ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES

56519

PHASE 1 INVESTIGATION
Town of Saugerties Landfill
Site No. 356003
Town of Saugerties, Ulster County
Final - June 1987

New York State
Department of
Environmental Conservation

50 Wolf Road, Albany, New York 12233
Henry G. Williams, Commissioner

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

Prepared by:

EA SCIENCE AND TECHNOLOGY
A Division of EA Engineering, Science, and Technology, Inc.

15 (12-75)

New York State Department of Environmental Conservation

MEMORANDUM

TO: David O'Toole
FROM: Charles Goddard
SUBJECT: Phase I Investigation Report

DATE: October 21, 1987

Attached are final Phase I reports, Preliminary Engineering Investigations at Inactive Hazardous Waste Disposal Sites, for the Town of Saugerties Landfill, Ulster County site code 356003, Bull Path Landfill, Suffolk County, site code 152059, Brookhaven Landfill - Horseblock Road, Suffolk County, site code 152041 Holtsville Landfill, Suffolk County, site code 152010 and the Pine Road Ecology site, Suffolk County, site code 152049, for your records.

If you have any questions, please contact Mr. Chen at extension 7-0639.

Attachment

EA REPORT DEC63A

ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES IN THE STATE OF NEW YORK PHASE I INVESTIGATIONS

TOWN OF SAUGERTIES LANDFILL
TOWN OF SAUGERTIES, ULSTER COUNTY
NEW YORK I.D. NO. 356003

Prepared for

Division of Solid and Hazardous Waste
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233-0001

Prepared by

EA Science and Technology
R.D. 2, Goshen Turnpike
Middletown, New York 10940

A Division of EA Engineering, Science, and Technology, Inc.

June 1987

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1. EXECUTIVE SUMMARY

The Town of Saugerties Landfill site (New York I.D. No. 356003 and EPA I.D. No. D9805057636) is a 15-acre active municipal landfill located on Route 212, south of Shultis Corners, in the Town of Saugerties, Ulster County, New York (Figures 1-1 and 1-2, and Photos 1-1 through 1-8). The Town of Saugerties purchased the property from Mr. Charles Keefe in 1969 for the sole purpose of operating a landfill. The site opened in 1970. Only refuse generated in the unincorporated part of the town is deposited at the site. The Village of Saugerties has its own facility.

The site was issued a New York State permit in March 1979 under which it was not allowed to accept hazardous industrial wastes or septic sludges. For a number of years, the site received grinding swarf and wastewater treatment sludge from Ferroxcube, a local electronics manufacturer. Approximately 750 tons of grinding swarf (components unknown), 350 tons of grinding swarf (95+ percent iron oxide with oil and water), and 55 cubic yards of wastewater treatment sludge per year were sent to the site for several years. The sludge was high in iron, zinc oxide, and manganese oxide.

There has been leachate visible at the site in the past, however, there has not been a recent leachate problem. In 1979, consulting engineers for the Town of Saugerties reported that there was no evidence of ground water within the bed of the landfill. There are two ground-water monitoring wells at the landfill. Past sampling has indicated elevated levels of iron, manganese, and zinc.

The preliminary HRS scores for this site are as follows: Migration Score (S_M) = 37.93 (Ground Water Score (S_{GW}) = 65.62, Surface Water Score (S_{SW}) = 0, Air Score (S_A) = 0); Fire and Explosion Score (S_{FE}) = NA; Direct Contact Score (S_{DC}) = 0. For purposes of calculating a preliminary ground-water route score, an observed release to ground water has been scored based on the available analytical data from sampling conducted at the two existing onsite wells. However, the integrity of these two wells is unknown because they are unsecured (castings not locked), as observed during EA's site inspection.

In order to prepare a final HRS score for this site, analytical data regarding the Hazardous Substance List (HSL) quality of the ground water, surface water, and sediment will be necessary, thus requiring performance of a Phase II investigation. The proposed Phase II study would include a geophysical study, the installation and testing of six observation wells, and the collection and analysis of ground-water, surface water, and sediment samples. The estimated cost of the Phase II investigation is $69,500.

Site Coordinates:

Latitude: 42° 02' 30"
Longitude: 74° 04' 30"

TOWN OF SAUGERTIES

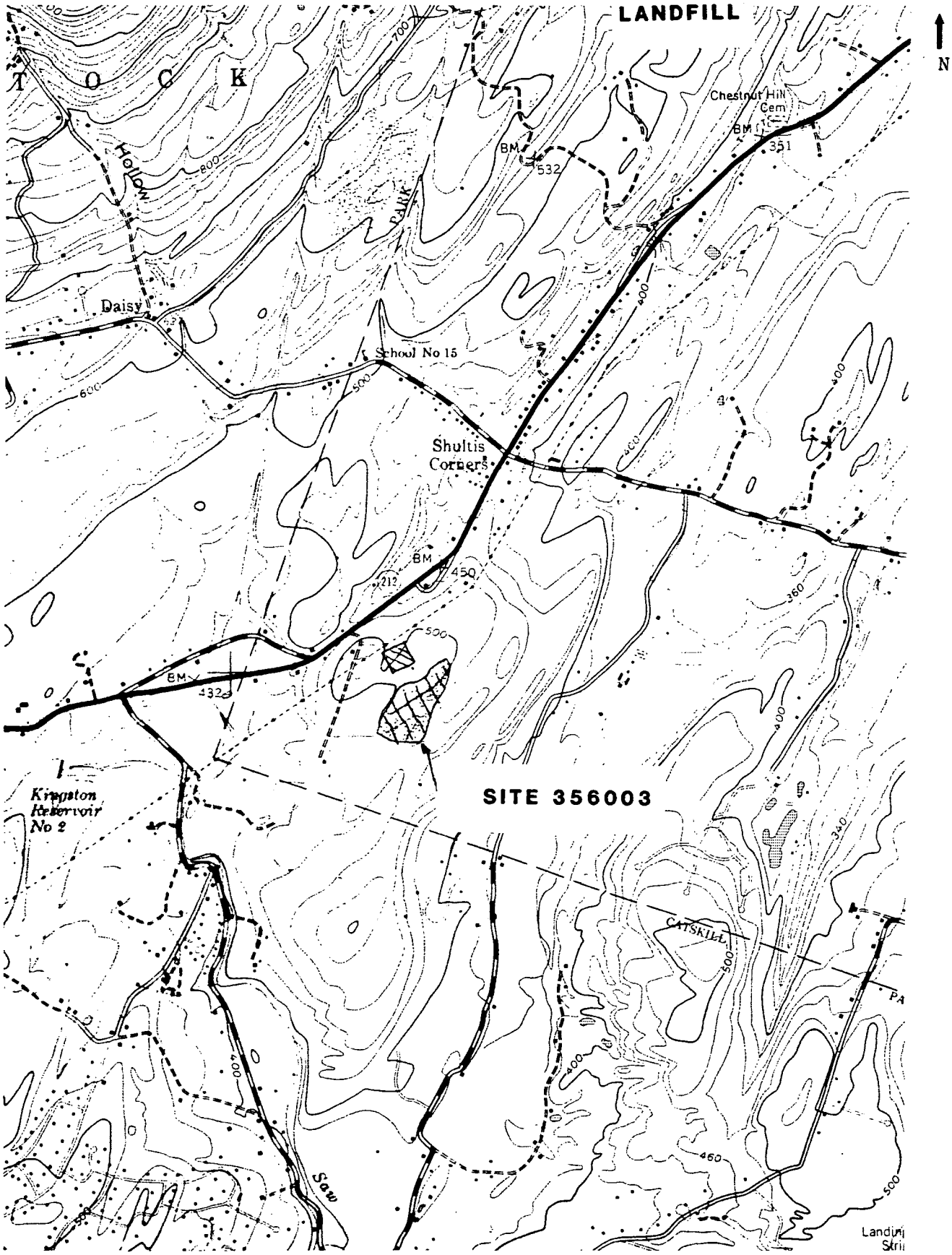


Figure 1-1 Scale 1:24,000 **WOODSTOCK QUAD.**

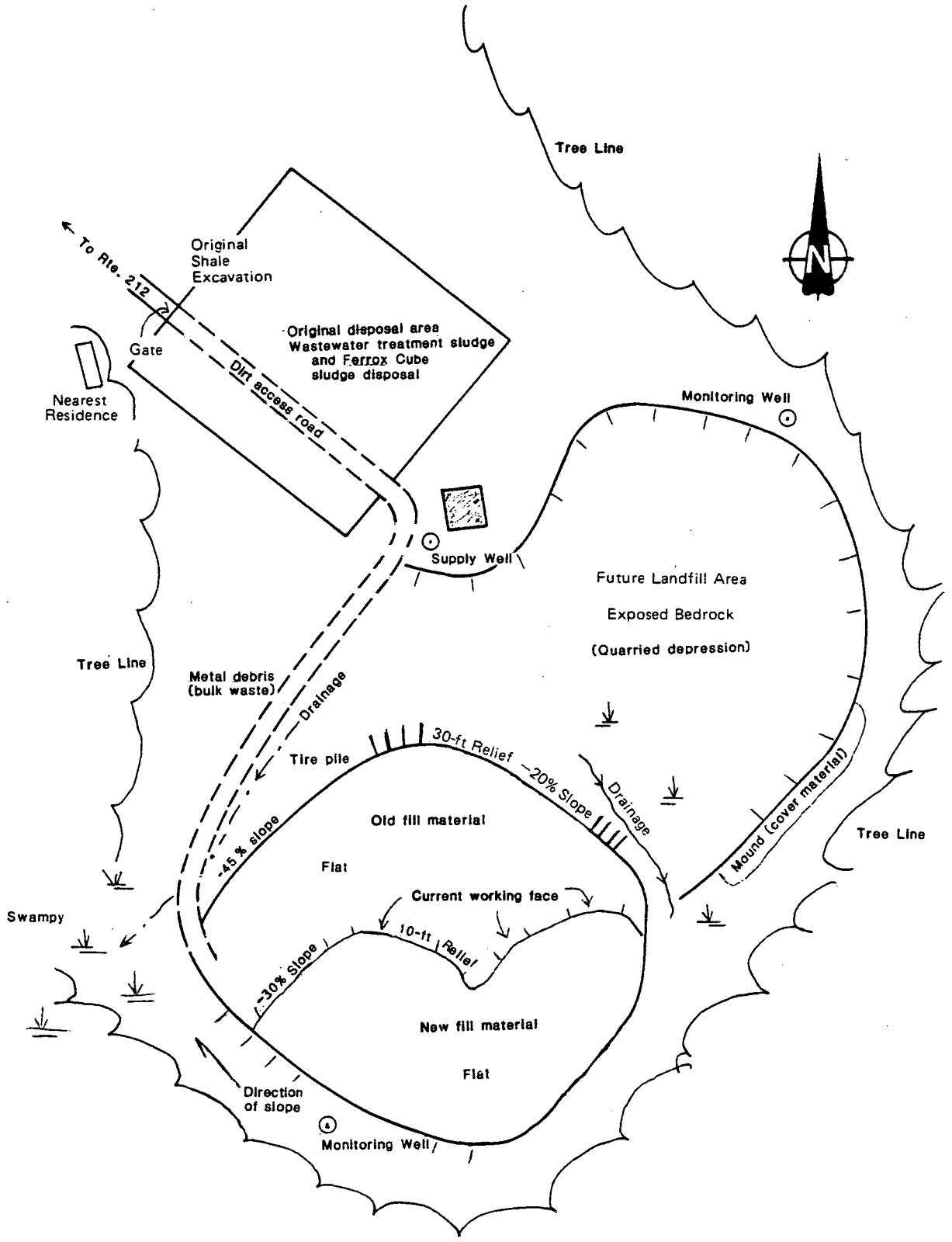


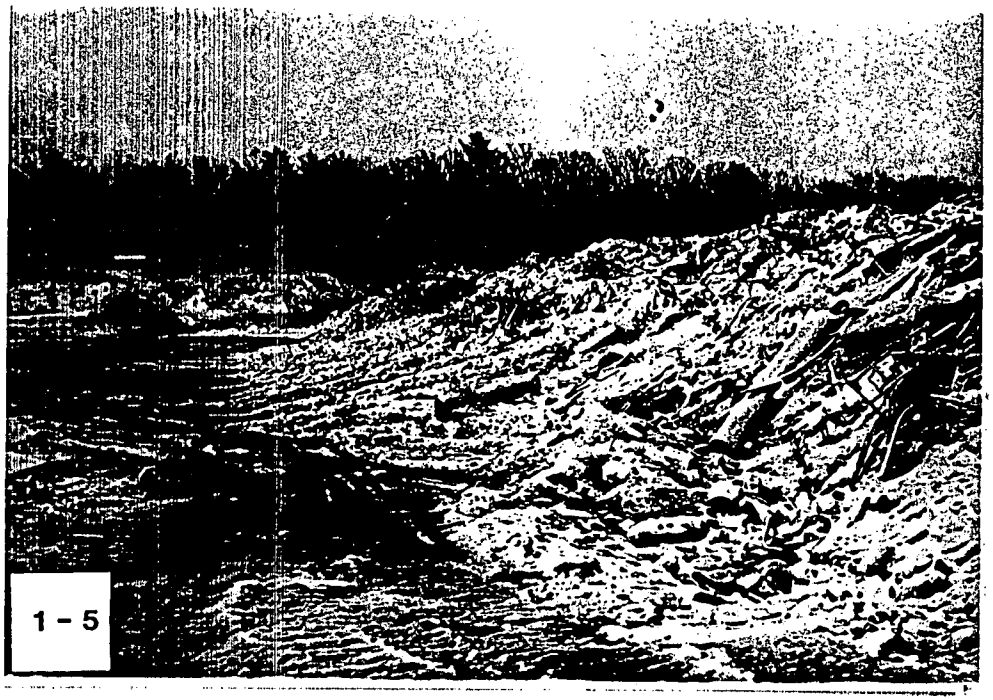
Figure 1-2. Site sketch. Town of Saugerties Landfill, 23 April 1986. (Not to scale.)

1 - 1

1 - 2

1 - 3

1 - 4


1 - 5


1 - 6


1 - 7


1 - 8

PHOTO LOG - TOWN OF SAUGERTIES LANDFILL

Photo	Description
1-1	The entrance of the landfill is locked at night but provides no limit to pedestrial access. The nearest residence is seen in the right of the photo, and the original dump site is left of the gate.
1-2	Facing southeast, this is the original dump site, just south of the entrance gate. Currently this area accepts treated sludge.
1-3, 1-4	Facing north, this is the office building at the landfill, the front part of which is used as a kennel. The excavated area just right and in front of the building is part of the original shale mining operation. This area is all exposed bedrock and full of water. The Town of Saugerties plans to use the area in the next phase of the landfilling operation.
1-5, 1-6	Facing east, these next two photos depict the northern edge of "cell two" of the landfill. Surface water flows right along this edge from which leachate was reportedly observed emanating. During the EA site inspection the surface water was a reddish color, but believed to be stained from the rock and clay, and not leachate.
1-7	This is the southwestern edge of the landfill, where the Town has established a huge tire pile. Surface water flows southerly past these tires, and is also red in color.
1-8	This is an eastward view of the active cell of the landfill. When this cell is completed, the Town intends to begin filling the shale pit.

2. Purpose

2. PURPOSE

The Town of Saugerties Landfill site was listed in the New York State Registry of Inactive Hazardous Wastes Sites because it received various industrial wastes including grinding sludge and wastewater treatment sludge from Ferroxcube.

The goal of the Phase I investigation of this site was to: (1) obtain available records on the site history from state, federal, county, and local agencies; (2) obtain information on site topography, geology, local surface water and ground-water use, previous contamination assessments, and local demographics; (3) interview site owners, operators, and other groups or individuals knowledgeable of site operations; (4) conduct a site inspection to observe current conditions; and (5) prepare a Phase I report. The Phase I report includes a preliminary Hazard Ranking Score (HRS), an assessment of the available information, and a recommended work plan for Phase II studies.

3. SCOPE OF WORK

The Phase I investigation of the Town of Saugerties Landfill site involved a site inspection by EA Science and Technology, as well as record searches and interviews. The following agencies or individuals were contacted:

Contact	Information Received
Mrs. Gloria Schovel Town Supervisor Town Hall Main Street Saugerties, New York 12477 (914) 246-2809	Site history
Mr. Ramanand Pergadia, P.E. Senior Sanitary Engineer New York State Department of Environmental Conservation 21 South Putt Corners Road New Paltz, New York 12561 (914) 255-5453	Interview; in-place toxics file
Mr. Dean Palen, P.E. Director of Environmental Health Ulster County Health Department 300 Flatbush Avenue Kingston, New York 12401 (914) 338-8443	Site file
Mr. Kevin Walter, P.E. New York State Department of Environmental Conservation Division of Hazardous Waste Enforcement 50 Wolf Road Albany, New York 12233-0001 (518) 457-4346	No file/information
Mr. John Iannotti, P.E. New York State Department of Environmental Conservation Bureau of Remedial Action 50 Wolf Road Albany, New York 12233-0001 (518) 457-5637	No file/information

Contact	Information Received
Mr. Earl Barcomb, P.E. New York State Department of Environmental Conservation Landfill Operations Vatrano Road Albany, New York 12205 (518) 457-2051	Site file
Mr. Peter Skinner, P.E. New York State Attorney General's Office Room 221 Justice Building Albany, New York 12224 (518) 474-2432	No file/information
Mr. Ron Tramontano/Mr. Charlie Hudson New York State Department of Health Bureau of Toxic Substances Assessment Nelson A. Rockefeller Empire State Plaza Corning Tower Building, Room 342 Albany, New York 12237 (518) 473-8427	Site file
Mr. James Covey, P.E. New York State Department of Health Nelson A. Rockefeller Empire State Plaza Corning Tower Building Albany, New York 12237 (518) 473-4637	Community Water Supply Atlas
Mr. Rocky Paggione, Atty./ Mr. Louis A. Evans, Atty. New York State Department of Environmental Conservation Division of Environmental Enforcement 202 Mamaroneck Avenue White Plains, New York 10601-5381 (914) 761-6660	No file/information
Mr. Marsden Chen, P.E. New York State Department of Environmental Conservation Bureau of Site Control 50 Wolf Road Albany, New York 12233-0001 (518) 457-0639	Site file

Contact	Information Received
Mr. John W. Ozard Senior Wildlife Biologist New York State Department of Environmental Conservation Wildlife Resources Center Significant Habitat Unit Delmar, New York 12054 (518) 439-7486	Significant habitats
Mr. Perry Katz U.S. Environmental Protection Agency Region II Room 757 26 Federal Plaza New York, New York 10278 (212) 264-4595	Site file
Mr. George A. Sisco District Conservationist Ulster SWCD 380 Washington Avenue UPO Box 97 Kingston, New York 12401	Irrigation and agricultural land
Mr. Wayne Elliot Regional Fisheries Manager New York State Department of Environmental Conservation Region 3 21 South Putt Corners Road New Paltz, New York (914) 255-5453	Surface water use
Mr. Walter Myer Ulster County Department of Health 300 Flatbush Avenue Kingston, New York 12401 (914) 338-8443	Water district boundaries

[redacted]

4. SITE ASSESSMENT - TOWN OF SAUGERTIES LANDFILL

4.1 SITE HISTORY

The Town of Saugerties Landfill site is a 15-acre municipal active landfill located on Route 212, south of Shultis Corners, in the Town of Saugerties, Ulster County, New York. The 15-acre landfill is part of a 44-acre plot which the Town of Saugerties purchased from Mr. Charles Keefe in 1969 for the sole purpose of operating a landfill when the neighboring Town of Woodstock ceased to accept its garbage (Appendix 1.1-1). The site opened in 1970. Only refuse generated in the unincorporated part of the Town is deposited at the site. The Village of Saugerties has its own facility (Appendix 1.1-2).

Initially, refuse was disposed in three trenches excavated by the Town situated in the northern portion of the property. These trenches are seeded, and the Town currently uses the area to dump sludge from the Village sewage treatment plant (Appendix 1.1-1).

After the original trenches were filled in, the Town began landfilling refuse in the southern section of the landfill. The Town has historically employed the "cell method" of refuse disposal, with provisions for separate collection of steel, aluminum, tin, paper, and glass (Appendixes 1.1-1 and 1.1-3). The cells have been formed by placing layers of new refuse over compacted waste material. The Town is currently working in the third cell at the landfill which overlies the second cell which in turn overlies the first cell. The exact depth of deposited materials is unknown, but present Town employees

estimate that the first cell is 30-40 ft below the ground surface. To prepare for future expansion, the Town reportedly sold shale, mined from the site, to a private contractor (Appendixes 1.1-1 through 1.1-4). Today, shale is excavated by the Town and used as cover material on the landfill (Appendix 1.1-1).

The site was issued a New York State permit (Part 360) in March 1979 under which it was not allowed to accept hazardous industrial wastes or septic sludges (Appendix 1.1-5). For a number of years, the site received grinding swarf and wastewater treatment sludge from Ferroxcube, a local electronics manufacturer. In 1976, it was reported that the site had received approximately 750 tons of grinding swarf (components unknown), 350 tons of grinding swarf (95+ percent iron oxide with oil and water), and 55 cubic yards of wastewater treatment sludge per year for several years. The sludge was high in iron oxide, zinc oxide, and manganese oxide (Appendixes 1.1-6 through 1.1-8). During EA's site inspection, it was pointed out that Ferroxcube wastes are placed in the same general area of the site that served as the original disposal area.

There has been leachate visible at the site in the past, however, there has not been a recent leachate problem (Appendixes 1.1-1, 1.1-2, 1.1-9, and 1.1-10). In 1978, consulting engineers for the Town of Saugerties reported that there was no evidence of ground water within the bed of the landfill (Appendix 1.1-4). There are two ground-water monitoring wells at the landfill, and analysis of the ground water has shown elevated levels of various metals and phenol (Appendixes 1.1-1, 1.1-11, and 1.1-12). These monitoring wells are not secured (EA Site Inspection, 23 April 1986).

4.2 SITE TOPOGRAPHY

The Town of Saugerties Landfill site is located on Route 212, south of Shultis Corners, in Ulster County, at an elevation of approximately 480 ft above mean sea level. Large areas of the landfill have a slope of 1-3 percent, however, working faces of the landfill have slopes ranging from 20 to 45 percent. Two drainage ditches to the north and west of the landfill divert runoff away from the landfill operation. The surface runoff follows the ditchline which runs to the southwest. Regional slope of terrain in the immediate vicinity is to the south-southwest at <1 percent (Appendix 1.2-1, EA Site Inspection).

An office/garage is located in the northern part of the site. The current working area is located in the southern section which includes a tire pile located along the southwest edge. Shale is mined for use at the landfill from the northeast area where future landfilling is expected to occur. In the northeastern part of the site, various materials such as glass, paper, and tin are collected and stored in bins (Appendix 1.1-1). There is a gate at the entrance of the landfill, but the property is not entirely fenced and pedestrian access is not restricted.

The site is located in a rural area with low to medium density residential areas in the surrounding vicinity. The nearest residence is located outside the operation's gate, adjacent to the original dump area. The nearest commercial operation is located approximately 250 ft west of the original dump area. The nearest surface water is a tributary of the Saw Kill and is located approximately 1,000 ft to the south of the southernmost edge of the landfill. The nearest ground-water well is located on the landfill property at the

office/garage approximately 200 ft southeast of the original dump area. This well provides drinking water to the office/garage (Appendix 1.2-1, EA Site Inspection).

4.3 SITE HYDROGEOLOGY

The site is directly underlain by a thin layer of glacial till overlying layered shale and sandstone of the Middle Devonian Age Plattekill and Ashokan Formations (Appendixes 1.3-1 and 1.3-2). Shale is being excavated at the Town of Saugerties landfill to a depth of $\leq$20 ft. Brenner and Rossi, consulting engineers for the Town, report approximately 1 ft of overburden overlies the shale (Appendix 1.1-5). Therefore, there is a good potential that landfilled material was deposited directly on bedrock. Within a 3-mi radius of concern, the bedrock aquifer has been developed by the Hudson Valley Water Company No. 4, Trnka Farms Mobile Home Park, and private water supply sources (Appendixes 1.3-3 and 1.3-4). Because the overburden is absent or too thin to supply sufficient quantities of water, the shale and sandstone aquifer is considered the aquifer of concern. The reported depth to ground water in a drinking water well at the Town of Saugerties landfill is 20 ft (Appendix 1.1-5). During the EA site inspection, depth to water in the southern monitoring well was measured at 4 ft below grade.

4.4 SITE CONTAMINATION

Waste Types and Quantities

The Town of Saugerties landfill is a municipal landfill opened in 1970, which accepted industrial waste from Ferroxcube, a local electronics manufacturer, in addition to typical municipal refuse. There are no records of the total volume of waste received over the years, however, there are estimates of total industrial wastes received annually from Ferroxcube.

The site reportedly received approximately 750 tons of grinding swarf (components unknown), 350 tons of grinding swarf (95+ percent iron oxide with oil and water), and 55 cubic yards of wastewater treatment sludge per year for several years. This sludge was high in iron, zinc oxide, and manganese oxide (Appendixes 1.1-6 through 1.1-8).

Ground Water

There are two ground-water monitoring wells at the site (Figure 1-2). The "southern" well is located to the south of the newer landfill area and is considered downgradient of the site. The "northern" well is located to the north of the future landfill area and to the east of the original disposal area. This northern well is probably reflective of ambient ground-water conditions relative to the newer landfill area, but it is unknown how it relates to the original disposal area. Any localized ground-water movement in the vicinity of the original disposal area may place the northern well downgradient of the original disposal area.

Analytical data from ground-water sampling conducted in February 1985 indicated levels of iron (35 mg/liter), manganese (15 mg/liter), sodium (320 mg/liter), zinc (1.5 mg/liter), arsenic (4.2 µg/liter), and phenol (0.010 mg/liter) in the southern monitoring well. During the same sampling event, iron (12 mg/liter), manganese (0.95 mg/liter), sodium (12 mg/liter), and zinc (0.11 mg/liter) were detected in the northern monitoring well. Arsenic and phenol were not detected in the northern well. Analytical data from ground-water sampling conducted in March 1982 indicated higher levels of iron (0.7 mg/liter), manganese (7.3 mg/liter), and strontium (0.4 mg/liter) in the southern monitoring well when compared to levels detected in the northern monitoring well (0.7 mg/liter, <0.1 mg/liter, and 0.4 mg/liter, respectively) (Appendix 1.1-11).

May 1979 analytical data indicated higher levels of iron (8.3 mg/liter) and manganese (6.0 mg/liter) in the "downgradient" sample as compared to the "upgradient" sample (0.76 mg/liter and 0.18 mg/liter, respectively) (Appendix 1.1-12).

Surface Water

No data available.

Soil

No data available.

Air

No data available.

[redacted]

TOWN OF SAUGERTIES LANDFILL
TOWN OF SAUGERTIES, ULSTER COUNTY

The Town of Saugerties Landfill site is a 15-acre active municipal landfill located on Route 212, south of Shultis Corners, in the Town of Saugerties, Ulster County, New York. The Town of Saugerties purchased the property from Mr. Charles Keefe in 1969 for the sole purpose of operating a landfill. The site, previously a shale mining operation, opened in 1970. The Town employs the "cell method" of refuse disposal with provisions for separate collection of steel, aluminum, tin, paper, and glass.

The landfill reportedly received approximately 750 tons of grinding swarf (components unknown), 350 tons of grinding swarf (95+ percent iron with oil and water), and 55 cubic yards of wastewater treatment sludge per year for several years from Ferroxcube, a local electronics manufacturer. The sludge was high in iron, zinc oxide, and manganese oxide.

There are two ground-water monitoring wells at the landfill. Past sampling has indicated elevated levels of various metals and phenol.

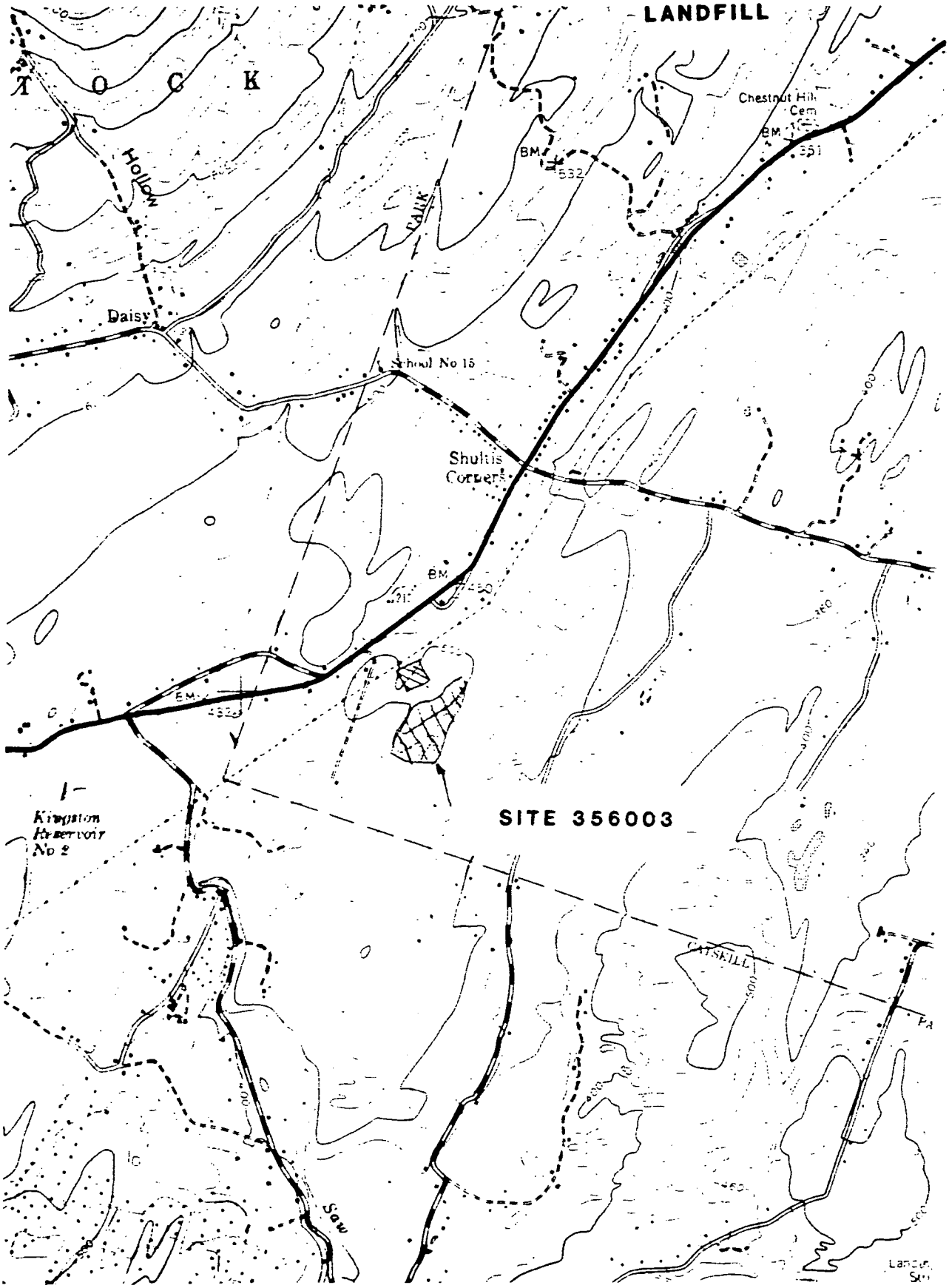
[redacted]

Site Coordinates:

Latitude: 42° 02' 30"
Longitude: 74° 04' 30"

TOWN OF SAUGERTIES

LANDFILL



Scale 1:24,000

WOODSTOCK QUAD.

Facility name: Town of Saugerties Landfill

Location: Town of Saugerties, Ulster County

EPA Region: II

Person(s) in charge of the facility: Mrs. Gloria Schovel (Town Supervisor)
Town Hall, Main Street
Saugerties, New York 12477

Name of Reviewer: EA Science and Technology Date: 29 October 1986

General description of the facility:
(For example: landfill, surface impoundment, pile, container; types of hazardous substances; location of the facility; contamination route of major concern; types of information needed for rating; agency action, etc.)

The site is a 15-acre active municipal landfill on Route 212, south of Shultis Corners. The landfill received grinding swarf (components unknown), grinding swarf (95 percent iron oxide with oil and water), and wastewater treatment sludge from a local electronics manufacturer. The sludge was high in iron, zinc oxide, and manganese oxide. Two observation wells were installed onsite. The downgradient well was found to contain various metals and phenol.

Scores: S_M = 37.95 (S_{gw} = 65.62 S_{sw} = 0 S_a = 0)
S_{FE} = N/A
S_{DC} = 0

Maximum S_M = 46.25

FIGURE 1
HRS COVER SHEET

Ground Water Route Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max Score	Ref. (Section)
1 Observed Release	0 (45)	1	45	45	3.1
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					3.2
Depth to Aquifer of Concern	0 1 2 3	2		6	
Net Precipitation	0 1 2 3	1		3	
Permeability of the Unsaturated Zone	0 1 2 3	1		3	
Physical State	0 1 2 3	1		3	
Total Route Characteristics Score				15	
3 Containment	0 1 2 3	1		3	3.3
4 Waste Characteristics					3.4
Toxicity/Persistence	0 3 6 9 12 15 (18)	1	18	18	
Hazardous Waste Quantity	0 1 2 3 4 (5) 6 7 8	1	5	8	
Total Waste Characteristics Score			23	26	
5 Targets					3.5
Ground Water Use	0 1 2 (3)	3	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	
Total Targets Score			44	49	
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			45,540	57,330	
7 Divide line 6 by 57,330 and multiply by 100		S_{gw} = 79.43			

FIGURE 2
GROUND WATER ROUTE WORK SHEET

Surface Water Route Work Sheet						
Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max Score	Ref. (Section)	Maximum Possible
1 Observed Release	(0) 45	1	0	45	4.1	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					4.2	
Facility Slope and Intervening Terrain	(0) 1 2 3	1	0	3		
1-yr. 24-hr. Rainfall	0 1 (2) 3	1	2	3		
Distance to Nearest Surface Water	0 1 (2) 3	2	4	6		
Physical State	0 1 2 (3)	1	3	3		
Total Route Characteristics Score			9	15		
3 Containment	(0) 1 2 3	1	0	3	4.3	
4 Waste Characteristics					4.4	
Toxicity/Persistence	(0) 3 6 9 12 15 18	1	0	18		
Hazardous Waste Quantity	(0) 1 2 3 4 5 6 7 8	1	0	8		
Total Waste Characteristics Score			0	26		23
5 Targets					4.5	
Surface Water Use	0 1 (2) 3	3	6	9		
Distance to a Sensitive Environment	(0) 1 2 3	2	0	6		
Population Served/Distance to Water Intake Downstream	(0) 4 6 8 10 12 16 18 20 24 30 32 35 40	1	0	40		
Total Targets Score			6	55		6
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			0	64,350		6,210
7 Divide line 6 by 64,350 and multiply by 100		S_{SW} =	0			9.65

FIGURE 7
SURFACE WATER ROUTE WORK SHEET

Air Route Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max Score	Ref. (Section)
1 Observed Release	0 45	1	0	45	5.1
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					5.2
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					5.3
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			

FIGURE 9
AIR ROUTE WORK SHEET

	S	S^2
Groundwater Route Score (S_{gw})	79.43	6,309.12
Surface Water Route Score (S_{sw})	0	0
Air Route Score (S_a)	0	0
$S_{gw}^2 + S_{sw}^2 + S_a^2$		6,309.12
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		79.43
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73 = S_M =$		45.91

FIGURE 10
WORKSHEET FOR COMPUTING S_M

Maximum S_M = 46.25

Fire and Explosion Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max Score	Ref. (Section)
1 Containment	1 3	1		3	7.1
2 Waste Characteristics					7.2
Direct Evidence	0 3	1		3	
Ignitability	0 1 2 3	1		3	
Reactivity	0 1 2 3	1		3	
Incompatibility	0 1 2 3	1		3	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8	
Total Waste Characteristics Score				20	
3 Targets					7.3
Distance to Nearest Population	0 1 2 3 4 5	1		5	
Distance to Nearest Building	0 1 2 3	1		3	
Distance to Sensitive Environment	0 1 2 3	1		3	
Land Use	0 1 2 3	1		3	
Population Within 2-Mile Radius	0 1 2 3 4 5	1		5	
Buildings Within 2-Mile Radius	0 1 2 3 4 5	1		5	
Total Targets Score				24	
4 Multiply 1 x 2 x 3				1,440	
5 Divide line 4 by 1,440 and multiply by 100		S_{FE} = N/A			

FIGURE 11
FIRE AND EXPLOSION WORK SHEET

Direct Contact Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max Score	Ref. (Section)
1 Observed Incident	(0) 45	1	0	45	8.1
If line 1 is 45, proceed to line 4 If line 1 is 0, proceed to line 2					
2 Accessibility	0 1 2 (3)	1	3	3	8.2
3 Containment	(0) 15	1	0	15	8.3
4 Waste Characteristics Toxicity	(0) 1 2 3	5	0	15	8.4
5 Targets					8.5
Population Within a 1-Mile Radius	0 1 (2) 3 4 5	4	8	20	
Distance to a Critical Habitat	(0) 1 2 3	4	0	12	
Total Targets Score			8	32	
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			0	21,600	
7 Divide line 6 by 21,600 and multiply by 100	S_{DC} =		0		

FIGURE 12
DIRECT CONTACT WORK SHEET

DOCUMENTATION RECORDS
FOR
HAZARD RANKING SYSTEM

INSTRUCTIONS: As briefly as possible, summarize the information you used to assign the score for each factor (e.g., "Waste quantity = 4,230 drums plus 800 cubic yards of sludges"). The source of information should be provided for each entry and should be a bibliographic-type reference. Include the location of the document.

FACILITY NAME: Town of Saugerties Landfill

LOCATION: Town of Saugerties, Ulster County, New York

DATE SCORED: 29 October 1986

PERSON SCORING: EA Science and Technology

PRIMARY SOURCES(S) OF INFORMATION (e.g., EPA region, state, FIT, etc.)

Ulster County Department of Health
NYSDEC Region 3
G. Schovel, Town Supervisor (Saugerties)
EA Site Inspection

FACTORS NOT SCORED DUE TO INSUFFICIENT INFORMATION:

Air Route

COMMENTS OR QUALIFICATIONS:

An observed release to ground-water has been scored based on analytical data (parameters include iron, manganese, and zinc) from two existing onsite monitoring wells. The integrity of these existing wells is unknown because they are unsecured (casings not locked), as observed during EA's site inspection.

Surface water route scored on the basis that the landfill is adequately covered.

The local fire marshal does not consider the site to be an imminent fire or explosion threat.

Direct contact scored on the basis that the landfill is adequately covered.

GROUND WATER ROUTE

1 OBSERVED RELEASE

Contaminants detected (5 maximum):

Manganese, zinc, and iron.

Reference: 1.

Rationale for attributing the contaminants to the facility:

Analytical data from ground-water sampling conducted in February 1985 indicated levels of manganese (15 mg/liter) and zinc (1.5 mg/liter) in the southern (downgradient) monitoring well as compared to levels of 0.95 mg/liter and 0.11 mg/liter, respectively, in the northern (upgradient) monitoring well. In March 1982, manganese was detected at a concentration of 7.3 mg/liter in the southern monitoring well, while it was not detected in the northern well. In May 1979, concentrations of iron and manganese were reported to be 8.3 mg/liter and 6.2 mg/liter, respectively, in the "down-gradient" well, as compared to concentrations of 0.76 mg/liter and 0.18 mg/liter, respectively, in the "upgradient" well.

Assigned value = 45.

References: 1 and 2.

***

2 ROUTE CHARACTERISTICS

Depth to Aquifer of Concern

Name/description of aquifer(s) of concern:

Depth(s) from the ground surface to the highest seasonal level of the saturated zone (water table[s]) of the aquifer of concern:

Depth from the ground surface to the lowest point of waste disposal/storage:

Net Precipitation

Mean annual or seasonal precipitation (list months for seasonal):

Mean annual lake or seasonal evaporation (list months for seasonal):

Net precipitation (subtract the above figures):

Permeability of Unsaturated Zone

Soil type in unsaturated zone:

Permeability associated with soil type:

Physical State

Physical state of substances at time of disposal (or at present time for generated gases):

***

3 CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

Landfill.

Method with highest score:

No liner or leachate collection system.

Assigned value = 3.

Reference: 2.

4 WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated:

Iron oxide, iron, zinc oxide, manganese oxide, manganese, and zinc.

References: 1, 3, and 4.

Compound with highest score:

Iron.

Assigned value = 18.

References: 2 and 5.

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

Quantity assumed to be at least 350 tons.

Basis of estimating and/or computing waste quantity:

The site reportedly received 750 tons of grinding swarf (components unknown), 350 tons of grinding swarf (95 percent iron with oil and water), and 55 cu yds of wastewater treatment sludge per year for several years.

References: 3 and 4.

Assigned value = 5.

Reference: 2.

***

5 TARGETS

Ground Water Use

Use(s) of aquifer(s) of concern within a 3-mile radius of the facility:

Drinking water, no alternate supply available.

Reference: 6, 7, and 8.

Assigned value = 3.

Reference: 2.

Distance to Nearest Well

Location of nearest well drawing from aquifer of concern or occupied building not served by a public water supply:

Onsite well located at the garage/office.

References: 9 and 10.

Distance to above well or building:

Approximately 200 ft southeast of the old dump area, and approximately 1,000 ft north of the most distant edge of the landfill.

Reference: 11.

Assigned value = 4.

Reference: 2.

Population Served by Ground Water Wells Within a 3-Mile Radius

Identified water-supply well(s) drawing from aquifer(s) of concern within a 3-mile radius and populations served by each:

Supplies	Population:
Hudson Valley Water Company No. 4	350
Trnka Farms Mobile Home Park	138
Private wells (1,059 wells x 3.8)	4,024
	4,511

References: 7, 8, 11, and 12.

Computation of land area irrigated by supply well(s) drawing from aquifer(s) of concern within a 3-mile radius, and conversion to population (1.5 people per acre):

Although there is agricultural land within 3 mi of the site, none of it is irrigated.

Reference: 13.

Total population served by ground water within a 3-mile radius:

Assigned value = 4.

Reference: 2.

SURFACE WATER ROUTE

1 OBSERVED RELEASE

Contaminants detected in surface water at the facility or downhill from it (5 maximum):

No data available.

Assigned value = 0.

Reference: 2.

Rationale for attributing the contaminants to the facility:

***

2 ROUTE CHARACTERISTICS

Facility Slope and Intervening Terrain

Average slope of facility in percent:

Average slope is 13 percent. Estimated with Suunto clinometer.

Reference: 14.

Name/description of nearest downslope surface water:

Saw Kill.

Reference: 14.

Average slope of terrain between facility and above-cited surface water body in percent:

Average slope is <1 percent. Estimated with Suunto clinometer and from topographic maps.

References: 11 and 14.

Is the facility located either totally or partially in surface water?

No.

Reference: 11.

Is the facility completely surrounded by areas of higher elevation?

No.

References: 11 and 14.

Assigned value = 0.

Reference: 2.

1-Year, 24-Hour Rainfall in Inches

2.5 in.

Assigned value = 2.

Reference: 2.

Distance to Nearest Downslope Surface Water

Approximately 2,000 ft (measured from northernmost edge of landfill).

References: 11 and 14

Assigned value = 2.

Reference: 2.

Physical State of Waste

Sludge and solid: grinding swarfs and wastewater treatment sludge.

References: 4 and 5.

Assigned value = 3.

Reference: 2.

***

3 CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

Completed portions of the landfill appeared to be adequately covered.

Reference: 14.

Method with highest score:

Landfill appears to have adequate cover.

Assigned value = 0.

Reference: 2.

***

4 WASTE CHARACTERISTICS

Containment score = 0, therefore, waste characteristics are not scored.

Reference: 2.

Toxicity and Persistence

Compound(s) evaluated

Compound with highest score:

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

Basis of estimating and/or computing waste quantity:

***

5 TARGETS

Surface Water Use

Use(s) of surface water within 3 miles downstream of the hazardous substance:

Recreational.

Reference: 15.

Assigned value = 2.

Reference: 2.

Is there tidal influence?

No.

Reference: 11.

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

None.

Reference: 11.

Distance to 5-acre (minimum) freshwater wetland, if 1 mile or less:

None.

Reference: 11.

Distance to critical habitat of an endangered species or national wildlife refuge, if 1 mile or less:

None.

Reference: 16.

Assigned value = 0.

Reference: 2.

Population Served by Surface Water

Location(s) of water supply intake(s) within 3 miles (free-flowing bodies) or 1 mile (static waterbodies) downstream of the hazardous substance and population served by each intake:

None.

References: 7, 8, and 13.

Computation of land area irrigated by above-cited intake(s) and conversion to population (1.5 people per acre).

None. No land is irrigated within 3 mi of the site.

References: 7, 8, and 13.

Total population served:

Zero.

References: 7, 8, and 13.

Name/description of nearest of above waterbodies:

Distance to above-cited intakes, measured in stream miles.

AIR ROUTE

1 OBSERVED RELEASE

Contaminants detected:

No data available.

Reference: Chapter 3.

Assigned value = 0.

Reference: 2.

Date and location of detection of contaminants

Methods used to detect the contaminants:

Rationale for attributing the contaminants to the site:

***

2 WASTE CHARACTERISTICS

Reactivity and Incompatibility

Most reactive compound:

Most incompatible pair of compounds:

Toxicity

Most toxic compound:

Hazardous Waste Quantity

Total quantity of hazardous waste:

Basis of estimating and/or computing waste quantity:

3 TARGETS

Population Within 4-Mile Radius

Circle radius used, give population, and indicate how determined:

0 to 4 mi 0 to 1 mi 0 to 1/2 mi 0 to 1/4 mi

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

Distance to 5-acre (minimum) freshwater wetland, if 1 mile or less:

Distance to critical habitat of an endangered species, if 1 mile or less:

Land Use

Distance to commercial/industrial area, if 1 mile or less:

Distance to national or state park, forest, or wildlife reserve if 2 miles or less:

Distance to residential area, if 2 miles or less:

Distance to agricultural land in production within past 5 years, if 1 mile or less:

Distance to prime agricultural land in production within past 5 years, if 2 miles or less:

Is a historic or landmark site (National Register or Historic Places and National Natural Landmarks) within the view of the site?

FIRE AND EXPLOSION

The local fire marshal has not certified that the site presents a significant fire or explosion threat (Reference: 17). There are no analytical data available in any of the agency files examined (Chapter 3).

1 CONTAINMENT

Hazardous substances present:

Type of containment, if applicable:

***

2 WASTE CHARACTERISTICS

Direct Evidence

Type of instrument and measurements:

Ignitability

Compound used:

Reactivity

Most reactive compound:

Incompatibility

Most incompatible pair of compounds:

***

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility:

Basis of estimating and/or computing waste quantity:

***

3 TARGETS

Distance to Nearest Population

Distance to Nearest Building

Distance to Sensitive Environment

Distance to wetlands:

Distance to critical habitat:

Land Use

Distance to commercial/industrial area, if 1 mile or less:

Distance to national or state park, forest, or wildlife reserve, if 2 miles or less:

Distance to residential area, if 2 miles or less:

Distance to agricultural land in production within past 5 years, if 1 mile or less:

Distance to prime agricultural land in production within past 5 years, if 2 miles or less:

Is a historic or landmark site (National Register or Historic Places and National Natural Landmarks) within the view of the site?

Population Within 2-Mile Radius

Buildings Within 2-Mile Radius

DIRECT CONTACT

1 OBSERVED INCIDENT

Date, location, and pertinent details of incident:

No observed incident on record.

Reference: Chapter 3.

Assigned value = 0.

Reference: 2.

***

2 ACCESSIBILITY

Describe type of barrier(s):

Barriers do not completely surround the facility.

Reference: 14.

Assigned value = 3.

Reference: 2.

***

3 CONTAINMENT

Type of containment, if applicable:

Landfill is adequately covered.

Reference: 14.

Assigned value = 0.

Reference: 2.

***

4 WASTE CHARACTERISTICS

Containment score = 0, therefore, waste characteristics are not scored.

Reference: 2.

Toxicity

Compounds evaluated:

Compound with highest score:

***

5 TARGETS

Population Within 1-Mile Radius

597 (157 houses x 3.8).

Reference: 11.

Assigned value = 2.

Reference: 2.

Distance to Critical Habitat (of Endangered Species)

None within 1 mi.

Reference: 16.

Assigned value = 0.

Reference: 2.

REFERENCES

1. Analytical data for ground-water monitoring wells located at the Town of Saugerties Landfill. (Appendixes 1.1-11 and 1.1-12.)

2. U.S. Environmental Protection Agency. 1984. Uncontrolled Hazardous Waste Site Ranking System. A Users Manual. (HW-10). Originally published in the July 16, 1982 Federal Register.

3. New York State Department of Environmental Conservation (NYSDEC). Hazardous Waste Disposal Sites Report. (Appendix 1.1-6.)

4. NYSDEC. 1980. Hazardous Waste Disposal Sites Report. 25 March. (Appendix 1.1-7.)

5. Sax, N. Irving. 1979. Dangerous Properties of Industrial Materials. Van Nostrand Reinhold Company, New York.

6. Frimpter, M. 1970. Ground Water Basic Orange and Ulster Counties, New York. New York Water Resources Commission. (Appendix 1.3-3.)

7. New York State Department of Health (NYSDOH). 1982. New York State Atlas of Community Water System Sources.

8. NYSDOH. 1982. New York State Atlas of Community Water System Sources. (Appendix 1.3-4.)

9. Town of Saugerties Landfill Report. (Appendix 1.1-3).

10. Letter dated 29 May 1978 from A. Rossi, Consulting Engineer, to D. Palen, Ulster County Department of Health, regarding Town of Saugerties Landfill. (Appendix 1.1-4.)

11. USGS. 1980 photorevised. 7.5-Minute Topographic Series: Woodstock Quad. (Appendix 1.2-1.)

12. Myer, W. 1986. Ulster County Department of Health. Personal Communication. 6 November. (Appendix 1.5-1.)

13. Sisco, G. 1986. District Conservationist. Ulster County SWCD. Personal Communication. 7 March. (Appendix 1.5-2.)

14. EA Site Inspection, 23 April 1986.

15. Elliot, W. 1986. Regional Fisheries Manager. NYSDEC Region 3. Personal Communication. 3 November. (Appendix 1.5-3.)

16. Ozard, J.W. 1986. Sr. Wildlife Biologist. NYSDEC Wildlife Resource Center, Significant Habitat Unit. Personal Communication. 26 February. (Appendix 1.5-4.)

17. Wood, J. 1986. Fire Chief. Town of Saugerties Fire Department. Personal Communication. 19 December. (Appendix 1.5-5.)

[redacted]

United States
Environmental Protection
Agency

Office of Emergency and
Remedial Response
Washington, DC 20460

EPA Form 2070-12
July, 1981

Town of Saugerties Landfill

EPA

Potential Hazardous Waste Site

Preliminary Assessment

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	D9805057636

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Town of Saugerties Landfill	Route 212 (South of Shultis Corners)

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Town of Saugerties	NY	12477	Ulster		

09 COORDINATES LATITUDE	LONGITUDE
42° 02' 30"	74° 04' 30"

10 DIRECTIONS TO SITE (Starting from nearest public road)

On Route 212 approximately 1 mile south of Glasco Turnpike.

III. RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residential)
Town of Saugerties	Main Street

03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER
Saugerties	NY	12477	(914) 246-2400

07 OPERATOR (If known and different from owner)	08 STREET (Business, mailing, residential)
Same as owner	

09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER
			( )

13 TYPE OF OWNERSHIP (Check one)

☐ A. PRIVATE ☐ B. FEDERAL: _____ (Agency name) ☐ C. STATE ☐ D. COUNTY ☒ E. MUNICIPAL

☐ F. OTHER: _____ (Specify) ☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

☐ A. RCRA 3001 DATE RECEIVED: ___/___/___ (MONTH DAY YEAR) ☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: ___/___/___ (MONTH DAY YEAR) ☐ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION ☐ YES ☐ NO DATE Pending (MONTH DAY YEAR)

BY (Check all that apply) ☐ A. EPA ☐ B. EPA CONTRACTOR ☐ C. STATE ☒ D. OTHER CONTRACTOR ☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: _____ (Specify)

CONTRACTOR NAME(S): EA Science and Technology

02 SITE STATUS (Check one)	03 YEARS OF OPERATION		
☒ A. ACTIVE ☐ B. INACTIVE ☐ C. UNKNOWN	1969 (BEGINNING YEAR)	present (ENDING YEAR)	☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

The site reportedly received grinding sludge, grinding swarf (95% iron oxide with oil and water) and waste water treatment sludge from Ferroxcube, a local electronics manufacturer. The sludge was high in iron, zinc oxide, and manganese oxide.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

Potential for ground-water contamination.

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)

☐ A. HIGH (Inspection required promptly) ☐ B. MEDIUM (Inspection required) ☐ C. LOW (Inspect on time available basis) ☐ D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NUMBER
Rebecca Ligotino	EA Science and Technology	(914) 692-6706

04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE
Thomas Porter		EA	(914) 692-6706	3 / 23 / 86 (MONTH DAY YEAR)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	D9805057636

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

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

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

TONS: Unknown

CUBIC YARDS:

NO. OF DRUMS:

03 WASTE CHARACTERISTICS (Check all that apply)

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

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	1100	TN/year	for several years
OLW	OILY WASTE	55	CY/year	for several years
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	unknown		Sludge contained MES

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

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
MES	Iron	7439-89-6	LF	Unknown	
MES	Manganese	7439-96-5	LF	Unknown	
MES	Zinc	7440-66-6	LF	Unknown	

V. FEEDSTOCKS (See Appendix for CAS Numbers) Not applicable

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

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

New York State Department of Environmental Conservation Region 3 files

[redacted]

United States
Environmental Protection
Agency

Office of Emergency and
Remedial Response
Washington, DC 20460

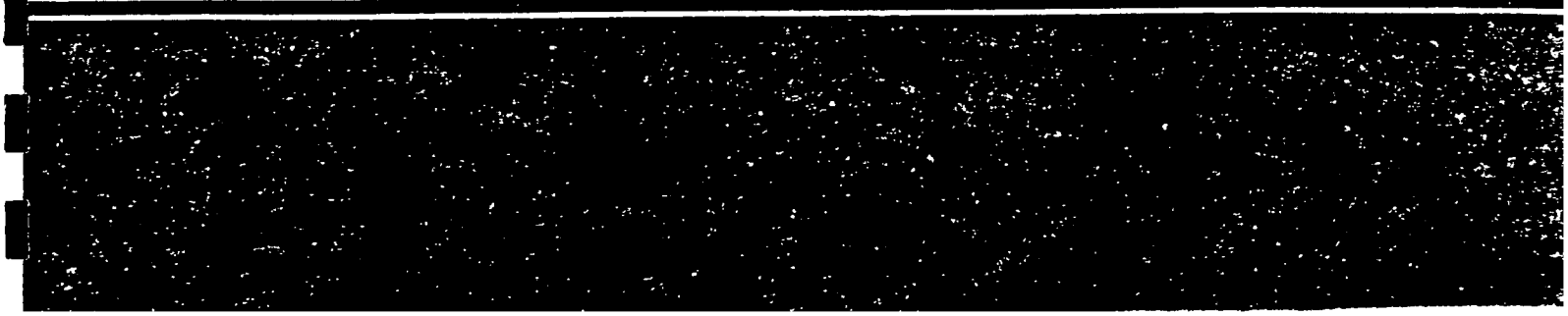
EPA Form 2070-13
July, 1981

Town of Saugerties Landfill

EPA

Potential Hazardous Waste Site

Site Inspection Report



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

EPA

I. IDENTIFICATION
01 STATE: NY | 02 SITE NUMBER: D9805057636

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER				
Town of Saugerties Landfill	Route 212				
03 CITY	**04 STATE**	**05 ZIP CODE**	**06 COUNTY**	**07 COUNTY CODE**	**08 CONG DIST**
Saugerties	NY	12477	Ulster		

09 COORDINATES: LATITUDE 42° 02' 30" | LONGITUDE 74° 04' 30"

10 TYPE OF OWNERSHIP (Check one): ☐ A. PRIVATE ☐ B. FEDERAL _____ ☐ C. STATE ☐ D. COUNTY ☒ E. MUNICIPAL ☐ F. OTHER _____ ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
04 / 23 / 86 (MONTH DAY YEAR)	☒ ACTIVE ☐ INACTIVE	1969 (BEGINNING YEAR) present (ENDING YEAR) ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)
☐ A. EPA ☐ B. EPA CONTRACTOR _____ (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR _____ (Name of firm)
☐ E. STATE ☒ F. STATE CONTRACTOR EA Science and Tech (Name of firm) ☐ G. OTHER _____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
Andris Lapins	Geologist	EA	(914) 692-6706
09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
Ellen Bidwell	Geologist	EA	(914) 692-6706
			( )
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
Mrs. G. Schovel	Town Supervisor	Town of Saugerties	(914) 246-2809
		Town Hall	( )
		Main Street	( )
		Saugerties, NY 12477	( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	1000 hrs	Windy, cold, 1 in. snow cover.

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Rebecca Ligotino	EA Science and Technology	(914) 692-6706

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Ellen Bidwell		EA	(914) 692-6706	10 / 29 / 86 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	D9805057636

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

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

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

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

03 WASTE CHARACTERISTICS (Check all that apply)

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

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	55	yd^3/yr	For several years, received wastewater treatment sludge from Ferroxcube, local electronics manufacturer. Sludge contained iron, zinc oxide, and manganese oxide. Also, received 750 tons/yr grinding swarf (components unknown) and 350 tons/yr grinding swarf (95 percent iron oxide with oil and water).
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

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

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION

V. FEEDSTOCKS (See Appendix for CAS Numbers) Not applicable

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

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

EA Site Inspection.
Appendixes 1.1-6 and 1.1-7.

EPA FORM 2070-13(7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	D9805057636

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 4,511 — 04 NARRATIVE DESCRIPTION

Ground water in the aquifer of concern has been developed by the Hudson Valley Water Company No. 4, Trnka Farms Mobile Home Park, and numerous private water supply sources.

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

The nearest surface waterbody, the Saw Kill, is used for recreational purposes only.

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

None known or reported.

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

None known or reported.

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

None known or reported.

01 ☐ F. CONTAMINATION OF SOIL — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: _____ (Acres) — 04 NARRATIVE DESCRIPTION

None known or reported.

01 ☒ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 4,511 — 04 NARRATIVE DESCRIPTION

Limited to the population served by ground water from the aquifer of concern within a 3-mi radius of the site.

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

None known or reported.

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

None known or reported.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	D9805057636

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

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

None known or reported.

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

None known or reported.

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

None known or reported.

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES (Spills/Runoff/Standing liquids, Leaking drums) — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 4,511 — 04 NARRATIVE DESCRIPTION

The landfill is unlined. The depth of the landfill is only a few ft above the water table.

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

None known or reported.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None known or reported.

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None known or reported.

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

None known or reported.

III. TOTAL POPULATION POTENTIALLY AFFECTED: 4,511

IV. COMMENTS

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

USGS. 1980 photorevised. 7.5-Minute Planimetric Series. Woodstock Quad.
NYSDOT. 1973. 7.5-Minute Planimetric Series. Bearsville Quad.
Appendixes 1.1-2, 1.1-3, 1.1-4, 1.1-6, 1.1-7, 1.3-2, and 1.3-3.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	D9805057636

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES				
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
☒ G. STATE (Specify)	0549	3/14/79	3/14/82	ECL Article 27, Title 5, Part 360.
☐ H. LOCAL (Specify)				
☐ I. OTHER (Specify)				
☐ J. NONE				

III. SITE DESCRIPTION

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

04 TREATMENT (Check all that apply)

- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☐ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☐ H. OTHER (Specify)

05 OTHER

- ☒ A. BUILDINGS ON SITE

06 AREA OF SITE

15 (Acres)

07 COMMENTS

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

☐ A. ADEQUATE, SECURE ☐ B. MODERATE ☒ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

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

The landfill is unlined and has no leachate collection system.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☐ YES ☒ NO

02 COMMENTS

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

Appendixes 1.1-2 and 1.1-3.
EA Site Inspection.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	D9805057636

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)

	SURFACE	WELL
COMMUNITY	A. ☐	B. ☒
NON-COMMUNITY	C. ☐	D. ☒

02 STATUS Unknown

ENDANGERED	AFFECTED	MONITORED
A. ☐	B. ☐	C. ☐
D. ☐	E. ☐	F. ☐

03 DISTANCE TO SITE

A. 2.9 (mi)
B. 0.04 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☒ A. ONLY SOURCE FOR DRINKING ☐ B. DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available) ☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available) ☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER 4,511

03 DISTANCE TO NEAREST DRINKING WATER WELL 0.04 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
20 (ft)	SSW	0 (ft)	(gpd)	☒ YES ☐ NO

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

Ground water in the aquifer of concern has been developed by the Hudson Valley Water Company No. 4, Trnka Farms Mobile Home Park, and numerous private water supply sources.

10 RECHARGE AREA		11 DISCHARGE AREA	
☒ YES ☐ NO	COMMENTS	☐ YES ☐ NO	COMMENTS

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

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

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
Saw Kill	☐	0.19 (mi)
	☐	(mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 597 NO. OF PERSONS	B. 3,021 NO. OF PERSONS	C. 7,432 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION 0.04 (mi)

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

04 DISTANCE TO NEAREST OFF-SITE BUILDING 0.25 (mi)

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

Site is located in a rural area with medium density residential developments to the west and southwest.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	D9805057636

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

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

02 PERMEABILITY OF BEDROCK (Check one) unknown

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

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH	
approx. 0 (ft)	Unknown (ft)	unknown	

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
27 (in)	2.5 (in)	13 %	SW	<1 %

09 FLOOD POTENTIAL N/A

SITE IS IN _____ YEAR FLOODPLAIN

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

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE: A. _____ (mi)

OTHER: B. _____ (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

_____ (mi)

ENDANGERED SPECIES: _____

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AGRICULTURAL LANDS: AG LAND
A. 0.30 (mi)	B. 0.25 (mi)	C. 0.8 (mi)	D. 0.8 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

Site is surrounded by hilly topography and has an elevation of approximately 480 ft above mean sea level. Large areas of the landfill have a slope of 1-3 percent, however, working faces of the landfill have slopes ranging from 20 to 45 percent. Two drainage ditches to the north and south of the landfill divert runoff away from the landfill operation. The surface runoff follows the ditchline which runs to the southwest. Regional slope of terrain in the immediate vicinity is to the south-southwest at 1 percent.

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

Appendix 1.2-1; Section 4.2 and 4.3; Appendixes 1.3-1 through 1.3-3 and 1.5-5.
EA Site Inspection.
USGS. 1980 photorevised. 7.5-Minute Series. Woodstock Quad.
USGS. 1945. Map of Flood-Prone Areas. 7.5-Minute Topographic Series. Woodstock Quad.
Ozard, J. 1986. NYSDEC. Personal Communication, 6 March.
NYSDOH. 1982. NYS Atlas of Community Water System Sources.
NYSDOH. 1984. Inventory-Community Water Systems. Volumes I and II.
USGS. 1951. Average Annual Runoff and Precipitation in the New England-New York Area. Hydrogolic Investigations Atlas HA 7.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	D9805057636

II. SAMPLES TAKEN

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

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
Slope	Esitmated with a Suunto Clinometer.

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☒ GROUND ☐ AERIAL

02 IN CUSTODY OF EA Science and Technology
(Name of organization or individual)

03 MAPS ☒ YES ☐ NO

04 LOCATION OF MAPS EA Science and Technology

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

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

EA Site Inspection.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	D9805057636

II. CURRENT OWNER(S) / PARENT COMPANY (if applicable)

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER
Town of Saugerties			

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE
Route 212			

05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE
Saugerties	NY	12477			

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE

III. PREVIOUS OWNER(S) (List most recent first) / IV. REALTY OWNER(S) (If applicable; list most recent first)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
Charles Keefe			

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
unknown			

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

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

Appendix 1.1-1.

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	D9805057636

II. CURRENT OPERATOR (Provide if different from owner)

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

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

PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)

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

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

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	D9805057636

II. ON-SITE GENERATOR

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

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
Ferroxcube Corporation			
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
P.O. Box 359			
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
Saugerties	NY / 12477		
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

IV. TRANSPORTER(S)

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

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

Appendixes 1.1-6 through 1.1-8.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE: NY | 02 SITE NUMBER: D9805057636

II. PAST RESPONSE ACTIVITIES None

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

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	D9805057636

II PAST RESPONSE ACTIVITIES (Continued)

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ S. CAPPING/COVERING — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

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

Chapter 3.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	D9805057636

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☐ YES ☒ NO

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

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

Chapter 3.

6. ASSESSMENT OF DATA ADEQUACY AND RECOMMENDATIONS

6.1 ADEQUACY OF EXISTING DATA

The available data are considered insufficient to prepare a final HRS score for this site. Sediment, ground-water, and surface water Hazardous Substance List (HSL) quality data are lacking.

6.2 RECOMMENDATIONS

In order to prepare a final HRS score for this site, analytical data regarding the HSL quality of the ground water, surface water, and sediment will be necessary, thus requiring performance of a Phase II investigation. The proposed Phase II study would include the installation of six test borings/ observation wells, and the collection and analysis of ground-water, surface water, and sediment samples.

6.3 PHASE II WORK PLAN

6.3.1 Task 1 - Mobilization and Site Reconnaissance

Project mobilization includes review of the Phase I report and updating the site database with any new information made available since completion of the Phase I report. Based on that review, a draft scope of work for this site will

be agreed to and a project schedule developed. At this time, a draft Quality Assurance/Quality Control (QA/QC) document will be prepared in accordance with the most up-to-date NYSDEC guidelines.

Site reconnaissance will be performed to examine general site access for Phase II studies. Site reconnaissance will familiarize key project personnel with the site, enable the project geologists to evaluate potential boring/well locations, and enable the project Health and Safety Officer to develop specific health and safety requirements for the field activities. Emergency, fire, and hospital services will be identified. Standard practice during site reconnaissance is an air survey with a photoionization detector (HNU). The air survey would be performed around the site perimeter and throughout the site for safety purposes. Detection of releases to air during site reconnaissance may warrant further confirmation studies. Based on the Phase I study, it is expected that field activities will require only Level D health and safety protective measures.

6.3.2 Task 2 - Geophysics

Multidepth EM and earth resistivity surveying will be performed around the site area perimeter to evaluate the extent of the fill area, the potential presence of ground-water contaminant plumes, and stratigraphic conditions. The number of stations and value of depth settings will be determined on the basis of field conditions. Results of the geophysics will be used to refine the specifications for locations, depths, and number of observation wells to be installed.

6.3.3 Task 3 - Preparation of Final Sampling Plan

All data collected during Tasks 1 and 2 will be evaluated to finalize sampling and boring/well locations. The final sampling plan will be developed and submitted to NYSDEC for approval. The plan will include final sampling locations, boring and well specifications, and reference pertinent portions of the QA/QC Plan. A final budget will be developed to complete the drilling and sampling program.

6.3.4 Task 4 - Test Borings and Observation Wells

Although there are two existing onsite monitoring wells, their integrity is unknown because they are unsecured (casing not locked), as observed during EA's Site Reconnaissance. Therefore, based upon currently available information, the drilling program is proposed to include the installation of six test borings/observation wells: one well upgradient (apparently southwest of the "old disposal area") of the entire site, two wells downgradient (apparently north to northeast) of the "original disposal area", and three wells downgradient (apparently south to southeast) of the current landfill area. This work would be performed under the fulltime supervision of a geologist. It is anticipated that the hollow-stem auger drilling method will be used in the unconsolidated sediment, and NX-coring in bedrock. Prior to the drilling of each boring/well, and at the completion of the last boring/well, the drilling equipment which comes in contact with subsurface materials will be steam-cleaned, as well as the split-spoon sampler after obtaining each sample. Soil sampling will be performed as necessary using a split-spoon sampler at approximately 5-ft intervals and at detected major stratigraphic changes.

An HNU would be used to monitor the potential organic vapors emitted during drilling operations and from each soil sample. Samples of major soil/unconsolidated sediment will be collected for grain-size and/or Atterburg Limits analysis.

It is anticipated that the six wells will be completed in the shale/sandstone bedrock, approximately 10-15 ft below the water table. Standard construction of a well completed in bedrock would include 4-in. diameter steel pipe set approximately 5 ft into bedrock, grouted to ground surface, and completed with a locked steel cap. The bedrock well would be continued as an open NX-core hole below the surface.

Upon completion and development of the wells by air surging/pumping, the vertical elevation of the upper rim of each well casing and the horizontal location will be surveyed in order to aid in evaluation of the ground-water flow direction. Depending upon the yield of each Phase II well, a short-term, low-yield pumping test will be performed in each well.

For cost estimating purposes, it is assumed that:

a. The depth of each of the three wells proposed to be located in the vicinity of the "original disposal area" will be 30 ft below grade. The depth of each of the three wells proposed to be located south to southeast of the current landfill area will be 20 ft below grade.

b. The six wells will require 13 days to install, develop, and test.

c. All drill sites are accessible by truck-mounted drilling rigs as determined by the driller.

d. There are no excessive amounts of cobbles/boulders which would increase drilling time.

e. Steam-cleaning of drilling/sampling equipment will be performed at each boring/well location. The fluids will be discharged to ground surface.

f. All drill cuttings, fluids, and development water will be left on, or discharged to, the ground surface in the immediate area of the activity.

g. That permission from appropriate land owners to drill borings/wells on their property will be a simple process (expedited by the NYSDEC, if necessary) so that delays during field operations are not incurred.

6.3.5 Task 5 - Sampling

All sampling and analysis will be conducted in accordance with the project QA/QC Plan. The analytical program for every water sample will include the 130 organic and 25 inorganic parameters listed in Statement of Work No. 784, New York State Department of Environmental Conservation Superfund and Contract Laboratory Protocol, January 1985. Also, all additional non-priority pollutant GC/MS major peaks will be identified and quantified. Major peaks will be considered as those whose area is 10 percent or greater than the

calibrating standard(s). Based upon the currently available information, collection and analysis of the following numbers and types of samples is recommended:

6 Ground-water samples (one from each Phase II well).

1 Composited surface water sample (comprised of one sample from each of the drainage ditches where they flow beyond the southern edge of the landfill).

1 Composited sediment sample (comprised of sediment from the two composited surface water sample locations).

6.3.6 Task 6 - Contamination Assessment

EA will evaluate the data obtained during the records search and field investigation: prepare final HRS scores and documentation forms; complete EPA Form 2070-13 and part One of 2070-12; summarize site history, site characteristics, available sampling and analysis data; and determine the adequacy of the existing data to confirm release, and if there is a population at risk.

6.3.7 Task 7 - Remedial Cost Estimate

EA will evaluate remedial alternatives for the site and develop a list of potential options given the information available on the nature and extent of contamination. Approximate cost estimates for the selected potential remedial options will be computed. This work is not intended to be, or a substitute for, a formal cost effectiveness analysis of potential remedial actions.

6.3.8 Task 8 - Final Phase II Report

In accordance with current (January 1985) NYSDEC guidelines, the Phase II report will include:

a. The results of the Phase II investigation, complete with boring logs, photos, and sketches developed as part of the Phase II field work.
b. Final HRS scores with detailed documentation.
c. Selected potential remedial alternatives and associated cost estimates.

In addition to the final Phase II report, the following raw data and resulting reduction would be provided to NYSDEC:

a. geophysical
b. well logs
c. all sampling forms and data
d. all analytical data
e. chain-of-custody forms
f. other pertinent collected information.

6.3.9 Task 9 - Project Management/Quality Assurance

A Project Manager will be responsible for the supervision, direction, and review of the project activities on a day-to-day basis. A Quality Assurance Officer will ensure that the QA/QC Program protocols are maintained and that the resultant analytical data are accurate.

6.4 PHASE II COST ESTIMATE

Based on the scope of work and assumptions described above, the estimated costs to complete the Phase II investigation of the Town of Saugerties Landfill site are as follows:

Consultant Costs (including labor, direct costs, fee)	$39,850
Drilling Contractor	16,350
Laboratory	13,300
Total	$69,500

[redacted]

Appendix 1.1-1

GLORIA M. SCHOVEL
SUPERVISOR

TOWN OF SAUGERTIES

TOWN HALL
SAUGERTIES, NEW YORK 12477
914-246-2809

p 1 of 6

May 31, 1986

EA Science and Technology
R. D. #2 Box 91
Goshen Turnpike
Middeltown, New York 10940

Dear Ms. Bidwell :

Enclosed is the corrected interview summary.

Also enclosed are copies of the only maps and drawings on file in this office.

There are no barrels buried at the site that we know of.

If we can be of any further help to you, please do contact us.

Sincerely,

Gloria Schovel

Gloria Schovel
Supervisor, Town of Saugerties

GS:cm

INTERVIEW ACKNOWLEDGEMENT FORM

p 2.86

Site Name: Town of Saugerties Landfill

I.D. Number: 356003

Person Contacted: Mrs. Schovel

Date: 23 April 1986

Title: Town Supervisor

Affiliation: Town of Saugerties

Phone No.: (914) 246-2809

Address: Town Hall
Main Street
Saugerties, New York 12477

Persons Making Contact:
EA Representatives:
Bidwell/Lapins

Type of Contact: In Person

Interview Summary:

The Town of Saugerties landfill began operation after Memorial Day weekend of 1970 or 1971, when the neighboring Town of Woodstock ceased to accept its garbage. Initially, the Town of Saugerties dug three trenches on property purchased from Mr. Charles Keaton. The approximately 40-acre parcel was previously used in a shale mining operation, but currently the land is used solely as a landfill. After the three original trenches were filled in, the Town employed the "cell method" of landfilling in the southern section of the property. Current Town employees estimate the waste material in the first cell to be 30-40 feet below ground surface. The second and third cells lie on top of the first. The Town plans to expand the landfill to the shale mining pit after completion of the third cell.

A few weeks after the landfill originally opened, two monitoring wells were installed at the site. Both State and County agencies dictated the location and construction of the wells, and they are still sampled on a regular basis. Because the Town of Saugerties is a rural area, there are few industries that dump in the landfill. Ferrox Cube, a local electronics manufacturer, has dumped various sludges over the years, but since 1979 has been permitted by the New York State Department of Environmental Conservation (NYSDEC) to do so. The sludge is high in iron, zinc oxide, and manganese oxide and is mixed right in with the residential garbage. At one time, leachate was observed emanating from the northern edge of "Cell 2." The Town responded by constructing a 3:1 clay bank over the leachate, and employees believe the problem has been solved. The original three trenches were filled in and seeded, but currently the Town uses the area to dump sludge from the Village treatment plant. Out of the entire 40 acres purchased from Mr. Keaton, the Town estimates only 15 have been landfilled. The entrance gate is locked at night and none of the current employees have seen nor heard of evidence of hazardous or illegal dumping at the landfill.

Acknowledgement:

I have read the above transcript and I agree that it is an accurate summary of the information verbally conveyed to EA Science and Technology interviewers, or as I have revised below, is an accurate account.

Revisions (please write in corrections to above transcript):

purchased from Chas Keefe
WAS NEVER PREVIOUSLY USED AS SHALE MINING OPERATION. (Town does not own mined area at entrence to landfill site.) SHALE USED AT LANDFILL IS MINED ON landFill area to REAR AND SIDE OF Building.

Signature: Gloria Schowe
Supervisor Town of Daugerties **Date:** June 6, 1986

Dear Mrs Bidwell:

Also enclosed please find copies of landfill maps. They are the only ones I could find in the files.

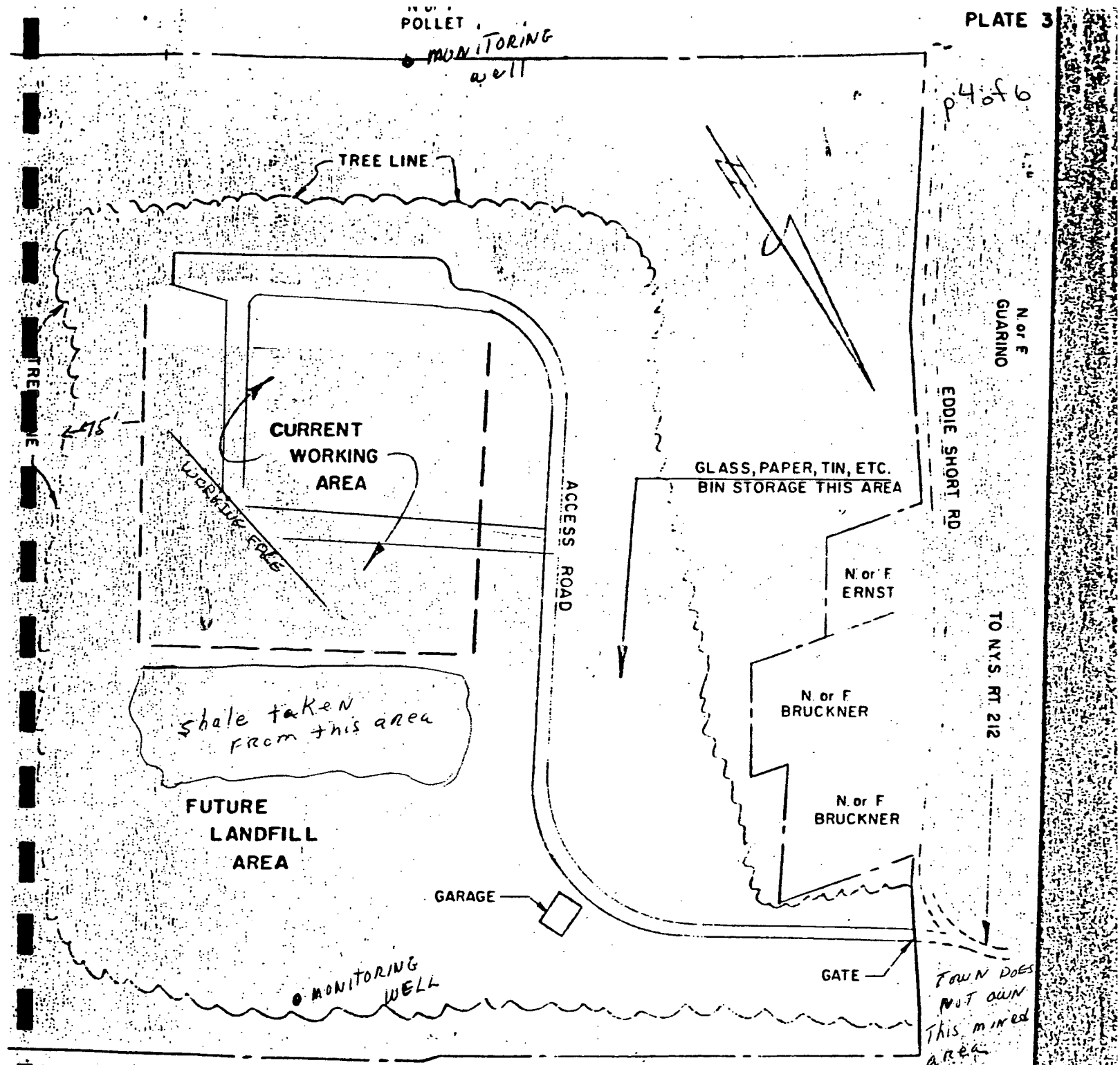
I have noted position of the 2 monitoring wells. The area that the Town has mined for shale is the circled in red ink.

If I can be of further help, please let me know.

Sincerely,

Gloria Schowe

PLATE 3



NOT TO SCALE

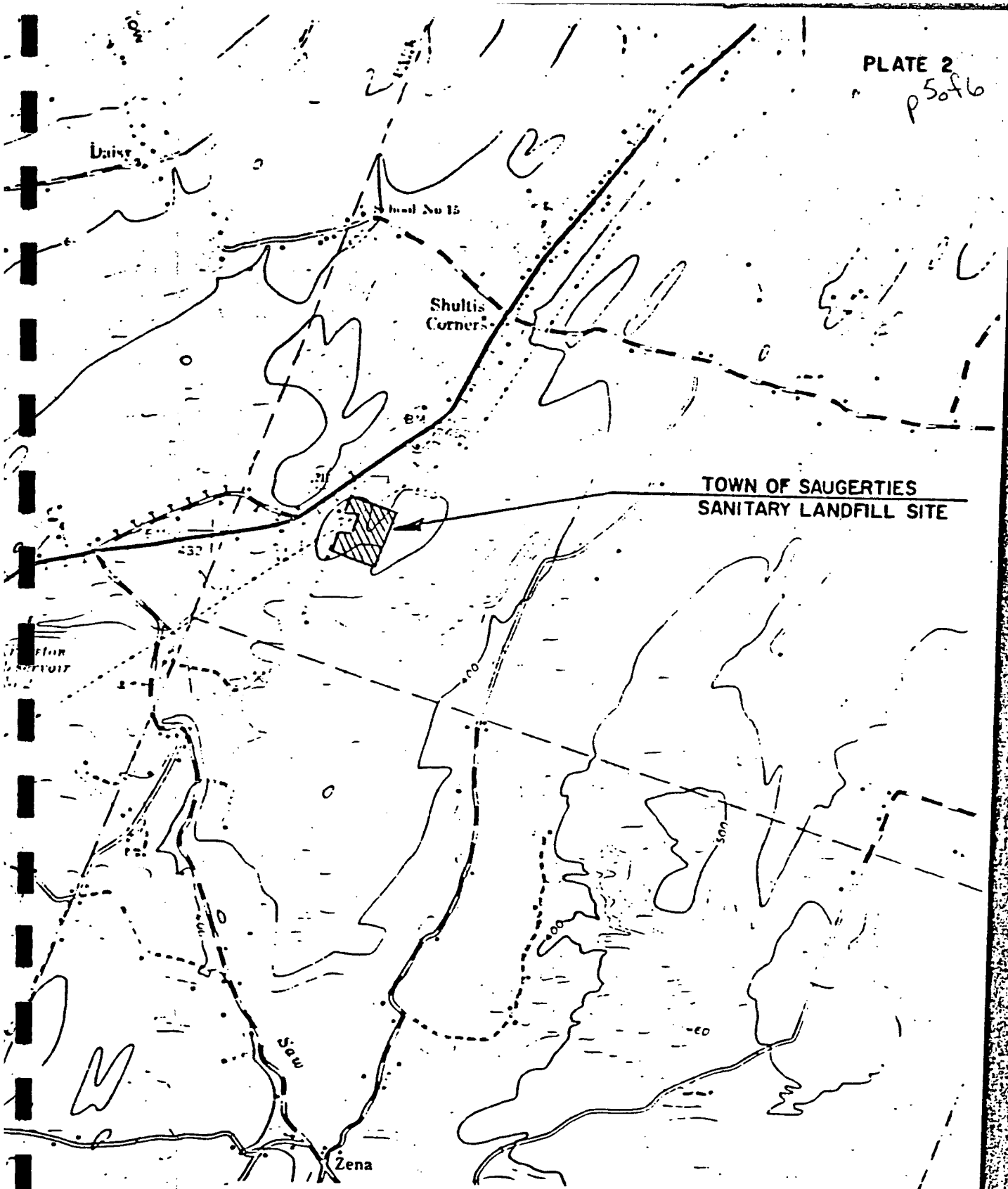
TOWN OF SAUGERTIES
SANITARY LANDFILL FACILITY SKETCH 2

BRENNER & ROSSI
CONSULTING ENGINEERS
TAPPAN, NEW YORK

APRIL, 1978

PLATE 2

p 5 of 6

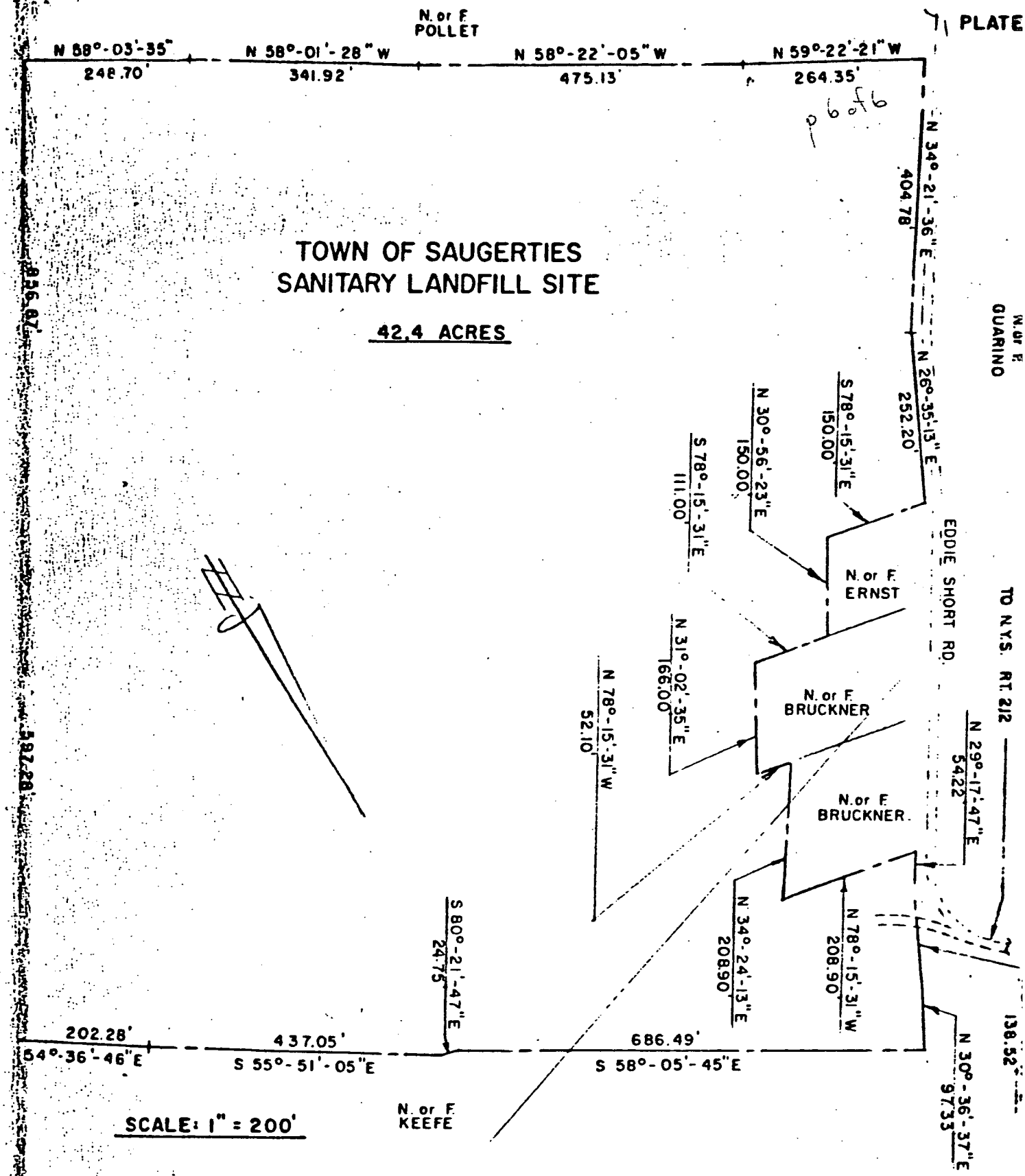


TOWN OF SAUGERTIES
SANITARY LANDFILL SITE LOCATION

LOCATION:
N 42°-02'-30"
W 74°-04'-30"
MAP, WOODSTOCK, N.Y. QUADRANGLE

BRENNER & ROSSI
CONSULTING ENGINEERS
TAPPAN, NEW YORK

PLATE



NOTE:
BOUNDARY SURVEY TAKEN FROM SURVEY PREPARED BY THOMAS W. MAINES, LLS, DATED SEPTEMBER 25, 1969.

TOWN OF SAUGERTIES
SANITARY LANDFILL
SITE BOUNDARY

BRENNER & ROSSI
CONSULTING ENGINEERS
TAPPAN, NEW YORK

56519

Appendix 1.1-2
p 1 of 19

N.Y. Dept. of Health
Bureau of Toxic Substances

Town of Saugerties
Ulster County
New York

SANITARY LANDFILL REPORT

Accompanying

Application for Approval to Construct and
Operate a Solid Waste Management Facility

April, 1978

Brenner & Rossi
Consulting Engineers
4 Independence Avenue
Tappan, New York 10983
(914) 359-2210

TABLE OF CONTENTS

	Page
Plan of Operation	1
Contingency Plan	4
Compliance With Section 360.8	5
A. General Requirements for All Solid Waste Management Facilities	5
B. Requirements for Specific Solid Waste Management Facilities	7
Closure Plan	10

Plates

Plate 1	Site Boundary
Plate 2	Site Location
Plate 3	Facility Sketch

PLAN OF OPERATION

P 4 of 19

I. Plan of Operation

A. In the early part of 1969, the Town of Saugerties purchased a 40 ± acre parcel of land abutting New York State Route 212 and approximately one mile south of Glasco Turnpike, for the sole purpose of operating its own sanitary landfill. On June 3, 1969, the Town received approval to establish a refuse disposal area on said site from the Ulster County Department of Health. (San. Form 240, executed by Dr. V.B. Link, M.D.)

In September of that year a boundary survey of subject site was prepared by Thomas W. Maines, L.L.S., and an operational plan was prepared by Mr. Maines. Said plan showed the access road into the site, the garage, and areas designated for current and future landfill operations. The drawing also contained spot elevations and a benchmark system for vertical control. This drawing provided the operator with the method of fill progression at the site. A topographic survey of the site was never completed.

Data is not available to substantiate depth of past filled areas nor whether final elevations of the fill areas were achieved. An inspection of the site does indicate that previously filled areas do conform with surrounding contours and provide a gradually sloped and drainable area.

Currently, as has been the practice in the past, only refuse generated in the unincorporated part of the Town is deposited at the site. The Village of Saugerties has its own facility.

The quantity of refuse delivered to the site is unknown as this data is not collected by the operator. However, an estimate on quantity can be arrived at by use of standard per capita values. If this information is needed, it will be forthcoming in a subsequent report.

At the present time, the facility is operating under a "cell" method and layers of new refuse are being placed upon consolidated solid waste material. The current operational area is several acres with an available lift height of eight to ten feet.

To prepare for future expansion, the Town sells shale, mined from the site, to a private contractor. The contractor excavates the shale basically to bedrock depth. The excavated area then serves as the future landfill working site.

The life of the landfill depends upon the resolvement of whether the facility can be horizontally expanded into the new mined area.

B. The operator controls the height of each lift by making each new fill section the same general shape as the previous one. The filling starts at the working face, and as the fill progresses its height decreases. An access road leads directly to the working face. By starting the fill at the operating face, obviously good access is afforded to all vehicles. Further, the passing of the vehicles over the covered refuse aids in the compaction process. In addition, the operator constructs drainage ditches on the access road side of the working face. Sloping the surface of the fill away from the working face and toward the ditch directs surface water off the refuse area and does not allow this water to pond or infiltrate into this fill.

In order to maintain desired finished grades at the site, a final contour plan will be established, and the operator will set grade stakes along the working fill area in accordance with the final contour plans.

C. As mentioned previously, surface water is directed to the ditch area by sloping the top of the fill. The surface runoff follows the ditch line away from the landfill operation. There are no provisions at the present time for underground drainage structures in the vicinity of the fill area.

D. The sanitary landfill is fenced at either side of the entrance gate. A sign located at the entrance gate states who may use the facility and gives the schedule of operation. Internal signs delineate the recycle area, the refuse area, the non-putrescible area, and the area where trees and brush may be deposited. In the recycling area, individuals may separate their deposits into glass, aluminum, paper, etc.

The Town issues permits to individuals, businesses, and commercial carriers who wish to utilize the facility. Again, only refuse from the unincorporated area of Town is permitted. There is currently no charge to any Town resident, business, or commercial carrier for use of the landfill.

E. The facility is open Monday thru Friday from 8:30 A.M. to 4:30 P.M., on Saturday from 8:30 A.M. to 3:30 P.M., and is closed on Sundays and Holidays.

A heated building for the storage of the 1974 Caterpillar 977L Loader is located within reasonable proximity to the fill area and serves as a shelter for the operator during inclement weather and as a place to perform routine maintenance on equipment.

During the day, the operator polices the site, checks to insure that only authorized vehicles use the facility, and carries out the basic landfill operations such as spreading, compacting, and covering refuse. The Town has hired a second man to assist the operator. This person checks the vehicles and directs them to the proper disposal areas. At the end of each working day the operator makes such that the entire face of the fill is covered.

F. The operator takes no special precautions during inclement weather except to stockpile cover material in close proximity to the face of the fill. To ensure that satisfactory access is maintained during the winter period, the Town's Highway Department services the road network.

The Town is currently constructing a new road to the landfill site. Once completed, this road will provide better access to the site during the winter period.

CONTINGENCY PLAN

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II. Contingency Plan

A. Equipment Breakdown

In the event of any equipment breakdown, the Town's Highway Department furnishes the landfill operator with a front-end loader for use until repairs are completed on the landfill equipment.

B. Air or Water Contamination Due to Operations

Open burning is not permitted at the site as a general rule. However, when a large quantity of brush and trees accumulate at the landfill, the operator obtains the necessary DEC permit to burn said debris. Further, all refuse is covered at the end of each day's operation. Accordingly, operations at the site do not result in any air or odor problems.

There have been no reported complaints of groundwater contamination at the site. However, some leachate production is evident at the site especially during wet periods. Said productions is minimal during dry summer months. Further, the landfill operator has significantly minimized leachate production by construction of a drainage ditch and use of less permeable soil cover material. If the regulatory agencies demonstrate that a problem does exist, the Town will construct an empoundment area so that the liquid can be tested. If a monitoring program is established, the operator will receive adequate training to ensure that the program is effective and that regulatory requirements are adhered to.

C. Fires

Since the operation of the facility commenced in 1969, there have been no serious fires at the landfill. An adequate water supply system exists to control any small fires.

D. Spills or Releases of Hazardous or Toxic Materials

Hazardous and toxic materials are not permitted at the landfill site. Further, there have been no recorded incidences of the presence of, or the spill or release of, these materials.

COMPLIANCE WITH SECTION 360.8

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III. Compliance with Section 360.8

The following are point by point responses to Section 360.8 of the Rules and Regulations for Solid Waste Management Facilities.

A. General Requirements for All Solid Waste Management Facilities

(1) There are no surface waters crossing the 40 acre site. Solid wastes are presently being deposited on landfilled area. Horizontal expansion of the landfill is being prepared by removal of material from the adjoining area. Adequate cover on the landfill area prevents surface runoff from penetrating the landfill. Runoff from the adjoining excavation area is channeled to a ditch adjacent to the landfill area. Groundwater appears to be well below the excavation level. Therefore, solid waste is not deposited in, and is prevented from entering, surface waters or groundwaters.

(2) Solid waste is not being deposited on any agricultural lands designated Class 1 and/or Class 2 (N.Y.S. Inventory of Soil and Water Conservation Needs, 1967).

(3) In accordance with data on file at the Ulster County Department of Health, some leachate production was evident at the site especially during wet periods. Further, said production is minimal during dry summer months. A wet area downstream from the landfill site receives landfill drainage; however, said flow ceases during dry seasons. The landfill operator has significantly minimized leachate production by construction of a drainage ditch and use of less permeable soil cover material.

A serious leachate problem does not exist. However, if the regulatory agencies demonstrate that a problem does exist, the Town will construct an empoundment area so that this liquid can be tested and the proper method of treatment can be administered.

(4) The operator allows salvaging at the site only where metals are stockpiled. Salvaging is not permitted at any other location. The metal stockpile is totally divorced from the working face of the fill. What little salvaging exists is totally controlled by the operator and does not interfere with day to day landfill operations or with any person utilizing the facility.

(5) The gate at the entrance to the facility controls access to the site. Therefore, the facility cannot be used unless the attendant is present.

(6) A sign is posted at the access gate which stipulates the hours of landfill operation. Internal signs control traffic into the site to the working face, and further designate specific areas for deposit of metals, brush, and recycled materials.

(7) The blowing of paper and other litter is not a problem at this site since the landfill area is surrounded by tall trees, and since adequate windrows exist in front of the face of the fill. Further, the operator polices the site as is required.

(8) Dust and odors do not appear to create a nuisance at the site. Further, there is no serious vector problem as the refuse is covered at the end of each working day. The operator has been instructed to institute a control program if a substantial build-up in the rodent population becomes evident.

(9) The present access road is unpaved, and some difficulty is experienced during winter months due to a steep incline at the entrance to the site. The Town is presently in the process of constructing a new access road which will greatly improve access to the facility. The internal road network is well maintained and provides good access to the operating face.

(10) The site is frequented by a limited number of collectors, businesses and individuals. To date, there has not been any serious accident at the site.

(11) The 40 acre site is well recessed from New York State Route 212. As a result of the site's remote location, and the fact that only a few pieces of equipment operate at the facility, there have been no complaints from residents near the area about excess noise.

(12) The heated garage at the site houses the landfill's tractor/loader and provides a shelter for operating personnel. The garage has adequate work and storage areas and has water, sewer and telephone facilities.

(13) The equipment used at the sanitary landfill is a 1974 Caterpillar 977L loader and a 1969 White dump truck. The tracked loader is well suited for a sanitary landfill operation in that it can spread, compact and cover refuse.

The operator is trained to perform routine maintenance and repairs on the equipment. In the event of a major breakdown, the operator uses a 1975 International 175 loader on loan

from the Town's Highway Department during the down period.

(14) As previously stated, the heated garage is adequate for providing shelter to both machine and operator, and has sufficient area for the operator to perform routine equipment maintenance.

(15) Open burning is not permitted at the sanitary landfill. When a large quantity of brush and trees accumulate at the site, the operator obtains a DEC permit to burn said debris. Adequate water facilities are available at the site to extinguish a fire.

(16) All refuse is deposited in one location on the site and is confined between windrows in front of the operating face. The placement of adequate signs and the scrutiny of the operator ensures that refuse is directed only to the face of the fill area.

(17) No hazardous wastes are deposited at the Town's sanitary landfill.

(18) Not Applicable.

(19) Not Applicable.

(20) Not Applicable.

(21) The Town's sanitary landfill is not located in a floodplain.

B. Requirements for Specific Solid Waste Management Facilities

(1) Sanitary Landfill

(i) At the present time new refuse is being deposited upon previously compacted beds. Accordingly, a minimum of five feet is being maintained between the solid waste and groundwater or bedrock. However, this working area is a few acres and will afford only a limited landfill life. A new area is presently being prepared by the Town. To accomplish this, the Town sells mined material to a private contractor. The contractor excavates the material basically to bedrock depth. The excavated area then serves as a future landfill site.

The depth from the top of the adjacent completed, final lift to the bottom of the current mined area varies from ten to fifteen feet. To

require a five feet vertical separation from bedrock will drastically reduce the life of the landfill. This would place undue, severe, economic hardships on the Town. Further, previous operation has gone to bedrock and there has been no reported adverse affects. Accordingly, a waiver of this specific requirement for future operations is requested.

(ii) The operation of this facility is in an excavated area, the method of operation is the "cell" type, and the operator uses extreme care to channel surface runoff from the working face. Accordingly, the operator has not had problems with surface runoff.

(iii) At the present time, there are no groundwater monitoring wells at the landfill. This is a continuing operation and there are no reports of groundwater contamination.

(iv) As stated, there are no monitoring wells located at the site. Accordingly, a monitoring program does not exist. (See Item 3.)

(v) Since this is an existing landfill, this requirement is not applicable.

(vi) There have been no reported problems pertaining to gases being generated at the existing landfill. Accordingly, no special precautions are being taken to control any gases that may be generated.

(vii) a) All refuse is deposited, spread and compacted in layers of less than two feet across the face of the fill.

b) Average lift height does not exceed ten feet.

c) A minimum of six inches of cover is placed over the face of the refuse area at the end of each day.

d) A compacted layer of at least 12 inches of cover material will be placed over all surfaces of the landfill where no additional refuse will be deposited within 30 days.

e) Final cover has been placed on that portion of the landfill adjacent to the existing garage. This area has been idle for several years and has a well established stand of grass.

(viii) As has been done in the past, all fill areas are graded to prevent ponding and erosion.

(ix) As soon as a final elevation is reached on any portion of the landfill, or if any lift is not to be covered by an additional lift within 90 days, a stand of grass, weather permitting, will be established.

(x) The Town will maintain for a period of five (5) years beyond the date that the final cover is completed, all soil cover integrity, slopes, cover vegetation, drainage structures, groundwater monitoring facilities, and gas venting structures, if applicable, pursuant to the permit issued by the New York State Department of Environmental Conservation.

(xi) As previously stated, hazardous materials are not deposited in the Town's sanitary landfill.

(xii) No portion of the existing landfill is within 50 feet of a property line. Current excavated areas are not within 50 feet of a property line. The landfill is presently surrounded by a treed area which provides an excellent natural buffer.

(xiii) Existing records indicate that spot elevations were taken, date unknown, with the establishment of a benchmark at the garage of elevation 500.00. This benchmark has served as vertical control at the facility.

(xiv) Not Applicable.

(xv) If additional requirements are established by DEC, the Town will comply with those requirements if it is economically feasible to do so.

(2) Secure Landburial Facility

Not Applicable.

(3) Industrial Waste Disposal Facilities

Not Applicable.

(4) Incinerators

Not Applicable.

CLOSURE PLAN

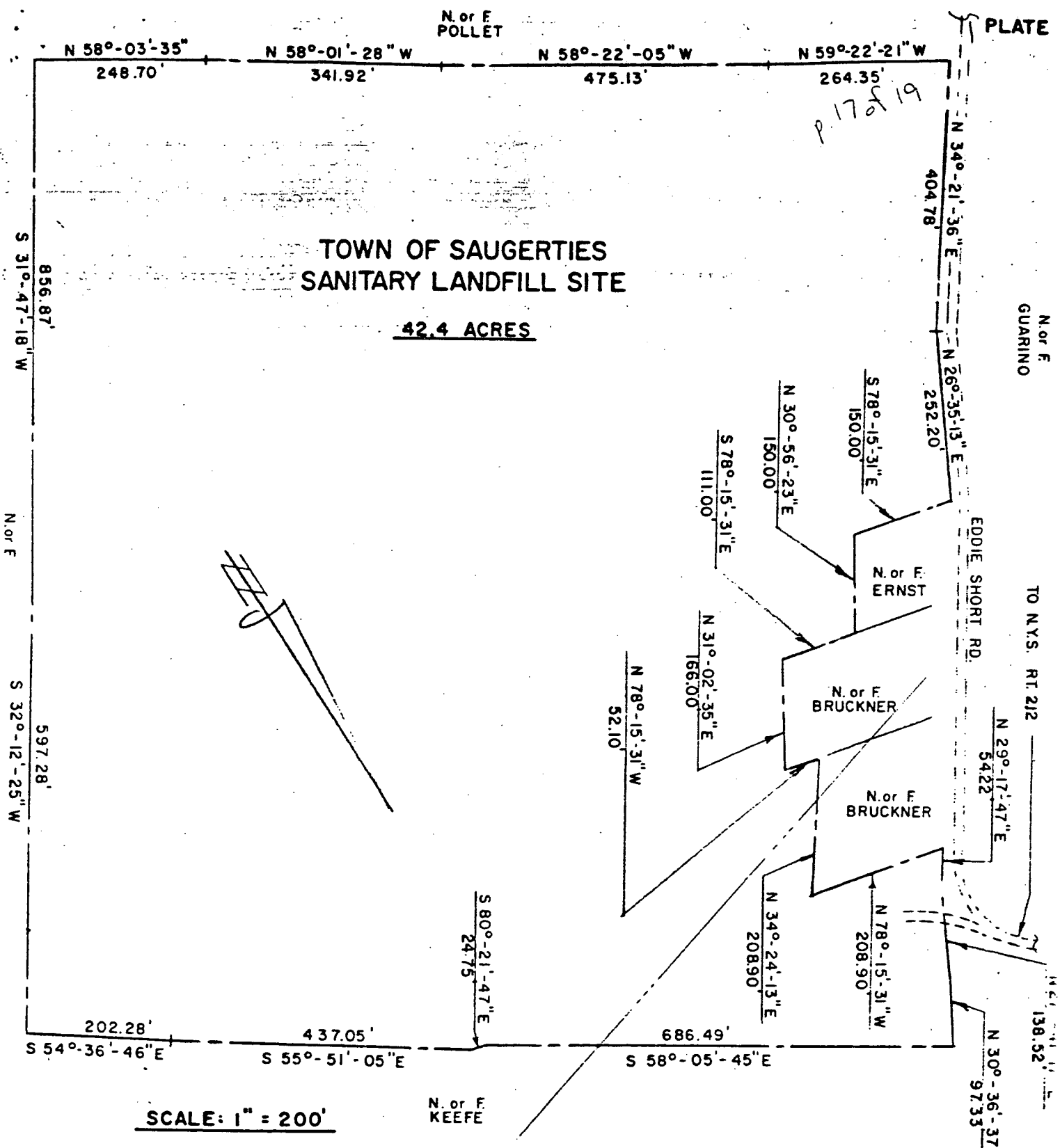
IV. Closure Plan

The Town is currently working on the adoption of a master plan and zoning ordinance. Accordingly, the zoning of land in the vicinity of the landfill property has yet to be determined. The landfill site has a useful life of some 10-15 years. In that span of time it would certainly be plausible to expect changes in any master plan which may be adopted at this time.

In any event, the Town has no definite plans for property development when its use as a sanitary landfill has been terminated.

The final plans, such as they are, will require a two (2) feet layer of cover material over the entire fill area, sloped to provide adequate drainage and seeded to produce a good stand of grass.

PLATE



TOWN OF SAUGERTIES
SANITARY LANDFILL SITE

42.4 ACRES

SCALE: 1" = 200'

NOTE:
BOUNDARY SURVEY TAKEN FROM SURVEY PREPARED BY THOMAS W. MAINES, LLS, DATED SEPTEMBER 25, 1969.

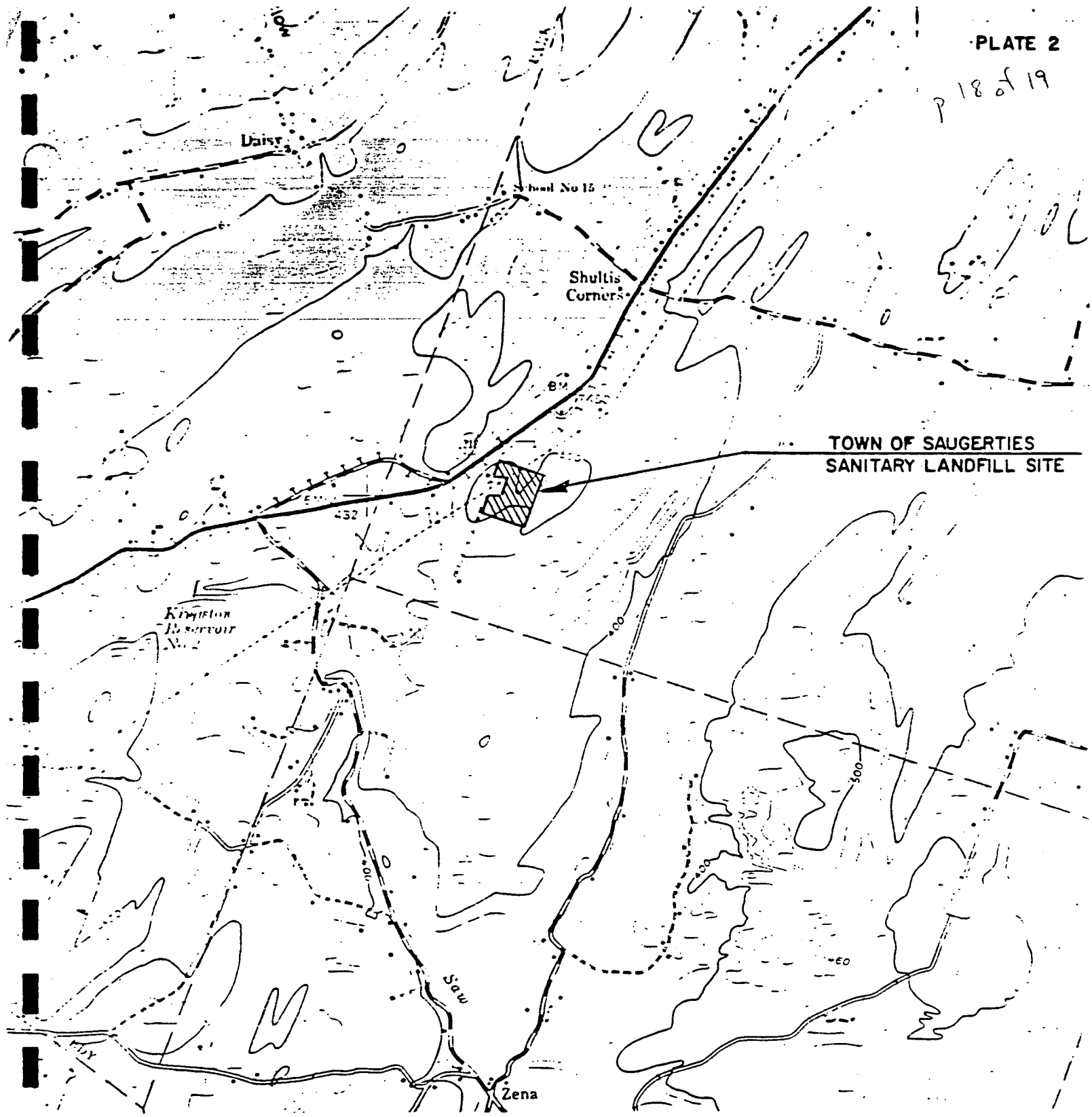
TOWN OF SAUGERTIES
SANITARY LANDFILL
SITE BOUNDARY

BRENNER & ROSSI
CONSULTING ENGINEERS
TAPPAN, NEW YORK

APRIL, 1978

PLATE 2

P 18 of 19



NOTE:

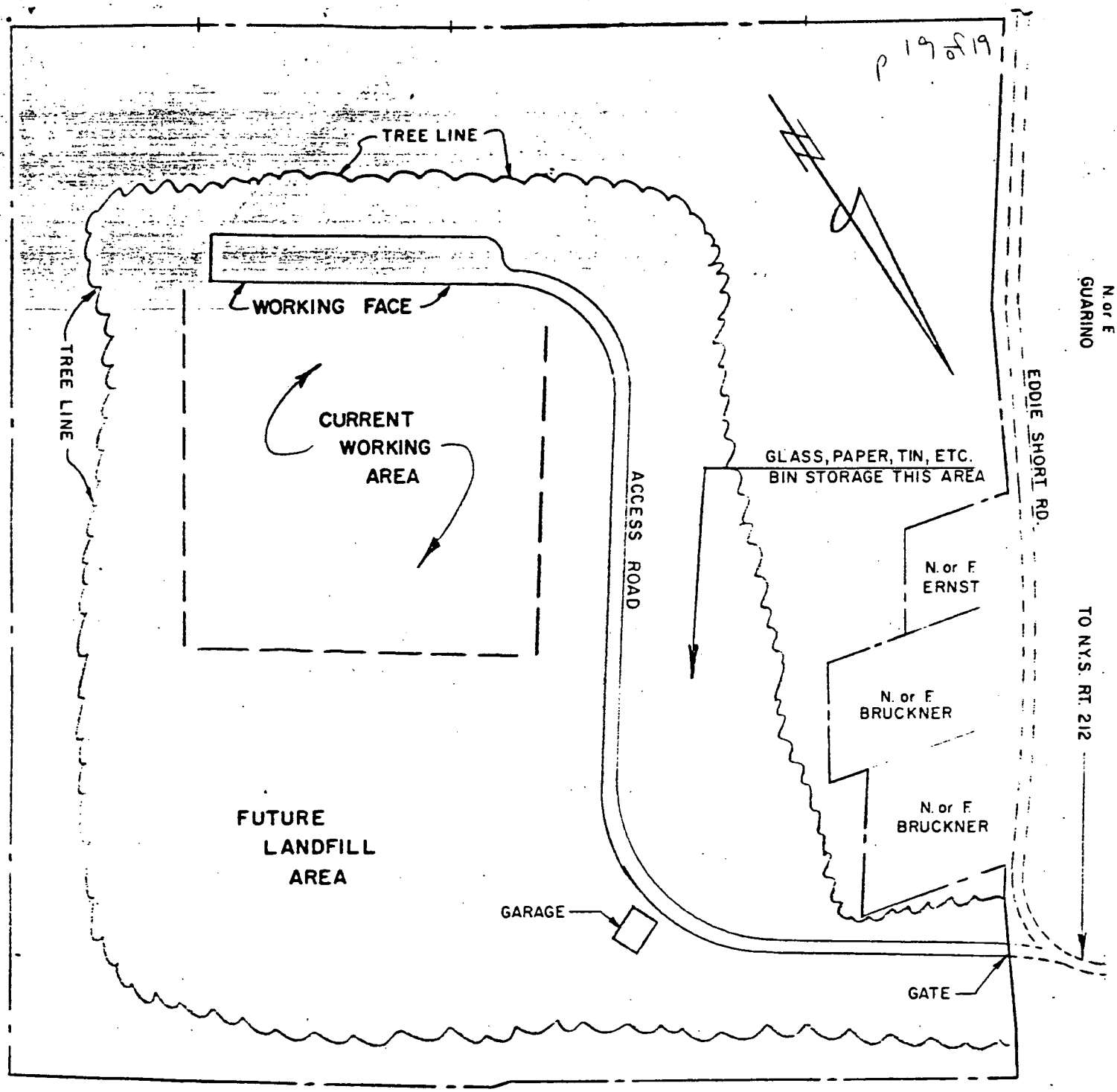
SITE LOCATION:
N 42°-02'-30"
W 74°-04'-30"
USGS MAP, WOODSTOCK, N.Y. QUADRANGLE

TOWN OF SAUGERTIES
SANITARY LANDFILL SITE LOCATION

BRENNER & ROSSI
CONSULTING ENGINEERS
TAPPAN, NEW YORK

APRIL, 1978

PLATE



NOT TO SCALE

TOWN OF SAUGERTIES
SANITARY LANDFILL FACILITY SKETCH

BRENNER & ROSSI
CONSULTING ENGINEERS
TAPPAN, NEW YORK

APRIL, 1978

5a59

Appendix 1.1-3

N.Y. Dept. of Health
Bureau of Toxic Substances

RECEIVED
MAR 26 1982
ULSTER COUNTY
HEALTH DEPARTMENT

TOWN OF SAUGERTIES

LANDFILL REPORT

SUPERVISOR * GEORGE TURNER

OPERATOR * STANLEY DOMAN

ASST. OPERATOR * GILBERT HARTRUM

REQUEST FOR NEW PERMIT TO INSTALL TOWN REFUSE ON EXISTING WORK AREA

TOWN POP. 17,995

VILLAGE POP. 3,882 (Village joining town in 1978)

AMOUNT OF PERMITS 5,517

INDUSTRIAL PLANTS USING LANDFILL

ROTRON

K.T.B.

F.L. RUSSELL

FERROXCUBE

1. Landfill in operation 13 years
Work area rectangular described on map.
Begining at South Easterly pipe in fence
North 675 feet then Westerly 725 feet then
Southerly 675 feet, then easterly to point
of begining 725 feet.

Creating 487,375 square feet approx. 14' deep
an average of approx. 14 to 15 inches a year. 44 TON/YEAR

2. A Fire pit is provided for burning of brush,
with a workable Indian Tank at hand.

Permit approved by Forest Ranger Roger Blatter.

3. Recycling areas are provided with two 35'
trailers for paper and magazines.

Shipped to J.C. Paper Co. of Poughkeepsie,N.Y.
when filled.

4. Glass bins are owned by

Recyceling Entprise of Mass.

5. Steel and tin recycling.

Are compacted onLandfill site once every 4
months by;

Millens & Son , Kingston,New York

P-3084

6. All areas are clearly marked by signs.

7. New road topping from entrance to work area of crushed shale has been completed.

8. At the request of E.P.A.

Two montering wells have been drilled.

9. By order of the county health department.

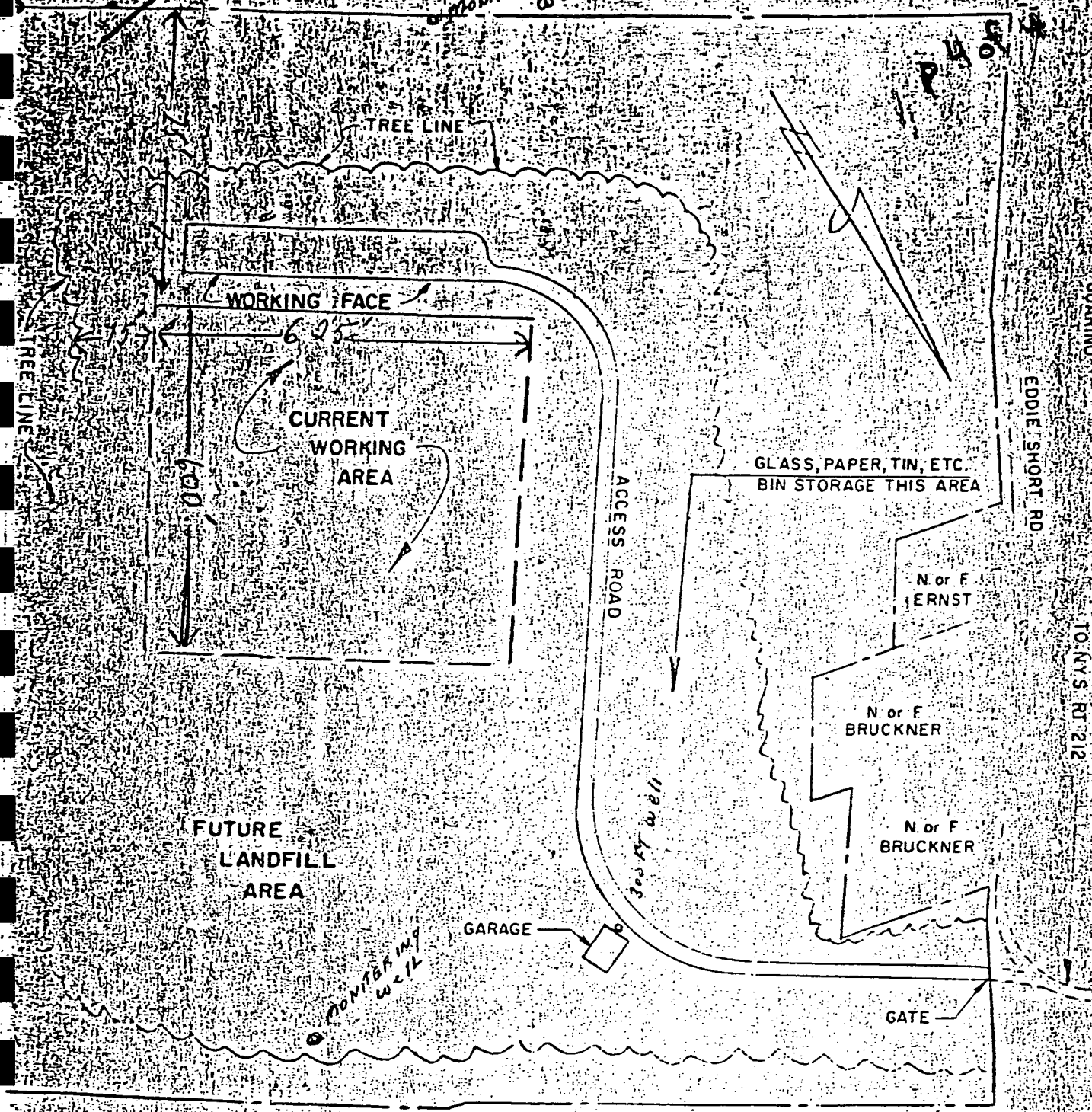
3 in 1 slopes on Eastern and Southern side of work area with approx. 200 feet of dirt is to be completed this spring.

10. Equipment.

1980 955 Cat Loader with ripper and 4 in 1 bucket -- Replaces 1972 977 loader.

* 11 Remaining Capacity 5 yrs in AREA

PLATE 3



TOWN OF SAUGERTIES
SANITARY LANDFILL FACILITY SKETCH

BRENNER & ROSSI
CONSULTING ENGINEERS
TAPPAN, NEW YORK

APRIL, 1978

Received from
NYSDEC Region 3

BRENNER & ROSSI
CONSULTING ENGINEERS

4 INDEPENDENCE AVENUE
TAPPAN, NEW YORK 10983
(914) 359-2210

DONALD B. [illegible]
(914) 623-2041
ALFRED T. ROSSI, P.E.
(914) 623-2731

Appendix 1.1-4
p 1 of 2

Town of Saugerties
App # Y56519

RECEIVED
JUL [illegible]
N.Y.S. D.E.C.
WHITE PLAINS OFFICE

May 29, 1978

Mr. Dean N. Palen, P.E.
County of Ulster
Department of Health
300 Flatbush Avenue
Kingston, New York 12401

Re: Solid Waste Management Facility, Saugerties, New York

Dear Mr. Palen:

We are in receipt of your letter dated May 16, 1978, requesting additional information regarding the Sanitary Landfill Report for the above captioned facility.

The responses herein below are in the same order as listed in your letter of May 16th.

Application for Approval to Operate

3a. As stated in the Sanitary Landfill Report dated April 1978, the operation of this facility is in an excavated area, and the method used is the "cell" type. At the present time, new refuse is being deposited upon previously compacted beds. The current operational area is several acres with an available lift height of eight to ten feet. The fill progression starts at the working face, and proceeds northerly into the working area as shown on Plate 3 in the Report. To prepare for future expansion, the Town is excavating an area northerly of the current working area, also as shown on Plate 3.

3b. As stated in part B of the Plan of Operation, the operator controls the height of each lift by making each new fill section the same general shape as the previous one. The fill starts at the working face, and as the fill progressed its height decreases. Further, sloping the fill away from the working face and toward the ditch directs surface water off the refuse area and does not allow this water to pond or infiltrate into this fill.

Re: Solid Waste Management Facility, Saugerties, New York P 2 of 2

The current working area is in a previously excavated area. The final lift height has been the height of adjoining terrain. There are no plans to date to have lift heights in excess of adjoining contours. Accordingly, the operator's present method of control is the adjoining grade.

A benchmark system does exist at the site. An elevation of 500.00 (garage floor elevation) has served as vertical control at the facility.

3c. A well adjacent to the garage and approximately 500 feet from the current working area was driven 301 feet, and provides approximately 1 gpm. Discussions with the facility operator reveals that a vein was tapped during well construction at a depth of approximately 20 feet. Accordingly, there is evidence of groundwater at a depth of approximately 20 feet.

The excavation of the landfill area has not exceeded 20 feet. There is no evidence of groundwater within the bed of the landfill.

As previously stated the Town is currently preparing for future expansion by excavating an area northerly of the current working area. Operation at this location indicates approximately 1 foot of overburden before shale strada is reached. Excavation of the shale generally has not exceeded 20 feet. Therefore, the depth to bedrock can generally be stated as approximately 20 feet.

4c. The closest firehouse is located in Centerville, approximately 4 miles from subject facility.

7c. The 40+ acre site is relatively flat as shown on Plate 2 in the Report (USGS Map). Since the current working area is a previously excavated area, finish grades have, and to date, will continue to match adjoining existing grades.

7f. The prevailing wind is generally from the West.

A further point to note is that the facility operator has attended a D.E.C. sponsored course held in New Paltz on May 18th.

We trust that the above information is sufficient for your office and the Regional Office to consider the Town of Saugerties application as complete and ready for formal review.

Very truly yours,

Alfred T. Rossi, P.E.

ATR/err

cc: Supervisor Greco

7-20-2 (8/77)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Received from NYSDEC Region

PERMIT

NYSDEC Reg 3

Under the Environmental Conservation Law, Article 27, Title 7, Part 360

FACILITY NO. NYSL 0549

EXPIRATION DATE March 14, 1982

Appendix 1.1-5

☐ CONSTRUCTION ☐ INITIAL ISSUE ☐ REISSUE

☐ OPERATION ☐ RENEWAL ☐ MODIFICATION

PERMIT ISSUED TO	ADDRESS OF PERMITTEE	TELEPHON
Town of Saugerties	Town Hall, Saugerties, NY	914-246-2800

LOCATION OF PROJECT Town	County	Environmental Conservation Regional Office
Saugerties	Ulster	202 Mamaroneck Ave., White Plains, NY 10601

DESCRIPTION OF PROJECT	ON-SITE SUPERVISOR
Operation of a Sanitary Landfill	Mr. Stanley Doman 246-9866

GENERAL CONDITIONS

1. The permittee shall file in the office of the Environmental Conservation Region specified above, a notice on intention to commence work at least 48 hours in advance of the time of commencement and shall also notify said office promptly in writing of the completion of the work.
2. The permitted work shall be subject to inspection by an authorized representative of the Department of Environmental Conservation who may order the work suspended if the public interest so requires.
3. As a condition of the issuance of this permit, the applicant has accepted expressly, by the execution of the application, the full legal responsibility for all damages, direct or indirect, of whatever nature, and by whomever suffered, arising out of the project described herein and has agreed to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from the said project.
4. All work carried out under this permit shall conform to the approved plans and specifications. Any amendments must be approved by the Department of Environmental Conservation prior to their implementation.
5. The permittee is responsible for obtaining any other permits, approvals, easements and rights-of-way which may be required for this project.
6. By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with Part 360 and the special conditions. Any variances granted by the Department of Environmental Conservation to Part 360 must be in writing and attached hereto.

SPECIAL CONDITIONS

1) The following wastes shall not be accepted at this site: hazardous, industrial, septage, sewage treatment plant sludge and sludge from the Ferroxcube plant.

2) Prior to the disposal of any refuse in a newly mined area, the Permittee shall exhibit its compliance with Section 360.8(b)(1)(i). This shall be accomplished by the excavation of test pits witnessed by a representative of the Ulster County Health Department and/or the Department. The depth and number of test pits shall be determined at the time of excavation.

3) "Daily Cover" shall be placed on the working face and "Intermediate Cover" shall be placed on the top of the lift.

4) The following remedial work shall be completed by November 1, 1979:
   a) The southern perimeter slope shall be: flattened to a maximum of 1 on 3 (vert. to hor.) and final cover placed and seeded.
   b) The ditch to the east of the refuse disposal area shall be lined with 1 foot of clay.

5) One down-gradient and one up-gradient monitoring well shall be in place by November 1, 1979. They shall be in compliance with Section 3.3 of the "Content Guidelines."

6) Routine water sampling of the down-gradient will be required consistent with Section 3.3(c) of the "Content Guidelines."

7) During the life of the site, an annual report shall be submitted to the Ulster Co. Dept. of Health and the Department at the Region 3 office, including as a minimum: the volume of waste processed, the remaining capacity and information to demonstrate the compliance with submitted plans and specifications.

8) If this facility is terminated during the life of the permit, the following closure plan shall be followed: a) two (2) feet of suitable material, the top six inches of which shall be capable of sustaining a ground cover crop, is to be placed over the entire refuse disposal area; b) area is to be sloped to provide adequate drainage; and c) a stand of ground cover crop shall be established pursuant to Section 360.7(b)(1)(v).

ISSUE DATE	ISSUING OFFICER	SIGNATURE
March 14, 1979	John E. Harrison, P.E.	X [signature] 3/14/79

REGIONAL OFFICE

NOTICE OF PERMIT

for:

- ☐ CONSTRUCTION
- ☒ INITIAL ISSUE
- ☐ REISSUANCE
- ☒ OPERATION
- ☐ RENEWAL
- ☐ MODIFICATION

has been issued to: TOWN OF SAUGERTIES

address: TOWN HALL, MAIN STREET, SAUGERTIES, N.Y.

for a project described as: OPERATION OF A SANITARY LANDFILL

under the Environmental Conservation Law,
Article 27, Title 5, Part 360 (Solid Waste Management Facilities)

NOTE:

- This Notice of Permit must be posted on the project site in such a manner that it is protected from weather and is in a location readily visible to the public.
- A copy of the Permit with the general and special conditions noted thereon will be shown to anyone upon request.

JOHN E. HARRISON, P.E.
Issuing Officer Regional Solid Waste Engineer

202 MAMARONECK AVENUE
Address WHITE PLAINS, N.Y. 10601

New York State
Department of Environmental Conservation

0549 MARCH 14, 1979 MARCH 14, 1982
Permit No. Issue Date Expiration Date

47-12-2 (8/77)

Dean Palen, Ulster Co. Dept. of Health
Richard Gardineer, D.E.C., Region 3, White Plains
SAUGERTIES (T) SANITARY LANDFILL, APPLICATION NO. Y56S19

March 14, 1979

Enclosed please find a Permit and a Permit Placard for the subject application. Please forward these to the Town and inform them that the submission schedule for the well sampling and annual report shall be sent to them at a later date.

RAG:fk
bcc: Reg. Dir.
FILE

New York State Department of Environmental Conservation
202 Mamaroneck Avenue, White Plains, N.Y. 10601
(914) 761-6660

Robert F. Flacke
Commissioner

Date MARCH 14, 1979
Project Number Y56519
Project Name SAUGERTIES (T)
ULSTER COUNTY

David Mafrici, P.E., Director
Bureau of Management Programs
Division of Solid Waste Management
N.Y.S. Dept. of Environmental Conservation
50 Wolf Road
Albany, New York 12233
Attention: D. O'Toole

Re: Application for:
- [x] Sanitary Landfill
- [ ] Construction and Demolition
- [ ] Incinerator
- [ ] Resource Recovery (Materials)
- [ ] Processing (Shredding, Baling)
- [ ] Transfer Stations

Dear Mr. Mafrici:

Enclosed please find the following material pertaining to Application(s) for Approval to Construct and/or Operate a Solid Waste Management Facility in Region 3:

- [ ] Construction Application - Project No. X _____ Assigned
- [ ] Operation Application - Project No. Y _____ Assigned
- [ ] Application Processing Check List
- [ ] Application Project Review Dates
- [ ] Notice of Incomplete Application
- [ ] Notice of Complete Application (Completeness)
- [ ] Plans and/or Engineering Report
- [ ] Supplemental Material Transmittal Memo to U.C.O.H.
- [x] Permit Issued No. 0549

If you have any questions, please do not hesitate to contact:

- [x] Mr. John E. Harrison
- [ ] Mr. Salvatore Ervolina
- [x] Mr. Richard Gardineer

Very truly yours,

John E. Harrison

John E. Harrison, P.E.
Regional Solid Waste Engineer

JEH:RG:bz
cc:

HAZARDOUS WASTE DISPOSAL SITES REPORT
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Appendix 1.1-6

Code: E

Site Code: 356003

Name of Site: Saugerties Landfill (T) Region: 3

County: Ulster Town/~~City~~ Saugerties

Street Address: (S) Shultis Corners

Status of Site Narrative:

The site is a NYS permitted municipal landfill not allowed to accept hazardous industrial wastes or septic sludges. The permit was issued in March 1979. The site has a monitoring well on site now. There are no homes or wells within a mile of the site. The operation is now fenced. The site allegedly received 750 tons of grinding sludge, 350 tons of grinding swarf (95+% Iron oxide with oil & water) and 55 cubic yard of waste water treatment sludge per year for several years from the Ferroxcube plant. The sludge was high in iron, zinc oxide and manganese oxide. These are the only industrial wastes which this facility accepted prior to its permit issuance.

Type of Site: Open Dump ☑ Landfill ☑ Structure ☐ Treatment Pond(s) ☐ Lagoon(s) ☐ Number of Ponds_____ Number of Lagoons_____

Estimated Size 3 Acres

Hazardous Wastes Disposed? Confirmed ☐ Suspected ☐ Unknown

*Type and Quantity of Hazardous Wastes:

TYPE	QUANTITY (Pounds, drums, tons, gallons)

*Use additional sheets if more space is needed.

HAZARDOUS WASTE DISPOSAL SITES REPORT
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Received f NYSDEC Region 3 Appendix 1.1-7

Priority Code: E
Site Code: 356003
Name of Site: (T) SAUGERTIES L.F. Region: 3 p 1 of 2
County: ULSTER Town/~~City~~ SAUGERTIES
Street Address: SHULTIS CORNERS

Status of Site Narrative:

NYSDEC PERMITTED LANDFILL, ISSUED MARCH 1979. NOT PERMITTED TO ACCEPT HAZARDOUS, INDUSTRIAL, OR SEPTIC WASTE. NO HOMES OR POTABLE WELLS WITHIN A MILE. SITE ALLEGEDLY RECEIVED 750 TONS OF GRINDING SLUDGE, 350 TONS OF GRINDING SWARF (95+% IRON OXIDE, OIL, WATER) AND 55 CUBIC YARDS OF WASTEWATER TREATMENT SLUDGE PER YEAR FOR SEVERAL YEARS FROM FERROXCUBE. THIS WAS THE ONLY INDUSTRIAL WASTE ACCEPTED PRIOR TO ISSUANCE OF ITS 360 PERMIT.

Type of Site: Open Dump ☐ Treatment Pond(s) ☐ Number of Ponds ____
Landfill ☒ Lagoon(s) ☐ Number of Lagoons ____
Structure ☐

Estimated Size 3 Acres

Hazardous Wastes Disposed? Confirmed ☐ Suspected ☐ UNKNOWN ☒

*Type and Quantity of Hazardous Wastes:

TYPE	QUANTITY (Pounds, drums, tons, gallons)
UNKNOWN	

*Use additional sheets if more space is needed.

Name of Current Owner of Site: TOWN OF SAUGERTIES
Address of Current Owner of Site: _____

P 2 of 2

Time Period Site Was Used for Hazardous Waste Disposal:
_____, 19__ To _____, 19__

Is site Active ☒ Inactive ☐
(Site is inactive if hazardous wastes were disposed of at this site and site was closed prior to August 25, 1979)

Types of Samples: Air ☐ Groundwater ☒ None ☐
Surface Water ☐ Soil ☐

Remedial Action: Proposed ☐ Under Design ☐
In Progress ☐ Completed ☐
Nature of Action: MONITORING WELLS INSTALLED

Status of Legal Action: NONE State ☐ Federal ☐

Permits Issued: Federal ☐ Local Government ☐ SPDES ☐
PART 360 Solid Waste ☒ Mined Land ☐ Wetlands ☐ Other ☐

Assessment of Environmental Problems:
NO KNOWN SIGNIFICANT QUANTITIES OF HAZARDOUS WASTE DISPOSED OF AT THIS SITE. SAMPLING WILL BE PERFORMED

Assessment of Health Problems: NONE KNOWN

Persons Completing this Form:

JACK DOTY
G. D. KNOWLES

New York State Department of Environmental Conservation
Date 3/25/80

RON TRAMONTANO

New York State Department of Health
Date 3/25/80

1/18/80
GDK:cl

NYDEC Bureau of Hazardous Site Control

NYDEC Bureau of Hazardous Site Control

Company Code

II. Waste Characterization and Management Practice

(Use separate form for each waste stream)

1. Waste Stream No. 11 (from Form I, Number 17)

2. Description of process producing waste WASTEWATER TREATMENT

3. Brief characterization of waste SLUDGE CONTAINING Fe_2O_3, ZnO $MnCO_3$ WATER

4. Time period for which data are representative _____ to _____

5. a. Annual waste production 5.5 YD^3 ☐ tons/yr. ☐ gal./yr.

   b. Daily waste production _____ ☐ tons/day ☐ gal./day

   c. Frequency of waste production: ☐ seasonal ☐ occasional ☒ continual

   ☐ other (specify) _____

6. Waste Composition

   a. Average percent solids ____ % b. pH range __ to __

   c. Physical state: ☐ liquid, ☐ slurry, ☒ sludge, ☐ solid,

   ☐ other (specify) _____

d. Component	Average Concentration	☐ wet weight ☒ dry weight	
1. Fe_2O_3		☐ wt.%	☐ ppm
2. ZnO		☐ wt.%	☐ ppm
3. MnO_3		☐ wt.%	☐ ppm
4. DIATOMACEOUS EARTH		☐ wt.%	☐ ppm
5.		☐ wt.%	☐ ppm
6.		☐ wt.%	☐ ppm
7.		☐ wt.%	☐ ppm
8.		☐ wt.%	☐ ppm
9.		☐ wt.%	☐ ppm
10.		☐ wt.%	☐ ppm

Company Code

e. Analysis of composition is ☐ theoretical ☐ laboratory ☐ estimate
(attach copy of laboratory analysis if available)

f. Projected ☐ increase, ☐ decrease in volume from base year: 0 % by July 1977;
0 % by July 1983.

g. Hazardous properties of waste: ☐ flammable ☐ toxic ☐ reactive ☐ explosive
☐ corrosive ☐ other (specify) UNKNOWN

7. On Site Storage

a. Method: ☐ drum, ☒ roll-off container, ☐ tank, ☐ lagoon, ☐ other (specify) _____

b. Typical length of time waste stored 1 ☐ days, ☒ weeks, ☐ months

c. Typical volume of waste stored 1.25 ☐ tons, ☐ gallons YD^3

d. Is storage site diked? ☐ Yes ☒ No

e. Surface drainage collection ☐ Yes ☒ No

8. Transportation

a. Waste hauled off site by ☐ you ☒ others

b. Name of waste hauler KEN DACHENHAUSEN

Address BOX 21 (Street) RUBY (City)
N.Y. (State) 12475 (Zip Code) (914) 246-5201 (Phone)

9. Treatment and Disposal

a. Treatment or disposal: ☐ on site ☒ off site

b. Waste is ☐ reclaimed ☐ treated ☒ land disposed ☐ incinerated
☐ other (specify) _____

c. Off site facility receiving waste

Name of Facility SAUGERTIES LANDFILL

Facility Operator _____

Facility Location _____
(Street) (City)
(State) (Zip Code) ( ) (Phone)

47-15-4(12/76)

Company Code [ ][ ][ ][ ][ ][ ][ ][ ][ ]

II. Waste Characterization and Management Practice
(Use separate form for each waste stream)

L.F. PLANT

1. Waste Stream No. 12 (from Form I, Number 17)

2. Description of process producing waste GRINDING SCARF

3. Brief characterization of waste IRON OXIDE, H_2O, OIL

4. Time period for which data are representative 1976 to _____

5. a. Annual waste production 348 [X] tons/yr. [ ] gal./yr.

b. Daily waste production _____ [ ] tons/day [ ] gal./day

c. Frequency of waste production: [ ] seasonal [ ] occasional [X] continual

[ ] other (specify) _____

6. Waste Composition

a. Average percent solids 95-100 % b. pH range __ to __

c. Physical state: [ ] liquid, [ ] slurry, [ ] sludge, [X] solid,

[ ] other (specify) _____

d. Component	Average Concentration	[ ] wet weight [ ] dry weight	
1. IRON OXIDE	95-100	[X] wt.%	[ ] ppm
2. H_2O	>0-5	[X] wt.%	[ ] ppm
3. OIL		[ ] wt.%	[ ] ppm
4.		[ ] wt.%	[ ] ppm
5.		[ ] wt.%	[ ] ppm
6.		[ ] wt.%	[ ] ppm
7.		[ ] wt.%	[ ] ppm
8.		[ ] wt.%	[ ] ppm
9.		[ ] wt.%	[ ] ppm
10.		[ ] wt.%	[ ] ppm

[illegible] (76)

Company Code [ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]

e. Analysis of composition is [ ] theoretical [ ] laboratory [ ] estimate
(attach copy of laboratory analysis if available)

f. Projected [ ] increase, [ ] decrease in volume from base year: ____ % by July 1977;
____ % by July 1983.

g. Hazardous properties of waste: [ ] flammable [ ] toxic [ ] reactive [ ] explosive
[ ] corrosive [ ] other (specify) UNKNOWN

7. On Site Storage

a. Method: [X] drum, [ ] roll-off container, [ ] tank, [ ] lagoon, [ ] other (specify) _____

b. Typical length of time waste stored 1 [ ] days, [X] weeks, [ ] months

c. Typical volume of waste stored 6 [X] tons, [ ] gallons

d. Is storage site diked? [ ] Yes [X] No

e. Surface drainage collection [ ] Yes [X] No

8. Transportation

a. Waste hauled off site by [ ] you [X] others

b. Name of waste hauler KEN DACHENHAUSEN

Address _____
Street City

( )
State Zip Code Phone

9. Treatment and Disposal

a. Treatment or disposal: [ ] on site [X] off site

b. Waste is [ ] reclaimed [ ] treated [X] land disposed [ ] incinerated
[ ] other (specify) _____

c. Off site facility receiving waste

Name of Facility SAUGERTIES LANDFILL

Facility Operator _____

Facility Location _____
Street City

( )
State Zip Code Phone

47-15-4(12/76)

Company Code ☐☐☐☐☐☐☐☐☐☐

II. Waste Characterization and Management Practice

(Use separate form for each waste stream)

P.M Plant

1. Waste Stream No. 13 (from Form I, Number 17)

2. Description of process producing waste GRINDING

3. Brief characterization of waste GRINDING SLUDGE

4. Time period for which data are representative 1976 to _____

5. a. Annual waste production 750 ☒ tons/yr. ☐ gal./yr.

   b. Daily waste production _____ ☐ tons/day ☐ gal./day

   c. Frequency of waste production: ☐ seasonal ☐ occasional ☐ continual

   ☐ other (specify) _____

6. Waste Composition

   a. Average percent solids ____ % b. pH range __ to __

   c. Physical state: ☐ liquid, ☐ slurry, ☐ sludge, ☒ solid,

   ☐ other (specify) _____

d. Component	Average Concentration	☐ wet weight ☐ dry weight
1. UNKNOWN		☐ wt.% ☐ ppm
2.		☐ wt.% ☐ ppm
3.		☐ wt.% ☐ ppm
4.		☐ wt.% ☐ ppm
5.		☐ wt.% ☐ ppm
6.		☐ wt.% ☐ ppm
7.		☐ wt.% ☐ ppm
8.		☐ wt.% ☐ ppm
9.		☐ wt.% ☐ ppm
10.		☐ wt.% ☐ ppm

Company Code [ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]

e. Analysis of composition is [ ] theoretical [ ] laboratory [ ] estimate
(attach copy of laboratory analysis if available)

f. Projected [ ] increase, [ ] decrease in volume from base year: ____ % by July 1977;
____ % by July 1983.

g. Hazardous properties of waste: [ ] flammable [ ] toxic [ ] reactive [ ] explosive
[ ] corrosive [ ] other (specify) _____

7. On Site Storage

a. Method: [X] drum, [ ] roll-off container, [ ] tank, [ ] lagoon, [ ] other (specify) _____

b. Typical length of time waste stored 1 [ ] days, [X] weeks, [ ] months

c. Typical volume of waste stored _____ [ ] tons, [ ] gallons

d. Is storage site diked? [ ] Yes [X] No

e. Surface drainage collection [ ] Yes [X] No

8. Transportation

a. Waste hauled off site by [ ] you [X] others

b. Name of waste hauler KEN DACHENHAUSEN

Address _____
Street City
( )
State Zip Code Phone

9. Treatment and Disposal

a. Treatment or disposal: [ ] on site [X] off site

b. Waste is [ ] reclaimed [ ] treated [X] land disposed [ ] incinerated
[ ] other (specify) _____

c. Off site facility receiving waste

Name of Facility SAUGERTIES LANDFILL

Facility Operator _____

Facility Location _____
Street City
( )
State Zip Code Phone

47-15-4(12/76)

KEN DACHENHAUSEN
~~KINGSTON~~ BOX 21
RUBY NY 12475
TEL 914-246-5201

DEC 11
ULSTER COUNTY

WASTE DISPOSAL

12 MONTH PERIOD / SLURRY, DRY FILTER CAKE, GRINDING SWARF,

FERRITE WASTE	HOPPERS (3/4 YD)	LF-RH BARRELLS	DM BARRELLS
1	4	28	– ~70% 30%
2	3	12	–
3	7	33	–
4	5	30	–
5	5	30	–
6	4	14	–
7	4	18	–
8	7	21	120
9	6	71	530
10	6	16	130
11	8	117	320
12	7	67	130
13	6	121	154
14	2	118	169
	79	696	1,553
	55.5 YD³		÷ 6.94
			224 BBLS

5430 gal
22.5
11.20

p 8 of 17

FERROXCUBE CORPORATION
P.O. BOX 359, SAUGERTIES, N. Y.
Area Code 914 246-2811

53583

DATE: 1 21 76

SOLD TO: MARISOL INC.
125 FACTORY LANE
MIDDLESEX, N.J. 08846

SHIP TO: SAME

SHIP VIA	PREPAID	PPD & CHGE	COLLECT	DATE SHIPPED	OUR ORDER NO.	ACCOUNT NO.
					69212	0174 00 5810

QUAN. ORDERED	PROD. CODE	PART NO. & DESCRIPTION	QUAN. SHIPPED	PRICE	AMOUNT
2 DRUMS		SOLDER FLUX (CORROSIVE)			
2 DRUMS		INHIBISOL, DETAR			
9 DRUMS		CRANE OIL, DETAR, ETHYL ACETATE, INHIBISOL			
3 DRUMS		CRANE OIL, DETAR, ETHYL ACETATE, ACETONE			
1 DRUM		ACETONE, INHIBISOL, ETHYL ACETATE			
		TO BE PICKED UP BY VENDOR			
		WASTE CHEMICALS - ALL FOR DISPOSAL			
		($10 CHARGE PER DRUM)			

DISPOSITION ☐ ISSUE CREDIT & REBILL ☐ ISSUE CREDIT ONLY ☐ FXC PROPERTY TO BE RETURNED

PURCHASING

FORM #5000-00011-000

54 gals

1 dr Chlorothene NU 0.25 gal 1612.25

50 gals $37.25

Account no. 0-174-5810

To be picked up by vendor

P. 9617

DEBIT MEMO

No. 53584

APD [X]
AS [ ]
RM [ ]

FERROXCUBE CORPORATION
P.O. BOX 359, SAUGERTIES, N. Y.
Area Code 914 246-2811

INVOICE DATE • 1 21 76

SOLD TO • HARISOL INC.
• 125 FACTORY LANE
• MIDDLESEX, N. J.

SHIP TO • SAME

SHIP VIA	PREPAID	PPD & CHGE	COLLECT	DATE SHIPPED	OUR ORDER NO.	ACCOUNT NO.
						0 174 00 5610

QUAN. ORDERED	PROD. CODE	PART NO. & DESCRIPTION	QUAN. SHIPPED	PRICE	AMOUNT
1 DRUM		FREON TDA 5 50 GALS		.50 GAL.	25.00
1 DRUM		CHLOROTHENE NU 50 GALS.		.25/GAL.	12.25
					$37.25
		TO BE PICKED UP BY VENDOR			

APD [X]
AS [ ]
RM [ ]

FERROXCUBE CORPORATION

P.O. BOX 359, SAUGERTIES, N. Y.
Area Code 914 246-2811

No. 53679

INVOICE DATE 4 9 76

SOLD TO
• HARISCI INC.
• 125 FACTORY LANE
• MIDDLESEX, N.J. 08846

SHIP TO
SAME

UP VIA	PREPAID	PPD & CHGE	COLLECT	DATE SHIPPED	OUR ORDER NO.	ACCOUNT NO.
					69218	0 174 00 5810

QUAN. ORDERED	PROD. CODE	PART NO. & DESCRIPTION	QUAN. SHIPPED	PRICE	AMOUNT
9 DRUMS		CHLOROTHENE NU, ETHYL ACETATE CRANE OIL, DETAR			
1 DRUM		SOLDER FLUX (CORROSIVE)			
		TO BE PICKED UP BY VENDOR			
		WASTE CHEMICALS - ALL FOR DISPOSAL			
		($10.00 CHARGE PER DRUM)			

ION

[ ] ISSUE CREDIT & REBILL [ ] ISSUE CREDIT ONLY [ ] FXC PROPERTY TO BE RETURNED

78000-00011-000

PURCHASING

p 11 & 17

DEBIT MEMO

No. 53680

APD [X]
AS [ ]
RM [ ]

FERROXCUBE CORPORATION

P.O. BOX 359, SAUGERTIES, N. Y.
Area Code 914 246-2811

INVOICE DATE 4 9 76

SOLD TO: KARISOL INC.
125 FACTORY LANE
MIDDLESEX. N.J. 08846

SHIP TO: Same

SHIP VIA	PREPAID	PPD & CHGE	COLLECT	DATE SHIPPED	OUR ORDER NO.	ACCOUNT NO.

QUAN. ORDERED	PROD. CODE	PART NO. & DESCRIPTION	QUAN. SHIPPED	PRICE	AMOUNT
4 DRUMS		CHLOROTHENE NU 50 GALS. EA.	200 GALS.	.25/GAL.	50.00
6 DRUMS		FREON 50 GALS. EA.	300 GALS.	.50/GAL.	150.00
		TO BE PICKED UP BY VENDOR			

DISPOSITION [ ] ISSUE CREDIT & REBILL [ ] ISSUE CREDIT ONLY [ ] FXC PROPERTY TO BE RETURNED

PURCHASING

FORM #5000-00011-000

p 12 of 17

NO. 53741

APD XX
AS
RM

FERROXCUBE CORPORATION

P.O. BOX 359, SAUGERTIES, N. Y.
Area Code 914 246-2811

INVOICE DATE • 5 26 76

SOLD TO • MARISOL INC.
• 325 FACTORY LANE
• MIDDLESEX, N.J. 08846

SHIP TO • SAME

SHIP VIA	PREPAID	PPD & CHGE	COLLECT	DATE SHIPPED	OUR ORDER NO.	ACCOUNT NO.
					69221	0 174 00 5910

QUAN. ORDERED	PROD. CODE	PART NO. & DESCRIPTION	QUAN. SHIPPED	PRICE	AMOUNT
7 DRUMS		CHLOROTHENE NU, ETHYL ACETATE, CRANE OIL, DETAR			
1 DRUM		CHLOROTHENE NU, GLACIAL ~~XXXXXXX~~ ACETIC ACID			
		TO BE PICKED UP BY VENDOR			
		WASTE CHEMICALS - ALL FOR DISPOSAL			
		($10.00 CHARGE PER DRUM)			

NC
25 of gal

DISPOSITION ☐ ISSUE CREDIT & REBILL ☐ ISSUE CREDIT ONLY ☐ FXC PROPERTY TO BE RETURNED

PURCHASING

FORM #5000-00011-000

NO. 53142

APD
AS
RM

FERROXCUBE CORPORATION

P.O. BOX 359, SAUGERTIES, N. Y.
Area Code 914 246-2811

INVOICE DATE • 5 26 76

SOLD TO • MARISOL INC.
• 125 FACTORY LANE
• MIDDLESEX, N.J. 08846

SHIP TO • SAME

SHIP VIA	PREPAID	PPD & CHGE	COLLECT	DATE SHIPPED	OUR ORDER NO.	ACCOUNT NO.

QUAN. ORDERED	PROD. CODE	PART NO. & DESCRIPTION	QUAN. SHIPPED	PRICE	AMOUNT
5 DRUMS		CHLOROTHENE NU 50 GALS. EA.	250 GALS.	.25/GAL.	62.50
		TO BE PICKED UP BY VENDOR			

DISPOSITION ☐ ISSUE CREDIT & REBILL ☐ ISSUE CREDIT ONLY ☐ FXC PROPERTY TO BE RETURNED

PURCHASING

FORM #5000-00011-000

DEBIT MEMO

No. 53863

APD XX
AS
RM

FERROXCUBE CORPORATION

P.O. BOX 359, SAUGERTIES, N. Y.
Area Code 914 246-2811

INVOICE DATE . 9 13 76

SOLD TO : MARISOL INC.
125 FACOTRY LANE
MIDDLESEX, N.J. 08846

SHIP TO : SAME

SHIP VIA	PREPAID	PPD & CHGE	COLLECT	DATE SHIPPED	OUR ORDER NO.	ACCOUNT NO.
					69230	0 174 00 5810

QUAN. ORDERED	PROD. CODE	PART NO. & DESCRIPTION	QUAN. SHIPPED	PRICE	AMOUNT
7 DRUMS		NU ACETATE CRANE OIL DETAR			
8 DRUMS		NU ACETATE CRANE OIL DETAR ~~ACETONE~~ ACETONE			
4 DRUMS		CRANE OIL			
4 CARBOYS		(15 GAL.) DE SCALING ACID			
		TO BE PICKED UP BY VENDOR			
		WASTE CHEMICALS - ALL FOR DISPOSAL			

DISPOSITION ☐ ISSUE CREDIT & REBILL ☐ ISSUE CREDIT ONLY ☐ FXC PROPERTY TO BE RETURNED

PURCHASING

FORM #5000-00011-0000

p 15 of 17

No. 53862

APD [XX]
AS [ ]
RM [ ]

FERROXCUBE CORPORATION

P.O. BOX 359, SAUGERTIES, N. Y.
Area Code 914 246-2811

INVOICE DATE • 9 13 76

SOLD TO • HARISOL INC.
• 125 FACTORY LANE
• MIDDLESEX, N.J. 08846

SHIP TO • SAME

SHIP VIA	PREPAID	PPD & CHGE	COLLECT	DATE SHIPPED	OUR ORDER NO.	ACCOUNT NO.
						0-171-

QUAN. ORDERED	PROD. CODE	PART NO. & DESCRIPTION	QUAN. SHIPPED	PRICE	AMOUNT
6 DRUMS		CHLOROTHENE NU 50 GALS. EA.		.25/GAL.	75.00
		TO BE PICKED UP BY VENDOR			

DISPOSITION [ ] ISSUE CREDIT & REBILL [ ] ISSUE CREDIT ONLY [ ] FXC PROPERTY TO BE RETURNED

PURCHASING

FORM #5000-00011-000

AS
RM

5083 KINGS HIGHWAY, SAUGERTIES, N. Y.
Area Code 914 246-2811

INVOICE DATE • 1 6 77

SOLD TO • MARISOL INC.
• 125 FACTORY LANE
• MIDDLESEX, N.J. 08846

SHIP TO • SAME

SHIP VIA	PREPAID	PPD & CHGE	COLLECT	DATE SHIPPED	OUR ORDER NO.	ACCOUNT NO
					90593	1 511 5100 4 542 5100

QUAN. ORDERED	PROD. CODE	PART NO. & DESCRIPTION	QUAN. SHIPPED	PRICE	AMOUNT
13 DRUMS		NU ACETATE [illegible] CRUDE OIL ACETONE DETAR		N/C	
1 DRUM		GLACIAL ACETER		N/C	
2 DRUMS		OIL & KEROSENE		N/C	
5 DELBOYS		[illegible] DESCALING ACID		N/C	
		TO BE PICKED UP BY VENDOR			
		WASTE CHEMICALS - ALL FOR DISPOSAL			

DISPOSITION ☐ ISSUE CREDIT & REBILL ☐ ISSUE CREDIT ONLY ☐ FXC PROPERTY TO BE RETURNED

PURCHASING

© FORM # 5000-00011-000

DEBIT MEMO No. 54016

APD [X]
AS [ ]
RM [ ]

FERROXCUBE CORPORATION

5083 KINGS HIGHWAY, SAUGERTIES, N. Y.
Area Code 914 246-2811

INVOICE DATE • 1 6 77

SOLD TO • MARISOL INC.
125 FACTORY LANE
MIDDLESEX, N.J. 03846

SHIP TO • SAME

SHIP VIA	PREPAID	PPD & CHGE	COLLECT	DATE SHIPPED	OUR ORDER NO.	ACCOUNT NO
						1 511 5100 4 542 5100

QUAN. ORDERED	PROD. CODE	PART NO. & DESCRIPTION	QUAN. SHIPPED	PRICE	AMOUNT
6 DRUMS		MU 50 GALS. EA.		.25/GAL.	
1 DRUM		FE01 50 GALS.		.50/GAL.	
		TO BE PICKED UP VENDOR			

DISPOSITION [ ] ISSUE CREDIT & REBILL [ ] ISSUE CREDIT ONLY [ ] FXC PROPERTY TO BE RETURNED

PURCHASING

FORM # 5000-00011-000

[redacted] REGION [redacted] [redacted] [redacted] [redacted] [redacted] [redacted] [redacted] [redacted] -1 (8/80) [redacted]

3

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID WASTE MANAGEMENT

FACILITY INSPECTION REPORT

1 TRANS. TYPE 1 ☐ Delete 2 ☒ Add	2 FACILITY NO. 7	8 DATE 13	14 TIME 17
	565119	042082	1500

20 CARD 21 TYPE	22 INSPECTOR'S NAME 36	37	38 REMARKS 72
1 1	Schoonmaker		

20 CARD 21 TYPE 1 2

LEACHATE
1. Leachate is entering surface water.
2. Leachate is known to be contravening groundwater standards.
3. Refuse is being placed into water.

BURNING
4. Refuse is burning without permit or not under permit conditions.
5. There is evidence of unapproved previous burning.

COVER
6. Previous days refuse is not covered.
7. Refuse is protruding through daily, intermediate or final cover.
8. Intermediate or final cover is not in place or improperly applied.

GRADING
9. Depressions, ponding, cracked cover, or slopes steeper than 3 to 1 exist.
10. Vegetative cover is missing or inadequate on completed areas.
11. Soil erosion or other drainage problems exist.

SEPARATION DISTANCES
12. Refuse is closer than 50 feet to site boundaries.
13. Refuse is being placed less than 5 feet above groundwater or bedrock.
14. Refuse is being placed too close to surface water.

NUISANCE CONDITIONS
15. Odors are detectable off site.
16. Blowing dust or dirt is a nuisance.
17. ☒ Papers are uncontrolled or are blowing off-site.
18. Methane gas is known to be leaving the site.
19. Noise is a nuisance off-site.

OPERATION CONTROL
20. Operation Permit conditions are being violated. (List violations)
21. Refuse is not sufficiently confined or controlled.
22. Refuse is spread in layers thicker than 2 feet.
23. Refuse is not compacted or compacted insufficiently.
24. The working face height is greater than 10 feet.
25. Equipment on the site is not adequate for proper operation.

SAFETY AND HEALTH
26. Salvaging is uncontrolled or is creating a nuisance.
27. Rodents, insects, birds, or other vectors are not controlled.
28. Unsafe conditions or equipment exist. (List items)

ACCESS CONTROL
29. Access to the site is improper, unsafe, or inadequately controlled.
30. The site is open without an attendant.
31. Information about the site is not posted. (e.g., hours of operation)
32. Access to the operating area is poor or unsafe.

OTHER
33. ☒ Uncontrolled leachate is visible on, or near the site.
34. The quality of cover material is inadequate.
35. The working face is steeper than a 3 to 1 slope.
36. Monitoring wells are not operative.
37. Unapproved wastes have been deposited since last inspection.
38. Operator is unfamiliar with wite boundaries, operation plan or permit

MARK BOXES WITH "X" ONLY IF ANSWER IS YES

Central Office Copy

CENTRAL OFFICE COPY

FA[redacted]NAM[redacted]: Tn Saugerties

[redacted]TION: RT 212 Ulster Co. Tn Saugerties

PERSONS INTERVIEWED & TITLES

G. Hartman
Operator

SITE SKETCH/COMMENTS (additional sheets attached ☐ YES ☒ NO)

#17 Papers blown into wooded area East of working face

#33 Leachate along toe of North Slope

P.L. Schoonmaker
INSPECTOR'S SIGNATURE

Appendix 1-9

p 161

Appendix 1.1-10

p 1 of 1

EA SCIENCE AND TECHNOLOGY
A Division of EA Engineering, Science, and Technology, Inc.

COMMUNICATIONS RECORD FORM

Distribution: (x) Town of Saugerties L.F. ( ) _____
( ) _____, ( ) _____
( ) **Author**

Person Contacted: Edward Kahill / Edwin Schoonmaker **Date:** 12-18-85

Phone Number: 331-9300 **Title:** Assistant Public Health Engineers

Affiliation: Ulster Co. Dept. of Health **Type of Contact:** interview

Address: 244 Fair St. Kingston N.Y. **Person Making Contact:** L. Wilson

Communications Summary: Town of Saugerties L.F. 356003

Elevated levels of iron and manganese are found in ground water at site. The site is an old quarry. There is only shale under the L.F. There has been no recent problem with leachate draining into an ajacent stream.

(see over for additional space)

Signature: Larry Wilson

Appendix L.1-11
Received from
NYSDEC Region 3
p 1 of 4

Dear Ed,

I have included a copy of test results of the Langetuit Landfill's two monitoring wells. I have also scheduled a meeting of our Town Engineering firm, and someone from the UCBH at our land fill on April 11 at 1 p.m. I hope you will be able to attended.

Thank You

John Serra (48 Clermont St. Suzy)
Langetuit Town Board

EnviroTest Laboratories, Inc.
717 Broadway • Newburgh, New York 12550
(914) 562-0890

Received from NYSDEC Region 3

RECEIVED

MAR 21 1985

New Paltz

LAB#: 33467A DATE REC'D: 85/02/07 DATE COLL'D: 85/02/07 STATUS: closed
FNAME: (T) Saugerties
STREET:
SPL LOCATION: Landfill, North GWMW
COLL'D BY: E. Andersen, EnviroTest

REPORT TO:
BILL TO:

COLI:		Cr+6	<0.05	COD	450
COLI:		Phenol	<0.005	HARD-T	1000
SPC		CN		Ca Hard	
F		B		SO3	
NO3	1.2	Br		Cl	410
NO2		Color	2.5 Pt-Co	Alk	110
T-PO4		Odor	1	BOD-Inf	
O-PO4		Turb		BOD-Eff	
SO4	110	pH	7.4	BOD-S	
MBAS	<0.02	LI		TSS-Inf	
SiO2		Cond	150 uMHOS	TSS-Eff	
H2S		NH3-T	<0.4	MLSS	
NH3-C		TKN	8.3	MLVSS	
Ba		Ca	9.8		
Be		Cr	<0.05	Fe	<2 ug/l
V		Co		Ag	<0.01
TDS	530	Cu	<0.05	Na	12
B		Au		Tl	
% SOL		Fe	12	Sn	
& O		Pb	<0.05	Ti	
Al	11	Mg		V	
Sb		Mn	0.95	Zn	0.11
As	<2 ug/l	Hg	0.4 ug/l	THM	
Ba	0.30	Mo		TOC	4.9
Be		Ni	0.11		
Cd	<0.01	Pd		Sr	<0.1

Remarks: All results in mg/l unless otherwise indicated.

Ronald A. Bayer
Laboratory Director 3/4/85

EnviroTest Laboratories, Inc.

(914) 562-0890

LAB#: 334678 DATE REC'D: 85/02/07 DATE COLL'D: 85/02/07 STATUS: closed
LNAME: (T) Saugerties FNAME:
STREET: CITY: STATE: ZIP:
SPL LOCATION: Landfill, South GWMW

REPORT TO:
BILL TO:

T COLI:		Cr+6	: <0.05	COD	: 550
F COLI:		Phenol	: 0.010	HARD-T	: 550
SPC	:	CN	:	Ca Hard	:
F	:	B	:	SO3	:
NO3	: 6.2	Br	:	Cl	: 97
NO2	:	Color	: 50 Pt-Co	Alk	: 1400
T-PO4	:	Odor	: 3	BOD-Inf	:
O-PO4	:	Turb	:	BOD-Eff	:
SO4	: 72	pH	: 6.9	BOD-S	:
MBAS	: 0.21	LI	:	TSS-Inf	:
SiO2	:	Cond	: 2200 uMHOS	TSS-Eff	:
H2S	:	NH3-T	: 91	MLSS	:
NH3-C	:	TKN	: 100	MLVSS	:
VSS	:	Ca	: 23	K	:
TS	:	Cr	: <0.05	Se	: <2 ug/l
VS	:	Co	:	Ag	: <0.01
TDS	: 1700	Cu	: <0.05	Na	: 320
SS	:	Au	:	Tl	:
% SOL	:	Fe	: 35	Sn	:
G & O	:	Pb	: <0.05	Ti	:
Al	: 1.4	Mg	:	V	:
Sb	:	Mn	: 15	Zn	: 1.5
As	: 4.2 ug/l	Hg	: <0.4 ug/l	THM	:
Ba	: 0.31	Mo	:	TOC	: 56
Be	:	Ni	: 0.17		
Cd	: <0.01	Pd	:	Sr	: <0.1

Remarks: All results in mg/l unless otherwise indicated.

Ronald A. Bayer
Laboratory Director 3/4/85

Received from:
NYSDEC Region 3

FERROXCUBE
DIVISION OF AMPEREX ELECTRONIC CORP.
Saugerties, NY 12477 914-246-2811 TWX 510-247-5410

R&E/2-76

p 404

April 12, 1982

Town of Saugerties
Town Hall
Main Street
Saugerties, NY 12477

ATTN: George Turner, Town Supervisor

RE: Ground Water Well Monitoring Analysis
(T) Saugerties Landfill 3/27/82

Dear Mr. Turner:

The results of the referenced analyses are as follows:

Parameter	Unit	1-North Well	2-South Well	3-House Well
Chlorides	mg/l	13	280	50
Conductivity	µmhos/cm	220	1800	640
pH	standard	6.7	6.5	9.2
TOC	mg/l	15	21	7
Aluminum	mg/l	<1.0	<0.1	<0.1
Barium	mg/l	<0.5	<0.5	<0.5
Chromium(T)	mg/l	<0.1	<0.1	<0.1
Chromium(Hex)	mg/l	<0.05	<0.05	<0.05
Iron	mg/l	0.7	4.7	0.1
Manganese	mg/l	<0.1	7.3	<0.1
Nickel	mg/l	<0.1	0.1	<0.1
Strontium	mg/l	0.4	2.3	<0.1
zinc	mg/l	<0.1	<0.1	<0.1

If there are any questions regarding this data, please do not hesitate to contact the undersigned.

Very turly yours,

Joseph L. Wolf, Jr.
Environmental Engineer

/cab

cc: E. Jones
S. Dahlman (T) Saugerties

RECEIVED
APR 15 1982
ULSTER COUNTY
HEALTH DEPARTMENT

Appendix 1.1-12

p.1 of 4

0483

NEW YORK STATE DEPARTMENT OF HEALTH
DIVISION OF LABORATORIES AND RESEARC
ENVIRONMENTAL HEALTH CENTER

RECEIVED FROM
USEPA
REGION II

RESULTS OF EXAMINATION
(PAGE 1 OF 2)

LAB ACCESSION NO: 00692 YR/MO/DAY/HR SAMPLE REC'D: 79/05/22/11

REPORTING LAB: 10 EHC ALBANY
PROGRAM: 124
STATION (SOURCE) NO:
DRAINAGE BASIN: 13 NY GAZETTEER NO: 5564 COUNTY: ULSTER
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: IN SAUGERTIES UPGRADIENT MONITOR WELL FOR GROUND WATER
EXACT SAMPLING POINT: 9FT BELOW GROUND SURFACE
TYPE OF SAMPLE: 25 GROUND WATER
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 05/21/14
REPORT SENT TO: CO (1) RO (1) LPHE (1) LHO (0) FED (0) CHEM (0)

PARAMETER		UNIT	RESULT	NOTATION
000401	FLUORIDE,FREE	MG/L	0.13	
000801	NITROGEN,NITRATE&NITRITE	MG/L	0.60	
009401	BARIUM	MG/L	0.5	LT
010301	MERCURY, TOTAL	MG/L	0.0004	LT
010601	SILVER	MG/L	0.02	LT
309301	ARSENIC	MG/L	0.01	LT
309701	CADMIUM	MG/L	0.003	
309801	CHROMIUM	MG/L	0.02	
310101	LEAD	MG/L	0.01	
310501	SELENIUM	MG/L	0.01	LT
001900	PH (LABORATORY)		7.0	
001001	CHLORIDE	MG/L	3.	
002401	SULFATE AS S04	MG/L	11.	

DATE COMPLETED: 7/30/79

RECEIVED
AUG 1 1979
ULSTER COUNTY
HEALTH DEPARTMENT

DIRECTOR OF ENVIRONMENTAL SANITATION
ULSTER COUNTY HEALTH DEPARTMENT
300FLATBUSH AVENUE
KINGSTON, NEW YORK 12401

SUBMITTED BY: SCHONMKE

0484 -

NEW YORK STATE DEPARTMENT OF HEALTH
DIVISION OF LABORATORIES AND RESEARCH
ENVIRONMENTAL HEALTH CENTER

p 2014

RECEIVED FROM
USEPA
REGION II

RESULTS OF EXAMINATION
(PAGE 2 OF 2)

LAB ACCESSION NO: 00692 YR/MO/DAY/HR SAMPLE REC'D: 79/05/22/11

REPORTING LAB: 10 EHC ALBANY
PROGRAM: 124
STATION (SOURCE) NO:
DRAINAGE BASIN: 13 NY GAZETTEER NO: 5564 COUNTY: ULSTER
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: IN SAUGERTIES UPGRADIENT MONITOR WELL FOR GROUND WATER
EXACT SAMPLING POINT: 9FT BELOW GROUND SURFACE
TYPE OF SAMPLE: 25 GROUND WATER
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 05/21/14
REPORT SENT TO: CO (1) RO (1) LPHE (1) LHO (0) FED (0) CHEM (0)

	PARAMETER	UNIT	RESULT	NOTATION
311101	ALUMINUM	MG/L		NA
009901	COPPER	MG/L	0.05	LT
010001	IRON	MG/L	0.76	
010201	MANGANESE	MG/L	0.18	
010901	ZINC	MG/L	0.14	

DATE COMPLETED: 7/30/79

RECEIVED
AUG 1 1979
ULSTER COUNTY
HEALTH DEPARTMENT

DIRECTOR OF ENVIRONMENTAL SANITATION
ULSTER COUNTY HEALTH DEPARTMENT
300FLATBUSH AVENUE
KINGSTON, NEW YORK 12401

SUBMITTED BY: SCHONMKE

0460

NEW . RK STATE DEPARTMENT OF HE_TH
DIVISION OF LABORATORIES AND RESEARCH
ENVIRONMENTAL HEALTH CENTER

1.314

RECEIVED FROM
USEPA
REGION II

RESULTS OF EXAMINATION
(PAGE 1 OF 2)

LAB ACCESSION NO: 00686 YR/MO/DAY/HR SAMPLE REC'D: 79/05/22/11

REPORTING LAB: 10 EHC ALBANY
PROGRAM: 124
STATION (SOURCE) NO:
DRAINAGE BASIN: 13 NY GAZETTEER NO: 5564 COUNTY: ULSTER
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: TN SAUGERTIES LANDFILL DOWNGRADIENT GRO
UNDWATER MONITOR WELL
EXACT SAMPLING POINT: 11 FEET BELOW GROUND SURFACE
TYPE OF SAMPLE: 25 GROUND WATER
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 05/21/14
REPORT SENT TO: CO (1) RO (1) LPHE (1) LHO (0) FED (0) CHEM (0)

PARAMETER		UNIT	RESULT	NOTATION
000401	FLUORIDE,FREE	MG/L	0,1	LT
000801	NITROGEN,NITRATE&NITRITE	MG/L	0,2	LT
009401	BARIUM	MG/L	0,5	LT
010301	MERCURY, TOTAL	MG/L	0,0004	LT
010601	SILVER	MG/L	0,02	LT
309301	ARSENIC	MG/L	0,01	
309701	CADMIUM	MG/L	0,002	LT
309801	CHROMIUM	MG/L	0,01	
310101	LEAD	MG/L	0,01	LT
310501	SELENIUM	MG/L	0,01	LT
001900	PH (LABORATORY)		6,5	
001001	CHLORIDE	MG/L	130,	
002401	SULFATE AS SO4	MG/L	110,	

DATE COMPLETED: 7/30/79

RECEIVED
AUG 1 1979
ULSTER COUNTY
HEALTH DEPARTMENT

DIRECTOR OF ENVIRONMENTAL SANITATION
ULSTER COUNTY HEALTH DEPARTMENT
300FLATBUSH AVENUE
KINGSTON, NEW YORK 12401

SUBMITTED BY: SCHOONMAK

0461

NEW YORK STATE DEPARTMENT OF HEALTH
DIVISION OF LABORATORIES AND RESEARCH
ENVIRONMENTAL HEALTH CENTER

p414

RECEIVED FROM
USEPA
REGION II

RESULTS OF EXAMINATION
(PAGE 2 OF 2)

LAB ACCESSION NO: 00686 YR/MO/DAY/HR SAMPLE REC'D: 79/05/22/11

REPORTING LAB: 10 EHC ALBANY
PROGRAM: 124
STATION (SOURCE) NO:
DRAINAGE BASIN: 13 NY GAZETTEER NO: 5564 COUNTY: ULSTER
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: TN SAUGERTIES LANDFILL DOWNGRADIENT GRO
UNDWATER MONITOR WELL
EXACT SAMPLING POINT: 11 FEET BELOW GROUND SURFACE
TYPE OF SAMPLE: 25 GROUND WATER
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 05/21/14
REPORT SENT TO: CO (1) RO (1) LPHE (1) LHO (0) FED (0) CHEM (0)

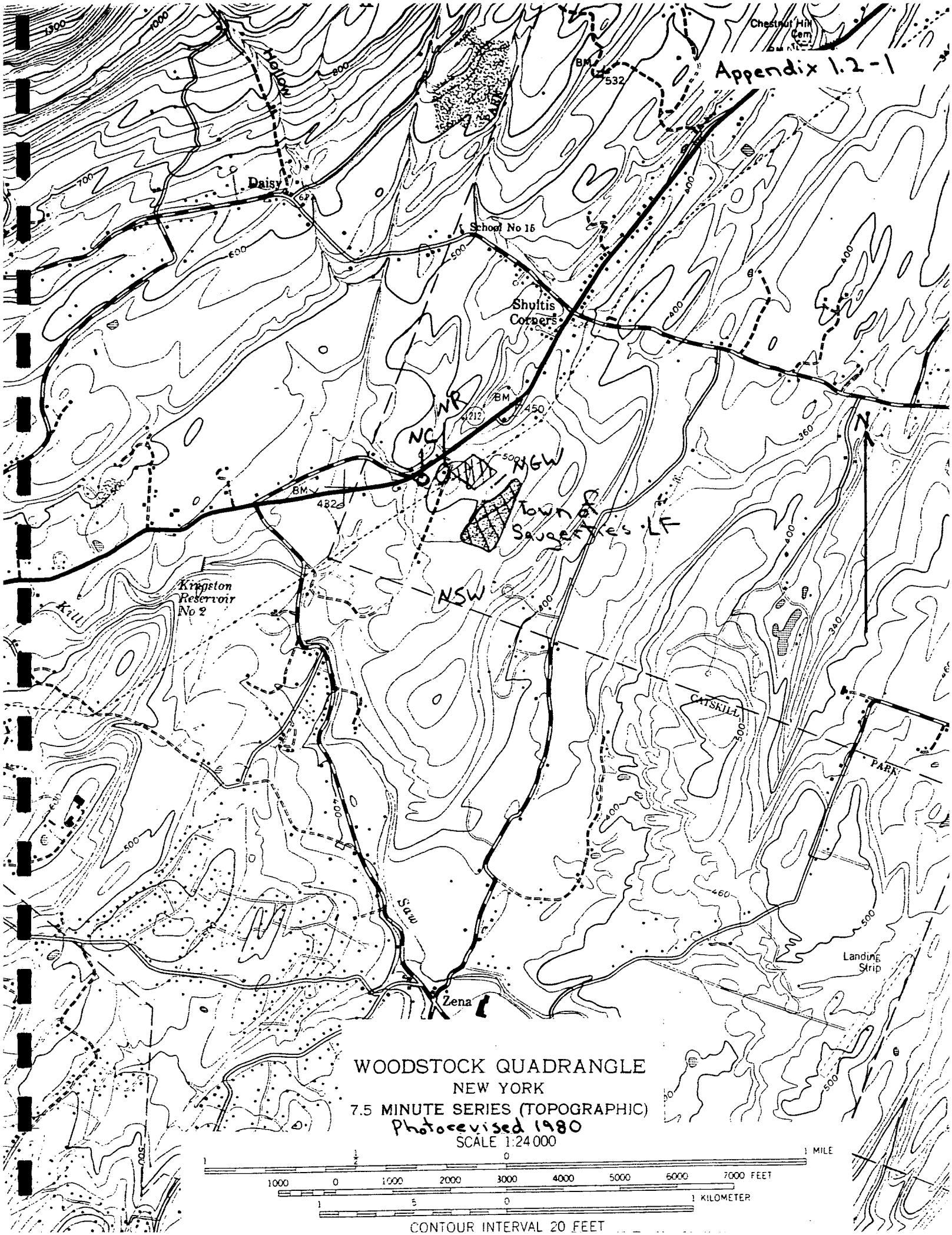
PARAMETER		UNIT	RESULT	NOTATION
311101	ALUMINUM	MG/L	0.76	
010201	MANGANESE	MG/L	6.0	.6 →
010901	ZINC	MG/L	0.15	
009901	COPPER	MG/L	0.05	LT
010001	IRON	MG/L	8.3	.6 →

DATE COMPLETED: 7/30/79

RECEIVED
AUG - 1 197
ULSTER COUNTY
HEALTH DEPARTMENT

DIRECTOR OF ENVIRONMENTAL SANITATION
ULSTER COUNTY HEALTH DEPARTMENT
300 FLATBUSH AVENUE
KINGSTON, NEW YORK 12401

SUBMITTED BY: SCHOONMAK


Appendix 1.2-1
Chestnut Hill Cem.
BM
532
Daisy
School No 15
Shultis Corners
NC
WR
BM
1212
450
500
NGW
BM
482
Town of Saugerties LF
NSW
Kingston Reservoir No 2
Kill
CATSKILL
PARK
Landing Strip
Zena
WOODSTOCK QUADRANGLE
NEW YORK
7.5 MINUTE SERIES (TOPOGRAPHIC)
Photorevised 1980
SCALE 1:24000
1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 KILOMETER
CONTOUR INTERVAL 20 FEET

Appendix 1.3-1

P 1 of 5

Ground-Water Resources of Orange and Ulster Counties, New York

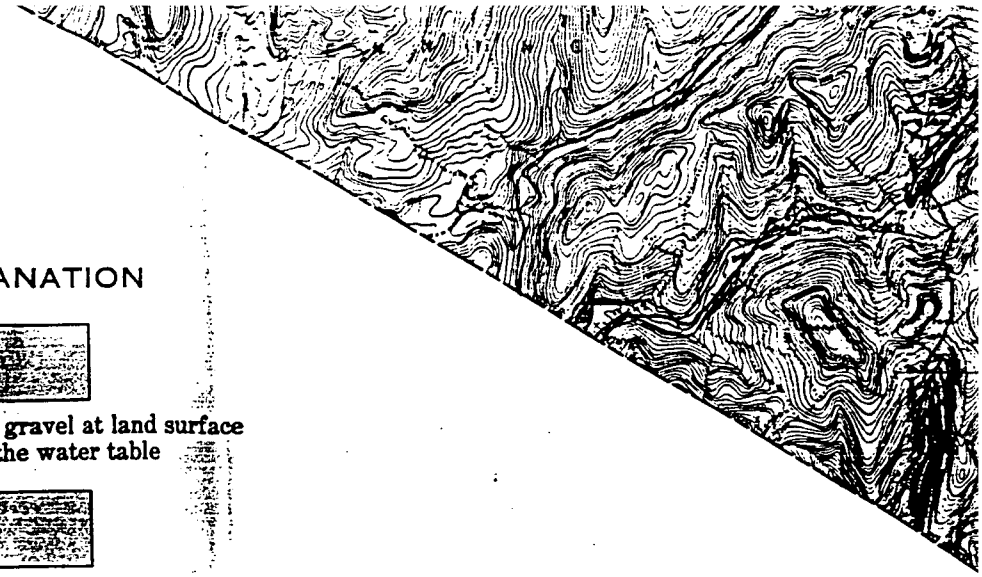
77457

By MICHAEL H. FRIMPTER

GEOLOGICAL SURVEY WATER-SUPPLY PAPER 1985

Prepared in cooperation with the New York State Conservation Department

UNITED STATES GOVERNMENT PRINTING OFFICE, WASHINGTON : 1972



EXPLANATION

Stratified sand and gravel at land surface and above the water table

Stratified sand and gravel at land surface and below the water table

Stratified sand and gravel below clay or silt and the water table

Stratified clay and silt with no or thin layers of sand and gravel at land surface and below the water table

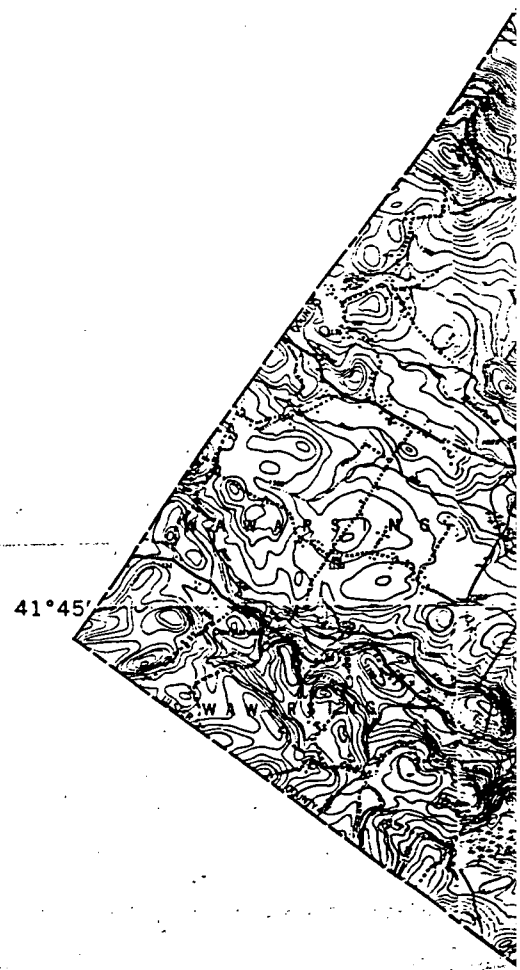
Till and bedrock outcrop, small quantities of sand and gravel may occur in these deposits, but they are not capable of sustaining industrial or municipal water supplies

Contact

Dashed where inferred or projected

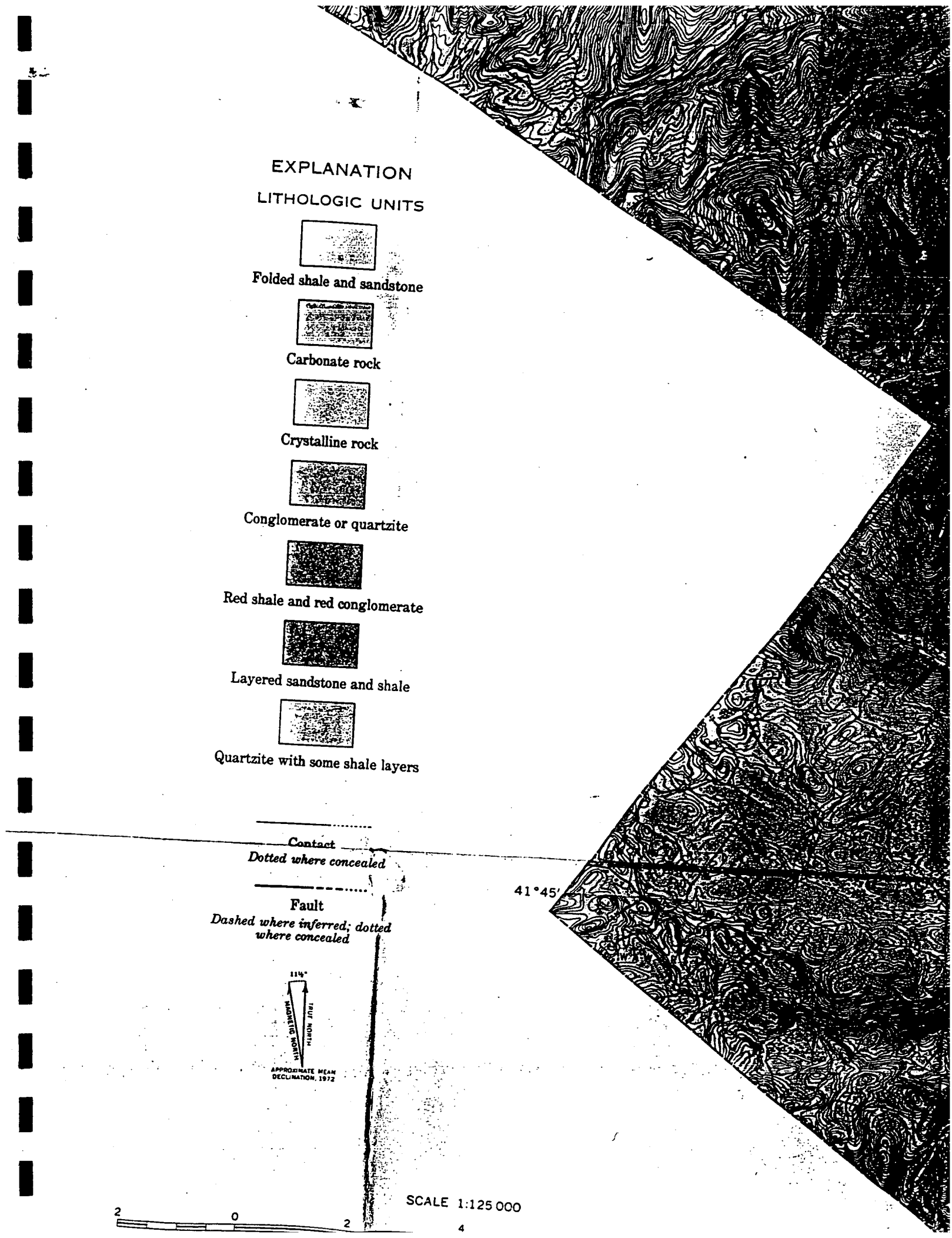
A ——— A'

Location of cross sections described in report



SCALE 1:125 000


N


EXPLANATION
LITHOLOGIC UNITS
Folded shale and sandstone
Carbonate rock
Crystalline rock
Conglomerate or quartzite
Red shale and red conglomerate
Layered sandstone and shale
Quartzite with some shale layers
Contact
Dotted where concealed
Fault
Dashed where inferred; dotted where concealed
41°45'
11½°
MAGNETIC NORTH
TRUE NORTH
APPROXIMATE MEAN DECLINATION, 1972
SCALE 1:125 000
2
0
2

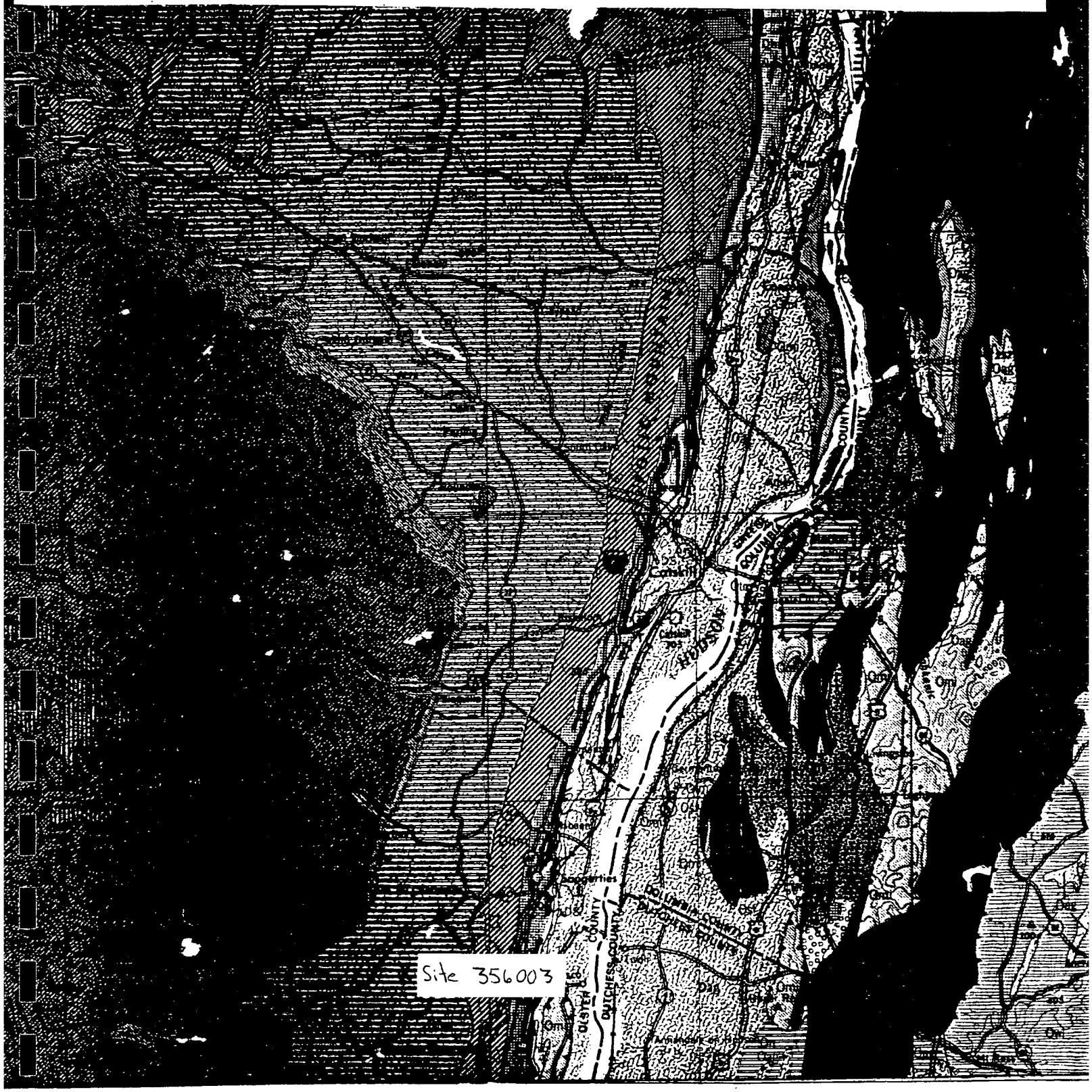

N
42°30'
RESERVOIR
RIVER
Scale 1:25000

GEOLOGIC MAP OF NEW YORK

1970

Appendix 1.3-2
p. 1 of 2

Hudson–Mohawk Sheet

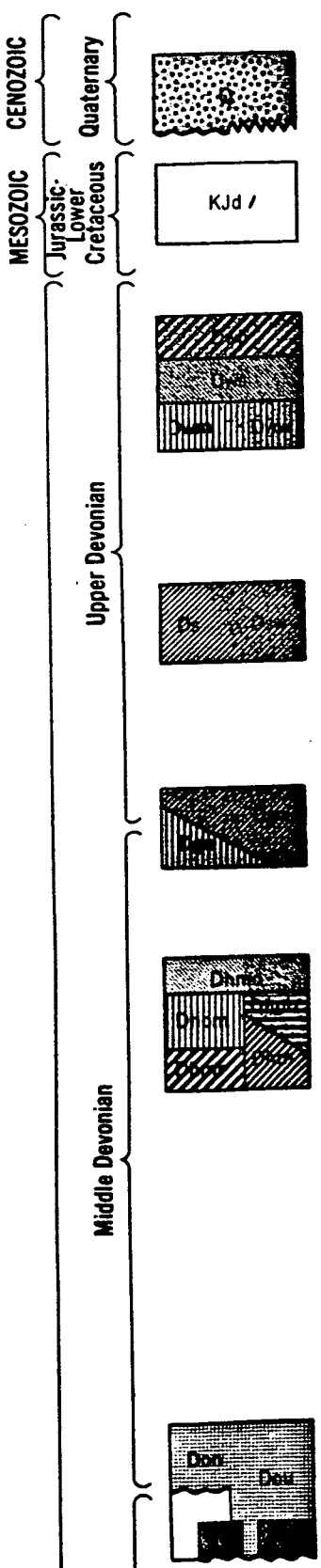


Random dash, V, and + patterns: igneous or meta-igneous rocks

A query (?) placed before the symbol of a mapping unit signi unit may be older than the age indicated. A query placed after t a mapping unit signifies doubt concerning the identification of

An irregular lower margin on the "color boxes" signifies that an unconformable relationship with subjacent units, however se with the next unit listed. Wavy lines signify parallel unconfo teeth lines signify angular unconformities.

Boxes outlined in red denote igneous or meta-igneous rocks.



15'

43°00'

GLACIAL AND ALLUVIAL DEPOSITS

Q — Underlying bedrock geology unknown.

MESOZOIC INTRUSIVES

KJd — Lamprophyre, diabase, and albite-basalt dikes; not shown in Proterozoic terrane.

WEST FALLS GROUP
1,500-2,100 ft. (460-640 m.)

Dwh — Honesdale Formation—sandstone, shale.

Dws — Slide Mountain Formation—sandstone, shale, conglomerate.

Dwm — Beers Hill, Dunn Hill, Millport, and Moreland Shales.

Dww — upper Walton Formation—shale, sandstone, conglomerate.

SONYEA GROUP
700-1100 ft. (210-340 m.)

Ds — "Enfield" and Kattel Formations—shale, siltstone, sandstone.

Dsw — lower Walton Formation—shale, sandstone, conglomerate.

GENESEE GROUP
1,200-1,500 ft. (370-460 m.)

Dgo — Oneonta Formation—shale, sandstone, conglomerate.

Dgu — Unadilla, Laurens, New Lisbon, and Gilboa Formations —shale, siltstone, sandstone.

HAMILTON GROUP
1,700-2,800 ft. (520-850 m.)

Dhmo — Moscow Formation—In west: Cooperstown and Portland Point shale and sandstone Members; In east: "Manorkill" and Portland Point shale and sandstone Members.

Dhpm — Panther Mountain Formation—shale, siltstone, sandstone.

Dhmr — Marcellus Formation—Pecksport, Solsville, Otsego, and Chittenango shale and sandstone Members, Cherry Valley Limestone, and Union Springs Shale Members.

→ Dhpl — Plattekill Formation—shale, sandstone; Ashokan Formation—shale, sandstone.

Dhm — Undifferentiated lower Hamilton Group—Panther Mountain, Mount Marion, Stony Hollow, and Union Springs shales and sandstones.

ONONDAGA LIMESTONE AND ULSTER GROUP
100-500 ft. (30-150 m.)

Don — Onondaga Limestone—Seneca, Morehouse (cherty), and Nedrow Limestone Members, Edgecliff cherty limestone Member, local bioherms.

Dou — Onondaga Limestone; Schoharie Formation—shale, limestone; Carlisle Center Siltstone; Esopus Shale.

Do — Oriskany Formation—sandstone, arenaceous limestone.

Dgl — Glenerie Formation—limestone, shale

PALEOZOIC

Ordovician

Cambrian

Appendix 1.3-3
p 1 of 4

GROUND-WATER BASIC DATA ORANGE AND ULSTER COUNTIES NEW YORK

BY

MICHAEL H. FRIMPTER
U.S. GEOLOGICAL SURVEY

Prepared by

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
in cooperation with

NEW YORK WATER RESOURCES COMMISSION

STATE OF NEW YORK
CONSERVATION DEPARTMENT
WATER RESOURCES COMMISSION

Bulletin 65
1970

Table 1.--Records of selected wells and springs (Continued)

Well number	Owner's name	Reported yield (gallons per minute)	Use	Method of construction; completion	Depth of well (feet)	Diameter (inches)	Length of casing (feet)	Aquifer	Water level below land surface (feet)	Water level Date	Topographic situation	Altitude above sea level (feet)	Remarks
204-427-1	Richard Gavette	12	D	-- --	r72	7	68	Sandstone	r10	5/ 1/66	VF	1,375	
-2	John Rossitz	40	D	Dr; OE	r96	7	97	Gravel	r10	6/12/65	VF	1,375	Backfilled 1 ft.
204-418-1	Mr. Michels	--	D	Du; P	18	36	18	Till	6.0	7/25/49	Hs	820	
204-412-1	Howard Humphries	20	D	Dr; OH	135	6	20	Sandstone	6.0	6/16/65	Hs	1,110	
204-411-1	School No. 5	--	I	-- --	61	6	--	do.	flows	7/25/66	VF	1,200	Partial anal; temp 53 7/25/66.
204-401-1	Mr. Talia	--	D	-- --	r115	6	--	do.	--	--	Hs	320	
204-400-1	Mr. Kanon	6	D	Dr; OH	45	6	--	do.	--	--	VF	320	
204-359-1	Unknown	--	A	-- --	r125	6	6	Shale	flows	7/13/49	Hs	190	H_2S.
204-358-1	Arthur V. Wallot	52	D	-- --	r107	6	56	Carbonate	r5	1956	VF	165	Do.
204-357-1	Mr. Schraeter	--	T	Dr; OE	r114	--	114	Clay	r13	--	VF	65	Log; destroyed.
-2	do.	--	T	Dr; OE	r25	--	25	Sand	r8	--	VF	58	Log.
203-419-1	Paul Miller	10	D	-- --	440	8, 6	270	Sandstone	r50	8/23/49	Hs	1,200	
203-409-1	A. D. Harris	--	D	-- --	r167	6	30	Shale	--	--	VF	360	
203-407-1	Mr. Greenwood	7	D	-- --	r176	6	10	Sandstone	--	--	Hs	740	
203-403-1	John Hasselgrave	--	D	-- --	107	6	--	Shale	87.1	9/10/60	VF	345	
203-359-1	D. Campese	--	D	-- --	r145	6	--	do.	r5	7/14/49	VF	260	H_2S.
203-358-1	Charles Bennett	--	D	-- --	166	6	--	Carbonate	1.5	11-10/60	VF	165	Do.
-2	Unknown	26	D	-- --	r45	6	30	do.	r26	6/23/49	VF	160	
202-417-1	D. Schaffer	30	D	-- --	120	6	90	Sandstone	flows	7/25/49	VF	710	
202-416-2	Charles Gustafson	10	D	-- --	260	6	170	do.	r.0	1940	Hs	740	
202-409-1	McDaniel and Wingert	--	C	-- --	r265	6	--	do.	r50	--	Hs	670	
202-408-1	Richard E. Bark	--	C	-- --	r199	6	50	do.	28.3	12/14/60	VF	660	Partial anal; H_2S.
-2	Village of Woodstock	250	P	Dr; S	r36	10	26	Gravel	r9	9/ 8/60	VF	630	Log; backfilled 64 ft.
-3	do.	250	P	Dr; S	r36	10	26	do.	r8	9/ 8/60	VF	630	
202-403-1	Mr. Marek	19	D	Dr; OH	r80	6	--	Sandstone	--	--	Ter	365	H_2S.
202-359-1	John Greco	12	D	-- --	r135	6	135	Gravel	r40	9/ /59	VF	175	
-2	George Hoffman	60	P	-- --	r157	6	130	Carbonate	r14	7/14/49	Ter	190	H_2S; log.
-3	Mount Marion Water Co., Inc.	--	P	Dr; S	r81	12	66	Sand	--	--	Ter	180	
202-357-1	Henry Fuller	20	C, D	-- --	r165	6	140	Shale	r40	7/14/49	Ter	155	Partial anal; log.
201-442-1Sp	Fred Shaver	20	A	-- --	--	--	--	Gravel	0	10/26/66	VF	1,860	Spring in old stream channel.
-2	do.	--	A, D	Du; P	3	60	4	Till	0	10/26/66	Hs	1,900	Developed spring; supplies four houses and a barn; filled in 1 ft.
201-415-1	Howard C. Umbey	20	D	Dr; OE	r90	6	90	Gravel	--	--	Hs	910	
201-414-1	Perrine Studios	3	D	Dr; OH	r83	6	--	Sandstone	--	--	Hs	350	

201-414-1 Perrine Studios 3 D Dr; OH r81 6 Sandstone 35

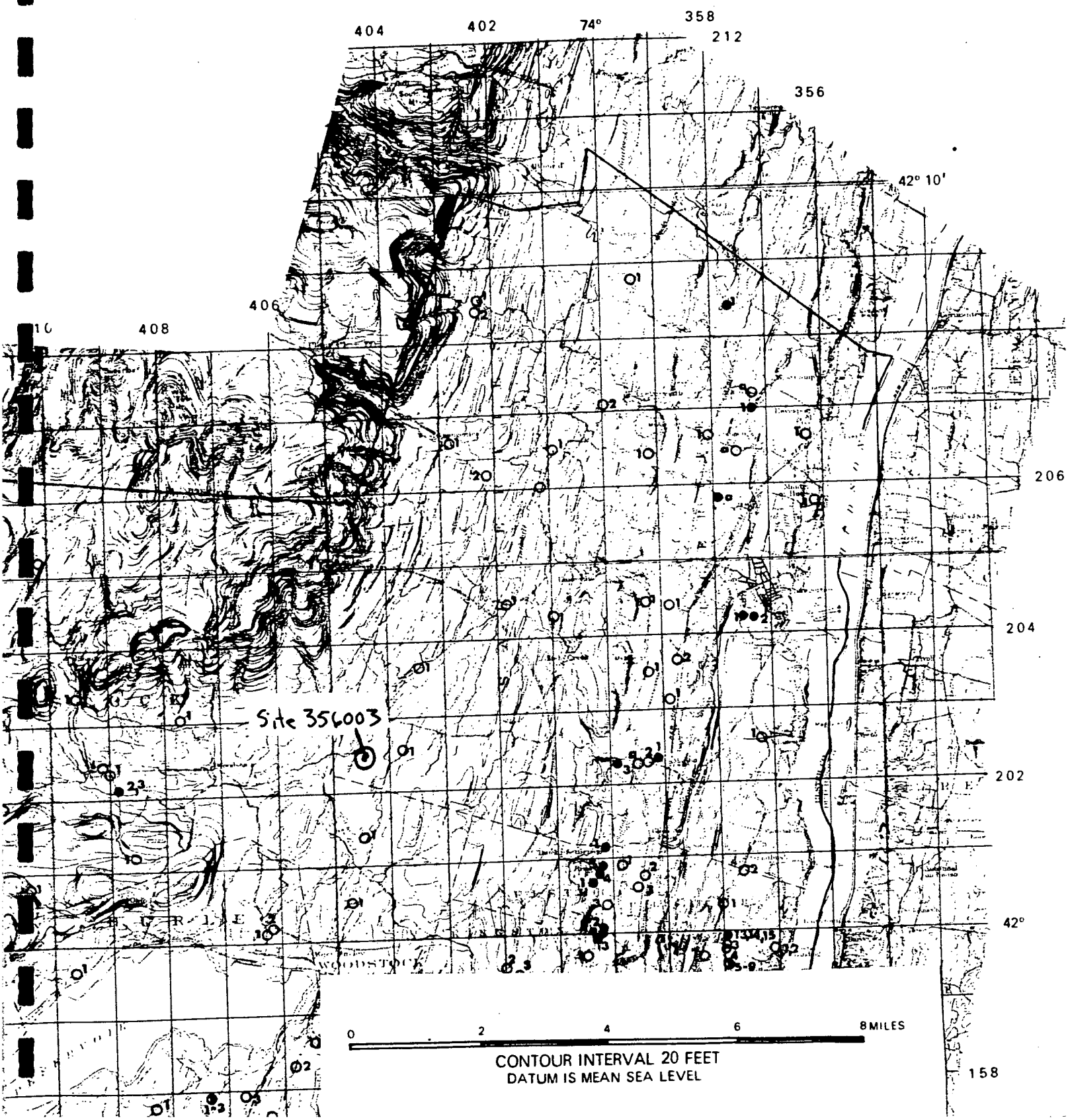
Table 1.--Records of selected wells and springs (Continued)

Well number	Owner's name	Reported yield (gallons per minute)	Use	Method of construction; completion	Depth of well (feet)	Diameter (inches)	Length of casing (feet)	Aquifer	Water level: Below land surface (feet)	Water level: Date	Topographic situation	Altitude above sea level (feet)	Remarks
201-413-1	Wittenberg Grade School	3	I	-- --	r90	6	30	Sandstone	0.0	7/19/49	Hs	820	
201-411-1	E. Lester	12	D	-- --	r135	6	10	do.	--	--	Hs	820	Iron.
201-410-1	D. B. Schultis	--	D	-- --	r92	6	--	do.	--	--	VF	860	
201-408-1	Irving Parker	--	--	-- --	r138	6	--	do.	--	--	VF	930	
201-404-1	E. A. Schnack	--	D	-- --	r60	6	--	do.	--	--	VF	380	
201-400-1	Town of Ulster	--	T	Dr; OE	r71	8	71	Sand and gravel	r12.5	--	Hs	160	Log.
200-416-1	Anthony and Rosario Genguzza	--	A	Dr; OE	33	6	36	Gravel	12.4	10/26/66	VF	1,650	Filled in 3 ft.
200-415-1	Beechford Farms, Inc.	20	A, D	Dr; OH	202	10, 8	202	Sandstone	flows	1945	VF	680	
200-410-1	V. Siegel	--	A, D	-- --	181	6	180	do.	flows	8/ 4/49	Hs	760	Flows 4 gpm from reduced outlet.
200-406-1	August May	9	D	-- --	r149	6	29	do.	r33	7/29/49	Hs	950	
-2	Richard S. Gibbs	12	D	-- --	r98	6	22	do.	r30	1955	Hs	590	
200-404-1	Edward and Jeanette Lasagni	7	D	-- --	r180	--	--	do.	r2	1956	Hs	600	H_2S.
200-400-1	Donald Osgood	--	D	-- --	r80	6	--	Shale	r6	9/13/60	Hs	418	
-2	John Fredricks	--	U	Du; P	19	30	19	Gravel	13	10/18/60	Hs	200	
-3	Town of Ulster	--	T	Dr; OE	r64	8	64	do.	--	--	VF	150	Log; backfilled 2 ft.
-4	do.	--	T	Dr; OH	r47	8	44	Shale	--	--	Hs	160	Log.
-5	Halcyon Park Water Dist.	200	P	Dr; S	r74	6	57	Gravel	12.4	12/ 7/65	Hs	172	Do.
	N. Y. State Thruway Authority	200	P	-- --	r77	6	--	do.	r31	9/29/53	Hs	165	dd 17 after pumping 8 hours; log; temp 8.1 9/29/53.
200-359-1	L. R. Hall	--	D	Dr; OH	r97	6	7	Shale	--	--	Hs	160	
-2	B. Bishop	30	D	-- --	r123	6	7	Carbonate	--	--	VF	115	
-3	Town of Ulster	--	T	-- --	r153	8	149	Shale	r24.5	--	Ter	150	Log.
200-357-1	Harry Carle	3	D	-- --	r128	6	20	Carbonate	9.1	10/20/60	Hs	180	
-2	R. Delninger	5	D	-- --	r110	6	40	Shale	r17	1951	Ter	190	
159-413-1	Kingston YMCA	--	I	Du; P	5	120	9	Gravel	flows	9/22/64	Hs	1,270	Temp 10.8 9/22/64.
-2	do.	6	I	Dr; OH	r136	6	--	Sandstone	--	--	Hs	1,330	
159-409-1	Charles Smishkoff	20	C, D	-- --	r128	6	8	do.	r46	7/29/49	Hs	730	
159-401-1	Cecelia and Anne Oldpaugh	--	D	-- --	103	6	--	do.	15.6	9/21/60	VF	140	
-2	Anna and Ernst Mossl	3 1/2	D	-- --	r136	6	10	do.	r60	1952	Hs	380	
-3	Unknown	3 3/4	D	-- --	r293	6	16	do.	r90	10/ /58	Hs	400	
159-400-1	Paul Clark	4	D	-- --	r162	--	--	do.	r112	10/18/60	Hs	210	
-2	Town of Ulster	--	T	Dr; OE	r74	8	74	None	--	--	VF	145	Log.
-3	do.	10	T	Dr; OE	r75	8	75	Gravel	--	--	VF	145	dd 4; log; backfilled 2 ft.
159-358-1	Kingsvale Water Co.	40	T	Dr; OH	r180	6	26	Shale	r0	1955	Ter	157	dd 140 after pumping 24 hours; log.

p 4 of 4

BULLETIN 65 PLATE 2

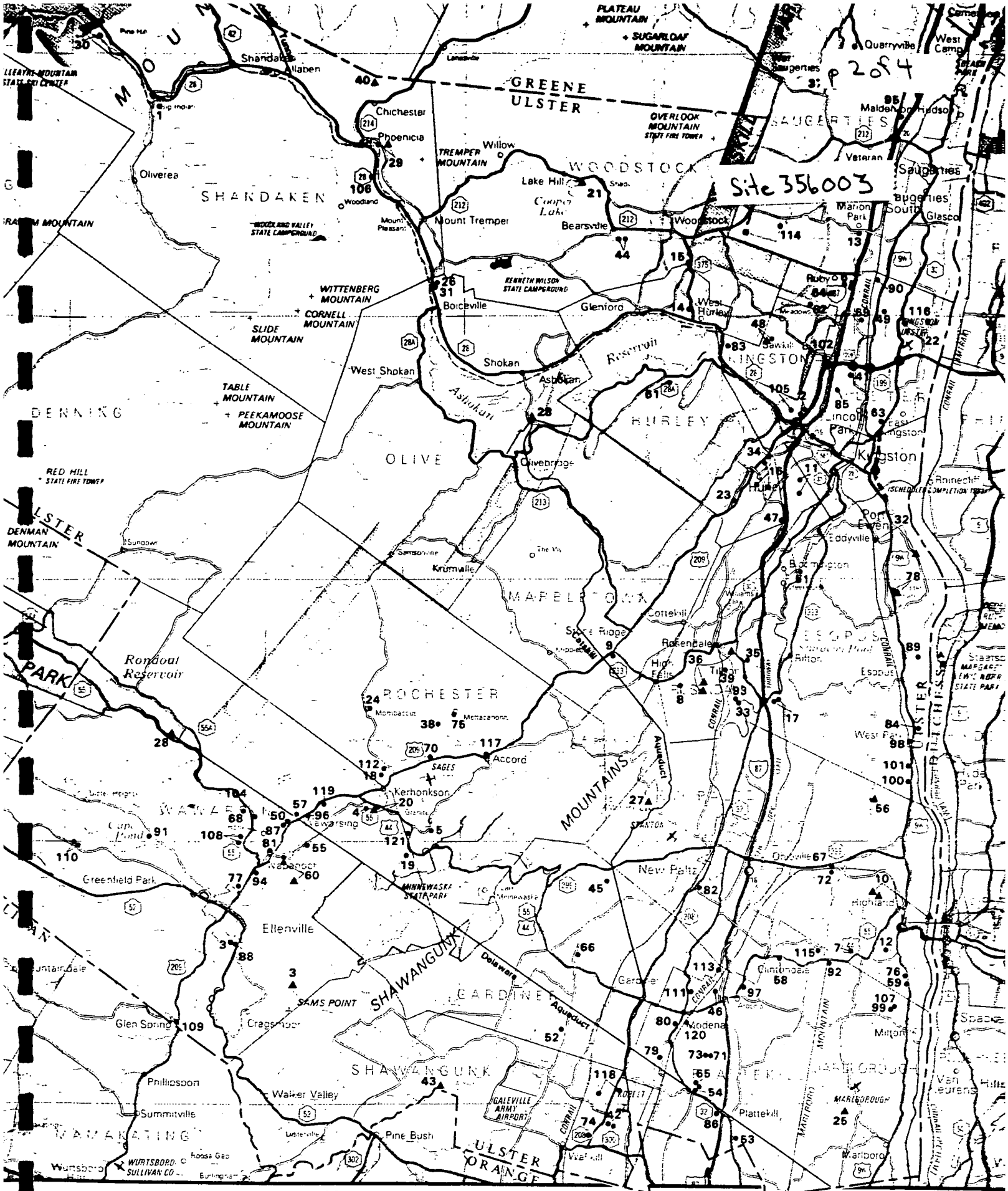
Published by NEW YORK STATE WATER RESOURCES COMI
CONSERVATION DEPARTMENT , DIVISION OF WATER RESO



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

Appendix 1.3-4
P 1 of 4


P 2054
Site 356003
GREENE
ULSTER
SHANDAKEN
WOODSTOCK
OLIVE
HURLEY
ROCHESTER
MARBLETOWN
GARDINER
SHAWANGUNK
WAWARSING
ESOPUS
KINGSTON
PLATEAU MOUNTAIN
SUGARLOAF MOUNTAIN
OVERLOOK MOUNTAIN
TREMPER MOUNTAIN
WITTENBERG MOUNTAIN
CORNELL MOUNTAIN
SLIDE MOUNTAIN
TABLE MOUNTAIN
PEEKAMOOSE MOUNTAIN
RED HILL
DENMAN MOUNTAIN
SAMS POINT
Ashokan Reservoir
Rondout Reservoir
Shandaken
Phoenicia
Oliverea
Mount Tremper
Lake Hill
Bearsville
Woodstock
Boiceville
Glenford
West Hurley
Shokan
West Shokan
Olivebridge
Kingston
Saugerties
Ellenville
Napanoch
Kerhonkson
Accord
New Paltz
Highland
Gardiner
Modena
Plattekill
Marlboro
Milton
Walker Valley
Summitville
Phillipsport
Pine Bush
Wurtsboro
Glen Spring
Greenfield Park
Cragsmoor
Ellenville
Aqueduct
Conrail
SCALE 1:250,000
5 0 5 MILES
NORTH

ULSTER COUNTY

ID NO	COMMUNITY WATER SYSTEM	POPULATION	SOURCE
Municipal Community			
1	Big Indian Water Association	25	Wells (Springs)
2	Bright Acres Water Company	54	Wells
3	Ellenville Village	4400	Lake Maratanza
4	Fern Hill Water Association	24	Wells
5	Granite Estates Water Company	45	Wells
6	Halcyon Park Water District	297	Wells
7	Heritage Estates Water Company	24	Wells
8	High Falls Park Water Company	280	Wells
9	High Ridge Water Company	65	Wells
10	Highland Water District	3568	Hudson River, Reservoirs
11	Hillside Acres Water Company	484	Wells
12	Hudson Hills Water Company	168	Wells
13	Hudson Valley Water Company #1	790	Wells
14	Hudson Valley Water Company #3	56	Wells
→ 15	Hudson Valley Water Company #4	350	Wells
16	Hurley Water Company	1529	Wells
17	Hutterian Society of Brothers	400	Wells, Well (Springs)
18	Joint Venture Water Company	19	Wells
19	Kerhonkson Heights Association	62	Wells (Springs)
20	Kerhonkson Water District	650	Kerhonkson Reservoir, Wells
21	Kingston City Water District	24000	Cooper Lake
22	Kingsvale Water Company	434	Wells
23	Leewood Knolls Water Company	105	Wells
24	Linden Hills Water Company	27	Wells
25	Marlboro Water District	3500	Marlboro Reservoir
26	Mt Valley Acres Water Company	35	Wells
27	New Paltz Village	8500	Reservoirs
28	New York City - Aqueduct System (Page 76)		Ashokan Reservoir (Catskill Aqueduct System) Rondout Reservoir (Delaware Aqueduct System)
29	Phoenicia Water District	650	Reservoir, Wells
30	Pine Hill Water Company	210	Wells, Wells (Springs)
31	Piney Point Water Company	40	Wells
32	Port Ewen Water District	4500	Hudson River, Wells
33	River Road Water Supply	39	Wells
34	Rolling Meadows Water Company	1945	Wells
35	Rosendale Plains Homeowners	160	Wells
36	Rosendale Water District	1200	Still Pond, Reservoirs
37	Saugerties Village	6400	Plattekill Creek Reservoir
38	Sylvan Glade Water Company	80	Wells
39	Tillson Estates Waterworks	440	Wells
40	Tiskilwa Water Association	80	Ox Clove Creek Reservoir
41	Ulster Water District	5300	Wells
42	Wallkill Water District	1380	Wells, Wells (Springs)
43	Watchtower Farms	950	Pond
44	Woodstock Water District	4300	Wells
Non-Municipal Community			
45	Alex Thoben Trailer Park	39	Wells
46	Aloha Home Acres	150	Wells
47	Alpine Heights Trailer Park	60	Wells
48	Blue Stone Acres	180	Reservoir, Wells
49	C K W Trailer Park	15	Wells
50	Cozy Trailer Court	18	Wells
51	Creeklocks Mobile Home Park	NA	Wells
52	Deerhaven Mobile Home Park	111	Wells
53	Denardo Apartments	55	Wells
54	Depew and Harris Trailer Park	96	Wells
55	Diener Trailer Park	30	Wells
56	Division for Youth-Highland Occupational Education	400	Chodikee Lake
57	Dogwoods Mobile Park	72	Wells
58	Dormir Trailer Park	24	Wells
59	Dugue Trailer Park	33	Wells
60	Eastern New York Correctional Facility	700	Reservoir, Wells
61	Ebo Mobile Park	90	Wells
62	Edgar P Elliott Mobile Home Park	42	Wells
63	Every's Trailer Park	NA	Wells
64	Feddes Trailer Park	45	Wells
65	Forest Park Mobile Home Park	546	Wells
66	Gardiner Town House Apartments	85	Wells
67	Georgetown Bluffs	57	Wells

ID NO	COMMUNITY WATER SYSTEM	POPULATION	SOURCE
	Non-Municipal Community		
68	Golden Lane Mobile Park	36	Wells
69	H & H Mobile Home Park	132	Wells
70	H E George Trailer Sales	27	Wells
71	Hideway Acres	18	Wells
72	Highland Woods Trailer Park	54	Wells
73	Hilltop Apartments	208	Wells
74	Hudson Valley Estates	120	Wells
75	Larsons Adult Mobile Home Park	36	Wells
76	Longs Trailer Park	45	Wells
77	McDole Mobile Home Park	54	Wells
78	Mirror Lake Trailer Park	NA	Mirror Lake, Wells
79	Modena Country Club Inc	225	Wells
80	Modena Trailer Park	78	Wells
81	Napanoch Trailer Park	39	Wells
82	New Paltz Nursing Home	79	Wells
83	Onteora Lake Park	30	Wells
84	Order of the Holy Cross	25	Wells
85	Phil and Pauls Trailer Park	135	Wells
86	Plattekill Mobile Home Park	24	Wells
87	Quicks Trailer Park	27	Wells (Springs)
88	Randzin Trailer Park	17	Wells
89	Redemptorist Fathers of New York	110	Wells (Infiltration Gallery)
90	Reillys Trailer Park	42	Wells
91	Renaissance Project Inc	75	Wells
92	Rhodes Trailer Park	15	Wells
93	River Road Mobile Home Park	117	Wells
94	River Street Mobile Home Park	45	Wells
95	Robins Trailer Park	45	Wells
96	Robinson's Old Homestead Trailer Park	60	Wells
97	Rolling Acres Mobile Park	120	Wells
98	Rosemarie Mobile Home Park	51	Wells
99	Sagarese Trailer Park	25	Wells
100	Saint Cabrini Home Inc	140	Wells, Wells (Springs)
101	Santa Maria-Christian Brothers	20	Wells, Well (Springs)
102	Sawkill Trailer Park	186	Wells
103	Schaals Trailer Park	42	Wells
104	Shady Acres Mobile Home Park	135	Wells
105	Skytop Apartments	140	Wells
106	Sleepy Hollow Trailer Park	44	Wells
107	Strawberry Acres Trailer Park	36	Wells
108	Swan Acres Mobile Home Park	117	Wells
109	The Glen Mobile Home Park	96	Wells
110	The Greenwood Rehabilitation Center Inc	210	Wells
111	Timberbrook Mobile Home Park	54	Wells
112	Timothy Estates Apartments	35	Wells
113	Treeline Trailer Park	51	Wells
→ 114	Trnka Farms Mobile Home Park	138	Wells
115	Trout Brook Trailer Park	36	Wells
116	Ulster Landing Mobile Court	84	Wells
117	Valley Gardens Trailer Park	15	Wells
118	Wallkill Correctional Facility	700	Wells
119	Werners Trailer Park	30	Wells
120	Winters Trailer Park	27	Wells
121	Zolota Osin Inc	101	Wells

EA SCIENCE AND TECHNOLOGY
A Division of EA Engineering, Science, and Technology, Inc.

Appendix 1.5-1
p 1 of 1

COMMUNICATIONS RECORD FORM

Distribution: ( ) _____, ( ) _____
( ) _____, ( ) _____
( ) Author

Person Contacted: Walt Myer Date: 11/6/86

Phone Number: (914) 338-8443 Title: _____

Affiliation: Ulster County DOH Type of Contact: phone

Address: 300 Flatbrush Ave Person Making Contact: L. Rogess
Kingston, New York 12401

Communications Summary: Woodstock Water District is bounded by Rt 212 to the west, Terry Hill Rd to the southwest, Park Drive to the south, Plochman Lane to the east, California Quarry Rd & Byrdcliff Road to the north.

Perimeters for Hudson Valley Water Co. No. 4 are Brittany Dr, Holland Dr, Ridge Dr., & Rt 375.

(see over for additional space)

Signature: Lori Rogers

Appendix 1.5-2

RECEIVED MAR 19 1986 p 1 of 2

EA SCIENCE AND TECHNOLOGY
A Division of EA Engineering, Science, and Technology, Inc.
R.D. 2, Box 91 • Goshen Turnpike • Middletown, New York 10940
Telephone: (914) 692-6706

7 March 1986

Mr. George A. Sisco
District Consvst.
Ulster SWCD
380 Washington Avenue
UPO Box 97
Kingston, New York 12401

Dear Mr. Sisco:

EA Science and Technology, a Division of EA Engineering, Science, and Technology Inc., is conducting Phase I engineering investigations and assessments at inactive hazardous waste sites for the New York State Department of Environmental Conservation--attached is a copy of an authorization letter signed by Commissioner Williams. We need a particular piece of information which we believe your office has access to. Specifically, our assessments must include the number of acres of land irrigated with water (surface or ground water) drawn from the area within a 3-mile radius of each site.

Please examine the locations of sites in your county (site list and locator maps attached) and determine whether, to the best of your knowledge, there are any sources of irrigation water within approximately 3 miles of these sites... and estimate the number of acres of land irrigated by these sources. You could indicate the numbers of acres on a copy of the attached site list and simply return it to us.

This request is based on recent conversations with several Soil Conservation Service (SCS) offices which have indicated that SCS conducts an agricultural information survey periodically, and would in most cases have some information regarding acres irrigated. If your particular office believes there are no irrigated areas near these sites, or if you cannot estimate the number of acres involved, please reply in some fashion so that we can produce a reference to our attempt to obtain this information.

Thank you very much for your cooperation. If you have questions, please do not hesitate to call at the above number.

Sincerely yours,

William L. Going

William L. Going
Manager, Environmental
Assessment Studies

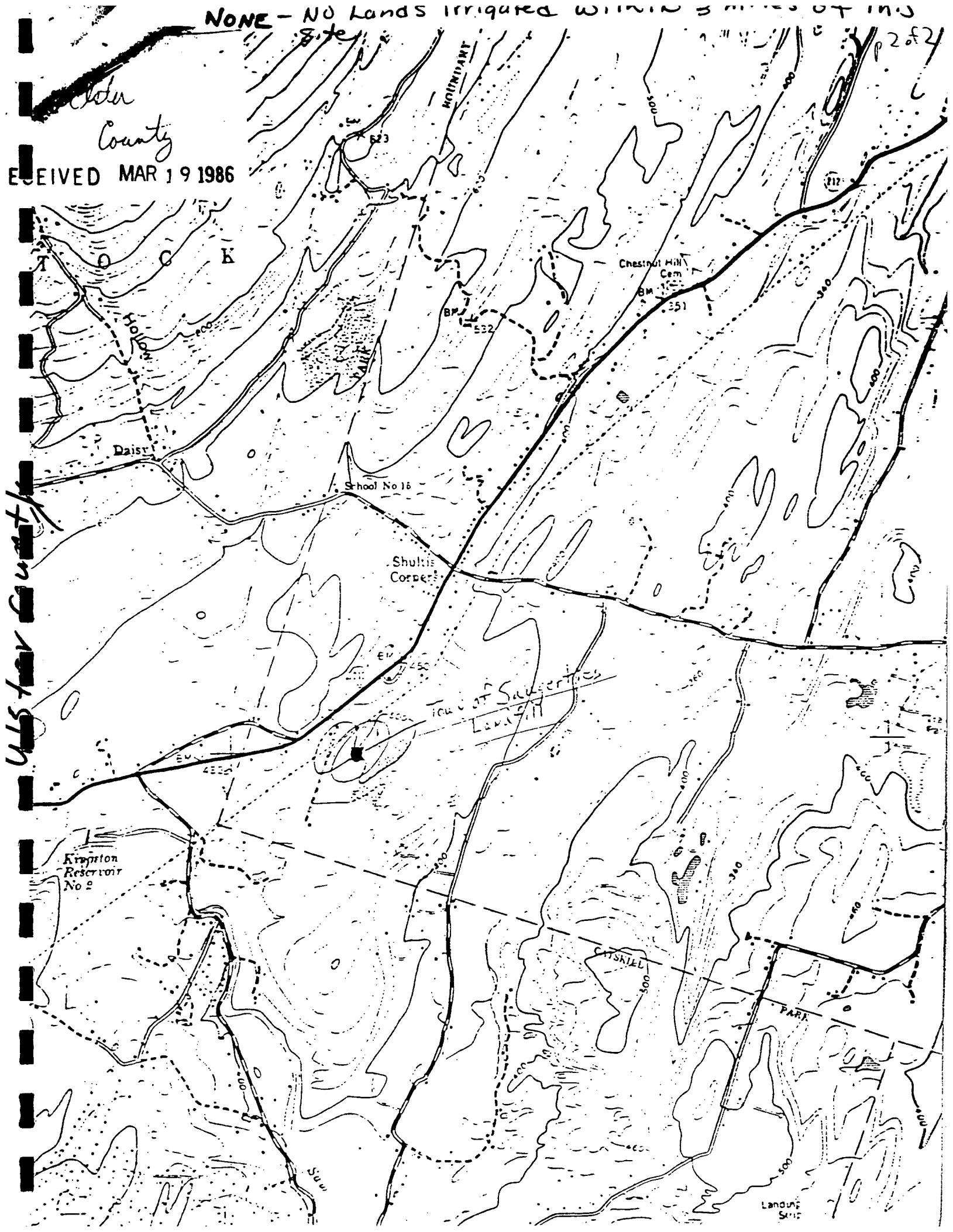
WLG/rlc
Enclosure

NONE - No Lands Irrigated within 5 miles of this site

p 2 of 4

Ulster County

RECEIVED MAR 19 1986



EA SCIENCE AND TECHNOLOGY
A Division of EA Engineering, Science, and Technology, Inc.

Appendix 1.5-3
p 1 of 1

COMMUNICATIONS RECORD FORM

Distribution: ( ) T. of Saugerties L.F., ( ) _____
( ) _____, ( ) _____
( ) Author

Person Contacted: Mr Wayne Elliot Date: 11/3/86

Phone Number: (914)255-5453 Title: Regional Fisheries Manager

Affiliation: DEC Region 3 Type of Contact: phone

Address: 21 South Putt Corners Road Person Making Contact: L. Rogess
New Paltz, NY

Communications Summary: Mr Elliot stated that the Saw Kill is used frequently for fishing & is considered a recreational resource.

(see over for additional space)

Signature: Lori Rogers

EA SCIENCE AND TECHNOLOGY
A Division of EA Engineering, Science, and Technology, Inc.

Appendix 1.5-4
p 1 of 1

COMMUNICATIONS RECORD FORM

Distribution: ( ) Town of Saugerties LF, ( ) _____
( ) _____, ( ) _____
( ) Author

Person Contacted: Mr George Sisco **Date:** 11/3/86

Phone Number: _____ **Title:** District Conservationist

Affiliation: Ulster SWCD **Type of Contact:** phone

Address: 380 Washington Ave
Kingston, NY 12401 **Person Making Contact:** L. Rogers

Communications Summary: The nearest agricultural land is located at the intersection of Sawkill Rd & Route 212.

(see over for additional space)

Signature: Lori Rogers

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A Division of EA Engineering, Science, and Technology, Inc.

Appendix 1.5-5
p 1 of 1

COMMUNICATIONS RECORD FORM

Distribution: ( ) T. of Saugerties L.F., ( ) _____
( ) _____, ( ) _____
( ) **Author**

Person Contacted: John Wood **Date:** 12/19/86

Phone Number: (914) 246-1479 **Title:** Fire Chief

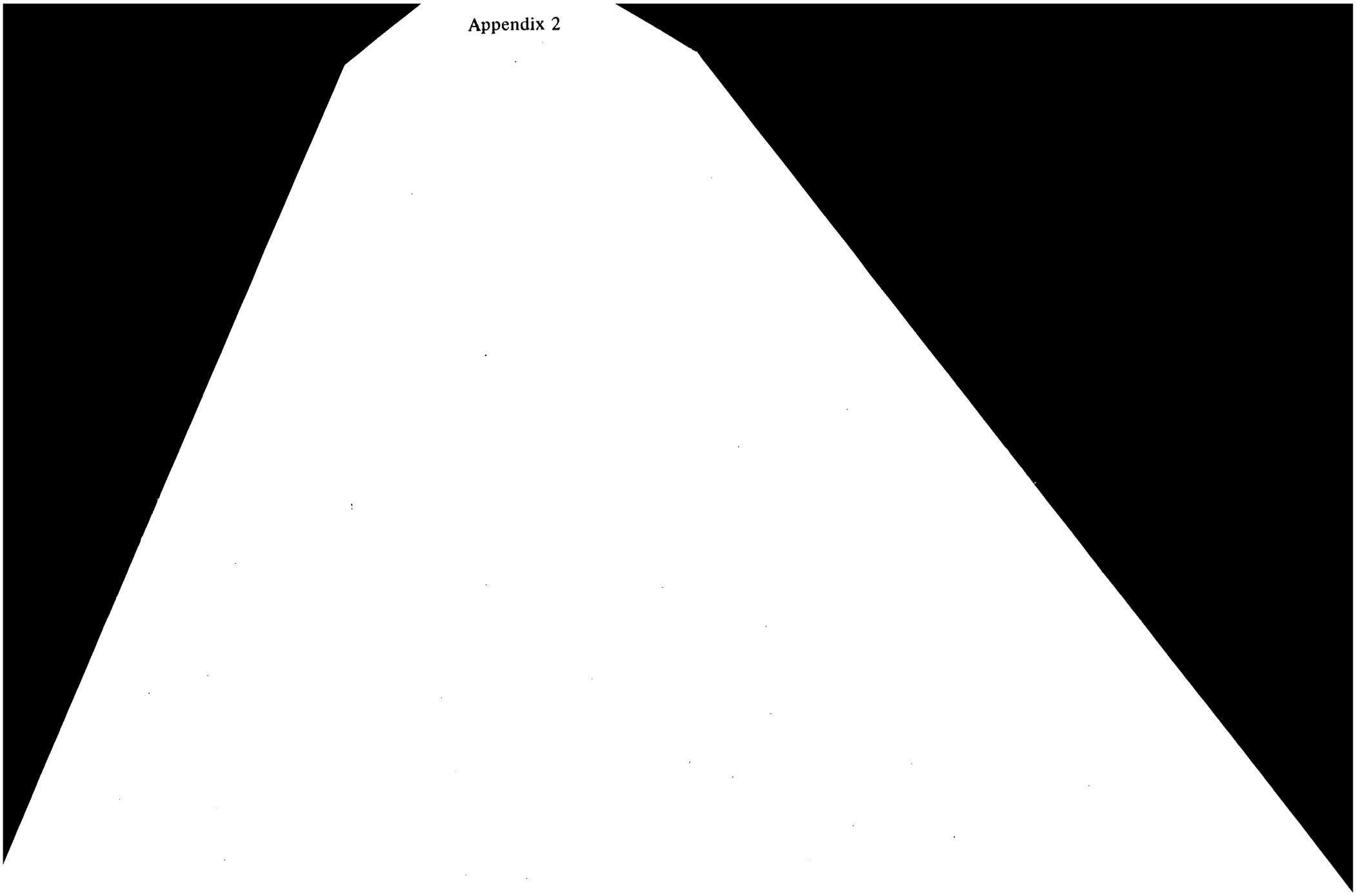
Affiliation: Town of Saugerties **Type of Contact:** phone

Address: CPO Box 1724
Kingston, NY 12401 **Person Making Contact:** C. Rogers

Communications Summary: Mr Wood did not consider the T. of Saugerties Landfill a fire or explosion threat

(see over for additional space)

Signature: Jon Rogers



(47-15-11 (10/83)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

DIVISION OF SOLID AND HAZARDOUS WASTE

INACTIVE HAZARDOUS WASTE DISPOSAL SITE REPORT

PRIORITY CODE: _____ SITE CODE: 356003

NAME OF SITE: Town of Saugerties Landfill REGION: 3

STREET ADDRESS: Route 212

TOWN/CITY: Saugerties COUNTY: Ulster

NAME OF CURRENT OWNER OF SITE: Town of Saugerties

ADDRESS OF CURRENT OWNER OF SITE: Town Hall, Main Street Saugerties, NY 12477

TYPE OF SITE: OPEN DUMP ☐ STRUCTURE ☐ LAGOON ☐

LANDFILL ☒ TREATMENT POND ☐

ESTIMATED SIZE: 15 ACRES

SITE DESCRIPTION:

The 15-acre active municipal landfill is part of a 44-acre property owned by the Town of Saugerties. The landfill, active from 1969, was issued a NYS permit in March 1979 under which it was not allowed to accept hazardous industrial wastes or septic sludges.

For a number of years, the site reportedly received approximately 750 tons of grinding swarf (components unknown), 350 tons of grinding swarf (95+ percent iron oxide with oil and water), and 55 yd^3 of wastewater treatment sludge (high in iron, zinc oxide, and manganese oxide) per year from Ferroxcube.

HAZARDOUS WASTE DISPOSED: CONFIRMED ☐ SUSPECTED ☐

TYPE AND QUANTITY OF HAZARDOUS WASTES DISPOSED:

TYPE	QUANTITY (POUNDS, DRUMS, TONS, GALLONS)
Unknown	

TIME PERIOD SITE WAS USED FOR HAZARDOUS WASTE DISPOSAL:

_____, 19___ TO _____, 19___

OWNER(S) DURING PERIOD OF USE: Town of Saugerties

SITE OPERATOR DURING PERIOD OF USE: Town of Saugerties

ADDRESS OF SITE OPERATOR: Route 212, Saugerties, NY 12477

ANALYTICAL DATA AVAILABLE: AIR ☐ SURFACE WATER ☐ GROUNDWATER ☒
SOIL ☐ SEDIMENT ☐ NONE ☐

CONTRAVENTION OF STANDARDS: GROUNDWATER ☐ DRINKING WATER ☐
SURFACE WATER ☐ AIR ☐

SOIL TYPE: _____

DEPTH TO GROUNDWATER TABLE: approximately 20 ft

LEGAL ACTION: TYPE: _____ STATE ☐ FEDERAL ☐
STATUS: IN PROGRESS ☐ COMPLETED ☐
REMEDIAL ACTION: PROPOSED ☐ UNDER DESIGN ☐
IN PROGRESS ☐ COMPLETED ☐

NATURE OF ACTION: _____

ASSESSMENT OF ENVIRONMENTAL PROBLEMS:

Ground-water contamination: elevated levels of manganese, zinc, and iron in a downgradient monitoring well.

ASSESSMENT OF HEALTH PROBLEMS:

None known or reported.

PERSON(S) COMPLETING THIS FORM:

FOR NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

NAME EA Science and Technology
TITLE _____
NAME _____
TITLE _____
DATE: 29 October 1986

NEW YORK STATE DEPARTMENT OF HEALTH

NAME _____
TITLE _____
NAME _____
TITLE _____
DATE: _____