5.

ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES

PHASE I INVESTIGATION

Sampson State Park | **Site no. 850005**

Town Of Romulus | **Seneca County**

Prepared for:

New York State Department of Environmental Conservation

50 Wolf Road, Albany, New York 12233

Thomas C. Jorling, *Commissioner*

Division of Hazardous Waste Remediation

Michael J. O'Toole, P.E., *Director*

By:

ENGINEERING-SCIENCE

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

SAMPSON STATE PARK
NYS SITE NUMBER 850005
TOWN OF ROMULUS
SENECA COUNTY
NEW YORK STATE

Prepared For

DIVISION OF SOLID AND HAZARDOUS WASTE
NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
50 WOLF ROAD
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DATE OF SUBMITTAL: SEPTEMBER, 1988

SAMPSON STATE PARK

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SECTION I
EXECUTIVE SUMMARY

This report, prepared for the New York State Department of Environmental Conservation (NYSDEC), presents the results of the Phase I investigation for the Sampson State Park (NYS Site Number 850005, No EPA Site Number), located in the Town of Romulus, Seneca County, New York (see Figure I-1).

SITE BACKGROUND

The Sampson State Park refuse disposal site is currently owned by the New York State Parks and Recreation Department under the jurisdiction of the Finger Lakes State Park and Recreation Commission (Sanford, 1985). Sampson State Park, as well as the 7-acre refuse disposal area, were originally owned by the U.S. Government and used as a Naval Training Base from 1941 to 1946 (Sanford, 1985; NYSDEC, 1985). From 1952 to 1955, the U.S. Air Force operated the facility as a training station. In 1962, the State of New York acquired the land for use as a state park under the jurisdiction of the Finger Lakes State Park and Recreation Commission (Sanford, 1985). A site plan is presented in Figure I-2.

There are no existing records which indicate the type or quantity of wastes disposed of at the facility during the ownership period of the U.S. Air Force. A review of the Seneca County Department of Health (SCDOH) records determined that the disposal area utilized by the Air Force was located near an abandoned incinerator. This area was also used by Sampson State Park maintenance personnel for the disposal of park refuse from 1967 to 1974 (Wellington, 1967; 1974). Interviews with park employees revealed that incinerator ash and municipal garbage were uncovered while digging in the abandoned disposal area (ES Site Visit,

1985). During a recent site visit, it was noted that portions of the site contained scrap metal, paint cans, decomposed 55-gallon drums and miscellaneous hardfill (ES Site Visit, 1985).

To date, no groundwater or surface water monitoring has been conducted at the site (NYSDEC, 1985). HNu meter readings taken during the ES site visit did not detect volatile organics in concentrations greater than background concentrations of 1 ppm (ES Site Visit, 1985).

ASSESSMENT

In an attempt to quantify the risk associated with this site, the Hazard Ranking Scoring system (HRS) was applied as currently being used by the NYSDEC to evaluate abandoned hazardous waste sites in New York State. This system takes into account the types of wastes at the site, receptors, and transport routes to apply a numerical ranking of the site. As stated in 40 CFR Subpart H Section 300.81, the HRS scoring system was developed to be used in evaluating the relative potential of uncontrolled hazardous disposal substances to cause health or safety problems or ecological or environmental damage. It is assumed by the EPA that a uniform application of the ranking system in each state will permit EPA to identify those releases of hazardous substances that pose the greatest hazard to humans or the environment.

Under the HRS, three numerical scores are computed for each site, to express the relative risk or danger from the site, taking into account the population at risk, the hazardous potential of the substances at a facility, the potential for contamination of drinking water supplies, for direct human contact, and for destruction of sensitive ecological systems and other appropriate factors. The three scores are:

- S_M reflects the potential for harm to humans or the environment from migration of a hazardous substance away from the facility by routes involving groundwater, surface water or air. It is a composite of separate scores for each of the three routes (S_{GW} = groundwater route score, S_{SW} = surface water route score, and S_A = air route score).

- S_{FE} reflects the potential for harm from substances that can explode or cause fires.

- S_{DC} reflects the potential for harm from direct contact with hazardous substances at the facility (i.e., no migration need be involved).

The preliminary HRS score was:

S_M	= 0.00	S_{GW}	= 0.00
S_{FE}	= 0.00	S_{SW}	= 0.00
S_{DC}	= 0.00	S_A	= 0.00

The HRS scores are all very low because there are no known hazardous substances present at this site.

RECOMMENDATIONS

No records concerning past disposal practices were found during the Phase I study to determine the types or quantity of wastes disposed of at the Sampson State Park disposal site. Therefore, to evaluate the site using the HRS and to determine if hazardous wastes were disposed of on-site, a Phase II study is recommended.

The following recommendations are made for the completion of Phase II:

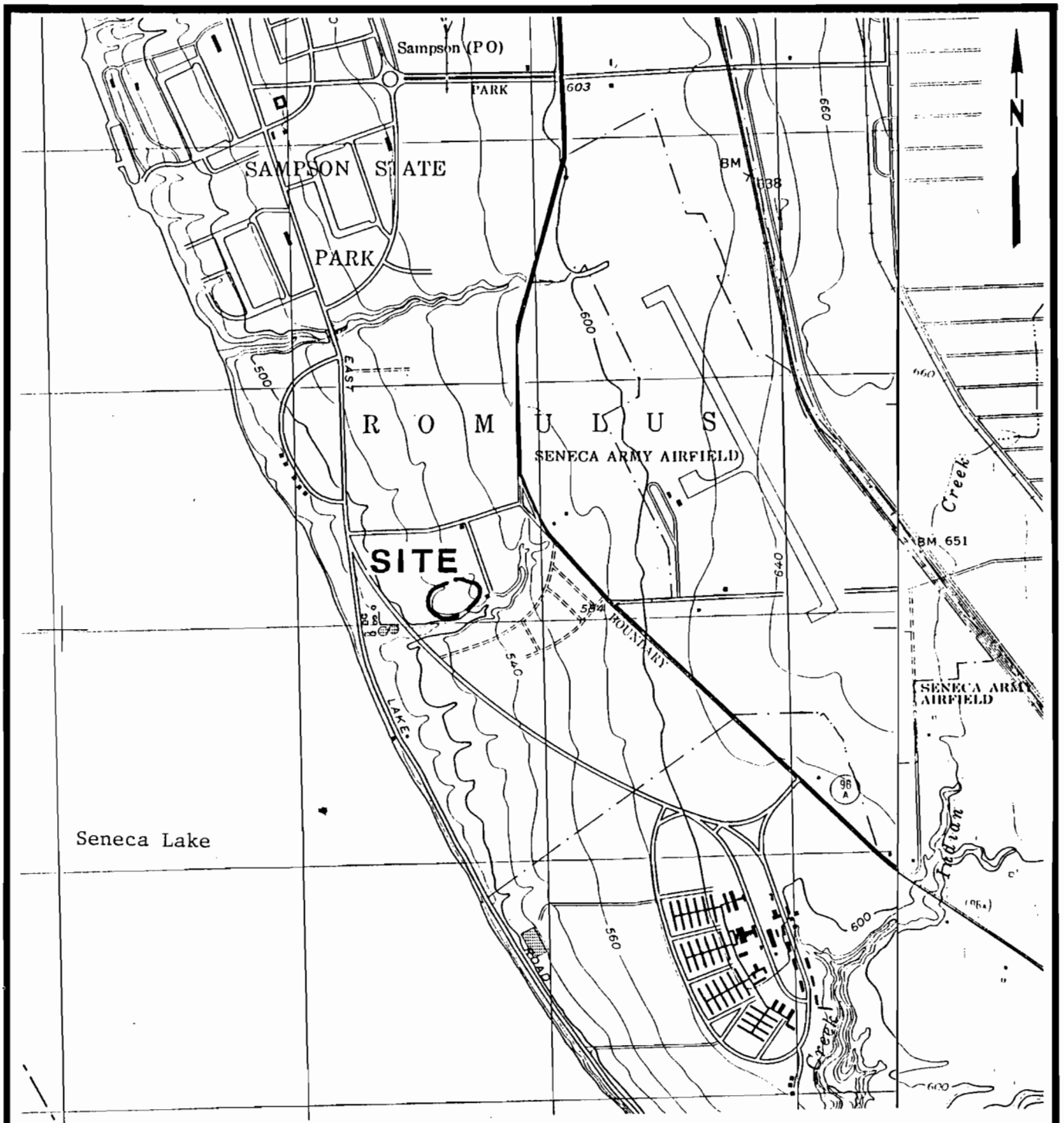
- Geophysical study consisting of an electrical resistivity survey.

- Groundwater monitoring system consisting of one upgradient and three downgradient wells based on results of geophysical surveys.

- Surface water and sediment monitoring system consisting of two surface water and sediment monitoring stations in a west flowing brook south of the site, and two surface water and sediment sampling locations along the lake to the west of the site.

- Analyses to include Hazardous Substance List (HSL) metals and organics.

The estimated man-hours required to complete Phase II are 1,186, while the estimated cost is $92,873.



LATITUDE: 42°44'00" N
LONGITUDE: 76°54'30" W

SCALE
0 1000 2000 3000 4000 FEET

REFERENCE: U.S.G.S. 7.5' Topographic Map
Dresden, NY (1978) and Ovid, NY (1970)
Quadrangles.

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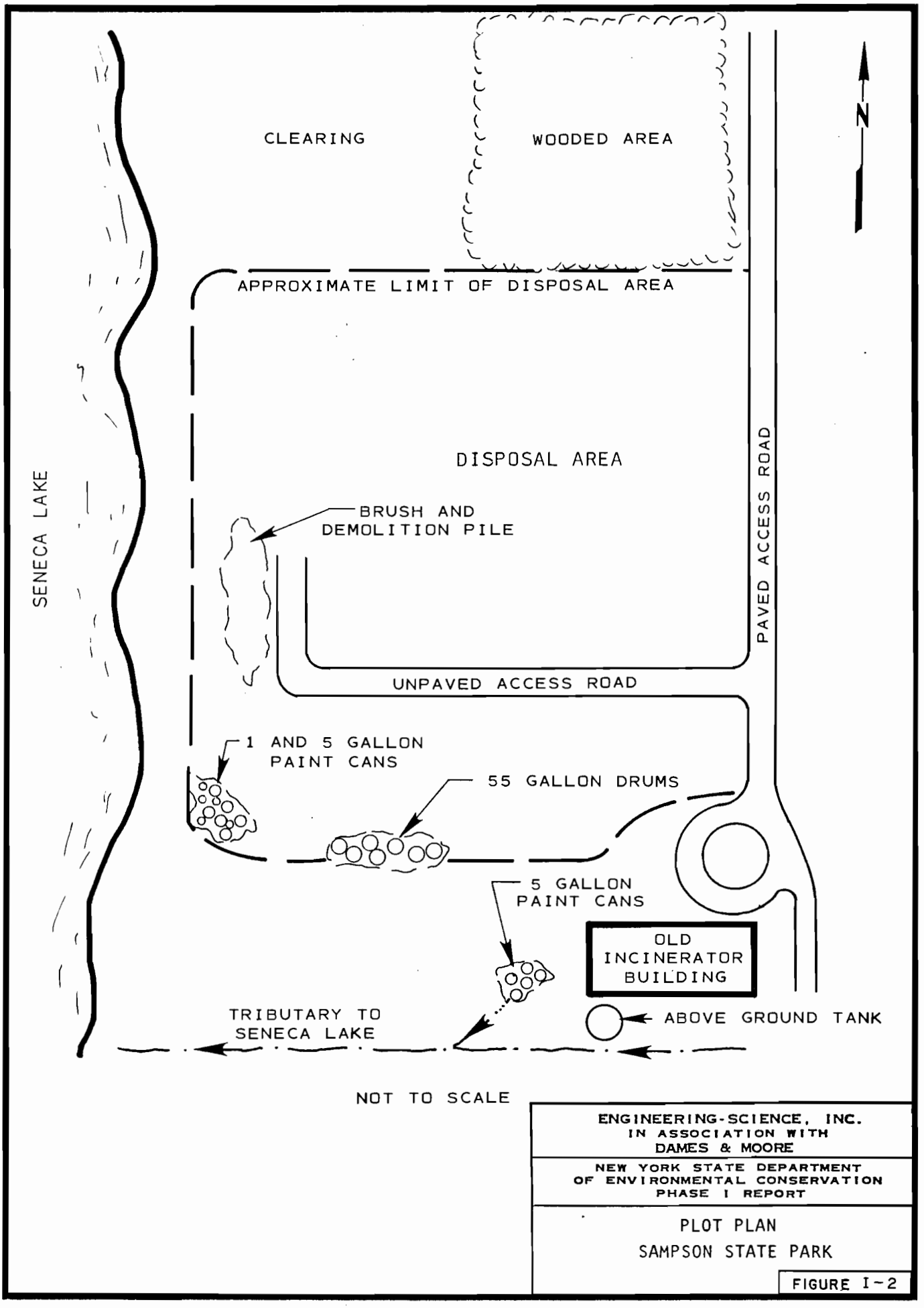
PHASE I REPORT

SITE LOCATION MAP

SAMPSON STATE PARK

FIGURE I-1



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PLOT PLAN
SAMPSON STATE PARK

FIGURE I-2

SECTION II
PURPOSE

The purpose of the Phase I investigation at the Sampson State Park site was to assess the hazard to the environment caused by the present condition of the site. This assessment is based on the Hazard Ranking System, which involves the compilation and rating of numerous geological, toxicological, environmental, chemical, and demographic factors and the calculation of an HRS score. Details of HRS implementation are included in Section V. During the initial portion of the investigation, available data and records, combined with information collected from a site inspection, were reviewed and evaluated. The investigation at this site focused on whether the site had received any hazardous industrial wastes in the past. Based on this initial evaluation of the Sampson State Park site, a Phase II Work Plan has been prepared for collecting any additional data needed to complete the HRS score. In addition, a cost estimate for the recommended Phase II work is provided.

SECTION III
SCOPE OF WORK

The scope of work for the New York State Inactive Site Investigation Program (Phase I) was to collect and review available information necessary for the documentation and preparation of a Hazard Ranking System score and a Phase II work plan and cost estimate if required. The work activities performed included data collection and review, a site inspection, and interviews with knowledgeable individuals of past and present disposal activities at the site.

The sources contacted during this Phase I investigation included government agencies (federal, state and local), present site owners and operators, and any other individuals that may have knowledge of the site, as identified during the performance of the investigation. These sources are listed in Appendix A. The intent of the list is to identify all persons, departments, and/or agencies contacted during the fourth round of the Phase I investigations even though useful information may not have been collected from each source contacted.

SECTION IV
SITE ASSESSMENT

SITE HISTORY

Sampson State Park was owned by the U.S. Government and used as a Naval Training Base for approximately 5 years from 1941 to 1946 (Sanford, 1985, NYSDEC, 1985). From 1952 to 1955, the area was used by the U.S. Air Force as a training base. In 1962, the land was acquired by the State of New York and became a state park under the jurisdiction of the Finger Lakes State Park and Recreation Commission (Sanford, 1985). No information was available regarding site activities (if any) that took place between 1946 and 1952, and 1955 and 1962.

There are no records known to exist which indicate the type or quantity of waste disposed at the landfill site during the period the property was owned by the U.S. Government. A review of the SCDOH records determined that the disposal area is located near an abandoned incinerator building at the park. Discussions with park employees confirmed this location. Excavations conducted at the site by park personnel unconvered incinerator ash and municipal garbage at the site (ES Site Visit, 1985). This area was also used by Sampson State Park as a refuse disposal area during the period from 1967 to 1974 (Wellington, 1967; 1974). Disposed scrap metal, paint cans, and miscellaneous hard-fill, along with a number of decomposed drums, were observed at the landfill during a recent 1985 site investigation (ES, 1985).

SITE TOPOGRAPHY

The Sampson State Park site is located on the east side of Seneca Lake in the southwestern portion of the park, Seneca County, New York (see Figure IV-1). The land surface is irregular due to past disposal

practices, but generally is gently sloping to the west toward Seneca Lake.

The northern portion of this rectangular 7-acre site contains assorted types of hardfill, decaying material, and scrap metal. A large clearing is located northwest of the site and a small wooded area is located to the north and northeast. West of the site approximately 1,000 feet, is Seneca Lake.

On the southern half of the site is a small road which provides access to the western portion of the site. Hardfill and assorted brush from park maintenance activities are disposed along the western side of the road. South of the road are several decaying 55-gallon drums, assorted 1-gallon paint cans, hardfill, decaying material, and scrap metal which all add to the irregular relief in that area. South of the site is a small clearing and a small stream, flowing west, to Seneca Lake.

Located to the east of the site is a paved road which provides access to the site from the main park roads. This road marks the eastern boundary of the disposal area. Located southeast of the site is an abandoned incineration building. Some miscellaneous trash and 5-gallon cans were observed in the erosion channels leading to the small stream along the southeastern boundary of the site.

Local Sensitive Environments

There are no NYS designated freshwater wetland areas or critical habitats of endangered species located in the vicinity of the site (LeRoux, 1986; Ozard, 1985).

Regional Geology and Hydrology

The Sampson State Park site is located along the eastern shore of Seneca Lake in the Erie-Ontario-Mohawk Plain of the Central Lowlands physiographic province (USDA Soil Survey, Seneca County, 1972) north of

the Portage Escarpment which separates the Central Lowlands and the Appalachian Plateau physiographic provinces. This is an undulating plain approximately 400 to 500 feet in elevation in the northern part of the county and rising to almost 800 feet along the edge of the Portage Escarpment (USDA Soil Survey, Seneca County, 1972). South of the Portage Escarpment, near Ovid, the Appalachian Plateau area rises from 800 to 1600 feet above sea level. The Appalachian Plateau area of Seneca County is a rolling upland that is slightly dissected by small streams and drainageways (USDA Soil Survey, Seneca County, 1972). The bedrock of the region consists of nearly horizontal layers of dolomite, limestone, and shale deposited in ancient seas during the Silurian and Devonian Period (NYS Museum and Science Service Bedrock Geology Map, Finger Lakes Sheet, 1970).

In the recent past, most of New York State, including the site, has been repeatedly covered by a series of continental ice sheets. The work of the glacier in Seneca County widened pre-existing valleys, transported loose bedrock and soil material, and deposited them as widespread accumulations of till, stratified ice-contact sediments, and outwash throughout the region. The melting ice, ending approximately 12,000 years ago, produced large volumes of meltwater. The meltwater subsequently shaped channels and deposited large accumulations of stratified granular sediments.

As glacial ice retreated from the region, meltwater formed lakes in front of the ice margin. Glacial Lake Newberry, the predecessor of the present Seneca Lake, is one example (USDA Soil Survey, Seneca County, 1972). In these temporary glacial lakes, large accumulations of sand, silt, and clay were deposited. The northwestern portion of Seneca County is blanketed in these deposits.

Granular deposits in this region frequently act as shallow aquifers since the preglacial lacustrine silts and clays along with the tills often inhibit groundwater movement. However, fine grained, water-lain sediments, such as silts and clays frequently exhibit horizontal laminations and sand seams. These internal features often create secondary

porosity which facilitate lateral groundwater movement through otherwise low permeability materials.

SITE HYDROGEOLOGY

Bedrock at the Sampson State Park site is expected to be the Ludlowville and Moscow shale members of the Hamilton Group (NYS Museum and Science Service Bedrock Map, Finger Lakes Sheet, 1970). These formations, each approximately 140 feet thick, are composed mainly of interbedded shale and thin limestone layers. The Ludlowville and Moscow formations, which form the bedrock aquifer, are anticipated at shallow depths, 3 to 10 feet below the site (USDA Soil Survey, Seneca County, 1972). Fractures along bedding joints within these formations may create an aquifer system capable of yielding acceptable quality water to wells at rates less than 100 gpm (Great Lakes Basin Commission, 1975). Groundwater flow within the bedrock aquifer may be to the south (regional trend), but will vary locally. The bedrock aquifer is used for drinking purposes in the Hamlet of Kendala, 2.5 miles north of the site.

Overlying the bedrock aquifer system at the site is a thin veneer of unconsolidated glacial till deposits. This thin water bearing zone is known as the shallow aquifer. Because the till mantle is so thin and compact, it forms a poor aquifer which yields little water. As a result, for the purpose of this report, it was assumed that the bedrock aquifer is the aquifer of concern. The primary source of drinking water for the area is supplied by Seneca Lake. The depth to groundwater in the shallow aquifer system is anticipated between 1 and 3 feet (USDA Soil Survey, Seneca County, 1972) and probably flows to the west and south, paralleling the ground surface, toward Seneca Lake and its tributary (ES Site Inspection, 1985).

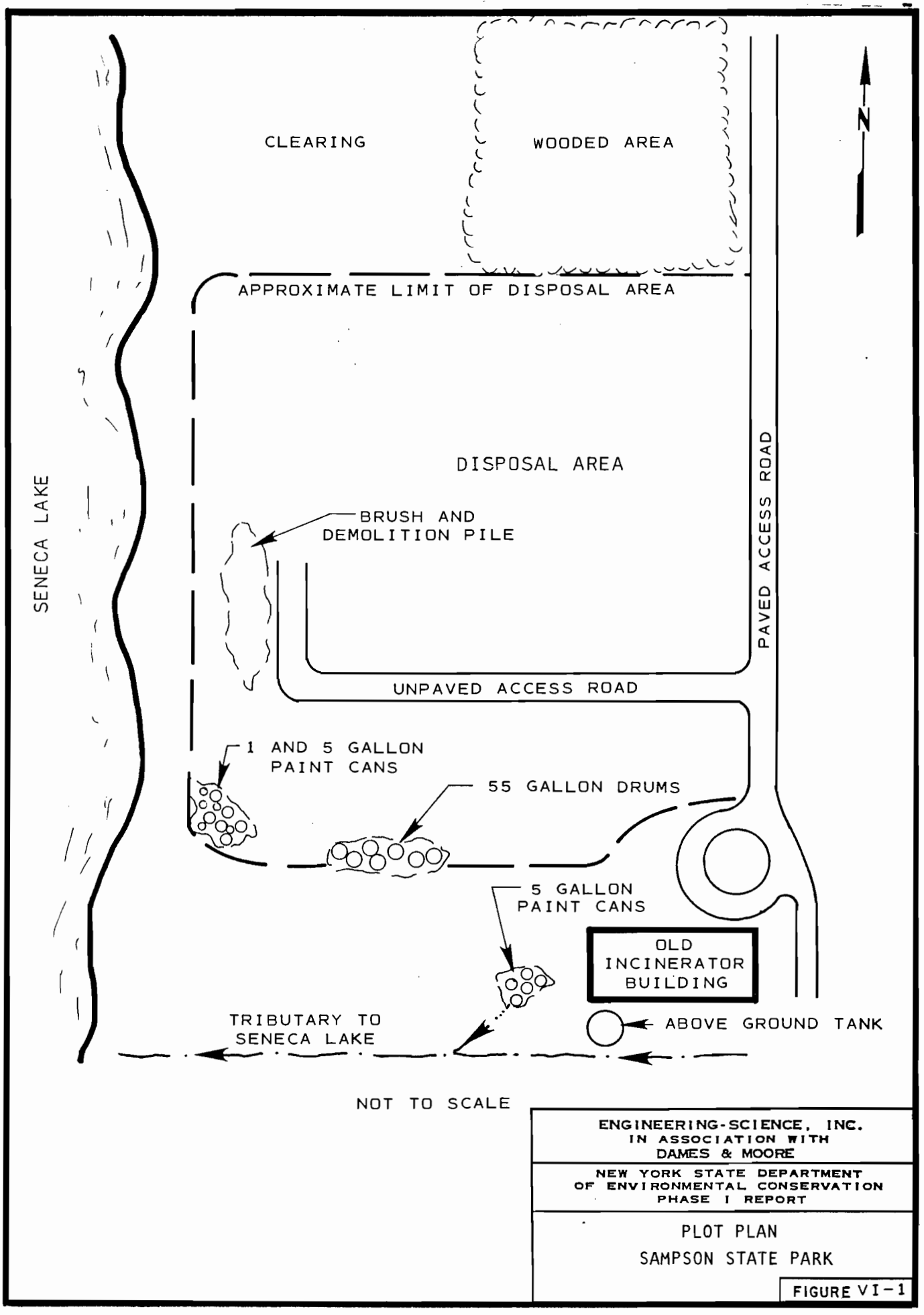
SITE CONTAMINATION

There are no records known to exist which identify the type or quantity of waste disposed of at the Sampson State Park site (NYSDEC, 1985). Review of SCDOH files indicate that the U.S. Air Force used an

area near an abandoned incinerator building as a refuse disposal area (Wellington, 1967). Discussions with park employees revealed that this area may have been used for the disposal of general refuse and incinerator ash (ES Site Visit, 1985).

The armed services disposal area that was used by the U.S. Air Force was also used by Sampson State Park for the disposal of park refuse and demolition debris during periods from 1967 to 1974 (Wellington, 1967; 1974). Park refuse was disposed of in trenches, burned and periodically covered with soil (Wellington, 1967).

An existing hardfill pile containing recently disposed of paint cans, brush, and scrap metal was observed during a 1985 site investigation (ES, 1985). In addition, a number of partially deteriorated 55-gallon drums were present at the refuse area (ES, 1985). The materials that were previously stored in these drums are unknown. No groundwater or surface water monitoring has been conducted at the site (NYSDEC, 1985).



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PLOT PLAN
SAMPSON STATE PARK

FIGURE VI-1

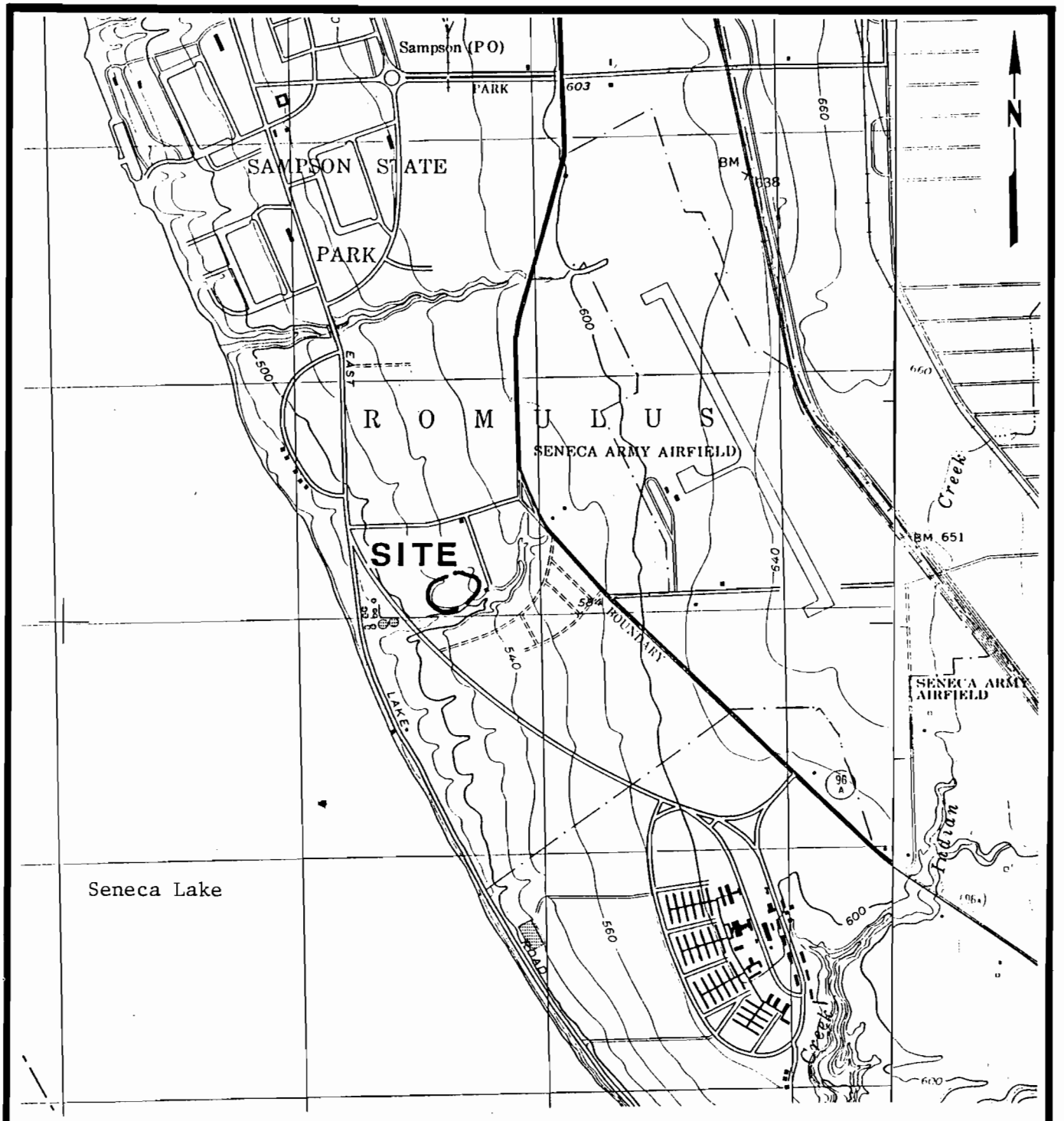
NARRATIVE SUMMARY

The Sampson State Park site consists of a 7 acre landfill disposal area in Sampson State Park, Town of Romulus, Seneca County, New York (ES Site Visit, 1985). The park area was initially owned by the U.S. Government (Sanford, 1985; NYSDEC, 1985). It was used by the U.S. Navy from 1941 to 1946 and by the U.S. Air Force from 1952 to 1955 (Sanford, 1985; NYSDEC, 1985). In 1962, the land was aquired by the State of New York and became a state park under the jurisdiction of the Finger Lakes State Park and Recreation Commission (Sanford, 1985). No information was available regarding site activities that occurred between 1946 and 1952, and 1955 and 1962.

Review of Seneca County Department of Health (SCDOH) records indicated that the Air Force and Navy utilized a refuse disposal area near an abandoned incinerator building at the park (Wellington, 1967). There are no records known to exist which indicate the type and quantity of the refuse disposed of on-site. Conversations with park employees revealed that incinerator ash and household trash were uncovered at the site during conduct of shallow land excavations (ES Site Visit, 1985). The disposal area was subsequently used by Sampson State Park for the disposal of general park refuse during periods between 1967 and 1974 (Wellington, 1976; 1974). Recently disposed hardfill and deteriorated 55-gallon drums were observed during a 1985 site investigation (ES, 1985). The materials that were previously stored in these drums are unknown.

The primary source of drinking water in the area is Seneca Lake although approximately 15 homes use private drinking water wells within a three mile radius of the site. Seneca Lake is also used for recreation and fishing.

No groundwater or surface water monitoring has been conducted at this site (NYSDEC, 1985). The site is located approximately 1,000 feet from Seneca Lake (USGS, 1978).



LATITUDE: 42°44'00" N
LONGITUDE: 76°54'30" W

SCALE
0 1000 2000 3000 4000 FEET

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PHASE I REPORT

SITE LOCATION MAP
SAMPSON STATE PARK

FIGURE V-1

REFERENCE: U.S.G.S. 7.5' Topographic Map
Dresden, NY (1978) and Ovid, NY (1970)
Quadrangles.

HRS COVER SHEET

Facility Name: Sampson State Park

Location: Route 96A, Town of Romulus, Seneca County, New York

EPA Region: 2

Person(s) in charge of the facility: Ted Sanford

Name of Reviewer: J. Baker/L. Cordone Date: 12/6/85

General Description of the facility:

The 7-acre Sampson State Park refuse disposal site was used by the U.S. Navy from 1941 to 1946 and by the U.S. Air Force from 1952 to 1955. During these periods, the disposal site was used as a general refuse disposal area. In 1962, the State of New York aquired the land for use as a state park under the jurisdiction of the Finger Lakes Park and Recreation Commission. Park maintenance personnel disposed of park refuse at the site from 1967 to 1974. Currently, the park maintenance personnel periodically dispose of demolition material and tree brush at the site. During a recent site visit, decomposed 55-gallon drums, paint cans and scrap metal were noted above ground at the site. No groundwater or surface water monitoring has been conducted at the site to date.

Scores: $S_M = 0.00$ ($S_{gw} = 0.00$ $S_{sw} = 0.00$ $S_a = 0.00$)

$S_{FE} = 0.00$

$S_{DC} = 0.00$

Facility Name: SAMPSON State PARK Date: 12/6/85

Ground Water Route Work Sheet

Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)
1 Observed Release	(0) 45	1	0	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	6	
Net Precipitation	0 (1) 2 3	1	1	3	
Permeability of the Unsaturated Zone	0 1 (2) 3	1	2	3	
Physical State	0 (1) 2 3	1	1	3	
Total Route Characteristics Score			10	15	
3 Containment	0 1 2 (3)	1	3	3	3.3
4 Waste Characteristics					3.4
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	
5 Targets NOTE! Bedrock aquifer was used for scoring purposes because it results in higher target scores.					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	8	40	
Total Targets Score			17	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			0	57,330	
7 Divide line 6 by 57,330 and multiply by 100			S_{gw} = 0		

GROUND WATER ROUTE WORK SHEET

Facility Name: SAMPSON State Park Date: 12/6/85

Surface Water Route Work Sheet

Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)
1 Observed Release	(0) 45	1	0	45	4.1
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	3	3	
1-yr. 24-hr. Rainfall	0 1 (2) 3	1	2	3	
Distance to Nearest Surface Water	0 1 2 (3)	2	6	6	
Physical State	0 (1) 2 3	1	1	3	
Total Route Characteristics Score			12	15	
3 Containment	0 1 2 (3)	1	3	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	
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 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	
7 Divide line 6 by 64,350 and multiply by 100			S_{sw} = 0		

SURFACE WATER ROUTE WORK SHEET

Facility Name: SAMPSON State Bank Date: 12/6/85

Air Route Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
[1] Observed Release	(0) 45	1	0	45	5.1
Date and Location: 12/6/85 upwind and downwind at site					
Sampling Protocol: HNu meter readings ≤ 1 ppm					
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	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		

AIR ROUTE WORK SHEET

Facility Name: Sampson State Bank Date: 12/6/85

Worksheet for Computing S_M

	S	S^2
Groundwater Route Score (S_{gw})	0.0	0.0
Surface Water Route Score (S_{sw})	0.0	0.0
Air Route Score (S_a)	0.0	0.0
$S_{gw}^2 + S_{sw}^2 + S_a^2$		0.0
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		0.0
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73 = S_M =$		0.0

WORK SHEET FOR COMPUTING S_M

Facility Name: SAMPSON STATE BANK Date: 12/6/85

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} = 0		

FIRE AND EXPLOSION WORK SHEET

Facility Name: Sampson State Bank Date: 12/6/85

Direct Contact Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multiplier	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		8.3
4 Waste Characteristics Toxicity	(0) 1 2 3	5	0	15	8.4
5 Targets					8.5
Population Within 1-Mile Radius	0 (1) 2 3 4 5	4	4	20	
Distance to a Critical Habitat	(0) 1 2 3	4	0	12	
Total Targets Score			4	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		

DIRECT CONTACT WORK SHEET

HRS
DOCUMENTATION
RECORDS

DOCUMENTATION RECORDS
FOR
HAZARD RANKING SYSTEM

FACILITY NAME: Sampson State Park

LOCATION: Romulus, New York

GROUND WATER ROUTE

1. OBSERVED RELEASE

Contaminants detected (5 maximum):

No observed release; no groundwater monitoring conducted on-site (NYSDEC, 1985).

Rationale for attributing the contaminants to the facility:

Not applicable.

* * *

2. ROUTE CHARACTERISTICS

Depth to Aquifer of Concern

Name/description of aquifer(s) in concern:

1. Bedrock aquifer anticipated at shallow depths 3 to 10 feet (USDA Soil Survey, Seneca County, 1972).
2. Shallow aquifer in thin veneer of unconsolidated glacial till (USDA Soil Survey, Seneca County, 1972).

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

1. 3 to 10 feet (USDA Soil Survey, Seneca County, 1972).
2. 1 to 3 feet (USDA Soil Survey, Seneca County, 1972).

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

Unknown - for purposes of HRS scoring, the depth of waste disposal is assumed to be 3 to 10 feet (ES Site Visit, 1985).

Net Precipitation

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

Mean annual precipitation is 32" (USDOC, 1979).

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

Mean annual lake evaporation is 27" (USDOC, 1979).

Net precipitation (subtract the above figures):

5" (32" - 27" = 5") (USDOC, 1979).

Permeability of Unsaturated Zone

Soil type in unsaturated zone:

Darien and Lima silt loam (USDA Soil Survey, Seneca County, 1972).

Permeability associated with soil type

1.41×10^{-3} to 4.44×10^{-4} cm/sec (USDA Soil Survey, Seneca County, 1972).

Physical State

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

General refuse, household refuse - Solid/unconsolidated wastes (ES Site Visit, 1985; Wellington, 1967; 1974). Paint cans and 55 gallon drums observed during ES Site Visit (1985) are not scored for purposes of HRS because there is no evidence that the containers leaked.

3. CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

Unlined landfill (ES Site Visit, 1985).

Method with highest score:

Unlined landfill (ES Site Visit, 1985).

4. WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated:

No known hazardous substances - score = 0 (NYSDEC Registry Sheet, 1985).

Compound with highest score:

No known hazardous wastes (NYSDEC Registry Sheet, 1985).

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):

No hazardous wastes are known to be disposed on-site (NYSDEC Registry Sheet, 1985).

Basis of estimating and/or computing waste quantity:

No hazardous wastes are known to be disposed on-site (NYSDEC Registry Sheet, 1985).

5. TARGETS

Ground Water Use

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

1. Groundwater used for drinking water purposes in the Hamlet of Kendala (Dombrowski, 1986).
2. No known use of the shallow aquifer.

Distance to Nearest Well

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

1. Hamlet of Kendala - 2.5 miles (USGS Topographic Map: Dresden Quadrangle, 1943).
2. No known wells drawing from shallow aquifer.

Distance to above well or building:

1. 2.5 miles (USGS Topographic Map: Dresden Quadrangle, 1943).
2. Not applicable.

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:

1. Approximately 15 wells (USGS Topographic Map: Dresden Quadrangle, 1943).
2. No known wells in shallow aquifer.

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):

Irrigation not practiced in the area (LeRoux, 1986).

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

1. 15 x 3.8 = 57. (Estimated from USGS Topographic Maps, 1943).
2. 0

SURFACE WATER ROUTE

1. OBSERVED RELEASE

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

No observed release. No surface water monitoring conducted on-site (NYSDEC, 1985).

Rationale for attributing the contaminants to the facility:

Not applicable, no observed release.

2. ROUTE CHARACTERISTICS

Facility Slope and Intervening Terrain

Average slope of facility in percent:

3% to 8% (USDA Soil Survey, Seneca County, 1972; ES Site Visit, 1985).

Name/description of nearest downslope surface water:

Seneca Lake (USGS Topographic Map: Dresden Quadrangle, 1943).

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

9% (USGS Topographic Map: Dresden Quadrangle, 1943).

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

No (ES Site Visit, 1985).

Is the facility completely surrounded by areas of higher elevation?

No (ES Site Visit, 1985; USGS Topographic Map: Dresden Quadrangle, 1943).

1-Year 24-Hour Rainfall in Inches

2.1" (USDOC, 1963).

Distance to Nearest Downslope Surface Water

200 feet to tributary of Seneca Lake and 1,000 feet to Seneca Lake (USGS Topographic Map: Dresden Quadrangle, 1943; ES Site Visit, 1985).

Physical State of Waste

General refuse, household refuse - solid/unconsolidated wastes (ES Site Visit, 1985; Wellington, 1967; 1974). Paint cans and 55-gallon drums observed during ES Site Visit (1985) are not scored for purposes of HRS because there is no evidence that the containers leaked.

3. CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

Landfill with inadequate cover and unsound diversion system (ES Site Visit, 1985).

Method with highest score:

Landfill with inadequate cover and unsound diversion system (ES Site Visit, 1985).

4. WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated

No known disposal of hazardous wastes (NYSDEC Registry Sheet, 1985).

Compound with highest score:

No known hazardous substances - score = 0 (NYSDEC Registry Sheet, 1985).

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):

No hazardous wastes are known to be disposed of on-site (NYSDEC Registry Sheet, 1985).

Basis of estimating and/or computing waste quantity:

No hazardous wastes are known to be disposed of on-site (NYSDEC Registry Sheet, 1985).

* * *

5. TARGETS

Surface Water Use

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

Recreation (ES Site Visit, 1985).

Is there tidal influence?

Not a coastal area (USGS Topographic Maps: Dresden (1943) and Ovid (1970) Quadrangles).

Distance to a Sensitive Environment

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

Not a coastal area (USGS Topographic Maps: Dresden (1943) and Ovid (1970) Quadrangles).

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

No NYS designated freshwater wetlands within 1 mile of the site (LeRoux, 1986).

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

None within 1 mile (Ozard, 1985).

Population Served by Surface Water

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

None located within 1 mile of the creek confluence with Seneca Lake (Dombrowski, 1986).

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

Irrigation not practiced (LeRoux, 1986).

Total population served:

None (Dombrowski, 1986).

Name/description of nearest of above water bodies:

Seneca Lake (USGS Topographic Map: Dresden Quadrangle, 1943; ES Site Visit, 1985).

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

Not applicable.

AIR ROUTE

1. OBSERVED RELEASE

Contaminants detected:

HNU meter readings taken on-site. No readings were above background concentration of 1 ppm (ES Site Visit, 1985).

Date and location of detection of contaminants:

No volatile organics detected (12/6/85).

Methods used to detect the contaminants:

HNU meter readings taken both upwind and downwind of the site (ES Site Visit, 1985).

Rationale for attributing the contaminants to the site:

Not applicable.

* * *

2. WASTE CHARACTERISTICS

Reactivity and Incompatibility

Most reactive compound:

No known reactive compounds are known to exist on-site (NYSDEC Registry Sheet, 1985).

Most incompatible pair of compounds:

No incompatible compounds are known to exist on-site (NYSDEC Registry Sheet, 1985).

Toxicity

Most toxic compound:

Municipal solid waste reported to be disposed on-site (Wellington, 1967; 1974). No hazardous wastes with the potential to impact the air pathway are known to exist on-site (NYSDEC Registry Sheet, 1985).

Hazardous Waste Quantity

Total quantity of hazardous waste:

No hazardous wastes are known to be disposed of on-site (NYSDEC Registry Sheet, 1985).

Basis of estimating and/or computing waste quantity:

No hazardous wastes are known to be disposed of on-site (NYSDEC Registry Sheet, 1985).

* * *

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

20 x 3.8 = 76 (USGS Topographic Map: Dresden Quadrangle, 1943).

Distance to a Sensitive Environment

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

Not a coastal area.

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

None within 1 mile (Ozard, 1985).

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

None within 1 mile (Ozard, 1985).

Land Use

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

None within 1 mile (ES Site Visit, 1985).

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

Located within Sampson State Park boundary (USGS Topographic Map: Dresden Quadrangle, 1943; ES Site Visit, 1985).

Distance to residential area, if 2 miles or less:

2,500 feet to park ranger housing (USGS Topographic Map: Dresden Quadrangle, 1943; ES Site Visit, 1985).

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

0.5 mile (USGS Topographic Map: Dresden Quadrangle, 1943; USDA, 1972).

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

0.5 mile (USGS Topographic Map: Dresden Quadrangle, 1943; USDA, 1972).

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

No (ES Site Visit, 1985).

FIRE AND EXPLOSION

1. CONTAINMENT

Hazardous substances present:

No information was discovered during the Phase I Study which indicates that a fire and explosion situation existed or presently exists at the site.

Type of containment, if applicable:

Not applicable.

* * *

2. WASTE CHARACTERISTICS

Direct Evidence

Type of instrument and measurements:

No measurements to determine the fire and explosion potential were taken on-site.

Ignitability

Compound used:

No ignitable compounds are known to exist on-site (NYSDEC Registry Sheet, 1985).

Reactivity

Most reactive compound:

No reactive compounds are known to exist on-site (NYSDEC Registry Sheet, 1985).

Incompatibility

Most incompatible pair of compounds:

No incompatible compounds are known to exist on-site (NYSDEC Registry Sheet, 1985).

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility:

No records exist indicating that any hazardous substances were disposed of at the facility (NYSDEC Registry Sheet, 1985).

Basis of estimating and/or computing waste quantity:

Not applicable.

* * *

3. TARGETS

Distance to Nearest Population

2,500 feet to park ranger housing (USGS Topographic Map: Dresden Quadrangle, 1943; ES Site Visit, 1985).

Distance to Nearest Building

660 feet (USGS Topographic Map: Dresden Quadrangle, 1943; ES Site Visit, 1985).

Distance to Sensitive Environment

Distance to wetlands:

More than 1,000' (Ozard, 1985).

Distance to critical habitat:

More than 1/2 mile (Ozard, 1985).

Land Use

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

None within 1 mile (ES Site Visit, 1985).

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

Located within Sampson State Park Boundary (USGS Topographic Map: Dresden Quadrangle, 1943; ES Site Visit, 1985).

Distance to residential area, if 2 miles or less:

2,500 feet to park ranger housing (USGS Topographic Map: Dresden Quadrangle, 1943; ES Site Visit, 1985).

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

0.5 mile (USGS Topographic Map: Dresden Quadrangle, 1943; USDA, 1972).

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

0.5 mile (USGS Topographic Map: Dresden Quadrangle, 1943; USDA, 1972).

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

No (ES Site Visit, 1985).

Population with 2-Mile Radius

141 people (37 x 3.8) (USGS Topographica Maps: Dresden (1943) and Ovid (1970) Quadrangles).

Buildings Within 2-Mile Radius

45 buildings (USGS Topographica Maps: Dresden (1943) and Ovid (1970) Quadrangles).

DIRECT CONTACT

1. OBSERVED INCIDENT

Date, location, and pertinent details of incident:

There is no confirmed instance in which contact with hazardous substances at the site (note that no hazardous waste are known to be on-site) have caused injury, illness or death to humans or animals. (Record search during Phase I Study.)

* * *

2. ACCESSIBILITY

Describe type of barrier(s):

Barriers do not completely surround the site (ES Site Visit, 1985).

* * *

3. CONTAINMENT

Type of containment, if applicable:

Hazardous wastes are not known to be disposed of on-site. Therefore, no hazardous substances are accessible to direct contact.

* * *

4. WASTE CHARACTERISTICS

Toxicity

Compounds evaluated:

No known toxic compounds disposed of on-site (NYSDEC Registry Sheet, 1985).

Compound with highest score:

Not applicable (see above comment).

5. TARGETS

Population within one-mile radius

20 x 3.8 = 76 (USGS Topographic Map: Dresden Quadrangle, 1943).

Distance to critical habitat (of endangered species)

None within one mile (Ozard, 1985).

HRS REFERENCES*
SAMPSON STATE PARK

1. Dombrowski, B. (1976), SCDOH, Personal Communication, 2/7/86.

2. Engineering-Science, Inc. (1985), Field Investigation at Sampson State Park with Dames and Moore.

3. LeRoux, N. (1986), USDA Department of Soil Conservation. Personal Communication, 2/6/86.

4. NYSDEC (1985). "Inactive Hazardous Waste Disposal Site Report".

5. Ozard, J. (1985), NYSDEC Wildlife Resources Center. Personal Communication, 12/16/85.

6. USDA (1972). "Soil Survey of Seneca County, New York".

7. USDOC (1979). "Climatic Atlas of the United States".

8. USDOC (1963). "Rainfall Frequency Atlas of the U.S.", Technical Paper No. 40.

9. USGS (1943). Topographic Map: Dresden Quadrangle.

10. USGS (1970). Topographic Map: Ovid Quadrangle.

11. Wellington, J. C. and Dombrowski, B. (1974). NYSDEC Refuse Disposal and Inspection Report, 8/1/74.

12. Wellington, J. (1967), NYSDEC Environmental Health Technician. Memo to the Sampson State Park File, 7/11/67.

* For general references, see Appendix A.

(1)

INTERVIEW FORM

INTERVIEWEE/CODE Brian Dombrowski /

TITLE - POSITION

ADDRESS Seneca County Department of Health, 31 Thurber Drive

CITY Waterloo STATE NY ZIP 13165

PHONE (315) 539-9294 RESIDENCE PERIOD TO

LOCATION phone interview INTERVIEWER L. Crodone

DATE/TIME 2/7/86 / 9:15 a.m.

SUBJECT: Sampson State Park site (water supply info.)

REMARKS: Sampson State Park - potable water for the park is drawn from Seneca Lake. The water intake is located just south of an existing marina at the park.

Hamlet of Willard - potable water for the hamlet is drawn from Seneca Lake. The intake is near the site of Willard State Hospital. Some of the residences located on Rt. 96-A and West Blaine Road (between Willard and the Sampson State Park Boundary) are most likely drawing water from private wells.

Hamlet of Kendais - most residences of this hamlet draw water from private wells.

Pontius Point - The residents in this area are most likely drawing water from Seneca Lake (Private supply).

Seneca Army Depot Water supply - intake approximately one mile north of marina.

I AGREE WITH THE ABOVE SUMMARY OF THE INTERVIEW:

SIGNATURE: /s/ Brian Dombrowski, Public Health Director

COMMENTS:

REC'D MAR 3 - 1986

(1)

INTERVIEW FORM

INTERVIEWEE/CODE Brian Dombrowski /

TITLE - POSITION

ADDRESS Seneca County Department of Health, 31 Thurber Drive

CITY Waterloo STATE NY ZIP 13165

PHONE (315) 539-9294 RESIDENCE PERIOD ____ TO ____

LOCATION phone interview INTERVIEWER L. Cordone

DATE/TIME 2/7/86 1015 hrs

SUBJECT: Sampson State Park Site (Water Supply Info.)

REMARKS: Sampson State Park - potable water for the park is drawn from Seneca Lake. The water intake is located just south of an existing marina at the park.

Hamlet of Willard - potable water for the hamlet is drawn from Seneca Lake. The intake is near the site of Willard State Hospital. Some of the residences located on Rt. 96-A and West Blaine Road (between Willard and the Sampson State Park Boundary) are most likely drawing water from private wells.

Hamlet of Kendaia - most of the residences of this hamlet draw water from private wells.

Pontius Point - The residents in this area are most likely drawing water from Seneca Lake (private supply).

Seneca Army Depot Water Supply - intake approximately one mile north of marina

I agree with the above interview summary:

Signature/Title: Brian Dombrowski, Public Health Director

Comments:

ES AND D&M SITE INSPECTION

Observations made during the ES and D&M Site Inspections are provided on US EPA Forms 2070-12 and 2070-13. Field notes were used to complete these EPA Forms, and are not included herein.

(3)

REC'D FEB 14 1986

INTERVIEW FORM

INTERVIEWEE/CODE Neil LeRoux /

TITLE - POSITION Soil Conservationist

ADDRESS USDA Dept. of Soil Conservation, 321 William St.

CITY Waterloo STATE N.Y. ZIP 13165

PHONE (315) 539-3411 RESIDENCE PERIOD ____ TO ____ X

LOCATION phone interview INTERVIEWER Les Cordone

DATE/TIME 2/6/86 1000 hrs

SUBJECT: Sampson State Park Site

REMARKS: ~~There are no NYS Designated Freshwater Wetlands within one mile of the site in Sampson State Park.~~ ** Also, Neil felt that irrigation was probably not practiced by area farmers.

**I stated that on the NYS Freshwater Wetlands Map -Dresden Quadrangle- there is a statement "There are no wetlands on this map within this county that are regulated under The Freshwater Wetlands Act". One mile from the Sampson site may require that you look at adjoining USGS quad sheets. I recommended that you contact NYS. Department of Environmental Conservation Office in Avon, New York for wetland information and copies of maps.

I agree with the above interview summary. -- as amended.

Signature/Title: Neil E. LeRoux, District Conservationist

Comments:

(3)

INTERVIEW FORM

INTERVIEWEE/CODE Neil LeRoux /

TITLE - POSITION Soil Consultant

ADDRESS USDA Dept. of Soil Conservation, 321 William St.

CITY Waterloo STATE NY ZIP 13165

PHONE (315) 539-3411 RESIDENCE PERIOD _____ TO _____

LOCATION phone interview INTERVIEWER Les Cordone

DATE/TIME 2/6/86 / 10:00 a.m.

SUBJECT: Sampson State Park site

REMARKS: ~~There was no NYS Designated Freshwater Wetlands within one mile of the Site in Sampson State Park.~~**

Also Neil felt that irrigation was probably not practiced by area farmers.

**I stated that on the NYS Freashwaters Wetlands Map - Dresden Quadrangle - there is a statement "There are no wetlands on this map within this county that are regualted under The Freshwater Wetlands Act." One mile from Sampson site may require that you look at adjoining USGS quad sheets. I recommended that you contact NYS, Department of Environmental Conservation Office in Avon, New York for wetland information and copies of maps.

I AGREE WITH THE ABOVE SUMMARY OF THE INTERVIEW: - as amended.

SIGNATURE: /s/ Neil E. LeRoux, District Conservationist

COMMENTS:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID AND HAZARDOUS WASTE
INACTIVE HAZARDOUS WASTE DISPOSAL SITE REPORT

(4)

CLASSIFICATION CODE: 2a REGION: 8 SITE CODE: 850005

NAME OF SITE : Sampson State Park
STREET ADDRESS: Route 96A
TOWN/CITY: COUNTY: ZIP:
Romulus Seneca

SITE TYPE: Open Dump-X Structure- Lagoon- Landfill- Treatment Pond-
ESTIMATED SIZE: Acres

SITE OWNER/OPERATOR INFORMATION:
CURRENT OWNER NAME....: NYS Park's Service
CURRENT OWNER ADDRESS.:
OWNER(S) DURING USE...:
OPERATOR DURING USE...:
OPERATOR ADDRESS.....:
PERIOD ASSOCIATED WITH HAZARDOUS WASTE: From To

SITE DESCRIPTION:
Lat 42 44' 00" N. Long. 76 54' 30" W
Hillside topography rural agricultural surrounding nearest waterbody:
Seneca Lake
This site was originally a Naval Training Base in 1941 and was abandoned

prior to 1950. It was then reactivated by the Air Force in 1950
and used until 1956.
It is presently a State Park. There is no information as to the
location or type/quantity of waste disposal.

HAZARDOUS WASTE DISPOSED: Confirmed- Suspected -X

TYPE	QUANTITY (units)
unknown	

ANALYTICAL DATA AVAILABLE:

Air- Surface Water- Groundwater- Soil- Sediment- None-X

CONTRAVENTION OF STANDARDS:

Groundwater- Drinking Water- Surface Water- Air-

LEGAL ACTION:

TYPE..: none State- Federal-
STATUS: In Progress- Completed-

REMEDIAL ACTION:

Proposed- Under Design- In Progress- Completed-
NATURE OF ACTION:

GEOTECHNICAL INFORMATION:
SOIL TYPE: a variety of soil types are found throughout the Park
GROUNDWATER DEPTH: unknown

ASSESSMENT OF ENVIRONMENTAL PROBLEMS:

Unable to assess any environmenal problems.

ASSESSMENT OF HEALTH PROBLEMS:

insufficient information

PERSON(S) COMPLETING THIS FORM:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION	NEW YORK STATE DEPARTMENT OF HEALTH
NAME.: Deborah Jackson	NAME.: R. Tramontano
TITLE: Sr. Eng. Tech.	TITLE: Bur. Tox. Subst. Assess.
NAME.: R. A. Olazagasti	NAME.:
TITLE: SWMS	TITLE:
DATE.: 01/24/85	DATE.: 01/24/85

(5)

INTERVIEW FORM

INTERVIEWEE/CODE John Ozard /

TITLE - POSITION

ADDRESS NYSDEC Wildlife Resources Center

CITY Delmar, N.Y. STATE ZIP 12054

PHONE (518) 439 7426 RESIDENCE PERIOD TO

LOCATION Phone Interview INTERVIEWER

DATE/TIME 12/16/85 /

SUBJECT: Critical Habitats near Phase I - 4th round sites.

REMARKS: John informed me that there are no critical habitats for endangered species in the vicinities of any of the following Phase I sites: Lindley Landfill, Cedar St. Dump, Horan Road Landfill, Livonia Landfill, Haight Farm, Route 19 Drum Disposal, U.S. Chrome, Simpson State Park, William Benson Landfill, Penn Yann Boats, Conrail Site.

I agree with the above interview summary:

Signature/Title:

Comments:

(5)

INTERVIEW FORM

INTERVIEWEE/CODE John Ozard /

TITLE - POSITION

ADDRESS NYSDEC Wildlife Resources Center

CITY Delmar STATE NY ZIP 12054

PHONE (518) 439-7486 RESIDENCE PERIOD TO

LOCATION ~~phone interview~~ INTERVIEWER

DATE/TIME 12/16/85 /

SUBJECT: Critical Habitats near Phase I - 4th round sites

REMARKS: John informed me that there are no critical habitats for endangered species in the vicinities of any of the following Phase I sites: Lindley Landfill; Cedar St. Dump; Horan Road Landfill; Livonia Landfill; Haight Farm; Route 19 Drum Disposal; U.S. Chrome; Sampson State Park; William Benson Landfill; Penn Yann Boats; ConrailSite.

I AGREE WITH THE ABOVE SUMMARY OF THE INTERVIEW:

SIGNATURE:

COMMENTS:

SOIL SURVEY

Seneca County New York

Issued April 1972

UNITED STATES DEPARTMENT OF AGRICULTURE
Soil Conservation Service
In cooperation with
CORNELL UNIVERSITY AGRICULTURAL EXPERIMENT STATION

TABLE 5.—*Estimated properti*

[Alluvial land (Al); Edwards muck (Ed); Fresh water marsh (Fw); Made land, tillable (M

Soil series and map symbols	Depth to bedrock	Depth to seasonal high water table	Depth from surface	Classification: USDA texture
	Feet	*Feet*	*Inches*	
Alden:				
Ac	6–20	0	0–9	Mucky silt loam
			9–21	Silt loam or loam
			21–40	Stratified silt loam, loam, and very fine sandy loam.
Ad	4+	0	0–9	Mucky silt loam
			9–26	Silt loam
			26–48	Firm gritty silt loam or loam till, few stones.
Angola: AnA, AnB	2–3½	½–1½	0–9	Silt loam
			9–34	Silty clay loam and clay loam
			34	Soft shale bedrock; fractured
Appleton: AoA, AoB, ApA, ApB	3½–20	½–1½	0–12	Silt loam
Estimated properties of AoA and AoB differ from those of ApA and ApB in that they contain 15 to 50 percent stones by volume.			12–27	Heavy silt loam or heavy loam
			27–48	Loam to silt loam glacial till; few stones
Arkport: ArB, ArC, ArD	4–80	3+	0–59	Fine sandy loam and loamy fine sand
			59–100	(2)
Arnot: AuD	1–2	1–1½	0–17	Channery silt loam
			17	Sandstone bedrock.
Aurora: AwB, AwC, AwD, AzF	2–3	1½–2	0–13	Silt loam
For Farmington part of AzF, see Farmington series.			13–32	Silty clay loam and shaly silty clay loam.
			32–48	Bedrock; soft shale.
Canandaigua: Ca	6–20	0–½	0–27	Silt loam
			27–43	Very fine sandy loam and silt loam; stratified.
Cazenovia: CeB, CeB3, CeC, CeC3, ChD, ChE	3–25	1½–3	0–13	Silt loam to heavy loam
			13–31	Light silty clay loam
			31–40	Gravelly heavy silt loam glacial till
Claverack: CkA, CkB,	5+	1½–2	0–32	Loamy fine sand
			32–40	Silty clay
Collamer:				
ClA, ClB, ClC	5–40	1–2	0–42	Silt loam to light silty clay loam
CoA, CoB	5–40	1–2	0–27	Silt loam to coarse silty clay loam
			27–48	Silty clay to clay
Conesus: CsA, CsB	3½–20	1–2	0–19	Gravelly silt loam
			19–36	Gravelly silt loam
			36–42	Gravelly loam till
Cosad: Cu	5+	½–1½	0–30	Loamy fine sand
			30–40	Silty clay
Danley	3½–7	1½–3	0–11	Silt loam
			11–24	Light silty clay loam
			24–48	Gravelly heavy silt loam or gravelly heavy loam till; many shale chips.
Darien: DaA, DdB	3½–6	½–1½	0–10	Silt loam
For Danley and Cazenovia parts of DdB, see their respective series.			10–24	Light silty clay loam
			24–50	Gravelly light silty clay loam till

See footnotes at end of table.

TABLE 5.—*Estimated properties*

Soil series and map symbols	Depth to bedrock	Depth to seasonal high water table	Depth from surface	Classification: USDA texture
	Feet	*Feet*	*Inches*	
Dunkirk:				
DuB, DuC3, DuD	5–50	2+	0–48	Silt loam to light silty clay loam
DwB	3½–5	2+	0–42	Silt loam to light silty clay loam
			42	Limestone bedrock.
Eel: Ee	4–20	1–1½	0–40	Silt loam to very fine sandy loam
Elnora: ElA, ElB	5+	1½–2	0–48	Loamy fine sand
Erie:				
ErA, ErB	4+	½–1	0–13	Channery silt loam
			13–48	Channery silt loam or channery loam fragipan.
EsA, EsB	1½–3½	½–1	0–13	Channery silt loam
			13–28	Channery loam to silt loam fragipan
			28	Gray sandstone and shale bedrock; fractured in upper 6 inches.
Farmington	0–1½	2+	0–15	Silt loam
			15	Limestone bedrock.
Fonda: Fn	4–20	0–½	0–5	Mucky light silty clay loam
			5–60	Silty clay loam to silty clay
Honeoye: HnB, HnC, HnD, HoE	4–20	2–3½	0–11	Silt loam
For Ontario and Lansing parts of HoE, see their respective series.			11–26	Heavy silt loam
			26–48	Loam to silt loam till
Howard: HwA, HwC	5+	3	0–25	Gravelly loam
			25–36	Very gravelly light clay loam and heavy loam.
			36–60	Stratified sand and gravel
Ilion: Is	4–20	0–½	0–12	Light silty clay loam
			12–34	Silty clay loam
			34–48	Light silty clay loam to shaly silty clay loam till.
Lakemont: LcA, LcB	6–30	0–½	0–9	Silty clay loam
			9–48	Silty clay
Lamson: Lf	6–30	0–½	0–33	Fine sandy loam to loamy fine sand
			33–48	Layers of loamy fine sand and fine sand with thin lenses of silty clay.
Langford:				
LgB, LgC, LgC3, LgD	3½+	1–2	0–19	Channery silt loam
			19–48	Channery loam fragipan
LnB, LnC	2–3½	1–2	0–17	Channery silt loam
			17–29	Channery silt loam fragipan
			29–40	Gray sandstone and hard shale bedrock.
Lansing: LsB, LsC, LsC3, LsD	4+	2½–4	0–12	Gravelly silt loam
			12–37	Gravelly heavy silt loam
			37–45	Gravelly loam glacial till
Lima: LtA, LtB	4+	1–2	0–11	Silt loam
			11–21	Heavy silt loam
			21–40	Loam till

See footnotes at end of table.

TABLE 5.—*Estimated properties*

Soil series and map symbols	Depth to bedrock	Depth to seasonal high water table	Depth from surface	Classification: USDA texture
	Feet	*Feet*	*Inches*	
Lyons: Ly	4+	0–½	0–30	Silt loam to loam
			30–40	Gravelly silt loam to loam till
Madalin: Ma	5+	0–½	0–8	Light silty clay loam
For Odessa part, see Odessa series.			8–28	Heavy silty clay loam to silty clay
			28–54	Varved silty clay and silty clay loam with lenses of silt.
Niagara: Ng	4–15	½–1	0–15	Light silt loam or very fine sandy loam
			15–35	Silt loam
			35–48	Layers of silt, very fine sandy loam, and loamy fine sand.
Odessa: OdA, OdB	5+	½–1	0–8	Silt loam
			8–40	Silty clay loam to silty clay
Ontario:				
OfB, OfC3, OnB, OnC, OnC3, OnD3	5+	2½	0–15	Loam or fine sandy loam
			15–32	Heavy fine sandy loam to light clay loam
			32–72	Loam glacial till
OpB	1½–3	3+	0–22	Silt loam
For Farmington part, see Farmington series.			22–31	Heavy silt loam
			31–40	Limestone bedrock.
Ovid: OvA, OvB	4+	½–1½	0–12	Heavy silt loam
			12–24	Silty clay loam
			24–40	Silty clay loam to heavy loam glacial till
Palmyra: PgA, PgC, PhD, PhE	5+	3+	0–12	Gravelly loam
For Howard part of PhD and PhE, see Howard series.			12–42	Gravelly loam
			42–60	Stratified sand and gravel
Romulus: Ro	3+	0–1	0–15	Light silty clay loam
			15–48	Silty clay loam
Scholarie: SeB, ShA, ShB, ShC3, ShD3	5+	1½–3	0–9	Light silty clay loam and silt loam
			9–40	Silty clay to clay
Sloan: Sn	3–20	0–½	0–36	Silt loam, silty clay loam and mucky silt loam.
			36–48	Layers of light silty clay loam and heavy silt loam.
Stafford: Sr	5+	½–1½	0–34	Loamy fine sand
			34–48	Fine sand
Varick: Vc	1½–3½	0–½	0–24	Light silty clay loam
			24	Soft shale bedrock.
Wallkill: Wk	6+	0	0–14	Fine sandy loam to very fine sandy loam
			14–40	Muck or peat

[1] Calcareous.

Ilion soils and the very poorly drained Alden soils, till substratum. They resemble the moderately deep Aurora soils. Danley soils are finer textured than Lima, Hilton, and Conesus soils of similar drainage and lime content. Danley soils have grayer hues than do the reddish Cazenovia soils.

Darien Series

The Darien series consists of somewhat poorly drained soils that formed in glacial till derived mainly from local alkaline and calcareous, dark-gray and black silty shale and a small quantity of limestone. These are nearly level to gently sloping soils on uplands in the central part of the county.

In a typical profile, the plow layer is very dark grayish-brown silt loam about 9 inches thick. The thin subsurface layer is mottled, grayish-brown to brown silt loam. The subsoil is mottled, yellowish-brown silty clay loam that is dark grayish brown at a depth of more than about 18 inches. Reaction is neutral. At a depth of more than about 24 inches, the subsoil is calcareous, firm, mottled, dark grayish-brown gravelly silty clay loam. Depth to the calcareous till substratum is about 29 inches. The substratum consists of firm, dark grayish-brown gravelly and shaly silty clay loam or clay loam. It has a few mottles in the upper part, but these gradually disappear with depth.

Typical profile of Darien silt loam, 0 to 3 percent slopes (cultivated):

Ap—0 to 9 inches, very dark grayish-brown (10YR 3/2) silt loam; few, faint root mottles; weak, medium, granular structure; friable to firm when moist; slightly sticky when wet; medium acid; many, fine roots; abrupt, wavy boundary.

A2—9 to 10 inches, grayish-brown (10YR 5/2) to brown (10YR 5/3) silt loam; few, fine, distinct, yellowish-brown (10YR 5/6) and light olive-brown (2.5Y 5/4) mottles; moderate, thin and medium, platy structure, parting to moderate, fine, subangular blocky structure; friable to firm; medium acid; many, fine roots; broken, wavy boundary.

B21tg—10 to 18 inches, yellowish-brown (10YR 5/4 to 5/6) light silty clay loam; many, medium and coarse, prominent, grayish-brown (2.5Y 5/2) mottles, and faint, dark yellowish-brown (10YR 4/4) mottles; moderate, medium and coarse, angular and subangular blocky structure within moderate, coarse and very coarse prisms; faces of prisms and blocky peds have light, brownish-gray (2.5Y 6/2) to light-gray (2.5Y 7/2) silt coats and clay films; firm when moist; slightly sticky when wet; neutral; common, fine roots along ped faces; clear, wavy boundary.

B22tg—18 to 24 inches, dark grayish-brown (2.5Y 4/2) light silty clay loam; many, fine and medium, prominent, yellowish-brown (10YR 5/4 and 5/6) mottles; moderate, medium and coarse, angular and subangular blocky structure within moderate, coarse and very coarse prisms; faces of prisms and blocky peds have dark-gray (5Y 4/1) clay films; firm when moist; slightly sticky when wet; neutral; common, fine roots along ped faces; 5 to 10 percent pebbles and shale fragments; gradual, wavy boundary.

B3g—24 to 29 inches, dark grayish-brown (2.5YR 4/2) gravelly light silty clay loam; common, medium, distinct, light olive-brown (2.5Y 5/6), olive-yellow (2.5Y 6/8), and gray (10YR 5/1) mottles; massive to weak, coarse, prismatic structure, parting to weak, coarse, subangular blocky structure; patchy, dark grayish-brown (2.5Y 4/2) clay films on ped faces; firm when moist; slightly sticky when wet; calcareous; few, fine roots along ped faces; gradual, wavy boundary.

C—29 to 50 inches +, dark grayish-brown (2.5YR 4/2), gravelly and shaly light silty clay loam or clay loam till; few, fine, distinct, olive-brown (2.5Y 4/4), light olive-brown (2.5Y 5/6), olive-yellow (2.5Y 6/8), and gray (10YR 5/1) mottles, which become less numerous with depth; massive to weak, thick and very thick, platy structure; very few roots in upper part; 20 to 30 percent pebbles and shale fragments; calcareous.

Depth to shale bedrock ranges from 40 to 72 inches. Depth to carbonates ranges from 20 to 40 inches; at a depth of 36 inches, reaction is neutral to mildly alkaline.

The A horizon is commonly heavy silt loam in texture but ranges from silt loam to silty clay loam. Reaction ranges from strongly acid to neutral.

The B horizon is commonly silty clay loam in texture but ranges from light silty clay loam to silty clay containing 28 to 35 percent clay. Reaction ranges from slightly acid to mildly alkaline.

Darien soils are the somewhat poorly drained member of a drainage sequence that includes the moderately well drained to well drained Danley soils, the poorly drained Ilion soils, and the very poorly drained Alden soils, till substratum. They are closely associated with the moderately well drained to well drained Danley soils, the poorly drained Ilion soils, and the Angola soils; the Angola soils are a moderately deep analog of the Darien soils. Other similarly drained soils are the Ovid and Appleton soils. The Ovid soils have a reddish hue in contrast to the yellowish-brown to olive-brown hue of the Darien soils. The Appleton soils are lighter textured than the Darien soils.

Darien silt loam, 0 to 3 percent slopes (DaA).—This soil has the profile described as typical for the series. It is extensive on the broad uplands in the central part of the county.

Included in mapping are small areas of Ovid soils that occur where thin remnants of lake-deposited reddish clay overlie the shaly glacial till in which the Darien soil formed. Ovid soils make up as much as 20 percent of some mapped areas, and although extensive, they have little or no effect on use and management. Also included are spots of Ilion soils in slight depressions and along narrow, shallow drainageways. These soils make up as much as 10 percent of some areas. Although of limited extent, this wetter soil commonly delays tillage operations in spring. Angola soils make up as much as 5 percent of some areas where the underlying shale bedrock is less than 40 inches deep. Other inclusions in mapping are the Danley, Cazenovia, Appleton, Lima, and Alden soils.

This soil is suited to crops, pasture, or forest. Unless this soil is drained, planting is commonly delayed in spring, and harvesting of crops is very difficult when it is wet in fall. If adequately drained, this soil is suited to a variety of crops. Undrained areas can be used only for short-season crops or for moisture-tolerant forage crops. Some areas can be improved by draining the wettest spots.

This soil tends to be cloddy if plowed when wet. Drainage and maintenance of good structure and high organic-matter content are the main needs in management. There is little or no hazard of erosion. Need for lime ranges from none to moderate. The supply of nitrogen is deficient in spring but may be adequate later in the season. The supply of phosphorus is moderate, and the supply of potassium is moderate to high. (Capability unit IIIw–5; woodland suitability group 4)

Darien-Danley-Cazenovia silt loams, 3 to 8 percent slopes (DdB).—This complex consists of areas in which Darien, Danley, and Cazenovia soils are closely intermingled. The gently sloping Darien soil in this complex

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better suited to long-term hay and forage crops, because erosion is a continuing hazard. If intertilled crops are grown, stringent erosion control measures are needed, as well as rotations that include a high percentage of crops to improve soil structure and increase organic-matter content. This soil needs lime and a complete fertilizer. The severely eroded spots are especially deficient in nitrogen. (Capability unit IVe-2; woodland suitability group 1a)

Lansing gravelly silt loam, 15 to 25 percent slopes (LsD).—This soil is not extensive in the county and occurs mainly on short side slopes adjacent to the less strongly sloping Lansing soils. The degree of erosion ranges from none or slight in woods and unplowed fields to severe in cropped areas. Included in mapping are a few small areas of Conesus soils that occur in slightly wet spots.

This soil can be cultivated, but slopes are so steep that tillage is extremely difficult and hazardous. The hazard of erosion is severe, so most areas are better suited to hay, pasture, or forest than to other crops. Lime and a complete fertilizer are needed for hay and forage crops. (Capability unit IVe-1; woodland suitability group 1b)

Lima Series

The Lima series consists of deep, moderately well drained soils that formed in strongly calcareous, medium-textured glacial till. South of the Seneca River, the brown and olive-brown colors of the soil reflect the influence of the dark-gray and black shale in the till. North of the river, reddish colors are imparted by the red shale and sandstone of the till. These soils are in widely scattered areas north of Ovid. They are generally at an elevation of less than 1,000 feet.

In a cultivated area, a typical Lima soil has a dark grayish-brown silt loam plow layer about 8 inches thick. The subsurface layer is thin, leached, friable, brown to yellowish-brown silt loam that fingers into the upper subsoil at a depth of about 11 inches. The subsoil is friable to firm heavy silt loam that is yellowish brown to dark yellowish brown in the upper few inches. At a depth of more than about 15 inches, the subsoil is dark yellowish brown to olive brown and has common, distinct mottles. Depth to firm calcareous loam till is about 21 inches. The till is mottled grayish brown to light olive brown to a depth of about 30 inches. Below this depth it is grayish brown and unmottled.

Typical profile of Lima silt loam, 3 to 8 percent slopes (cultivated):

Ap—0 to 8 inches, dark grayish-brown (10YR 4/2) silt loam; dark brown (10YR 4/3) when rubbed; moderate, medium, granular structure; friable; many, fine and medium roots; neutral; abrupt, smooth boundary.

A2—8 to 11 inches, brown (10YR 5/3) to yellowish-brown (10YR 5/4) silt loam; weak to moderate, medium, subangular blocky structure; friable; nonsticky; many, fine and medium roots; many, fine and medium pores; neutral; clear, wavy boundary; thin fingers, 1 to 3 inches apart, extend 1 to 3 inches into the underlying horizon.

B21t—11 to 15 inches, yellowish-brown (10YR 5/4) to dark yellowish-brown (10YR 4/4) heavy silt loam; moderate, medium and coarse, subangular blocky structure; friable to firm; slightly sticky; thin, grayish-brown (10YR 5/2) to brown (10YR 5/3) clay films on ped faces and in pores; many, fine and medium roots; neutral; clear, wavy boundary.

B22t—15 to 21 inches, dark yellowish-brown (10YR 4/4) to olive-brown (2.5Y 4/4) heavy silt loam; common, medium, distinct mottles of yellowish brown (10YR 5/6), light olive brown (2.5YR 5/6), and pale brown (10YR 6/3); moderate, coarse and medium, subangular and angular blocky structure; slightly firm; slightly sticky; thin, grayish-brown (2.5Y 5/2) clay films on ped faces and in pores; common, fine and medium roots; neutral; clear, wavy boundary.

C1—21 to 30 inches, grayish-brown (2.5Y 5/2) to light olive-brown (2.5Y 5/4) loam; common, medium, distinct mottles of yellowish brown (10YR 5/4), olive brown (2.5Y 4/4), brown (10YR 4/3), and light gray (10YR 7/2); weak, platy structure, breaking to moderate, medium and coarse, blocky structure; firm; thin, gray, silty coats on vertical ped faces; few, fine roots; weakly calcareous; clear, wavy boundary.

C2—30 to 40 inches +, grayish-brown (2.5Y 5/2) loam; weak to moderate, thick, platy structure; firm, calcareous glacial till.

Thickness of the solum and depth to calcareous material range from 12 to 30 inches. Reaction of the solum is neutral.

The A1, or the Ap, horizon ranges in color from very dark gray to dark brown. The A2 horizon ranges in color from pale brown to yellowish brown and contains faint high-chroma mottles in some places where the horizon is wettest. The A2 horizon is weakly to moderately expressed. Texture of the A horizon is dominantly silt loam but ranges from fine sandy loam to silt loam. Content of stone fragments is 0 to 10 percent. Reaction ranges from slightly acid to mildly alkaline.

The B horizon is olive brown to reddish brown and in places is mottled throughout or only in the lower part. Texture ranges from heavy silt loam to heavy fine sandy loam, and content of clay is 18 to 28 percent. The content of stone fragments ranges from 0 to 25 percent or more. The content of dark-gray and black shale increases where these soils are closely associated with Danley soils. Reaction ranges from slightly acid to mildly alkaline.

Lima soils are the moderately well drained members of drainage sequences that include the well drained, brown Honeoye soils and the reddish-brown Ontario soils. Other members of these drainage sequences are the somewhat poorly drained Appleton soils, the poorly drained Lyons soils, and the very poorly drained Alden soils, till substratum. Lima soils are similar in drainage to the Conesus, Cazenovia, and Danley soils. Lima soils have a higher content of lime and a thinner solum than the Conesus soils and are coarser textured than the Cazenovia or Danley soils.

Lime silt loam, 0 to 3 percent slopes (LtA).—This soil has a profile that resembles the one described as typical for the series but in most places it is faintly mottled in the upper part of the subsoil and highly mottled in the lower part. In a few places, deposits of eroded material from adjacent areas are as much as 10 to 15 inches or more in thickness.

This soil comprises about a fourth of the acreage of the Lima series in Seneca County. The largest areas are in the uplands and receive little or no runoff from adjacent areas. Slopes are generally smooth or slightly convex in shape. In places this soil is dominant in entire fields, but it is generally associated with the more strongly sloping Lima, Appleton, or Darien soils.

In the northern part of the county, areas of this soil are generally small. They occur mostly as narrow, level or slightly depressional strips with a long north-south axis. They are associated with Ontario soils that occupy drumlins or long drumloidal hills.

Included in mapping are small areas of Appleton soils in shallow depressions or along narrow drainageways,

deeply buried. This formation, about 25 feet thick, contributed lime to the glacial drift overburden. The Cobleskill Formation occurs immediately above the Bertie Group and consists of three or four layers, about 8 to 10 feet thick, of harder, darker, dolomitic limestone. Above this is the Rondont Formation, which is a dark-colored waterlime about 9 feet thick at Seneca Falls. The Rondont Formation is dolomitic, is shaly, and is deeply buried except for small exposures along the south side of Seneca River. These formations also contributed lime to the overburden of glacial drift. Akron Dolomite was formerly used as hydraulic cement.

Formations of the Devonian System are as follows:

Manlius Limestone (of Helderburg Group).—This formation, sometimes placed in the Silurian System, consists of a thin bed that is pinched out in the vicinity of Waterloo. It is composed of layers of hard, dark-blue limestone separated by thin partings of black, bituminous matter. The Oriskany Sandstone, estimated to be only 3 to 6 inches thick, separates the Manlius Limestone from the overlying Onondaga Limestone. It is considered by some geologists to be the basal formation of the Lower Devonian series. These formations are too thin to have had much influence on the overriding glacial drift.

Onondaga Limestone.—This important formation crosses the county in a belt that trends west-northwest and east-southeast. Its area of outcrop is divided by the Seneca River, and most exposures occur south of the river. This is a dense, hard limestone that is dark when freshly broken but weathers to a bluish gray. The formation is about 80 feet thick and consists of horizontal beds, some of which are 3 feet thick. In places the beds are separated by partings of carbonaceous shale. Black and bluish layers of chert stand out prominently in the upper beds.

This is probably the most important limestone bed in New York State, and it is quarried in many places for both highway and industrial uses. A large quarry is operated in Seneca County in the town of Fayette. Since the limestone outcropped at right angles to the direction of travel of the glaciers, it contributed most of the lime that occurs in the soils that formed in the overburden of glacial drift south of the outcrops.

Marcellus and Skaneateles Formation.—These formations consist mainly of shale, but there are some thin layers of limestone. The Marcellus Formation consists of black, slatelike bituminous shale containing layers that are rich in iron sulfide and calcareous concretions. The freshly broken shale is black, but it weathers to gray. It is very fissile and breaks easily into small, thin fragments that are often stained with iron oxide. The Marcellus Formation is about 50 feet thick and is overlain by about 185 feet of Skaneateles Shale, which is dark and fissile in the lower part but becomes calcareous and bluish gray in the upper part. These soft shales contribute to the dark color and heavy texture of the soils of the Danley, Darien, and Ilion series.

Ludlowville and Moscow Formations.—These formations consist of shale and thin limestone. The Ludlowville Shale is about 140 feet thick. The lower beds are hard, calcareous layers that are rich in coral. Because of their resistance to erosion, the lower beds are responsible for the falls and cascades in some of the ravines and gorges. The middle beds consist of soft, sandy shale containing calcareous lenses and an occasional layer of sandstone. The youngest or upper beds are more calcareous and are coarser in texture. They are gray but turn bluish gray upon prolonged exposure. Tichenor Limestone, composed of layers of dense, light-colored limestone several inches thick, separates the Ludlowville Formation from the overlying Moscow Formation.

The Moscow Formation is soft, gray, and calcareous in the lower part, and dark, highly friable, and less calcareous in the upper part. Weathered surfaces are light gray and are stained with iron oxide. This formation is about 140 feet thick and, together with the Ludlow Formation, contributes to the medium texture and shaly character of the soils in this part of the county.

Tully Limestone.—This formation is about 15 feet thick in Seneca County. It consists of limestone that is black when freshly broken but turns light gray when weathered. Tully Limestone is dense, hard, and brittle, and it breaks readily into angular fragments. It is exposed in many of the ravines and gullies and in the worked-out quarry 1 mile northeast of Ovid. It contributed some lime to the glacial drift and soil material but is too thin to have been of much significance.

Genesee Shale and West River Shale Groups.—Overlying the Tully Limestone is the Genesee Shale, which is the basal member of the Genesee Group. Genesee Shale is about 85 feet thick in Seneca County and is black where freshly broken but turns light gray when weathered. It is hard and compact in new exposures but becomes fissile upon weathering. Genesee Shale is separated from the overlying West River Shale by Genundewa Limestone, which is about 10 feet thick. Genundewa Limestone is a gray to black rock that is soft and very friable and which contains prominent, flat concretions. West River Shale is 65 to 75 feet thick, is dark gray to black, and contains occasional layers of calcareous shale and calcareous sandstone. These formations contributed dark shale fragments and medium textures to the local drift and to local soils.

Cashaqua Shale and Hatch Shale Formations.—Cashaqua Shale is 250 feet thick. It is composed of gray, calcareous shale that contains thin beds of sandstone and interlaid sandstones in the upper part. Hatch Shale is 300 to 500 feet thick. It is light gray to dark gray or black. The basal beds are composed of soft rocks, and the upper beds are of hard, sandy rocks. Layers of hard, gray sandstone that ranges in thickness from 2 to 30 inches are interbedded with layers of shale. These formations contributed flagstones, chanmery, and medium-textured materials to the soils in the southern part of the county.

Lower West Falls Group.—These formations underlie the highest parts of the county. They consist of thin-bedded, gray to dark shales interbedded with thin layers of fine-grained, dense sandstone. They consist of Grimes Sandstone, Nunda Sandstone, and Wiscoy Shale and occupy a small area in Seneca County. These formations contributed stone fragments and a medium texture to the overlying soils on the highest hills in the county.

Physiography and Drainage

Seneca County is in two of the major physiographic provinces in New York State. That part of the county south of Ovid and marked by the Portage Escarpment is in the Southern New York section of the Appalachian Plateau (*12*). The part north of Ovid comprises part of the Erie-Ontario-Mohawk Plain.

In the northwestern part of Seneca County are Deltaic sandhills and plains. This is an area of sandy, nearly level to rolling soils. It is part of an old delta built into glacial Lake Newberry, the predecessor of the present Seneca Lake. In places the sand is underlain by stratified sand and gravel deposited as outwash by glacial meltwater. Elevation ranges from 400 to 500 feet.

East of the sandhills and plains is a belt of drumlins and drumloid hills, which are elongated hills that trench north and south. These hills have crests that range from 20 feet to more than 75 feet in height and are composed of glacial till. The till is derived mainly from the shale, sandstone, and limestone of the underlying formations, or from closely adjacent formations to the north. The till contains many crystalline erratics. These are hard rocks from Canada and the Adirondack region that were able to survive the grinding action of the ice during transportation.

East of the drumlin and drumloid hill area is Montezuma Marsh, which consists of the drowned land at the north end of Cayuga Lake. This area generally corresponds with the filled northern extension of Cayuga Lake valley. It consists of muck 2 to 8 feet deep that is underlain by 2 to 10 feet of marl. The marl, in turn, is underlain by layers of sand, silt, and clay that are more than 100 feet thick.

The glacial lake plain area, where the waters of Seneca and Cayuga valleys coalesced, extends across the county along the Seneca River and is about 5 or 6 miles wide. This is a nearly level to rolling area of lake-laid sediment consisting of sand, silt, and clay. This sediment ranges from yellowish brown to pinkish where well drained to drab gray and brown where wet. The poorly developed drainage pattern and the low permeability of the lacustrine sediment necessitate the installation of systems to remove excess water before cultivation of many areas is practical. The elevation of this area ranges from 400 to 600 feet.

South of the glacial lake plain is the glacial till plain area. In this area the surface materials consist mostly of glacial till derived mainly from the soft, silty, underlying shale. The glacial till also contains a considerable amount of limestone from the Onondaga Formation, which underlies the county just north of the lake plain. The relief is generally mild, but the slopes bordering the lakes in the south are steep. On the divide between the lakes, the till commonly contains small spots that are thin and spots that are remnants of lake-laid deposits. Elevation, which ranges from 600 to 800 feet, increases from north to south.

The Appalachian Plateau area is a rolling upland that is slightly dissected by small streams and drainageways. It is separated from the glacial till plain by the Portage Escarpment in the vicinity of Ovid. The Appalachian Plateau area includes the highest parts of the county, and elevation ranges from 800 to 1,600 feet above sea level.

Water Supply

Rural areas of Seneca County depend on ground water to supply the needs of farms. The main source of ground water is precipitation, which averages about 33 inches annually. During protracted dry spells, many wells, ponds, and streams dry up, and water to meet the needs of some farms may have to be hauled from Seneca Lake and Cayuga Lake.

The ground water used in Seneca County comes from springs and from wells that are dug or drilled. Most wells in the southern part of the county are drilled into rock. This is because the glacial till mantle is so thin and compact that it makes a poor aquifer; therefore, the amount of water obtained from dug wells is low. Dug wells in the northern part of the county, however, generally meet the needs of the average farm, since in this area the mantle of glacial till or other material is much deeper and holds a greater amount of water.

Seneca Falls and Waterloo, the two largest villages, use surface water from their municipal supplies, but industry in this area uses water from drilled wells. Ovid and Interlaken use ground water for their municipal supplies. Seneca Ordnance Depot uses Seneca Lake as its source of supply. The two lakes, the Seneca River, and the Barge Canal are additional sources of large amounts of water. The Seneca River is a source of water for the irrigation of muck soils. This water can be supplied through drainage ditches or channels at some distance from the river.

Additional information on ground water resources of Seneca County can be found in a publication by Mazola (*15*).

Climate [11]

Seneca County has a climate of the humid, continental type. The flow of air is mainly continental. Cold, dry weather generally results when the flow is from the northwest or north, while warm, occasionally humid weather prevails when the flow is from the southwest or south. The Atlantic Ocean has a secondary influence. Occasionally, air from vigorous storm systems and other pressure patterns reaches the county from maritime sources off the mid- or north-Atlantic coast. Such a flow, coming from the northeast, east, or southeast, is generally associated with cool, cloudy, and damp weather.

Summers are warm in this county. Winters are long and cold, and there are frequent spells of stormy, unsettled weather. Most major weather systems affect Seneca County to some degree, and the frequency with which these different weather systems move across the county produces a variety of weather. Temperature and other atmospheric conditions usually vary from day to day, and the weather one week can be entirely different from that of the preceding or following week. Seasonal weather frequently shows appreciable variation from year to year.

[11] By A. Boyd Pack, climatologist for New York, National Weather Service, U.S. Department of Commerce.

SOIL LEGEND

The first capital letter is the initial one of the soil name. A second capital letter, A, B, C, D, E, or F, is a general guide to the slope class. Symbols without a slope letter are for those miscellaneous land types or soils where slope is not significant to use and management. A final number, 3, in the symbol shows that the soil is eroded.

SYMBOL	NAME
Ac	Alden mucky silt loam
Ad	Alden mucky silt loam, till substratum
Al	Alluvial land
AnA	Angola silt loam, 0 to 3 percent slopes
AnB	Angola silt loam, 3 to 8 percent slopes
AoA	Appleton gravelly silt loam, 0 to 3 percent slopes
AoB	Appleton gravelly silt loam, 3 to 8 percent slopes
ApA	Appleton silt loam, 0 to 3 percent slopes
ApB	Appleton silt loam, 3 to 8 percent slopes
ArB	Arkport loamy fine sand, 1 to 6 percent slopes
ArC	Arkport loamy fine sand, 6 to 12 percent slopes
ArD	Arkport loamy fine sand, 12 to 20 percent slopes
AuD	Arnot channery silt loam, 15 to 25 percent slopes
AwB	Aurora silt loam, 3 to 8 percent slopes
AwC	Aurora silt loam, 8 to 15 percent slopes
AwD	Aurora silt loam, 15 to 25 percent slopes
AzF	Aurora and Farmington soils, 25 to 75 percent slopes
Ca	Canandaigua silt loam
CeB	Cazenovia silt loam, 3 to 8 percent slopes
CeB3	Cazenovia silt loam, 3 to 8 percent slopes, eroded
CeC	Cazenovia silt loam, 8 to 15 percent slopes
CeC3	Cazenovia silt loam, 8 to 15 percent slopes, eroded
ChD	Cazenovia soils, 15 to 25 percent slopes
ChE	Cazenovia soils, 25 to 40 percent slopes
CkA	Claverack loamy fine sand, 0 to 2 percent slopes
CkB	Claverack loamy fine sand, 2 to 6 percent slopes
ClA	Collamer silt loam, 0 to 2 percent slopes
ClB	Collamer silt loam, 2 to 6 percent slopes
ClC	Collamer silt loam, 6 to 12 percent slopes
CoA	Collamer silt loam, moderately shallow variant, 0 to 2 percent slopes
CoB	Collamer silt loam, moderately shallow variant, 2 to 6 percent slopes
CsA	Conesus gravelly silt loam, 0 to 3 percent slopes
CsB	Conesus gravelly silt loam, 3 to 8 percent slopes
Cu	Casad loamy fine sand
DaA	Darien silt loam, 0 to 3 percent slopes
DdB	Darien-Danley-Cazenovia silt loams, 3 to 8 percent slopes
DuB	Dunkirk silt loam, 1 to 6 percent slopes
DuC3	Dunkirk silt loam, 6 to 12 percent slopes, eroded
DuD	Dunkirk silt loam, 12 to 20 percent slopes
DwB	Dunkirk silt loam, limestone substratum, 1 to 6 percent slopes
Ed	Edwards muck
Ee	Eel silt loam
ElA	Elnora loamy fine sand, 0 to 2 percent slopes
ElB	Elnora loamy fine sand, 2 to 6 percent slopes
ErA	Erie channery silt loam, 0 to 3 percent slopes
ErB	Erie channery silt loam, 3 to 8 percent slopes
EsA	Erie channery silt loam, moderately shallow variant, 0 to 3 percent slopes
EsB	Erie channery silt loam, moderately shallow variant, 3 to 8 percent slopes
Fn	Fonda mucky silty clay loam
Fw	Fresh water marsh
HnB	Honeoye silt loam, 2 to 8 percent slopes
HnC	Honeoye silt loam, 8 to 15 percent slopes
HnD	Honeoye silt loam, 15 to 25 percent slopes
HoE	Honeoye, Ontario, and Lansing soils, 25 to 40 percent slopes
HwA	Howard gravelly loam, 0 to 5 percent slopes
HwC	Howard gravelly loam, 5 to 15 percent slopes
Is	Ilion silty clay loam
LcA	Lakemont silty clay loam, 0 to 2 percent slopes
LcB	Lakemont silty clay loam, 2 to 6 percent slopes
Lf	Lamson fine sandy loam and mucky fine sandy loam
LgB	Langford channery silt loam, 2 to 8 percent slopes
LgC	Langford channery silt loam, 8 to 15 percent slopes
LgC3	Langford channery silt loam, 8 to 15 percent slopes, eroded
LgD	Langford channery silt loam, 15 to 25 percent slopes
LnB	Langford channery silt loam, moderately shallow variant, 2 to 8 percent slopes
LnC	Langford channery silt loam, moderately shallow variant, 8 to 15 percent slopes
LsB	Lansing gravelly silt loam, 2 to 8 percent slopes
LsC	Lansing gravelly silt loam, 8 to 15 percent slopes
LsC3	Lansing gravelly silt loam, 8 to 15 percent slopes, eroded
LsD	Lansing gravelly silt loam, 15 to 25 percent slopes
LtA	Lima silt loam, 0 to 3 percent slopes
LtB	Lima silt loam, 3 to 8 percent slopes
Ly	Lyons silt loam
Ma	Madalin and Odessa silty clay loams
Md	Made land, tillable
Mr	Muck, deep
Ms	Muck, shallow
Ng	Niagara silt loam
OdA	Odessa silt loam, 0 to 2 percent slopes
OdB	Odessa silt loam, 2 to 6 percent slopes
OfB	Ontario fine sandy loam, 2 to 8 percent slopes
OfC3	Ontario fine sandy loam, 8 to 15 percent slopes, eroded
OnB	Ontario loam, 2 to 8 percent slopes
OnC	Ontario loam, 8 to 15 percent slopes
OnC3	Ontario loam, 8 to 15 percent slopes, eroded
OnD3	Ontario loam, 15 to 25 percent slopes, eroded
OpB	Ontario silt loam, moderately shallow variant, and Farmington soils, 2 to 8 percent slopes
OvA	Ovid silt loam, 0 to 3 percent slopes
OvB	Ovid silt loam, 3 to 8 percent slopes
PgA	Palmyra gravelly loam, 0 to 5 percent slopes
PgC	Palmyra gravelly loam, 5 to 15 percent slopes
PhD	Palmyra and Howard soils, 15 to 25 percent slopes
PhE	Palmyra and Howard soils, 25 to 35 percent slopes
Ro	Ramulus silty clay loam
SeB	Schoharie silt loam, 2 to 6 percent slopes
ShA	Schoharie silty clay loam, 0 to 2 percent slopes
ShB	Schoharie silty clay loam, 2 to 6 percent slopes
ShC3	Schoharie silty clay loam, 6 to 12 percent slopes, eroded
ShD3	Schoharie silty clay loam, 12 to 20 percent slopes, eroded
Sn	Sloan silt loam
Sr	Stafford loamy fine sand
Vc	Varick silty clay loam
Wk	Wallkill soils

WORKS

Highways and roads
- Dual .....
- Good motor .....
- Poor motor .....
- Trail .....

Highway markers
- National Interstate
- U. S. .....
- State or county .

Railroads
- Single track .....
- Multiple track ...
- Abandoned .....

Bridges and crossing
- Road .....
- Trail .....
- Railroad .....
- Ferry .....
- Ford .....
- Grade .....
- R. R. over .....
- R. R. under .....

Tunnel .....

Buildings .....
- School .....
- Church .....

Mine and quarry ...

Gravel pit .....

Power line .....

Pipeline .....

Cemetery .....

Dams .....

Levee .....

Tanks .....

Well, oil or gas ....

Forest fire or lookout

Sawmill .....

Sampson State Park


(Joins lower right)
410 000 FEET
415 000 FEET
Sampson (PO)
ROMULUS
SAMPSON
STATE PARK
SENECA LAKE
Landfill
formed
(Joins sheet 28)
1 005 000 FEET
1 000 000 FEET
995 000 FEET
990 000 FEET
985 000 FEET
AzF
HnC
LtB
LtA
ApA
ApB
DdB
DaA
Is
Md
Ro
OnB
HnB
96A

AnA Angola silt loam, 0 to 3 percent slopes - where drained

AoA Appleton gravelly silt loam, 0 to 3 percent slopes - where drained
AoB Appleton gravelly silt loam, 3 to 8 percent slopes - where drained

ApA Appleton silt loam, 0 to 3 percent slopes - where drained
ApB Appleton silt loam, 3 to 8 percent slopes - where drained

ArB Arkport loamy fine sand, 1 to 6 percent slopes

BaB Bath channery silt loam, 3 to 12 percent slopes

CkA Claverack loamy fine sand, 0 to 2 percent slopes
CkB Claverack loamy fine sand, 2 to 6 percent slopes

ClA Collamer silt loam, 0 to 2 percent slopes
ClB Collamer silt loam, 2 to 6 percent slopes

CoA Collamer silt loam, moderately shallow variant, 0 to 2 percent slopes
CoB Collamer silt loam, moderately shallow variant, 2 to 6 percent slopes

CsA Conesus gravelly silt loam, 0 to 3 percent slopes
CsB Conesus gravelly silt loam, 3 to 8 percent slopes

Cu Cosad loamy fine sand - where drained

DaA Darien silt loam, 0 to 3 percent slopes - where drained

DuB Dunkirk silt loam, 1 to 6 percent slopes

DwB Dunkirk silt loam, limestone stubstratum, 1 to 6 percent slopes

Ee Eel silt loam

ElA Elnora loamy fine sand, 0 to 2 percent slopes
ElB Elnora loamy fine sand, 2 to 6 percent slopes

HnB Honeoye silt loam, 2 to 8 percent slopes

HwA Howard gravelly loam, 0 to 5 percent slopes

LsB Lansing gravelly silt loam, 2 to 8 percent slopes

LtA Lima silt loam, 0 to 3 percent slopes
LtB Lima silt loam, 3 to 8 percent slopes

Ng Niagara silt loam - where drained

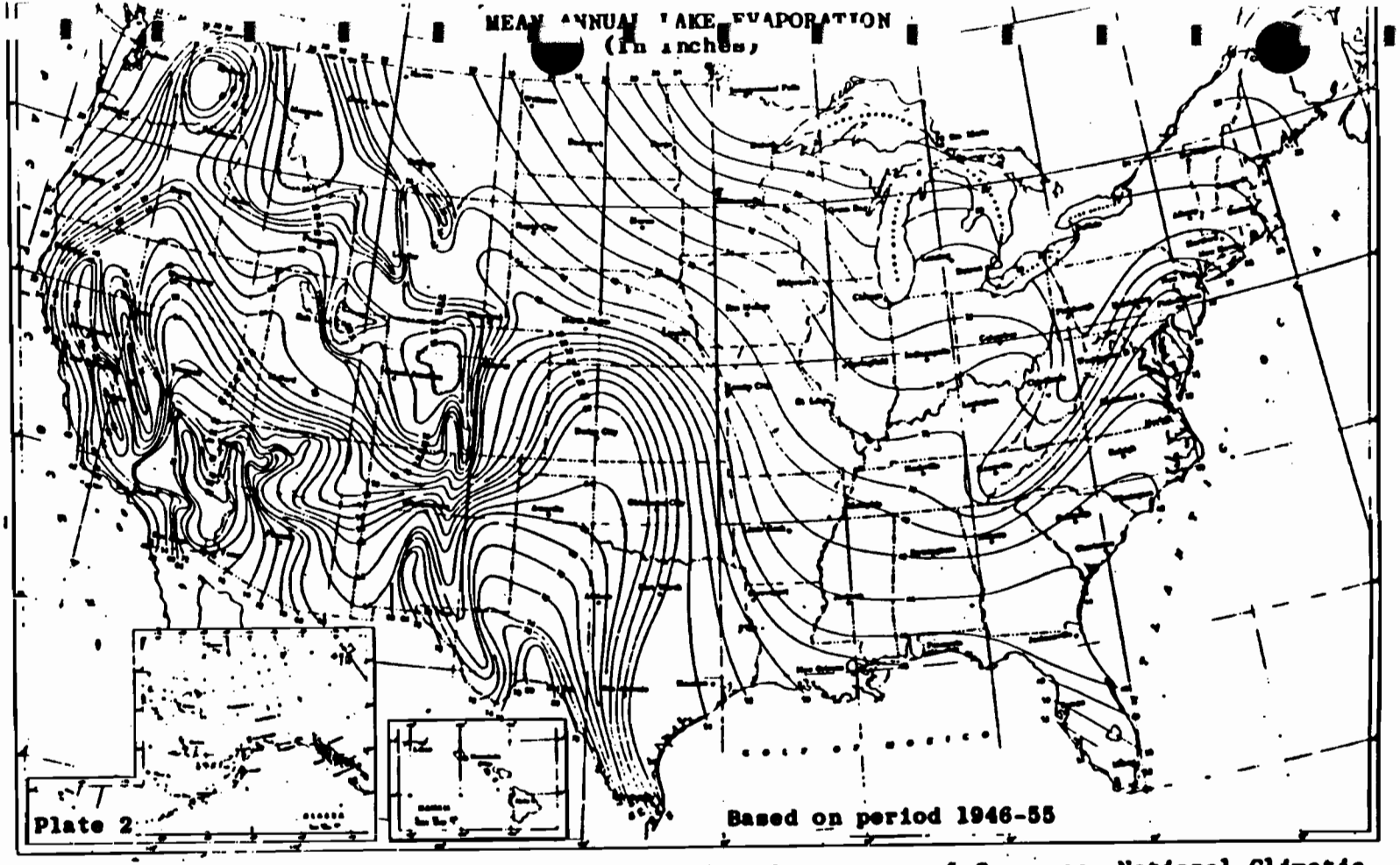
SENECA COUNTY, NEW YORK, PRIME FARMLAND MAPPING UNITS:

OfB Ontario fine sandy loam, 2 to 8 percent slopes

OnB Ontario loam, 2 to 8 percent slopes

OvA Ovid silt loam, 0 to 3 percent slopes - where drained

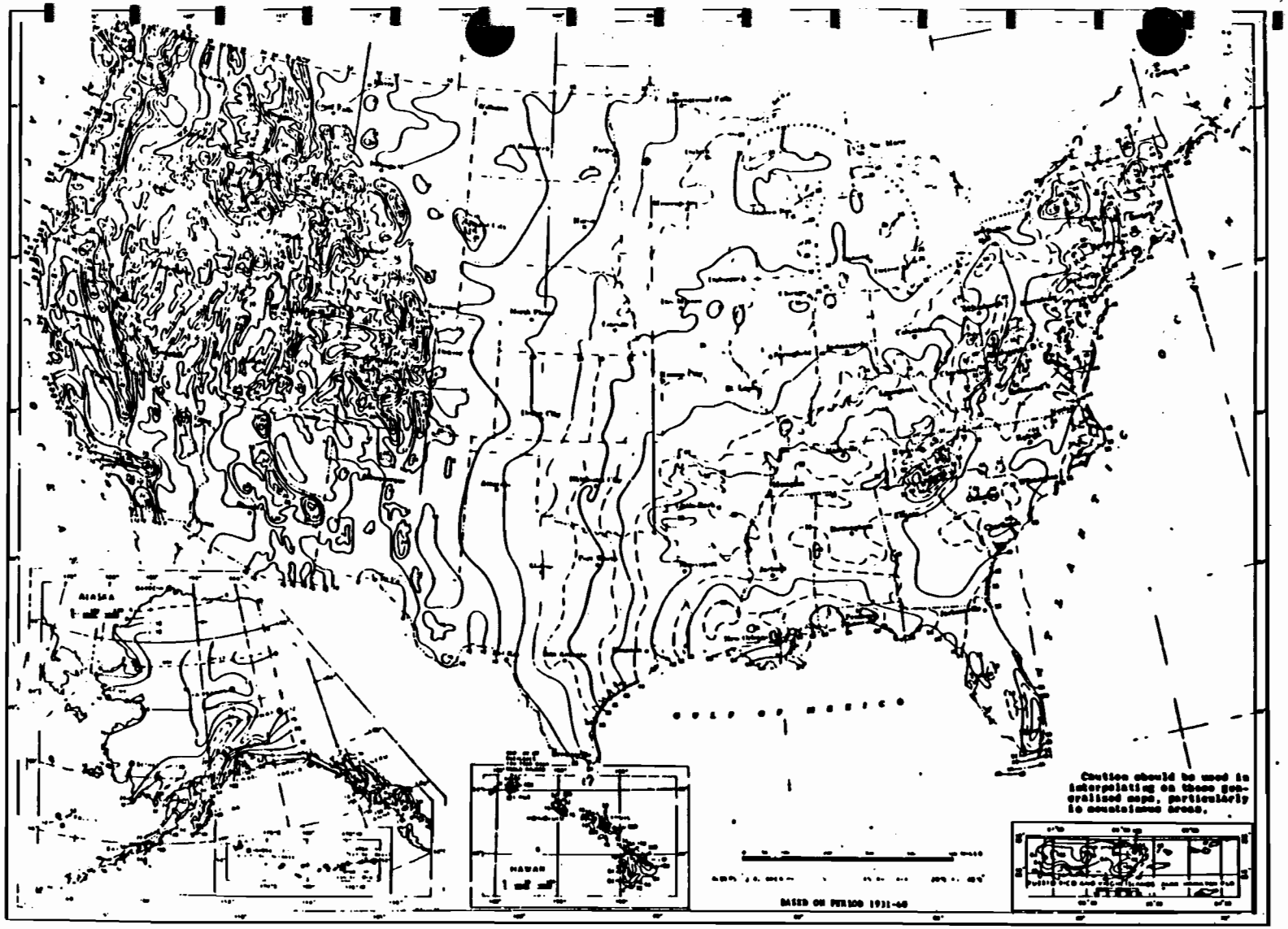
PgA Palmyra gravelly loam, 0 to 5 percent slopes



Source: Climatic Atlas of the United States, U.S. Department of Commerce, National Climatic Center, Ashville, N.C., 1979.

Figure 4

Mean Annual Lake Evaporation (In Inches)



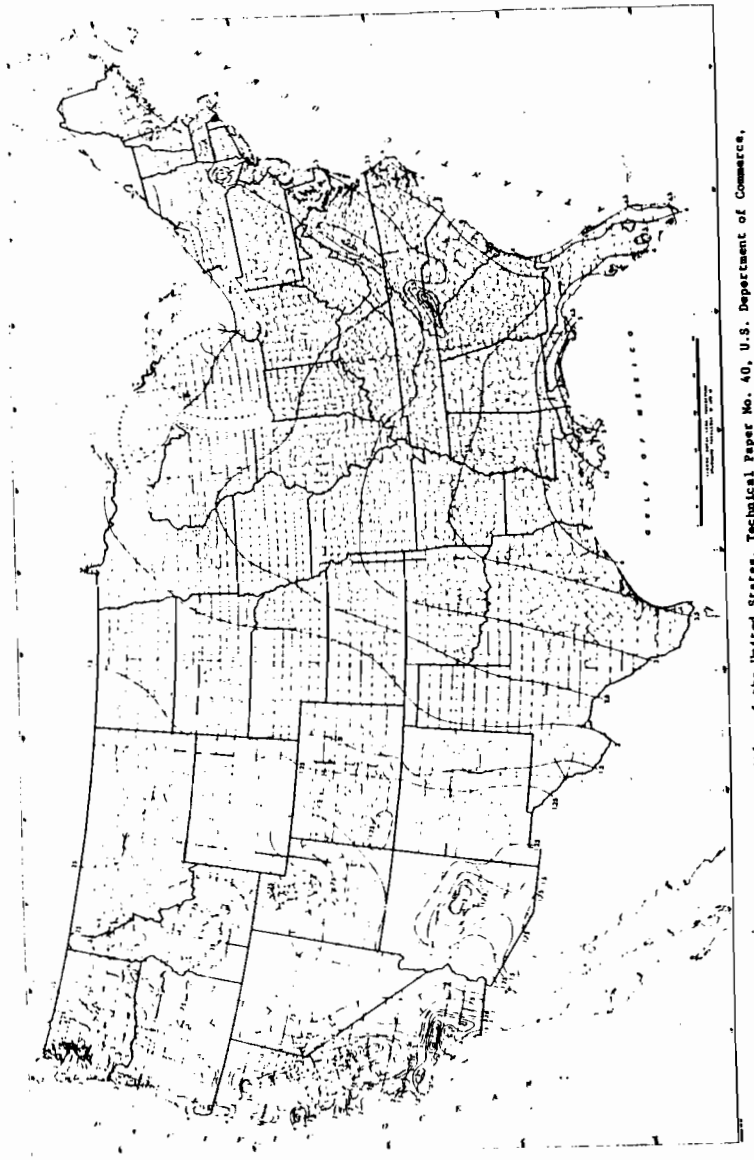
Source: Climatic Atlas of the United States, U.S. Department of Commerce, National Climatic Center, Asheville, N.C., 1979.

Figure 5

Normal Annual Total Precipitation (inches)

BILLING CODE 6560-50-C

US Dept. of Commerce, 1963 (2)

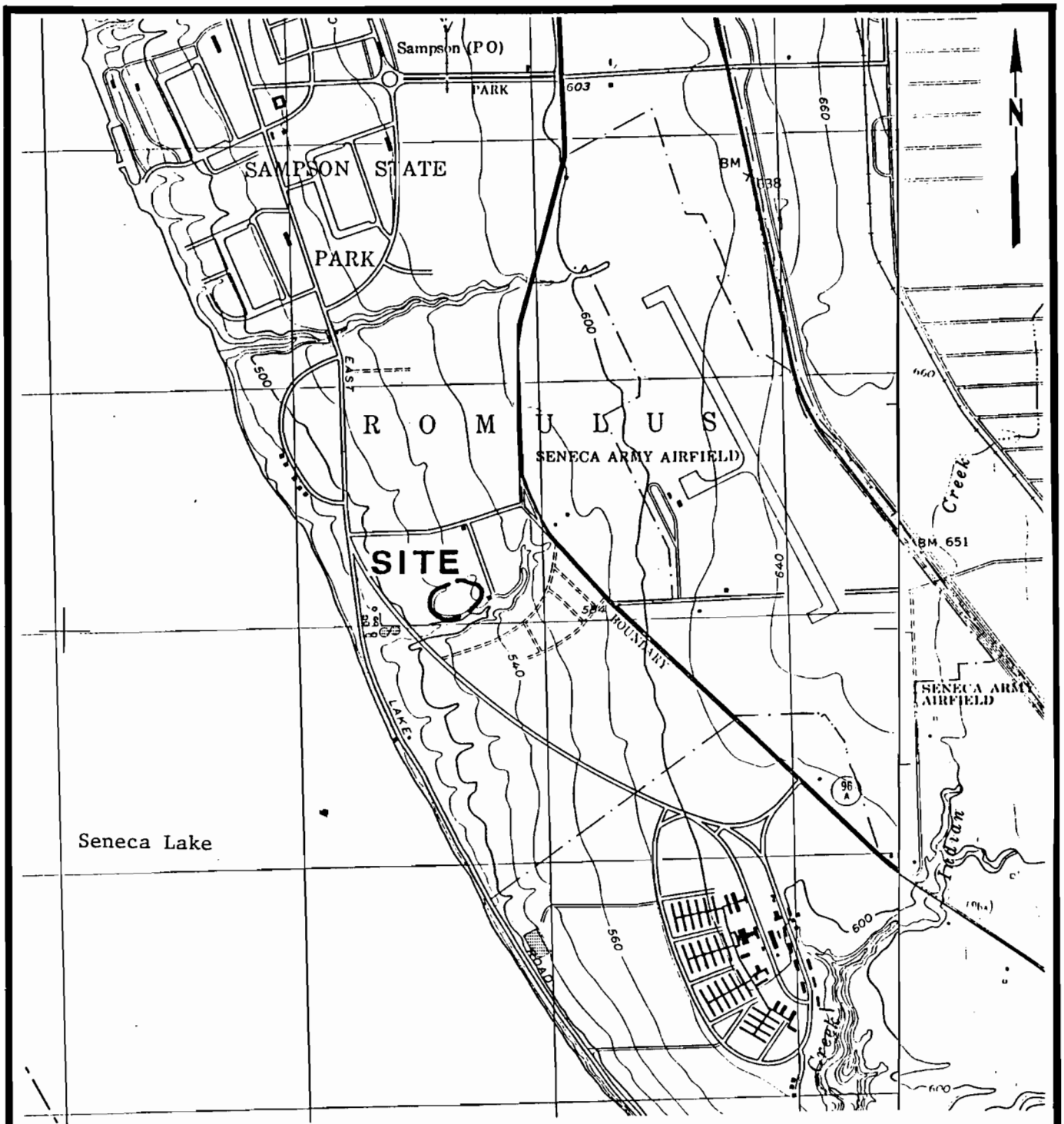


Source: Rainfall Frequency Atlas of the United States, Technical Paper No. 40, U.S. Department of Commerce, U.S. Government Printing Office, Washington, D.C., 1963.

Figure 8

1-Year 24-Hour Rainfall (Inches)

REF- 9 & 10



LATITUDE: 42°44'00" N
LONGITUDE: 76°54'30" W

SCALE
0 1000 2000 3000 4000 FEET

ENGINEERING-SCIENCE, INC.
IN ASSOCIATION WITH
DAMES & MOORE

NEW YORK STATE DEPARTMENT
OF ENVIRONMENTAL CONSERVATION
PHASE I REPORT

SITE LOCATION MAP
SAMPSON STATE PARK

FIGURE I-1

REFERENCE: U.S.G.S. 7.5' Topographic Map
Dresden, NY (1978) and Ovid, NY (1970)
Quadrangles.

(10)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

REFUSE DISPOSAL AND INSPECTION REPORT

NAME OF SITE	LOCATION (Town, Village, City)	COUNTY	REGION NO.
Sampson St. Park	Romulus	Seneca	8
OPERATOR	**ADDRESS**		**SITE NO.**
Finger Lakes St. Park Commission	Trumansburg, N.Y.		
OWNER	**ADDRESS**		
N.Y.S.			

EXPLAIN YES ANSWERS ON REVERSE SIDE	YES	NO
1. Burning at Time of Inspection.	☐	☒
2. Evidence of On-site Burning.	☐	☒
3. Dumping into Water.	☐	☒
4. Leachate Observed At The Site.	☐	☒
5. Leaching into a Water Course.	☐	☒
6. Refuse not Confined to a Manageable Area.	☒	☐
7. Unsatisfactory Daily Soil Cover.	☒	☐
8. Refuse Protruding through Completed Areas.	☐	☒
9. Improper Spreading and Compaction of the Refuse.	☒	☐
10. Pooling of Water, Cover Soil Cracking, Soil Erosion, or Improper Slope on Completed Area.	☐	☒
11. Evidence of Rodents and Insects.	☐	☒
12. Blowing Paper Problem.	☐	☒
13. Salvaging of Refuse Creating a Nuisance.	☐	☒
14. Approach Road Impassable to Vehicular Traffic During part of the year.	☐	☒

CONTROL OF SITE

☐ Signs ☐ Fence and Gate ☐ Supervision ☒ None at time of inspection

EQUIPMENT AT SITE

Type		
NONE		
Size		
—		

TYPE OF REFUSE DISPOSED

☒ Residential ☐ Commercial ☐ Industrial ☒ Demolition ☐ Agricultural ☐ Scavenger

PERSON INTERVIEWED	DATE (Month / Day / Year)	TIME
NO ONE	08 / 01 / 74	11 AM

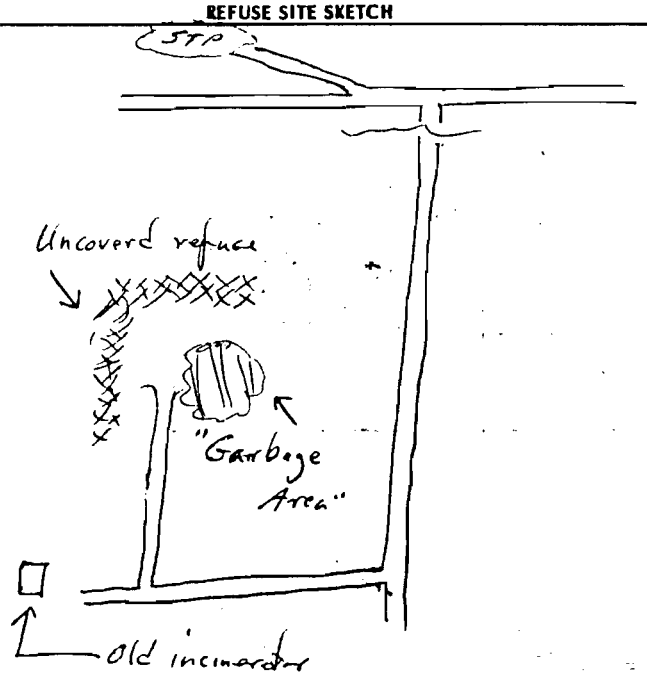
INSPECTED BY (Signature)		TITLE
John C. Willy & Brian Dombrowski, PHS		Sr. San.

V-1 (12/71)

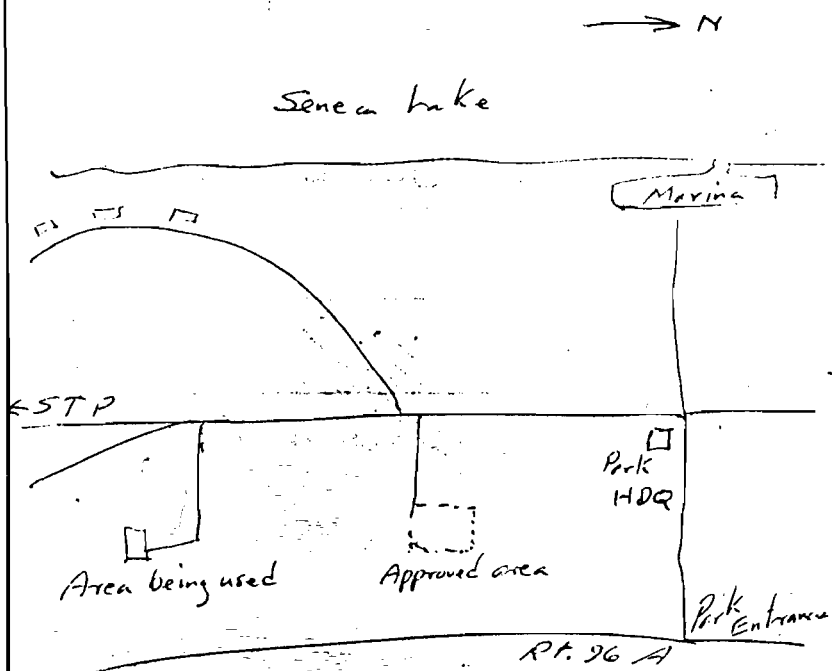
Copy to F.C. Daily - 8-5-74

E IN NO.	EXPLANATION OF YES ANSWERS
...ment →	The area presently being used is not the area for ~~which~~ which approved plans (dtd. 8/1/72) were approved for. This current used area is near the old incinerator, where as the approved area is to the north where an old coal yard existed.
6	Demolition material, trees, scrap iron have been dumped around area where apparent garbage trenches have been - see sketch.
7	As in #6
	Same
	At time of inspection a "dumpster" from ~~Seneca~~ Seneca Lake State Park was there dumping garbage. There was not a large enough hole ~~to~~ available to contain this load. Apparently garbage trenches have been dug, used and covered.

REFUSE SITE SKETCH



LOCATION SKETCH



(12)

July 11, 1967

FOR THE RECORD.

RE: Refuse Area
Sampson State Park
Romulus, N. Y.

Inspection was made about 2:30 P.M. this date with the operator of this refuse area. The area is east of an abandoned incinerator in the south part of the park and in the area used previously by the armed services.

Their operation consists of digging a pit 8' to 10' deep and 15' square. Refuse is dumped in and burned and then covered periodically. Contents are mostly cans and garbage. Fill is on hand for coverage. The area is isolated from habitation and is distant from any water course leading to Seneca Lake. Except for minor burning, this operation appears satisfactory.

John Wellington
Environmental Health Technician

JW:rf

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

EPA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	850005

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER				
SAMPSON STATE PARK	ROUTE 96-A				
03 CITY	**04 STATE**	**05 ZIP CODE**	**06 COUNTY**	**07 COUNTY CODE**	**08 CONG DIST**
ROMULUS, ~~NEW~~	NY		SENECA		
09 COORDINATES LATITUDE: 42 44 00.N	LONGITUDE: 076 54 30.W				

10 DIRECTIONS TO SITE (Starting from nearest public road)

III. RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residential)			
03 CITY	**04 STATE**	**05 ZIP CODE**	**06 TELEPHONE NUMBER**	
			( )	
07 OPERATOR (If known and different from owner)	**08 STREET** (Business, mailing, residential)			
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 DATE 2/6/85 (MONTH DAY YEAR)
☐ NO

BY (Check all that apply)

☐ A. EPA ☐ B. EPA CONTRACTOR ☐ C. STATE ☑ D. OTHER CONTRACTOR
☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: E (Specify)

CONTRACTOR NAME(S): ENGINEERING - SCIENCE

02 SITE STATUS (Check one)

☐ A. ACTIVE ☑ B. INACTIVE ☐ C. UNKNOWN

03 YEARS OF OPERATION

BEGINNING YEAR _____ ENDING YEAR _____ ☑ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

PAINT CANS, OIL CANS AND DECOMPOSED 55 GALLON DRUMS MAY BE PRESENT ON-SITE

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

SITE LOCATED WITHIN STATE PARK.

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
D. JACKSON	NYSDEC REGION 8			( )
04 PERSON RESPONSIBLE FOR ASSESSMENT	**05 AGENCY**	**06 ORGANIZATION**	**07 TELEPHONE NUMBER**	**08 DATE**
JAMES N. BAKER		ENG-SCI	315-451-9560	12, 6, 85 (MONTH DAY YEAR)

EPA FORM 2070-12 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	850005

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

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

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

TONS _____

CUBIC YARDS _____

NO. OF DRUMS UNKNOWN

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
- [x] M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			
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)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
	Municipal solid waste was landfilled on-site				

V. FEEDSTOCKS (See Appendix for CAS Numbers)

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

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

ES SITE INSPECTION 12/6/85

EPA FORM 2070-12 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	850005

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☑ A. GROUNDWATER CONTAMINATION
02 ☐ OBSERVED (DATE: _____) ☑ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

BURIED WASTES MAY BE IN SATURATED ZONE.

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

SURFACE WATER DRAINAGE IS WEST AND SOUTH INTO SENECA LAKE.

01 ☐ C. CONTAMINATION OF AIR
02 ☐ OBSERVED (DATE: 12/6/86) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

NOT OBSERVED

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS
02 ☐ OBSERVED (DATE: 12/6/86) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

NOT OBSERVED

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

NO ACCESS CONTROL (ES, 12-6-85)

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

EMPTY OR PARTIALLY FILLED WASTE PAINT OR OIL CANS MAY HAVE LEAKED ONTO SOIL.

01 ☑ G. DRINKING WATER CONTAMINATION
02 ☐ OBSERVED (DATE: _____) ☑ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 1050
04 NARRATIVE DESCRIPTION

SITE LOCATED ADJACENT SENECA LAKE, POTABLE DRINKING WATER SUPPLY (DOMBROWSKI, 1986)

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

POTENTIAL EXISTS - NO ACCESS RESTRICTIONS

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

POSSIBLE DRINKING WATER EXPOSURE (ES 12-6-85)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	850005

II. HAZARDOUS CONDITIONS AND INCIDENTS *(Continued)*

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

NOT OBSERVED

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

NOT OBSERVED

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

NOT OBSERVED

01 ☑ M. UNSTABLE CONTAINMENT OF WASTES *(Spills/runoff/standing liquids/leaking drums)* — 02 ☐ OBSERVED (DATE: _____) ☑ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

UNLINED LANDFILL

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

NOT OBSERVED

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

NOT OBSERVED

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

POTENTIAL FOR SCAVENGER DUMPING, NO SITE BARRIERS.

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

NA

III. TOTAL POPULATION POTENTIALLY AFFECTED: UNKNOWN

IV. COMMENTS

EMPTY PAINT CANS OBSERVED DURING SITE VISIT 12/85 WHICH COULD CONTAIN RESIDUAL QUANTITIES OF PAINT.

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

ES SITE VISIT (1985)

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

EPA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	850005

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
SAMPSON STATE PARK	ROUTE 96-A

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
ROMULUS	NY		SENECA		

09 COORDINATES LATITUDE	LONGITUDE
42 44 20.N	076 54 30.W

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
12, 6, 85 (MONTH DAY YEAR)	☐ ACTIVE ☐ INACTIVE	_____ BEGINNING YEAR _____ 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 ENG-SCI (Name of firm) ☐ G. OTHER _____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
JAMES N. BAKER	GEOLOGIST	ENG-SCI	(315)451-9560
09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
LESLIE SORDAHL	ENVIRONMENTAL TECH.	ENG. SCI	(315) 451-9560
			( )
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
			( )
			( )
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☑ PERMISSION ☐ WARRANT	1630 HRS.	COLD - SNOW ON GROUND

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
	NYSDEC REGION 8	( )

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
JAMES N. BAKER		ENG-SCI	(315) 451-9560	12, 6, 85 (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	850905

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

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

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

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

03 WASTE CHARACTERISTICS (Check all that apply)

- ☐ 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			
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)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
	Municipal Solid Waste was landfilled on-site.				
	No hazardous wastes are known to be disposed of on-site				

V. FEEDSTOCKS (See Appendix for CAS Numbers)

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

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

ES SITE INSPECTION 12-6-95

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	50005

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☑ A. GROUNDWATER CONTAMINATION
02 ☐ OBSERVED (DATE: _____) ☑ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

WASTES BURIED BELOW GROUND MAY BE IN SATURATION ZONE.

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

SURFACE WATER DRAINAGE IS WEST AND SOUTH INTO SENECA LAKE. 12-6-85

01 ☑ C. CONTAMINATION OF AIR
02 ☐ OBSERVED (DATE: 12/6/85) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

NOT OBSERVED

01 ☑ D. FIRE/EXPLOSIVE CONDITIONS
02 ☐ OBSERVED (DATE: 12/6/85) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

NOT OBSERVED

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

NO SITE ACCESS CONTROL (ES, 12-6-85)

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

PAINT AND OIL CANS MAY HAVE LEAKED ONTO SOIL.

01 ☑ G. DRINKING WATER CONTAMINATION
02 ☐ OBSERVED (DATE: _____) ☑ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 1050
04 NARRATIVE DESCRIPTION

SITE LOCATED ADJACENT SENECA LAKE, POTABLE WATER SUPPLY (DOMBROWSKI, 1986; ES 12-6-85)

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

POTENTIAL EXISTS - NO BARRIERS TO RESTRICT SITE ACCESS

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

SITE LOCATED ADJACENT TO SENECA LAKE. POTENTIAL EXISTS THROUGH DRINKING WATER (ES 12-6-85)

EPA

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

I. IDENTIFICATION	
01 STATE: NY	02 SITE NUMBER: 850005

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

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

NOT OBSERVED

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

NOT OBSERVED

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

NOT OBSERVED

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

UNLINED LANDFILL (ES SITE VISIT, 12/85)

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

NOT OBSERVED

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

NOT OBSERVED

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

NO SITE ACCESS CONTROL (ES 12-6-85)

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

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

PAINT AND OIL CANS OBSERVED DURING SITE VISIT 12/6/85

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

ES SITE INSPECTION 12-6-85

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	850005

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES				
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
☐ G. STATE (Specify)				
☐ H. LOCAL (Specify)				
☐ I. OTHER (Specify)				
☑ 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

~7 (Acres)

07 COMMENTS

SITE BELIEVED TO HAVE RECEIVED GENERAL REFUSE.

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.

SEVERAL DECOMPOSED PAINT AND OIL CANS AND SOME 55 GALLON DRUMS.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☑ YES ☐ NO

02 COMMENTS

NO BARRIERS

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

ES SITE INSP[illegible] 1-85

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	850005

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)

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

02 STATUS

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

03 DISTANCE TO SITE

A. 2 (mi)
B. 1/4 (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 183

03 DISTANCE TO NEAREST DRINKING WATER WELL 2.5 (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
3-10 (ft)	WEST	3-10 (ft)	UNKNOWN (gpd)	☐ YES ☑ NO

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

NEAREST WELL IS 2.5 MILES NORTHEAST OF SITE.

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
SENECA LAKE	☐	1/4 (mi)
	☐	(mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. ____ NO. OF PERSONS	B. ____ NO. OF PERSONS	C. 1050 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION 1/2 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE 67

04 DISTANCE TO NEAREST OFF-SITE BUILDING 1/8 (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)

RURAL AREA WITH THE TOWN OF ROMULUS AND VILLAGE OF WILLARD, NY WITHIN 3 MILE OF SITE.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	850005

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)

☐ 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	
<30' (ft)	UNKNOWN (ft)	UNKNOWN	

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE		
		SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
5 (in)	(in)	1-4 %	WEST	~5 %

09 FLOOD POTENTIAL

SITE IS IN NA YEAR FLOODPLAIN

10

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

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE	OTHER
A. (mi)	B. 1/8 (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

> 2 (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. (mi)	B. 0 (mi)	C. (mi)	D. (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

The site is located on a hill east of Seneca Lake. The site is gently sloping to steeply sloping to the west and south toward Seneca Lake and a tributary to Seneca Lake.

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

ES SITE VISIT 1985
NYSDEC REGION 8 FISH & WILDLIFE

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	850005

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER	0		
SURFACE WATER	0		
WASTE	0		
AIR	0		
RUNOFF	0		
SPILL	0		
SOIL	0		
VEGETATION	0		
OTHER	0		

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
HNu METER	NONE EXCEEDED 1 PPM

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☑ GROUND ☐ AERIAL

02 IN CUSTODY OF ENGINEERING-SCIENCE SYRACUSE, NY
(Name of organization or individual)

03 MAPS ☑ YES ☐ NO

04 LOCATION OF MAPS ENGINEERING-SCIENCE SYRACUSE OFFICE (USGS TOPOs)

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

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

ES SITE INSPECTION 12-6-85

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	85005

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
STATE PARK & RECREATION COM.		RD #3		TRUMANSBURG	NY	14886

PARENT COMPANY (If applicable)

08 NAME	09 D+B NUMBER	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE	12 CITY	13 STATE	14 ZIP CODE

III. PREVIOUS OWNER(S) (List most recent first)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
U.S. AIR FORCE				ROMULUS	NY	
U.S. NAVY				ROMULUS	NY	

IV. REALTY OWNER(S) (If applicable; list most recent first)

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

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

(SAMFORD, 12/85)
(NYSDEC, 1985)

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION
01 STATE: NY | 02 SITE NUMBER: 850005

II. CURRENT OPERATOR (Provide if different from owner)

01 NAME	02 D+B NUMBER	04 SIC CODE
NYS PARKS & RECREATION		

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	05 CITY	06 STATE	07 ZIP CODE
RD #3	TRUMANSBURG	NY	14886

08 YEARS OF OPERATION	09 NAME OF OWNER

OPERATOR'S PARENT COMPANY (If applicable)

10 NAME	11 D+B NUMBER	13 SIC CODE

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	14 CITY	15 STATE	16 ZIP CODE

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

01 NAME	02 D+B NUMBER	04 SIC CODE
US AIRFORCE		

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	05 CITY	06 STATE	07 ZIP CODE
	ROMULUS	NY	

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)

10 NAME	11 D+B NUMBER	13 SIC CODE

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER	04 SIC CODE
US NAVY		

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	05 CITY	06 STATE	07 ZIP CODE
	ROMULUS	NY	

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER	13 SIC CODE

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER	04 SIC CODE

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER	13 SIC CODE

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	14 CITY	15 STATE	16 ZIP CODE

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

NYSDEC, 1985

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	850005

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
NA	

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
NA			

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

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

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

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

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

IV. TRANSPORTER(S)

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

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)

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	850005

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NO

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NO

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NO

01 ☐ D. SPILLED MATERIAL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NO

01 ☐ E. CONTAMINATED SOIL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NO

01 ☐ F. WASTE REPACKAGED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NO

01 ☐ G. WASTE DISPOSED ELSEWHERE — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NO

01 ☑ H. ON SITE BURIAL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
SITE USED AS LANDFILL

01 ☐ I. IN SITU CHEMICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NO

01 ☐ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NO

01 ☐ K. IN SITU PHYSICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NO

01 ☐ L. ENCAPSULATION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NO

01 ☐ M. EMERGENCY WASTE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NO

01 ☐ N. CUTOFF WALLS — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NO

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NO

01 ☐ P. CUTOFF TRENCHES/SUMP — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NO

01 ☐ Q. SUBSURFACE CUTOFF WALL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NO

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	850005

II PAST RESPONSE ACTIVITIES (Continued)

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NO

01 ☐ S. CAPPING/COVERING — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NO

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NO

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NO

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NO

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NO

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NO

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NO

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NO

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NO

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NO

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NONE

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

ES SITE VISIT (1985)

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	850005

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)*

SECTION VI
ASSESSMENT OF DATA ADEQUACY AND RECOMMENDATIONS

ASSESSMENT OF DATA ADEQUACY

A summary assessment of the adequacy of existing data for completion of the HRS score is presented in Table VI-1. Based on this assessment, the following Phase II work plan and cost estimate has been prepared.

PHASE II WORK PLAN

A Phase II investigation has been proposed at this site for the following reasons: (1) waste types and quantities, and disposal practices conducted at the site, are unknown, and (2) no baseline monitoring data has been collected to date to identify the potential presence of contaminants at the site.

Objectives

The objectives of the proposed Phase II activities are:

- To collect additional field data necessary to identify the occurrence and extent of contamination and to determine if any imminent health hazard exists.

- To perform a conceptual evaluation of remedial alternatives and estimate budgetary costs for the most likely alternative.

- To prepare a site investigation report including final HRS score.

The additional field data required to complete this investigation are described as follows:

Geophysical Survey - A geophysical study consisting of an electrical resistivity survey is recommended. The electrical resistivity survey will be performed at various locations within and beyond the perimeter of the site to investigate site stratigraphy, delineate significant discontinuities and assess the presence and location of contaminant plumes.

Groundwater - A groundwater monitoring system consisting of 4 wells is recommended. Borings will be drilled to a maximum depth of 30 feet; soil samples will be taken every 5 feet or more frequently if a change in soil lithology is encountered. The wells will be placed in the aquifer of concern and constructed of 2" PVC pipe. The groundwater samples will be analyzed for HSL metals and organics. In addition, sieve and hydrometer analyses will be performed on representative samples of the subsurface soils. Finally, an in-situ permeability test will be performed on each well.

Surface Water and Sediment - A surface water and sediment monitoring system consisting of 4 monitoring stations is recommended. One station will be upgradient of the site, and three stations will be adjacent/downgradient of the site. The surface water and sediment samples will be analyzed for HSL metals and organics.

Air - An air monitoring survey with an HNU meter is recommended to test the air quality above the site during site activities.

TASK DESCRIPTION

The proposed Phase II tasks are described in Table VI-2. The proposed monitoring well and sampling locations are presented in Figure VI-1.

COST ESTIMATE

The estimated man-hours required for the Phase II project are presented in Table VI-3 and the estimated project costs by tasks are presented in Table VI-4.

TABLE VI-1

ASSESSMENT OF ADEQUACY OF DATA

HRS Data Requirement	Comments on Data
Observed Release	
Groundwater	Data inadequate to score an observed release
Surface Water	Data inadequate to score an observed release
Air	Data adequate for HRS score
Route Characteristics	
Groundwater	Data adequate for HRS score
Surface Water	Data adequate for HRS score
Air	Data adequate for HRS score
Containment	Data adequate for HRS score
Waste Characteristics	Data inadequate for HRS score
Targets	Data adequate for HRS score
Observed Incident	Data adequate for HRS score
Accessibility	Data adequate for HRS score

TABLE VI-2
PHASE II WORK PLAN - TASK DESCRIPTION

Tasks		Description of Task
II-A	Update Work Plan	Review the information in the Phase I report, conduct a site visit, and revise the Phase II work plan.
II-B	Conduct Geophysical Studies	Conduct electrical resistivity survey.
II-C	Conduct Boring/Install Monitoring Wells	Install 1 upgradient and 3 downgradient wells. The borings will be drilled to a depth of approximately 30 feet. Wells will be constructed of 2" PVC pipe.
II-D	Construct Test Pits/Auger Holes	No further construction of test pits/auger holes necessary.
II-E	Perform Sampling & Analysis	
	Soil samples from borings	Soil samples collected at 5 ft. intervals during drilling and at changes in subsurface lithologies. Perform one grain size analysis and permeability test per subsurface lithology change.
	Soil samples from surface soils	No further studies necessary.
	Soil samples from auger holes/test pits	No further studies necessary.
	Sediment samples from surface water	4 sediment samples are to be collected and analyzed for HSL metals and organics.
	Groundwater samples	4 groundwater samples are to be collected and analyzed for HSL metals and organics.
	Surface water samples	4 surface water samples are to be collected and analyzed for HSL metals and organics.

TABLE VI-2 (Continued)
PHASE II WORK PLAN - TASK DESCRIPTION

Tasks		Description of Task
	Air samples	Using the HNu determine the presence of organics.
	Waste samples	No further sampling necessary.
II-F	Calculate Final HRS	Based on the field data collected in Tasks II-B - II-E, complete the HRS form.
II-G	Conduct Site Assessment	Prepare final report containing significant Phase I information, additional field data, final HRS and HRS documentation records, and site assessments. The site assessment will consist of a conceptual evaluation of alternatives and a preliminary cost estimate of the most probable alternative.
II-H	Project Management	Project coordination, administration and reporting.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
PHASE II INVESTIGATION
COST ESTIMATE

SITE ID #: 850005
SITE NAME: SAMPSON STATE PARK
CONSULTANT: ENGINEERING SCIENCE

TABLE VI-3

TASK DESCRIPTION	ESTIMATED HOURS OF DIRECT TECHNICAL LABOR (DTL) L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	TOTAL HOURS	COST
II-A UPDATE WORKPLAN	4	24	4	12	4	60	24	32	24	52	240	3417.60
II-B CONDUCT GEOPHYSICAL STUDIES	2	4				80		80	10	10	186	2517.60
II-C CONDUCT BORING/INSTALL MONITORING WELLS	4	8				100		12	10	12	146	2188.40
II-D CONSTRUCT TEST PITS/ AUGER HOLES											0	0.00
II-E SAMPLING AND ANALYSIS											0	0.00
Soil samples from borings											0	0.00
Soil samples from surface soils											0	0.00
Soil samples from auger holes/test pits											0	0.00
Sediment samples from surface water		1				8		8			17	242.00
Groundwater samples		2				24		24			50	700.80
Surface water samples		1				8		8			17	242.00
Air samples											0	0.00
Waste samples											0	0.00
II-F CALCULATE FINAL HRS SCORE	8	16	4	2	8	32	32	16	8	8	134	2180.20
II-G CONDUCT SITE ASSESSMENT	2	40	4		8	60	32	8	60	80	294	3990.40
II-H PROJECT MANAGEMENT	4	30	4		16					48	102	1662.40
TOTAL HOURS	24	126	16	14	36	372	88	188	112	210		
HOURLY RATE $	33.40	25.20	22.00	19.70	17.00	15.10	13.30	12.00	9.60	8.60		
DIRECT LABOR COSTS $	801.60	3175.20	352.00	275.80	612.00	5617.20	1170.40	2256.00	1075.20	1806.00		

5/30/86

TOTAL DTL COSTS	17141.40
INDIRECT LABOR COSTS	20226.85
TOTAL LABOR COSTS	37368.25
PROFIT (15%)	5605.24
TOTAL PRICE	42973.49

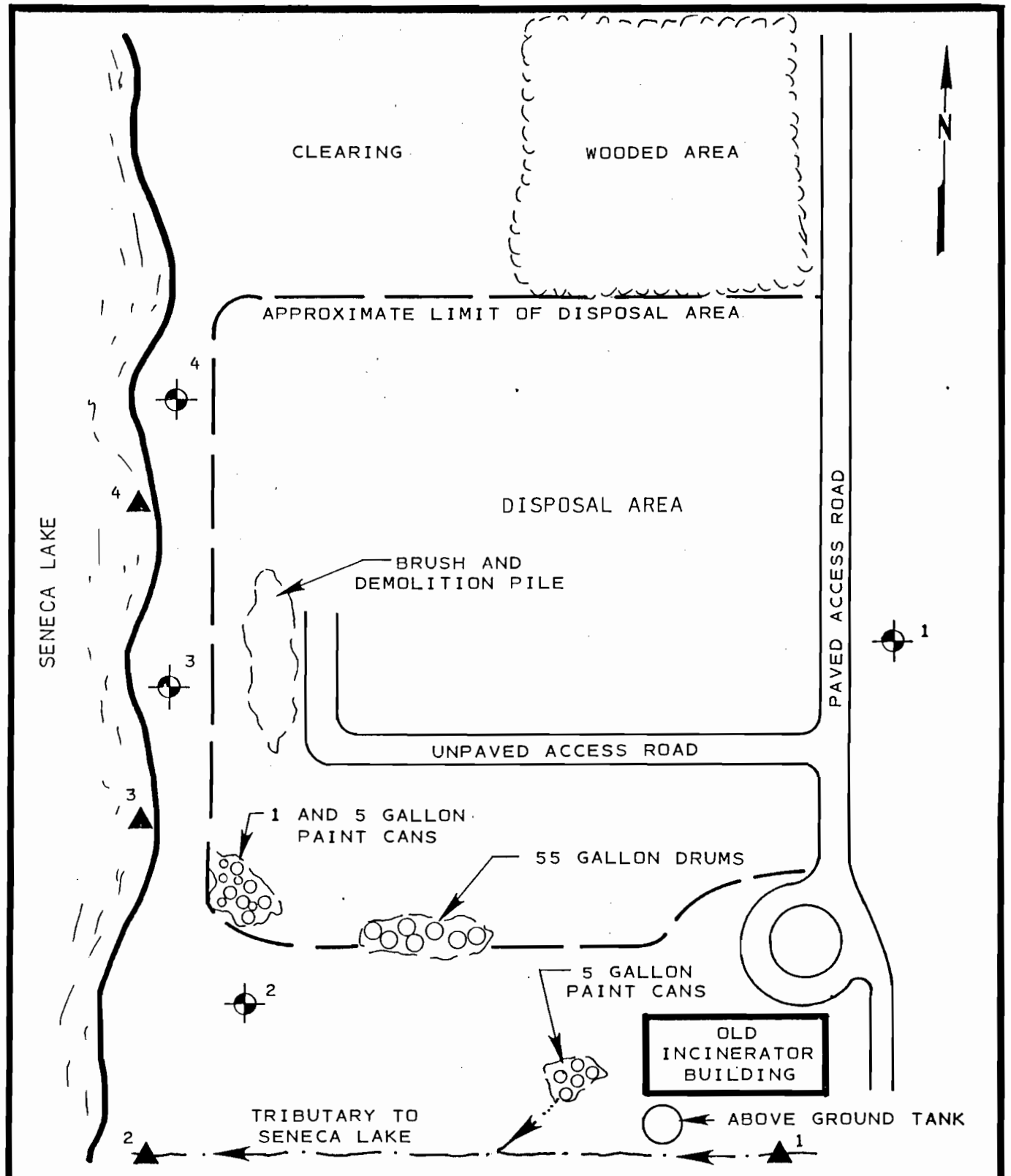
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
PHASE II INVESTIGATION
COST ESTIMATE

SITE ID #: 850005
SITE NAME: SAMPSON STATE PARK
CONSULTANT: ENGINEERING SCIENCE

TABLE VI-4

TASK DESCRIPTION	DIRECT LABOR HOURS	LABOR COST($)	SUBCONTR. COSTS $	SUPP.& EQUIP. $	MISC. $	TRAVEL & PER DIEM $	TOTALS $
II-A UPDATE WORKPLAN	240	3417.60		237	210	235	4099.60
II-B CONDUCT GEOPHYSICAL STUDIES	186	2517.60		1050	60	1370	4997.60
II-C CONDUCT BORING/INSTALL MONITORING WELLS	146	2188.40	17075	1126	75	1066	21530.40
II-D CONSTRUCT TEST PITS/ AUGER HOLES	0	0.00					0.00
II-E SAMPLING AND ANALYSIS	0	0.00	21600	372	50	685	22707.00
Soil samples from borings	0	0.00					0.00
Soil samples from surface soils	0	0.00					0.00
Soil samples from test pits/ auger holes	0	0.00					0.00
Sediment samples from surface water	17	242.00					242.00
Groundwater samples	50	700.80					700.80
Surface water samples	17	242.00					242.00
Air samples	0	0.00					0.00
Waste samples	0	0.00					0.00
II-F CALCULATE FINAL HRS SCORE	134	2180.20		50	75		2305.20
II-G CONDUCT SITE ASSESSMENT	294	3990.40		750	1000	165	5905.40
II-H PROJECT MANAGEMENT	102	1662.40		400	40		2102.40
SUBTOTAL	1186	17141.40	38675.00	3985.00	1510.00	3521.00	
INDIRECT LABOR (118% DTL)		20226.85					
PROFIT (%)		15	5	5	5	0	
PROFIT ($)		5605.24	1933.75	199.25	75.50		
TOTAL COSTS ($)		42973.49	40608.75	4184.25	1585.50	3521.00	92872.99

5/30/86


CLEARING
WOODED AREA
N
APPROXIMATE LIMIT OF DISPOSAL AREA
4
4
DISPOSAL AREA
SENECA LAKE
BRUSH AND
DEMOLITION PILE
PAVED ACCESS ROAD
1
3
UNPAVED ACCESS ROAD
3
1 AND 5 GALLON
PAINT CANS
55 GALLON DRUMS
2
5 GALLON
PAINT CANS
OLD
INCINERATOR
BUILDING
TRIBUTARY TO
SENECA LAKE
ABOVE GROUND TANK
2
1
NOT TO SCALE
EXPLANATION:
PROPOSED MONITORING
WELL LOCATION
PROPOSED SURFACE WATER
MONITORING LOCATION
ENGINEERING-SCIENCE, INC.
IN ASSOCIATION WITH
DAMES & MOORE
NEW YORK STATE DEPARTMENT
OF ENVIRONMENTAL CONSERVATION
PHASE I REPORT
PROPOSED SAMPLING LOCATIONS
SAMPSON STATE PARK
FIGURE VI-1

APPENDIX A
REFERENCES

Sources Contacted
Documentation

SOURCES CONTACTED SUMMARY SHEET
SAMPSON STATE PARK

Person Contacted/ Location	Telephone #	Date	Information Collected
Bob Hannaford NYSDEC - Division of Water 50 Wolf Road Albany, NY 12233	(518) 457-6716	11/22/85	Reviwed SPDES Permit Index to see if any permits were issued to site.
Frank Estabrook NYSDEC - Division of Monitoring & Assessment 50 Wolf Road Albany, NY 12233	(518) 457-2672	11/22/85	Reviewed surface water monitoring locations to see if any were close to site.
Kevin Walters NYSDEC - Division of Environmental Enforcement 50 Wolf Road Albany, NY 12233	(518) 457-4346	11/22/85	Determined that no legal action was presently occurring at site.
Vince Dick NYSDEC - Division of Monitoring and Assessment P.o. Box 57 Avon, NY	(716) 226-2466	12/17/85	Collected and reviewed geologic information.
John Ozard NYSDEC - Division of Fish and Wildlife Delmar, NY 12054	(518) 439-7486	12/16/85	Collected information concerning critical habitats of threatened or endangered species.
Fred Gilbert NYS Soil Conservation J. M. Hanley Federal Bldg. Syracuse, NY 13201	(315) 423-5510	11/23/85	County Soil Survey was forwarded.
Mel Hauptman USEPA Region II Federal Building Room 402 New York, NY	(212) 264-7681	12/31/85	Reviewed list of sites to determine EPA Site ID #'s.
Peter Bush NYSDEC - Division of Environmental Enforcement P.O. Box 57 Avon, NY	(716) 226-2466	11/22/85	Reviewed list of sites to determine if legal action has occurred in the past, is in progress and/or scheduled in the near future.

SOURCES CONTACTED SUMMARY SHEET
SAMPSON STATE PARK

Person Contacted/ Location	Telephone #	Date	Information Collected
Manmohan Mehta NYSDEC - Division of Solid & Haz. Waste P.O. Box 57 Avon, NY	(716) 226-2466	11/22/85	Collected general information from site files.
Pat Marshall Roger Waller Rich Renalds USGS 343 U.S.P.O. & Court House Albany, Ny 12201	(518) 472-2815 (518) 472-2825 (518) 472-2824	12/16/85 12/18/85 12/18/85	Collected and reviewed geological information.
Neil LeRoux USDA Soil Conservation 321 William Street Waterloo, NY 13165	(315) 539-3411	2/6/86	Collected wetlands, irrigation, and agricultural land information.
Jane Morris Seneca County ASCS 321 E. William St. Waterloo, NY 13165	(315) 539-9248	2/6/86	Provided information on nearby agricultural land formed within the past five years.
Brian Dombrowski Seneca County DOH 31 Thurber Drive Waterloo, NY 13165	(315) 539-9294	2/7/86	Reviewed DOH file information on the water supply in the site area.
Ted Sanford Sampson State Park 6096 Rt. 96A Romulus, NY 14541	(315) 585-6392	11/26/85	Provided ifnormation on site history.

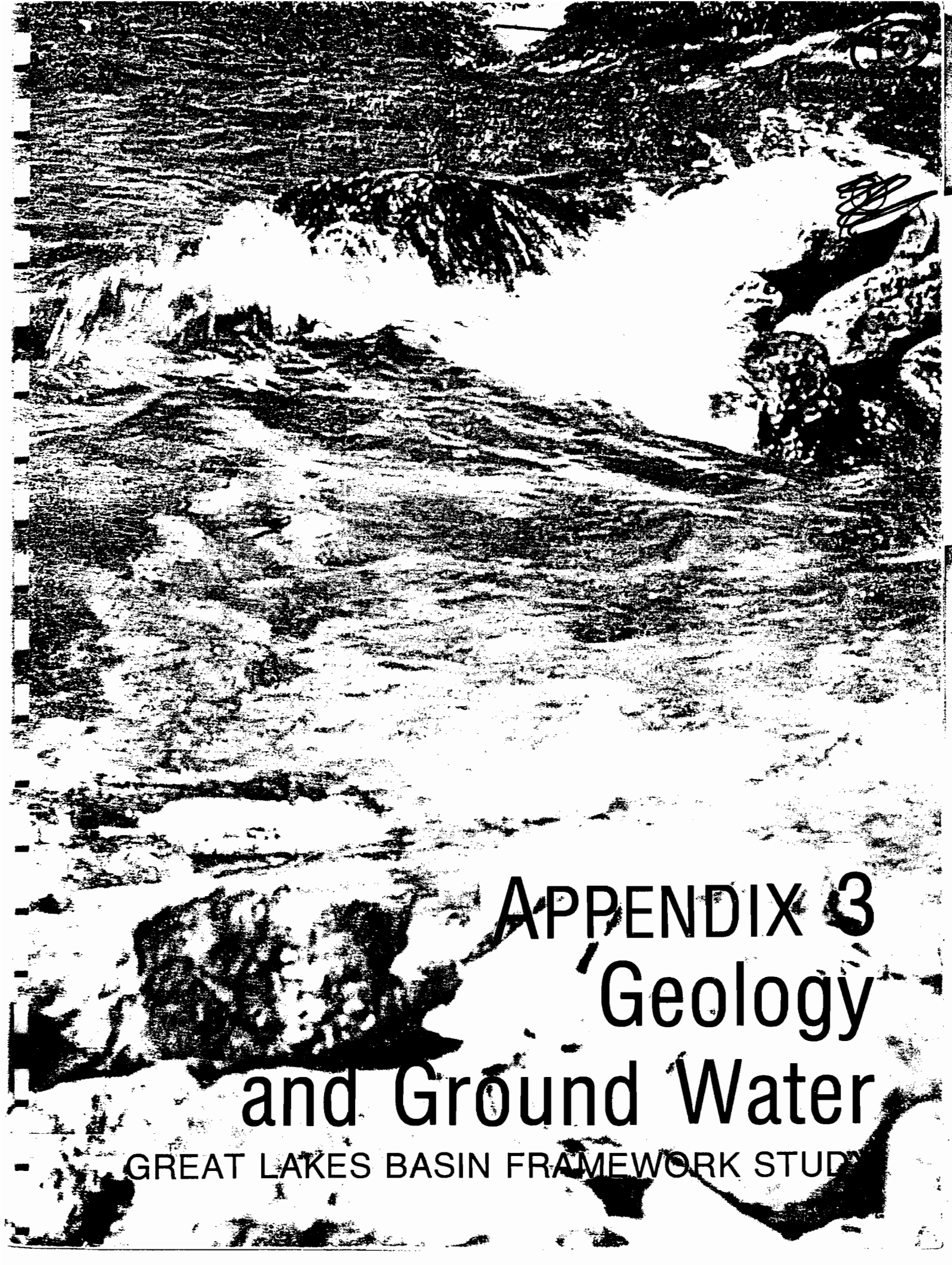
GENERAL REFERENCES*

13. Great Lakes Basin Commission (1975). "Framework Study, Appendix 3, Geology and Groundwater".

14. NYS Museum and Science Service Bedrock Geology Map, Finger Lakes Sheet, 1970.

15. Sanford, T. (1985), Manager, Sampson State Park. Personal Communication, 12/85.

* Does not include HRS References which are provided directly ater the HRS Documentation Records.



APPENDIX 3
Geology and Ground Water

GREAT LAKES BASIN FRAMEWORK STUDY

units adjacent to stream-recharge sources (Figure 3–54). In contrast, River Basin Group 5.2 does not have extensive units of good aquifer material, and the aquifers are not high-yielding. Unconsolidated sediments are quite extensive in the Adirondack part of River Basin Group 5.3, but little is known of the extent or thickness of sand and gravel units. Streamflow, precipitation, and cursory geologic data indicate a good ground-water potential in these unconsolidated sediments.[70]

Well yields as high as 2,000 gpm are possible in the best areas. Depths of glacial deposits are highly variable. Greatest thicknesses (1,000 feet) are known in the Oswego basin. Aquifer data are presented in Table 3–13. Figures 3–54, 3–56, and 3–58 show that more than half the Lake Ontario basin probably has a poor potential for other than domestic yields from the unconsolidated sediments.

Chemical quality of ground water in the unconsolidated sediment aquifers ranges from poor to excellent. Quality data in Table 3–14 indicate that the better water generally occurs in River Basin Group 5.3. Headwater areas of all regions generally produce water low in dissolved solids. Iron is the most prevalent problem. Below the headwater areas in the basin, ground water usually comes in contact with carbonate material and becomes increasingly hard and more mineralized. In the Genesee-Oswego areas, sulfate and chloride contents increase markedly in the lowlands where outflow of deep bedrock aquifers contributes highly mineralized water to shallow aquifer systems. Areas where highly mineralized waters are known are depicted on Figures 3–54 and 3–56.

Recharge potential from precipitation and streamflow is excellent. Studies elsewhere in New York under similar conditions indicate up to 4 mgd per square mile of recharge are possible to sand and gravel units. The ground-water potential has been depicted conservatively because of the lack of detailed studies. Most of the area of good potential aquifers is within the Adirondack Forest Preserve.

Many of the aquifers in unconsolidated sediments receive recharge directly from precipitation. Runoff from the till-covered mountains adds appreciably to the recharge. The highest precipitation in the State occurs in River Basin Group 5.3, approximately half of it in the form of snow. This heavy snowfall in most upland areas contributes extensive recharge to the unconsolidated aquifers. In contrast, because the lowland areas receive only half as much precipitation and soil permeability is generally low, recharge in the lowlands is much less.

6.3.2 Bedrock Aquifers

There are several significant bedrock aquifers in the Lake Ontario basin (Figures 3–55, 3–57, and 3–59). In some areas these provide the only ground-water source, while in others they are secondary to the overlying unconsolidated sediment aquifers. The bedrock units are significant aquifers only where they intrude into overlying sediments or are exposed. The upper part of these exposed formations makes up the major bedrock aquifer system, and this is considered the upper water-bearing zone. All rock units are shown as a single aquifer on the map for each river basin group, but different water-yielding and chemical quality characteristics make it useful to describe the various units separately.

The youngest rock formations are Devonian shales in the Genesee and Oswego River uplands. Fractures in the shale create an aquifer system capable of yielding water to wells at rates less than 100 gpm (Table 3–13). The chemical quality of the water is good, with hardness the main concern (Table 3–14). Saline water is present at depths greater than approximately 300 feet.

The next major aquifer system occurs in carbonate rocks in the Lower Devonian and Upper Silurian Series. Figures 3–55 and 3–57 show that the carbonates extrude in a narrow band along the north edge of the Appalachian Plateau border. The carbonates extend south, dipping below the Devonian shales, but decreased permeability and the presence of saline water inhibit their potential as aquifers. Well yields reach 500 gpm in the Oswego River basin, where extensive solution of the carbonates has taken place and stream recharge is available. Fifty-gpm wells are more common in most of the area (Table 3–13). Chemical quality of this carbonate-aquifer water is fair to poor, as shown in Table 3–14. Saline water, high in chlorides or sulfates, is a problem in the eastern part of the basin, where it is present at shallow depth (Figure 3–57). Saline water is present elsewhere, but at greater depths. Salinity of the aquifer is caused by upward circulation of water through underlying salt beds. The water is very hard.

Silurian shales (Salina Group) underlying the above-mentioned carbonate rocks are ex-

GEOLOGIC MAP OF NEW YORK

1970

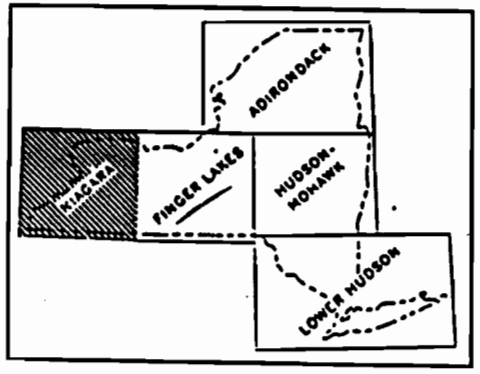
~~Niagara Sheet~~ Finger Lakes

Scale 1:250,000

5 0 5 10 15 Statute Miles 20

5 0 5 10 15 20 25 Kilometers 30

CONTOUR INTERVAL 100 FEET



Topographic Base from AMS Quadrangles 1:250,000 scale.

NEW YORK STATE MUSEUM AND SCIENCE SERVICE

MAP AND CHART SERIES NO. 15

COMPILED AND EDITED BY

Lawrence V. Rickard

Donald W. Fisher

March, 1970

71

15

INTERVIEW FORM

INTERVIEWEE/CODE Ted Sanford /

TITLE - POSITION Manager - Sampson State Park

ADDRESS Sampson State Park Route 96A

CITY Romulus STATE N.Y. ZIP 14541

PHONE ~~(315)~~ (315) 585-6392 . RESIDENCE PERIOD _____ TO _____

LOCATION phone interview INTERVIEWER L. Cordone

DATE/TIME 12/8/5 /

SUBJECT: Sampson State Park History

REMARKS: Sampson State Park was used ~~by~~ as a U.S. Naval Training Base from 1941 until 1946. The base was reopened by the Air Force from 1952 until 1955 during the Korean Conflict. The area became a state park in 1962.

I agree with the above interview summary:

Signature/Title:

Comments:

(15)

INTERVIEW FORM

INTERVIEWEE/CODE Ted Sanford /

TITLE - POSITION Manager, Sampson State Park

ADDRESS Sampson State Park, Route 96-A

CITY Romulus STATE NY ZIP 14541

PHONE (315) 585-6392 RESIDENCE PERIOD _____ TO _____

LOCATION phone interview INTERVIEWER L. Cordone

DATE/TIME 12/85 / _____

SUBJECT: Sampson State Park history

REMARKS: Sampson State Park was used as a U.S. Naval Training Base from 1941 until 1946. The base was reopened by the Air Force from 1952 until 1955 during the Korean conflict. The area became a state park in 1962

I AGREE WITH THE ABOVE SUMMARY OF THE INTERVIEW:

SIGNATURE:

COMMENTS:

APPENDIX B

PROPOSED UPDATED NYS REGISTRY SHEET

(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: 2a SITE CODE: 850005

NAME OF SITE: Sampson State Park REGION: 8

STREET ADDRESS: Route 96A

TOWN/CITY: Romulus COUNTY: Seneca

NAME OF CURRENT OWNER OF SITE: NYS Park's Service

ADDRESS OF CURRENT OWNER OF SITE:

TYPE OF SITE: OPEN DUMP [x] STRUCTURE [ ] LAGOON [ ]
LANDFILL [ ] TREATMENT POND [ ]

ESTIMATED SIZE: 7 ACRES

SITE DESCRIPTION: Lat: 42° 44' 00" N
Long. 76° 54' 30" W

Hillside topography rural agricultural surrounding nearest waterbody: Seneca Lake. This site was originally a Naval Training Base in 1941 and was abandoned prior to 1950. It was then reactivated by the Air Force in 1952 and used until 1956. It is presently a State Park. There is no information as to the location or type/quantity of waste disposal.

HAZARDOUS WASTE DISPOSED: CONFIRMED [ ] SUSPECTED [x]

TYPE AND QUANTITY OF HAZARDOUS WASTES DISPOSED:

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

TIME PERIOD SITE WAS USED FOR HAZARDOUS WASTE DISPOSAL:

_____, 19 41 TO _____, 19 86

OWNER(S) DURING PERIOD OF USE: _____

SITE OPERATOR DURING PERIOD OF USE: _____

ADDRESS OF SITE OPERATOR: _____

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

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

SOIL TYPE: Darien and Lima Silt loam

DEPTH TO GROUNDWATER TABLE: unknown

LEGAL ACTION: TYPE: None _____ STATE ☐ FEDERAL ☐
STATUS: IN PROGRESS ☐ COMPLETED ☐

REMEDIAL ACTION: PROPOSED ☐ UNDER DESIGN ☐
IN PROGRESS ☐ COMPLETED ☐

NATURE OF ACTION: _____

ASSESSMENT OF ENVIRONMENTAL PROBLEMS:

Unable to assess any environmental problems.

ASSESSMENT OF HEALTH PROBLEMS:

Insufficient information

PERSON(S) COMPLETING THIS FORM:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

NAME _____
TITLE _____
NAME _____
TITLE _____
DATE: _____

NEW YORK STATE DEPARTMENT OF HEALTH

NAME _____
TITLE _____
NAME _____
TITLE _____
DATE: _____