to the regulations found at 40 CFR Part 761 relating to Polychlorinated Biphenyls ("PCBs").

2. On or about May 8, 1984, a duly designated representative of EPA conducted an inspection at Respondent's facility. At the time of the inspection, Respondent had failed to maintain annual documents for the years 1978-1982 as required by 40 CFR 761.180(a). In addition, Respondent had failed to maintain records of an inspection program for the PCB Transformers as required by 40 CFR 761.30(a).

3. By letter dated October 17, 1985, Respondent submitted documentation to demonstrate efforts undertaken to come into compliance with 40 CFR Part 761 following EPA's inspection. Respondent put together annual documents for the years 1978 through 1982 based on existing and available data. Respondent also submitted annual reports prepared for 1983 and 1984. In addition, Respondent submitted copies of the quarterly inspection reports for PCB Transformers from October 1984 through September 1985 to demonstrate the change in compliance status following the EPA inspection.

4. Following the October 1984 EPA inspection, Respondent hired new compliance personnel to ensure compliance with the requirements of 40 CFR Part 761 and other applicable state and federal regulations.

CONCLUSION OF LAW

Respondent's failure, at the time of inspection, to meet the requirements pertaining to PCBs set forth at 40 CFR Part 761, as specified in paragraph 2 above, constitutes a violation of Section 15(1)(C) of TSCA.

CONSENT AGREEMENT

Based on the foregoing, and pursuant to Section 16(a) of TSCA, 15 U.S.C. §2615(a), and Section §22.18 of the Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation or Suspension of Permits, 40 CFR §22.18, it is hereby agreed that Respondent shall hereafter comply with all applicable provisions of 40 CFR Part 761 and the following terms:

1. For the purpose of this proceeding, and in the interest of settling this matter expeditiously, Respondent: (a) admits the jurisdictional allegations of the Complaint; and (b) admits the factual findings and the conclusion of law contained in this Agreement.

2. Respondent shall pay, by cashier's or certified check, a civil penalty for the violation cited herein in the amount of thirteen thousand dollars ($13,000) payable to the "Treasurer,

United States of America" and mailed to: EPA, Region II (Regional Hearing Clerk) P.O. Box 360188M, Pittsburgh, Pennsylvania 15251. The payment shall be identified as "Spaulding Fibre Company, Inc. - Docket No. II TSCA-PCB-85-0241.

a. The payment shall be made in two equal installments. The first installment shall be in the amount of six thousand five hundred dollars ($6,500) and is due within thirty (30) days after the Regional Administrator signs this Consent Agreement and Final Order (CA/FO) (hereinafter the "effective date"). The second installment shall be in the amount of six thousand five hundred dollars ($6,500) and is due within sixty (60) days after the Regional Administrator signs this CA/FO.

b. Failure to pay the penalty in full according to the above provisions will result in referral of this matter to the United States Attorney for collection.

c. Further, if payment is not received on or before the due dates, interest will be assessed at the annual rate established by the Secretary of Treasury pursuant to 31 U.S.C. §3717, on the overdue amount from the effective date of this CA/FO through the date of payment. In addition, a late payment handling charge of $20.00 will be assessed if payment is not received by the due date, with an additional charge of $10.00 for each subsequent thirty (30) day period. A 6% per annum penalty also will be applied on any principal amount not paid within ninety (90) days of the due date.

This CA/FO is being entered into by the parties in full settlement of all liabilities which might have attached as a result of the violations described in this CA/FO. On this basis, Respondent explicity waives its right to request a hearing on this matter, and agrees to pay the penalty in accordance with the terms of this CA/FO. Respondent has read the foregoing Agreement and its terms and consents to the issuance of the accompanying Final Order.

RESPONDENT: BY: Paul E. Rickabaugh

NAME: (Please Print) Paul E. Rickabaugh
SPAULDING FIBRE COMPANY, INC.

TITLE: (Please Print) Vice President
Industrial Relations

DATE: November 24, 1986

COMPLAINANT: BY: Barbara Metzger

BARBARA METZGER
Director
Environmental Services Division
U.S. Environmental Protection
Agency - Region II

DATE: December 19, 1986

FINAL ORDER

The Regional Administrator of EPA, Region II, concurs in the foregoing Consent Agreement and incorporates the terms of such Consent Agreement herein by reference. The Consent Agreement is hereby approved and this Final Order is issued, effective immediately. So ordered.

William J. Doggett 12-16-86

CHRISTOPHER J. DAGGETT
Regional Administrator
U.S. Environmental Protection Agency
Region II
26 Federal Plaza
New York, New York 10278

PARTMENT OF TRANSPORTATION
U. S. COAST GUARD
CG-3639 (Rev. 6-79)

WATER POLLUTION VIOLATION REPORT

INSTR: *Prepare in triplicate. Retain one for case file. Submit original and copy.*

REPORTING UNIT	DATE OF VIOLATION	CASE NUMBER
Marine Safety Office, Buffalo, New York	12 May 1986	1D-017/86

PART I – DISCHARGE DATA

1. TIME OF OCCURRENCE	2. LOCATION
0726	Tonawanda, New York (Ft. of Gibson Street)

3. WATER BODY	4. MATERIAL
Niagara River	ECON #4 Polishing Oil

5. QUANTITY	6. SOURCE
Approximately 5 gallons	Hose Connection

7. CAUSE	8. DISCHARGER
Loose hose connection	Spaulding Fibre Co.

9. REMARKS

None

PART II – REPORTING DATA

1. NAME OF PERSON REPORTING	2. ADDRESS OF PERSON REPORTING
Mary Pringle	NYS DEC, 600 Delaware, P/N 716 847-4590 Buffalo, NY 14202

3. GOVERNMENT AGENCY RECEIVING REPORT	4. DATE/TIME OF REPORT
U. S. Coast Guard	22 May 1986/0907

5. WAS THE PERSON REPORTING THE INCIDENT EMPLOYED BY OR ACTING IN BEHALF OF THE VIOLATOR?
☐ YES ☒ NO

6. NOTIFICATION PASSED VIA ☐ NRC ☒ OTHER New York State DEC

7. OTHER AGENCIES NOTIFIED	8. OCMI NOTIFIED (Time/Date)
EPA Region II	22 May 1986/0907 hours

9. REMARKS

None

PART III – FACILITY DATA

1. NAME OF ONSHORE/OFFSHORE FACILITY	2. ADDRESS OF ONSHORE/OFFSHORE FACILITY
Spaulding Fibre Company	310 Wheeler Street Town of Tonawanda, NY 14150

3. TYPE OF FACILITY	4. PERSON-IN-CHARGE
Manufacturing	Richard Preibisch, 716-692-2000, Ext. 330

5. NAME OF OWNER/OPERATOR	6. ADDRESS OF OWNER/OPERATOR
Spaulding Fibre Company	310 Wheeler Street Town of Tonawanda, NY 14150

7. REMARKS

None

PART IV – VESSEL DATA

1. NAME OF VESSEL	2. NATIONALITY	3. CALL SIGN/OFFICIAL NO.

4. GROSS/NET TONNAGE	5. FUEL/CARGO CAPACITY	6. HOME PORT	7. VESSEL TYPE

8. NAME OF OWNER/OPERATOR	9. ADDRESS OF OWNER/OPERATOR
N	

10. NAME OF LOCAL AGENT	11. ADDRESS OF LOCAL AGENT
	A

12. MASTER	13. LICENSE/DOC. NO.	14. PERSON-IN-CHARGE	15. LICENSE/DOC. NO.

16. CERTIFICATE OF FINANCIAL RESPONSIBILITY (Number and Date)	17. LOCATION	18. OCMI FILE

19. REMARKS

ADDRESS 310 Wheeler St. Town of Tonawanda, NY ZIP 14150 TELEPHONE NUMBER (716 692 2000, Ext. 330	POSITION Vice President of Technology CONNECTION WITH THE CASE Manufacturer's representative STATEMENT ATTACHED YES NO ENCLOSURE NUMBER
NAME Angelo Sarkees ADDRESS NYS DEC Buffalo Office 600 Delaware, Buffalo, NY ZIP 14202 TELEPHONE NUMBER (716) 847-4590	EMPLOYER NYS DEC POSITION Investigator CONNECTION WITH THE CASE Investigator for State STATEMENT ATTACHED YES NO ENCLOSURE NUMBER
NAME PS2 James Patton ADDRESS 111 W. Huron St. Buffalo, NY ZIP 14202 TELEPHONE NUMBER (716) 846-4168	EMPLOYER U. S. Coast Guard POSITION Petty Officer CONNECTION WITH THE CASE Investigator STATEMENT ATTACHED YES NO ENCLOSURE NUMBER
NAME ADDRESS ZIP TELEPHONE NUMBER ( ) -	EMPLOYER POSITION CONNECTION WITH THE CASE STATEMENT ATTACHED YES NO ENCLOSURE NUMBER
NAME ADDRESS ZIP TELEPHONE NUMBER ( ) -	EMPLOYER POSITION CONNECTION WITH THE CASE STATEMENT ATTACHED YES NO ENCLOSURE NUMBER
NAME ADDRESS ZIP TELEPHONE NUMBER ( ) -	EMPLOYER POSITION CONNECTION WITH THE CASE STATEMENT ATTACHED YES NO ENCLOSURE NUMBER

ADD SUPPLEMENTAL LIST IF REQUIRED FOR COMPLETE LIST.

PART VI – SAMPLES

1. TAKEN FROM Spill area near tank		
DATE AND TIME TAKEN 22 May 86/1300	TAKEN BY PS2 Patton	WITNESS PS1 Gorski
2. TAKEN FROM Niagara River		
DATE AND TIME TAKEN 22 May 86/1320	TAKEN BY PS2 Patton	WITNESS PS1 Gorski
3. TAKEN FROM		
DATE AND TIME TAKEN	TAKEN BY	WITNESS
4. TAKEN FROM		
DATE AND TIME TAKEN	TAKEN BY	WITNESS
5. TAKEN FROM		
DATE AND TIME TAKEN	TAKEN BY	WITNESS
6. TAKEN FROM		
DATE AND TIME TAKEN	TAKEN BY	WITNESS
7. TAKEN FROM		
DATE AND TIME TAKEN	TAKEN BY	WITNESS
8. TAKEN FROM		
DATE AND TIME TAKEN	TAKEN BY	WITNESS
9. TAKEN FROM		
DATE AND TIME TAKEN	TAKEN BY	WITNESS
10. TAKEN FROM		
DATE AND TIME TAKEN	TAKEN BY	WITNESS
11. TAKEN FROM		
DATE AND TIME TAKEN	TAKEN BY	WITNESS
12. TAKEN FROM		
DATE AND TIME TAKEN	TAKEN BY	WITNESS

ADD SUPPLEMENTAL LIST IF REQUIRED FOR COMPLETE LIST

PART VII - PHOTOGRAPHS

1 NUMBER TAKEN	2 TYPE OF FILM	3 ENCLOSURE NUMBER
None		

4 REMARKS

PART VIII – LIST OF ENCLOSURES

(1) Pollution Incident Notification Log
(2) Letter of Federal Interest
(3) Letter of Acceptance of Financial Responsibility
(4) POLREP One and Final

PART IX – INVESTIGATORS SUMMARY

On 22 May 1986 at 0907 local, MSO Buffalo was notified by Mary Pringle of the New York State Dept. of Environmental Conservation of a pollution incident in the Town of Tonawanda, New York involving the Spaulding Fibre Company.

At 1030, PS2 Patton and I were on scene and met with Mr. Richard Preibisch, Vice-President of Technology for the Spaulding Fibre Company. Investigation revealed that on 15 May 1986, a tank truck from Valvoline Oil Company was scheduled to transfer 2496 gallons of Econ #4 Polishing Oil to a holding tank at Spaulding Fibre Co. When the transfer procedure started, the product began to leak from the transfer coupling on to the ground. After a loss of approximately 5 gallons, the operation was stopped and the coupling was adjusted to prevent further loss. The ground below the transfer coupling was saturated with oil. Due to heavy rain on the contaminated soil, a mixture of oil and water entered the storm drain, and eventually reached the Niagara River causing a visible sheen.

The Niagara River is considered navigable waters of the United States as defined in 33 CFR 2.05-25(a).

The Spaulding Fibre Co. removed the contaminated soil and placed absorbent boom in the Niagara River at the mouth of the storm drain.

On 24 May 1986, personnel from MSO Buffalo returned to the spill site and reported clean-up complete and satisfactory.

16 June 1986 consulted with SSC who advised MSO that Econ #4 Polishing Oil is a mixture of mineral oil and kerosene which is considered an oil under the Clean Water Act.

PART X – CLEANUP OR OTHER MITIGATION ACTION

The soil at the spill site is to be removed and boom is to be deployed at the mouth of the discharge pipe.

REPORTED IMPACT

Negligible.

ACTION TAKEN TO PREVENT RECURRANCE

Use of proper operations and inspection of all couplings prior to the start of transfer is required.

SIGNATURE OF I.O.	SIGNATURE OF CO	DATE
DAVID J. GORSKI, PS1	FRANCIS X. OWENS, CDR, USCG	11 JUL 86

PART XI – CIVIL PENALTY ACTION TAKEN

TRANSPORTATION
U.S. COAST GUARD
CGSOBUF-11 (Rev. 2-80)

POLLUTION INCIDENT
NOTIFICATION LOG

FPN

NOTIFIER NAME MARV PRINGLE

ADDRESS NYS DEC

PHONE 947-4590

REPORTING ON BEHALF OF SPILLER? (YES) (NO)

WITNESS TO DISCHARGE? (YES) (NO)

OCCURRED DATE UNK TIME UNK

DISCOVERED DATE 5/22 TIME 0726

LOCATION SPAULDING FIBER WHEELER STREET

BODY OF WATER ~~NIAGARA~~ NIAGARA RIVER

SOURCE DISCHARGE PIPE

OPERATIONS IN PROGRESS NONE

** MATERIAL PETROLEUM

AMOUNT UNKNOWN

EXTENT OF SPILL UNKNOWN

SLICK SIZE UNK COLOR BLUE

DATE/TIME REPORT RECEIVED 0907/5/22

PERSON RECEIVING REPORT PSI/YNZ

REPORT RECEIVED VIA (NRC) (OTHER)
DEC/PHONE

COAST GUARD JURISDICTION (YES) (NO)

ACTION TAKEN

INVESTIGATOR

NOTES:

TOWN OF TONAWANDA NOTIFIED DEC

MR THIEBOLT
692-2121

CLOSER TO GIBSON ST. ENTRANCE

<DISCHARGE PIPE>
(TO RIVER)

**ANY NEW YORK HAZMAT SPILL NOTIFY OSHA REGION II, 212 944-3426
4 HR NUMBER 202 523-8033.

REFERENCE(1)

US Department of Transportation
United States Coast Guard

Fede . Bldg., Rm 1111
111 West Huron St.
Buffalo, New York 14202

16450.1A

SPAULDING FIBER
3/0 Wheeler St.
T. Tonawanda NY

Gentlemen:

This is to inform you that a pollution incident occurred or threatens to occur at SPAULDING FIBRE Co. at THE CITY OF TONAWANDA PLANT for which you may be financially responsible under federal statutes, the United States Government has an interest in this incident, and further, may take appropriate action to minimize the damage which may be caused by this incident.

The discharge of a harmful quantity of oil is a violation of the Federal Water Pollution Control Act as amended by the Clean Water Act. Under this Act, the person responsible for the pollution is obligated to undertake removal action. If he refuses to take adequate removal action he is financially responsible for actions taken by the Federal Government to remove the pollutant and adequately mitigate its effects. Removal is being done properly if it is in accordance with Federal and State statutes and regulations and the procedures and criteria of the National Oil and Hazardous Substance Pollution Contingency Plan. If you undertake removal, the adequacy of your actions will be determined by the U.S. Coast Guard On-Scene Coordinator. The On-Scene Coordinator for this area is F.X. OWENS, CDR. USCG. As long as you are taking adequate action in this matter, Federal action will be limited to monitoring the progress of your activities and to provide guidance as necessary.

If it is determined that you are not taking prompt and appropiate actions to contain, clean-up and dispose of the pollutant(s), Federal response may be initiated. You may then be held responsible for all actual costs incurred by the Federal Government as set forth in Section 311(f) of the Federal Water Pollution Control Act, as amended. Should you require further information concerning this this matter you should contact

Sincerely,

PS1 D. J. GORSKI + PS2 J. J. [illegible]
On-Scene Coordinator's Representative

Received and Acknowledged

[signature]
5-22-86

1230
TIME

05/22/86
DATE

ENCLOSURE (1)

ACCEPTANCE OF FINANCIAL RESPONSIBILITY

SPAULDING FIBRE Co. hereby assumes responsibility for
(name of company/person)

containment and cleanup of ECon #4 POLISHING OIL discharged from
(substance)

GIBSON ST on 05-22-86, and recognizes that
(source) (date)

the determination of the adequacy and propriety of the containment and cleanup operations continue to rest with the designated Coast Guard On-scene Coordinator.

Richard A. Pacek V.P. - Technology
(Authorized signature and title)

15-22-86 1:15:52 P.M.
(Date and Time)

ENCLOSURE(5)

DATE: November 13, 1986

TO: Wally Berndt

FROM: Greg Stubbs

SUBJECT: IPD PERMITS

Below is the list of IPD environmental permits as per your request.

NYSDEC AIR PERMITS:

Permit No.	Permitted Unit	Issue Date	Expiration Date
00001	South Fuel Oil Tank	03/07/84	04/01/90
00002	North Fuel Oil Tank	03/07/84	04/01/90
00003	Rag Shed West Phenol Tank	03/07/84	04/01/90
00004	Rag Shed Central Cresylic Tank	03/07/84	04/01/90
00005	Rag Shed East Cresylic S Tank	03/07/84	04/01/90
00006	Resin Making Formaldehyde Storage Tank	03/07/84	04/01/90
00007	Underground Caustic Tank	03/07/84	04/01/90
00008	Underground Toluene Tank	03/07/84	04/01/90
00009	Underground Methanol Tank(East)	03/07/84	04/01/90
00010	Underground Methanol Tank(West)	03/07/84	04/01/90
00011	Ethanol Tank	03/07/84	04/01/90
00012	Methanol Tank	03/07/84	04/01/90
00013	Grinding Oil Tank	03/07/84	04/01/90
008-0	Rag Cutter Wet Scrubber	01/01/82	05/01/91
01800	Spauldite Saws & Sanders Baghouse	01/01/82	05/01/91
01801	SEM Saws & Sanders Baghouse	09/01/82	05/01/91
0181A	Cyclone (backup to baghouse)	01/01/82	05/01/91
501-0	Fibre Tube Grinder Electrostatic Precipitator	01/01/82	05/01/91
502-0	Fibre Tube Dip Tank	01/01/82	05/01/91
503-0	Fibre Tube Dip Tank	01/01/82	05/01/91
504-0	Fibre Tube Grinder Electrostatic Precipitator	01/01/82	05/01/91
529-0	Mezzanine Resin Tanks Exhaust	01/01/82	05/01/91
543-0	Washer Chest	01/01/82	05/01/91
544-0	Washer Chest	01/01/82	05/01/91
545-0	Washer Chest	01/01/82	05/01/91
546-0	Washer Chest	01/01/82	05/01/91
547-0	Washer Chest	01/01/82	05/01/91
02DEH	No. 2 Treater Exit Exhaust	05/30/85	04/01/90
03DEH	No. 3 Treater Exit Exhaust	05/30/85	04/01/90
04DEH	No. 4 Treater Exit Exhaust	05/30/85	04/01/90
43DEE	Treater Room Ceiling Exhaust	05/30/85	09/01/90

Permit No.	Permitted Unit	Issue Date	Expiration Date
43WEE	Treater Room Ceiling Exhaust	05/30/85	09/01/90
04000	Four Inch Press	03/19/85	04/01/90
06000	Six Inch Press	03/19/85	04/01/90
16000	No. 16 Press	03/19/85	04/01/90
53800	No. 1 Boiler	01/01/82	05/01/91
53900	No. 2 Boiler	01/01/82	05/01/91
54000	No. 3 Boiler	01/01/82	05/01/91
54100	No. 4 Boiler	01/01/82	05/01/91
54200	Incinerator	01/01/82	05/01/91
55500	No. 5 Treater	12/01/82	05/01/91

NYSDEC SPDES PERMIT:

NY0002364	001 (F Line), 003 (K Line)	05/01/84	05/01/89

CITY OF TONAWANDA INDUSTRIAL SEWER CONNECTION PERMIT:

202	I Line	12/01/85	12/01/88

You will be notified of any additions, deletions, or changes.

Greg Stubbs

mm

Occupational Safety and Health Administration

Citation and Notification of Penalty

U.S. Department of Labor - OSHA
5360 Genesee Street

Bowmansville, NY 14026

1. Type of Violation(s)	2. Citation Number
Other	01

The violation(s) described in this Citation are alleged to have occurred on or about the day the inspection was made unless otherwise indicated within the description given below.

3. Issuance Date	4. Inspection Number
03/16/87	[illegible]
5. Reporting ID	6. CSHO ID
0213600	S5140
7. Optional Report No.	8. Page No.
1326	1 of 2

10. Inspection Date(s):

2/19/87 - 3/11/87

11. Inspection Site:

310 Wheeler Street
Tonawanda, NY 14150

Penalties Are Due Within 15 Days of Receipt of This Notification Unless Contested (See enclosed Booklet)

This Section May Be Detached Before Posting

9. To:

Spaulding Fibre Co. Inc.
and its successors
310 Wheeler Street
Tonawanda, NY 14150

THE LAW REQUIRES that a copy of this Citation be posted immediately in a prominent place at or near the location of violation(s) cited below. The Citation must remain posted until the violations cited below have been abated, or for 3 working days (excluding weekends and Federal holidays), whichever is longer.

This Citation describes violations of the Occupational Safety and Health Act of 1970. The penalty(ies) listed below are based on these violations. You must abate the violations referred to in this Citation by the dates listed below and pay the penalties proposed, unless within 15 working days (excluding weekends and Federal holidays) from your receipt of this Citation and penalty you mail a notice of contest to the U.S. Department of Labor Area Office at the address shown above. (See the enclosed booklet which outlines your rights and responsibilities and should be read in conjunction with this form.) You are further notified that unless you inform the Area Director in writing that you intend to contest the Citation or proposed penalties within 15 working days after receipt, this Citation and the proposed penalties will become a final order of the Occupational Safety and Health Review Commission and may not be reviewed by any court or agency. Issuance of this Citation does not constitute a finding that a violation of the Act has occurred unless there is a failure to contest as provided for in the Act or, if contested, unless the Citation is affirmed by the Review Commission.

12. Item Number / 13. Standard, Regulation or Section of the Act Violated	14. Description	15. Date by Which Violation Must Be Abated	16. Penalty
29 CFR 1910.212(a)(1)	Machine guarding was not provided to protect operators and other employees from hazards created by rotating parts: a) Machine shop, lathes: 1) Hercules Ajax; 2) Fitchbury; 3) Lodge & Shisley; 4) Cincinnati. b) Instrument shop: Johnson Horizontal saw did not have exposed portion of the blade guarded.	Immediately Upon Receipt	0.00
29 CFR 1910.252(a)(2)(iv)(c)	Oxygen cylinders in storage were not separated from fuel-gas cylinders by a minimum distance of 20 feet or by a noncombustible barrier at least 5 feet high having a fire-resistance rating of at least one-half hour: a) Machine shop, weld area: two oxygen cylinders and two acetylene cylinders stored adjacent to each other.	Immediately Upon Receipt	0.00

17. Area Director — Robert Bradley
For Richard J. Bradley

18. Last Pg

NOTICE TO EMPLOYEES — The law gives an employee or his representative the opportunity to object to any abatement date set for a violation if he believes the date to be unreasonable. The contest must be mailed to the U.S. Department of Labor Area Office at the address shown above within 15 working days (excluding weekends and Federal holidays) of the receipt by the employer of this Citation and penalty.

EMPLOYER DISCRIMINATION UNLAWFUL — The law prohibits discrimination by an employer against an employee for filing a complaint or for exercising any rights under this Act. An employee who believes that he has been discriminated against may file a complaint no later than 30 days after the discrimination with the U.S. Department of Labor Area Office at the address shown above.

EMPLOYER RIGHTS AND RESPONSIBILITIES — The enclosed booklet outlines employer rights and responsibilities and should be read in conjunction with this notification.

Total Penalty for This Citation

Make Check or Money Order Payable to: "DOL-OSHA"

Indicate Inspection Number on Remittance

CITATION AND NOTIFICATION OF PENALTY — ORIGINAL — OSHA-2 (Rev. 1/84)

Occupational Safety and Health Administration

Citation and Notification of Penalty

US Department of Labor - OSHA
5360 Genesee Street

Bowmansville, NY 14026

1. Type of Violation(s)	2. Citation Number
Other	01

3. Issuance Date	4. Inspection Number
03/18/87	100662816
5. Reporting ID 0213600	6. CSHO ID S5140
7. Optional Report No. 1326	8. Page No. 2 of 2

The violation(s) described in this Citation are alleged to have occurred on or about the day the inspection was made unless otherwise indicated within the description given below.

10. Inspection Date(s):

2/19/87 - 3/11/87

11. Inspection Site:

310 Wheeler Street
Tonawanda, NY 14150

9. To:

Spaulding Fibre Co. Inc.
and its successors
310 Wheeler Street
Tonawanda, NY 14150

Penalties Are Due Within 15 Days of Receipt of This Notification Unless Contested (See enclosed Booklet)

This Section May Be Detached Before Posting

THE LAW REQUIRES that a copy of this Citation be posted immediately in a prominent place at or near the location of violation(s) cited below. The Citation must remain posted until the violations cited below have been abated, or for 3 working days (excluding weekends and Federal holidays), whichever is longer.

This Citation describes violations of the Occupational Safety and Health Act of 1970. The penalty(ies) listed below are based on these violations. You must abate the violations referred to in this Citation by the dates listed below and pay the penalties proposed, unless within 15 working days (excluding weekends and Federal holidays) from your receipt of this Citation and penalty you mail a notice of contest to the U.S. Department of Labor Area Office at the address shown above. (See the enclosed booklet which outlines your rights and responsibilities and should be read in conjunction with this form.) You are further notified that unless you inform the Area Director in writing that you intend to contest the Citation or proposed penalties within 15 working days after receipt, this Citation and the proposed penalties will become a final order of the Occupational Safety and Health Review Commission and may not be reviewed by any court or agency. Issuance of this Citation does not constitute a finding that a violation of the Act has occurred unless there is a failure to contest as provided for in the Act or, if contested, unless the Citation is affirmed by the Review Commission.

12. Item Number / 13. Standard, Regulation or Section of the Act Violated	14. Description	15. Date by Which Violation Must Be Abated	16. Penalty
29 CFR 1910.252(b)(4)(ix)(c):	Work or electrode lead cable(s) with damaged insulation or exposed bare conductors were not replaced: a) Machine shop, weld area: weld cable had insulation breached baring conductors.	Immediately Upon Receipt	0.0

17. Area Director: Robert Boyd for Richard J. Bradley

18. $ 0.0

NOTICE TO EMPLOYEES — The law gives an employee or his representative the opportunity to object to any abatement date set for a violation if he believes the date to be unreasonable. The contest must be mailed to the U.S. Department of Labor Area Office at the address shown above within 15 working days (excluding weekends and Federal holidays) of the receipt by the employer of this Citation and penalty.

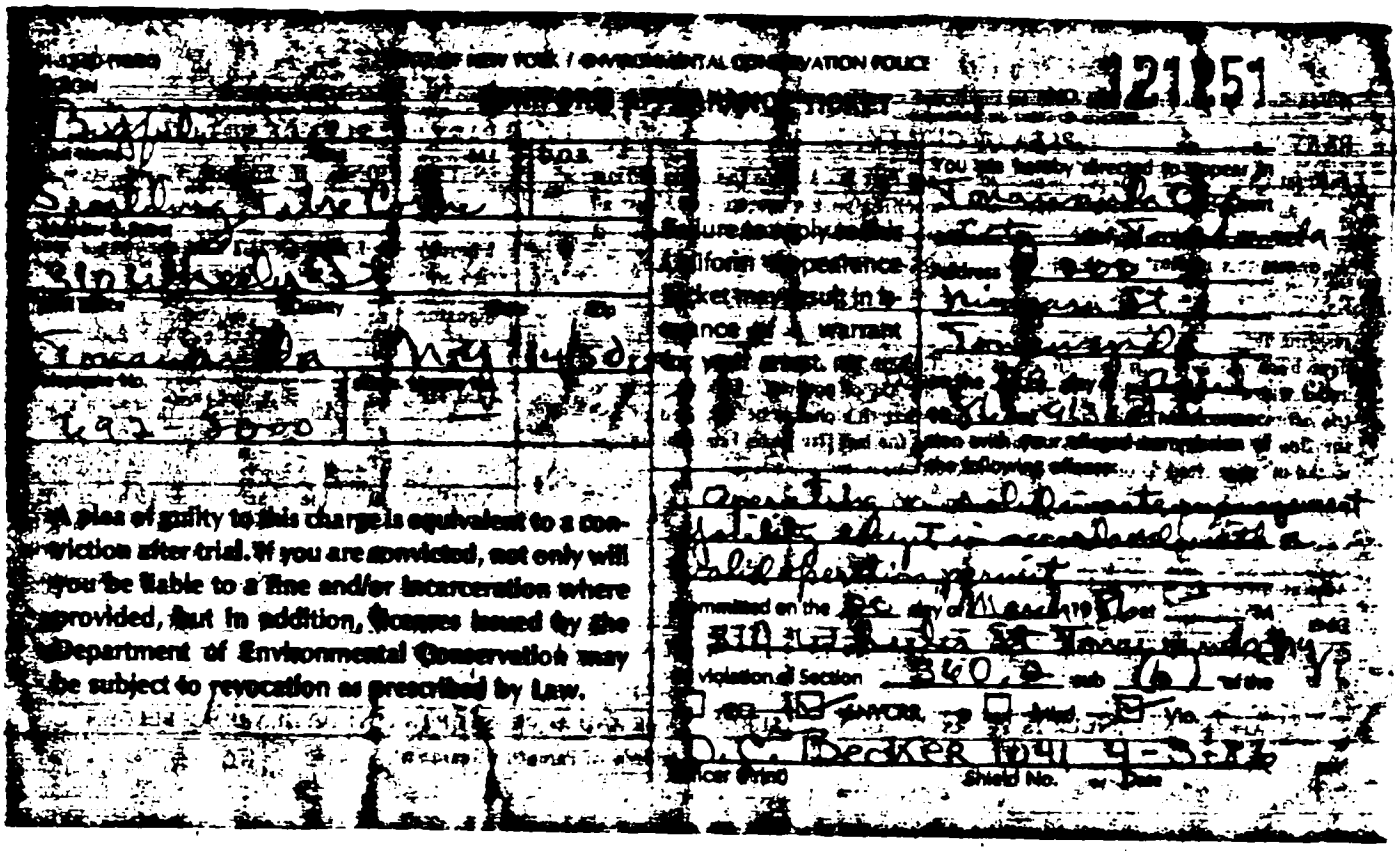
EMPLOYER DISCRIMINATION UNLAWFUL — The law prohibits discrimination by an employer against an employee for filing a complaint or for exercising any rights under this Act. An employee who believes that he has been discriminated against may file a complaint no later than 30 days after the discrimination with the U.S. Department of Labor Area Office at the address shown above.

EMPLOYER RIGHTS AND RESPONSIBILITIES — The enclosed booklet outlines employer rights and responsibilities and should be read in conjunction with this notification.

Total Penalty for This Citation

Make Check or Money Order Payable to: "DOL-OSHA"

Indicate Inspection Number on Remittance



A plea of guilty to this charge is equivalent to a conviction after trial. If you are convicted, not only will you be liable to a fine and/or incarceration where provided, but in addition, licenses issued by the Department of Environmental Conservation may be subject to revocation as prescribed by Law.

NEW YORK / ENVIRONMENTAL CONSERVATION POLICE

121251

You are hereby directed to appear

Failure to comply with this appearance ticket may result in issuance of a warrant

also with your alleged commission of the following offense:

committed on the 26 day of March 19 91

violation of Section 360.2 sub 6 of the

Becker 1041 9-3-92

Officer (Print) Shield No. Date

If you plea by mail, mail this form to the Court specified on the reverse side by Certified Mail. Return Receipt Requested.

PART "A" PLEA OF GUILTY

INSTRUCTIONS: If this part is used, cross out Part B. Mail to the court at least 3 days prior to the date of appearance specified on the reverse side. List all previous violations of the Environmental Conservation Law. If the court denies this application, the applicant will be notified to appear.

I, _____

residing at _____

have been charged with the offense as specified on the reverse of the application and I waive arraignment in open court and the aid of counsel. I plead guilty to the offense as charged and elect and request that this charge be disposed of and the fine or penalty fixed by the court. During the last five years I have been convicted of, stipulated to or settled for the violations noted below.

I make the following statement of explanation (Optional):

_____

_____

All statements are made under the penalty of perjury.

Date _____ Signed _____

PART "B" PLEA OF NOT GUILTY

INSTRUCTIONS: If this part is used, cross out Part A.

I hereby plead NOT GUILTY to the charge specified on the reverse side of this ticket.

Signature _____

Address _____

NOTE: Mail to the court within 48 hours. The court shall advise the violator by Certified Mail, Return Receipt Requested, of the Trial date, which in no event shall be less than 7 days after such notice of trial is mailed.

Convictions (List Offenses, Date, Fine and Place) ENVIRONMENTAL CONSERVATION LAW Only

APPLICANTS UNDER 18 YEARS OF AGE MUST SUBMIT NAME AND ADDRESS OF PARENT OR GUARDIAN BELOW

Name of Parent or Guardian

Address of Parent or Guardian

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233-

Henry G. Williams
Commissioner

CERTIFIED MAIL, RETURN RECEIPT REQUESTED MAR 2 1987 WL#23 29.1

Mr. Greg Stubbs
Environmental Compliance Analyst
Spaulding Fibre Company, Inc.
310 Wheeler Street
Tonawanda, Ner York 14150

RE: Hazardous Waste Compliance Inspection Date: January 23, 1987
Location of Handler: Same as Above

EPA Identification Number: NYD002104404

Dear Mr. Stubbs:

In order to determine compliance with the New York State Hazardous Waste Regulations, the New York State Department of Environmental Conservation conducted an inspection of your facility on the above referenced date.

As a result of that inspection, review of documentation submitted by your facility to this Department, and applying the New York State Hazardous Waste Regulations, we believe that your facility is operating as a generator of hazardous waste.

6NYCRR Part 373-3.2(g)(1),(2),(3) requires that facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of this Subpart. In addition, the owner or operator must ensure that:

- Facility personnel take part in an annual review of the initial training required.

You have not met the above requirement and, therefore, are in violation of 6NYCRR Part 373-3.2(g)(1),(2),(3).

6NYCRR Part 373-3.2(g)(4) requires the owner or operator to maintain the following documents and records at the facility:

- Records that document that the training or job experience required has been given to, and completed by facility personnel.

You have not maintained the above documentation and, therefore, are in violation of 6NYCRR Part 373-3.2(g)(4).

6NYCRR Part 373-3.2(g)(5) states: "Training records on current personnel must be kept until closure of the facility. Training records on former employees must be kept for at least three years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company." You have not maintained the required records and, therefore, are in violation of 6NYCRR Part 373-3.2(g)(5).

Please confirm in writing within 30 days of the date stamped on this letter, that the above referenced violations have been corrected and include supporting documentation as appropriate. You MUST include your EPA Identification Number on all correspondence. This confirmation should be addressed to:

Mr. Peter Buechi, P.E.
Regional Solid and Hazardous Waste Engineer
New York State Department of Environmental Conservation
600 Delaware Avenue
Buffalo, New York 14202
(716) 847-4600
Attention: Mr. Nelson F. Schnabel, Inspector

with a copy to:

Mr. David A. Blackman, P.E.
Supervisor of the Compliance Inspection Section
Bureau of Hazardous Waste Operations
Division of Solid and Hazardous Waste
New York State Department of Environmental Conservation
50 Wolf Road - Room 208/204
Albany, New York 12233-4017
(518) 457-0532
Attention: Mr. Michael J. Cruden, Reviewer

If you have any questions about this notice or should you wish to discuss this matter further, please contact the Inspector or the Reviewer at the telephone number above. A copy of the Inspection Form is enclosed for your information.

Sincerely,

David Mafrici, P.E.
Chief
Bureau of Hazardous Waste Operations
Division of Solid and Hazardous Waste

Enclosure

cc: w/o enc. - Mr. Jeffrey Lacey, Regional Attorney, Region 9
Mr. Peter Buechi, Regional Solid & Hazardous Waste Engineer, Region 9
Mr. Nelson F. Schnabel, Inspector, Region 9
New York State Department of Environmental Conservation

Mr. Michael J. Cruden, Reviewer, Central Office
New York State Department of Environmental Conservation

REFERENCE NO. 23

TABLE I
SAMPLE DESCRIPTIONS
SPAULDING FIBRE COMPANY
TONAWANDA, NEW YORK
CASE# 7204
4/28/87

Sample ID Number	Organic Traffic Report #	Inorganic Traffic Report #	Time	Sample Type
NYR9-SW1	BC084	MBF490	1455	Aqueous
NYR9-SW2	BC085	MBJ192	1535	Aqueous
NYR9-GW1	BK238	MBJ137	1650	Aqueous
NYR9-GW2	BK239	MBJ292	1715	Aqueous
NYR9-BL1	BF429	MBF484	-	Aqueous

TABLE 1 (CONT'D)
SAMPLE DESCRIPTIONS
SPAULDING FIBRE COMPANY
TONAWANDA, NEW YORK
CASE# 7204
04/29/87

Sample ID Number	Organic Traffic Report #	Inorganic Traffic Report #	Time	Sample Type
NYR9-S1	BK240	MBF480	1040	Soil
NYR9-S2	BK241	MBF481	1130	Soil
NYR9-S3	BF427	MBF482	1209	Soil
NYR9-S4	BF428	MBF483	1230	Soil
NYR9-S5	BC080	MBF486	1315	Soil
NYR9-S6	BC081	MBF487	1335	Soil
NYR9-S7	BC082	MBF488	1430	Soil
NYR9-S8	BK249	MBI590	1500	Soil
NYR9-BL2	BC083	-	-	Aqueous

ANALYTICAL DATA
SPAULDING FIBRE
SAMPLING DATE: 4/28-4/29/87
CASE NUMBER: 7204

VOLATILES

SAMPLE NUMBER	NYR9-S1	NYR9-S2	NYR9-S3	NYR9-S4	NYR9-S5	NYR9-S6	NYR9-S7	NYR9-S8	NYR9-GW1	NYR9-GW2	NYR9-SW1	NYR9-SW2	NYR9-BL1	NYR9-BL2
TRAFFIC REPORT NUMBER	BK-240	BK-241	BF-427	BF-428	BC-080	BC-081	BC-082	BK-249	BK-238	BK-239	BC-084	BC-085	BF-429	BC-083
MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	WATER	WATER	WATER	WATER	WATER	WATER
UNITS	**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**
CONC./DILUTION FACTOR	5	5	5	5	5	5	5	5	1	1	1	1	1	1
Chloromethane														
Bromomethane														
Vinyl Chloride														
Chloroethane														
Methylene Chloride	16J	21J	17J	9J	19J	10J	17J	13J						
Acetone							360						22	
Carbon Disulfide														
1,1-Dichloroethene														
1,1-Dichloroethane														
Trans-1,2-Dichloroethene														
Chloroform														
1,2-Dichloroethane														
2-Butanone														
1,1,1-Trichloroethane					10J			10J						
Carbon Tetrachloride														
Vinyl Acetate														
Bromodichloromethane														
1,2-Dichloropropane														
Trans-1,3-Dichloropropene														
Trichloroethene														
Dibromochloromethane														
1,1,2-Trichloroethane														
Benzene		230												
Cis-1,3-Dichloropropene														
2-Chloroethylvinylether														
Bromoform														
2-Hexanone														
4-Methyl-2-Pentanone														
Tetrachloroethene														
1,1,2,2-Tetrachloroethane														
Toluene	48	120	12J		8J	7J	10J	11J						
Chlorobenzene														
Ethylbenzene														
Styrene														
Total Xylenes														

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 limits
B - compound found in laboratory blank as well as the sample, and indicates possible/probable blank contamination
E - value estimated due to laboratory interference
NR - analysis not required

ANALYTICAL DATA
SPAULDING FIBRE
SAMPLING DATE: 4/28-4/29/87
CASE NUMBER: 7204

SEMI-VOLATILES															
SAMPLE NUMBER	NYR9-S1	NYR9-S2	NYR9-S3	NYR9-S4	NYR9-S5	NYR9-S6	NYR9-S7	NYR9-S8	NYR9-GW1	NYR9-GW2	NYR9-SW1	NYR9-SW2	NYR9-BL1	NYR9-BL2
TRAFFIC REPORT NUMBER	BK-240	BK-241	BF-427	BF-428	BC-080	BC-081	BC-082	BK-249	BK-238	BK-239	BC-084	BC-085	BF-429	BC-083
MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	WATER	WATER	WATER	WATER	WATER	WATER
UNITS	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
CONC./DILUTION FACTOR	5	20	5	1	5	1	200	5	1	1	1	1	1	
Phenol	9500	12000	1100J		1500J		910000	840J				11		NR
Bis(2-Chloroethyl)Ether														NR
2-Chlorophenol														NR
1,3-Dichlorobenzene														NR
1,4-Dichlorobenzene														NR
Benzyl Alcohol														NR
1,2-Dichlorobenzene														NR
2-Methylphenol	2800	28000			250J									NR
Bis(2-Chloroisopropyl)Ether														NR
4-Methylphenol	11000	71000	540J		430J			310J				J		NR
N-Nitroso-Di-n-Propylamine														NR
Hexachloroethane														NR
Nitrobenzene														NR
Isophorone														NR
2-Nitrophenol														NR
2,4-Dimethylphenol	9800	150000	340J		440J	J		220J						NR
Benzoic Acid	0	18000J										J		NR
Bis(2-Chloroethoxy)Methane														NR
2,4-Dichlorophenol														NR
1,2,4-Trichlorobenzene														NR
Naphthalene		3000J	1300J		370J									NR
4-Chloroaniline														NR
Hexachlorobutadiene														NR
4-Chloro-3-Methylphenol	0													NR
2-Methylnaphthalene	170J	4300J	980J											NR
Hexachlorocyclopentadiene														NR
2,4,6-Trichlorophenol														NR
2,4,5-Trichlorophenol														NR
2-Chloronaphthalene														NR
2-Nitroaniline														NR
Dimethyl Phthalate														NR
Acenaphthylene														NR
3-Nitroaniline														NR
Acenaphthene			2400		690J									NR
2,4-Dinitrophenol														NR
4-Nitrophenol														NR
Dibenzofuran			1700		370J									NR
2,4-Dinitrotoluene														NR
2,6-Dinitrotoluene														NR
Diethylphthalate														NR
4-Chlorophenylphenyl ether														NR
Fluorene			2100		770J									NR
4-Nitroaniline														NR

ANALYTICAL DATA
SPAULDING FIBRE
SAMPLING DATE: 4/28-4/29/87
CASE NUMBER: 7204

SEMI-VOLATILES

SAMPLE NUMBER	NYR9-S1	NYR9-S2	NYR9-S3	NYR9-S4	NYR9-S5	NYR9-S6	NYR9-S7	NYR9-S8	NYR9-GW1	NYR9-GW2	NYR9-SW1	NYR9-SW2	NYR9-BL1	NYR9-BL2
TRAFFIC REPORT NUMBER	BK-240	BK-241	BF-427	BF-428	BC-080	BC-081	BC-082	BK-249	BK-238	BK-239	BC-084	BC-085	BF-429	BC-083
MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	WATER	WATER	WATER	WATER	WATER	WATER
UNITS	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
CONC./DILUTION FACTOR	5	20	5	1	5	1	200	5	1	1	1	1	1	
4,6-Dinitro-2-Methylphenol														NR
N-Nitrosodiphenylamine														NR
4-Bromophenylphenyl ether														NR
Hexachlorobenzene														NR
Pentachlorophenol														NR
Phenanthrene	240J	2000J	13000		5300									NR
Anthracene			8900		1400J									NR
Di-n-Butylphthalate	13000	160000	5100	J	4200	J	240000	800J				11		NR
Fluoranthene	250J		15000		5000									NR
Pyrene	220J	2000J	7400		4500									NR
Butylbenzylphthalate														NR
3,3'-Dichlorobenzidine														NR
Benzo(a)Anthracene			9400		2300									NR
Bis(2-Ethylhexyl)Phthalate	350J	29000	1300J	J	2600	J						J		NR
Chrysene			8200		2000									NR
Di-n-Octyl Phthalate														NR
Benzo(b)Fluoranthene			9700		2200*									NR
Benzo(k)Fluoranthene														NR
Benzo(a)Pyrene			6800		1600J									NR
Indeno(1,2,3-cd)Pyrene			2500		490J									NR
Dibenzo(a,h)Anthracene			860J											NR
Benzo(ghi)Perylene			1900		410J									NR

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 limits
B - compound found in laboratory blank as well as the sample, and indicates possible/probable blank contamination
E - value estimated due to laboratory interference
NR - analysis not required
* - concentration is an indivisible sum for Benzo(b)- and Benzo(k)-Fluoranthene

ANALYTICAL DATA
SPAULDING FIBRE
SAMPLING DATE: 4/28-4/29/87
CASE NUMBER: 7204

PESTICIDES/PCBs															
SAMPLE NUMBER	NYR9-S1	NYR9-S2	NYR9-S3	NYR9-S4	NYR9-S5	NYR9-S6	NYR9-S7	NYR9-S8	NYR9-GW1	NYR9-GW2	NYR9-SW1	NYR9-SW2	NYR9-BL1	NYR9-BL2
TRAFFIC REPORT NUMBER	BK-240	BK-241	Bf-427	Bf-428	BC-080	BC-081	BC-082	BK-249	BK-238	BK-239	BC-084	BC-085	BF-429	BC-083
MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	WATER	WATER	WATER	WATER	WATER	WATER
UNITS	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
CONC./DILUTION FACTOR	10	10	10	1	10	10	10	5	1	1	5	10	10	
Alpha-BHC														NR
Beta-BHC														NR
Delta-BHC														NR
Gamma-BHC (Lindane)														NR
Heptachlor														NR
Aldrin														NR
Heptachlor Epoxide														NR
Endosulfan I														NR
Dieldrin														NR
4,4'-DDE														NR
Endrin														NR
Endosulfan II														NR
4,4'-DDD														NR
Endosulfan sulfate														NR
4,4'-DDT														NR
Methoxychlor														NR
Endrin Ketone														NR
Chlordane														NR
Toxaphene														NR
Aroclor-1016														NR
Aroclor-1221														NR
Aroclor-1232														NR
Aroclor-1242														NR
Aroclor-1248	3140			J	4310	5640								NR
Aroclor-1254		2910	1580J											NR
Aroclor-1260														NR

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 limits
B - compound found in laboratory blank as well as the sample, and indicates possible/probable blank contamination
E - value estimated due to laboratory interference
NR - analysis not required

U.S. ENVIRONMENTAL PROTECTION AGENCY HWI Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313—703/557-2490 • FTS/557-2490

ORGANICS TRAFFIC REPORT

Sample Number **BC084**

① **Case Number:** _____

Sample Site Name/Code: _____

② **SAMPLE CONCENTRATION** (Check One)

/ Low Concentration
___ Medium Concentration

③ **SAMPLE MATRIX** (Check One)

✓ Water
___ Soil/Sediment

④ **Ship To:** CC153

Attn: [redacted]

Transfer Ship To:

⑤ **Regional Office:** _____

Sampling Personnel: _____

(Name)

(Phone)

Sampling Date:

(Begin) (End)

⑥ **For each sample collected specify number of containers used and mark volume level on each bottle.**

	Number of Containers	Approximate Total Volume	⑪ Analysis Lab: Rec'd by: L Lambert Date Rec'd 4-22-87 Sample Condition on Receipt (e.g., broken, no ice, Chain-of-Custody, etc.)
Water (Extractable)			
Water (VOA)			
Soil/Sediment (Extractable)			
Soil/Sediment (VOA)			
Other			

⑦ **Shipping Information**

Name of Carrier: _____

Date Shipped: _____

Airbill Number: _____

⑧ **Sample Description**

___ Surface Water ___ Mixed Media
___ Ground Water ___ Solids
___ Leachate ___ Other (specify) _____

⑨ **Sample Location**

⑩ **Special Handling Instructions:**
(e.g., safety precautions, hazardous nature)

LAB FILE COPY

Sample Number
BC084

CC154

Organics Analysis Data Sheet
(Page 1)

Lab Name: Cambridge Analytical Assoc. Case No: 7204

Sample ID No: 8704240-02 | CLP VOA 1137 QC Report No: 21

Sample Matrix: Water Contract No: 68-01-7278

Data Release Authorized By: Date Sample Received: 4/29/87

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5/5/87

Date Analyzed: 5/5/87

Conc/Dil Factor: 1 pH 7

Percent Moisture: (Not Decanted) N/A

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	10u
74-83-9	Bromomethane	10u
75-01-4	Vinyl Chloride	10u
75-00-3	Chloroethane	10u
75-09-2	Methylene Chloride	5 u
67-64-1	Acetone	10u
75-15-0	Carbon Disulfide	5 u
75-35-4	1,1-Dichloroethene	5 u
75-34-3	1,1-Dichloroethane	5 u
156-60-5	Trans-1,2-Dichloroethene	5 u
67-66-3	Chloroform	5 u
107-06-2	1,2-Dichloroethane	5 u
78-93-3	2-Butanone	10u
71-55-6	1,1,1-Trichloroethane	5 u
56-23-5	Carbon Tetrachloride	5 u
108-05-4	Vinyl Acetate	10u
75-27-4	Bromodichloromethane	5 u

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1,2-Dichloropropane	5 u
10061-02-6	Trans-1,3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1,1,2-Trichloroethane	5 u
71-43-2	Benzene	5 u
10061-01-5	cis-1,3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10u
75-25-2	Bromoform	5 u
108-10-1	4-Methyl-2-Pentanone	10u
591-78-6	2-Hexanone	10u
127-18-4	Tetrachloroethene	5 u
79-34-5	1,1,2,2-Tetrachloroethane	5 u
108-88-3	Toluene	5 u
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	5 u
100-42-5	Styrene	5 u
	Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥ 10 ng/ml in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

Cambridge Analytical Associates

1204

Sample Number
BC 084

Organics Analysis Data Sheet
(Page 2)

00155

Semivolatile Compounds

entration: (Low) Medium (Circle One)

te Extracted/Prepared: 5/4/87

Date Analyzed: 5/20/87

Conc./Dil Factor: 1

Percent Moisture (Decanted) N/A

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☒Yes

CAS Number		ug/l or ug/Kg (Circle One)
108-95-2	Phenol	10u
111-44-4	bis(-2-Chloroethyl)Ether	10u
95-57-8	2-Chlorophenol	10u
541-73-1	1 3-Dichlorobenzene	10u
106-46-7	1, 4-Dichlorobenzene	10u
100-51-6	Benzyl Alcohol	10u
95-50-1	1, 2-Dichlorobenzene	10u
95-48-7	2-Methylphenol	10u
39638-32-9	bis(2-chloroisopropyl)Ether	10u
106-44-5	4-Methylphenol	10u
621-64-7	N-Nitroso-Di-n-Propylamine	10u
67-72-1	Hexachloroethane	10u
98-95-3	Nitrobenzene	10u
78-59-1	Isophorone	10u
88-75-5	2-Nitrophenol	10u
105-67-9	2, 4-Dimethylphenol	10u
65-85-0	Benzoic Acid	50u
111-91-1	bis(-2-Chloroethoxy)Methane	10u
120-83-2	2, 4-Dichlorophenol	10u
120-82-1	1, 2, 4-Trichlorobenzene	10u
91-20-3	Naphthalene	10u
106-47-8	4-Chloroaniline	10u
87-68-3	Hexachlorobutadiene	10u
59-50-7	4-Chloro-3-Methylphenol	10u
91-57-6	2-Methylnaphthalene	10u
77-47-4	Hexachlorocyclopentadiene	10u
88-06-2	2, 4, 6-Trichlorophenol	10u
95-95-4	2, 4, 5-Trichlorophenol	50u
91-58-7	2-Chloronaphthalene	10u
88-74-4	2-Nitroaniline	50u
131-11-3	Dimethyl Phthalate	10u
208-96-8	Acenaphthylene	10u
99-09-2	3-Nitroaniline	50u

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	10u
51-28-5	2, 4-Dinitrophenol	50u
100-02-7	4-Nitrophenol	50u
132-64-9	Dibenzofuran	10u
121-14-2	2 4-Dinitrotoluene	10u
606-20-2	2 6-Dinitrotoluene	10u
84-66-2	Diethylphthalate	10u
7005-72-3	4-Chlorophenyl-phenylether	10u
86-73-7	Fluorene	10u
100-01-6	4-Nitroaniline	50u
534-52-1	4, 6-Dinitro-2-Methylphenol	50u
86-30-6	N-Nitrosodiphenylamine (1)	10u
101-55-3	4-Bromophenyl-phenylether	10u
118-74-1	Hexachlorobenzene	10u
87-86-5	Pentachlorophenol	50u
85-01-8	Phenanthrene	10u
120-12-7	Anthracene	10u
84-74-2	Di-n-Butylphthalate	10u
206-44-0	Fluoranthene	10u
129-00-0	Pyrene	10u
85-68-7	Butylbenzylphthalate	10u
91-94-1	3, 3'-Dichlorobenzidine	20u
56-55-3	Benzo(a)Anthracene	10u
117-81-7	bis(2-Ethylhexyl)Phthalate	10u
218-01-9	Chrysene	10u
117-84-0	Di-n-Octyl Phthalate	10u
205-99-2	Benzo(b)Fluoranthene	10u
207-08-9	Benzo(k)Fluoranthene	10u
50-32-8	Benzo(a)Pyrene	10u
193-39-5	Indeno(1, 2, 3-cd)Pyrene	10u
53-70-3	Dibenz(a, h)Anthracene	10u
191-24-2	Benzo(g, h, i)Perylene	10u

(1)-Cannot be separated from diphenylamine

CC150

Name Cambridge Analytical Associates

~~6666~~ KD 7204

Sample Number
BC084

Organics Analysis Data Sheet
(Page 3)

- Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: ~~4/28/87~~ KD 5/4/87

Date Analyzed ~~5/23/87~~ KD 5/31/87

Conc/Dil Factor: 1/50 KD 1/5

Percent Moisture (decanted) —

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☒Yes

CAS Number		(ug/l or ug/Kg) (Circle One)
319-84-6	Alpha-BHC	0.25 U
319-85-7	Beta-BHC	0.25 U
319-86-8	Delta-BHC	0.25 U
58-89-9	Gamma-BHC (Lindane)	0.25 U
76-44-8	Heptachlor	0.25 U
309-00-2	Aldrin	0.25 U
1024-57-3	Heptachlor Epoxide	0.25 U
959-98-8	Endosulfan I	0.25 U
60-57-1	Dieldrin	0.50 U
72-55-9	4,4'-DDE	0.50 U
72-20-8	Endrin	0.50 U
33213-65-9	Endosulfan II	0.50 U
72-54-8	4,4'-DDD	0.50 U
1031-07-8	Endosulfan Sulfate	0.50 U
50-29-3	4,4'-DDT	0.50 U
72-43-5	Methoxychlor	2.5 U
53494-70-5	Endrin Ketone	0.50 U
57-74-9	Chlordane	2.5 U
8001-35-2	Toxaphene	5.0 U
12674-11-2	Aroclor-1016	2.5 U
11104-28-2	Aroclor-1221	2.5 U
11141-16-5	Aroclor-1232	2.5 U
53469-21-9	Aroclor-1242	2.5 U
12672-29-6	Aroclor-1248	2.5 U
11097-69-1	Aroclor-1254	5.0 U
11096-82-5	Aroclor-1260	5.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1000 ml or W_s — V_t 10,000 µl V_i 3 µl

U.S. ENVIRONMENTAL PROTECTION AGENCY HWI Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 -703 557-2490 • FTS 557-2490

ORGANICS TRAFFIC REPORT

Sample Number **BC085**

① **Case Number:**

Sample Site Name/Code:

② **SAMPLE CONCENTRATION**
(Check One)

✓ Low Concentration
___ Medium Concentration

③ **SAMPLE MATRIX**
(Check One)

✓ Water
___ Soil/Sediment

④ **Ship To:**

00170

Attn:

Transfer
Ship To:

⑤ **Regional Office:** ___

Sampling Personnel:

(Name)

(Phone)

Sampling Date:

(Begin) (End)

⑥ **For each sample collected specify number of containers used and mark volume level on each bottle.**

	Number of Containers	Approximate Total Volume	
Water (Extractable)			
Water (VOA)			
Soil/Sediment (Extractable)			
Soil/Sediment (VOA)			
Other			

⑪ **Analysis Lab:**
Rec'd by: L. Rawls
Date Rec'd: 4/29/87
Sample Condition on Receipt (e.g., broken, no ice, Chain-of-Custody, etc.)

⑦ **Shipping Information**

Name of Carrier

Date Shipped:

Airbill Number:

⑧ **Sample Description**

___ Surface Water ___ Mixed Media
___ Ground Water ___ Solids
___ Leachate ___ Other (specify) _____

⑨ **Sample Location**

⑩ **Special Handling Instructions:**
(e.g., safety precautions, hazardous nature)

LAB COPY FOR RETURN TO SMO

Sample Number
B0085

Organics Analysis Data Sheet
(Page 1)

00171

ratory Name: Cambridge Analytical Assoc. Case No: 7204

Lab Sample ID No: 8704240-3 | CAPVOA1138 QC Report No: 21

Sample Matrix: Water Contract No: 68-01-7278

Data Release Authorized By: Date Sample Received: 4/29/87

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5/5/87

Date Analyzed: 5/5/87

Conc/Dil Factor: 1 pH 7

Percent Moisture: (Not Decanted) N/A

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	10u
74-83-9	Bromomethane	10u
75-01-4	Vinyl Chloride	10u
75-00-3	Chloroethane	10u
75-09-2	Methylene Chloride	5 u
67-64-1	Acetone	10u
75-15-0	Carbon Disulfide	5 u
75-35-4	1, 1-Dichloroethene	5 u
75-34-3	1, 1-Dichloroethane	5 u
156-60-5	Trans-1, 2-Dichloroethene	5 u
67-66-3	Chloroform	5 u
107-06-2	1, 2-Dichloroethane	5 u
78-93-3	2-Butanone	10u
71-55-6	1, 1, 1-Trichloroethane	5 u
56-23-5	Carbon Tetrachloride	5 u
108-05-4	Vinyl Acetate	10u
75-27-4	Bromodichloromethane	5 u

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	5 u
10061-02-6	Trans-1, 3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1, 1, 2-Trichloroethane	5 u
71-43-2	Benzene	5 u
10061-01-5	cis-1, 3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10u
75-25-2	Bromoform	5 u
108-10-1	4-Methyl-2-Pentanone	10u
591-78-6	2-Hexanone	10u
127-18-4	Tetrachloroethene	5 u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5 u
108-88-3	Toluene	5 u
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	5 u
100-42-5	Styrene	5 u
	Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read "U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample."

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ml in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

Lab: Cambridge Analytical Associates

7204

Sample Number: BC085

00172

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5/4/87

Date Analyzed: 5/20/87

Conc./Dil Factor: 1

Percent Moisture (Decanted): N/A

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☒Yes

CAS Number		(ug/l) or ug/Kg (Circle One)
108-95-2	Phenol SAL	~~10u~~ 11
111-44-4	bis(-2-Chloroethyl)Ether	10u
95-57-8	2-Chlorophenol	10u
541-73-1	1 3-Dichlorobenzene	10u
106-46-7	1. 4-Dichlorobenzene	10u
100-51-6	Benzyl Alcohol	10u
95-50-1	1. 2-Dichlorobenzene	10u
95-48-7	2-Methylphenol	10u
39638-32-9	bis(2-chloroisopropyl)Ether	10u
106-44-5	4-Methylpheno' SAL	~~10u~~ 10J
621-64-7	N-Nitroso-Di-n-Propylamine	10u
67-72-1	Hexachloroethane	10u
98-95-3	Nitrobenzene	10u
78-59-1	Isophorone	10u
88-75-5	2-Nitrophenol	10u
105-67-9	2. 4-Dimethylphenol	10u
65-85-0	Benzoic Acid SAL	~~50u~~ 10J
111-91-1	bis(-2-Chloroethoxy)Methane	10u
120-83-2	2. 4-Dichlorophenol	10u
120-82-1	1. 2. 4-Trichlorobenzene	10u
91-20-3	Naphthalene	10u
106-47-8	4-Chloroaniline	10u
87-68-3	Hexachlorobutadiene	10u
59-50-7	4-Chloro-3-Methylphenol	10u
91-57-6	2-Methylnaphthalene	10u
77-47-4	Hexachlorocyclopentadiene	10u
88-06-2	2. 4. 6-Trichlorophenol	10u
95-95-4	2. 4. 5-Trichlorophenol	50u
91-58-7	2-Chloronaphthalene	10u
88-74-4	2-Nitroaniline	50u
131-11-3	Dimethyl Phthalate	10u
208-96-8	Acenaphthylene	10u
99-09-2	3-Nitroaniline	50u

CAS Number		(ug/l) or ug/Kg (Circle One)
83-32-9	Acenaphthene	10u
51-28-5	2. 4-Dinitrophenol	50u
100-02-7	4-Nitrophenol	50u
132-64-9	Dibenzofuran	10u
121-14-2	2 4-Dinitrotoluene	10u
606-20-2	2 6-Dinitrotoluene	10u
84-66-2	Diethylphthalate	10u
7005-72-3	4-Chlorophenyl-phenylether	10u
86-73-7	Fluorene	10u
100-01-6	4-Nitroaniline	50u
534-52-1	4, 6-Dinitro-2-Methylphenol	50u
86-30-6	N-Nitrosodiphenylamine (1)	10u
101-55-3	4-Bromophenyl-phenylether	10u
118-74-1	Hexachlorobenzene	10u
87-86-5	Pentachlorophenol	50u
85-01-8	Phenanthrene	10u
120-12-7	Anthracene	10u
84-74-2	Di-n-Butylphthalate SAL	~~10u~~ 11
206-44-0	Fluoranthene	10u
129-00-0	Pyrene	10u
85-68-7	Butylbenzylphthalate	10u
91-94-1	3. 3'-Dichlorobenzidine	20u
56-55-3	Benzo(a)Anthracene	10u
117-81-7	bis(2-Ethylhexyl)Phthalate SAL	~~10u~~ 5J
218-01-9	Chrysene	10u
117-84-0	Di-n-Octyl Phthalate	10u
205-99-2	Benzo(b)Fluoranthene	10u
207-08-9	Benzo(k)Fluoranthene	10u
50-32-8	Benzo(a)Pyrene	10u
193-39-5	Indeno(1. 2. 3-cd)Pyrene	10u
53-70-3	Dibenz(a. h)Anthracene	10u
191-24-2	Benzo(g. h. i)Perylene	10u

(1)-Cannot be seperated from diphenylamine

Laboratory Name Cambridge Analytical Associates

Case No 7204

Sample Number BC 085

00173

Organics Analysis Data Sheet (Page 3)

Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5/4/87

Date Analyzed 5/31/87

Conc/Dil Factor: 1/10

Percent Moisture (decanted) —

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☒Yes

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	0.5U
319-85-7	Beta-BHC	0.5U
319-86-8	Delta-BHC	0.5U
58-89-9	Gamma-BHC (Lindane)	0.5U
76-44-8	Heptachlor	0.5U
309-00-2	Aldrin	0.5U
1024-57-3	Heptachlor Epoxide	0.5U
959-98-8	Endosulfan I	0.5U
60-57-1	Dieldrin	1.0U
72-55-9	4,4'-DDE	1.0U
72-20-8	Endrin	1.0U
33213-65-9	Endosulfan II	1.0U
72-54-8	4,4'-DDD	1.0U
1031-07-8	Endosulfan Sulfate	1.0U
50-29-3	4,4'-DDT	1.0U
72-43-5	Methoxychlor	5.0U
53494-70-5	Endrin Ketone	1.0U
57-74-9	Chlordane	5.0U
8001-35-2	Toxaphene	10.0U
12674-11-2	Aroclor-1016	5.0U
11104-28-2	Aroclor-1221	5.0U
11141-16-5	Aroclor-1232	5.0U
53469-21-9	Aroclor-1242	5.0U
12672-29-6	Aroclor-1248	5.0U
11097-69-1	Aroclor-1254	10.0U
11096-82-5	Aroclor-1260	10.0U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1000ml or W_s — V_t 10,000ul V_i 3ul

Cambridge Analytical Associates

204

Sample Number
BC 085

Organics Analysis Data Sheet
(Page 4)

00174

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.		dihydro-2(3H) Furanone	BNA	8.74	68 J
2.		9-hexadecenoic acid	|	23.83	9 J
3.		17-Pentatriacontene NOS	|	34.09	12 J
4.		2H-Cyclopropa[3,4]benz[1,2-b]oxirene	|	35.65	15 J
5.		nonacosanol	|	37.61	48 J
6.		17-Pentatriacontene NOS	|	39.95	20 J
7.		1-Dotriacontanol	↓	42.82	31 J
8.		none found	VOA	—	—
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

U.S. ENVIRONMENTAL PROTECTION AGENCY HWI Sample Management Office
P.O. Box 818 Alexandria, Virginia 22313 – 703 557-2490 • FTS 557-2490

Sample Number
BK 238

ORGANICS TRAFFIC REPORT

① Case Number: 7 0 1 0 4 1

Sample Site Name/Code:

② SAMPLE CONCENTRATION (Check One)
✓ Low Concentration
___ Medium Concentration

③ SAMPLE MATRIX (Check One)
✓ Water
___ Soil/Sediment

④ Ship To:
CAMBRIDGE ANALYTICAL
1106 COMMONWEALTH AVE
BOSTON, MA 02215
Attn: SHARON WALKER

Transfer Ship To: 00327

⑤ Regional Office: EIA
Sampling Personnel: NUS
DINEEN
(Name)
(201) 455-6160
(Phone)
Sampling Date:
4/22/87 (Begin) (End)

⑥ For each sample collected specify number of containers used and mark volume level on each bottle.

	Number of Containers	Approximate Total Volume
Water (Extractable)	2	160 oz
Water (VOA)	2	80 ml
Soil/Sediment (Extractable)		
Soil/Sediment (VOA)		
WATER Other PCB/PEST	1	30 oz
		1

⑪ Analysis Lab:
Rec'd by: L. Lawler
Date Rec'd: 4/29/87
Sample Condition on Receipt (e.g., broken, ice, Chain-of-Custody, etc.)

⑦ Shipping Information
FEDERAL EXPRESS
Name of Carrier
4/23/87
Date Shipped:
[illegible]
Airbill Number:

⑧ Sample Description
___ Surface Water ___ Mixed Media
✓ Ground Water ___ Solids
___ Leachate ___ Other (specify) _____

⑨ Sample Location
NYR9 -GW1

⑩ Special Handling Instructions: (e.g., safety precautions, hazardous nature)
MATCHES INORGANIC T-REPORT # MBJ 137.

LAB COPY FOR RETURN TO SMO

Sample Number
BK238

Organics Analysis Data Sheet
(Page 1)

00328

Laboratory Name: Cambridge Analytical Assoc. Case No: 7204

Lab Sample ID No: 870420-04/apkoA1139 QC Report No: 21

Sample Matrix: Water Contract No: 68-01-7278

Data Release Authorized By: Date Sample Received: 4/29/87

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5/5/87

Date Analyzed: 5/5/87

Conc/Dil Factor: 1 pH 7

Percent Moisture: (Not Decanted) N/A

CAS Number		ug/L or ug/Kg (Circle One)
74-87-3	Chloromethane	10u
74-83-9	Bromomethane	10u
75-01-4	Vinyl Chloride	10u
75-00-3	Chloroethane	10u
75-09-2	Methylene Chloride	5 u
67-64-1	Acetone	10u
75-15-0	Carbon Disulfide	5 u
75-35-4	1, 1-Dichloroethene	5 u
75-34-3	1, 1-Dichloroethane	5 u
156-60-5	Trans-1, 2-Dichloroethene	5 u
67-66-3	Chloroform	5 u
107-06-2	1, 2-Dichloroethane	5 u
78-93-3	2-Butanone	10u
71-55-6	1, 1, 1-Trichloroethane	5 u
56-23-5	Carbon Tetrachloride	5 u
108-05-4	Vinyl Acetate	10u
75-27-4	Bromodichloromethane	5 u

CAS Number		ug/L or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	5 u
10061-02-6	Trans-1, 3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1, 1, 2-Trichloroethene	5 u
71-43-2	Benzene	5 u
10061-01-5	cis-1, 3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10u
75-25-2	Bromoform	5 u
108-10-1	4-Methyl-2-Pentanone	10u
591-78-6	2-Hexanone	10u
127-18-4	Tetrachloroethene	5 u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5 u
108-88-3	Toluene	5 u
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	5 u
100-42-5	Styrene	5 u
	Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ml in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

.ne Cambridge Analytical Associates
7204

Sample Number
BK 238

Organics Analysis Data Sheet
(Page 2)

QC329

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 5/4/87
Date Analyzed: 5/20/87
Conc./Dil Factor: 1
Percent Moisture (Decanted) N/A

GPC Cleanup ☐Yes ☒No
Separatory Funnel Extraction ☐Yes
Continuous Liquid - Liquid Extraction ☒Yes

CAS Number		ug/l or ug/Kg (Circle One)
108-95-2	Phenol	10u
111-44-4	bis(-2-Chloroethyl)Ether	10u
95-57-8	2-Chlorophenol	10u
541-73-1	1, 3-Dichlorobenzene	10u
106-46-7	1, 4-Dichlorobenzene	10u
100-51-6	Benzyl Alcohol	10u
95-50-1	1, 2-Dichlorobenzene	10u
95-48-7	2-Methylphenol	10u
39638-32-9	bis(2-chloroisopropyl)Ether	10u
106-44-5	4-Methylphenol	10u
621-64-7	N-Nitroso-Di-n-Propylamine	10u
67-72-1	Hexachloroethane	10u
98-95-3	Nitrobenzene	10u
78-59-1	Isophorone	10u
88-75-5	2-Nitrophenol	10u
105-67-9	2, 4-Dimethylphenol	10u
65-85-0	Benzoic Acid	50u
111-91-1	bis(-2-Chloroethoxy)Methane	10u
120-83-2	2, 4-Dichlorophenol	10u
120-82-1	1, 2, 4-Trichlorobenzene	10u
91-20-3	Naphthalene	10u
106-47-8	4-Chloroaniline	10u
87-68-3	Hexachlorobutadiene	10u
59-50-7	4-Chloro-3-Methylphenol	10u
91-57-6	2-Methylnaphthalene	10u
77-47-4	Hexachlorocyclopentadiene	10u
88-06-2	2, 4, 6-Trichlorophenol	10u
95-95-4	2, 4, 5-Trichlorophenol	50u
91-58-7	2-Chloronaphthalene	10u
88-74-4	2-Nitroaniline	50u
131-11-3	Dimethyl Phthalate	10u
208-96-8	Acenaphthylene	10u
99-09-2	3-Nitroaniline	50u

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	10u
51-28-5	2, 4-Dinitrophenol	50u
100-02-7	4-Nitrophenol	50u
132-64-9	Dibenzofuran	10u
121-14-2	2, 4-Dinitrotoluene	10u
606-20-2	2, 6-Dinitrotoluene	10u
84-66-2	Diethylphthalate	10u
7005-72-3	4-Chlorophenyl-phenylether	10u
86-73-7	Fluorene	10u
100-01-6	4-Nitroaniline	50u
534-52-1	4, 6-Dinitro-2-Methylphenol	50u
86-30-6	N-Nitrosodiphenylamine (1)	10u
101-55-3	4-Bromophenyl-phenylether	10u
118-74-1	Hexachlorobenzene	10u
87-86-5	Pentachlorophenol	50u
85-01-8	Phenanthrene	10u
120-12-7	Anthracene	10u
84-74-2	Di-n-Butylphthalate	10u
206-44-0	Fluoranthene	10u
129-00-0	Pyrene	10u
85-68-7	Butylbenzylphthalate	10u
91-94-1	3, 3'-Dichlorobenzidine	20u
56-55-3	Benzo(a)Anthracene	10u
117-81-7	bis(2-Ethylhexyl)Phthalate	10u
218-01-9	Chrysene	10u
117-84-0	Di-n-Octyl Phthalate	10u
205-99-2	Benzo(b)Fluoranthene	10u
207-08-9	Benzo(k)Fluoranthene	10u
50-32-8	Benzo(a)Pyrene	10u
193-39-5	Indeno(1, 2, 3-cd)Pyrene	10u
53-70-3	Dibenz(a, h)Anthracene	10u
191-24-2	Benzo(g, h, i)Perylene	10u

(1)-Cannot be separated from diphenylamine

00330

Laboratory Name Cambridge Analytical Associates

Case No 7204

Sample Number BK.238

Organics Analysis Data Sheet
(Page 3)

- Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5/4/87

Date Analyzed 5/31/87

Conc/Dil Factor: 1

Percent Moisture (decanted) —

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☒Yes

CAS Number		ug/L or ug/Kg (Circle One)
319-84-6	Alpha-BHC	0.05U
319-85-7	Beta-BHC	0.05U
319-86-8	Delta-BHC	0.05U
58-89-9	Gamma-BHC (Lindane)	0.05U
76-44-8	Heptachlor	0.05U
309-00-2	Aldrin	0.05U
1024-57-3	Heptachlor Epoxide	0.05U
959-98-8	Endosulfan I	0.05U
60-57-1	Dieldrin	0.1U
72-55-9	4,4'-DDE	0.1U
72-20-8	Endrin	0.1U
33213-65-9	Endosulfan II	0.1U
72-54-8	4,4'-DDD	0.1U
1031-07-8	Endosulfan Sulfate	0.1U
50-29-3	4,4'-DDT	0.1U
72-43-5	Methoxychlor	0.5U
53494-70-5	Endrin Ketone	0.1U
57-74-9	Chlordane	0.5U
8001-35-2	Toxaphene	1.0U
12674-11-2	Aroclor-1016	0.5U
11104-28-2	Aroclor-1221	0.5U
11141-16-5	Aroclor-1232	0.5U
53469-21-9	Aroclor-1242	0.5U
12672-29-6	Aroclor-1248	0.5U
11097-69-1	Aroclor-1254	1.0U
11096-82-5	Aroclor-1260	1.0U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1000 ml or W_s — V_t 10,000 ul V_i 3 ul

Cambridge Analytical Associates
7204

Sample Number
BK 238

Organics Analysis Data Sheet
(Page 4)

00331

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.		dihydro-2(3H)-furanone	BNA	8.74	67 J
2.		unknown branched alkane	↓	8.92	15 J
3.		none detected	VOA	—	—
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

U.S. ENVIRONMENTAL PROTECTION AGENCY HWI Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 – 703 557-2490 • FTS 557-2490

ORGANICS TRAFFIC REPORT

Sample Number: BK 239

① Case Number: 1201

Sample Site Name/Code:

② SAMPLE CONCENTRATION (Check One)

- ✓ Low Concentration
- ___ Medium Concentration

③ SAMPLE MATRIX (Check One)

- ✓ Water
- ___ Soil/Sediment

④ Ship To:
CAMBRIDGE ANALYTICAL A
1106 COMMONWEALTH AVE
BOSTON, MA 02215
Attn: SHARON WALTZ.

Transfer
Ship To: 00344

⑤ Regional Office: VUS
Sampling Personnel: FIT 2
P. DOHERTY
(Name)
(201) 225-6160
(Phone)
Sampling Date:
4/28/87 (Begin) 4/29/87 (End)

⑥ For each sample collected specify number of containers used and mark volume level on each bottle.

	Number of Containers	Approximate Total Volume
Water (Extractable)	2	160 oz
Water (VOA)	2	80 ml
Soil/Sediment (Extractable)		
Soil/Sediment (VOA)		
WATER Other (CB/PEST)	1	80 oz

⑪ Analysis Lab:
Rec'd by: D. Zayles
Date Rec'd: 4/29/87
Sample Condition on Receipt (e.g., broken, no ice, Chain-of-Custody, etc.)

⑦ Shipping Information
4/28/87
Name of Carrier
FEDERAL EXPRESS
Date Shipped:
3417025711
Airbill Number:

⑧ Sample Description

- ___ Surface Water
- ✓ Ground Water
- ___ Leachate
- ___ Mixed Media
- ___ Solids
- ___ Other (specify) _____

⑨ Sample Location
NYR9-GW2

⑩ Special Handling Instructions: (e.g., safety precautions, hazardous nature)
MATCHES INORGANIC T-REPORT # MBJ292.

LAB COPY FOR RETURN TO SMO

Sample Number
BK239

Organics Analysis Data Sheet
(Page 1)

00345

Laboratory Name: Cambridge Analytical Assoc. Case No: 7204

Lab Sample ID No: 8704240-05 CLP0A1140 QC Report No: 81

Sample Matrix: Water Contract No: 68-01-7278

Data Release Authorized By: [signature] Date Sample Received: 4/29/87

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5/5/87

Date Analyzed: 5/6/87

Conc/Dil Factor: 1 pH 7

Percent Moisture: (Not Decanted) N/A

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	10u
74-83-9	Bromomethane	10u
75-01-4	Vinyl Chloride	10u
75-00-3	Chloroethane	10u
75-09-2	Methylene Chloride	5 u
67-64-1	Acetone	10u
75-15-0	Carbon Disulfide	5 u
75-35-4	1, 1-Dichloroethene	5 u
75-34-3	1, 1-Dichloroethane	5 u
156-60-5	Trans-1, 2-Dichloroethene	5 u
67-66-3	Chloroform	5 u
107-06-2	1, 2-Dichloroethane	5 u
78-93-3	2-Butanone	10u
71-55-6	1, 1, 1-Trichloroethane	5 u
56-23-5	Carbon Tetrachloride	5 u
108-05-4	Vinyl Acetate	10u
75-27-4	Bromodichloromethane	5 u

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	5 u
10061-02-6	Trans-1, 3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1, 1, 2-Trichloroethene	5 u
71-43-2	Benzene	5 u
10061-01-5	cis-1, 3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10u
75-25-2	Bromoform	5 u
108-10-1	4-Methyl-2-Pentanone	10u
591-78-6	2-Hexanone	10u
127-18-4	Tetrachloroethene	5 u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5 u
108-88-3	Toluene	5 u
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	5 u
100-42-5	Styrene	5 u
	Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read "U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample."

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥ 10 ng/ml in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

ne Cambridge Analytical Associates

7204

Sample Number
BK 239

Organics Analysis Data Sheet
(Page 2)

00346

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5/4/87

Date Analyzed: 5/20/87

Conc./Dil Factor: 1

Percent Moisture (Decanted): N/A

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☒Yes

CAS Number		ug/l or ug/Kg (Circle One)
108-95-2	Phenol	10u
111-44-4	bis(-2-Chloroethyl)Ether	10u
95-57-8	2-Chlorophenol	10u
541-73-1	1 3-Dichlorobenzene	10u
106-46-7	1, 4-Dichlorobenzene	10u
100-51-6	Benzyl Alcohol	10u
95-50-1	1, 2-Dichlorobenzene	10u
95-48-7	2-Methylphenol	10u
39638-32-9	bis(2-chloroisopropyl)Ether	10u
106-44-5	4-Methylphenol	10u
621-64-7	N-Nitroso-Di-n-Propylamine	10u
67-72-1	Hexachloroethane	10u
98-95-3	Nitrobenzene	10u
78-59-1	Isophorone	10u
88-75-5	2-Nitrophenol	10u
105-67-9	2, 4-Dimethylphenol	10u
65-85-0	Benzoic Acid	50u
111-91-1	bis(-2-Chloroethoxy)Methane	10u
120-83-2	2, 4-Dichlorophenol	10u
120-82-1	1, 2, 4-Trichlorobenzene	10u
91-20-3	Naphthalene	10u
106-47-8	4-Chloroaniline	10u
87-68-3	Hexachlorobutadiene	10u
59-50-7	4-Chloro-3-Methylphenol	10u
91-57-6	2-Methylnaphthalene	10u
77-47-4	Hexachlorocyclopentadiene	10u
88-06-2	2, 4, 6-Trichlorophenol	10u
95-95-4	2, 4, 5-Trichlorophenol	50u
91-58-7	2-Chloronaphthalene	10u
88-74-4	2-Nitroaniline	50u
131-11-3	Dimethyl Phthalate	10u
208-96-8	Acenaphthylene	10u
99-09-2	3-Nitroaniline	50u

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	10u
51-28-5	2, 4-Dinitrophenol	50u
100-02-7	4-Nitrophenol	50u
132-64-9	Dibenzofuran	10u
121-14-2	2 4-Dinitrotoluene	10u
606-20-2	2 6-Dinitrotoluene	10u
84-66-2	Diethylphthalate	10u
7005-72-3	4-Chlorophenyl-phenylether	10u
86-73-7	Fluorene	10u
100-01-6	4-Nitroaniline	50u
534-52-1	4, 6-Dinitro-2-Methylphenol	50u
86-30-6	N-Nitrosodiphenylamine (1)	10u
101-55-3	4-Bromophenyl-phenylether	10u
118-74-1	Hexachlorobenzene	10u
87-86-5	Pentachlorophenol	50u
85-01-8	Phenanthrene	10u
120-12-7	Anthracene	10u
84-74-2	Di-n-Butylphthalate	10u
206-44-0	Fluoranthene	10u
129-00-0	Pyrene	10u
85-68-7	Butylbenzylphthalate	10u
91-94-1	3, 3'-Dichlorobenzidine	20u
56-55-3	Benzo(a)Anthracene	10u
117-81-7	bis(2-Ethylhexyl)Phthalate	10u
218-01-9	Chrysene	10u
117-84-0	Di-n-Octyl Phthalate	10u
205-99-2	Benzo(b)Fluoranthene	10u
207-08-9	Benzo(k)Fluoranthene	10u
50-32-8	Benzo(a)Pyrene	10u
193-39-5	Indeno(1, 2, 3-cd)Pyrene	10u
53-70-3	Dibenz(a, h)Anthracene	10u
191-24-2	Benzo(g, h, i)Perylene	10u

(1)-Cannot be separated from diphenylamine

Laboratory Name Cambridge Analytical Associates

Case No 7204

Sample Number BK 239

Organics Analysis Data Sheet (Page 3)

Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5/4/87

Date Analyzed 5/31/87

Conc/Dil Factor: 1

Percent Moisture (decanted) —

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☒Yes

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	0.05U
319-85-7	Beta-BHC	0.05U
319-86-8	Delta-BHC	0.05U
58-89-9	Gamma-BHC (Lindane)	0.05U
76-44-8	Heptachlor	0.05U
309-00-2	Aldrin	0.05U
1024-57-3	Heptachlor Epoxide	0.05U
959-98-8	Endosulfan I	0.05U
60-57-1	Dieldrin	0.1U
72-55-9	4,4'-DDE	0.1U
72-20-8	Endrin	0.1U
33213-65-9	Endosulfan II	0.1U
72-54-8	4,4'-DDD	0.1U
1031-07-8	Endosulfan Sulfate	0.1U
50-29-3	4,4'-DDT	0.1U
72-43-5	Methoxychlor	0.5U
53494-70-5	Endrin Ketone	0.1U
57-74-9	Chlordane	0.5U
8001-35-2	Toxaphene	1.0U
12674-11-2	Aroclor-1016	0.5U
11104-28-2	Aroclor-1221	0.5U
11141-16-5	Aroclor-1232	0.5U
53469-21-9	Aroclor-1242	0.5U
12672-29-6	Aroclor-1248	0.5U
11097-69-1	Aroclor-1254	0.5U
11096-82-5	Aroclor-1260	0.5U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1000ml or W_s — V_t 10,000ul V_i 3ul

ne Cambridge Analytical Associates
7204

Sample Number
BK239

Organics Analysis Data Sheet
(Page 4)

00348

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.		dihydro-2(3H)-furanone	BNA	8.68	29J
2.		none detected	VOA		
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

U.S. ENVIRONMENTAL PROTECTION AGENCY HWI Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313—703 557 2490 • FTS 557-2490

ORGANICS TRAFFIC REPORT

Sample Number: BF 429

① Case Number: 1204

Sample Site Name/Code:

② SAMPLE CONCENTRATION (Check One)
- ✓ Low Concentration
- ___ Medium Concentration

③ SAMPLE MATRIX (Check One)
- ✓ Water
- ___ Soil/Sediment

④ Ship To:
CAMBRIDGE ANALYTICAL
1106 COMMONWEALTH AV
BOSTON, MA 02215
Attn: SHARON WALER
Transfer / Ship To: 00306

⑤ Regional Office: NYS
Sampling Personnel: FITZ
P. DOHERTY
(Name)
(Phone)
Sampling Date: 4/29/97
(Begin) (End)

⑥ For each sample collected specify number of containers used and mark volume level on each bottle.

	Number of Containers	Approximate Total Volume
Water (Extractable)	2	1 Gal
Water (VOA)	2	80ml
Soil/Sediment (Extractable)		
Soil/Sediment (VOA)		
WATER Other (ICE/PERF)	1	500z.

⑪ Analysis Lab:
Rec'd by: L. Lawler
Date Rec'd: 4/30/97
Sample Condition on Receipt (e.g., broken, no ice, Chain-of-Custody, etc.): 4/29 OK

⑦ Shipping Information
FEDERAL EXPRESS
Name of Carrier
4/29/97
Date Shipped: [illegible]
Airbill Number: 3498025786

⑧ Sample Description
- ___ Surface Water
- ___ Ground Water
- ___ Leachate
- ___ Mixed Media
- ___ Solids
- ✓ Other (specify) TRIP BLANK

⑨ Sample Location
NYR9-BL1

⑩ Special Handling Instructions: (e.g., safety precautions, hazardous nature)
MATCHES INORGANIC T-REPORT # MBF 484

LAB COPY FOR RETURN TO SMO

Laboratory Name: Cambridge Analytical Associates

Case No: 7204

Sample Number: BK241

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

00417

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5-8-87

Date Analyzed: 5-28-87

Conc./Dil Factor: 20

Percent Moisture (Decanted): 41

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)
108-95-2	Phenol 12,000	~~6600 U~~
111-44-4	bis(-2-Chloroethyl)Ether	6600 U
95-57-8	2-Chlorophenol	6600 U
541-73-1	1 3-Dichlorobenzene	6600 U
106-46-7	1, 4-Dichlorobenzene	6600 U
100-51-6	Benzyl Alcohol	6600 U
95-50-1	1, 2-Dichlorobenzene	6600 U
95-48-7	2-Methylphenol 28,000	~~6600 U~~
39638-32-9	bis(2-chloroisopropyl)Ether	6600 U
106-44-5	4-Methylphenol 71,000	~~16000 U~~
621-64-7	N-Nitroso-Di-n-Propylamine	6600 U
67-72-1	Hexachloroethane	6600 U
98-95-3	Nitrobenzene	6600 U
78-59-1	Isophorone	6600 U
88-75-5	2-Nitrophenol	6600 U
105-67-9	2, 4-Dimethylphenol 50,000	~~6600 U~~
65-85-0	Benzoic Acid 18,000 J	~~32000 U~~
111-91-1	bis(-2-Chloroethoxy)Methane	6600 U
120-83-2	2, 4-Dichlorophenol	6600 U
120-82-1	1, 2, 4-Trichlorobenzene	6600 U
91-20-3	Naphthalene 3000 J	~~6600 U~~
106-47-8	4-Chloroaniline	6600 U
87-68-3	Hexachlorobutadiene	6600 U
59-50-7	4-Chloro-3-Methylphenol	6600 U
91-57-6	2-Methylnaphthalene 4300 J	~~6600 U~~
77-47-4	Hexachlorocyclopentadiene	6600 U
88-06-2	2, 4, 6-Trichlorophenol	6600 U
95-95-4	2, 4, 5-Trichlorophenol	32000 U
91-58-7	2-Chloronaphthalene	6600 U
88-74-4	2-Nitroaniline	32000 U
131-11-3	Dimethyl Phthalate	6600 U
208-96-8	Acenaphthylene	6600 U
99-09-2	3-Nitroaniline	32000 U

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	6600 U
51-28-5	2, 4-Dinitrophenol	32000 U
100-02-7	4-Nitrophenol	32000 U
132-64-9	Dibenzofuran	6600 U
121-14-2	2 4-Dinitrotoluene	6600 U
606-20-2	2 6-Dinitrotoluene	6600 U
84-66-2	Diethylphthalate	6600 U
7005-72-3	4-Chlorophenyl-phenylether	6600 U
86-73-7	Fluorene	6600 U
100-01-6	4-Nitroaniline	6600 U
534-52-1	4, 6-Dinitro-2-Methylphenol	32000 U
86-30-6	N-Nitrosodiphenylamine (1)	6600 U
101-55-3	4-Bromophenyl-phenylether	6600 U
118-74-1	Hexachlorobenzene	6600 U
87-86-5	Pentachlorophenol	32000 U
85-01-8	Phenanthrene 2000 J	~~6600 U~~
120-12-7	Anthracene 6600 U	~~16000 U~~
84-74-2	Di-n-Butylphthalate 160,000	~~6600 U~~
206-44-0	Fluoranthene 6600 U	~~16000 U~~
129-00-0	Pyrene 2000 J	~~6600 U~~
85-68-7	Butylbenzylphthalate	6600 U
91-94-1	3, 3'-Dichlorobenzidine	13200 U
56-55-3	Benzo(a)Anthracene	6600 U
117-81-7	bis(2-Ethylhexyl)Phthalate	~~6600 U~~ 29,000
218-01-9	Chrysene	6600 U
117-84-0	Di-n-Octyl Phthalate	6600 U
205-99-2	Benzo(b)Fluoranthene	6600 U
207-08-9	Benzo(k)Fluoranthene	6600 U
50-32-8	Benzo(a)Pyrene	6600 U
193-39-5	Indeno(1, 2, 3-cd)Pyrene	6600 U
53-70-3	Dibenz(a, h)Anthracene	6600 U
191-24-2	Benzo(g, h, i)Perylene	6600 U

(1)-Cannot be separated from diphenylamine

Laboratory Name Cambridge Analytical Associates

Case No 7204

Sample Number BK.241

00418

Organics Analysis Data Sheet (Page 3)

Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5/6/87

Date Analyzed 5/3/87

Conc/Dil Factor: 1/10

Percent Moisture (decanted) 41%

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	80.0U
319-85-7	Beta-BHC	80.0U
319-86-8	Delta-BHC	80.0U
58-89-9	Gamma-BHC (Lindane)	80.0U
76-44-8	Heptachlor	80.0U
309-00-2	Aldrin	80.0U
1024-57-3	Heptachlor Epoxide	80.0U
959-98-8	Endosulfan I	80.0U
60-57-1	Dieldrin	160.0U
72-55-9	4,4'-DDE	160.0U
72-20-8	Endrin	160.0U
33213-65-9	Endosulfan II	160.0U
72-54-8	4,4'-DDD	160.0U
1031-07-8	Endosulfan Sulfate	160.0U
50-29-3	4,4'-DDT	160.0U
72-43-5	Methoxychlor	800.0U
53494-70-5	Endrin Ketone	1600.0U
57-74-9	Chlordane	800.0U
8001-35-2	Toxaphene	1600.0U
12674-11-2	Aroclor-1016	800.0U
11104-28-2	Aroclor-1221	800.0U
11141-16-5	Aroclor-1232	800.0U
53469-21-9	Aroclor-1242	800.0U
12672-29-6	Aroclor-1248	800.0U
11097-69-1	Aroclor-1254	~~1600.0U~~ 2910 C
11096-82-5	Aroclor-1260	1600.0U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s — or W_s 17.6g V_t 20,000ul V_i 3ul

U.S. ENVIRONMENTAL PROTECTION AGENCY HWI Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 – 703 557 2490 • FTS 557-2490

ORGANICS TRAFFIC REPORT

Sample Number: MF 427

① Case Number: 7204

Sample Site Name/Code:

② SAMPLE CONCENTRATION (Check One)
- ✓ Low Concentration
- ___ Medium Concentration

③ SAMPLE MATRIX (Check One)
- ___ Water
- ✓ Soil/Sediment

④ Ship To:
CAMBRIDGE ANALYTICAL AS
1106 COMMONWEALTH AVE
BOSTON, MA
Attn: SHARON WALER
Transfer Ship To: 00201

⑤ Regional Office: NUS
Sampling Personnel: FIT2
P. DOHERTY (Name)
(201) 225-6160 (Phone)
Sampling Date: 4/28/87 (Begin) 4/28/87 (End)

⑥ For each sample collected specify number of containers used and mark volume level on each bottle.

	Number of Containers	Approximate Total Volume
Water (Extractable)		
Water (VOA)		
Soil/Sediment (Extractable)	1	807
Soil/Sediment (VOA)	1	120ml
Soil/Sediment Other PCB/PEST	1	807

⑪ Analysis Lab:
Rec'd by: L. Lawler
Date Rec'd: 4/30/87
Sample Condition on Receipt (e.g., broken, no ice, Chain-of-Custody, etc.)
OK

⑦ Shipping Information
FEDERAL EXPRESS
Name of Carrier
4/28/87 4/29/87
Date Shipped:
5849025716
Airbill Number:

⑧ Sample Description
- ___ Surface Water
- ___ Ground Water
- ___ Leachate
- ___ Mixed Media
- ✓ Solids
- ___ Other (specify) _____

⑨ Sample Location
NYR9-S3

⑩ Special Handling Instructions: (e.g., safety precautions, hazardous nature)
MATCHES INORGANIC T-REPORT # MBF 482.

LAB COPY FOR RETURN TO SMO

Sample Number
BF 427

OC202R

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Cambridge Analytical Assoc.
Case No: 720A
Lab Sample ID No: 8704240-11 | CLPVOA1147
QC Report No: 21
Sample Matrix: Soil
Contract No: 68-01-7278
Data Release Authorized By:
Date Sample Received: 4/29/87 4/30/87

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 5/6/87
Date Analyzed: 5/6/87
Conc/Dil Factor: 5 pH N/A
Percent Moisture: (Not Decanted) 25

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	50u
74-83-9	Bromomethane	50u
75-01-4	Vinyl Chloride	50u
75-00-3	Chloroethane	50u
75-09-2	Methylene Chloride	25u 17J
67-64-1	Acetone	50u
75-15-0	Carbon Disulfide	25u
75-35-4	1,1-Dichloroethene	25u
75-34-3	1,1-Dichloroethane	25u
156-60-5	Trans-1,2-Dichloroethene	25u
67-66-3	Chloroform	25u
107-06-2	1,2-Dichloroethane	25u
78-93-3	2-Butanone	50u
71-55-6	1,1,1-Trichloroethane	25u
56-23-5	Carbon Tetrachloride	25u
108-05-4	Vinyl Acetate	50u
75-27-4	Bromodichloromethane	25u

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1,2-Dichloropropane	25u
10061-02-6	Trans-1,3-Dichloropropene	25u
79-01-6	Trichloroethene	25u
124-48-1	Dibromochloromethane	25u
79-00-5	1,1,2-Trichloroethane	25u
71-43-2	Benzene	25u
10061-01-5	cis-1,3-Dichloropropene	25u
110-75-8	2-Chloroethylvinylether	50u
75-25-2	Bromoform	25u
108-10-1	4-Methyl-2-Pentanone	50u
591-78-6	2-Hexanone	50u
127-18-4	Tetrachloroethene	25u
79-34-5	1,1,2,2-Tetrachloroethane	25u
108-88-3	Toluene	25u 12J
108-90-7	Chlorobenzene	25u
100-41-4	Ethylbenzene	25u
100-42-5	Styrene	25u
	Total Xylenes	25u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read "U: Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample."

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ml in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

Laboratory Name: Cambridge Analytical Associates

Case No: 7204

Sample Number: BF 427

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5-8-87

Date Analyzed: 5-21-87

Conc/Dil Factor: 5

Percent Moisture (Decanted): 25

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

OC203

CAS Number		ug/l or ug/Kg (Circle One)
108-95-2	Phenol 1100 J	~~1650 U~~ SDL
111-44-4	bis(2-Chloroethyl)Ether	1650 U
95-57-8	2-Chlorophenol	1650 U
541-73-1	1,3-Dichlorobenzene	1650 U
106-46-7	1,4-Dichlorobenzene	1650 U
100-51-6	Benzyl Alcohol	1650 U
95-50-1	1,2-Dichlorobenzene	1650 U
95-48-7	2-Methylphenol	1650 U
39638-32-9	bis(2-chloroisopropyl)Ether	1650 U
106-44-5	4-Methylphenol 540 J	~~1650 U~~ SDL
621-64-7	N-Nitroso-Di-n-Propylamine	1650 U
67-72-1	Hexachloroethane	1650 U
98-95-3	Nitrobenzene	1650 U
78-59-1	Isophorone	1650 U
88-75-5	2-Nitrophenol	1650 U
105-67-9	2,4-Dimethylphenol 340 J	~~1650 U~~ SDL
65-85-0	Benzoic Acid	8000 U
111-91-1	bis(2-Chloroethoxy)Methane	1650 U
120-83-2	2,4-Dichlorophenol	1650 U
120-82-1	1,2,4-Trichlorobenzene	1650 U
91-20-3	Naphthalene 1300 J	~~1650 U~~ SDL
106-47-8	4-Chloroaniline	1650 U
87-68-3	Hexachlorobutadiene	1650 U
59-50-7	4-Chloro-3-Methylphenol	1650 U
91-57-6	2-Methylnaphthalene 980 J	~~1650 U~~ SDL
77-47-4	Hexachlorocyclopentadiene	1650 U
88-06-2	2,4,6-Trichlorophenol	1650 U
95-95-4	2,4,5-Trichlorophenol	8000 U
91-58-7	2-Chloronaphthalene	1650 U
88-74-4	2-Nitroaniline	8000 U
131-11-3	Dimethyl Phthalate	1650 U
208-96-8	Acenaphthylene	1650 U
99-09-2	3-Nitroaniline	8000 U

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene 2400	~~1650 U~~ SDL
51-28-5	2,4-Dinitrophenol	8000 U
100-02-7	4-Nitrophenol	8000 U
132-64-9	Dibenzofuran 1700	~~1650 U~~ SDL
121-14-2	2,4-Dinitrotoluene	1650 U
606-20-2	2,6-Dinitrotoluene	1650 U
84-66-2	Diethylphthalate	1650 U
7005-72-3	4-Chlorophenyl-phenylether	1650 U
86-73-7	Fluorene 2100	~~1650 U~~ SDL
100-01-6	4-Nitroaniline	1650 U
534-52-1	4,6-Dinitro-2-Methylphenol	8000 U
86-30-6	N-Nitrosodiphenylamine (1)	1650 U
101-55-3	4-Bromophenyl-phenylether	1650 U
118-74-1	Hexachlorobenzene	1650 U
87-86-5	Pentachlorophenol	8000 U
85-01-8	Phenanthrene 13,000	~~1650 U~~ SDL
120-12-7	Anthracene 8,900	~~1650 U~~ SDL
84-74-2	Di-n-Butylphthalate 5100	~~1650 U~~ SDL
206-44-0	Fluoranthene 15,000	~~1650 U~~ SDL
129-00-0	Pyrene 7,400	~~1650 U~~ SDL
85-68-7	Butylbenzylphthalate	1650 U
91-94-1	3,3'-Dichlorobenzidine	3300 U
56-55-3	Benzo(a)Anthracene 9400	~~1650 U~~ SDL
117-81-7	bis(2-Ethylhexyl)Phthalate	~~1650 U~~ 13 000 J
218-01-9	Chrysene 8200	~~1650 U~~ SDL
117-84-0	Di-n-Octyl Phthalate	1650 U
205-99-2	Benzo(b)Fluoranthene 9700	~~1650 U~~ SDL
207-08-9	Benzo(k)Fluoranthene	~~1650 U~~ SDL *
50-32-8	Benzo(a)Pyrene 6800	~~1650 U~~ SDL
193-39-5	Indeno(1,2,3-cd)Pyrene SDL	~~1650 U~~ 2500
53-70-3	Dibenz(a,h)Anthracene SDL	~~1650 U~~ 880 J
191-24-2	Benzo(g,h,i)Perylene 1900	~~1650 U~~ SDL

* reported as unresolved benzo(b,k)fluoranthenes

(1)-Cannot be seperated from diphenylamine

CC204

Laboratory Name Cambridge Analytical Associates

Case No 7204

Sample Number BF 427

Organics Analysis Data Sheet
(Page 3)

- Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5/8/87

Date Analyzed 5/31/87

Conc/Dil Factor: 1/10

Percent Moisture (decanted) 25%

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	80.0U
319-85-7	Beta-BHC	80.0U
319-86-8	Delta-BHC	80.0U
58-89-9	Gamma-BHC (Lindane)	80.0U
76-44-8	Heptachlor	80.0U
309-00-2	Aldrin	80.0U
1024-57-3	Heptachlor Epoxide	80.0U
959-98-8	Endosulfan I	80.0U
60-57-1	Dieldrin	160.0U
72-55-9	4,4'-DDE	160.0U
72-20-8	Endrin	160.0U
33213-65-9	Endosulfan II	160.0U
72-54-8	4,4'-DDD	160.0U
1031-07-8	Endosulfan Sulfate	160.0U
50-29-3	4,4'-DDT	160.0U
72-43-5	Methoxychlor	800.0U
53494-70-5	Endrin Ketone	1600.0U
57-74-9	Chlordane	800.0U
8001-35-2	Toxaphene	1600.0U
12674-11-2	Aroclor-1016	800.0U
11104-28-2	Aroclor-1221	800.0U
11141-16-5	Aroclor-1232	800.0U
53469-21-9	Aroclor-1242	800.0U
12672-29-6	Aroclor-1248	800.0U
11097-69-1	Aroclor-1254	~~1600.0U~~ 1580J C
11096-82-5	Aroclor-1260	1600.0U

V_t = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s — or W_s 19.4 g V_t 20,000 ul V_i 3 ul

Laboratory Name Cambridge Analytical Associates

Case No 7204

Sample Number BF 427

Organics Analysis Data Sheet
(Page 4)

00205

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.		hexacosane NOS	BNA	14.24	2200 J
2.		methyl dodecane NOS isomer		14.46	2200
3.		trimethyl octane isomer		15.39	3300
4.		octacosane NOS		15.81	2100
5.		trimethyl octane isomer		16.94	3100
6.		hexacosane NOS		17.26	3500
7.		tetramethyl heptadecane isomer		18.13	6000
8.		unknown		18.34	2600
9.		tritetracontane NOS		19.35	2600
10.		unknown alkane		19.49	3600
11.		tritetracontane NOS		19.93	6100
12.		unknown alkane		20.56	9000
13.		dimethyl dodecane isomer		21.27	15000
14.		unknown alkane		21.74	8300
15.		↓		23.50	12000
16.				29.06	1500
17.		benzo (j) fluoranthene		33.34	1700
18.		dihydro 2(3H) furanone		8.72	4500
19.		hexacosane NOS		12.54	2800
20.		unknown	↓	12.81	2000
21.					
22.		none found	VOA	—	—
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

U.S. ENVIRONMENTAL PROTECTION AGENCY HWI Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313—703 557-2490 • FTS 557-2490

ORGANICS TRAFFIC REPORT

Sample Number: BF 428

① Case Number: 7714

Sample Site Name/Code:

② SAMPLE CONCENTRATION (Check One)
- ✓ Low Concentration
- ___ Medium Concentration

③ SAMPLE MATRIX (Check One)
- ✓ Water
- ✓ Soil/Sediment

④ Ship To:
CAMBRIDGE ANALYTICAL
1106 COMMONWEALTH AVE
BOSTON, MA 02215
Attn: SHARON WALTER
Transfer Ship To: 00273

⑤ Regional Office: NJDS FIT 2
Sampling Personnel: P. DOHERTY
(Name)
(201) 225-6160
(Phone)
Sampling Date: 4/28/87 4/29/87
(Begin) (End)

⑥ For each sample collected specify number of containers used and mark volume level on each bottle.

	Number of Containers	Approximate Total Volume
Water (Extractable)		
Water (VOA)		
Soil/Sediment (Extractable)	1	8 oz.
Soil/Sediment (VOA)	1	120 ml
SOIL/SEDIMENT Other RCRA	1	8 oz

⑪ Analysis Lab:
Rec'd by: L. Lawley
Date Rec'd: 4/30/87
Sample Condition on Receipt (e.g., broken, no ice, Chain-of-Custody, etc.)
OK

⑦ Shipping Information
FEDERAL EXPRESS
Name of Carrier
4/28/87 4-1?
Date Shipped:
3498025710
Airbill Number:

⑧ Sample Description
- ___ Surface Water
- ___ Ground Water
- ___ Leachate
- ___ Mixed Media
- ✓ Solids
- ___ Other (specify) _____

⑨ Sample Location
NJR9-S4

⑩ Special Handling Instructions: (e.g., safety precautions, hazardous nature)
MATCHES INORGANIC T-REPORT # MBF-483

LAB COPY FOR RETURN TO SMO

CC274R

Sample Number
BF 428

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Cambridge Analytical Assoc. Case No: 7204

Lab Sample ID No: 8704240-12 | ul VOA1161 QC Report No: 21

Sample Matrix: Soil Contract No: 68-01-7278

Data Release Authorized By: [signature] Date Sample Received: SDL 4/29/87 4/30/87

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5/8/87

Date Analyzed: 5/8/87

Conc/Dil Factor: 5 pH N/A

Percent Moisture: (Not Decanted) 16

CAS Number		ug/l or (ug/Kg) (Circle One)
74-87-3	Chloromethane	50u
74-83-9	Bromomethane	50u
75-01-4	Vinyl Chloride	50u
75-00-3	Chloroethane	50u
75-09-2	Methylene Chloride	26u at 9J
67-64-1	Acetone	50u
75-15-0	Carbon Disulfide	25u
75-35-4	1, 1-Dichloroethene	25u
75-34-3	1, 1-Dichloroethane	25u
156-60-5	Trans-1, 2-Dichloroethene	25u
67-66-3	Chloroform	25u
107-06-2	1, 2-Dichloroethane	25u
78-93-3	2-Butanone	50u
71-55-6	1, 1, 1-Trichloroethane	25u
56-23-5	Carbon Tetrachloride	25u
108-05-4	Vinyl Acetate	50u
75-27-4	Bromodichloromethane	25u

CAS Number		ug/l or (ug/Kg) (Circle One)
78-87-5	1, 2-Dichloropropane	25u
10061-02-6	Trans-1, 3-Dichloropropene	25u
79-01-6	Trichloroethene	25u
124-48-1	Dibromochlbromethane	25u
79-00-5	1, 1, 2-Trichloroethane	25u
71-43-2	Benzene	25u
10061-01-5	cis-1, 3-Dichloropropene	25u
110-75-8	2-Chloroethylvinylether	50u
75-25-2	Bromoform	25u
108-10-1	4-Methyl-2-Pentanone	50u
591-78-6	2-Hexanone	50u
127-18-4	Tetrachloroethene	25u
79-34-5	1, 1, 2, 2-Tetrachloroethane	25u
108-88-3	Toluene	25u
108-90-7	Chlorobenzene	25u
100-41-4	Ethylbenzene	25u
100-42-5	Styrene	25u
	Total Xylenes	25u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read "U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample."

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

,tory Name Cambridge Analytical Associates

, No 7204

Sample Number
BF428

Organics Analysis Data Sheet
(Page 2)

00275

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted 'Prepared: 5-8-87

Date Analyzed 5-21-87

Conc 'Dil Factor: 1

Percent Moisture (Decanted) 16

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)
108 95 2	Phenol	330u
111-44-4	bis(2-Chloroethyl)Ether	330u
95-57-8	2-Chlorophenol	330u
541-73-1	1 3-Dichlorobenzene	330u
106-46-7	1 4-Dichlorobenzene	330u
100-51-6	Benzyl Alcohol	330u
95-50-1	1 2-Dichlorobenzene	330u
95-48-7	2-Methylphenol	330u
39638-32-9	bis(2-chloroisopropyl)Ether	330u
106-44-5	4-Methylphenol	330u
621-64-7	N-Nitroso-Di-n-Propylamine	330u
67-72-1	Hexachloroethane	330u
98-95-3	Nitrobenzene	330u
78 59-1	Isophorone	330u
88-75-5	2-Nitrophenol	330u
105-67-9	2 4-Dimethylphenol	330u
65-85-0	Benzoic Acid	1600u
111-91-1	bis(2-Chloroethoxy)Methane	330u
120-83-2	2 4-Dichlorophenol	330u
120-82-1	1 2 4-Trichlorobenzene	330u
91-20-3	Naphthalene	330u
106-47-8	4-Chloroaniline	330u
87-68 3	Hexachlorobutadiene	330u
59-50-7	4-Chloro-3-Methylphenol	330u
91-57-6	2-Methylnaphthalene	330u
77-47-4	Hexachlorocyclopentadiene	330u
88-06-2	2 4 6-Trichlorophenol	330u
95 95-4	2 4 5-Trichlorophenol	1600u
91-58-7	2-Chloronaphthalene	330u
88 74-4	2-Nitroaniline	1600u
131-11-3	Dimethyl Phthalate	330u
208 96-8	Acenaphthylene	330u
99-09-2	3-Nitroaniline	1600u

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	330u
51-28-5	2 4-Dinitrophenol	1600u
100-02-7	4-Nitrophenol	1600 u
132-64 9	Dibenzofuran	330u
121-14-2	2 4-Dinitrotoluene	330u
606-20-2	2 6-Dinitrotoluene	330u
84-66-2	Diethylphthalate	330u
7005-72-3	4-Chlorophenyl-phenylether	330u
86-73-7	Fluorene	330u
100-01-6	4-Nitroaniline	330u
534-52-1	4 6-Dinitro-2-Methylphenol	1600u
86-30-6	N-Nitrosodiphenylamine (1)	330u
101-55-3	4-Bromophenyl-phenylether	330u
118-74-1	Hexachlorobenzene	330u
87-86-5	Pentachlorophenol	1600u
85-01-8	Phenanthrene	330u
120-12-7	Anthracene	330u
84-74-2	Di-n-Butylphthalate	~~330u~~ 65J
206-44-0	Fluoranthene	330u
129-00-0	Pyrene	330u
85-68-7	Butylbenzylphthalate	330u
91-94-1	3 3-Dichlorobenzidine	660u
56-55-3	Benzo(a)Anthracene	330u
117-81-7	bis(2-Ethylhexyl)Phthalate	~~330u~~ 120J
218-01-9	Chrysene	330u
117-84-0	Di-n-Octyl Phthalate	330u
205-99-2	Benzo(b)fluoranthene	330u
207-08-9	Benzo(k)fluoranthene	330u
50-32-8	Benzo(a)Pyrene	330u
193-39-5	Indeno(1 2 3-cd)Pyrene	330u
53-70-3	Dibenz(a h)Anthracene	330u
191-24-2	Benzo(g h i)Perylene	330u

(1)-Cannot be seperated from diphenylamine

Laboratory Name Cambridge Analytical Associates

Case No 7204

Sample Number BF 428

Organics Analysis Data Sheet
(Page 3)

00270

- Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5/8/87

Date Analyzed 5/31/87

Conc/Dil Factor: 1

Percent Moisture (decanted) 16%

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or (ug/Kg) (Circle One)	
319-84-6	Alpha-BHC	8.0U	
319-85-7	Beta-BHC	8.0U	
319-86-8	Delta-BHC	8.0U	
58-89-9	Gamma-BHC (Lindane)	8.0U	
76-44-8	Heptachlor	8.0U	
309-00-2	Aldrin	8.0U	
1024-57-3	Heptachlor Epoxide	8.0U	
959-98-8	Endosulfan I	8.0U	
60-57-1	Dieldrin	16.0U	
72-55-9	4,4'-DDE	16.0U	
72-20-8	Endrin	16.0U	
33213-65-9	Endosulfan II	16.0U	
72-54-8	4,4'-DDD	16.0U	
1031-07-8	Endosulfan Sulfate	16.0U	
50-29-3	4,4'-DDT	16.0U	
72-43-5	Methoxychlor	80.0U	
53494-70-5	Endrin Ketone	160.0U	
57-74-9	Chlordane	80.0U	
8001-35-2	Toxaphene	160.0U	
12674-11-2	Aroclor-1016	80.0U	
11104-28-2	Aroclor-1221	80.0U	
11141-16-5	Aroclor-1232	80.0U	
53469-21-9	Aroclor-1242	80.0U	
12672-29-6	Aroclor-1248	~~80.0U~~ 79.1 J	79.1 J
11097-69-1	Aroclor-1254	160.0U	
11096-82-5	Aroclor-1260	160.0U	

V_t = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s — or W_s 20.5g V_t 20,000ul V_i 3ul

Name Cambridge Analytical Associates

7204

Sample Number
BF428

Organics Analysis Data Sheet
(Page 4)

OC277

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.		dihydro 2(3H) furanone	BNA	8.85	4300 J
2.		2-propenyl ester 2-propenoic acid		9.05	1700
3.		1-Propene, 2-bromo		9.57	1100
4.		~~2-decanamide~~ unknown		10.16	1800
5.		benzene, 1-bromo-4-chloro		13.26	320
6.		pentatriacontane isomer		30.80	2100
7.		"	↓	33.06	2200 ↓
8.		none found	VOA	—	—
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

U.S. ENVIRONMENTAL PROTECTION AGENCY HWI Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 – 703 557-2490 • FTS 557-2490

ORGANICS TRAFFIC REPORT

Sample Number: BC080

① Case Number:

Sample Site Name/Code:

② SAMPLE CONCENTRATION (Check One)

✓ Low Concentration
___ Medium Concentration

③ SAMPLE MATRIX (Check One)

___ Water
✓ Soil/Sediment

④ Ship To:
CAMBRIDGE ANALYTICAL
1106 COMMONWEALTH AV.
BOSTON, MA 02215

Attn: SHARON WALSH

Transfer Ship To: 00017

⑤ Regional Office:

Sampling Personnel:

(Name)

(Phone)

Sampling Date:

(Begin) (End)

⑥ For each sample collected specify number of containers used and mark volume level on each bottle.

	Number of Containers	Approximate Total Volume
Water (Extractable)		
Water (VOA)		
Soil/Sediment (Extractable)		
Soil/Sediment (VOA)		
Other		

⑪ Analysis Lab:
Rec'd by: L. Zaider
Date Rec'd: 4/30/87
Sample Condition on Receipt (e.g., broken, no ice, Chain-of-Custody, etc.)

OK

⑦ Shipping Information

Name of Carrier

Date Shipped:

Airbill Number:

⑧ Sample Description

___ Surface Water ___ Mixed Media
___ Ground Water ✓ Solids
___ Leachate ___ Other (specify) _____

⑨ Sample Location

MA RI-65

⑩ Special Handling Instructions:
(e.g., safety precautions, hazardous nature)

MATCHES MOORE-NK
T-REPORT FMBF
486

LAB COPY FOR RETURN TO SMO

Sample Number
BC080

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Cambridge Analytical Assoc.
Case No: 7204
Lab Sample ID No: 8704240-43/CAVOA1159
QC Report No: 21
Sample Matrix: Soil
Contract No: 68-01-7278
Data Release Authorized By:
Date Sample Received: SAS 4/29/87 4/30/87

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 5/8/87
Date Analyzed: 5/8/87
Conc/Dil Factor: 5 pH N/A
Percent Moisture: (Not Decanted) 14

CAS Number		ug/l or (ug/Kg) (Circle One)
74-87-3	Chloromethane	50u
74-83-9	Bromomethane	50u
75-01-4	Vinyl Chloride	50u
75-00-3	Chloroethane	50u
75-09-2	Methylene Chloride B	26u 19J
67-64-1	Acetone	50u
75-15-0	Carbon Disulfide	25u
75-35-4	1,1-Dichloroethene	25u
75-34-3	1,1-Dichloroethane	25u
156-60-5	Trans-1,2-Dichloroethene	25u
67-66-3	Chloroform	25u
107-06-2	1,2-Dichloroethane	25u
78-93-3	2-Butanone	50u
71-55-6	1,1,1-Trichloroethane A	25u 10J
56-23-5	Carbon Tetrachloride	25u
108-05-4	Vinyl Acetate	50u
75-27-4	Bromodichloromethane	25u

CAS Number		ug/l or (ug/Kg) (Circle One)
78-87-5	1,2-Dichloropropane	25u
10061-02-6	Trans-1,3-Dichloropropene	25u
79-01-6	Trichloroethene	25u
124-48-1	Dibromochloromethane	25u
79-00-5	1,1,2-Trichloroethane	25u
71-43-2	Benzene	25u
10061-01-5	cis-1,3-Dichloropropene	25u
110-75-8	2-Chloroethylvinylether	50u
75-25-2	Bromoform	25u
108-10-1	4-Methyl-2-Pentanone	50u
591-78-6	2-Hexanone	50u
127-18-4	Tetrachloroethene	25u
79-34-5	1,1,2,2-Tetrachloroethane	25u
108-88-3	Toluene B	25u 8J
108-90-7	Chlorobenzene	25u
100-41-4	Ethylbenzene	25u
100-42-5	Styrene	25u
	Total Xylenes	25u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read "U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample."

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ml in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

ory Name: Cambridge Analytical Associates
No: 7204

Sample Number
BC080

Organics Analysis Data Sheet
(Page 2)

OC019

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 5-8-87
Date Analyzed: 5-21-87
Conc/Dil Factor: 5
Percent Moisture (Decanted): 14

GPC Cleanup ☐Yes ☒No
Separatory Funnel Extraction ☐Yes
Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)
108-95-2	Phenol 1500J	~~1650U~~ SOL
111-44-4	bis(-2-Chloroethyl)Ether	1650U
95-57-8	2-Chlorophenol	1650U
541-73-1	1 3-Dichlorobenzene	1650U
106-46-7	1, 4-Dichlorobenzene	1650U
100-51-6	Benzyl Alcohol	1650U
95-50-1	1, 2-Dichlorobenzene	1650U
95-48-7	2-Methylphenol 250J	~~1650U~~ SOL
39638-32-9	bis(2-chloroisopropyl)Ether	1650U
106-44-5	4-Methylpheno 430J	~~1650U~~ SOL
621-64-7	N-Nitroso-Di-n-Propylamine	1650U
67-72-1	Hexachloroethane	1650U
98-95-3	Nitrobenzene	1650U
78-59-1	Isophorone	1650U
88-75-5	2-Nitrophenol	1650U
105-67-9	2, 4-Dimethylphenol 440J	~~1650U~~ SOL
65-85-0	Benzoic Acid	8000U
111-91-1	bis(-2-Chloroethoxy)Methane	1650U
120-83-2	2, 4-Dichlorophenol	1650U
120-82-1	1, 2, 4-Trichlorobenzene	1650U
91-20-3	Naphthalene 370J	~~1650U~~ SOL
106-47-8	4-Chloroaniline	1650U
87-68-3	Hexachlorobutadiene	1650U
59-50-7	4-Chloro-3-Methylphenol	1650U
91-57-6	2-Methylnaphthalene	1650U
77-47-4	Hexachlorocyclopentadiene	1650U
88-06-2	2, 4, 6-Trichlorophenol	1650U
95-95-4	2, 4, 5-Trichlorophenol	8000U
91-58-7	2-Chloronaphthalene	1650U
88-74-4	2-Nitroaniline	8000U
131-11-3	Dimethyl Phthalate	1650U
208-96-8	Acenaphthylene	1650U
99-09-2	3-Nitroaniline	8000U

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene 690J	~~1650U~~ SOL
51-28-5	2, 4-Dinitrophenol	8000U
100-02-7	4-Nitrophenol	8000U
132-64-9	Dibenzofuran 370J	~~1650U~~ SOL
121-14-2	2 4-Dinitrotoluene	1650U
606-20-2	2, 6-Dinitrotoluene	1650U
84-66-2	Diethylphthalate	1650U
7005-72-3	4-Chlorophenyl-phenylether	1650U
86-73-7	Fluorene 770J	~~1650U~~ SOL
100-01-6	4-Nitroaniline	1650U
534-52-1	4, 6-Dinitro-2-Methylphenol	8000U
86-30-6	N-Nitrosodiphenylamine (1)	1650U
101-55-3	4-Bromophenyl-phenylether	1650U
118-74-1	Hexachlorobenzene	1650U
87-86-5	Pentachlorophenol	8000U
85-01-8	Phenanthrene 5300	~~1650U~~ SOL
120-12-7	Anthracene 1400J	~~1650U~~ SOL
84-74-2	Di-n-Butylphthalate 4200	~~1650U~~ SOL
206-44-0	Fluoranthene 5000	~~1650U~~ SOL
129-00-0	Pyrene 4500	~~1650U~~ SOL
85-68-7	Butylbenzylphthalate	1650U
91-94-1	3, 3'-Dichlorobenzidine	3300U
56-55-3	Benzo(a)Anthracene 2300	~~1650U~~ SOL
117-81-7	bis(2-Ethylhexyl)Phthalate	~~1650U~~ 2600
218-01-9	Chrysene 2000	~~1650U~~ SOL
117-84-0	Di-n-Octyl Phthalate	1650U
205-99-2	Benzo(b)Fluoranthene 2200J	~~1650U~~ * SOL
207-08-9	Benzo(k)Fluoranthene	~~1650U~~ SOL *
50-32-8	Benzo(a)Pyrene 1600J	~~1650U~~ 490J
193-39-5	Indeno(1, 2, 3-cd)Pyrene	~~1650U~~
53-70-3	Dibenz(a h)Anthracene	1650U
191-24-2	Benzo(g h, i)Perylene *	~~1650U~~ 410J

* Report as unresolved Benzofluoranthene
(1)-Cannot be seperated from diphenylamine

Laboratory Name Cambridge Analytical Associates

Case No 7204

Sample Number BC080

Organics Analysis Data Sheet
(Page 3)

00020

- Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5/8/87

Date Analyzed 5/31/87

Conc/Dil Factor: 1/10

Percent Moisture (decanted) 14%

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or (ug/Kg) (Circle One)
319-84-6	Alpha-BHC	80.0U
319-85-7	Beta-BHC	80.0U
319-86-8	Delta-BHC	80.0U
58-89-9	Gamma-BHC (Lindane)	80.0U
76-44-8	Heptachlor	80.0U
309-00-2	Aldrin	80.0U
1024-57-3	Heptachlor Epoxide	80.0U
959-98-8	Endosulfan I	80.0U
60-57-1	Dieldrin	160.0U
72-55-9	4,4'-DDE	160.0U
72-20-8	Endrin	160.0U
33213-65-9	Endosulfan II	160.0U
72-54-8	4,4'-DDD	160.0U
1031-07-8	Endosulfan Sulfate	160.0U
50-29-3	4,4'-DDT	160.0U
72-43-5	Methoxychlor	800.0U
53494-70-5	Endrin Ketone	1600.0U
57-74-9	Chlordane	800.0U
8001-35-2	Toxaphene	1600.0U
12674-11-2	Aroclor-1016	800.0U
11104-28-2	Aroclor-1221	800.0U
11141-16-5	Aroclor-1232	800.0U
53469-21-9	Aroclor-1242	800.0U
12672-29-6	Aroclor-1248	~~800.0U~~ KD 4310
11097-69-1	Aroclor-1254	1600.0U
11096-82-5	Aroclor-1260	1600.0U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s — or W_s 21.8g V_t 20,000ul V_i 3ul

Laboratory Name: Cambridge Analytical Assoc.

Case No: 7204

Sample Number: BC080

Organics Analysis Data Sheet
(Page 4)

00021

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.		1,4-DIOXANE	VOA	233	94J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

Laboratory Name Cambridge Analytical Associates

Case No 7204

Sample Number BC080

Organics Analysis Data Sheet
(Page 4)

00022

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.		dihydro 2(3H)-furanone	BNA	8.73	5200 J
2.		unknown		10.13	1700 J
3.		4H-Cyclopenta(def)phenanthrene		23.95	830 J
4.		Phenol, 2-[(4-hydroxyphenyl)methyl]-		25.22	1800 J
5.				~~25.47~~	~~5000 J~~ SBL
6.		11H-Benzo(b)fluorene		26.93	1100 J
7.		unknown		27.65	970 J
8.		1-Phenanthrene carboxylic acid		27.97	2500 J
9.		unknown		30.88	1300 J
10.		benz[e]acephenanthrylene	↓	33.27	2100 J
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

U.S. ENVIRONMENTAL PROTECTION AGENCY HWI Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 – 703 557-2490 • FTS 557-2490

ORGANICS TRAFFIC REPORT

Sample Number: BC081

① **Case Number:**

Sample Site Name/Code:

② **SAMPLE CONCENTRATION**
(Check One)

___ Low Concentration
___ Medium Concentration

③ **SAMPLE MATRIX**
(Check One)

___ Water
___ Soil/Sediment

④ **Ship To:**
CAMBRIDGE ANALYTICAL
1106 COMMONWEALTH AVE
BOSTON, MA 02215
Attn: SHARON WALKER

Transfer
Ship To: 00079

⑤ **Regional Office:**
Sampling Personnel:
(Name)
(Phone)
Sampling Date:
(Begin) (End)

⑥ **For each sample collected specify number of containers used and mark volume level on each bottle.**

	Number of Containers	Approximate Total Volume	
Water (Extractable)			OK
Water (VOA)			
Soil/Sediment (Extractable)			
Soil/Sediment (VOA)			
Other			

⑪ **Analysis Lab:**
Rec'd by: L Lawler
Date Rec'd: 4/30/87
Sample Condition on Receipt (e.g., broken, no ice, Chain-of-Custody, etc.)

⑦ **Shipping Information**
Name of Carrier
Date Shipped:
Airbill Number:

⑧ **Sample Description**

___ Surface Water ___ Mixed Media
___ Ground Water ___ Solids
___ Leachate ___ Other (specify) _____

⑨ **Sample Location**

NYR9-56

⑩ **Special Handling Instructions:**
(e.g., safety precautions, hazardous nature) MATCHES INORGANIC T-REPORT
= MBF487

LAB COPY FOR RETURN TO SMO

Sample Number
BC081

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Cambridge Analytical Assoc.
Case No: 7204 00080R
Lab Sample ID No: 8704240-14/CAVOA1160
QC Report No: 21
Sample Matrix: Soil
Contract No: 68-01-7278
Data Release Authorized By:
Date Sample Received: ~~4/29/87~~ 4/30/87

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 5/6/87
Date Analyzed: 5/6/87
Conc/Dil Factor: 5 pH N/A
Percent Moisture: (Not Decanted) 13

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	50u
74-83-9	Bromomethane	50u
75-01-4	Vinyl Chloride	50u
75-00-3	Chloroethane	50u
75-09-2	Methylene Chloride 95	~~85u~~ 10J
67-64-1	Acetone	50u
75-15-0	Carbon Disulfide	25u
75-35-4	1,1-Dichloroethene	25u
75-34-3	1,1-Dichloroethane	25u
156-60-5	Trans-1,2-Dichloroethene	25u
67-66-3	Chloroform	25u
107-06-2	1,2-Dichloroethane	25u
78-93-3	2-Butanone	50u
71-55-6	1,1,1-Trichloroethane	25u
56-23-5	Carbon Tetrachloride	25u
108-05-4	Vinyl Acetate	50u
75-27-4	Bromodichloromethane	25u

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1,2-Dichloropropane	25u
10061-02-6	Trans-1,3-Dichloropropene	25u
79-01-6	Trichloroethene	25u
124-48-1	Dibromochloromethane	25u
79-00-5	1,1,2-Trichloroethane	25u
71-43-2	Benzene	25u
10061-01-5	cis-1,3-Dichloropropene	25u
110-75-8	2-Chloroethylvinylether	50u
75-25-2	Bromoform	25u
108-10-1	4-Methyl-2-Pentanone	50u
591-78-6	2-Hexanone	50u
127-18-4	Tetrachloroethene	25u
79-34-5	1,1,2,2-Tetrachloroethene	25u
108-88-3	Toluene 96	~~25u~~ 7J
108-90-7	Chlorobenzene	25u
100-41-4	Ethylbenzene	25u
100-42-5	Styrene	25u
	Total Xylenes	25u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be supplied.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read "U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample."

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ml in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

oratory Name Cambridge Analytical Associates

ase No 7204

Sample Number BC081 (R)

Organics Analysis Data Sheet
(Page 2)

00081

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared 5-8-87

Date Analyzed 5-28-87

Conc/Dil Factor: 1

Percent Moisture (Decanted) 13

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)
108 95 2	Phenol	330u
111-44-4	bis(2-Chloroethyl)Ether	330u
95-57-8	2-Chlorophenol	330u
541-73-1	1 3-Dichlorobenzene	330u
106-46-7	1 4-Dichlorobenzene	330u
100-51-6	Benzyl Alcohol	330u
95-50-1	1 2-Dichlorobenzene	330u
95-48-7	2-Methylphenol	330u
39638-32-9	bis(2-chloroisopropyl)Ether	330u
106-44-5	4-Methylphenol	330u
621-64-7	N-Nitroso-Di-n-Propylamine	330u
67-72-1	Hexachloroethane	330u
98-95-3	Nitrobenzene	330u
78-59-1	Isophorone	330u
88-75-5	2-Nitrophenol	330u
105-67-9	2 4-Dimethylphenol 76J	~~330u~~ sol
65-85-0	Benzoic Acid	1600u
111-91-1	bis(2-Chloroethoxy)Methane	330u
120-83-2	2 4-Dichlorophenol	330u
120-82-1	1 2 4-Trichlorobenzene	330u
91-20-3	Naphthalene	330u
106-47-8	4-Chloroaniline	330u
87-68-3	Hexachlorobutadiene	330u
59-50-7	4-Chloro-3-Methylphenol	330u
91-57-6	2-Methylnaphthalene	330u
77-47-4	Hexachlorocyclopentadiene	330u
88-06-2	2 4 6-Trichlorophenol	330u
95-95-4	2 4 5-Trichlorophenol	1600u
91-58-7	2-Chloronaphthalene	330u
88-74-4	2-Nitroaniline	1600u
131-11-3	Dimethyl Phthalate	330u
208-96-8	Acenaphthylene	330u
99-09-2	3-Nitroaniline	1600u

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	330u
51-28-5	2 4-Dinitrophenol	1600u
100-02-7	4-Nitrophenol	1600 u
132-64-9	Dibenzofuran	330u
121-14-2	2 4-Dinitrotoluene	330u
606-20-2	2 6-Dinitrotoluene	330u
84-66-2	Diethylphthalate	330u
7005-72-3	4-Chlorophenyl-phenylether	330u
86-73-7	Fluorene	330u
100-01-6	4-Nitroaniline	330u
534-52-1	4 6-Dinitro-2-Methylphenol	1600u
86-30-6	N-Nitrosodiphenylamine (1)	330u
101-55-3	4-Bromophenyl-phenylether	330u
118-74-1	Hexachlorobenzene	330u
87-86-5	Pentachlorophenol	1600u
85-01-8	Phenanthrene	330u
120-12-7	Anthracene	330u
84-74-2	Di-n-Butylphthalate 220J	~~330u~~ sol
206-44-0	Fluoranthene	330u
129-00-0	Pyrene	330u
85-68-7	Butylbenzylphthalate	330u
91-94-1	3 3-Dichlorobenzidine	660u
56-55-3	Benzo(a)Anthracene	330u
117-81-7	bis(2-Ethylhexyl)Phthalate	~~330u~~ 200J
218-01-9	Chrysene	330u
117-84-0	Di-n-Octyl Phthalate	330u
205-99-2	Benzo(b)Fluoranthene	330u
207-08-9	Benzo(k)Fluoranthene	330u
50-32-8	Benzo(a)Pyrene	330u
193-39-5	Indeno(1 2 3-cd)Pyrene	330u
53-70-3	Dibenzo(a h)Anthracene	330u
191-24-2	Benzo(g h i)Perylene	330u

(1)-Cannot be separated from diphenylamine

Laboratory Name Cambridge Analytical Associates

Case No 7204

Sample Number BC 081

Organics Analysis Data Sheet
(Page 3)

- Pesticide/PCBs

00082

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5/8/87

Date Analyzed 5/31/87

Conc/Dil Factor: 1/10

Percent Moisture (decanted) 13%

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	80.0U
319-85-7	Beta-BHC	80.0U
319-86-8	Delta-BHC	80.0U
58-89-9	Gamma-BHC (Lindane)	80.0U
76-44-8	Heptachlor	80.0U
309-00-2	Aldrin	80.0U
1024-57-3	Heptachlor Epoxide	80.0U
959-98-8	Endosulfan I	80.0U
60-57-1	Dieldrin	160.0U
72-55-9	4,4'-DDE	160.0U
72-20-8	Endrin	160.0U
33213-65-9	Endosulfan II	160.0U
72-54-8	4,4'-DDD	160.0U
1031-07-8	Endosulfan Sulfate	160.0U
50-29-3	4,4'-DDT	160.0U
72-43-5	Methoxychlor	800.0U
53494-70-5	Endrin Ketone	1600.0U
57-74-9	Chlordane	800.0U
8001-35-2	Toxaphene	1600.0U
12674-11-2	Aroclor-1016	800.0U
11104-28-2	Aroclor-1221	800.0U
11141-16-5	Aroclor-1232	800.0U
53469-21-9	Aroclor-1242	800.0U
12672-29-6	Aroclor-1248	~~800.0U~~ 5640
11097-69-1	Aroclor-1254	1600.0U
11096-82-5	Aroclor-1260	1600.0U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s — or W_s 21.0g V_t 20,000ul V_i 3ul

ory Name Cambridge Analytical Associates

ID 7204

Sample Number BC081 R SDL

00083

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.		dihydro 2(3H) furanone	BNA	8.85	5300 J
2.		1-propene 2 bromo		9.55	870
3.		Unknown		10.14	1600
4.		benzene 2-bromo-4 chloro		13.26	390
5.		1,3-Cyclopentanedione, 2 bromo		15.59	540
6.		trichloro biphenyl isomer		23.35	200
7.		1,2 benzenedicarboxylic acid		24.10	460
8.		tetrachloro biphenyl isomer		24.54	240
9.		"		24.80	230
10.		"		25.45	370
11.		"		25.79	270
12.		1,2 Benzenedicarboxylic acid	↓	29.51	330 ↓
13.		None detectable	VOA	—	—
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

U.S. ENVIRONMENTAL PROTECTION AGENCY HWI Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313—703 557 2490 • FTS 557 2490

ORGANICS TRAFFIC REPORT

Sample Number: **BC082**

① Case Number:

Sample Site Name/Code:

② SAMPLE CONCENTRATION
(Check One)

- [✓] Low Concentration
- [ ] Medium Concentration

③ SAMPLE MATRIX
(Check One)

- [ ] Water
- [✓] Soil/Sediment

④ Ship To: 00120
CAMBRIDGE ANALYTICAL ASSOC.
1106 COMMONWEALTH AVE
BOSTON, MA
Attn: SHARON WALKER

Transfer Ship To: 00121

⑤ Regional Office:
Sampling Personnel:
(Name)
(Phone)
Sampling Date:
(Begin) / (End)

⑥ For each sample collected specify number of containers used and mark volume level on each bottle.

	Number of Containers	Approximate Total Volume	
Water (Extractable)			OK
Water (VOA)			
Soil/Sediment (Extractable)			
Soil/Sediment (VOA)			
Other			

⑪ Analysis Lab:
Rec'd by: L. Kaufler
Date Rec'd: 4/30/87
Sample Condition on Receipt (e.g., broken, no ice, Chain-of-Custody, etc.)

⑦ Shipping Information
Name of Carrier
Date Shipped:
Airbill Number:

⑧ Sample Description

- [ ] Surface Water
- [ ] Ground Water
- [ ] Leachate
- [ ] Mixed Media
- [✓] Solids
- [ ] Other (specify)

⑨ Sample Location
NY84-57

⑩ Special Handling Instructions:
(e.g., safety precautions, hazardous nature)
MATCHED ORIGINAL T-REPORT
#MBF 488

LAB COPY FOR RETURN TO SMO

00122R

Sample Number
BC-082

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Cambridge Analytical Assoc. Case No: 7204

Lab Sample ID No: 8704240-15 | CLPVOA1153 OC Report No: 21

Sample Matrix: Soil Contract No: 68-01-7278

Data Release Authorized By: [signature] Date Sample Received: 4/29/87 4/30/87

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5/6/87

Date Analyzed: 5/6/87

Conc/Dil Factor: 5 pH N/A

Percent Moisture: (Not Decanted) 21

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	50u
74-83-9	Bromomethane	50u
75-01-4	Vinyl Chloride	50u
75-00-3	Chloroethane	50u
75-09-2	Methylene Chloride aq	25u 17J
67-64-1	Acetone aq	50u 360
75-15-0	Carbon Disulfide	25u
75-35-4	1,1-Dichloroethene	25u
75-34-3	1,1-Dichloroethane	25u
156-60-5	Trans-1,2-Dichloroethene	25u
67-66-3	Chloroform	25u
107-06-2	1,2-Dichloroethane	25u
78-93-3	2-Butanone	50u
71-55-6	1,1,1-Trichloroethane	25u
56-23-5	Carbon Tetrachloride	25u
108-05-4	Vinyl Acetate	50u
75-27-4	Bromodichloromethane	25u

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1,2-Dichloropropane	25u
10061-02-6	Trans-1,3-Dichloropropene	25u
79-01-6	Trichloroethene	25u
124-48-1	Dibromochloromethane	25u
79-00-5	1,1,2-Trichloroethane	25u
71-43-2	Benzene	25u
10061-01-5	cis-1,3-Dichloropropene	25u
110-75-8	2-Chloroethylvinylether	50u
75-25-2	Bromoform	25u
108-10-1	4-Methyl-2-Pentanone	50u
591-78-6	2-Hexanone	50u
127-18-4	Tetrachloroethene	25u
79-34-5	1,1,2,2-Tetrachloroethane	25u
108-88-3	Toluene aq	25u 10J
108-90-7	Chlorobenzene	25u
100-41-4	Ethylbenzene	25u
100-42-5	Styrene	25u
	Total Xylenes	25u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read "U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample."

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

me Cambridge Analytical Associates
7204

Sample Number
BC 082

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

00123

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 5-8-87
Date Analyzed: 6-1-87
Conc./Dil Factor: 200
Percent Moisture (Decanted) 21

GPC Cleanup ☐Yes ☐No
Separatory Funnel Extraction ☐Yes
Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or (ug/Kg) (Circle One)
108-95-2	Phenol 910,000	660000u SBL
111-44-4	bis(-2-Chloroethyl)Ether	660000u
95-57-8	2-Chlorophenol	660000u
541-73-1	1 3-Dichlorobenzene	660000u
106-46-7	1 4-Dichlorobenzene	660000u
100-51-6	Benzyl Alcohol	660000u
95-50-1	1 2-Dichlorobenzene	660000u
95-48-7	2-Methylphenol	660000u
39638-32-9	bis(2-chloroisopropyl)Ether	660000u
106-44-5	4-Methylphenol	660000u
621-64-7	N-Nitroso-Di-n-Propylamine	660000u
67-72-1	Hexachloroethane	660000u
98-95-3	Nitrobenzene	660000u
78-59-1	Isophorone	660000u
88-75-5	2-Nitrophenol	660000u
105-67-9	2, 4-Dimethylphenol	660000u
65-85-0	Benzoic Acid	320000u
111-91-1	bis(-2-Chloroethoxy)Methane	660000u
120-83-2	2, 4-Dichlorophenol	660000u
120-82-1	1, 2, 4-Trichlorobenzene	660000u
91-20-3	Naphthalene	660000u
106-47-8	4-Chloroaniline	660000u
87-68-3	Hexachlorobutadiene	660000u
59-50-7	4-Chloro-3-Methylphenol	660000u
91-57-6	2-Methylnaphthalene	660000u
77-47-4	Hexachlorocyclopentadiene	660000u
88-06-2	2, 4, 6-Trichlorophenol	660000u
95-95-4	2, 4, 5-Trichlorophenol	320000u
91-58-7	2-Chloronaphthalene	660000u
88-74-4	2-Nitroaniline	320000u
131-11-3	Dimethyl Phthalate	660000u
208-96-8	Acenaphthylene	660000u
99-09-2	3-Nitroaniline	320000u

CAS Number		ug/l or (ug/Kg) (Circle One)
83-32-9	Acenaphthene	660000u
51-28-5	2, 4-Dinitrophenol	320000u
100-02-7	4-Nitrophenol	320000u
132-64-9	Dibenzofuran	660000u
121-14-2	2 4-Dinitrotoluene	660000u
606-20-2	2 6-Dinitrotoluene	660000u
84-66-2	Diethylphthalate	660000u
7005-72-3	4-Chlorophenyl-phenylether	660000u
86-73-7	Fluorene	660000u
100-01-6	4-Nitroaniline	660000u
534-52-1	4, 6-Dinitro-2-Methylphenol	320000u
86-30-6	N-Nitrosodiphenylamine (1)	660000u
101-55-3	4-Bromophenyl-phenylether	660000u
118-74-1	Hexachlorobenzene	660000u
87-86-5	Pentachlorophenol	320000u
85-01-8	Phenanthrene	660000u
120-12-7	Anthracene	660000u
84-74-2	Di-n-Butylphthalate 240,000	660000u SBL
206-44-0	Fluoranthene	660000u
129-00-0	Pyrene	660000u
85-68-7	Butylbenzylphthalate	660000u
91-94-1	3, 3'-Dichlorobenzidine	1320000u
56-55-3	Benzo(a)Anthracene	660000u
117-81-7	bis(2-Ethylhexyl)Phthalate	660000u
218-01-9	Chrysene	660000u
117-84-0	Di-n-Octyl Phthalate	660000u
205-99-2	Benzo(b)Fluoranthene	660000u
207-08-9	Benzo(k)Fluoranthene	660000u
50-32-8	Benzo(a)Pyrene	660000u
193-39-5	Indeno(1, 2, 3-cd)Pyrene	660000u
53-70-3	Dibenz(a h)Anthracene	660000u
191-24-2	Benzo(g h i)Perylene	660000u

(1)-Cannot be separated from diphenylamine

ratory Name Cambridge Analytical Associates

se No 7204

Sample Number
BC 082

00124

Organics Analysis Data Sheet
(Page 3)

- Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5/8/87

Date Analyzed 5/31/87

Conc/Dil Factor: 1/10

Percent Moisture (decanted) 21%

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or (ug/Kg) (Circle One)
319-84-6	Alpha-BHC	80.0U
319-85-7	Beta-BHC	80.0U
319-86-8	Delta-BHC	80.0U
58-89-9	Gamma-BHC (Lindane)	80.0U
76-44-8	Heptachlor	80.0U
309-00-2	Aldrin	80.0U
1024-57-3	Heptachlor Epoxide	80.0U
959-98-8	Endosulfan I	80.0U
60-57-1	Dieldrin	160.0U
72-55-9	4,4'-DDE	160.0U
72-20-8	Endrin	160.0U
33213-65-9	Endosulfan II	160.0U
72-54-8	4,4'-DDD	160.0U
1031-07-8	Endosulfan Sulfate	160.0U
50-29-3	4,4'-DDT	160.0U
72-43-5	Methoxychlor	800.0U
53494-70-5	Endrin Ketone	1600.0U
57-74-9	Chlordane	800.0U
8001-35-2	Toxaphene	1600.0U
12674-11-2	Aroclor-1016	800.0U
11104-28-2	Aroclor-1221	800.0U
11141-16-5	Aroclor-1232	800.0U
53469-21-9	Aroclor-1242	800.0U
12672-29-6	Aroclor-1248	800.0U
11097-69-1	Aroclor-1254	1600.0U
11096-82-5	Aroclor-1260	1600.0U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s — or W_s 22.2g V_t 20,000ul V_i 3ul

ory Name: Cambridge Analytical Assoc.

No: 7204

Sample Number
BC-082

Organics Analysis Data Sheet
(Page 4)

00125

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.		phenol	VOA	428	270 J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

U.S. ENVIRONMENTAL PROTECTION AGENCY HWI Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 – 703 557-2490 • FTS 557-2490

ORGANICS TRAFFIC REPORT

Sample Number: BK 249

① Case Number: 90
[illegible]
7204
Sample Site Name/Code:

② SAMPLE CONCENTRATION (Check One)
✓ Low Concentration
___ Medium Concentration

③ SAMPLE MATRIX (Check One)
___ Water
✓ Soil/Sediment

④ Ship To:
CAMBRIDGE ANALYTICAL
1106 COMMONWEALTH AVE
BOSTON, MA 02215
Attn: SHARON WALFR
Transfer 00475
Ship To:

⑤ Regional Office: [illegible]
Sampling Personnel: FTS
P. DOHERTY
(Name)
(201) 225-6160
(Phone)
Sampling Date: 4/19/87 (Begin) 4/25/87 (End)

⑥ For each sample collected specify number of containers used and mark volume level on each bottle.

	Number of Containers	Approximate Total Volume	
Water (Extractable)			
Water (VOA)			OK
Soil/Sediment (Extractable)	1	8oz 8oz	
Soil/Sediment (VOA)	1	1 Cond	
Other- SEDIMENT (PCB/PEST)	1	8 oz	

⑦ Shipping Information
FEDERAL EXPRESS
Name of Carrier
4/28/87
Date Shipped:
2498025764
Airbill Number:

⑧ Sample Description
___ Surface Water ___ Mixed Media
___ Ground Water ✓ Solids
___ Leachate ___ Other (specify) _____

⑨ Sample Location
NYR9-58

⑩ Special Handling Instructions: (e.g., safety precautions, hazardous nature)
MATCHES INORGANIC T-REPORT # MBI 590

LAB COPY FOR RETURN TO SMO

⑪ Analysis Lab:
Rec'd by: [illegible]
Date Rec'd: 4/30/87
Sample Condition on Receipt (e.g., broken, r ice, Chain-of-Custody, etc.)

Sample Number
BK249

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Cambridge Analytical Assoc. Case No: 7204

Lab Sample ID No: 8704240-16 | CLYOA1165 QC Report No: 21

Sample Matrix: Soil Contract No: 68-01-7278

Data Release Authorized By: Date Sample Received: 4/29/87 & 4/30/87

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5/8/87

Date Analyzed: 5/8/87

Conc/Dil Factor: 5 pH N/A

Percent Moisture: (Not Decanted) 17

00476R

CAS Number		ug/l or (ug/Kg) (Circle One)
74-87-3	Chloromethane	50u
74-83-9	Bromomethane	50u
75-01-4	Vinyl Chloride	50u
75-00-3	Chloroethane	50u
75-09-2	Methylene Chloride [B]	~~85u~~ 13J
67-64-1	Acetone	50u
75-15-0	Carbon Disulfide	25u
75-35-4	1, 1-Dichloroethene	25u
75-34-3	1, 1-Dichloroethane	25u
156-60-5	Trans-1, 2-Dichloroethene	25u
67-66-3	Chloroform	25u
107-06-2	1, 2-Dichloroethane	25u
78-93-3	2-Butanone	50u
71-55-6	1, 1, 1-Trichloroethane [B]	~~25u~~ 10J
56-23-5	Carbon Tetrachloride	25u
108-05-4	Vinyl Acetate	50u
75-27-4	Bromodichloromethane	25u

CAS Number		ug/l or (ug/Kg) (Circle One)
78-87-5	1, 2-Dichloropropane	25u
10061-02-6	Trans-1, 3-Dichloropropene	25u
79-01-6	Trichloroethene	25u
124-48-1	Dibromochloromethane	25u
79-00-5	1, 1, 2-Trichloroethane	25u
71-43-2	Benzene	25u
10061-01-5	cis-1, 3-Dichloropropene	25u
110-75-8	2-Chloroethylvinylether	50u
75-25-2	Bromoform	25u
108-10-1	4-Methyl-2-Pentanone	50u
591-78-6	2-Hexanone	50u
127-18-4	Tetrachloroethene	25u
79-34-5	1, 1, 2, 2-Tetrachloroethane	25u
108-88-3	Toluene [B]	~~25u~~ 11J
108-90-7	Chlorobenzene	25u
100-41-4	Ethylbenzene	25u
100-42-5	Styrene	25u
	Total Xylenes	25u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read "U - Compound was analyzed for but not detected." The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ml in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

Laboratory Name: Cambridge Analytical Associates

Case No: 7204

Sample Number: BK249

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5-8-87

Date Analyzed: 5-22-87

Conc/(Dil) Factor: 5

Percent Moisture (Decanted): 17

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

00477

CAS Number		ug/l or (ug/Kg) (Circle One)
106-95-2	Phenol 840J	~~1650U~~ 1650U
111-44-4	bis(-2-Chloroethyl)Ether	1650U
95-57-8	2-Chlorophenol	1650U
541-73-1	1 3-Dichlorobenzene	1650U
106-46-7	1, 4-Dichlorobenzene	1650U
100-51-6	Benzyl Alcohol	1650U
95-50-1	1, 2-Dichlorobenzene	1650U
95-48-7	2-Methylphenol	1650U
39638-32-9	bis(2-chloroisopropyl)Ether	1650U
106-44-5	4-Methylphenol 310J	~~1650U~~ 1650U
621-64-7	N-Nitroso-Di-n-Propylamine	1650U
67-72-1	Hexachloroethane	1650U
98-95-3	Nitrobenzene	1650U
78-59-1	Isophorone	1650U
88-75-5	2-Nitrophenol	1650U
105-67-9	2, 4-Dimethylphenol 220J	~~1650U~~ 1650U
65-85-0	Benzoic Acid	8000U
111-91-1	bis(-2-Chloroethoxy)Methane	1650U
120-83-2	2, 4-Dichlorophenol	1650U
120-82-1	1, 2, 4-Trichlorobenzene	1650U
91-20-3	Naphthalene	1650U
106-47-8	4-Chloroaniline	1650U
87-68-3	Hexachlorobutadiene	1650U
59-50-7	4-Chloro-3-Methylphenol	1650U
91-57-6	2-Methylnaphthalene	1650U
77-47-4	Hexachlorocyclopentadiene	1650U
88-06-2	2, 4, 6-Trichlorophenol	1650U
95-95-4	2, 4, 5-Trichlorophenol	8000U
91-58-7	2-Chloronaphthalene	1650U
88-74-4	2-Nitroaniline	8000U
131-11-3	Dimethyl Phthalate	1650U
208-96-8	Acenaphthylene	1650U
99-09-2	3-Nitroaniline	8000U

CAS Number		ug/l or (ug/Kg) (Circle One)
83-32-9	Acenaphthene	1650U
51-28-5	2, 4-Dinitrophenol	8000U
100-02-7	4-Nitrophenol	8000U
132-64-9	Dibenzofuran	1650U
121-14-2	2 4-Dinitrotoluene	1650U
606-20-2	2, 6-Dinitrotoluene	1650U
84-66-2	Diethylphthalate	1650U
7005-72-3	4-Chlorophenyl-phenylether	1650U
86-73-7	Fluorene	1650U
100-01-6	4-Nitroaniline	1650U
534-52-1	4, 6-Dinitro-2-Methylphenol	8000U
86-30-6	N-Nitrosodiphenylamine (1)	1650U
101-55-3	4-Bromophenyl-phenylether	1650U
118-74-1	Hexachlorobenzene	1650U
87-86-5	Pentachlorophenol	8000U
85-01-8	Phenanthrene	1650U
120-12-7	Anthracene	1650U
84-74-2	Di-n-Butylphthalate 800J	~~1650U~~ 1650U
206-44-0	Fluoranthene	1650U
129-00-0	Pyrene	1650U
85-68-7	Butylbenzylphthalate	1650U
91-94-1	3, 3'-Dichlorobenzidine	3300U
56-55-3	Benzo(a)Anthracene	1650U
117-81-7	bis(2-Ethylhexyl)Phthalate	1650U
218-01-9	Chrysene	1650U
117-84-0	Di-n-Octyl Phthalate	1650U
205-99-2	Benzo(b)Fluoranthene	1650U
207-08-9	Benzo(k)Fluoranthene	1650U
50-32-8	Benzo(a)Pyrene	1650U
193-39-5	Indeno(1, 2, 3-cd)Pyrene	1650U
53-70-3	Dibenz(a, h)Anthracene	1650U
191-24-2	Benzo(g, h, i)Perylene	1650U

(1)-Cannot be seperated from diphenylamine

Laboratory Name Cambridge Analytical

Case No 7204

Sample Number
BK249

Organics Analysis Data Sheet
(Page 3)

00478

Pesticide/PCBs

Concentration (Low) Medium (Circle One)

Date Extracted/Prepared 5/8/87

Date Analyzed 5/31/87

Conc/Dil Factor 1/5

Percent Moisture (decanted) 17%

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or (ug/Kg) (Circle One)
319-84-6	Alpha-BHC	40.0 U
319-85-7	Beta-BHC	40.0 U
319-86-8	Delta-BHC	40.0 U
58-89-9	Gamma-BHC (Lindane)	40.0 U
76-44-8	Heptachlor	40.0 U
309-00-2	Aldrin	40.0 U
1024-57-3	Heptachlor Epoxide	40.0 U
959-98-8	Endosulfan I	40.0 U
60-57-1	Dieldrin	80.0 U
72-55-9	4,4'-DDE	80.0 U
72-20-8	Endrin	80.0 U
33213-65-9	Endosulfan II	80.0 U
72-54-8	4,4'-DDD	80.0 U
1031-07-8	Endosulfan Sulfate	80.0 U
50-29-3	4,4'-DDT	80.0 U
72-43-5	Methoxychlor	400 U
53494-70-5	Endrin Ketone	800 U
57-74-9	Chlordane	400 U
8001-35-2	Toxaphene	800 U
12674-11-2	Aroclor-1016	400 U
11104-28-2	Aroclor-1221	400 U
11141-16-5	Aroclor-1232	400 U
53469-21-9	Aroclor-1242	400 U
12672-29-6	Aroclor-1248	400 U
11097-69-1	Aroclor-1254	800 U
11096-82-5	Aroclor-1260	800 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s — or W_s 28.3g V_t 20,000 V_i 3ul

00479

Laboratory Name Cambridge Analytical Associates

Case No 7204

Sample Number BK249

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.		dihydro 2(3H) furanone	BNA	8.72	3600 J
2.		unknown		10.12	980 J
3.		surrogate		~~11.89~~	~~1200~~ SQL
4.		2,4,6 trichloro benzenamine		17.52	1200 J
5.		unknown		17.81	970
6.		Eicosane NOS		30.90	760
7.		tritetracontane NOS	↓	36.20	880 ↓
8.		none detected	VOA	—	—
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

U.S. ENVIRONMENTAL PROTECTION AGENCY HWI Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 – 703 557-2490 • FTS 557-2490

ORGANICS TRAFFIC REPORT

Sample Number: **BC 083**

① **Case Number:**

Sample Site Name/Code:

② **SAMPLE CONCENTRATION**
(Check One)

✓ Low Concentration
___ Medium Concentration

③ **SAMPLE MATRIX**
(Check One)

✓ Water
___ Soil/Sediment

④ **Ship To:**
CAMBRIDGE ANALYTICAL
1106 COMMONWEALTH AVE
BOSTON, MA 02215

Attn: SHARON WALKER

Transfer Ship To: 00146

⑤ **Regional Office:** 1 U.S.
Sampling Personnel: FTS

(Name)

(Phone)

Sampling Date:

(Begin) (End)

⑥ **For each sample collected specify number of containers used and mark volume level on each bottle.**

	Number of Containers	Approximate Total Volume	⑪ Analysis Lab: Rec'd by: L Lawler; Date Rec'd: 4/30/87; Sample Condition on Receipt (e.g., broken, no ice, Chain-of-Custody, etc.)
Water (Extractable)	2		OK
Water (VOA)	2		
Soil/Sediment (Extractable)			
Soil/Sediment (VOA)			
Other WATER	1		
	4		

⑦ **Shipping Information**

Name of Carrier

Date Shipped:

Airbill Number:

⑧ **Sample Description**

___ Surface Water ___ Mixed Media
___ Ground Water ___ Solids
___ Leachate ___ Other (specify) TRIP BLK

⑨ **Sample Location**

NYR9 - RL2

⑩ **Special Handling Instructions:**
(e.g., safety precautions, hazardous nature)

MATCHES ENVIRONMENTAL TRIP BLK #BT4954

LAB COPY FOR RETURN TO SMO

Sample Number
B0083

Organics Analysis Data Sheet
(Page 1)

00147R

Laboratory Name: Cambridge Analytical Assoc. Case No: 7204

Sample ID No: 8704240-06/CLP VOA 1142 QC Report No: 21

Sample Matrix: Water Contract No: 68-01-7278

Data Release Authorized By: Date Sample Received: 4/29/87 4/30/87

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5/6/87

Date Analyzed: 5/6/87

Conc/Dil Factor: 1 pH 7

Percent Moisture: (Not Decanted) N/A

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	10u
74-83-9	Bromomethane	10u
75-01-4	Vinyl Chloride	10u
75-00-3	Chloroethane	10u
75-09-2	Methylene Chloride	5 u
67-64-1	Acetone	10u
75-15-0	Carbon Disulfide	5 u
75-35-4	1,1-Dichloroethene	5 u
75-34-3	1,1-Dichloroethane	5 u
156-60-5	Trans-1,2-Dichloroethene	5 u
67-66-3	Chloroform	5 u
107-06-2	1,2-Dichloroethane	5 u
78-93-3	2-Butanone	10u
71-55-6	1,1,1-Trichloroethane	5 u
56-23-5	Carbon Tetrachloride	5 u
108-05-4	Vinyl Acetate	10u
75-27-4	Bromodichloromethane	5 u

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1,2-Dichloropropane	5 u
10061-02-6	Trans-1,3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1,1,2-Trichloroethane	5 u
71-43-2	Benzene	5 u
10061-01-5	cis-1,3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10u
75-25-2	Bromoform	5 u
108-10-1	4-Methyl-2-Pentanone	10u
591-78-6	2-Hexanone	10u
127-18-4	Tetrachloroethene	5 u
79-34-5	1,1,2,2-Tetrachloroethane	5 u
108-88-3	Toluene	5 u
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	5 u
100-42-5	Styrene	5 u
	Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value	If the result is a value greater than or equal to the detection limit, report the value.
U	Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read "U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample."
J	Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.
C	This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ml in the final extract should be confirmed by GC/MS.
B	This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.
Other	Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

REFERENCE NO. 24

TABLE 1
SAMPLE DESCRIPTIONS
SPAULDING FIBRE COMPANY
TONAWANDA, NEW YORK
CASE# 7204
4/28/87

Sample ID Number	Organic Traffic Report #	Inorganic Traffic Report #	Time	Sample Type
NYR9-SW1	BC084	MBF490	1455	Aqueous
NYR9-SW2	BC085	MBJ192	1535	Aqueous
NYR9-GW1	BK238	MBJ137	1650	Aqueous
NYR9-GW2	BK239	MBJ292	1715	Aqueous
NYR9-BL1	BF429	MBF484	-	Aqueous

TABLE 1 (CONT'D)
SAMPLE DESCRIPTIONS
SPAULDING FIBRE COMPANY
TONAWANDA, NEW YORK
CASE# 7204
04/29/87

Sample ID Number	Organic Traffic Report #	Inorganic Traffic Report #	Time	Sample Type
NYR9-S1	BK240	MBF480	1040	Soil
NYR9-S2	BK241	MBF481	1130	Soil
NYR9-S3	BF427	MBF482	1209	Soil
NYR9-S4	BF428	MBF483	1230	Soil
NYR9-S5	BC080	MBF486	1315	Soil
NYR9-S6	BC081	MBF487	1335	Soil
NYR9-S7	BC082	MBF488	1430	Soil
NYR9-S8	BK249	MBI590	1500	Soil
NYR9-BL2	BC083	-	-	Aqueous

ANALYTICAL DATA
SPALLDING FIBRE
SAMPLING DATE: 4/28-4/29/87
CASE NUMBER: 7204

INORGANICS															
SAMPLE NUMBER	NYR9-S1	NYR9-S2	NYR9-S3	NYR9-S4	NYR9-S5	NYR9-S6	NYR9-S7	NYR9-S8	NYR9-GW1	NYR9-GW2	NYR9-SW1	NYR9-SW2	NYR9-BL1	NYR9-BL2
TRAFFIC REPORT NUMBER	**MBF-480**	**MBF-481**	**MBF-482**	**MBF-483**	**MBF-486**	**MBF-487**	**MBF-488**	**MBI-590**	**MBJ-137**	**MBJ-292**	**MBF-490**	**MBJ-192**	**MBF-484**	
MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	WATER	WATER	WATER	WATER	WATER	WATER
UNITS	**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	ug/L	ug/L	**ug/L**	**ug/L**	**ug/L**	ug/L
Aluminum	10700E	14600E	12600E	22500E	21500E	22000E	27500E	18500E	1530	200	380	3620		NR
Antimony									[50]				[40]	NR
Arsenic	26	33	40	6	13	[4]	7	10			[4]	[7]	[4]	NR
Barium	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	[50]	NR
Beryllium	[2]	[0.7]	[1]	[1]	[0.6]	[1]	[0.7]	[1]						NR
Cadmium		4			5		6	70						NR
Calcium	8480E	11400E	7650E	66900E	16700E	62900E	57400E	31200E	78900	74300	120000	80800		NR
Chromium	Q	Q	Q	Q	Q	Q	Q	Q						NR
Cobalt	[19]	[14]	[20]	[12]	[12]			[18]						NR
Copper	2040E	3920E	239E	18E	596E	20E	1840E	25400E		[11]	[15]	23		NR
Iron	29900E	44000E	28400E	28600E	36200E	28300E	34100E	76300E	2040	Q	1050	6190		NR
Lead	574	1150	73	17	200	16	408	581	5	12	54	25		NR
Magnesium	3820E	6890E	5960E	22000E	7100E	21200E	20200E	7170E	77200	42200	53600	35700		NR
Manganese	272E	442E	624E	715E	1090E	641E	731E	699E	Q	Q	144	423		NR
Mercury		0.21E			0.46E			2.66E						NR
Nickel	38E	56E	[20]	30E	61E	35E	68E	593E						NR
Potassium				5680E	[2880]	4860E	3930E	[1950]E			[3220]	[3070]		NR
Selenium														NR
Silver														NR
Sodium	Q	Q	Q	Q	Q	Q	Q	Q	Q	39600	Q	Q	Q	NR
Thallium									Q	Q	Q	Q	Q	NR
Tin	102	366	[13]		[18]		82	111						NR
Vanadium	[26]	35	[26]	41	42	40	41	37						NR
Zinc	5290E	11100E	1850E	2540E	3030E	87E	2150E	30300E			97E	377E		NR

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

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MBT 460

Date: June 26 1987
Revised: July 25 1987

INORGANICS ANALYSIS DATA SHEET

LAB NAME: Mock Laboratories
SOW NO.: 784
LAB SAMPLE ID. NO.: 3000/517

CASE NO. 7804
QC REPORT NO.: 3000/40

Elements Identified and Measured

Concentration: Low X Medium ____

Matrix: Water X Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	380		P	13. Magnesium	53,600	P
2.	Antimony	40 U	J	P	14. Manganese	166	P
3.	Arsenic	[4]		F	15. Mercury	0.2 U	C.Vapor
4.	Barium	[110]	J	P	16. Nickel	20 U	P
5.	Beryllium	1 U		P	17. Potassium	[3,000]	P
6.	Cadmium	5 U	J	P	18. Selenium	2 U	F
7.	Calcium	120,000		P	19. Silver	9 U	P
8.	Chromium	7 U	J	P	20. Sodium	21,400 R	P
9.	Cobalt	20 U		P	21. Thallium	15 UR	F
10.	Copper	[15]		P	22. Tin	20 U	P
11.	Iron	1,050		P	23. Vanadium	40 U	P
12.	Lead	54 R		F	24. Zinc	97	J P
Cyanide		NR			Percent Solids (%)	NR	

Footnotes: For reporting results to EPA, Standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page. however.

Comments: _____

[redacted] Manager James Blackburn

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MBJ192

Date: June 25, 1987
Revised: July 29, 1987

INORGANICS ANALYSIS DATA SHEET

LAB NAME: Mack Laboratories
SOW NO.: 784
LAB SAMPLE ID. NO.: 3000/518

CASE NO. 7209

QC REPORT NO.: 3000/40

Elements Identified and Measured

Concentration: Low X Medium _____

Matrix: Water X Soil _____ Sludge _____ Other _____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	3,620		P	13.	Magnesium	35,700		P
2.	Antimony	40 U		P	14.	Manganese	423		P
3.	Arsenic	[7]		F	15.	Mercury	0.2 U	C.Vapor	
4.	Barium	[68]		P	16.	Nickel	30 U		P
5.	Beryllium	1 U		P	17.	Potassium	[3,070]		P
6.	Cadmium	5 U		P	18.	Selenium	4 U		F
7.	Calcium	80,800		P	19.	Silver	9 U		P
8.	Chromium	7 U		P	20.	Sodium	13,100 R		P
9.	Cobalt	20 U		P	21.	Thallium	9 UR		F
10.	Copper	23		P	22.	Tin	20 U		P
11.	Iron	6,190		P	23.	Vanadium	40 U		P
12.	Lead	[5] R		F	24.	Zinc	377	J	P
Cyanide		NR			Percent Solids (%)		NR		

Footnotes: For reporting results to EPA, Standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page; however.

Comments:

Manager [illegible] James J. Buchanan

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MBJ137

Date: June 29, 1987
Revised: July 29, 1987

INORGANICS ANALYSIS DATA SHEET

LAB NAME: Mock Laboratories
SOW NO. 788
LAB SAMPLE ID. NO. 3000/519

CASE NO. 7204
QC REPORT NO.: 3000/40

Elements Identified and Measured

Concentration: Low X Medium ____

Matrix: Water X Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	1,530		P	13.	Magnesium	77,200		P
2.	Antimony	[50]	J	P	14.	Manganese	93		P
3.	Arsenic	4 U		F	15.	Mercury	0.2 U	CVapor	
4.	Barium	[100]	J	P	16.	Nickel	30 U		P
5.	Beryllium	1 U		P	17.	Potassium	3,000 U		P
6.	Cadmium	5 U	J	P	18.	Selenium	4 U		F
7.	Calcium	78,900		P	19.	Silver	9 U		P
8.	Chromium	7 U	J	P	20.	Sodium	25,800 E		P
9.	Cobalt	20 U		P	21.	Thallium	15 UK		F
10.	Copper	10 U		P	22.	Tin	20 U		P
11.	Iron	2,040		P	23.	Vanadium	40 U		F
12.	Lead	5 sR		F	24.	Zinc	13 U	J	P
Cyanide		NR			Percent Solids (%)		NR		

Footnotes: For reporting results to EPA, Standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments:

Manager James Buchanan

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MBJ292

Date: June 26, 1987
Revised: July 28, 1987

INORGANICS ANALYSIS DATA SHEET

LAB NAME: Mack Laboratories
SOW NO. 784
LAB SAMPLE ID. NO. 3000/520

CASE NO. 7204
QC REPORT NO.: 3000/40

Elements Identified and Measured

Concentration: Low X Medium ____

Matrix: Water X Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	200		P	13.	Magnesium	42,200		P
2.	Antimony	40 U	J	P	14.	Manganese	32		P
3.	Arsenic	4 U		F	15.	Mercury	0.2 U		C.Vapor
4.	Barium	[116]	J	P	16.	Nickel	30 U		P
5.	Beryllium	1 U		P	17.	Potassium	3,000 U		P
6.	Cadmium	5 U	J	P	18.	Selenium	4 U		F
7.	Calcium	74,300		P	19.	Silver	9 U		P
8.	Chromium	7 U	J	P	20.	Sodium	39,600 R		P
9.	Cobalt	20 U		P	21.	Thallium	45 UR		F
10.	Copper	[11]		P	22.	Tin	20 U		P
11.	Iron	[150]		P	23.	Vanadium	40 U		P
12.	Lead	12 R		F	24.	Zinc	13 U	J	P
	Cyanide	NR				Percent Solids (%)	NR		

Footnotes: For reporting results to EPA, Standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments:

[redacted] Manager James F. Mack

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MBF 484

Date June 26, 1987
Revised July 23, 1987

INORGANICS ANALYSIS DATA SHEET

LAB NAME: Mock Laboratories
SOW NO. 784
LAB SAMPLE ID. NO. 3000/516

CASE NO 7204
QC REPORT NO.: 3000/40

Elements Identified and Measured

Concentration: Low X Medium _____

Matrix: Water X Soil _____ Sludge _____ Other _____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	110 U		P	13.	Magnesium	700 U		P
2.	Antimony	40	J	P	14.	Manganese	5 U		P
3.	Arsenic	4		F	15.	Mercury	0.2 U	C.Vapor	
4.	Barium	50	J	P	16.	Nickel	30 U		P
5.	Beryllium	4 U		P	17.	Potessium	3,000 U		P
6.	Chromium	5 U	J	P	18.	Selenium	4 U		F
7.	Calcium	800 U		P	19.	Silver	8 U		P
8.	Chromium	7 U	J	P	20.	Sodium	3,600 U		P
9.	Cobalt	20 U		P	21.	Thallium	3 U	K	F
10.	Copper	10 U		P	22.	Tin	20 U		P
11.	Iron	40 U		P	23.	Vanadium	40 U		P
12.	Lead	4 UR		F	24.	Zinc	13 U	J	P
Cyanide		NR			Percent Solids (%)		NR		

Footnotes: For reporting results to EPA, Standard result qualifiers are used as defined on the Cover Page. Additional flags or footnotes explaining results are encouraged. Defintion of such flags must be explicit and contained on Cover Page, however.

Comments: _____

Manager James P. Buchanan

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MBF 480

Date: June 26, 1987
Revised: July 29, 1987

INORGANICS ANALYSIS DATA SHEET

CASE NO. 7004

QC REPORT NO.: 3000/40

LAB NAME: Mack Laboratories
SOW NO: 784
LAB SAMPLE ID. NO. 3000/525

Elements Identified and Measured

Concentration: Low X Medium ____

Matrix: Water ____ Soil X Sludge ____ Other ____

(ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	10,700 E	J P	13.	Magnesium	3,620	J P
2.	Antimony	26 UR	J P	14.	Manganese	372 P	J P
3.	Arsenic	26	F	15.	Mercury	0.1 UR	C Vapor
4.	Barium	427 *	P	16.	Nickel	38	J P
5.	Beryllium	[2]	P	17.	Potassium	1,910 U	P
6.	Cadmium	3 U	P	18.	Selenium	2 U	F
7.	Calcium	8,480 *	J P	19.	Silver	6 UR	J P
8.	Chromium	18	P	20.	Sodium	[1,550]	P
9.	Cobalt	[19]	J P	21.	Thallium	5 U	F
10.	Copper	2,040	J P	22.	Tin	102	P
11.	Iron	29,900	J P	23.	Vanadium	[26]	P
12.	Lead	574	P	24.	Zinc	5,290	J P
Cyanide				Percent Solids (%)		78	

Footnotes: For reporting results to EPA, Standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: ____

Manager [signature]

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MEF 481

Date: June 25, 1987
Revised: July 23, 1987

INORGANICS ANALYSIS DATA SHEET

LAB NAME: Meck Laboratories
SOW NO.: 788
LAB SAMPLE ID. NO. 3000/526

CASE NO. 720e
QC REPORT NO. 3000/48

Elements Identified and Measured

Concentration: Low X Medium ____

Matrix: Water ____ Soil X Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	14,600 E	J	P	13.	Magnesium	6,890	J	P
2.	Antimony	28 UR	J	P	14.	Manganese	442 R	J	P
3.	Arsenic	33		F	15.	Mercury	0.21R	J	Cold Vapor
4.	Barium	1,013 *		P	16.	Nickel	56	J	P
5.	Beryllium	[0.7]		P	17.	Potassium	2,110 U		P
6.	Cadmium	4		P	18.	Selenium	3 U		P
7.	Calcium	11,400 *	J	P	19.	Silver	5 UR	J	P
8.	Chromium	83		P	20.	Sodium	[1,320]		P
9.	Cobalt	[14]	J	P	21.	Thallium	6 U		F
10.	Copper	3,920	J	P	22.	Tin	366		P
11.	Iron	46,000	J	P	23.	Vanadium	35		P
12.	Lead	1150		P	24.	Zinc	11,100	J	P
Cyanide		NR			Percent Solids (%)		70		

Footnotes: For reporting results to EPA, Standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments:

Manager [signature]

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MBF 482

Date: June 26, 1987
Revised: July 20, 1987

INORGANICS ANALYSIS DATA SHEET

LAB NAME: Mack Laboratories
SOW NO: 784
LAB SAMPLE ID. NO. 3000/527

CASE NO. 7204

QC REPORT NO.: 3000/40

Elements Identified and Meesured

Concentration: Low X Medium ____

Matrix: Water ____ Soil X Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	12,600	J	P	13.	Magnesium	5,960		J P
2.	Antimony	26 UR	J	P	14.	Manganese	624 R		J P
3.	Arsenic	40 s		F	15.	Mercury	0.1 UR		C.Vapor
4.	Barium	159 *		P	16.	Nickel	[20]	J	P
5.	Beryllium	[1]		P	17.	Potassium	1,990 U		P
6.	Cadmium	3 U		P	18.	Selenium	3 U		F
7.	Calcium	7,650 *	J	P	19.	Silver	6 UR	J	P
8.	Chromium	72		P	20.	~~Sodium~~	[1,610]		P
9.	Cobalt	[20]		P	21.	Thallium	6 U		F
10.	Copper	239		P	22.	Tin	[13]		P
11.	Iron	28,400	J	P	23.	Vanadium	[26]		P
12.	Lead	73 *		F	24.	Zinc	1,850	J	P
Cyanide		NR			Percent Solids (%)		75		

Footnotes: For reporting results to EPA, Standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Defintion of such flags must be explicit and contained on Cover Page, however.

Comments: ____

Manager James E. Graham

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MBF 483

Date: June 26, 1987
Revised: July 23, 1987

INORGANICS ANALYSIS DATA SHEET

CASE NO. 7204

QC REPORT NO.: 3000/40

LAB NAME: Mock Laboratories
SDV NO.: 784
LAB SAMPLE ID NO.: 3000/526

Elements Identified and Meesured

Concentration: Low

Medium _____

Matrix: Water _____ Soil X Sludge _____ Other _____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	22,500	E	J	P
2.	Antimony	24	UR	J	P
3.	Arsenic	6			F
4.	Barium	190	*		P
5.	Beryllium	[1]			P
6.	Cadmium	3	U		P
7.	Calcium	66,900	*	J	P
8.	Chromium	29			P
9.	Cobalt	[12]		J	P
10.	Copper	18			P
11.	Iron	28,600		J	P
12.	Lead	17	S+		F
	Cyanide	NR			

13.	Magnesium	22,000		J	P
14.	Manganese	715	R	J	P
15.	Mercury	0.1	UR	C.Vapor	
16.	Nickel	30		J	P
17.	Potassium	5,650		J	P
18.	Selenium	2	U		F
19.	Silver	5	UR	J	P
20.	Sodium	[1440]			P
21.	Thallium	5	U		F
22.	Tin	12	U		P
23.	Vanadium	41			P
24.	Zinc	2,540		J	P
	Percent Solids (%)	83			

Footnotes: For reporting results to EPA, Standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: _____

[redacted] Manager James [illegible]

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.: MBF 486

Date: June 26, 1987
Revised: July 23, 1987

INORGANICS ANALYSIS DATA SHEET

LAB NAME: Mock Laboratories
SOW NO.: 7/86
LAB SAMPLE ID. NO.: 3000/529

CASE NO.: 7304
QC REPORT NO.: 3000/40

Elements Identified and Measured

Concentration: Low X Medium ____

Matrix: Water ____ Soil X Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	21,500 E	J	P	13. Magnesium	7,110	J P
2.	Antimony	24 UR	J	P	14. Manganese	1,090 S	J P
3.	Arsenic	13		F	15. Mercury	0.46 R	J C Vapor
4.	Barium	225 *		P	16. Nickel	61	J P
5.	Beryllium	[0.6]		P	17. Potassium	[2,880]	J P
6.	Cadmium	5		P	18. Selenium	2 U	F
7.	Calcium	16,700 *	J	P	19. Silver	5 UR	J P
8.	Chromium	32		P	20. Sodium	[1,400]	P
9.	Cobalt	[12]	J	P	21. Thallium	5 U	F
10.	Copper	596	J	P	22. Tin	[18]	P
11.	Iron	36,200	* J	P	23. Vanadium	42	P
12.	Lead	200		P	24. Zinc	3,030	J P
Cyanide		NR			Percent Solids (%)	82	

Footnotes: For reporting results to EPA, Standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments:

Manager James J. Mockmann

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MBF 467

Date: June 26, 1987
Revised: July 23, 1987

INORGANICS ANALYSIS DATA SHEET

LAB NAME: Mack Laboratories
SOW NO. 784
LAB SAMPLE ID. NO. 3000/530

CASE NO. 720e
QC REPORT NO. 3000/40

Elements Identified and Measured

Concentration: Low X Medium ____

Matrix: Water ____ Soil X Sludge ____ Other ____

µg/L or mg/kg dry weight (Circle One)

1.	Aluminum	22,000 E	J	P	13.	Magnesium	21,200	J	P
2.	Antimony	23 UR	J	P	14.	Manganese	641 R	J	P
3.	Arsenic	[4]		F	15.	Mercury	0.1 UR	C.Vapor	
4.	Barium	179 *		P	16.	Nickel	35	J	P
5.	Beryllium	[1]		P	17.	Potassium	4,860	J*	P
6.	Cadmium	3 U		P	18.	Selenium	2 U		F
7.	Calcium	82,900 *	J	P	19.	Silver	5 UR	J	P
8.	Chromium	25		P	20.	Sodium	[1,490]		P
9.	Cobalt	12 U	J	P	21.	Thallium	5 U		F
10.	Copper	20	J	P	22.	Tin	12 U		P
11.	Iron	28,300	J	P	23.	Vanadium	40		P
12.	Lead	16 S+		F	24.	Zinc	87	J	P
	Cyanide	NR				Percent Solids (%)	86		

Footnotes: For reporting results to EPA, Standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments:

anager

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MBF 488

Date: June 26 1987
Revised: July 23, 1987

INORGANICS ANALYSIS DATA SHEET

LAB NAME: Mack Laboratories
SOW NO: 784
LAB SAMPLE ID. NO.: 3000/531

CASE NO.: 7204
QC REPORT NO.: 3000/40

Elements Identified and Measured

Concentration: Low X Medium ____

Matrix: Water ____ Soil X Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	27,500	E	J	P	13. Magnesium	20,200	J P
2.	Antimony	27	UR	J	P	14. Manganese	731	R J P
3.	Arsenic	7			F	15. Mercury	0.1	UR C.Vapor
4.	Barium	204	*		P	16. Nickel	68	J P
5.	Beryllium	0.7			P	17. Potassium	3,930	J P
6.	Cadmium	6			P	18. Selenium	3	U F
7.	Calcium	57,400	*	J	P	19. Silver	6	UR J P
8.	Chromium	5	U		P	20. Sodium	(1,650)	P
9.	Cobalt	14	U	J	P	21. Thallium	6	U F
10.	Copper	1,840		J	P	22. Tin	82	P
11.	Iron	34,100		J	P	23. Vanadium	41	P
12.	Lead	408			P	24. Zinc	2,130	J P
Cyanide		NR				Percent Solids (%)	73	

Footnotes: For reporting results to EPA, Standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments:

Manager [signature]

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MBI 590

Date: June 26 1987
Revised: June 30 1987

INORGANICS ANALYSIS DATA SHEET

LAB NAME: Mack Laboratories
CASE NO. 7304
SOW NO. #784
LAB SAMPLE ID NO. 3000/532
QC REPORT NO.: 3000/40

Elements Identified and Measured

Concentration: Low X Medium ____

Matrix: Water ____ Soil X Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	18,500	E	J	P	13.	Magnesium	7,170		J	P
2.	Antimony	23	UR	J	P	14.	Manganese	699	R	J	P
3.	Arsenic	10			F	15.	Mercury	2.65	R	J C	Vapor
4.	Barium	389	*		P	16.	Nickel	593		J	P
5.	Beryllium	[1]			P	17.	Potassium	[1,950]			J P
6.	Cadmium	70			P	18.	Selenium	2	U		F
7.	Calcium	31,200	*	J	P	19.	Silver	6	UR	J	P
8.	Chromium	4	U		P	20.	Sodium	[1,560]			P
9.	Cobalt	[18]		J	P	21.	Thallium	6	U		F
10.	Copper	25,400		J	P	22.	Tin	111			P
11.	Iron	76,300		J	P	23.	Vanadium	57			P
12.	Lead	581			P	24.	Zinc	30,300		J	P
	Cyanide	NR					Percent Solids (%)	78			

Footnotes: For reporting results to EPA, Standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments:

[redacted] Manager [signature]

Sample Number
BF429 66307

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Cambridge Analytical Assoc. Case No: 7204

Lab Sample ID No: 8704240-01 / CLPVOA1136 QC Report No: 21

Sample Matrix: Water Contract No: 68-01-7278

Data Release Authorized By: Date Sample Received: 4/29/87

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5/5/87

Date Analyzed: 5/5/87

Conc/Dil Factor: 1 pH 7

Percent Moisture: (Not Decanted) N/A

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	10u
74-83-9	Bromomethane	10u
75-01-4	Vinyl Chloride	10u
75-00-3	Chloroethane	10u
75-09-2	Methylene Chloride	5 u
67-64-1	Acetone	~~10u~~ 22
75-15-0	Carbon Disulfide	5 u
75-35-4	1, 1-Dichloroethene	5 u
75-34-3	1, 1-Dichloroethane	5 u
156-60-5	Trans-1, 2-Dichloroethene	5 u
67-66-3	Chloroform	5 u
107-06-2	1, 2-Dichloroethane	5 u
78-93-3	2-Butanone	10u
71-55-6	1, 1, 1-Trichloroethane	5 u
56-23-5	Carbon Tetrachloride	5 u
108-05-4	Vinyl Acetate	10u
75-27-4	Bromodichloromethane	5 u

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	5 u
10061-02-6	Trans-1, 3-Dichloropropene	5 u
79-01-6	Trichloroethene	5 u
124-48-1	Dibromochloromethane	5 u
79-00-5	1, 1, 2-Trichloroethane	5 u
71-43-2	Benzene	5 u
10061-01-5	cis-1, 3-Dichloropropene	5 u
110-75-8	2-Chloroethylvinylether	10u
75-25-2	Bromoform	5 u
108-10-1	4-Methyl-2-Pentanone	10u
591-78-6	2-Hexanone	10u
127-18-4	Tetrachloroethene	5 u
79-34-5	1, 1, 2, 2-Tetrachloroethane	5 u
108-88-3	Toluene	5 u
108-90-7	Chlorobenzene	5 u
100-41-4	Ethylbenzene	5 u
100-42-5	Styrene	5 u
	Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read "U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample."

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ml in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

ratory Name Cambridge Analytical Associates

se No: 7204

Sample Number
BF 429

Organics Analysis Data Sheet
(Page 2)

00308

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5/04/87

Date Analyzed: 5/20/87

Conc./Dil Factor: 1

Percent Moisture (Decanted): N/A

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☒Yes

CAS Number		(ug/l) or ug/Kg (Circle One)
108-95-2	Phenol	10u
111-44-4	bis(-2-Chloroethyl)Ether	10u
95-57-8	2-Chlorophenol	10u
541-73-1	1, 3-Dichlorobenzene	10u
106-46-7	1, 4-Dichlorobenzene	10u
100-51-6	Benzyl Alcohol	10u
95-50-1	1, 2-Dichlorobenzene	10u
95-48-7	2-Methylphenol	10u
39638-32-9	bis(2-chloroisopropyl)Ether	10u
106-44-5	4-Methylphenol	10u
621-64-7	N-Nitroso-Di-n-Propylamine	10u
67-72-1	Hexachloroethane	10u
98-95-3	Nitrobenzene	10u
78-59-1	Isophorone	10u
88-75-5	2-Nitrophenol	10u
105-67-9	2, 4-Dimethylphenol	10u
65-85-0	Benzoic Acid	50u
111-91-1	bis(-2-Chloroethoxyl)Methane	10u
120-83-2	2, 4-Dichlorophenol	10u
120-82-1	1, 2, 4-Trichlorobenzene	10u
91-20-3	Naphthalene	10u
106-47-8	4-Chloroaniline	10u
87-68-3	Hexachlorobutadiene	10u
59-50-7	4-Chloro-3-Methylphenol	10u
91-57-6	2-Methylnaphthalene	10u
77-47-4	Hexachlorocyclopentadiene	10u
88-06-2	2, 4, 6-Trichlorophenol	10u
95-95-4	2, 4, 5-Trichlorophenol	50u
91-58-7	2-Chloronaphthalene	10u
88-74-4	2-Nitroaniline	50u
131-11-3	Dimethyl Phthalate	10u
208-96-8	Acenaphthylene	10u
99-09-2	3-Nitroaniline	50u

CAS Number		(ug/l) or ug/Kg (Circle One)
83-32-9	Acenaphthene	10u
51-28-5	2, 4-Dinitrophenol	50u
100-02-7	4-Nitrophenol	50u
132-64-9	Dibenzofuran	10u
121-14-2	2, 4-Dinitrotoluene	10u
606-20-2	2, 6-Dinitrotoluene	10u
84-66-2	Diethylphthalate	10u
7005-72-3	4-Chlorophenyl-phenylether	10u
86-73-7	Fluorene	10u
100-01-6	4-Nitroaniline	50u
534-52-1	4, 6-Dinitro-2-Methylphenol	50u
86-30-6	N-Nitrosodiphenylamine (1)	10u
101-55-3	4-Bromophenyl-phenylether	10u
118-74-1	Hexachlorobenzene	10u
87-86-5	Pentachlorophenol	50u
85-01-8	Phenanthrene	10u
120-12-7	Anthracene	10u
84-74-2	Di-n-Butylphthalate	10u
206-44-0	Fluoranthene	10u
129-00-0	Pyrene	10u
85-68-7	Butylbenzylphthalate	10u
91-94-1	3, 3'-Dichlorobenzidine	20u
56-55-3	Benzo(a)Anthracene	10u
117-81-7	bis(2-Ethylhexyl)Phthalate	10u
218-01-9	Chrysene	10u
117-84-0	Di-n-Octyl Phthalate	10u
205-99-2	Benzo(b)Fluoranthene	10u
207-08-9	Benzo(k)Fluoranthene	10u
50-32-8	Benzo(a)Pyrene	10u
193-39-5	Indeno(1, 2, 3-cd)Pyrene	10u
53-70-3	Dibenz(a, h)Anthracene	10u
191-24-2	Benzo(g, h, i)Perylene	10u

(1)-Cannot be separated from diphenylamine

Laboratory Name Cambridge Analytical Associates

Case No 7204

Sample Number BF 429

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5/4/87

Date Analyzed: 5/31/87

Conc/Dil Factor: 1

Percent Moisture (decanted): —

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☒Yes

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Delta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.5 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.5 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Aroclor-1016	0.5 U
11104-28-2	Aroclor-1221	0.5 U
11141-16-5	Aroclor-1232	0.5 U
53469-21-9	Aroclor-1242	0.5 U
12672-29-6	Aroclor-1248	0.5 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s 1000ml or W_s — V_t 10,000µl V_i 3µl

ɔratory Name Cambridge Analytical Associates

ɛ No 7204

Sample Number
BF 429

Organics Analysis Data Sheet
(Page 4)

00310

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.		nonane	BNA	8.47	16 J
2.		dihydro-2(3H) furanone	↓	8.68	27 J
3.		undecane	↓	10.64	58 J
4.		none detected	VOA	—	—
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

U.S. ENVIRONMENTAL PROTECTION AGENCY HWI Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 – 703 557-2490 • FTS 557 2490

Sample Number
BK 240

ORGANICS TRAFFIC REPORT

① Case Number: 17061

Sample Site Name/Code:

② SAMPLE CONCENTRATION (Check One)
- ✓ Low Concentration
- ___ Medium Concentration

③ SAMPLE MATRIX (Check One)
- ___ Water
- ✓ Soil/Sediment

④ Ship To:
CAMBRIDGE ANALYTICAL AS
1106 COMMONWEALTH AV
BOSTON, MA
Attn: SHARON WALER
Transfer
Ship To: 00360

⑤ Regional Office: NJS
Sampling Personnel: FIT 2
P DOHERTY
(Name)
(201) 225-6160
(Phone)
Sampling Date:
4/20/87 4/29/87
(Begin) (End)

⑥ For each sample collected specify number of containers used and mark volume level on each bottle.

	Number of Containers	Approximate Total Volume
Water (Extractable)		
Water (VOA)		
Soil/Sediment (Extractable)	1	8oz.
Soil/Sediment (VOA)	1	20ml
SOIL/SEDIMENT Other 2,3,7,8 TCDF	1	8 oz.

⑪ Analysis Lab:
Rec'd by: S. Lawler
Date Rec'd: 4/30/87
Sample Condition on Receipt (e.g., broken, n ice, Chain-of-Custody, etc.)
OK

⑦ Shipping Information
FEDERAL EXPRESS
Name of Carrier
4/24/87
Date Shipped:
5494025714
Airbill Number:

⑧ Sample Description
- ___ Surface Water
- ___ Ground Water
- ___ Leachate
- ___ Mixed Media
- ✓ Solids
- ___ Other (specify) _____

⑨ Sample Location
NYR9-S1

⑩ Special Handling Instructions: (e.g., safety precautions, hazardous nature)
MATCHES INORGANIC T-REPORT # MBF490

LAB COPY FOR RETURN TO SMO

OC361R

Sample Number
BK240

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Cambridge Analytical Assoc. Case No: 7204

Lab Sample ID No: 87-0240-09 | CAVA1165 QC Report No: 21

Sample Matrix: Soil Contract No: 68-01-7278

Data Release Authorized By: Date Sample Received: ~~4/29/87~~ SAL 4/30/87

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5/8/87

Date Analyzed: 5/8/87

Conc/Dil Factor: 5 pH NA

Percent Moisture: (Not Decanted) 21

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	50u
74-83-9	Bromomethane	50u
75-01-4	Vinyl Chloride	50u
75-00-3	Chloroethane	50u
75-09-2	Methylene Chloride [B]	~~25u~~ 16J
67-64-1	Acetone	50u
75-15-0	Carbon Disulfide	25u
75-35-4	1, 1-Dichloroethene	25u
75-34-3	1, 1-Dichloroethane	25u
156-60-5	Trans-1, 2-Dichloroethene	25u
67-66-3	Chloroform	25u
107-06-2	1, 2-Dichloroethane	25u
78-93-3	2-Butanone	50u
71-55-6	1, 1, 1-Trichloroethane	25u
56-23-5	Carbon Tetrachloride	25u
108-05-4	Vinyl Acetate	50u
75-27-4	Bromodichloromethane	25u

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	25u
10061-02-6	Trans-1, 3-Dichloropropene	25u
79-01-6	Trichloroethene	25u
124-48-1	Dibromochloromethane	25u
79-00-5	1, 1, 2-Trichloroethane	25u
71-43-2	Benzene	25u
10061-01-5	cis-1, 3-Dichloropropene	25u
110-75-8	2-Chloroethylvinylether	50u
75-25-2	Bromoform	25u
108-10-1	4-Methyl-2-Pentanone	50u
591-78-6	2-Hexanone	50u
127-18-4	Tetrachloroethene	25u
79-34-5	1, 1, 2, 2-Tetrachloroethane	25u
108-88-3	Toluene [B]	~~25u~~ 48
108-90-7	Chlorobenzene	25u
100-41-4	Ethylbenzene	25u
100-42-5	Styrene	25u
	Total Xylenes	25u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ml in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

ry Name Cambridge Analytical Associates

No: 7204

Sample Number
BK 240

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5-8-87

Date Analyzed: 5-21-87

Conc/Dil Factor: 5

Percent Moisture (Decanted) 21

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

00362

CAS Number		ug/l or ug/Kg (Circle One)
108-95-2	Phenol 9500	~~1650 U~~ sa
111-44-4	bis(-2-Chloroethyl)Ether	1650 U
95-57-8	2-Chlorophenol	1650 U
541-73-1	1 3-Dichlorobenzene	1650 U
106-46-7	1, 4-Dichlorobenzene	1650 U
100-51-6	Benzyl Alcohol	1650 U
95-50-1	1, 2-Dichlorobenzene	1650 U
95-48-7	2-Methylphenol 2800	~~1650 U~~ sa
39638-32-9	bis(2-chloroisopropyl)Ether	1650 U
106-44-5	4-Methylphenol 11,000	~~1650 U~~ sa
621-64-7	N-Nitroso-Di-n-Propylamine	1650 U
67-72-1	Hexachloroethane	1650 U
98-95-3	Nitrobenzene	1650 U
78-59-1	Isophorone	1650 U
88-75-5	2-Nitrophenol	1650 U
105-67-9	2, 4-Dimethylphenol 9800	~~1650 U~~ sa
65-85-0	Benzoic Acid [redacted]	~~8000 U~~ sa
111-91-1	bis(-2-Chloroethoxy)Methane	1650 U
120-83-2	2, 4-Dichlorophenol	1650 U
120-82-1	1, 2, 4-Trichlorobenzene	1650 U
91-20-3	Naphthalene	1650 U
106-47-8	4-Chloroaniline	1650 U
87-68-3	Hexachlorobutadiene	1650 U
59-50-7	4-Chloro-3-Methylphenol	~~1650 U~~ sa 440
91-57-6	2-Methylnaphthalene 470 J	~~1650 U~~ sa
77-47-4	Hexachlorocyclopentadiene	1650 U
88-06-2	2, 4, 6-Trichlorophenol	1650 U
95-95-4	2, 4, 5-Trichlorophenol	8000 U
91-58-7	2-Chloronaphthalene	1650 U
88-74-4	2-Nitroaniline	8000 U
131-11-3	Dimethyl Phthalate	1650 U
208-96-8	Acenaphthylene	1650 U
99-09-2	3-Nitroaniline	8000 U

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	1650 U
51-28-5	2, 4-Dinitrophenol	8000 U
100-02-7	4-Nitrophenol	8000 U
132-64-9	Dibenzofuran	1650 U
121-14-2	2 4-Dinitrotoluene	1650 U
606-20-2	2, 6-Dinitrotoluene	1650 U
84-66-2	Diethylphthalate	1650 U
7005-72-3	4-Chlorophenyl-phenylether	1650 U
86-73-7	Fluorene	1650 U
100-01-6	4-Nitroaniline	1650 U
534-52-1	4, 6-Dinitro-2-Methylphenol	8000 U
86-30-6	N-Nitrosodiphenylamine (1)	1650 U
101-55-3	4-Bromophenyl-phenylether	1650 U
118-74-1	Hexachlorobenzene	1650 U
87-86-5	Pentachlorophenol	8000 U
85-01-8	Phenanthrene 240 J	~~1650 U~~ sa
120-12-7	Anthracene	1650 U
84-74-2	Di-n-Butylphthalate 13000	~~1650 U~~ sa
206-44-0	Fluoranthene 250 J	~~1650 U~~ sa
129-00-0	Pyrene 220 J	~~1650 U~~ sa
85-68-7	Butylbenzylphthalate	1650 U
91-94-1	3, 3'-Dichlorobenzidine	3300 U
56-55-3	Benzo(a)Anthracene	1650 U
117-81-7	bis(2-Ethylhexyl)Phthalate	~~1650 U~~ sa 360 J
218-01-9	Chrysene	1650 U
117-84-0	Di-n-Octyl Phthalate	1650 U
205-99-2	Benzo(b)Fluoranthene	1650 U
207-08-9	Benzo(k)Fluoranthene	1650 U
50-32-8	Benzo(a)Pyrene	1650 U
193-39-5	Indeno(1, 2, 3-cd)Pyrene	1650 U
53-70-3	Dibenz(a, h)Anthracene	1650 U
191-24-2	Benzo(g, h, i)Perylene	1650 U

(1)-Cannot be seperated from diphenylamine

Laboratory Name Cambridge Analytical Associates

Case No 7204

Sample Number BK 240

Organics Analysis Data Sheet (Page 3)

00363

- Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5/8/87

Date Analyzed 5/31/87

Conc/Dil Factor: 1/10

Percent Moisture (decanted) 21%

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	80.0U
319-85-7	Beta-BHC	80.0U
319-86-8	Delta-BHC	80.0U
58-89-9	Gamma-BHC (Lindane)	80.0U
76-44-8	Heptachlor	80.0U
309-00-2	Aldrin	80.0U
1024-57-3	Heptachlor Epoxide	80.0U
959-98-8	Endosulfan I	80.0U
60-57-1	Dieldrin	160.0U
72-55-9	4,4'-DDE	160.0U
72-20-8	Endrin	160.0U
33213-65-9	Endosulfan II	160.0U
72-54-8	4,4'-DDD	160.0U
1031-07-8	Endosulfan Sulfate	160.0U
50-29-3	4,4'-DDT	160.0U
72-43-5	Methoxychlor	800.0U
53494-70-5	Endrin Ketone	1600.0U
57-74-9	Chlordane	800.0U
8001-35-2	Toxaphene	1600.0U
12674-11-2	Aroclor-1016	800.0U
11104-28-2	Aroclor-1221	800.0U
11141-16-5	Aroclor-1232	800.0U
53469-21-9	Aroclor-1242	800.0U
12672-29-6	Aroclor-1248	~~800.0U~~ 3140 C
11097-69-1	Aroclor-1254	1600.0U
11096-82-5	Aroclor-1260	1600.0U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s — or W_s 21.2g V_t 20,000ml V_i 3ml

oratory Name Cambridge Analytical Associates

se No 7204

Sample Number
BK240

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

00364

	CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)	
1.		Dehydro 2(3H) furanone	BNA	8.74	2100	J
2.		2 ethyl phenol "	"	13.19	1200	
3.		3-methoxy benzaldehyde		13.56	930	
4.		trimethyl phenol isomer		14.33	1900	
5.		2 ethyl 6 methyl phenol		14.68	1400	
6.		benzene, 1-ethyl-4-methoxy		14.86	1900	
7.		pyridine, 2,3 diethyl 5 methyl		15.02	1500	
8.		Unknown		25.95	1800	
9.		1,4 cyclohexadiene, 6-methylene		26.53	2400	
10.		Unknown		27.66	1600	
11.		1-phenanthrenecarboxylic acid		27.99	3700	
12.		unknown		28.08	920	
13.		"		30.60	5200	
14.		"		30.91	6400	
15.		"		31.21	3100	
16.		"		31.38	3100	
17.		Benzeneamine, 4-(2-phenylethenyl)	↓	31.72	3300	↓
18.		None detected	VOA	—	—	
19.						
20.						
21.						
22.						
23.						
24.						
25.						
26.						
27.						
28.						
29.						
30.						

U.S. ENVIRONMENTAL PROTECTION AGENCY HWI Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 – 703 557-2490 • FTS 557-2490

ORGANICS TRAFFIC REPORT

Sample Number **BK 241**

① Case Number: 1204

Sample Site Name/Code:

② SAMPLE CONCENTRATION (Check One)

- ✓ Low Concentration
- ___ Medium Concentration

③ SAMPLE MATRIX (Check One)

- ___ Water
- ✓ Soil/Sediment

④ Ship To:
CAMBRIDGE ANALYTICAL ASSOC
106 COMMONWEALTH AVE
BOSTON, MA 02215
Attn: SHARON WALFD
[redacted] 0641J
Transfer
Ship To:

⑤ Regional Office: MLS
Sampling Personnel: FIT2
P. DOHERTY
(Name)
(201) 225-1110
(Phone)
Sampling Date: EC
(Begin) 4/29/87 (End) 4/29/87

⑥ For each sample collected specify number of containers used and mark volume level on each bottle.

	Number of Containers	Approximate Total Volume	
Water (Extractable)			
Water (VOA)			OK
Soil/Sediment (Extractable)	1	8 oz	
Soil/Sediment (VOA)	1	120 ml	
Other SOIL/SEDIMENT (CB/PEST)	1	8 oz	

⑦ Shipping Information
FEDERAL EXPRESS
Name of Carrier
4/29/87
Date Shipped:
5-7805764
Airbill Number:

⑧ Sample Description

- ___ Surface Water
- ___ Ground Water
- ___ Leachate
- ___ Mixed Media
- ✓ Solids
- ___ Other (specify) _____

⑨ Sample Location
NYRG-S2

⑩ Special Handling Instructions: (e.g., safety precautions, hazardous nature)
MATCHES NO INORGANIC T-REPORT # MBF 481

⑪ Analysis Lab:
Rec'd by: [signature]
Date Rec'd: 4/30/87
Sample Condition on Receipt (e.g., broken, no ice, Chain-of-Custody, etc.)

LAB COPY FOR RETURN TO SMO

00416R

Sample Number
BK241

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Cambridge Analytical Assoc. Case No: 7204

Lab Sample ID No: 8704240-10 | CLPVOA1146 OC Report No: 21

Sample Matrix: Soil Contract No: 68-01-7278

Data Release Authorized By: Date Sample Received: 4/29/87 4/30/87

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 5/6/87

Date Analyzed: 5/6/87

Conc/Dil Factor: 5 pH N/A

Percent Moisture: (Not Decanted) 59 41

CAS Number		ug/l or (ug/Kg) (Circle One)
74-87-3	Chloromethane	50u
74-83-9	Bromomethane	50u
75-01-4	Vinyl Chloride	50u
75-00-3	Chloroethane	50u
75-09-2	Methylene Chloride 65	26u 21J
67-64-1	Acetone	50u
75-15-0	Carbon Disulfide	25u
75-35-4	1,1-Dichloroethene	25u
75-34-3	1,1-Dichloroethane	25u
156-60-5	Trans-1,2-Dichloroethene	25u
67-66-3	Chloroform	25u
107-06-2	1,2-Dichloroethane	25u
78-93-3	2-Butanone	50u
71-55-6	1,1,1-Trichloroethane	25u
56-23-5	Carbon Tetrachloride	25u
108-05-4	Vinyl Acetate	50u
75-27-4	Bromodichloromethane	25u

CAS Number		ug/l or (ug/Kg) (Circle One)
78-87-5	1,2-Dichloropropane	25u
10061-02-6	Trans-1,3-Dichloropropene	25u
79-01-6	Trichloroethene	25u
124-48-1	Dibromochloromethane	25u
79-00-5	1,1,2-Trichloroethane	25u
71-43-2	Benzene 66	25u 230
10061-01-5	cis-1,3-Dichloropropene	25u
110-75-8	2-Chloroethylvinylether	50u
75-25-2	Bromoform	25u
108-10-1	4-Methyl-2-Pentanone	50u
591-78-6	2-Hexanone	50u
127-18-4	Tetrachloroethene	25u
79-34-5	1,1,2,2-Tetrachloroethane	25u
108-88-3	Toluene	25u 120
108-90-7	Chlorobenzene	25u
100-41-4	Ethylbenzene	25u
100-42-5	Styrene	25u
	Total Xylenes	25u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read "U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample."

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ml in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.