Report. HW. 152129.
1989-03-29 Final Draft
Preliminary Assessment
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FIELD INVESTIGATION TEAM ACTIVITIES AT UNCONTROLLED HAZARDOUS SUBSTANCES FACILITIES — ZONE I

NUS CORPORATION
SUPERFUND DIVISION

1031

02-8902-50-PA
REV. NO. 0

FINAL DRAFT
PRELIMINARY ASSESSMENT
RITE-OFF INC.
BAY SHORE, NEW YORK

PREPARED UNDER

TECHNICAL DIRECTIVE DOCUMENT NO. 02-8902-50
CONTRACT NO. 68-01-7346

FOR THE

ENVIRONMENTAL SERVICES DIVISION
U.S. ENVIRONMENTAL PROTECTION AGENCY

MARCH 29, 1989

NUS CORPORATION
SUPERFUND DIVISION

SUBMITTED BY:

Joann L. Wagner
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PHILIP J. SOLINSKI
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REVIEWED/APPROVED BY:

Timothy Minick for
RONALD M. NAMAN
FIT OFFICE MANAGER

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT

PART I: SITE INFORMATION

1. Site Name/Alias Rite-Off Inc.

   Street 1545 5th Industrial Court

   City Bay Shore State New York Zip 11706

2. County Suffolk County Code 103 Cong. Dist. 2

3 EPA ID No. NYD000726786

4. Latitude 40° 45' 05" N Longitude 73° 15' 56" W

   USGS Quad. Greenlawn, New York 7.5 Minute Series

5. Owner Howard Rapps (President) Tel. No. (516) 665-6868

   Street 1545 5th Industrial Court

   City Bay Shore State New York Zip 11706

6. Operator Rite-Off Inc. Tel. No. (516) 665-6868

   Street 1545 5th Industrial Court

   City Bay Shore State New York Zip 11706

7. Type of Ownership

   ☒ Private ☐ Federal ☐ State
   ☐ County ☐ Municipal ☐ Unknown ☐ Other

8. Owner/Operator Notification on File

   ☒ RCRA 3001 Date 09/05/80 ☐ CERCLA 103c Date
   ☐ None ☐ Unknown

9. Permit Information

Permit	Permit No.	Date Issued	Expiration Date	Comments
RCRA Part A	NYD000726786			Part A withdrawn; interim status not terminated
SPDES	Application No. NY0206591			withdrawn as not required

10. Site Status

    ☒ Active ☐ Inactive ☐ Unknown

11. Years of Operation 1968 to Present

12. Identify the types of waste units (e.g., landfill, surface impoundment, piles, stained soil, above- or below-ground tanks or containers, land treatment, etc.) on site. Initiate as many waste unit numbers as needed to identify all waste sources on site.

(a) Waste Management Areas

Waste Unit No.	Waste Unit Type	Facility Name for Unit
1	Drum Storage Area (inside main building)	Unknown
2	Tank Storage (inside adjacent building)	Unknown
3	Drum Storage Area (inside adjacent building)	Unknown

(b) Other Areas of Concern

Identify any miscellaneous spills, dumping, etc. on site; describe the materials and identify their locations on site.

In 1983 an act of vandalism resulted in spills of petroleum distillate and tetrachloroethylene inside a building on site. The tetrachloroethylene escaped the building and contaminated a storm drain located 100 feet south of the building. Cleanup involved the removal of sediment from the storm drain. Two sampling events, one in December 1986 and the other in March 1987, uncovered tetrachloroethene and 1,1,1-trichloroethane at various other locations throughout the site.

13. Information available from

Contact Amy Brochu Agency U.S. EPA Tel. No. (201) 906-6802

Preparer Philip Solinski Agency NUS Corp. Region 2 FIT Date 03/31/89

PART II: WASTE SOURCE INFORMATION

For each of the waste units identified in Part I, complete the following six items.

Waste Unit 1 - Drum Storage Area (inside main building), Facility name unknown

1. Identify the RCRA status and permit history, if applicable, and the age of the waste unit.

   Rite-Off Inc. filed its notification of hazardous waste activity in September of 1980 as a treatment, storage, and disposal facility (TSDF). Its status has since changed to a nonhandler of hazardous waste. The date of this change is not known by the U.S. Environmental Protection Agency (EPA). In June of 1988, Rite-Off's State Pollutant Discharge Elimination System (SPDES) permit application was withdrawn by the New York State Department of Environmental Conservation (NYSDEC) because the facility's discharges of sanitary waste and noncontact cooling water were each less than 1000 gallons/day.

2. Describe the location of the waste unit and identify clearly on the site map.

   Drums containing hazardous waste were located within the main building along the eastern wall.

3. Identify the size or quantity of the waste unit (e.g., area or volume of a landfill or surface impoundment, number and capacity of drums or tanks). Specify the quantity of hazardous substances in the waste unit.

   At the time of an NYSDEC inspection in December 1986, there were forty-seven 55-gallon drums located in the main building. The contents of these drums were unknown.

4. Identify the physical state(s) of the waste type(s) as disposed of in the waste unit. The physical state(s) should be categorized as follows: solid, powder or fines, sludge, slurry, liquid, or gas.

   The physical state(s) of the wastes were unknown; liquid and sludge were suspected.

5. Identify specific hazardous substance(s) known or suspected to be present in the waste unit.

   The hazardous substances contained in the drums were unknown, as the drums were not labeled; 1,1,1-trichloroethane and methylene chloride were suspected.

6. Describe the containment of the waste unit as it relates to contaminant migration via groundwater, surface water, and air.

   The potential for contaminant migration via groundwater, surface water, and air is minimal, as the storage area was located within the main building. However, numerous violations in the drum storage area were noted during the 1986 NYSDEC inspection, including unlabeled and open containers, improper handling or storage, and inadequate inspection frequency. It was also noted that there was a film of liquid on the floor near several of the drums.

Ref. Nos. 1, 16, 17, 18, 19

PART II: WASTE SOURCE INFORMATION

For each of the waste units identified in Part I, complete the following six items.

Waste Unit 2 - Tank Storage (inside adjacent building), Facility name unknown

1. Identify the RCRA status and permit history, if applicable, and the age of the waste unit.

   Rite-Off Inc. filed a notification of hazardous waste activity in September of 1980 as a TSDF. Its status has since changed to a nonhandler of hazardous waste. The date of this change is not known by EPA. In June of 1988, Rite-Off's SPDES permit was withdrawn by the NYSDEC because the facility's discharges of sanitary waste and noncontact cooling water were each less than 1000 gallons/day.

2. Describe the location of the waste unit and identify clearly on the site map.

   At the time of an inspection by the NYSDEC in December 1986, two tanks were located in the adjacent building west of the main building.

3. Identify the size or quantity of the waste unit (e.g., area or volume of a landfill or surface impoundment, number and capacity of drums or tanks). Specify the quantity of hazardous substances in the waste unit.

   The two tanks (300 gallons and 170 gallons) were part of an evaporator machine used to recycle 1,1,1-trichloroethane and methylene chloride. The wastes were pumped from drums into the tanks. There are also several propellant storage tanks located outside of the main building.

4. Identify the physical state(s) of the waste type(s) as disposed of in the waste unit. The physical state(s) should be categorized as follows: solid, powder or fines, sludge, slurry, liquid, or gas.

   The physical state of the waste was liquid.

5. Identify specific hazardous substance(s) known or suspected to be present in the waste unit.

   The hazardous substances stored in the tanks were 1,1,1-trichloroethane and methylene chloride.

6. Describe the containment of the waste unit as it relates to contaminant migration via groundwater, surface water, and air.

   The evaporator machine and tanks were located within a building at the site; therefore the potential for contaminant migration is minimal. However, it was noted during the December 1986 NYSDEC inspection that the tanks containing hazardous wastes were not properly labeled or inspected, and that the containment system could not contain at least 110 percent of the tank volume as required in sole source aquifer areas.

Ref. Nos. 1, 16, 17, 18, 19

PART II: WASTE SOURCE INFORMATION

For each of the waste units identified in Part I, complete the following six items.

Waste Unit 3 - Drum Storage Area (inside adjacent building), Facility name unknown

1. Identify the RCRA status and permit history, if applicable, and the age of the waste unit.

   Rite-Off Inc. filed a notification of hazardous waste activity in September of 1980 as a TSDF. Its status has since changed to a nonhandler of hazardous waste. The date of this change is not known by EPA. In June of 1988, Rite-Off's SPDES permit was withdrawn by the NYSDEC because the facility's discharges of sanitary waste and noncontact cooling water were each less than 1000 gallons/day.

2. Describe the location of the waste unit and identify clearly on the site map.

   At the time of the December 1986 NYSDEC inspection, drums were located in the adjacent building west of the main building.

3. Identify the size or quantity of the waste unit (e.g., area or volume of a landfill or surface impoundment, number and capacity of drums or tanks). Specify the quantity of hazardous substances in the waste unit.

   Approximately twenty-one 55-gallon drums were located in the adjacent building. The same building also housed the evaporator machine. In addition to the drums of wastes in the buildings on site, there were also drums of raw products stored in trailers south of the main building.

4. Identify the physical state(s) of the waste type(s) as disposed of in the waste unit. The physical state(s) should be categorized as follows: solid, powder or fines, sludge, slurry, liquid, or gas.

   The drums reportedly contained liquid and sludge.

5. Identify specific hazardous substance(s) known or suspected to be present in the waste unit.

   The exact contents of the drums were unknown. Nineteen were believed to contain methylene chloride and 1,1,1-trichloroethane. The remaining 55-gallon drums contained sludge from the evaporator machine, which was used to recycle methylene chloride and 1,1,1-trichloroethane.

6. Describe the containment of the waste unit as it relates to contaminant migration via groundwater, surface water, and air.

   All of the drums were located within the building adjacent to the main building; therefore the potential for contaminant migration is minimal.

Ref. Nos. 1, 16, 17, 18, 19

PART III: HAZARD ASSESSMENT

GROUNDWATER ROUTE

1. Describe the likelihood of a release of contaminant(s) to the groundwater as follows: observed, alleged, potential, or none. Identify the contaminant(s) detected or suspected, and provide a rationale for attributing the contaminant(s) to the facility.

   Soil sampling results from December 1986 and dry well sampling results from March 1987 showed concentrations of tetrachloroethylene and 1,1,1-trichloroethane, both of which are used on site. The presence of these contaminants in the soil and the dry well represents a potential for groundwater contamination.

   Ref. Nos. 1, 2, 3, 4, 5

2. Describe the aquifer of concern; include information such as depth, thickness, geologic composition, permeability, overlying strata, confining layers, interconnections, discontinuities, depth to water table, groundwater flow direction.

   The aquifer of concern consists of the surficial Upper Glacial Aquifer and the underlying Magothy Aquifer. The Upper Glacial Aquifer consists of till, outwash deposits, and glaciolacustrine deposits. The Magothy Aquifer consists of medium to fine sand, and in some parts has a clayey consistency. Also intermixed in the aquifer are lenses and layers of coarse sand and sandy and solid clay. The Gardiners Clay is also present in some areas of southern Suffolk County as a confining unit over the Magothy; however, it is not continuous throughout the 3-mile radius of the site. Therefore, the Upper Glacial Aquifer and the Magothy Aquifer are considered to be hydraulically connected. The Magothy lies approximately 110 to 122 feet below ground surface in the vicinity of the Rite-Off site and is approximately 800 feet thick in this area. The depth to the water table is approximately 16 to 21 feet. Groundwater flows from the north-northwest to south-southeast towards the Great South Bay.

   Ref. Nos. 6, 7

3. Is a designated sole source aquifer within 3 miles of the site?

   Yes, the Magothy Aquifer is a designated sole source aquifer.

   Ref. No. 8

4. What is the depth from the lowest point of waste disposal/storage to the highest seasonal level of the saturated zone of the aquifer of concern?

   The depths of the dry wells on site in which contaminants were found are approximately 16 feet, and the water level at a nearby well is 16 feet below the surface. Therefore, the depth from the lowest point of waste disposal to the highest seasonal level of the aquifer of concern is zero feet.

   Ref. Nos. 3, 6

5. What is the permeability value of the least permeable continuous intervening stratum between the ground surface and the aquifer of concern?

   The unsaturated zone consists of glacial deposits of varying permeability, including till, outwash deposits, and glaciolacustrine deposits. Site-specific permeability values are unknown; permeabilities could range from less than 10^{-7} cm/sec for till to greater than 10^{-3} cm/sec for outwash deposits

   Ref. Nos. 6, 7, 9

6. What is the net annual precipitation for the area?

Approximately 15 inches.

Ref. No. 9

7. Identify uses of groundwater within 3 miles of the site (i.e., private drinking source, municipal source, commercial, industrial, irrigation, unusable).

Groundwater is the only source for municipal supply and all other fresh water uses in Suffolk County.

Ref. Nos. 6, 10

8. What is the distance to and depth of the nearest well that is currently used for drinking or irrigation purposes?

Distance 0.9 mile Depth 565 feet (to top of screen)

Ref. Nos. 6, 11

9. Identify the population served by the aquifer of concern within a 3-mile radius of the site.

Public supply wells of the Bay Shore Water District serve a population of approximately 170,000. Public supply wells of the Brentwood Water District are also located within 3 miles of the site. The population served by these wells is approximately 26,000. Therefore, the total population served by the aquifer of concern is approximately 196,000.

Ref. Nos. 10, 21

SURFACE WATER ROUTE

10. Describe the likelihood of a release of contaminant(s) to surface water as follows: observed, alleged, potential, or none. Identify the contaminant(s) detected or suspected, and provide a rationale for attributing the contaminants to the facility.

There is no potential for surface water contamination, as there are no migration routes. There are many recharge basins within the area into which surface water runoff would be directed. There are also two major highways between the site and the nearest natural surface water body.

Ref. No. 11

11. Identify and locate the nearest downslope surface water. If possible, include a description of possible surface drainage patterns from the site.

The Pentaquit Creek is the nearest downslope natural surface water. It is located to the southeast of the site and is separated from the site by two major highways. Therefore, there are no likely surface drainage patterns from the site to the creek.

Ref. No. 11

12. What is the facility slope in percent? (Facility slope is measured from the highest point of deposited hazardous waste to the most downhill point of the waste area or to where contamination is detected.)

The facility slope as defined above cannot be calculated, as the elevations of the soil samples that contained contaminants are unknown. The general site slope is estimated to be less than 3 percent.

Ref. Nos. 11, 12

13. What is the slope of the intervening terrain in percent? (Intervening terrain slope is measured from the most downhill point of the waste area to the probable point of entry to surface water.)

The slope of the intervening terrain as defined above cannot be calculated, as there are no migration routes between the site and the surface water. The slope of the land surface from the site to the Pentaquit Creek is less than 1 percent.

Ref. No. 11

14. What is the 1-year 24-hour rainfall?

Approximately 2.7 inches.

Ref. No. 9

15. What is the distance to the nearest downslope surface water? Measure the distance along a course that runoff can be expected to follow.

Pentaquit Creek is located 1.5 miles southeast of the site; there is no drainage course which runoff might follow to the creek.

Ref. No. 11

16. Identify uses of surface waters within 3 miles downstream of the site (i.e., drinking, irrigation, recreation, commercial, industrial, not used).

There are no natural surface waters located along a migration pathway from the site. Great South Bay, into which the Pentaquit Creek flows, is used for recreation, boating, and swimming.

Ref. No. 11

17. Describe any wetlands, greater than 5 acres in area, within 2 miles downstream of the site. Include whether it is a freshwater or coastal wetland.

No wetlands are within 2 miles of the site.

Ref. No. 11

18. Describe any critical habitats of federally listed endangered species within 2 miles of the site along the migration path.

There are no critical habitats of federally listed endangered species within 2 miles of the site.

Ref. No. 13

19. What is the distance to the nearest sensitive environment along or contiguous to the migration path (if any exist within 2 miles)?

There are no sensitive environments within 2 miles of the site.

Ref. Nos. 11, 13

20. Identify the population served or acres of food crops irrigated by surface water intakes within 3 miles downstream of the site and the distance to the intake(s).

Groundwater is the only source of water for drinking and irrigation in Suffolk County. The land within a 3-mile radius is urban; therefore, the water is presumably not used for irrigation.

Ref. Nos. 6, 10, 11

21. What is the state water quality classification of the water body of concern?

The classification of the nearest natural surface water body is unknown, but due to the separation of the site from the water body by two major highways and the presence of numerous recharge basins in the vicinity, it is unlikely to be affected.

Ref. No. 11

22. Describe any apparent biota contamination that is attributable to the site.

No biota contamination that is attributable to the site has been reported or observed.

Ref. Nos. 1, 5, 12

AIR ROUTE

23. Describe the likelihood of a release of contaminant(s) to the air as follows: observed, alleged, potential, none. Identify the contaminant(s) detected or suspected, and provide a rationale for attributing the contaminant(s) to the facility.

No potential exists for a release of contaminants to the air, as all waste units are located within buildings on the site.

Ref. No. 1

24. What is the population within a 4-mile radius of the site?

Approximately 197,700 people.

Ref. No. 14

FIRE AND EXPLOSION

25. Describe the potential for a fire or explosion to occur with respect to the hazardous substance(s) known or suspected to be present on site. Identify the hazardous substance(s) and the method of storage or containment associated with each.

A potential for a fire or explosion exists due to the nature of the compounds stored on site, and the numerous violations noted with respect to the on-site accumulation of hazardous waste and the storage of ignitable or reactive waste. 1,1,1-Trichloroethane and methylene chloride wastes were known to have been generated and stored on site. Methyl ethyl ketone, which is also an ignitable compound, was also reportedly generated on site.

Ref. Nos. 1, 5, 15

26. What is the population within a 2-mile radius of the hazardous substance(s) at the facility?

Approximately 50,300 people.

Ref. No. 14

DIRECT CONTACT/ON-SITE EXPOSURE

27. Describe the potential for direct contact with hazardous substance(s) stored in any of the waste units on site or deposited in on-site soils. Identify the hazardous substance(s) and the accessibility of the waste unit.

There is a potential for worker exposure because of the poor management of the drummed wastes. The site is fenced, reducing the potential for exposure of the public to the wastes on site.

Ref. Nos. 1, 12

28. How many residents live on a property whose boundaries encompass any part of an area contaminated by the site?

It is not known whether any residents live on a property whose boundaries encompass ah area contaminated by the site, as no off-site sampling has been conducted. There are approximately 5 houses bordering the site, with an estimated 19 residents (assuming 3.8 people per house).

Ref. No. 12

29. What is the population within a 1-mile radius of the site?

Approximately 15,000 people.

Ref. No. 14

PART IV: SITE SUMMARY AND RECOMMENDATIONS

Rite-Off Inc. is an active, privately owned 1-acre facility located in a generally residential area in Bay Shore, Suffolk County, New York. The company has operated from 1968 to the present. There are several small industrial properties in the area. Larger residential/commercial areas are also in close proximity to the site.

Rite-Off packages organic solvent cleaners, insecticides, and lubricants for retail sale. Hazardous wastes generated (1,1,1-trichloroethane and methylene chloride) were recycled on site through the use of an evaporator machine. In 1983 an act of vandalism resulted in spills of petroleum distillate and tetrachloroethylene inside a building on site. The tetrachloroethylene escaped the building and contaminated a storm drain located 100 feet south of the building. The incident was reported to the Suffolk County Health Department. Cleanup involved the removal of sediment from the storm drain.

Sampling results from inspections by the New York State Department of Environmental Conservation (NYSDEC) in December 1986 and March 1987 show levels of tetrachloroethylene and 1,1,1-trichloroethane in the soil and dry wells on site. Rite-Off was fined, based on the NYSDEC December 1986 investigation. The Law Enforcement Branch of the NYSDEC conducted a surprise inspection of the facility; the date, findings, and outcome of that investigation are not available at the present time (Ref. No. 20).

At the time of the NYSDEC inspection in 1986 there were forty-seven 55-gallon drums located within the main building. The contents of the drums were unknown, but were suspected to be 1,1,1 trichloroethane and methylene chloride. All of the containers were unlabeled and some were open. The floor near several of these drums was covered with a film of liquid. In the adjacent building there were two tanks (300 gallons and 170 gallons) that were part of an evaporator machine used to recycle 1,1,1 trichloroethane and methylene chloride. These tanks were not properly labeled or inspected, and the containment system could not contain 110 percent of the tank volume as required in sole source aquifer areas. There were also approximately 21 unlabeled drums located within the adjacent building. These drums were also believed to contain methylene chloride and 1,1,1 trichloroethane.

Rite-Off's current RCRA status is as a nonhandler of hazardous waste, while their interim status remains in effect. In June 1988, Rite-Off's SPDES permit application was withdrawn because the facility's discharge did not require permitting.

Because of the dependence of the surrounding population on groundwater as its source of potable water and the presence of contaminants in the soils and dry wells on the Rite-Off property, this site is recommended for a MEDIUM PRIORITY site inspection Sampling of dry wells and of any exposed soils on site is suggested

ATTACHMENT 1

RITE-OFF INC.
BAY SHORE, NEW YORK

CONTENTS

Figure 1: Site Location Map
Figure 2: Site Map
Exhibit A: Photograph Log

02-8902-50-PA
Rev. No. 0

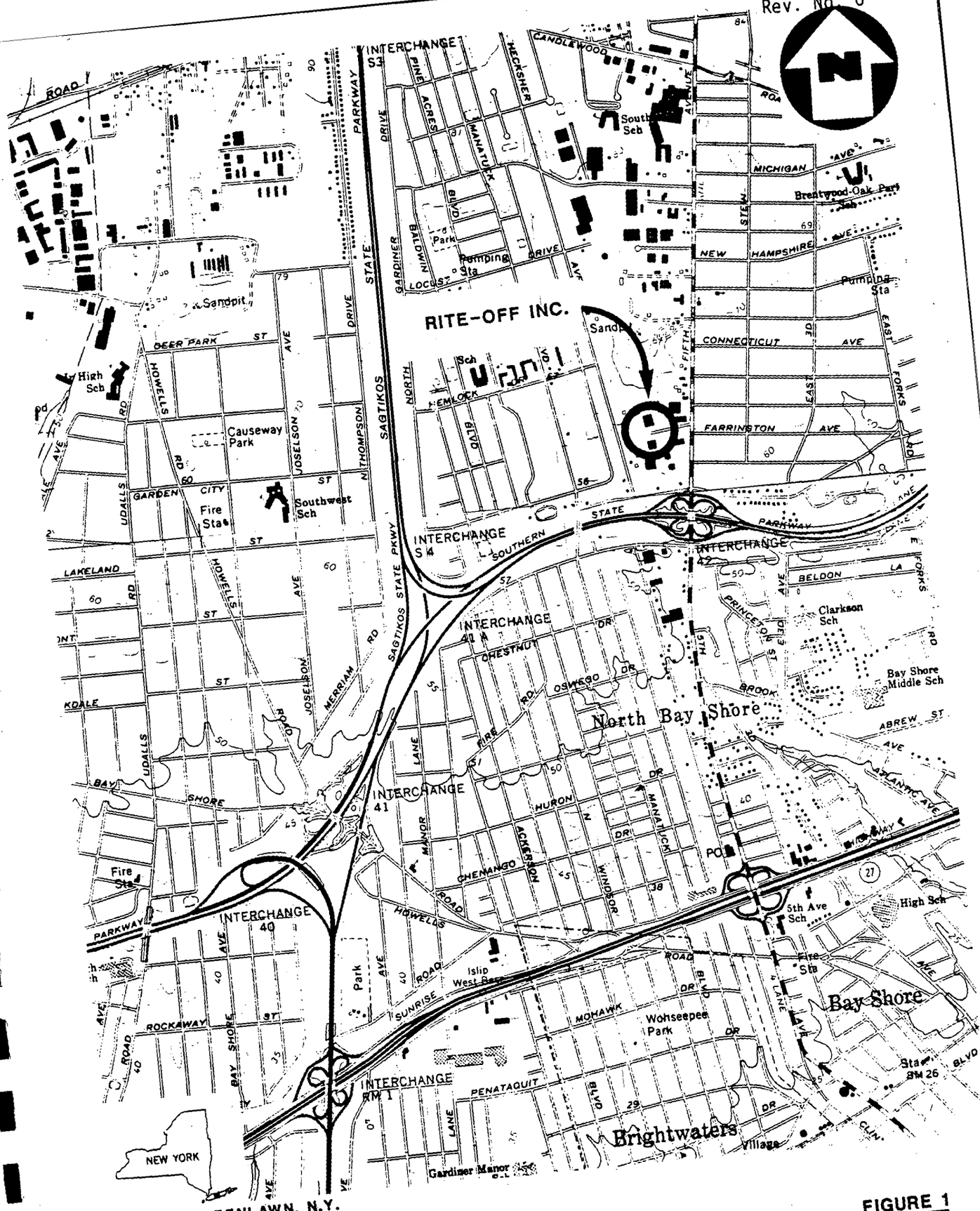


FIGURE 1

SITE LOCATION MAP

RITE-OFF INC., BAY SHORE, N.Y.

SCALE: 1"=2000'

NUS CORPORATION

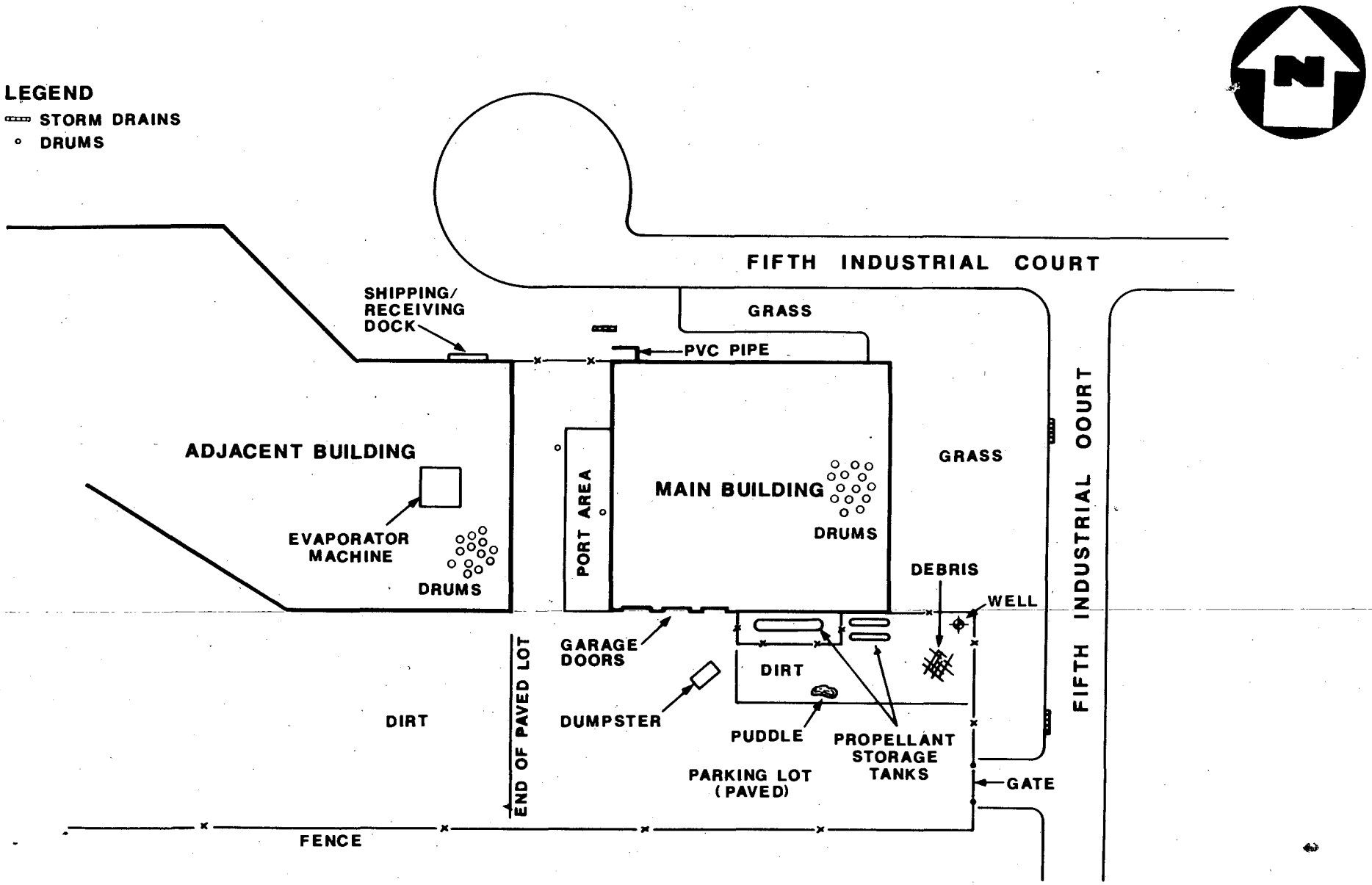


FIGURE 2

SITE MAP

RITE-OFF INC., BAY SHORE, N.Y.

NOT TO SCALE

NUS CORPORATION

EXHIBIT A

PHOTOGRAPH LOG

RITE-OFF INC.
BAY SHORE, NEW YORK

OFF-SITE RECONNAISSANCE: MARCH 1, 1989

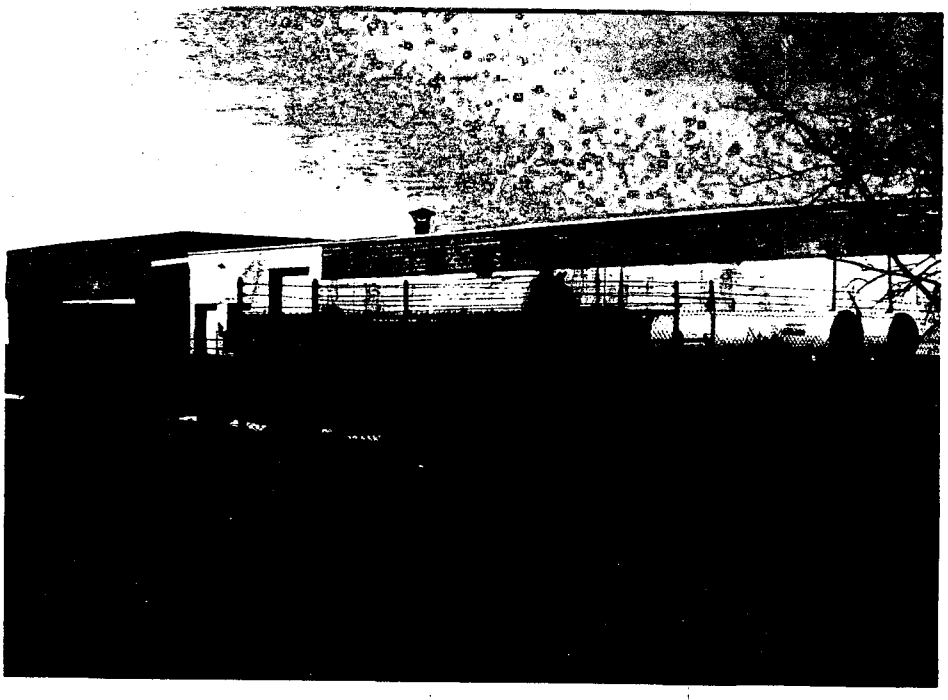
RITE-OFF INC.
BAY SHORE, NEW YORK
MARCH 1, 1989

PHOTOGRAPH INDEX

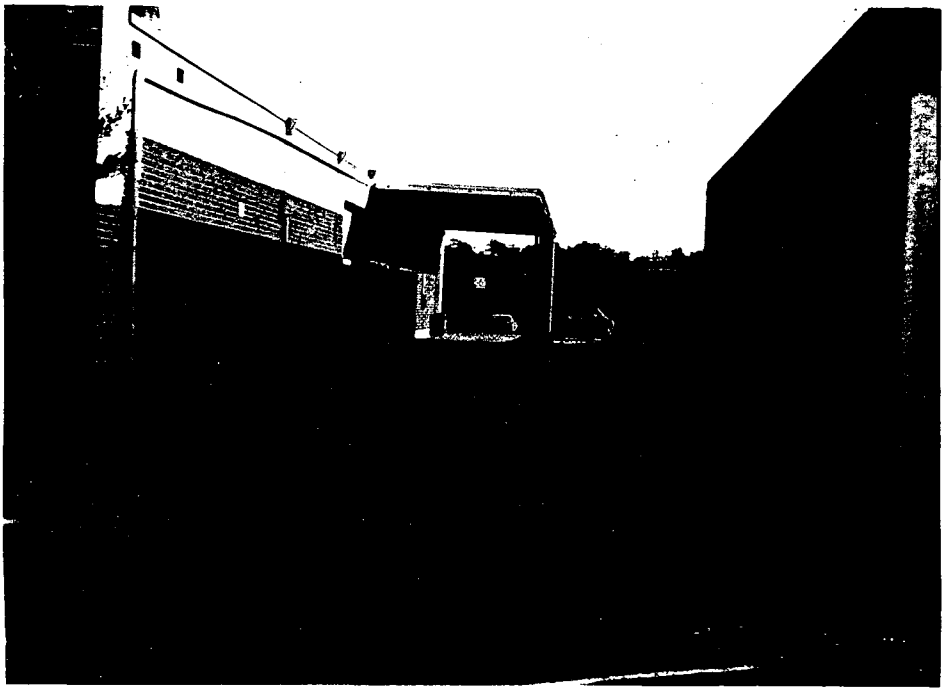
Photo Number	Description	Time
1P-11	Photo of propellant storage tanks, south side of building.	1532
1P-12	Photo of the northwest corner of the main building.	1555
1P-13	Photo of northeast corner of adjacent building.	1556
1P-14	Photo of northeast corner of main building.	1600

Photographs 1P-11 through 1P-13 taken by J. Dvorak.
Photograph 1P-14 taken by J. Tescon.

RITE-OFF INC., BAY SHORE. NEW YORK

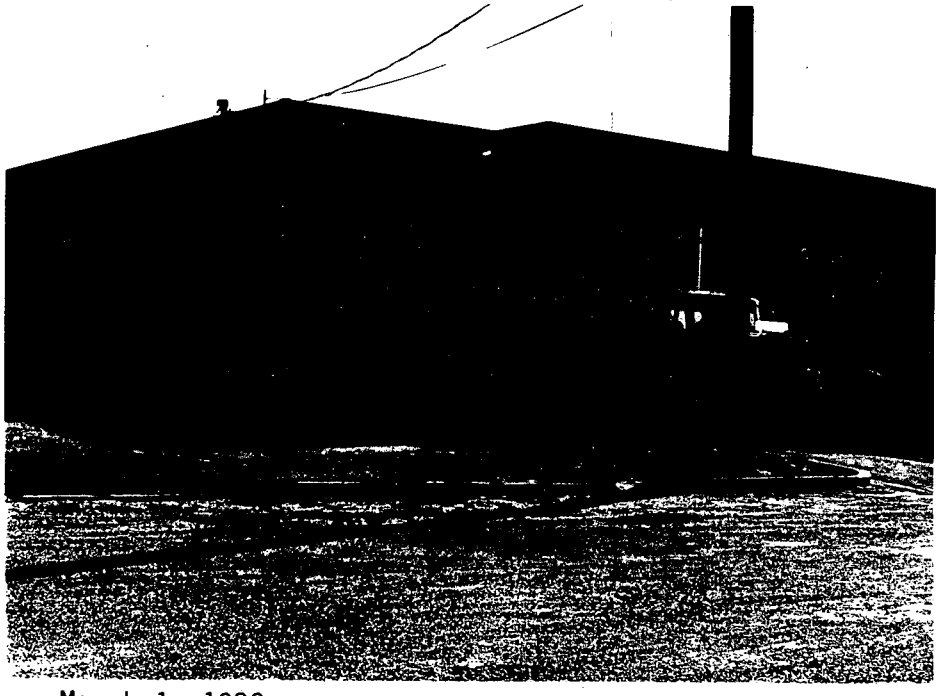


1P-11 March 1, 1989 1532
Photo of propellant storage tanks, south side of building.



1P-12 March 1, 1989 1555
Photo of northwest corner of the main building.

RITE-OFF INC., BAY SHORE, NEW YORK



1P-13 March 1. 1989 1556
Photo of the northeast corner of the adjacent building.



1P-14 March 1, 1989 1600
Photo of the northeast corner of the main building.

ATTACHMENT 2

REFERENCES

1. New York State Industrial Hazardous Waste Management Act Inspection Form, Chapter 639, Laws of 1978, December 17, 1986.

2. NUS Corporation, Laboratory Services Division, Case NYSDEC-MCGEE, Laboratory Analyses from NYSDEC Inspection conducted on December 17, 1986.

3. NUS Corporation, Laboratory Services Division, Case NYSDEC, Laboratory Analyses from NYSDEC Inspection conducted on March 24, 1987.

4. Suffolk County Department of Health Services, Interoffice Memorandum from A.M. Santino to the file, Subject: Spill #1983-216, Rite-Off Inc., September 12, 1983.

5. Letter from J. L. Kaufman, Attorney for Rite-Off Inc., to M.D. Heck, Reviewing Engineer, NYSDEC, August 31, 1987.

6. Hydrogeologic Data from Selected Wells and Test Holes in Suffolk County, Long Island, New York, 1972-80. United States Geological Survey, Open-File Report 81-500.

7. Frank, O.L. and N.E. McClymonds. Summary of the Hydrologic Situation on Long Island, New York, as a Guide to Water-Management Alternatives. Geological Survey Professional Paper 627-F. United States Department of the Interior, 1972.

8. Federal Register, Vol. 43, No. 120-Wednesday, June 21, 1978, pp. 26611 and 26612.

9. Uncontrolled hazardous waste site ranking system, A user's manual, 40 CFR, Part 300, Appendix A, 1986.

10. Letter from S.R. Dassler, Assistant Engineer, Suffolk County Water Authority, to M. Gentils, NUS Corporation, April 29, 1988.

11. Three-mile Vicinity Map, based on U.S. Department of Interior, Geological Survey Topographic Maps, 7.5 minute series, "Bay Shore East Quadrangle, NY", "Bay Shore West Quadrangle, NY", "Central Islip Quadrangle, NY", "Greenlawn Quadrangle, NY", 1967, revised 1979.

12. Off-Site Reconnaissance Information Reporting Form, TDD No. 02-8902-50, NUS Corp. Region 2 FIT. March 1, 1989.

13. Letter from M.S. Scheibel, Senior Wildlife Biologist, NYSDEC, to D. Trube, NUS Corporation, December 20, 1988.

14. General Software Corporation, Graphical Exposure Modeling System (GEMS). Landover, Maryland, 1986.

15. Sax, N. Irving. Dangerous properties of industrial materials. 6th edition. New York, Van Nostrand Reinhold Co., 1984.

16. Telecon Note: Conversation between D. Debrunce, EPA Permitting Office, and P. Solinski, NUS Corporation, March 10, 1989.

17. Telecon Note: Conversation between T. Hermos, NYSDEC Region 1, and P. Solinski, NUS Corporation, March 9, 1989.

REFERENCES (cont'd)

18. Letter from D. DeRiddler, Deputy Regional Permit Administrator, NYSDEC, to B. Schleifman, Rite-Off Inc., June 15, 1988.

19. U.S. EPA Notification of Hazardous Waste Activity, EPA Form 8700-12 (6-80), Rite-Off Inc., EPA I.D. Number NY000726786, September 5, 1980.

20. Telecon Note: Conversation between Lt. Mitura, NYSDEC Law Enforcement Branch, and P. Solinski, NUS Corporation, March 9, 1989.

21. 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.

REFERENCE NO. 1

4-15-149/96

INSPECTION FORM

REGION: 1
Major:
Major TSDF:
Non-Major:
Substitution:

NEW YORK STATE INDUSTRIAL HAZARDOUS WASTE MANAGEMENT ACT

Chapter 639, Laws of 1978

Prepared for:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Henry G. Williams, Commissioner

Division of Solid and Hazardous Waste
Norman H. Nosenchuck, Director

Send to: Compliance Inspection Section
50 Wolf Road - Room 209/415
Albany, New York 12233-0001

EPA I.D. NUMBER: N Y D ø ø ø 7 2 6 7 8 6

*HANDLER'S NAME (Corporate): Rite-Off Inc.

(Division):

*HANDLER'S MAILING ADDRESS: Rite-Off Inc

1545 5th Industrial Court

City, State & Zip Code Bay Shore, New York 11706

*HANDLER'S LOCATION ADDRESS: (if different than mailing)

City, State & Zip Code

*HANDLER'S TELEPHONE NUMBER: ( ) Extension:

*FULL NAME OF HANDLER'S CONTACT: (Mr.) (Ms.) Bruce Schleifmen / General Manager

*SIGNATURE OF HANDLER'S CONTACT:
(This signature is not an admittance to any violations cited herein. It merely acknowledges that an inspection took place.)

*TITLE OF HANDLER'S CONTACT:

INSPECTION DATE: 12 / 17 / 19 86 TIME OF INSPECTION: 11:00 (a.m.) (p.m.)

INSPECTOR'S SIGNATURE: Tanya Herman

COUNTY: Suffolk E/A NUMBER:

INSPECTOR'S NAME: Tanya Hermos

TITLE: Certified Inspector

NAME:

TITLE:

CHECK ONE: Copy of THIS report (___ has) (X has not) been given to the Handler.

REPORT PREPARED BY: Tanya Herman DATE: 1/27/87

REPORT APPROVED BY: [signature] DATE: 2/2/87

TABLE OF CONTENTS

		Page No.
Part I	General Information and Classification of Facility	
	1. Identification of Hazardous Waste	I-1
	2. Status Identification	I-4
	3. Exemptions	I-5
	4. Environmental Facilities Corporation (EFC) Survey	I-8
Part II	Generator Inspection Section	
	1. Exempt and Small-Quantity Generator Requirements	II-1
	2. General Requirements	II-2
	3. On-Site Accumulation of Hazardous Waste Prior to Shipment	II-2
	4. Manifest Records	II-7
	5. Personnel Training	II-9
	6. Preparedness and Prevention	II-10
	7. Contingency Plan and Emergency Procedures	II-11
Part III	Comments, Conclusions and Recommendations	III-1

APPENDICES

(Need Not Attach If Not Required - Circle Attached Appendices)

		Page No.
Appendix A	Treatment, Storage and Disposal Inspection Section	A-1
Appendix B	Transportation Terminal Inspection	B-1
Appendix C	Groundwater Monitoring	C-1
Appendix D	Surface Impoundments	D-1
Appendix E	Waste Piles	E-1
Appendix F	Secure Landburial Facilities	F-1
Appendix G	Land Treatment	G-1
Appendix H	Incinerators and Energy Recovery Facilities	H-1
Appendix I	Thermal Treatment	I-1
Appendix J	Chemical, Physical and Biological Treatment	J-1
Appendix K	Underground Injection	K-1
Appendix L	Closure/Post Closure Inspection	L-1
Appendix M	Part B Inspection	M-1
Appendix N	Requirements for Repeat Inspections	N-1

* For the purpose of this Inspection Report - HANDLER means a hazardous waste Generator, Transporter, Treatment, Storage or Disposal Facility (TSDF).

New York State Department of Environmental Conservation
Division of Solid and Hazardous Waste
50 Wolf Road, Albany, New York 12233

PART I

General Information and Classification of Facility

1. Identification of Hazardous Waste - 371	Yes	No
A. Is there reason to believe the facility has hazardous waste on-site? If yes, what leads you to believe it is hazardous waste? Check appropriate box/boxes and attach any applicable correspondence with DEC or EPA:	X	___

(1) X Company recognizes that its waste is hazardous during the inspection.

(2) X Company admitted the waste is hazardous in its RCRA notification and/or Part A permit application.

(3) ___ Testing has shown characteristics of:
( ) ignitability - 371.3(b);
( ) corrosivity - 371.3(c);
( ) reactivity - 371.3(d);
( ) EP toxicity - 371.3(e)

___ Has revealed hazardous constituents (please attach analysis report) 371.4(a)(2), Appendix 22, Appendix 23

(4) X The material is listed in the regulations as a hazardous waste from non-specific sources 371.4(b). F001

(5) ___ The waste material is listed in the regulations as a hazardous waste from specific sources. 371.4(c).

(6) ___ The material or product is listed in the regulations as discarded commercial chemical products, off-specification species, container residues and spill residues thereof. 371.4(d).

(7) ___ Company is unsure, but they have reason to believe that waste materials are hazardous. (Explain) _____

_____

_____

_____

_____

B. Is there reason, other than those above, for you to believe that there is hazardous waste on site? (Explain) _____

_____

_____

C. What other environmental permits are held by the company, relative to hazardous waste management?

___ SPDES Permit Number NO Air Permit Number

NO Part 364 Industrial Waste Transporter Permit (indicate this company's permit number if any)

Please describe other relavent (if any) permits and give the name, address, Part 364 Permit Number and EPA I.D. Number of transporter(s) used by company.

NYD000824334 - Technitronics Ecological

_____

_____

D. If the facility is a treatment, storage or disposal facility, have they:

___ Submitted a Part A application. ___ Have changes been made that are not reflected in the Part A application? Should the Part A be modified by the Company? ___ If so, explain.

_____

_____

_____

_____

_____

___ Submitted a Part B application.

___ Been granted a Part 373 permit.

If so, when does it expire: _____
Please attach or explain any special conditions or variances - 373-1.1(e) _____

_____

_____

_____

___ Been granted a hazardous waste Part B permit.

If so, also complete Appendix M.

E. Describe the activities that result in the generation of hazardous waste. Include the company's manufacturing processes. _____

This facility packages chemicals into aerosol spray cans These chemicals include: 1,1,1-trichloroethane, methylene chloride, perchloroethylene, methyl ethly Ketone

F. Identify the hazardous wastes that are on-site and the quantity of each (use the identification numbers referred to in Part 371). _____

47 - (55) Gallon Steel Drums in main building (see diagram attached to back) CONTENTS UNKNOWN

1 1/2 - (55) Gallon Steel Drums in adjacent building filled with sludge from the "Evaporator Machine" used to recycle the methylene chloride, 1,1,1-trichloroethane

19 - (55) Gallon Steel Drums of EXACT contents unknown Some contain methylene Chloride others 1,1,1-trichloroetha

G. The handler notified EPA as a:

Generator

Has EPA or DEC officially modified the handlers status? If so, attach correspondence. _____

_____

2. Status Identification:

This handler should be inspected as a (check each appropriate category after considering exemptions)

A. ___ Transporter - complete Appendix B

B. Generator Status Identification 372.1

1. ___ Category 1 generator - small quantity generator - generates less than 100 kg/mo and stores less than 100 kg. - 372.1(e)(1)(vii)(a) Complete Part II, 1A.

2. ___ Category 2 generator - small quantity generator - generates less than 100 kg/mo and stores more than 100 kg but less than 1,000 kg. - 372.1(e)(1)(vii)(b) - Complete Part II, 1B.

3. X Category 3 generator - small quantity generator - generates more than 100 kg/mo but less than 1,000 kg/mo and stores less than 1,000 kg. - 372.1(e)(1)(viii) - Complete Part II, 1B and 1C.

4. ___ Category 5 generator - generated 1,000 kilograms or more per month or generated acute hazardous waste in quantities greater than those specified in Part 372.1(e)(1)(v). Complete Part II. Generators over sole source aquifers also complete Appendix A.

5. X Category 6 generator - stores 1,000 kilograms or more or stores acute hazardous waste in quantities greater than those specified in Part 372.1(e)(1)(v). Complete Part II. Generators over sole source aquifers also complete Appendix A.

C. Treatment, Storage or Disposal Facility Status

If yes, complete Appendix A and other appropriate Appendices.

1. Is hazardous waste generated and stored on-site? If so:

(a) X Has hazardous waste been stored on-site longer than 90 days? 373-1.1(d)(1)(iii)

(b) NO Has more than 8,800 gallons of hazardous waste been stored in containers? 373-1.1(d)(iii)(a)

(c) NO Has more than 20,000 gallons of hazardous waste been stored in tanks? 373-1.1(d)(iii)(b)

2. NO Hazardous waste received from off-site and not beneficially used, reused or legitimately recycled or stored.

3. X Hazardous waste is treated on-site. EVAPORATOR MACHINE IS USED

4. NO Hazardous waste is disposed of on-site.

3. Exemptions

A. Generator Exemptions

(1) NO Not a regulated handler (be sure to indicate why in Part I 1F and 1G and/or in appropriate exemption below - for example the company notified for precautionary reasons or the waste generated is not hazardous as specified in 371.1(e)(2).

(2) ___ Delisted hazardous waste. IDENTIFY the waste that was delisted: (If the company is in the delisting process they are still regulated until their delisting petition is favorably approved) Complete appropriate parts depending on company status.

_____

_____

(3) ___ Exemption for used engine lubricating oil. 372.1(e)(8) -

(4) ___ Exemption for publicly owned treatment works 372.1(e)(4).

(5) ___ Samples collected for testing. 372.1(e)(5).

(6) ___ Residues of hazardous waste in empty containers. 372.1(e)(6).

(7) √ A hazardous waste which is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated non-waste treatment manufacturing unit is not subject to regulation until it exits the unit in which it was generated, unless the unit is a surface impoundment, or unless the hazardous waste remains in the unit more than 90 days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials. 372.1(e)(7).

3. TSD Exemptions

1. TSD exemptions - 373-1.1(d)(1) (for facilities and operations that manage hazardous waste other than waste oil)

(a) ____ Storage of hazardous wastes indicated in 373-1.1(d)(4) prior to its beneficial use or reuse or legitimate recycling or reclamation. 373-1.1(d)(1)(vi). If yes, complete Part II, Questions 3, 5, 6, 7.

(b) ____ Beneficial use or reuse or legitmate recycling or reclamation of a characteristic hazardous waste not identified in 373-1.1(d)(5) other than sludge. (373-1.1(d)(1)(vii)). Complete manifest questions.

(c) X Beneficial use or reuse or legitimate recycling or reclamation of a listed hazardous waste or hazardous waste sludge other than at commercial facilities. Units utilized for precious metal recovery at commercial facilities are exempt. Recyclable materials listed in 373-1.1(d)(5) are not exempt. Any off-site facility must have an EPA identification number. (373-1.1(d)(1)(viii)) Complete manifest questions. SEE COMMENTS

(d) ____ The treatment of characteristic hazardous waste other than sludge prior to its beneficial use or reuse or legitimate recycling or reclamation. Recyclable materials listed in 373-1.1(d)(5) are not exempt. 373-1.1(d)(1)(ix). Complete manifest questions.

(e) ____ The treatment of a listed hazardous waste or hazardous waste sludge prior to its beneficial use or reuse or legitimate recycling or reclamation other than at commercial facilities. Units utilized for precious metal recovery at commercial facilities are exempt. Any off-site facility must have an EPA identification number and comply with manifesting requirements. Recyclable materials listed in 373-1.1(d)(5) are not exempt. (373-1.1(d)(1)(x))

(f) ____ Totally enclosed treatment facility (373-1.1(d)(1)(xi))

(g) ____ Elementary neutralization units or wastewater treatment units other than units located at commercial facilities. Units utilized for precious metal recovery at commercial facilities are exempt. If yes, complete Part II, 3. (373-1.1(d)(1)(xii))

(h) ____ A wastewater treatment facility holding a SPDES Permit for a surface water point source discharge that reuses spent pickle liquor or facilities that accumulate, store or physically, chemically or biologically treat spent pickle liquor prior to reuse in a wastewater treatment facility. (373-1.1(d)(1)(xvi))

2. TSD exemptions - 373.1.1 (d)(2) (for facilities and operations that manage waste oils)

(a) NA Storage or treatment of waste oil generated on-site prior to its beneficial use or reuse or legitimate recycling or reclamation if the waste oil is not a listed hazardous waste, and the waste oil is not a hazardous sludge. 373-1.1(d)(2)(ii). If yes, complete Part II: 3, 5, 6, 7.

(b) ___ Exemptions for storage of waste oil at an energy recovery facility prior to its on-site combustion of such waste oils are not listed hazardous wastes, waste oils are not hazardous sludges, and the facility stored less than 80,000 gallons of waste oil. 373-1.1(d)(2)(iii). If yes, complete Part II: 3, 5, 6, 7.

(c) ✓ Combustion units that recover energy from waste oil, other than listed hazardous waste and sludges and the related treatment on-site of such combustion units.

3. TSD exemptions - (for facilities and operations that manage hazardous waste or waste oils).

(a) NA Storage of hazardous waste generated and stored on-site for 90 days or less and 8,800 gallons or less is stored in containers or 20,000 gallons or less is stored in tanks. The facility cannot be located in a geographical area overlying a sole source aquifer. If yes, complete Part II. 373-1.1(d)(1)(iii).

(b) ___ Storage or treatment of hazardous waste on-site of generation if generated and stored less than 1,000 kilograms of hazardous waste in each calendar month and do not generate or store acute hazardous waste as described in 373-1.1(d)(1)(i)(b). 373-1.1(d)(1)(v).

(c) ___ Treatment or containment activities during an immediate response 373-1.1(d)(1)(xiii).

(d) ___ Accumulation areas. If yes, complete Part II: 3C, questions 1-5. 373-1.1(d)(1)(xiv).

(e) ___ Storage of manifested shipments of hazardous waste in containers or vehicles by a transporter at its own transfer facility for 5 days or less. If yes, complete Appendix B: 3. 373-1.1(d)(1)(xv).

Environmental Facilities Corporation (EFC) Survey

The following questions are voluntary:

The Environmental Facilities Corporation (EFC) is actively involved in the industrial materials recycling program, and these questions will assist EFC in carrying out this program. It may also be beneficial to the facility being inspected in that acceptable markets or more economical alternatives to the facility's current disposal techniques may be brought to their attention.

A. Does the company believe their hazardous waste has the potential for recovery, reclamation or exchange with other companies to minimize disposal costs? ___Yes ___No ___Don't Know

If yes:

B. Does the company wish to list their waste stream in the Northeast Industrial Waste Exchange Listings Catalog? ___Yes ___No ___Don't Know

C. Does the company want to receive additional information about the potential for waste exchange? ___Yes ___No ___Don't Know

D. Does the company wish to obtain assistance from the New York State Environmental Facilities Corporation to assess the potential for recovery, reclamation or exchange of the hazardous waste stream? ___Yes ___No ___Don't Know

The Company representative may wish to contact Mr. Pickett Simpson, Hazardous Waste Program Manager, Environmental Facilities Corporation, 50 Wolf Road, Room 527, Albany, New York 12233 at (518) 457-4138.

New York State Department of Environmental Conservation
Division of Solid and Hazardous Waste
Bureau of Hazardous Waste Operations
50 Wolf Road, Albany, New York 12233

Part II

Generator Inspection Section

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

Refer to questions based upon category checked in Part I.

1. Requirements for Category 1-3 Generators:

A. If Category 1, the generator has:

____ disposed of hazardous waste in a solid waste facility - 372.1(e)(1)((vii)(a)(2) ____

____ made a hazardous waste determination - 372.1(e)(1)(vii)(a)(1) ____

B. If Category 2 or 3, the generator has met the following:

X made a hazardous waste determination - 372.1(e)(1)(vii)(b)(1) ____

____ disposed of in authorized hazardous waste facility - 372.1(e)(1)(vii)(b)(2) * See Comments X

X used appropriate containers; properly packaged, labeled and marked during storage and shipment - 372.1(e)(1)(vii)(b)(4) ____

X had containers and tanks stored properly; not open, not handled or stored in a way which may cause it to leak; inspected at least quarterly - 372.1(e)(1)(vii)(b)(5) ____

X had tanks designed, constructed and operated in accordance with regulations - 372.1(e)(1)(vii)(b)(5) ____

____ had tanks properly sheltered and protected-372.1(e)(1)(vii)(b)(7) NA

C. If Category 3 generator, has:

____ annual report prepared and sent to DEC - 372.1(e)(1)(viii)(f) X

____ obtained an EPA Identification Number - 372.1(e)(1)(viii)(b) X

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

For Category 5 and 6 generators complete remainder of Part II.

2. General Requirement

A. X The generator has made a determination as to whether or not his solid waste is a hazardous waste - 372.2(a)(2) ___

3. On-site accumulation of hazardous waste prior to shipment

A. X All such wastes are shipped off-site to an authorized treatment, storage or disposal (TSD) facility in 90 days or less. 372.2(a)(8)(ii) ___

B. X The date upon which each period of accumulation begins is clearly marked and visible for inspection on each container or tank 372.2(a)(8)(ii) ___

C. Standards for management of containers - 372.2(a)(8)(ii); 373-3.9
(This section will also be completed for TSD's as referred to from Appendix A.)

1. What type of containers are used for accumulation? Describe the size, type. (e.g., 12 fifty-five gallon drums of waste acetone).

47 -(55) Gallon steel drums located in main building (see diagram attached to back) contents unknown
1½ - (55) Gallon Steel drums in adjacent building filled with sludge from the "Evaporator Machine" used to recycle the methylene chloride & 1,1,1-trichloroethane
19 - (55) Gallon Steel drums exact contents unknown some contain methylene chloride & 1,1,1-trichloroethane

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

2. X Each container is marked with the words "Hazardous Waste." 372.2(a)(8): 373-1.1(d)(1)(iii) ___

3. X The containers appear to be in good condition and are not in danger of leaking. (If containers are leaking, describe the type, condition and number that are leaking or corroded. Be detailed and specific) - 373-3.9(b) ___

The floor by the hazardous waste storage area in the main building had a film of liquid by several storage drums

4. ___ Hazardous waste is stored in containers made of compatible materials 373-3.9(c) (If not, please explain). X

5. X All containers except those in use are closed - 373-3.9(d)(1) ___

6. X Containers holding hazardous waste must not be opened, handled or stored in a manner which may rupture the container or cause it to leak - 373-3.9(d)(2) ___

7. X The storage area is inspected at least weekly - 373-3.9(e) ___

8. The generator complies with the following special requirements related to storage of ignitable, or reactive wastes 373-3.9(f):

(a) ___ Containers holding ignitable or reactive waste are located at least 15 meters (50 feet) from the facility property line. 373-3.9(f) X

(b) X Generator has taken precautions to prevent accidental ignition or reaction of ignitable or reactive waste - 373-3.2(h)(1) ___

(c) ___ Generator has placed "No Smoking" signs conspicuously wherever there is a hazard from ignitable or reactive waste - 373-3.2(h)(1) X

_ dicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

9. The generator complies with the following special requirements related to incompatible wastes: 373-3.9(g)

(a) The storage of ignitable or reactive wastes, and the mixture or comingling of incompatible wastes, or incompatible wastes and materials, is conducted to prevent - 373-3.2(h)(2)

(1) X the generation of extreme heat or pressure, fire or explosion, or violent reaction - 373-3.2(h)(2)(i) ____

(2) X production of uncontrolled toxic mists, fumes, dusts or gases in sufficient quantities to threaten human health - 373-3.2(h)(2)(ii) ____

(3) X production of uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions - 373-3.2(h)(2)(iii) ____

(4) X the damage to the structural integrity of the device or facility containing the waste - 373-3.2(h)(2)(iv) ____

(5) X a threat to human health or the environment - 373-3.2(h)(2)(v) ____

(b) ___ Hazardous waste must not be placed in an unwashed container that previously held an incompatible waste or material. 373-3.9(g)(2) U X

(c) ___ Hazardous waste in containers stored nearby incompatible waste or material is separated by the incompatible waste by a dike, berm, wall or other device. 373-3.9(g)(3). UNKNOWN - WASTES NOT completely identified ____

D. Standards for management of tanks - 372.2(a)(8)(ii); 373-3.10

1. What are the approximate number and size of tanks containing hazardous waste?

The evaporator Machine consists of a 300 gallon and 170 gallon tank

2. Identify the waste treated/stored in each tank. Include whether they are above or below ground.

The tanks are above ground and used to recycle methylene chloride & 1,1,1-trichloroethane

3. X Each tank is marked with the words "Hazardous Waste" ___

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

Tank General Operating Requirements - 373-3.10(b)

4. ____ Hazardous wastes or treatment reagents are not placed in a tank, if they could cause the tank or its inner liner to rupture, leak, corrode, or otherwise fail before the end of its intended life - 373-3.10(b)(2). If so, please explain. — X

5. X Uncovered tanks have at least 60 centimeters (2 feet) of freeboard or an adequate containment structure - 373-3.10(b)(3) — ____

6. ____ Where waste is continuously fed into a tank, the tank must be equipped with a means to stop the inflow (e.g., bypass system to a standby tank or a waste feed cutoff system) - 373-3.10(b)(4) — NA

Tank Waste Analysis - 373-3.10(c)

7. ____ There is a waste analysis plan if tank is to be used to chemically treat or store a hazardous waste substantially different from the previous waste, or if a different process is used from the previous process. (Complete Appendix A, Number 4). — NA

Tank Inspections - 373-3.10(d)

8. Tank(s) are inspected each operating day for:

(A) X discharge control equipment (e.g., waste feed cutoff systems, bypass systems and drainage systems) - 373-3.10(d)(1)(i) — ____

(B) X monitoring equipment (e.g., pressure and temperature gauges) - 373-3.10(d)(1)(ii) — ____

(C) X level of waste in tank to ensure proper freeboard - 373-3.10(d)(1)(iii) — ____

9. Tank(s) are inspected weekly for:

(A) X Corrosion or leaking of fixtures or seams - 373-3.10(d)(iv) — ____

(B) X Erosion or obvious signs of leakage (e.g., wet spots or dead vegetation) of the construction materials of, and the area immediately surrounding discharge confinement structures (e.g., dikes). 373-3.10(d)(v) — ____

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

Ignitable or reactive wastes - 373-3.10(f)

10. ___ Ignitable or reactive waste is placed in a tank and the waste is stored, treated, rendered or mixed before or immediately after placement in the tank so that the resulting wastes, mixture or dissolution of material is no longer ignitable or reactive. — X

11. ___ Ignitable and reactive waste is stored in a tank and the tank is used solely for emergencies. — NA

12. ___ Storage of ignitable or reactive waste in covered tanks complies with the National Fire Protection Association's (NFPA's) buffer zone requirements for tanks, contained in Tables 2-1 thru 2-6 of the "Flammable and Combustible Liquids Code, 1981." — NA

Incompatible Wastes - 373-3.10(g)

13. ___ Incompatible wastes, or incompatible wastes and materials must not be placed in the same tank unless 373-3.2(h)(2) is complied with. 373-3.10(g)(1) — X

14. ___ Incompatible wastes must not be placed in an unwashed tank which previously held an incompatible waste or material unless 373-3.2(h)(2) is complied with. 373-3.10(g)(2) — X

Special Requirements in sole source aquifer areas - 373-3.10(h)

15. ___ The base underlying the tank is free of cracks and is sufficiently impervious to contain leaks. — X

16. ___ The base is designed to drain or the tank is elevated to prevent contact with accumulated liquids. — X

17. X Containment system can contain at least 110 percent of tank volume. — ___

18. ___ Run-on into containment system is prevented or designed for. — NA

19. ___ Leaked waste or accumulated precipitation is timely removed to prevent possible overflow. — NA

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

4. Manifest Records and Reporting

A. ___ It appears, from the available information, that there is a manifest copy available for each hazardous waste shipment off-site that has been made - 372.2(b)(5)(i). X

If "violation" checked or "don't know," please elaborate.

B. Describe the approximate size of an average shipment made and how many shipments per month? ___

3-4 (55) Gallon drums of Hazardous Waste / per mo.

C. Each manifest (a representative sample) has the following information: - 372.2(b)(1); Appendix 30

		Generator	Transporter 1	Transporter 2	TSDF	
1. ___	Name of	X	X	X	X	X
2. ___	EPA ID No. of	X	X	X	X	X
3. ___	Mailing Address of	X	X	X	X	X
4. ___	Telephone No. of	X	X	X	X	X
5. ___	Manifest Document No.	X	X	X	X	X
6. ___	The proper USDOT description.					X

7. ___ The appropriate ___ quantity, ___ container no. ___ container type, and ___ waste type by units of weight or volume.

8. ___ Signed certification that the materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation under regulations of the USDOT and NYSDEC - 372.2(a)(4) and 372.2(a)(5) and 372.2(a)(6). X

9. ___ Signed copies of the manifest records have been retained at the facility for at least three years - 372.2(c)(1)(i) X

Indicate: X Violations	Indicate: X Satisfactory, NA Not Applicable	
O. X There is written communication that the designated treatment, storage or disposal facility is an authorized treatment, storage or disposal facility for the particular wastes being offered for shipment and has capacity to accept the hazardous waste set forth on the manifest and will assure the ultimate disposal method is followed. 372.2(b)(2)(i)		
E. ___ The generator must distribute copies of the manifest as specified on the manifest form - 372.2(b)(3)		X
F. International shipments - 372.5		
(1) ___ EPA has been notified four weeks prior to shipment of hazardous waste destined for treatment, storage or disposal outside the United States - 372.5(b)(1)		NA
(2) ___ Delivery of the wastes has been confirmed within 90 days of acceptance of initial transporter - 372.5(b)(2)		
(3) ___ The generator has identified the point of departure from the United States through which the waste must travel before entering a foreign country - 372.5(b)(3)(ii)		
G. ___ Has complied with interstate shipments - 372.6		X
H. ___ Has complied with shipments by rail or water (bulk) - 372.7		NA
I. ___ Copies of all records have been kept for at least three years (e.g., annual reports, manifests, exception reports, sampling data) - 372.2(c)(1)(i), (ii), and (iii).		X
J. ___ All records required under this subdivision were furnished upon request, or made available at a reasonable time for inspection - 372.2(c)(1)(iv)		X
K. ___ The generator has received signed copies (from the TSD facility) of all manifests for wastes shipped off-site more than 20 days ago:		X
___ If not, exception reports have been submitted covering these shipments - 372.2(c)(3)		NA
L. ___ A generator annual report has been prepared and sent to the department. 372.2(c)(2)		X

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

5. Personnel Training - 372.2(a)(8)(ii) and 373-3.2(g)

A. There is a:

___ written description of the job title for each position at the facility related to hazardous waste management and name of the employee filling each job - 373-3.2(g)(4)(i) — X

X written job description for each position 373-3.2(g)(4)(ii) — ___

___ written description of the type and amount of both introductory and continuing training that will be given to each person related to hazardous waste management - 373-3.2(g)(4)(iii) — X

X Records that document the training or job experience required 373-3.2(g)(4)(iv) has been given to and completed by facility personnel. — ___

B. ___ The training program is directed by a person trained in hazardous waste management procedures and must include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed. 373-3.2(g)(1)(i),(ii) and (iii). The components are: — X

(1) X Procedures for using, inspecting, repairing and replacing facility emergency and monitoring equipment; — ___

(2) ___ Key perameters for automated waste feed cutoff systems; — NA

(3) ___ Communications or alarm systems; — X

(4) ___ Response to fires and explosions; — X

(5) ___ Response to groundwater contamination incidents; and — X

(6) ___ Shutdown of operations. — X

C. ___ Facility personnel have successfully completed the program by the effective date of these regulations or six months after the date of their employment. 373-3.2(g)(2) — X

D. ___ Facility personnel have taken part in an annual review of the initial training required. 373-3.2(g)(3) — ___

The training program is new therefore an annual review has not yet been given.

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

E. ___ Training records on current personnel have been kept permanently at the facility (until closure). 373-3.2(g)(5) — X

F. ___ Training records on former employees have been kept for at least three years from the date the employee last worked at a facility. 373-3.2(g)(5) TRAINING PROGRAM HAS JUST recently been implemented. — X

6. Preparedness and Prevention - 372.2(a)(8)(ii); 373-3.3

A. X The facility is maintained and operated to minimize the possibility of a fire or explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water - 373-3.3(b) — ___

B. The facility must be equipped with the following (Check missing equipment if needed in this facility's particular operations.) - 373-3.3(c)

(1) ___ An internal communication or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel; — X

(2) ___ A device, such as a telephone or a hand-held, two-way radio capable of summoning emergency assistance from local police departments, fire departments or state or local emergency response teams; — X

(3) ___ Portable fire extinguishers, fire control equipment. — X

(4) ___ Water at adequate volume and pressure to supply water hose streams, or foam-producing equipment, or automatic sprinklers, or water spray systems. — X

C. X Facility communications or alarm systems, fire protection equipment, and spill control equipment are tested and maintained as necessary to assure their proper operation in time of emergency - 373-3.3(d) — ___

D. ___ Personnel involved in hazardous waste operations have immediate access to an internal alarm or emergency communication device 373-3.3(e) — X

E. X The facility has the required aisle space - 373-3.3(f) (Inspections should be able to be made of each drum and space should be sufficient to fight a fire). — ___

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

F. The facility owner or operator has made an attempt in good faith to make the following arrangements with local authorities, as appropriate for the type of waste handled at the facility and the potential need for the services of these organizations - 373-3.3(g)(1):

(1) X Arrangements to familiarize police, fire departments and emergency response teams with the functions and layout of the facility; ___

(2) X Where more than one police and fire department might respond to an emergency, an agreement designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to primary emergency authority; ___

(3) X Agreements with government emergency response teams, emergency response contractors, and equipment suppliers; ___

(4) X Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illness which could result from fires, explosions or releases at the facility; and ___

(5) ___ Where state or local authorities decline to enter into such arrangements, the owner or operator has documented the refusal in the operating record. NA

7. Contingency Plan and Emergency Procedures - 372.2(a)(8)(ii); 373-3.4

A. X The facility has a contingency plan or some other emergency plan which incorporates hazardous waste management. ___

B. The following are included in the contingency plan - 373-3.4(c)

(1) X A description of actions facility personnel must take in response to fires, explosions or any unplanned sudden or non-sudden releases of hazardous waste or hazardous waste constituents to air, soil or surface water; ___

Indicate: X Violations	Indicate: X Satisfactory, NA Not Applicable

(2) X A description of arrangements agreed to by local police departments, fire departments, hospitals, contractors, and state and local emergency response teams to coordinate emergency services; ___

(3) X Names, addresses and phone numbers of all persons qualified to act as emergency coordinator; ___

(4) X A list of all emergency equipment at the facility, and decontamination equipment, where this equipment is required; ___

(5) X The location and the physical description of each item on the list, and a brief outline of its capabilities; ___

(6) X An evacuation plan for facility personnel, where there is a possibility that evacuation could be necessary. ___

C. X Copies of the contingency plan are maintained at the facility - 373-3.4(d)(1) ___

D. X Copies of the contingency plan have been submitted to all local police departments, fire departments, hospitals, and state and local emergency response teams that may be called upon to provide emergency services - 373-3.4(d)(2) ___

E. X The contingency plan has been amended - 373-3.4(e) ___

F. X There was at least one employee either on the facility premises or on call with the responsibility for coordinating all emergency response measures - 373-3.4(f) ___

G. ___ During a past emergency situation the emergency coordinator (or his designee when the emergency coordinator is not on call) immediately activated emergency procedures - 373-3.4(g) X
An emergency situation occurred on September 1983
The following was done:

(1) ___ Activated internal facility alarms or communication systems; X

(2) ___ Notified appropriate state or local agencies; X

(3) ___ Immediately identified the character, extent, exact source, amount and areal extent of any released materials; X

(4) ___ The emergency coordinator assessed possible hazardous to human health and the environment; X

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

DETAILS OF THE INCIDENT WERE NOT GIVEN

(5) ___ The emergency coordinator, after determining that the facility had a release, fire or explosion which could threaten human health or the environment outside the facility, reported his findings; ___

(6) ___ During the emergency, the emergency coordinator took all reasonable measures necessary to ensure that fire, explosions and releases do not occur, recur or spread to other hazardous waste; ___

(7) ___ The emergency coordinator monitored for leaks, pressure buildup, gas generation or ruptures in valves, pipes or other equipment, where appropriate during the facility's response to the emergency; ___

(8) ___ The emergency coordinator provided for treating, storing or disposing of recovered waste, contaminated soil or surface water, or any other material that resulted from a release, fire or explosion at the facility; ___

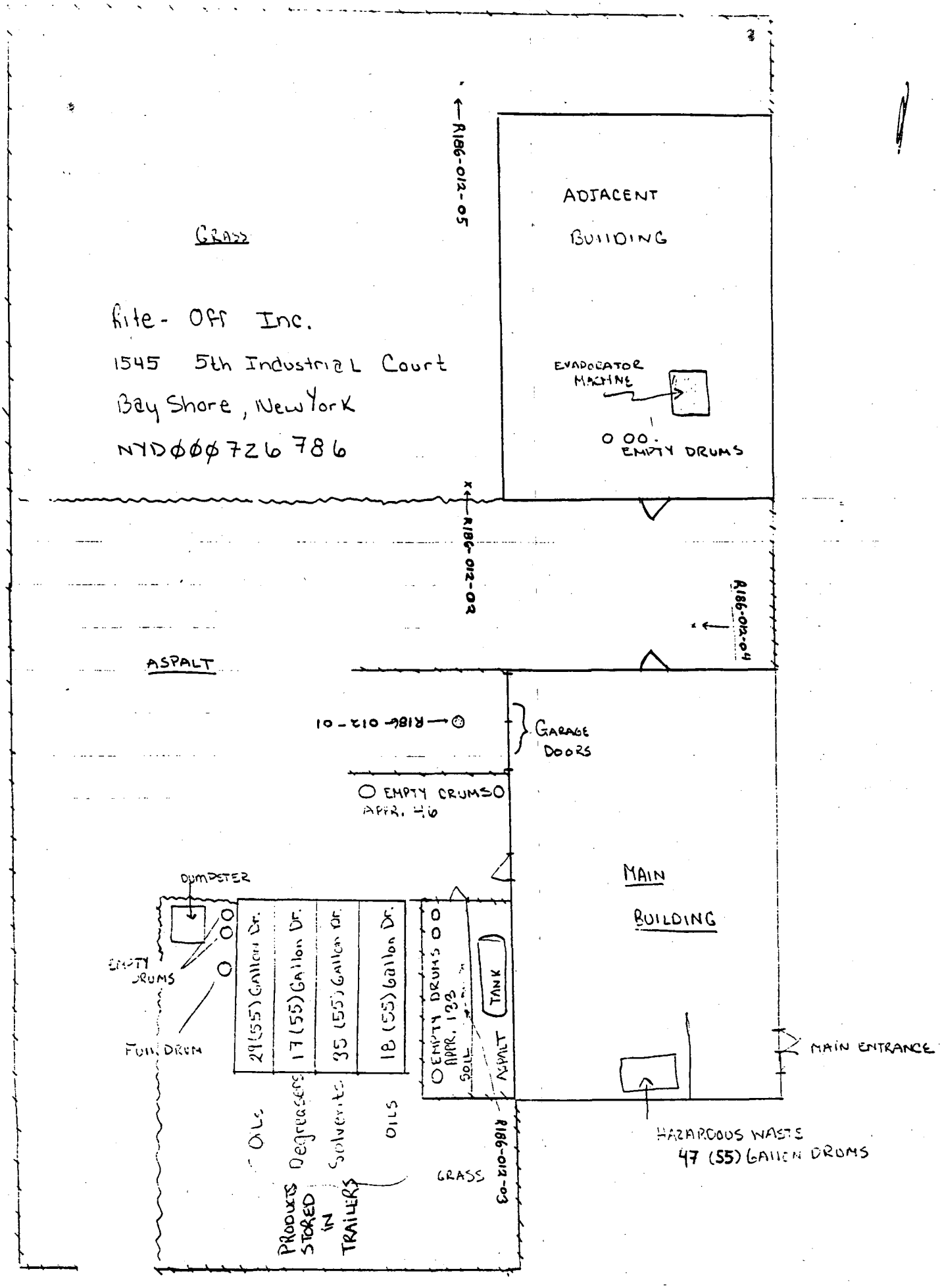
(9) ___ The emergency coordinator ensured that in the affected area no waste that may be incompatible with the released material was treated, stored or disposed of prior to cleanup procedures being completed; ___

(10) ___ The emergency coordinator ensured that all emergency equipment listed in the contingency plan was cleaned and fitted for its intended use before operations were resumed; ___

(11) ___ The owner or operator notified the Commissioner that the facility is in compliance with Part 373-3.4(g)(8) before operations were resumed in the affected areas of the facility; ___

(12) ___ The owner or operator noted in the operating record the time, date and details of the incident that required implementation of the contingency plan; ___

(13) ___ The owner or operator submitted a complete written report on the incident within 15 days after the incident occurred. ___


GRASS
R186-012-05
ADJACENT
BUILDING
Fite- Off Inc.
1545 5th Industrial Court
Bay Shore, New York
NYD000726786
EVAPORATOR MACHINE
0 00. EMPTY DRUMS
R186-012-02
R186-012-04
ASPALT
R186-012-01
GARAGE DOORS
O EMPTY DRUMSO
APPR. 4/6
MAIN
BUILDING
DUMPSTER
EMPTY DRUMS
FULL DRUM
29 (55) Gallon Dr.
17 (55) Gallon Dr.
35 (55) Gallon Dr.
18 (55) Gallon Dr.
O EMPTY DRUMS O
APPR. 1/23
TANK
ASPALT
MAIN ENTRANCE
HAZARDOUS WASTE
47 (55) GALLON DRUMS
OILS
Degreasers
Solvents
OILS
PRODUCTS STORED IN TRAILERS
GRASS
R186-012-03

New York State Department of Environmental Conservation
Division of Solid and Hazardous Waste
Bureau of Hazardous Waste Operations
50 Wolf Road, Albany, New York 12233

Handler Name Rite-Off Inc.
EPA ID No. NYD000726786

Appendix A

Treatment, Storage and Disposal Inspection Section
Also complete for generators over sole source aquifer areas.

Indicate:	Indicate:
X Violations	X Satisfactory NA Not Applicable

1. Owner Transfer

(A) ___ The facility has transferred ownership or operation of facility with prior written approval of the Department - 373-2.2(b)(1). NA

(B) ___ Before transferring ownership or operation of a facility during its operating life, or of a disposal facility during the post-closure care period, the owner or operator notified the new owner or operator in writing of the requirements - 373-3.2(c)(2). NA

2. Sampling

(A) X The owner or operator obtained a sample of the waste and had it analyzed - 373-3.2(d)(1)(i); or ___

(B) X The analysis included data developed under 6NYCRR Part 371, and existing published or documented data on the hazardous waste or on waste generated from similar processes - 373-3.2(d)(1)(ii) ___

(C) X The analysis has been repeated as necessary to ensure that it is accurate and up to date - 373-3.2(d)(1)(iii) ___

3. Waste Analysis Plan - (Spent Battery Reclaimers do not have to meet Waste Analysis)

(A) X The owner or operator has developed and followed a written waste analysis plan - 373-3.2(d)(2) ___

(B) X The owner or operator keeps this plan at the facility - 373-3.2(d)(2) ___

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

(C) The plan specifies at a minimum:

(1) X The parameters for which each hazardous waste will be analyzed and the rationale for the selection of these parameters - 373-3.2(d)(2)(i) ___

(2) X The test methods which will be used to test for these parameters - 373-3.2(d)(2)(ii) ___

(3) X The sampling method which will be used to obtain a representative sample of the waste to be analyzed - 373-3.2(d)(2)(iii) ___

(4) X The frequency with which the initial analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate and up to date - 373-3.2(d)(2)(iv) ___

(5) X For off-site facilities, the waste analyses that hazardous waste generators have agreed to supply - 373-3.2(d)(2)(v) ___

(7) (For off-site facilities) The waste analysis plan required must also specify the procedures which will be used to inspect and, if necessary, analyze each movement of hazardous waste received at the facility to ensure that it matches the identity of the waste designated on the accompanying manifest or shipping paper. The plan describes, at a minimum:

(a) ___ The procedure which will be used to determine the identity of each movement of waste managed at the facility - 373-3.2(d)(3)(i); and NA

(b) ___ The sampling method which will be used to obtain a representative sample of the waste to be identified, if the identification method includes sampling - 373-3.2(d)(3)(ii) NA

4. Security - 373-3.2(e)

(A) The owner or operator has adequately prevented the unknowing entry, or minimized the possibility for the unauthorized entry, of persons or livestock onto the active portion of his facility, because:

(1) Physical contact with the waste, structures or equipment, or with the active portion of the facility may injure unknowing or unauthorized persons or livestock which may enter the active portion of a facility - 373-3.2(e)(1)(i) (YES) OR NO

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

(2) Disturbance of the waste or equipment, by the unknowing or unauthorized entry of persons or livestock onto the active portion of a facility, may cause a violation of the requirements - 373-3.2(e)(1)(ii) (YES) OR NO

(B) If not exempt under A1 or A2 above, the facility must have the following:

(1) ___ A 24-hour surveillance system which continuously monitors and controls entry onto the active portion of the facility - 373-3.2(e)(2)(i) or ___

(2) ___ An artificial or natural barrier which completely surrounds the active portion of the facility - 373-3.2(e)(2)(ii)(a) and ___

___ A means to control entry, at all times, through the gates or other entrances to the active portion of the facility - 373-3.2(e)(2)(ii)(b) ___

(3) ___ A sign with the legend, "Danger - Unauthorized Personnel Keep Out" posted at each entrance to the active portion of a facility, and at other locations, in sufficient numbers to be seen from any approach to that active portion - 373-3.2(e)(3). ___

5. General Inspection Requirements - 373-3.2(f)

(A) X The owner or operator has inspected the facility for malfunctions and deterioration, operator errors, and discharges which may be causing - or may lead to release of hazardous waste constituents to the environment, or a threat to human health - 373-3.2(f)(1) ___

(B) (1) X The owner or operator has developed a written schedule for inspecting all monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment that are important to preventing, detecting or responding to environmental or human health hazards - 373-3.2(f)(2)(i) ___

(2) X He has kept the written inspection schedules at the facility - 373-3.2(f)(2)(ii) ___

(3) X The schedule identifies the types of problems which are to be looked for during the inspection - 373-3.2(f)(2)(iii) ___

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

(4) X The frequency of inspection is based on the rate of possible deterioration of the equipment and the probability of an environmental or human health incident, if the deterioration or malfunction or any operator error goes undetected between inspections - 373-3.2(f)(2)(iv) ____

(C) X The owner or operator has remediated deterioration or malfunction of equipment or structures which the inspection has revealed - 373-3.2(f)(3) ____

(D) X The owner or operator has recorded inspections in an inspection log or summary - 373-3.2(f)(4) ____

(E) X The inspection log or summary has been kept for at least three years from the date of inspection - 373-3.2(f)(4) ____

(F) X The records, at a minimum, include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions - 373-3.2(f)(4) ____

6. Ignitable or reactive wastes - Complete Part II, questions 3C 8 and 9 and 3D 10-12.

7. Personnel Training - Complete Part II 5.

8. Preparedness and Prevention - Complete Part II 6

9. Contingency Plan and Emergency Procedures - Complete Part II 7

10. Manifest system, recordkeeping and reporting -

The regulations in this paragraph apply to the owners and operators of all hazardous waste facilities.

A. Operating Record - 373-3.5(c)

(1) X There is an operating record. ____

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

(2) X The owner or operator has kept a written operating record at his facility. ___

(3) The following information is included in the operating record, as it becomes available, or maintained in the operating record until closure of the facility:

(a) X A description and the quantity of each hazardous waste received; ___

(b) X The method(s) and date(s) of its treatment, storage or disposal at the facility; ___

(c) X The location of each hazardous waste within the facility and the quantity at each location; ___

(d) ___ (For disposal facilities) The location and quantity of each hazardous waste must be recorded on a map or diagram of each cell or disposal area. NA

(e) ___ Information must include cross references to specific manifest document numbers, if the waste was accompanied by a manifest; NA

(f) X Records and results of waste analyses and trial tests performed; ___

(g) X Summary reports and details of all incidents that require implementing the contingency plan; ___

(h) X Records and results of inspections; ___

(i) X Monitoring, testing or analytical data where required ___

(j) X All closure cost estimates. ___

(k) ___ (For disposal facilities) All post-closure cost estimates. NA

B. Manifest

(1) Upon receipt of manifested shipment of hazardous waste the owner or operator:

(a) ___ determined significant discrepancies from those stated on the manifest - 372.4(b)(1)(i) NA

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

(b) ___ determined that all portions of the manifest have been completed - 372.4(b)(1)(ii), Explain _____ NA

_____

_____

(c) ___ distribute copies of the manifest according to the instructions with the manifest form - 372.4(b)(4) NA

(2) Upon receipt of an unmanifested shipment of hazardous waste the owner and operator:

(a) ___ determined the reason why the shipment was not accompanied by a manifest - 372.4(c)(1) NA

(b) ___ filed an unmanifested waste report after accepting the waste - 372.4(c)(3) NA

(3) ___ Facility accepted a particular hazardous waste without an authorized permit to do so - 372.4(f)(i) NA

(4) ___ Facility accepted a hazardous waste without having adequate treatment, storage or disposal capacity available. - 372.4(f)(ii) NA

C. Availability, retention and disposition of records

(1) ___ All records, including plans, required under this Part are furnished upon request, and made available at all reasonable times for inspection - 373-3.5(d)(1). ___

(2) X All reports and records required were retained for three years from the date of submittal - 372.4(d)(3)(i) ___

(3) ___ Upon closure of the facility, a copy of records of waste disposal locations and quantities under subparagraph 373-3.5(d) was submitted to the Commissioner and the county clerk's office of the county in which the facility is located - 373-3.5(d)(3). NA

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

D. Additional reports - 373-3.5(g)

(1) / A TSDF Annual Report has been submitted to the department 373-3.5(e). ___

(2) X Releases, fires and explosions as specified in paragraph 373-3.4(g)(10) - 373-3.5(g)(1) ___

(3) ___ Groundwater contamination and monitoring data as specified in subdivisions 373-3.6(d) and 373-3.6(e) - 373-3.5(g)(2) NA

(4) X Facility closure as specified in subdivision 373-3.7(f) - 373-3.5(g)(3) ___

11. Groundwater monitoring. - 373-3.6

(A) ___ A groundwater monitoring plan is required. NA

(B) ___ ATTACH COMPLETED GROUNDWATER MONITORING QUESTIONNAIRE - APPENDIX C NA

(C) ___ A groundwater monitoring program is required, and has been instituted. NA

12. Closure and post-closure. - 373-3.7

(A) X The owner or operator has a written closure plan - 373-3.7(c)(1) ___

(1) X The plan is kept at the facility - 373-3.7(c)(1) ___

(2) The plan identifies:

(a) X How and when the facility will be ___ partially closed if applicable, and ___ ultimately closed - 373-3.7(c)(1)(i) ___

(b) X The maximum extent of the operation which will be unclosed during the life of the facility - 373-3.7(c)(1)(i) ___

(c) X All the hazardous waste and hazardous waste residues that must be removed from tanks, discharge control equipment, and discharge confinement structures - 373-3.10(e). ___

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

(d) X An estimate of the maximum inventory of wastes in storage or in treatment at any given time during the life of the facility - 373-3.7(c)(1)(ii) ____

(e) X A description of the steps needed to decontaminate facility equipment during closure - 373-3.7(c)(1)(iii) ____

(f) A schedule for final closure including:

X An estimate of the expected year of closure - 373-3.7(c)(1)(iv) ____

X The total time required to close the facility - 373-3.7(c)(1)(iv) ____

X The time required for partial closure activities which will allow tracking of the progress of closure - 373-3.7(c)(1)(iv) ____

(B) X The owner or operator has amended his plan when changes in operating plans or facility design affect the closure plan - 373-3.7(c)(2) ____

(C) ___ The owner or operator has submitted his closure plan to the Commissioner at least 180 days before the date he expects to begin closure - 373-3.7(c)(3) NA

NOTE: The following (13D - 13J) are for owners and operators of disposal facilities only.

(D) Post-closure care consists of at least:

1. ___ Groundwater monitoring and reporting - 373-3.7(g)(1)(i) NA

2. ___ Maintenance of monitoring and waste containment systems - 373-3.7(g)(1)(ii) NA

3. ___ Maintenance of any or all of the security requirements if required by the Commissioner - 373-3.7(g)(2) NA

(E) Post-closure use of property on or in which hazardous waste remains after closure is disturbing the integrity of the ___ final cover, liner(s), or ___ other components of any containment system, or ___ the function of the facility's monitoring systems, and the owner or operator has demonstrated to the Commissioner, either in the post-closure plan or by petition, that the disturbance: NA

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

1. ___ Is necessary to the proposed use of the property, and will not increase the potential hazard to human health or the environment - 373-3.7(g)(3)(i) — NA

2. ___ Is necessary to reduce a threat to human health or the environment - 373-3.7(g)(3)(ii). — NA

(F) ___ The owner or operator of a disposal facility has a written post-closure plan - 373-3.7(h)(1) — NA

(G) ___ The owner or operator of a disposal facility keeps this plan at the facility - 373-3.7(h)(1) — NA

(H) This plan identifies:

1. ___ Groundwater monitoring activities and frequencies - 373-3.7(h)(1)(i) — NA

2. ___ Maintenance activities and frequencies - 373-3.7(h)(1)(ii) — NA

(I) ___ The owner or operator has amended his post-closure plan, and changes have occurred in operating plans or facility designs which affect his post-closure plan - 373-3.7(h)(2) — NA

13. Financial requirements - 373-3.8 Generators only in sole source aquifer areas do not have to meet financial requirements.

(A) X The owner or operator has a written estimate of the cost of closing the facility - 373-3.8(c)(1) — ___

(B) X The estimate appears to equal the cost of closure at the point in the facility's operating life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan. (PLEASE EXPLAIN) — ___

(C) X Within 30 days after each anniversary of the date on which the first closure cost estimate was prepared, the owner or operator has adjusted the latest closure cost estimate - 373-3.8(c)(2) — ___

(D) X The owner or operator has revised the new closure cost estimate whenever a change in the closure plan affects the cost of closure - 373-3.8(c)(3) — ___

(E) X The owner or operator has kept this estimate, and all subsequent estimates required at the facility - 373-3.8(c)(4) — ___

Indicate:

*X Violations

Indicate:

X Satisfactory
NA Not Applicable

(QUESTIONS (F) THRU (I) ARE FOR OWNERS AND OPERATORS OF DISPOSAL FACILITIES)

(F)___ The owner or operator of a disposal facility has a written estimate of the annual costs of post-closure monitoring and maintenance of the facility - 373-3.8(e)(1) NA

(G)___ Within 30 days after each anniversary of the date on which the first post-closure cost estimate was prepared, during the operating life of the facility, the owner or operator has adjusted the latest post-closure cost estimate - 373-3.8(e)(2) NA

(H)___ The owner or operator has prepared an annual post-closure cost estimate whenever a change in the post-closure plan affects the cost of post-closure care - 373-3.8(e)(3) NA

(I)___ The owner or operator has kept this estimate, and all subsequent estimates required in this Section, at the facility - 373-3.8(e)(4) NA

15. Use and management of containers. - 373-3.9

(A) Complete Part II-3 C

(B)___ Incompatible wastes, or incompatible wastes and materials, are not placed in the same container. - 373-3.9(g)(1) X

(C)___ Hazardous waste is not placed in an unwashed container that previously held an incompatible waste or material. - 373-3.9(g)(2) X

(D)___ A storage container holding a hazardous waste that is incompatible with any waste or other materials stored nearby in other containers, piles, open tanks or surface impoundments, is separated from the other materials or protected from them by means of a dike, berm, wall or other device. - 373-3.9(g)(3) *SEE BELOW

* Unknown - WASTES NOT completely identified

16. Tanks. - 373-3.10

(A) Complete Part II-3D

(B) The tank is to be used to chemically treat or store a hazardous waste which is substantially different from waste previously treated or stored in that tank, and the owner or operator has, before treating or storing the different waste or using the different process:

(1)___ Conducted waste analyses and trial treatment or storage tests (e.g., bench scale or pilot plant scale tests - 373-3.10(c)(1)(i)(a) or NA

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

(2)___ obtained written, documented information on similar storage or treatment of similar waste under similar operating conditions - 373-3.10(e)(1)(i)(b) NA

(C) Chemically treat hazardous waste with a substantially different process than any previously used in that than, and the owner or operator not, before treating or storing the different waste or using the different process:

(1)___ Conducted waste analyses and trial treatment or storage tests (e.g., bench scale or pilot plant scale tests) - 373-3.10(c)(1)(ii)(a) or NA

(2)___ Obtained written, documented information on similar storage or treatment of similar waste under similar operating conditions. - 373-3.10(c)(1)(ii)(b) NA

REFERENCE NO. 2

NUS CORPORATION

5350 CAMPBELLS RUN ROAD • PITTSBURGH, PA 15205
412-788-1080

LABORATORY SERVICES DIVISION

January 16, 1987

Mr. Chris Magee
NEW YORK STATE DEPARTMENT
OF ENVIRONMENTAL CONSERVATION
Building #40
SUNY
Stoney Brook, NY 11794

Dear Mr. Magee:

Enclosed please find the organic results of Case: NYSDEC-Magee.

Should you have any questions or comments, please feel free to contact me.

Very truly yours,

David A. Danner
Supervisor, Organic Laboratory

DAD/mw

Enclosures

CASE NARRATIVE: NYSDEC-MCGEE

NYSDEC NO.	NUS NO.	MATRIX	LEVEL	ANALYSIS
R-186-012-01	16121486	Soil	Med/Low	VOA/PEST
R-186-012-02	16121487	Soil	Medium	VOA
R-186-012-03	16121488	Soil	Low	VOA
R-186-012-04 ②	16121489	Soil	Medium	VOA
R-186-012-05 ①	16121490	Soil	Low	VOA/PEST

① MS and MSD done for Low Level Soil VOA/PEST
② MS and MSD done for Medium Level Soil VOA

SOLID WASTE MANAGEMENT
DEC REGION

David P. Damon

CASE NARRATIVE: NYSDEC-MCGEE

1. The following Medium Level Soil VOA Method Blanks contained 2-Butanone greater than the detection limit:

   NYS1230M1
   NYS1230M2
   NYS1231M

   This 2-Butanone is a contaminant in the methanol used for the medium level soil method extraction.

2. The percent difference for the calibration factor for endrin was greater than the acceptable limit for the capillary analysis at 17:25 on 1/7/87. Since endrin was not identified in any sample, no further action was taken.

3. The result reported for DDE in sample #16121486 (R-186-012-01) is less than the detection limit when taking into consideration the percent moisture and dilution. However, the result would be reportable if a less dilute aliquot was used. Because of interfering peaks in the front end of the chromatogram, a fairly large dilution (x 20) had to be taken. (See New York State Department of Environmental Conservation Superfund and Contract Laboratory Protocol, January 1985, Section II, page B-32, Data Reporting Qualifiers, J.)

4. The following samples were analyzed for VOA's beyond maximum holding times:

SAMPLE NO.	EXCEEDING HOLDING TIME(hrs)
R-186-012-01	2
R-186-012-02	27
R-186-012-04	16
R-186-012-04 MS	17
R-186-012-05 MS	11
R-186-012-04 MSD	17
R-186-012-05 MSD	11

David C. Dawson

SOIL SURROGATE PERCENT RECOVERY SUMMARY

Case No. NYSDEC-MCGEE Contract Laboratory NUS Contract No. _____

Low X Medium _____

	VOLATILE			SEMI-VOLATILE								PESTICIDE
SMO TRAFFIC NO.	TOLUENE-D8 (81-117)	BFB (74-121)	1,2 DICHLOROETHANE-D4 (70-121)	NITROBENZENE-D5 (23-120)	2-FLUOROBIPHENYL (30-115)	TERPHENYL-D14 (18-137)			PHENOL-D5 (24-113)	2-FLUOROPHENOL (20-121)	2,4,6 TRIBROMOPHENOL (19-122)	DIBUTYLCHLORENDATE ** (20-150)
R-186-012-01	NR	NR	NR	NR	NR	NR			NR	NR	NR	DL
R-186-012-03	105	82	88									NR
R-186-012-05	99	86	88									75
R-186-012-05MS	104	103	96									78
R-186-012-05MSD	104	102	100									74
NYS1229L	102	99	84									64
NYS1230L	99	96	96									69

* VALUES ARE OUTSIDE OF CONTRACT REQUIRED QC LIMITS

** ADVISORY LIMITS ONLY

Volatiles: 0 out of 18 ; outside of QC limits

Semi-Volatiles: - out of -- ; outside of QC limits

Pesticides: 0 out of 5 ; outside of QC limits

7/86

Comments: NR = not required. DL = diluted out.

SOIL SURROGATE PERCENT RECOVERY SUMMARY

Case No. NYSDEC-MCGEE Contract Laboratory NUS Contract No. _____

Low _____ Medium X

	VOLATILE			SEMI-VOLATILE								PESTICIDE
SMO TRAFFIC NO.	TOLUENE-D8 (81-117)	BFB (74-121)	1,2 DICHLOROETHANE-D4 (70-121)	NITROBENZENE-D5 (23-120)	2-FLUOROBIPHENYL (30-115)	TERPHENYL-D14 (18-137)			PHENOL-D5 (24-113)	2-FLUOROPHENOL (25-121)	2,4,6 TRIBROMOPHENOL (19-122)	DIBUTYLCHLORENDATE (20-150)
R-186-012-01	DL	DL	DL	NR	NR	NR			NR	NR	NR	NR
R-186-012-02	92	102	89									
R-186-012-04	84	84	81									
R-186-012-04MS	91	78	85									
R-186-012-04MSD	92	79	87									
NYS1230M1	102	102	107									
NYS1230M2	102	108	99									
NYS1231M	100	107	95									

* VALUES ARE OUTSIDE OF CONTRACT REQUIRED QC LIMITS

** ADVISORY LIMITS ONLY

Volatiles: 0 out of 21 ; outside of QC limits

Semi-Volatiles: - out of -- ; outside of QC limits

Pesticides: - out of -- ; outside of QC limits

7/86

Comments: DL = diluted out. NR = not required.

METHOD BLANK SUMMARY

No. NYSDEC-MCGEE Region _____ Contractor NUS Contract No. _____

FILE ID	DATE OF ANALYSIS	FRACTION	MATRIX	CONC. LEVEL	INST. ID	CAS NUMBER	COMPOUND (NBS, TIC OR UNKNOWN)	CONC.	UNITS	CRDL
1229L	1/05/87	PEST	soil	low	3700 #2	-------	None	----	----	----
1230L	1/05/87	PEST	soil	low	3700 #2	-------	None	----	----	----
1229L	1/07/87	PEST	soil	low	3700 #6	-------	None	----	----	----

Comments:

METHOD BLANK SUMMARY

Case No. NYSDEC-MCGEE Region _____ Contractor NUS Contract No. _____

FILE ID	DATE OF ANALYSIS	FRACTION	MATRIX	CONC. LEVEL	INST. ID	CAS NUMBER	COMPOUND (NBS, TIC OR UNKNOWN)	CONC.	UNITS	CRDL
NYS1229L	12/29/86	VOA	soil	low	Finn3200	67-64-1	Acetone	7	ug/kg	10
						78-93-3	2-Butanone	4		10
						1066-40-6	Silanol, Trimethyl	10		NR
NYS1230L	12/30/86					75-09-2	Methylene Chloride	6		5
						67-64-1	Acetone	12		10
NYS1230M1	12/30/86			med		75-09-2	Methylene Chloride	540		500
						67-64-1	Acetone	1700		1000
						78-93-3	2-Butanone	2600		1000
						108-99-3	Toluene	640		500
						115-22-0	3-Hydroxy-3-Methyl-2-Butanone	800		NR
						107-87-9	2-Pentanone	500		NR
NYS1230M2	12/30/86				Finn4000	75-09-2	Methylene Chloride	620		500
						67-64-1	Acetone	3100		1000
						78-93-3	2-Butanone	3000		1000
						108-88-3	Toluene	720		500
						75-65-0	2-Methyl, 2-Propanol	800		NR
NYS1231M	12/31/86					75-09-2	Methylene Chloride	550		500
						67-64-1	Acetone	2500		1000
						78-93-3	2-Butanone	3400		1000
						-------	Unknown	800		NR

Comments:

SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Case No. NYSDEC-MCGEE **Contractor** NUS **Contract No.** _____

Low Level _____ **Medium Level** X

FRACTION	COMPOUND	CONC. SPIKE ADDED (ug)	SAMPLE RESULT	CONC. MS	% REC	CONC. MSD	% REC	RPD	QC LIMITS * RPD	QC LIMITS * RECOVERY
VOA SMO SAMPLE NO. R-186-012-04	1,1-Dicholorethene	0.25	0	0.21	84	0.22	88	5	22	50-172
	Trichloroethene	0.25	0	0.22	88	0.22	88	0	24	62-137
	Chlorobenzene	0.25	0	0.23	92	0.24	96	4	21	60-133
	Toluene	0.25	0.03	0.22	76	0.22	76	0	21	59-139
	Benzene	0.25	0	0.21	84	0.21	84	0	21	66-142
B/N SMO SAMPLE NO. _____ _____	1,2,4-Trichlorobenzene	NR	NR	NR	NR	NR	NR	NR	23	38-107
	Acenaphthene								18	31-137
	2,4 Dinitrotoluene								47	28-89
	Pyrene								36	35-142
	N-Nitrosodi-n-Propylamine								38	41-126
	1,4-Dichlorobenzene								27	28-104
ACID SMO SAMPLE NO. _____ _____	Pentachlorophenol								47	17-109
	Phenol								35	26-90
	2-Chlorophenol								50	25-102
	4-Chloro-3-Methylphenol								33	26-103
	4-Nitrophenol								50	11-114
PEST SMO SAMPLE NO. _____ _____	Lindane								50	46-127
	Heptachlor								31	35-130
	Aldrin								43	34-132
	Dieldrin								38	31-134
	Endrin								45	42-139
	4,4'-DDT	↓	↓	↓	↓	↓	↓	↓	50	23-134

*ASTERISKED VALUES ARE OUTSIDE QC LIMITS.

RPD: VOAs 0 out of 5 ; outside QC limits
B/N - out of - ; outside QC limits
ACID - out of - ; outside QC limits
PEST - out of - ; outside QC limits

RECOVERY: VOAs 0 out of 10 ; outside QC limits
B/N - out of - ; outside QC limits
ACID - out of - ; outside QC limits
PEST - out of - ; outside QC limits

Comments: _____

SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Case No. NYSDEC-MCGEE **Contractor** NUS **Contract No.** _____

Low Level X **Medium Level** _____

FRACTION	COMPOUND	CONC. SPIKE ADDED (ug)	SAMPLE RESULT	CONC. MS	% REC	CONC. MSD	% REC	RPD	QC LIMITS RPD	QC LIMITS RECOVERY
VOA SMO SAMPLE NO. R-186-012-05	1,1-Dichloroethene	0.25	0	0.30	120	0.31	124	3	22	59-172
	Trichloroethene	0.25	0	0.23	92	0.22	88	4	24	62-137
	Chlorobenzene	0.25	0	0.26	104	0.27	108	4	21	60-133
	Toluene	0.25	0	0.26	104	0.27	108	4	21	59-139
	Benzene	0.25	0	0.24	96	0.23	92	4	21	66-142
B/N SMO SAMPLE NO. ------	1,2,4-Trichlorobenzene	NR	NR	NR	NR	NR	NR	NR	23	38-107
	Acenaphthene								19	31-137
	2,4 Dinitrotoluene								47	28-89
	Pyrene								36	35-142
	N-Nitrosodi-n-Propylamine								38	41-126
	1,4-Dichlorobenzene								27	28-104
ACID SMO SAMPLE NO. ------	Pentachlorophenol								47	17-109
	Phenol								35	26-90
	2-Chlorophenol								50	25-102
	4-Chloro-3-Methylphenol								33	26-103
	4-Nitrophenol	↓	↓	↓	↓	↓	↓	↓	50	11-114
PEST SMO SAMPLE NO. R-186-012-05	Lindane	0.2	0	0.15	75	0.15	75	0	50	46-127
	Heptachlor	0.2	0	0.17	85	0.17	85	0	31	35-130
	Aldrin	0.2	0	0.17	85	0.17	85	0	43	34-132
	Dieldrin	0.5	0.03*	0.41	76	0.41	76	0	38	31-134
	Endrin	0.5	0	0.48	96	0.49	98	2.1	45	42-139
	4,4'-DDT	0.5	0.13*	0.69	112	0.72	118	4.3	50	23-134

*ASTERISKED VALUES ARE OUTSIDE QC LIMITS.

RPD: VOAs 0 out of 5 ; outside QC limits
B/N - out of - ; outside QC limits
ACID - out of - ; outside QC limits
PEST 0 out of 6 ; outside QC limits

RECOVERY: VOAs 0 out of 10 ; outside QC limits
B/N - out of - ; outside QC limits
ACID - out of - ; outside QC limits
PEST 0 out of 12 ; outside QC limits

Comments: *Sample contains peaks that are not Dieldrin or DDT, but are treated as such in order to calculate the sample result above. Since these peaks contribute to the Dieldrin and DDT peak areas of the MS and MSD.

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 16121486
Sample Matrix: Soil
Data Release Authorized By:

Case No: NYSOEC-MCCEE
QC Report No:
Contract No:
Date Sample Received: 12/20/86

Volatile Compounds
Concentration: Medium
Date Extracted/Prepared: 12/30/86
Date Analyzed: 12/30/86
Conc/Dil Factor: 800 pH NR
Percent Moisture: 35
Percent Moisture (Not Decanted): NR

CAS Number		ug/kg	CAS Number		ug/kg
74-87-3	Chloromethane	1100000 u	78-87-5	1,2-Dichloropropane	550000 u
74-83-9	Bromomethane	1100000 u	10061-02-6	Trans-1,3-Dichloropropene	550000 u
75-01-4	Vinyl Chloride	1100000 u	79-01-6	Trichloroethene	550000 u
75-00-3	Chloroethane	1100000 u	124-48-1	Dibromochloromethane	550000 u
75-09-2	Methylene Chloride	500000 B	79-00-5	1,1,2-Trichloroetbane	550000 u
67-64-1	Acetone	2300000 B	71-43-2	Benzene	550000 u
75-15-0	Carbon Disulfide	550000 u	10061-01-5	cis-1,3-Dichloropropene	550000 u
75-35-4	1,1-Dichloroethene	550000 u	110-75-8	2-Chloroethylvinylether	1100000 u
75-34-3	1,1-Dichloroethane	550000 u	75-25-2	Bromoform	550000 u
156-60-5	Trans-1,2-Dichloroethene	550000 u	108-10-1	4-Methyl-2-Pentanone	1100000 u
67-66-3	Chloroform	550000 u	591-78-6	2-Hexanone	1100000 u
107-06-3	1,2-Dichloroethane	550000 u	127-18-4	Tetrachloroethene	12000000
78-93-3	2-Butanone	2600000 B	79-34-5	1,1,2,2-Tetrachloroethane	550000 u
71-55-6	1,1,1-Trichloroethane	550000 u	108-88-3	Toluene	750000 B
56-23-5	Carbon Tetrachloride	550000 u	108-90-7	Chlorobenzene	550000 u
108-05-4	Vinyl Acetate	1100000 u	100-41-4	Ethylbenzene	550000 u
75-27-4	Bromodichloromethane	550000 u	100-42-5	Styrene	550000 u
				Total Xylenes	550000 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.

lue If the result is a value greater than or equal to the detection limit, report the valoe.

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 10ug/l and a concentration of 3ug/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)=10ng/ul in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in th blank as well as a sample. It indicates possible. probable blank contamination and warns the data user to take the 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 descriptio attached to the data summary report.

S Spiked Compound

NR No value required.

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: Medium
Date Extracted/Prepared: 12/29/86
Date Analyzed: 01/05/87
Conc/Dil Factor: 20
Percent Moisture (Decanted): 25

GPC Cleanup: NO
Separatory Funnel Extraction: NO
Continuous Liquid-Liquid Extraction: NO

CAS Number		ug/Kg	
319-84-6	Alpha-BHC	3240	U
319-85-7	Beta-BHC	3240	U
319-86-8	Delta-BHC	3240	U
58-89-9	Gamma-BHC(Lindane)	3240	U
76-44-8	Heptachlor	3240	U
309-00-2	Aldrin	3240	U
1024-57-3	Heptachlor Epoxide	3240	U
959-98-8	Endosulfan I	3240	U
60-57-1	Dieldrin	6480	U
72-55-9	4,4'-DDE	53*	
72-20-0	Endrin	6400	U
33213-65-9	Endosulfan II	6480	U
72-54-8	4,4'-DDD	6480	U
1031-07-8	Endosulfan Sulfate	6480	U
50-29-3	4,4'-DDT	6480	U
72-43-5	Methoxychlor	32400	U
53494-70-5	Endrin Ketone	6480	U
57-74-9	Chlordane	32400	U
8001-35-2	Toxaphene	64800	U
12674-11-2	Aroclor-1016	32400	U
11104-28-2	Aroclor-1221	32400	U
11141-16-5	Aroclor-1232	32400	U
53469-21-9	Aroclor-1242	32400	U
12672-29-6	Aroclor-1248	32400	U
11097-69-1	Aroclor-1254	64800	U
11096-82-5	Aroclor-1260	64800	U

Vi = Volume of extract injected (ul)
Vs = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ul)

Vs or Ws 22.53 Vt 20000 Vi 4

*SEE CASE NARRATIVE #2.

Laboratory Name MUS CORPORATION
Case No NYSDEC-MCCEE

Sample Number
R-186-012-01

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	Scan Number	Estimated concentration ug/kg
1	76-13-1	ETHANE,1,1,2-TRICHLORO-1,2,2-TRIFLUORO-	VOA	233	2000000 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					

Sample Number

R-186-012-02

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Case No: NYSDEC-MCGEE
Lab Sample ID No: 16121487
QC Report No:
Sample Matrix: Soil
Contract No:
Data Release Authorized By:
Date Sample Received: 12/20/86

Volatile Compounds

Concentration: Medium
Date Extracted/Prepared: 12/31/86
Date Analyzed: 12/31/86
Conc/Dil Factor: 1 pH NR
Percent Moisture: 15
Percent Moisture (Not Decanted): NR

CAS Number		ug/kg	CAS Number		ug/kg
74-87-3	Chloromethane	1200 u	78-87-5	1,2-Dichloropropane	600 u
74-83-9	Bromomethane	1200 u	10061-02-6	Trans-1,3-Dichloropropene	600 u
75-01-4	Vinyl Chloride	1200 u	79-01-6	Trichloroethene	600 u
75-00-3	Chloroethane	1200 u	124-48-1	Dibromochloromethane	600 u
75-09-2	Methylene Chloride	850 B	79-00-5	1,1,2-Trichloroethane	600 u
67-64-1	Acetone	3400 B	71-43-2	Benzene	600 u
75-15-0	Carbon Disulfide	600 u	10061-01-5	cis-1,3-Dichloropropene	600 u
75-35-4	1,1-Dichloroethene	600 u	110-75-8	2-Chloroethylvinylether	1200 u
75-34-3	1,1-Dichloroethane	600 u	75-25-2	Bromoform	600 u
156-60-5	Trans-1,2-Dichloroethene	600 u	108-10-1	4-Methyl-2-Pentanone	1200 u
67-66-3	Chloroform	600 u	591-78-6	2-Hexanone	1200 u
107-06-2	1,2-Dichloroethane	600 u	127-18-4	Tetrachloroethene	22000
78-93-3	2-Butanone	4000 B	79-34-5	1,1,2,2-Tetrachloroethane	600 u
71-55-6	1,1,1-Trichloroethane	14000	108-88-3	Toluene	600 u
56-23-5	Carbon Tetrachloride	600 u	108-90-7	Chlorobenzene	600 u
108-05-4	Vinyl Acetate	1200 u	100-41-4	Ethylbenzene	600 u
75-27-4	Bromodichloromethane	600 u	100-42-5	Styrene	600 u
				Total Xylenes	460 J

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.

alue 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 10ug/l and a concentration of 3ug/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)=10ng/ml in the final extract should be confirmed by CC/MS.

B This flag is osed 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 the 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.

S Spiked Compound

Laboratory Name: NUS CORPORATION
Case No: NYSDEC-MCGEE

Sample Number
SR-186-012-02

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

	CAS Number	Compoond Name	Fraction	Scan Number	Estimated concentration ug/kg
1		UNKNOWN	VOA	336	1000 B,J
2	95-49-8	BENZENE, 1-CHLORO-2-METHYL-	VOA	619	2000 J
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					

Sample Number

R-186-012-03

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Case No: NYSDEC-MCGEE
Lab Sample ID No: 16121488
QC Report No:
Sample Matrix: Soil
Contract No:
Data Release Authorized By:
Date Sample Received: 12/20/86

Volatile Compounds
Concentration: Low
Date Extracted/Prepared: 12/29/86
Date Analyzed: 12/29/86
Conc/Dil Factor: 5 pH NR
Percent Moisture: 11
Percent Moisture (Not Decanted): NR

CAS Number		ug/kg	CAS Number		ug/kg
74-87-3	Chloromethane	56 U	78-87-5	1,2-Dichloropropane	28 U
74-83-9	Bromomethane	56 U	10061-02-6	Trans-1,3-Dichloropropene	28 U
75-01-4	Vinyl Chloride	56 U	79-01-6	Trichloroethene	28 U
75-00-3	Chloroethane	56 U	124-48-1	Dibromochloromethane	28 U
75-09-2	Methylene Chloride	51	79-00-5	1,1,2-Trichloroethane	28 U
67-64-1	Acetone	120 B	71-43-2	Benzene	28 U
75-15-0	Carbon Disulfide	28 U	10061-01-5	cis-1,3-Dichloropropene	28 U
75-35-4	1,1-Dichloroethene	28 U	110-75-8	2-Chloroethylvinylether	56 U
75-34-3	1,1-Dichloroethane	28 U	75-25-2	Bromoform	28 U
156-60-5	Trans-1,2-Dichloroethene	28 U	108-10-1	4-Methyl-2-Pentanone	56 U
67-66-3	Chloroform	28 U	591-78-6	2-Hexanone	56 U
107-06-2	1,2-Dichloroethane	28 U	127-18-4	Tetrachloroethene	750
78-93-3	2-Butanone	37 J,B	79-34-5	1,1,2,2-Tetrachloroethane	28 U
71-55-6	1,1,1-Trichloroethane	670	108-88-3	Toluene	34
56-23-5	Carbon Tetrachloride	28 U	108-90-7	Chlorobenzene	28 U
108-05-4	Vinyl Acetate	56 U	100-41-4	Ethylbenzene	28 U
75-27-4	Bromodichloromethane	28 U	100-42-5	Styrene	28 U
				Total Xylenes	28 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.

No entry — 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 10ug/l and a concentration of 3ug/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>=10ng/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 the 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.

S — Spiked Compound

Laboratory Name: NUS CORPORATION
Case No: NYSDEC-MCCEE

Sample Number
R-186-012-03

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	Scan Number	Estimated concentration ug/kg
1		UNKNOWN	VOA	224	50 J
2	76-13-1	ETHANE,1,1,2-TRICHLORO-1,2,2-TRIFLUORO-	VOA	237	200 J
3	1066-40-6	SILANOL,TRIMETHYL-	VOA	285	90 J,B
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					

Sample Number

R-186-012-04

Organics Analysis Data Sheet

(Page 1)

Laboratory Name: NUS CORPORATION
Case No: NYSDEC-MCGEE
Lab Sample ID No: 16121489
QC Report No:
Sample Matrix: Soil
Contract No:
Data Release Authorized By:
Date Sample Received: 12/10/86

Volatile Compounds

Concentration: Medium
Date Extracted/Prepared: 12/31/86
Date Analyzed: 12/31/86
Conc/Dil Factor: 1 pH NR
Percent Moisture: 27
Percent Moisture (Not Decanted): NR

CAS Number		ug/kg	CAS Number		ug/kg
74-87-3	Chloromethane	1400 u	78-87-5	1,2-Dichloropropane	700 u
74-83-9	Bromomethane	1400 u	10061-02-6	Trans-1,3-Dichloropropene	700 u
75-01-4	Vinyl Chloride	1400 u	79-01-6	Trichloroethene	700 u
75-00-3	Chloroethane	1400 u	124-48-1	Dibromochloromethane	700 u
75-09-2	Methylene Chloride	800 B	79-00-5	1,1,2-Trichloroetbane	700 u
67-64-1	Acetone	3900 B	71-43-2	Benzene	700 u
75-15-0	Carbon Disulfide	700 u	10061-01-5	cis-1,3-Dichloropropene	700 u
75-35-4	1,1-Dichloroethene	700 u	110-75-8	2-Chloroethylvinylether	1400 u
75-34-3	1,1-Dichloroethane	700 u	75-25-2	Bromoform	700 u
156-60-5	Trans-1,2-Dichloroethene	700 u	108-10-1	4-Methyl-2-Pentanone	1400 u
67-66-3	Chloroform	700 u	591-78-6	2-Hexanone	1400 u
107-06-2	1,2-Dichloroethane	700 u	127-18-4	Tetrachloroethene	700 u
78-93-3	2-Butanone	3600 B	79-34-5	1,1,2,2-Tetrachloroethane	700 u
71-55-6	1,1,1-Trichloroethane	3400	108-88-3	Toluene	930 B
56-23-5	Carbon Tetrachloride	700 u	108-90-7	Chlorobenzene	700 u
108-05-4	Vinyl Acetate	1400 u	100-41-4	Ethylbenzene	700 u
75-27-4	Bromodichloromethane	700 u	100-42-5	Styrene	700 u
				Total Xylenes	700 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.

ue 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 bot greater than zero.(e.g.10J). If limit of detection is 10ug/l and a concentration of 3ug/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)=10ng/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 the 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.

S Spiked Compound

Laboratory Name NUS CORPORATION
Case No. NYSDEC-MCCEE

Sample Number
R-186-012-04

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	Scan Number	Estimated concentration ug/kg
1	75-65-0	2-PROPANOL, 2-METHYL-	VOA	219	1000 B,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					

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 16121489 MSD
Sample Matrix: Soil
Data Release Authorized By:

Case No: NYSDEC-MCGEE
QC Report No:
Contract No:
Date Sample Received: 12/23/86

Volatile Compounds
Concentration: Medium
Date Extracted/Prepared: 12/31/86
Date Analyzed: 12/31/86
Conc/Dil Factor: 1 pH NR
Percent Moisture: 27
Percent Moisture (Not Decanted): NR

CAS Number		ug/kg	CAS Number		ug/kg
74-87-3	Chloromethane	1400 u	78-87-5	1,2-Dichloropropane	700 u
74-83-9	Bromomethane	1400 u	10061-02-6	Trans-1,3-Dichloropropene	700 u
75-01-4	Vinyl Chloride	1400 u	79-01-6	Trichloroethene S	
75-00-3	Chloroethane	1400 u	124-48-1	Dibromochloromethane	700 u
75-09-2	Methylene Chloride	1100 B	79-00-5	1,1,2-Trichloroethane	700 u
67-64-1	Acetone	4600	71-43-2	Benzene S	
75-15-0	Carbon Disulfide	700 u	10061-01-5	cis-1,3-Dichloropropene	700 u
75-35-4	1,1-Dichloroethene	S	110-75-8	2-Chloroethylvinylether	1400 u
75-34-3	1,1-Dichloroethane	700 u	75-25-2	Bromoform	700 u
156-60-5	Trans-1,2-Dichloroethene	700 u	108-10-1	4-Methyl-2-Pentanone	1400 u
67-66-3	Chloroform	700 u	591-78-6	2-Hexanone	1400 u
107-06-2	1,2-Dichloroethane	700 u	127-18-4	Tetrachloroethene	700 u
78-93-3	2-Butanone	5100 B	79-34-5	1,1,2,2-Tetrachloroethane	700 u
71-55-6	1,1,1-Trichloroethane	1700	108-88-3	Toluene S	
56-23-5	Carbon Tetrachloride	700 u	108-90-7	Chlorobensene S	
108-05-4	Vinyl Acetate	1400 u	100-41-4	Ethylbensene	700 u
75-27-4	Bromodichloromethane	700 u	100-42-5	Styrene	700 u
				Total Xylenes	700 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.15J If limit of detection is 10ug/l and a concentration of 5ug/l is calculated, report as 5J

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in blank as well as a sample. It indicates possibl probable blank contamination and warns the data user to take the appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If us they must be fully described and such descripti attached to the data summary report.

S Spiked Compound

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	Scan Number	Estimated concentration ug/kg
1		NO VOA COMPOUND FOUND			
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					

Sample Number

R-186-012-09

BACKROUND CORE

Organics Analysis Data Sheet

(Page 1)

Laboratory Name: NUS CORPORATION
Case No: NYSOEC-MCCEE
Lab Sample ID No: 16121490
QC Report No:
Sample Matrix: Soil
Contract No:
Data Release Authorized By:
Date Sample Received: 12/20/86

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 12/29/86
Date Analysed: 12/29/86
Conc/Dil Factor: 1 pH NR
Percent Moisture: 10
Percent Moisture (Not Decanted): NR

CAS Number		ug/kg	CAS Number		ug/kg
74-87-3	Chloromethane	11 u	78-87-5	1,2-Dichloropropane	5 u
74-83-9	Bromomethane	11 u	10061-02-6	Trans-1,3-Dichloropropene	5 u
75-01-4	Vinyl Chloride	11 u	79-01-6	Trichloroethene	5 u
75-00-3	Chloroethane	11 u	124-48-1	Dibromochloromethane	5 u
75-09-2	Methylene Chloride	22	79-00-5	1,1,2-Trichloroethane	5 u
67-64-1	Acetone	79 B	71-43-2	Benzene	5 u
75-15-0	Carbon Disulfide	5 u	10061-01-5	cis-1,3-Dichloropropene	5 u
75-35-4	1,1-Dichloroethene	5 u	110-75-8	2-Chloroethylvinylether	11 u
75-34-3	1,1-Dichloroethane	5 u	75-25-2	Bromoform	5 u
156-60-5	Trans-1,2-Dichloroethano	5 u	108-10-1	4-Methyl-2-Pentanone	11 u
67-66-3	Chloroform	5 u	591-78-6	2-Hexanone	11 u
107-06-2	1,2-Dichloroethane	5 u	127-18-4	Tetrachloroethene	5 u
78-93-3	2-Butanone	4 J,B	79-34-5	1,1,2,2-Tetrachloroethane	5 u
71-55-6	1,1,1-Trichloroethane	5 u	108-88-3	Toluene	5 u
56-23-5	Carbon Tetrachloride	5 u	108-90-7	Chlorobenzene	5 u
108-05-4	Vinyl Acetate	11 u	100-41-4	Ethylbenzene	5 u
75-27-4	Bromodichloromethane	5 u	100-42-5	Styrene	5 u
				Total Xylenes	5 u

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiurs are used. Additional flags or footnotes explaining results are enconraged. However, the definition of each flag must he explicit.

Value — If the result is a value greater than or egoal to the detection limit, report the value.

U — Indicates compound was analysed for hut not detected. Report the minimum detection limit for the sample with the U(e.g., 10U)based on necessary concentration/dilntion action. (This is net necessarily the instrument detection limit.) The footnote should read: U-Compound was analysed 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 componnds 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 10ng/l and a concentration of 3ug/l is calculated, report as 3J.

C — This flag applies to pesticide parameters where the identification has been confirmed by CC/NS. Single component pesticides)=10ng/el in the final extract shonld he confirmed by CC/NS.

B — This flag is nsed 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 the appropriate action.

Other — Other specific flags and footnotes may be required to properly define the resnlts. If used, they nnst be fnlly described and such description attached to the data snmmary report.

S — Spiked Compound

NR — No value reqnired.

Laboratory Name: NUS CORPORATION
Case No: NYSDEC-MCCEE

Sample Number
R-186-012-05

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: Low
Date Extracted/Prepared: 12/30/86
Date Analysed: 01/05/67
Conc/Dil Factor: 1
Percent Moisture (Decanted): 10

GPC Cleanup: NO
Separatory Funnel Extraction: NO
Continuous Liquid-Liquid Extraction: NO

CAS Number		ug/kg
319-84-6	Alpha-BHC	8.8 u
319-85-7	Beta-BHC	8.8 u
319-86-8	Delta-BHC	8.8 u
58-89-9	Gamma-BHC(Lindane)	8.8 u
76-44-8	Heptachlor	8.8 u
309-00-2	Aldrin	8.8 u
1024-57-3	Heptachlor Epoxide	8.8 u
959-98-8	Endosulfan I	8.8 u
60-57-1	Dieldrin	17.6 u
72-55-9	4,4`-DDE	17.6 u
72-20-8	Endrin	17.6 u
33213-65-9	Endosulfan II	17.6 u
72-54-8	4,4`-DDD	17.6 u
1031-07-8	Endosulfan Sulfate	17.6 u
50-29-3	4,4`-DDT	17.6 u
72-43-5	Methoxychlor	88.0 u
53494-70-5	Endrin Ketone	17.6 u
57-74-9	Chlordane	88.0 u
8001-35-2	Toxaphene	176.0 u
12674-11-2	Aroclor-1016	88.0 u
11104-28-2	Aroclor-1221	88.0 u
11141-16-5	Aroclor-1232	88.0 u
53469-21-9	Aroclor-1242	88.0 u
12672-29-6	Aroclor-1248	88.0 u
11097-69-1	Aroclor-1254	176.0 u
11096-82-5	Aroclor-1260	176.0 u

Vi = Volume of extract injected (ml)
Vs = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ml)

Vs or Ws 26.88 Vt 20000 Vi 4

Laboratory Name: NUS CORPORATION
Case No: NYSDEC-MCGEE

Sample Number
R-186-012-05

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	Scan Number	Estimated concentration ug/kg
1	76-13-1	ETHANE,1,1,2-TRICHLORO-1,2,2-TRIFLUORO-	VOA	234	10 J
2	1066-40-6	SILANOL,TRIMETHYL-	VOA	282	20 B,J
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
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28					
29					
30					

Organics Analysis Data Sheet

(Page 1)

Laboratory Name: NUS CORPORATION Case No: NYSDEC-MCGEE

Lab Sample ID No: 161211490 MS QC Report No:

Sample Matrix: Soil Contract No:

Data Release Authorized By: Date Sample Received: 12/20/86

Volatile Compounds

Concentration: Low

Date Extracted/Prepared: 12/30/86

Date Analyzed: 12/30/86

Conc/Dil Factor: 1 pH: NR

Percent Moisture: 10

Percent Moisture (Not Decanted): NR

CAS Number		ug/kg	CAS Number		ug/kg
74-87-3	Chloromethane	11 u	78-87-5	1,2-Dichloropropane	5 u
74-83-9	Bromomethane	11 u	10061-02-6	Trans-1,3-Dichloropropene	5 u
75-01-4	Vinyl Chloride	11 u	79-01-6	Trichloroethene	S
75-00-3	Chloroethane	11 u	124-48-1	Dibromochloromethane	5 u
75-09-2	Methylene Chloride	24 B	79-00-5	1,1,2-Trichloroethane	5 u
67-64-1	Acetone	190 B	71-43-2	Benzene	S
75-15-0	Carbon Disulfide	5 u	10061-01-5	cis-1,3-Dichloropropene	5 u
75-35-4	1,1-Dichloroethene	S	110-75-8	2-Chloroethylvinylether	11 u
75-34-3	1,1-Dichloroethane	5 u	75-25-2	Bromoform	5 u
156-60-5	Trans-1,2-Dichloroethene	5 u	108-10-1	4-Methyl-2-Pentanone	11 u
67-66-3	Chloroform	5 u	591-78-6	2-Hexanone	11 u
107-06-2	1,2-Dichloroethane	5 u	127-18-4	Tetrachloroethene	5 u
78-93-3	2-Butanone	26	79-34-5	1,1,2,2-Tetrachloroethane	5 u
71-55-6	1,1,1-Trichloroethane	5 u	108-88-3	Toluene	S
56-23-5	Carbon Tetrachloride	5 u	108-90-7	Chlorobenzene	S
108-05-4	Vinyl Acetate	11 u	100-41-4	Ethylbenzene	5 u
75-27-4	Bromodichloromethane	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 10ug/l and a concentration of 3ug/l is calculated, report as 3J

C — This flag applies to pesticide parameters wher the identification has been confirmed by GC/MS Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B — This flag is used when the analyte is found in blank as well as a sample. It indicates possit probable blank contamination and warns the dat user to take the appropriate action.

Other — Other specific flags and footnotes may be required to properly define the results. If us they must be fully described and such descript attached to the data summary report.

S — Spiked Compound

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: Low
Date Extracted/Prepared: 12/30/86
Date Analyzed: 01/05/87
Conc/Dil Factor: 1
Percent Moisture (Decanted): 10

GPC Cleanup: NO
Separatory Funnel Extraction: NO
Continuous Liquid-Liquid Extraction: NO

CAS Number			ug/kg
319-84-6	Alpha-BHC		8.8 u
319-85-7	Beta-BHC		8.8 u
319-86-8	Delta-BHC		8.8 u
58-89-9	Gamma-BHC(Lindane)	S	
76-44-8	Heptachlor	S	
309-00-2	Aldrin	S	
1024-57-3	Heptachlor Epoxide		8.8 u
959-98-8	Endosulfan I		8.8 u
60-57-1	Dieldrin	S	
72-55-9	4,4`-DDE		17.6 u
72-20-8	Endrin	S	
33213-65-9	Endosulfan II		17.6 u
72-54-8	4,4`-DDD		17.6 u
1031-07-8	Endosulfan Sulfate		17.6 u
50-29-3	4,4`-DDT	S	
72-43-5	Methoxychlor		88.0 u
53494-70-5	Endrin Ketone		17.6 u
57-74-9	Chlordane		88.0 u
8001-35-2	Toxaphene		176.0 u
12674-11-2	Aroclor-1016		88.0 u
11104-28-2	Aroclor-1221		88.0 u
11141-16-5	Aroclor-1232		88.0 u
53469-21-9	Aroclor-1242		88.0 u
12672-29-6	Aroclor-1248		88.0 u
11097-69-1	Aroclor-1254		176.0 u
11096-82-5	Aroclor-1260		176.0 u

Vi = Volume of extract injected (ul)
Vs = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ul)

Vs or Ws 26.88 Vt 20000 Vi 4

Lab Name: [illegible] Case No.: [illegible] Sample Number: [illegible]

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	Scan Number	Estimated concentration ug/kg
1.		NO VOA COMPOUND FOUND			
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.					

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 16121490 MSD
Sample Matrix: Soil
Data Release Authorized By:

Case No: NYSDEC-MCGEE
QC Report No:
Contract No:
Date Sample Received: 12/20/86

Volatile Compounds
Concentration: Low
Date Extracted/Prepared: 12/30/86
Date Analysed: 12/30/86
Conc/Dil Factor: 1 pH NR
Percent Moisture: 10
Percent Moisture (Not Decanted): NR

CAS Number		ug/kg	CAS Number		ug/kg
74-87-3	Chloromethane	11 u	78-87-5	1,2-Dichloropropane	5 u
74-83-9	Bromomethane	11 u	10061-02-6	Trans-1,3-Dichloropropene	5 u
75-01-4	Vinyl Chloride	11 u	79-01-6	Trichloroethene	S
75-00-3	Chloroethane	11 u	124-48-1	Dibromochloromethane	5 u
75-09-2	Methylene Chloride	20 B	79-00-5	1,1,2-Trichloroethane	5 u
67-64-1	Acetone	200 B	71-43-2	Benzene	S
75-15-0	Carbon Disulfide	5 u	10061-01-5	cis-1,3-Dichloropropene	5 u
75-35-4	1,1-Dichloroethene	S	110-75-8	2-Chloroethylvinylether	11 u
75-34-3	1,1-Dichloroethane	5 u	75-25-2	Bromoform	5 u
156-60-5	Trans-1,2-Dichloroethene	5 u	108-10-1	4-Methyl-2-Pentanone	11 u
67-66-3	Chloroform	5 u	591-78-6	2-Hexanone	11 u
107-06-2	1,2-Dichloroethane	5 u	127-18-4	Tetrachloroethene	5 u
78-93-3	2-Butanone	28	79-34-5	1,1,2,2-Tetrachloroethane	5 u
71-55-6	1,1,1-Trichloroethane	5 u	108-88-3	Toluene	S
56-23-5	Carbon Tetrachloride	5 u	108-90-7	Chlorobenzene	S
108-05-4	Vinyl Acetate	11 u	100-41-4	Ethylbenzene	5 u
75-27-4	Bromodichloromethane	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 analysed 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 10ug/l and a concentration of 3ug/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)=10ng/ul in the final extract should be confirmed by CC/MS.

B This flag is used when the analyte is found in blank as well as a sample. It indicates possibl probable blank contamination and warns the data user to take the appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If use they must be fully described and such descripti attached to the data summary report.

S Spiked Compound

NR No value required.

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: Low
Date Extracted/Prepared: 12/30/86
Date Analyzed: 01/05/87
Conc/Dil Factor: 1
Percent Moisture (Decanted): 10

CPC Cleanup: NO
Separatory Funnel Extraction: NO
Continuous Liquid-Liquid Extraction: NO

CAS Number			ug/kg
319-84-6	Alpha-BHC		8.8 u
319-85-7	Beta-BHC		8.8 u
319-86-8	Delta-BHC		8.8 u
58-89-9	Gamma-BHC(Lindane)	S	
76-44-8	Heptachlor	S	
309-00-2	Aldrin	S	
1024-57-3	Heptachlor Epoxide		8.8 u
959-98-8	Endosulfan I		8.8 u
60-57-1	Dieldrin	S	
72-55-9	4,4'-DDE		17.6 u
72-20-8	Endrin	S	
33213-65-9	Endosulfan II		17.6 u
72-54-8	4,4'-DDD		17.6 u
1031-07-8	Endosulfan Sulfate		17.6 u
50-29-3	4,4'-DDT	S	
72-43-5	Methoxychlor		88.0 u
53494-70-5	Endrin Ketone		17.6 u
57-74-9	Chlordane		88.0 u
8001-35-2	Toxaphene		176.0 u
12674-11-2	Aroclor-1016		88.0 u
11104-28-2	Aroclor-1221		88.0 u
11141-16-5	Aroclor-1232		88.0 u
53469-21-9	Aroclor-1242		88.0 u
12672-29-6	Aroclor-1248		88.0 u
11097-69-1	Aroclor-1254		176.0 u
11096-82-5	Aroclor-1260		176.0 u

Vi = Volume of extract injected (ul)
Vs = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ul)

Vs or Ws 26.88 Vt 20000 Vi 4

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	Scan Number	Estimated concentration ug/kg
1.		NO VOA COMPOUND FOUND			
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.					

Sample Number

METHOD BLANK FOR LLS

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: NYS1230L
Sample Matrix: Soil
Data Release Authorized By:

Case No: NYSDEC-MCCEE
QC Report No:
Contract No:
Date Sample Received: 12/20/86

Volatile Compounds
Concentration: Low
Date Extracted/Prepared: 12/30/86
Date Analyzed: 12/30/86
Conc/Dil Factor: 1 pH NR
Percent Moisture: 0
Percent Moisture (Hot Decanted): NR

CAS Number		ug/kg	CAS Number		ug/kg
74-87-3	Chloromethane	10 u	78-87-5	1,2-Dichloropropane	5 u
74-83-9	Bromomethane	10 u	10061-02-6	Trans-1,3-Dichloropropene	5 u
75-01-4	Vinyl Chloride	10 u	79-01-6	Trichloroethene	5 u
75-00-3	Chloroethane	10 u	124-48-1	Dibromochloromethane	5 u
75-09-2	Methylene Chloride	6	79-00-5	1,1,2-Trichloroethane	5 u
67-64-1	Acetone	12	71-43-2	Benzene	5 u
75-15-0	Carbon Disulfide	5 u	10061-01-5	cis-1,3-Dichloropropene	5 u
75-35-4	1,1-Dichloroethene	5 u	110-75-8	2-Chloroethylvinylether	10 u
75-34-3	1,1-Dichloroethane	5 u	75-25-2	Bromoform	5 u
156-60-5	Trans-1,2-Dichloroethene	5 u	108-10-1	4-Methyl-2-Pentanone	10 u
67-66-3	Chloroform	5 u	591-78-6	2-Hexanone	10 u
107-06-2	1,2-Dichloroethane	5 u	127-18-4	Tetrachloroethene	5 u
78-93-3	2-Butanone	10 u	79-34-5	1,1,2,2-Tetrachloroethane	5 u
71-55-6	1,1,1-Trichloroethane	5 u	108-88-3	Toluene	5 u
56-23-5	Carbon Tetrachloride	5 u	108-90-7	Chlorobenzene	5 u
108-05-4	Vinyl Acetate	10 u	100-41-4	Ethylbenzene	5 u
75-27-4	Bromodichloromethane	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 10ug/l and a concentration of 3ug/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)=10ng/ul in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in t blank as well as a sample. It indicates possible probable blank contamination and warns the data user to take the appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If use they must be fully described and such descripti attached to the data summary report.

S Spiked Compound

NR No value reported

Laboratory Name: NUS CORPORATION
Case No: NYSDEC-MCSEE

Sample Number:
METHOD BLANK FOR SDG

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: Low
Date Extracted/Prepared: 12/30/86
Date Analyzed: 01/05/87
Conc/Dil Factor: 1
Percent Moisture (Decanted): 0

GPC Cleanup: NO
Separatory Funnel Extraction: NO
Continuous Liquid-Liquid Extraction: NO

CAS Number		ug/kg
319-84-6	Alpha-BHC	8.0 u
319-85-7	Beta-BHC	8.0 u
319-86-8	Delta-BHC	8.0 u
58-89-9	Gamma-BHC(Lindane)	8.0 u
76-44-8	Heptachlor	8.0 u
309-00-2	Aldrin	8.0 u
1024-57-3	Heptachlor Epoxide	8.0 u
959-98-8	Endosulfan I	8.0 u
60-57-1	Dieldrin	16.0 u
72-55-9	4,4'-DDE	16.0 u
72-20-8	Endrin	16.0 u
33213-65-9	Endosulfan II	16.0 u
72-54-8	4,4'-DDD	16.0 u
1031-07-8	Endosulfan Sulfate	16.0 u
50-29-3	4,4'-DDT	16.0 u
72-43-5	Methoxychlor	80.0 u
53494-70-5	Endrin Ketone	16.0 u
57-74-9	Chlordane	80.0 u
8001-35-2	Toxaphene	160.0 u
12674-11-2	Aroclor-1016	80.0 u
11104-28-2	Aroclor-1221	80.0 u
11141-16-5	Aroclor-1232	80.0 u
53469-21-9	Aroclor-1242	80.0 u
12672-29-6	Aroclor-1248	80.0 u
11097-69-1	Aroclor-1254	160.0 u
11096-82-5	Aroclor-1260	160.0 u

Vi = Volume of extract injected (ul)
Vs = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ml)

Vs or Ws 30 Vt 20000 Vi 4

Laboratory Name: NUS CORPORATION

Case No: NYSDEC-MCGEE

Sample Number
METHOD BLANK FOR LLS

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Componnds

	CAS Number	Compound Name	Fraction	Scan Number	Estimated concentration ug/kg
1		NO VOA COMPOUND FOUND			
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
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28					
29					
30					

Sample Number

METHOD BLANK FOR SDG

Organics Analysis Data Sheet

(Page 1)

Laboratory Name: NUS CORPORATION Case No: NYSDEC-MCGEE

Lab Sample ID No: NYS1239L QC Report No:

Sample Matrix: Soil Contract No:

Data Release Authorized By: Date Sample Received: 12/20/86

Volatile Compounds

Concentration: Low

Date Extracted/Prepared: 12/29/86

Date Analyzed: 12/29/86

Conc/Dil Factor: 1 pH NR

Percent Moisture: 0

Percent Moisture (Not Decanted): NR

CAS Number		ug/kg	CAS Number		ug/kg
74-87-3	Chloromethane	10 u	78-87-5	1,2-Dichloropropane	5 u
74-83-9	Bromomethane	10 u	10061-02-6	Trans-1,3-Dichloropropene	5 u
75-01-4	Vinyl Chloride	10 u	79-01-6	Trichloroethene	5 u
75-00-3	Chloroethane	10 u	124-48-1	Dibromochloromethane	5 u
75-09-2	Methylene Chloride	5 u	79-00-5	1,1,2-Trichloroethane	5 u
67-64-1	Acetone	7 J	71-43-2	Benzene	5 u
75-15-0	Carbon Disulfide	5 u	10061-01-5	cis-1,3-Dichloropropene	5 u
75-35-4	1,1-Dichloroethene	5 u	110-75-8	2-Chloroethylvinylether	10 u
75-34-3	1,1-Dichloroethane	5 u	75-25-2	Bromoform	5 u
156-60-5	Trans-1,2-Dichloroethene	5 u	108-10-1	4-Methyl-2-Pentanone	10 u
67-66-3	Chloroform	5 u	591-78-6	2-Hexanone	10 u
107-06-2	1,2-Dichloroethane	5 u	127-18-4	Tetrachloroethene	5 u
78-93-3	2-Butanone	4 J	79-34-5	1,1,2,2-Tetrachloroethane	5 u
71-55-6	1,1,1-Trichloroethane	5 u	108-88-3	Toluene	5 u
56-23-5	Carbon Tetrachloride	5 u	108-90-7	Chlorobenzene	5 u
108-05-4	Vinyl Acetate	10 u	100-41-4	Ethylbenzene	5 u
75-27-4	Bromodichloromethane	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 10ug/l and a

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MS Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B — This flag is used when the analyte is found in blank as well as a sample. It indicates possibl probable blank contamination and warns the data user to take the appropriate action.

Other — Other specific flags and footnotes may be required to properly define the results. If use they must be fully described and such descripti attached to the data summary report.

S — Spiked Compound

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: Low
Date Extracted/Prepared: 12/29/86
Date Analysed: 01/05/87
Conc/Dil Factor: 1
Percent Moisture (Decanted): 0

GPC Cleanup: NO
Separatory Funnel Extraction: NO
Continuous Liquid-Liquid Extraction: NO

CAS Number		ug/kg
319-84-6	Alpha-BHC	8.0 u
319-85-7	Beta-BHC	8.0 u
319-86-8	Delta-BHC	8.0 u
58-89-9	Gamma-BHC(Lindane)	8.0 u
76-44-8	Heptachlor	8.0 u
309-00-2	Aldrin	8.0 u
1024-57-3	Heptachlor Epoxide	8.0 u
959-98-8	Endosulfan I	8.0 u
60-57-1	Dieldrin	16.0 u
72-55-9	4,4'-DDE	16.0 u
72-20-8	Endrin	16.0 u
33213-65-9	Endosulfan II	16.0 u
72-54-8	4,4'-DDD	16.0 u
1031-07-8	Endosulfan Sulfate	16.0 u
50-29-3	4,4'-DDT	16.0 u
72-43-5	Methoxychlor	80.0 u
53494-70-5	Endrin Ketone	16.0 u
57-74-9	Chlordane	80.0 u
8001-35-2	Toxaphene	160.0 u
12674-11-2	Aroclor-1016	80.0 u
11104-28-2	Aroclor-1221	80.0 u
11141-16-5	Aroclor-1232	80.0 u
53469-21-9	Aroclor-1242	80.0 u
12672-29-6	Aroclor-1248	80.0 u
11097-69-1	Aroclor-1254	160.0 u
11096-82-5	Aroclor-1260	160.0 u

Vi = Volume of extract injected (ul)
Vs = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ul)

Vs or Ws 30.0 Vt 20000 Vi 4

Laboratory Name: NUS CORPORATION
Case No: NYSDEC-MOSES

Sample Number:
3 METHOD BLANK FOR LLS

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	Scan Number	Estimated concentration ug/kg
1	1066-40-6	SILANOL,TRIMETHYL-	VOA	284	10 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					

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Case No: NYSUSC-MCGEE
Lab Sample ID No: NYS1231M
QC Report No:
Sample Matrix: Soil
Contract No:
Data Release Authorized By:
Date Sample Received: 12/20/86

Volatile Compounds
Concentration: Medium
Date Extracted/Prepared: 12/31/86
Date Analyzed: 12/31/86
Conc/Dil Factor: 1 pH NR
Percent Moisture: 0
Percent Moisture (Not Decanted): NR

CAS Number		ug/kg	CAS Number		ug/kg
74-87-3	Chloromethane	1000 u	78-87-5	1,2-Dichloropropane	500 u
74-83-9	Bromomethane	1000 u	10061-02-6	Trans-1,3-Dichloropropene	500 u
75-01-4	Vinyl Chloride	1000 u	79-01-6	Trichloroethene	500 u
75-00-3	Chloroethane	1000 u	124-48-1	Dibromochloromethane	500 u
75-09-2	Methylene Chloride	550	79-00-5	1,1,2-Trichloroethane	500 u
67-64-1	Acetone	2500	71-43-2	Benzene	500 u
75-15-0	Carbon Disulfide	500 u	10061-01-5	cis-1,3-Dichloropropene	500 u
75-35-4	1,1-Dichloroethene	500 u	110-75-8	2-Chloroethylvinylether	1000 u
75-34-3	1,1-Dichloroethane	500 u	75-25-2	Bromoform	500 u
156-60-5	Trans-1,2-Dichloroethene	500 u	108-10-1	4-Methyl-2-Pentanone	1000 u
67-66-3	Chloroform	500 u	591-78-6	2-Hexanone	1000 u
107-06-2	1,2-Dichloroethane	500 u	127-18-4	Tetrachloroethene	500 u
78-93-3	2-Butanone	3400	79-34-5	1,1,2,2-Tetrachloroethane	500 u
71-55-6	1,1,1-Trichloroethane	500 u	108-88-3	Toluene	500 u
56-23-5	Carbon Tetrachloride	500 u	108-90-7	Chlorobenzene	500 u
108-05-4	Vinyl Acetate	1000 u	100-41-4	Ethylbenzene	500 u
75-27-4	Bromodichloromethane	500 u	100-42-5	Styrene	500 u
				Total Xylenes	500 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 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

C This flag applies to pesticide parameters wher the identification has been confirmed by GC/MS Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in blank as well as a sample. It indicates possi probable blank contamination and warns the da user to take the appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If u they must be fully described and such descrip attached to the data summary report.

S Spiked Compound

NR No value required.

Organics Analysis Data Sheet
(Page 6)

3

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	Scan Number	Estimated concentration ug/kg
1		UNKNOWN	VOA	334	800 J
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
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26					
27					
28					
29					
30					

Sample Number:

METHOD BLANK FOR MLS

Organics Analysis Data Sheet

(Page 1)

Laboratory Name: NUS CORPORATION | Case No: NYSDEC-MCCEE

Lab Sample ID No: NYS1230M1 | QC Report No:

Sample Matrix: Soil | Contract No:

Data Release Authorized By: | Date Sample Received: 12/20/86

Volatile Compounds

Concentration: Medium

Date Extracted/Prepared: 12/30/86

Date Analyzed: 12/30/86

Conc/Dil Factor: 1 pH NR

Percent Moisture: 0

Percent Moisture (Not Decanted): NR

CAS Number		ug/kg	CAS Number		ug/kg
74-87-3	Chloromethane	1000 u	78-87-5	1,2-Dichloropropane	500 u
74-83-9	Bromomethane	1000 u	10061-02-6	Trans-1,3-Dichloropropene	500 u
75-01-4	Vinyl Chloride	1000 u	79-01-6	Trichloroethene	500 u
75-00-3	Chloroethane	1000 u	124-48-1	Dibromochloromethane	500 u
75-09-2	Methylene Chloride	540	79-00-5	1,1,2-Trichloroethane	500 u
67-64-1	Acetone	1700	71-43-2	Benzene	500 u
75-15-0	Carbon Disulfide	500 u	10061-01-5	cis-1,3-Dichloropropene	500 u
75-35-4	1,1-Dichloroethene	500 u	110-75-8	2-Chloroethylvinylether	1000 u
75-34-3	1,1-Dichloroethane	500 u	75-25-2	Bromoform	500 u
156-60-5	Trans-1,2-Dichloroethene	500 u	108-10-1	4-Methyl-2-Pentanone	1000 u
67-66-3	Chloroform	500 u	591-78-6	2-Hexanone	1000 u
107-06-2	1,2-Dichloroethane	500 u	127-18-4	Tetrachloroethene	500 u
78-93-3	2-Butanone	2600	79-34-5	1,1,2,2-Tetrachloroethane	500 u
71-55-6	1,1,1-Trichloroethane	500 u	108-88-3	Toluene	640
56-23-5	Carbon Tetrachloride	500 u	108-90-7	Chlorobenzene	500 u
108-05-4	Vinyl Acetate	1000 u	100-41-4	Ethylbenzene	500 u
75-27-4	Bromodichloromethane	500 u	100-42-5	Styrene	500 u
				Total Xylenes	500 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 10ug/l and a concentration of 3ug/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)=10ng/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 the 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.

S Spiked Compound

NR No value received

Laboratory Name: NUS CORPORATION
Case No: NTSDEC-MCCEE

Sample Number
METHOD BLANK FOR MLS

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	Scan Number	Estimated concentration ug/kg
1.	115-22-0	2-BUTANONE,3-HYDROXY-3-METHYL-	VOA	219	800 J
2.	107-87-9	2-PENTANONE	VOA	335	500 J
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
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27.					
28.					
29.					
30.					

Sample Number

METHOD BLANK FOR MLS

Organics Analysis Data Sheet

(Page 1)

Laboratory Name: NUS CORPORATION — Case No: NYSDEC-MCGEE

Lab Sample ID No: NYS1230M2 — QC Report No:

Sample Matrix: Soil — Contract No:

Data Release Authorized By: — Date Sample Received: 12/20/86

Volatile Compounds

Concentration: Medium

Date Extracted/Prepared: 12/30/86

Date Analyzed: 12/30/86

Conc/Dil Factor: 1 pH NR

Percent Moisture: 0

Percent Moisture (Not Decanted): NR

CAS Number		ug/kg	CAS Number		ug/kg
74-87-3	Chloromethane	1000 u	78-87-5	1,2-Dichloropropane	500 u
74-83-9	Bromomethane	1000 u	10061-02-6	Trans-1,3-Dichloropropene	500 u
75-01-4	Vinyl Chloride	1000 u	79-01-6	Trichloroethene	500 u
75-00-3	Chloroethane	1000 u	124-48-1	Dibromochloromethane	500 u
75-09-2	Methylene Chloride	620	79-00-5	1,1,2-Trichloroethane	500 u
67-64-1	Acetone	3100	71-43-2	Benzene	500 u
75-15-0	Carbon Disulfide	500 u	10061-01-5	cis-1,3-Dichloropropene	500 u
75-35-4	1,1-Dichloroethene	500 u	110-75-8	2-Chloroethylvinylether	1000 u
75-34-3	1,1-Dichloroethane	500 u	75-25-2	Bromoform	500 u
156-60-5	Trans-1,2-Dichloroethene	500 u	108-10-1	4-Methyl-2-Pentanone	1000 u
67-66-3	Chloroform	500 u	591-78-6	2-Hexanone	1000 u
107-06-2	1,2-Dichloroethane	500 u	127-18-4	Tetrachloroethene	500 u
78-93-3	2-Butanone	3000	79-34-5	1,1,2,2-Tetrachloroethane	500 u
71-55-6	1,1,1-Trichloroethane	500 u	108-88-3	Toluene	720
56-23-5	Carbon Tetrachloride	500 u	108-90-7	Chlorobenzene	500 u
108-05-4	Vinyl Acetate	1000 u	100-41-4	Ethylbenzene	500 u
75-27-4	Bromodichloromethane	500 u	100-42-5	Styrene	500 u
				Total Xylenes	500 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 analysed 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 analysed 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 10ug/l and a

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B — This flag is used when the analyte is found in blank as well as a sample. It indicates possibl probable blank contamination and warns the data user to take the appropriate action.

Other — Other specific flags and footnotes may be required to properly define the results. If us they must be fully described and such descript attached to the data summary report.

S — Spiked Compound

Laboratory Name: NUS CORPORATION
Case No.: NTEDDC-MOOOE

Sample Number:
METHOD BLANK FOR MOS

Organics Analysis Data Sheet
Page 4A

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	Scan Number	Estimated concentration ug/kg
1.	75-65-0	2-PROPANOL, 2-METHYL-	VOA	213	900 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.					

REFERENCE NO. 3

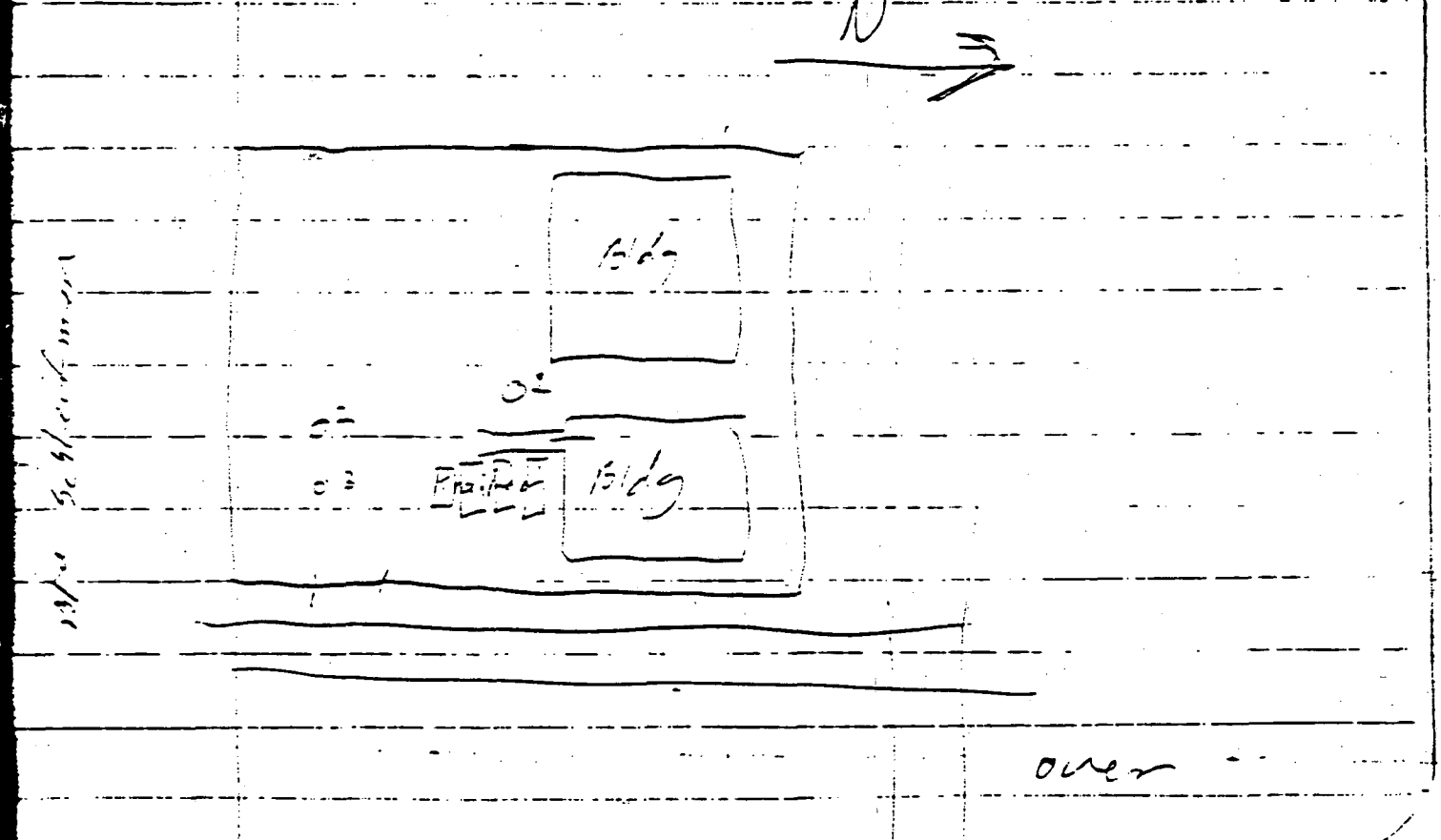
Fortriver - Tanya Homes 3/24/87

Rite-off - drywell sampling

6:30-9:30 - Prepared & decont. equipment in office

Arrive @ site at ± 10:40AM. Weather sunny & warm w slight breeze. Meet with Bruce & Chuck (Rite-off)

Time	Sample points ("dry" well manholes) (see map)	
11:00	SB1-04-1 -	VOA (2 vials), Phenols (1 bottle)
11:10	" " 2 -	" "
11:20	" " 3 -	" "
11:25	" " 4 -	Field blank from 2gal potable water container



Depths of manholes

	Water	Bot
1	3' 3½"	15' 1½"
2	6' 0"	16' 6½"
3	12' 1½"	15' 7½"

Sample Number

M186-014-01

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: 17031638
Sample Matrix: Water
Data Release Authorized By:

Case No: NYSDEC
QC Report No:
Contract No:
Date Sample Received: 03/25/87

RECEIVED
APR 27 1987
DIVISION OF SOLID & HAZARDOUS WA
NYSDEC REGION 1

Volatile Compounds
Concentration: Low
Date Extracted/Prepared: 03/26/87
Date Analysed: 03/26/87
Conc/Dil Factor: 1.0 pH NR
Percent Moisture: NR
Percent Moisture (Not Decanted): NR

CAS Number		ug/l	CAS Number		ug/l
74-87-3	Chloromethane	10 U	78-87-5	1,2-Dichloropropane	5 U
74-83-9	Bromomethane	10 U	10061-02-6	Trans-1,3-Dichloropropene	5 U
75-01-4	Vinyl Chloride	10 U	79-01-6	Trichloroethene	7
75-00-3	Chloroethane	10 U	124-48-1	Dibromochloromethane	5 U
75-09-2	Methylene Chloride	65 B	79-00-5	1,1,2-Trichloroethane	5 U
67-64-1	Acetone	19 B	71-43-2	Benzene	5 U
75-15-0	Carbon Disulfide	5 U	10061-01-5	cis-1,3-Dichloropropene	5 U
75-35-4	1,1-Dichloroethene	5 U	110-75-8	2-Chloroethylvinylether	10 U
75-34-3	1,1-Dichloroethane	5 U	75-25-2	Bromoform	5 U
156-60-5	Trans-1,2-Dichloroethene	5 U	108-10-1	4-Methyl-2-Pentanone	10 U
67-66-3	Chloroform	5 U	591-78-6	2-Hexanone	10 U
107-06-2	1,2-Dichloroethane	5 U	127-18-4	Tetrachloroethene	14
78-93-3	2-Butanone	10 U	79-34-5	1,1,2,2-Tetrachloroethane	5 U
71-55-6	1,1,1-Trichloroethane	160	108-88-3	Toluene	5 U
56-23-5	Carbon Tetrachloride	5 U	108-90-7	Chlorobenzene	5 U
108-05-4	Vinyl Acetate	10 U	100-41-4	Ethylbenzene	5 U
75-27-4	Bromodichloromethane	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 analysed 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 analysed 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.18J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

C — This flag applies to pesticide parameters the identification has been confirmed by G Single component pesticides)=10ng/ul in th final extract should be confirmed by GC/MS

B — This flag is used when the analyte is foun blank as well as a sample. It indicates pr probable blank contamination and warns the user to take the appropriate action.

Other — Other specific flags and footnotes may be required to properly define the results. they must be fully described and such des attached to the data summary report.

S — Spiked Compound

NR — No value required.

Case No- MFSDEC

Comp.r Number
R1BA-014-01

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	Scan Number	Estimated concentration ug/l
1.	354-23-4	ETHANE, 1,2-DICHLORO-1,1,2-TRIFLUORO-	VOA	173	12 J
2	76-13-1	ETHANE, 1,1,2-TRICHLORO-1,2,2-TRIFLUORO-	VOA	216	1100 J
3					
4.					
5.					
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30.					

R186-014-02

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Case No: NYSDEC
Lab Sample ID No: 17031439
QC Report No:
Sample Matrix: Water
Contract No:
Data Release Authorized By:
Date Sample Received: 03/25/87

David A. Dawson

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 03/26/87
Date Analyzed: 03/26/87
Conc/Dil Factor: 1.0 pH NR
Percent Moisture: NR
Percent Moisture (Not Decanted): NR

CAS Number		ug/l	CAS Number		ug/l
74-87-3	Chloromethane	10 U	78-87-5	1,2-Dichloropropane	5 U
74-83-9	Bromomethane	10 U	10061-02-6	Trans-1,3-Dichloropropene	5 U
75-01-4	Vinyl Chloride	10 U	79-01-6	Trichloroethene	5 U
75-00-3	Chloroethane	10 U	124-48-1	Dibromochloromethane	5 U
75-09-2	Methylene Chloride	3 J,B	79-00-5	1,1,2-Trichloroethane	5 U
67-64-1	Acetone	13 B	71-43-2	Benzene	5 U
75-15-0	Carbon Disulfide	5 U	10061-01-5	cis-1,3-Dichloropropene	5 U
75-35-4	1,1-Dichloroethene	5 U	110-75-8	2-Chloroethylvinylether	10 U
75-34-3	1,1-Dichloroethane	5 U	75-25-2	Bromoform	5 U
156-60-5	Trans-1,2-Dichloroethene	5 U	108-10-1	4-Methyl-2-Pentanone	10 U
67-66-3	Chloroform	5 U	591-78-6	2-Hexanone	10 U
107-06-2	1,2-Dichloroethane	5 U	127-18-4	Tetrachloroethene	13
78-93-3	2-Butanone	10 U	79-34-5	1,1,2,2-Tetrachloroethane	5 U
71-55-6	1,1,1-Trichloroethane	18	108-88-3	Toluene	5 U
56-23-5	Carbon Tetrachloride	5 U	108-90-7	Chlorobenzene	5 U
108-05-4	Vinyl Acetate	10 U	100-41-4	Ethylbenzene	5 U
75-27-4	Bromodichloromethane	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. 13J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

C - This flag applies to pesticide parameters w the identification has been confirmed by GC Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found blank as well as a sample. It indicates pos probable blank contamination and warns the user to take the appropriate action.

Other - Other specific flags and footnotes may be required to properly define the results. If they must be fully described and such descr attached to the data summary report.

S - Spiked Compound

NR - No value required.

Laboratory Name: NUS CORPORATION
Case No: NYSDEC

Sample Number
8486-014-03

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: Low
Date Extracted/Prepared: 03/26/87
Date Analysed: 04/02/87
Conc/Dil Factor: 1
Percent Moisture (Decanted): NR

CPC Cleanup: NO
Separatory Funnel Extraction: YES
Continuous Liquid-Liquid Extraction: NO

CAS Number		ug/l
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	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.00 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.00 U
11096-82-5	Aroclor-1260	1.00 U

Vi = Volume of extract injected (ul)
Vs = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ul)

Vs 500 or Ws - Vt 5000 Vi 4

Laboratory Name: [illegible]

Case No. NYSDEC

Sample Number: R184-814-02

Organics Analysis Data Sheet
(Page 4)

2

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	Scan Number	Estimated concentration ug/l
1.		NO VOA COMPOUND FOUND			
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
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29.					
30.					

Organics Analysis Data Sheet

(Page 1)

Laboratory Name: NUS CORPORATION Case No: NYSDEC
Lab Sample ID No: 17031448 QC Report No:
Sample Matrix: Water Contract No:
Data Release Authorized By: Date Sample Received: 03/25/87

David A Damon

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 03/26/87
Date Analyzed: 03/26/87
Conc/Dil Factor: 1.0 pH NR
Percent Moisture: NR
Percent Moisture (Not Decanted): NR

CAS Number		ug/l	CAS Number		ug/l
74-87-3	Chloromethane	10 u	78-87-5	1,2-Dichloropropane	5 u
74-83-9	Bromomethane	10 u	10061-02-6	Trans-1,3-Dichloropropene	5 u
75-01-4	Vinyl Chloride	10 u	79-01-6	Trichloroethene	5 u
75-00-3	Chloroethane	10 u	124-48-1	Dibromochloromethane	5 u
75-09-2	Methylene Chloride	5 B	79-00-5	1,1,2-Trichloroethane	5 u
67-64-1	Acetone	11 B	71-43-2	Benzene	5 u
75-15-0	Carbon Disulfide	5 u	10061-01-5	cis-1,3-Dichloropropene	5 u
75-35-4	1,1-Dichloroethene	5 u	110-75-8	2-Chloroethylvinylether	10 u
75-34-3	1,1-Dichloroethane	5 u	75-25-2	Bromoform	5 u
156-60-5	Trans-1,2-Dichloroethene	5 u	108-10-1	4-Methyl-2-Pentanone	10 u
67-66-3	Chloroform	5 u	591-78-6	2-Hexanone	10 u
107-06-2	1,2-Dichloroethane	5 u	127-18-4	Tetrachloroethene	5 u
78-93-3	2-Butanone	10 u	79-34-5	1,1,2,2-Tetrachloroethane	5 u
71-55-6	1,1,1-Trichloroethane	43	108-88-3	Toluene	5 u
56-23-5	Carbon Tetrachloride	5 u	108-90-7	Chlorobenzene	5 u
108-05-4	Vinyl Acetate	10 u	100-41-4	Ethylbenzene	5 u
75-27-4	Bromodichloromethane	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 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

C — This flag applies to pesticide parameters whe the identification has been confirmed by GC/E Single component pesticides>=10ug/ml in the final extract should be confirmed by GC/MS.

B — This flag is used when the analyte is found in blank as well as a sample. It indicates possil probable blank contamination and warns the dat user to take the appropriate action.

Other — Other specific flags and footnotes may be required to properly define the results. If us they must be fully described and each descript attached to the data summary report.

S — Spiked Compound

NR — No value required.

Laboratory Name: NUS CORPORATION
Case No: NYSDEC

Sample Number
8186-814-03

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: Low
Date Extracted/Prepared: 03/26/87
Date Analyzed: 04/02/87
Conc/Dil Factor: 5
Percent Moisture (Decanted): NR

GPC Cleanup: NO
Separatory Funnel Extraction: YES
Continuous Liquid-Liquid Extraction: NO

CAS Number		ug/l
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	2.50 u
53494-70-5	Endrin Ketone	0.50 u
57-74-9	Chlordane	2.50 u
8001-35-2	Toxaphene	5.00 u
12674-11-2	Aroclor-1016	2.50 u
11104-28-2	Aroclor-1221	2.50 u
11141-16-5	Aroclor-1232	2.50 u
53469-21-9	Aroclor-1242	2.50 u
12672-29-6	Aroclor-1248	2.50 u
11097-69-1	Aroclor-1254	5.00 u
11096-82-5	Aroclor-1260	5.00 u

Vi = Volume of extract injected (ul)
Ve = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ul)

Vs 1000 or Ws= Vt 10000 Vi 4

Laboratory Name NUS CORPORATION

Case No NYSDEC

8184-014-03

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	Scan Number	Estimated concentration ug/l
1.		NO VOA COMPOUND FOUND			
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
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27.					
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29.					
30.					

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION
Case No: NYSDEC
Lab Sample ID No: 17821441
QC Report No:
Sample Matrix: Water
Contract No:
Data Release Authorized By:
Date Sample Received: 03/25/87

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 03/26/87
Date Analyzed: 03/26/87
Conc/Dil Factor: 1.0 pH NR
Percent Moisture: NR
Percent Moisture (Not Decanted): NR

CAS Number		ug/l	CAS Number		ug/l
74-87-3	Chloromethane	10 U	78-87-5	1,2-Dichloropropane	5 U
74-83-9	Bromomethane	10 U	10061-02-6	Trans-1,3-Dichloropropene	5 U
75-01-4	Vinyl Chloride	10 U	79-01-6	Trichloroethene	3 U
75-00-3	Chloroethane	10 U	124-48-1	Dibromochloromethane	5 U
75-09-2	Methylene Chloride	5 U	79-00-5	1,1,2-Trichloroethane	5 U
67-64-1	Acetone	14 B	71-43-2	Benzene	3 U
75-15-0	Carbon Disulfide	5 U	10061-01-5	cis-1,3-Dichloropropene	5 U
75-35-4	1,1-Dichloroethene	5 U	110-75-8	2-Chloroethylvinylether	10 U
75-34-3	1,1-Dichloroethane	5 U	75-25-2	Bromoform	5 U
156-60-5	Trans-1,2-Dichloroethene	5 U	108-10-1	4-Methyl-2-Pentanone	10 U
67-66-3	Chloroform	3 J	591-78-6	2-Hexanone	10 U
107-06-2	1,2-Dichloroethane	5 U	127-18-4	Tetrachloroethene	5 U
78-93-3	2-Butanone	10 U	79-34-5	1,1,2,2-Tetrachloroethane	5 U
71-55-6	1,1,1-Trichloroethane	5 U	108-88-3	Toluene	5 U
56-23-5	Carbon Tetrachloride	5 U	108-90-7	Chlorobenzene	5 U
108-05-4	Vinyl Acetate	10 U	100-41-4	Ethylbenzene	5 U
75-27-4	Bromodichloromethane	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 10ug/l and a concentration of 3ug/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>=10ng/ul in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in t blank as well as a sample. It indicates possible probable blank contamination and warns the data user to take the 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 descriptio attached to the data summary report.

S Spiked Compound

NR No value required

Laboratory Name: NUS CORPORATION
Case No: NYSDEC

Sample Number
R186-014-04

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: Low
Date Extracted/Prepared: 03/16/87
Date Analyzed: 04/01/87
Conc/Dil Factor: 1
Percent Moisture (Decanted): NR

GPC Cleanup: NO
Separatory Funnel Extraction: YES
Continuous Liquid-Liquid Extraction: NO

CAS Number		ug/l
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	0.08 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	0.50 u
53494-70-5	Endrin Ketone	0.10 u
57-74-9	Chlordane	0.50 u
8001-35-2	Toxaphene	1.00 u
12674-11-2	Aroclor-1016	0.50 u
11104-28-2	Aroclor-1221	0.50 u
11141-16-5	Aroclor-1232	0.50 u
53469-21-9	Aroclor-1242	0.50 u
12672-29-6	Aroclor-1248	0.50 u
11097-69-1	Aroclor-1254	1.00 u
11096-82-5	Aroclor-1260	1.00 u

Vi = Volume of extract injected (ml)
Vs = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ml)

Vs 1000 or Ws Vt 10000 Vi 4

Case No. NYSDEC R184-014-04

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	Scan Number	Estimated concentration ug/l
1.		NO VOA COMPOUND FOUND			
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.					

METHOD BLANK FOR

Organics Analysis Data Sheet

(Page 1)

Laboratory Name: NUS CORPORATION
Lab Sample ID No: NYSD0224V
Sample Matrix: Water
Data Release Authorized By:

Case No: NYSDEC
QC Report No:
Contract No:
Date Sample Received: 03/25/87

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: 03/26/87
Date Analyzed: 03/26/87
Conc/Dil Factor: 1.0 pH NR
Percent Moisture: NR
Percent Moisture (Not Decanted): NR

CAS Number		ug/l	CAS Number		ug/l
74-87-3	Chloromethane	10 U	78-87-5	1,2-Dichloropropane	5 U
74-83-9	Bromomethane	10 U	10061-02-6	Trans-1,3-Dichloropropene	5 U
75-01-4	Vinyl Chloride	10 U	79-01-6	Trichloroethene	5 U
75-00-3	Chloroethane	10 U	124-48-1	Dibromochloromethane	5 U
75-09-2	Methylene Chloride	4 J	79-00-5	1,1,2-Trichloroethane	5 U
67-64-1	Acetone	22	71-43-2	Benzene	5 U
75-15-0	Carbon Disulfide	5 U	10061-01-5	cis-1,3-Dichloropropene	5 U
75-35-4	1,1-Dichloroethene	5 U	110-75-8	2-Chloroethylvinylether	10 U
75-34-3	1,1-Dichloroethane	5 U	75-25-2	Bromoform	5 U
156-60-5	Trans-1,2-Dichloroethene	5 U	108-10-1	4-Methyl-2-Pentanone	10 U
67-66-3	Chloroform	5 U	591-78-6	2-Hexanone	10 U
107-06-2	1,2-Dichloroethane	5 U	127-18-4	Tetrachloroethene	5 U
78-93-3	2-Butanone	10 U	79-34-5	1,1,2,2-Tetrachloroethane	5 U
71-55-6	1,1,1-Trichloroethane	5 U	108-88-3	Toluene	5 U
56-23-5	Carbon Tetrachloride	5 U	108-76-7	Chlorobenzene	5 U
108-05-4	Vinyl Acetate	10 U	100-41-4	Ethylbenzene	5 U
75-27-4	Bromodichloromethane	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 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

C — This flag applies to pesticide parameters w the identification has been confirmed by G Single component pesticides)>10ng/ul is th final extract should be confirmed by GC/MS

B — This flag is used when the analyte is foun blank as well as a sample. It indicates po probable blank contamination and warns the user to take the appropriate action.

Other — Other specific flags and footnotes may be required to properly define the results. I they must be fully described and such descr attached to the data summary report.

S — Spiked Compound

NR — No value required

Laboratory Name: NUS CORPORATION
Case No: NYSDEC

Sample Number
METHOD BLANK FOR L

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: Low
Date Extracted/Prepared: 03/26/87
Date Analyzed: 04/02/87
Conc/Dil Factor: 1
Percent Moisture (Decanted): NR

GPC Cleanup: NO
Separatory Funnel Extraction: YES
Continuous Liquid-Liquid Extraction: NO

CAS Number		ug/l
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	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
8001-35-2	Toxaphene	1.00 U
12674-11-2	Aroclor-1016	0.50 U
11104-28-2	Aroclor-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
53469-21-9	Aroclor-1242	0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Aroclor-1254	1.00 U
11096-82-5	Aroclor-1260	1.00 U

Vi = Volume of extract injected (ul)
Vs = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ul)

Vs 1000 or Ws Vt 10000 Vi 4

Laboratory Name: NUS CORPORATION

Case No.: NYSDEC

Sample Number: METHOD BLANK FOR

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	Scan Number	Estimated concentration ug/l
1.		NO VOA COMPOUND FOUND			
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
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27.					
28.					
29.					
30.					

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION Case No: NYSDEC
Lab Sample ID No: 17031639 MS OC Report No:
Sample Matrix: Water Contract No:
Data Release Authorized By: Date Sample Received: 03/25/87

David A. Damm

Volatile Compounds
Concentration: Low
Date Extracted/Prepared: NR
Date Analyzed: NR
Conc/Dil Factor: NR pH NR
Percent Moisture: NR
Percent Moisture (Not Decanted): NR

CAS Number		ug/l	CAS Number		ug/l
74-87-3	Chloromethane		78-87-5	1,2-Dichloropropane	
74-83-9	Bromomethane		10061-02-6	Trans-1,3-Dichloropropene	
75-01-4	Vinyl Chloride		79-01-6	Trichloroethene	
75-00-3	Chloroethane		124-48-1	Dibromochloromethane	
75-09-2	Methylene Chloride		79-00-5	1,1,2-Trichloroethane	
67-64-1	Acetone		71-43-2	Benzene	
75-15-0	Carbon Disulfide		10061-01-5	cis-1,3-Dichloropropene	
75-35-4	1,1-Dichloroethene		110-75-8	2-Chloroethylvinylether	
75-34-3	1,1-Dichloroethane		75-25-2	Bromoform	
156-60-5	Trans-1,2-Dichloroethene		108-10-1	4-Methyl-2-Pentanone	
67-66-3	Chloroform		591-78-6	2-Hexanone	
107-06-2	1,2-Dichloroethane		127-18-4	Tetrachloroethene	
78-93-3	2-Butanone		79-34-5	1,1,2,2-Tetrachloroethane	
71-55-6	1,1,1-Trichloroethane		108-88-3	Toluene	
56-23-5	Carbon Tetrachloride		108-90-7	Chlorobenzene	
108-05-4	Vinyl Acetate		100-41-4	Ethylbenzene	
75-27-4	Bromodichloromethane		100-42-5	Styrene	
				Total Xylenes	

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 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

C This flag applies to pesticide parameters wh the identification has been confirmed by GC/ Single component pesticides)>10ug/ml in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found blank as well as a sample. It indicates poss probable blank contamination and warns the u user to take the appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If they must be fully described and such descri attached to the data summary report.

S Spiked Compound

NR No value required

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: Low
Date Extracted/Prepared: 03/26/87
Date Analysed: 04/01/87
Conc/Dil Factor: 1
Percent Moisture (Decanted): NR

CPC Cleanup: NO
Separatory Funnel Extraction: YES
Continuous Liquid-Liquid Extraction: NO

CAS Number		ug/l
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)	5
76-44-8	Heptachlor	5
309-00-2	Aldrin	5
1024-57-3	Heptachlor Epoxide	0.05 u
959-98-8	Endosulfan I	0.05 u
60-57-1	Dieldrin	5
72-55-9	4,4'-DDE	0.10 u
72-20-8	Endrin	5
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	5
72-43-5	Methoxychlor	0.50 u
53494-70-5	Endrin Ketone	0.10 u
57-74-9	Chlordane	0.50 u
8001-35-2	Toxaphene	1.00 u
12674-11-2	Aroclor-1016	0.50 u
11104-28-2	Aroclor-1221	0.50 u
11141-16-5	Aroclor-1232	0.50 u
53469-21-9	Aroclor-1242	0.50 u
12672-29-6	Aroclor-1248	0.50 u
11097-69-1	Aroclor-1254	1.00 u
11096-82-5	Aroclor-1260	1.00 u

Vi = Volume of extract injected (ul)
Vs = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ul)

Vs 500 or Ws - Vt 5000 VI 4

Organics Analysis Data Sheet

(Page 1)

Laboratory Name: NUS CORPORATION Case No: NYSDEC
Lab Sample ID No: 17031639 MSD QC Report No:
Sample Matrix: Water Contract No:
Data Release Authorized By: Date Sample Received: 03/25/87

Volatile Compounds

Concentration: Low
Date Extracted/Prepared: NR
Date Analyzed: NR
Conc/Dil Factor: NR pH NR
Percent Moisture: NR
Percent Moisture (Not Decanted): NR

CAS Number		ug/l	CAS Number		ug/l
74-87-3	Chloromethane		78-87-5	1,2-Dichloropropane	
74-83-9	Bromomethane		10061-02-6	Trans-1,3-Dichloropropene	
75-01-4	Vinyl Chloride		79-01-6	Trichloroethene	
75-00-3	Chloroethane		124-48-1	Dibromochloromethane	
75-09-2	Methylene Chloride		79-00-5	1,1,2-Trichloroethane	
67-64-1	Acetone		71-43-2	Benzene	
75-15-0	Carbon Disulfide		10061-01-5	cis-1,3-Dichloropropene	
75-35-4	1,1-Dichloroethene		110-75-8	2-Chloroethylvinylether	
75-34-3	1,1-Dichloroethane		75-25-2	Bromoform	
156-60-5	Trans-1,2-Dichloroethene		108-10-1	4-Methyl-2-Pentanone	
67-66-3	Chloroform		591-78-6	2-Hexanone	
107-06-2	1,2-Dichloroethane		127-18-4	Tetrachloroethene	
78-93-3	2-Butanone		79-34-5	1,1,2,2-Tetrachloroethane	
71-55-6	1,1,1-Trichloroethane		108-88-3	Toluene	
56-23-5	Carbon Tetrachloride		108-90-7	Chlorobenzene	
108-05-4	Vinyl Acetate		100-41-4	Ethylbenzene	
75-27-4	Bromodichloromethane		100-42-5	Styrene	
				Total Xylenes	

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 bot greater than zero.(e.g.10J). If limit of detection is 10ug/l and a concentration of 3ug/l is calculated, report as 3J.

C — This flag applies to pesticide parameters whe the identification has been confirmed by GC/M Single component pesticides)>10ng/ml in the final extract should be confirmed by GC/MS.

B — This flag is used when the analyte is found i blank as well as a sample. It indicates possi probable blank contamination and warns the da user to take the appropriate action.

Other — Other specific flags and footnotes may be required to properly define the results. If u they must be fully described and such descrip attached to the data summary report.

S — Spiked Compound

NR — No value required

Laboratory Name: NUS CORPORATION
Case No: NYSDEC

Sample Number:
8186-014-02 MSD LL

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: Low
Date Extracted/Prepared: 03/26/87
Date Analysed: 04/02/87
Conc/Dil Factor: 1.0
Percent Moisture (Decanted): NR

GPC Cleanup: NO
Separatory Funnel Extraction: YES
Continuous Liquid-Liquid Extraction: NO

CAS Number			ug/l
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)	S	
76-44-8	Heptachlor	S	
309-00-2	Aldrin	S	
1024-57-3	Heptachlor Epoxide		0.05 U
959-98-8	Endosulfan I		0.05 U
60-57-1	Dieldrin	S	
72-55-9	4,4'-DDE		0.10 U
72-20-8	Endrin	S	
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	S	
72-43-5	Methoxychlor		0.50 U
53494-70-5	Endrin Ketone		0.10 U
57-74-9	Chlordane		0.50 U
8001-35-2	Toxaphene		1.00 U
12674-11-2	Aroclor-1016		0.50 U
11104-28-2	Aroclor-1221		0.50 U
11141-16-5	Aroclor-1232		0.50 U
53469-21-9	Aroclor-1242		0.50 U
12672-29-6	Aroclor-1248		0.50 U
11097-69-1	Aroclor-1254		1.00 U
11096-82-5	Aroclor-1260		1.00 U

Vi = Volume of extract injected (ml)
Vo = Volume of water extracted (ml)
Ws = Weight of sample extracted (g)
Vt = Volume of total extract (ml)

Ws 500 or Vo Vt 5000 Vi 4

Sample Number

R186-014-04-MS LLW

Organics Analysis Data Sheet

(Page 1) -

Laboratory Name: NUS CORPORATION — Case No: NYSDEC

Lab Sample ID No: 17031641 MS — QC Report No:

Sample Matrix: Water — Contract No:

Data Release Authorized By: — Data Sample Received: 03/25/87

David A. Damm

Volatile Compounds

Concentration: Low

Date Extracted/Prepared: 03/26/87

Date Analysed: 03/26/87

Conc/Dil Factor: 1.0 pH NR

Percent Moisture: NR

Percent Moisture (Not Decanted): NR

CAS Number		ug/l	CAS Number		ug/l
74-87-3	Chloromethane	10 U	78-87-5	1,2-Dichloropropane	5 U
74-83-9	Bromomethane	10 U	10061-02-6	Trans-1,3-Dichloropropene	5 U
75-01-4	Vinyl Chloride	10 U	79-01-6	Trichloroethene	S
75-00-3	Chloroethane	10 U	124-48-1	Dibromochloromethane	5 U
75-09-2	Methylene Chloride	3 J,B	79-00-5	1,1,2-Trichloroethane	5 U
67-64-1	Acetone	17 B	71-43-2	Benzene	S
75-15-0	Carbon Disulfide	5 U	10061-01-5	cis-1,3-Dichloropropene	5 U
75-35-4	1,1-Dichloroethene	S	110-75-8	2-Chloroethylvinylether	10 U
75-34-3	1,1-Dichloroethane	5 U	75-25-2	Bromoform	5 U
156-60-5	Trans-1,2-Dichloroethene	5 U	108-10-1	4-Methyl-2-Pentanone	10 U
67-66-3	Chloroform	5 U	591-78-6	2-Hexanone	10 U
107-06-2	1,2-Dichloroethane	5 U	127-18-4	Tetrachloroethene	5 U
78-93-3	2-Butanone	7 J	79-34-5	1,1,2,2-Tetrachloroethane	5 U
71-55-6	1,1,1-Trichloroethane	5 U	108-88-3	Toluene	S
56-23-5	Carbon Tetrachloride	5 U	108-90-7	Chlorobenzene	S
108-05-4	Vinyl Acetate	10 U	100-41-4	Ethylbenzene	5 U
75-27-4	Bromodichloromethane	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 10ug/l and a concentration of 3ug/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>=10ng/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 the 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.

S — Spiked Compound

NR — No value required

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: NUS CORPORATION Case No: NYSDEC #
Lat Sample ID No: 17031641 MSD QC Report No
Sample Matrix: Water Contract No:
Data Release Authorized By: Date Sample Received: 03/33/87

Volatile Compounds
Concentration: Low
Date Extracted/Prepared: 03/26/87
Date Analysed: 03/26/87
Conc/Dil Factor: 1.0 pH NR
Percent Moisture: NR
Percent Moisture (Not Decanted): NR

CAS Number		ug/l	CAS Number		ug/l
74-87-3	Chloromethane	10 u	78-87-5	1,2-Dichloropropane	5 u
74-83-9	Bromomethane	10 u	10061-02-6	Trans-1,3-Dichloropropene	5 u
75-01-4	Vinyl Chloride	10 u	79-01-6	Trichloroethene	8
75-00-3	Chloroethane	10 u	124-48-1	Dibromochloromethane	5 u
75-09-2	Methylene Chloride	3 J,B	79-00-3	1,1,2-Trichloroethane	5 u
67-64-1	Acetone	17 B	71-43-3	Benzene	5
75-15-0	Carbon Disulfide	5 u	10061-01-5	cis-1,3-Dichloropropene	5 u
75-35-4	1,1-Dichloroethene	5	110-75-8	2-Chloroethylvinylether	10 u
75-34-3	1,1-Dichloroethane	5 u	75-25-2	Bromoform	5 u
156-60-5	Trans-1,2-Dichloroethene	5 u	108-10-1	4-Methyl-2-Pentanone	10 u
67-66-3	Chloroform	5 u	591-78-6	2-Hexanone	10 u
107-06-2	1,2-Dichloroethane	5 u	127-18-4	Tetrachloroethene	5 u
78-73-3	2-Butanone	7 J	79-34-5	1,1,2,2-Tetrachloroethane	5 u
71-55-6	1,1,1-Trichloroethane	5 u	108-88-3	Toluene	5
56-23-5	Carbon Tetrachloride	5 u	108-90-7	Chlorobenzene	5
108-05-4	Vinyl Acetate	10 u	100-41-4	Ethylbenzene	5 u
75-27-4	Bromodichloromethane	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 10ng/l and a concentration of 3ng/l is calculated, report as 3J.

C — This flag applies to pesticide parameters wher the identification has been confirmed by GC/MS Single component pesticides)=10ng/ul in the final extract should be confirmed by GC/MS.

B — This flag is used when the analyte is found in blank as well as a sample. It indicates possib prebable blank contamination and wares the dat user to take the appropriate action.

Other — Other specific flags and footnotes may be required to properly define the results. If us they must be fully described and such descript attached to the data summary report.

S — Spiked Compound

NR — No value required.

REFERENCE NO. 4

SUFFOLK COUNTY

DEPARTMENT OF HEALTH SERVICES

INTEROFFICE MEMORANDUM

To: FOR THE RECORD

Date: Sept. 12, 1983

From: Alexander M. Santino

Subject: Spill # 1983-216
Rite Off Corp.
1545 Fifth Industrial Court
Bay Shore

On Sept. 12, 1983 at approx. 8;10 am a complaint was received in this office concerning a spill of approx. 700 gal. of mineral spirits and 120 gal. of perchloroethylene at the above referenced facility.

The writer responded to the spill and the following was noted:

1. The Suffolk County Police Dept. was at the facility to investigate the cause of the spill which was attributed to vandalism and malicious mischief by a former employee of the firm.

2. A visual inspection revealed that someone had broken into the factory and opened the spigots on two 500 gal. tanks; one containing mineral spirits and the other perchloroethylene.

3. The mineral spirits tank was located away from any doorways or openings and as such the petroleum liquid that leaked from that tank was confined to the interior of the facility.

4. The perchloroethylene tank was located adjacent to an overhead garage door and the 120 gal. of perc that was spilled ran directly out the door across an asphalt parking lot and puddled around a storm drain approx. 100 ft. south of the factory.

5. Rite Off Corp. contacted R.G.M. Liquid Waste Haulers to remove the liquid from the storm drain and the interior of the factory.

6. Dan Lyons of R.G.M. was dispatched to the site and after consulting with his home office arrangements were made to have a pump tanker truck report to the scene to start the clean-up process.

7. After the liquid was removed from the storm drain in the parking lot a sediment sample was taken with a steel auger and after inspecting the sample for color and telltale smell of organic solvent it was decided to have the bottom sediment removed by the use of a vacuum truck.

8. Dan Lyons was made aware of the various aspects of the clean-up as mandated by the Health Dept. such as the removal of all contaminated cardboard used in the process of soaking up the mineral spirits from the interior of the factory, the removal of portions of asphalt paving that were cracked or where the dirt underneath was contaminated with perc and finally the disposal of Speedy Dry used to soak up puddles of perc and mineral spirits.

9. Dan Lyons informed me that the contaminated material was to be transported to a disposal site located outside Buffalo, N.Y.

Alexander M. Santino
AMS/rt
Att.

Alexander M. Santino

REFERENCE NO. 5

Attachment 11c

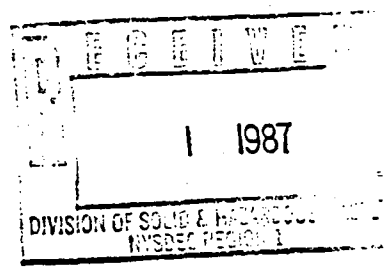
JOSEPH L. KAUFMAN
ATTORNEY-AT-LAW

P.O. BOX 248
BABYLON, NEW YORK 11702

(516) 587-6400

August 31, 1987

Mr. Michael D. Heck, Reviewing Engineer
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

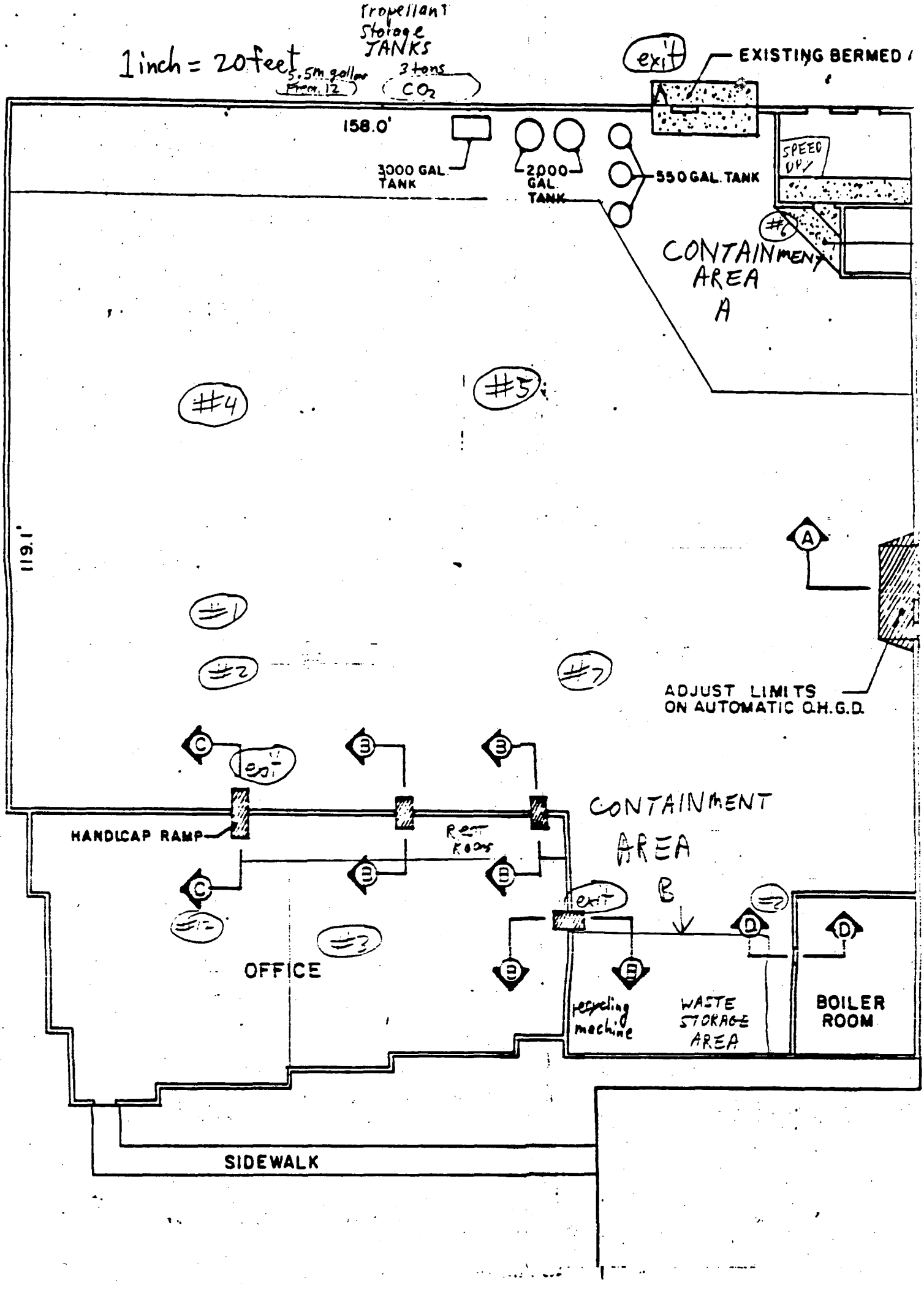


RE: Rite-Off, Incorporated
Your Case No. C1-0003-87-04

Dear Mr. Heck:

I am writing as a result of a telephone call from Ms. Tanya Hermos of NYSDEC's Region 1, Stony Brook office. She has been helpful in providing me assistance on how to comply with NYSDEC documentation requirements in regard to the captioned matter. During one of our discussions I asked her if we could obtain an extension of time on the thirty day response called for in NYSDEC's letter of August 14, 1987. She indicated that such would be possible if good faith progress were shown and I have tried to demonstrate this by my August 28, 1987 letter. In this regard I have additional updating information on behalf of Rite-Off which I am enclosing and for your convenience have "hilighted" so that it is readily apparent.

One area that leaves me with continuing concern is Rite-Off's proposed Personnel Training log against which I have studied the 6 NYCRR Subpart 373.3 but believe we are in substantial compliance. If there is something specific that we need to incorporate I would appreciate your advising. In order to review our general progress and status I shall call your office at the (518) 457 - 0532 number that Ms. Hermos provided. Based upon our conversation we should be able to agree on an extension of time, if necessary.


Propellant Storage TANKS
1 inch = 20 feet
5,5m gallon
From 12
3 tons
CO_2
exit
EXISTING BERMED
158.0'
3000 GAL. TANK
2000 GAL. TANK
550 GAL. TANK
SPEED DRY
#6
CONTAINMENT AREA A
#4
#5
119.1'
#1
#2
#7
A
ADJUST LIMITS ON AUTOMATIC O.H.G.D.
C
exit
B
B
B
HANDICAP RAMP
Rest Rooms
CONTAINMENT AREA B
C
B
B
exit
#2
#3
D
D
OFFICE
B
B
recycling machine
WASTE STORAGE AREA
BOILER ROOM
SIDEWALK

CHEMICAL LIST

Chemical:	On Hand Maximum	Location
Molydag 210	3 pails	A
Alox 165	1 drum	"
Propane	10 cylinders	South yard
Perfumes: R501 Almond	3 pails	A
R9 Bouquet	3 pails	
R14 Cherrymint	1 pail	
R10 Lemon	4 pails	
R542 Spearmint	1 pail	
R526 Spice	1 pail	
R638 Evergreen	1 pail	
Dyes: T-4716 blonde bronze	20 lbs.	A
S-3641 blonde	20 lbs.	
1400NB aluminum	20 lbs.	
TIME MIST Aerosols	40 cases	
Keystone No-Weld	3 pails	A
Carbon Dioxide	3 tons	South yard
Adhesive PS-1973-1	4 drums	A
S-96 Tall oil fatty acid	6 drums	A

CHEMICAL LIST

Chemical:	On Hand Maximum	Location
Dyes: T-17-N Saturn yellow	4 Bags	A
T-18-N Signal Green	4 "	
T-19 Horizon blue	8 "	
T-15 Blaze orange	4 "	
T-13 Rocket red	4 "	
CT-21 Corona magenta	4 "	
T-11 Aurora pink	2 "	
Cinch water based rust penetrant	1 drum	A
GL-420 graphite	4 pails	A
*Dymel 12	30,000 lbs	South yard
Dymel 11	15 drums	A
**"Vydax" AR Fluorotelomer dispersion	1 drum	A
Esi-cryl 411	1 drum	A
Surett fluid 4-K	2 drums	A
Isopar H	5 drums	A
Insecticides:		
623.00 butacide	1 drum	A
708.00 pyrethrum	1 drum	"
750.10 EC10-1	2 drums	"
875.05 tetralate	1 drum	"
880.05 tetralate 1.25-.53	1 drum	"
948.00 wasp & hornet	8 drums	"
970.00 P-DS residual	2 drums	"
992.90 Dursban aqueous	1 drum	"
722.50 Drione	120 lbs.	"
PVP V/A I 535	1 drum	"

CHEMICAL LIST

Chemical:	On Hand Maximum	Location
Hi sil 233	4 bags	A
P. ICC 825 ink remover	1 pail	Blg 2
ICC 767 stencil remover	1 pail	"
ICC ghost/haze remover	1 pail	"
aerosol starting ether	1000 cases	Bldg 2
Perfume: #470647 Lemon Fragrascent	4 pails	A
Aqua ammonia 26 deg.	1 carboy	A
Elvacite 2045	10 drums	A
PA 1445	1 drum	A
(see list "A")		
TL-102 lubricant	1 drum	A
(see list A)		

CHEMICAL LIST

Chemical:	On Hand Maximum	Location
Silicones: LM 1000	1 drum	A
EM 100	1 "	"
EM 10M	1 "	"
SF 350	1 "	"
SF 60,000	1 "	"
SF 5,000	1 "	"
dye: Timica silk white	2 drums	A
see list "A"		
10W30 Motor Oil	2 drums	A
Cirrus 43	1 drum	A
Metazene 99%	3 pails	A
Aerosol paints	250 cases	Bldg 2
Lead napthanate 24%	1 drum	A
Isotron 12	30,000 lbs.	South yard
Inseticides: Pyrethrum extract 20%	1 drum	A
Technical Piperonyl butoxide	1 "	A
Carbamate Conc. 10% Baygon	1 "	A
Diazinon 4 lb. oil conc.	1 "	A
Malathion 95%	1 pail	A
DPB 1000	1 drum	A
50-10	1 "	A

CHEMICAL LIST

Chemical:	On Hand Maximum	Location
see list "A"		
Protachem STO	1 drum	A
#30 mineral oil	1 drum	A
Acryloid B66 100%	2 pails	A
White lithium grease #2	6 drums	A
Aerosol products: Window Cleaner	1000 cs.	Bldg 2
Foam Cleaner	1000 cs.	"
Oven Cleaner	500 cs.	"
Baseboard Stripper	500 cs.	"
Surface disinfectant	300 cs.	"
Germicidal foam cleaner	300 cs.	"
Silk screening inks	10 gal.	"
dye: Cosmetic black C33134	2 drums	A
Dupont Zelec NK	1 drum	A
Nitrous oxide	10 cylinders	A

CHEMICAL LIST

Chemical:	On Hand Maximum	Location
Perfumes: Lemon 87-1333	4 pails	A
Almond 86-1306	4 pails	A
Silwet L7002	2 pails	A
see list "A"		
Liquid sulfuric acid drain opener	250 cs.	Bldg 2
Granular drain opener	6 pails	"
Enzymes	6 pails	"
Rozol Rat & Mouse Bait	25 cs.	"

CHEMICAL LIST

	On Hand Maximum	Location
Carbitol solvent	1 drum	A
Dibutyl phthalate	1 "	"
Dipropylene glycol	4 "	"
Ethylene glycol	2 "	"
Kerosene	3 "	"
Lactal spirits	1 "	"
Monoethanolamine	1 "	"
Methyl isobutylketone	1 "	"
Odorless Mineral spirits	2 "	"
Orthodichlorobenzene	1 "	"
PM Acetate	3 "	"
PM Solvent	7 "	"
Propylene glycol	2 "	"
Triethanolamine	1 "	"
Tergitol NP-9	1 "	"
Toluene	6 "	"
Triethylene glycol	1 "	"
VM P Naptha	1 "	"
Xylene	6 "	"
1,1,1 trichloroethane	2000 gl.	Tank area
Isopropanol	8 drums	A
Methanol	5 drums	A
Methylene chloride	1000 gl.	Tank area
Mineral spirits	2000 gl.	" "
Perchloroethylene	500 gl.	" "

Schedule "B"

Pickup of Unused Materials

1. Raw Material Suppliers List
   (Company Name/ Address/ Contact/ Phone, by Chemical/ Compound).

   a. Update this listing as changes require.

   b. Indicate maximum estimated quantity stored.

   See attachment entitled "CHEMICAL SUPPLIERS LIST".

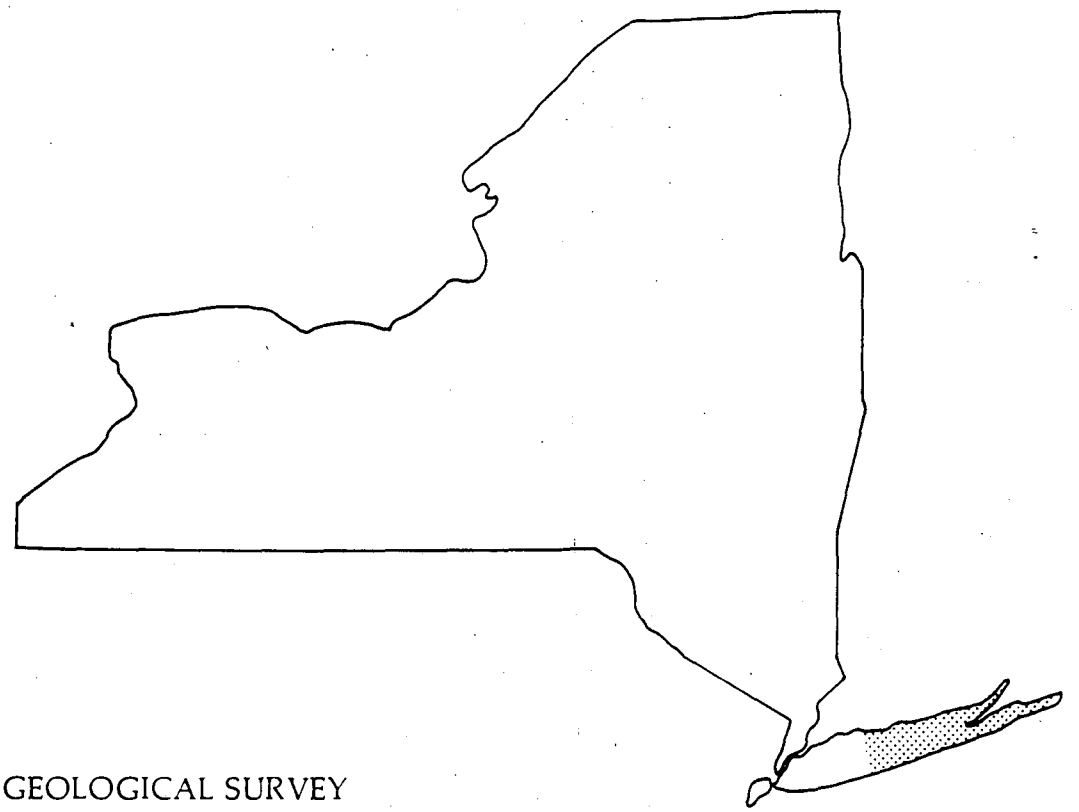
CHEMICAL SUPPLIERS LIST

LIST "A"

Carbitol solvent
Dibutyl phthalate
Dipropylene glycol
Ethylene glycol
Kerosene
Lactal spirits
Monoethanolamine
Methyl isobutylketone
Odorless Mineral spirits
Orthodichlorobenzene
PM Acetate
PM Solvent
Propylene glycol
Triethanolamine
Tergitol NP-9
Toluene
Triethylene glycol
VM P Naptha
Xylene
1,1,1 trichloroethane
Isopropanol
Methanol
Methylene chloride
Mineral spirits
Perchloroethylene

REFERENCE NO. 6

Hydrogeologic Data from Selected Wells and Test Holes in Suffolk County, Long Island, New York, 1972-80



U.S. GEOLOGICAL SURVEY
Open-File Report 81-500

Prepared in cooperation with
SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES
SUFFOLK COUNTY WATER AUTHORITY

HYDROGEOLOGIC DATA FROM SELECTED WELLS AND TEST HOLES IN SUFFOLK COUNTY, LONG ISLAND, NEW YORK, 1972-80

By Richard K. Krulikas

U.S. GEOLOGICAL SURVEY

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SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES

SUFFOLK COUNTY WATER AUTHORITY

Syosset, New York

1981

UNITED STATES
DEPARTMENT OF THE INTERIOR

JAMES G. WATT, Secretary

GEOLOGICAL SURVEY

Doyle G. Frederick, Acting Director

For additional information write to

U.S. Geological Survey
5 Aerial Way
Syosset, New York 11791

CONTENTS

	Page
Conversion factors and abbreviations	iv
Abstract	1
Introduction	1
Acknowledgments	2
Geohydrology	3
Selected references	5

PLATE

(in pocket)

Plate 1. Map showing locations of selected wells and test holes in Suffolk County

ILLUSTRATIONS

Figure 1. Map of Long Island showing location of Suffolk County..... 2

2. Generalized section showing major hydrogeologic units in Suffolk County..... 3

TABLES

Table 1. Major hydrogeologic units in Suffolk County..... 4

2. Hydrogeologic units and well-completion data from selected wells and test holes in Suffolk County..... 6

CONVERSION FACTORS AND ABBREVIATIONS

Multiply inch-pound units	By	To obtain metric (SI)[1/] units
inch (in)	25.4	millimeter (mm)
foot (ft)	.348	meters (m)
mile (mi)	1.609	kilometer (km)
square mile (mi^2)	2.509	square kilometer (km^2)
million gallons per day (Mgal/d)	.04381	cubic meters per second (m^3/s)

[1/] International System of units

HYDROGEOLOGIC DATA FROM WELLS AND TEST HOLES IN SUFFOLK COUNTY, LONG ISLAND, NEW YORK, 1972-80

By

Richard K. Krulikas

ABSTRACT

The population of Suffolk County, New York, an area of 922 square miles, has increased rapidly, from less than 200,000 in 1940 to about 1.3 million in 1978. Ground-water pumpage has increased from an average of 42 million gallons per day in 1950 to about 257 million gallons per day in 1978. To help supply the hydrologic information needed to anticipate and prevent shortages, this report presents hydrogeologic and well-completion data on over 700 wells and test holes.

INTRODUCTION

Suffolk County, in eastern Long Island, N.Y., is about 90 miles long and has a maximum width of about 20 miles (fig. 1). Land area of the county is about 922 square miles and constitutes approximately two-thirds of Long Island's 1,411 square-mile area. The population of Suffolk County has increased sharply from less than 200,000 in 1940 to about 1.3 million in 1978 (Long Island Lighting Company, Population Survey, January 1978). The growth has occurred mostly in the western part of the county; the eastern part has remained mainly rural.

The freshwater supply for the county is obtained solely from the underlying ground-water reservoir. Ground-water pumpage increased from an average of 42 Mgal/d in 1950 to about 257 Mgal/d in 1978 (R. J. O'Reilley, New York State Department of Environmental Conservation, oral commun., March 1980). The major hydrogeologic units in the ground-water reservoir are summarized in table 1; the vertical relationship of these units is depicted in a generalized section in figure 2.

The recent population growth in Suffolk County has given rise to a need for increased ground-water development. To help supply the hydrologic information needed to anticipate and prevent shortages, the U.S. Geological Survey is participating in a cooperative program of water-resources studies with the Suffolk County Water Authority and the Suffolk County Department of Health Services. Several reports have been published as a result of the cooperative program; among them are Jensen and Soren, 1971; Soren, 1971; and Jensen and Soren 1974.

Table 2 presents hydrogeologic units and well-completion data on 700 wells and test holes in Suffolk County; these include most of the pertinent wells and test holes drilled in Suffolk County since 1972 and a few older wells of importance that were not mentioned previously. Locations of wells and test holes are shown on plate 1.

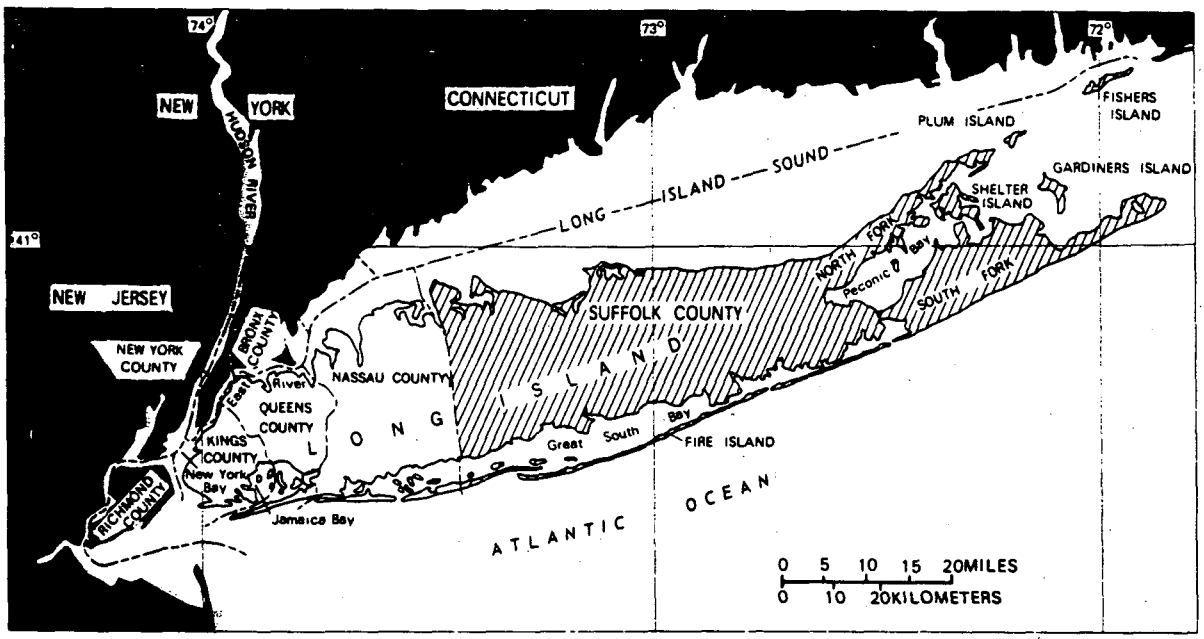


Figure 1.--Map of Long Island showing location of Suffolk County. (Modified from Jensen and Soren, 1971, p. 3.)

Acknowlegments

The author extends thanks to the Suffolk County Water Authority, the Suffolk County Department of Health Services, and the New York State Department of Environmental Conservation, particularly to R. J. O'Reilly, engineering technician, whose cooperation in providing well-completion data was essential for preparation of the report.

The author also thanks the well-drilling companies for providing well information, drill cuttings, and split-spoon core samples used in determining geologic correlations. These companies include Delta Well Company, Inc., Central Islip, N.Y.; East Coast Well Drilling and Supply Company, Inc., Riverhead, N.Y.; Lauman Company, Inc., Farmingdale, N.Y.; Strata Well Corporation, Islip, N.Y.; and Howard McMahon, Inc., Amagansett, N.Y.

GEOHYDROLOGY

Geology and hydrology of Long Island are summarized in numerous reports, notably Veatch and others (1906), Fuller (1914), Suter and others, (1949), Cohen and others (1968), and Jensen and Soren (1974).

The ground-water reservoir on Long Island lies within a thick sequence of unconsolidated deposits underlain by Precambrian (?) basement complex (fig. 2). The unconsolidated materials consist of a southward-dipping wedge of Cretaceous deposits overlain by a relatively thick layer of glacial outwash and morainal deposits of Pleistocene age. Characteristics of the geologic and hydrogeologic units are summarized in table 1.

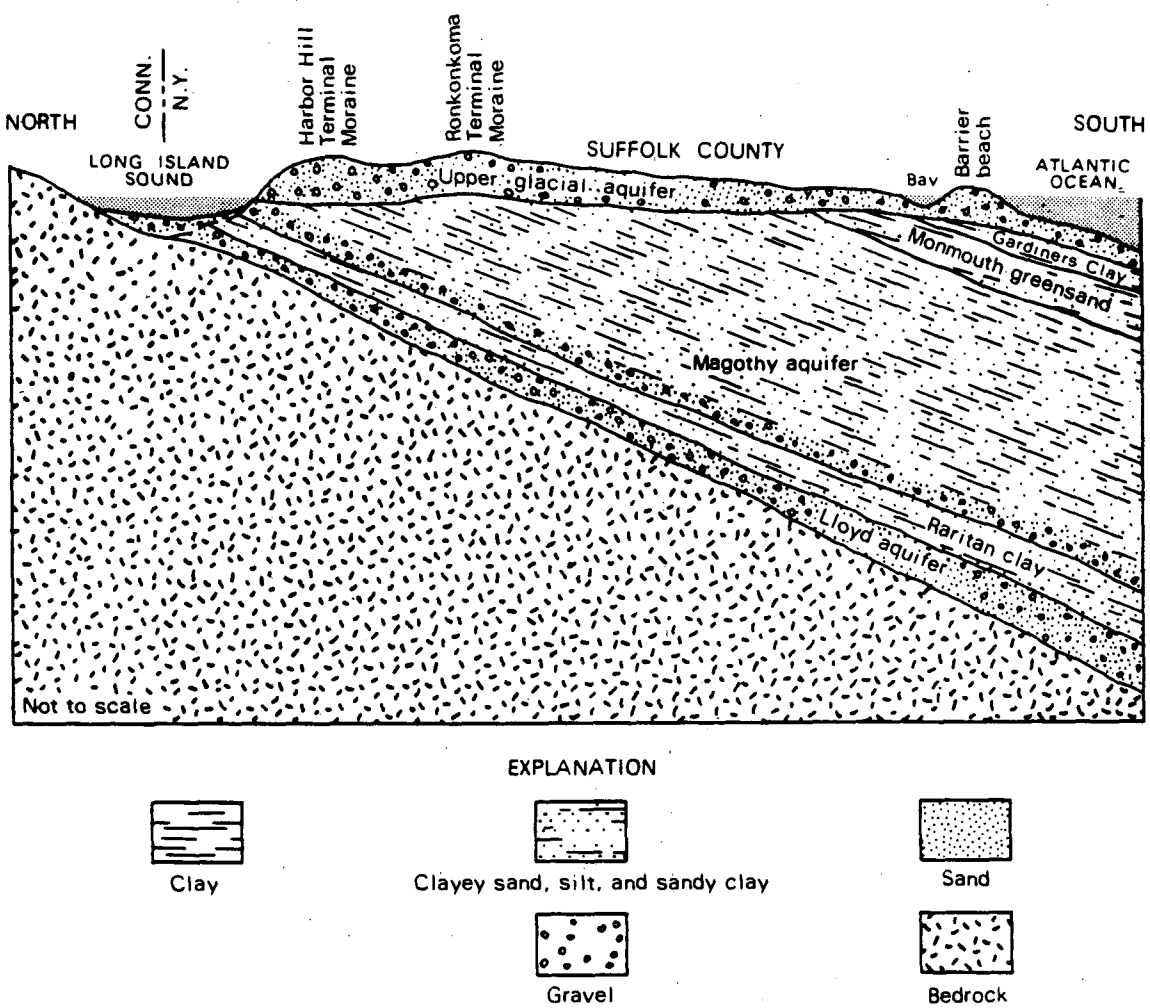


Figure 2.--Generalized section showing major hydrogeologic units in Suffolk County. (From Cohen and others, 1968.)

Table 1.--Major hydrogeologic units in Suffolk County, N.Y.

Hydrogeologic unit[1/]	Geologic name	Approximate thickness (feet)	Description and water-bearing character
Upper glacial aquifer	Holocene and upper Pleistocene deposits, and Mannetto Gravel	0 - 750	Mainly brown and gray sand and gravel of moderate to high hydraulic conductivity; also includes deposits of clayey glacial till and lacustrine clay of low hydraulic conductivity. A major aquifer.
Gardiners Clay	Gardiners Clay	0 - 75	Green and gray clay, silt, clayey and silty sand, and some interbedded clayey and silty gravel; of low hydraulic conductivity. Unit tends to confine water in underlying aquifer.
Monmouth greensand	Monmouth Group, undifferentiated	0 - 200	Interbedded marine deposits of dark-gray, olive-green, dark-greenish-gray, and greenish-black glauconitic and lignitic clay, silt, and clayey and silty sand. Unit has low hydraulic conductivity and tends to confine water in under-lying aquifer.
Magothy aquifer	Matawan Group and Magothy Formation, undifferentiated	0 - 1,100	Gray and white fine to coarse sand of moderate hydraulic conductivity. Generally contains sand and gravel beds of low to high hydraulic conductivity in basal 100 to 200 feet. Contains much interstitial clay and silt, and beds and lenses of clay, of low hydraulic conductivity. A major aquifer.
Raritan Clay	Unnamed clay member of the Raritan Formation	0 - 200	Gray, black, and multicolored clay and some silt and fine sand. Unit has low hydraulic conductivity and tends to confine water in underlying aquifer.
Lloyd aquifer	Lloyd Sand Member of the Raritan Formation	0 - 500	White and gray fine-to-coarse sand and gravel of moderate hydraulic conductivity and some clayey beds of low hydraulic conductivity. Not highly developed as an aquifer.
Bedrock	Undifferentiated crystalline rocks	Not Known	Mainly metamorphic rocks of low hydraulic conductivity; surface generally weathered; considered to be the bottom of the ground-water reservoir. Not a source of water in Suffolk County.

1/ Adapted largely from Cohen and others (1968, p. 18).

SELECTED REFERENCES

Cohen, Philip, Franke, O. L., and Foxworthy, B. L., 1968, An atlas of Long Island's water resources: New York State Water Resources Commission Bulletin 62, 117 p.

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Suter, Russell, de Laguna, Wallace, and Perlmutter, N. M., 1949, Mapping of geologic formations and aqiufers of Long Island, New York: New York State Water Power and Control Commission Bulletin GW-18, 212 p., 24 pls.

Veatch, A. C., Slichter, C. S., Bowman, Isaiah, Crosby, W. D., and Horton, R. E., 1906, Underground water resources of Long Island, New York: U.S. Geological Survey Professional Paper 44, 394 p., 34 pls.

Table 2. Hydrogeologic units and well completion data from selected wells and test holes in Suffolk County, New York.

EXPLANATION OF COLUMNAR DATA AND ABBREVIATIONS

Well Number

Well numbers are assigned by the New York State Department of Environmental Conservation. A prefix letter S, which designates Suffolk County, is omitted from the well number; thus, the official number of well 40161, for example, is S 40161. Wells are listed in numerical order.

Location of Well

Locations of wells are given by map coordinates, based on latitude and longitude, as shown on plate 1. Map coordinates are based on a latitude and longitude grid system established for Long Island (Veatch and others, 1906; Jensen and Soren, 1971). In this system, 5-minute intervals of latitude are lettered consecutively from south to north, and 5-minute intervals of longitude are numbered consecutively from west to east. The grid coordinates for Suffolk County are shown along the margins of plate 1. Thus, a well whose map coordinates are D15 is in the grid square bounded by lat 40°45' and 40°50'N and long 72°55' and 72°50'W.

Wells are also numbered according to the national well-numbering system of the U.S. Geological Survey. This system locates wells to the nearest second of latitude and longitude and gives a sequence number to the well to denote the chronological order in which wells within a 1-second quadrangle were recorded. For example, in well number 404707N0731905.01 (S 18075), the first six numbers indicate latitude 40°47'07" North; the remaining numbers before the period indicate longitude 073°19'05". The 01 after the period is the sequence number. Thus this well was the first one recorded in the 1-second quadrangle defined by the latitude and the longitude.

Well depth

The figures give well depth or total depth of the drilled test hole, in feet below land surface.

Hydrogeologic Unit Penetrated and Elevation of Unit Surface

Elevations of the tops of the hydrogeologic units penetrated by wells are given in feet above or below National Geodetic Vertical Datum of 1929. A minus (-) sign preceding the elevation figure indicates that the elevation is below National Geodetic Vertical Datum of 1929. The number in the "upper glacial aquifer" column is the elevation of the land surface at the well site. Absence of an elevation figure indicates that the test hole did not penetrate the unit.

Table 2.--Explanation (continued)

Year Completed

Year completed refers to the year in which the well was reported to have been completed or accepted by the original well owner. It may not always be the year in which the well was actually drilled.

Elevation of Land-Surface Datum (LSD) (feet above National Geodetic Vertical Datum of 1929)

The elevation of land surface at the well was estimated from U.S. Geological Survey 7-1/2-minute quadrangle topographic maps.

Use of Water

The following abbreviations indicate the primary purpose in 1977 for which the water from the well was reported to be used.

ARCD	air conditioning	IND	industrial
COM	commercial	IRR	irrigation
DOM	domestic	OTHR	other
FRPT	fire protection	P.S.	public supply
INST	institutional		

Use of Well

The following abbreviations indicate the principal use of the well or the purpose for which the well or hole was drilled.

DEST	well destroyed	TEST	test hole
OBS	observation well	UNSD	well unused
RECH	recharge water	WTDR	withdrawal of water

Screen Setting and Total Screen Length

The elevations of the top and bottom of the screened interval are given in feet above or below (-) National Geodetic Vertical Datum of 1929. The total length of screen or perforated pipe in that interval is given in feet. In some wells, screen was set at two or more intervals; in such cases the difference between the elevations of the two screen settings is different from the total screen length.

Diameter of Well

The diameter of the well is the inside diameter of the smallest casing at land surface, in inches.

Table 2.--Explanation (continued)

Water Level (feet below land-surface datum)

The water level given is the reported original static water level, in feet above or below land surface, when the well was completed.

Date of Measurement

The date of water-level measurement is given by month (M), day (D), and year (Y).

Lift Type

The following abbreviations indicate the type of pump or other conveyance known or assumed to have been used in 1977 to bring water to the surface.

CENT	centrifugal	TURB	turbine
JET	jet	NONE	no pump in well
SUBM	submersible	OTHR	some other type of lift

Aquifer Developed

The following abbreviations indicate the hydrogeologic unit that yields water to the well. Where two or more units yield water to the well, the probable principal unit is given.

UPGLAC	Upper glacial aquifer
GARD	Gardiners Clay
MONMOUTH	Monmouth greensand
MAGOTHY	Magothy aquifer
RARITAN	Raritan clay
LLOYD	Lloyd aquifer

Table 2.--Explanation (continued)

Specific Capacity

The value in this column is the number of gallons per minute pumped from the well per foot of drawdown in the well, as reported by drillers.

Abbreviations

COORD	coordinates
D	day
DIAM	diameter
FT	feet
CPM/FT	gallons per minute pumped per foot of drawdown in the well
IN	inches
LSD	land surface datum
M	month
MEAS	measurement
NGVD	National Geodetic Vertical Datum of 1929.
Y	year

Table 2.--Hydrologic units and well-completion data

Location of well			HYDROLOGIC UNIT PENETRATED AND ELEVATION OF UNIT SURFACE, IN FEET ABOVE OR BELOW NATIONAL GEODETIC VERTICAL DATUM OF 1929							
Well number	Map coord	Latitude and Longitude	Well depth (ft)	Upper glacial aquifer	Gardiners Clay	Monmouth greensand	Magothy aquifer	Raritan clay	Lloyd aquifer	Bedrock
18075	D10	404707 0731905.01	627	110			-155			
18261	D10	404707 0731904.01	388	110						
18621	D10	404704 0731904.01	201	110						
19767	F10	405506 0731801.01	28	15						
20041	C 8	404444 0732511.01	268	80			-280			
20042	C 8	404444 0732511.02	585	80			-298			
21734	F 8	405519 0732939.01	453	64						
22303	B10	403821 0731820.01	285	10	- 62		-145			
22548	D10	404705 0731907.01	415	114			-151			
22823	D11	404908 0731328.01	400	125						
23433	D18	404841 0723935.01	321	15			-103			
23462	D11	404813 0731328.01	400	125						
23524	E13	405158 0730300.01	446	110						
23609	E12	405319 0730829.01	484	125			-324			
26247	E 9	405058 0732338.01	447	178						
26490	D11	404505 0731317.01	110	40						
26600	E12	405200 0730855.01	323	123						
26681	E 8	405246 0732523.01	600	10	-113			-390	-470	
29743	F24	405356 0720639.01	302	50		-120	-239			
29823	D 9	404521 0732252.01	622	76			- 6			
30008	E 9	405058 0732338.01	488	185						
30114	B 9	408800 0732034.01	327	10	-100		-133			
30118	D12	404914 0730956.03	192	58						
30421	D 9	404718 0732453.01	272	125						
30506	D 9	404515 0732255.01	621	75			1			
31269	F13	405512 0730105.03	337	138			- 94			
31711	E11	405143 0731100.01	600	125						
31734	E13	405455 0730258.02	1125	165			- 55	-573	-730	
31976	F18	405936 0723542.01	112	65						
32821	F12	405614 0730610.01	600	75			3	-495		
33060	E12	405157 0730740.01	410	95						
33203	E12	405149 0730756.01	580	95						
33204	E12	405149 0730752.01	517	95						
33205	E12	405150 0730748.01	436	93						
33206	E12	405154 0730801.01	581	93						
33991	D11	404511 0731127.01	696	35	-68		- 93			
34016	E13	405156 0730451.01	712	95						
34651	E12	405147 0730740.01	417	94						
34652	E12	405148 0730755.01	102	94						
34653	E12	405149 0730801.01	700	93						
34893	F14	405517 0725749.01	840	125			-555	-719		
36448	F15	405627 0725407.01	404	132						
36711	E14	405333 0725629.01	143	81			- 83			
36965	F22	405639 0721811.01	161	52						
37140	D11	404510 0731123.01	330	35	-69		- 86			
37276	D11	404918 0731330.01	400	40						
37494	D14	404717 0725956.03	622	60			-300			
37991	E15	405456 0725327.01	141	102						
38035	D 9	404723 0732453.01	450	130						
38194	F14	405652 0725900.02	775	157				-593		
38320	D13	404756 0730255.02	173	75						
38321	D13	404756 0730255.03	303	63			-133			
38595	E12	405257 0730501.01	605	108			-200			
38784	E13	405256 0730456.02	603	105			-200			
38785	E 9	405135 0732355.01	701	202						

from selected wells and test holes in Suffolk County, New York.

WELL-COMPLETION DATA

Well Number	Year Com-pleted	Elevation of LSD (ft above or below NGVD)	Use of Water	Use of Well	Screen Setting (ft above or below NGVD)	Total Screen Length (ft)	Diam of Well (in)	Water level (ft below LSD)	Date of Meas. (M-D-Y)	Lift Type	Aquifer Devel-oped	Specific Capacity (GPM/ft)
18075	1959	110	UNSD	TEST							MAGOTHY	
18261	1960	110	P.S.	WTDR	-180 TO -263	83	16	60	01-13-60		MAGOTHY	
18621	1960	110	P.S.	WTDR	- 34 TO - 91	57	36	51	05-23-60		UPGLAC	36
19767	1961	15	IRR	WTDR							UPGLAC	
20041	1962	80	P.S	WTDR	-110 TO -188	78	12	25	09-05-61	TURB	UPGLAC	75
20042	1962	80	P.S.	WTDR	-444 TO -505	61	20	25	07-15-61	TURB	MAGOTHY	40
21734	1962	64	DOM	WTDR	-377 TO -389	12	6				UPGLAC	
22303	1963	10	COM	WTDR	-263 TO -275	12	4				MAGOTHY	
22548	1964	114	UNSD	UNSD	-233 TO -289	56	42				MAGOTHY	
22823	1964	125	IND	WTDR	-224 TO -275	51	12				MAGOTHY	
23433	1965	15	IRR	WTDR	-255 TO -306	51	10	4	03-02-65		MAGOTHY	
23462	1965	125	UNSD	UNSD	-249 TO -275	26	12				UPGLAC	
23524	1965	110	P.S.	WTDR	-210 TO -326	116	16	66	08-25-65	TURB	UPGLAC	41
23609	1965	125	FRPT	WTDR	-329 TO -359	30	10	94	05-01-65	TURB	MAGOTHY	30
26247	1965	178	P.S.	WTDR	- 86 TO -269	183	20	133	12-14-65	TURB	MAGOTHY	79
26490	1965	40	P.S.	WTDR	- 32 TO - 67	35	30	17	06-28-65	TURB	UPGLAC	60
26600	1966	123	UNSD	TEST	-147 TO -167	20	8	82	03-11-66		UPGLAC	3
26681	1966	10	P.S.	WTDR	-515 TO -587	72	16	7	04-24-66		LLOYD	18
29743	1967	50	UNSD	OBS	- 89 TO -100	11	6	45	01-11-67		MAGOTHY	2
29823	1967	76	UNSD	TEST							MAGOTHY	
30008	1967	185	P.S.	WTDR	-238 TO -298	60	20	137	03-20-67	SUBM	MAGOTHY	61
30114	1967	10	IRR	WTDR	-134 TO -200	66	10	8	05-22-67	TURB	MAGOTHY	4
30118	1967	58	P.S.	WTDR	- 93 TO -134	51	16				UPGLAC	
30421	1967	125	ARCD	WTDR				67	07-07-67	TURB	UPGLAC	6
30506	1967	75	P.S.	WTDR	-471 TO -543	62		26	07-25-67		MAGOTHY	41
31269	1967	138	UNSD	TEST			6				MAGOTHY	
31711	1967	125	UNSD	TEST							MAGOTHY	20
31734	1967	165	UNSD	TEST							MAGOTHY	
31976	1967	65	IND	WTDR	- 16 TO - 47	31	12			TURB	UPGLAC	
32821	1968	75	UNSD	TEST							MAGOTHY	
33060	1968	95	ARCD	WTDR	-262 TO -315	53	16				UPGLAC	
33203	1968	95	OTHR	RECH	-425 TO -485	60	16	50	08-29-68		UPGLAC	75
33204	1968	95	OTHR	RECH	-361 TO -422	61	16	53	09-17-68		UPGLAC	37
33205	1968	93	ARCD	WTDR	-282 TO -343	61	16	50	09-20-68	TURB	UPGLAC	36
33206	1968	93	OTHR	RECH	-428 TO -488	60	16	53	08-13-68		UPGLAC	40
33991	1968	35	UNSD	TEST							MAGOTHY	
34016	1968	95	UNSD	OBS			8				MAGOTHY	
34651	1969	94	ARCD	WTDR	-258 TO -318	60	16	46	04-10-69	TURB	UPGLAC	27
34652	1969	94	ARCD	WTDR	- 45 TO - 76	31	16	32	03-12-69	TURB	UPGLAC	52
34653	1969	93	UNSD	OBS	-505 TO -607	102	8	49	03-13-69		UPGLAC	54
34893	1969	125	UNSD	OBS							MAGOTHY	
36448	1969	132	UNSD	OBS			10				UPGLAC	
36711	1970	81	UNSD	OBS	- 28 TO - 58	30	12	55			UPGLAC	239
36965	1970	52	P.S.	WTDR	- 71 TO -101	30	12	36	04-15-70	TURB	UPGLAC	
37140	1970	35	P.S.	WTDR	-225 TO -295	70	20	18	05-13-70		MAGOTHY	39
37276	1970	40	ARCD	WTDR	-309 TO -359	50	36	13	05-01-70	TURB	UPGLAC	40
37494	1970	60	UNSD	UNSD			42				MAGOTHY	
37991	1970	102	P.S.	WTDR	- 13 TO - 39	26	16	45	09-14-70	TURB	UPGLAC	49
38035	1970	130	UNSD	UNSD			38				UPGLAC	
38194	1970	157	P.S.	WTDR	-513 TO -573	60	20	133	12-10-70		UPGLAC	21
38320	1970	75	P.S.	WTDR	- 35 TO - 82	47	20	39	11-18-70		UPGLAC	54
38321	1971	63	P.S.	WTDR	-176 TO -237	61	20	38	01-08-71		MAGOTHY	40
38595	1970	105	UNSD	TEST							MAGOTHY	
38784	1970	105	P.S.	WTDR	-422 TO -492	70	20	44	09-23-71	TURB	MAGOTHY	
38785	1971	202	P.S.	WTDR	-370 TO -461	91	20	157	03-30-71		UPGLAC	67

Table 2.--Hydrologic units and well-completion data

Location of well			HYDROLOGIC UNIT PENETRATED AND ELEVATION OF UNIT SURFACE, IN FEET ABOVE OR BELOW NATIONAL GEODETIC VERTICAL DATUM OF 1929							
Well number	Map coord	Latitude and Longitude	Well depth (ft)	Upper glacial aquifer	Gardiners Clay	Monmouth greensand	Magothy aquifer	Raritan clay	Lloyd aquifer	Bedrock
38916	E12	405418 0730649.02	845	227			- 27	-563		
39184	E12	405147 0730804.01	700	93						
39185	E12	405147 0730805.02	619	93						
39186	E12	405147 0730803.03	683	93						
39187	E12	405147 0730804.04	698	95						
39333	E11	405208 0731314.01	658	64			-422			
39347	E12	405054 0730509.01	176	128						
39518	E11	405118 0731238.01	725	76			- 64	-684		
39531	D11	404614 0731230.01	289	53			-105			
39535	B11	403819 0731117.01	461	5	- 92	- 98	-313			
39536	E 9	405345 0732038.01	615	173						
39709	C 8	404556 0732522.01	705	85			-268			
40057	E12	405016 0730903.01	623	110			-154			
40161	E14	405335 0725629.02	138	80						
40331	E13	405221 0730212.01	694	87			-408			
40333	E10	405236 0731709.01	525	110						
40407	F19	405636 0723448.01	140	10						
40497	D10	404606 0731746.02	284	74	- 50		- 64			
40498	C 9	404230 0732041.01	748	24	- 54		- 60			
40709	E13	405223 0730219.01	485	90						
40710	E11	405207 0731314.01	463	70			-295			
40711	E11	405209 0731314.01	273	70						
40818	D12	404610 0730507.01	754	55	-101		-113			
40837	F13	405510 0730453.02	810	195			- 81	-573		
40838	F13	405510 0730453.02	294	195			- 81			
40980	E12	405418 0730649.01	578	225			1			
40981	D12	404820 0730735.01	694	100			-124			
41341	D14	404807 0725907.01	703	73			-127			
41342	E12	405021 0730624.01	663	130			-384			
41343	E13	405217 0730116.01	650	110			-186			
41344	D11	404919 0731428.01	693	79			- 47			
41345	E10	405249 0731928.01	807	237						
41358	B10	403817 0731633.02	290	10	- 73		-280			
41513	E12	405120 0730824.01	719	108			-149			
42053	E11	405032 0731407.01	713	50			- 56			
42054	E11	405043 0731229.01	723	40			-240			
42225	E 9	405015 0732342.01	790	110						
42226	E12	405015 0730902.01	270	110						
42227	E12	405016 0730903.01	253	110						
42270	E11	405119 0731237.00	649	76			- 64			
42473	E11	405119 0731237.02	649	76			- 64			
42504	E13	405215 0730115.01	223	110						
42505	E13	405213 0720113.02	233	110						
42760	E12	405054 0730509.02	173	130						
42761	D13	404756 0730255.01	333	75			-115			
42762	C10	404305 0731614.01	714	26	- 56		- 64			
42827	D11	404511 0731123.01	663	35	- 62		- 92			
43001	E 8	405113 0732609.01	590	230				-337		
43010	D16	404804 0724838.01	700	20	- 76	- 94	-144			
43088	D10	404640 0731521.01	902	90			- 80	-772		
43101	E13	405140 0730240.01	703	40			-116			
43117	E13	405256 0730456.03	552	102			-305			
43516	D13	404618 0730356.01	803	55			-101			
43808	C 8	404323 0732534.01	59	66						
43810	C 9	404124 0732416.02	76	30						

from selected wells and test holes in Suffolk County, New York.

WELL-COMPLETION DATA

Well Number	Year Completed	Elevation of LSD (ft above or below NGVD)	Use of Water	Use of Well	Screen Setting (ft above or below NGVD)	Total Screen Length (ft)	Diam of Well (in)	Water level (ft below LSD)	Date of Meas. (M-D-Y)	Lift Type	Aquifer Developed	Specific Capacity (GPM/ft)
38916	1971	227	UNSD	TEST							MAGOTHY	
39184	1971	93	ARCD	RECH	-507 TO -607	100	10				UPGLAC	
39185	1971	93	ARCD	RECH	-426 TO -526	100	10				UPGLAC	
39186	1971	93	ARCD	RECH	-490 TO -590	100	10				UPGLAC	
39187	1971	95	ARCD	RECH	-503 TO -603	100	10				UPGLAC	
39333	1971	64	UNSD	TEST	-546 TO -568	22	16	33	04-09-71		MAGOTHY	
39347	1971	128	P.S.	WTDR	- 8 TO - 48	40	10	69	07-06-71		UPGLAC	109
39518	1971	76	UNSD	TEST	-514 TO -614	100	8	47			MAGOTHY	
39531	1971	53	P.S.	WTDR	-149 TO -219	70	20	23	10-01-71	TURB	MAGOTHY	37
39535	1971	5	P.S.	WTDR	-313 TO -456	143	12	FLOWING	12-20-72	TURB	MAGOTHY	
39536	1971	173	P.S.	WTDR	-362 TO -442	80	20	155	09-01-71	TURB	UPGLAC	30
39709	1971	85	P.S.	WTDR	-565 TO -620	55	20	36	07-21-71	TURB	MAGOTHY	3
40057	1971	110	UNSD	TEST							MAGOTHY	
40161	1971	80	P.S.	WTDR	- 14 TO - 54	40	20	43	07-28-71	TURB	UPGLAC	35
40331	1971	87	P.S.	WTDR							UPGLAC	
40333	1972	110	UNSD	WTDR	-405 TO -415	10	6	74	08-27-72	SUBM	UPGLAC	7
40407	1971	10	FRPT	WTDR	-109 TO -129	20	16	4	09-13-71		UPGLAC	
40497	1971	74	P.S.	WTDR	-150 TO -210	60	10	32		TURB	MAGOTHY	44
40498	1972	24	P.S.	WTDR	-648 TO 718	70	20	4	05-10-72	TURB	MAGOTHY	54
40709	1971	90	P.S.	WTDR	-330 TO -390	60	20	37	10-12-71		UPGLAC	87
40710	1971	70	P.S.	WTDR	-297 TO -387	90	20	33	10-28-71		MAGOTHY	126
40711	1971	70	P.S.	WTDR	-153 TO -203	50	20	37	09-08-71		UPGLAC	80
40818	1971	55	UNSD	TEST			6				MAGOTHY	
40837	1972	195	P.S.	WTDR	- 38 TO - 92	54	20	160	01-10-72	TURB	MAGOTHY	9
40838	1972	195	P.S.	WTDR	- 44 TO - 99	55	20	162	04-04-72	TURB	UPGLAC	10
40980	1972	225	P.S.	WTDR	-279 TO -348	69	20	191	02-10-72	SUBM	MAGOTHY	30
40981	1971	100	UNSD	TEST	-555 TO -575	20	8	58	11-02-71		MAGOTHY	7
41341	1972	73	UNSD	TEST							MAGOTHY	
41342	1972	130	UNSD	TEST							MAGOTHY	
41343	1971	110	UNSD	TEST							MAGOTHY	
41344	1971	79	UNSD	TEST							MAGOTHY	
41345	1972	237	UNSD	TEST							UPGLAC	
41358	1972	10	UNSD	UNSD							MAGOTHY	
41513	1972	108	UNSD	TEST			14				MAGOTHY	
42053	1972	50	UNSD	TEST							MAGOTHY	
42054	1972	40	UNSD	TEST			18				MAGOTHY	
42225	1972	110	P.S.	WTDR	-580 TO -680	100	20	114	04-21-72	SUBM	MAGOTHY	48
42226	1972	110	P.S.	WTDR	- 95 TO -157	62	20	65	04-10-72		UPGLAC	73
42227	1972	110	P.S.	WTDR	- 78 TO -140	62	20	65	01-31-72		UPGLAC	54
42270	1972	76	UNSD	UNSD	-499 TO -573	74	20	47	01-31-72		MAGOTHY	23
42473	1972	76	UNSD	UNSD	-503 TO -573	70	20	45	02-08-72	TURB	MAGOTHY	24
42504	1972	110	P.S.	WTDR	- 51 TO -117	66	20	53	06-28-72		UPGLAC	
42505	1972	110	P.S.	WTDR	- 63 TO -123	60	60	68	06-26-72		UPGLAC	
42760	1972	130	P.S.	WTDR	- 7 TO - 43	36	20	72	08-28-72	TURB	UPGLAC	102
42761	1972	75	P.S.	WTDR	- 91 TO -258	167	20	50	05-23-72	TURB	MAGOTHY	46
42762	1972	26	P.S.	WTDR	-624 TO -684	60	20	8	04-10-72		MAGOTHY	43
42827	1972	35	P.S.	WTDR	-563 TO -625	62	20			TURB	MAGOTHY	
43001	1972	230	P.S.	WTDR	-216 TO -296	80	20	189	09-07-72	TURB	UPGLAC	95
43010	1972	20	UNSD	TEST	-660 TO -680	20				SUBM	MAGOTHY	
43088	1972	90	UNSD	TEST							MAGOTHY	
43101	1972	40	UNSD	TEST							MAGOTHY	
43117	1972	102	P.S.	WTDR	-366 TO -451	85	20	49	05-08-72	TURB	MAGOTHY	55
43516	1972	55	UNSD	TEST							MAGOTHY	
43808	1972	66	UNSD	OBS	22 TO 12	10	6	5			UPGLAC	
43810	1972	30	UNSD	OBS	- 31 TO - 41	10	6				UPGLAC	

Table 2.--Hydrologic units and well-completion data

Well number	Location of well: Map coord	Location of well: Latitude and Longitude	Well depth (ft)	HYDROLOGIC UNIT PENETRATED AND ELEVATION OF UNIT SURFACE, IN FEET ABOVE OR BELOW NATIONAL GEODETIC VERTICAL DATUM OF 1929: Upper glacial aquifer	Gardiners Clay	Monmouth greensand	Magothy aquifer	Raritan clay	Lloyd aquifer	Bedrock
43811	D 9	404530 0732411.01	90	102						
43813	C 9	404158 0732258.02	78	35						
43814	C 9	404455 0732150.01	50	60						
43816	C 9	404237 0732206.02	80	40						
43817	D 9	404618 0732050.01	56	70						
43819	C 9	404250 0732023.02	78	30						
43820	D10	404649 0731840.01	98	110						
43822	C10	404302 0731855.02	74	20						
44032	E12	405147 0730649.01	753	118			-136			
44137	C10	404432 0731513.01	720	39	- 46		- 75			
44186	E13	405004 0730227.01	673	180			- 88			
44378	E 9	405322 0732114.01	467	27						
44467	E15	405122 0725407.00	713	105			-107			
44640	F14	405710 0725713.01	205	155						
44774	D11	404920 0731428.01	293	79						
44775	E13	405407 0730009.01	755	150						
44914	E 9	405254 0732142.01	25	30						
44918	D13	404812 0730412.01	85	85						
45053	E 9	405330 0732424.01	125	185						
45207	E10	405132 0731814.01	146	165						
45208	E 9	405005 0732337.01	137	150						
45210	D10	404943 0731745.01	109	125						
45212	E10	405356 0731920.01	114	120						
45220	C12	404305 0730853.00	724	10	- 76	-104	-202			
45347	D10	404726 0731626.01	643	130			-200			
45348	D10	404729 0731628.01	650	130			-200			
45402	E10	405259 0731622.01	170	180						
45446	C10	404400 0731544.02	41	38						
45447	D12	404606 0730500.01	82	52						
45594	D10	404920 0731509.01	85	105						
45610	E 9	405322 0732114.04	313	15						
45637	D12	404508 0730809.01	82	13						
45638	D 9	404804 0732037.01	725	170						
45639	D 9	404804 0732037.02	740	170						
45717	D10	404618 0731645.01	75	93						
45719	D11	404635 0731016.01	82	26						
45720	D11	404716 0731316.02	81	90						
45722	D11	404516 0731228.01	91	37						
45808	E15	405201 0725442.00	707	93			-105			
45839	D11	404503 0731312.01	726	40			-105			
45935	D10	404851 0731851.01	605	285			-344			
46165	F11	405521 0731005.01	481	15						
* 46235	C10	404432 0731513.01	713	39	- 46		- 75			
46281	E 8	405237 0732505.00	51	34						
46283	D 9	404823 0732118.00	239	275						
46284	D12	404848 0730734.01	108	110						
46286	D11	404836 0731109.01	107	120						
46400	E13	405002 0730226.00	266	180			- 84			
46509	C12	404317 0730859.01	315	15	- 75	-115	-201			
46712	D16	404803 0724840.01	100	20						
46713	D16	404804 0724941.01	444	20	- 76	- 95	-144			
46830	D10	404606 0731746.01	655	76	- 46		- 60			
46871	E 8	405041 0732515.01	836	196				-428		
46911	D16	404920 0724845.02	34	41						
46912	D16	404919 0724845.01	32	42						

* CLOSEST WELL USED FOR DRINKING WATER

from selected wells and test holes in Suffolk County, New York.

WELL-COMPLETION DATA

Well Number	Year Completed	Elevation of LSD (ft above or below NGVD)	Use of Water	Use of Well	Screen Setting (ft above or below NGVD)	Total Screen Length (ft)	Diam of Well (in)	Water level (ft below LSD)	Date of Meas. (M-D-Y)	Lift Type	Aquifer Developed	Specific Capacity (GPM/ft)
43811	1972	102	UNSD	OBS	27 TO 17	10	6				UPGLAC	
43813	1972	35	UNSD	OBS	- 28 TO - 38	10	6				UPGLAC	
43814	1972	60	UNSD	OBS	25 TO 15	10	6				UPGLAC	
43816	1972	40	UNSD	OBS	- 25 TO - 35	10	6				UPGLAC	
43817	1972	70	UNSD	OBS	29 TO 19	10	6				UPGLAC	
43819	1972	30	UNSD	OBS	- 33 TO - 43	10	6				UPGLAC	
43820	1972	110	UNSD	OBS	28 TO 18	10	6				UPGLAC	
43822	1972	20	UNSD	OBS	- 39 TO - 49	10	6				UPGLAC	
44032	1972	118	UNSD	TEST							MAGOTHY	
44137	1972	39	UNSD	TEST				16	07-11-72		MAGOTHY	10
44186	1972	180	UNSD	TEST				117	06-26-72		MAGOTHY	19
44378	1972	27	UNSD	TEST							UPGLAG	
44467	1972	105	UNSD	TEST							UPGLAC	
44640	1973	155	P.S.	WTDR	0 TO - 49	49	16	90	06-06-72	TURB	UPGLAC	75
44774	1972	79	P.S.	WTDR	-119 TO -209	90	36	38	09-20-72	SUBM	UPGLAC	
44775	1972	150	UNSD	TEST							UPGLAC	
44914	1973	30	UNSD	OBS	17 TO 5	12					UPGLAC	
44918	1973	85	UNSD	OBS	12 TO 0	12	6				UPGLAC	
45053	1972	185	UNSD	OBS	80 TO 70	10	6				UPGLAC	
45207	1973	165	UNSD	OBS	31 TO 21	10	6				UPGLAC	
45208	1973	150	UNSD	OBS	25 TO 15	10	6				UPGLAC	
45210	1972	125	UNSD	OBS	28 TO 18	10	6				UPGLAC	
45212	1972	120	UNSD	OBS	18 TO 8	10	6				UPGLAG	
45220	1972	10	UNSD	TEST							MAGOTHY	
45347	1972	130	INST	WTDR	-457 TO -513	56	16	73	10-24-72		MAGOTHY	31
45348	1972	130	INST	WTDR	-460 TO -518	58	16	74	11-01-72		MAGOTHY	52
45402	1972	180	UNSD	OBS	22 TO 12	10	6				UPGLAC	
45446	1972	38	UNSD	OBS	9 TO - 1	10	6				UPGLAG	
45447	1972	52	UNSD	OBS	- 19 TO - 29	10	6				UPGLAC	
45594	1972	105	UNSD	OBS	32 TO 22	10	6				UPGLAC	
45610	1972	15	P.S.	WTDR	-244 TO -294	50	20			SUBM	UPGLAC	
45637	1972	13	UNSD	OBS	- 58 TO - 68	10	6				UPGLAG	
45638	1973	170	P.S.	WTDR	-478 TO -555	77	20	97	02-01-73	TURB	UPGLAC	29
45639	1973	170	P.S.	WTDR	-490 TO -565	75	20	90	07-03-73	SUBM	UPGLAG	24
45717	1972	93	UNSD	OBS	30 TO 18	12	6				UPGLAC	
45719	1972	26	UNSD	OBS	- 43 TO - 53	10	6				UPGLAC	
45720	1972	90	UNSD	OBS	22 TO 12	10	6				UPGLAC	
45722	1972	37	UNSD	OBS	- 41 TO - 51	10	6				UPGLAC	
45808	1972	93	UNSD	TEST							MAGOTHY	
45839	1973	40	P.S.	WTDR	-610 TO -680	70	20	13	02-20-73	TURB	MAGOTHY	
45935	1974	285	P.S.	WTDR	-254 TO -314	60	48	218	05-29-74		UPGLAC	44
46165	1973	15	UNSD	DEST							UPGLAC	
*46235	1973	39	P.S.	WTDR	-610 TO -671	61	20	19	02-27-73	TURB	MAGOTHY	38
46281	1973	34	UNSD	OBS	- 4 TO - 16	12	6				UPGLAC	
46283	1973	275	UNSD	OBS	48 TO 38	10	6				UPGLAC	
46284	1972	110	UNSD	OBS	15 TO 5	10	6				UPGLAC	
46286	1972	120	UNSD	OBS	26 TO 16	10	6				UPGLAC	
46400	1973	180	P.S.	WTDR	- 20 TO - 80	60	20	117	03-01-73	TURB	UPGLAC	
46509	1973	15	P.S.	WTDR	-246 TO -308	62	48			TURB	MAGOTHY	
46712	1973	20	P.S.	WTDR	- 53 TO - 80	27	10	19	03-05-73	TURB	UPGLAC	30
46713	1973	20	P.S.	WTDR	-295 TO -423	128	20	14	03-07-73	TURB	MAGOTHY	27
46830	1973	76	P.S.	WTDR	-474 TO -575	101	20	70	10-16-73		MAGOTHY	56
46871	1973	196	UNSD	TEST							MAGOTHY	
46911	1973	41	UNSD	OBS	21 TO 16	5	6				UPGLAG	
46912	1973	42	UNSD	OBS	24 TO 19	5	6				UPGLAC	

* CLOSEST WELL USED FOR DRINKING WATER

Table 2.--Hydrologic units and well-completion data

Well number	Location of well: Map coord	Location of well: Latitude and Longitude	Well depth (ft)	HYDROLOGIC UNIT PENETRATED AND ELEVATION OF UNIT SURFACE, IN FEET ABOVE OR BELOW NATIONAL GEODETIC VERTICAL DATUM OF 1929: Upper glacial aquifer	Gardiners Clay	Monmouth greensand	Magothy aquifer	Raritan clay	Lloyd aquifer	Bedrock
46928	E13	405455 0730258.01	654	166			- 35			
46963	E12	405226 0730957.01	133	147						
46964	E10	405225 0731522.00	114	123						
46965	E10	405230 0731644.00	152	166						
46966	D16	404952 0724705.01	86	89						
47002	E19	405300 0723052.01	163	90						
47024	D17	404628 0724308.04	377	10		-210	-321			
47157	D11	404933 0731342.01	25	105						
47218	E14	405335 0725629.00	703	71			-307			
47222	C10	404200 0731636.01	28	75						
47223	C12	404351 0730541.01	30	55						
47224	D15	404817 0725325.00	33	20						
47225	E14	405218 0725611.01	31	51						
47227	E16	405240 0724914.01	100	40						
47228	E16	405306 0724827.01	101	40						
47231	F18	405541 0723753.00	40	40						
47233	Q20	410348 0722729.00	51	11						
47234	G21	410213 0722327.00	27	7						
47235	G23	410037 0721451.01	22	5						
47236	C23	410156 0721336.01	60	35						
47281	E17	405349 0724415.02	275	140	- 78		- 90			
47282	E17	405849 0724415.03	283	140	- 87		- 95			
47436	E15	405124 0725408.01	196	105						
47437	E15	405124 0725408.02	179	105						
47438	E15	405124 0725408.03	269	105			-103			
47439	D14	404739 0725627.02	707	71			-114			
47453	D12	404804 0730513.00	443	100	- 86		-102			
47672	D11	404810 0731132.00	734	100			-341			
47673	E11	405142 0731058.01	279	109						
47675	E12	405111 0730658.01	90	80						
47698	E12	405307 0730609.01	104	133						
47711	C 9	404119 0732219.01	221	25	- 47		- 68			
47718	D12	404941 0730654.01	51	68						
47741	E 8	405211 0732507.00	559	70						
47743	D13	404642 0730058.01	100	35						
47745	E14	405417 0725727.01	32	62						
47746	D14	404847 0725713.00	84	90						
47747	D15	404740 0725452.00	35	31						
47748	F15	405638 0725147.00	36	110						
47750	E15	405004 0725154.00	95	95						
47752	D14	404607 0725947.01	100	23						
47755	E16	405136 0724645.00	58	63						
47756	D14	404922 0725950.01	69	89						
47757	E13	405008 0730255.01	138	160						
47758	D12	404852 0730504.01	102	121						
47886	C 9	404204 0732420.01	509	43			- 47			
47887	C 8	404046 0732521.02	648	26	- 56		- 64			
47945	F14	405648 0725551.01	142	143						
47973	F12	405604 0730643.01	90	94						
47974	F13	405532 0730257.01	150	149						
47975	E14	405050 0725953.01	129	153						
47976	F14	405605 0725915.01	138	150						
47977	D15	404711 0725150.00	55	38						
48014	E12	405203 0730855.01	343	124			-109			
48193	D 9	404515 0732255.02	534	80						

from selected wells and test holes in Suffolk County, New York.

WELL-COMPLETION DATA

Well Number	Year Completed	Elevation of LSD (ft above or below NGVD)	Use of Water	Use of Well	Screen Setting (ft above or below NGVD)	Total Screen Length (ft)	Diam of Well (in)	Water level (ft below LSD)	Date of Meas. (M-D-Y)	Lift Type	Aquifer Developed	Specific Capacity (GPM/ft)
46928	1973	166	P.S.	WTDR	-424 TO -484	60	20	121	07-27-73		MAGOTHY	38
46963	1973	147	UNSD	OBS	26 TO 16	10	6				UPGLAC	
46964	1973	123	UNSD	OBS	21 TO 11	10	6				UPGLAC	
46965	1973	166	UNSD	OBS	28 TO 18	10	6				UPGLAC	
46966	1973	89	UNSD	OBS	15 TO 5	10	6				UPGLAC	
47002	1972	90	UNSD	TEST	- 68 TO - 73	5	4	81	11-12-72		UPGLAC	
47024	1973	10	P.S.	WTDR	-323 TO -358	35	16	2	06-07-73	SUBM	MAGOTHY	3
47157	1973	105	UNSD	OBS	93 TO 83	10	6				UPGLAC	
47218	1973	71	UNSD	TEST				22	06-01-73		MAGOTHY	10
47222	1973	75	UNSD	OBS	59 TO 49	10	6				UPGLAC	
47223	1973	55	UNSD	OBS	37 TO 27	10	6				UPGLAC	
47224	1973	20	UNSD	OBS	- 1 TO - 11	10	6				UPGLAC	
47225	1973	51	UNSD	OBS	32 TO 22	10	6				UPGLAC	
47227	1973	40	UNSD	OBS	- 48 TO - 58	10	6				UPGLAC	
47228	1973	40	UNSD	OBS	- 47 TO - 57	10	6				UPGLAC	
47231	1973	40	UNSD	OBS	15 TO 5	10	6				UPGLAC	
47233	1973	11	UNSD	OBS	- 28 TO - 38	10	4				UPGLAC	
47234	1973	7	UNSD	OBS	- 8 TO - 18	10	4				UPGLAC	
47235	1973	5	UNSD	OBS	- 7 TO - 17	10	4				UPGLAC	
47236	1973	35	UNSD	OBS	- 12 TO - 22	10	4				UPGLAC	
47281	1973	140	INST	WTDR	- 90 TO -135	45	10	116	05-09-73	TURB	MAGOTHY	24
47282	1973	140	INST	WTDR	- 98 TO -143	45	10	115	05-14-73	TURB	MAGOTHY	25
47436	1973	105	P.S.	WTDR	-144 TO -183	39	10				UPGLAC	37
47437	1973	105	P.S.	WTDR	- 17 TO - 72	55	20				UPGLAC	
47438	1973	105	P.S.	WTDR	-109 TO -160	51	20	52	09-20-73		MAGOTHY	36
47439	1973	71	P.S.	WTDR							MAGOTHY	
47453	1973	100	P.S.	WTDR	-280 TO -340	60	20	57	05-24-73	TURB	MAGOTHY	42
47672	1973	100	UNSD	TEST							MAGOTHY	
47673	1973	109	P.S.	WTDR	-106 TO -167	61	20	85	08-06-73	TURB	UPGLAC	125
47675	1973	80	UNSD	OBS	2 TO - 8	10	6				UPGLAC	
47698	1973	133	UNSD	OBS	41 TO 31	10	6				UPGLAC	
47711	1974	25	IND	WTDR	-183 TO -196	13	8	9	05-01-73	SUBM	MAGOTHY	20
47718	1973	68	UNSD	OBS	29 TO 19	10	6				UPGLAC	
47741	1973	70	UNSD	TEST	-469 TO -489	20	6				UPGLAC	
47743	1973	35	UNSD	OBS	- 53 TO - 63	10	6				UPGLAC	
47745	1973	62	UNSD	OBS	42 TO 32	10	6				UPGLAC	
47746	1973	90	UNSD	OBS	18 TO 8	10	6				UPGLAC	
47747	1973	31	UNSD	OBS	8 TO - 2	10	6				UPGLAC	
47748	1973	110	UNSD	OBS	86 TO 76	10	6				UPGLAC	
47750	1973	95	UNSD	OBS	12 TO 2	10	6				UPGLAC	
47752	1973	23	UNSD	OBS	- 65 TO - 75	10	6				UPGLAC	
47755	1973	63	UNSD	OBS	17 TO 7	10	6				UPGLAC	
47756	1973	89	UNSD	OBS	32 TO 22	10	6				UPGLAC	
47757	1973	160	UNSD	OBS	34 TO 24	10	6				UPGLAC	
47758	1973	121	UNSD	OBS	31 TO 21	10	6				UPGLAC	
47886	1973	43	P.S.	WTDR	-408 TO -458	50	20	18	08-13-73		MAGOTHY	28
47887	1973	26	P.S.	WTDR	-513 TO -614	101	20	6	06-13-73		MAGOTHY	
47945	1973	143	UNSD	OBS	13 TO 3	10	6				UPGLAC	
47973	1973	94	UNSD	OBS	16 TO 6	10	6				UPGLAC	
47974	1973	149	UNSD	OBS	14 TO 4	10	6				UPGLAC	
47975	1973	153	UNSD	OBS	35 TO 25	10	6				UPGLAC	
47976	1973	150	UNSD	OBS	27 TO 17	17	6				UPGLAC	
47977	1973	38	UNSD	OBS	- 5 TO - 15	10	6				UPGLAC	
48014	1973	124	P.S.	WTDR	-158 TO -219	61	20	84	10-03-73		MAGOTHY	30
48193	1974	80	P.S.	WTDR	-375 TO -446	71	20	29	12-21-73		UPGLAC	43

Table 2.--Hydrologic units and well-completion data

Well number	Location of well: Map coord	Location of well: Latitude and Longitude	Well depth (ft)	HYDROLOGIC UNIT PENETRATED AND ELEVATION OF UNIT SURFACE, IN FEET ABOVE OR BELOW NATIONAL GEODETIC VERTICAL DATUM OF 1929: Upper glacial aquifer	Gardiners Clay	Monmouth greensand	Magothy aquifer	Raritan clay	Lloyd aquifer	Bedrock
48422	D12	404948 0730848.01	735	95			-165			
48423	F13	405609 0730213.00	687	133						
48424	D14	404904 0725700.02	810	102			-180			
48425	F21	405606 0722027.01	44	35						
48426	F22	405740 0721900.01	121	117						
48427	F22	405618 0721805.01	52	38						
48428	F27	405704 0721659.01	71	63						
48429	F23	405807 0721210.01	66	50						
48430	F21	405501 0722155.01	43	22						
48432	F21	405606 0722357.01	63	52						
48433	F21	405644 0722201.01	135	78						
48434	E18	405227 0723523.01	187	170						
48435	E18	405051 0723531.01	59	170						
48436	E17	405229 0724156.01	105	112						
48437	F22	405831 0721712.01	72	65						
48438	F22	405844 0721916.01	82	114						
48439	E20	405325 0722627.02	51	31						
48441	E21	405349 0722348.01	61	47						
48442	D17	404941 0724148.01	55	44						
48517	F22	405838 0721540.01	71	36						
48518	F23	405650 0721452.01	71	37						
48519	G22	410243 0715601.01	82	80						
48520	F23	405918 0721321.01	62	50						
48521	F22	405940 0721647.01	75	48						
48522	F24	405858 0720624.01	92	20						
48577	G22	410149 0715832.01	109	180						
48578	F21	405928 0721104.01	32	90						
48579	G22	410316 0715355.01	66	28						
48580	G21	410124 0721032.01	46	40						
48581	E19	405808 0723222.01	76	60						
48582	E18	405225 0723701.01	105	80						
48583	E18	405139 0723850.01	139	87						
48719	E 9	405319 0732336.01	349	101						
48759	D13	404641 0730054.02	35	28						
48946	E16	405121 0724906.01	45	40						
49018	D14	404739 0725627.01	516	71			-116			
49439	E10	405353 0731822.01	707	120						
49477	E16	405006 0724900.01	279	70			-110			
49542	C 9	404206 0732458.02	560	45	- 29		- 53			
49543	E13	405410 0730101.01	706	125						
49606	E14	405335 0725629.03	703	75			-300			
50222	F15	405738 0725420.01	212	100						
50399	F18	405723 0723754.03	346	48						
*50546	C10	404432 0731513.03	668	39	- 42		- 71			
50630	C12	404226 0730733.04	243	20	- 85		-120			
50970	E19	405305 0723230.01	208	90						
51169	G21	410349 0722222.01	54	35						
51170	C21	410311 0722155.01	43	10						
51171	C21	410410 0722147.01	53	27						
51173	H21	410510 0722123.01	49	45						
51174	G21	410437 0722056.01	61	45						
51175	G21	410416 0722501.01	48	39						
51177	G22	410316 0721921.01	27	18						
51178	G22	410344 0721932.01	47	28						
51179	G22	410424 0721928.01	55	18						

* CLOSEST WELL USED FOR DRINKING WATER

from selected wells and test holes in Suffolk County, New York.

WELL-COMPLETION DATA

Well Number	Year Com-pleted	Elevation of LSD (ft above or below NGVD)	Use of Water	Use of Well	Screen Setting (ft above or below NGVD)	Total Screen Length (ft)	Diam of Well (in)	Water level (ft below LSD)	Date of Meas. (M-D-Y)	Lift Type	Aquifer Devel-oped	Specific Capacity (GPM/ft)
48422	1974	95	UNSD	TEST							MAGOTHY	
48423	1973	133	UNSD	TEST							UPGLAC	
48424	1974	102	UNSD	TEST							MAGOTHY	
48425	1973	35	UNSD	OBS	1 TO - 9	10	6				UPGLAC	
48426	1973	117	UNSD	OBS	8 TO - 2	10	6				UPGLAC	
48427	1973	38	UNSD	OBS	- 1 TO - 11	10	4				UPGLAC	
48428	1973	63	UNSD	OBS	4 TO - 6	10	6				UPGLAC	
48429	1973	50	UNSD	OBS	- 4 TO - 14	10	4				UPGLAC	
48430	1973	22	UNSD	OBS	- 7 TO - 17	10	4				UPGLAC	
48432	1973	52	UNSD	OBS	- 1 TO - 11	10	6				UPGLAC	
48433	1973	78	UNSD	OBS	- 44 TO - 54	10	6				UPGLAC	
48434	1973	170	UNSD	OBS	- 5 TO - 15	10	6				UPGLAC	
48435	1973	170	UNSD	OBS	126 TO 112	14	6				UPGLAC	
48436	1973	112	UNSD	OBS	20 TO 10	10	6				UPGLAC	
48437	1973	65	UNSD	OBS	6 TO - 4	10	6				UPGLAC	
48438	1973	114	UNSD	OBS	45 TO 35	10	6				UPGLAC	
48439	1973	31	UNSD	OBS	- 6 TO - 16	10	6				UPGLAC	
48441	1973	47	UNSD	OBS	0 TO - 10	10	6				UPGLAC	
48442	1973	44	UNSD	OBS	2 TO - 8	10	6				UPGLAC	
48517	1973	36	UNSD	OBS	- 21 TO - 31	10	6				UPGLAC	
48518	1973	37	UNSD	OBS	- 20 TO - 30	10	4				UPGLAC	
48519	1973	80	UNSD	OBS	11 TO 1	10	6				UPGLAC	
48520	1973	50	UNSD	OBS	1 TO - 9	10	6				UPGLAC	
48521	1973	48	UNSD	OBS	- 14 TO - 24	10	4				UPGLAC	
48522	1973	20	UNSD	OBS	- 59 TO - 69	10	6				UPGLAC	
48577	1973	180	UNSD	OBS	6 TO - 4	10	6				UPGLAC	
48578	1973	90	UNSD	OBS	71 TO 61	10	4				UPGLAC	
48579	1973	28	UNSD	OBS	- 25 TO - 35	10	6				UPGLAC	
48580	1973	40	UNSD	OBS	6 TO - 4	10	6				UPGLAC	
48581	1973	60	UNSD	OBS	- 4 TO - 18	14	6				UPGLAC	
48582	1973	80	UNSD	OBS	- 12 TO - 22	10	6				UPGLAC	
48583	1973	87	UNSD	OBS	- 39 TO - 49	10	6				UPGLAC	
48719	1973	101	P.S.	WTDR	-182 TO -242	60	20	90	10-03-73		UPGLAC	52
48759	1973	28	UNSD	OBS	5 TO - 5	10	6				UPGLAC	
48946	1973	40	UNSD	OBS	7 TO - 3	10	6				UPGLAC	
49018	1973	71	P.S.	WTDR	-382 TO -442	60	20	44	09-21-73		MAGOTHY	37
49439	1973	120	UNSD	TEST							UPGLAC	
49477	1974	70	IRR	WTDR	-179 TO -209	30	12	40	05-03-74		MAGOTHY	13
49542	1973	45	UNSD	TEST	-495 TO -515	20	6				MAGOTHY	
49543	1973	125	UNSD	TEST							UPGLAC	
49606	1973	75	UNSD	TEST							MAGOTHY	
50222	1974	100	P.S.	WTDR	- 17 TO - 52	35	16	44	02-11-74		UPGLAC	11
50399	1973	48	UNSD	TEST				36	11-28-73		UPGLAC	
*50546	1974	39	P.S.	WTDR	-565 TO -626	61	20	21	01-05-74		MAGOTHY	50
50630	1974	20	P.S.	WTDR	-150 TO -220	70	20	7	02-06-74		MAGOTHY	20
50970	1973	90	P.S.	WTDR	- 98 TO -118	20	14	87	08-12-73	TURB	UPGLAC	5
51169	1974	35	UNSD	TEST	- 9 TO - 19	10	6				UPGLAC	
51170	1974	10	UNSD	TEST	- 23 TO - 33	10	4				UPGLAC	
51171	1974	27	UNSD	TEST	- 16 TO - 26	10	6				UPGLAC	
51173	1974	45	UNSD	TEST	6 TO - 4	10	4				UPGLAC	
51174	1974	45	UNSD	TEST	- 6 TO - 16	10	6				UPGLAC	
51175	1974	39	UNSD	TEST	1 TO - 9	10	6				UPGLAC	
51177	1974	18	UNSD	TEST	1 TO - 9	10	4				UPGLAC	
51178	1974	28	UNSD	TEST	3 TO - 7	10	6				UPGLAC	
51179	1974	18	UNSD	TEST	- 27 TO - 37	10	4				UPGLAC	

* CLOSEST WELL USED FOR DRINKING WATER

Table 2.--Hydrologic units and well-completion data

Well number	Location of well: Map coord	Location of well: Latitude and Longitude	Well depth (ft)	HYDROLOGIC UNIT PENETRATED AND ELEVATION OF UNIT SURFACE, IN FEET ABOVE OR BELOW NATIONAL GEODETIC VERTICAL DATUM OF 1929: Upper glacial aquifer	Gardiners Clay	Monmouth greensand	Magothy aquifer	Raritan clay	Lloyd aquifer	Bedrock
51180	C21	410452 0722002.01	39	4						
51181	H22	410534 0721946.01	62	49						
51182	H22	410602 0721958.01	64	61						
51183	G22	410334 0721727.01	39	41						
51184	G22	410147 0721841.01	32	18						
51185	G22	410132 0721846.01	33	10						
51186	G22	410047 0721847.01	42	22						
51214	C 8	404210 0732502.01	395	45	- 38		- 53			
51274	G26	410253 0715708.01	55	20						
51275	G26	410212 0715744.01	178	124						
51322	F18	405717 0723748.02	200	33						
51336	F17	405808 0724213.01	200	120						
51461	C14	404119 0725935.01	467	5	-119	-150	-311			
51519	D11	404808 0731133.01	408	100						
51566	F17	405716 0724133.01	89	74						
51567	F17	405653 0724225.01	92	81						
51568	F18	405808 0723854.01	70	65						
51571	F17	405805 0724037.01	108	86						
51573	F18	405512 0723952.01	90	25						
51575	F17	405544 0724118.01	34	37						
51576	F17	405559 0724252.01	69	60						
51577	F17	405630 0724420.01	95	80						
51578	F16	405721 0724537.01	126	85						
51579	F16	405542 0724630.01	87	78						
51580	F16	405714 0724709.01	135	80						
51581	F19	405722 0723420.01	45	32						
51582	F18	405953 0723539.01	84	62						
51583	F16	405500 0724952.01	51	68						
51584	F16	405757 0724918.01	142	105						
51586	F16	405642 0724919.01	100	103						
51587	F18	405809 0723709.01	80	61						
51588	F18	405634 0723805.01	60	38						
51589	F18	405704 0723614.01	44	31						
51591	E16	405418 0724706.01	30	35						
51592	E16	405349 0724941.01	42	56						
51609	D12	404820 0730734.03	729	99			-117			
51828	F16	405745 0724557.01	149	85						
51953	F13	405607 0730213.01	316	133						
52050	G21	410400 0722020.01	348	44			-297			
52084	H21	410516 0722009.01	74	29						
52162	C15	404357 0725157.01	1695	8	-108	-144	-277	-1336	-1542	
52236	D 9	404504 0732219.01	98	80			-185			
52383	F17	405542 0724453.01	64	63						
52434	E11	405426 0731216.01	73	15						
52449	F18	405512 0723952.02	41	58						
52490	E13	405354 0730212.02	554	137			-223			
52886	F15	405513 0725054.01	57	45						
52943	D15	404558 0725210.01	310	23	- 89	-115	-217			
52944	D14	404905 0725655.01	204	102						
53274	D11	404758 0731277.01	800	109			- 97			
53291	E13	405002 0730226.02	265	180						
53322	G21	410057 0723155.01	100	53						
53323	H21	410702 0722216.01	52	30						
53324	G19	410104 0723033.01	62	42						
53325	G19	410007 0723319.01	68	41						

from selected wells and test holes in Suffolk County, New York.

WELL-COMPLETION DATA

Well Number	Year Completed	Elevation of LSD (ft above or below NGVD)	Use of Water	Use of Well	Screen Setting (ft above or below NGVD)	Total Screen Length (ft)	Diam of Well (in)	Water level (ft below LSD)	Date of Meas. (M-D-Y)	Lift Type	Aquifer Developed	Specific Capacity (GPM/ft)
51180	1974	41	UNSD	TEST	12 TO 2	10	6				UPGLAC	
51181	1974	49	UNSD	TEST	- 3 TO - 13	10	6				UPGLAC	
51182	1974	61	UNSD	TEST	7 TO - 3	10	6				UPGLAC	
51183	1974	41	UNSD	TEST	12 TO 2	10	6				UPGLAC	
51184	1973	18	UNSD	OBS	- 2 TO - 12	10	4				UPGLAC	
51185	1973	10	UNSD	OBS	- 10 TO - 20	10	4				UPGLAC	
51186	1973	22	UNSD	OBS	- 8 TO - 18	10	4				UPGLAC	
51214	1974	45	P.S.	WTDR	- 285 TO - 345	60		18	03-12-74		MAGOTHY	35
51274	1974	20	P.S.	WTDR	- 17 TO - 34	17	8	4	03-26-74	TURB	UPGLAC	15
51275	1974	124	P.S.	WTDR	- 31 TO - 51	20	10	120	03-18-74	SUBM	UPGLAC	33
51322	1974	33	ARCD	WTDR	- 136 TO - 167	31	10	40	05-14-74	TURB	UPGLAC	34
51336	1974	120	IRR	WTDR	- 65 TO - 80	15		158	03-18-74	TURB	UPGLAG	1
51461	1974	5	P.S.	WTDR	- 425 TO - 455	30	6	14	05-30-74	SUBM	MAGOTHY	26
51519	1974	100	P.S.	WTDR	- 225 TO - 305	80	20	70			UPGLAG	33
51566	1974	74	UNSD	OBS	- 3 TO - 13	10	6				UPCLAC	
51567	1974	81	UNSD	OBS	1 TO - 9	10	6				UPGLAC	
51568	1974	65	UNSD	OBS	7 TO - 3	10	6				UPGLAC	
51571	1974	86	UNSD	OBS	- 10 TO - 20	10	6				UPGLAG	
51573	1974	25	UNSD	OBS	- 53 TO - 63	10	6				UPGLAC	
51575	1974	37	UNSD	OBS	15 TO 5	10	6				UPCLAC	
51576	1974	60	UNSD	OBS	3 TO - 7	10	6				UPGLAC	
51577	1974	80	UNSD	OBS	- 3 TO - 13	10	6				UPGLAC	
51578	1974	85	UNSD	OBS	- 29 TO - 39	10	6				UPGLAC	
51579	1974	78	UNSD	OBS	3 TO - 7	10	6				UPGLAC	
51580	1975	80	UNSD	OBS	- 42 TO - 52	10	6				UPGLAC	
51581	1974	32	UNSD	OBS	- 1 TO - 11	10	6				UPGLAC	
51582	1974	62	UNSD	OBS	- 10 TO - 20	10	6				UPGLAC	
51583	1974	68	UNSD	OBS	29 TO 19	10	6				UPCLAC	
51584	1974	105	UNSD	OBS	- 22 TO - 37	15	6				UPCLAC	
51586	1974	103	UNSD	OBS	15 TO 5	10	6				UPGLAC	
51587	1974	61	UNSD	OBS	- 8 TO - 18	10	6				UPGLAC	
51588	1974	38	UNSD	OBS	- 10 TO - 20	10	6				UPGLAC	
51589	1974	31	UNSD	OBS	0 TO - 10	10	6				UPGLAC	
51591	1974	35	UNSD	OBS	21 TO 11	10	6				UPGLAC	
51592	1974	56	UNSD	OBS	27 TO 17	10	6				UPGLAC	
51609	1974	99	P.S.	WTDR	- 572 TO - 627	55	20	63	08-15-74	TURB	MAGOTHY	34
51828	1974	85	UNSD	OBS	- 44 TO - 64	20	6				UPGLAC	
51953	1975	133	P.S.	WTDR	- 102 TO - 162	60	42	102	10-01-74	TURB	UPCLAC	73
52050	1974	44	UNSD	TEST							MAGOTHY	
52084	1974	29	UNSD	TEST	- 33 TO - 43	10	6				UPGLAC	
52162	1974	8	UNSD	OBS	-1662 TO -1682	20	4				LLOYD	
52236	1974	80	DOM	WTDR	- 14 TO - 18	4	4			SUBM	UPCLAC	
52383	1974	63	UNSD	OBS	12 TO 2	10	6				UPGLAC	
52434	1974	15	DOM	WTDR	- 52 TO - 57	5	5			SUBM	UPGLAG	
52449	1974	58	UNSD	OBS	29 TO 19	10	6				UPGLAC	
52490	1974	137	P.S.	WTDR	- 343 TO - 417	74	48	94	10-10-74		MAGOTHY	33
52886	1974	45	UNSD	OBS	3 TO - 12	15	6				UPCLAC	
52943	1974	23	UNSD	TEST	- 66 TO - 92	26	8	21	09-11-74		UPGLAC	11
52944	1974	102	P.S.	WTDR	- 44 TO - 99	55	20	65	10-29-74		UPGLAC	87
53274	1974	109	UNSD	TEST							MAGOTHY	
53291	1975	180	P.S.	WTDR	- 22 TO - 82	60	20	123	05-29-75	TURB	IPCLAC	77
53322	1974	53	UNSD	OBS	- 26 TO - 46	20	8				UPCLAC	
53323	1974	30	UNSD	OBS	- 9 TO - 19	10	4				UPGLAC	
53324	1974	42	UNSD	OBS	- 7 TO - 17	10	4				UPGLAC	
53325	1974	41	UNSD	OBS	- 12 TO - 22	10	4				UPGLAC	

Table 2.--Hydrologic units and well-completion data

Well number	Location of well: Map coord	Location of well: Latitude and Longitude	Well depth (ft)	HYDROLOCIC UNIT PENETRATED AND ELEVATION OF UNIT SURFACE, IN FEET ABOVE OR BELOW NATIONAL GEODETIC VERTICAL DATUM OF 1929: Upper glacial aquifer	Cardiners Clay	Monmouth greensand	Magothy aquifer	Raritan clay	Lloyd aquifer	Bedrock
53326	G20	410229 0722957.01	92	60						
53327	G20	410022 0722936.01	44	24						
53328	G21	410234 0722436.01	41	20						
53329	G20	410140 0722816.01	71	30						
53330	H21	410706 0722032.01	52	15						
53331	H21	410753 0722055.01	70	47						
53332	F19	405843 0723243.01	45	25						
53333	F19	405924 0723423.01	74	51						
53334	F19	405959 0723039.01	53	32						
53335	G20	410304 0722627.01	37	16						
53336	G19	410017 0723155.01	42	18						
53337	H22	410906 0721713.01	52	20						
53338	G20	410412 0722613.01	65	39						
53339	G20	404722 0730305.01	798	50	-122		-140			
53360	E10	405032 0731628.02	703	141			- 88			
53361	E10	405133 0731559.01	521	148			- 75			
53497	D12	404950 0730850.01	173	90						
53498	D12	404950 0730850.02	721	90			-180			
53522	E17	405230 0724300.01	137	167	- 69		- 81			
53593	E18	405124 0723536.03	161	47						
53747	E10	405140 0731910.01	453	171			-117			
53851	E17	405230 0724300.02	291	167	- 69		- 81			
54099	E13	405029 0730321.01	703	170			- 90			
54155	C10	404326 0731735.01	721	38			- 97			
54162	E10	405359 0731828.01	543	151						
54305	D12	404805 0730515.02	313	100	- 78		- 96			
54308	D11	404759 0731225.01	797	109			-106			
54377	B12	403936 0730525.01	630	5			-329			
54473	E13	405030 0730321.03	312	170	- 69		-130			
54478	F18	405906 0723528.01	125	65			-481			
54479	F18	405857 0723538.01	467	65			-481			
54568	C 8	404210 0732502.02	423	45	- 38		- 53			
54731	B10	403822 0731550.01	750	8			-117			
54957	D11	404618 0731233.01	378	50			- 74			
55028	E25	405332 0722420.01	161	50			-158			
55076	F18	405856 0723540.01	343	68						
55094	E 9	405122 0732327.01	180	185						
55733	C10	404326 0731741.01	233	38			- 97			
56133	E10	405434 0731942.02	333	70						
56423	C10	404418 0731718.01	800	50	- 50		- 75			
56508	D13	404542 0730133.01	709	6	-116	-135	-184			
56674	D13	404950 0730015.01	179	107	- 71					
56980	F18	405935 0723548.01	1104	35			-285	-715	-875	-1015
57008	D10	404658 0731642.01	635	111			-160			
57354	E 8	405126 0732737.01	257	50						
57357	G26	410249 0715545.01	93	32		-110				
57666	D 9	404604 0732458.01	270	105						
57723	C13	404322 0730450.01	807	38			-152			
57748	F 8	405520 0732939.01	418	82				-282	-300	
57979	F12	405614 0730515.01	582	100			- 55			
57980	F13	405510 0730452.01	703	187			- 98	-573		
58708	D10	404936 0731525.01	423	132			- 16			
58755	E13	405052 0730205.01	252	240						
58761	E13	405342 0730307.01	723	130			-165			
58921	G25	410040 0720025.01	75	48						

from selected wells and test holes in Suffolk County, New York.

WELL-COMPLETION DATA

Well Number	Year Completed	Elevation of LSD (ft above or below NGVD)	Uae of Water	Use of Well	Screen Setting (ft above or below NGVD)	Total Screen Length (ft)	Diam of Well (in)	Water level (ft below LSD)	Date of Meas. (M-D-Y)	Lift Type	Aquifer Developed	Specific Capacity (GPM/ft)
53326	1974	60	UNSD	OBS	- 19 TO - 29	10	4				UPGLAC	
53327	1974	24	UNSD	OBS	- 8 TO - 18	10	4				UPGLAC	
53328	1974	20	UNSD	OBS	- 9 TO - 19	10	4				UPGLAC	
53329	1975	30	UNSD	OBS	- 26 TO - 41	15	8				UPGLAC	
53330	1975	15	UNSD	OBS	- 17 TO - 37	20	4				UPGLAC	
53331	1974	47	UNSD	OBS	- 11 TO - 21	10	4				UPGLAC	
53332	1974	25	UNSD	OBS	- 8 TO - 18	10	4				UPGLAC	
53333	1974	51	UNSD	OBS	- 11 TO - 21	10	4				UPGLAC	
53334	1974	32	UNSD	OBS	- 9 TO - 19	10	4				UPGLAC	
53335	1974	16	UNSD	OBS	- 9 TO - 19	10	4				UPGLAC	
53336	1974	18	UNSD	OBS	- 12 TO - 22	10	4				UPGLAC	
53337	1975	20	UNSD	OBS	- 12 TO - 32	20	4				UPGLAC	
53338	1974	39	UNSD	OBS	- 14 TO - 24	10	4				UPGLAC	
53339	1974	50	UNSD	TEST							MAGOTHY	
53360	1975	141	P.S.	WTDR	-407 TO -526	119	20	80	02-27-75	TURB	MAGOTHY	76
53361	1975	148	P.S.	WTDR	-289 TO -369	80	20	111	05-15-75	TURB	MAGOTHY	61
53497	1975	90	P.S.	WTDR	- 25 TO - 80	55	42			TURB	UPGLAC	
53498	1975	90	P.S.	WTDR	-573 TO -628	55	42			TURB	MAGOTHY	
53522	1976	167	P.S.	WTDR						TURB	MAGOTHY	
53593	1974	47	P.S.	WTDR	- 71 TO -111	40	20	38	12-17-74		UPGLAC	
53747	1975	171	P.S.	WTDR	-199 TO -277	78	20	111	10-03-75	TURB	MAGOTHY	51
53851	1975	167	P.S.	WTDR						TURB	MAGOTHY	
54099	1975	170	UNSD	TEST				114	02-27-75		MAGOTHY	
54155	1975	38	UNSD	TEST							MAGOTHY	
54162	1975	151	P.S.	WTDR	-304 TO -374	70	20	130	03-18-75		UPGLAC	82
54305	1975	100	P.S.	WTDR	-149 TO -210	61	20	55	06-02-75		MAGOTHY	26
54308	1975	109	P.S.	WTDR	-613 TO -683	70	20	72	05-06-75	TURB	MAGOTHY	50
54377	1975	5	P.S.	WTDR	-575 TO -625	50	12	10	04-03-75	TURB	MAGOTHY	20
54473	1975	170	P.S.	WTDR	- 78 TO -139	61	20	115	07-16-75	TURB	MAGOTHY	44
54478	1975	65	UNSD	TEST	- 29 TO - 60	31	12	56	03-31-75		MAGOTHY	66
54479	1975	65	UNSD	OBS	-392 TO -402	10	6				MAGOTHY	
54568	1975	45	P.S.	WTDR	-293 TO -376	83	20	23	05-12-75	TURB	MAGOTHY	41
54731	1975	8	P.S.	WTDR	-691 TO -742	51	14	4	07-21-75		MAGOTHY	21
54957	1976	50	P.S.	WTDR	-268 TO -323	55	20	19			MAGOTHY	10
55028	1975	50	P.S.	WTDR	- 75 TO -110	35	10	43	08-01-75		UPGLAC	175
55076	1975	68	UNSD	UNSD							UPGLAC	
55094	1975	185	UNSD	UNSD							UPGLAC	
55733	1975	38	P.S.	WTDR	-142 TO -192	50	20	14	09-25-75	TURB	MAGOTHY	56
56133	1976	70	UNSD	TEST	-157 TO -261	104	20	23	05-12-76		UPGLAC	108
56423	1975	50	UNSD	TEST		0		21			MAGOTHY	13
56508	1976	6	UNSD	TEST		0					MAGOTHY	
56674	1975	107	P.S.	WTDR	- 15 TO - 65	50	20	56	12-26-75		UPGLAC	88
56980	1976	35	UNSD	TEST							LLOYD	
57008	1976	111	P.S.	WTDR	-418 TO -521	103	20	62	02-23-76	TURB	MAGOTHY	50
57354	1976	50	P.S.	WTDR	-163 TO -204	41	12	19	04-29-76	TURB	UPGLAC	48
57357	1976	32	UNSD	UNSD	- 26 TO - 57	31	10	29	03-18-76		UPGLAC	152
57666	1976	105	ARCD	WTDR	-135 TO -165	30	8	43	08-10-76	TURB	UPGLAC	13
57723	1976	38	UNSD	TEST			16				MAGOTHY	
57748	1977	82	DOM	WTDR	-331 TO -336	5	4	78	05-15-76	SUBM	LLOYD	2
57979	1976	100	P.S.	WTDR	-389 TO -479	90	20	59	05-26-76	TURB	MAGOTHY	56
57980	1977	187	P.S.	WTDR	-443 TO -513	70	20	144	01-03-77	TURB	MAGOTHY	24
58708	1976	132	P.S.	WTDR	-197 TO -257	60	20	81	09-28-76	TURB	MAGOTHY	50
58755	1976	240	DOM	WTDR	- 6 TO - 12	6	4			SUBM	UPGLAC	
58761	1977	130	UNSD	UNSD	-522 TO -593	71	20	82	02-15-77		MAGOTHY	22
58921	1976	48	UNSD	OBS	- 19 TO - 24	5	4				UPGLAC	

Table 2.--Hydrologic units and well-completion data

Well number	Location of well: Map coord	Location of well: Latitude and Longitude	Well depth (ft)	HYDROLOGIC UNIT PENETRATED AND ELEVATION OF UNIT SURFACE, IN FEET ABOVE OR BELOW NATIONAL GEODETIC VERTICAL DATUM OF 1929: Upper glacial aquifer	Gardiners Clay	Monmouth greensand	Magothy aquifer	Raritan clay	Lloyd aquifer	Bedrock
58922	C22	410356 0715442.01	62	48						
58923	G26	410401 0715702.02	76	57						
58924	F24	405934 0720932.01	139	110						
58925	F23	405948 0721240.01	92	72						
58956	F20	405556 0722512.01	43	5						
58957	F21	405608 0722307.01	203	189						
58958	F21	405737 0722158.01	210	190						
58959	F22	405816 0721628.01	203	187						
58960	F22	405827 0721905.01	164	164						
58961	F22	405831 0721639.01	131	131						
59012	E13	405040 0730134.01	259	240						
59073	E13	405045 0730206.01	250	240						
59347	C10	404419 0731715.01	463	51	- 53		- 79			
59711	G23	410123 0721303.01	394	65						
59719	E15	405323 0725213.01	150	63						
59744	D13	404722 0730305.02	301	80	-110		-125			
59793	F22	405615 0721823.01	580	34	- 81		-172			
59794	E21	405208 0722418.01	153	8						
59795	G22	410121 0721907.01	130	15	-109					
59992	F21	405642 0722400.01	292	24			-164			
60123	F23	405559 0721459.01	330	12			-155			
60124	F24	405922 0720634.01	195	27						
60125	G26	410330 0715638.01	315	87			-211			
60126	G24	410239 0720915.01	179	23						
60127	D13	404947 0730426.01	489	132	- 63		-374			
60177	F21	405857 0722137.01	840	99			-275			
60264	E13	405040 0730210.01	241	245						
60305	E13	405048 0730147.01	291	245						
60486	D13	404542 0730133.02	363	6	-116	-135	-184			
60775	E15	405223 0725202.01	140	63						
60812	D13	404524 0730448.01	489	38			-152			
60897	G26	410202 0715629.01	142	78	25		- 6			
60996	B10	403820 0731805.01	305	10	- 73	-120	-190			
61015	H20	410444 0722605.01	143	40						
61124	G25	410109 0720103.01	410	58						
61160	E19	404936 0723145.01	1040	15	- 40	-121	-251	-995		
61356	D 9	404804 0732038.01	752	170						
61664	U11	404415 0731140.01	763	28	- 66		- 85			
61937	E10	405249 0731928.02	594	237						
62022	D14	404717 0725956.02	313	60						
62101	F22	405801 0721804.01	286	74	- 66		-134			
62102	F24	405918 0720825.01	180	50		-120				
62240	E12	405147 0730648.01	652	118			-136			
62855	F22	405919 0721705.01	171	85	- 81					
63205	C 9	404202 0732427.01	417	40			- 50			
63311	E12	405059 0730507.01	802	130	- 56		- 65			
63365	E12	405147 0730811.01	835	100			-715			
63426	D 8	404638 0732511.01	295	120						
63618	C11	404416 0731137.01	553	20	- 83		- 92			
63794	E12	405154 0732546.01	650	170						
63966	E10	405053 0731509.01	653	79			- 36			
63967	D14	404948 0725917.01	804	110			-130			
64023	F14	405643 0725859.01	835	160			-603	-632		
64062	E11	405302 0731534.01	639	169			-228	-359		
64609	D12	404932 0730608.01	373	143						

from selected wells and test holes in Suffolk County, New York.

WELL-COMPLETION DATA

Well Number	Year Com-pleted	Elevation of LSD (ft above or below NGVD)	Uae of Water	Uae of Well	Screen Setting (ft above or below NGVD)-	Total Screen Length (ft)	Diam of Well (in)	Water level (ft below LSD)	Date of Meas. (M-D-Y)	Lift Type	Aquifer Devel-oped	Specific Capacity (GPM/ft)
58922	1976	48	UNSD	OBS	- 3 TO - 8	5	4				UPCLAC	
58923	1976	57	UNSD	OBS	- 8 TO - 13	5	4				UPCLAC	
58924	1976	110	UNSD	OBS	- 22 TO - 27	5	4				UPCLAC	
58925	1976	72	UNSD	OBS	- 13 TO - 18	5	4				UPGLAC	
58956	1976	5	UNSD	OBS	- 30 TO - 35	5	4				UPCLAC	
58957	1976	189	UNSD	OBS	- 7 TO - 12	5	4				UPGLAC	
58958	1976	190	UNSO	OBS	- 13 TO - 18	5	4				UPGLAC	
58959	1976	187	UNSD	OBS	- 8 TO - 13	5	4				UPGLAC	
58960	1976	164	UNSD	OBS	14 TO 9	5	4				UPGLAC	
58961	1976	131	UNSD	OBS	6 TO 1	5	4				UPCLAC	
59012	1976	240	DOM	WTDR	22 TO 16	6	4			SUBM	UPGLAC	
59073	1976	240	DOM	WTDR	- 4 TO - 10	6	4			SUBM	UPGLAC	
59347	1976	51	P.S.	WTDR	-337 TO -407	70	20	21	10-13-76	TURB	MAGOTHY	37
59711	1976	65	UNSD	OBS	- 97 TO -107	10	4				UPGLAC	
59719	1977	63	UNSD	TEST				20	09-24-76		UPGLAC	
59744	1976	80	P.S.	WTDR	-156 TO -216	60	20	47	11-12-76	TURB	MAGOTHY	36
59793	1977	34	UNSD	OBS	-478 TO -488	10	3				MAGOTHY	
59794	1977	8	UNSD	OBS	-107 TO -112	5	4				UPGLAC	
59795	1976	15	UNSD	OBS	- 93 TO - 98	5	4				UPGLAC	
59992	1976	24	UNSD	OBS	-244 TO -254	10	4				MAGOTHY	
60123	1976	12	UNSD	OBS	-258 TO -268	10	4				MAGOTHY	
60124	1976	27	UNSD	OBS	-137 TO -147	10	4				UPGLAC	
60125	1976	87	UNSD	OBS	-187 TO -197	10	4				MAGOTHY	
60126	1976	23	UNSD	OBS	-115 TO -125	10	4				UPGLAC	
60127	1977	132	P.S.	WTDR	-243 TO -353	110	20	88	03-16-77		MAGOTHY	240
60177	1976	99	UNSD	OBS							MAGOTHY	
60264	1976	245	DOM	WTDR	9 TO 4	5	4			SUBM	UPGLAC	
60305	1976	245	DOM	WTDR	- 40 TO - 46	6	4				UPGLAC	
60486	1977	6	P.S.	WTDR	-275 TO -358	83	36				MAGOTHY	
60775	1977	63	UNSD	OBS	- 36 TO - 76	40	8	46	01-28-77		UPCLAC	41
60812	1977	38	P.S.	WTDR	-366 TO -446	80	20	15	05-06-77	TURB	MAGOTHY	37
60897	1978	78	UNSD	UNSD	- 30 TO - 63	33	10	76	08-19-78		MAGOTHY	9
60996	1977	10	UNSD	UNSD	-285 TO -295	10	6	12	03-11-75		MAGOTHY	11
61015	1977	40	P.S.	WTDR	-103 TO -113	10					UPGLAC	
61124	1976	58	UNSD	OBS	-139 TO -149	10	4				UPGLAC	
61160	1977	15	UNSD	TEST							MAGOTHY	
61356	1977	170	P.S.	WTDR	-448 TO -508	60	24				UPGLAC	
61664	1977	28	UNSD	TEST							MAGOTHY	
61937	1978	237	P.S.	WTDR	-293 TO -354	61	20	195	08-24-78		UPCLAC	39
62022	1977	60	P.S.	WTDR	-190 TO -251	61	20	33	11-30-77		UPGLAC	69
62101	1977	74	DOM	WTDR	-192 TO -212	20	4			SUBM	MAGOTHY	
62102	1977	50	DOM	WTDR	-110 TO -130	20	4				UPCLAC	
62240	1978	118	P.S.	WTDR	-461 TO -521	60	20	61.92	04-07-78	TURB	MAGOTHY	43
62855	1977	85	P.S.	WTDR							UPGLAC	
63205	1978	40	P.S.	WTDR						TURB	MAGOTHY	
63311	1978	130	UNSD	TEST							MAGOTHY	
63365	1977	100	UNSD	TEST							UPGLAC	
63426	1977	120	UNSD	UNSD	-134 TO -175	41	12	43	12-21-77	TURB	UPGLAC	21
63618	1978	20	P.S.	WTDR	-470 TO -530	60	20	4	04-27-78	TURB	MAGOTHY	18
63794	1978	170	UNSD	UNSD							UPGLAC	
63966	1978	79	P.S.	WTDR	-481 TO -571	90	20	32	08-15-78		MAGOTHY	65
63967	1978	110	UNSD	TEST				63	04-06-78		MAGOTHY	15
64023	1978	160	UNSD	TEST							MAGOTHY	
64062	1978	169	P.S.	WTDR	-352 TO -467	115	20	129	10-26-78		MAGOTHY	57
64609	1979	143	P.S.	WTDR	-157 TO -227	70	20	91	02-01-79		UPGLAC	42

Table 2.--Hydrologic units and well-completion data

Location of well				HYDROLOGIC UNIT PENETRATED AND ELEVATION OF UNIT SURFACE, IN FEET ABOVE OR BELOW NATIONAL GEODETIC VERTICAL DATUM OF 1929							
Well number	Map coord	Latitude and Longitude	Well depth (ft)	Upper glacial aquifer	Gardiners Clay	Monmouth greensand	Magothy aquifer	Raritan clay	Lloyd aquifer	Bedrock
64847	D11	404505 0731320.01	634	40			-114			
64927	E 9	405306 0732331.01	621	95						
64928	D11	404651 0731203.01	742	65	- 58		- 71			
65196	D10	404529 0731719.01	124	69	- 39		- 48			
65321	E17	405243 0724117.01	304	259	- 35					
65340	D12	404636 0730709.01	804	70			-282			
65505	C 9	404352 0732158.01	650	54			-132			
65766	D11	404759 0731228.01	796	100			-110			
66132	D 9	404605 0732417.01	140	100			40			
66133	C 9	404330 0732441.01	161	66			- 30			
66134	C 9	404235 0732411.01	150	51			- 53			
66135	C11	404430 0731233.01	168	34	- 56		- 59			
66136	B 9	403935 0732350.01	143	7	- 57		- 69			
66137	D 9	404618 0732121.01	143	140			70			
66138	C 9	404430 0732156.01	150	63	- 27		- 41			
66139	C 9	404332 0732122.01	153	42			- 44			
66140	C 9	404205 0732100.01	112	21			- 54			
66141	C 9	404058 0732025.01	133	5	- 53		-105			
66142	D10	404815 0731632.01	203	140	- 15		- 33			
66143	D10	404541 0731803.01	185	70	- 36		- 45			
*66144	C10	404448 0731641.01	143	59	- 51		- 59			
66145	C10	404435 0731712.01	175	42			- 58			
66146	C10	404201 0731638.01	143	12	- 39		- 63			
66147	C12	404251 0730959.01	184	12	- 87	-104	-143			
66148	D11	404614 0731336.01	153	66			- 53			
66149	D11	404524 0731234.01	183	38			- 76			
66150	C11	404430 0731233.01	163	26	- 58		- 77			
66151	C11	404308 0731318.01	150	7	- 68		- 98			
66152	D11	404810 0731219.01	193	107			- 57			
66153	D11	404645 0731053.01	163	50			- 68			
66154	D11	404548 0731010.01	153	31	- 64		- 91			
66155	C11	404447 0731041.01	155	28	- 73		- 91			
66156	C12	404334 0730955.01	173	18	- 92		-112			
66183	D13	404722 0730305.03	543	71	-139		-159			
66366	E 9	405158 0732548.01	479	170						
66496	E12	405058 0730509.01	793	127	- 53		- 78			
66556	C 9	404308 0732431.01	753	50			- 48			
66733	F23	405814 0721008.01	607	45			-485			
66823	F13	405623 0730052.01	646	160						
66825	E21	405333 0722417.01	385	50			-162			
66880	E19	405031 0722850.01	216	5		-124	-239			
67074	D12	404632 0730706.01	832	70			-374			
67081	B11	403301 0731227.01	125	4	- 87	-102				
67082	B11	403739 0731432.01	234	12	- 73	-100	-206			
67083	B10	403729 0731701.01	125	12	- 80	- 97				
67084	B10	403825 0731823.01	205	9	- 73	- 91	-147			
67085	B 9	403813 0732007.01	122	10	- 70					
67086	B 9	403739 0732201.01	125	10	- 74					
67087	B 9	403657 0732421.01	205	10	- 74	- 95	-140			
67088	B 8	403640 0732527.01	225	10	- 74	- 95	-151			
67197	D11	404652 0731203.01	763	65	- 58		- 71			
67974	D14	404552 0725617.01	790	30		- 98	-130			

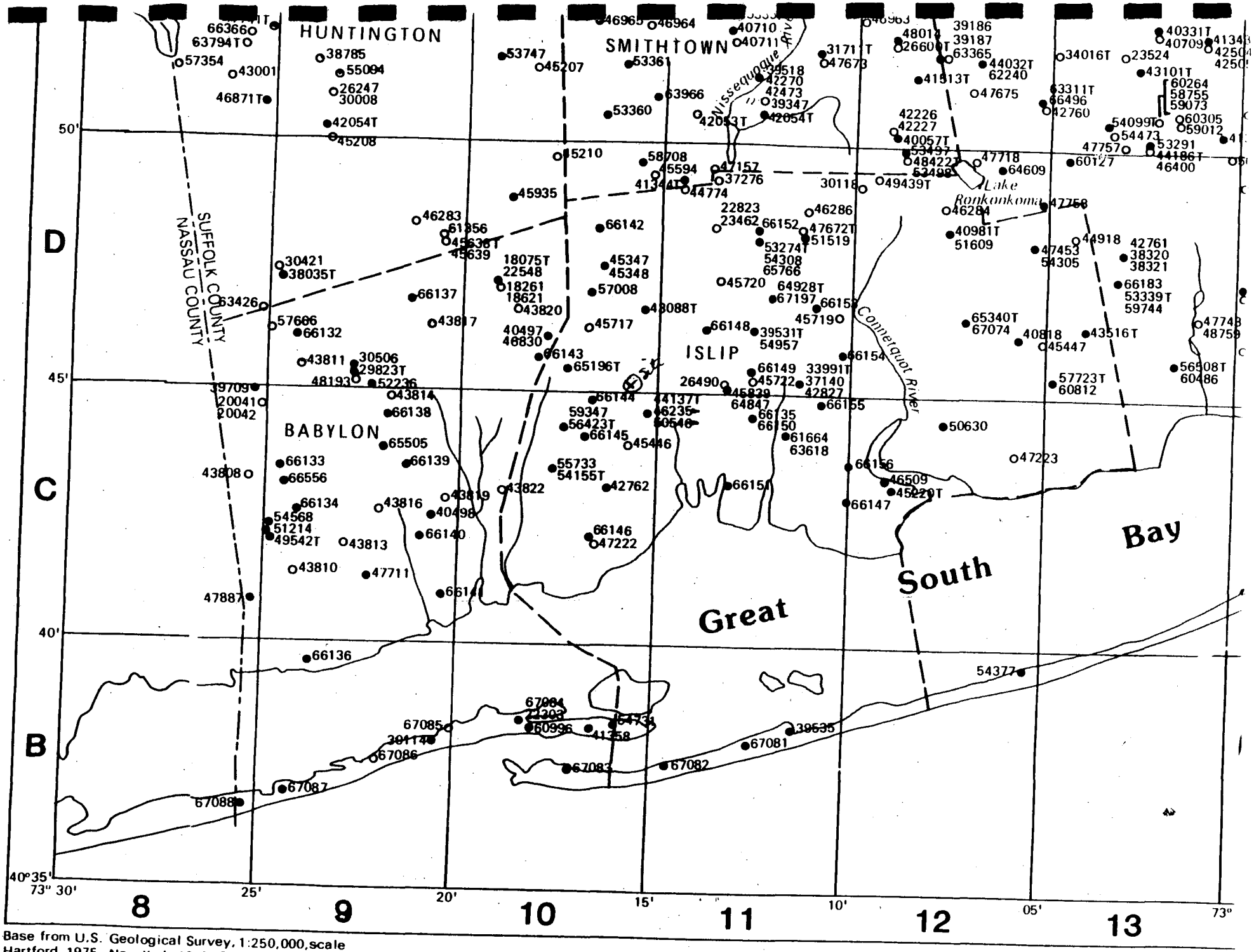
* CLOSEST WELL

from selected wells and test holes in Suffolk County, New York.

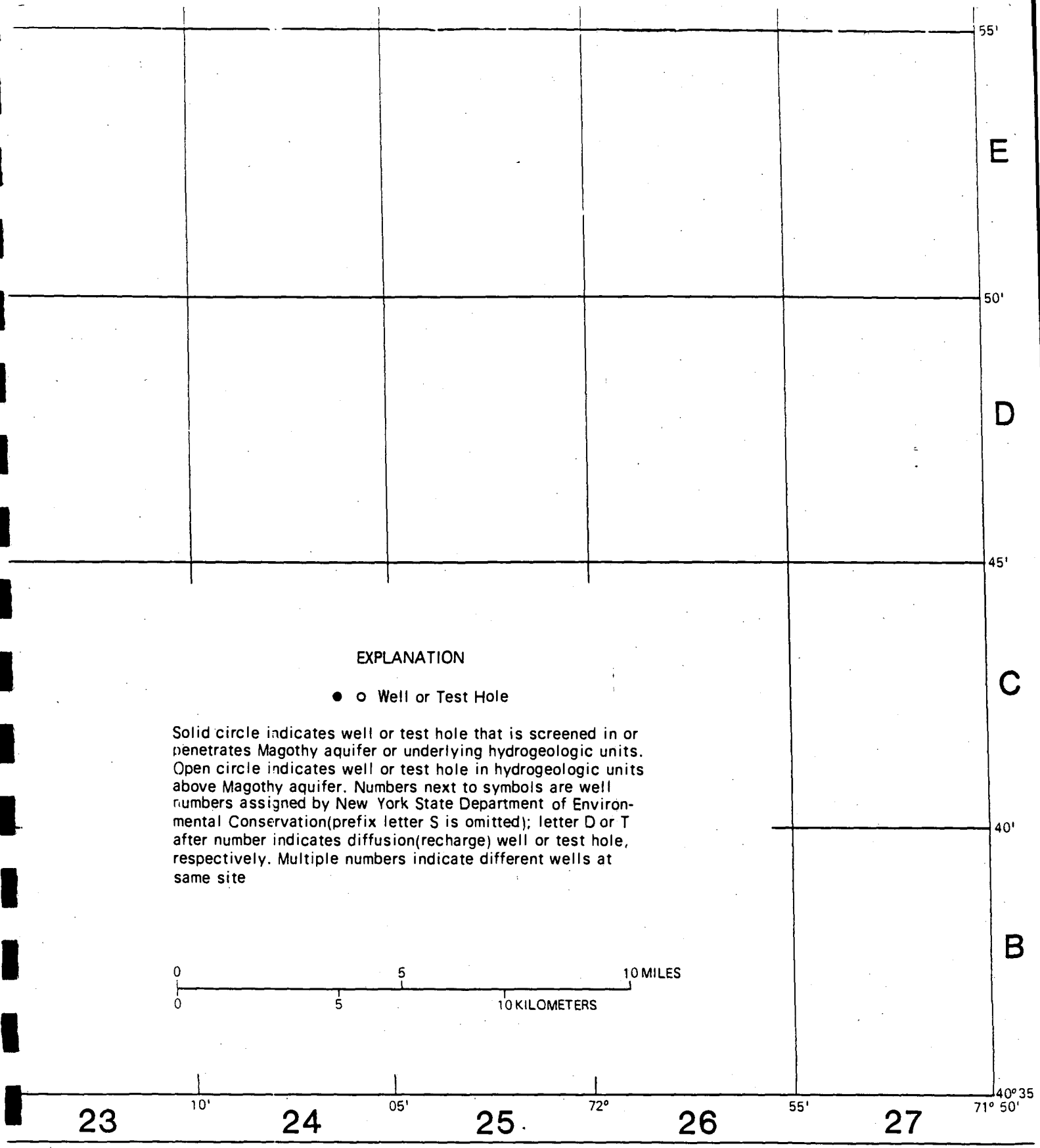
WELL-COMPLETION DATA

Well Number	Year Completed	Elevation of LSD (ft above or below NGVD)	Use of Water	Use of Well	Screen Setting (ft above or below NGVD)	Total Screen Length (ft)	Diam of Well (in)	Water level (ft below LSD)	Date of Meas. (M-D-Y)	Lift Type	Aquifer Developed	Specific Capacity (GPM/ft)
64847	1979	40	P.S.	WTDR	-488 TO -590	112	20	14	01-08-79		MAGOTHY	39
64927	1978	95	UNSD	TEST							UPGLAC	
64928	1978	65	UNSD	TEST							MAGOTHY	
65196	1978	69	UNSD	TEST							MAGOTHY	
65321	1978	259	UNSD	UNSD	2 TO - 8	10	4				UPGLAC	
65340	1978	70	UNSD	TEST							MAGOTHY	
65505	1979	54	P.S.	WTDR	-521 TO -591	70	20	21			MAGOTHY	70
65766	1978	100	UNSD	UNSD							MAGOTHY	
66132	1978	100	UNSD	OBS	10 TO 0	10	6	73	07-11-79		MAGOTHY	
66133	1979	66	UNSD	OBS	- 66 TO - 76	10	6	47	07-11-79		MAGOTHY	
66134	1979	51	UNSD	OBS	- 83 TO - 93	10	6	34	07-11-79		MAGOTHY	
66135	1979	34	UNSD	OBS	- 93 TO -103	10	6	21	07-11-79		MAGOTHY	
66136	1979	7	UNSD	OBS	-118 TO -128	10	6	4	07-11-79		MAGOTHY	
66137	1979	140	UNSD	OBS	20 TO 10	10	6	71	07-11-79		MAGOTHY	
66138	1979	63	UNSD	OBS	- 56 TO - 66	10	6	41	07-11-79		MAGOTHY	
66139	1979	42	UNSD	OBS	- 76 TO - 86	10	6	34	07-11-79		MAGOTHY	
66140	1979	21	UNSD	OBS	- 62 TO - 72	10	6	16	07-11-79		MAGOTHY	
66141	1979	5	UNSD	OBS	-105 TO -115	10	6	4	07-11-79		MAGOTHY	
66142	1979	140	UNSD	OBS	- 32 TO - 42	10	6	60	07-11-79		MAGOTHY	
66143	1979	70	UNSD	OBS	- 96 TO -106	10	6	47	07-11-79		MAGOTHY	
* 66144	1979	59	UNSD	OBS	- 67 TO - 77	10	6	41	07-11-79		MAGOTHY	
66145	1979	42	UNSD	OBS	-105 TO -115	10	6	27	07-11-79		MAGOTHY	
66146	1979	12	UNSD	OBS	-101 TO -111	10	6	8	07-11-79		MAGOTHY	
66147	1979	12	UNSD	OBS	-145 TO -155	10	6	11	07-11-79		MAGOTHY	
66148	1979	66	UNSD	OBS	- 69 TO - 79	10	6	42	07-11-79		MAGOTHY	
66149	1979	38	UNSD	OBS	-119 TO -129	10	6	23	07-11-79		MAGOTHY	
66150	1979	26	UNSD	OBS	- 84 TO - 94	10	6	17	07-11-79		MAGOTHY	
66151	1979	7	UNSD	OBS	-117 TO -127	10	6	9	07-11-79		MAGOTHY	
66152	1979	107	UNSD	OBS	- 68 TO - 78	10	6	45	07-11-79		MAGOTHY	
66153	1979	50	UNSD	OBS	- 98 TO -108	10	6	31	07-11-79		MAGOTHY	
66154	1979	31	UNSD	OBS	- 97 TO -107	10	6	21	07-11-79		MAGOTHY	
66155	1979	28	UNSD	OBS	-107 TO -115	10	6	16	07-11-79		MAGOTHY	
66156	1979	18	UNSD	OBS	-134 TO -144	10	6	12	07-11-79		MAGOTHY	
66183	1979	71	UNSD	UNSD							MAGOTHY	
66366	1979	170	P.S.	WTDR	-230 TO -290	60	20	133	04-04-79		UPGLAC	59
66496	1979	127	UNSD	UNSD							MAGOTHY	
66556	1979	50	UNSD	UNSD							MAGOTHY	
66733	1979	45	UNSD	UNSD							MAGOTHY	
66823	1979	160	UNSD	TEST							UPGLAC	
66825	1979	50	UNSD	OBS							MAGOTHY	
66880	1979	5	UNSD	OBS	-201 TO -211	10	2				MAGOTHY	
67074	1979	70	UNSD	OBS							MAGOTHY	
67081	1979	4	UNSD	TEST							UPGLAC	
67082	1979	12	UNSD	OBS	-208 TO -218	10	6				MAGOTHY	
67083	1979	12	UNSD	TEST							UPGLAC	
67084	1979	9	UNSD	OBS	-158 TO -168	10	6				MAGOTHY	
67085	1979	10	UNSD	TEST							UPGLAC	
67086	1979	10	UNSD	TEST							UPGLAC	
67087	1979	10	UNSD	OBS							MAGOTHY	
67088	1979	10	UNSD	TEST							MAGOTHY	
67197	1979	65	UNSD	OBS							MAGOTHY	
67974	1980	30	UNSD	OBS							MAGOTHY	

* CLOSEST WELL



Base from U.S. Geological Survey, 1:250,000, scale
Hartford, 1975, New York, 1969, Providence, 1969


55'
50'
45'
40'
E
D
C
B
EXPLANATION
● o Well or Test Hole
Solid circle indicates well or test hole that is screened in or penetrates Magothy aquifer or underlying hydrogeologic units. Open circle indicates well or test hole in hydrogeologic units above Magothy aquifer. Numbers next to symbols are well numbers assigned by New York State Department of Environmental Conservation(prefix letter S is omitted); letter D or T after number indicates diffusion(recharge) well or test hole, respectively. Multiple numbers indicate different wells at same site
0 5 10 MILES
0 5 10 KILOMETERS
10'
05'
72°
55'
40°35
71° 50'
23
24
25
26
27

REFERENCE NO. 7

Werbin
AKA
Trube

Summary of the Hydrologic Situation on Long Island, New York, as a Guide to Water-Management Alternatives

By O. L. FRANKE *and* N. E. McCLYMONDS

HYDROLOGY AND SOME EFFECTS OF URBANIZATION ON LONG ISLAND, NEW YORK

GEOLOGICAL SURVEY PROFESSIONAL PAPER 627-F

Prepared in cooperation with the New York State Department of Conservation, Division of Water Resources; the Nassau County Department of Public Works; the Suffolk County Board of Supervisors; and the Suffolk County Water Authority



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underlain by terminal-moraine deposits, the depth to the water table is more than 50 feet, and in small areas the depth to the water table is more than 200 feet. Depths to the water table near the northern coast of the island generally are more than 20 feet, except adjacent to stream channels or in narrow bands near the shoreline.

GROUND-WATER RESERVOIR

HYDROLOGIC FEATURES OF THE GROUND-WATER RESERVOIR

The overall hydrogeologic setting of Long Island was described in considerable detail by Veatch (1906), Fuller (1914), and Suter, De Laguna, and Perlmutter (1949). The geology and related hydrology of several smaller areas of Long Island have been studied in greater detail by others, including De Laguna (1963), Isbister (1966), Lubke (1964), Lusczynski and Swarzenski (1966), Perlmutter and Geraghty (1963), Pluhowski and Kantrowitz (1964), and Swarzenski (1963).

Long Island is underlain by consolidated bedrock, which, in turn, is overlain by a wedge-shaped mass of unconsolidated rock materials (fig. 8).[1] These materials, which constitute Long Island's ground-water reservoir, consist primarily of a series of Pleistocene glacial deposits and Cretaceous fluvial or deltaic deposits composed of gravel, sand, silt, clay, and mixtures thereof. The Cretaceous deposits were eroded by

[1] The actual dip of the upper bedrock surface is slightly less than 1° to the southeast. The much greater inclination of the bedrock surface and the Magothy aquifer shown in figure 8 is due to the large vertical-scale exaggeration of this cross section.

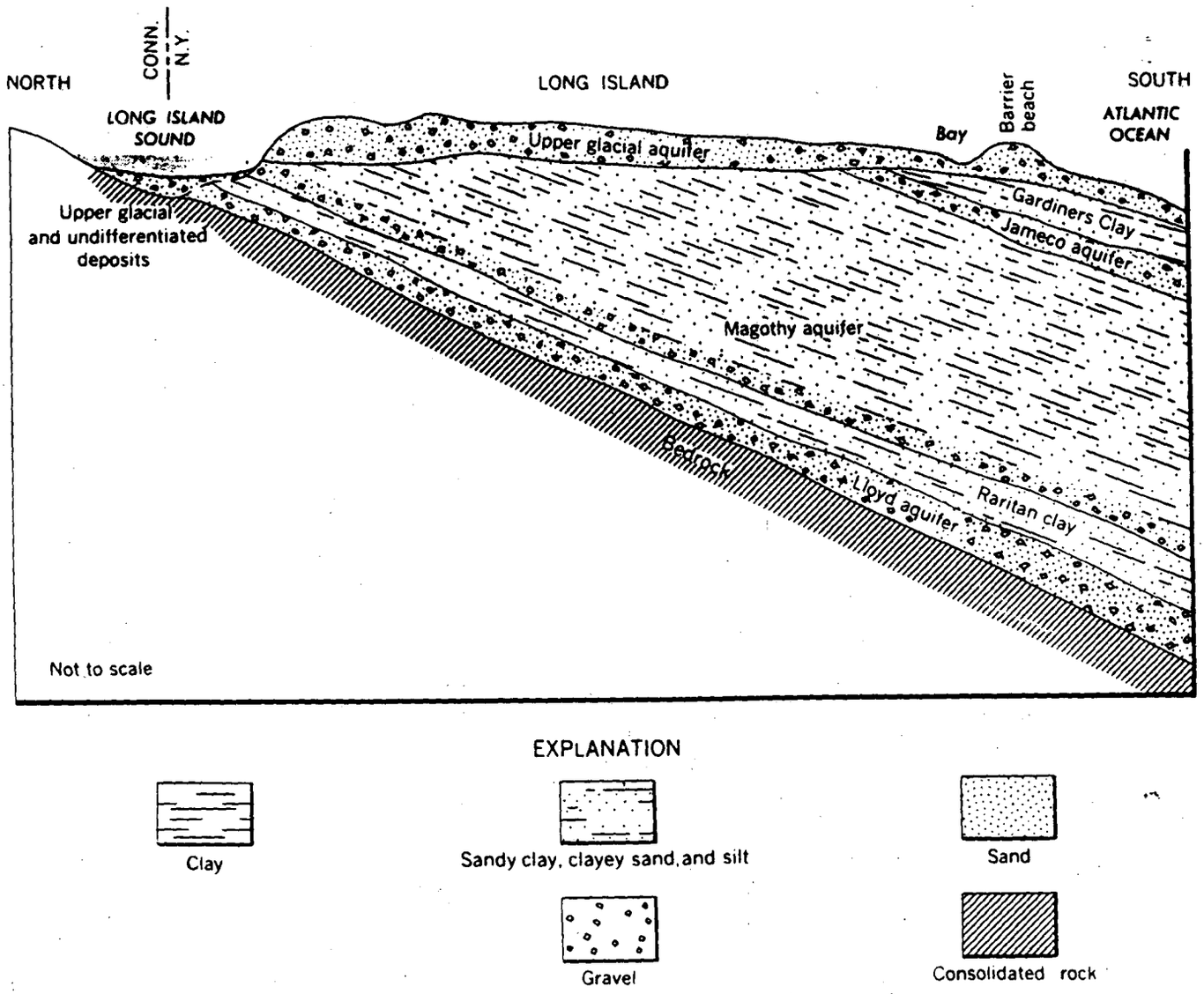


FIGURE 8.—Geologic features of the ground-water reservoir.

TABLE 2.—*Summary of the rock units and their water-bearing properties, Long Island, N.Y.*

[After McClymonds and Franke, 1971]

System	Series	Geologic unit	Hydrogeologic unit	Approximate maximum thickness (feet)	Depth from land surface to top (feet)	Character of deposits	Water-bearing properties
Quaternary	Holocene	Artificial fill, salt marsh deposits, stream alluvium, and shoreline deposits.	Holocene deposits	50	0	Sand, gravel, clay, silt, organic mud, peat, loam, and shells. Colors are gray, brown, green, black, and yellow. Holocene artificial-fill deposits of gravel, sand, clay, and rubbish.	Permeable sandy beds beneath barrier beaches yield fresh water at shallow depths, brackish to salty water at greater depth. Clay and silt beneath bays retard salt-water encroachment and confine underlying aquifers. Stream-flood-plain and marsh deposits may yield small quantities of water, but are generally clayey or silty and much less permeable than underlying upper glacial aquifer.
	Pleistocene	Upper Pleistocene deposits	Upper glacial aquifer	600	0–50	Till (mostly along north shore and in moraines) composed of clay, sand, gravel, and boulders. Forms Harbor Hill and Ronkonkoma terminal moraines. Outwash deposits (mostly between and south of terminal moraines, but also interlayered with till) consist of quartzose sand, fine to very coarse, and gravel, pebble to boulder sized. Glaciolacustrine deposits (mostly in central and eastern Long Island) and marine clay (locally along south shore) consist of silt, clay, and some sand and gravel layers; includes "20-foot clay" in southern Nassau County and Queens County. Colors are mainly gray, brown, and yellow; silt and clay locally are grayish green. Contains shells and plant remains, generally in finer grained beds; also contains Foraminifera. Contains chlorite, biotite, muscovite, hornblende, olivine, and feldspar as accessory minerals; "20-foot clay" commonly contains glauconite.	Till is poorly permeable; commonly causes perched-water bodies and impedes downward percolation of water to underlying beds. Outwash deposits are moderately to highly permeable; specific capacities of wells tapping them range from about 10 to more than 200 gpm per foot of drawdown. Good to excellent infiltration characteristics. Glaciolacustrine and marine clay deposits are mostly poorly permeable, but locally have thin moderately permeable layers of sand and gravel; generally retard downward percolation of ground water. Contains fresh water, except near the shorelines. Till and marine deposits locally retard salt-water encroachment.
		—Unconformity?—					
		Gardiners Clay	Gardiners Clay	300	50–400	Clay, silt, and few layers of sand and gravel. Colors are grayish green and brown. Contains marine shells, Foraminifera, and lignite; also glauconite, locally. Altitude of top generally is 50–80 ft below mean sea level. Occurs in Kings and Queens Counties, southern Nassau County, and Suffolk County; similar clay occurs in buried valleys near north shore.	Poorly permeable; constitutes confining layer for underlying Jameco aquifer. Locally, sand layers yield small quantities of water.
		—Unconformity?—					
		Jameco Gravel	Jameco aquifer	300	50–550	Sand, fine to very coarse, and gravel to large-pebble size; few layers of clay and silt. Gravel is composed of crystalline and sedimentary rocks. Color is mostly dark brown. Contains chlorite, biotite, muscovite, hornblende, and feldspar as accessory minerals. Occurs in Kings and Queens Counties, and southern Nassau County; similar deposits occur in buried valleys near north shore.	Moderately to highly permeable; contains mostly fresh water, but brackish water and water with high iron content locally in southeastern Nassau County and southern Queens County. Specific capacities of wells in the Jameco range from about 20 to 150 gpm per foot of drawdown.
		—Unconformity—					
Tertiary(?)	Pliocene(?)	Mannetto Gravel	(Commonly included with upper glacial aquifer.)	300	0–120	Gravel, fine to coarse, and lenses of sand; scattered clay lenses. Colors are white, yellow, and brown. Occurs only near Nassau-Suffolk County border near center of island.	Highly permeable, but occurs mostly above water table. Excellent infiltration characteristics.
		—Unconformity—					
Cretaceous		Magothy Formation	Magothy aquifer	1,100	0–600	Sand, fine to medium, clayey in part; interbedded with lenses and layers of coarse sand and sandy and solid clay. Gravel is common in basal 50–200 ft. Sand and gravel are quartzose. Lignite, pyrite, and iron oxide concretions are common; muscovite, magnetite, rutile, and garnet are accessory minerals. Colors are gray, white, red, brown, and yellow.	Most layers are poorly to moderately permeable; some are highly permeable locally. Specific capacities of wells in the Magothy generally range from 1 to about 30 gpm per foot of drawdown, rarely are as much as 80 gpm per ft. Water is unconfined in uppermost parts, elsewhere is confined. Water is generally of excellent quality but has high iron content locally along north and south shores. Constitutes principal aquifer for public-supply wells in western Long Island, except Kings County where it is mostly absent. Has been invaded by salty-ground water locally in southwestern Nassau County and southern Queens County, and in small areas along north shore.

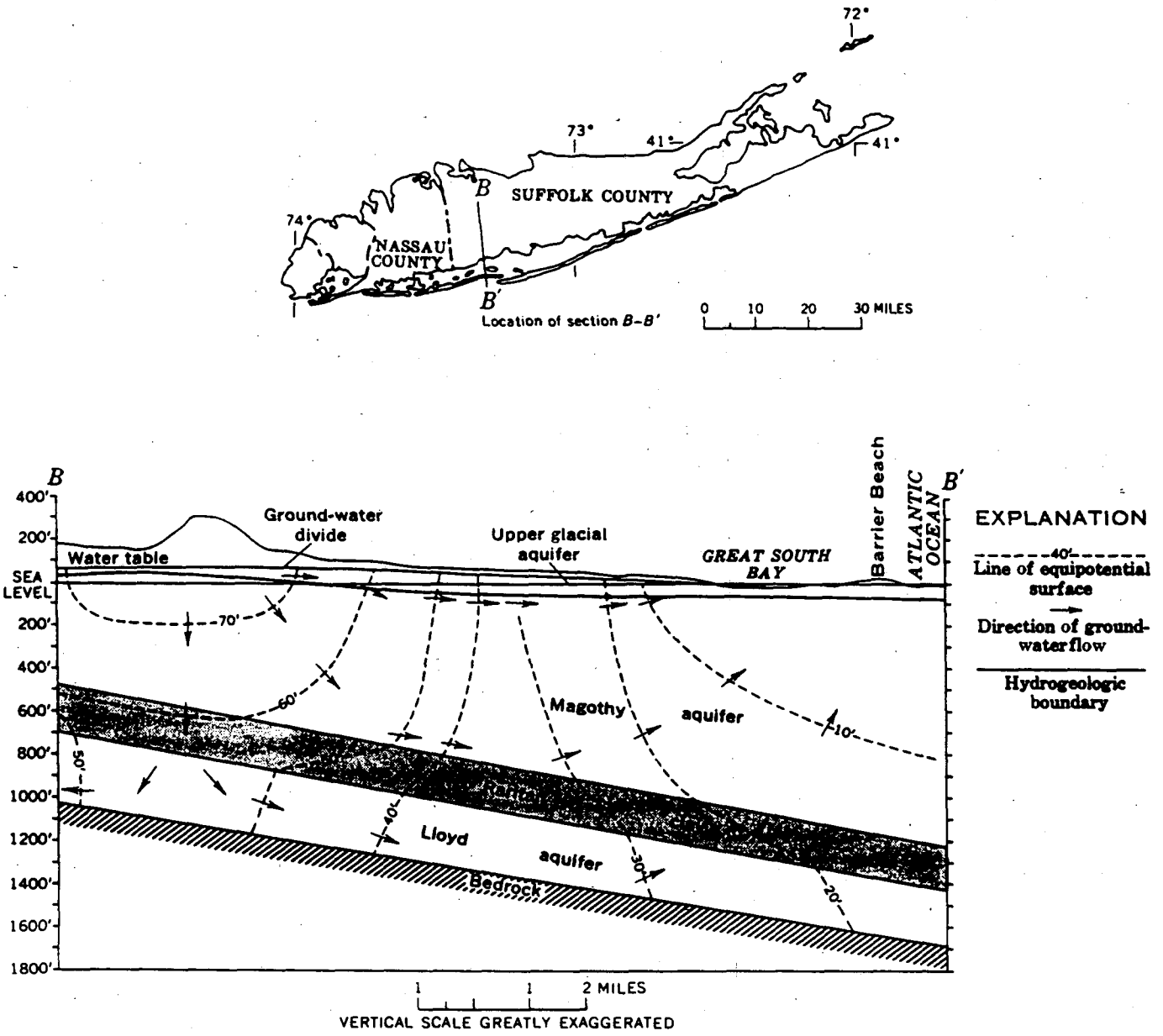


FIGURE 21.—Geohydrologic section of the ground-water reservoir in southwestern Suffolk County in October 1960. Adapted from Pluhowski and Kantrowitz (1964, fig. 13).

bounds the fresh ground-water reservoir of Long Island. The presence of the salty ground water results in several salt-fresh water interfaces at various depths in the Long Island ground-water reservoir. As stated previously, these interfaces are dynamic boundaries that change position in response to changes in head within the ground-water reservoir. The positions of these interfaces are undoubtedly at least partly related to the location of the relatively permeable and impermeable layers in the ground-water reservoir.

DISCHARGE FROM THE GROUND-WATER RESERVOIR

The main elements of discharge from the ground-water reservoir are seepage to streams and springs, ground-water evapotranspiration, and subsurface outflow (fig. 13).

STREAMFLOW AND SPRINGFLOW

Those aspects of streamflow that are emphasized in this report are the annual and daily streamflow from the water-budget area, streamflow in the near-

REFERENCE NO. 8

[6560-01]

[FRL 910-3]

AQUIFERS UNDERLYING NASSAU AND SUFFOLK COUNTIES, NEW YORK

Determination

Notice is hereby given that pursuant to Section 1434(e) of the Safe Drinking Water Act (42 U.S.C. 300f, 300h-3(e); 88 Stat. 1660 et seq.; Pub. L. 93-523) the Administrator of the Environmental Protection Agency has determined that the aquifer system underlying Nassau and Suffolk Counties, Long Island, New York, is the principal source of drinking water for these counties and that, if the aquifer system were contaminated, it would create a significant hazard to public health.

Background

The Safe Drinking Water Act was enacted on December 16, 1974. Section 1424(e) of the Act states: "If the Administrator determines, on his own initiative or upon petition, that an area has an aquifer which is the sole or principal drinking water source for the area and which, if contaminated, would create a significant hazard to public health, he shall publish notice of that determination in the FEDERAL REGISTER. After the publication of any such notice, no commitment for Federal financial assistance (through a grant, contract, loan guarantee, or otherwise) may be entered into for any project which the Administrator determines may contaminate such aquifer through a recharge zone so as to create a significant hazard to public health but a commitment for Federal financial assistance may, if authorized under another provision of law, be entered into to plan or design the project to assure that it will not so contaminate the aquifer."

On January 21, 1975, the Environmental Defense Fund petitioned the Administrator to designate the aquifers underlying Nassau and Suffolk Counties, Long Island, New York, as a sole source aquifer under the provisions of the Act. A notice of receipt of this petition, together with a request for comments, was published in the FEDERAL REGISTER, Thursday, June 12, 1975. Written comments were submitted by the Environmental Defense Fund (EDF) on August 7, 1975, supporting their petition. A letter from the Director of the Nassau-Suffolk Regional Planning Board, dated October 1, 1976, requested that designation be delayed until after the completion of the areawide waste management (208) planning process for Long Island.

Because of the limited response to the FEDERAL REGISTER notice, EPA issued a press release and mailed an information sheet to elected officials and environmental groups on Long Island in March 1977. In addition, a presentation was made to the Citizens Advisory Committee (CAC) of the 208 planning agency and to the executive committee of the Long Island Water Conference. In response to these activities EPA received three comments: a letter from EDF questioning why project review would exclude direct Federal projects, a letter from a member of the East Hampton Planning Board expressing support for the designation, and a letter from the CAC requesting that designation be delayed until after the completion and approval of the Long Island 208 plan.

In considering the comments received, we could not agree with the letters requesting further delay since we do not believe that the review process under Section 1424(e) will constrain the options of 208 planning.

On the basis of the information which is available to this Agency, the Administrator has made the following findings, which are the basis for the determination noted above:

(1) The aquifers underlying Nassau and Suffolk Counties are the sole or principal drinking water source for the area. They supply good quality water for about 2.5 million people. Current water supply treatment practice for public supplies is generally limited to disinfection for drinking purposes, with some plants capable of nitrate removal. There are also numerous private sources. There is no alternative source of drinking water supply which could economically replace this aquifer system.

(2) The aquifer system is vulnerable to contamination through its recharge zone. Since contamination of a ground-water aquifer can be difficult or impossible to reverse, contamination of the the aquifer system underlying Nassau and Suffolk Counties, New York, would pose a significant hazard to those people dependent on the aquifer system for drinking purposes.

Among the determinations which the Administrator must make in connection with the designation of an area under Section 1424(e) is that the area's sole or principal source aquifer or aquifers, "if contaminated, would create a significant hazard to public health * * *" Obviously, threats to the quality of the drinking water supply for such a large population could create a significant hazard to public health. The EPA does not construe this provision to require a determination that projects planned or likely to be constructed will in fact create such a hazard; it is sufficient to demonstrate that approximately 2.5 million people depend on the aquifer system underlying Nassau and Suffolk Counties as their principal source of drinking water, and that the aquifer system is vulnerable to contamination through its recharge zone.

Section 1424(e) of the Act requires that a Federal agency may not commit funds to a project which may contaminate the aquifer system through a recharge zone so as to create a significant hazard to public health. The recharge zone is that area through which water enters into the aquifer system. Because of groundwater movement within these aquifers, the recharge zone is considered to be the entire area of Nassau and Suffolk Counties. However, both horizontal and vertical boundaries of the recharge zone are discussed in the background document under the section entitled "Area of Consideration."

The data upon which these findings are based are available to the public and may be inspected during normal business hours at the office of the Environmental Protection Agency, Region II, 26 Federal Plaza, New York, New York 10007. It includes a support document for designation of the aquifers underlying Nassau and Suffolk Counties, New York, and maps of the area within which projects will be subject to review.

A copy of the above documentation is also available at the U.S. Waterside Mall, Environmental Protection Agency, Public Information and Reference Unit, Room 2922, 401 M Street S.W., Washington, D.C. 20460.

The EPA has issued proposed regulations for the selective review of Federal financially assisted projects which may contaminate the aquifer system underlying Nassau and Suffolk Counties, New York, through the recharge zone so as to create a significant hazard to public health. These proposed regulations were published in the FEDERAL REGISTER issue of September 29, 1977, and public comments were requested. They will be used as interim guidance for project review until their promulgation during 1978.

EPA, Region II, is working with the Federal agencies which may in the near future fund projects in the area of concern to EPA to develop interagency procedures whereby EPA will be notified of proposed commitments for projects which could contaminate the bicounty area's sole source aquifer system. Although the project review process cannot be delegated, the Regional Administrator in Region II will rely to the maximum extent possible upon any existing or future State and local control mechanisms in protecting the ground-water quality of the aquifer system underlying Nassau and Suffolk Counties, New York. Included in the review of any Federal financially assisted project will be coordination with the State and local agencies. Their determinations will be given full consideration and the Federal review process will function so as to complement and support State and local mechanisms.

Dated: June 12, 1978.

DOUGLAS M. COSTLE,
Administrator.

[FR Doc. 78-17067 Filed 6-20-78; 8:45 am]

REFERENCE NO. 9

Uncontrolled Hazardous Waste Site Ranking System

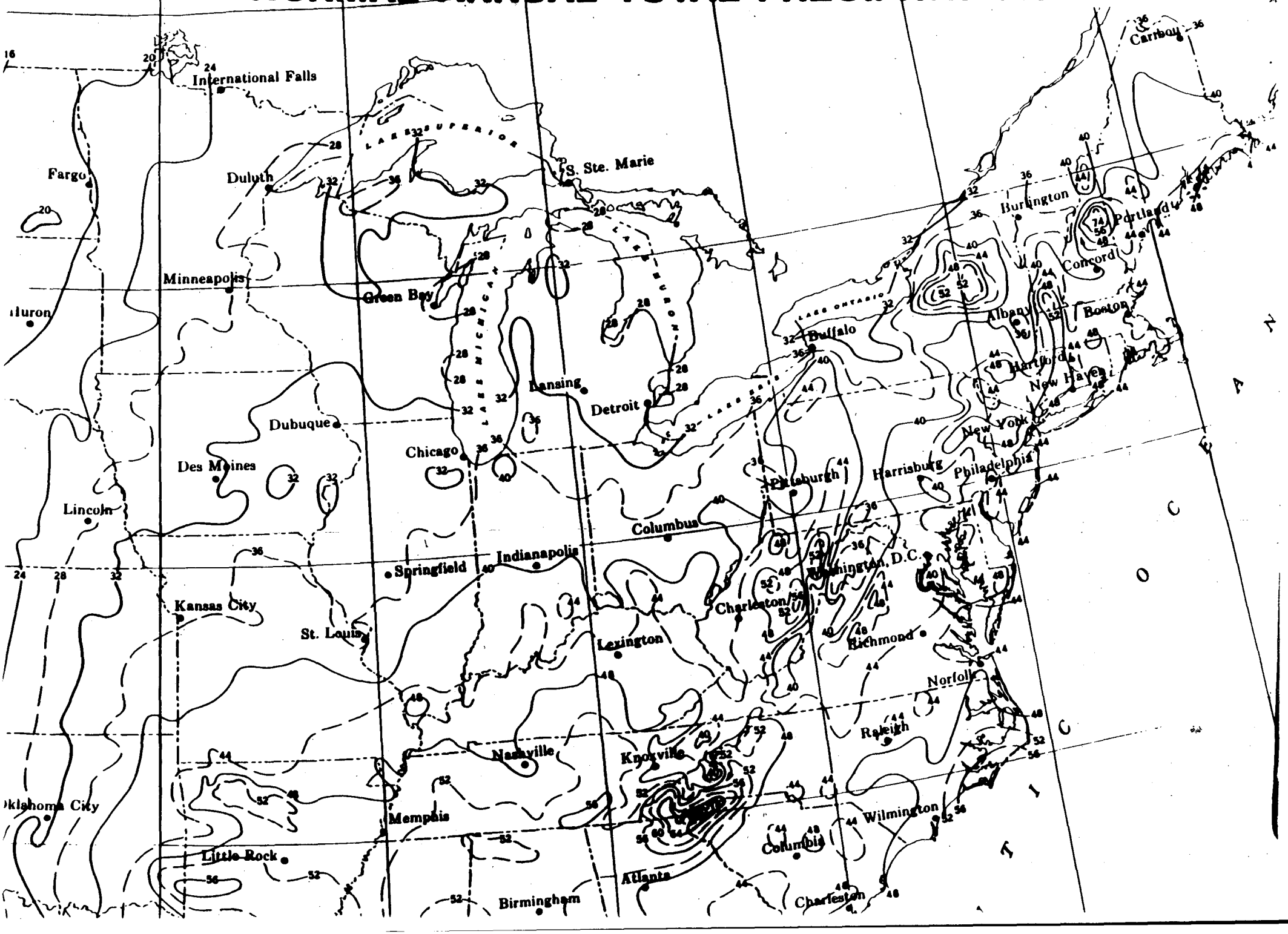
A Users Manual
(HW-10)

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

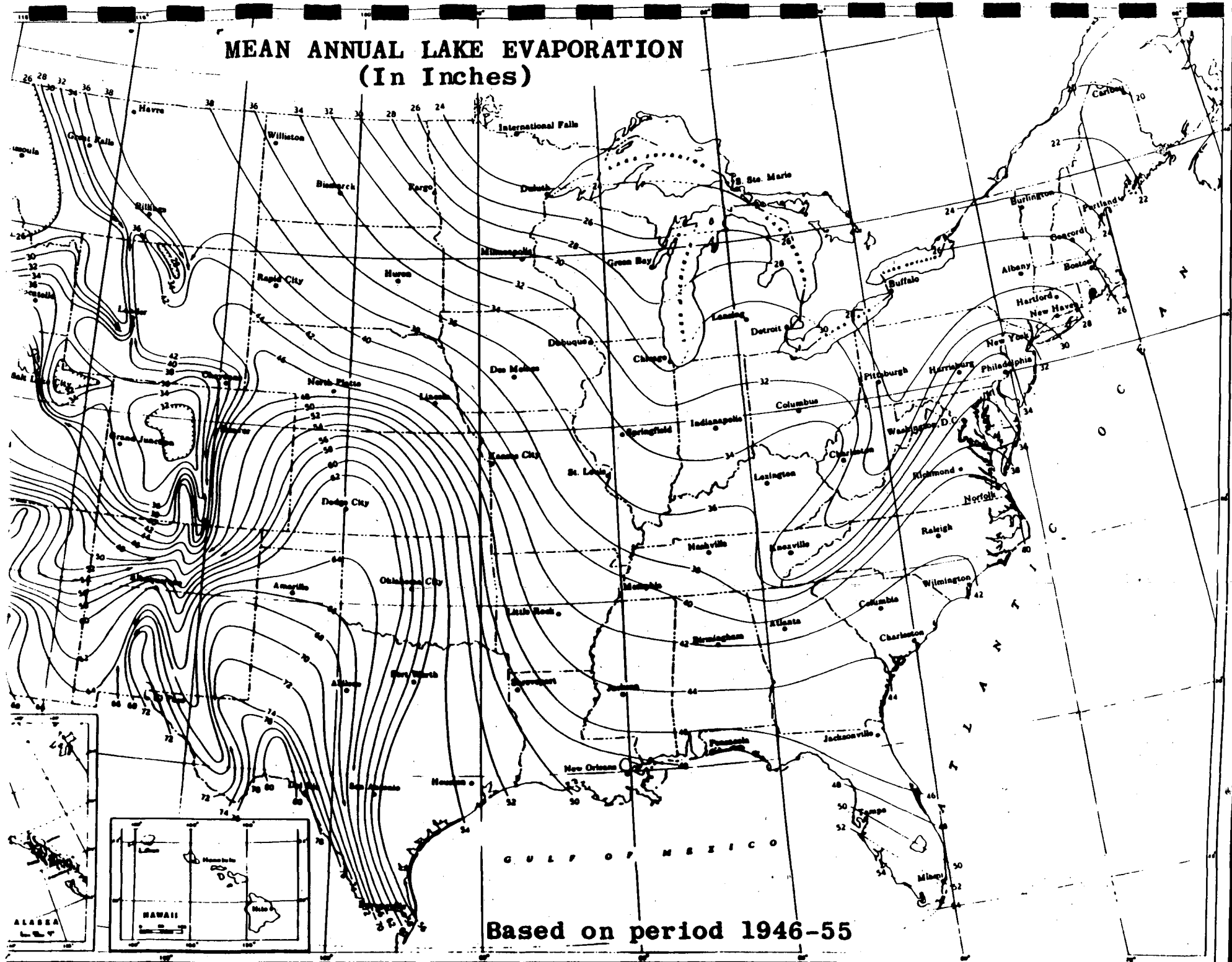
United States
Environmental Protection
Agency

1984

NORMAL ANNUAL TOTAL PRECIPITATION (Inches)

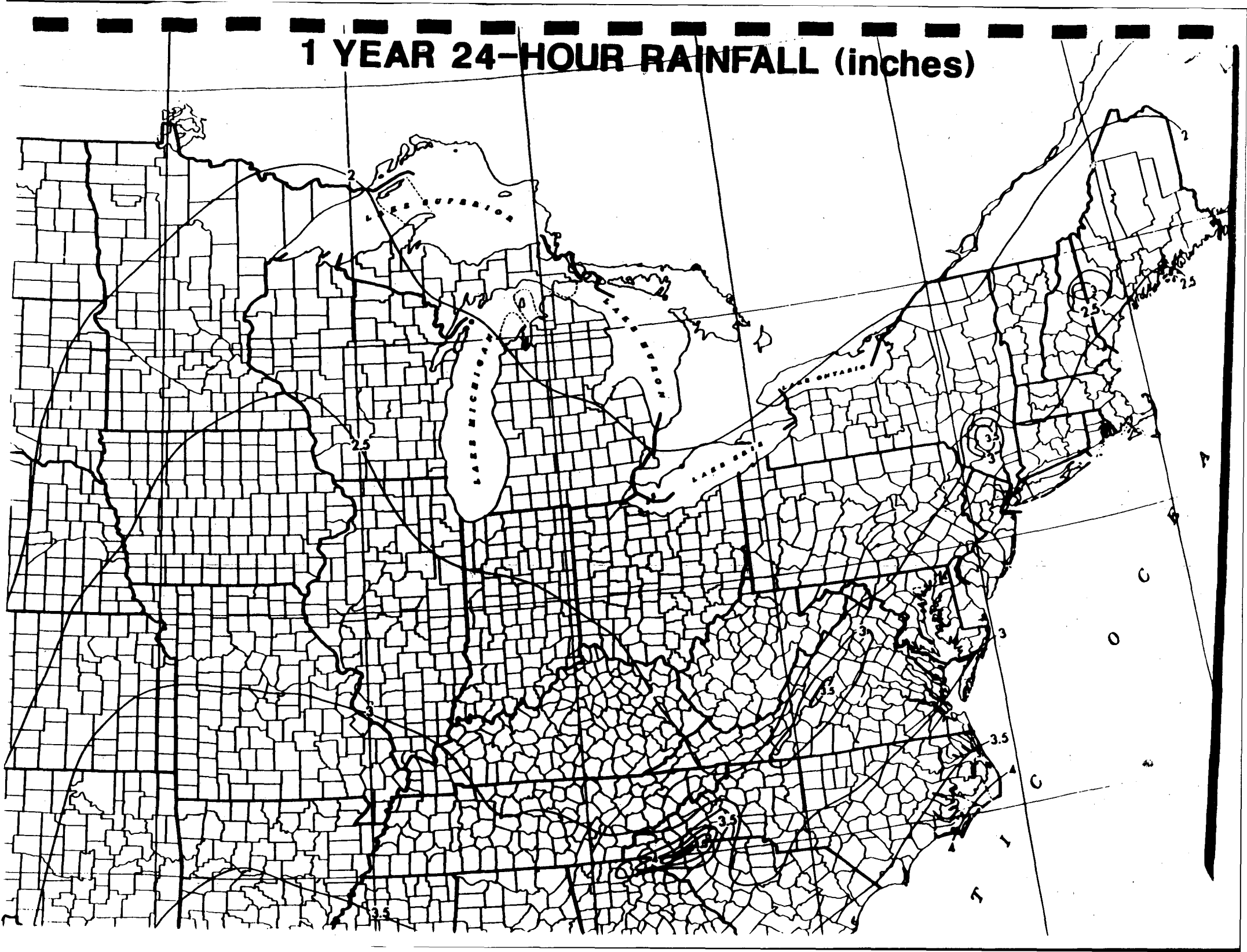


MEAN ANNUAL LAKE EVAPORATION
(In Inches)



Based on period 1946-55

1 YEAR 24-HOUR RAINFALL (inches)



REFERENCE NO. 10

SUFFOLK COUNTY WATER AUTHORITY

Leon J. Campo, *Chairman*
Melvin M. Fritz, M.D., *Member*
Matthew B. Kondenar, *Secretary*
James T.B. Tripp, *Member*
Michael E. White, *Member*

Administrative offices: Oakdale, Long Island, N.Y. 11769
Area 516-589-5200

April 29, 1988

Mr. Michael Gentils
NUS Corp.
1090 King George's Post Road
Suite 1103
Edison, NJ 08837

Dear Mr. Gentils:

Enclosed, please find computer print which shows identification number, depth, aquifer and district of the wells which appear to fall within your areas of interest. The Water Authority districts are titled on these sheets as follows: ABL- Babylon; ABS - Bay Shore; APG - Patchogue and BSM- Smithtown.

The location of each of these well fields has also been noted on a copy of the maps you submitted.

There are no other public water suppliers within the area around Mac Arthur Airport but the Brentwood Water District extends into the area around North Bay Shore.

The Suffolk County Water Authority system is completely interconnected in these areas and the population served by individual wells is not available. The estimated population of the various districts as of May 31, 1987, is as follows: Babylon - 195,000; Bay Shore - 170,000; Patchogue - 187,000 and Smithtown - 85,000.

If you have further questions, please advise.

Very truly yours,

S. R. Dassler
Assistant Engineer

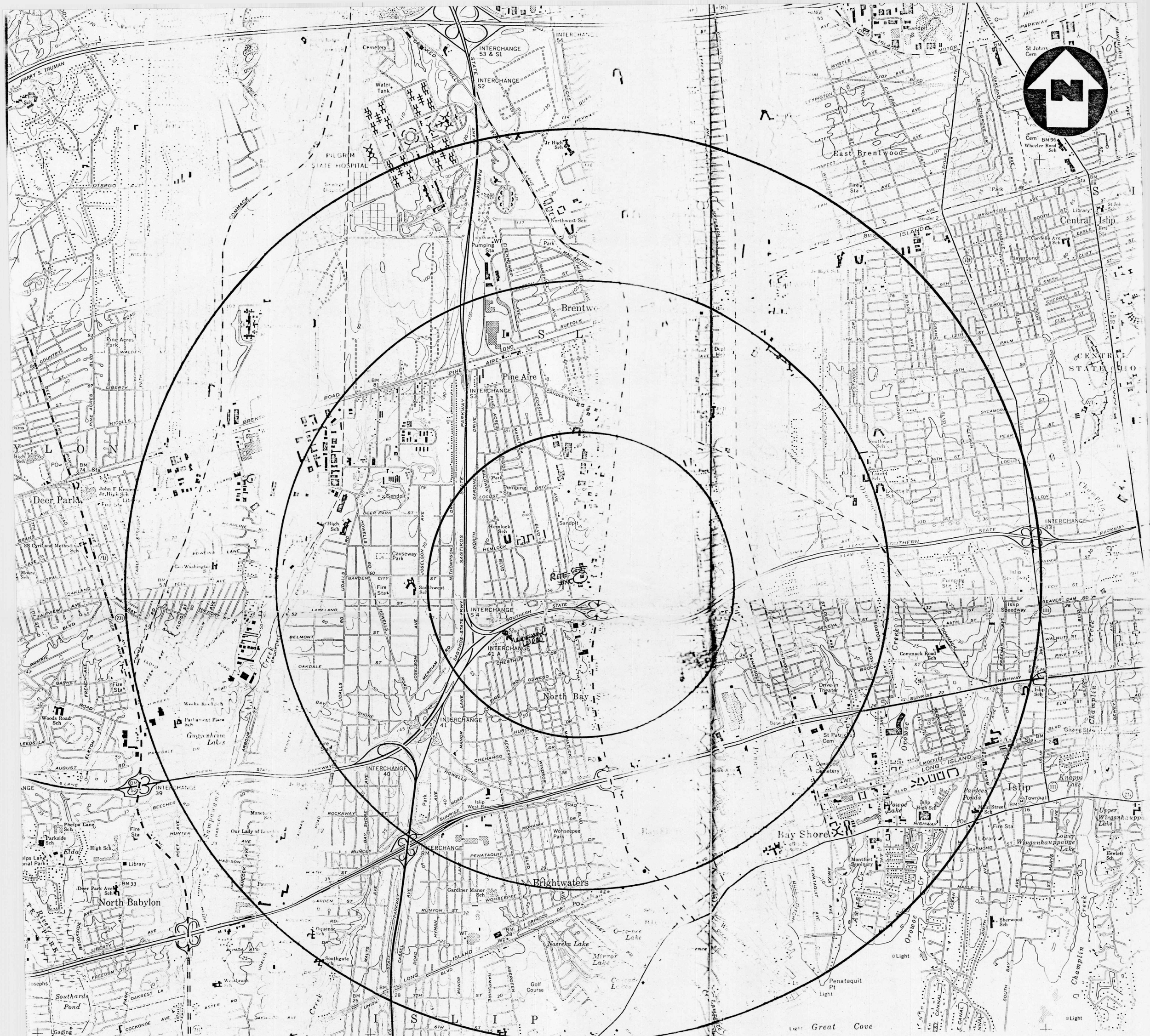
SRD:FDS
Enclosures

WELL	T/P	SR	DIS	CN	AQ	DEP	WDTH	PMTG	E.DATE	REMARKS
BANANA 1	W	S-12143	ABS	15	S	116	700	700	[illegible]	
BANANA 2	W	S-13558	ABS	15	S	115	700	700	540000	
BANANA 3	W	S-22494	ABS	15	S	117	1000	1000	[illegible]	
BANANA 4	W	S-39531	ABS	15	M	238	1200	1200	[illegible]	
BANANA 5	W	S-54957	ABS	15	M	379	1400	700		
BAY SHORE 1	W	S-59347	ABS	15	M	463	1300	1300	[illegible]	
BAY SHORE 2	W	S-72917	ABS	15	M	460	1300	1300		
BLUE POINT 1	W	S-38220	APS	18	S	172	1200	1200	710619	
BLUE POINT 2	W	S-38321	APS	18	M	303	1200	1200	710626	
BLUE POINT 3	W	S-42761	APS	18	M	334	1400	1400	730811	
BLUE POINT 4	W	S-53074	APS	18	S	169	1400	1200	760309	
BROOK 1	W	S-23046	ABL	13	M	448	1200	1200	630609	
BROOK 2	W	S-25617	ABL	13	M	440	1200	1200	660520	
BROOK 3	W	S-36714	ABL	13	M	309	1200	1200	700731	
BROOK 4	W	S-55463	ABL	13	M	360	1400	1400	761012	
CHINA 1	W	S-50812	APS	18	M	489	1300	1300	750126	
CHINA 2	W	S-73492	APS	18	M	482	1300	1300		
CHURCH RD 1	W	S-52126	APS	18	S	156	1400	1400	750523	
CHURCH RD 2	W	S-57971	APS	18	S	158	1400	1400	761217	
CHURCH RD 3	W	S-58552	APS	18	M	338	1300	1300	810703	
CHURCH RD 1	W	S-27259	APS	18	S	164	1000	1000	660708	
CHURCH RD 2	W	S-31913	APS	18	S	160	1000	1000	680508	
CHURCH RD 3	W	S-47035	APS	18	M	598	1400	1400	740130	
EAST FORKS 1	W	S-13534	ABS	15	S	119	900	900	550726	
EAST FORKS 2	W	S-16176	ABS	15	S	117	1000	900	580630	
EAST FORKS 3	W	S-18566	ABS	15	M	376	1000	1000	610307	
EAST FORKS 4	W	S-38192	ABS	15	M	306	1200	1200	720229	
EAST FORKS 5	W	S-71083	ABS	15	M	798	1300	1300		
EASTON 1	W	S-40982	APS	11	S	150	300	300	730924	
EASTON 2	W	S-43641	APS	11	M	706	1400	1300	730924	
EASTON 3	W	S-51609	APS	11	M	730	1400	1400	750228	
EMJAY 1	W	S-23445	ABS	14	M	608	1200	1200	650826	
EMJAY 2	W	S-31104	ABS	14	M	660	1200	1200	680312	
EMJAY 3	W	S-57008	ABS	14	M	634	2400	1400	761213	
FIFTH 32	W	S-20566	ABS	15	M	775	1200	1200	660310	
FIFTH 33	W	S-26535	ABS	15	M	776	1200	1000	660630	
FIFTH 34	W	S-71038	ABS	15	M	592	1300	1300		
FORTY FIRST 1	W	S-20603	ABS	15	S	110	1000	1000		
FORTY FIRST 2	W	S-26490	ABS	15	S	112	1000	1000		
FORTY FIRST 3	W	S-39406	ABS	15	S	106	1200	1200		
FORTY FIRST 4	W	S-45839	ABS	15	M	726	1400	1400		
FORTY FIRST 5	W	S-64847	ABS	15	M	634	1300	1300		
GREEN BELT 1	W	S-54730	APS	18	M	259	1400	1400		
GREEN BELT 2	W	S-59744	APS	18	M	302	1400	1400		
GREEN BELT 3	W	S-66183	APS	18	M	532	1300	1300		
GREEN BELT 4	W	S-66184	APS	18	M	384	1300	1300		
HARVEST 1	W	S-21366	ABS	13	M	455	1200	1100		
HARVEST 2	W	S-22389	ABS	13	M	465	1200	1100		
HARVEST 3	W	S-39024	ABS	13	M	623	1200	1100		
INDUSTRY 1	W	S-40497	ABL	13	M	283	1200	1200		
INDUSTRY 2	W	S-46830	ABL	13	M	655	1400	1200		
KAYRON 1A	W	S-60127	APS	22	S	490	2400	1300		

EVCDATE CODE: 640627 = JUNE 27, 1964; 540000 = 1954

WELL	TYP	S#	DIS	ZN	AQ	DEP	AUTH	RATD	SVCDATE	REMARKS
LINCOLN 1	W	S-35701	APG	18	G	202	1200	1200		
LINCOLN 2	W	S-47453	APG	18	M	444	1200	1200		
LINCOLN 3	W	S-54305	APG	18	M	312	1400	1200		
LINDST NB 1	W	S-15899	ABS	15	G	123	1000	500		
LINDST NB 2	W	S-16175	ABS	15	G	130	1000	700		
LINDST NB 3	W	S-32490	ABS	15	M	511	1200	1200		
MORRIS 1	W	S-23819	APG	22	G	245	1000	1000		
MORRIS 2	W	S-29492	APG	22	G	234	1000	1000		
MORRIS 3	W	S-32666	APG	22	G	274	1300	1300		
PECONIC 1	W	S-77010	APG	11	M	567	1300	1300		
SAMUEL 1	W	S-13620	APG	22	G	154	900	900		
SAMUEL 2	W	S-17630	APG	22	G	173	1000	900		
SAMUEL 3	W	S-37547	APG	22	G	349	1200	1200		
SAMUEL 4	W	S-44607	APG	22	G	373	1300	1300		
SUNRISE 1	W	S-55733	ABS	13	M	233	1400	1300		
SUNRISE 2	W	S-55734	ABS	13	M	308	1400	1400		
SUNRISE 3	W	S-66429	ABS	13	M	718	1300	1300		
THOMAS 1	W	S-46235	ABS	15	M	713	1400	1400		
THOMAS 2	W	S-50546	ABS	15	M	667	1400	1400		
TOWN LINE 1	W	S-53497	BSM	10	G	172	1400	1400		
TOWN LINE 2	W	S-53498	BSM	10	M	720	1400	1400		
UNION 1	W	S-19048	ABS	13	M	731	1200	1200		
UNION 2	W	S-21244	ABS	13	M	600	1200	1200		
UNION 3	W	S-42762	ABS	13	M	721	1400	1400		
VIRGINIA 1	W	S-72300	APS	22	G	274	1300	1250		
VIRGINIA 2	W	S-83096	APS	22	G	280	1300	0		
Lowest Ave 1		S-20045	APG		G	140				
Lowest Ave 2		S-22711	APG		G	140				
Lowest Ave 3		S-31522	APG		G	149				
Lowest Ave 4		S-67074	APG		M	830				
Lowest Ave 5		S-68690	APG		M	824				

REFERENCE NO. 11



NUS CORPORATION	TITLE: THREE MILE VICINITY MAP
	SITE: RITE-OFF INC., BAY SHORE, N.Y.
DATE : 03/07/89	
TDD : 02-8902-50	
QUAD : GREENLAWN, N.Y.	FIGURE NUMBER:
	SCALE: 1"= 2000'

REFERENCE NO. 12

PRELIMINARY ASSESSMENT
OFF SITE RECONNAISSANCE
INFORMATION REPORTING FORM

Date: 3-1-89

Site Name: Rite-Off Inc. TDD: 02-8902-50

Site Address: 1545 5th Industrial Court
Street, Box, etc.

Bay Shore
Town

Suffolk
County

New York
State

NUS Personnel:	Name	Discipline
	JESS TECSON	ENV. SCI.
	Joe Dvorak	CHEMIST

Weather Conditions (clear, cloudy, rain, snow, etc.):

Clear, Sunny

Estimated wind direction and wind speed: SE N20 mph

Estimated temperature: 40°C

Signature: Jess Tecson Date: 3-1-89

Countersigned: J. Dvorak Date: 3-1-89

PRELIMINARY ASSESSMENT

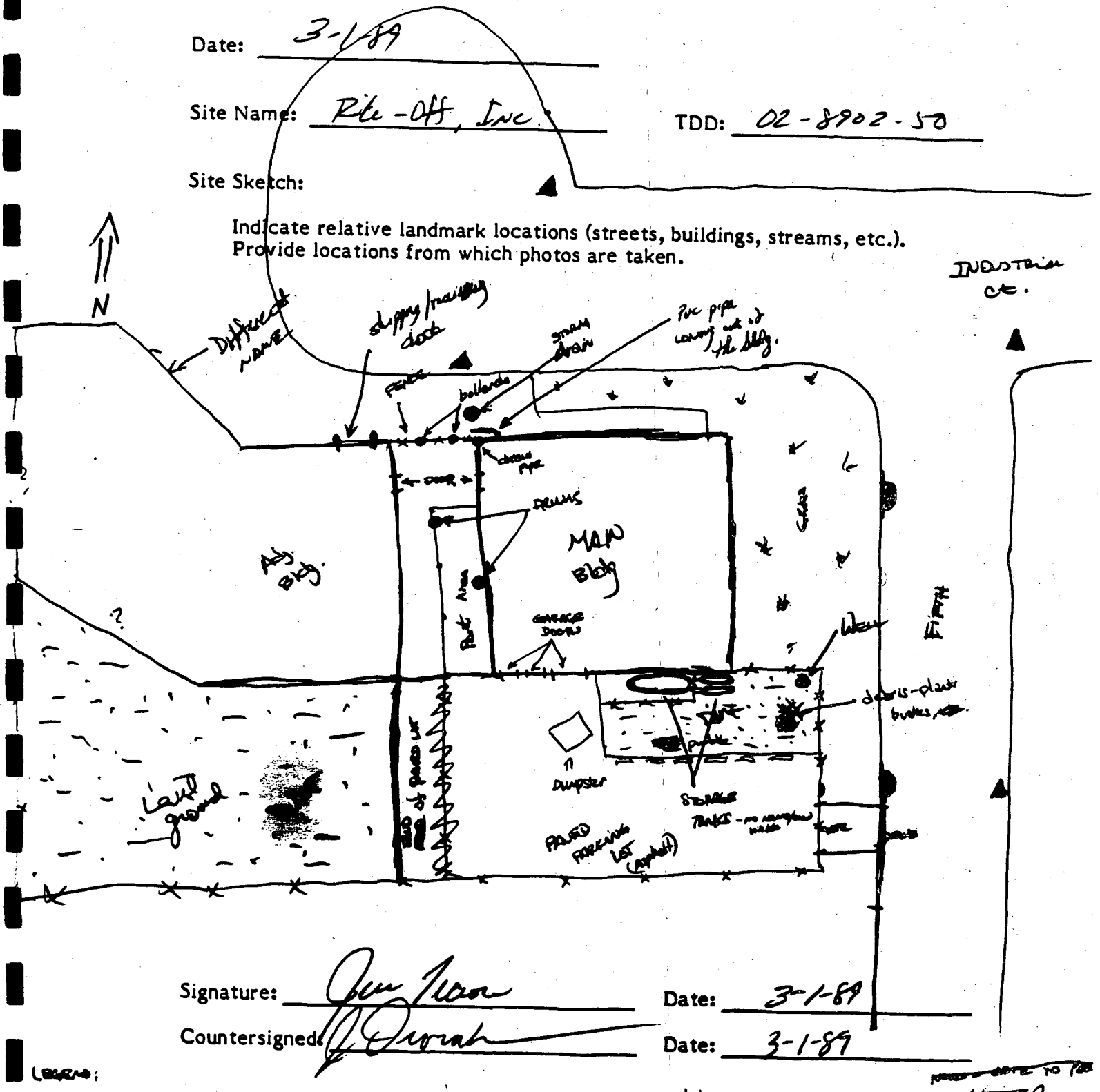
INFORMATION REPORTING FORM

Date: 3-1-89

Site Name: Rite-Off, Inc. TDD: 02-8902-50

Site Sketch:

Indicate relative landmark locations (streets, buildings, streams, etc.).
Provide locations from which photos are taken.



Signature: [signature] Date: 3-1-89

Countersigned: [signature] Date: 3-1-89

LEGEND:

▲ - location where photos were taken

⊢⊣ - chain link fence 6' high

▮ - storm drains

PRELIMINARY ASSESSMENT

INFORMATION REPORTING FORM

Date: 3-1-89

Site Name: Rite Aid, INC. TDD: 02-8902-50

Notes (Periodically indicate time of entries in military time):

Arrive at site area 1527

- Site located on corner of Fifth/Industrial Court
- Dumpster found on South side of the building in a parking lot.
- 3 storage containers located on the South side of the building; ~~tagged~~ close to one large tank, approximately 10,000 gal capacity two other smaller tanks approximately 5,000 gal capacity; large tank found in estimated
- Southern ~~the~~ parking lot not completely paved w/ asphalt; ~~tag~~ bare ground in area of the parking lot holds the two smaller storage tanks and the large tank.
- Well also on southeastern corner of the building
- site is active
- storm drains all present around the north & eastern sides vicinity of the building.
- [redacted] of ~~suspected~~ oil/ tire branches/ debris observed near the smaller storage tanks.
- pavement observed crossing from main bldg to adjacent bldg ([redacted] 3-1-89
- [redacted] Adjacent bldg is location of shipping/receiving dock area

Signature: [signature] Date: 3-1-89

Countersignature: [signature] Date: 3-1-89

PRELIMINARY ASSESSMENT

INFORMATION REPORTING FORM

Date: 3-1-89

Site Name: Rileoff, Inc TDD: 02-8902-59

Notes (Cont'd):

- No observed damage to flora
- site is on level ground. no area of low elevation
- ~~more~~ damage not likely through storm drain around the site
- adjacent bldg. has different name posted in front.
- storage tanks are above ground supported by concrete blocks
- smaller storage tanks connected to pipes which is directed to the ground.

Attach additional sheets if necessary. Provide site name, TDD number, signature, and countersignature on each.

Signature: [signature] Date: 3-1-89

Countersignature: [signature] Date: 3-1-89

PRELIMINARY ASSESSMENT

INFORMATION REPORTING FORM

Date: 3-1-89

Site Name: Rita-Off, Inc TDD: 02-8902-50

Photolog:

Frame/Photo Number	Date	Time	Photographer	Description
11P/11S	3-1-89	1532	Joe Dimock	photo of storage tanks; south east of the building
12P/12S	3-1-89	1555	Joe D.	photo of NW corner of main Bldg.
13P/13S	3-1-89	1556	Joe D.	photo of NE corner of adjacent bldg (shipping & receiving
14P/14S	3-1-89	1600	Jeff Ferson	photo of NE corner of main building

Attach additional sheets if necessary. Provide site name, TDD number, signature, and countersignature on each.

Signature: Jeff Ferson Date: 3-1-89

Countersignature: [illegible] Date: 3-1-89

REFERENCE NO. 13

New York State Department of Environmental Conservation
Building 40—SUNY, Stony Brook, New York 11794
(516) 751-7900

Thomas C. Jorling
Commissioner

December 20, 1988

Ms. Diane Trube
NUS Corp.
1090 King Georges Post Road
Suite 1103
Edison, New Jersey 08837

Re: Farmingdale - Lindenhurst Sites

Dear Ms. Trube:

I have reviewed your request of 11/22/88, and have the following responses to your questions:

1. No "critical habitats" for federally listed endangered species have been designated for Long Island as of this date.

2. Please contact Mr. Philip Barbato, of our Water Unit, at 516-751-7900, ext. 226.

3. Please contact Mr. Charles Guthrie of our Freshwater Fisheries Unit at 516-751-7900, ext 263.

If I can be of further assistance, please do not hesitate to contact me at 751-7900, ext. 248.

Sincerely,

Michael S. Scheibel
Senior Wildlife Biologist

MSS/sjmr

REFERENCE NO. 14

GSC-TR8645

GRAPHICAL EXPOSURE MODELING SYSTEM

(GEMS)

USER'S GUIDE

VOLUME 2. MODELING

Prepared for:

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF PESTICIDES AND TOXIC SUBSTANCES
EXPOSURE EVALUATION DIVISION
Task No. 3-2
Contract No. 68023970
Project Officer: Russell Kinerson
Task Manager: Loren Hall

Prepared by:

GENERAL SCIENCES CORPORATION
8401 Corporate Drive
Landover, Maryland 20785

Submitted: December 1, 1986

GEMS> I

RITE-OFF INC.
LATITUDE 40:45: 5 LONGITUDE 73:15:56 1980 POPULATION

KM	0.00-.400	.400-.810	.810-1.60	1.60-3.20	3.20-4.80	4.80-6.40	SECTOR TOTALS
S 1	1996	1157	11874	35279	57728	89644	197678
RING TOTALS	1996	1157	11874	35279	57728	89644	197678

GEMS> I

RITE-OFF INC.
LATITUDE 40:45: 5 LONGITUDE 73:15:56 1980 HOUSING

KM	0.00-.400	.400-.810	.810-1.60	1.60-3.20	3.20-4.80	4.80-6.40	SECTOR TOTALS
S 1	521	295	3357	9872	16784	24674	55503
RING TOTALS	521	295	3357	9872	16784	24674	55503

Cumulative Totals

Distance from site (miles)	Population	Houses
0.25	1996	521
0.5	3153	816
1	15027	4173
2	50306	14045
3	105634	30829
4	197678	55503

REFERENCE NO. 15

Dangerous Properties of Industrial Materials

Sixth Edition

N. IRVING SAX

Assisted by:

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

VAN NOSTRAND REINHOLD COMPANY

NEW YORK CINCINNATI TORONTO LONDON MELBOURNE

Colorless liquid, skunk-like odor. mp: −116°, bp: 98°, d: 0.8365 @ 25°/4°, flash p: 35°F, vap. d: 3.1.

SYNS:

BUTYL MERCAPTAN
NCI-C60866

TOXICITY DATA:	3-2	CODEN:
eye-rbt 83 mg		AIHAAP 19,171,58
ihl-rat LC50:4020 ppm/4H		AIHAAP 19,171,58
orl-rat LD50:1500 mg/kg		AIHAAP 19,171,58
ipr-rat LD50:399 mg/kg		AIHAAP 19,171,58
ihl-mus LC50:2500 ppm/4H		AIHAAP 19,171,58

TLV: Air: 0.5 ppm DTLVS* 4,57,80. OSHA Standard: Air: TWA 10 ppm (SCP-W) FEREAC 39,23540,74. DOT: Flammable Liquid, Label: Flammable Liquid FEREAC 41,57018,76. Occupational Exposure to n-alkane mono thiols recm std: Air: CL 0.5 ppm/15M NTIS**. "NIOSH Manual of Analytical Methods" VOL 4 S350*. Reported in EPA TSCA Inventory, 1980. EPA TSCA 8(a) Preliminary Assessment Information Proposed Rule FERREAC 45,13646,80.

THR: MOD via inhal and oral routes; HIGH via ipr route. Reacts violently with HNO_3. An eye irr.

Fire Hazard: Dangerous by exposure to heat, flame, sparks or powerful oxidizers.

Disaster Hazard: Dangerous; when heated to decomp emits SO_x.

To Fight Fire: Alcohol foam.

Incomp: Acid, Acid fumes oxidizing materials, heat, flame, sparks.

4-BUTANOLIDE

CAS RN: 96480 NIOSH #: LU 3500000
mf: $C_4H_6O_2$; mw: 86.10

Colorless liquid, mild odor. mp: −44°, bp: 206°, flash p: 209°F (OC), d: 1.124 @ 25°/4°, vap. d: 3.0.

SYNS:

4-DEOXYTETRONIC ACID
GAMMA-HYDROXYBUTYRO-LACTONE
TETRAHYDRO-2-FURANONE
BUTYRIC ACID LACTONE
GAMMA-BUTYROLACTONE
BUTYRYL LACTONE
ALPHA-BUTYROLACTONE
DIHYDRO-2(3H)-FURANONE
4-HYDROXYBUTANOIC ACID LACTONE
GAMMA-HYDROXYBUTYRIC ACID CYCLIC ESTER
4-HYDROXYBUTYRIC ACID, GAMMA-LACTONE
NCI-C55878

TOXICITY DATA:	3	CODEN:
skn-mus TDLo:50 gm/kg/42W-I:ETA		JNCIAM 31,41,63

Aquatic Toxicity Rating: TLm96:over 1000 ppm WQCHM* 3,-,74. Carcinogenic Determination: Negative IARC** 11,231,76. Currently Tested by NIP for Carcinogenesis by Standard Bioassay Protocol as of December 1980. Reported in EPA TSCA Inventory, 1980.

THR: An exper ETA. Less acutely tox than beta-propiolactone.

Fire Hazard: Low, when exposed to heat or flame; can react with oxidizing materials.

To Fight Fire: Foam, alcohol foam, CO_2, dry chemical.

Disaster Hazard: When heated to decomp it emits acrid smoke and irr fumes.

For further information see gamma Butyrolactone, Vol. 1, No. 3 of *DPIM Report.*

2-BUTANONE

CAS RN: 78933 NIOSH #: EL 6475000
mf: C_4H_8O; mw: 72.12

Colorless liquid, acetone-like odor. bp: 79.57°, fp: −85.9°, lel = 1.8%, uel = 11.5%, flash p: 22°F (TOC), d: 0.80615 @ 20°/20°, vap. press: 71.2 mm @ 20°, autoign. temp.: 960°F, vap. d: 2.42, ULC: 85-90.

SYNS:

AETHYLMETHYLKETON (GERMAN)
BUTANONE-2 (FRENCH)
ETHYL METHYL CETONE (FRENCH)
ETHYLMETHYLKETON (DUTCH)
ETHYL METHYL KETONE
MEK
METHYL ACETONE
METHYL ETHYL KETONE
METHYL ETHYL KETONE (DOT)
METILETILCHETONE (ITALIAN)
METYLOETYLOKETON (POLISH)

TOXICITY DATA:	3	CODEN:
eye-hmn 350 ppm		JIHTAB 25,282,43
skn-rbt 500 mg/24H MOD		JIHTAB 25,282,43
skn-rbt 402 mg/24H MLD		TXAPA9 19,276,71
skn-rbt 13780 ug/24H open MLD		AIHAAP 23,95,62
eye-rbt 80 mg		TXAPA9 19,276,71
ihl-rat TCLo:1000 ppm/(6-15D preg):TER		TXAPA9 28,452,74
ihl-hmn TCLo:100 ppm/5M:IRR		JIHTAB 25,282,43
orl-rat LD50:3400 mg/kg		TXAPA9 19,699,71
ihl-rat LCLo:2000 ppm/4H		JIHTAB 31,343,49
ipr-mus LD50:616 mg/kg		SCCUR* -,6,61
skn-rbt LD50:13 gm/kg		UCDS** 5/7/70
ipr-gpg LDLo:2000 mg/kg		FCTXAV 15,611,77

Aquatic Toxicity Rating: TLm96:over 1000 ppm. WQCHM* 2,-,74.

TLV: Air: 200 ppm DTLVS* 4,279,80. *Toxicology Review:* 27ZTAP 3,94,69. OSHA Standard: Air: TWA 200 ppm (SCP-A) FEREAC 39,23540,74. DOT: Flammable Liquid, Label: Flammable Liquid FEREAC 41,57018,76. Occupational Exposure to Ketones recm std: Air: TWA 590 mg/m3 NTIS**. "NIOSH Manual of Analytical Methods" VOL 1 127, VOL 2 S3. Reported in EPA TSCA Inventory, 1980. EPA TSCA 8(a) Preliminary Assessment Information Proposed Rule FERREAC 45,13646,80.

THR: MOD via oral; LOW via dermal routes. A strong irr. Affects peripheral nervous system, CNS. is an exper TER. See ketones. Eye irr @ 350 ppm.

Fire Hazard: Dangerous when exposed to heat or flame.

Spontaneous Heating: No.

Disaster Hazard: Highly dangerous upon exposure to heat or flame.

Explosion Hazard: Mod, when exposed to flame.

To Fight Fire: Alcohol foam, CO_2, dry chemical.

Incomp: Chlorosulfonic acid, oleum, potassium-tert-butoxide, heat or flame, chloroform, hydrogen peroxide, nitric acid.

TOXICITY DATA: 1 CODEN:

Aquatic Toxicity Rating: TLm96:over 1000 ppm WQCHM*. 3,-,74. DOT: Flammable Gas, Label: Flammable Gas FEREAC 41,57018,76. Reported in EPA TSCA Inventory, 1980.

THR: A simple asphyxiant. See argon.

Fire Hazard: Very dangerous, when exposed to heat or flame. Reacts violently with BrF_5, Cl_2, ClO_2, NF_3, liquid O_2, OF_2.

Spontaneous Heating: No.

Explosion Hazard: Dangerous, when exposed to heat or flame.

Disaster Hazard: Dangerous.

To Fight Fire: Stop flow of gas, CO_2 or dry chemical.

Incomp: halogens or interhalogens; oxidants, air (forms explosive mixtures).

METHANE DICHLORIDE

CAS RN: 75092 NIOSH #: PA 8050000
mf: CH_2Cl_2; mw: 84.93

Colorless volatile liquid. bp: 39.8°, lel = 15.5% in O_2, uel = 66.4% in O_2, fp: −96.7°, d: 1.326 @ 20°/4°, autoign. temp.: 1139°F, vap. press: 380 mm @ 22°, vap. d: 2.93.

SYNS:

CHLORURE DE METHYLENE (FRENCH)
DICHLOROMETHANE (DOT)
FREON 30
METHYLENE BICHLORIDE
METHYLENE CHLORIDE (DOT)
METHYLENE DICHLORIDE
METYLENU CHLOREK (POLISH)
NCI-C50102

TOXICITY DATA: 3 CODEN:

skn-rbt 810 mg/24H SEV	JETOAS 9,171,76
eye-rbt 162 mg MOD	JETOAS 9,171,76
eye-rbt 10 mg MLD	TXCYAC 6,173,76
eye-rbt 17500 mg/m3/10M	TXCYAC 6,173,76
mmo-sat 5700 ppm	MUREAV 56,245,78
mma-sat 5700 ppm	MUREAV 56,245,78
dni-hmn:fbr 5000 ppm/1H-C	MUREAV 81,203,81
dni-ham:lng 5000 ppm/1H-C	MUREAV 81,203,81
sce-ham:lng 5000 ppm/1H-C	MUREAV 81,203,81
ihl-rat TCLo:4500 ppm/24H (1-17D preg)	TXAPA9 52,29,80
ihl-rat TCLo:1250 ppm/7H (6-15D preg)	TXAPA9 32,84,75
ihl-mus TCLo:1250 ppm/7H (6-15D preg)	TXAPA9 32,84,75
ihl-rat TCLo:500 ppm/6H/2Y:ETA	TXAPA9 48,A185,79
ihl-hmn TCLo:500 ppm/1Y-I:CNS	ABHYAE 43,1123,68
ihl-hmn TCLo:500 ppm/8H:BLD	SCIEAS 176,295,72
orl-rat LD50:167 mg/kg	DOWSD* 1/26/76
ihl-rat LC50:88000 mg/m3/30M	FAVUAI 7,35,75
ihl-mus LC50:14400 ppm/7H	NIHBAZ 191,1,49
ipr-mus LD50:1500 mg/kg	TXAPA9 9,139,66
scu-mus LD50:6460 mg/kg	TXAPA9 4,354,62
orl-dog LDLo:3000 mg/kg	QJPPAL 7,205,34
ihl-dog LCLo:14108 ppm/7H	NIHBAZ 191,1,49
ipr-dog LDLo:950 mg/kg	TXAPA9 10,119,67
scu-dog LDLo:2700 mg/kg	QJPPAL 7,205,34
ivn-dog LDLo:200 mg/kg	QJPPAL 7,205,34
ihl-cat LCLo:43400 mg/m3/4.5H	AHBAAM 116,131,36
orl-rab LDLo:1900 mg/kg	HBTXAC 1,94,56
scu-rbt LDLo:2700 mg/kg	QJPPAL 7,205,34
ihl-gpg LCLo:5000 ppm/2H	FLCRAP 1,197,67

Aquatic Toxicity Rating: TLm96:1000-100 ppm WQCHM* 3,-,74. Carcinogenic Determination: Indefinite IARC** 20,449,79.

TLV: Air: 100 ppm DTLVS* 4,275,80. *Toxicology Review:* FAZMAE 18,365,74; 27ZTAP 3,94,69. OSHA Standard: Air: TWA 500 ppm; CL 1000; Pk 2000/5M/2H (SCP-J) FEREAC 39,23540,74. DOT-ORM-A, Label: None FEREAC 41,57018,76. Occupational Exposure to Methylene Chloride recm std: Air: TWA 75 ppm; Pk 500 ppm/15M NTIS**. Currently tested by NTP for Carcinogenesis by Standard Bioassay Protocol as of December 1980. "NIOSH Manual of Analytical Methods" Vol 1 127, Vol 3 S329. Reported in EPA TSCA Inventory, 1980. EPA TSCA 8(a) Preliminary Assessment Information Proposed Rule FERREAC 45,13646,80.

THR: MUT data. A skn, eye irr. An exper ETA, ± CARC. A hmn CNS, BLD. HIGH orl, ivn; MOD ipr, orl, scu, ihl; LOW ihl, scu. See also chlorinated aliphatic hydrocarbons. Very dangerous to the eyes. Except for its property of inducing narcosis, it has very few other acute toxicity effects. Its narcotic powers are quite strong, and in view of its great volatility, care should be taken in its use. It will not form explosive mixtures with air at ordinary temp. However, it can be decomp by contact with hot surfaces and open flame, and it can then yield toxic fumes, which are irr and will thus give warning of their presence. It has been used as an anesthetic in Europe and is still used there for local anesthesia. Exper have shown that 25,000 ppm conc for 2 hr exposures were not lethal. Conc of 7,200 ppm after 8 min caused paresthesia of the extremities; after 16 min, acceleration of the pulse to 100; during the first 20 min, congestion in the head, a sense of heat and slight irr of the eyes. At a level of 2,300 ppm, there was no feeling of dizziness during 1-hr exposures, but nausea did occur after 30 min of exposure. The limit of perception by smell is set at 25-50 ppm conc. Can cause a dermatitis upon prolonged skin contact. A respirator for organic vapors and fumes should be worn to avoid excessive inhal. Used as a food additive permitted in food for human consumption.

Fire Hazard: Reacts violently with Li, NaK, potassium-*tert*-butoxide, (KOH + *n*-methyl-*n*-nitrosourea).

Explosion Hazard: None under ordinary conditions, but will form explosive mixtures in atmosphere having high oxygen content, in liquid O_2, N_2O_4, K, Na, NaK.

Disaster Hazard: Dangerous; when heated to decomp, emits highly tox fumes of phosgene.

METHANESULFONIC ACID

CAS RN: 75752 NIOSH #: PB 1140000
mf: CH_4O_3S; mw: 96.11

Solid. Sol in water, alc and ether; d: 1.4812 @ 18°/4°; mp: 20°; bp: 167° @ 10 mm. Corrosive to iron, steel, brass, copper and lead.

SYN: WSQ 1

TLV: Air: 5 ppm DTLVS* 3,249,71. DOT: ORM-A, Label: None FEREAC 41,57018,76. Reported in EPA TSCA Inventory, 1980. EPA TSCA 8(a) Preliminary Assessment Information Proposed Rule FERREAC 45,13646,80.

THR: HIGH orl, ihl in rat. MOD skn, ipr in rbt, gpg.

Disaster Hazard: When heated to decomp it emits tox fumes of Cl^-.

For further information see Vol. 1, No. 5 of *DPIM Report.*

1,1,1,2-TETRACHLOROETHANE

CAS RN: 630206 NIOSH #: KI 8450000
mf: $C_2H_2Cl_4$; mw: 167.84

Liquid; d: 1.588 @ 20°/4°; bp: 129°-130°; sol in water; misc in alc, ether.

SYN: NCI-C52459

TOXICITY DATA: 2	CODEN:
skn-rbt 500 mg/24H	AMPMAR 35,593,74
eye-rbt 100 mg SEV	AMPMAR 35,593,74

Toxicology Review: AIHAAP 40,A46,79. Currently Tested by NTP for Carcinogenesis by Standard Bioassay Protocol as of December 1980. NIOSH Current Intelligence Bulletin 27, 1978. Reported in EPA TSCA Inventory, 1980.

THR: Possible CARC. An irr (SEV) in rbt eyes and MOD in rbt skn.

Disaster Hazard: When heated to decomp it emits very tox fumes of Cl^-.

Incomp: Dinitrogen tetraoxide.

For further information see Vol. 2, No. 6 and Vol. 3, No. 2 of *DPIM Report.*

1,1,2,2-TETRACHLOROETHYLENE

CAS RN: 127184 NIOSH #: KX 3850000
mf: C_2Cl_4; mw: 165.82

Colorless liquid, chloroform-like odor. mp: −23.35°, bp: 121.20°, flash p: none, d: 1.6311 @ 15°/4°, vap. press: 15.8 mm @ 22°, vap. d: 5.83.

SYNS:

CARBON BICHLORIDE
CARBON DICHLORIDE
CZTEROCHLOROETYLEN (POLISH)
DOW-PER
ETHYLENE TETRACHLORIDE
NCI-C04580
PERCHLOORETHYLEEN, PER (DUTCH)
PERCHLORAETHYLEN, PER (GERMAN)
PERCHLORETHYLENE, PER (FRENCH)
PERCHLOROETHYLENE
PERCLENE
PERCLOROETILENE (ITALIAN)
TETRACHLOORETHEEN (DUTCH)
TETRACHLORAETHEN (GERMAN)
TETRACHLOROETHYLENE (DOT)
TETRACLOROETENE (ITALIAN)

TOXICITY DATA: 3	CODEN:
ihl-rat TCLo:1000 ppm/24H (14D pre/1-22D preg)	APTOD9 19,A21,80
ihl-rat TCLo:1000 ppm/24H (1-22D preg)	APTOD9 19,A21,80
ihl-rat TCLo:900 ppm/7H (7-13D preg)	TJADAB 19,41A,79
ihl-rat TCLo:300 ppm/7H (6-15D preg)	TXAPA9 32,84,75
ihl-mus TCLo:300 ppm/7H (6-15D preg)	TXAPA9 32,84,75
skn-rbt 810 mg/24H SEV	JETOAS 9,171,76
eye-rbt 162 mg MLD	JETOAS 9,171,76
mmo-sat 50 uL/plate	NIOSH* 5AUG77
mma-sat 200 uL/plate	NIOSH* 5AUG77
orl-mus TDLo:195 gm/kg/50W-I:CAR	NCITR* NCI-CG-TR-13,77
orl-mus TD:240 gm/kg/62W-I:CAR	NCITR* NCI-CG-TR-13,77
ihl-hmn TCLo:96 ppm/7H:SYS	NTIS** PB257-135
ihl-man TCLo:280 ppm/2H:EYE	AMIHBC 5,566,52
ihl-man TCLo:600 ppm/10M:CNS	AMIHBC 5,566,52
orl-rat LD50:8850 mg/kg	NPIRI* 1,96,74
ihl-rat LCLo:4000 ppm/4H	JOCMA7 4,262,62
orl-mus LD50:8100 mg/kg	NTIS** PB257-135
ihl-mus LCLo:23000 mg/m3/2H	AHBAAM 116,131,36
ipr-mus LD50:4700 mg/kg	NTIS** PB257-135
orl-dog LOLo:4000 mg/kg	AJHYA2 9,430,29
ipr-dog LD50:2100 mg/kg	TXAPA9 10,119,87
ivn-dog LDLo:85 mg/kg	QJPPAL 7,205,34
orl-cat LDLo:4000 mg/kg	AJHYA2 9,430,29
orl-rbt LDLo:5000 mg/kg	AJHYA2 9,430,29
scu-rbt LDLo:2200 mg/kg	QJPPAL 7,205,34

Aquatic Toxicity Rating: TLm96:100-10 ppm WQCHM* 3,-,74. Carcinogenic Determination: Animal Positive IARC** 20,491,79.

TLV: Air: 50 ppm (skin) DTLVS* 4,325,80. *Toxicology Review:* AJMEAZ 38,409,65; 27ZTAP 3,139,69. OSHA Standard: Air: TWA 100 ppm; CL 200; Pk 300/5M/3H (SCP-J) FEREAC 39,23540,74. DOT: ORM-A, Label: None FEREAC 41,57018,76. Occupational Exposure to Tetrachloroethylene recm std: Air: TWA 50 ppm; CL 100 ppm/15M NTIS**. NCI Carcinogenesis Bioassay Completed; Results Positive: Mouse (NCITR* NCI-CG-TR-13,77). NCI Carcinogenesis Bioassay Completed; Results Negative: Rat (NCITR* NCI-CG-TR-13,77). Currently Tested by NTP for Carcinogenesis by Standard Bioassay Protocol as of December 1980."NIOSH Manual of Analytical Methods" VOL 1 127, VOL 3 S335. NIOSH Current Intelligence Bulletin 20, 1978. Reported in EPA TSCA Inventory, 1980. EPA TSCA 8E No: 05780146-Followup Sent as of April, 1979.

THR: MOD via inhal, oral, scu, ipr and dermal routes. HIGH via ivn route. Not corrosive or dangerously acutely reactive, but toxic by inhal, by prolonged or repeated contact with the skin or mu mem, or when ingested by mouth. The liquid can cause injuries to the eyes; however, with proper precautions it can be handled safely. The symptoms of acute intoxication from this material are the result of its effects upon the nervous system.

Exposures to higher conc than 200 ppm cause irr, lachrymation and burning of the eyes and irr of the nose and throat. There may be vomiting, nausea, drowsiness, an attitude of irresponsibility, and even an appearance resembling alcoholic intoxication. This material also acts as an anesthetic, through the inhalation of excessive amounts within a short time. The symptoms of fatal intoxication are irritation of the eyes, nose and throat, then fullness in the head, mental confusion; there may be headache stupefaction, nausea and vomiting, personnel suffering from subacute poisoning

may suffer from such symptoms as headache, fatigue, nausea, vomiting, mental confusion and temporary blurring of the vision. This can occur when inadequate ventilation results in concentrations higher than 200 ppm, or where the vapor conc are intermittently high due to faulty handling of the material, or when an individual fails to take adequate precautionary measures.

This material can cause dermatitis, particularly after repeated or prolonged contact with the skin. The dermatitis is preceded by a reddening and burning and more rarely, a blistering of the skin. In any event, the skin becomes rough and dry, due largely to the removal of skin oils by material. The skin then cracks easily and is readily susceptible to infection. Upon ingestion it causes irr of the gastrointestinal tract, which, in turn, causes nausea, vomiting, diarrhea and bloody stools. However, such effects are usually less severe than the effects of swallowing similar amounts of other chlorinated hydrocarbons. An exper CARC. MUT data.

It may be handled in the presence or absence of air, water, and light with any of the common construction materials at temp. up to 140°C. This material is extremely stable and resists hydrolysis. A common air contaminant. Reacts violently with Ba, Be, Li; N_2O_4; metals; NaOH.

Disaster Hazard: Dangerous; when heated to decomp it emits high tox fumes of chlorides.

For further information see Perchloroethylene Vol. 1, No. 2 of *DPIM Report.*

TETRACHLORO HYDROQUINONE

CAS RN: 87876 NIOSH #: MX 7700000
mf: $C_6H_2Cl_4O_2$; mw: 247.88

SYN: USAF DO-62

TOXICITY DATA: 3-2 CODEN:
orl-mus LD50:500 mg/kg ARTODN 40,63,78
ipr-mus LD50:25 mg/kg NTIS** AD277-689

Reported in EPA TSCA Inventory, 1980.
THR: HIGH ipr. MOD orl.

TETRACHLOROISOPHTHALONITRILE

CAS RN: 1897456 NIOSH #: NT 2600000
mf: $C_8Cl_4N_2$; mw: 265.90

SYNS:
CHLORTHALONIL (GERMAN)
NCI-C00102
M-TETRACHLOROPHTHALONITRILE

TOXICITY DATA: 3 CODEN:
orl-rat TDLo:142 gm/kg/80W-C:CAR NCITR* NCI-CG-TR-41,78
orl-rat LD50:10000 mg/kg 85ARAE 4,75,76
ipr-mus LD50:2500 mg/kg INHEAO 4,11,66

NCI Carcinogenesis Bioassay Completed; Results Positive: Rat (NCITR* NCI-CG-TR-41,78); Results Negative: Mouse (NCITR* NCI-CG-TR-41,78). Reported in EPA TSCA Inventory, 1980.

THR: An exper CARC. MOD acute ipr and LOW acute orl.

Disaster Hazard: When heated to decomp it emits very tox fumes of Cl^-, NO_x and CN^-.

TETRACHLORONAPHTHALENE

CAS RN: 1335882 NIOSH #: QK 3700000
mf: $C_{10}H_4Cl_4$; mw: 265.94

Crystals. mp: 182°.

TOXICITY DATA: 3 CODEN:
ihl-hmn TCLo:3 mg/m3:SYS DTLVS* 3.251.71

TLV: Air: 2 mg/m3 (skin) DTLVS* 4,391,80. OSHA Standard: Air: TWA 2 mg/m3 (skin) (SCP-I) FEREAC 39,23540,74. "NIOSH Manual of Analytical Methods" VOL 2 S130. Reported in EPA TSCA Inventory, 1980. EPA TSCA 8(a) Preliminary Assessment Information Proposed Rule FERREAC 45,13646, 80.

THR: HIGH via inhal and dermal routes. See also chlorinated naphthalenes and chlorinated diphenyls.

Disaster Hazard: Dangerous; when heated to decomp it emits highly toxic fumes of Cl^-.

TETRACHLORONITROANISOLE

CAS RN: 2438882 NIOSH #: BZ 9625000
mf: $C_7H_3Cl_4NO_3$; mw: 290.91

SYNS:
BENZENE, 1,2,4,5-TETRACHLORO-3-METHOXY-6-NITRO- (9CI)
ENT 22,335
NCI-C03032
4-NITRO-2,3,5,6-TETRACHLORANISOLE
2,3,5,6-TETRACHLORO-4-NITROANISOLE

TOXICITY DATA: 3 CODEN:
orl-rat LD50:260 mg/kg IHFCAY 6,1,67

NCI Carcinogenesis Bioassay Completed; Results Negative (NCITR* NCI-CG-TR-114,78).

THR: HIGH orl.

Disaster Hazard: When heated to decomp it emits very tox fumes of Cl^- and NO_x.

2,3,4,6-TETRACHLORONITROBENZENE

CAS RN: 3714623 NIOSH #: DB 9800000
mf: $C_6HCl_4NO_2$; mw: 260.88

SYN: 1,2,3,5-TETRACHLORO-4-NITROBENZENE

TOXICITY DATA: 3 CODEN:
skn-mus TDLo:576 mg/kg/12W-I:NEO CNREA8 26,12,66

THR: An exper NEO.

Disaster Hazard: When heated to decomp it emits very tox fumes of HCl and NO_x.

2,3,5,6-TETRACHLORONITROBENZENE

CAS RN: 117180 NIOSH #: DC 0175000
mf: $C_6HCl_4NO_2$; mw: 260.88

4,5,7-TRICHLOROBENZTHIADIAZOLE-2,1,3

CAS RN: 1982554 NIOSH #: DL 0175000
mf: $C_6HCl_3N_2S$; mw: 239.50

SYN: 4,5,7-TRICHLORO-2,1,3-BENZOTHIADIAZOLE

TOXICITY DATA:	2	CODEN:
orl-rat LD50:1620 mg/kg		WRPCA2 9,119,70
orl-mus LD50:1500 mg/kg		31ZOAD 1,423,68

THR: MOD orl.
Disaster Hazard: When heated to decomp it emits very tox fumes of NO_x and SO_x.

TRICHLOROBENZYL CHLORIDE

CAS RN: 1344327 NIOSH #: XT 8575000
mf: $C_7H_4Cl_4$; mw: 229.91

SYN: TCBC

TOXICITY DATA:	2	CODEN:
orl-rat LD50:3075 mg/kg		28ZEAL 4,359,69

Toxicology Review: 27ZTAP 3,146,69. Reported in EPA TSCA Inventory, 1980.
THR: MOD orl.
Disaster Hazard: When heated to decomp it emits tox fumes of Cl^-.

3,4,4'-TRICHLOROCARBANILIDE

CAS RN: 101202 NIOSH #: FE 1250000
mf: $C_{13}H_9Cl_3N_2O$; mw: 315.59

SYN: N-(3,4-DICHLOROPHENYL)-N'-(4-CHLOROPHENYL)UREA

TOXICITY DATA:	3	CODEN:
ipr-mus LD50:2100 mg/kg		LPPTAK 27,306,79

Toxicology Review: 27ZTAP 3,146,69. Reported in EPA TSCA Inventory, 1980. EPA TSCA 8(a) Preliminary Assessment Information Proposed Rule FERREAC 45,13646,80.
THR: MOD ipr.
Disaster Hazard: When heated to decomp it emits very tox fumes of Cl^- and NO_x.

4,5,6-TRICHLORO-2-(2,4-DICHLOROPHENOXY) PHENOL

NIOSH #: SL 0532000
mf: $C_{12}H_5Cl_5O_2$; mw: 358.42

SYN: 2-(2,4-DICHLOROPHENOXY)-4,5,6-TRICHLOROPHENOL

TOXICITY DATA:	CODEN:
slt-mus-ipr 140 umol/L	MUREAV 46,202,77

THR: MUT data.
Disaster Hazard: When heated to decomp it emits tox fumes of Cl^-.

1,1,2-TRICHLORO-2,2-DIFLUOROETHANE

CAS RN: 354212 NIOSH #: KI 1435000
mf: $CHCl_3F_2$; mw: 157.37

SYN: UCON FLUOROCARBON 122

TOXICITY DATA:	2	CODEN:
orl-rat LDLo:7500 mg/kg		16CZAC 20,459,66
ihl-rat LCLo:4000 ppm/4H		UCMH** 11,15,62

THR: MOD orl, ihl.
Disaster Hazard: When heated to decomp it emits very tox fumes of F^- and Cl^-.

TRICHLORODINITROBENZENE

CAS RN: 8003461 NIOSH #: CZ 7960000
mf: $C_6HCl_3N_2O_4$; mw: 271.44

SYNS:
BRASSISAN (GERMAN)
DINITROTRICHLOROBENZENE ISOMERIC MIXTURE

TOXICITY DATA:	2	CODEN:
orl-rat LD50:425 mg/kg		GUCHAZ 6,516,73
skn-rat LD50:425 mg/kg		GUCHAZ 6,516,73

THR: MOD, via oral and dermal routes. See also benzene and nitrobenzene. A pesticide.
Fire Hazard: Mod, when exposed to heat or flame. See nitrates.
Explosion Hazard: See nitrates.
Disaster Hazard: Dangerous; when heated to decomp it emits highly tox fumes of NO_x and Cl^-; can react vigorously with reducing materials.

TRICHLORO ESTERTIN

NIOSH #: WH 8240000

SYN: ESTERTRICHLOROSTANNANE

TOXICITY DATA:	1	CODEN:
unk-rat LD50:5500 mg/kg		TIUSAD 107,1,76

Occupational Exposure to Organotin Compounds recm std: Air: TWA 0.1 mg(Sn)/m3 NTIS**.
THR: LOW unk. See also tin compounds and esters.
Disaster Hazard: When heated to decomp it emits tox fumes of Cl^-.

1,1,1-TRICHLOROETHANE

CAS RN: 71556 NIOSH #: KJ 2975000
mf: $C_2H_3Cl_3$; mw: 133.40

Colorless liquid. bp: 74.1°, fp: −32.5°, flash p: none, d: 1.3376 @ 20°/4°, vap. press: 100 mm @ 20.0°. Insol in water; sol in acetone, benzene, carbon tetrachloride, methanol, ether.

SYNS:
CHLOROETHENE
CHLOROTHANE NU
CHLOROTHENE
METHYL CHLOROFORM
METHYLTRICHLOROMETHANE
NCI-C04626
1,1,1-TRICHLOORETHAAN (DUTCH)
1,1,1-TRICHLORAETHAN (GERMAN)
TRICHLORO-1,1,1-ETHANE (FRENCH)
ALPHA-TRICHLOROETHANE
1,1,1-TRICLOROETANO (ITALIAN)

TOXICITY DATA:	2-1	CODEN:
ihl-rat TCLo:2100 ppm/24H (14D pre/1-20D preg)		TOXID9 1,28,80
eye-man 450 ppm/8H		BJIMAG 28,286,71
skn-rbt 5 gm/12D-I MLD		AIHAAP 19,353,58

skn-rbt 500 mg/24H MOD	28ZPAK -,28,72
eye-rbt 100 mg MLD	AIHAAP 19,353,58
eye-rbt 2 mg/24H SEV	28ZPAK -,28,72
ihl-man LCLo:27 gm/m3/10M	JOCMA7 8,358,66
ihl-man TCLo:350 ppm:PSY	WEHSAL 10,82,73
orl-hmn TDLo:670 mg/kg:GIT	NTIS** PB257-185
ihl-hmn TCLo:920 ppm/70M:CNS	AIHAAP 19,353,58
orl-rat LD50:10300 mg/kg	NTIS** PB257-185
ihl-rat LCLo:1000 ppm	FMCHA2 -,D317,80
ipr-rat LD50:5100 mg/kg	NTIS** PB257-185
orl-mus LD50:11240 mg/kg	NTIS** PB257-185
ihl-mus LCLo:11000 ppm/2H	HBTXAC 5,72,59
ipr-mus LD50:4700 mg/kg	TXAPA9 13,287,68
orl-dog LD50:750 mg/kg	FMCHA2 -,D317,80
ipr-dog LD50:3100 mg/kg	TXAPA9 10,119,67
ivn-dog LDLo:95 mg/kg	HBTXAC 5,72,59
orl-rbt LD50:5660 mg/kg	AIHAAP 19,353,58
scu-rbt LDLo:500 mg/kg	HBTXAC 5,72,59
orl-gpg LD50:9470 mg/kg	AIHAAP 19,353,58

Aquatic Toxicity Rating: TLm96:100-10 ppm WQCHM* 3,-,74. Carcinogenic Determination: Indefinite IARC** 20,515,79.

TLV: Air: 350 ppm DTLVS* 4,269,80. *Toxicology Review:* FAZMAE 18,365,74; EATR** EB-TR-75047; AIHAAP 40,A46,79. OSHA Standard: Air: TWA 350 ppm (SCP-J) FEREAC 39,23540,74. DOT: ORM-A, Label: None FEREAC 41,57018,76. Occupational Exposure to 1,1,1-Trichloroethane recm std: Air: CL 350 ppm/15M NTIS**. NCI Carcinogenesis Bioassay Completed; Results Negative (NCITR* NCI-CG-TR-3,77). Currently Tested by NTP for Carcinogenesis by Standard Bioassay Protocol as of December 1980. "NIOSH Manual of Analytical Methods" VOL 1 127, VOL 3 S328. NIOSH Current Intelligence Bulletin 27, 1978. Reported in EPA TSCA Inventory, 1980. EPA TSCA 8(a) Preliminary Assessment Information Proposed Rule FERREAC 45,13646,80.

THR: In hmn it causes PSY, GIT, CNS effects. A MOD skn irr, a SEV eye irr in rbts. LOW orl, ipr, ihl in rat, mus. MOD orl, ipr dog; Narcotic in high conc. Causes a proarrhythmic activity which sensitizes the heart to epinephrine-induced arrhythmias. This sometimes will cause a cardiac arrest particularly when this material is massively inhaled as in drug abuse for euphoria. Reacts violently with N_2O_4, O_2, O_2 liquid, Na, NaOH, Na-K alloy.

Disaster Hazard: Dangerous; see chlorides.

For further information see Vol. 2, No. 1 of *DPIM Report.*

1,1,2-TRICHLOROETHANE

CAS RN: 79005 NIOSH #: KJ 3150000
mf: $C_2H_3Cl_3$; mw: 133.40

Liquid, pleasant odor. bp: 114°, fp: −35°, d: 1.4416 @ 20°/4°, vap. press: 40 mm @ 35.2°.

SYNS:

ETHANE TRICHLORIDE
NCI-C04579
BETA-TRICHLOROETHANE
1,2.2-TRICHLOROETHANE
TROICHLOROETAN(1,1,2) (POLISH)
VINYL TRICHLORIDE

TOXICITY DATA: 3 CODEN:

skn-rbt 500 mg open MLD	UCDS** 6/28/72
skn-rbt 810 mg/24H SEV	JETOAS 9,171,76
eye-rbt 162 mg MLD	JETOAS 9,171,76
skn-gpg 1440 mg/15M	APTOA6 41,298,77
cyt-gpg-skn 2880 ug/kg	APTOA6 41,298,77
orl-mus TDLo:76 gm/kg/78W-I:CAR	NCITR* NCI-CG-TR-74,78
orl-mus TD:152 gm/kg/78W-I:CAR	NCITR* NCI-CG-TR-74,78
orl-rat LD50:1140 mg/kg	UCDS** 6/28/72
ihl-rat LCLo:500 ppm/8H	AIHAAP 30.470.69
ipr-mus LD50:994 mg/kg	TXAPA9 9,139,66
scu-mus LD50:227 mg/kg	JPETAB 123,224,58
orl-dog LDLo:500 mg/kg	AJHYA2 16,325,32
ipr-dog LD50:450 mg/kg	TXAPA9 10,119,67
ivn-dog LDLo:95 mg/kg	QJPPAL 7,205,34
ihl-cat LCLo:13100 mg/m3/4.5H	AHBAAM 116,131,36
scu-rbt LDLo:500 mg/kg	QJPPAL 7,205,34

Aquatic Toxicity Rating: TLm96:100-10 ppm WQCHM* 3,-,74. Carcinogenic Determination: Animal Positive IARC** 20,533,79.

TLV: Air: 10 ppm (skin) DTLVS* 4,406,80. *Toxicology Review:* FAZMAE 18,365,74; AIHAAP 40,A46,79; 27ZTAP 3,146,69. OSHA Standard: Air: TWA 10 ppm (skin) (SCP-J) FEREAC 39,23540,74. NCI Carcinogenesis Bioassay Completed; Results Positive: Mouse (NCITR* NCI-CG-TR-74,78). NCI Carcinogenesis Bioassay Completed; Results Negative: Rat (NCITR* NCI-CG-TR-74,78). "NIOSH Manual of Analytical Methods" VOL 1 127, VOL 2 S134. NIOSH Current Intelligence Bulletin 27, 1978. Reported in EPA TSCA Inventory, 1980. EPA TSCA 8(a) Preliminary Assessment Information Proposed Rule FERREAC 45, 13646,80.

THR: HIGH ivn, scu and MOD orl, ihl, ipr and dermal. MOD skn irr and SEV eye irr in rbts. Trichloroethane has narcotic properties and acts as a local irr to the eyes, nose and lungs. It may also be injurious to the liver and kidneys. A fumigant. An exper CARC. MUT data.

Disaster Hazard: Dangerous; see chlorides.

Incomp: K.

For further information see Vol. 2, No. 6 and Vol. 3, No. 2 of *DPIM Report.*

1,1,1-TRICHLOROETHANE mixed with TETRACHLOROETHYLENE (3:1)

NIOSH #: KJ 3950000

SYNS:

DOWCLENE
EC CLEANER

TOXICITY DATA: 2-1 CODEN:

orl-rat LD50:15 gm/kg	AIHAAP 24,541,63
ihl-rat LC50:3700 ppm/7H	AIHAAP 24,541,63
orl-mus LD50:10 gm/kg	AIHAAP 24,541,63
orl-rbt LD50:13 gm/kg	AIHAAP 24,541,63
orl-gpg LD50:6 gm/kg	AIHAAP 24,541,63

THR: LOW orl, ihl in rat; LOW orl in mus; orl in rbt and orl in gpg.

Disaster Hazard: When heated to decomp it emits very tox fumes of Cl^-.

REFERENCE NO. 16

NUS CORPORATION — **TELECON NOTE**

CONTROL NO:	DATE:	TIME:
02-8902-52	3/10/89	1055

DISTRIBUTION:

BETWEEN:	OF:	PHONE:
DAVE DEBRUNCE	EPA PERMITTING OFFICE	(212) 264-9880

ANO: P. SOLINSKI E. (NUS)

DISCUSSION:

RE: RITE-OFF INC. PERMIT INFO

He stated that Rite-off Inc. (ID # NYD000726786) is currently a non-handler of hazardous waste. He said that Part A of the RCRA permit had be withdrawn, and that its interim status was not terminated. He said that this was probably based upon a letter from the NYDEC. They had no record of it. He stated that possible reasoning for the change in status could be that the company changed their waste stream, that they went out of business or that they only store hazardous waste less than 90 days. He did not know when this took place.

ACTION ITEMS:

NUS 067 REVISED 0681

REFERENCE NO. 17

NUS CORPORATION — TELECON NOTE

CONTROL NO:	DATE:	TIME:
02-8902-50	3/9/89	1515

DISTRIBUTION:

BETWEEN:	OF:	PHONE:
TANYA HERMOS	NYDEC REGION 1	(516) 751-7900

AND: P. SOLINSKI (NUS)

DISCUSSION:

RE: Background information on Rite-Hill Inc.

She informed me that they began operation in March 1968. They don't have a SPDES permit. She didn't have any information on a RCRA permit, but that was the type of inspection. She also informed me that a raid was done by ~~they~~ DEC 3/9/87 the NYDEC law enforcement branch out of the White Plains office. She gave the names of the investigators - John Wood and Dottie Thunn. The White Plains office # is 914-761-6660. She also said that John Wood had since been transfered. She knew of no information about the outcome of the raid. Alleged onsite dumping occured.

ACTION ITEMS: To call NYDEC White Plains office

NUS 067 REVISED 0681

REFERENCE NO. 18

New York State Department of Environmental Conservation
Building 40—SUNY, Stony Brook, New York 11794

(516) 751-7900

Thomas C. Jorling
Commissioner

June 15, 1988

Rite Off Inc.
1545 5th Industrial Ct.
Bay Shore, N. Y. 11706
Att: Bruce Schleifman

Re: Withdrawal of SPDES Application
NY-0206591, UPA #10-87-1316

Dear Mr. Schleifman:

This Department has made a determination to withdraw your referenced SPDES permit application because your discharge of less than 1000 gpd of sanitary waste and less than 1000 gpd of non-contact cooling water do not require permitting as verified by the Suffolk County Department of Health Services.

Please be advised that Suffolk County Article 7 restricts the co-mingling of sanitary waste and non-contact cooling water.

You are also hereby notified that it shall be unlawful for any person to cause a discharge of pollutants from this facility to either surface or ground waters unless a permit to do so has been issued by this Department and if applicable, any subsequent owner(s) of this facility should be advised of the requirement to obtain a permit if they intend to cause such a discharge.

Please direct any inquiries you may have to this office or call (516) 751-7900, extension 239.

Very truly yours,

David DeRidder

David DeRidder
Deputy Regional Permit Administrator

DDR:rw
cc: R. Hannaford
P. Barbato
T. Sanford
J. Maloney
file

REFERENCE NO. 19

Please print or type with ELITE type *(12 characters/inch)* in the unshaded areas only.

Form Approved OMB No. 158-S79016
GSA No. 0246-EPA-OT

EPA — U.S. ENVIRONMENTAL PROTECTION AGENCY
NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

INSTALLATION'S EPA I.D. NO.

I. NAME OF INSTALLATION

II. INSTALLATION MAILING ADDRESS

III. LOCATION OF INSTALLATION

RITE-OFF,® INC.
1545 FIFTH INDUSTRIAL CT.
BAY SHORE, NY 11706

INSTRUCTIONS: If you received a preprinted label, affix it in the space at left. If any of the information on the label is incorrect, draw a line through it and supply the correct information in the appropriate section below. If the label is complete and correct, leave Items I, II, and III below blank. If you did not receive a preprinted label, complete all items. "Installation" means a single site where hazardous waste is generated, treated, stored and/or disposed of, or a transporter's principal place of business. Please refer to the INSTRUCTIONS FOR FILING NOTIFICATION before completing this form. The information requested herein is required by law *(Section 3010 of the Resource Conservation and Recovery Act)*.

DETACH

FOR OFFICIAL USE ONLY

COMMENTS: C

INSTALLATION'S EPA I.D. NUMBER: F NYD000726786 T/A 2 C 1 | APPROVED: | DATE RECEIVED (yr., mo., & day): 800902

I. NAME OF INSTALLATION

X RITE OFF INC.

II. INSTALLATION MAILING ADDRESS

STREET OR P.O. BOX: 1545 5TH INDUSTRIAL COURT

CITY OR TOWN: BAYSHORE N.Y. | ST.: NY | ZIP CODE: 11706

III. LOCATION OF INSTALLATION

STREET OR ROUTE NUMBER: 1545 5TH INDUSTRIAL COURT

CITY OR TOWN: BAYSHORE N.Y. | ST.: NY | ZIP CODE: 11706

IV. INSTALLATION CONTACT

NAME AND TITLE *(last, first, & job title)*: HOWARD RAPPS PRES. | PHONE NO. *(area code & no.)*: 516-665-6868

V. OWNERSHIP

DETACH

A. NAME OF INSTALLATION'S LEGAL OWNER

X HOWARD RAPPS PRES.

B. TYPE OF OWNERSHIP *(enter the appropriate letter into box)*: M

F = FEDERAL
M = NON-FEDERAL

VI. TYPE OF HAZARDOUS WASTE ACTIVITY *(enter "X" in the appropriate box(es))*

- ☐ A. GENERATION
- ☐ B. TRANSPORTATION *(complete item VII)*
- ☑ C. TREAT/STORE/DISPOSE
- ☐ D. UNDERGROUND INJECTION

VII. MODE OF TRANSPORTATION *(transporters only – enter "X" in the appropriate box(es))*

- ☐ A. AIR
- ☐ B. RAIL
- ☑ C. HIGHWAY
- ☐ D. WATER
- ☐ E. OTHER *(specify)*:

VIII. FIRST OR SUBSEQUENT NOTIFICATION

Mark "X" in the appropriate box to indicate whether this is your installation's first notification of hazardous waste activity or a subsequent notification. If this is not your first notification, enter your Installation's EPA I.D. Number in the space provided below.

- ☒ A. FIRST NOTIFICATION
- ☐ B. SUBSEQUENT NOTIFICATION *(complete item C)*

C. INSTALLATION'S EPA I.D. NO.:

IX. DESCRIPTION OF HAZARDOUS WASTES

Please go to the reverse of this form and provide the requested information.

CONTINUE ON REVERSE

I.D. – FOR OFFICIAL USE ONLY

| | | |

REFERENCE NO. 20

NUS CORPORATION — **TELECON NOTE**

CONTROL NO:	DATE:	TIME:
02-8902-50	3/9/89	1530

DISTRIBUTION:

BETWEEN:	OF:	PHONE:
~~ANN~~ C.T. MITURA	NYDEC White Plains LAW ENFORCEMENT	(914) 761-6660

ANO: P. SOLINSKI (NUS)

DISCUSSION:

RE: Rite-Off Raid / Location of Investigators

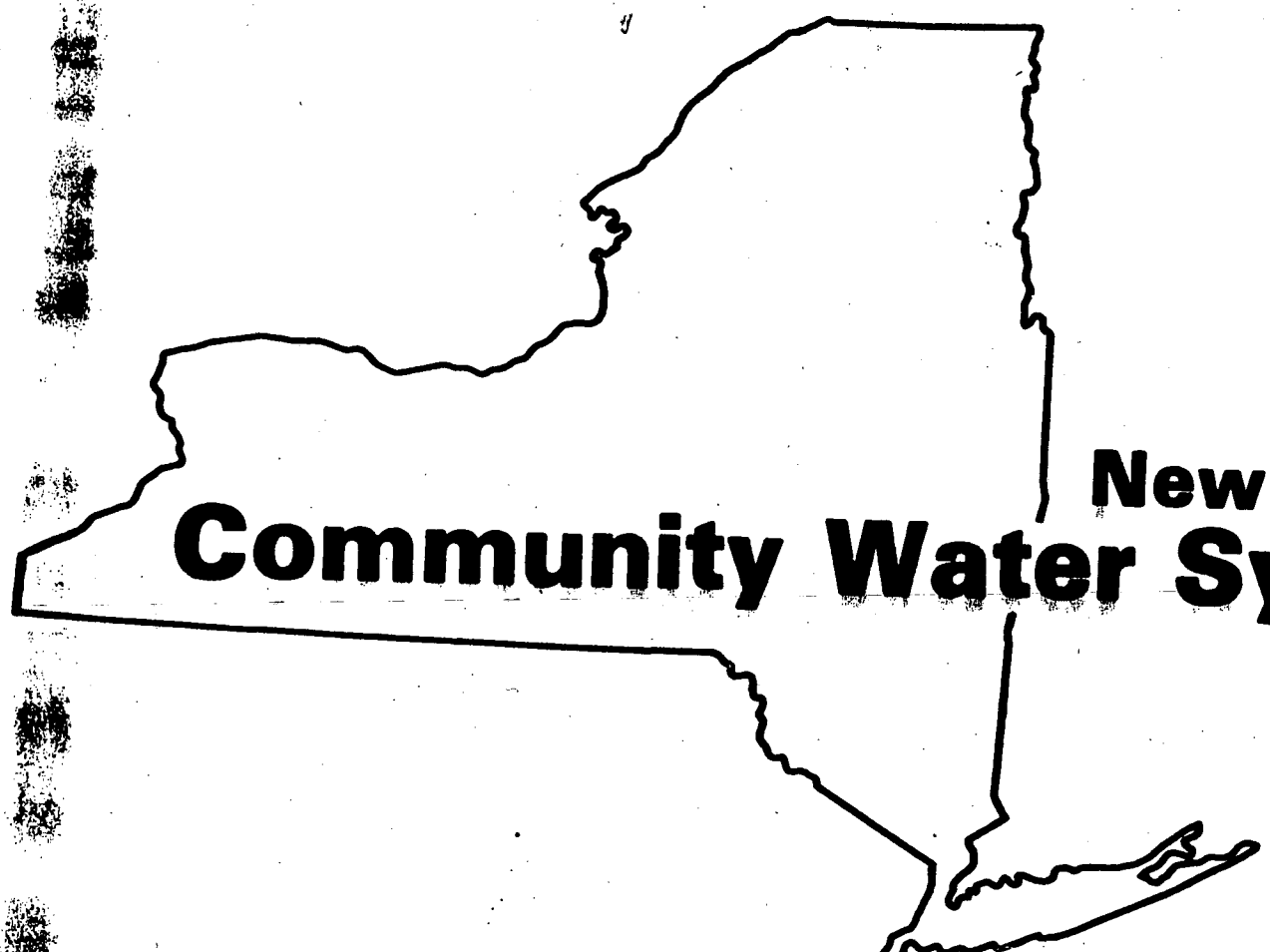
Stated that she knew not of the raid. Also said that Dottie Thurn (Investigator) was on vacation until last week of March. She gave an adress for John Wood

New York State Attorney General's Office
State Capitol Building
Albany, N.Y. 12224

She stated that he was currently in Webster NY (located near Rochester)

ACTION ITEMS: Nothing resolved until investigators can be located.

REFERENCE NO. 21



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

FOREWARD

SOURCE LOCATIONS

The county maps in this atlas show the locations of surface water intakes and groundwater sources for community water systems in New York State. A community water system is defined in Part 5 of the New York State Sanitary Code as a public water system which serves at least five service connections used by year round residents or regularly serves at least 25 year round residents. Many different types of water systems are therefore included. Community water systems which purchase 100 percent of their water and have no sources of their own are not shown.

Each county map is accompanied by a list of the county's community water systems, population served, and source names. Systems are separated into MUNICIPAL COMMUNITY (program code 100) and NON-MUNICIPAL COMMUNITY (all other program codes) and listed alphabetically within each. MUNICIPAL COMMUNITY water systems are operated by a city, town, village, county or water authority or the water system may be a water district or privately owned. NON-MUNICIPAL COMMUNITY systems are primarily mobile home parks but also include apartments/condominiums, resident health care facilities, resident institutions, and federal facilities.

EXPLANATION OF SYMBOLS

Suface water intakes are designated on the county maps by a triangle (▲) accompanied by the corresponding water supply number.

Groundwater sources are designated by a dot (•) followed by the supply number. Multiple wells separated by less than 1000' and supplying the same water system are shown with one dot. Springs and infiltration galleries are shown as groundwater sources unless the local health unit has designated it a surface source. Therefore, springs and infiltration galleries are listed as wells (springs) or wells (infiltration galleries).

If a Community Water System has source(s) located outside the county, these sources are shown in the county list and show in parentheses the system number, county and page number. Conversely, when a county contains source(s) which supply community water systems located outside the county, the name of the system is also shown in that county's list of sources.

ACKNOWLEDGEMENT

Data compiled in this Atlas is based on location of community water system sources from visits, in 1979, to every county health unit in the State by technicians working for the Bureau of Public Water Supply Protection. This data was updated in 1982 through use of the Department of Health's SAFWATER computer inventory and through limited field review. The Bureau of Public Water Supply Protection wishes to acknowledge the following organizations who have made the Atlas possible:

To the United States Environmental Protection Agency for funding this Atlas as a part of the Underground Injection Control Program.

To the Cartography Section of the New York State Department of Transportation for providing the talent, time and effort in performing the necessary cartographic work to produce this Atlas.

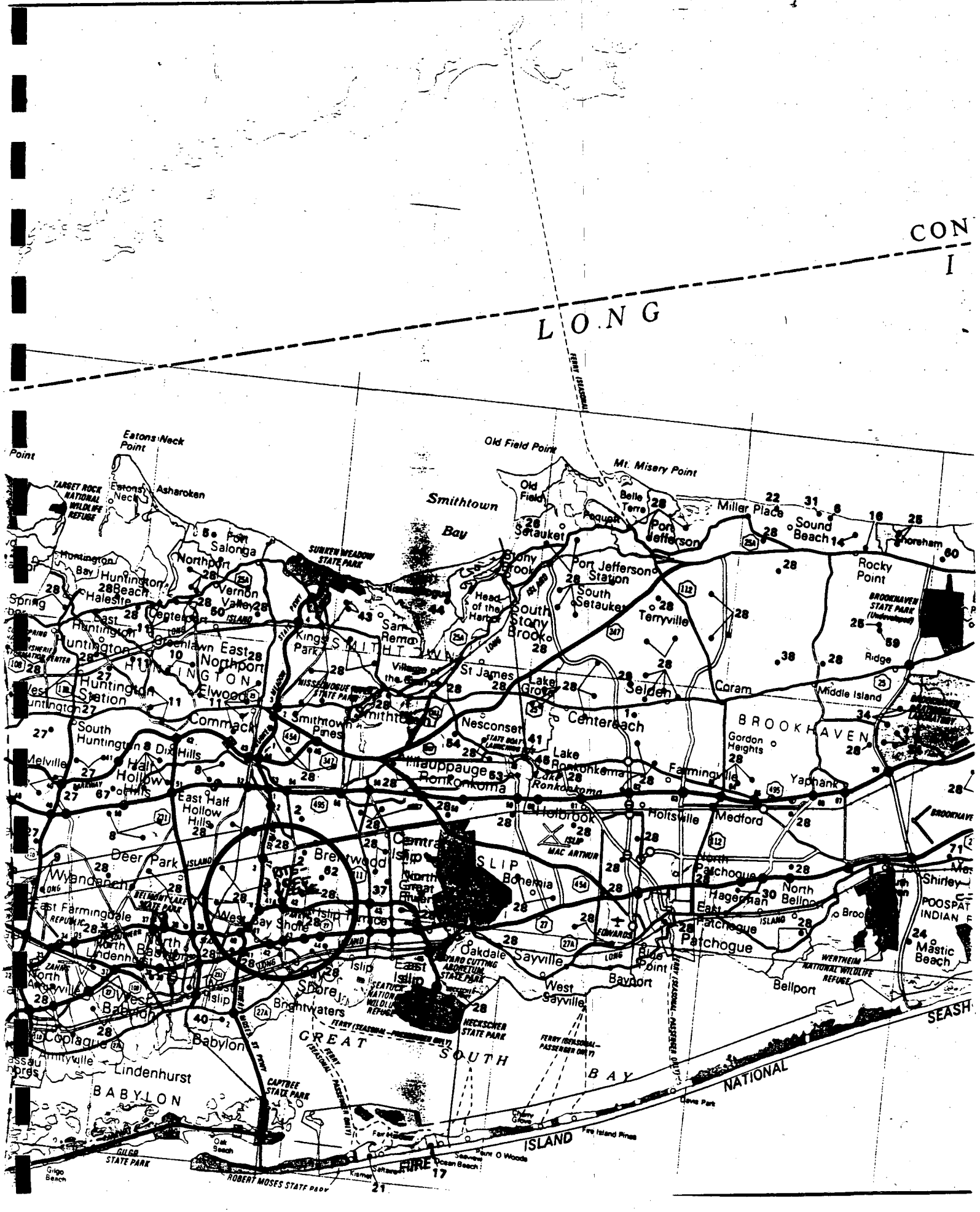
To the engineers and technicians of the Bureau of Public Water Supply Protection of the New York State Department of Health for the painstaking work of gathering the basic data and cross-checking it, and for leading this project through to completion.

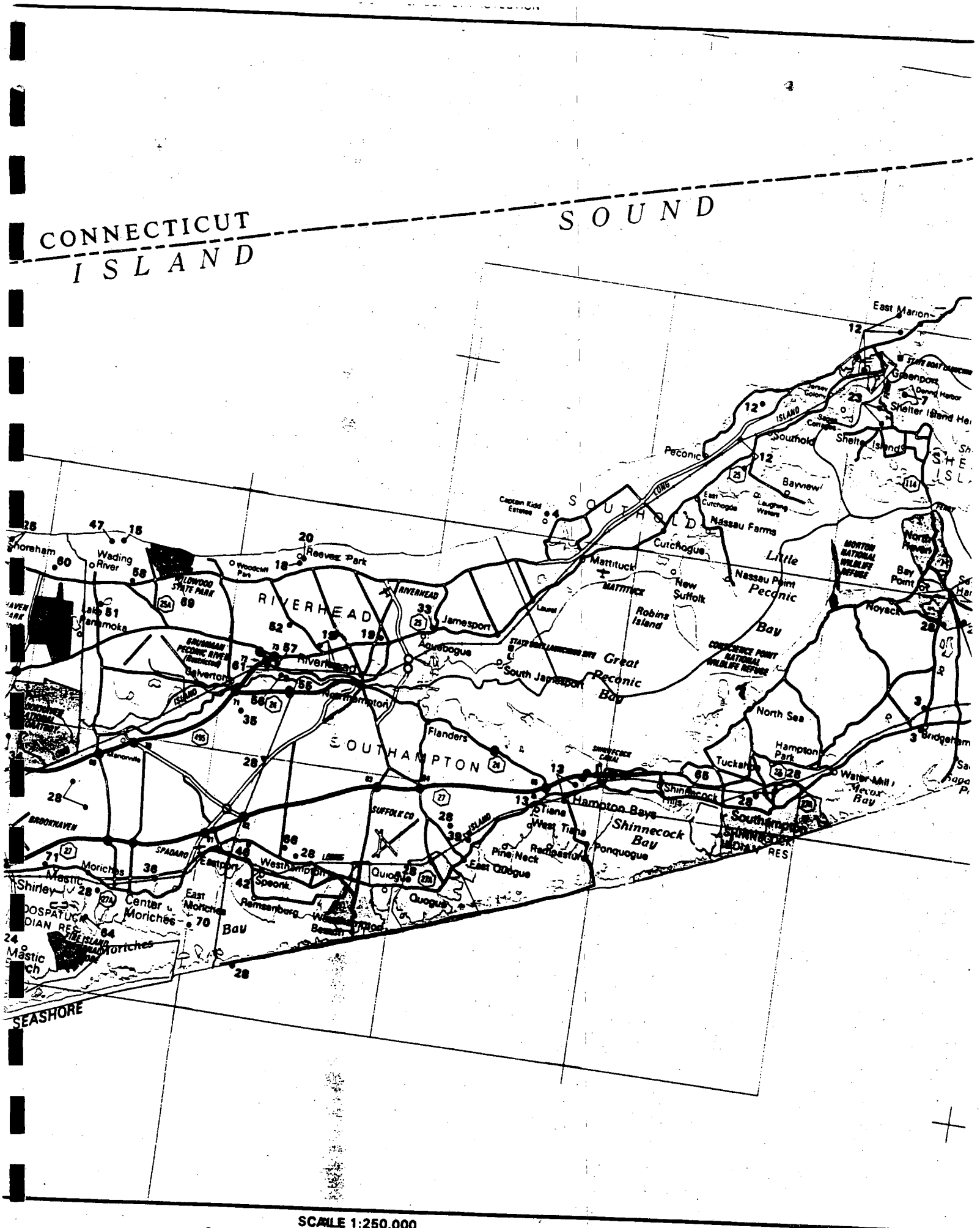
SUFFOLK COUNTY

ID NO	COMMUNITY WATER SYSTEM	POPULATION	SOURCE
Municipal Community			
1	Bevon Water Corporation	1150	Wells
* 2	Brentwood Water District	25812	Wells
3	Bridgehampton Water Company	1916	Wells
4	Captain Kidd Water Company	580	Wells
5	Crab Meadow Beach	50	Wells
6	Culross Corporation (Culross Beach)	104	Wells
7	Dering Harbor Village	130	Wells
8	Dix Hills Water District	30000	Wells
9	East Farmingdale Water District	7850	Wells
10	Fishers Island Water Works Corporation	250	Barlow, Middle Farms and Treasure Ponds, Wells
11	Greenlawn Water District	40000	Wells
12	Greenport Village	6851	Wells
13	Hampton Bays Water District	9500	Wells
14	Hawthorne - Maple Civic Association	50	Wells
15	Herod Point Association	80	Wells
16	North Shores Water Company	5000	Wells
17	Ocean Beach Village	155	Wells
18	Reeves Beach Water Company	650	Wells
19	Riverhead Water District	9300	Wells
20	Roanoke Water Corporation	201	Wells
21	Saltaire Village	35	Wells
22	Scott's Beach Water Company	342	Wells
23	Shelter Island Heights Association	498	Wells
24	Shirley Water Works	3400	Wells
25	Shorewood Water Corporation	10000	Wells
26	Soundview Association	236	Wells
27	South Huntington Water District	51260	Wells
* 28	Suffolk County Water Authority	900000	Wells
29	Sunhill Water Corporation	3959	Wells
30	Swan Lake Water Corporation	1485	Wells
31	Terrace-on-the-Sound	400	Wells
32	Woodbury Triangle Corporation	800	Wells
Non-Municipal Community			
33	Aquebogue Mobile Home Court	120	Wells
34	Brookhaven National Labs	3373	Wells
35	Calverton Hills Owners Association	897	Wells
36	Cedar Lodge Nursing Home	100	Wells
37	Central Islip Psychiatric Center	4525	Wells
38	Crest Hall Health Related Facility	120	Wells
39	East Quogue Mobile Estates	160	Wells
40	Good Samaritan Hospital	NA	Wells
41	Greis Mobile Park	70	Wells
42	Hampton Gateway Apartments	304	Wells
43	Kings Park Psychiatric Center	3100	Wells
44	Knox School	NA	Wells
45	Lake Hurst Lodge Adult Home	57	Wells
46	Leier's Mobile Park	350	Wells
47	Little Flower Children's Services	150	Wells
48	Montauk Air Force Station	10	Wells
49	Napeague Trailer Park	78	Wells
50	Northport VA Hospital	3000	Wells
51	Oak Park Trailer Park	50	Wells
52	Oakland Ridge Mobile Park	74	Wells
53	Park Lake Rest Home	46	Wells
54	Peacock Alley	35	Wells
55	Peconic River Trailer Park	90	Wells
56	Peconic View Adult Mobile Home Park	70	Wells
57	Pinecrest Garden Apartments	392	Wells
58	Ramblewood Mobile Homes	210	Wells
59	Ridge Rest Home	58	Wells
60	Rocky Point Family Housing	55	Wells
61	Rollin Mobile Homes	220	Wells
* 62	St Joseph Convent - Long Island University	1177	Wells
63	Sam A Lewison Start Center	40	Wells
64	South Bay Adult Home	40	Wells
65	Southampton College	1000	Wells
66	Speonk Mobile Home Park	50	Wells
67	Suffolk Developmental Center	3500	Wells
68	Three Mile Harbor Trailer Park	40	Wells
69	Thurm's Mobile Estates	450	Wells
70	USCG Station - Moriches	23	Wells
71	Wes Dubicki Apartments	NA	Wells

* - WATER SYSTEMS WITHIN A 3 MILE RADIUS OF RITE-OFF INC.

ATION OF COMMUNITY WATER SYSTEM SOURCES-1982




CONNECTICUT
ISLAND
SOUND
East Marion
Greenport
Shelter Island
Southold
Peconic
Bayview
Cutchogue
Mattituck
New Suffolk
Nassau Farms
Little Peconic Bay
Great Peconic Bay
Robins Island
Nassau Point
Noyack
Bay Point
North Haven
Sag Harbor
Jamesport
Aquebogue
Riverhead
Reeves Park
Wading River
Shoreham
Northampton
Flanders
Hampton Bays
Shinnecock Bay
Ponquogue
Quogue
Westhampton
Eastport
Speonk
Remsenburg
Moriches
Center Moriches
East Moriches
Bay
Mastic
Shirley
Pine Neck
Red Creek
Tiana
West Tiana
East Quogue
North Sea
Hampton Park
Tuckahoe
Water Mill
Mecox Bay
Bridgehampton
Southampton
Shinnecock Hills
Shinnecock Canal
Shinnecock Indian Res
Long Island
Suffolk Co
Brookhaven
SOUTHOLD
RIVERHEAD
SOUTHAMPTON
SEASHORE
SCALE 1:250,000
5 0 5 MILES
NORTH

02-8902-SD-1A
REF. NO. 0

0 - HRS SCORE
☐ - ARE SCORE

Ground Water Route Work Sheet

Rating Factor	Assigned Value (Circle One)	Multiplier	HRS	Max. Score	PRO
1 Observed Release	(0) 45	1	0	45	45
If observed release is given a score of 45, proceed to line 4. If observed release is given a score of 0, proceed to line 2.					
2 Route Characteristics					
Depth to Aquifer of Concern	0 1 2 (3)	2	6	6	6
Net Precipitation	0 1 (2) 3	1	2	3	2
Permeability of the Unsaturated Zone	(0) 1 2 3	1	0	3	3
Physical State	0 1 2 (3)	1	3	3	3
Total Route Characteristics Score			11	15	14
3 Containment	0 1 2 (3)	1	3	3	3
4 Waste Characteristics					
Toxicity/Persistence	0 3 6 9 (12) 15 18	1	12	18	18
Hazardous Waste Quantity	0 (1) (2) 3 4 5 6 7 8	1	1	8	2
Total Waste Characteristics Score			13	26	20
5 Targets					
Ground Water Use	0 1 2 (3)	3	9	9	9
Distance to Nearest Well/Population Served	0 4 6 8 10 / 12 16 18 20 / 24 30 32 (35) 40	1	35	40	35
Total Targets Score			44	49	44
6 If line 1 is 45, multiply 1 x 4 x 5. If line 1 is 0, multiply 2 x 3 x 4 x 5			8876	57,330	39600
7 Divide line 6 by 57,330 and multiply by 100		S_{gw} =	32.93		69.07

02-8902-50-7A
REV. NO. 0

Surface Water Route Work Sheet

Rating Factor	Assigned Value (Circle One)	Multiplier	HRS	Max. Score	PRO
1 Observed Release	0 45	1		45	
If observed release is given a value of 45, proceed to line 4. If observed release is given a value of 0, proceed to line 2.					
2 Route Characteristics					
Facility Slope and Intervening Terrain	0 1 2 3	1		3	
1-yr. 24-hr. Rainfall	0 1 2 3	1		3	
Distance to Nearest Surface Water	0 1 2 3	2		6	
Physical State	0 1 2 3	1		3	
Total Route Characteristics Score				15	
3 Containment	0 1 2 3	1		3	
4 Waste Characteristics					
Toxicity/Persistence	0 3 6 9 12 15 18	1		18	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8	
Total Waste Characteristics Score				26	
5 Targets					
Surface Water Use	0 1 2 3	3		9	
Distance to a Sensitive Environment	0 1 2 3	2		6	
Population Served/Distance to Water Intake Downstream	0 4 6 8 10 12 16 18 20 24 30 32 35 40	1		40	
Total Targets Score				55	
6 If line 1 is 45, multiply 1 x 4 x 5. If line 1 is 0, multiply 2 x 3 x 4 x 5				64,350	
7 Divide line 6 by 64,350 and multiply by 100	S_{sw} =		0.00		0.00

THE SURFACE WATER MIGRATION ROUTE WAS SCORED ZERO, AS THERE IS NO OVERLAND MIGRATION ROUTE FROM THE SITE TO SURFACE WATER.

02-8902-SD-PA
REV. NO. 0

Air Route Work Sheet

Rating Factor	Assigned Value (Circle One)	Multiplier	HRS	Max. Score	PRO
1 Observed Release	(0) 45	1	0	45	0
Date and Location:					
Sampling Protocol:					
If line 1 is 0, the S_a = 0. Enter on line 5 If line 1 is 45, then proceed to line 2					
2 Waste Characteristics					
Reactivity and Incompatibility	0 1 2 3	1		3	
Toxicity	0 1 2 3	3		9	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8	
Total Waste Characteristics Score				20	
3 Targets					
Population Within 4-Mile Radius	0 9 12 15 18 21 24 27 30	1		30	
Distance to Sensitive Environment	0 1 2 3	2		6	
Land Use	0 1 2 3	1		3	
Total Targets Score				39	
4 Multiply 1 x 2 x 3				35,100	
5 Divide line 4 by 35,100 and multiply by 100		S_a =	0		0

02-8902-50-PA
REV. NO. 0

HRS

	S	S^2
Groundwater Route Score (S_{gw})	32.93	1084.38
Surface Water Route Score (S_{sw})	0	0
Air Route Score (S_a)	0	0
$S_{gw}^2 + S_{sw}^2 + S_a^2$		1084.38
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		32.93
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73 = S_M =$		19.03

WORKSHEET FOR COMPUTING S_M

PRO

	S	S^2
Groundwater Route Score (S_{gw})	69.07	4770.66
Surface Water Route Score (S_{sw})	0	0
Air Route Score (S_a)	0	0
$S_{gw}^2 + S_{sw}^2 + S_a^2$		4770.66
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		69.07
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73 = S_M =$		39.92

WORKSHEET FOR COMPUTING S_M