EPA WORK ASSIGNMENT NO: 076-2JZZ
EPA CONTRACT NO: 68-W8-0110
FOSTER WHEELER ENVIRONMENTAL CORPORATION

ARCS II PROGRAM

FINAL
SITE INSPECTION PRIORITIZATION (SIP)
PAS HOLBROOK PROPERTY SITE
TOWN OF PARISH
OSWEGO COUNTY, NEW YORK
CERCLIS NO: NYD000511600

DECEMBER 1995

VOLUME I of II

NOTICE

THE INFORMATION PROVIDED IN THIS DOCUMENT HAS BEEN FUNDED BY THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (USEPA) UNDER ARCS II CONTRACT NO. 68-W8-0110 TO FOSTER WHEELER ENVIRONMENTAL CORPORATION (FORMERLY EBASCO SERVICES INCORPORATED). THIS DOCUMENT HAS BEEN FORMALLY RELEASED BY FOSTER WHEELER ENVIRONMENTAL CORPORATION TO THE USEPA. THIS DOCUMENT DOES NOT REPRESENT, HOWEVER, THE USEPA POSITION OR POLICY, AND HAS NOT BEEN FORMALLY RELEASED BY THE USEPA.

FOSTER WHEELER ENVIRONMENTAL CORPORATION

December 5, 1995
ARCS II-95-076-1462

Ms. Catherine Moyik
Work Assignment Manager
U.S. Environmental Protection Agency
290 Broadway, 18th Floor
New York, New York 10007

SUBJECT: ARCS II PROGRAM - EPA CONTRACT NO. 68-W8-0110
WORK ASSIGNMENT NO. 076-2JZZ-PREREMEDIAL INVESTIGATIONS
SITE INSPECTION PRIORITIZATION (SIP) REPORT
PAS HOLBROOK PROPERTY SITE

Dear Ms. Moyik:

This following is a summary of the Site Inspection Prioritization (SIP) evaluation of the PAS Holbrook Property site, CERCLIS No. NYD000511600, located on Bangall Road in the Town of Parish, Oswego County, New York.

General Description and Site History

The PAS Holbrook Property site is a 48.75 acre residential property bounded by Bangall Road to the southeast, Grafton Square Road to the east, Richardson Road to the north and a residential property to the west and southwest (Ref. 7, p. 3 of 15; Ref. 11, p. 1 of 1). The site location is depicted on Figure 1. A site detail map is presented in Figure 2.

The site currently serves as a residence for the owner, Mr. Gale Holbrook, and his family (Ref. 3, pp. 4 and 5 of 15). A wood frame house is present on-site, fronting Bangall Road (Ref. 3, pp. 5 and 11 of 15). West of the house is a dilapidated wooden barn and two trailers which appear to be unoccupied (Ref. 3, p. 5 of 15). A rack of utility poles is present between the two trailers, adjacent to Bangall Road (Ref. 3, p. 5 of 15). A small tributary, entering the site from under Bangall Road, southeast of the site, exits the site along the western portion of the property (Ref. 12, p. 1 of 1). The majority of the site, north of the unnamed tributary, is densely wooded (Ref. 3, pp. 3 and 6 of 15). A high elevation point occurs north of the unnamed tributary, almost in the center of the site (Ref. 3, pp. 2 and 3 of 15). This area has been cleared of trees and has access roads leading to it from Bangall Road (Ref. 3, p. 3 of 15).

On August 28, 1978, the Parish Town Supervisor lodged a complaint with the Oswego County Department of Health (OCDOH) regarding the Holbrook property (Ref. 24, p. 1 of 1). The complaint alleged the presence of old and new 55-gallon drums stored on the property (Ref. 24, p. 1 of 1).

8 PEACH TREE HILL ROAD, LIVINGSTON, NJ 07039
TEL: 201-597-7000 FAX: 201-597-7025

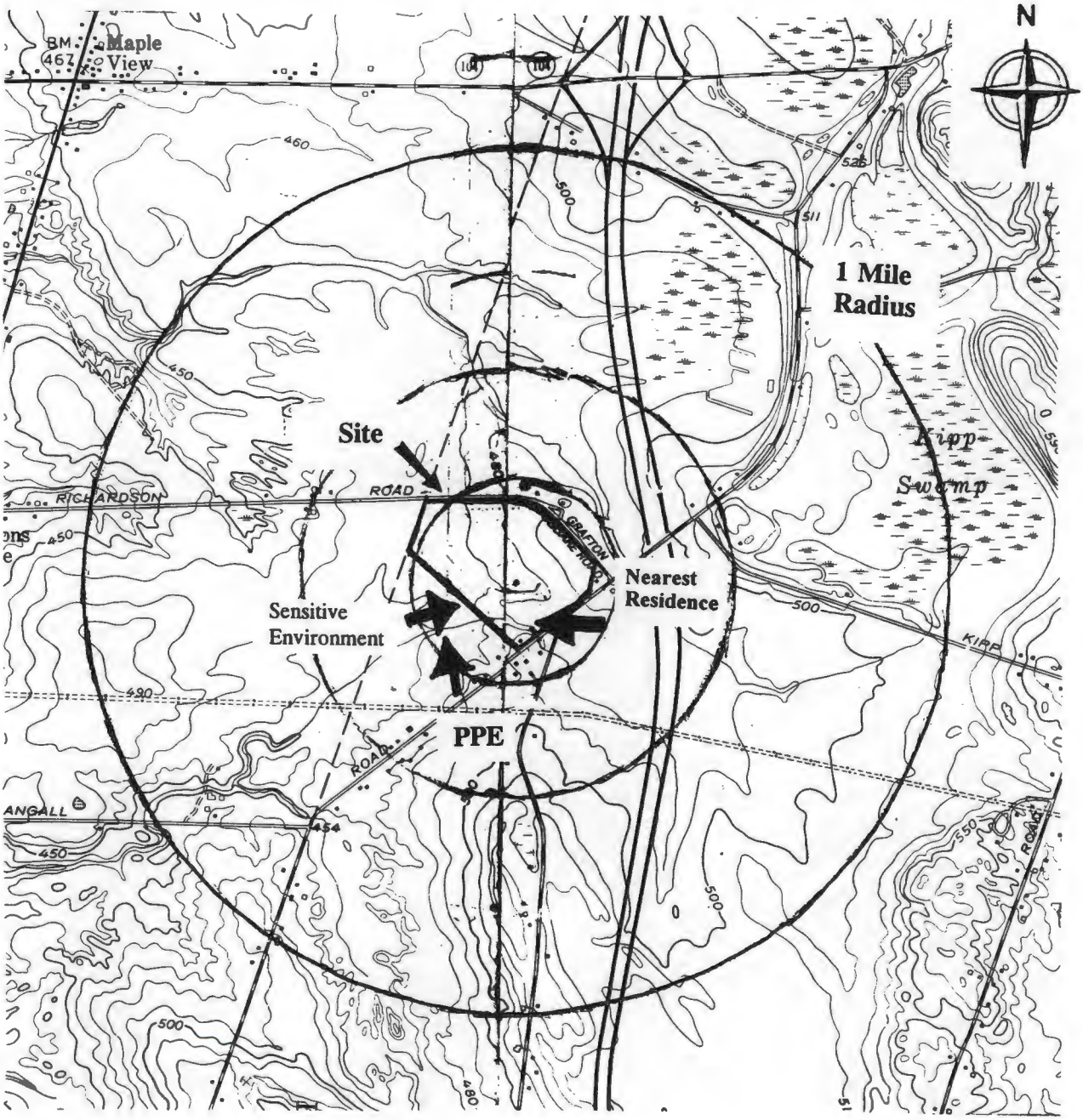


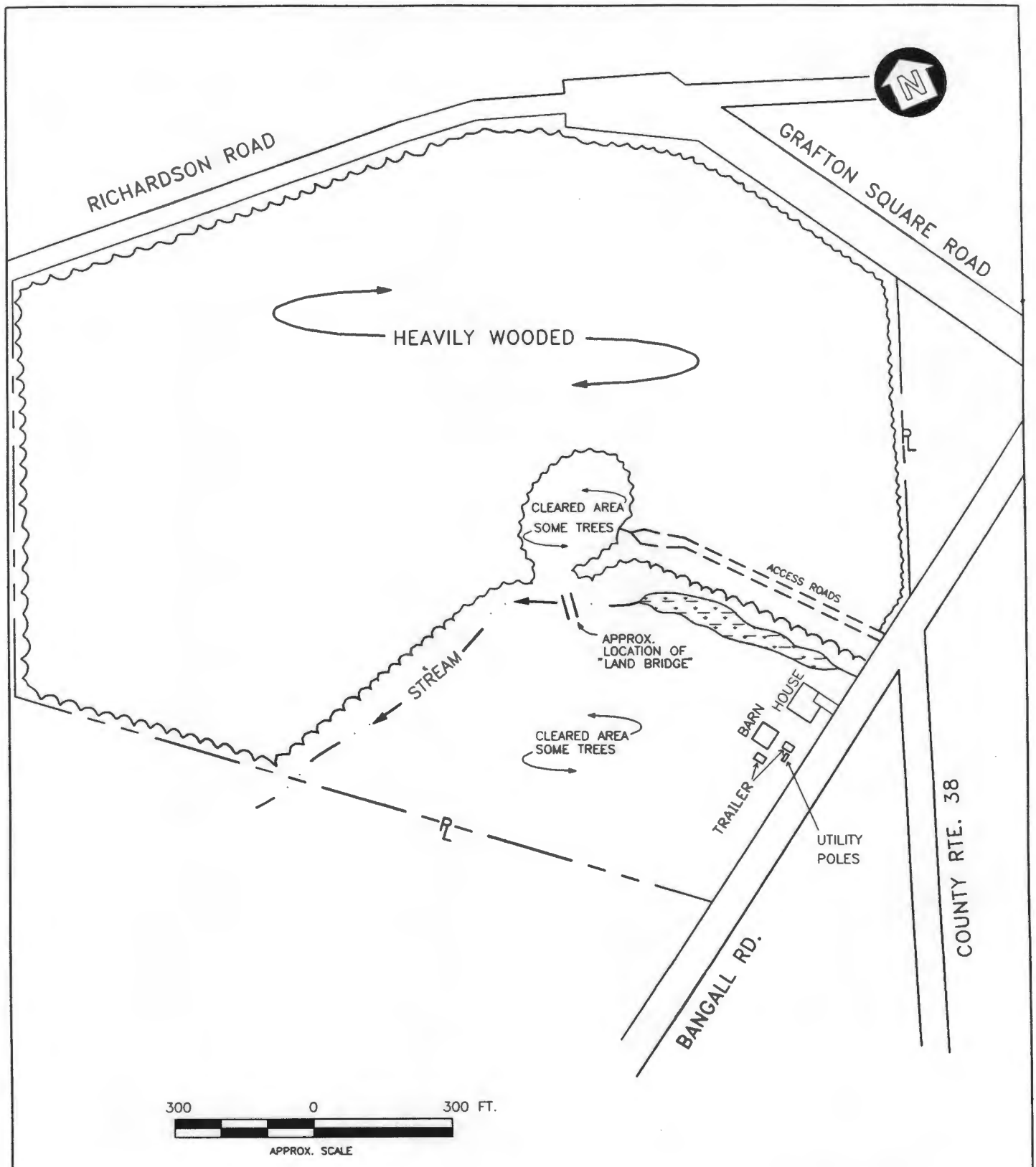
Figure 1

Site Location Map

PAS Holbrook Property Site
Parish, NY

Ebasco Services, Inc.

Source: 7.5 Minute USGS Quad Maps for Dugway, NY & Mexico, NY



Site Detail Map is based on 2/6/95 Site Visit and on Engineering Science's Site Plan prepared for the New York State Department of Environmental Conservation Preliminary Site Investigation.

FIGURE 2
PAS HOLBROOK PROPERTY
SITE DETAIL MAP

EBASCO SERVICES, INC. ARCSDOC/PAS-FIG1

In April 1979, a site reconnaissance conducted by the New York State Department of Environmental Conservation (NYSDEC), identified the presence of an estimated 500 55-gallon drums stored throughout the site (Ref. 10, p. 1 of 2). At the time of the inspection, there were no identified signs of leakage associated with the drums (Ref. 10, p. 1 of 2). These drums were alleged to be earmarked for disposal at the now defunct Pollution Abatement Services, Inc. (PAS) facility in Oswego, New York (Ref. 10, p. 1 of 2). No evidence exists to document that the drums found on the Holbrook residence were associated with the PAS facility.

In January and February 1980, field investigations were conducted by the USEPA's Emergency Response and Inspection Branch (Ref. 25, p. 1 of 7). Results of the investigations indicated that approximately 500 drums were present on the property (Ref. 25, p. 2 of 7). No samples were collected in conjunction with this investigation (Ref. 25, p. 5 of 7).

In April 1980, the OCDOH sampled six residential wells within the vicinity of the PAS Holbrook Property site (Ref. 6, p. 2 of 3; Ref. 29, pp. 1 and 2 of 115). The samples were analyzed for inorganics, organics and microbial and physical parameters (Ref. 29, pp. 1 and 2 of 115). Benzene was detected in all six samples in concentrations ranging from 2 μg/l to 6 μg/l (Ref. 29, pp. 1 and 2 of 115).

In May 1980, the OCDOH sampled 16 residential wells (including the six wells previously sampled) within the vicinity of the PAS Holbrook Property site (Ref. 29, pp. 1 and 2 of 115). In general, all samples were analyzed for organic parameters (Ref. 29, pp. 1 and 2 of 115). Samples collected from the residential wells which had not previously been sampled in April 1980 were also submitted for analysis of petroleum products (Ref. 29, pp. 1 and 2 of 115). No organic compounds or petroleum products were detected in these well samples (Ref. 29, pp. 1 and 2 of 115).

In June 1980, the OCDOH sampled eight residential wells within the vicinity of the PAS Holbrook Property site (Ref. 29, pp. 1 and 2 of 115). The sample analyses included organic and physical parameters (Ref. 29, pp. 1 and 2 of 115). No organic compounds were detected; physical parameters did not generally exceed state water standards (Ref. 29, pp. 1 and 2 of 115). In addition to these residential well samples, a sample was collected from a well located at the rear of the barn on the Holbrook property (Ref. 29, pp. 112, 113, and 115 of 115). This sample was analyzed for physical parameters; the results indicated an exceedence of state water standards for color (Ref. 29, pp. 112 and 115 of 115).

On June 17, 1980, a site reconnaissance was conducted by the NYSDEC and the New York State Department of Health (NYSDOH) (Ref. 4, p. 1 of 2). The results of this reconnaissance indicated that approximately 400 55-gallon drums were at 12 different locations on the Holbrook property (Ref. 4, p. 1 of 2). It was approximated that 60% of the drums were empty (Ref. 4, p. 1 of 2).

On June 24, 1980, a site reconnaissance was conducted by the NYSDEC and the NYSDOH, the US Environmental Protection Agency (USEPA), the US Geological Survey, and the State University of New York at Oswego (Ref. 5, p. 1 of 1). The results of this reconnaissance indicated that the majority of the drums present were empty and displayed "evidence of having been pierced by a pick ax" (Ref. 5, p. 1 of 1). Of the drums which appeared intact, most were

full or partially full and appeared to contain a semi-solid material (Ref. 5, p. 1 of 1). A "phenol-like" odor was noted to be associated with the drums (Ref. 7, p. 3 of 15). A few of the intact drums contained a liquid material (Ref. 5, p. 1 of 1).

In July 1980, groundwater samples were collected from the Altmar Parish Williamstown High School and from the well at the rear of the barn on the Holbrook property (Ref. 29, pp. 108 through 111, and 113 of 115). The samples collected from the high school were analyzed for organic compounds; no organics were detected (Ref. 29, pp. 108 through 110 of 115). The sample from the Holbrook property was analyzed for inorganics (Ref. 29, pp. 111 and 114 of 115). The results indicated the presence of iron at 0.55 mg/l and manganese at 0.89 mg/l, exceeding the state water standards (Ref. 29, pp. 111 and 114 of 115).

From late November to early December 1980, the OCDOH oversaw the removal of the drums (Ref. 6, p. 1 of 3). A substance described as a "resin material" and discolored surficial soil alleged by the OCDOH to be associated with the drums were also removed (Ref. 6, pp. 1 and 2 of 3). The presence of surficial and subsurface soil contamination was not assessed. The materials contained by the drums and the associated excavated soil were not analyzed (Ref. 6, p. 2 of 3). All material removed from the site was sent to the SCA facility in Model City, New York for disposal (Ref. 6, pp. 2 and 3 of 3). At the time of disposal activities, the SCA facility had RCRA interim status (Ref. 23, p. 1 of 1).

In May 1984, the NUS Corporation completed a Preliminary Assessment (PA) at the PAS Holbrook Property site on behalf of the USEPA (Ref. 26, p. 1 of 7). The site was assigned a low priority for further action (Ref. 26, p. 1 of 7). The report indicated that there was a low potential for groundwater contamination (Ref. 26, p. 2 of 7). A recommendation of no further action was made for the site (Ref. 26, p. 1 of 7).

In December 1987, the Ruffos residential well, located near the site on Grafton Square Road, was sampled by the OCDOH after the resident had complained of a chemical odor associated with the well water (Ref. 6, p. 3 of 3; Ref. 29, pp. 23 through 34 of 115). The sample was analyzed for organic compounds (Ref. 29, pp. 25 through 30 of 115). The compounds detected included chloroform at 1 μg/l, benzene at 10 μg/l, toluene at 23 μg/l, p-xylene at 5 μg/l, m-xylene at 11 μg/l, o-xylene at 20 μg/l, 1,3,5-trimethylbenzene at 2 μg/l, 1,2,4-trimethylbenzene at 3 μg/l and naphthalene at 2 μg/l (Ref. 29, pp. 25 through 30 of 115).

In January 1988, the Ruffos residential well was sampled by the OCDOH (Ref. 29, pp. 23 through 26 of 115). The sample was analyzed for organic compounds (Ref. 29, pp. 23 through 26 of 115). No organics were detected (Ref. 29, pp. 23 through 26 of 115).

During June 1988, the NYSDEC collected three surficial soil samples at the property (Ref. 8, p. 1 of 6). Samples were to have been analyzed for volatile organic and base/neutral compounds and metals (Ref. 8, p. 1 of 6). Analytical data from this sampling event are not available (Ref. 15, p. 1 of 1). Two of these samples, S-1 and S-2, were collected from a location that had reportedly served as a storage area for 150 of the drums that were removed in 1980 (Ref. 7, pp. 9 and 14 of 15; Ref. 8, p. 2 of 6). It has been reported that the analysis from these two samples did not indicate the presence of organic contamination (Ref. 7, p. 3 of 15). The third soil sample, S-3, was collected from an area adjacent to Bangall Road that reportedly served as a

drum storage area and is still being utilized as a storage area for utility poles (Ref. 3, p. 4 of 15; Ref. 7, pp. 9 and 14 of 15; Ref. 8, p. 2 of 6). At the time of sample collection, a creosote odor was noted and a positive response was obtained from the air monitoring instrumentation at this sampling location (Ref. 8, p. 4 of 6). Analytical data from this sample indicated the presence of 13 organic contaminants, particularly polycyclic aromatic hydrocarbons (PAHs); reportedly, fluoranthene and pyrene were the compounds with the highest concentrations (2.7 ppm) (Ref. 7, p. 3 of 15). Benzo(a)pyrene, chrysene, diethylphthalate, and pentachlorophenol were also reportedly detected in this sample at unknown concentrations (Ref. 7, p. 4 of 15).

In December 1992, Engineering Science, Inc., the NYSDEC and the OCDOH conducted a site reconnaissance (Ref. 7, p. 4 of 15). Eleven 55-gallon drums were noted to be present: five empty drums, two intact drums containing material and four intact, partially buried drums (Ref. 7, p. 4 of 15). The words "PHENO..., Flammable Liquid" were legible on one of the intact drum labels (Ref. 7, p. 4 of 15). Labels on the two intact drums with contents read: "General Electric, Riverview Plant Schenectady, Insulating Materials Department (Ref. 7, pp. 1 and 4 of 15). There is no additional information regarding these drums.

In February 1995, Ebasco Services Incorporated conducted a site reconnaissance. Only two drums were noted to be present. Both were rusted and empty, and had no discernible labels (Ref. 3, pp. 2 and 3 of 15).

On May 25, 1995, the NYSDEC conducted a site visit to the PAS Holbrook Property site (Ref. 15, p. 1 of 1). A few drums were observed on the site with the "General Electric" label on them (Ref. 15, p. 1 of 1). Air monitoring in the area of the drums was conducted using a photoionization detector (PID). PID readings around these drums were above background levels (Ref. 15, p. 1 of 1).

Evaluation of Existing Information

Investigations conducted for the PAS Holbrook Property site and historical site information were utilized in evaluating the site.

No evidence has been identified to document that hazardous substances have ever been used, stored or present at the PAS Holbrook Property site. The drum and soil material removed from the site in 1980 was not sampled and analyzed. No evidence such as manifests or historical records are known to be associated with any of the drums found on the property. There is no documentation to indicate that the drums contained hazardous constituents.

The 1988 NYSDEC surficial soil sampling indicates the presence of PAHs, in particular fluoranthene and pyrene, in sample S-3. This sample was collected from a former drum storage area potentially influenced by the asphalt cover, a typical source of PAHs, on Bangall Road and by utility poles likely to contain creosote.

Several drums containing material are currently present on the site. PID responses were noted around the drums. Although the contents of these drums have not been identified, a partial label on one of the drums indicates that the drum may contain a phenolic compound.

There is no supporting documentation for the 1988 NYSDEC sampling event. There is no information to document the contents of the drums. Therefore, the NYSDEC sampling data and the results of the various site visits were used to characterize the potential sources at the site for screening purposes, but not support observed releases to the various pathways.

Hazard Assessment

Updated and additional information and data were collected to further evaluate the site to determine the need for CERCLA remedial action. This information and data included reports on past investigations, nearby populations, 4-mile radius populations and the potable water supply, and wetland and sensitive environments information.

Source Description

Two potential sources were identified at the PAS Holbrook Property site. The first source is contaminated soil in the former drum storage area where sample S-3 was collected. Analysis of the soil from this area indicates the presence of benzo(a)pyrene at an unknown concentration, pentachlorophenol at an unknown concentration, fluoranthene at a concentration of 2.7 ppm, and pyrene at a concentration of 2.7 ppm (Ref. 7, pp. 3 and 4 of 15). For screening purposes, the area of the contaminated soil source has been assigned a value of one square foot since only a single soil sample (S-3) was used to characterize the source.

The second source used to screen the site is the drums still present on the site. A partial label on one of the intact drums containing material indicates that the drum may contain phenolic compounds (Ref. 7, p. 4 of 15). For evaluation purposes, phenol and pentachlorophenol are the hazardous substances assigned to this source. The volume of the two intact drums with contents has been assigned a value of 110 gallons.

Groundwater Pathway

Analytical data from the residential well sampling events as well as data from the on-site well at the PAS Holbrook Property site indicate the absence of organic contaminants likely to be related to site activities. This pathway is evaluated on a potential-to-release basis.

The aquifer of concern for the PAS Holbrook Property site is the Lacustrine sand aquifer (Ref. 16, pp. 8 through 20 of 26). Surface material at the site appears to be comprised of lake sediment, particularly Lacustrine sand (Ref. 16, pp. 8, 16, and 18 of 26). It is estimated that this sand unit is approximately 10 feet thick (Ref. 16, p. 18 of 26). This unit has a conductivity value of 1×10^{-4} cm/sec (Ref. 1, p. 1 of 1). Depth to groundwater is estimated to be five feet below grade (Ref. 16, p. 18 of 26). Regional groundwater flow direction in the unconsolidated deposits roughly parallels the land surface, toward the northwest (Ref. 11, p. 1 of 1; Ref. 16, p. 20 of 26).

Underlying the Lacustrine sand is the Lodgement till aquifer (Ref. 16, pp. 13 and 18 of 26). This unit extends from approximately 10 to 28 feet below grade (Ref. 16, p. 18 of 26). The Lodgement till is comprised of a mix of clay, silt, sand and pebble to boulder sized material; it is typically dense and compacted (Ref. 16, p. 13 of 26). It has a conductivity value of 1×10^{-6} cm/sec (Ref. 1, p. 1 of 1). Underlying the Lodgement till unit is the Medina (aka Albion)

bedrock formation (Ref. 16, pp. 10, 11, and 18 of 26). The bedrock unit occurs at approximately 28 feet below grade and is comprised of red shale, siltstone and sandstone (Ref. 16, pp. 10, 11, and 18 of 26). It has a conductivity value of 1 x 10^{-8} cm/sec (Ref. 1, p. 1 of 1). Regional groundwater flow direction in bedrock is toward Lake Ontario, toward the northwest (Ref. 11, p. 1 of 1; Ref. 16, p. 20 of 26). The Lodgement till and the Medina bedrock units do not generally yield water readily therefore, groundwater targets were not assigned to these formations and are not included in the evaluation (Ref. 16, pp. 2 and 20 of 26).

The population within the groundwater pathway target distance limit (TDL) relies heavily on groundwater resources for potable water supplies (Ref. 18, p. 1 of 1). There are no municipal water supplies within the groundwater pathway TDL (Ref. 18, p. 1 of 1). Approximately all of the 4,420 people living within four miles of the site receive their potable water from private supply wells as follows: 0 to 0.25 mile, 17; 0.25 mile to 0.5 mile, 54; 0.5 mile to 1 mile, 226; 1 to 2 miles, 900; 2 to 3 miles, 1,429; 3 to 4 miles, 1,794 (Ref. 9, pp. 7 and 8 of 8; 18, p. 1 of 1). There are no wellhead protection areas identified for the groundwater pathway (Ref. 22, p. 1 of 1).

Surface Water Pathway

Surface water samples were not collected in conjunction with any investigations conducted at the site. Therefore, this pathway is evaluated on a potential-to-release basis.

Based on topographic trends, the unnamed tributary which transects the site receives surface water runoff from the entire site (Ref. 3, p. 3 of 15; Ref. 11, p. 1 of 1). Water in this tributary flows in a northwestern direction (Ref. 12, p. 1 of 1).

The probable point of entry (PPE) for the surface water pathway is located approximately 850 feet from the contaminated soil source (Ref. 12, p. 1 of 1). From the PPE, surface water will flow approximately 4.1 miles in the unnamed tributary to the junction with Sage Creek (Ref. 12, p. 1 of 1). An average flow rate of 9 cfs was assigned to the unnamed tributary segment (Ref. 1, p. 1 of 1). The second segment of the surface water pathway TDL extends along the TDL from 4.1 miles to 13.7 miles and occurs along Sage Creek from the junction of the unnamed tributary to the point where Sage Creek discharges into Lake Ontario (Ref. 12, p. 1 of 1). An average flow rate of 50 cfs was assigned to this segment (Ref. 1, p. 1 of 1). Flow rates were not assigned to the Lake Ontario in-line segments as they were evaluated based upon depth (Ref. 1, p. 1 of 1). From approximately 13.7 miles to 14.6 miles along the surface water TDL, the depth of Lake Ontario is less than 20 feet (Ref. 12, p. 1 of 1). The depth of Lake Ontario increases to greater than 20 feet from approximately 14.6 miles to the end of the TDL (Ref. 12, p. 1 of 1).

Fisheries are located along the Sage Creek and Lake Ontario portions of the surface water pathway (Ref. 17, pp. 1 through 3 of 3; Ref. 19, p. 3 of 3). Lake Ontario is stocked with fish (Ref. 19, p. 3 of 3). The fish production values of these segments are not documented.

Lake Ontario is classified as Class A fresh surface water (Ref. 27, p. 4 of 4). The mouth of Sage Creek and associated Lake Ontario shoreline is classified as a coastal zone management area (Ref. 20, p. 3 of 3). The Black Tern, a state protected species, is known to utilize habitat

in this area (Ref. 28, p. 2 of 4). These areas have also been designated as being significant coastal fish and wildlife habitats by the state of New York (Ref. 28, p. 2 of 4). There are approximately 8.08 miles of wetland frontage along the surface water pathway TDL (Ref. 12, p. 1 of 1).

The 2-year, 24-hour rainfall for the area of the PAS Holbrook Property site is 2.5 inches (Ref. 21, p. 2 of 2). The site does not lie within a designated floodplain (Ref. 14, p. 1 of 1). There are no surface water intakes present in the surface water pathway TDL (Ref. 18, p. 1 of 1).

Soil Exposure Pathway

The 1988 NYSDEC soil sampling event indicates the presence of benzo(a)pyrene at an unknown concentration, pentachlorophenol at an unknown concentration, fluoranthene at a concentration of 2.7 ppm, and pyrene at a concentration of 2.7 ppm in the vicinity of a former drum storage area adjacent to Bangall Road (Ref. 7, pp. 3 and 4 of 15). These data were used to evaluate the soil exposure pathway based on an area of observed contamination.

There are 3 people residing on-site (Ref. 3, p. 2 of 15). There are no schools or day-care centers within 200 feet of the potential area of observed contamination (Ref. 11, p. 1 of 1). There is a wetland on-site; however, the area of observed contamination does not occur within the boundaries of the wetland (Ref. 13, p. 1 of 1). Census bureau derived data indicates a one mile radius resident population of 297 distributed as follows: 0 to 0.25 mile, 17; 0.25 to 0.5 mile, 54; 0.5 to 1 mile, 226 (Ref. 9, pp. 7 and 8 of 8).

Air Pathway

During the 1988 NYSDEC sampling event, a positive response was obtained from the air monitoring instrumentation at sampling location S-3 (Ref. 8, p. 4 of 6). During the 1995 NYSDEC site visit, air monitoring was conducted in the area of the intact drums. Instrument responses around these drums were above background levels (Ref. 15, p. 1 of 1). However, there were no air samples collected for laboratory analysis during previous investigations for the PAS Holbrook Property site. Therefore, the air pathway is being evaluated on a potential-to-release basis.

The nearest regularly occupied building is the Holbrook residence located on-site (Ref. 3, p. 5 of 15). Census Bureau derived information indicates a total population of approximately 4,420 within the 4-mile radius as follows: 0 to 0.25 mile, 17; 0.25 to 0.5 mile, 54; 0.5 to 1 mile, 226; 1 to 2 miles, 900; 2 to 3 miles, 1,429; 3 to 4 miles, 1,794 (Ref. 9, pp. 7 and 8 of 8).

The presence of wetlands was evaluated for the air pathway TDL as follows: on-site, 1 acre; 0 to 0.25 mile, 9.2 acres; 0.25 to 0.5 mile, 43 acres; 0.5 to 1 mile, 240 acres; 1 to 2 miles, 1,017 acres; 2 to 3 miles, 859 acres; 3 to 4 miles, 1,256 acres (Ref. 13, p. 1 of 1).

Summary

In 1980, approximately 500 55-gallon drums, a substance described as a "resin material" and discolored surficial soil alleged by the OCDOH to be associated with the drums were removed from the PAS Holbrook Property site. The materials contained by the drums and the associated excavated soil were not assessed for the presence of hazardous substances. Subsequent sampling of the surficial soil at the site indicated the presence of PAHs in an area where drums were once stored and where utility poles are currently stored. Subsequent site visits have indicated the presence of intact drums containing an unknown material.

Groundwater within the 4-mile radius of the site is used as the sole source for potable water supplies. Approximately 4,420 people rely on groundwater from private wells for a potable water source. Existing analytical data indicates that residential wells within the vicinity of the site do not contain possible site-related contaminants.

Surface water runoff from the site enters an unnamed tributary which transects the site. The surface water pathway includes portions of Sage Creek and Lake Ontario, both of which are fisheries. Sensitive environment targets for the surface water pathway include a coastal zone management area, habitat for the state protected Black Tern, and approximately 8.08 miles of wetland frontage. There are no surface water intakes located within the surface water TDL.

The site is utilized as a residence for an estimated three people. There are no schools or day-care centers within 200 feet of the potential area of observed contamination. There is a wetland on-site, however, the potential area of observed contamination does not occur within the boundaries of the wetland.

There is no evidence to indicate that a release to the air pathway has occurred. The nearest regularly occupied building is located on-site. There is a total population of approximately 4,420 within the four mile radius. There are approximately 3,425.2 acres of wetlands within the air pathway TDL.

Prepared by:

Michele Christina/EP

Michele Christina
Task Leader
Ebasco Services Incorporated

Approved by:

Dev R. Sachdev

Dev Sachdev, Ph.D., P.E.
ARCS II Program Manager
Ebasco Services Incorporated

Reviewed by:

Edgar J. Aguado
Site Manager
Ebasco Services Incorporated

REFERENCES

1. US Environmental Protection Agency (USEPA), Hazardous Ranking System (HRS), Final Rule, 40 CFR 300, Volume 55, No. 241, 12/14/90.

2. USEPA, Superfund Chemical Data Matrix (SCDM), EPA 9360.4-18, 7/94, as incorporated in the PREscore Software, Version 3.0, Publication 9450.2200, 8/94.

3. Ebasco Services, Inc. (Ebasco), Logbook entry for Site Reconnaissance, PAS Holbrook Property Site, 2/6/95.

4. Correspondence from Joseph V. Barry, Area Public Health Director, State of New York Department of Health, to Rupert Collins, Commissioner of Health Services, Oswego County Health Department, June 30, 1980.

5. Memo from Donald J. Casey, Rochester Program Support Branch, USEPA, to Distribution List, July 2, 1980.

6. Telephone log. Conversation between Evan Walsh, Oswego County Department of Health, and Michele Christina, Ebasco, January 1, 1995.

7. Correspondence from Engineering Science, Inc., to New York State Department of Environmental Conservation (NYSDEC), Holbrook Property Site, February 22, 1993.

8. NYSDEC, Logbook entry for sampling incident, Holbrook Property, June 1988, Holbrook Property, June 15, 1988.

9. Frost Associates, CENTRACTS Report, based on 1990 Census Bureau STF-A and STF-3A files, PAS Holbrook Property Site, February 8, 1995.

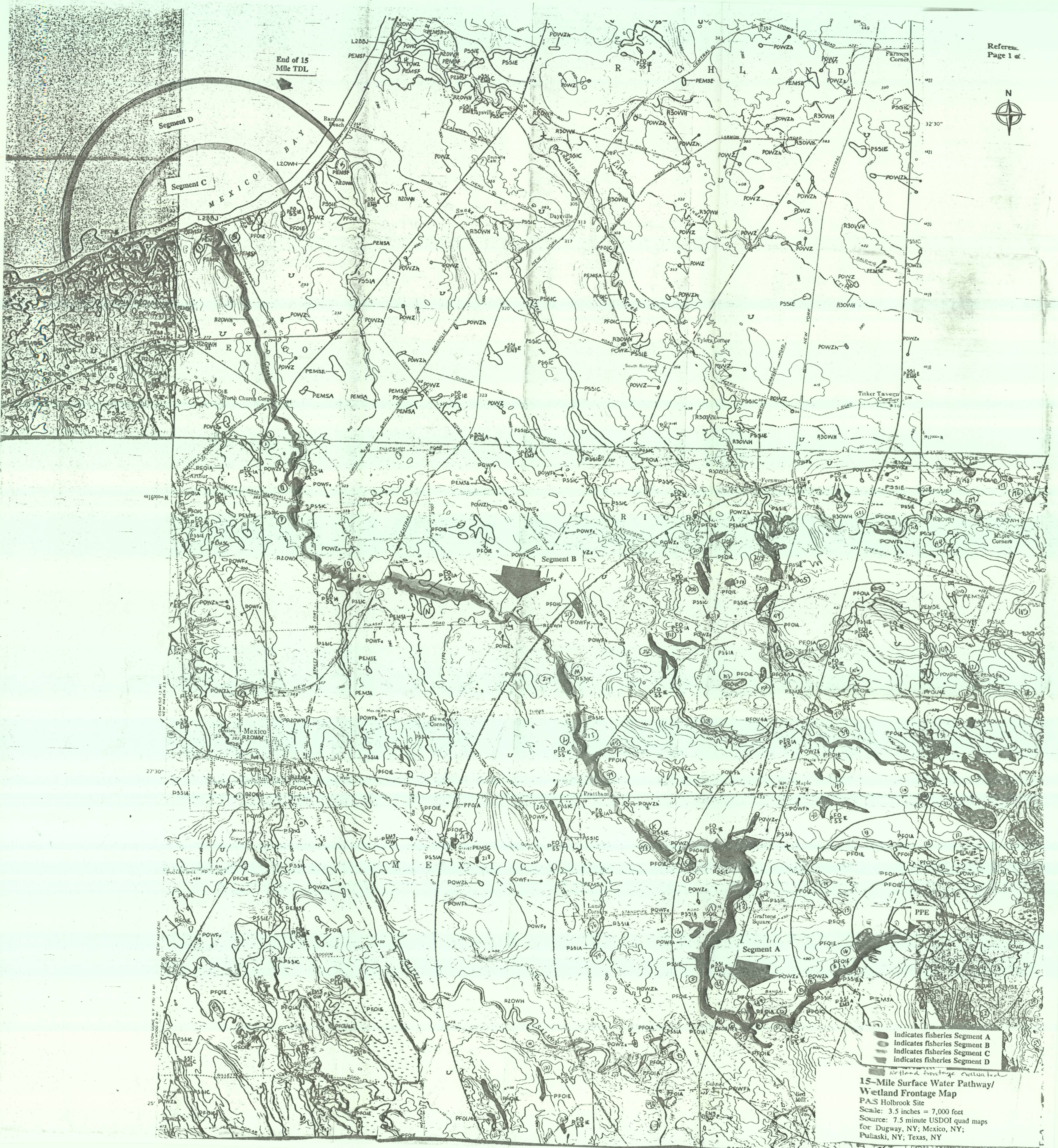
10. Hazardous Waste Site Dossier, March 17, 1980.

11. Ebasco, Four-Mile Radius Vicinity Map, PAS Holbrook Property Site, US Department of the Interior (USDOI), 7.5 Minute US Geological Survey (USGS) Quad Maps for Dugway, NY and Mexico, NY.

12. Ebasco, 15-Mile Surface Water Pathway/Wetland Frontage Map, PAS Holbrook Property Site, USDOI, 7.5 Minute USGS Quad Maps for Dugway, NY, Mexico, NY, Pulaski, NY, and Texas, NY.

13. Ebasco, Four-Mile Radius Air Pathway Map, PAS Holbrook Property Site, USDOI, 7.5 Minute USGS Quad Maps for Dugway, NY and Mexico, NY.

14. Telephone log. Conversations between Oswego County Planners Office, Federal Emergency Management Agency and Michele Christina, Ebasco, 12/13/94.

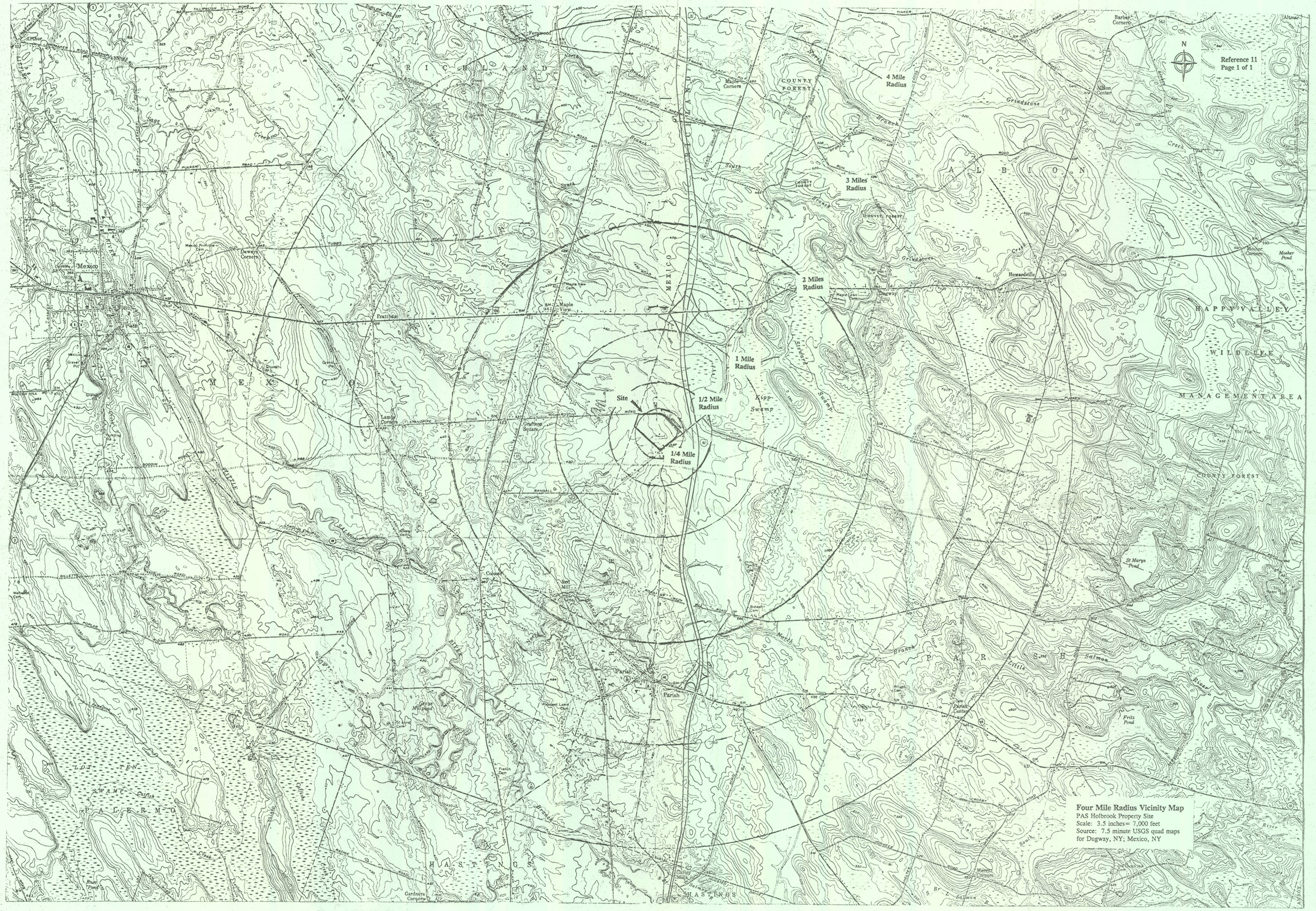

End of 15
Mile TDL
Segment D
Segment C
MEXICO BAY
Segment B
Segment A
PPE
RICHLAND
MEXICO
Mexico
Fernwood
Dayville
Prattham
Grafton Square
Tinker Tavern Corner
Tyler Corner
South Richland
North Church Corner
Farmers Corner
N
indicates fisheries Segment A
indicates fisheries Segment B
indicates fisheries Segment C
indicates fisheries Segment D
wetland frontage evaluated

15-Mile Surface Water Pathway/ Wetland Frontage Map

PAS Holbrook Site

Scale: 3.5 inches = 7,000 feet

Source: 7.5 minute USDOI quad maps for Dugway, NY; Mexico, NY; Pulaski, NY; Texas, NY

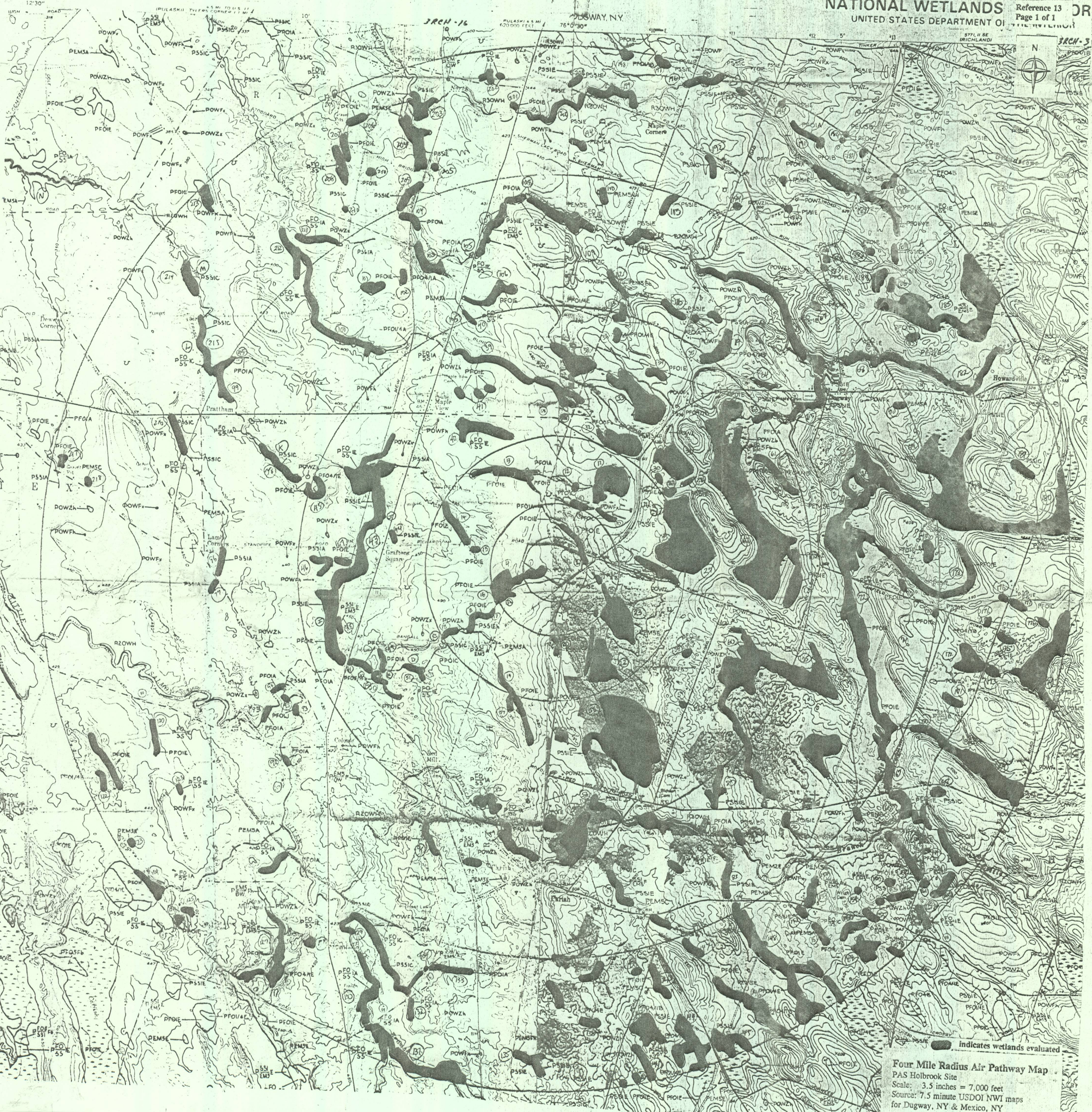

Reference 11
Page 1 of 1
N
4 Mile Radius
3 Miles Radius
2 Miles Radius
1 Mile Radius
1/2 Mile Radius
1/4 Mile Radius
Site
Four Mile Radius Vicinity Map
PAS Holbrook Property Site
Scale: 3.5 inches= 7,000 feet
Source: 7.5 minute USGS quad maps
for Dugway, NY; Mexico, NY

NATIONAL WETLANDS INVENTORY

UNITED STATES DEPARTMENT OF THE INTERIOR

NATIONAL WETLANDS

UNITED STATES DEPARTMENT OF THE INTERIOR



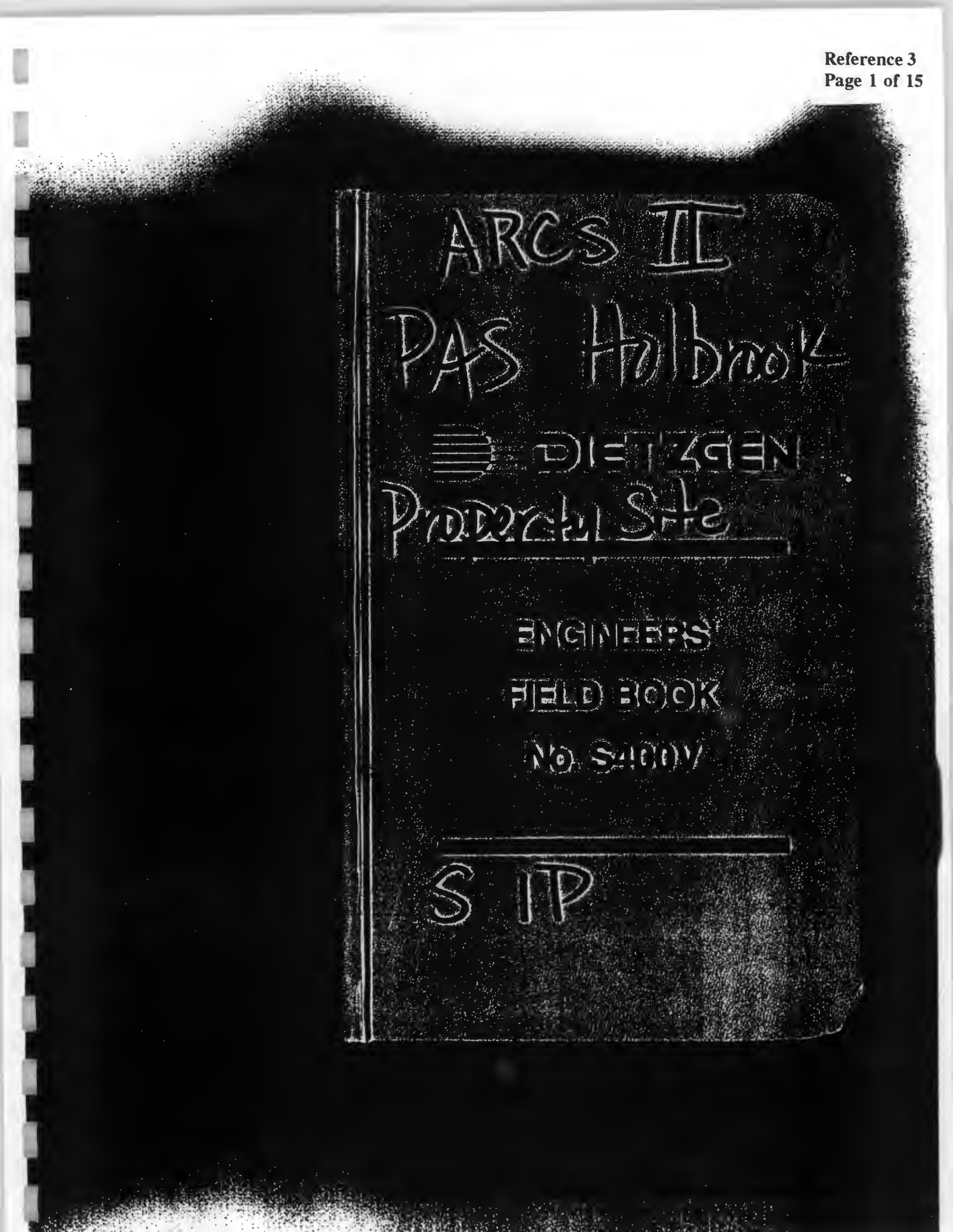
Four Mile Radius Air Pathway Map

PAS Holbrook Site

Scale: 3.5 inches = 7,000 feet

Source: 7.5 minute USDOI NWI maps for Dugway, NY & Mexico, NY

Reference 3


ARCS II
PAS Holbrook
DIETZGEN
ENGINEER'S
FIELD BOOK
No. S400V
SIP

PAS Holbrook

(2)

Monday 6 Feb 95

1430 EBASCO [M. Christman, A. Braccia] arrive on site. Mr. G. Holbrook outside. M. Christman introduced EBASCO FIT.

Weather: 0°F [-33° w/ wind chill]
Wind ≈ 20 mph. Snowing

Activities: Site walk

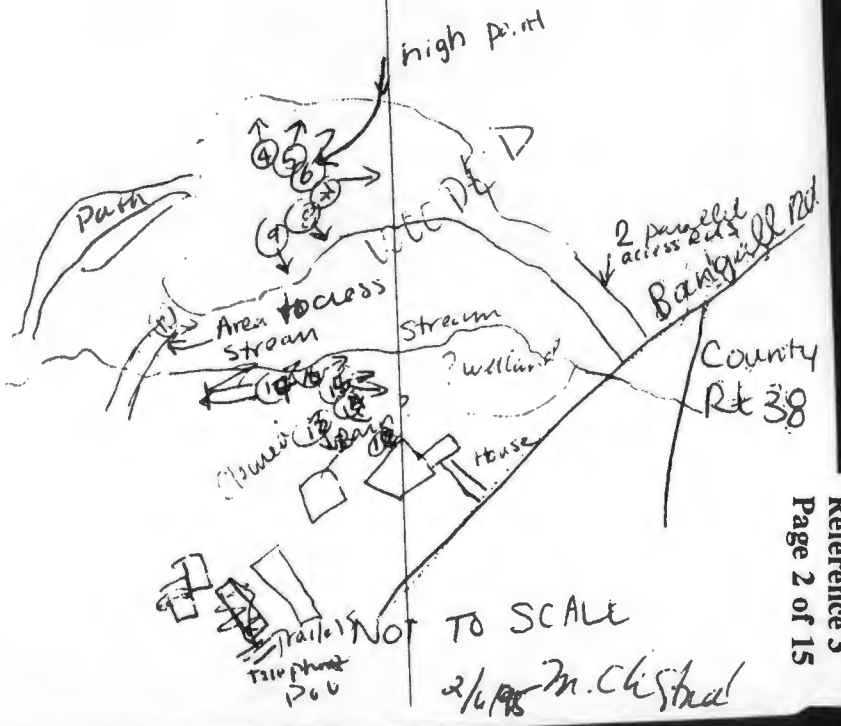
Snow cover ranges from approx 10" to 1.5 feet in drifts.

1450 Start film w/ Photo No. 4 Photos 4 thru 9 Panarama in back of house in open area. Start North, turning east to back of house

1455 Photo 10. Shot facing towards Bangall Rd. Photo of Poss. stream/wetland area. Camera stops functioning. A. Braccia is videotaping, video tape not working.

2/6/95 M. Chatman

Photo map.



 Monday 6 FEB95

1520 Return to car to warm up & to see if we can get camera & video camera to work. G. Holbrook not present

Accidentally take photo No 11 inside car.

Noted the following observations:
- Apparent stream runs from the eastern side of Rt 38, underneath Bangall drive & continues east to ~~[illegible]~~ Northeast of house.

- Above stream snow covered. Broke thru snow & ice cover of stream where it is in wooded area North of house. Unable to discern a definative flow direction. Based on topography, ~~[illegible]~~ stream flow appears to be east to west as noted in previous site report.

- Majority of property appears to be mature wood land. ~~[illegible]~~ Birch present in low lying areas)

2/6/95 M. Chiger

- Access Roads cut thru woodland area & lead from Bangall Rd to High Point on property. This high point has been cleared & corresponds to the area where reportedly 150 drums were removed.

This area drains directly into unnamed stream (located west of high point area.)

1615 Photo No 11(?) 12 me. 55-gallon drum behind house. No discernable markings. Drum weathered. Bung gone. Appears to be empty.

Travel further north behind house. Take Photos 13 me thru 16(?) me, Panarama starting with back of house & ending at wetland area east of house.

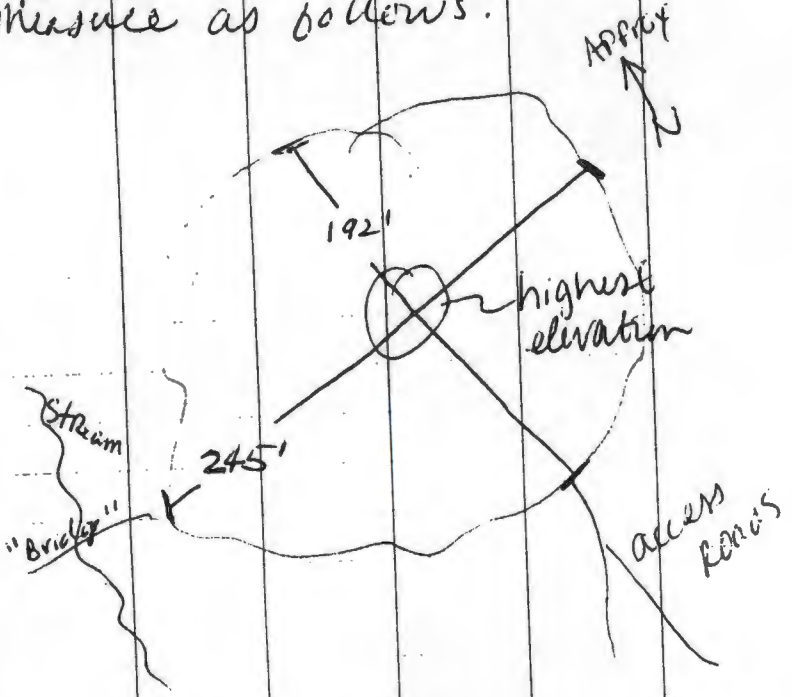
Photo 17 is photo of stream facing South (similar to #10)

2/6/95 M. Chiger

(3) Monday 2/6/95

Take Photo No 17. Standing on what is believed to be land bridge over stream. Facing SE towards Bangall Rd.

Attempt to measure open highpt area where the ≥150 drums were removed. Measured "clearing" (approx. boundaries) with tape measure as follows:



2/6/95 M. Chestnut

PAS Holbrook (4)

More observations:

- clearing high point area has several trees randomly located thruout it & some herbaceous vegetation.
- Land "Bridge" which ~~separates~~ traverses stream has a grass cover where snow was kicked up
- Surrounding area of high point is dense mature woodland
- Barbed wire fence depicted in Engineering Science map was noted to be down. Map appears accurate for rest of property.

Return towards house

Photo No 18 is of rusted drum between house & barn. Drum is dented thru in several locations & has no discernable markings.

- Yard areas around house appears to have tricycles, swingsets & other childrens' toys.

2/6/95 M. Chestnut

⑦ Monday 2/6/95

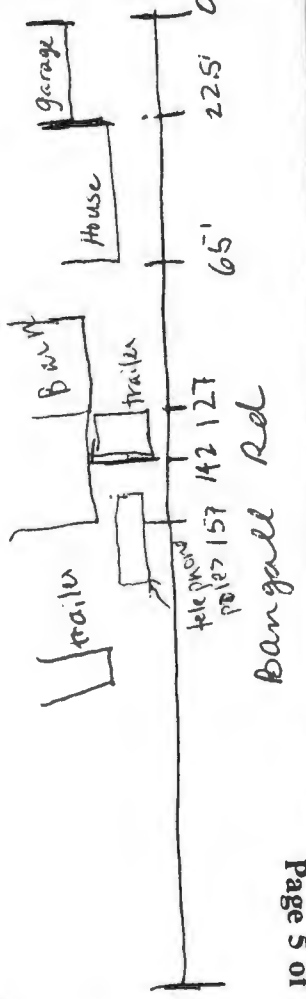
- Barn is dilapidated, structural integrity is questionable. Will not enter for inspection.
- ~~adjacent~~ mc In front of barn, fronting Bangall Rd, is a dilapidated trailer. No one appears to occupy trailer.
- A second trailer is located west of the barn, Northwest of the above trailer. This trailer does not appear to be occupied.
- Unable to locate well heads on property.
- ~~No~~ One ~~A~~animal tracks were NOT observed at any time during the site visit.
- No storm sewers were noted at the front of the property along Bangall Rd.

2/6/95 Michele Clister

PAS Holbrook

⑧

The following measurements were taken of the front of the property. Measurements were taken via tape measure extended along Bangall Rd:



2/6/95 Michele Clister

(9) Monday 6 FEB 95

- Mailbox for property west of Holbrooks says "Bouchard"

- Site appears to be drill rig accessible. Overhead wires are present along Bangall Road.

1711 A. Braccia & M. Christman off site. At time of departure, Mr. Holbrook had not returned to house. No evidence of anyone being present in house.

1715 Conduct window survey of North / Northeastern portion of property. Area was not targeted in ~~earlier~~ previous removal / investigative activities. Drove along Grafton Sq/Richardsmkd

Area densely wooded. Snow cover indicates that perimeter of wooded area has not be recently disturbed.

2/6/95 M. Christman

PAS HOLBROOK (10)

Atleast two areas were observed that had been clear cut, possibly leading to a "pathway". Inspection of one of these areas indicated a pathway entering the Holbrook property. Trail was not followed. Pathway not quite width of car. Observed trees along area. No sign of garbage thru snow cover.

NOTE: H&S Briefing was conducted prior to conducting site visit. Briefing was done in car while in transit to site.

2/6/95

M. Christman

Site Name: PAS Holbrook Property Site
Photographer: M. Christina

Location: Parish, New York
Date: 2/6/95

Photos 1-3: Trouble loading film. Site Photographs begin with Photo 4.

Site Name: PAS Holbrook Property Site
Photographer: M. Christina

Location: Parish, New York
Date: 2/6/95

Photo 4: Photos 4-9 are panorama from north to southwest from the center of property. Photo depicts cleared, open area in center of property where drums were reportedly stored. Shot facing north.

Site Name: PAS Holbrook Property Site
Photographer: M. Christina

Location: Parish, New York
Date: 2/6/95

Photo 5: Photos 4-9 are panorama from north to southwest from the center of property. Photo depicts cleared, open area in center of property where drums were reportedly stored. Shot facing northeast.

Site Name: PAS Holbrook Property Site
Photographer: M. Christina

Location: Parish, New York
Date: 2/6/95

Photo 6: Photos 4-9 are panorama from north to southwest from the center of property. Photo depicts cleared, open area in center of property where drums were reportedly stored. Shot facing east.

Site Name: PAS Holbrook Property Site
Photographer: M. Christina

Location: Parish, New York
Date: 2/6/95

Photo 7: Photos 4-9 are panorama from north to southwest from the center of property. Photo depicts cleared, open area in center of property where drums were reportedly stored. Shot facing southeast.

Site Name: PAS Holbrook Property Site
Photographer: M. Christina

Location: Parish, New York
Date: 2/6/95

Photo 8: Photos 4-9 are panorama from north to southwest from the center of property. Photo depicts cleared, open area in center of property where drums were reportedly stored. Shot facing south.

Site Name: PAS Holbrook Property Site
Photographer: M. Christina

Location: Parish, New York
Date: 2/6/95

Photo 9: Photos 4-9 are panorama from north to southwest from the center of property. Photo depicts cleared, open area in center of property where drums were reportedly stored. "Shot facing southwest. Right side of photo depicts "Land Bridge" which crosses stream. Stream & associated "wetland" are located in depression."

Site Name: PAS Holbrook Property Site
Photographer: M. Christina

Location: Parish, New York
Date: 2/6/95

Photo 10: Photo depicts stream & associated wetland adjacent to residence. Photo taken from land bridge, facing southeast.

Site Name: PAS Holbrook Property Site
Photographer: M. Christina

Location: Parish, New York
Date: 2/6/95

Photo 11: Photo accidentially taken in car. Not included in report.

Site Name: PAS Holbrook Property Site
Photographer: M. Christina

Location: Parish, New York
Date: 2/6/95

Photo 12: Photo of 55 gallon drum behind residence. No discernable markings. Drum weathered & has no bung. Appears to be empty.

Site Name: PAS Holbrook Property Site
Photographer: M. Christina

Location: Parish, New York
Date: 2/6/95

Photo 13: Photos 13-16 are panorama from the south to the northeast taken from the open area behind the residence. Facing south, the photo depicts the rear of the Holbrook residence & garage.

Site Name: PAS Holbrook Property Site
Photographer: M. Christina

Location: Parish, New York
Date: 2/6/95

Photo 14: Photos 13-16 are panorama from the south to the northeast taken from the open area behind the residence. Facing southeast, the photo depicts the low lying wetland & stream adjacent to the residence.

Site Name: PAS Holbrook Property Site
Photographer: M. Christina

Location: Parish, New York
Date: 2/6/95

Photo 15: Photos 13-16 are panorama from the south to the northeast taken from the open area behind the residence. Facing east/southeast, the photo depicts the low lying wetland & stream adjacent to the residence.

Site Name: PAS Holbrook Property Site
Photographer: M. Christina

Location: Parish, New York
Date: 2/6/95

Photo 16: Photos 13-16 are panorama from the south to the northeast taken from the open area behind the residence. Facing east, photo depicts the low lying wetland & stream adjacent to the residence.

Site Name: PAS Holbrook Property Site
Photographer: M. Christina

Location: Parish, New York
Date: 2/6/95

Photo 17: Photo shot facing south/southeast. Depicts area of stream/wetland. Similar to Photo 10.

REFERENCES (continued)

15. Telephone log. Conversations between Cindy Whitfield, NYSDEC, and Michele Christina, Ebasco, 6/13/95 and 7/24/95.

16. USGS, Water-Resources Investigations Report 81-60, Geology and Ground-Water Resources of Oswego County, New York by Todd S. Miller, 1982.

17. Telephone log/fax. Conversations between Dan Bishop, NYSDEC Fisheries, Les Wedge, NYSDEC Fisheries, and Amy Braccia, Ebasco, 8/14/95.

18. Ebasco, PAS Holbrook Property Site, Local Water Supply Project Notes, September 1995.

19. NYSDEC, Fish Stocking List, Region 7, Fish Distribution for the period January 1, 1994 to December 1, 1994.

20. New York State Coastal Management Program, Coastal Area Maps, Maps Number 17, 1981.

21. US Department of Commerce, Rainfall Frequency Atlas of the United States, Weather Bureau Technical Paper No. 40, 1961.

22. Telephone log. Conversation between Bill McCarthy, NYSDEC, and Michele Christina, Ebasco, 12/12/94.

23. Telephone log. Conversation between Micheal Cannon and Michele Christina, Ebasco, 3/13/95.

24. Oswego County Health Department, Environmental Division, Complaint Form, 8/28/78.

25. USEPA, Initial Hazardous Waste Site Field Investigation Report, Holbrook Property, 1/16/80 and 2/3/80 Field Investigation.

26. NUS Corporation, Preliminary Assessment Report, Holbrook Property, 5/24/84.

27. NYSDEC, Division of Water, New York State Water Quality 1994 Report, June 1994.

28. Correspondence from New York Natural Heritage Program to Amy Braccia, Ebasco, PAS Holbrook Property Site, 1/4/95.

29. PAS Holbrook Property Site, Residential Well Sampling Data, April 1980 through January 1988.

Reference 1

12-14-90
Vol. 55 No. 241

Federal Register

Friday
December 14, 1990

Book 2

United States
Government
Printing Office
SUPERINTENDENT
OF DOCUMENTS
Washington, DC 20402

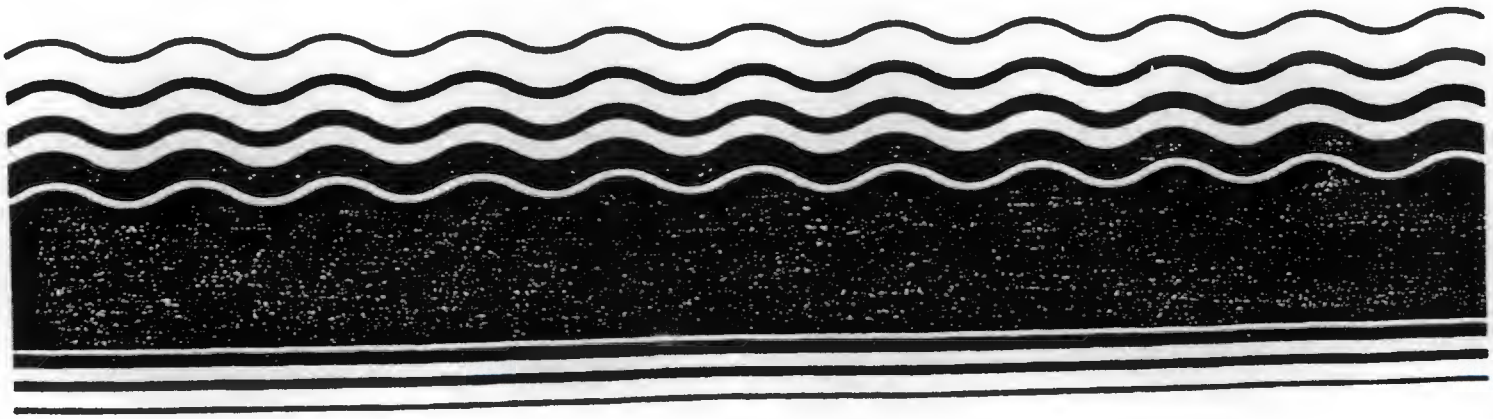
OFFICIAL BUSINESS
Penalty for private use, $300

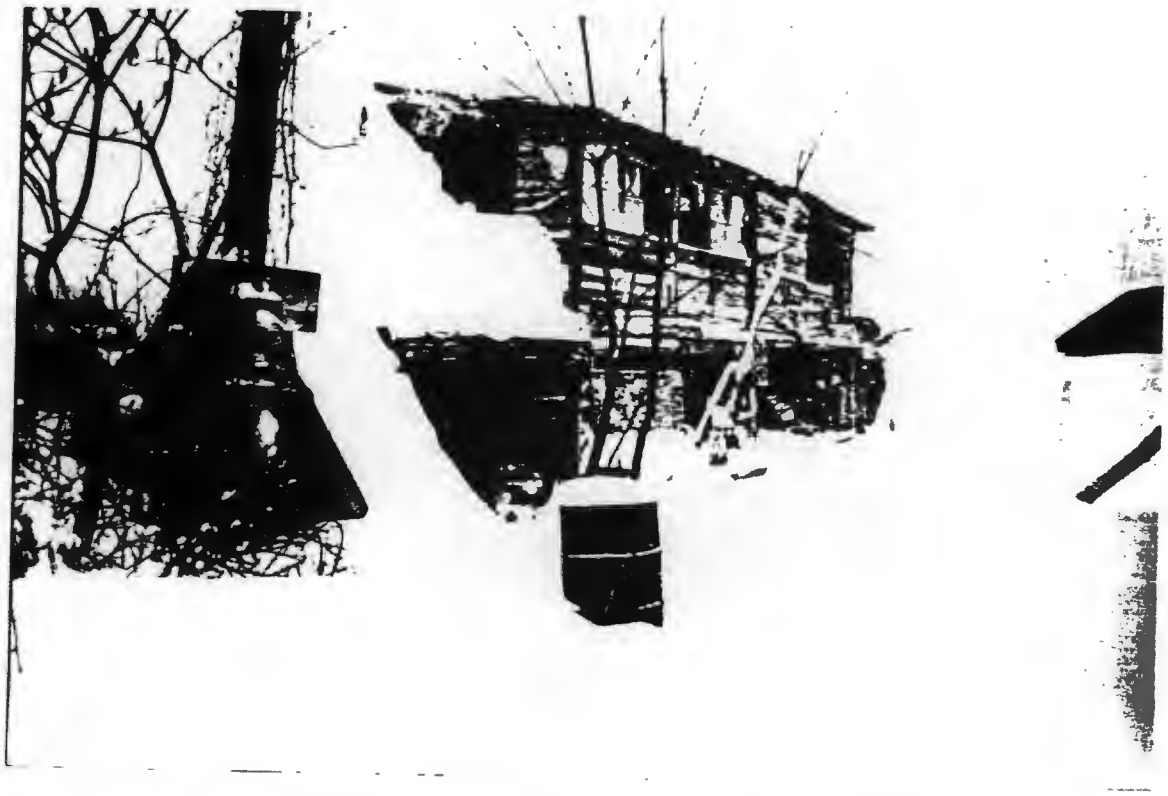
SECOND CLASS NEWSPAPER
Postage and Fees Paid
U.S. Government Printing Office
(ISSN 0097-6326)

Reference 2

EPA

Superfund Chemical Data Matrix





Site Name: PAS Holbrook Property Site
Photographer: M. Christina

Location: Parish, New York
Date: 2/6/95

Photo 18: Photo depicts rusted drum located between residence & barn. Drum is rusted through in several areas. No discernable lables are on drum. Shot facing west. Delapidated barn is in background.

Reference 4

STATE OF NEW YORK
DEPARTMENT OF HEALTH
OFFICE OF PUBLIC HEALTH

351 SOUTH WARREN STREET SYRACUSE, N.Y. 13202

DAVID AXELROD, M.D.
Commissioner
GLENN E. HAUGHIE, M.D.
Director of Public Health

SYRACUSE AREA OFFICE
JOSEPH V. BARRY
Area Public Health Director

June 30, 1980

Rupert Collins
Comm. of Health Services
Oswego County Health Dept.
70 Bunner Street
Oswego, New York 13126

Dear Comm. Collins:

On Tuesday, June 17, 1980 staff members of the New York State Department of Health and Environmental Conservation conducted a site inspection of the Holbrook farm on Bangall Road, Oswego County. This site is one of the PAS sites identified in the May 1979 report entitled "Toxic Substances in New York's Environment" prepared jointly by the two Departments.

Reconnaissance of the Holbrook PAS site indicated that approximately 400 55-gallon drums were located at 12 specific locations on the property. It was estimated that 60 percent of the drums were empty and that others contained rainwater, semi-solid sludges, contaminated filter media or unidentified materials. Some drums were full with the bungs rusted closed, preventing inspection.

It is this Department's finding that the site is a public health nuisance. The nature of the site makes it attractive to playing children who could be exposed to toxic materials. We recommend that as such, the filled and/or deteriorated barrels be moved to one area of the site and that a fence be erected to prevent access by residents and other individuals. We have been informed by the Town Supervisor of the Town of Parish that the Town intends to remove the empty barrels from the site by virtue of a violation of a local zoning ordinance.

In order to determine any impact of chemicals at the site on groundwater quality, the Department of Environmental Conservation, the United States Geological Survey and this Department will collect groundwater samples and soil cores at this site. Mr. Holbrook has given the Department of Environmental Conservation his approval to collect these samples.

In an effort to resolve this nuisance at the Holbrook site, please prepare a working plan and estimated schedule of activities to result in the segregation of these barrels, including appropriate barriers to prevent access to that area. The proposed plan should

be submitted to me within ten (10) working days. Upon approval, it is hoped that the remedial work will commence quickly so that the public health nuisance may be abated.

Our Department is prepared to assist you in this matter. Please let me know what assistance is requested.

Very truly yours,

Joseph V. Barry

Joseph V. Barry
Area Public Health Director

cc: Dr. Ramer
Mr. James Wright

Reference 5

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE: July 2, 1980

SUBJECT: Holbrook Property

FROM: Donald J. Casey DJC
Rochester Program Support Branch, 2 SA

TO: See Below

Dewling
cc: Stoller

On June 24, 1980, I visited the Holbrook Property located on Bangall Road, Town of Parish, Oswego County, New York with representatives of the NYS Department of Environmental Conservation, NYS Department of Health, U.S. Geological Survey, SUNY at Oswego, and Mr. Holbrook, the site's owner.

With the exception of a few barrels which contain semi-solid material, all of the barrels viewed from the air on June 25, 1980, located on the northern side of the property, are empty. Most of the barrels showed evidence of having been pierced by a pickax.

About 15 of the barrels stored, generally speaking, to the front of the property (Bangall Road) are full or partially full. Of these, 3-4 contain liquid material; the rest appear to contain semi-solid material.

More information will follow.

Addressees:
✔ Richard T. Dewling, Deputy Regional Administrator, Region II
Kenneth Stoller, Deputy Director, S & A Division, Region II
Richard D. Spear, Chief, S & M Branch, S & A Div. Region II
John Frisco, Chief, Hazardous Waste Site Investigation Program, Region II

Reference 6

PROJECT: PAS Holbrook — TELECON NOTE

PROJECT NO. 8310.0076 | DATE: 1/5/95 | TIME: 13:45

DISTRIBUTION: File

BETWEEN: Evan Walsh | OF: Cayuga DOH | PHONE: (315) 349-3564

AND: M. Christina Re: Drum disposal at Site

DISCUSSION: Not in. Left Message. Called 1/6/95 @ 1030. Not in. Left message. Called 1/9/94 @ 0950. Not in. Left message. Called @ 10:23 on 1/10/95. Spoke with him later that day. He oversaw drum removal. Provided me w/ the following information:

① Drums were removed from site by DEC 1980.

② Also removed from site at this time was obviously contaminated soil (soil which contained chemical odors, was discolored, etc) & resin material which ~~had leaked from drums~~ also was on-site (poss. dumped on-site). Soil was excavated to varying depths depending on observed contamination (excavation depths ranged from

ACTION ITEMS:

EBASCO SERVICE INCORPORATED

Cont

PROJECT: FAS Hillbrook — TELECON NOTE

PROJECT NO. 8310.0076 | DATE: | TIME:

DISTRIBUTION: File

BETWEEN Evan Walsh | OF: Oswego DOH | PHONE:

AND: M. Christina

DISCUSSION: Several inches to six inches. Contaminated soil & resin material was placed in 30 overpack drums & disposed of off-site.

(3) No confirmatory post-ex soil sampling was conducted. Only associated sampling of which he is aware involved sample collection from nearby residential potable wells. Residential well sampling was conducted before & after drum/waste removal (note: the same wells may not have been sampled for both rounds of sampling). No significant contamination was found to be present in samples. Sample data should be in DEC regional files. If not, he may be able to find it in his files.

(4) Removal operations occurred at 3 locations on property. They did do site sketches assoc. w/ removal. If we can't locate them, he may be able to assist us with our site reconn. Call later to assess his availability.

(5) Removal/disposal subcontractor was SCA Chemical Services of Model City, New York. [near Buffalo]. Are not likely to be RCRA permited TSD facility as

ACTION ITEMS:

EBASCO

EBASCO SERVICE INCORPORATED

cont

PROJECT: PAS Holbrook		TELECON NOTE
PROJECT NO. 8310.0076	DATE:	TIME:
DISTRIBUTION: File		Reference 6 Page 3 of 3
BETWEEN Evan Walsh	OF: Oswego DOH	PHONE:
AND: M. Christma		

DISCUSSION: Removal was conducted Pre-RCRA. At the same time of PAS Holbrook removal, waste from 3 other sites was picked up & disposed of: Powerline Site (≈ 1/2-1/4 mile down Road, ≈ 50 yds from highway; Suspected PAS/Holbrook waste dumping Site); Liebolt Property; and Orwell Ladder.

(6) Approx 4-6 years after removal, neighbor complained of chemical odor assoc. w/ residential well water. DOH sampled. Benzene did show up in analysis however was attributed to property owner changing oil/antifreeze, etc on dirt driveway adjacent to well head.

(7) PAS facility no longer operational. Was one of the first facilities to be shut down in this country. Has engineered controls (capped, leachate collection system, etc). Located in Oswego, NY.

(8) DOH has atlas of info regarding County waste sites. Will allow us to drop in during our 23 JAN file search & obtain a copy of PAS Holbrook site listing. Will fax directions. Call to confirm date to review ~~draft~~ Atlas (24th Jan. bad time for Ha.

(9) Warned us that Wendell Holbrook (father, now deceased) & Gale Holbrook (son-current owner), are very hostile & have been known to approach ~~them~~ investigators on their property with guns. May even resind permission to conduct site visit.

ACTION ITEMS:

(10) Rabies problem. Beware!

EBASCO

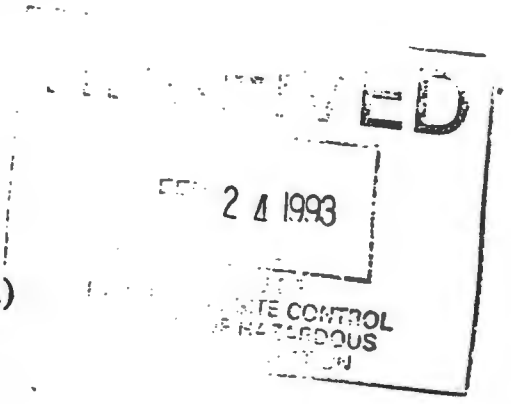
Reference 7

ENGINEERING-SCIENCE, INC.

290 Elwood Davis Road, Suite 312 • Liverpool, New York 13088 • (315) 451-9560 • Fax: (315) 451-9570

February 22, 1993

N.Y.S. Dept. of Environmental Conservation
50 Wolf Road, Room 218
Albany, NY 12233-7010
Attn: Ms. Cynthia A. Whitfield



RE: Holbrook Property Site (NYSDEC Site No. 738011)
Preliminary Site Assessments
Work Assignment No. D002478-11
State Superfund Standby Contract

Dear Cynthia:

As we discussed during our phone conversation last December 23, Engineering-Science, Inc. (ES), regrettably, will have to drop the Holbrook Property Site from our PSA Work Assignment (No. D002478-11) because a conflict-of-interest was identified during the site visit on December 22, 1992. During the visit, 11 drums were observed near the Holbrook house in the southern corner of the property, including two intact drums with contents. Labels on the two intact drums read: "General Electric, Riverview Plant Schenectady, Insulating Materials Department". ES is currently under contract with General Electric.

Though ES will not be able to continue the PSA investigation of the site, we believe that the investigation of the site can be continued, either by NYSDEC personnel or by assignment to another consulting firm, with little disruption because enough information has been developed to prepare a sampling plan. Immediately prior to the December 22 site visit, the information required to prepare a Site Work Plan for PSA Task 3 was nearly complete; the only critical unknowns were the precise locations of drum storage areas which were identified in records gathered during Task 1 (after the December 1991 site inspection). However, the storage area locations were determined during the site visit with the assistance of Mr. Evan Walsh of the Oswego County Public Health Department. Mr. Walsh personally observed drums on-site during the 1980 drum removal action at the site, and showed the ES inspection team where drums were stored on the site and recommended sampling locations for PSA Task 3.

Our recommendations for the PSA Task 3 investigation of the Holbrook Property Site are attached. The recommendations are based on the Task 1 Report, comments on the report received from NYSDEC, and observations made during the site visit.

Sincerely,

ENGINEERING-SCIENCE, INC.

D. Chaffin

David Chaffin
Project Manager

cc: File SY230.08(#4)

RECOMMENDATIONS FOR PSA TASK 3
HOLBROOK PROPERTY SITE
NYSDEC SITE NO. 738011
OSWEGO COUNTY, NEW YORK

SITE BACKGROUND

The Holbrook Property Site is located on an occupied 48.75-acre residential property in Parish Township, Oswego County, New York (Figure 1). The site is owned by Mr. Gale Holbrook, and is under investigation because hazardous waste may have been released to the site from 55-gallon drums stored at the site during the years 1977 through 1980.

In June 1980, personnel from the New York State Department of Health (NYSDOH) and New York State Department of Environmental Conservation (NYSDEC) conducted an inspection at the site, and observed approximately 440 55-gallon drums at twelve locations on-site (Figure 2). Sixty percent of the drums were empty, but appeared to have been pierced with a sharp instrument. The bungs of some drums were rusted shut, preventing any assessment of contents. The remaining drums contained semi-solid sludges, rainwater, and contaminated filter material which had an odor described as "phenolic-like". A summary of the distribution and contents of drums observed on-site during the inspection is presented in Table 1. Locations correspond to those shown on Figure 2. "Sludge-like" material, covering several square feet at most, was observed on the ground in Location 1. Relatively strong odors were also noted at the location. Discolored water (estimated to be 10-20 gallons) was observed in a pit in Location 3.

The drums were removed from the site during November and December 1980 under the supervision of the Oswego County Public Health Department (OCPHD). The materials contained by the drums were not sampled and analyzed to determine their composition. Approximately 10 drums of contaminated soil were removed from the ground surface in Location 1. The contaminated soil was not sampled and analyzed.

NYSDEC collected three near-surface soil samples from the Holbrook Property site during June 1988 (Figure 2). Samples 1 and 2 were collected from the Location 1. Sample 3 was collected beneath a utility pole rack adjacent to Bangall Road. With the exception of two compounds which were detected in laboratory blanks, organic contaminants were not reported in Samples 1 and 2. Analyzed metals were within naturally occurring ranges. Thirteen organic compounds were detected in Sample 3. Most of the compounds were PAHs. Fluoranthene and pyrene were the compounds with the highest concentrations; both at 2.7 ppm.

Engineering-Science, Inc. (ES) began a Preliminary Site Assessment (PSA) investigation of the site in November 1991. The PSA Task 1 investigation, a compilation of site records, background information, and on-site observations, was completed in April 1992 (ES, 1992). The information gathered during Task 1 was insufficient for determining whether hazardous waste, as defined under Part 371, is

present at the site and whether hazardous waste at the site might pose a significant threat, as defined by Part 375, to public health or the environment. A surface investigation including sampling of soil, surface water, and sediments was recommended.

During a follow-up site visit in December 1992, ES, NYSDEC, and OCDPH observed 11 drums on-site: four 55-gallon drums (two empty, two intact with contents) at the northeast corner of the utility pole rack; four, intact, partially buried 55-gallon drums inside the barn; and three empty 55-gallon drums in an open area southwest of the barn (Figure 2). A partial label on one of the intact drums observed near the utility pole rack read: "PHENO..., Flammable Liquid", suggesting the drums contents include phenol or phenolic compounds.. No other drums were labeled. ES was not able to determine whether the drums observed on-site were present during the 1980 removal, or more recently transported to the site.

The Holbrook Property site is currently listed on the state Registry of Inactive Hazardous Waste Disposal Sites with the Class 4 designation: Site properly closed - requires continued management.

Presence of Hazardous Waste

Available data indicate that some of the drums stored at the site in 1980 contained hazardous wastes, but are insufficient for determining whether hazardous waste is now present at the site. Several of the compounds detected in a sample collected by NYSDEC personnel in June 1988 (Sample 3), are listed hazardous wastes: benzo(a)pyrene (USEPA Hazardous Waste No. U022), bis(2-ethylhexyl)phthalate (U028), chrysene (U050), diethylphthalate (U088), fluoranthene (U120), and pentachlorophenol (F027). The presence of these compounds does not establish the presence of hazardous waste at the site, however, because they cannot be attributed to discarded chemical products as required by Part 371.4(d)(1), or, for the case of pentachlorophenol, unused formulations as required by Part 371.4(b). In particular, the presence of these compounds cannot be attributed to the drums stored at the site. Other potential sources of the detected compounds include the utility poles stored on a rack adjacent to Bangall Road at the time of the sampling (poles were also observed on the rack during the 1991 and 1992 site visits for the PSA investigation), pavement on Bangall Road, and natural occurrence.

Presence of Significant Threat

Available data are insufficient for determining whether hazardous waste at the site might pose a significant threat to public health or the environment. Surface water samples were not collected from the stream crossing the site during previous investigations. Borings have not been drilled at the site, and monitoring wells have not been installed at the site. Off-site groundwater samples collected from wells located within 1 mile of the site by NYSDOH in 1980 did not indicate that contaminants are being released to groundwater at the site.

SCOPE OF WORK

The scope of work recommended for the PSA Task 3 investigation of the Holbrook Property Site is presented in this subsection. The scope of work is intended to generate data that can be used to satisfy the primary purpose of the PSA investigation, i.e., assign one of the following three site classifications provided by Article 27, Title 13 of the Environmental Conservation Law to the site:

- Class 2 - Site poses significant threat to public health or environment - action required;
- Class 3 - Site does not present a significant threat to public health or environment - action may be deferred; or
- Class D - Site delisted from Registry of Inactive Hazardous Waste Sites.

The scope of work should include the following six tasks: (1) Environmental Sample Collection, (2) Environmental Sample Analysis, (3) Data Validation, (4) Sample Location Survey, (5) Sample Results Report Preparation, and (6) Task 3 Report Preparation (Table 2).

Environmental Sample Collection

Surface water, sediment, soil, and waste samples should be collected for the PSA Task 3 investigation. The surface soil and waste samples should be collected to determine whether hazardous waste is present on-site. The surface water and sediment samples should be collected to determine whether potential hazardous wastes on-site might be releasing contaminants to downstream surface waters and sediments, posing a significant threat to public health or the environment. Recommended sample locations are shown in Figure 3. Analytical parameters are described below and summarized in Table 3.

Procedures for equipment decontamination, sample collection, sample shipping and custody, and analysis of samples should conform, at a minimum, to those presented in the ES PSA project Quality Assurance Plan (QAP) dated August 1992. The QAP also specifies the number and type of quality control (QC) samples which should be included in the sample program.

Shallow Soils

Two shallow (0 to 0.5 feet below ground surface) soil samples should be collected from the site to determine background conditions at the site (Sample SS-1 in Figure 3), and to determine if hazardous waste is present in the barn and to screen the soils in the barn for contamination (SS-2). The soil samples should be analyzed for Target Compound List (TCL) volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides and PCBs, and Target Analyte List (TAL) metals and cyanide.

Subsurface Soils

Fifteen subsurface soil samples (Samples B-1 to B-15 in Figure 3) should be collected from locations where potentially hazardous materials were stored, leaked, or discharged on-site. We recommend that samples be obtained from depths ranging from

0 to 4 feet below ground surface using a split-spoon sampler or a combination of 2.25-inch, inner-diameter, hollow-stem augers mounted on a portable drill rig (e.g., a Minuteman rig) and a split-spoon sampler.

Subsurface samples should be visually inspected, logged, and screened with a photoionization detector (PID). Samples which are visually stained or discolored and/or which have the highest PID readings should be selected for lab analysis. If contamination is noted across several depth intervals, the samples may be composited for analysis. The samples should be analyzed for TCL VOCs, SVOCs, pesticides and PCBs, and TAL metals and cyanide.

Surface Water and Sediment Samples

Four surface water and four sediment samples (Samples SW/SED-1 to SW/SED-4 in Figure 3) should be collected from the unnamed stream which flows from east to west across the site. The purpose of the samples is to determine whether hazardous wastes were disposed in those locations, and to determine whether contaminants are being discharged from hazardous waste on-site to downstream waters and sediments. The surface water and sediment samples should be analyzed for TCL VOCs, SVOCs, pesticides and PCBs, and TAL metals and cyanide.

Drum Samples

Four waste (liquid, solid, or sludge) samples (designated Samples W-1 to W-4 in Table 2) should be collected from the two intact drums with contents located near the utility pole rack, and from two drums inside the barn located west of the Holbrook house (Figure 3) to determine whether hazardous waste is present in the drums, and to screen the waste for contaminants.

The waste samples should be collected from the drums after they have been overpacked and staged in a containment area. Suitable sampling equipment includes a glass drum thief, a stainless steel beaker, or a stainless steel trowel. Based on the information gathered during the PSA Task 1, LEVEL B health and safety protection will be required for the drum overpacking and sampling activities. Air monitoring should be performed using a PID and an explosimeter.

The analytical program should be determined at the time of sampling, based on the observed contents and air monitoring results, and could include analysis for one or more of the following fractions: TCL VOCs, SVOCs, PCBs, TAL metals and cyanide, and hazardous waste characteristics: Extraction Procedure Toxicity (EP Tox), ignitability, and corrosivity. Examples of typical analytical suites that could be selected at the time of sampling include:

Suspected Contents	Analytical Suite
Solvents	VOCs, ignitability, corrosivity
Other Liquids	VOCs, SVOCs, PCBs, ignitability, corrosivity, TAL metals and cyanide
Metallic Solids	EP Tox metals, TAL metals
Other Solids	EP Tox, ignitability

Environmental Sample Analysis

Environmental samples should be analyzed by a New York State-certified laboratory, in accordance with the NYSDEC protocols specified in the QAP. Analytical methods and the contract required quantification limits (CRQLs) are identified in Section B6 of the QAP. NYSDEC Methods ASP 91-1, ASP 91-2, and ASP 91-3 are recommended for analysis of organic compounds. Various NYSDEC CLP-M methods may be selected by the laboratory for analysis of inorganics; however, the selected methods should meet the CRQLs.

Data Validation

Analytical data generated by the laboratory should be independently validated following USEPA guidelines adapted to the QC criteria in the NYSDEC ASP, as described in Section B7 of the QAP.

Sample Location Survey

A sample location survey should be conducted by a New York State-licensed land surveyor so that samples can be recollected or additional nearby samples can be collected, if deemed necessary in the future. The surveyor should locate the position and elevation of the surface water/sediment sampling locations, and the positions of soil samples and any structures or features which are pertinent to the investigation (e.g., ditches, streams, drums, disposal areas, structures).

Vertical control should be established to the nearest 0.01 foot at each surface water/sediment sampling point. Elevations should be determined relative to a regional, local, or project-specific datum point. Horizontal control for the sample points should be obtained by ties (location and distance) relative to one another and to the specified datum point. A U.S. Geological Survey benchmark should be used if practical.

A site plan should be prepared showing surveyed sample locations and significant features, approximate (unsurveyed) locations of property lines obtained from tax maps, and approximate locations of significant features, if not surveyed. The site plan should also include a legend identifying sampled media, names of property owners, a north arrow, a scale, and a title block.

Sample Results Report Preparation

A Sample Results Report consisting of a cover letter and summary tables should be prepared. The summary tables should show validated concentrations of analytes detected in environmental samples collected during PSA Task 3 with comparison to appropriate New York State environmental standards or guidelines.

PSA Task 3 Report Preparation

A Task 3 Report presenting the results of the surface field investigation should be prepared. A tentative outline is provided in Table 4. The report should describe the field activities conducted during the Task 3 investigation, present validated analytical results for environmental samples collected during the investigation, update background information gathered during PSA Task 1, present any new background information generated during the PSA Task 3 investigation, provide an assessment of the information gathered during the investigation, and provide recommendations for the

reclassification of the site or additional work at the site. The assessment should be focused on a determination of the presence of hazardous waste at the site as defined by Part 371 regulations, and whether hazardous waste, if present, poses a significant threat to public health or the environment. If the data indicate that the site might pose a significant threat to groundwater users, the Task 3 Report should include a recommendation to conduct a survey to identify groundwater users within one-quarter mile of the site.

During preparation of the PSA Task 3 Report, a preliminary evaluation of whether the site can be nominated for the USEPA's National Priorities List (NPL) should be made with the data gathered during the surface investigation. The preliminary evaluation may be limited to preliminary estimates of Hazard Ranking System (HRS) scores using the system published in the Federal Register on July 16, 1982. If the preliminary estimates indicate that the site might be added to the NPL, preliminary HRS scores should be calculated using a version of the HRS selected by NYSDEC to support the nomination.

If sufficient data are obtained to reclassify or delist the site, the PSA Task 3 Report should include a recommendation that the PSA investigation proceed to PSA Tasks 5 and 6 (Draft and Final PSA Report). If the data generated during PSA Task 3 are insufficient for classifying or delisting the site, the PSA Task 3 Report should include a recommendation to prepare work plans for PSA Task 4 (Subsurface Investigation) to obtain sufficient data to classify the site.

REFERENCES

ES, 1992. Task One Report, Holbrook Property Site, dated April 1992. Engineering-Science, Inc. Liverpool, New York.

TABLE 1

55-GALLON DRUM INVENTORY
HOLBROOK PROPERTY SITE
OSWEGO COUNTY, NEW YORK

Drum Location	Drum Quantity	Comment
1	150	Evidence of spillage.
2	50	
3	10	Rusted drums in standing water.
4	60	
5	40	
6	12	Scattered Drums.
7	15	
8	13	
9	20	
10	30	
11	15	
12	25	

TABLE 2

TASK DESCRIPTIONS
HOLBROOK PROPERTY SITE
OSWEGO COUNTY, NEW YORK

TASK	DESCRIPTION
Sample Collection	Collect 2 shallow soil samples, 15 subsurface soil samples, 4 surface water and sediment samples, and 4 waste samples from the locations shown in Figure 3.
Sample Analysis	Laboratory analysis of samples as specified in Table 3.
Data Validation	Independent validation of laboratory data.
Sample Location Survey	Survey of sample locations by a New York State-licensed surveyor. In addition, elevations should be surveyed for the surface water and sediment sample locations.
Sample Results Report Preparation	Letter report with summary of environmental sample results.
PSA Task 3 Report Preparation	Report supporting recommendations to reclassify or delist the site, or prepare a work plan for PSA Task 4.

TABLE 3

SAMPLE LOCATIONS SUMMARY
HOLBROOK PROPERTY SITE
OSWEGO COUNTY, NEW YORK

Sample Designation	Analytical Parameters	Rationale
Shallow Soil Samples		
SS-1 to SS-2	Full TCL-TAL	Determine whether hazardous waste is present in soils on-site. Screen for contaminants.
Subsurface Soil Samples		
B-1 to B-15	Full TCL-TAL	Determine whether hazardous waste is present in soils on-site. Screen for contaminants.
Surface Water/Sediment Samples		
SW/SED-1 to SW/SED-4	Full TCL-TAL	Screen downstream surface water and sediments for contaminants potentially released from hazardous waste on-site.
Waste Samples		
W-1 to W-4	VOCs, SVOCs, PCBs, TAL Metals and Cyanide, Waste Characteristics	Determine whether drums contain hazardous waste.

Full TCL-TAL = TCL VOCs, SVOCs, Pesticides/PCBs, TAL Metals and cyanide.

Waste Characteristics = EP Toxicity, ignitability, corrosivity.

TABLE 4
TASK 3 REPORT OUTLINE
HOLBROOK PROPERTY SITE
OSWEGO COUNTY, NEW YORK

SECTION 1 - EXECUTIVE SUMMARY

- 1.1 Summary of Task 3 Results
- 1.2 Presence of Hazardous Waste
- 1.3 Presence of Significant Threat
- 1.4 Recommended Classification and Action

SECTION 2 - INTRODUCTION

- 2.1 PSA Investigation
- 2.1 PSA Task 3 Objective
- 2.3 Site Background
- 2.4 Task 3 Report Organization

SECTION 3 - SCOPE OF WORK

- 3.1 Introduction
- 3.2 Environmental Sample Collection
- 3.3 Environmental Sample Analysis
- 3.4 Data Validation
- 3.5 Sample Location Survey

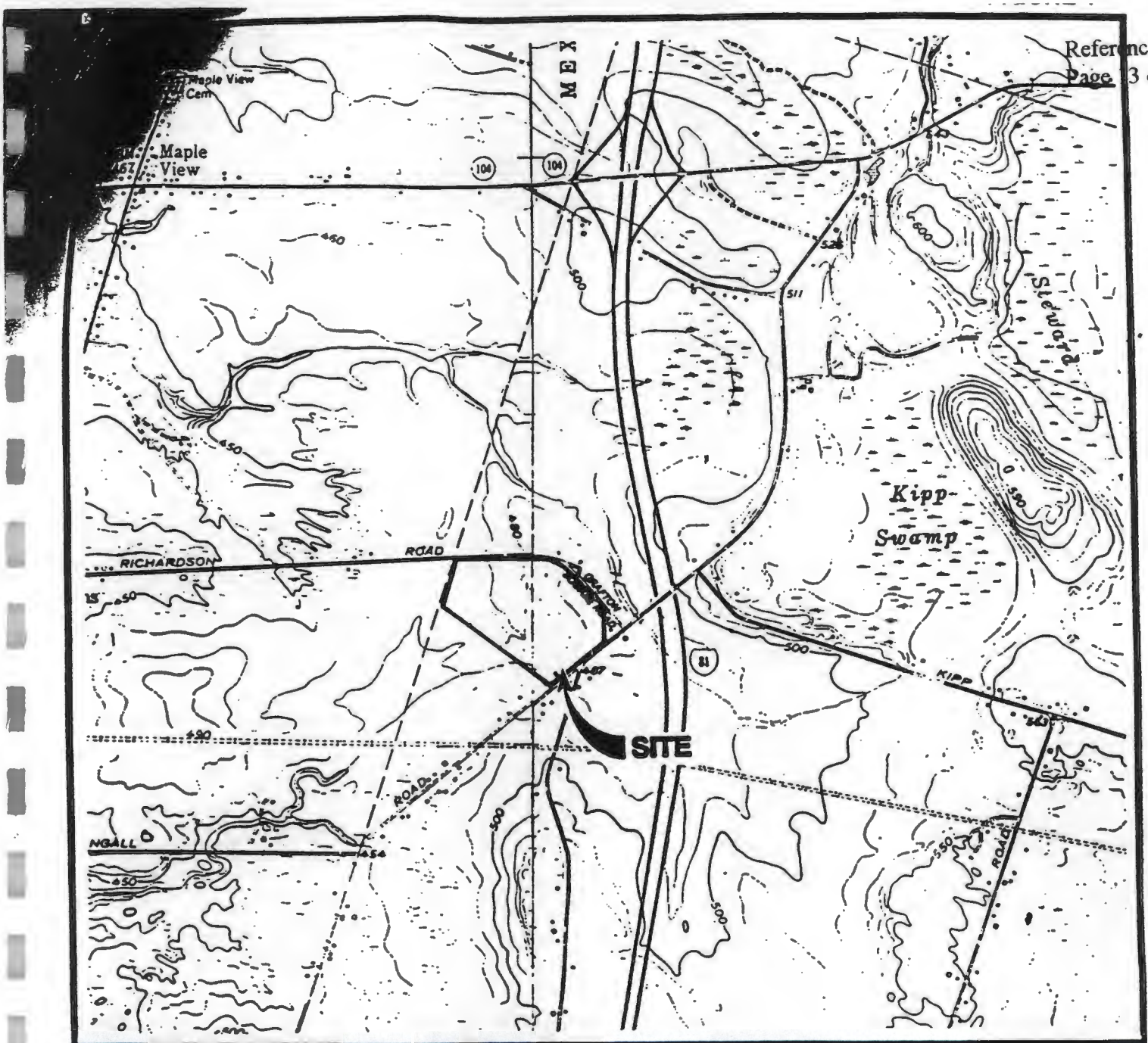
SECTION 4 - SITE ASSESSMENT

- 4.1 Introduction
- 4.2 Task 3 Background Information
- 4.3 Presence of Hazardous Waste
- 4.4 Presence of Significant Threat

SECTION 5 - RECOMMENDATIONS

- 5.1 Recommended Site Classification
- 5.2 Future Work

SECTION 6 - REFERENCES



SOURCE: U.S.G.S. 7.5 SERIES TOPOGRAPHIC MAPS: DUGWAY,N.Y.(1957)AND MEXICO,N.Y.(1956) QUADRANGLES. PHOTOREVISED 1982.

SCALE
0 2000 4000 FT.

QUADRANGLE LOCATION

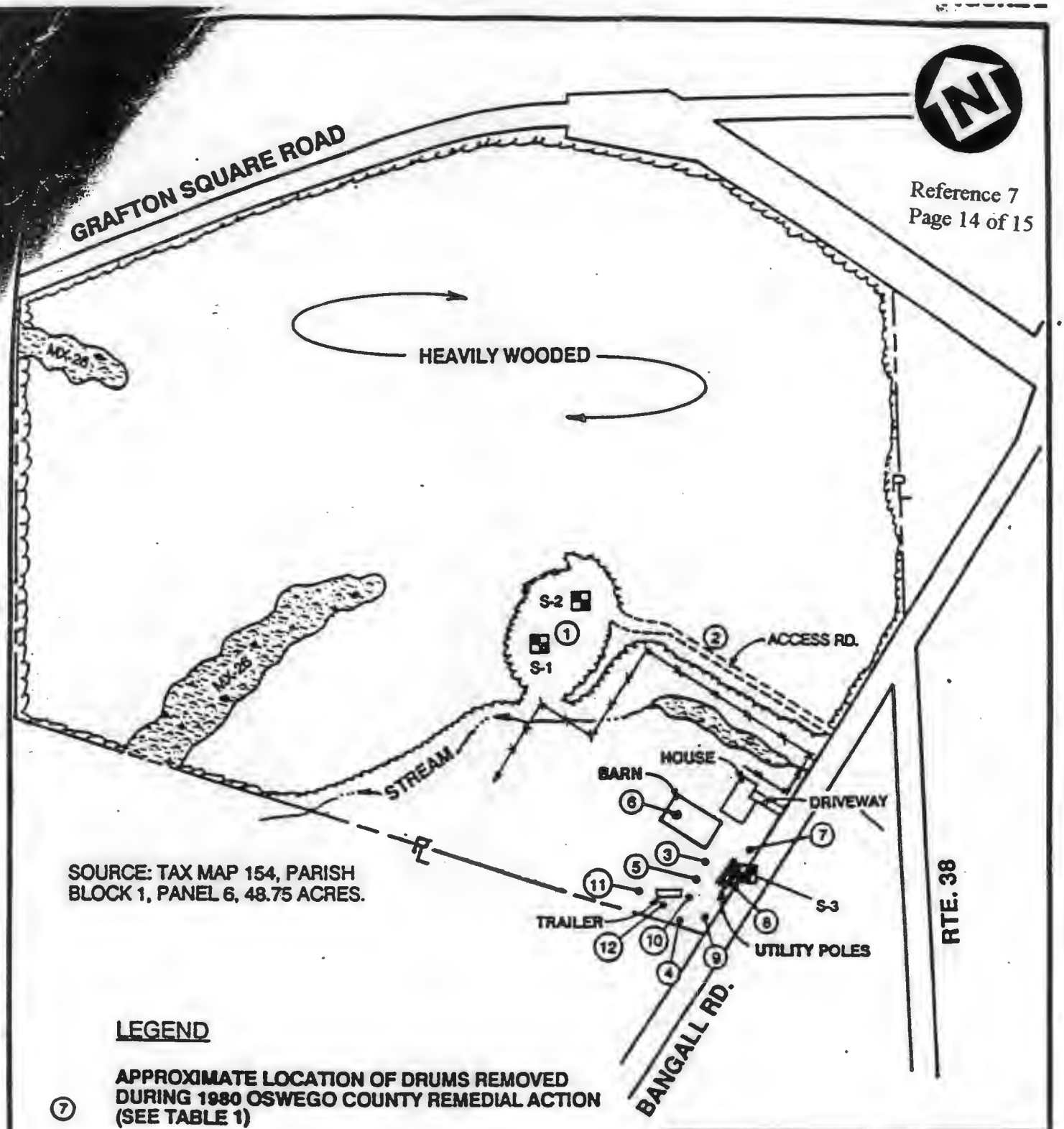
N

LATITUDE: 43°26'30"
LONGITUDE: 76°07'25"

ENGINEERING-SCIENCE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
PRELIMINARY SITE INVESTIGATION

SITE LOCATION
HOLBROOK PROPERTY
PARISH, N.Y.

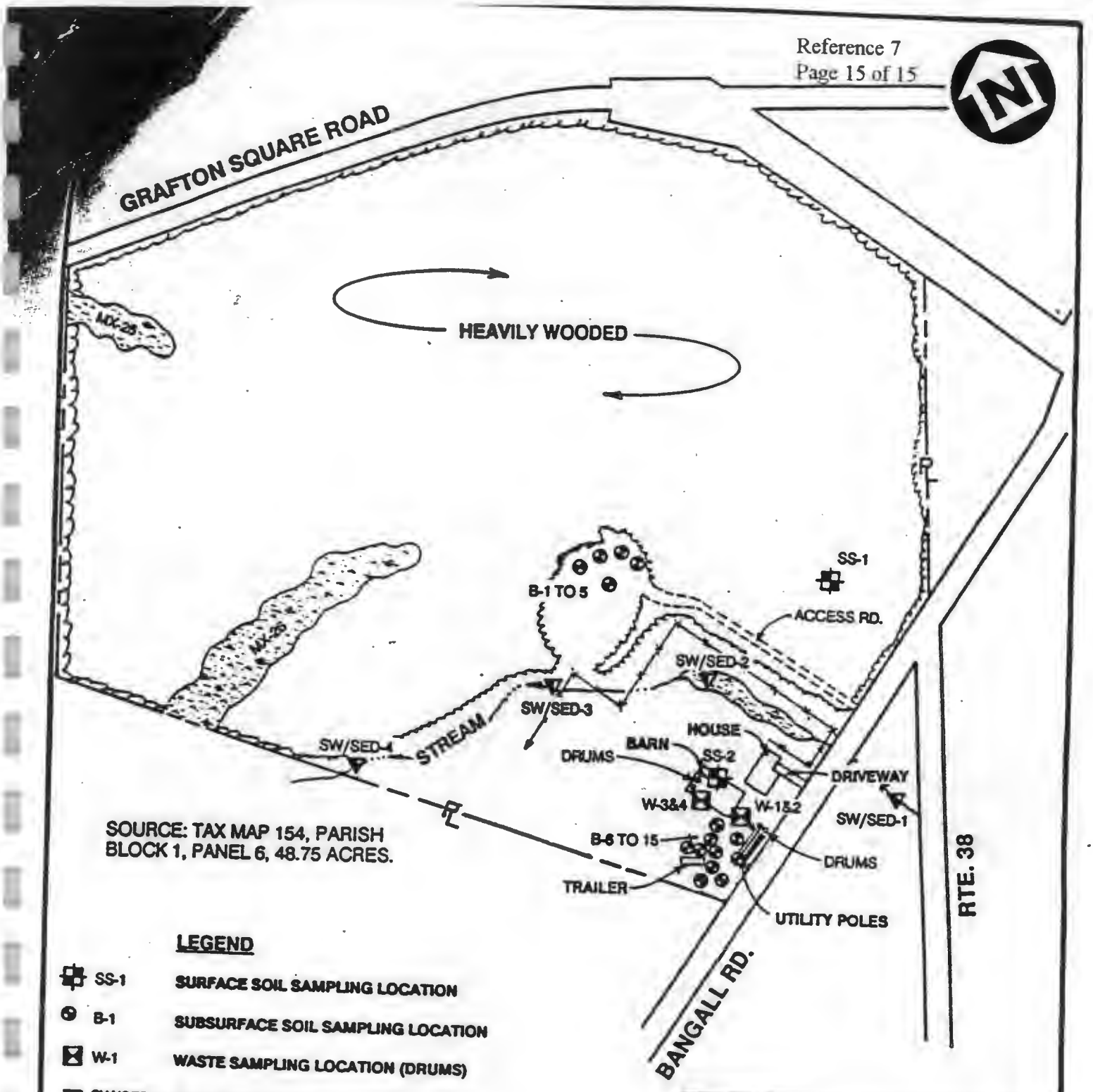


ENGINEERING - SCIENCE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
PRELIMINARY SITE INVESTIGATION

SITE PLAN
HOLBROOK PROPERTY
PARISH, N.Y.

SY 230.08



ENGINEERING - SCIENCE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
PRELIMINARY SITE INVESTIGATION

SAMPLE LOCATION MAP
HOLBROOK PROPERTY
PARISH, NY

SY 230.08

Reference 8

Field Notes

June 1988

Holbrook property

[Site ID N° 738011]

Holbroo
Propert
738011

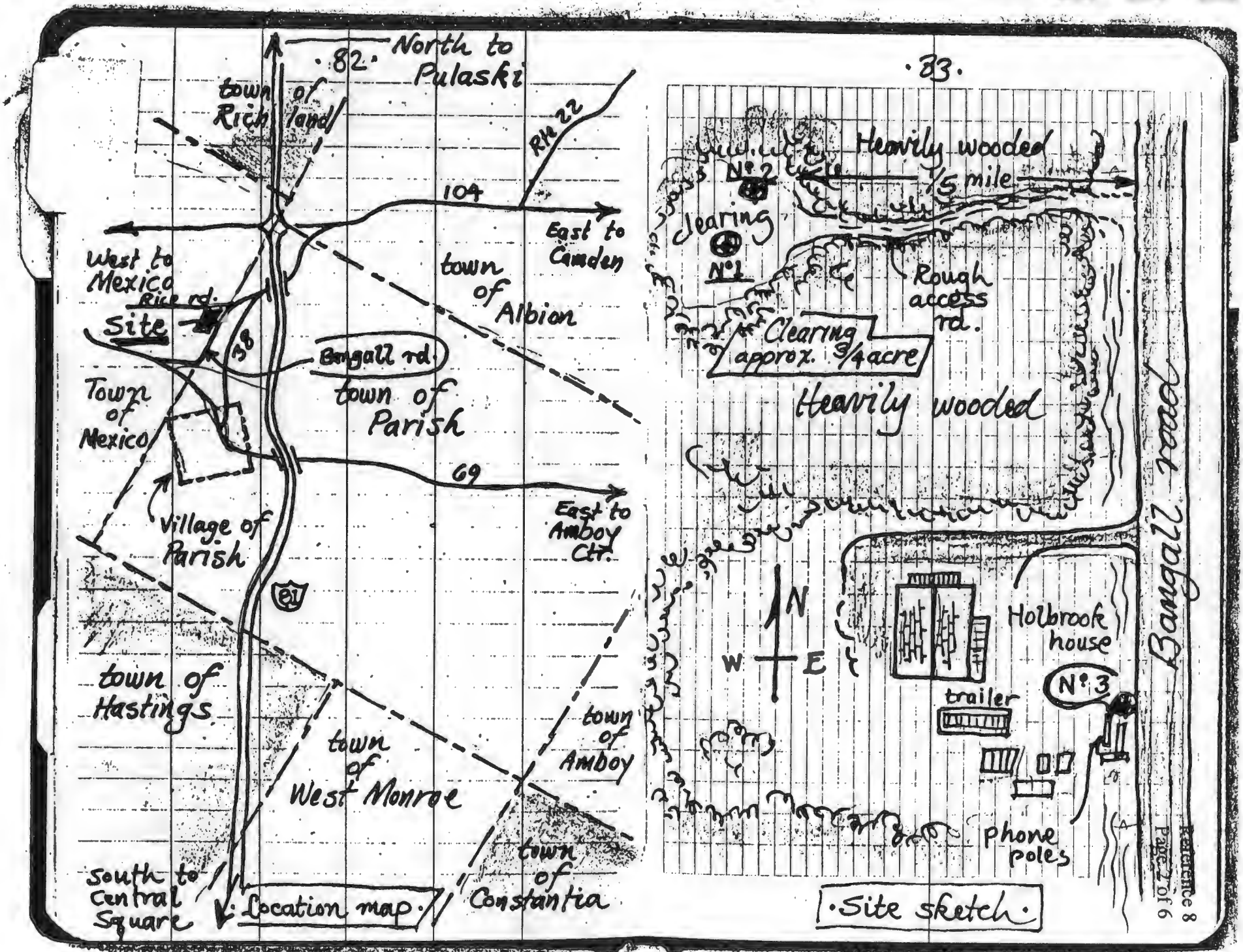
Holbrook Property
Bangall rd.
Parish (t)
Oswego County
Site ID N° 738011

A total of 3 soil samples are to be taken @ this site. They will be analysed for VOA's, BNA's & metals.

Sampling is scheduled for Wednesday, June 15, 1988. Note: An Conservation Officer from Oswego county will be accompanying us on this sampling trip.

Sampling analysis is scheduled to be done by VERSAR Lab in Springfield, VA. Contacted Jay Bernardino (of VERSAR) on June 10th & placed an order for the sample bottles.

Sample bottles arrived on 6-14. All bottles were in good shape.


·82·
North to Pulaski
town of Richland
Rte 22
104
East to Camden
West to Mexico
Rice rd.
Site
town of Albion
Bengall rd.
Town of Mexico
town of Parish
69
East to Amboy Ctr.
Village of Parish
town of Hastings
town of West Monroe
town of Amboy
town of Constantia
South to Central Square
Location map
·83·
Heavily wooded
1/5 mile
No 2
clearing
No 1
Rough access rd.
Clearing approx. 3/4 acre
Heavily wooded
Route 270
N
W
E
Holbrook house
No 3
trailer
phone poles
·Site sketch·

Arrive on site Wednesday June 15th 1988 @ 11:45 AM

Present for sampling:

- T M Koch
- Kevin Kelly
- Brian Rogers
- Mike Gibson - E.C.O.

Weather conditions:

- Extremely hot (90°s)
- Humid
- Very slight breeze

We went to the back part of the property behind the Holbrook residence. There is a long overgrown road about 1/5th mile back from Bangall rd. The road goes between the trees & opens up to a fairly large clearing about 3/4 acre in size. Brian Rogers walked around the clearing w/ the photovac. Nowhere

on site did he get a photovac reading. The only odor noted on site was the bush smell of vegatation.

Sample N° 1
St 887380 I-01
Soil sample 12:30 PM
Very Hot
Taken by TM Koch @ 12:17 P.M.
w/ decon'ed trowels. (Decon'ed w/ water - methanol - distilled water)
Sample taken @ Level C - as directed by RAO.

Sample taken 30 ft. from entrance of clearing and off to the Right slightly.
Heavy weed growth present
Very rocky soil. Unable to dig more than a few inches
On the photovac soil is dry & many roots
dk. brown in color

SH 88 238 011-02
Sample Taken 200 ft in 50 ft to right of entiance
Fine, sandy soil, very dry
12:35 PM O - photovac

SH 88 238 011-03 12:55
Roadside site South of Holbrook Road. Beneath Telephone pole rig. 3 inches Soil - shallow to Rock
positive photo vac reading - 75 - 80

Detected an odor on site, may be from the phone poles. There were several old power-line poles "built up" above the area where Sample No. 3 was taken. There was a relatively strong odor @ this location. Reminiscent of a creosote odor found on telephone poles.

After getting sample No. 3

We loaded the samples into the cooler & locked up the back of the truck. Stopped off for lunch in Mexico. Following this we got ice for the samples @ the Big M market in Mexico, Proceeded from there to the Ni Mo fire training school in Oswego.

Samples were sent out via Federal X-Press on Thursday June 16th 1988. Sent out from the Latham office. I contacted Jay Berrafato on 6-17 & confirmed that the samples arrived okay. No breakage, nor evidence of tampering was noted...

Photos on the next pages...

·88·

SAMPLE 01

Sample No. 1 taken in the clearing (Shown on the location sketch on pg. 83)

·89·

HOLBROOK 02

Sample No. 2 – about 50 ft. north of Sample No. 1

Sample No 3

Sample taken beneath the telephone pole structure about 10 ft. in from Bangall road.

Sample 03
Holbrook

Overview of the Holbrook property showing the approx location of Sample No 3.

Reference 9

FROST ASSOCIATES

P.O.Box 495, Essex, Connecticut 06426
(203) 767-7644 FAX (203) 767-1971

Feb 8, 1995

To: Edgar Aguado
Ebasco Services Inc.
1290 Wall Street West
P.O Box 661
Lyndhurst, New Jersey 07071

Fr: Bob Frost
Frost Associates
P.O. Box 495
Essex, Conn 06426

Tel: (203) 767-1254
Fax: (203) 767-7069

Sub: PAS Holbrook Property
Bangold Road, Parish, NY

CERCLIS: NYD000511600

Job: 50126

Site Longitude: 76-07-27.5 76.124313
Site Latitude : 43-26-20 43.438889

The CENTRACTS report below identifies the population, households, and private water wells of each Block Group that lies within, or partially within, the 4, 3, 2, 1, .5, and .25, mile "rings" of the latitude and longitude coordinates above. CENTRACTS may have up to ten radii of any length. 1000 block groups, and 15000 block group sides.

CENTRACTS uses the 1990 Block Group population and Block Group house count data found in the Census Bureau's 1990 STF-1A files. The sources of water supply data are from the Bureau's 1990 STF-3A files. The boundary line coordinates of the Block Groups were extracted from the Census Bureau's 1990 TIGER/Line Files.

CENTRACTS reports are created with programs written by Frost Associates, P.O. Box 495, Essex, Conn. The code was written using Microsoft's Quick-Basic Ver. 4.5.

Latitude and Longitude coordinates identifying a site are entered in degrees and decimal degrees. One or more county files holding Block Group boundary lines are selected for use by CENTRACTS by determining whether the site coordinates fall within the minimum and maximum Lat\Lon coordinates of each county in the state.

Each Block Group line segment has Lat\Lon coordinates representing the "From" and "To" ends of that line. All coordinates from the selected county files are read and converted from degrees, decimal degrees to X\Y miles from the site location. Each line segment is then examined whether it lies within or partially within the maximum ring from the site.

The unique Block Group ID numbers of each line segment that lie within the maximum ring are retained. All Block Group boundary lines matching the Block Group numbers are then extracted from the respective county files to obtain all sides of the included Block Groups. Boundary records are then sorted in adjacent side order to determine the shape and area of each Block Group polygon.

A method to solve for the area of a polygon is to take one-half the sum of the products obtained by multiplying each X-coordinate by the difference between the adja-

cent Y-coordinates. For a polygon with coordinates at adjacent angles A, B, C, D, and E. The formula can be expressed:

Area = 1/2{Xa(Ye-Yb)+ Xb(Ya-Yb)+ Xc(Yb-Yd)+ Xd(Yc-Ye)+ Xe(Yd-Ya)}

For each ring, the selected Block Groups will be inside, outside, or intersected by the ring. When a polygon is intersected, the partial Block Group area within that ring is calculated using the method described below.

When a ring intersects a Block Group, the intersect points are solved and plotted at the points where the ring enters and exits the shape. The chord line, a line within the circle connecting the intersect points is determined. This chord line is used to calculate the segment area, the half moon shape between the chord line and the ring, and the sub-polygon created by the chord line and the Block Group boundaries that lie outside the ring.

The segment area is subtracted from the sub-polygon area to determine the area of the sub-polygon outside the ring. The area outside the ring is then subtracted from the area of the entire polygon to arrive at the inside area. This inside area is then divided by the tract's total area to determine the percentage of area within the ring. This process is repeated for each block group that is intersected by one of the rings. The total area, partial area, and percentage of partial area of those block groups within, or partially within a ring, are held in memory for the report.

On occasion, the algorithm described above is unable to determine the area of the partial area. Within the report program is a "Paint" routine which allows an enclosed shape to be highlighted. Another routine calculates the percentage of highlighted screen pixels to the pixels within the polygon. A manual entry is allowed. Both the "paint" method and manual entry method over ride the calculated method.

CENTRACTS lists, starting on page 4, all Block Groups in State, County, Census Tract, and Block Group ID order that lie within, or partially within, the maximum ring. Each Block Group is identified by a City or Town name and by the Block Group's State, County, Tract and Block Group ID number. Following is the Block Group's 1990 populu tion and house count extracted from the Census Bureau's 1990 STF-1A files.

The next four columns display water source data from the 1990 STF-3A files. The first column is "Units with Public system or private company source of water", followed by "Units with individual well, Drilled, source of water"; "Units with individual well, Dug, source of water" and "Units with Other source of water".

For each ring, CENTRACTS then shows the Block Groups that are within that ring, the Block Group's total area in square miles, the partial area of the Block Group within that ring, and the partial percentage within the ring. The areas of the included Block Group and the partial areas are then totaled.

The last section tallies the demographic data within each ring. The percentage of area for each Block Group is multiplied times the census data for that Block Group and totaled for all Block Group's within the ring. Ring totals are then determined by subtracting the three mile data from the four mile, the two mile from the three mile, one from the two, etc... Population on private wells is calculated using the formula: ((Drilled + Dug Wells) / Households) * Population

No.	City	Block Group ID	Blk Grp People	House Holds	Public Water	Drilled Wells	Dug Wells	Other
1	Mexico	36075 0204 1	2256	1091	389	323	383	1
2	Mexico	36075 0204 2	2794	1014	421	181	369	38
3	Amboy	36075 0205 2	821	297	0	125	146	24
4	Amboy	36075 0205 3	956	354	11	111	209	15
5	Amboy	36075 0205 4	953	346	1	205	116	4
6	Amboy	36075 0205 5	1849	653	19	141	480	31
7	Richland	36075 020302 1	1682	609	80	180	332	7
8	Richland	36075 020302 2	1710	880	47	487	321	9
9	Hastings	36075 020703 1	2356	819	53	241	504	32
10	Hastings	36075 020703 2	2068	689	52	193	411	24
	Totals:		17445	6752	1073	2187	3271	185

PAS Holbrook Property
Parish, NY

City	Census Tract ID	Tract People	House Count	Public Water	Drilled Wells	Dug Wells	Other Wells
Amboy	36075 0205 5	1849	653	19	141	480	31
Amboy	36075 0205 3	956	354	11	111	209	15
Amboy	36075 0205 2	821	297	0	125	146	24
Amboy	36075 0205 4	953	346	1	205	116	4
	Sub Totals:	4579	1650	31	582	951	74
Hastings	36075 0207032	2068	689	52	193	411	24
Hastings	36075 0207031	2356	819	53	241	504	32
	Sub Totals:	4424	1508	105	434	915	56
Mexico	36075 0204 2	2794	1014	421	181	369	38
Mexico	36075 0204 1	2256	1091	389	323	383	1
	Sub Totals:	5050	2105	810	504	752	39
Richland	36075 0203021	1682	609	80	180	332	7
Richland	36075 0203022	1710	880	47	487	321	9
	Sub Totals:	3392	1489	127	667	653	16

PAS Holbrook Property
Parish, NY

For Radius of 4 Mi., Circle Area = 50.265482

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
1	Mexico	36075 2041	20.436930	4.795020	23.46
2	Mexico	36075 2042	25.104702	13.180501	52.50
3	Amboy	36075 2052	29.597391	2.151011	7.27
4	Amboy	36075 2053	20.094009	0.007340	0.04
5	Amboy	36075 2054	18.425285	5.450231	29.58
6	Hastings	36075 207032	17.818802	0.185394	1.04
7	Richland	36075 203021	21.160847	2.193528	10.37
8	Richland	36075 203022	34.548252	2.178401	6.31
9	Hastings	36075 207031	14.637068	0.330413	2.26
10	Amboy	36075 2055	21.220346	19.793642	93.28
	Totals:		223.043625	50.265480	

For Radius of 3 Mi., Circle Area = 28.274334

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
1	Mexico	36075 2041	20.436930	2.869115	14.04
2	Mexico	36075 2042	25.104702	8.099288	32.26
5	Amboy	36075 2054	18.425285	2.347989	12.74
7	Richland	36075 203021	21.160847	0.958426	4.53
8	Richland	36075 203022	34.548252	0.264175	0.76
10	Amboy	36075 2055	21.220346	13.735341	64.73
	Totals:		140.896362	28.274334	

For Radius of 2 Mi., Circle Area = 12.566371

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
1	Mexico	36075 2041	20.436930	0.957427	4.68
2	Mexico	36075 2042	25.104702	4.038767	16.09
5	Amboy	36075 2054	18.425285	0.514635	2.79
10	Amboy	36075 2055	21.220346	7.055542	33.25
	Totals:		85.187263	12.566370	

For Radius of 1 Mi., Circle Area = 3.141593

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
2	Mexico	36075 2042	25.104702	0.936599	3.73
10	Amboy	36075 2055	21.220346	2.204993	10.39

PAS Holbrook Property
Parish, NY

	Totals:		46.325050	3.141593	

For Radius of .5 Mi., Circle Area = 0.785398

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
2	Mexico	36075 2042	25.104702	0.095914	0.38
10	Amboy	36075 2055	21.220346	0.689484	3.25
	Totals:		46.325050	0.785398	

For Radius of .25 Mi., Circle Area = 0.196350

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
10	Amboy	36075 2055	21.220346	0.196350	0.93
	Totals:		21.220346	0.196350	

PAS Holbrook Property
Parish, NY

========== Site Data ==========

Population:	4419.70
Households:	1665.78
Drilled Wells:	428.91
Dug Wells:	846.63
Other Water Sources:	54.30

========== Partial (RING) data ==========

---- Within Ring: 4 Mile(s) and 3 Mile(s) ----

Population:	1794.08
Households:	684.40
Drilled Wells:	195.91
Dug Wells:	330.85
Other Wells:	20.94

** Population On Private Wells: 1380.82

---- Within Ring: 3 Mile(s) and 2 Mile(s) ----

Population:	1429.06
Households:	540.35
Drilled Wells:	136.15
Dug Wells:	275.64
Other Wells:	16.78

** Population On Private Wells: 1089.04

---- Within Ring: 2 Mile(s) and 1 Mile(s) ----

Population:	900.20
Households:	335.34
Drilled Wells:	75.45
Dug Wells:	176.50
Other Wells:	11.94

** Population On Private Wells: 676.36

---- Within Ring: 1 Mile(s) and .5 Mile(s) ----

Population:	225.61
Households:	80.59
Drilled Wells:	16.13
Dug Wells:	46.64
Other Wells:	3.49

** Population On Private Wells: 175.72

---- Within Ring: .5 Mile(s) and .25 Mile(s) ----

Population:	53.64
Households:	19.05
Drilled Wells:	3.97
Dug Wells:	12.56
Other Wells:	0.87

** Population On Private Wells: 46.56

---- Within Ring: .25 Mile(s) and 0 Mile(s) ----

Population:	17.11
Households:	6.04
Drilled Wells:	1.30
Dug Wells:	4.44
Other Wells:	0.29

** Population On Private Wells: 16.27

** Total Population On Private Wells: 3384.77

Reference 10

March 17, 1980

Hazardous Waste Site Dossier

I. Site Name

PAS Holbrook Property
Bangall Road
Town of Parish
Oswego County

II. Background to Investigation and Sources of Initial Referral

The site is listed in the Department of Environmental Conservation (DEC) Technical Report: Toxic Substances in New York's Environment, and also the Oswego County Water Quality Study Interium Report. (Dr. Ronald J. Scrudato, Director, Research Center).

III. Site Description

This inactive site is owned by Mr. Holbrook. The site was used from 1977 to 1978. Inspection by Mr. Gross, DEC, on April 19, 1979 disclosed an estimated 500 barrels of waste. The barrels were scattered throughout the site. There were no signs of any major chemical leakage at the time of the inspection. The site also included a number of junk cars, and assorted materials.

IV. Allegations of "Imminent Hazard" Pollution

Information obtained from the DEC files did not attribute any health effects at this time. However, the wastes are of unknown composition. Due to the association of Mr. Holbrook with Pollution Abatement Services, Inc., it is assumed that these are PAS wastes.

V. Current Involvement

DEC states that there was no significant change in the status of this case during 1979. A residential fire heavily damaged the Holbrook home at this site. Locations of potable water wells, within one half mile of the site, has been requested by Task Force, from the Oswego County Health Department.

*UPDATE: Chemical waste leachate - potential for groundwater contamination in Oswego County[1]

Bangall Rd. (U.S.G.S. Dugway Quad.).

a. No. of barrels - approximately 500 barrels - originated at PAS.

b. Barrels scattered randomly around property, unprotected; investigation made by N.Y.S. DEC found none leaking.

c. Approximately 100 barrels are stored 250 ft. from Sage Creek.

d. Soil - permeability is rapid to very rapid.

*1This paper represents a contribution from the Oswego County Legislature (Oswego County Planning Department, New York Central Regional planning and Development Board (USEPA - 208), United States Geological Survey, and the State university Research Center at Oswego. (A copy will be furnished work, and Executive Committee Members).

By

Ronald J. Scrudato, Charles S. Ehlers, Philip A. Goliber
and Raymond H. Schneider
State University Research Center
SUNY @ Oswego
Oswego, New York 13126

And

Hank Anderson, Todd S. Miller
United States Department of the Interior
Geological Survey
Water Resources Division
Ithoca, New York 14850

VI. Recommendation

High priority

EPA make a site visit.

PAS HOLBROOK PROPERTY
BANGALL ROAD

Reference 11

Reference 12

Reference 13

Reference 14

WATER (TOWNSHIP)	NUMBER	SPECIES	SIZE
OSWEGO COUNTY (CONT'D)			
Lake Ontario (Oswego)	14,000	BT	7.50
" " "	17,500	BT	7.00
" " "	13,080	LLS	6.50
" " "	24,680	LLS	5.50
" " (Selkirk)	39,000	LT	8.00
" " "	78,000	LT	7.00
" " (Selkirk Shores)	14,000	BT	7.50
" "	17,500	BT	7.00
" "	23,000	RT	9.00
" "	5,066	LT	4.75
Lighthouse Hill Reservoir (Orwell)	3,960	RT	8.50
Oneida Lake	152,144,000	WP	Fry
Orwell Brook (Albion, Orwell)	18,000	STHD	5.50
Oswego River	83,300	CHIN	3.00
" "	14,360	STHD	5.50
Panther Lake	1,200	TGRM	9.00
Reese's Pond (Albion)	100	ST	8.00
Rice Creek (Oswego, Granby)	660	BT	7.50
Salmon River (Albion)	18,000	STHD	5.00
Salmon River, East Branch (Redfield)	1,010	RT	8.50
" " " " "	1,000	BT	8.00
" " North Branch "	4,300	ST	8.00
" " Rt 3 Brdg.	211,100	CHIN	4.00
" " " "	25,000	STHD	5.00
Sandy Pond - South	7,240	WP	2.00
Scriba Creek (Constantia)	1,000	BT	7.00
Trout Brook (Albion, Orwell)	9,680	STHD	6.00
" " " "	8,320	STHD	5.50
TIOGA COUNTY			
Cayuta Creek (Barton)	2,920	BT	7.50
Oakley Corners Pond	120	TGRM	8.50
Owego Creek, East Branch (Berkshire, Richford)	5,280	BT	7.50
" " " " " "	2,070	BT	7.00
" " West Branch	1,900	BT	8.00
" " " "	7,400	BT	7.50
Susquehanna River	4,600	TGRM	8.50
Tri-County Pond (Richford)	190	RT	8.50
TOMPKINS COUNTY			
Buttermilk Creek (Ithaca)	500	BT	8.00
Cayuga Inlet	5,000	RT	5.50

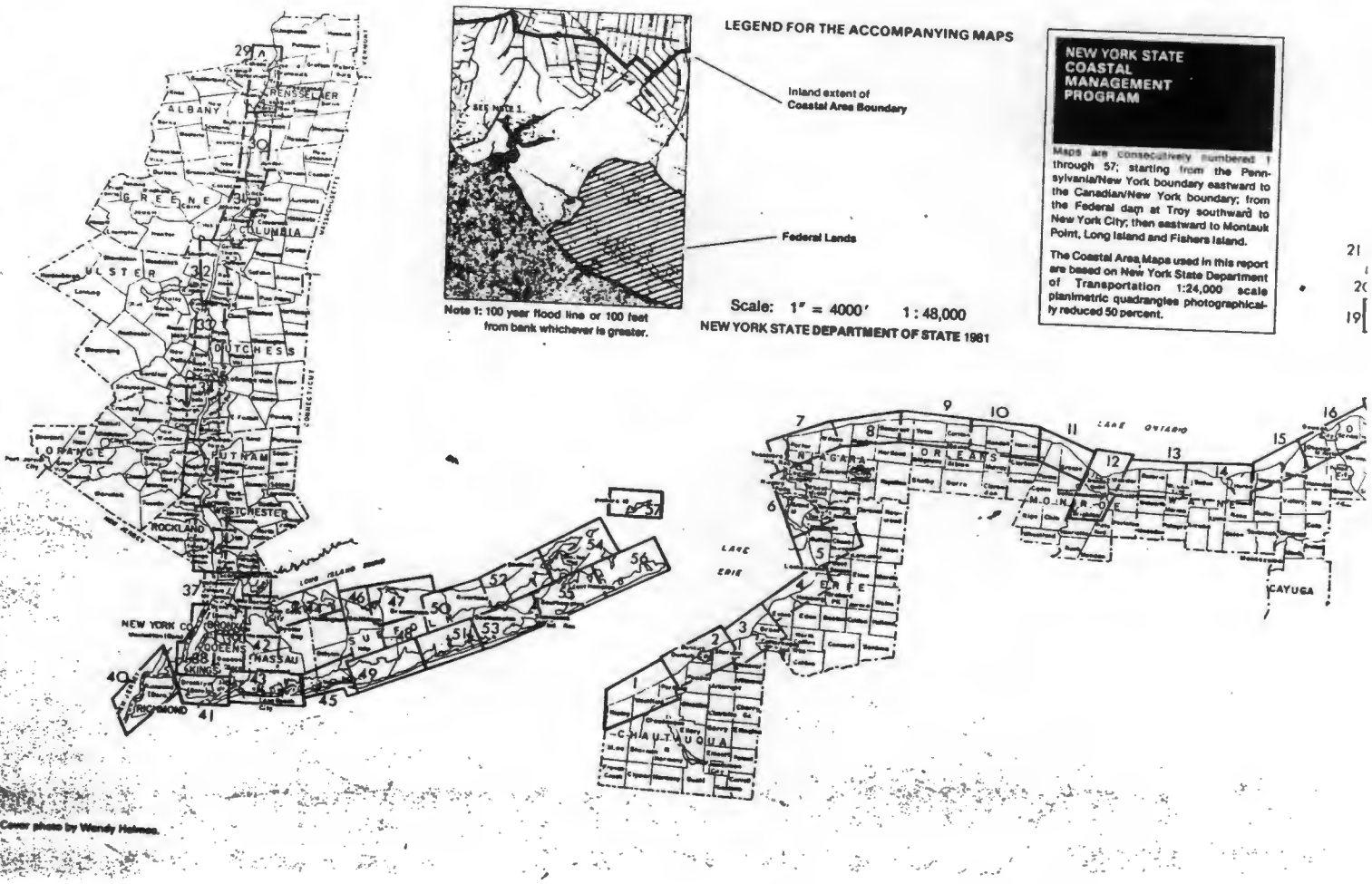
Reference 20

COASTAL AREA MAPS

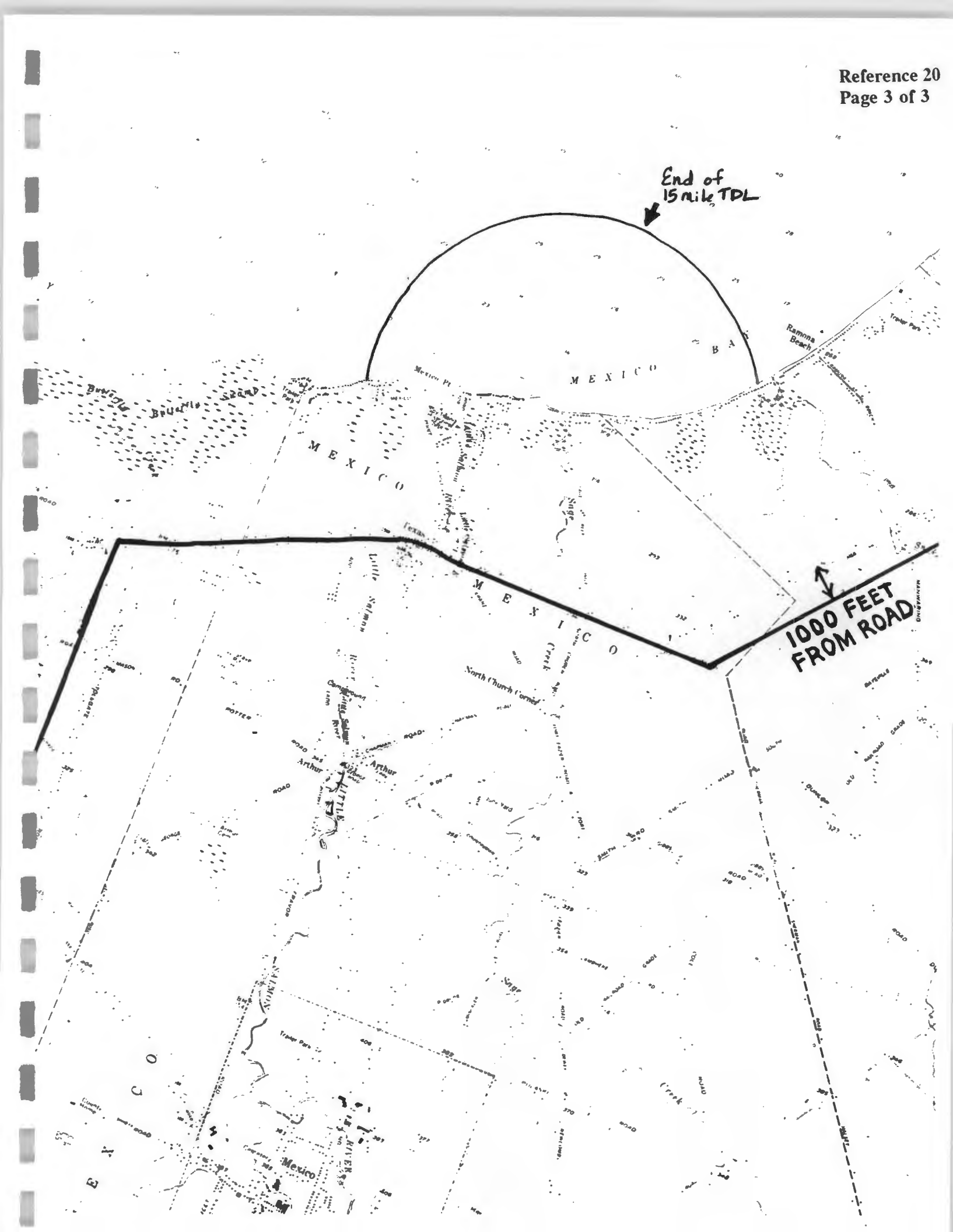
NEW YORK STATE COASTAL MANAGEMENT PROGRAM

HUGH L. CAREY, Governor • BASIL A. PATERSON, Secretary of State

Scale: 1" = 4000'



Cover photo by Wendy Holmes.


End of
15 mile TDL
MEXICO
MEXICO
MEXICO
1000 FEET
FROM ROAD
Ramona
Beach
Arthur
Arthur
Mexico

Reference 21

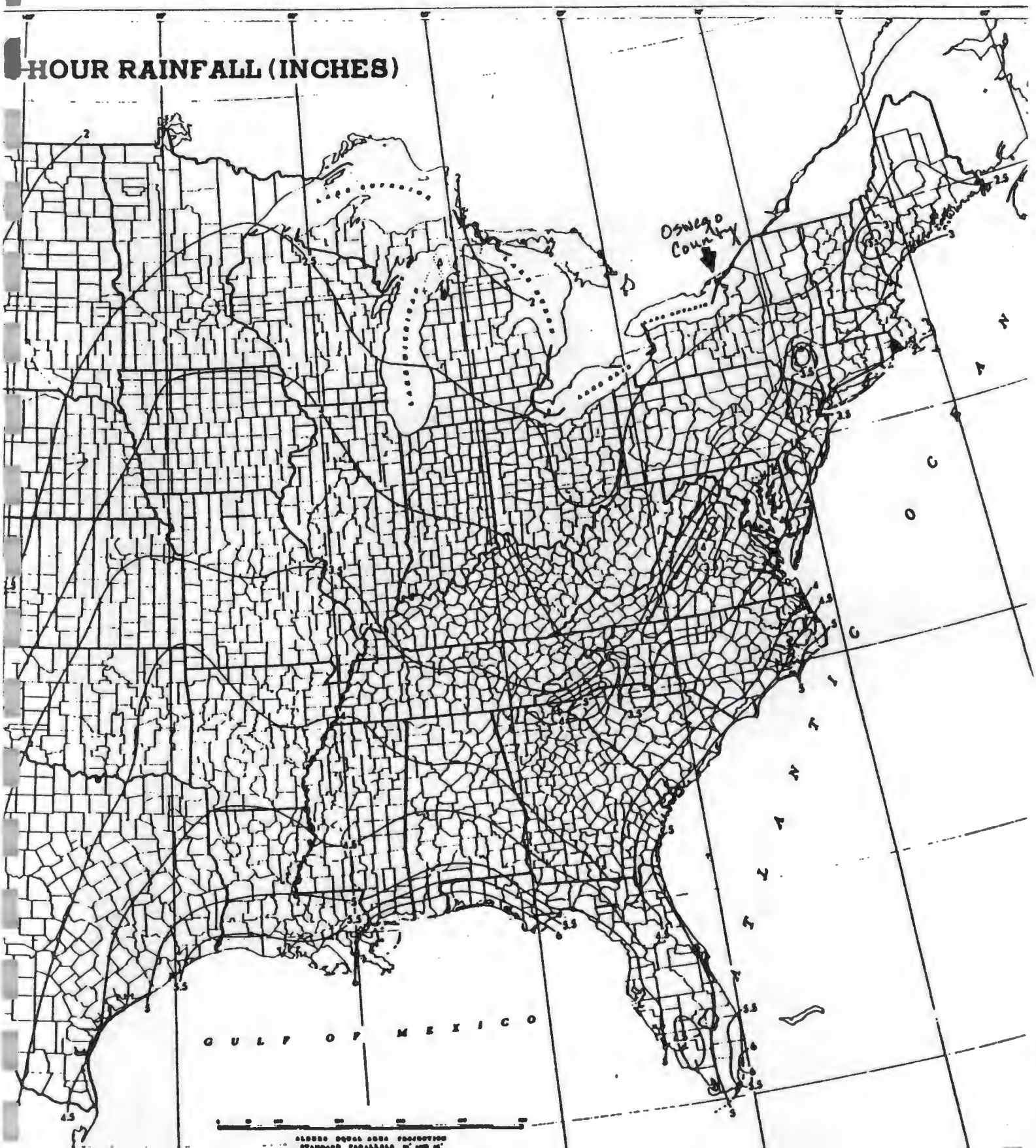
DEPARTMENT OF COMMERCE
H. Hodges, Secretary

TECHNICAL PAPER NO. 40

RAINFALL FREQUENCY ATLAS OF THE UNITED STATES

for Durations from 30 Minutes to 24 Hours and Return Periods from 1 to 100 Years

Prepared by
DAVID M. HERSHFIELD
Cooperative Studies Section, Hydrologic Services Division
for
Engineering Division, Soil Conservation Service
U.S. Department of Agriculture


HOUR RAINFALL (INCHES)
Oswego County
GULF OF MEXICO

Reference 22

PROJECT: Mirabito Property / Fulton Sixth Ward / PAS Holbrook TELECON NOTE

PROJECT NO. 8310.0076 | DATE: 12/12/94 | TIME: 1345

DISTRIBUTION: Files

BETWEEN: Bill McCarthy | OF: NYSDEC-Region 7 | PHONE: (315) 426-7439 main
(315) 427-7500 water resou

AND: M. Christina

DISCUSSION: RE: Wellhead Protection Areas for Oswego County

Bill McCarthy is person I need to talk to, not in → left message

Called 9:40 on 13 DEC 94. Spoke w/ B. McCarthy. He was asked if there were any wellhead protection areas for Oswego County. He said that there was not any for that area

ACTION ITEMS:

Reference 23

EBASCO SERVICE INCORPORATED

TELECON NOTE

PROJECT: PAS Holbrook

PROJECT NO. 8310.0076.0000 5012.6

DATE: 3-10-95

TIME: 1200

DISTRIBUTION:

PAS Holbrook

BETWEEN

Phil Hersbrun

OF: Cecos International

PHONE: (716) 282-2671

AND: Amy Braccia

DISCUSSION:

I called Cecos International to determine The RCRA status of SCA chemical as of December 1980. Phil told me That ~~=~~ Chemical Waste Management bought SCA in 1981. Cecos is not related to SCA. I called chemical Waste Mngmt in Model City, NY @ (716) 694-1303. The Secretary at That office referred me to their legal counsel @ (713) 874-8447. His name is Michael Cannon.

Called Micheal Cannon on 13MAR95 @ 1335. Left voice mail message. He called me back on 17MAR95 @ 1050. I explained that we needed to know the RCRA Status of the SCA facility ~~as~~ inc on DEC 1980. He told me that the facility had ~~submitted~~ mc filed a RCRA Part A in November 1980. So In Dec 1980, the facility had RCRA interim status.

ACTION ITEMS:

EBASCO

Reference 24

OSWEGO COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL DIVISION

OFFICE

INVESTIGATION #	VIOLATION #	TAKEN BY	TIME/DATE	REFERRED TO
78-187		EL MC	8/28/78 10:30	

COMPLAINT

COMPLAINTANT: Mr. Frank Karbowski	AGAINST: Mr. Holbrook
ADDRESS: Town Supervisor, Parish	ADDRESS:
PHONE: 625-7265 (TN) VLG. CTY: Parish	PHONE: (TN) VLG. CTY: Parish

COMPLAINT: Old and new 55 gal. drums being stored on the Holbrook property

DIRECTIONS: Corner of Bengall Rd. and Co. Rt 38. Junk cars in yard

INVESTIGATION

SITE SKETCH

INITIAL INVESTIGATION Observed barrels on Bengall Rd. site. Mailbox had name Holbrook on it. Barrels spread over wide area. Unable to determine number of barrels on site.

D.E.C. also aware of problem. (See copy of D.E.C. complaint ck

INVESTIGATED BY EW

DATE 8/28/78

OWNER	OWNER'S AGENT
NAME	NAME
ADDRESS	ADDRESS
PHONE	PHONE

OWNERSHIP VERIFIED	VERIFICATION
A. COUNTY OFFICE	RECEIVED:
B. LOCALITY OFFICE	☐ YES ☐ NO
C. OTHER (EXPLAIN)	DATE

DWELLING INFORMATION:	OCCUPANT INFORMATION:
A. NO. OF DWELLING UNITS	A. NO. ADULTS
B. NO. UNITS OCCUPIED	B. NO. CHILDREN (UNDER 18)
C. NO. FLOORS IN BLDG.	C. TOTAL OCCUPANTS
D. COMMERCIAL E. OTHER	D. TOTAL NO. EMPLOYEES

DEGREE OF INVESTIGATION:	OTHER AGENCIES INT.	OCCUPANTS REC. AID
A. FLOORS - INC. ATTIC & CELLAR	A.	
B. UNITS	B.	
C. ROOMS	C.	

ENFORCEMENT

CODE ENFORCEMENT

A. NOTICE TO:	ADDRESS:	DATE:
B. SCHEDULED: CONFERENCE DATE	TIME	
C. SCHEDULED: HEARING DATE	TIME	
D. OTHER		

Reference 25

EPA REGION II

SURVEILLANCE & ANALYSIS DIVISION

EMERGENCY RESPONSE & INSPECTION BRANCH

Initial Hazardous Waste Site Field Investigation Report

I. Background

1. Name of Investigator Donald J. Casey and Lawrence R. Moriarty
2. Title Physical Science Administrator and Sanitary Engineer
3. Date(s) of Field Investigation 1/16/80 and 2/3/80
4. Identity of Site Holbrook property
5. Location (Streets, Town, County, State) Bangall Road, Town of Parish, Oswego County, New York
6. Facility owner and facility operator (corporate name, municipality, corporate address, telephone number
   Gayle Holbrook, Bangall Road, Parish, Oswego County, New York
7. Length of time owned by present owner (Unknown) yrs.
8. Prior owner(s) and or operators and years involved
   Unknown

9. Other investigators along (name/title) None

10. Persons Interviewed:

	Name	Affiliation/Title	Telephone	Address
a.	Dan Halton	NYS DEC	315-473-8391	7481 Henry Clay Road Liverpool, NY 13088
b.				
c.				
d.				
e.				
f.				
g.				

II. Nature of Materials Disposed of at Site

1. Types of Wastes: Municiapl _____ Industrial x

2. Characterize Wastes by Industry: Unknown

3. Identify Sources of Industrial Wastes if Appropriate and Possible These barrels were originally sent to Pollution Abatement Services in Oswego, New York

4. Amounts of Hazardous Wastes at Site, Characterized as:

   a. Sludges Deposited Unknown

   b. Liquids Deposited Unknown

   c. Solids Deposited Unknown

   d. Drums (number) Approximately 500

5. Identity of actual chemicals disposed of and amounts if known and if critical:

Chemical	Amount
Unknown: G. Holbrook apparently collected resinous materials originally sent to PAS	

6. How comprehensive and accurate is information on the chemicals deposited on site?

a. Sparse/Written Records do not Exist _____

b. Sparse/Written Records may be Available _____

c. Sparse/Interviewed (identify Enclosed _____) _____

d. Good/Written Records Exist _____

e. Good/Interviewed Knowledgeable Individual (identify _____) _____

III. Description of Dump Site

1. Acreage or Dimensions Estimated as five acres

2. Topography: _____ Hillside _____ Ravine x Flat

3. Visual description (portion covered by drums, where located, condition of drums; cover on landfill exists; liner exists; other impermeable layer exists; odors present; skin, eye, nose irritation; other symptoms apparently caused by site; color of leachate; extent and location of standing pools; path(s) of runoff or surface leaching (access to site; living or dead vegetation and animals):

See photographs which were taken along the road. Mr. Holbrook's house burned down sometime ago. Barrels are scattered all over property.

IV. Description of Surrounding Area

a. Closest Residences (indicate distance from site)

Across road

b. Are Private Wells Used for Water Supply in Surrounding Area? Yes x No ____

(Identify Location(s)) ____

d. Do surrounding homes have basements (below ground).

Yes

e. Estimate residences, other buildings in immediate and (1000 feet or less)

Five feet

(Indicate on Site Map)

f. Identify surface waters in area indicating any direct relationship to site runoff, and distance from site

Small creeks; area has been glaciated.

(Indicate on site map)

g. Indicate surrounding land use as appropriate

Residential and farm

h. Immediate area is: x Residential; ___ Commercial;

_____ Agricultural; x Natural

V. Geology and Groundwater

Indicate information gained on direction of groundwater flow, soil types near and under the site and their permeabilities, depth of groundwater table, estimate of erosion and runoff

Unconfined aquifer; depth to water table estimated 15';

surface drainage at site is unadjusted due to glaciation.

VI. Sampling and Chemical Analysis of Samples

a. Has anyone taken samples in the past?

Date No Taken By _____ Analyzed By _____

Date _____ Taken By _____ Analyzed By _____

Date _____ Taken By _____ Analyzed By _____

Date _____ Taken By _____ Analyzed By _____

(Request copies of any available reports)

b. Samples taken? No If yes, record on proper forms

VII. Status of Local, State Involvement

1. What permits exist for the facility? (indicate number)

   State would like site cleaned up.

2. What previous studies have been sponsored previously? (request a copy)

   See enclosed memoranda

3. Has county/local health official investigated and reported on this site? (request a copy)

   Yes. See enclosed memoranda

4. What are local plans regarding this site?

   Unknown

5. What are State plans regarding this site?

   Unknown

6. What are the industry's plans, if any, regarding this site?

VIII. Imminent Hazard Aspects of Site

1. Presence of disease clusters or health problems?

   Fire, spillage.

2. Potential ecological effects in general or specific wildlife or other natural resources which may be adversely affected.

Spillage could contaminate soil, possibly groundwater.

Reference 26

NUS CORPORATION

POTENTIAL HAZARDOUS WASTE SITE

PRELIMINARY ASSESSMENT

Holbrook Property
Site Name

NYD000511600
EPA Site ID Number

Bangall Road, Parish, New York
Address

02-8303-76
TDD Number

Date of Site Visit: None conducted

SITE DESCRIPTION

The 5 to 7 acres of private property located in Oswego County, N.Y., countained approximately 500 drums of a resinous material which were allegedly earmarked for disposal at PAS in Oswego. The site was cleaned up by the Oswego County Health Department in late November, 1980. All drums and contaminated soil were sent to SCA for disposal. The site is presently wooded or covered by weeds, shrubs and bushes. Well samples taken by the county from nearby residences yielded no detectable traces of organic solvents and heavy metals.

PRIORITY FOR FURTHER ACTION: High___ Medium___ Low X

RECOMMENDATIONS

Since the Oswego County Health Department has removed all contaminated material on site, no further action is recommended.

Prepared by: Jerry Cirilli
of NUS Corporation

Date: 5/24/84

 NYD000511605

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

EPA

I. IDENTIFICATION
01 STATE: N Y | 02 SITE NUMBER: New Site

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER				
Holbrook Property	Bangall Road				
03 CITY	**04 STATE**	**05 ZIP CODE**	**06 COUNTY**	**07 COUNTY CODE**	**08 CONG DIST**
Parish	N.Y.	13131	Oswego	75	29
09 COORDINATES LATITUDE: 43° 26' 00" N	LONGITUDE: 076° 06' 00" W				

10 DIRECTIONS TO SITE (Starting from nearest public road)
Interstate 81, to exit 34. Take Rte. 104 east to first intersection. Make right turn onto Bangall Rd, proceed for approximately 1 mile, then make right onto Grafton Square Road. Site is about ¼ mile on right side.

III. RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residential)			
Wendal Holbrook	Bangall Road			
03 CITY	**04 STATE**	**05 ZIP CODE**	**06 TELEPHONE NUMBER**	
Parish	N.Y.	13131	( )	
07 OPERATOR (If known and different from owner)	**08 STREET** (Business, mailing, residential)			
Not applicable				
09 CITY	**10 STATE**	**11 ZIP CODE**	**12 TELEPHONE NUMBER**	
			( )	

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

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)
☐ A. RCRA 3001 DATE RECEIVED: ___/___/___ (MONTH DAY YEAR) ☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: ___/___/___ (MONTH DAY YEAR) ☒ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION
☒ YES ☐ NO DATE 12/2/80 (MONTH DAY YEAR)
BY (Check all that apply)
☐ A. EPA ☐ B. EPA CONTRACTOR ☐ C. STATE ☐ D. OTHER CONTRACTOR
☒ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: _____ (Specify)
CONTRACTOR NAME(S): _____

02 SITE STATUS (Check one)
☐ A. ACTIVE ☒ B. INACTIVE ☐ C. UNKNOWN

03 YEARS OF OPERATION
prior to late 1970's (BEGINNING YEAR) (ENDING YEAR) ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED
Unknown resinous materials.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION
Low potential for damage if material leaked from drums and reached groundwater. The drums were removed by the Oswego County Health Dept. in 1980.

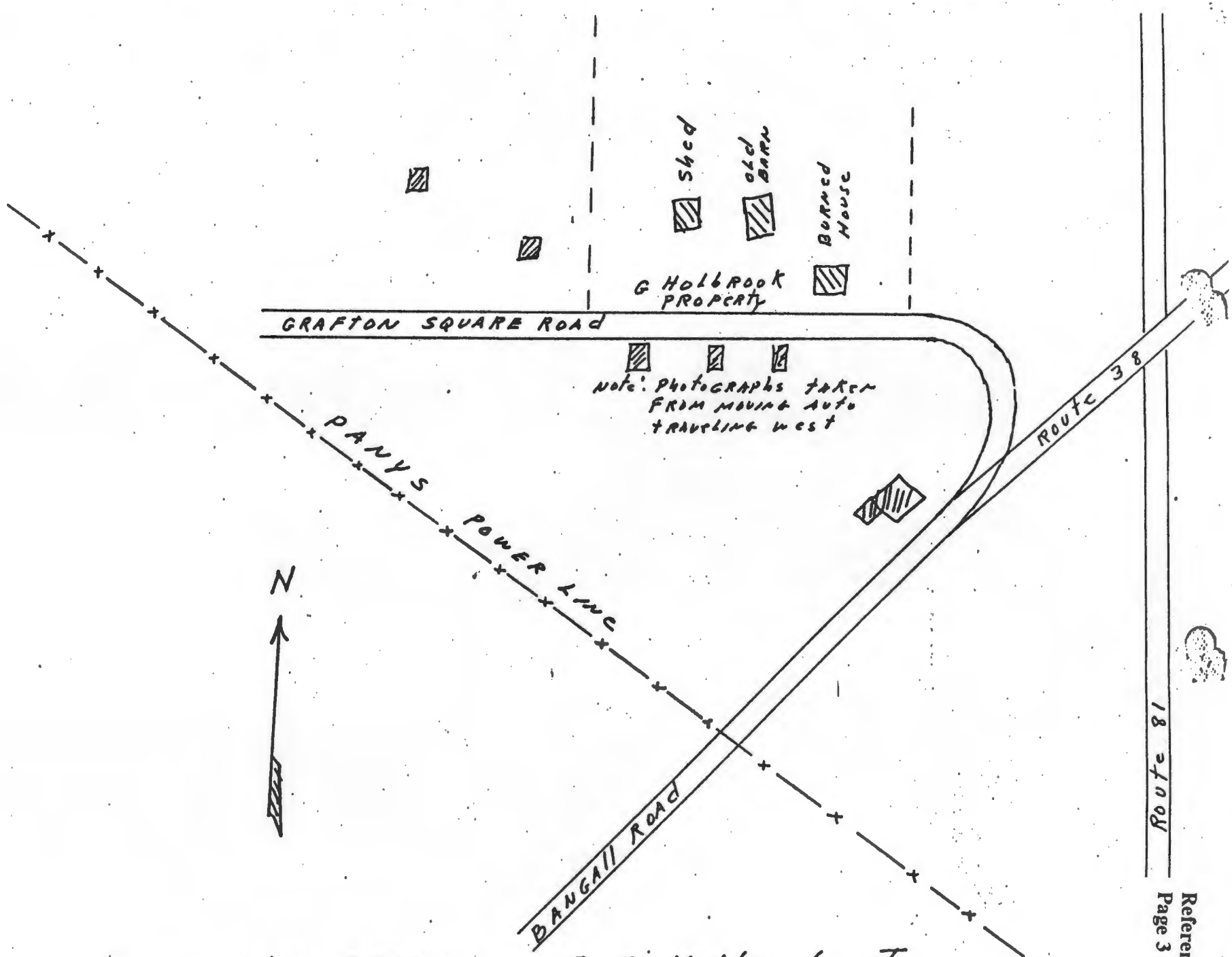
V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 3 - 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)

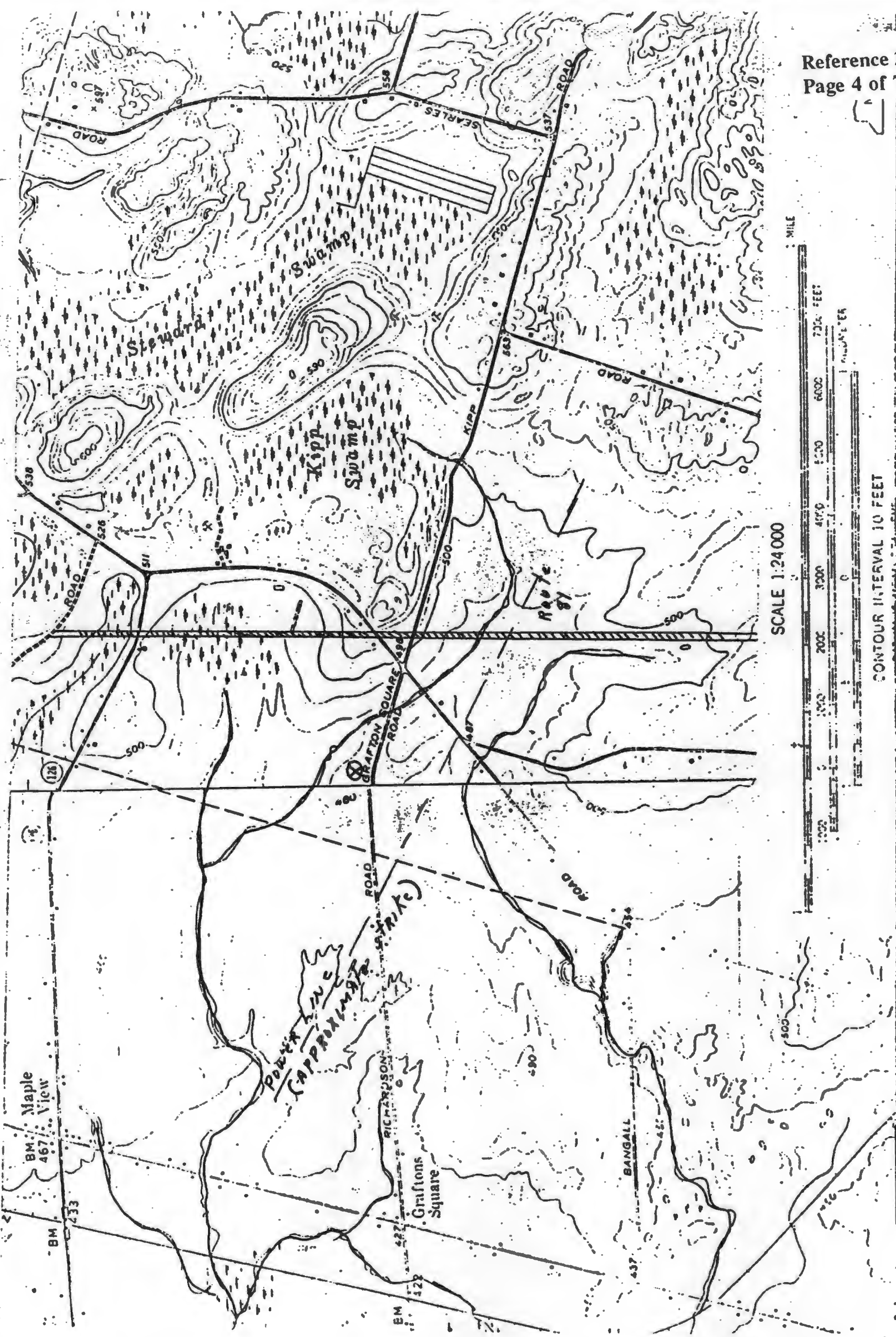
VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)			03 TELEPHONE NUMBER
Mark Haulenbeek	U.S. EPA Region II			(201) 321-6685
04 PERSON RESPONSIBLE FOR ASSESSMENT	**05 AGENCY**	**06 ORGANIZATION**	**07 TELEPHONE NUMBER**	**08 DATE**
Jerry Cirilli		NUS Corp. FIT II	(201) 225-6160	5/24/84 (MONTH DAY YEAR)

EPA FORM 2070-12 (7-81)



SCHEMATIC DRAWING OF G. HOLBROOK SITE.


Seward Swamp
Kipp Swamp
KIPP ROAD
SEARLES ROAD
GRAFTON SQUARE ROAD
RICHARDSON ROAD
BANGALL ROAD
ROAD
Route 81
POWER LINE (APPROXIMATE STRIKE)
Maple View
Graftons Square
BM 467
BM 433
BM 422
SCALE 1:24000
CONTOUR INTERVAL 10 FEET

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
N Y	New site

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

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

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

TONS _____

CUBIC YARDS _____

NO. OF DRUMS 500 Estimated

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

Suspected Characteristics

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	500	55 gallon drums	These drums were removed late
OLW	OILY WASTE			November - December 2, 1980.
SOL	SOLVENTS			They were disposed at SCA- Model City.
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

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

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

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)

Evan Walsh, Senoir Public Health Sanitarian, Oswego County Health Department (315) 349-3260.
U.S. EPA files

EPA

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

I. IDENTIFICATION
01 STATE: N Y | 02 SITE NUMBER: New site

II. HAZARDOUS CONDITIONS AND INCIDENTS

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

Some potential for groundwater contamination exists, although groundwater wells are believed to be tapping bedrock not the shallow glacial tills which would be more accessible to contamination.

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

No potential exists, although all drums have been removed from site.

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

No potential presently exists, however in June, 1980, faint odors were detected from certain drums. All drums have been removed from site.

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

No potential exists at the present time. All drums have been removed from site.

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

Site is unoccupied, drums have been removed. Direct contact with waste has been eliminated.

01 ☒ F. CONTAMINATION OF SOIL — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: 0.1 (Acres) — 04 NARRATIVE DESCRIPTION

All visibly contaminated soil was removed by the county. Contaminated subsurface soil may still be present.

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

No potential for drinking water contamination. Five private wells closest to the site were tested in Spring 1980. No organic solvents or heavy metals were detected. Drinking water is derived from deep bedrock aquifers.

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

No potential exists, there are no workers on or adjacent to site.

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

No potential exists. Private wells were tested prior to drum removal and found to be free of contaminants.

EPA

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

I. IDENTIFICATION
01 STATE: N Y | 02 SITE NUMBER: New site

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

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

Low potential for damage to flora exists via uptake from soil of any spilled contaminants. Visibly contaminated soil has been removed. Site is presently half wooded and grass covered.

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

No known damage to fauna exists.

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

Low potential exists for contamination of food chain via ingestion of vegetation.

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES (Spills/Runoff/Standing liquids/Leaking drums) — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 100
04 NARRATIVE DESCRIPTION

Drums were dumped in a random fashion. Most drums were reported in fair condition although there was some contaminated runoff and soil as a result of leakage from these drums.

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

No damage to offsite property reported.

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

No potential exists.

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

A potential may exist since site is unoccupied.

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

None

III. TOTAL POPULATION POTENTIALLY AFFECTED: 100

IV. COMMENTS

From late November - December 2, 1980, the Oswego County Health Department removed approximately 500 drums from the site. Resin material and obviously contaminated soil were also removed. All materials were sent to SCA- Model City for disposal.

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

Evan Walsh, Senior Public Health Sanitarian, Oswego County Health Department, (315) 349-3260
U.S. EPA files

EPA FORM 2070-12 (7-81)

Reference 27

Department of Environmental Conservation

Division of Water

New York State Water Quality 1994

Submitted Pursuant to Section 305(b) of the Federal Clean Water Act

June 1994

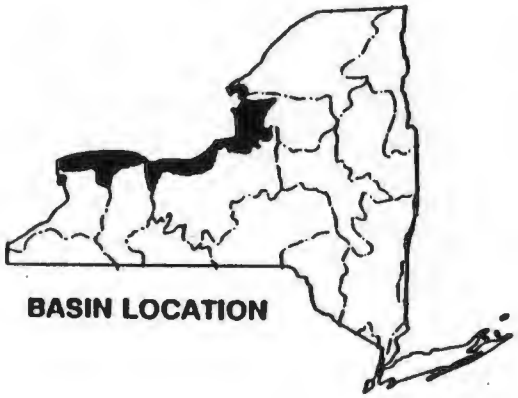
New York State Department of Environmental Conservation
MARIO M. CUOMO, *Governor* LANGDON MARSH, *Commissioner*

NEW YORK STATE WATER QUALITY 1994

Submitted Pursuant to
Section 305(b) of the
Federal Clean Water Act
Amendments of 1977 (PL 95-217)

Prepared by:

Quality Evaluation Section
Bureau of Monitoring & Assessment
Division of Water
New York State Department of Environmental Conservation
50 Wolf Road - Room 328
Albany, N.Y. 12233-3503



Lake Ontario Drainage Basin

EBASCO SERVICES INCORPORATED

me

TELECON NOTE

PROJECT: ~~Mirabito Property~~ & PAS Holbrook

PROJECT NO. 9310.0076 | DATE: 13 DEC 94 | TIME:

DISTRIBUTION: File

BETWEEN: | OF: | PHONE:

AND: M. Christina

DISCUSSION:

Call to Oswego County Planners Office (315)349-8292
Area of PAS Holbrook site — No Flood map, Page not Printed, Area in Zone C. No Flood map available.

Call to FEMA, Spoke with Chantel 12/13/94 (800) 358-9616
She confirmed that if the above was on the County Mosiac Map that it is not in a Flood Zone & that no FEMA map is available for the area

ACTION ITEMS:

Reference 15

EBASCO SERVICE INCORPORATED

TELECON NOTE

PROJECT: PAS Holbrook Property Site

PROJECT NO. 8310.0076.0000.50126 | DATE: 13 JUN 95 | TIME: 1440

DISTRIBUTION:

BETWEEN Cindy Whitfield | OF: NYS DEC | PHONE: (518)457-9588

AND: Michele Christina

DISCUSSION:

Cindy is in charge of the NYSDEC investigation. They conducted a site visit to the Holbrook Property on 25 MAY 95. There were a few drums to the left of the house. They did have the "GE" labels on them. PID readings around these drums were above background. She is not sure when/if the NYSDEC will sample property. These appear to be same drums noted in 1992 ES site vis

24 JUL 95 @ 1100. Spoke w/ Cindy Whitfield. Re: data from NYSDEC 1988 sampling event. She said that there probably was data validation conducted on 1988 analytical data, however it may not be present. She will check for copies of Form I's & any data packages. She indicated that the Engineering Science data summary may be all that is available regarding analytical data

ACTION ITEMS:

EBASCO

Reference 16

Geology and Ground-Water Resources of Oswego County, New York

U.S. GEOLOGICAL SURVEY
Water-Resources Investigations 81-60

Prepared in cooperation with
OSWEGO COUNTY PLANNING BOARD

50272-101

REPORT DOCUMENTATION PAGE	1. REPORT NO.	2.	3. Recipient's Accession No.

4. Title and Subtitle
Geology and ground-water resources of Oswego County, New York

5. Report Date
1982

6.

7. Author(s)
Todd S. Miller

8. Performing Organization Rept. No.
USGS/WRI 81-60

9. Performing Organization Name and Address
U.S. Geological Survey
Water Resources Division
343 U.S. Post Office & Courthouse
Albany, New York 12201

10. Project/Task/Work Unit No.

11. Contract(C) or Grant(G) No.
(C)
(G)

12. Sponsoring Organization Name and Address
U.S. Geological Survey
Water Resources Division
343 U.S. Post Office & Courthouse
Albany, New York 12201

13. Type of Report & Period Covered
Final (1979-80)

14.

15. Supplementary Notes

16. Abstract (Limit: 200 words)

Unconsolidated deposits of Pleistocene and Holocene age form a nearly continuous cover in Oswego County. Pleistocene deposits consist of lodgment and ablation tills; outwash; kame, beach, and wave-delta sand and gravel; and lacustrine sand, silt, and clay. Holocene deposits consist of peat and muck deposited in wetlands and alluvial silt, sand, and gravel deposited in stream valleys.

Unconsolidated deposits contain sufficient water for domestic and small farm needs except in areas mantled by silt and clay. Sand and gravel deposits are the best source of large quantities of water. Aquifers in glacial outwash are common in the eastern Tug Hill region, whereas kame, esker-kame, and beach aquifers predominate in the eastern and central regions. The principal sand and gravel aquifer, known as the Lacona-Williamstown aquifer, is 20 miles long, 0.5 to 3 miles wide, and 10 to 85 feet thick. Wells tapping the aquifer yield from 220 to 800 gallons per minute.

Fracturing, rather than rock type, is the controlling factor in the water-producing capacity of bedrock. Bedrock near or at the land surface provides adequate supplies for domestic and farm needs. Shallow wells in bedrock generally have water of fair to good quality, but mineral content increases with depth.

17. Document Analysis a. Descriptors

Glacial drift, Ground-water resources, Water wells, Glacial aquifers

b. Identifiers/Open-Ended Terms

Glacial geology; Oswego County, N.Y.

c. COSATI Field/Group

18. Availability Statement
No restriction on distribution

19. Security Class (This Report)
UNCLASSIFIED

21. No. of Pages
41

20. Security Class (This Page)
UNCLASSIFIED

22. Price

(See ANSI-Z39.18) See Instructions on Reverse

OPTIONAL FORM 272 (4-77)
(Formerly NTIS-35)
Department of Commerce

GEOLOGY AND GROUND-WATER RESOURCES OF OSWEGO COUNTY, NEW YORK

By Todd S. Miller

Water-Resources Investigations 81-60

Prepared in cooperation with
OSWEGO COUNTY PLANNING BOARD

Ithaca, New York

1982

UNITED STATES DEPARTMENT OF THE INTERIOR

JAMES G. WATT, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

For additional information write to:

U.S. Geological Survey
521 W. Seneca Street
Ithaca, New York 14850
(607) 272-8722

CONTENTS

	Page
Abstract	1
Introduction	3
Purpose and scope	3
Methods	3
Acknowledgments	3
Topography and drainage	3
Geology	4
Bedrock	6
Surficial geology	10
Lodgment till	10
Ablation till	10
Sand and gravel	11
Kames and eskers	11
Outwash	11
Beaches, bars, and shoals	12
Wave-delta deposits	13
Delta deposits	13
Lake sediments	13
Aeolian sand	13
Holocene deposits	16
Wetlands	16
Alluvium	16
Ground-water occurrence	16
Bedrock	17
Lodgment till	17
Ablation till	18
Lake sediments	18
Aeolian sand	18
Wetlands	19
Sand and gravel	19
Summary and conclusions	22
Selected references	23

ILLUSTRATIONS

Figure 1.--Map showing location of Oswego County and physiographic provinces of New York	4
2.--Map showing surficial geology of Oswego County	5
3.--Diagram showing mode of deposition of common glacial deposits	6
4.--Cross section showing relative position of bedrock formations in Oswego County	7

INTRODUCTION

Oswego County, in north-central New York, has an area of 964 mi^2. Approximately 70 percent of the county's residents depend on ground water. A thorough knowledge of the local hydrogeology is needed to aid the county in developing and managing its ground-water resources.

Purpose and Scope

This report describes the relationship between geology and ground-water occurrence in Oswego County and indicates how much ground water is likely to be available in any given area. It is a companion to a series of 29 maps produced during 1978-80[1] to document the surficial deposits in the county's 29 quadrangles and includes a compilation of data on representative wells in each quadrangle.

Methods

Surficial geology and well locations were compiled on the 7.5-minute topographic quadrangle maps cited in the list of references. Well data were collected from well owners, drillers, and public and industrial supply records to document ground-water conditions. Data from selected wells are presented in table 1 (at end of report).

Acknowledgments

This study was done in cooperation with the Oswego County Planning Board. Thanks are given to the Oswego County Planning Board, drillers, and individual well owners who provided well information, and to Dr. Ernest H. Muller of Syracuse University for his assistance in mapping and for providing information on geologic conditions.

TOPOGRAPHY AND DRAINAGE

Oswego County lies within parts of two physiographic provinces--the Erie-Ontario Plain and the Tug Hill Plateau (fig. 1; also Miller, 1924). The western and central parts (Erie-Ontario Plain) consist of gently rolling hills ranging in altitude[2] from 246 to 600 ft; the northeastern section, which occupies part of the Tug Hill Plateau, slopes northeastward from the former shoreline of proglacial Lake Iroquois at 500 ft to the northeast corner of Oswego County at 1,720 ft (fig. 2). Location of Oswego County in relation to the physiographic provinces of New York State is shown in figure 1.

Glacial deposits overlie most of Oswego County. The Erie-Ontario Plain is characterized by numerous long, parallel, elliptical hills called drumlins; the Tug Hill Plateau contains irregular, low, knobby mounds of ablation moraine overlying drumlins and bedrock.

---

1 Quadrangle maps are listed in references section.
2 Altitudes are in feet above National Geodetic Vertical Datum of 1929 (NGVD).

The entire county lies within the Lake Ontario drainage basin. Stream gradients on the Erie-Ontario Plain are low, but in the Tug Hill region, they range from low to steep. Major factors that control the direction of streamflow are the regional bedrock slope toward Lake Ontario and orientation of the drumlins.

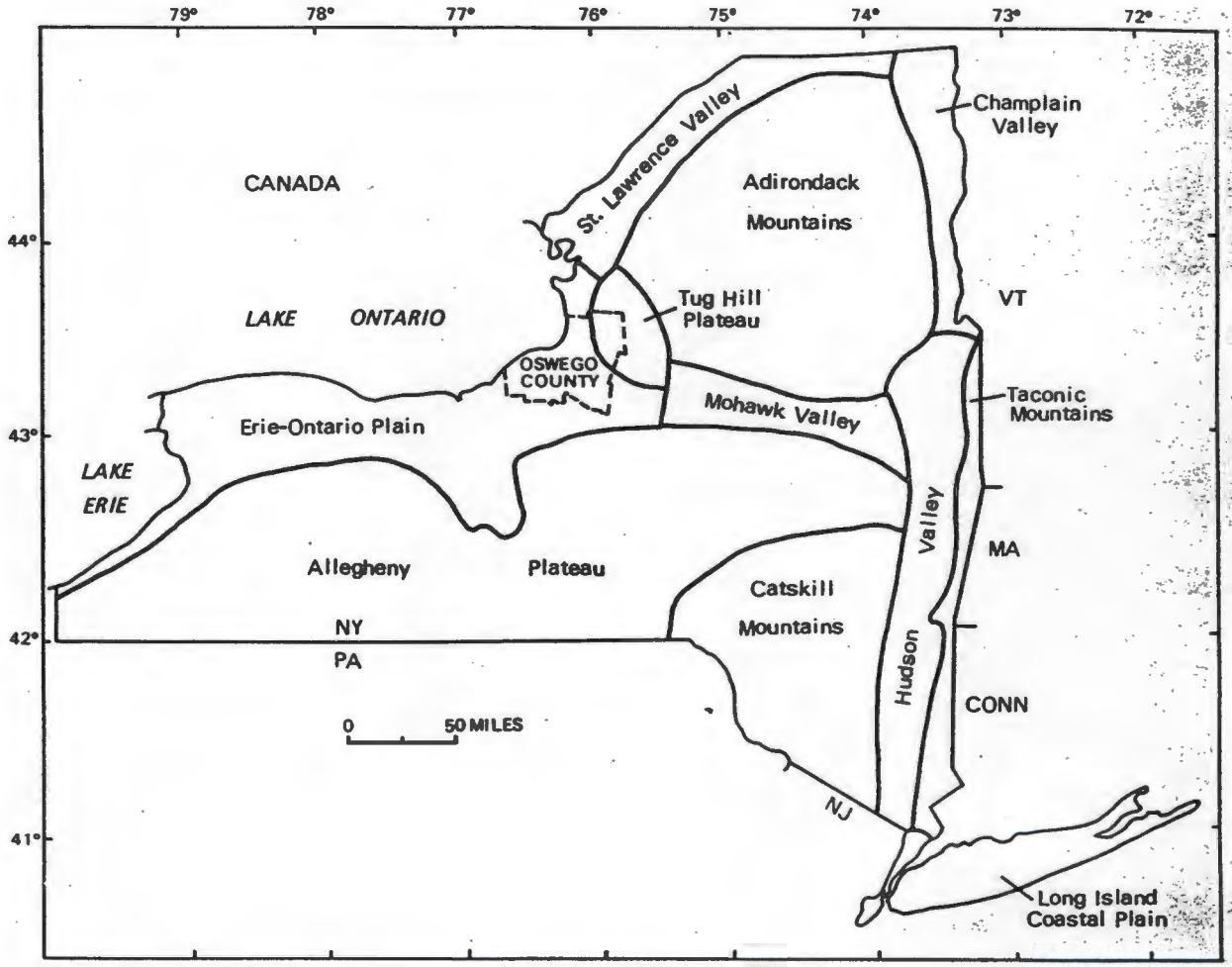


Figure 1.--Location of Oswego County and physiographic provinces of New York (Modified from Miller, 1924.)

GEOLOGY

Unconsolidated Quaternary sediments, deposited during and after the last glaciation (Wisconsinan), overlie most of the bedrock surface (fig. 2). Some bedrock is exposed where erosion has removed the overlying glacial sediments along segments of the Lake Ontario shoreline, in glacial meltwater channels on the Tug Hill Plateau, and in some channels of present drainage systems. These exposures indicate that the bedrock surface has a low and gently undulating relief in the Erie-Ontario Plain and a gently sloping surface with many deep ravines incised by glacial meltwater on the Tug Hill Plateau.

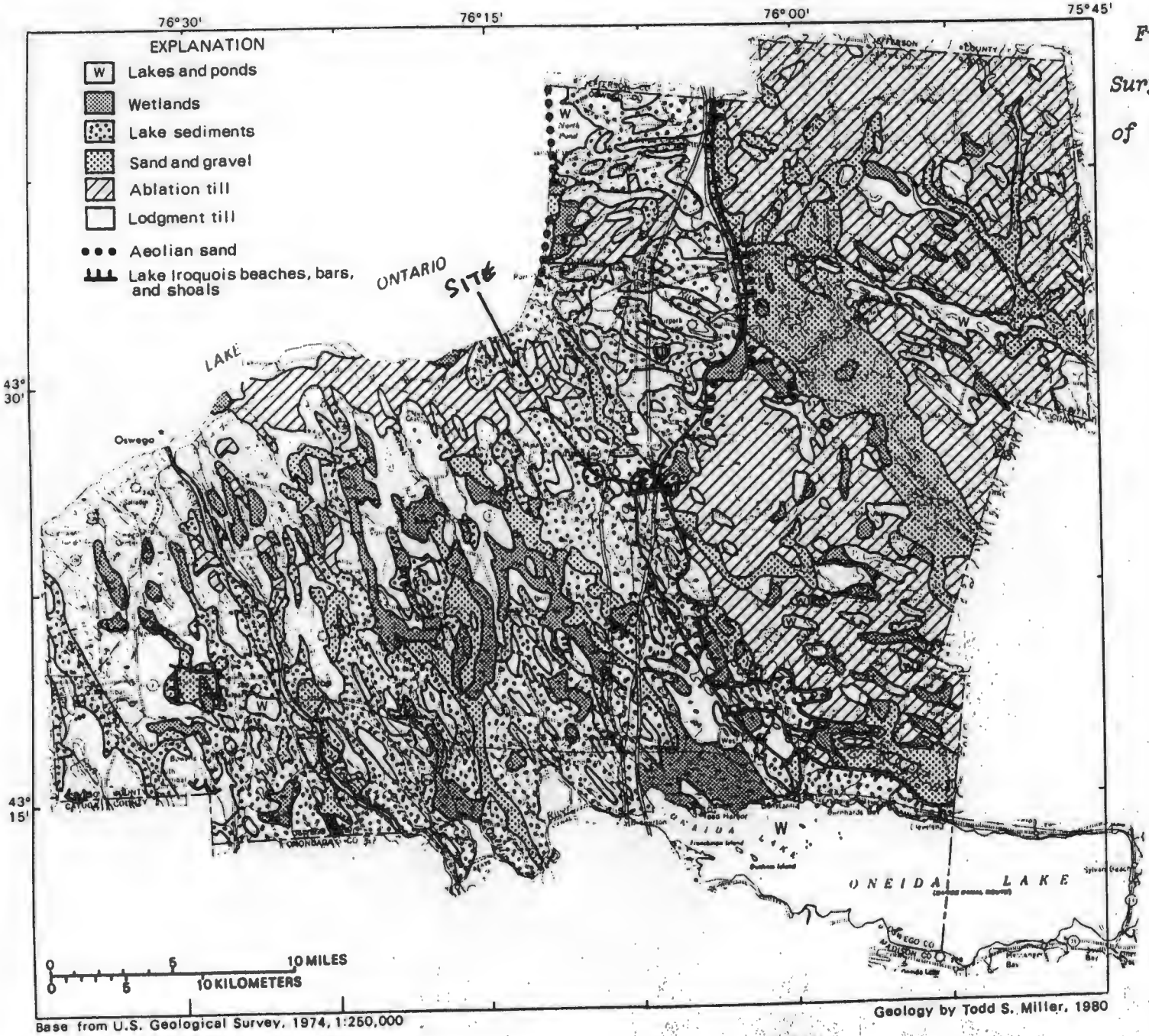


Figure 2. Surficial geology of Oswego County.

Glacial deposits consist of lodgment and ablation tills; kame, esker, outwash, beach and wave-delta sand and gravels; and proglacial lake deposits of fine sand, silt, and clay. End or recessional moraines deposited at the ice front form arcuate ridges consisting of ablation and lodgment tills. Ground moraine consisting predominantly of lodgment till but commonly having a veneer of ablation till at the surface forms drumlins. The origin of selected types of glacial deposits is depicted in the geologic section in figure 3; the distribution of these deposits is shown in figure 2. The surficial geology is shown in greater detail in the 29 quadrangle maps prepared during this study. (See list of references.)

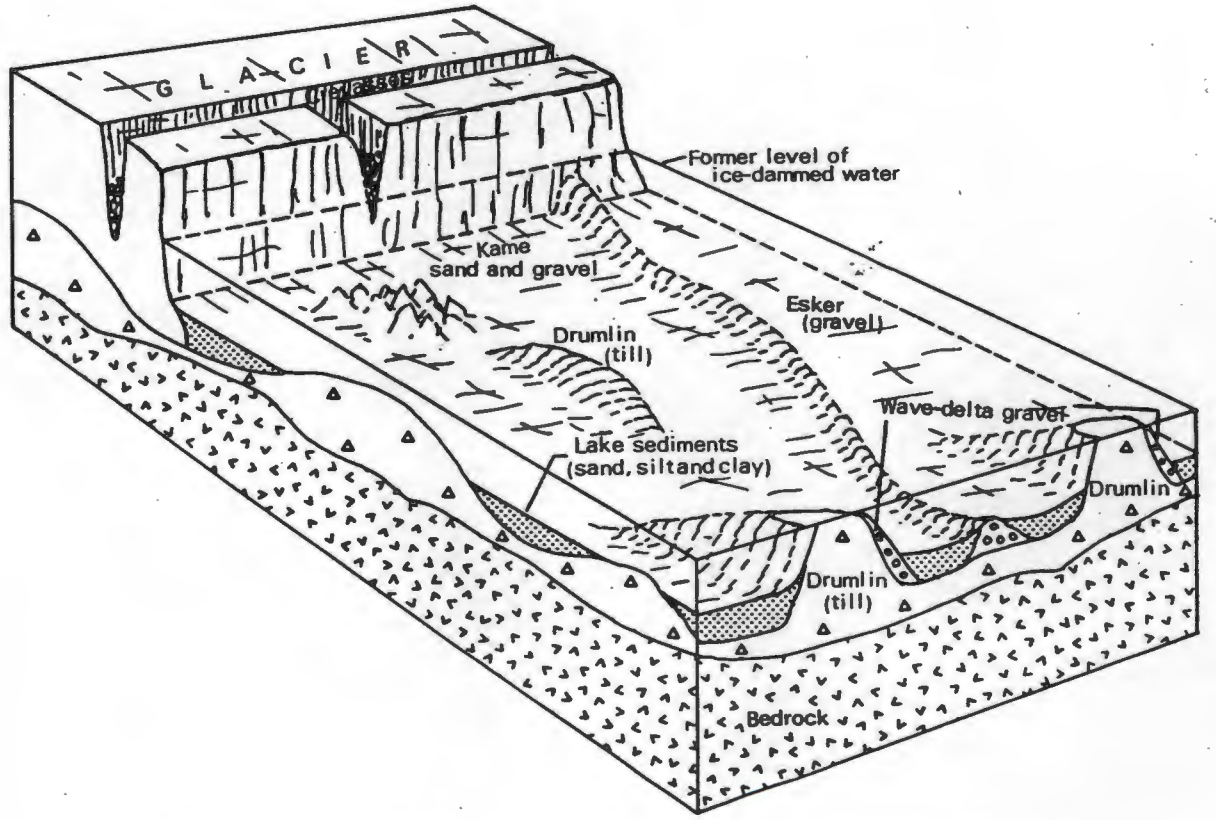


Figure 3.--Mode of deposition of common glacial deposits.

Bedrock

The bedrock consists of nearly flat-lying Ordovician and Silurian sedimentary formations that were deposited in marine and terrestrial environments 400 to 500 million years ago (Broughton and others, 1970). Older formations of Late Ordovician age crop out in northern Oswego County, and successively younger formations are exposed from there southward (figs. 4, 5). The younger rock units overlie the older units so that the age of units increases with depth. Bedrock dips to the southwest at approximately 50 ft/mi. A section of the bedrock formations is shown in figure 4.

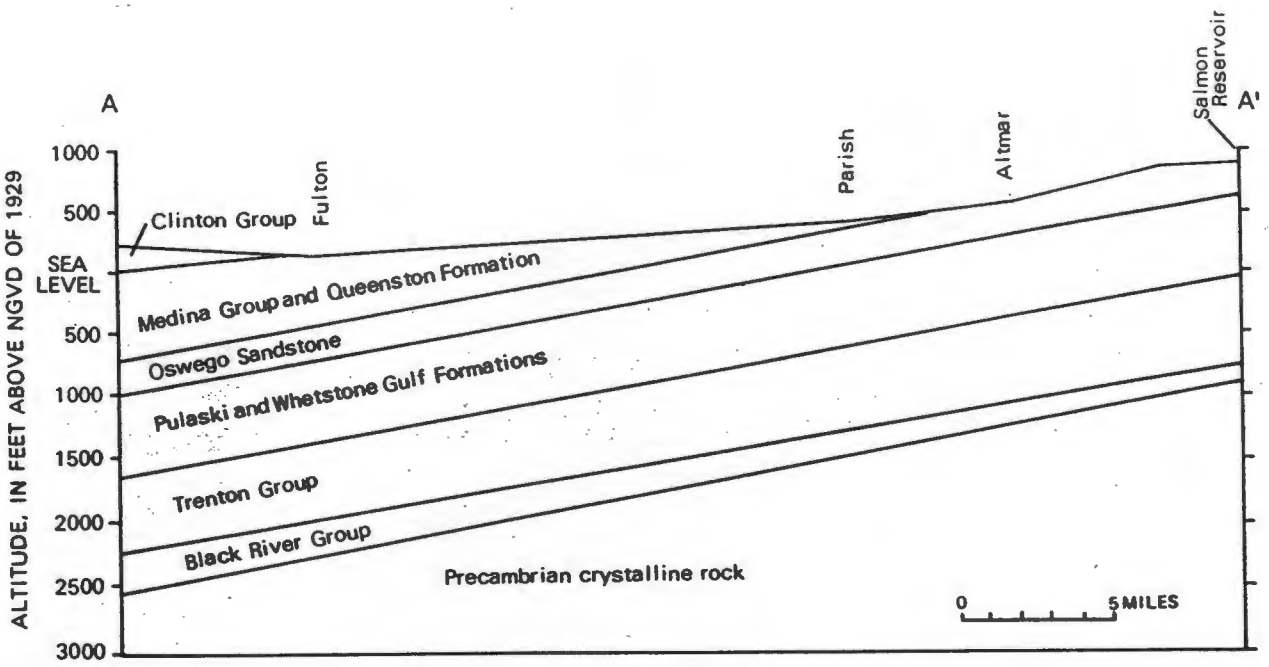


Figure 4.--Section showing relative position of bedrock formations in Oswego County. Location of section is shown in figure 5.

The oldest exposed formations are the fossiliferous Pulaski Formation and the Whetstone Gulf Formation (the local name), which grade upward from predominantly shale in the Whetstone Gulf and lower part of the Pulaski to siltstone in the upper part of the Pulaski (figs. 4 and 5). The overlying Oswego Sandstone grades upward from shale to very fine-grained sandstone in the lower part to fine-grained sandstone in the upper part.

The Queenston Formation and Medina Group (designated Albion Group by the U.S. Geological Survey) are commonly mapped together because they are difficult to differentiate. Both contain red shale, siltstone, and sandstone, and both were deposited under tidal flat and deltaic conditions (Patchen, 1978 p. 368). Exposure of Queenston and Medina sediments to an aerobic environment allowed iron to oxidize and produced the red color. Together the Pulaski, Oswego, and Queenston sequence represents the Queenston Delta, which extended westward from the ancient Taconic Mountains in the eastern part of New York State (fig. 1), the source of sediment for these formations.

Overlying and cropping out south of the Queenston-Medina sequence is the Clinton Group (figs. 4 and 5), which consists of green and gray marine sandstone, siltstone, shale, and hematitic limestone. The Clinton rocks are the youngest in the county.

Two significant bedrock troughs have been noted--the Salmon River trough near the village of Redfield and the Ninemile Creek trough west of the village of Hannibal (fig. 6). These troughs are preglacial valleys that were alined in the direction of glacier flow and extensively scoured. These troughs are typically U-shaped and contain varying amounts of drift.

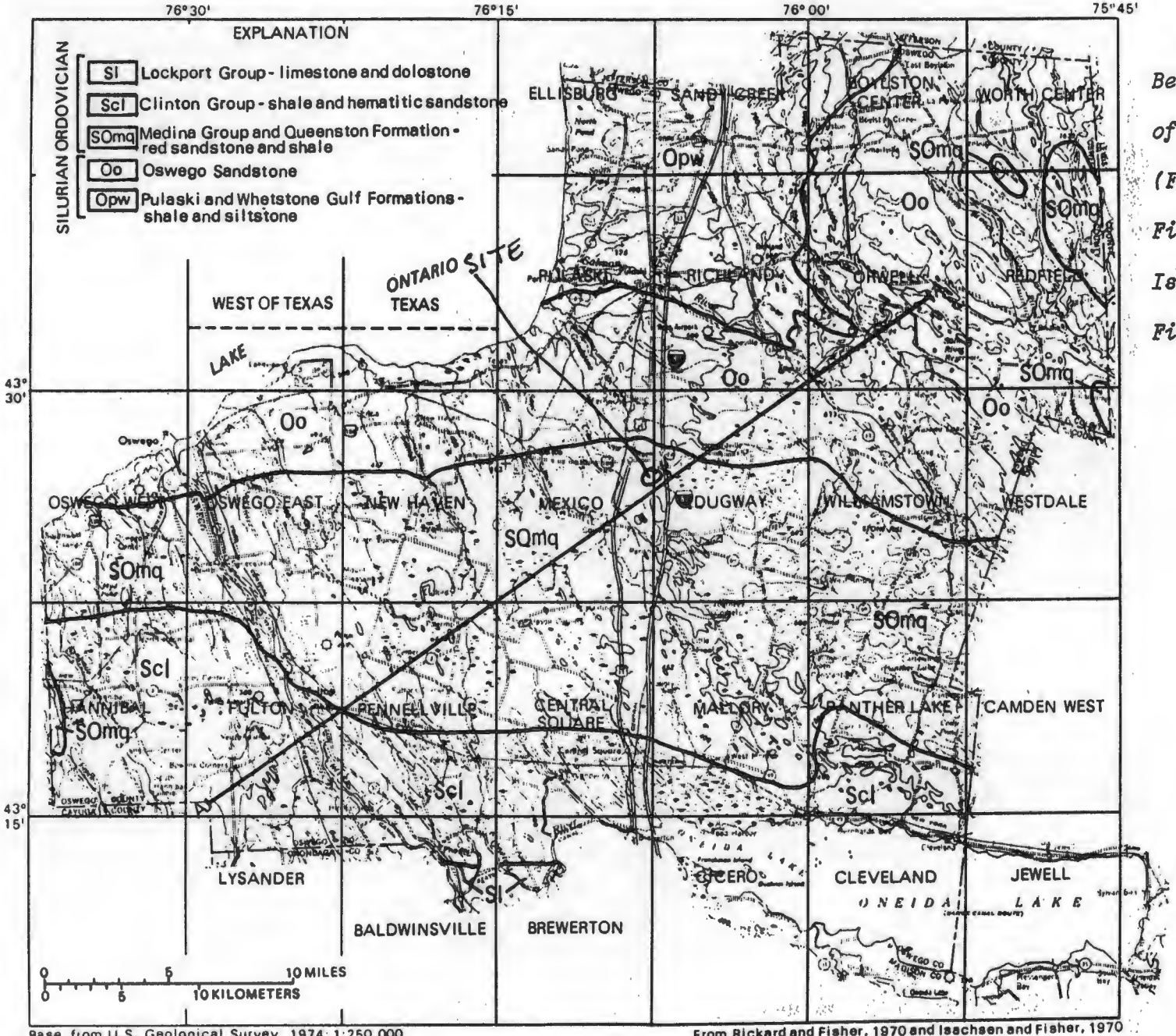
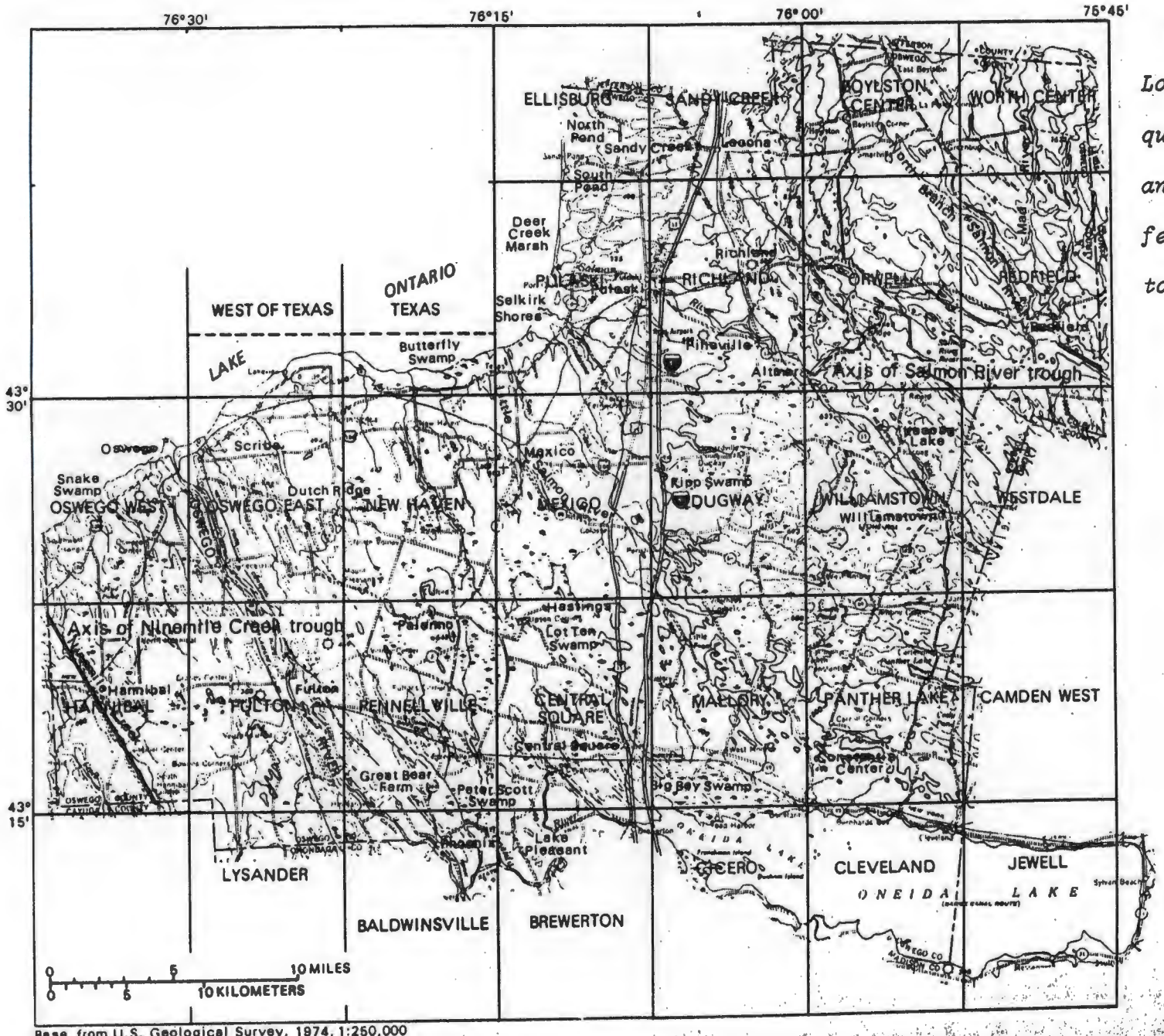


Figure 5. Bedrock geology of Oswego County. (From Rickard and Fisher, 1970, and Isachsen and Fisher, 1970.)



Base from U.S. Geological Survey, 1974, 1:250,000

Figure 6. Location of quadrangles and geographic features referred to in text.

Surficial Geology

The unconsolidated materials that cover the bedrock were deposited during and after the advance of Pleistocene ice sheets. The common types of deposits and their mode of formation are described in the paragraphs that follow.

Lodgment Till

Lodgment till was deposited beneath the advancing glacier and consists of poorly sorted sediments ranging in size from clay to boulders. This compact material was compressed beneath the advancing ice and is typically dense, firm, and relatively impermeable. Lodgment till contains pebbles and cobbles alined in the direction of glacier flow and, when exposed to air, developes a platy structure.

Typically at least 80 percent of the material that forms lodgment till is derived from local bedrock. For example, in the northern part of the county, till overlying the green Oswego Sandstone is olive green, and in the southern part of the county, till overlying red sandstones has a characteristic red color. Particle-size analyses by Soloman (1974) of till matrix from the Lake Ontario shore west of the city of Oswego revealed nearly equal proportions of sand and silt (45 percent each) and about 10 percent clay.

Lodgment till forms most of the 20- to 150-ft high drumlins that dominate the topography. The main axis of drumlins is alined with the direction of glacier flow (south to southeastward). Their lower parts are commonly covered with lake sediments or wetlands.

Ablation Till

Ablation till is drift that was carried on top of or within a glacier and was deposited as the ice melted. Ablation till in Oswego County consists of poorly sorted material ranging in size from silt to boulders and tends to be coarser, looser, and more permeable than lodgment till. Stones tend to be broken by frost action and are more angular than those in lodgment till. Till fabric or structure is absent except in local patches of stratified drift showing evidence of washing.

An extensive blanket of ablation moraine overlying lodgment till or bedrock covers a large part of the Tug Hill Plateau and the region just south of it (fig. 2). Till in this region has a silty sand matrix with pebbles and cobbles. Land surface of the Tug Hill area is characterized by a blanket of irregular knobs that are in places alined in arcuate ridges that mark temporary standstills of the ice front.

Ablation till forms the end moraine in the Texas and West of Texas quadrangles and the northern parts of the Oswego East, New Haven, and Mexico quadrangles (fig. 6). Till in this moraine contains large blocks of Oswego Sandstone and forms well-defined, arcuate, knobby ridges that reflect former ice-margin positions. This belt of ablation till is the result of a minor glacial readvance. Elsewhere, ablation till is present only in small patches of irregular relief.

Sand and Gravel

Sand is detrital material ranging from 0.005 to 0.08 inches in diameter; gravel is made up of particles ranging from 0.08 to 3.0 inches in diameter. Sand and gravel have a high porosity and are unconsolidated except where secondary calcite in ground water has cemented the grains.

In the western and central parts of the county, sand and gravel occurs in irregular patches of conical mounds or as long, sinuous deposits; in the east it occurs as linear deposits and as wide belts (fig. 2). In the detailed quadrangle maps cited in the list of references, sand and gravel deposits are differentiated according to mode of deposition; these forms include kame and esker, outwash, beach, wave-delta, delta, and aeolian deposits. Each of these is described in paragraphs that follow.

Kames and eskers.--Crevasses and openings in a glacier that became filled with sediment left conical mounds of stratified sand and gravel when the ice melted. Such deposits, known as kames, may consist of sand, gravel, or both. When sediments were deposited in streams flowing in subglacial tunnels, they formed long, sinuous ridges called eskers.

Significant kame deposits occur near Fulton in Fulton quadrangle, at Great Bear Farm in Pennelville quadrangle, near Lake Pleasant in Brewerton quadrangle, in areas south and east of Mexico in Mexico quadrangle, at Hastings in Central Square quadrangle, at the eastern margin of Central Square quadrangle, near Constantia Center in Panther Lake quadrangle, and southeast of Redfield in Redfield quadrangle (fig. 6). The largest esker-kame deposit forms a part of a sand and gravel complex also consisting of outwash, beach, and aeolian sediments that extends from Lacona to Williamstown (fig. 2). The Lacona-Williamstown deposit is 20 mi long, 0.5 to 3 mi wide, and 10 to 85 ft thick. This deposit was formed by ice-contact sediments accumulating at a stagnant ice front and by outwash and beach deposition. Sand and gravel deposits accumulated until the glacier's melting rate exceeded its rate of advance and the ice front retreated to the northwest. Smaller kame deposits are common throughout Oswego County.

Most of the kame deposits are associated with eskers. Glacial streams channeled sediment-laden meltwater on top of and within the ice southeastward to the ice margin. In the central part of the county, where subglacial tunnels connected with subglacial caverns, many eskers are associated with large kame deposits.

Also associated with kame deposits are bowl-shaped depressions called kettles, generally 10 to 25 ft deep, which were formed by the melting of buried or isolated ice blocks. When these depressions filled with water, they formed kettle lakes, of which Kasoag Lake in Williamstown quadrangle (fig. 6) is an example.

Outwash.--Stratified sand and gravel deposited by glacial meltwater beyond the ice front is known as outwash. Outwash that was deposited close to the ice front consists of coarse sand and gravel that could not be moved readily; the material at greater distances grades into progressively finer grained deposits. Outwash deposits typically form plains and valley trains having relatively flat surfaces that slope gently away from the former ice front.

Because outwash is formed by fluvial processes, it is uncommon in the western and central parts of Oswego County, which were inundated by proglacial Lake Iroquois (fig. 2) below 480 to 500 ft. One end moraine with an associated outwash plain, 1.5 mi east of Scriba in the Oswego East quadrangle (fig. 6), was just above lake level.

On the west margin of the Tug Hill Plateau, which was above Lake Iroquois, ice-marginal streams along the east edge of the retreating Ontario ice lobe deposited much outwash. Meltwater streams flowing south and southwestward along the ice margin carved deep incisions into bedrock and lodgment till and deposited sediments where stream gradients decreased. Outwash deposits left by ice-marginal meltwaters are visible along the west margin of the Tug Hill Plateau in the Sandy Creek, Boylston Center, Redfield, Richland, and Orwell quadrangles (fig. 2). (See also maps cited in list of references.)

The largest outwash deposit is in the preglacial valley of North Branch Salmon River in the Tug Hill Plateau (fig. 6). This valley was parallel to the direction of ice flow and thus received meltwaters carrying outwash for a longer time than the numerous short-lived, ice-marginal meltwaters.

Beaches, bars, and shoals.--Prominent beaches, bars, and shoals developed approximately 12,000 years ago along the shore of proglacial Lake Iroquois, which inundated most of western and central Oswego County. This lake formed in a basin in front of the glacier when the meltwater outlets were dammed by ice and topographic obstructions. Locations of major beaches, bars, and shoals are shown in figure 2; the Lake Iroquois beach roughly parallels the boundary between the Erie-Ontario Plain and Tug Hill Plateau (fig. 1).

In southern Oswego County, features created or modified by wave action, such as beaches, sea cliffs, and wave-cut drumlins, indicate that Lake Iroquois reached a maximum altitude of 480 to 500 ft. The beach rises northward at approximately 4 ft/mi; this rise is attributed to progressively greater crustal rebound to the north after removal of the ice load (Flint, 1971).

The Lake Iroquois beach from Lacona to Pineville (figs. 2 and 6) is exceptionally wide because large quantities of outwash sediments from the Tug Hill Plateau were being deposited in the lake, where they became reworked by wave action to form the beach.

In central and western Oswego County, less prominent shore features at altitudes of 430 to 460 ft, 415 to 425 ft, and 390 to 400 ft (Wright, 1973) represent lower substages of Lake Iroquois. These substages are indicated mainly by flattened drumlin tops, as depicted in figure 3. Dutch Ridge, in Oswego West quadrangle (fig. 6), is a typical drumlin whose top has been eroded to a flat surface (altitude 430 ft). Sutton and others (1972) identified four other post-Iroquois standstills in the coastal area of the eastern Ontario basin at elevations of 290 to 300 ft, 255 ft, and 215 ft. During one stage, the Dune stage (altitude 215 ft), when Lake Ontario was 30 ft lower than its present level, a wide beach developed that provided enough sand for dunes to form on the east side of the beach. These dunes are now partly inundated by Lake Ontario and form barrier beaches along the eastern Lake Ontario shore at North and South Ponds and Deer Creek Marsh (fig. 6).

Recent beach deposits of Lake Ontario between Oswego County's western boundary and the mouth of Little Salmon River (fig. 6) consist of a coarse cobble gravel with intervening sea cliffs cut into drumlins or bedrock. A sandy beach formed by the reworking of dune sand has developed from the mouth of Little Salmon River to the northern border of the county.

Wave-delta deposits.--Waves on Lake Iroquois, its substages, and other postglacial lakes have eroded the tops of drumlins to altitudes corresponding with lake levels and deposited stratified sand and gravel on the lee side. The presence of gravel on only the east flanks of drumlins indicates that currents flowed from west to east. As a result of winnowing, or separation of fine particles from coarser ones by wave action, a lag of boulders remains on top of the flat-topped drumlins. Wave-delta deposits are found along drumlins in the western and central part of the county. Figure 7 shows an east-west cross-sectional view through drumlin, beach, and wave-delta deposits.

Delta deposits.--The delta deposits consist of sediment deposited by meltwater flowing into Lake Iroquois from the Tug Hill Plateau. Coarse stratified sand and gravel was deposited near stream mouths, and finer material was deposited farther out in the lake. A major delta deposit is found near Pineville in Richland quadrangle (fig. 6), where Salmon River flowed into Lake Iroquois.

Lake Sediments

Lake sediments, also called lacustrine sediments, are deposits of sand, silt, and clay that settled out of suspension in lakes. The sediments of former Lake Iroquois are the most widespread type of surficial deposits in western and central Oswego County (fig. 2). Sand, silt, and clay blanketed the interdrumlin lowlands, the areas offshore from the postglacial beaches, and the mouths of streams that drained the Tug Hill Plateau into Lake Iroquois. The lake sediments generally overlie lodgment till or kame deposits.

Lake currents kept the tops of inundated drumlins free of fine sediment, but fine sand accumulated on their lower flanks. This material grades into finer particles of sand, silt, and clay toward the center of interdrumlin lowlands. A typical interdrumlin deposit is depicted in figure 8. Fine sand predominates just offshore from former high-energy environments such as beaches and deltas; deposits of finer particles consisting of silt and clay formed in the quieter water farther offshore.

Aeolian Sand

Lowering of lake levels exposed sand deposits to the wind until vegetation was reestablished. Aeolian sand formed dunes on the landward side of the Lake Iroquois beach from Lacona to Altmar (figs. 2, 6) and mantled the windward side of drumlins, ablation moraine, and kame deposits downwind adjacent to the beach. Sand dunes have also collected along the east shore of Lake Ontario from Selkirk Shores to North Pond (figs. 2, 6).

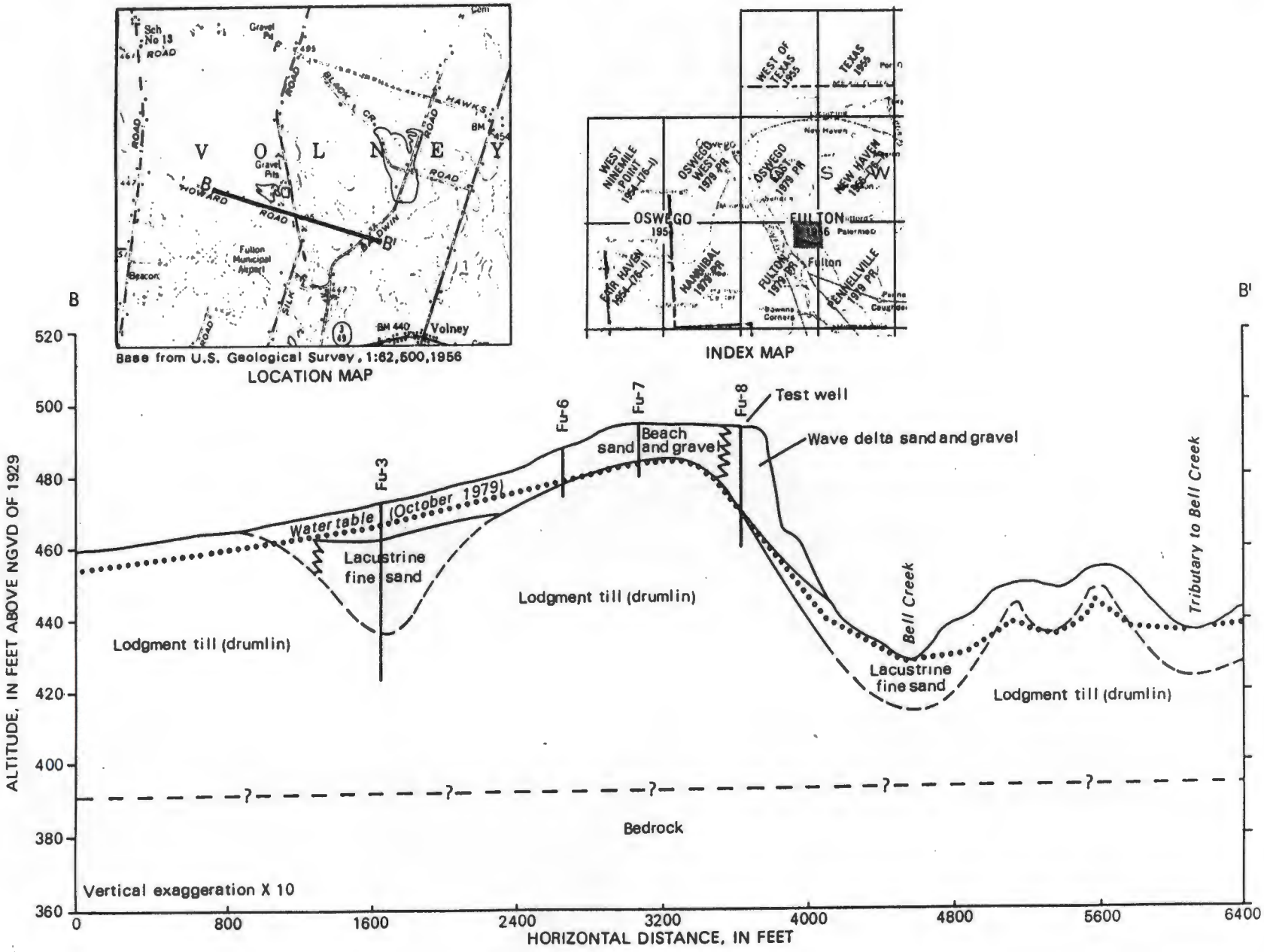


Figure 7.--Generalized section in Fulton quadrangle showing location of typical beach and wave-delta deposits.

SITE

HOLBROOK PROPERTY IS ~1,300' NORTH OF C-C'

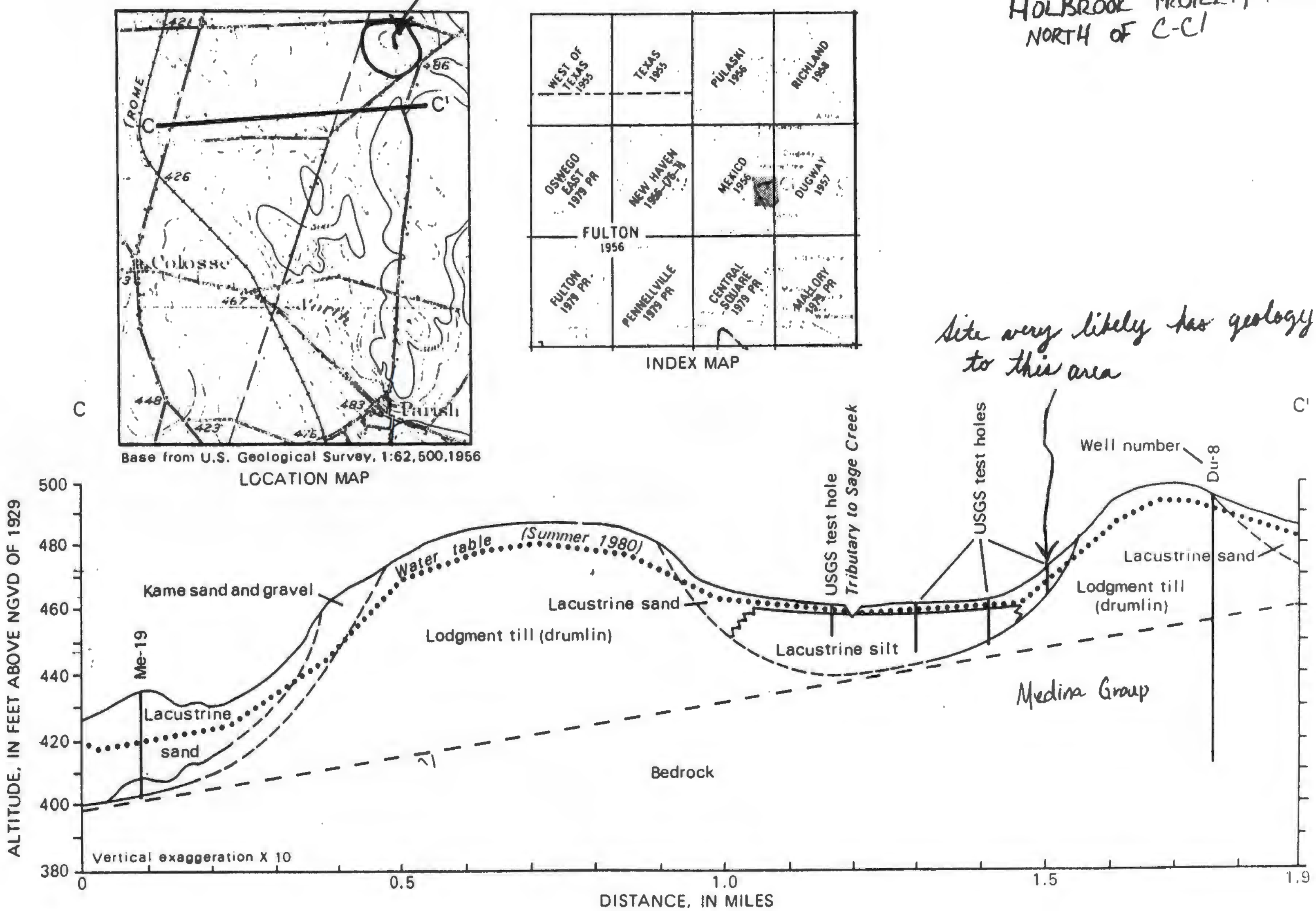


Figure 8.--Cross section of typical drumlin and interdrumlin deposits.

Miller, 1982 - USGS Report 81-60

Holocene Deposits

Wetlands.--Oswego County contains hundreds of wetlands, most of which formed during deglaciation, when drainage in low areas became blocked by glacial debris. Wetlands consist of shallow stagnant water, organic material, marl, peat, and muck. Many of the wetlands have been drained for agricultural use during the last two decades.

In the western and central parts of the county, wetlands commonly formed in swales, or depressions between drumlins, when the outlets were dammed by kame moraine, esker, beach, or ablation till deposits. The wetlands southeast of Palermo in Pennellville quadrangle (fig. 6) were created by esker and kame dams, and Kipp Swamp in Dugway quadrangle (fig. 6) formed behind a Lake Iroquois sand bar. Other wetland remnants of Lake Iroquois are Peter Scott swamp in Baldwinsville quadrangle, Big Bay swamp in Mallory quadrangle, and Lot Ten swamp in Mexico quadrangle (fig. 6). Wetlands also formed in former estuaries along Lake Ontario when the lake level rose in response to uplift of the St. Lawrence River outlet (Flint, 1971). Examples of estuary wetlands are Deer Creek marsh in Pulaski quadrangle, Butterfly swamp in Texas quadrangle, and Snake swamp in Oswego West quandrangle (fig. 6).

In the Tug Hill region, wetland formation has been categorized into six types (Jordan, 1978): intramorainal basins, basins related to stratified drift (such as those formed in kettle depressions), interdrumlin basins, bedrock basins, meltwater-channel basins, and large wetland basins (either intramoraine or interdrumlin). The most extensive type of wetland in the Tug Hill region is the intramoraine basin; these wetlands occupy isolated basins that formed between irregular ablation and recessional-moraine zones.

Alluvium.--Alluvium is significant only in the channel of the Salmon River in the reach from Altmar to Pulaski. In other streams, little alluvium has accumulated since postglacial time. Even along the county's largest waterway, the Oswego River, alluvial deposits are absent; this is attributed to gradual erosion.

GROUND-WATER OCCURRENCE

Ground water is available in most of the county and may be obtained from both bedrock and glacial deposits. Generally, larger water supplies can be obtained from sand and gravel deposits, less from bedrock, and the least from till or silt and clay deposits. Quantities obtainable from properly developed wells range from 0.25 gal/min in till or bedrock units to more than 1,000 gal/min in outwash sand and gravel.

In unconsolidated deposits, water is stored in the openings (pore space) between particles. The amount of pore space (porosity) determines the amount of water that can be stored but not how much can be withdrawn. The amount of water that an aquifer releases from storage is called specific yield. Coarse, well-sorted material such as gravel has high porosity and high specific yield; mixed deposits such as silt and gravel have low porosity and low specific yield, and well-sorted fine particles such as clay have high porosity but low specific yield.

The ground water is replenished by rain and snowmelt infiltrating through the soil to the saturated zone (water table) and moves downgradient from recharge areas to discharge areas such as streams, lakes, and wetlands. In recharge areas, annual water-level fluctuations are greater (5 to 25 ft) than in low discharge areas, where fluctuations are generally less than 10 ft.

The water table in unconsolidated deposits roughly parallels the land surface and is generally 5 to 30 ft beneath it. The general direction of ground-water movement in bedrock is toward Lake Ontario (Kantrowitz, 1970). Table 1 (at end of report) presents well data and ground-water levels in selected wells.

Bedrock

The bedrock is made up of sedimentary rocks in which secondary cementation has closed most of the original intergranular pore space. The total volume of openings in such material seldom exceeds 5 percent. However, bedrock typically contains numerous fractures through which water can move freely, and wells tapping bedrock can draw water from these fractures.

Because fracturing generally decreases with depth, water is obtained principally from the upper levels of a bedrock unit. Fracturing, rather than rock type, is the controlling factor in the water-producing capacity of bedrock. Yields of bedrock wells range from 1 to 125 gal/min, but most average 10 gal/min. Most bedrock is overlain by relatively impermeable lodgment till, which acts as a confining layer, so that water in bedrock is commonly under artesian pressure. Water levels in many wells penetrating bedrock rise above bedrock surface in response to water pressure in the formation. Bedrock units generally provide water adequate for domestic, small farm, and commercial use.

Regional ground-water flow in bedrock is northward to Lake Ontario. Recharge occurs from water infiltration through the overburden and possibly from ground water originating in the Finger Lakes region to the south. Ground water moving toward Lake Ontario becomes brackish as it dissolved materials from the rock, including salts of Silurian evaporite beds (Kantrowitz, 1970).

Chemical quality of water in bedrock depends on the depth of well penetration and rock type. Generally, ground water more than 100 ft below land surface is brackish, whereas ground water above that depth is less mineralized.

In the upper 100 ft of the Oswego Sandstone (figs. 4 and 5), the water is generally of suitable quality for drinking; water from the Queenston-Medina sequence contains some iron, and water from the Clinton Group contains salt, iron, and hydrogen sulfide.

Lodgment Till

Lodgment till, with its compactness and poorly sorted matrix of clay, silt, and sand surrounding pebble- to boulder-size material, has a low porosity and low specific yield and therefore does not yield water readily. However, these deposits can generally supply domestic and small farm needs if large-diameter dug wells are installed. Dug wells are typically 3 ft in diameter and

10 to 20 ft deep. Dug wells are successful because they provide a large surface area from which water may drain slowly from the till, and they also provide considerable storage capacity. Sustained yields of a dug well in lodgment till ranges from about 0.25 to 1 gal/min., but, because of the well's large storage capacity, it can be pumped at 10 gal/min for about 30 minutes before becoming dry. It would take 5 to 20 hours for the well to refill.

Movement of water through lodgment till is slow. As an example, water in a till with a silty sand matrix could move about 3.6 ft/yr. The velocity is estimated to be 0.01 ft/d from a hydraulic conductivity of 0.1 ft/d, a hydraulic gradient of 3 ft (vertical) per 100 ft (horizontal), and a porosity of 0.3. The water table in lodgment till roughly parallels land surface. Depth to water typically ranges from 5 to 20 ft.

Ablation Till

Ablation till is generally too thin and too impermeable to yield large quantities of water but, as a result of its higher sand content and less compact nature, it will yield slightly more water than lodgment till. Thickness typically ranges from 1 to 25 ft. Many areas of ablation till may be seasonally saturated. Ablation till provides sufficient water for domestic and small farm use, generally through dug wells.

Lake Sediments

Lake deposits are composed of sand, silt, and clay. Sand and silty sand are somewhat permeable and may yield low to moderate amounts of water to wells, but silt and clay are virtually impermeable and are the poorest aquifers in the county. Although silt and clay are porous, the stored water is held as a film by surface tension around the particles, so that water yield is low. In areas of silt and clay, wells must be drilled into an underlying, more permeable, unit such as bedrock.

Well-sorted sand having little or no silt could yield as much as 50 gal/min to wells. The higher the silt content, the poorer the yield. Lake deposits are prevalent in lowlands, where the water table is generally less than 10 ft below land surface and undergoes annual fluctuations of less than 6 ft. Dug and drilled wells can yield water sufficient for domestic and farm use. Dug wells are typically constructed in the late summer or early fall, when water levels are lowest and wells can be dug the deepest.

Assuming a ground-water gradient common to lowlands of 1 ft (vertical) to 100 ft (horizontal) and a porosity of 35 percent, ground-water movement in fine sand is estimated to be 30 ft/yr, and in clayey silt 0.001 ft/yr.

Aeolian Sand

Sand dunes on the east side of former Lake Iroquois beach are either too thin to yield water or are above the water table, but they serve as recharge areas to the Lacona-Williamstown aquifer (fig. 2). Dunes along the eastern

Ontario shore from Selkirk to North Pond (figs. 2, 6) yield moderate amounts of water, but excessive withdrawal may induce water of poor quality from Lake Ontario or adjacent swamps.

Wetlands

Water from wetlands is typically unsuitable for drinking and domestic use because it may contain relatively high concentrations of iron and decaying organic material. However, wetlands play an important role in the environment by retaining pollutants, storing water during floods, and providing wildlife habitat. Wetlands are generally ground-water discharge areas, and the water level in wetlands commonly represents the water table.

Sand and Gravel

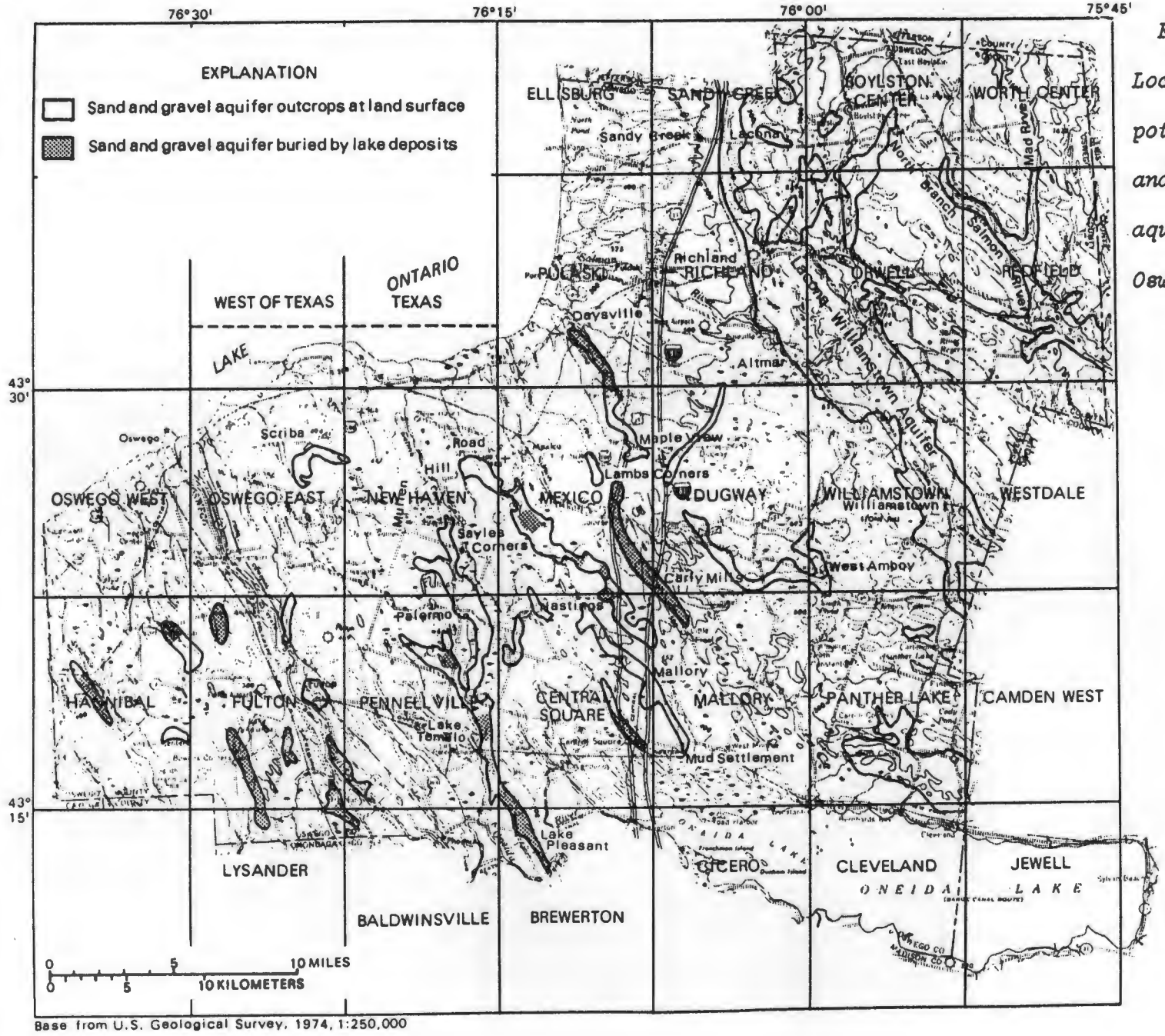
Sand and gravel deposits such as outwash, beaches, kame moraines, and esker-moraine complexes have the greatest potential for ground-water development. These deposits have high porosity and yield large amounts of water to properly constructed wells. Potential well yields range from 50 to 1,500 gal/min.

Most of the townships are underlain by some sand and gravel deposits. Deposits may be at land surface or partly or entirely buried beneath fine-grained lacustrine deposits. The maximum thickness shown in well logs was 125 ft at Great Bear Farm in Pennellville quadrangle (fig. 6); elsewhere, average thickness is generally 25 to 50 ft. Thin deposits (5 to 25 ft thick) in topographic highs are usually unsaturated or only seasonally saturated and are not reliable water sources. Useful sand and gravel aquifers are either in topographic lows or are of sufficient thickness to extend tens of feet below the water table. The locations of potential sand and gravel aquifers in Oswego County are shown in figure 9.

The largest sand and gravel aquifer is a beach, outwash, and esker-kame moraine complex extending as a belt from the northern county border north of Lacona to the eastern boundary 2 mi east of Williamstown (fig. 9). The Lacona-Williamstown aquifer is 20 mi long and ranges in width from 0.5 to 3 mi. It is widest near Altmar. Thickness ranges from 10 to 85 ft.

The Lacona-Williamstown aquifer is tapped by three significant well fields; one is owned by the villages of Sandy Creek and Lacona, one by a paper company near Richland, and the other by a State fish hatchery near Altmar. Two wells 1.5 mi north of Lacona (SC-5 and SC-7, table 1) supply Sandy Creek and Lacona. These wells tap a beach deposit about 30 ft thick; their yields are reported to range from 200 to 400 gal/min each.

The paper company's well field at Richland (fig. 6) taps beach and kame moraine deposits; the 12-inch diameter wells (Ri-11 and Ri-13, table 1) are reported to yield 800 gal/min each. Water levels during spring are generally 8 to 10 ft below land surface and decline 25 to 30 ft in late fall. Water quality meets U.S. Environmental Protection Agency drinking standards; hardness ranges from 100 to 200 mg/L.



Base from U.S. Geological Survey, 1974, 1:250,000

Figure 9. Location of potential sand and gravel aquifers in Oswego County.

The State fish hatchery near Altmar (fig. 9) contains 25 test wells and several production wells that tap a kame moraine deposit. Sand and gravel ranges in thickness from 30 to 85 ft and overlies bedrock and till. Results of five pumping tests (Irving, 1975) indicate that specific capacity (rate of discharge from well per unit of drawdown) ranged from 5.5 to 30 gal/min per ft of drawdown, and transmissivity (rate at which water flows through a unit width of the aquifer under a unit hydraulic gradient) ranged from 60,000 to 100,000 (gal/d)/ft. Well yields ranged from 100 to 400 gal/min.

The valley of the North Branch Salmon River (fig. 9) contains an outwash deposit 6 mi long and about 0.25 mi wide. This aquifer extends another 2 mi eastward into Lewis County as a kame moraine plug in the Salmon River trough. The deposit is thickest where the Mad River, the largest ice margin channel of Oswego County, deposited its sediment load at the confluence of the North Branch Salmon River and Mad River valleys.

Areally extensive but thin (10 to 30 ft thick) outwash aquifers line the west flank of the Tug Hill Plateau. These aquifers are common in Boylston Center, Richland, and Orwell quadrangles (fig. 6), but relatively little hydrologic data are available from these areas.

In the Tug Hill region, most beach and outwash aquifers are in hydraulic contact with streams, and a large percentage of water withdrawn from wells may be induced from these streams. As a result, the wells may be shallow and inexpensive to operate, but the quality of water from such wells is similar to that in the streams. The quality of ground water in the Tug Hill region is generally good. Results of 25 shallow ground-water samples collected and analyzed by U.S. Geological Survey, Oswego County Health Department, and engineering consultants revealed a range of hardness of 60 to 200 mg/L, with 150 mg/L the average, and a range of chloride from 2 to 19 mg/L, with 7 mg/L the average. Because the Tug Hill region is sparsely populated and virtually unindustrialized, the streams and ground water are not subject to significant contamination.

In the central and western part of the county, sand and gravel aquifers consist of kame and kame-esker deposits. Beach and wave-delta deposits in this region are generally unsuitable as aquifers because they are weakly developed or are on topographic highs above the water table. Except for a small area near Scriba (fig. 9), the region contains few outwash deposits because it was inundated by proglacial Lake Iroquois.

Discontinuous kame aquifers are common near Fulton and in the southern part of Fulton quadrangle (fig. 9). Lacustrine sand mantles some of the deposits so that their extent can be determined only from test drilling. Fulton obtains its water supply from kame deposits adjacent to Lake Neahtahwanta, along the east bank of the Oswego River, and at Great Bear Farm (fig. 6). Wells at Great Bear Farm range from 67 to 125 ft in depth and yield 100 to 600 gal/min (Geraghty and Miller, 1967). Wells along the Oswego River south of Fulton are about 40 ft deep and yield 200 to 400 gal/min (Barton, Brown, Clyde and Loguidice, 1967). Water levels and water quality at Great Bear Farm wells indicate that the Oswego River is far enough downgradient from pumping wells that river water is not induced into the wells. Chemical quality of water from the other wells close to the Oswego River (within 200 ft) suggests that the well field south of Fulton may be inducing recharge from the river.

The central part of the county contains many small, irregularly distributed kame deposits. These are shown on the 7.5-minute quadrangles cited in the list of references but are too small to be plotted in figure 9. Small deposits may yield enough water for domestic, farm, and small municipal uses. The villages of Hannibal and Central Square obtain water from deposits of this type.

Several esker-kame deposits extend diagonally across central Oswego county from northwest to southeast (fig. 9; detailed maps showing the location of these deposits are cited in the list of references). The larger belts extend (1) from Sayles Corners through Palermo and through Lake Temalo to Lake Pleasant in Pennellville, Central Square, and Brewerton quadrangles; (2) from Mullen Hill Road at the east border of New Haven quadrangle past and 1.5 mi south of Mexico through Hastings and Mallory to Mud Settlement in Mallory quadrangle; (3) from Lamb's Corners through Carly Mills in Mexico and Mallory quadrangles; (4) from Daysville to Maple View in Pulaski and Mexico quadrangles; and (5) from Parish Center to West Amboy in Dugway and Williamstown quadrangles.

Most esker-kame deposits are poorly defined because they are partly covered by lacustrine deposits, are discontinuous, and have irregular physical characteristics such as varying thickness and width. Little hydrologic data on these deposits are available.

Several communities in Oswego County obtain water from the esker-kame deposits; among them are Phoenix, Mexico, and Central Square (fig. 9). Two Phoenix wells (Br-1 and Br-2, table 1), 1 mi northwest of Lake Pleasant, have reported yields of 700 and 400 gal/min., respectively. Two Mexico wells, about 1.5 mi south of the village, yield 225 and 340 gal/min. The transmissivity of this aquifer is 80,000 (gal/d)/ft (Andrews, 1957).

SUMMARY AND CONCLUSIONS

Glacial sediments and marshes constitute most of the surface of Oswego County, which has few bedrock outcrops. Lodgment till in the form of drumlins and lake deposits is the most common type of deposit in the central and western part of the county; ablation till overlying lodgment till is the most common type on the Tug Hill Plateau. Extensive kame, outwash, and beach sand and gravel deposits are numerous along the west margin of the Tug Hill Plateau; small, patchy kame and beach deposits are common in the western and central regions. Bedrock consists of nearly flat-lying shale, siltstone, and sandstone.

The principal aquifers are kame, esker-kame, beach, and outwash deposits consisting of sand and gravel. Outwash aquifers are the most common type in the Tug Hill region, whereas kame, esker-kame, and beach aquifers predominate elsewhere. The largest sand and gravel aquifer is the Lacona-Williamstown aquifer, which is 20 mi long, 0.5 to 3 mi wide and 10 to 85 ft thick, and yields from 200 to 800 gal/min.

Ground water is available everywhere in quantities generally sufficient for domestic and farm use and, in some areas, in quantities sufficient for municipal and industrial supplies. Bedrock, lodgment till, ablation till, and lacustrine sand can yield sufficient quantities of water for farm and domestic use. In bedrock, the extent of fracture development rather than rock type is the major factor affecting water yield. Large-diameter dug wells are the only type that can obtain sufficient water from lodgment till, ablation till, and lacustrine silty sand.

SELECTED REFERENCES

Andrews, Harry, 1957, Report of ground water investigation for village of Mexico, Oswego County, New York: Hall and Co., Delmar, N.Y., unpub. engineering rept., 7 p.

Barton, Brown, Clyde and Loguidice, Consulting Engineers, 1967, Oswego County water supply study: New York State Department of Health Contract CPWS-23, 111 p.

Broughton, J. G., Fisher, D. W., Isachsen, Y. W., and Rickard, L. V., 1962, The geology of New York State: New York State Museum and Science Service, Map and Chart Series 5, 42 p.

Flint, R. F., 1971, Glacial and quaternary geology: New York, John Wiley, 892 p.

Geraghty and Miller, 1967, Preliminary report of the ground-water resources at Great Bear Farm, Fulton, New York: Geraghty and Miller, Port Washington, N.Y., 11 p.

Irving, F. R., 1975, Test well program at proposed Great Lakes Fish Hatchery, Altmar, New York: New York State Department of Environmental Conservation, rept. D 90958, 13 p.

Isachsen, Y. W. and Fisher, D. W., 1970, Geologic map of New York, Adirondack sheet: New York State Museum and Science Service, Map and Chart Series 15.

Jordan, R. J., 1978, The deglaciation and consequent wetland formation of the Tug Hill Plateau, New York: Syracuse University, unpub. thesis, 110 p.

Jordan, R. J., and Miller, T. S., 1980, Surficial geology of Redfield quadrangle, Oswego County, New York: U.S. Geological Survey Water-Resources Investigations, Open-File Rept. 80-1118, 1 sheet.

Kantrowitz, I. H., 1970, Ground-water resources in the Eastern Oswego River basin, New York: New York State Department of Environmental Conservation, Basin Planning Rept. ORB-2, 129 p.

Miller, W. J., 1924, The geological history of New York State: New York State Museum and Science Bulletin 255, 148 p.

Reference 17

EBASCO SERVICE INCORPORATED

TELECON NOTE

PROJECT: 345 Holbrook

PROJECT NO. 8310.0076.0000.5012 LS

DATE: 14 Sept 95

TIME: 1150

DISTRIBUTION:

BETWEEN: Dan Bishop / Les Wedge

OF: NYSDEC Fisheries

PHONE: (607) 753-3095

AND: Amy Braccia

DISCUSSION: I spoke w/ the Mr. Bishop & Mr. Wedge regarding the small tributary to Sage Creek. They will fax me a map showing the point where the tributary becomes Sage Creek. They have no fish information in regards to the tributary (9A) however Sage Creek is fished quite often & contains fish species such as Northern Pike, smelt, Small Mouth Bass and suckers. The tributary (9A) is a ~~SM~~ 1AB slow flowing stream and is ± 15 to 20' feet wide.

@ 14 Sept 95 1430

I received the fax from Dan Bishop & realized he had marked a different tributary than the one of interest. However he directed me to the correct location of where Sage Creek & the tributary meet over the phone - I marked the area on his fax - they dont have any fisheries information on this tributary either.

ACTION ITEMS:

Catch summary for
SAGE CREEK
ONT-57

939

sh caught

ASS PICKEREL
DSIDE DACE
UTLIPS MINNOW
OMMON SHINER
NTNOSE MINNOW
ACKNOSE DACE
REEK CHUB
LFISH
TE SUCKER
REEK CHUBSUCKER
CK BASS
MPKINSEED
MALLMOUTH BASS
NTAIL DARTER
NNY DARTER

sh observed/reported

CKER FAMILY (Spp reported as: Sucker)
UNFISH FAMILY (Spp reported as: Bass)
ERICAN EEL
AIN PICKEREL
ROWN BULLHEAD

960

h caught

NOW & CARP FAMILY (Spp reported as: Minnow)
OWN TROUT
OMMON SHINER
LLFISH
ITE SUCKER
CK BASS
MALLMOUTH BASS
HNNY DARTER

Post-it™ brand fax transmittal memo 7671 | # of pages ▸ 2

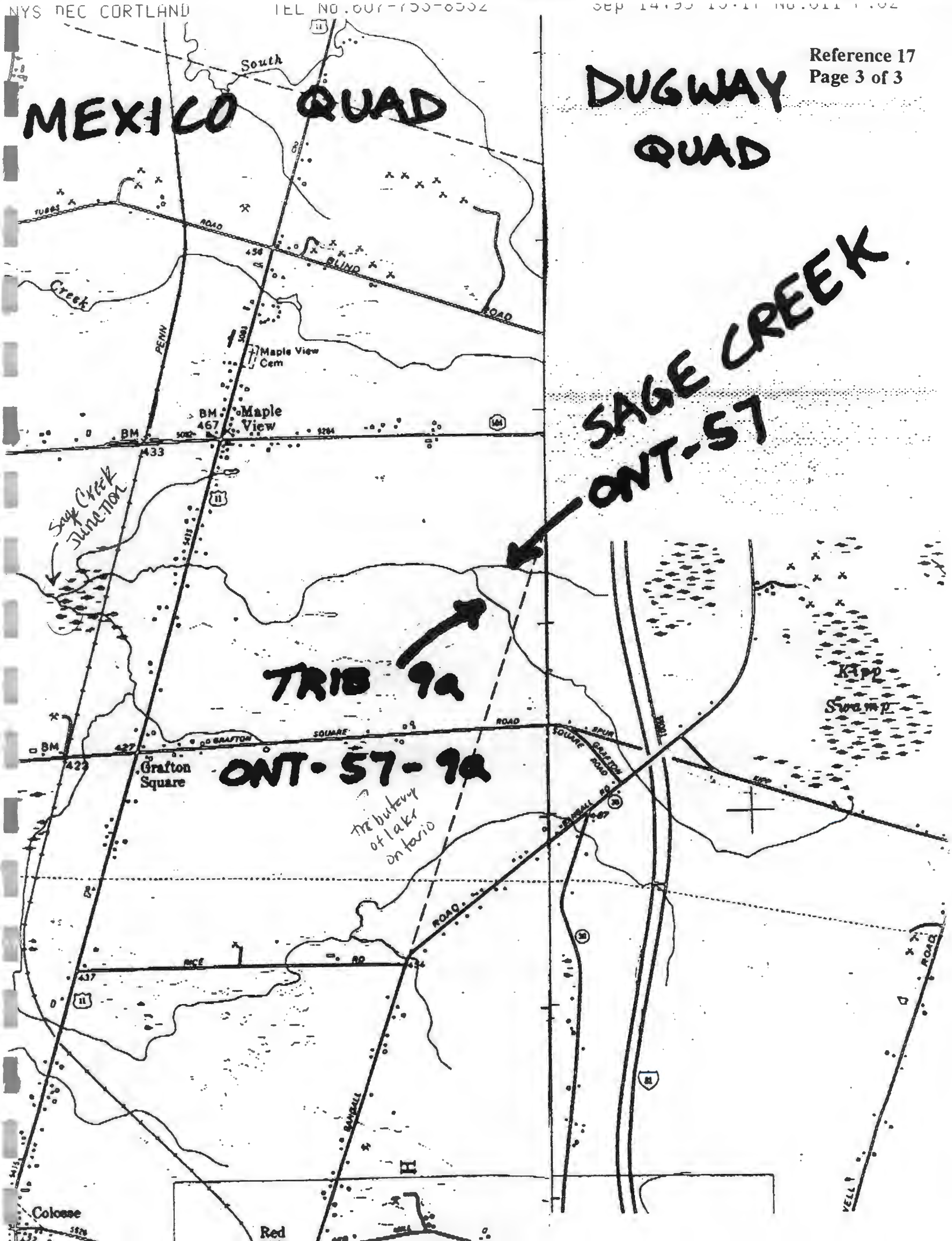
To Amy Brallia	From Dan Bishop
Co.	Co.
Dept.	Phone # 607 753 3095
Fax #	Fax #

Also -
Northern Pike
and smelt

Amy,

We did not have flow estimates, sorry. Call if you have any questions.

Dan Bishop


MEXICO QUAD
DUGWAY QUAD
South
Creek
ROAD
BLIND
ROAD
PENN
Maple View Cem
BM 467
Maple View
BM 433
Sage Creek Junction
SAGE CREEK ONT-57
TRIB 9a
ONT-57-9a
tributary of lake ontario
BM 423
427
Grafton Square
GRAFTON
SQUARE
ROAD
SPUR
GRAFTON ROAD
Kipp Swamp
RICE
RD
ROAD
Colosse
Red

Reference 18

PAS HOLBROOK PROPERTY SITE
LOCAL WATER SUPPLY - PROJECT NOTES
SEPTEMBER 1995

1. Village of Mexico-The village supplies public water via two groundwater wells located outside the village. The population associated with these wells is approximately 1,555. The water distribution area and the groundwater supply wells are outside of the four mile radius of the site (Source: 12/14/94 telecon between Bob Davis, Village of Mexico, and Amy Braccia, Ebasco; 7/26/95 telecon and fax from Village of Mexico).

2. Parish-There are no municipal supply wells in Parish. All residents utilize private water wells for a potable source (Source: 12/13/94 telecon between Kelly Reader, Parish Town Hall, and Amy Braccia, Ebasco).

3. Town of Albion and Village of Altmar-There are no municipal supply wells. All residents utilize private water wells for a potable source (Source: 12/15/94 telecon between Sue Brosnam, Albion Town Clerk, and Amy Braccia, Ebasco).

4. Town of Richland-There are no municipal supply wells in Richland. All residents utilize private water wells for a potable source (Source: 12/15/94 telecon between Paula O'Brien, Richland Clerk's Office, and Amy Braccia, Ebasco).

5. Village of Pulaski-The village supplies public water via three groundwater wells located outside the village, in Richland Township on Richland Road. No known surface water intakes in the area of the surface water TDL. The water distribution area and the groundwater supply wells are outside of the four mile radius of the site (Source: 7/26/95 telecon between Pulaski Town Clerk and Michele Christina, Ebasco).

SUMMARY: There are no public supply wells located within four miles of the site. There do not appear to be any surface water intakes utilized in the area. All residents living within a four mile radius of the site utilize private wells as a potable water source.

Reference 19

FISH STOCKING LIST

N.Y.S. DEPARTMENT OF ENVIRONMENTAL CONSERVATION

REGION 7

Fish Distribution January 1 - December 31, 1994
Planted in cooperation with County Federated Sportsmen

CODE: ST-Brook Trout; BT-Brown Trout; RT-Rainbow Trout; TGRM-Tiger Muskellunge; CHIN-Chinook Salmon; LLS-Landlocked Salmon; WP-Walleye Pike; COHO-Coho Salmon; STHD-Rainbow Trout Steelhead Strain Rainbow Trout

WATER (TOWNSHIP)	NUMBER	SPECIES	SIZE
BROOME COUNTY			
Artic Lake (Sanford)	2,300	RT	8.00
Chenango Lake (Fenton)	2,750	RT	9.00
" " "	7,480	RT	8.00
Dudley Creek (Lisle) (Richfield in Tioga)	190	BT	7.50
Finch Hollow - Site 15 (Union)	920	RT	8.00
Greenwood Lake	1,840	RT	9.50
Little Coconut Creek	190	RT	8.00
Nanticoke Creek (Maine, Nanticoke)	250	BT	8.50
" " " "	1,900	BT	7.50
Nanticoke Lake (Lisle)	2,120	RT	8.50
" " "	560	RT	8.00
Oquaga Creek (Sanford)	2,160	BT	7.50
" " - Trib 6 (Sanford)	850	BT	7.50
Palmers Pond	190	RT	8.00
Patterson Pond	740	RT	8.00
Susquehanna River	2,400	TGRM	8.50
Whitney Point Reservoir (Triangle)	3,800	TGRM	9.00
CAYUGA COUNTY			
Duck Pond	700	TGRM	9.00
Fall Creek (Summer Hill)	960	ST	8.50
" " " "	2,000	ST	4.00
Lake Como	200	TGRM	9.00
Lake Ontario (Fair Haven)	13,160	BT	8.50
" " " "	17,500	BT	7.00
" " (Little Sodus Bay)	15,000	WP	2.00
North Brook (Throop)	670	BT	7.50
Otter Lake	1,300,000	WP	Fry
Owasco Inlet, Tr. 17-49 (Moravia, Locke, Groton)	3,100	BT	7.50
" " " "	20,000	RT	3.00

WATER (TOWNSHIP)	NUMBER	SPECIES	SIZE
ONONDAGA COUNTY (CONT'D)			
Oneida Lake	6,000	TGRM	9.00
*Onondaga Creek (Tully)	1,400	BT	8.00
Otisco Lake (Otisco, Spafford)	7,200	TGRM	9.00
* " " " "	1,750	BT	14.00
* " " " "	2,800	BT	9.25
* " " " "	2,738	BT	7.50
" " " "	22,500	WP	5.00
" " " "	6,450	WP	2.00
" " " "	16,050	WP	1.50
*Pools Brook	500	BT	8.50
* " "	275	ST	9.00
*Pratt Falls	500	BT	8.25
Skaneateles Creek (Skaneateles)	23,000	LLS	1.50
* " " "	400	BT	13.50
* " " "	1,700	BT	8.00
* " " "	3,800	BT	7.50
* " " "	3,500	RT	11.00
* " " "	1,300	RT	8.00
Skaneateles Lake	2,280	RT	10.00
" "	21,370	RT	7.00
" "	5,000	RT	5.50
" "	5,000	RT	4.00
" "	5,000	LLS	6.50
*Spafford Creek	1,500	BT	8.00
*Spruce Pond	250	ST	15.00
* " "	625	ST	9.00
* " "	1,200	RT	8.00
*Tannery Creek	175	ST	9.25

*STOCKED BY CARPENTER'S BROOK (ONONDAGA COUNTY) HATCHERY

OSWEGO COUNTY			
Beaverdam Brook (Albion, Orwell, Williamstown)	91,590	COHO	6.00
" " "	77,780	STHD	6.00
Black Creek (Scriba)	1,030	BT	7.50
Dykeman Creek (Hastings)	3,000	ST	4.50
Fish Creek (Williamstown)	2,350	BT	7.50
Grindstone Creek, So. Branch (Richland, Albion)	3,600	ST	6.00
" " " "	4,000	ST	4.50

1333

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 07921 YR/MO/DAY/HR SAMPLE REC'D: 80/04/22/14

REPORTING LAB: 30 SYRACUSE LAB
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: VECCHIO RESIDENCE RICE RD

EXACT SAMPLING POINT: CWTK SINK
TYPE OF SAMPLE: 00 PWS, RAW WATER
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 04/22/11
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
026800	STD PL COUNT		4.	
027000	COLIF MF COL/100ML		1.	LT

This microbiological analysis indicates that the water (was) was not of a satisfactory sanitary quality when the sample was collected.
Oswego County Health Dept.
Lyndi J. Waterman

DATE COMPLETED: 4/24/80

RECEIVED
APR 30 1980
OSWEGO COUNTY HEALTH DEPT

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCCARTHY

0876

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 80518 YR/MO/DAY/HR SAMPLE REC'D: 80/04/23/16

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: VECCHIO RES RICE RD PARISH

EXACT SAMPLING POINT: CW TAP KIT SINK
TYPE OF SAMPLE: 00 PWS, RAW WATER
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 04/22/11
REPORT SENT TO: CO (1) RO (2) LPHE (2) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
023609	1,1,1-TRICHLOROETHANE	MCG/L	5.	LT
036609	CARBON TETRACHLORIDE	MCG/L	5.	LT
038909	BROMODICHLOROMETHANE	MCG/L	2.	LT
039009	CHLOROFORM	MCG/L	5.	LT
041109	TRICHLOROETHYLENE	MCG/L	5.	LT
041209	TETRACHLOROETHYLENE	MCG/L	2.	LT
042109	BROMOFORM	MCG/L	5.	LT
044909	DIBROMOCHLOROMETHANE	MCG/L	2.	LT
034409	BENZENE	MCG/L	(3.)	
034509	XYLENES	MCG/L	1.	LT
039209	TOLUENE	MCG/L	1.	LT

DATE COMPLETED: 5/14/80

THE RESULTS CIRCLED ABOVE
DO NOT MEET THE RECOMMENDED
STANDARDS SET FORTH IN THE
N.Y.S. PART 5 SANITARY CODE

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: NOTGIVEN

NEW(ORK(TATE DEPARTMENT OF HE(TH(
DIVISION OF LABORATORIES AND RESEARCH
ENVIRONMENTAL HEALTH CENTER

RESULTS OF EXAMINATION
(PAGE 1 OF 2)

LAB ACCESSION NO: 00871 YR/MO/DAY/HR SAMPLE REC'D: 80/04/22/14

REPORTING LAB: 33 SYRACUSE LAB
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO (T)PARISH
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: VECCHIO RESIDENCE, RICE RD.

EXACT SAMPLING POINT: CW TAP KIT SINK
TYPE OF SAMPLE: 00 PWS, RAW WATER
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 04/22/11
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
000401	FLUORIDE,FREE	MG/L	.1	
000801	NITROGEN,NITRATE&NITRITE	MG/L	11.	
009401	BARIUM	MG/L	0.5	LT
010309	MERCURY, TOTAL	MCG/L	0.4	LT
010601	SILVER	MG/L	0.02	
309309	ARSENIC	MCG/L	10.	LT
309709	CADMIUM	MCG/L	2.	LT
309809	CHROMIUM	MCG/L	10.	LT
310109	LEAD	MCG/L	10.	LT
310509	SELENIUM	MCG/L	5.	LT
100300	ODOR, COLD		3.SULFUR	
001900	PH (LABORATORY)		7.2	
101501	ALKALINITY,ELECTROM.PH4.5	MG/L	200.	

DATE COMPLETED: 6/10/80

RECEI
JUN 16
OSWEGO COUNTY HEALTH

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCCARTHY

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

RESULTS OF EXAMINATION
(PAGE 2 OF 2)

LAB ACCESSION NO: 00871 YR/MO/DAY/HR SAMPLE REC'D: 80/04/22/14

REPORTING LAB: 33 SYRACUSE LAB
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: VECCHIO RESIDENCE, RICE RD.

EXACT SAMPLING POINT: CW TAP KIT SINK
TYPE OF SAMPLE: 00 PWS, RAW WATER
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 04/22/11
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
001101	HARDNESS, TOTAL AS CACO3	MG/L	248.	
010701	SODIUM	MG/L	7.5	
001001	CHLORIDE	MG/L	13.	
106501	C.O.D.	MG/L	2.2	

THE ABOVE RESULTS MEET THE
RECOMMENDED STANDARDS SET
FORTH IN THE N.Y.S. PART 5
SANITARY CODE

DATE COMPLETED: 6/10/80

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCCARTHY

0655

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 80624 YR/MO/DAY/HR SAMPLE REC'D: 80/05/14/14

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: VECCHIO RES RICE RD PARISH

EXACT SAMPLING POINT: CWT KIT SINK
TYPE OF SAMPLE: 00 PWS, RAW WATER
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 05/13/13
REPORT SENT TO: CO (1) RO (2) LPHE (2) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
034409	BENZENE	MCG/L	1.	LT
034509	XYLENES	MCG/L	1.	LT
039209	TOLUENE	MCG/L	1.	LT

DATE COMPLETED: 5/23/80

RECEIVED
JUN 04 1980
OSWEGO COUNTY HEALTH DEPT

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: NOTGIVEN

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 80763 YR/MO/DAY/HR SAMPLE REC'D: 80/06/04/10

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: VECCHIO RESIDENCE PARISH

EXACT SAMPLING POINT: CWKT
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 06/03/11
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (0)

PARAMETER		UNIT	RESULT	NOTATION
034409	BENZENE	MCG/L	1.	LT
034509	XYLENES	MCG/L	1.	LT
039209	TOLUENE	MCG/L	1.	LT

THE ABOVE RESULTS MEET THE RECOMMENDED STANDARDS SET FORTH IN THE N.Y.S. PART 5 SANITARY CODE

DATE COMPLETED: 6/13/80

RECEIVED
JUN 19 1980
OSWEGO COUNTY HEALTH DEPT.

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: HEERKENS

3236

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 01647 YR/MO/DAY/HR SAMPLE REC'D: 80/06/25/09

REPORTING LAB: 33 SYRACUSE LAB
PROGRAM: 126
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: VECCHIO RESIDENCE

EXACT SAMPLING POINT: CW KT.
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 06/24/11
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

PARAMETER		UNIT	RESULT	NOTATION
202401	SULFATE AS S04	MG/L	27.	
000801	NITROGEN,NITRATE&NITRITE	MG/L	3.6	

THE ABOVE RESULTS MEET THE RECOMMENDED STANDARDS SET FORTH IN THE N.Y.S. PART 5 SANITARY CODE

DATE COMPLETED: 7/07/80

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: HEERKENS

June 19, 1980

Mr. & Mrs. Lynden Comstock
R.D. #1, Bangall Road
Parish, NY 13131

Dear Mr. & Mrs. Comstock:

Attached is a photocopy of an additional laboratory report for a water sample at your home on June 3, 1980. This is the 4th such report that we have sent you. This report indicates the concentrations for Benzene, Xylenes, Toluene were at less than 1 microgram per liter.

If you have any questions, please feel free to call me at 473-8374.

Very truly yours,

James M. McCarthy, P.E.
Director of Public Health Engineering

Attachment

cc: Oswego County Health Dept.

June 6, 1980

Mr. & Mrs. Lynden Comstock
R.D. #1, Bangall Road
Parish, New York 13131

Dear Mr. & Mrs. Comstock:

Attached is a photocopy of an additional laboratory report for a water sample at your home on May 13, 1980. This is the third such report that we have sent you. This report indicates the concentrations for Benzene, Xylenes, Toluene were at less than 1 microgram per liter.

An additional test was taken at your home on June 4, 1980.

If you have any questions, please feel free to call me at 473-8374.

Very truly yours,

James M. McCarthy, P.E.
Director of Public Health Engineering

JMM:kfb
Attach.

cc: Oswego County Health Dept.

May 30, 1980

Mr. & Mrs. Lynden Comstock
RD #1, Bangall Road
Parish, N.Y. 13131

Dear Mr. & Mrs. Comstock:

Attached is a photocopy of an additional laboratory report for a water sample collected at your home on April 22, 1980. You will remember the copy of the bacteriological report that I sent you on May 5, 1980.

The results are all satisfactory except for the positive result reported for Benzene.

As you remember resamples were collected from your home on May 13, 1980 and the laboratory has reported by telephone that reportable levels of Benzene were not present. However, printed copies of these reports are not yet available. They will be sent as soon as possible.

We do not know for sure why the first samples collected from your well had positive levels of Benzene present and the second sample was negative for Benzene. But we are concerned and will resample your home shortly.

The results of some Parameters or chemicals tested are reported as 5 LT which means less than 5 micrograms per liter. This is the lowest value which the laboratory will ever report on the minimum detectable limit.

The following chemicals have a minimum detection of 5 micrograms/liter.

1. 1, 1, 1 - Trichloroethane
2. Carbon Tetrachloride
3. Chloroform
4. Trichloroethylene
5. Bromoform

The following chemicals have a minimum detection limit of 2 micrograms per liter.

1. Bromodichloromethane
2. Tetrachloroethylene
3. Dibromochloromethane

The following chemicals have a minimum detection limit of 1 microgram per liter.

1. Benzene
2. Xylene
3. Toluene

Therefore, a result of 1, 1, 1-Trichloroethane MCG/L 5 LT should be read as less than detectable amounts of 1, 1, 1-Trichloroethane.

A result for Benzene of MCG/L 3 would mean that the sample contained 3 micrograms per liter of Benzene.

If you have any questions please feel free to call me at 473-8374.

Very truly yours,

James M. McCarthy, P.E.
Director of Public Health Engineering

JMM:kfb
Enc.

cc: Oswego County Health Dept. ✓

1309

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 07917 YR/MO/DAY/HR SAMPLE REC'D: 80/04/22/14

REPORTING LAB: 30 SYRACUSE LAB
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N. DEG ' "W
COMMON NAME INCL SUBW'SHED: COMSTOCK RESIDENCE

EXACT SAMPLING POINT: CWKT
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 04/22/11
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
026800	STD PL COUNT		1.	LT
027000	COLIF MF COL/100ML		1.	LT

This microbiological analysis indicates that the water (was) ~~was not~~ of a satisfactory sanitary quality when the sample was collected.
Oswego County Health Dept.
Lynda J. Waterman

RECEIVED
APR 30 1980
OSWEGO COUNTY HEALTH DEPT

DATE COMPLETED: 4/24/80

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNDY STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCCARTHY

1368

NEW ORK(TATE DEPARTMENT OF H(.TH(
DIVISION OF LABORATORIES AND RESEARCH
ENVIRONMENTAL HEALTH CENTER

RESULTS OF EXAMINATION
(PAGE 1 OF 2)

LAB ACCESSION NO: 00874 YR/MO/DAY/HR SAMPLE REC'D: 80/04/22/14

REPORTING LAB: 33 SYRACUSE LAB
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 (T)PARISH COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: COMSTOCK RESIDENCE

EXACT SAMPLING POINT: CW KT
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 04/22/11
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
000401	FLUORIDE,FREE	MG/L	.1	
000801	NITROGEN,NITRATE&NITRITE	MG/L	.1	LT
009401	BARIUM	MG/L	0.7	
010309	MERCURY, TOTAL	MCG/L	0.4	
010601	SILVER	MG/L	0.02	LT
309309	ARSENIC	MCG/L	10.	LT
309709	CADMIUM	MCG/L	2.	LT
309809	CHROMIUM	MCG/L	10.	LT
310109	LEAD	MCG/L	10.	LT
310509	SELENIUM	MCG/L	5.	LT
100300	ODOR, COLD		2,SULFUR	
001900	PH (LABORATORY)		7.6	
101501	ALKALINITY,ELECTROM.PH4.5	MG/L	178.	

DATE COMPLETED: 6/10/80

RECEIV[illegible]
JUN 16 19[illegible]
OSWEGO COUNTY HEALTH [illegible]

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCCARTHY

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

RESULTS OF EXAMINATION
(PAGE 2 OF 2)

LAB ACCESSION NO: 00874 YR/MO/DAY/HR SAMPLE REC'D: 80/04/22/14

REPORTING LAB: 33 SYRACUSE LAB
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: COMSTOCK RESIDENCE

EXACT SAMPLING POINT: CW KT
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 04/22/11
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

PARAMETER		UNIT	RESULT	NOTATION
001101	HARDNESS, TOTAL AS CACO3	MG/L	192.	
010701	SODIUM	MG/L	11.	
001001	CHLORIDE	MG/L	15.	
106501	C.O.D.	MG/L	4.LT	UI

THE ABOVE RESULTS MEET THE RECOMMENDED STANDARDS SET FORTH IN THE N.Y.S. PART 5 SANITARY CODE

DATE COMPLETED: 6/10/80

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCCARTHY

SEGMENT NAME	SEG ID	COUNTY	SEGMENT TYPE	SEGMENT SIZE		CLASS	PRIMARY USE IMPAIRED	SEVERITY	PRIMARY POLLUTANT	PRIMARY SOURCE
DRAINAGE BASIN: Lake Ontario										
Sub-Basin: Lake Ontario West										
BOND LAKE	0301-0012	Niagara	Lake	33.0	A	B	Bathing	Stressed	Nutrients	Agriculture
BRADDOCK BAY	0301-0010	Monroe	G. Lake	6.0	Mi.	B	Boating	Impaired	Silt (Sediment)	Construction
EIGHTEENMILE CK	0301-0002	Niagara	River	14.7	Mi.	B	Fishing	Impaired	Priority Organics	Contaminated Sed.
JEDDO CREEK TRIB	0301-0013	Niagara	River	5.0	Mi.	B	Fish Propagation	Stressed	Pesticides	Land Disposal
JOHNSON CREEK	0301-0007	Orleans	River	19.0	Mi.	C	Fishing	Threatened	Silt (Sediment)	Agriculture
LAKE ONTARIO	0301-0001	Niagara	G. Lake	373.9	Mi.	A	Fishing	Impaired	Priority Organics	Contaminated Sed.
NYS BARGE CANAL	0301-0008	Orleans	River	26.0	Mi.	C	Fishing	Threatened	Water Level/Flow	Hydromodification
OAK ORCHARD CREEK	0301-0004	Orleans	River	5.5	Mi.	C	Aesthetics	Stressed	Pathogens	On-site Systems
OAK ORCHARD CREEK	0301-0005	Orleans	River	13.5	Mi.	C	Fishing	Threatened	Nutrients	Agriculture
OAK ORCHARD CREEK	0301-0009	Orleans	River	4.0	Mi.	C	Fish Propagation	Threatened	Nutrients	Agriculture
OAK ORCHARD CREEK	0301-0014	Genesee	River	14.7	Mi.	C	Fishing	Precluded	Nutrients	Agriculture
SANDY CREEK	0301-0006	Orleans	River	17.0	Mi.	C	Fishing	Threatened	Unknown Toxicity	Land Disposal
TWELVE MILE CREEK	0301-0011	Niagara	River	15.0	Mi.	B,CT	Fish Propagation	Threatened	Water Level/Flow	Hydromodification
DRAINAGE BASIN: Lake Ontario										
Sub-Basin: Lake Ontario Central										
ALLEN CREEK	0302-0022	Monroe	River	8.0	Mi.	B	Fishing	Stressed	Nutrients	Urban Runoff
BLIND SODUS BAY	0302-0021	Wayne	G. Lake	3.0	Mi.	B	Bathing	Stressed	Nutrients	On-site Systems
EAST BAY	0302-0011	Wayne	G. Lake	3.0	Mi.	B	Bathing	Stressed	Nutrients	On-site Systems
FIRST CREEK	0302-0008	Wayne	River	3.0	Mi.	C	Fish Propagation	Threatened	Silt (Sediment)	Other Source
FOUR MILE CREEK	0302-0006	Monroe	River	5.5	Mi.	C	Fish Propagation	Threatened	Unknown Toxicity	Land Disposal
IRONDEQUOIT BAY	0302-0001	Monroe	G. Lake	14.0	Mi.	B	Bathing	Impaired	Nutrients	Urban Runoff
IRONDEQUOIT CREEK	0302-0024	Monroe	River	13.0	Mi.	B(T)	Fishing	Stressed	Silt (Sediment)	Construction
LITTLE SODUS BAY	0302-0017	Cayuga	G. Lake	6.8	Mi.	B	Fishing	Impaired	Nutrients.	On-site Systems
MILL CREEK	0302-0025	Monroe	River	6.0	Mi.	C	Fishing	Threatened	Priority Organics	Land Disposal
MINK CREEK	0302-0016	Wayne	River	5.5	Mi.	C	Fish Propagation	Stressed	Nutrients	Agriculture
MUDGE CREEK	0302-0010	Wayne	River	1.7	Mi.	C	Fish Propagation	Stressed	Nutrients	Agriculture
NINEMILE CREEK	0302-0005	Oswego	River	8.0	Mi.	C(T)	Fishing	Impaired	Aesthetics	On-site Systems
PORT BAY	0302-0012	Wayne	G. Lake	7.5	Mi.	B	Bathing	Stressed	Nutrients	Agriculture
RED CREEK	0302-0014	Wayne	River	7.0	Mi.	C	Fish Propagation	Threatened	Nutrients	On-site Systems
ROCH. EMBAYMENT	0302-0002	Monroe	G. Lake	21.0	Mi.	A	Bathing	Impaired	Pathogens	CSO's

(continued on next page...)

Reference 28

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Wildlife Resources Center
700 Troy-Schenectady Road
Latham, NY 12110-2400
(518) 783-3932

Langdon Marsh
Commissioner

January 4, 1995

Amy Braccia
Ebasco Environmental
2111 Wilson Blvd., Suite 435
Arlington, VA 22201-3058

Dear Ms. Braccia:

We have reviewed the New York Natural Heritage Program files with respect to your recent request for biological information concerning three Hazardous Waste investigation sites, locations as indicated on your enclosed maps, Oswego County, New York State.

Enclosed is a computer printout covering the area you requested to be reviewed by our staff. The information contained in this report is considered sensitive and may not be released to the public without permission from the New York Natural Heritage Program.

Our files are continually growing as new habitats and occurrences of rare species and communities are discovered. In most cases, site-specific or comprehensive surveys for plant and animal occurrences have not been conducted. For these reasons, we can only provide data which have been assembled from our files. We cannot provide a definitive statement on the presence or absence of species, habitats or natural communities. This information should not be substituted for on-site surveys that may be required for environmental assessment.

This response applies only to known occurrences of rare animals, plants and natural communities and/or significant wildlife habitats. You should contact our regional office, Division of Regulatory Affairs, at the address enclosed for information regarding any regulated areas or permits that may be required (e.g., regulated wetlands) under State Law.

If this proposed project is still active one year from now we recommend that you contact us again so that we can update this response.

Sincerely,
Information Services
New York Natural Heritage Program

Encs.
cc: Reg. 7, Wildlife Mgr.
Reg. 7, Fisheries Mgr.

BIOLOGICAL AND CONSERVATION DATA SYSTEM - ELEMENT OCCURRENCE REPORT, 28 DEC 1994
Prepared by N.Y.S.D.E.C NATURAL HERITAGE PROGRAM

(This report contains sensitive information which should be treated in a sensitive manner. Refer to the users guide for explanation of codes and ranks.)

COUNTY & TOWN	USGS 7 1/2' TOPOGRAPHIC MAP		LAT./ LONG.	PRECISION	LAST SEEN	EO RANK	SCIENTIFIC NAME	COMMON NAME	ELEMENT TYPE	NY STATUS	FED. STATUS	GLOBAL RANK	STATE RANK	OFFICE	USE
OSWEGO															
MEXICO	PULASKI	*	433133 761440	S	1992	D	CHLIDONIAS NIGER	BLACK TERN	BIRD	P SC	C2	G4	S2	4307652	9
MEXICO	PULASKI	*	433137 761425	S	1993	E	RAPTOR OBSERVATION AREA	RAPTOR OBSERVATION AREA	OTHER	U				4307652	17
MEXICO	PULASKI TEXAS MEXICO NEW HAVEN	*	433052 761456	S	1976	E?	WARM WATER FISH CONCENTRATION AREA	WARM WATER FISH CONCENTRATION AREA	OTHER	U				4307652	16
RICHLAND	PULASKI	*	433256 761247	S	1990	D	CHLIDONIAS NIGER	BLACK TERN	BIRD	P SC	C2	G4	S2	4307652	10
RICHLAND	PULASKI	*	433205 761326	M	1991	F	CHLIDONIAS NIGER	BLACK TERN	BIRD	P SC	C2	G4	S2	4307652	27

Records Processed

PAS Holbrook Property

* These areas have also been designated Significant Coastal Fish and Wildlife Habitats by the NYS Dept. of State.

USERS GUIDE TO NATURAL HERITAGE DATA

DATA SENSITIVITY: The data provided in these reports is sensitive and should be treated in a sensitive manner. The data is for your in-house use only and may not be released to the general public or incorporated in any public document without prior permission from the Natural Heritage Program.

BIOLOGICAL AND CONSERVATION DATA SYSTEM ELEMENT OCCURRENCE REPORTS:

COUNTY NAME: County where the element occurrence is located.
TOWN NAME: Town where the element occurrence is located.
USGS 7 1/2' TOPOGRAPHIC MAP: Name of 7.5 minute US Geological Survey (USGS) quadrangle map (scale 1:24,000).
LAT: Centrum latitude coordinates of the location of the occurrence. Important: latitude and longitude must be used with PRECISION (see below). For example, the location of an occurrence with M (minute) precision is not precisely known at this time and is thought to occur somewhere within a 1.5 mile radius of the given latitude/longitude coordinates.
LONG: Centrum longitude coordinates of the location of the occurrence. See also LAT above.
PRECISION: S - seconds: Location known precisely. (within a 300' or 1-second radius of the latitude and longitude given.
M - minutes: Location known only to within a 1.5 mile (1 minute) radius of the latitude and longitude given.
SIZE (acres): Approximate acres occupied by the element at this location.
SCIENTIFIC NAME: Scientific name of the element occurrence.
COMMON NAME: Common name of the element occurrence.
ELEMENT TYPE: Type of element (i.e. plant, community, other, etc.)
LAST SEEN: Year element occurrence last observed extant at this location.
EO RANK: Comparative evaluation summarizing the quality, condition, viability and defensibility of this occurrence. Use in combination with LAST SEEN and PRECISION.
A-E = Extant: A=excellent, B=good, C=marginal, D=poor, E=extant but with insufficiently data to assign a rank of A - D.
F = Failed to find. Did not locate species, but habitat is still there and further field work is justified.
H = Historic. Historic occurrence without any recent field information.
X = Extirpated. Field/other data indicates element/habitat is destroyed and the element no longer exists at this location.

NYS STATUS - animals: Categories of Endangered and Threatened species are defined in New York State Environmental Conservation Law section 11-0535. Endangered, Threatened, and Special Concern species are listed in regulation 6NYCRR 182.5.
E = Endangered Species: any species which meet one of the following criteria:
1) Any native species in imminent danger of extirpation or extinction in New York.
2) Any species listed as endangered by the United States Department of the Interior, as enumerated in the Code of Federal Regulations 50 CFR 17.11.
T = Threatened Species: any species which meet one of the following criteria:
1) Any native species likely to become an endangered species within the foreseeable future in NY.
2) Any species listed as threatened by the U.S. Department of the Interior, as enumerated in the Code of the Federal Regulations 50 CFR 17.11.
SC = Special Concern Species: those species which are not yet recognized as endangered or threatened, but for which documented concern exists for their continued welfare in New York. Unlike the first two categories, species of special concern receive no additional legal protection under Environmental Conservation Law section 11-0535 (Endangered and Threatened Species).
P = Protected Wildlife (defined in Environmental Conservation Law section 11-0103): wild game, protected wild birds, and endangered species of wildlife.
U = Unprotected (defined in Environmental Conservation Law section 11-0103): the species may be taken at any time without limit; however a license to take may be required.
G = Game (defined in Environmental Conservation Law section 11-0103): any of a variety of big game or small game species as stated in the Environmental Conservation Law; many normally have an open season for at least part of the year, and are protected at other times.

NYS STATUS - plants: The following categories are defined in regulation 6NYCRR part 193.3 and apply to New York State Environmental Conservation Law section 9-1503.
(blank) = no state status
E = Endangered Species: listed species are those with:
1) 5 or fewer extant sites, or
2) fewer than 1,000 individuals, or
3) restricted to fewer than 4 U.S.G.S. 7 1/2 minute topographical maps, or
4) species listed as endangered by U.S. Department of Interior, as enumerated in Code of Federal Regulations 50 CFR 17.11
T = Threatened: listed species are those with:
1) 6 to fewer than 20 extant sites, or
2) 1,000 to fewer than 3,000 individuals, or
3) restricted to not less than 4 or more than 7 U.S.G.S. 7 and 1/2 minute topographical maps, or
4) listed as threatened by U.S. Department of Interior, as enumerated in Code of Federal Regulations 50 CFR 17.11.
R = Rare: listed species have:
1) 20 to 35 extant sites, or
2) 3,000 to 5,000 individuals statewide.
U = Unprotected
V = Exploitably vulnerable: listed species are likely to become threatened in the near future throughout all or a significar portion of their range within the state if causal factors continue unchecked.

NYS STATUS - communities: At this time there are no categories defined for communities.

continued on next page

FEDERAL STATUS (plants and animals): The categories of federal status are defined by the United States Department of the Interior as part of the 1974 Endangered Species Act (see Code of Federal Regulations 50 CFR 17). The species listed under this law are enumerated in the Federal Register vol. 50, no. 188, pp. 39526 - 39527.

(blank) = No Federal Endangered Species Act status.
LE = The taxon is formally listed as endangered.
LT = The taxon is formally listed as threatened.
LELT = The taxon is formally listed as endangered in part of its range and threatened in other parts.
PE = The taxon is proposed as endangered.
PT = The taxon is proposed as threatened.
C1 = Candidate, category 1 - There is sufficient information to list the taxon as endangered or threatened.
C2 = Candidate, category 2 - The taxon may be appropriate for listing but more data are needed.
3A = The taxon considered extinct by the U. S. Fish and Wildlife Service.
3B = The taxon is no longer considered taxonomically distinct by the U.S. Fish and Wildlife Service & thus not appropriate for listing.
3C = The taxon has been shown to be more abundant, widespread, or better protected than previously thought and therefore not in need of official listing.
* = The taxon is possibly extinct.
** = The taxon is thought to be extinct in the wild but extant in cultivation.

Additional codes:
(C2NL) = Heritage code indicating that the taxon is a candidate in some areas, not listed in other areas.
(E/SA) = Heritage code indicating that the taxon is endangered because of similarity of appearance to other endangered species or subspecies.

FEDERAL STATUS (communities): At this time there are no categories defined for communities.

GLOBAL AND STATE RANKS (animals, plants, communities and others): Each element has a global and state rank as determined by the NY Natural Heritage Program. These ranks carry no legal weight. The global rank reflects the rarity of the element throughout the world and the state rank reflects the rarity within New York State. Infraspecific taxa are also assigned a taxon rank to reflect the infraspecific taxon's rank throughout the world.

GLOBAL RANK:
G1 = Critically imperiled globally because of extreme rarity (5 or fewer occurrences), or very few remaining acres, or miles of stream) or especially vulnerable to extinction because of some factor of its biology.
G2 = Imperiled globally because of rarity (6 - 20 occurrences, or few remaining acres, or miles of stream) or very vulnerable to extinction throughout its range because of other factors.
G3 = Either rare and local throughout its range (21 to 100 occurrences), or found locally (even abundantly at some of its locations) in a restricted range (e.g. a physiographic region), or vulnerable to extinction throughout its range because of other factors.
G4 = Apparently secure globally, though it may be quite rare in parts of its range, especially at the periphery.
G5 = Demonstrably secure globally, though it may be quite rare in parts of its range, especially at the periphery.
GH = Historically known, with the expectation that it might be rediscovered.
GX = Species believed to be extinct.
GU = Status unknown.

STATE RANK:
S1 = Typically 5 or fewer occurrences, very few remaining individuals, acres, or miles of stream, or some factor of its biology making it especially vulnerable in New York State.
S2 = Typically 6 to 20 occurrences, few remaining individuals, acres, or miles of stream, or factors demonstrably making it very vulnerable in New York State.
S3 = Typically 21 to 100 occurrences, limited acreage, or miles of stream in New York State.
S4 = Apparently secure in New York State.
S5 = Demonstrably secure in New York State.
SH = Historically known from New York State, but not seen in the past 15 years.
SX = Apparently extirpated from New York State.
SA = Accidental or casual in the state.
SE = Exotic, not native to New York State.
SP = Element potentially occurs in the state but there are no occurrences reported.
SR = Reported in the state but without persuasive documentation.
SU = Status unknown.
TAXON (T) RANK: The T-ranks (T1 - T5) are defined the same way the Global ranks (G1 - G5) are but the T-rank only refers to the rarity of the subspecific taxon of the species as a whole.
T1 through T5 = See Global Rank definitions above.
Q = Indicates a question exists whether or not the taxon is a good taxonomic entity.
? = Indicates a question exists about the rank.

OFFICE USE: Information for use by the Natural Heritage Program.

SIGNIFICANT HABITAT REPORTS:
REPORT ID: Significant habitat file code.
NAME OF AREA: Site name where the significant habitat is located.
TYPE OF AREA: Type of significant habitat.
COUNTY/TOWN OR CITY: County and town where the significant habitat is located.
QUADRANGLE: Name of the USGS 7.5 minute topographic map where the significant habitat is located.
LATITUDE: Latitude coordinates (degrees, minutes, seconds) for the location of the significant habitat.
LONGITUDE: Longitude coordinates for the location of the significant habitat.

Reference 29

PAS Holbrook Property Site
Residential Well Sampling Summary - Project Notes
Ebasco Services, Inc.
October 1995

Name/Address	Date	microbial	physical parameters	inorganics	organics	petroluem products	Notes - NY Water Standards Exceedences
Clark Residence	May-80	x	x	x	x		Turbidity = 5.6 NTU; chloride = 290 mg/l; iron = 0.38 mg/l
Bangall Road							
Scott Residence	May-80				x	x	Garage tap and basement sink sampled; no exceedences noted.
R.D. #1							
Davis Residence	Jun-80	x	x				Exceedence for color
Ruffos Residence	Apr-80	x	x	x	x		Benzene = 4.0 ug/l
R.D. #1	May-80				x		No detections
Grafton Square Road	Jun-80		x		x		No detections/exceedences
	Dec-87				x		Detections included: benzene = 10 ug/l; toluene = 23 ug/l; naphthalene = 2 ug/l
	Jan-88				x		No detections
Stacey Residence	May-80	x	x	x			Microbial exceedences
Bangall Road							
Fernstein Residence	Jun-80				x		No detections
Vecchio Residence	Apr-80	x	x	x	x		Benzene = 3 ug/l; nitrogen = 11mg/l
Rice Road	May-80				x		No detections
	Jun-80		x		x		No detections
Comstock Residence	Apr-80	x	x	x	x		Benzene = 3 ug/l
Bangall Road	May-80				x		No detections
	Jun-80				x		No detections
Forkhamer Residence	Apr-80	x	x	x	x		Benzene = 2 ug/l
Route 38	May-80				x		No detections
	Jun-80				x		No detections
Parker Residence	Apr-80	x	x	x	x		Benzene = 6 ug/l
Bangall Road	May-80				x		No detections
	Jun-80		x		x		No detections
Miller Residence	May-80				x	x	No detections
R.D. #1, Box 111A							
Cook Residence	May-80				x	x	No detections
Box 197							

PAS Holbrook Property Site
Residential Well Sampling Summary - Project Notes
Ebasco Services, Inc.
October 1995

Name/Address	Date	microbial	physical parameters	inorganics	organics	petroluem products	Notes - NY Water Standards Exceedences
Conrad Residence	Apr-80	x	x	x	x		Benzene = 5 ug/l
Grafton Square Road	May-80	x			x		No detections
	Jun-80		x		x		No detections
Ware Residence	May-80				x	x	No detections
R.D. #1							
Minkler Residence	May-80				x	x	No detections
R.D. #1							
Foote Residence	May-80				x	x	No detections
R.D. #1, Rice Road							
Smith Residence	May-80				x	x	No detections
R.D. #1							
Gould Residence	May-80				x	x	No detections
R.D. #1, Box 14a							
APW High School	Jul-80				x		No detections
Village of Parish							
Holbrook Residence	Jun-80		x				Sampled well at rear of barn; exceedence for color
Bangall Road	Jul-80			x			Iron = 0.55 mg/l; manganese = 0.89 mg/l

0454

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 10545 YR/MO/DAY/HR SAMPLE REC'D: 80/05/22/09

REPORTING LAB: 30 SYRACUSE LAB
PROGRAM: 126
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: RAY CLARK RES., BANGALL RD

ST) PARISH

EXACT SAMPLING POINT: KITCHEN TAP TRAILER
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 05/21/15
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

PARAMETER		UNIT	RESULT	NOTATION
026800	STD PL COUNT		8.	
026900	COLIFORM BAC MPN		2.	LT
526900	COL ORG STUBE MTD NO POS		1.	LT

This microbiological analysis indicates that the water (was) was not of a satisfactory sanitary quality when the sample was collected.
Oswego County Health Dept.
Lyndi J. Waterman

RECEIVED
JUN 0 3 1980
OSWEGO COUNTY HEALTH DEPT.

DATE COMPLETED: 5/27/80

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: HEERKENS

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 01169 YR/MO/DAY/HR SAMPLE REC'D: 80/05/22/09

REPORTING LAB: 33 SYRACUSE LAB
PROGRAM: 126
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO (T) PARISH
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: RAY CLARK RESIDENCE, BANGALL RD.

EXACT SAMPLING POINT: KITCHEN TAP TRAILER
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 05/21/15
REPORT SENT TO: CO (0) RO (1) LPHE (2) LHO (1) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
100200	TURBIDITY,N.T.U.NEPHEL.		(5.6)	
000100	COLOR (APPARENT)		12.	
100300	ODOR, COLD		3.ROTTEN	
001900	PH (LABORATORY)		8.3	
101501	ALKALINITY,ELECTROM.PH4.5	MG/L	160.	
001001	CHLORIDE	MG/L	(290.)	
000801	NITROGEN,NITRATE&NITRITE	MG/L	.1	LT
202401	SULFATE AS SO4	MG/L	7.	
106501	C.O.D.	MG/L	7.2	

THE RESULTS CIRCLED ABOVE
DO NOT MEET THE RECOMMENDED
STANDARDS SET FORTH IN THE
N.Y.S. PART 5 SANITARY CODE

RECEIVED
JUN 04 1980
OSWEGO COUNTY HEALTH DEPT.

DATE COMPLETED: 5/29/80

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: HEERKENS

0924

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 00508 YR/MO/DAY/HR SAMPLE REC'D: 80/05/28/11

REPORTING LAB: 10 EHC ALBANY
PROGRAM: 126
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: RAY CLARK RES BANGALL RD PARISH

(T) PARISH

EXACT SAMPLING POINT: KIT TAP TRAILOR
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 05/21/15
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (0)

	PARAMETER	UNIT	RESULT	NOTATION
010001	IRON	MG/L	0.38	
010201	MANGANESE	MG/L	0.02	

THE RESULTS CIRCLED ABOVE
DO NOT MEET THE RECOMMENDED
STANDARDS SET FORTH IN THE
N.Y.S. PART 5 SANITARY CODE

RECEIVED
JUN 09 1980
OSWEGO COUNTY HEALTH DEPT.

DATE COMPLETED: 6/05/80

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: HERRKINS

0809

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 80648 YR/MO/DAY/HR SAMPLE REC'D: 80/05/15/09

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N. DEG ' "W
COMMON NAME INCL SUBW'SHED: RAY CLARK RES PARISH

EXACT SAMPLING POINT: CWKT
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 05/14/10
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
023609	1,1,1-TRICHLOROETHANE	MCG/L	5.	LT
036609	CARBON TETRACHLORIDE	MCG/L	5.	LT
038909	BROMODICHLOROMETHANE	MCG/L	2.	LT
039009	CHLOROFORM	MCG/L	5.	LT
041109	TRICHLOROETHYLENE	MCG/L	5.	LT
041209	TETRACHLOROETHYLENE	MCG/L	2.	LT
042109	BROMOFORM	MCG/L	5.	LT
044909	DIBROMOCHLOROMETHANE	MCG/L	2.	LT
034409	BENZENE	MCG/L	1.	LT
034509	XYLENES	MCG/L	1.	LT
039209	TOLUENE	MCG/L	1.	LT

DATE COMPLETED: 5/30/80

RECEIVED
JUN 04 1980
OSWEGO COUNTY HEALTH DEPT.

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCCARTHY

June 19, 1980

Mr. Leonard Scott
R.D. #1
Parish, NY 13131

Dear Mr. Scott:

Attached is a photo copy of a laboratory report for a water sample collected at your home on May 12, 1980. You will remember that we telephoned these results some weeks ago.

The report indicates that no gasoline, kerosene, fuel oil or lubricating oil was found in your well. Also Benzene, Xylene and Toluene were less than the detection limits of our testing procedure, which is one micro gram per litre.

If you have any questions, please feel free to call me at 473-8374.

Sincerely,

James M. McCarthy
Dir. of Public Health Engineering

Attachment

cc: Oswego County Health Dept. ✓

1032

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 80616 YR/MO/DAY/HR SAMPLE REC'D: 80/05/13/16

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N. DEG ' "W
COMMON NAME INCL SUBW'SHED: PARISH

EXACT SAMPLING POINT: CWT BASEMENT SINK SCOTT RES
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 05/12/11
REPORT SENT TO: CO (1) RO (2) LPHE (2) LHO (0) FED (0) CHEM (1)

PARAMETER		UNIT	RESULT	NOTATION
007310	GASOLINE	MCL/L	NONE DET.	
007410	KEROSENE	MCL/L	NONE DET.	
007510	OIL LUBRICATING	MCL/L	NONE DET.	
007610	OIL FUEL	MCL/L	NONE DET.	
034409	BENZENE	MCG/L	1.	LT
034509	XYLENES	MCG/L	1.	LT
039209	TOLUENE	MCG/L	1.	LT

THE ABOVE RESULTS MEET THE RECOMMENDED STANDARDS SET FORTH IN THE N.Y.S. PART 5 SANITARY CODE

DATE COMPLETED: 6/13/80

RECEIVED
JUN 19 1980
OSWEGO COUNTY HEALTH DEPT.

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: NOTGIVEN

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 80614 YR/MO/DAY/HR SAMPLE REC'D: 80/05/13/16

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO (T) PARISH
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: PARISH

EXACT SAMPLING POINT: GARAGE TAP SCOTT RES
TYPE OF SAMPLE: 10 WATER, DUG WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 05/12/11
REPORT SENT TO: CO (1) RO (2) LPHE (2) LHO (0) FED (0) CHEM (0)

	PARAMETER	UNIT	RESULT	NOTATION
007310	GASOLINE	MCL/L	NONE DET.	
007410	KEROSENE	MCL/L	NONE DET.	
007510	OIL LUBRICATING	MCL/L	NONE DET.	
007610	OIL FUEL	MCL/L	NONE DET.	
034409	BENZENE	MCG/L	1.	LT
034509	XYLENES	MCG/L	1.	LT
039209	TOLUENE	MCG/L	1.	LT

THE ABOVE RESULTS MEET THE RECOMMENDED STANDARDS SET FORTH IN THE N.Y. [illegible] PART 5 SANITARY CODE

RECEIVED
JUN 19 1980
OSWEGO COUNTY HEALTH DEPT.

DATE COMPLETED: 6/13/80

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCCARTHY

0698

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 11371 YR/MO/DAY/HR SAMPLE RECVD: 80/06/03/16

REPORTING LAB: 30 SYRACUSE LAB
PROGRAM: 126
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBWSHED: ELMER DAVIS RESD

(T) PARISH

EXACT SAMPLING POINT: CWKT
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 06/03/12
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

PARAMETER		UNIT	RESULT	NOTATION
026800	STD PL COUNT		3.	
027000	COLIF MF COL/100ML		1.	LT

This microbiological analysis indicates that the water (was,) ~~was not~~ of a satisfactory sanitary quality when the sample was collected.
Oswego County Health Dept.
Lyndi J. Waterman

RECEIVED
JUN 12 1980
OSWEGO COUNTY HEALTH DEPT

DATE COMPLETED: 6/06/80

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: HEERKENS

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 01314 YR/MO/DAY/HR SAMPLE REC'D: 80/06/03/16

REPORTING LAB: 33 SYRACUSE LAB
PROGRAM: 126
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO (PARISH)
COORDINATES: DEG ' "N. DEG ' "W
COMMON NAME INCL SUBW'SHED: ELMER DAVIS RESD

EXACT SAMPLING POINT: CWKT
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 06/03/12
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
100200	TURBIDITY,N.T.U.NEPHEL.		7.2	
000100	COLOR (APPARENT)		(20.)	
100300	ODOR, COLD		1.VEG	
001900	PH (LABORATORY)		8.2	
101501	ALKALINITY,ELECTROM.PH4.5	MG/L	139.	
001101	HARDNESS, TOTAL AS CACO3	MG/L	140.	
001001	CHLORIDE	MG/L	5.LT	SR
000801	NITROGEN,NITRATE&NITRITE	MG/L	.1	LT
106501	C.O.D.	MG/L	4.	LT

THE RESULTS CIRCLED ABOVE DO NOT MEET THE RECOMMENDED STANDARDS SET FORTH IN THE N.Y.S. PART 5 SANITARY CODE

DATE COMPLETED: 6/12/80

RECEIVED
JUN 17 1980
OSWEGO COUNTY HEALTH DEPT

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: HEERKENS

June 19, 1980

Mr. & Mrs. George Ruffos
R.D. #1, Grafton Square Rd.
Parish, NY 13131

Dear Mr. & Mrs. Ruffos:

Attached is a photocopy of an additional laboratory report for a water sample at your home on June 3, 1980. This is the 4th such report that we have sent you. This report indicates the concentrations for Benzene, Xylenes, Toluene were at less than 1 microgram per liter.

If you have any questions, please feel free to call me at 473-8374.

Very truly yours,

James M. McCarthy, P.E.
Director of Public Health Engineering

Attachment

cc: Oswego County Health Dept.

June 6, 1980

Mr. & Mrs. George Ruffos
R.D. #1, Grafton Square Road
Parish, New York 13131

Dear Mr. & Mrs. Ruffos:

Attached is a photocopy of an additional laboratory report for a water sample at your home on May 13, 1980. This is the third such report that we have sent you. This report indicates the concentrations for Benzene, Xylenes, Toluene were at less than 1 microgram per liter.

An additional test was taken at your home on June 4, 1980.

If you have any questions, please feel free to call me at 473-8374.

Very truly yours,

James M. McCarthy, P.E.
Director of Public Health Engineering

JMM:kfb
Attach.

cc: Oswego County Health Dept.

May 30, 1980

Mr. & Mrs. George E. Ruffos
R.D. #1, Grafton Square Road
Parish, New York 13131

Dear Mr. & Mrs. Ruffos:

Attached is a photocopy of an additional laboratory report for a water sample collected at your home on April 22, 1980. You will remember the copy of the bacteriological report that I sent you on May 5, 1980.

The results are all satisfactory except for the positive result reported for Benzene.

As you remember resamples were collected from your home on May 13, 1980 and the laboratory has reported by telephone that reportable levels of Benzene were not present. However, printed copies of these reports are not yet available. They will be sent as soon as possible.

We do not know for sure why the first samples collected from your well had positive levels of Benzene present and the second sample was negative for Benzene. But, we are concerned and will resample your home shortly.

The results of some Parameters or chemicals tested are reported as 5 LT which means less than 5 micrograms per liter. This is the lowest value which the laboratory will ever report on the minimum detectable limit.

The following chemicals have a minimum detection of 5 micrograms/liter

1. 1, 1, 1 - Trichloroethane
2. Carbon Tetrachloride
3. Chloroform
4. Trichloroethylene
5. Bromoform

The following chemicals have a minimum detection limit of 2 micrograms per liter.

1. Bromodichloromethane
2. Tetrachloroethylene
3. Dibromochloromethane

The following chemicals have a minimum detection limit of 1 microgram per liter.

1. Benzene
2. Xylene
3. Toluene

Therefore, a result of 1, 1, 1-Trichloroethane MCG/L 5 LT should be read as less than detectable amounts of 1, 1, 1- Trichloroethane.

A result for Benzene of MCG/L 4 would mean that the sample contained 4 micrograms per liter of Benzene.

If you have any questions, please feel free to call me at 473-8374.

Very truly yours,

James M. McCarthy, P.E.
Director of Public Health Engineering

Attachment

cc: Oswego County Health Dept.

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 07919 YR/MO/DAY/HR SAMPLE REC'D: 80/04/22/14

REPORTING LAB: 30 SYRACUSE LAB
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: RUFFOS RESIDENNCE

EXACT SAMPLING POINT: CWKT
TYPE OF SAMPLE: 10 WATER, DUG WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 04/22/10
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
026800	STD PL COUNT		110.	
027000	COLIF MF COL/100ML		1.	LT

This microbiological analysis indicates that the water was/was-not of a satisfactory sanitary quality when the sample was collected.
Oswego County Health Dept.
Lyndi J. Waterman

DATE COMPLETED: 4/24/80

RECEIVED
APR 30 1980
OSWEGO COUNTY HEALTH DEPT

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCCARTHY

NEW OR STATE DEPARTMENT OF HE .TH
DIVISION OF LABORATORIES AND RESEARCH
ENVIRONMENTAL HEALTH CENTER

RESULTS OF EXAMINATION
(PAGE 1 OF 2)

LAB ACCESSION NO: 00873 YR/MO/DAY/HR SAMPLE REC'D: 80/04/22/14

REPORTING LAB: 33 SYRACUSE LAB
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 (T)PARISH COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: RUFFOS RESIDENCE

EXACT SAMPLING POINT: CW KT
TYPE OF SAMPLE: 10 WATER, DUG WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 04/22/10
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
000401	FLUORIDE,FREE	MG/L	.1	LT
000801	NITROGEN,NITRATE&NITRITE	MG/L	3.1	
009401	BARIUM	MG/L	0.5	LT
010309	MERCURY, TOTAL	MCG/L	0.4	LT
010601	SILVER	MG/L	0.02	LT
309309	ARSENIC	MCG/L	10.	LT
309709	CADMIUM	MCG/L	2.	LT
309809	CHROMIUM	MCG/L	10.	LT
310109	LEAD	MCG/L	10.	
310509	SELENIUM	MCG/L	5.	LT
100300	ODOR, COLD		1.SULFUR	
001900	PH (LABORATORY)		6.8	
101501	ALKALINITY,ELECTROM.PH4.5	MG/L	139.	

DATE COMPLETED: 6/10/80

RECEIVED
JUN 16 1980
OSWEGO COUNTY HEALTH DEPT.

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCCARTHY

NEW(RK STATE DEPARTMENT OF HE(TH
DIVISION OF LABORATORIES AND RESEARCH
ENVIRONMENTAL HEALTH CENTER

RESULTS OF EXAMINATION
(PAGE 2 OF 2)

LAB ACCESSION NO: 00873 YR/MO/DAY/HR SAMPLE REC'D: 80/04/22/14

REPORTING LAB: 33 SYRACUSE LAB
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: RUFFOS RESIDENCE

EXACT SAMPLING POINT: CW KT
TYPE OF SAMPLE: 10 WATER, DUG WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 04/22/10
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
001101	HARDNESS, TOTAL AS CACO3	MG/L	184.	
010701	SODIUM	MG/L	13.	
001001	CHLORIDE	MG/L	33.	
106501	C.O.D.	MG/L	5.4	

THE ABOVE RESULTS MEET THE
RECOMMENDED STANDARDS SET
FORTH IN THE N.Y.S. PART 5
SANITARY CODE

DATE COMPLETED: 6/10/80

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCCARTHY

0882

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

MAY 22 1980

OSWEGO COUNTY HEALTH DEPT

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 80519 YR/MO/DAY/HR SAMPLE REC'D: 80/04/23/16

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: RUFFOS RES PARISH

EXACT SAMPLING POINT: CWKT
TYPE OF SAMPLE: 10 WATER, DUG WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 04/22/10
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

PARAMETER		UNIT	RESULT	NOTATION
023609	1,1,1-TRICHLOROETHANE	MCG/L	5.	LT
036609	CARBON TETRACHLORIDE	MCG/L	5.	LT
038909	BROMODICHLOROMETHANE	MCG/L	2.	LT
039009	CHLOROFORM	MCG/L	5.	LT
041109	TRICHLOROETHYLENE	MCG/L	5.	LT
041209	TETRACHLOROETHYLENE	MCG/L	2.	LT
042109	BROMOFORM	MCG/L	5.	LT
044909	DIBROMOCHLOROMETHANE	MCG/L	2.	LT
034409	BENZENE	MCG/L	4.	
034509	XYLENES	MCG/L	1.	LT
039209	TOLUENE	MCG/L	1.	LT

DATE COMPLETED: 5/14/80

THE RESULTS CIRCLED ABOVE DO NOT MEET THE RECOMMENDED STANDARDS SET FORTH IN THE N.Y.S. PART 5 SANITARY CODE

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCCARTHY

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 80626 YR/MO/DAY/HR SAMPLE REC'D: 80/05/14/14

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: RUFFOS RES PARISH

EXACT SAMPLING POINT: CWKT DUG WELL
TYPE OF SAMPLE: 10 WATER, DUG WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 05/13/12
REPORT SENT TO: CO (1) RO (2) LPHE (2) LHO (1) FED (0) CHEM (0)

	PARAMETER	UNIT	RESULT	NOTATION
034409	BENZENE	MCG/L	1.	LT
034509	XYLENES	MCG/L	1.	LT
039209	TOLUENE	MCG/L	1.	LT

DATE COMPLETED: 5/23/80

RECEIVED
JUN 04 1980
OSWEGO COUNTY HEALTH DEPT

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: NOTGIVEN

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 80767 YR/MO/DAY/HR SAMPLE RECD: 80/06/04/10

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBWISHED: RUFFOS RES PARISH

EXACT SAMPLING POINT: CWKT
TYPE OF SAMPLE: 10 WATER, DUG WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 06/03/10
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
034409	BENZENE	MCG/L	1.	LT
034509	XYLENES	MCG/L	1.	LT
039209	TOLUENE	MCG/L	1.	LT

THE ABOVE RESULTS MEET THE RECOMMENDED STANDARDS SET FORTH IN THE N.Y.S. PART 5 SANITARY CODE

RECEIVED
JUN 19 1980
OSWEGO COUNTY HEALTH DEPT.

DATE COMPLETED: 6/13/80

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: HEERKENS

3224

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 01645 YR/MO/DAY/HR SAMPLE REC'D: 80/06/25/09

REPORTING LAB: 33 SYRACUSE LAB
PROGRAM: 126
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 (T) PARISH COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: GEORGE RUFFOS RESIDENCE

EXACT SAMPLING POINT: CW KT.
TYPE OF SAMPLE: 10 WATER, DUG WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 06/24/11
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
202401	SULFATE AS S04	MG/L	21.	

THE ABOVE RESULTS MEET THE RECOMMENDED STANDARDS SET FORTH IN THE N.Y.S. PART 5 SANITARY CODE

DATE COMPLETED: 7/07/80

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: HEERKENS

OSWEGO COUNTY HEALTH SERVICES (315) 349-3545
PUBLIC HEALTH DEPARTMENT
MENTAL HEALTH DEPARTMENT
70 BUNNER STREET
P.O. BOX 3080
OSWEGO, N.Y. 13126-3080

RUPERT J. COLLINS
COMMISSIONER

February 8, 1988

Mr. George Ruffos
R.D.# 1, Grafton Sq. Rd.
Parish, New York 13131

Dear Mr. Ruffos:

Enclosed please find two (2) sets of sample results from your residence.

The first set of results corresponds with the sample taken on 12/9/87 by myself in response to your complaint to the New York State Department of Health. These results show a benzene level of 10.0 mcg/l, which is above the State public drinking water standard of 5.0 mcg/l. There were other positive findings as well, chloroform at 1.0 mcg/l, Toluene at 23.0 mcg/l, para-xylene at 5.0 mcg/l, meta-xylene at 11.0 mcg/l , ortho-xylene at 20.0 mcg/l, 1,3,5 trimethylbenzene at 2.0 mcg/l, 1,2,4 trimethyl-benzene at 3.0mcg/l and naphthalene at 2.0 mcg/l. However, none of these exceeded the guideline of 50.0 mcg/l for individual parameters or 100.0 mcg/l for the total concentration of all organics detected (total = 77.0 mcg/l).

As a result of the first sample and its subsequent findings, you were advised on 1/8/88 not to consume the water until a follow-up sample was analyzed. This second sample was collected on 1/11/88. The results from this sample indicate all parameters were less than detectable and meet State Public Drinking Water standards and guidelines. You were notified of this fact on 2/4/88 by Evan Walsh of this Department.

Other points of interest which should be stated:

1. The presence of an odor was noted during the 12/9 sample but was not during the 1/11 sample.

2. The location of the shallow dug well lends itself to contamination from runoff via the road and/or the driveway.

3. The parameters with the highest concentrations (benzene, tolene and the xylenes) are all components of petroleum products, and are commonly associated with such.

4. Pumping of the well between first and second sampling events rendered the water ordorless and apparently clean of contaminants.

Ruffos, Feb 8, 1988, Cont.

Although a specific reason for the difference between the two results connot be given, a logical assumption would appear to be that the contamination occurred as a result of runoff from the road or your driveway.

Should the odor problem reappear or any additional questions arise, please do not hesitate to call our office at 349-3561.

Sincerely,

Christopher J. Williams
Public Health Sanitarian

CJW/mm

0295 NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 880047 SAMPLE RECEIVED:88/01/13/ CHARGE: 7.00
PROGRAM: 110:STATE SUPERFUND ANALYTICAL SERVICES - HRI Contract 814-2245
SOURCE ID: DRAINAGE BASIN:03 GAZETTEER CODE:3762
POLITICAL SUBDIVISION:PARISH COUNTY:OSWEGO
LATITUDE: . LONGITUDE: . Z DIRECTION:
LOCATION: PARISH DOWNGRADE FROM HOLBROOK PROP
DESCRIPTION:GEORGE RUFFOS RES KITCHEN CWT
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: 5031:AROMATIC PURGEABLES
SAMPLE TYPE: 100:PRIVATE WATER SUPPLY - DUG WELL
REASONS FOR SUBMISSION: TASTE/ODOR
TIME OF SAMPLING: 88/01/11 10:30 DATE PRINTED:88/01/21

<> >>>>> INQUIRED 880114 BY D.E.H.(SMB03) <<<<< <>
<> >>>>> INQUIRED 880119 BY D.E.H.(SMB03) <<<<< <>
<> >>>>> INQUIRED 880119 BY D.E.H.(SMB03) <<<<< <>

ANALYSIS: 5031 AROMATIC PURGEABLES, EPA METHOD 503.1 (DES 310-22)
DATE PRINTED: 88/01/21 FINAL REPORT

----------PARAMETER----------	----------RESULT----------
BENZENE	< 1. MCG/L
TRICHLOROETHENE	< 1. MCG/L
TOLUENE	< 1. MCG/L
TETRACHLOROETHENE	< 1. MCG/L
ETHYLBENZENE	< 1. MCG/L
1-CHLOROCYCLOHEXENE-1	< 1. MCG/L
PARA-XYLENE	< 1. MCG/L
META-XYLENE	< 1. MCG/L
CHLOROBENZENE	< 1. MCG/L
ORTHO-XYLENE	< 1. MCG/L
CUMENE	< 1. MCG/L
STYRENE	< 1. MCG/L
P-BROMOFLUOROBENZENE	< 1. MCG/L
N-PROPYLBENZENE	< 1. MCG/L
TERT-BUTYLBENZENE	< 1. MCG/L
O/P-CHLOROTOLUENE	< 1. MCG/L
BROMOBENZENE	< 1. MCG/L
META-CHLOROTOLUENE	< 1. MCG/L
1,3,5-TRIMETHYLBENZENE	< 1. MCG/L
1,2,4-TRIMETHYLBENZENE	< 1. MCG/L
P-CYMENE	< 1. MCG/L
1,4-DICHLOROBENZENE	< 1. MCG/L
CYCLOPROPYLBENZENE	< 1. MCG/L
1,3-DICHLOROBENZENE	< 1. MCG/L
SEC-BUTYLBENZENE	< 1. MCG/L

**** CONTINUED ON NEXT PAGE ****

COPIES SENT TO: CO(2), RO(1), LPHE(2), FED( ), INFO-P( ), INFO-L( )

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPT.
BUNNER ST.
OSWEGO,N.Y. 13126

SUBMITTED BY:THOMEE

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 2 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 880047 SAMPLE RECEIVED:88/01/13/ CHARGE: 7.00
POLITICAL SUBDIVISION:PARISH COUNTY:OSWEGO
LOCATION: PARISH DOWNGRADE FROM HOLBROOK PROP
TIME OF SAMPLING: 88/01/11 10:30 DATE PRINTED:88/01/21

PARAMETER	RESULT
N-BUTYLBENZENE	< 1. MCG/L
2,3-BENZOFURAN	< 1. MCG/L
1,2-DICHLOROBENZENE	< 1. MCG/L
HEXACHLOROBUTADIENE (C-46)	< 5. MCG/L
1,2,4-TRICHLOROBENZENE	< 5. MCG/L
NAPHTHALENE	< 5. MCG/L
1,2,3-TRICHLOROBENZENE	< 5. MCG/L

**** END OF REPORT ****

0887 NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 875658 SAMPLE RECEIVED:87/12/10/ CHARGE: 34.90
PROGRAM: 106:BUREAU OF ENVIRONMENTAL EXPOSURE INVESTIGATION
SOURCE ID: DRAINAGE BASIN:03 GAZETTEER CODE:3762
POLITICAL SUBDIVISION:PARISH COUNTY:OSWEGO
LATITUDE: LONGITUDE: Z DIRECTION:
LOCATION: TOWN OF PARISH-GEO. RUFFOS RES.
DESCRIPTION:RICHARDSON RD PARISH NY KCWT
REPORTING LAB: TOX:LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: XPEST-625:ORGANOCHLORINE PESTICIDES & PRIORITY POLLUTANTS
SAMPLE TYPE: 120:PRIVATE WATER SUPPLY - DRILLED WELL
REASONS FOR SUBMISSION: TASTE/ODOR
TIME OF SAMPLING: 87/12/09 09:30 DATE PRINTED:88/01/29

ANALYSIS: VHO5021 VOLATILE HALOGENATED INDICATORS-EPA METHOD 502.1
DATE REPORTED: 87/12/31 REPORT MAILED OUT

PARAMETER	RESULT
CHLOROMETHANE	< 1. MCG/L
BROMOMETHANE	< 1. MCG/L
VINYL CHLORIDE	< 1. MCG/L
DICHLORODIFLUOROMETHANE	< 1. MCG/L
CHLOROETHANE	< 1. MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 1. MCG/L
TRICHLOROFLUOROMETHANE	< 1. MCG/L
1,1-DICHLOROETHENE	< 1. MCG/L
1,1-DICHLOROETHANE	< 1. MCG/L
TRANS-1,2-DICHLOROETHENE	< 1. MCG/L
CIS-1,2-DICHLOROETHENE	< 1. MCG/L
CHLOROFORM	1. MCG/L
1,2-DICHLOROETHANE	< 1. MCG/L
DIBROMOMETHANE	< 1. MCG/L
1,1,1-TRICHLOROETHANE	< 1. MCG/L
CARBON TETRACHLORIDE	< 1. MCG/L
BROMODICHLOROMETHANE	< 1. MCG/L
2,3-DICHLOROPROPENE	< 1. MCG/L
1,2-DICHLOROPROPANE	< 1. MCG/L
TRANS-1,3-DICHLOROPROPENE	< 1. MCG/L
TRICHLOROETHENE	< 1. MCG/L
1,3-DICHLOROPROPANE	< 1. MCG/L
DIBROMOCHLOROMETHANE	< 1. MCG/L
CIS-1,3-DICHLOROPROPENE	< 1. MCG/L
1,1,2-TRICHLOROETHANE	< 1. MCG/L
1,2-DIBROMOETHANE	< 1. MCG/L
2-CHLOROETHYLVINYL ETHER	< 1. MCG/L
BROMOFORM	< 1. MCG/L
1,1,1,2-TETRACHLOROETHANE	< 1. MCG/L

**** CONTINUED ON NEXT PAGE ****

COPIES SENT TO: CO(1). RO(1). LPHE(2). FED( ). INFO-P( ). INFO-L( )

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPT.
BUNNER ST.
OSWEGO, N.Y. 13126

SUBMITTED BY:WILLIAMS

0888 NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 2 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 875658 SAMPLE RECEIVED:87/12/10/ CHARGE: 34.90
POLITICAL SUBDIVISION:PARISH COUNTY:OSWEGO
LOCATION: TOWN OF PARISH-GEO. RUFFOS RES.
TIME OF SAMPLING: 87/12/09 09:30 DATE PRINTED:88/01/29

PARAMETER	RESULT
1,2,3-TRICHLOROPROPANE	< 1, MCG/L
1,1,2,2-TETRACHLOROETHANE	< 1, MCG/L
TETRACHLOROETHENE	< 1, MCG/L
PENTACHLOROETHANE	< 1, MCG/L
1-CHLOROCYCLOHEXENE-1	< 1, MCG/L
CHLOROBENZENE	< 1, MCG/L
BIS(2-CHLOROETHYL)ETHER	< 1, MCG/L
1,2-DIBROMO-3-CHLOROPROPANE	< 1, MCG/L
BROMOBENZENE	< 1, MCG/L
ORTHO-CHLOROTOLUENE	< 1, MCG/L
BIS(2-CHLOROISOPROPYL)ETHER	< 1, MCG/L
1,3-DICHLOROBENZENE	< 1, MCG/L
1,2-DICHLOROBENZENE	< 1, MCG/L
1,4-DICHLOROBENZENE	< 1, MCG/L

ANALYSIS: P5031 AROMATIC PURGEABLES EPA METHOD 503.1 (DES 310-22)
DATE REPORTED: 87/12/24 REPORT MAILED OUT

PARAMETER	RESULT
BENZENE	10, MCG/L
TOLUENE	23, MCG/L
ETHYLBENZENE	< 1, MCG/L
PARA-XYLENE	5, MCG/L
META-XYLENE	11, MCG/L
ORTHO-XYLENE	20, MCG/L
CUMENE	< 1, MCG/L
STYRENE	< 1, MCG/L
P-BROMOFLUOROBENZENE	< 1, MCG/L
N-PROPYLBENZENE	< 1, MCG/L
TERT-BUTYLBENZENE	< 1, MCG/L
O/P-CHLOROTOLUENE	< 1, MCG/L
META-CHLOROTOLUENE	< 1, MCG/L
1,3,5-TRIMETHYLBENZENE	2, MCG/L
1,2,4-TRIMETHYLBENZENE	3, MCG/L
P-CYMENE	< 1, MCG/L
CYCLOPROPYLBENZENE	< 1, MCG/L
SEC-BUTYLBENZENE	< 1, MCG/L
N-BUTYLBENZENE	< 1, MCG/L
2,3-BENZOFURAN	< 1, MCG/L
HEXACHLOROBUTADIENE (C-46)	< 5, MCG/L
1,2,4-TRICHLOROBENZENE	< 5, MCG/L
NAPHTHALENE	2, MCG/L
1,2,3-TRICHLOROBENZENE	< 5, MCG/L

**** CONTINUED ON NEXT PAGE ****

0889 NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 3 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 875658 SAMPLE RECEIVED:87/12/10/ CHARGE: 34.90
POLITICAL SUBDIVISION:PARISH COUNTY:OSWEGO
LOCATION: TOWN OF PARISH-GEO. RUFFOS RES.
TIME OF SAMPLING: 87/12/09 09:30 DATE PRINTED:88/01/29

FOLLOWING PARAMETERS NOT PART OF TEST PATTERN

ANALYSIS: HERB HERBICIDES (DES 310-3)
DATE REPORTED: 87/12/24 REPORT MAILED OUT

PARAMETER	RESULT
2,4-D	< 0.5 MCG/L
SILVEX (2,4,5-TP)	< 0.1 MCG/L

ANALYSIS: XPEST ORGANOCHLORINE PESTICIDES (DES 310-2)
DATE REPORTED: 87/12/17 REPORT MAILED OUT

PARAMETER	RESULT
HCH,ALPHA	< 0.04 MCG/L
HCH,BETA	< 0.04 MCG/L
HCH,GAMMA (LINDANE)	< 0.04 MCG/L
HCH,DELTA	< 0.04 MCG/L
HEPTACHLOR	< 0.05 MCG/L
ALDRIN	< 0.02 MCG/L
HEPTACHLOR EPOXIDE	< 0.05 MCG/L
ENDOSULFAN I	< 0.05 MCG/L
DDE -PARA, PARA	< 0.05 MCG/L
DIELDRIN	< 0.02 MCG/L
ENDRIN	< 0.02 MCG/L
DDD -PARA, PARA	< 0.05 MCG/L
ENDOSULFAN II	< 0.05 MCG/L
ENDRIN ALDEHYDE	< 0.02 MCG/L
ENDOSULFAN SULFATE	< 0.05 MCG/L
DDT -PARA, PARA	< 0.05 MCG/L
METHOXYCHLOR	< 1.0 MCG/L
TOXAPHENE	< 1.0 MCG/L
CHLORDANE	< 0.1 MCG/L
MIREX	< 0.05 MCG/L

ANALYSIS: 625A ACIDS - E.P.A. METHOD 625 (DES 310-8)
DATE PRINTED: 88/01/29 FINAL REPORT

PARAMETER	RESULT
PHENOL	< 10. MCG/L
2-CHLOROPHENOL	< 10. MCG/L
2-NITROPHENOL	< 10. MCG/L
2,4-DIMETHYLPHENOL	< 10. MCG/L
2,4-DICHLOROPHENOL	< 10. MCG/L
4-CHLORO-3-METHYLPHENOL	< 10. MCG/L
2,4,6-TRICHLOROPHENOL	< 10. MCG/L
2,4,5-TRICHLOROPHENOL	< 10. MCG/L
2,4-DINITROPHENOL	< 10. MCG/L
4-NITROPHENOL	< 10. MCG/L
2-METHYL-4,6-DINITROPHENOL	< 10. MCG/L

**** CONTINUED ON NEXT PAGE ****

0890 NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 4 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 875658 SAMPLE RECEIVED:87/12/10/ CHARGE: 34.90
POLITICAL SUBDIVISION:PARISH COUNTY:OSWEGO
LOCATION: TOWN OF PARISH-GEO. RUFFOS RES.
TIME OF SAMPLING: 87/12/09 09:30 DATE PRINTED:88/01/29

PARAMETER	RESULT
PENTACHLOROPHENOL	< 10. MCG/L

ANALYSIS: 625BN BASE/NEUTRALS - F.R. METHOD 625 (DES 310-8)
DATE PRINTED: 88/01/29 FINAL REPORT

PARAMETER	RESULT
N-NITROSODI-N-PROPYLAMINE	< 10. MCG/L
HEXACHLOROETHANE	< 10. MCG/L
NITROBENZENE	< 10. MCG/L
ISOPHORONE	< 10. MCG/L
BIS(2-CHLOROETHOXY)METHANE	< 10. MCG/L
HEXACHLOROCYCLOPENTADIENE (C-56)	< 10. MCG/L
2-CHLORONAPHTHALENE	< 10. MCG/L
2,6-DINITROTOLUENE	< 10. MCG/L
ACENAPHTHYLENE	< 10. MCG/L
DIMETHYLPHTHALATE	< 10. MCG/L
ACENAPHTHENE	< 10. MCG/L
2,4-DINITROTOLUENE	< 10. MCG/L
DIETHYLPHTHALATE	< 10. MCG/L
FLUORENE	< 10. MCG/L
N-NITROSODIPHENYLAMINE	< 10. MCG/L
1,2-DIPHENYLHYDRAZINE	< 10. MCG/L
4-BROMOPHENYL PHENYL ETHER	< 10. MCG/L
HEXACHLOROBENZENE	< 10. MCG/L
PHENANTHRENE	< 10. MCG/L
ANTHRACENE	< 10. MCG/L
DI-N-BUTYLPHTHALATE	< 10. MCG/L
FLUORANTHENE	< 10. MCG/L
PYRENE	< 10. MCG/L
BENZIDINE	< 30. MCG/L
BUTYL BENZYL PHTHALATE	< 30. MCG/L
BENZO(A)ANTHRACENE	< 30. MCG/L
3,3'-DICHLOROBENZIDINE	< 30. MCG/L
CHRYSENE	< 30. MCG/L
BIS(2-ETHYLHEXYL)PHTHALATE	< 30. MCG/L
DI-N-OCTYL PHTHALATE	< 30. MCG/L
BENZO(B)FLUORANTHENE	< 30. MCG/L
BENZO(K)FLUORANTHENE	< 30. MCG/L
BENZO(A)PYRENE	< 30. MCG/L
INDENO(1,2,3-CD)PYRENE	< 30. MCG/L
DIBENZO(A,H)ANTHRACENE	< 30. MCG/L
BENZO(GHI)PERYLENE	< 30. MCG/L

**** END OF REPORT ****

6/1980 – Borgens 4 ppb, KCWT. Followups showed no further contamination.

Summer '87 - Drilled well pipe replaced, ∅ sulfur taste.

9 or 10/87 Water tasted bad. Well cleaned out + chlorox'd by son. Improved for awhile. Negative BacT., done privately.

11/87 - Tasted oily, with film. Stopped drinking it.

12/87 - Tested by Oswego Co. – Pos. for BTX + naphthalene.

1/87 - Retested, + San. Survey done by C. Williams (Os. Co.) + C. Thomée (NYS-DOH). Notes park next to shallow well, which is now used only for showers, dishes (non-drinking-water uses). "Now, no bad taste."

Prelim. results from 12/9 - Chloroform 1 ppb
B - 10
T - 83
PX - 5
MX - 11
OX - 20
1,3,5 TMB - 2
1,2,4 TMB - 3
Naphth. - 2

1/21/87 Phoned Mr. Ruffoo: Mr. R. believes that Holbrook, from 450 barrel-storage area, (80) is source. Soap bands were removed, & his own well pumped prior to '80 testing. So he feels that maximum contamination was never documented. Also says that Holbrook dumped material down an old well, on Rt. 38, and into a cistern on Mexico Hillplant site (according to neighbors).

Told of results, cautioned against drinking, bathing in water. Told he will be notified of final results by County, when results come in.

In person ✓
By phone ____

Re: Well Survey

Date: 1/11/88

By: Emmy Thomas Title PRS II

Name: George Ruffos (information by Mrs. Ruffos) # of Occupants: 4

Address: Richardson Rd. Yrs. at Present Address: Since '49

Town: Parish

Mailing Address (if different): R.D. 1 Grafton Sq., Parish

Phone: 625-7129 (H) 298-5133 (Schoeller Tech. Papers) (W)

Well Information:

Type (Dug, Drilled, Driven) 2 wells, dug
1 – ? 3' deep; sulphur taste; recovery slow; 65'
Year: 1933; 1949; ~1973 Approx. Depth: ? 60' Feet
Approx. Elevation: ____ Feet
Depth to Water: Dug – 3' down Feet 62' down, drilled
Depth of Casing: ____ Feet
Well Yield: Drilled 10g/min Gal/Min. Dug, 1/min. 265/hr.
Water Bearing Material: ? sand, gravel, red clay
Driller: Parish Dug 3-4' down Drilled well into rock

Sump on cellar floor, drain to ① area

Pump (Submersible/Jet) 2
Make: for dug well, 1/3 HP; Taft
Age: ____ Year

Both wells are to CWT (kitchen), but controlled with valves. Currently using "hauled" water from brother next door.

Water Treatment Devices:

Softener: No
Filter (Type): ____ aerator removed for sampling.

Can it be bypassed? (Yes/No)
Other: ____

Water Information:

Water Shortages? (Yes/No) If so, when? Shallow well slow to recover in summer when dry

Water Quality: Odor Yes, with film
(Describe) Taste "Oily" (Undesirable)
Duration of Problem: 1 ~ 2 mos.

Discoloration Clear
Film Yes –
After laundry, washer smelled oily

Fuel Storage Tanks On-Site? (Yes/No) # 3
(Above/Below Ground)
Capacity ____ Gallons → 1) ~250 gal; Fuel 2) 100 gal Agway (empty) since '83
3) Storage 50g drum with old auto oil "sometimes drips"

Remarks: Cellar has gutters around edges

Diagram: Show roads, subject dwelling, compass direction, well location, subsurface disposal area (leachfield), other nearby structures or dwellings, fuel storage tank location, and upgradient/downgradient locations.

LOCATION:
____ Feet (N/S) of North Latitude ____
____ Feet (E/W) of West Longitude ____

P- pump ① Agway gas tank
F- furnace ⊗ = Well

WADSWORTH CENTER FOR LABORATORIES AND RESEARCH
/ YORK STATE DEPARTMENT OF ..LTH
ALBANY, NEW YORK 12201

REQUEST FOR ANALYSIS

FOR LABORATORY USE ONLY — LAB ACCESSION NO. ______ SAMPLE REC'D. [ ] YEAR [ ] MONTH [ ] DAY [ ] MILITARY HOUR 00-24
TEST PATTERN ______

PLEASE PRINT ALL INFORMATION LEGIBLY IN INK

PROGRAM CODE 1 0 8 PROGRAM NAME Haz. Waste Site (Holbrook) offsite

A. SOURCE NUMBER ~~1 1 0 0~~ COUNTY Oswego

B. DRAINAGE BASIN 0 3 Ontario NAME NEW YORK GAZETTEER NO. 3 7 6 2 TOWN Parish

LATITUDE 4 _ ° _ _ ' _ _ . _ _ " N LONGITUDE 7 _ ° _ _ ' _ _ . _ _ " W

Z DIRECTION, ALTITUDE OR DEPTH, INCLUDE UNITS

LOCATION (CITY, TOWN OR VILLAGE), WATERSHED, NAME OF INDUSTRY, TREATMENT PLANT, OR WATER SUPPLY NAME OF LAKE, RIVER OR STREAM

PARISH, DOWNGRADE FROM HOLBROOK PROP.

60 character maximum (PLEASE PRINT)

EXACT DESCRIPTION OF SITE, NAME OF RESIDENT, STREET ADDRESS, PRECISE SAMPLING POINT

GEORGE RUFFOS RESIDENCE KITCHEN CWT

58 character maximum (PLEASE PRINT)

TIME OF SAMPLING

GRAB/COMPOSITE FINISH 8 8 YEAR 0 1 MONTH 1 1 DAY 1 0 MIL.HRS. (00-24) 3 0 MINUTE

COMPOSITE START [ ] YEAR [ ] MONTH [ ] DAY [ ] MIL. HRS. (00-24) [ ] MINUTE

TYPE OF SAMPLE (SELECT FROM LIST) 1 1 0 0 DESCRIPTION: Dug well kitchen CWT ..

COMPLAINTS, OBSERVATIONS, REASONS FOR SUBMISSION *(DO NOT CHECK IF ROUTINE SURVEILLANCE)*

- ☐ ILLNESS (A)
- ☑ TASTE/ODOR (B)
- ☐ TURBIDITY (C)
- ☐ COLOR (D)
- ☐ NATURAL DISASTER (E)
- ☐ FISHKILL (F)
- ☐ NEW EQUIP OR PROC. (G)
- ☐ EQUIP FAILURE (H)
- ☐ INTERRUPTION IN CHLORINATION (I)
- ☐ OTHER (J)

REPORT RESULTS TO (NO. OF COPIES): CO 1 RO 1 LPHE 2 FED [ ] INFO [ ] LAB [ ]

SUBMITTED BY E. THOMAS (PLEASE PRINT)

PRS II — TITLE (315) 428-7257 AREA CODE (PHONE NO)

ADDITIONAL INFORMATION REGARDING THIS SAMPLE
Follow-up on sample taken 12/9/87 which showed BTX and naphthalene.
cc: to Kevin Kelly, Region 7 DEC.

SANITARY BACTERIOLOCY
- ☐ TOTAL COLIFORMS MF CHLORINATED POTABLE WATER
- ☐ TOTAL COLIFORMS MF & SPC UNCHLORINATED POTABLE WATER
- ☐ TOTAL & FECAL COLIFORMS MF NONPOTABLE SURFACE WATER
- ☐ TOTAL COLIFORMS MPN & SPC POTABLE WATER
- ☐ TOTAL & FECAL COLIFORMS MPN CHLORINATED WASTE WATER
- ☐ OTHER ______

ORGANIC CHEMISTRY
- ☐ INSECTICIDES/HERBICIDES
- ☐ PCB'S
- ☐ TRIHALOMETHANES (THM-501)
- ☐ PURGEABLE HALOCARBONS (EPA601)
- ☐ PURGEABLE AROMATICS (EPA602)
- ☑ PURGEABLE COMPOUNDS (EPA503.1)
- ☐ PRIORITY POLLUTANTS — PURGEABLES (EPA624)
- ☐ PRIORITY POLLUTANTS — BASE NEUTRALS, ACIDS, PESTICIDES (EPA625)
- ☐ PETROLEUM PRODUCTS
- ☐ OTHER ______

Sample has HCl; do not believe it has thiosulfate (un-chlorinated - from a well (?))

INORGANIC CHEMISTRY
- ☐ POTABLE WATER, OCSS-I
- ☐ FLUORIDE
- ☐ NITRATE
- ☐ TRACE METALS, SPECIFY ______
- ☐ WQSN
- ☐ PRIMARY STP
- ☐ SECONDARY STP
- ☐ OTHER ______

WHITE COPY - Laboratory   YELLOW COPY - Collector retains

MEMORANDUM

TO: File

FROM: Chris Williams

SUBJ: Ruffos Res. H_2O Sample

DATE: 1/6/88

A water sample was taken at the Ruffos residence on Grafton Square Rd. Tn. of Parish on 12/9/87 in response to a taste/odor complaint. The sample was requested by Henri Hamel of the State Health Dept. in Syracuse.

05:45

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 10389 YR/MO/DAY/HR SAMPLE REC'D: 80/05/21/09

REPORTING LAB: 3C SYRACUSE LAB
PROGRAM: 126
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 (T)PARRISH COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: ENID STACEY RESIDENCE BANGALL RD

EXACT SAMPLING POINT: CNT KITCH
TYPE OF SAMPLE: 10 WATER, DUG WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 05/20/15
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

PARAMETER		UNIT	RESULT	NOTATION
026800	STD PL COUNT		560.	EE
026900	COLIFORM BAC MPN		16.	GT
526900	COL ORG STUBE MTD NO POS		5.	

This microbiological analysis indicates that the water ~~was~~, was not of a satisfactory sanitary quality when the sample was collected.
Oswego County Health Dept.
Lyndi J. Waterman

RECEIVED
JUN 0 3 1980
OSWEGO COUNTY HEALTH DEPT.

DATE COMPLETED: 5/27/80

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: HEERKENS

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 01171 YR/MO/DAY/HR SAMPLE REC'D: 80/05/21/09

REPORTING LAB: 33 SYRACUSE LAB
PROGRAM: 126
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 (T) PARISH COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: ENID STACEY RES., BANGALL RD.

EXACT SAMPLING POINT: CCW KT.
TYPE OF SAMPLE: 10 WATER, DUG WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 05/20/15
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
100200	TURBIDITY,N.T.U.NEPHEL.		1.0	
100300	ODOR, COLD		1,VEG	
001900	PH (LABORATORY)		7.3	
101501	ALKALINITY,ELECTROM.PH4.5	MG/L	234.	
001001	CHLORIDE	MG/L	6.	
000601	NITROGEN,NITRATE&NITRITE	MG/L	.35	
106501	C.O.D.	MG/L	8.5	

THE ABOVE RESULTS MEET THE RECOMMENDED STANDARDS SET FORTH IN THE N.Y.S. PART 5 SANITARY CODE

RECEIVED
JUN 4 1980
HEALTH DEPT.

DATE COMPLETED: 5/29/80

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: HEERKENS

0933

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 00510 YR/MO/DAY/HR SAMPLE REC'D: 80/05/28/11

REPORTING LAB: 10 EHC ALBANY
PROGRAM: 126
STATION (SOURCE) NO: (1) PARISH
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: ENID STACEY RES BANGALL RD PARISH

EXACT SAMPLING POINT: CWKT
TYPE OF SAMPLE: 10 WATER, DUG WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 05/20/80
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (0)

	PARAMETER	UNIT	RESULT	NOTATION
010001	IRON	MG/L	0.06	
010201	MANGANESE	MG/L	0.07	

THE ABOVE RESULTS MEET THE RECOMMENDED STANDARDS SET FORTH IN THE N.Y.S. PART 5 SANITARY CODE

DATE COMPLETED: 6/05/80

RECEIVED
JUN 09 1980
OSWEGO COUNTY HEALTH DEPT.

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: HEERKENS

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 80813 YR/MO/DAY/HR SAMPLE RECEIVED: 80/06/10/11

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO (T) PARISH
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBWATERSHED: TED FERNSTEIN RES PARISH

EXACT SAMPLING POINT: CHKT
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 06/09/10
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

PARAMETER		UNIT	RESULT	NOTATION
023609	1,1,1-TRICHLOROETHANE	MCG/L	5.	LT
036609	CARBON TETRACHLORIDE	MCG/L	5.	LT
038909	BROMODICHLOROMETHANE	MCG/L	2.	LT
039009	CHLOROFORM	MCG/L	5.	LT
041109	TRICHLOROETHYLENE	MCG/L	5.	LT
041209	TETRACHLOROETHYLENE	MCG/L	2.	LT
042109	BROMOFORM	MCG/L	5.	LT
044909	DIBROMOCHLOROMETHANE	MCG/L	2.	LT
034409	BENZENE	MCG/L	1.	LT
034509	XYLENES	MCG/L	1.	LT
039209	TOLUENE	MCG/L	1.	LT

THE ABOVE RESULTS MEET THE RECOMMENDED STANDARDS SET FORTH IN THE N.Y.S. PART 5 SANITARY CODE

DATE COMPLETED: 6/20/80

RECEIVED
JUN 26 1980
OSWEGO COUNTY HEALTH DEPT.

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: HEERKENS

June 19, 1980

Mr. & Mrs. David Vecchio
Rice Road
Parish, NY 13131

Dear Mr. & Mrs. Vecchio:

Attached is a photocopy of an additional laboratory report for a water sample at your home on June 3, 1980. This is the 4th such report that we have sent you. This report indicates the concentrations for Benzene, Xylenes, Toluene were at less than 1 microgram per liter.

If you have any questions, please feel free to call me at 473-8374.

Very truly yours,

James M. McCarthy, P.E.
Director of Public Health Engineering

Attachment

cc: Oswego County Health Dept. ✓

June 16, 1980

Mr. & Mrs. David A. Vecchio
Rice Road
Parish, New York 13131

Dear Mr. & Mrs. Vecchio:

Attached are the inorganic chemical results for a sample collected from your well on 4/22/80.

The results indicate that those parameters analyzed are within the standard for public water supplies as specified in Part 5 of the New York State Sanitary Code except for Nitrate which was reported at 11.0 milligrams per liter while the standard for public sources of water calls for no more than 10.0 milligrams per liter. A copy of Part 5 is enclosed and you will find the maximum contaminant levels for inorganic chemicals on Pages 13 and 15.

The significance of Nitrate is that it could cause methemoglobinemia in children less than six months.

The source of Nitrate in the water may be domestic sewage or possibly from fertilizers. We requested that the Oswego County Health Dept. resample the well in an attempt to determine the source. We have enclosed some reference material concerning Nitrates in drinking water.

In reviewing the results you will note that the levels specified in the code are in milligrams per liter or part per million, the symbol for which is MG/l. Some of the results are reported in micrograms per liter or parts per billion, the symbol for which is MCG/l. As an example, 0.05 milligrams per liter is equal to 50.0 micrograms per liter.

Also enclosed for your information is the booklet, "Rural Water Supply" which provides some background on well construction and development. As discussed with Mr. Heerkens last week, it is recommended that you locate and unearth the well and inspect it to determine whether it is adequately protected. The Oswego County Health Dept. can help you with this and they may be contacted at 349-3250.

Mr. & Mrs. David A. Vecchio
June 16, 1980

Should you have any questions, feel free to contact this office at 473-8374.

Very truly yours,

James McCarthy, P.E.
Regional Director of Public
Health Engineering

JMM:kfb
Attachment
cc: Oswego County Health Dept.

May 30, 1980

Mr. & Mrs. David Vecchio
Rice Road
Parish, N.Y. 13131

Dear Mr. & Mrs. Vecchio:

Attached is a photocopy of an additional laboratory rpport for a water sample collected at your home on April 22, 1980. You will remember the copy of the bacteriological report that I sent you on May 5, 1980.

The results are all satisfactory except for the positive result reported for Benzene.

As you remember resamples were collected from your home on May 13, 1980 and the laboratory has reported by telephone that reportable levels of Benzene were not present. However, printed copies of these reports are not yet available. They will be sent as soon as possible.

We do not know for sure why the first samples collected from your well had positive levels of Benzene present and the second sample was negative for Benzene. But we are concerned and will resample your home shortly.

The results of some Parameters or chemicals tested are reported as 5 LT which means less than 5 micrograms per liter. This is the lowest value which the laboratory will ever report on the minimum detectable limit.

The following chemicals have a minimum detection of 5 microgram/liter.

1. 1, 1, 1 - Trichloroethane
2. Carbon Tetrachloride
3. Chloroform
4. Trichloroethylene
5. Bromoform

The following chemicals have a minimum detection limit of 2 micrograms per liter.

1. Bromodichloromethane
2. Tetrachloroethylene
3. Dibromochloromethane

The following chemicals have a minimum detection limit of 1 microgram per liter.

1. Benzene
2. Xylene
3. Toluene

Therefore, a result of 1, 1, 1-Trichloroethane MCG/L 5 LT should be read as less than detectable amounts of 1, 1, 1-Trichloroethane.

A result for Benzene of MCG/3 would mean that the sample contained 3 micrograms per liter of Benzene.

If you have any questions please feel free to call me at 473-8374.

Very truly yours,

James M. McCarthy, P.E.
Director of Public Health Engineering

JMM:kfb
Attach.

cc: Oswego County Health Dept.

0869

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 80517 YR/MO/DAY/HR SAMPLE REC'D: 80/04/23/16

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: COMSTOCK RES PARISH

EXACT SAMPLING POINT: CMKT
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 04/23/11
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
023609	1,1,1-TRICHLOROETHANE	MCG/L	5.	LT
036609	CARBON TETRACHLORIDE	MCG/L	5.	LT
038909	BROMODICHLOROMETHANE	MCG/L	2.	LT
039009	CHLOROFORM	MCG/L	5.	LT
041109	TRICHLOROETHYLENE	MCG/L	5.	LT
041209	TETRACHLOROETHYLENE	MCG/L	2.	LT
042109	BROMOFORM	MCG/L	5.	LT
044909	DIBROMOCHLOROMETHANE	MCG/L	2.	LT
034409	BENZENE	MCG/L	3.	
034509	XYLENES	MCG/L	1.	LT
039209	TOLUENE	MCG/L	1.	LT

DATE COMPLETED: 5/14/80

THE RESULTS CIRCLED ABOVE DO NOT MEET THE RECOMMENDED STANDARDS SET FORTH IN THE N.Y.S. PART 5 SANITARY CODE

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCCARTHY

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 80649 YR/MO/DAY/HR SAMPLE REC'D: 80/05/15/09

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: COMSTOCK RES PARISH

EXACT SAMPLING POINT: CWKT
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 05/14/10
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
034409	BENZENE	MCG/L	1.	LT
034509	XYLENES	MCG/L	1.	LT
039209	TOLUENE	MCG/L	1.	LT

DATE COMPLETED: 5/23/80

RECEIVED
JUN 04 1980
OSWEGO COUNTY HEALTH DEPT.

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCCARHTY

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 80765 YR/MO/DAY/HR SAMPLE REC'D: 80/06/04/10

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: COMSTOCK RES PARISH

EXACT SAMPLING POINT: CWKT
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 06/03/11
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
034409	BENZENE	MCG/L	1.	LT
034509	XYLENES	MCG/L	1.	LT
039209	TOLUENE	MCG/L	1.	LT

THE ABOVE RESULTS MEET THE RECOMMENDED STANDARDS SET FORTH IN THE N.Y.S. PART 5 SANITARY CODE

DATE COMPLETED: 6/13/80

RECEIVED
JUN 19 1980
OSWEGO COUNTY HEALTH DEPT.

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: HEERKENS

June 19, 1980

Mr. & Mrs. James J. Forkhamer
R.D. #1, Rt. 38
Parish, NY 13131

Dear Mr. & Mrs. Forkhamer:

Attached is a photocopy of an additional laboratory report for a water sample at your home on June 3, 1980. This is the 4th such report that we have sent you. This report indicates the concentrations for Benzene, Xylenes, Toluene were at less than 1 microgram per liter.

If you have any questions, please feel free to call me at 473-8374.

Very truly yours,

James M. McCarthy, P.E.
Director of Public Health Engineering

Attachment

cc: Oswego County Health Department

June 6, 1980

Mr. & Mrs. James J. Forkhamer
R.D. #1, Route 38
Parish, New York 13131

Dear Mr. & Mrs. Forkhamer:

Attached is a photocopy of an additional laboratory report for a water sample at your home on May 13, 1980. This is the third such report that we have sent you. This report indicates the concentrations for Benzene, Xylenes, Toluene were at less than 1 microgram per liter.

An additional test was taken at your home on June 4, 1980.

If you have any questions, please feel free to call me at 473-8374.

Very truly yours,

James M. McCarthy, P.E.
Director of Public Health Engineering

JMM:kfb
Attach.

cc: Oswego County Health Dept. ✓

May 28, 1980

Mr. & Mrs. James J. Forkhamer
RD #1, Route 38
Parish, N.Y. 13131

Dear Mr. & Mrs. Forkhamer:

Attached is a photocopy of an additional laboratory report for a water sample collected at your home on April 22, 1980. You will remember the copy of the bacteriological report that I sent you on May 5, 1980.

The results are all satisfactory except for the positive result reported for Benzene.

As you remember resamples were collected from your home on May 13, 1980 and the laboratory has reported by telephone that reportable levels of Benzene were not present. However, printed copies of these reports are not yet available. They will be sent as soon as possible.

We do not know for sure why the first samples collected from your well had positive levels of Benzene present and the second sample was negative for Benzene. But we are concerned and will resample your home shortly.

The results of some Parameters or chemicals tested are reported as 5 LT which means less than 5 micrograms per liter. This is the lowest value which the laboratory will ever report on the minimum detectable limit.

The following chemicals have a minimum detection of 5 micrograms/liter.

1. 1, 1, 1-Trichloroethane
2. Carbon Tetrachloride
3. Chloroform
4. Trichloroethylene
5. Bromoform

The following chemicals have a minimum detection limit of 2 micrograms per liter.

1. Bromodichloromethane
2. Tetrachloroethylene
3. Dibromochloromethane

The following chemicals have a minimum detection limit of 1 microgram per liter.

1. Benzene
2. Xylene
3. Toluene

Therefore, a result of 1, 1, 1-Trichloroethane MCG/L 5 LT should be read as less than detectable amounts of 1, 1, 1-Trichloroethane.

A result for Benzene of MCG/L 2 would mean that the sample contained 2 micrograms per liter of Benzene.

If you have any questions please feel free to call me at 473-8374.

Very truly yours,

James M. McCarthy, P.E.
Director of Public Health Engineering

JMM:kfb
Attach.

cc: Oswego County Health Department ✓

1327

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 07920 YR/MO/DAY/HR SAMPLE REC'D: 80/04/22/14

REPORTING LAB: 30 SYRACUSE LAB
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: FORKHAMER RES

EXACT SAMPLING POINT: TAP PUMP DISCHARGE
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 04/22/10
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

PARAMETER		UNIT	RESULT	NOTATION
026800	STD PL COUNT		3.	
027000	COLIF MF COL/100ML		1.	LT

This microbiological analysis indicates that the water was ~~was not~~ of a satisfactory sanitary quality when the sample was collected.
Oswego County Health Dept.
Lyndi J. Waterman

RECEIVED
APR 30 19[illegible]
OSWEGO COUNTY [illegible]

DATE COMPLETED: 4/24/80

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCCARTHY

0863

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

RECEIVED
MAY 22 1980
OSWEGO COUNTY HEALTH DEPT

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 80516 YR/MO/DAY/HR SAMPLE REC'D: 80/04/23/16

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: FORKHAMER RES PARISH

EXACT SAMPLING POINT: TAP AT PUMP DISCHARGE
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 04/22/10
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
023609	1,1,1-TRICHLOROETHANE	MCG/L	5.	LT
036609	CARBON TETRACHLORIDE	MCG/L	5.	LT
038909	BROMODICHLOROMETHANE	MCG/L	2.	LT
039009	CHLOROFORM	MCG/L	5.	LT
041109	TRICHLOROETHYLENE	MCG/L	5.	LT
041209	TETRACHLOROETHYLENE	MCG/L	2.	LT
042109	BROMOFORM	MCG/L	5.	LT
044909	DIBROMOCHLOROMETHANE	MCG/L	2.	LT
034409	BENZENE	MCG/L	(2.)	
034509	XYLENES	MCG/L	1.	LT
039209	TOLUENE	MCG/L	1.	LT

DATE COMPLETED: 5/14/80

THE RESULTS CIRCLED ABOVE
DO NOT MEET THE RECOMMENDED
STANDARDS SET FORTH IN THE
N.Y.S. PART 5 SANITARY CODE

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCCARTHY

1344

NEW( )RK(TATE DEPARTMENT OF HE(TH(
DIVISION OF LABORATORIES AND RESEARCH
ENVIRONMENTAL HEALTH CENTER

RESULTS OF EXAMINATION
(PAGE 1 OF 2)

LAB ACCESSION NO: 00872 YR/MO/DAY/HR SAMPLE REC'D: 80/04/22/14

REPORTING LAB: 33 SYRACUSE LAB
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO (T) PARRISH
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: FORK ~~WARREN~~ HAMMEK RES
EXACT SAMPLING POINT: TAP PUMP DISCHARGE
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 04/22/10
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

PARAMETER		UNIT	RESULT	NOTATION
000401	FLUORIDE,FREE	MG/L	.1	
000801	NITROGEN,NITRATE&NITRITE	MG/L	.1	LT
009401	BARIUM	MG/L	0.5	LT
010309	MERCURY, TOTAL	MCG/L	0.4	LT
010601	SILVER	MG/L	0.02	LT
309309	ARSENIC	MCG/L	10.	
309709	CADMIUM	MCG/L	2.	LT
309809	CHROMIUM	MCG/L	10.	LT
310109	LEAD	MCG/L	10.	LT
310509	SELENIUM	MCG/L	5.	LT
100300	ODOR, COLD		2,SULFUR	
001900	PH (LABORATORY)		7.8	
101501	ALKALINITY,ELECTROM.PH4.5	MG/L	149.	

DATE COMPLETED: 6/10/80

RECEIVED
JUN 16 1980
OSWEGO COUNTY HEALTH DEPT.

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCCARTHY

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

RESULTS OF EXAMINATION
(PAGE 2 OF 2)

LAB ACCESSION NO: 00872 YR/MO/DAY/HR SAMPLE REC'D: 80/04/22/14

REPORTING LAB: 33 SYRACUSE LAB
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: FORKWARREN RES

EXACT SAMPLING POINT: TAP PUMP DISCHARGE
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 04/22/10
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
001101	HARDNESS, TOTAL AS CACO3	MG/L	160.	
010701	SODIUM	MG/L	7.1	
001001	CHLORIDE	MG/L	5.	LT
106501	C.O.D.	MG/L	12.09	

THE ABOVE RESULTS MEET THE
RECOMMENDED STANDARDS SET
FORTH IN THE N.Y.S. PART 5
SANITARY CODE

DATE COMPLETED: 6/10/80

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCCARTHY

0662

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 80625 YR/MO/DAY/HR SAMPLE REC'D: 80/05/14/14

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: FORKHAMER RES PARISH

EXACT SAMPLING POINT: TAP AT PUMP DISC
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 05/13/12
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
034409	BENZENE	MCG/L	1.	LT
034509	XYLENES	MCG/L	1.	LT
039209	TOLUENE	MCG/L	1.	LT

DATE COMPLETED: 5/23/80

RECEIVED
JUN 04 1980
OSWEGO COUNTY HEALTH DEPT.

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCCARTHY

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 80762 YR/MO/DAY/HR SAMPLE REC'D: 80/06/04/10

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: FORKHAMMER RES PARISH

EXACT SAMPLING POINT: RAW WATER TAP
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 06/03/11
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

PARAMETER		UNIT	RESULT	NOTATION
034409	BENZENE	MCG/L	1.	LT
034509	XYLENES	MCG/L	1.	LT
039209	TOLUENE	MCG/L	1.	LT

THE ABOVE RESULTS MEET THE RECOMMENDED STANDARDS SET FORTH IN THE N.Y.S. PART 5 SANITARY CODE

DATE COMPLETED: 6/13/80

RECEIVED
JUN 19 1980
OSWEGO COUNTY HEALTH DEPT.

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: HEERKENS

June 6, 1980

Mr. & Mrs. Alfred Parker
RD #1, Bangall Road
Parish, New York 13131

Dear Mr. & Mrs. Parker:

Attached is a photocopy of an additional laboratory report for a water sample at your home on May 13, 1980. This is the 3rd such report that we have sent you. This report indicates the concentrations for Benzene, Xylenes, Toluene were at less than 1 microgram per liter.

An additional test was taken at your home on June 4, 1980.

If you have any questions, please feel free to call me at 473-8374.

Very truly yours,

James M. McCarthy, P.E.
Director of Public Health Engineering

JMM:kfb
Attach.

cc: Oswego County Health Dept.

May 28, 1980

Mr. Alfred Parker
RD #1, Bangall Road
Parish, N.Y. 13131

Dear Mr. Parker:

Attached is a photocopy of an additional laboratory report for a water sample collected at your home on April 22, 1980. You will remember the copy of the bacteriological report that I sent you on May 5, 1980.

The results are all satisfactory except for the positive result reported for Benzene.

As you remember resamples were collected from your home on May 13, 1980 and the laboratory has reported by telephone that reportable levels of Benzene were not present. However, printed copies of these reports are not yet available. They will be sent as soon as possible.

We do not know for sure why the first samples collected from your well had positive levels of Benzene present and the second sample was negative for Benzene. But we are concerned and will resample your home shortly.

The results of some Parameters or chemicals tested are reported as 5 LT which means less than 5 micrograms per liter. This is the lowest value which the laboratory will ever report on the minimum detectable limit.

The following chemicals have a minimum detection of 5 micrograms/liter.

1. 1, 1, 1-Trichloroethane
2. Carbon Tetrachloride
3. Chloroform
4. Trichloroethylene
5. Bromoform

The following chemicals have a minimum detection limit of 2 micrograms per liter.

1. Bromodichloromethane
2. Tetrachloroethylene
3. Dibromochloromethane

The following chemicals have a minimum detection limit of 1 microgram per liter.

1. Benzene
2. Xylene
3. Toluene

Therefore, a result of 1, 1, 1-Trichloroethane MCG/L 5 LT should be read as less than detectable amounts of 1, 1, 1-Trichloroethane

A result for Benzene of MCG/L 6 would mean that the sample contained 6 micrograms per liter of Benzene.

If you have any questions please feel free to call me at 473-8374.

Very truly yours,

James M. McCarthy, P.E.
Director of Public Health Engineering

JMM:kfb
Attach.

cc: Oswego County Health Dept. ✓

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 07918 YR/MO/DAY/HR SAMPLE REC'D: 80/04/22/14

REPORTING LAB: 30 SYRACUSE LAB
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 04 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: PARKER RESIDENCE BANGALL RD

EXACT SAMPLING POINT: CWT KIT SINK
TYPE OF SAMPLE: 00 PWS, RAW WATER
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 04/22/10
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
026800	STD PL COUNT		27.	
027000	COLIF MF COL/100ML		1.	LT

This microbiological analysis indicates that the water (was) was not of a satisfactory sanitary quality when the sample was collected.
Oswego County Health Dept.
Lyndi J. Waterman

RECEIVED
APR 30 1980
OSWEGO COUNTY HEALTH D...

DATE COMPLETED: 4/24/80

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNKER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCCARTHY

1308

NEW( )RK(TATE DEPARTMENT OF HE(TH (
DIVISION OF LABORATORIES AND RESEARCH
ENVIRONMENTAL HEALTH CENTER

RESULTS OF EXAMINATION
(PAGE 1 OF 2)

LAB ACCESSION NO: 00869 YR/MO/DAY/HR SAMPLE REC'D: 80/04/22/14

REPORTING LAB: 33 SYRACUSE LAB
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 04 NY GAZETTEER NO: 3762 COUNTY: OSWEGO (T)PARISH
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: PARKER RESIDENCE, BANGALL RD.

EXACT SAMPLING POINT: CWT KITCHEN SINK
TYPE OF SAMPLE: 00 PWS, RAW WATER
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 04/22/10
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
000401	FLUORIDE,FREE	MG/L	.3	
000801	NITROGEN,NITRATE&NITRITE	MG/L	.1	LT
009401	BARIUM	MG/L	0.5	
010309	MERCURY, TOTAL	MCG/L	0.4	LT
010601	SILVER	MG/L	0.02	LT
309309	ARSENIC	MCG/L	19.	
309709	CADMIUM	MCG/L	2.	LT
309809	CHROMIUM	MCG/L	10.	LT
310109	LEAD	MCG/L	10.	LT
310509	SELENIUM	MCG/L	5.	LT
100300	ODOR, COLD		2.SULFUR	
001900	PH (LABORATORY)		7.9	
101501	ALKALINITY,ELECTROM.PH4.5	MG/L	157.	

DATE COMPLETED: 6/10/80

RECEIVED
JUN 16 1980
OSWEGO COUNTY HEALTH DEPT.

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCCARTHY

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

RESULTS OF EXAMINATION
(PAGE 2 OF 2)

LAB ACCESSION NO: 00869 YR/MO/DAY/HR SAMPLE REC'D: 80/04/22/14

REPORTING LAB: 33 SYRACUSE LAB
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 04 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: PARKER RESIDENCE, BANGALL RD.

EXACT SAMPLING POINT: CWT KITCHEN SINK
TYPE OF SAMPLE: 00 PWS, RAW WATER
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 04/22/10
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

PARAMETER		UNIT	RESULT	NOTATION
001101	HARDNESS, TOTAL AS CACO3	MG/L	180.	
010701	SODIUM	MG/L	97.*	
001001	CHLORIDE	MG/L	180.	
106501	C.O.D.	MG/L	12.	

* High for severely restricted sodium diets.

THE ABOVE RESULTS MEET THE RECOMMENDED STANDARDS SET FORTH IN THE N.Y.S. PART 5 SANITARY CODE

DATE COMPLETED: 6/10/80

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCCARTHY

0888

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

RECEI
MAY 22 1980
WEGO COUNTY HEALTH DEPT.

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 80520 YR/MO/DAY/HR SAMPLE REC'D: 80/04/23/16

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: PARKER RES BANGALL RD PARISH

EXACT SAMPLING POINT: CW TAP KIT SINK
TYPE OF SAMPLE: 00 PWS, RAW WATER
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 04/22/10
REPORT SENT TO: CO (1) RO (2) LPHE (2) LHO (0) FED (0) CHEM (1)

PARAMETER		UNIT	RESULT	NOTATION
023609	1,1,1-TRICHLOROETHANE	MCG/L	5.	LT
036609	CARBON TETRACHLORIDE	MCG/L	5.	LT
038909	BROMODICHLOROMETHANE	MCG/L	2.	LT
039009	CHLOROFORM	MCG/L	5.	LT
041109	TRICHLOROETHYLENE	MCG/L	5.	LT
041209	TETRACHLOROETHYLENE	MCG/L	2.	LT
042109	BROMOFORM	MCG/L	5.	LT
044909	DIBROMOCHLOROMETHANE	MCG/L	2.	LT
034409	BENZENE	MCG/L	6.	
034509	XYLENES	MCG/L	1.	LT
039209	TOLUENE	MCG/L	1.	LT

DATE COMPLETED: 5/14/80

THE RESULTS CIRCLED ABOVE DO NOT MEET THE RECOMMENDED STANDARDS SET FORTH IN THE N.Y.S. PART 5 SANITARY CODE

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: NOTGIVEN

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 80623 YR/MO/DAY/HR SAMPLE REC'D: 80/05/14/14

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: PARKER RES BANGALL RD PARISH

EXACT SAMPLING POINT: CWT KIT SINK
TYPE OF SAMPLE: 00 PWS, RAW WATER
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 05/13/13
REPORT SENT TO: CO (1) RO (2) LPHE (2) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
034409	BENZENE	MCG/L	1.	LT
034509	XYLENES	MCG/L	1.	LT
039209	TOLUENE	MCG/L	1.	LT

DATE COMPLETED: 5/23/80

RECEIV
JUN 0 4 1
OSWEGO COUNTY HEA

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: NOTGIVEN

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 80764 YR/MO/DAY/HR SAMPLE REC'D: 80/06/04/10

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBWATERSHED: PARKER RES PARISH

EXACT SAMPLING POINT: CWKT
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 06/03/11
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

PARAMETER		UNIT	RESULT	NOTATION
034409	BENZENE	MCG/L	1.	LT
034509	XYLENES	MCG/L	1.	LT
039209	TOLUENE	MCG/L	1.	LT

THE ABOVE RESULTS MEET THE RECOMMENDED STANDARDS SET FORTH IN THE N.Y.S. PART 5 SANITARY CODE

DATE COMPLETED: 6/13/80

RECEIVED
JUN 19 1980
OSWEGO COUNTY HEALTH DEPT.

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: HEERKENS

3218

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 01644 YR/MO/DAY/HR SAMPLE REC'D: 80/06/25/09

REPORTING LAB: 33 SYRACUSE LAB
PROGRAM: 126
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 (T) PARISH COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: PARKER RESIDENCE

EXACT SAMPLING POINT: CW KT.
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 06/24/11
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
202401	SULFATE AS SO4	MG/L	10.	

THE ABOVE RESULTS MEET THE RECOMMENDED STANDARDS SET FORTH IN THE N.Y.S. PART 5 SANITARY CODE

RECEIVED
JUL 09 1980
OSWEGO COUNTY HEALTH DEPT.

DATE COMPLETED: 7/07/80

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: HEERKENS

June 19, 1980

Mr. & Mrs. Gene Miller
R.D. #1, Box 111A
Parish, NY 13131

Dear Mr. & Mrs. Miller:

Attached is a photocopy of a laboratory report for a water sample collected at your home on May 12, 1980. You will remember that we telephoned these results some weeks ago.

The report indicates that no gasoline, kerosene, fuel oil or lubricating oil was found in your well. Also Benzene, Xylene and Toluene were less than the detection limits of our testing procedure, which is one micro gram per litre.

If you have any questions, please feel free to call me at 473-8374.

Sincerely,

James M. McCarthy, P.E.
Director of Public Health Engineering

Attachment

cc: Oswego County Health Dept. ✓

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 80617 YR/MO/DAY/HR SAMPLE REC'D: 80/05/13/16

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N. DEG ' "W
COMMON NAME INCL SUBW'SHED: PARISH

EXACT SAMPLING POINT: CWT KIT SINK MILLER RES
TYPE OF SAMPLE: 10 WATER, DUG WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 05/12/12
REPORT SENT TO: CO (1) RO (2) LPHE (2) LHO (0) FED (0) CHEM (1)

PARAMETER		UNIT	RESULT	NOTATION
007310	GASOLINE	MCL/L	NONE DET.	
007410	KEROSENE	MCL/L	NONE DET.	
007510	OIL LUBRICATING	MCL/L	NONE DET.	
007610	OIL FUEL	MCL/L	NONE DET.	
034409	BENZENE	MCG/L	1.	LT
034509	XYLENES	MCG/L	1.	LT
039209	TOLUENE	MCG/L	1.	LT

THE ABOVE RESULTS MEET THE RECOMMENDED STANDARDS SET FORTH IN THE N.Y.S. PART 5 SANITARY CODE

DATE COMPLETED: 6/13/80

RECEIVED
JUN 19 1980
OSWEGO COUNTY HEALTH DEPT.

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: NOTGIVEN

June 19, 1980

Mr. Marvin W. Cook
Box 197
Parish, NY 13131

Dear Mr. Cook:

Attached is a photocopy of a laboratory report for a water sample collected at your home on May 12, 1980. You will remember that we telephoned these results some weeks ago.

The report indicates that no gasoline, kerosene, fuel oil or lubricating oil was found in your well. Also Benzene, Xylene and Toluene were less than the detection limits of our testing procedure, which is one micro gram per litre.

If you have any questions, please feel free to call me at 473-8374.

Sincerely,

James M. McCarthy, P.E.
Director of Public Health Engineering

Attachment

cc: Oswego County Health Dept.

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 80615 YR/MO/DAY/HR SAMPLE REC'D: 80/05/13/16

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N. DEG ' "W
COMMON NAME INCL SUBWATERSHED: PARISH (T)PARISH

EXACT SAMPLING POINT: REAR TAP COOK RES
TYPE OF SAMPLE: 10 WATER, DUG WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 05/12/11
REPORT SENT TO: CO (1) RO (2) LPHE (2) LHO (0) FED (0) CHEM (1)

PARAMETER		UNIT	RESULT	NOTATION
007310	GASOLINE	MCL/L	NONE DET.	
007410	KEROSENE	MCL/L	NONE DET.	
007510	OIL LUBRICATING	MCL/L	NONE DET.	
007610	OIL FUEL	MCL/L	NONE DET.	
034409	BENZENE	MCG/L	1.	LT
034509	XYLENES	MCG/L	1.	LT
039209	TOLUENE	MCG/L	1.	LT

THE ABOVE RESULTS MEET THE RECOMMENDED STANDARDS SET FORTH IN THE N.Y.S. PART 5 SANITARY CODE

DATE COMPLETED: 6/13/80

RECEIVED
JUN 19 1980
OSWEGO COUNTY HEALTH DEPT.

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: NOTGIVEN

June 19, 1980

Mr. & Mrs. Allen Conrad
Grafton Square Road
Parish, NY 13131

Dear Mr. & Mrs. Conrad:

Attached is a photocopy of an additional laboratory report for a water sample at your home on June 3, 1980. This is the 4th such report that we have sent you. This report indicates the concentrations for Benzene, Xylenes, Toluene were at less than 1 microgram per liter.

If you have any questions, please feel free to call me at 473-8374.

Very truly yours,

James M. McCarthy, P.E.
Director of Public Health Engineering

Attachment

cc: Oswego County Health Dept.

June 6, 1980

Mr. & Mrs. Allen Conrad
Grafton Square Road
Parish, New York 13131

Dear Mr. & Mrs. Conrad:

Attached is a photocopy of an additional laboratory report for a water sample at your home on May 13, 1980. This is the third such report that we have sent you. This report indicates the concentrations for Benzene, Xylenes, Toluene were at less than 1 microgram per liter.

An additional test was taken at your home on June 4, 1980.

If you have any questions, please fee free to call me at 473-8374.

Very truly yours,

James M. McCarthy, P.E.
Director of Public Health Engineering

JMM:kfb
Attach.

cc: Oswego County Health Dept. ✓

May 27, 1980

Mr. & Mrs. Allen Conrad
Grafton Square Road
Parish, N.Y. 13131

Dear Mr. & Mrs. Conrad:

Attached is a photocopy of an additional laboratory report for a water sample collected at your home on April 22, 1980. You will remember the copy of the bacteriological report that I sent you on May 5, 1980.

The results are all satisfactory except for the positive results reported for Benzene.

As you remember resamples were collected from your home on May 13, 1980 and the laboratory has reported by telephone that reportable levels of Benzene were not present. However, printed copies of these reports are not yet available. They will be sent as soon as possible.

We do not know for sure why the first samples collected from your well had positive levels of Benzene present and the second sample was negative for Benzene. But we are concerned and will resample your home shortly.

The results of some Parameters or chemicals tested are reported as 5 LT which means less than 5 micrograms per liter. This is the lowest value which the laboratory will ever report on the minimum detectable limit.

The following chemicals have a minimum detection of 5 micrograms/liter.

1. 1, 1, 1 - Trichloroethane
2. Carbon Tetrachloride
3. Chloroform
4. Trichloroethylene
5. Bromoform

The following chemicals have a minimum detection limit of 2 micrograms per liter.

1. Bromodichloromethane
2. Tetrachloroethylene
3. Dibromochloromethane

The following chemicals have a minimum detection limit of 1 microgram per liter.

1. Benzene
2. Xylene
3. Toluene

Therefore, a result of 1, 1, 1-Trichloroethane MCG/L 5 LT should be read as less than detectable amounts of 1, 1, 1-Trichloroethane.

A result for Benzene of MCG/L 5 would mean that the sample contained 5 micrograms per liter of Benzene.

Also, attached is a copy of a laboratory report which shows that the bacteriological quality of your water supply was acceptable (less than 2.2 coliform bacterial per 100 m.) at the time the sample was collected.

If you have any questions, please feel free to call me at 473-8374.

Very truly yours,

James M. McCarthy, P.E.
Director of Public Health Engineering

JMM:kfb
Attach.

cc: Oswego County Health Dept.

1338

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 07922 YR/MO/DAY/HR SAMPLE REC'D: 80/04/22/14

REPORTING LAB: 30 SYRACUSE LAB
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: NY GAZETTEER NO: 3757 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: ~~HEELER~~ RES GRAFTON SQUARE RD (CONRAD)
EXACT SAMPLING POINT: CWT KIT SINK
TYPE OF SAMPLE: S7 SURV., PWS, MISCELL.
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 04/22/10
REPORT SENT TO: CO (0) RO (2) LPHE (2) LHO (0) FED (0) CHEM (1)

PARAMETER		UNIT	RESULT	NOTATION
026800	STD PL COUNT		360.	EE
027000	COLIF MF COL/100ML		BG.	

Inconclusive
Lydia J. Waterman

RECEIVED
APR 30 1980
OSWEGO COUNTY HEALTH DEPT

DATE COMPLETED: 4/24/80

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCCARTHY

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

RESULTS OF EXAMINATION
(PAGE 1 OF 2)

LAB ACCESSION NO: 00870 YR/MO/DAY/HR SAMPLE REC'D: 80/04/22/14

REPORTING LAB: 33 SYRACUSE LAB
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: NY GAZETTEER NO: 3757 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: ~~WHEELER~~ (CONRAD) RESIDENCE, GRAFTON SQUARE RD.
EXACT SAMPLING POINT: CW TAP KIT SINK
TYPE OF SAMPLE: 00 PWS, RAW WATER
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 04/22/10
REPORT SENT TO: CO (0) RO (2) LPHE (2) LHO (0) FED (0) CHEM (1)

PARAMETER		UNIT	RESULT	NOTATION
000401	FLUORIDE,FREE	MG/L	0.1	
000801	NITROGEN,NITRATE&NITRITE	MG/L	0.1	LT
009401	BARIUM	MG/L	0.5	LT
010309	MERCURY, TOTAL	MCG/L	0.4	LT
010601	SILVER	MG/L	0.02	
309309	ARSENIC	MCG/L	10.	LT
309709	CADMIUM	MCG/L	2.	LT
309809	CHROMIUM	MCG/L	10.	LT
310109	LEAD	MCG/L	10.	LT
310509	SELENIUM	MCG/L	5.	LT
100300	ODOR, COLD		1.VEG	
001900	PH (LABORATORY)		8.0	
101501	ALKALINITY,ELECTROM.PH4.5	MG/L	124.	

DATE COMPLETED: 6/10/80

RECEIVED
JUN 16 1980
OSWEGO COUNTY HEALTH DEPT

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCC

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

RESULTS OF EXAMINATION
(PAGE 2 OF 2)

LAB ACCESSION NO: 00870 YR/MO/DAY/HR SAMPLE REC'D: 80/04/22/14

REPORTING LAB: 33 SYRACUSE LAB
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: NY GAZETTEER NO: 3757 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: WHEELER RESIDENCE, GRAFTON SQUARE RD.

EXACT SAMPLING POINT: CW TAP KIT SINK
TYPE OF SAMPLE: 00 PWS, RAW WATER
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 04/22/10
REPORT SENT TO: CO (0) RO (2) LPHE (2) LHO (0) FED (0) CHEM (1)

PARAMETER		UNIT	RESULT	NOTATION
001101	HARDNESS, TOTAL AS CACO3	MG/L	128.	
010701	SODIUM	MG/L	3.4	
001001	CHLORIDE	MG/L	5.	LT
106501	C.O.D.	MG/L	4.LT	UI

THE ABOVE RESULTS MEET THE
RECOMMENDED STANDARDS SET
FORTH IN THE N.Y.S. PART 5
SANITARY CODE

DATE COMPLETED: 6/10/80

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCC

854

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 80515 YR/MO/DAY/HR SAMPLE REC'D: 80/04/23/16

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: NY GAZETTEER NO: 3757 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: ~~WATER~~ RES GRAFTON SQUARE RD MEXICO (Conrad)
EXACT SAMPLING POINT: CW TAP KIT SINK
TYPE OF SAMPLE: 00 PWS, RAW WATER
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 04/22/10
REPORT SENT TO: CO (1) RO (2) LPHE (2) LHO (0) FED (0) CHEM (1)

PARAMETER		UNIT	RESULT	NOTATION
23609	1,1,1-TRICHLOROETHANE	MCG/L	5.	LT
036609	CARBON TETRACHLORIDE	MCG/L	5.	LT
38909	BROMODICHLOROMETHANE	MCG/L	2.	LT
039009	CHLOROFORM	MCG/L	5.	LT
041109	TRICHLOROETHYLENE	MCG/L	5.	LT
41209	TETRACHLOROETHYLENE	MCG/L	2.	LT
042109	BROMOFORM	MCG/L	5.	LT
44909	DIBROMOCHLOROMETHANE	MCG/L	2.	LT
034409	BENZENE	MCG/L	5.	
034509	XYLENES	MCG/L	1.	LT
39209	TOLUENE	MCG/L	1.	LT

DATE COMPLETED: 5/14/80

REGIONAL DIRECTOR OF P.H. ENGINEERING
NEW YORK STATE DEPARTMENT OF HEALTH
351 SOUTH HARREN STREET
SYRACUSE NEW YORK 13202

SUBMITTED BY: MCCARTHY

0856

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 80515 YR/MO/DAY/HR SAMPLE REC'D: 80/04/23/16

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: NY GAZETTEER NO: 3757 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: ~~WHEELER~~ (CONRAD) RES GRAFTON SQUARE RD MEXICO
EXACT SAMPLING POINT: CW TAP KIT SINK
TYPE OF SAMPLE: 00 PWS, RAW WATER
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 04/22/10
REPORT SENT TO: CO (1) RO (2) LPHE (2) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
023609	1,1,1-TRICHLOROETHANE	MCG/L	5.	LT
036609	CARBON TETRACHLORIDE	MCG/L	5.	LT
038909	BROMODICHLOROMETHANE	MCG/L	2.	LT
039009	CHLOROFORM	MCG/L	5.	LT
041109	TRICHLOROETHYLENE	MCG/L	5.	LT
041209	TETRACHLOROETHYLENE	MCG/L	2.	LT
042109	BROMOFORM	MCG/L	5.	LT
044909	DIBROMOCHLOROMETHANE	MCG/L	2.	LT
034409	BENZENE	MCG/L	(5.)	
034509	XYLENES	MCG/L	1.	LT
039209	TOLUENE	MCG/L	1.	LT

DATE COMPLETED: 5/14/80

THE RESULTS CIRCLED ABOVE
DO NOT MEET THE RECOMMENDED
STANDARDS SET FORTH IN THE
N.Y.S. PART 5 SANITARY CODE

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCCARTHY

0170

NE('ORK TATE DEPARTMENT OF H(LTH(
DIVISION OF LABORATORIES AND RESEARCH
ENVIRONMENTAL HEALTH CENTER

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 09547 YR/MO/DAY/HR SAMPLE REC'D: 80/05/13/09

REPORTING LAB: 30 SYRACUSE LAB
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO (T) PARISH
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: U

EXACT SAMPLING POINT: CWT BATHROOM TAP CONRAD RESIDENCE
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 05/12/10
REPORT SENT TO: CO (1) RO (2) LPHE (2) LHO (0) FED (0) CHEM (1)

PARAMETER		UNIT	RESULT	NOTATION
026800	STD PL COUNT		710.	EE
026900	COLIFORM BAC MPN		2.2	LT
526900	COL ORG STUBE MTD NO POS		1.	LT

This microbiological analysis indicates that the water (was) ~~was not~~ of a satisfactory sanitary quality when the sample was collected.
Oswego County Health Dept.
Lyndi J. Waterman

DATE COMPLETED: 5/19/80

RECEIVED
MAY 22 1980
OSWEGO COUNTY HEALTH DEPT

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCCARTHY

0675

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 80627 YR/MO/DAY/HR SAMPLE REC'D: 80/05/14/14

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3757 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: CONRAD RES GRAFTON SQUARE RD MEXICO

EXACT SAMPLING POINT: CWT BATHTUB
TYPE OF SAMPLE: 00 PWS, RAW WATER
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 05/13/12
REPORT SENT TO: CO (1) RO (2) LPHE (2) LHO (0) FED (0) CHEM (1)

PARAMETER		UNIT	RESULT	NOTATION
034409	BENZENE	MCG/L	1.	LT
034509	XYLENES	MCG/L	1.	LT
039209	TOLUENE	MCG/L	1.	LT

DATE COMPLETED: 5/23/80

RECEIVED
JUN 04 1980
OSWEGO COUNTY HEALTH DEPT

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: NOTGIVEN

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 80766 YR/MO/DAY/HR SAMPLE REC'D: 80/06/04/10

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3757 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: ALLAN CONRAD RES MEXICO

EXACT SAMPLING POINT: CWKT
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 06/03/12
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
034409	BENZENE	MCG/L	1.	LT
034509	XYLENES	MCG/L	1.	LT
039209	TOLUENE	MCG/L	1.	LT

THE ABOVE RESULTS MEET THE RECOMMENDED STANDARDS SET FORTH IN THE N.Y.S. PART 5 SANITARY CODE

DATE COMPLETED: 6/13/80

RECEIVED
JUN 19 1980
OSWEGO COUNTY HEALTH DEPT.

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: HEERKENS

3230

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 01646 YR/MO/DAY/HR SAMPLE REC'D: 80/06/25/09

REPORTING LAB: 33 SYRACUSE LAB
PROGRAM: 126
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3757 COUNTY: OSWEGO (T) MEXICO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: ALLEN CONRAD RESIDENCE

EXACT SAMPLING POINT: CW KT.
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 06/24/10
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
202401	SULFATE AS SO4	MG/L	10.	

THE ABOVE RESULTS MEET THE RECOMMENDED STANDARDS SET FORTH IN THE N.Y.S. PART 5 SANITARY CODE

RECEIVED
JUL 09 1980
OSWEGO COUNTY HEALTH DEPT.

DATE COMPLETED: 7/07/80

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: HEERKENS

June 19, 1980

Mr. & Mrs. Lloyde Ware
R.D. #1
Parish, NY 13131

Dear Mr. & Mrs. Lloyde Ware:

Attached is a photocopy of a laboratory report for a water sample collected at your home on May 12, 1980. You will remember that we telephoned these results some weeks ago.

The report indicates that no gasoline, kerosene, fuel oil or lubricating oil was found in your well. Also Benzene, Xylene and Toluene were less than the detection limits of our testing procedure, which is one micro gram per litre.

If you have any questions, please feel free to call me at 473-8374.

Sincerely,

James M. McCarthy, P.E.
Director of Public Health Engineering

Attachment

cc: Oswego County Health Dept.

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 80613 YR/MO/DAY/HR SAMPLE REC'D: 80/05/13/16

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBWATERSHED: LLOYD WARE RES (T) PARISH

EXACT SAMPLING POINT: CWKT
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 05/12/12
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

PARAMETER		UNIT	RESULT	NOTATION
007310	GASOLINE	MCL/L	NONE DET.	
007410	KEROSENE	MCL/L	NONE DET.	
007510	OIL LUBRICATING	MCL/L	NONE DET.	
007610	OIL FUEL	MCL/L	NONE DET.	
034409	BENZENE	MCG/L	1.	LT
034509	XYLENES	MCG/L	1.	LT
039209	TOLUENE	MCG/L	1.	LT

THE ABOVE RESULTS MEET THE RECOMMENDED STANDARDS SET FORTH IN THE N.Y.S. PART 5 SANITARY CODE

RECEIVED
JUN 19 1980
OSWEGO COUNTY HEALTH DEPT.

DATE COMPLETED: 6/13/80

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCCARTHY

June 19, 1980

Mr. & Mrs. Minkler
% Mrs. Lynden Comstock
R.D. #1
Parish, NY 13131

Dear Mr. & Mrs. Minkler:

Attached is a photocopy of a laboratory report for a water sample collected at your home on May 12, 1980. You will remember that we telephoned these results some weeks ago.

The report indicates that no gasoline, kerosene, fuel oil or lubricating oil was found in your well. Also Benzene, Xylene and Toluene were less than the detection limits of our testing procedure, which is one micro gram per litre.

If you have any questions, please feel free to call me at 473-8374.

Sincerely,

James M. McCarthy, P.E.
Director of Public Health Engineering

Attachment

cc: Oswego County Health Dept.

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 80619 YR/MO/DAY/HR SAMPLE REC'D: 80/05/13/16

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: PARISH

EXACT SAMPLING POINT: CWT KIT TAP MINKLER RES
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 05/12/14
REPORT SENT TO: CO (1) RO (2) LPHE (2) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
007310	GASOLINE	MCL/L	NONE DET.	
007410	KEROSENE	MCL/L	NONE DET.	
007510	OIL LUBRICATING	MCL/L	NONE DET.	
007610	OIL FUEL	MCL/L	NONE DET.	
034409	BENZENE	MCG/L	1.	LT
034509	XYLENES	MCG/L	1.	LT
039209	TOLUENE	MCG/L	1.	LT

THE ABOVE RESULTS MEET THE RECOMMENDED STANDARDS SET FORTH IN THE N.Y.S. PART 5 SANITARY CODE

DATE COMPLETED: 6/13/80

RECEIVED
JUN 19 1980
OSWEGO COUNTY HEALTH DEPT.

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: NOTGIVEN

June 19, 1980

Mr. & Mrs. Nathan Foote
R.D. #1, Rice Rd.
Parish, NY 13131

Dear Mr. & Mrs. Foote:

Attached is a photocopy of a laboratory report for a water sample collected at your home on May 12, 1980. You will remember that we telephoned these results some weeks ago.

The report indicates that no gasoline, kerosene, fuel oil or lubricating oil was found in your well. Also Benzene, Xylene and Toluene were less than the detection limits of our testing procedure, which is one micro gram per litre.

If you have any questions, please feel free to call me at 473-8374.

Sincerely,

James M. McCarthy, P.E.
Director of Public Health Engineering

Attachment

cc: Oswego County Health Dept.

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 80620 YR/MO/DAY/HR SAMPLE REC'D: 80/05/13/16

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3757 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBWATERSHED: FOOTE RES MEXICO

EXACT SAMPLING POINT: CWKT
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 05/12/13
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

PARAMETER		UNIT	RESULT	NOTATION
007310	GASOLINE	MCL/L	NONE DET.	
007410	KEROSENE	MCL/L	NONE DET.	
007510	OIL LUBRICATING	MCL/L	NONE DET.	
007610	OIL FUEL	MCL/L	NONE DET.	
034409	BENZENE	MCG/L	1.	LT
034509	XYLENES	MCG/L	1.	LT
039209	TOLUENE	MCG/L	1.	LT

THE ABOVE RESULTS MEET THE RECOMMENDED STANDARDS SET FORTH IN THE N.Y.S. PART 5 SANITARY CODE

DATE COMPLETED: 6/13/80

RECEIVED
JUN 19 1980
OSWEGO COUNTY HEALTH DEPT.

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCCARTHY

June 19, 1980

Mr. Arthur R. Smith
R.D. #1
Parish, NY 13131

Dear Mr. Smith:

Attached is a photocopy of a laboratory report for a water sample collected at your home on May 12, 1980. You will remember that we telephoned these results some weeks ago.

The report indicates that no gasoline, kerosene, fuel oil or lubricating oil was found in your well. Also Benzene, Xylene and Toluene were less than the detection limits of our testing procedure, which is one micro gram per litre.

If you have any questions, please feel free to call me at 473-8374.

Sincerely,

James M. McCarthy, P.E.
Director of Public Health Engineering

Attachment

cc: Oswego County Health Dept.

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 80621 YR/MO/DAY/HR SAMPLE REC'D: 80/05/13/16

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3757 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBWISHED: ARTHUR R SMITH RES MEXICO

EXACT SAMPLING POINT: CWKT
TYPE OF SAMPLE: 10 WATER, DUG WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 05/12/14
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

PARAMETER		UNIT	RESULT	NOTATION
007310	GASOLINE	MCL/L	NONE DET.	
007410	KEROSENE	MCL/L	NONE DET.	
007510	OIL LUBRICATING	MCL/L	NONE DET.	
007610	OIL FUEL	MCL/L	NONE DET.	
034409	BENZENE	MCG/L	1.	LT
034509	XYLENES	MCG/L	1.	LT
039209	TOLUENE	MCG/L	1.	LT

THE ABOVE RESULTS MEET THE
RECOMMENDED STANDARDS SET
FORTH IN THE N.Y.S. PART 5
SANITARY CODE

DATE COMPLETED: 6/13/80

RECEIVED
JUN 19 1980
OSWEGO COUNTY HEALTH DEPT

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCCARTHY

June 19, 1980

Mr. & Mrs. Henry Gould
R.D. #1, Box 14a
Parish, NY 13131

Dear Mr. & Mrs. Gould:

Attached is a photocopy of a laboratory report for a water sample collected at your home on May 12, 1980. You will remember that we telephoned these results some weeks ago.

The report indicates that no gasoline, kerosene, fuel oil or lubricating oil was found in your well. Also Benzene, Xylene and Toluene were less than the detection limits of our testing procedure, which is one micro gram per litre.

If you have any questions, please feel free to call me at 473-8374.

Sincerely,

James M. McCarthy, P.E.
Director of Public Health Engineering

Attachment

cc: Oswego County Health Dept.

1047

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 80618 YR/MO/DAY/HR SAMPLE REC'D: 80/05/13/16

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N. DEG ' "W
COMMON NAME INCL SUBWATERSHED: PARISH

EXACT SAMPLING POINT: CWI KIT SINK GOULD RES
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 05/12/11
REPORT SENT TO: CO (1) RO (2) LPHE (2) LHO (0) FED (0) CHEM (1)

PARAMETER		UNIT	RESULT	NOTATION
007310	GASOLINE	MCL/L	NONE DET.	
007410	KEROSENE	MCL/L	NONE DET.	
007510	OIL LUBRICATING	MCL/L	NONE DET.	
007610	OIL FUEL	MCL/L	NONE DET.	
034409	BENZENE	MCG/L	1.	LT
034509	XYLENES	MCG/L	1.	LT
039209	TOLUENE	MCG/L	1.	LT

THE ABOVE RESULTS MEET THE RECOMMENDED STANDARDS SET FORTH IN THE N.Y.S. PART 5 SANITARY CODE

DATE COMPLETED: 6/13/80

RECEIVED
JUN 19 1980
OSWEGO COUNTY HEALTH DEPT.

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: NOTGIVEN

September 3, 1980

Mr. Grederick Campbell
Superintendent
Altmar Parish Williamstown Central Schools
Parish, NY 13131

RE: Water Supply
APW High School

Dear Mr. Campbell:

Enclosed you will find copies of the results of the water samples collected from the above noted facility on 7/28/80 and analyzed for Benzene, Toluene and Xylene.

These are the results mentioned in my letter of 8/11/80 and as stated at that time, results for each of the parameters tested at all four sampling points were below the detectable level.

Very truly yours,

Ronald Hoerkens
Senior Sanitarian

RH:kb
Enclosure

cc: Oswego County Health Dept.
Ron Tramontano

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 81017 YR/MO/DAY/HR SAMPLE REC'D: 80/07/29/08

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N. DEG ' "W
COMMON NAME INCL SUBW'SHED: APW HIGH SCHOOL

EXACT SAMPLING POINT: CAFETERIA TAP MIXED WATER
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 07/28/15
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
034409	BENZENE	MCG/L	1.	LT
034509	XYLENES	MCG/L	1.	LT
039209	TOLUENE	MCG/L	1.	LT

DATE COMPLETED: 8/21/80

REGIONAL DIRECTOR OF P.H. ENGINEERING
NEW YORK STATE DEPARTMENT OF HEALTH
351 SOUTH WARREN STREET
SYRACUSE NEW YORK 13202

SUBMITTED BY: HEERKENS

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 81014 YR/MO/DAY/HR SAMPLE REC'D: 80/07/29/08

REPORTING LAB: 17 EHC ALBANY
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: APW HIGH SCHOOL

EXACT SAMPLING POINT: WELL TAP PIT SOUTH WELL
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 07/28/14
REPORT SENT TO: CO (1) RO (2) LPHE (1) LHO (0) FED (0) CHEM (1)

PARAMETER		UNIT	RESULT	NOTATION
34409	BENZENE	MCG/L	1.	LT
34509	XYLENES	MCG/L	1.	LT
39209	TOLUENE	MCG/L	1.	LT

DATE COMPLETED: 8/21/80

RECEIVED
SEP 04 1980
OSWEGO COUNTY HEALTH DEPT

REGIONAL DIRECTOR OF P.H. ENGINEERING
NEW YORK STATE DEPARTMENT OF HEALTH
351 SOUTH WARREN STREET
SYRACUSE NEW YORK 13202

SUBMITTED BY: HEERKENS

July 29, 1980

Mr. A. Wendell Holbrook
Parish, New York 13131

Re: Holbrook Barrel Site
Parish(T), Oswego County

Dear Mr. Holbrook:

Attached are photocopies of laboratory reports from the old dug well toward the rear of the barn. The concentration for iron and manganese are both in excess of the drinking water recommended standards.

The concentration of other constitutents are acceptable.

Very truly yours,

James M. McCarthy, P.E.
Director of Public Health Engineering

JMM:kfb
Attach

cc: Mr. Halton
Mr. Tramontano
Oswego County Health Dept.

STATE OF NEW YORK
DEPARTMENT OF HEALTH
OFFICE OF PUBLIC HEALTH
351 SOUTH WARREN STREET SYRACUSE, N.Y. 13202

DAVID AXELROD, M.D.
Commissioner
GLENN E. HAUGHIE, M.D.
Director of Public Health

SYRACUSE AREA OFFICE
JOSEPH V. BARRY
Area Public Health Director

July 15, 1980

Mr. A. Wendell Holbrook
Parish, New York 13131

Re: Holbrook Barrel Site
Parish(T), Oswego County

Dear Mr. Holbrook:

Attached are results of chemical testing done on the old dug well on June 24, 1980 toward the rear of your barn on the Bangall Road Farm. The results indicate that the color, 45 units and the odor, 3 units are unsatisfactory for a drinking water supply.

Additional samples were collected on June 25, 1980 which indicated a similar unsatisfactory color intensity, however, the odor was reported to be satisfactory.

If you have any questions please feel free to call me at 473-8374.

Very truly yours,

James M. McCarthy, P.E.
Director of Public Health Engineering

JMM:kfb
Attach.

cc: Mr. Halton
Mr. Tramontano

3205

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 01639 YR/MO/DAY/HR SAMPLE REC'D: 80/06/24/15

REPORTING LAB: 33 SYRACUSE LAB
PROGRAM: 126
STATION (SOURCE) NO:
DRAINAGE BASIN: NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: U

EXACT SAMPLING POINT: OLD DUG WELL HOLBROOK RESD BANGALL RD
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 06/24/13
REPORT SENT TO: CO (1) RO (2) LPHE (2) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
100200	TURBIDITY,N.T.U.NEPHEL.		1.2	
000100	COLOR (APPARENT)		(45.)	
100300	ODOR, COLD		3.ALCOHOL	
001900	PH (LABORATORY)		6.7	
101501	ALKALINITY,ELECTROM.PH4.5	MG/L	42.	
001101	HARDNESS, TOTAL AS CACO3	MG/L	54.	
001001	CHLORIDE	MG/L	29.	
202401	SULFATE AS SO4	MG/L	5.	LT
000401	FLUORIDE,FREE	MG/L	.1	LT

THE RESULTS CIRCLED ABOVE DO NOT MEET THE RECOMMENDED STANDARDS SET FORTH IN THE N.Y.S. PART 5 SANITARY CODE

RECEIVED
JUL 09 1980
OSWEGO COUNTY HEALTH DEPT.

DATE COMPLETED: 7/07/80

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCCRTHY

1518

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 00688 YR/MO/DAY/HR SAMPLE REC'D: 80/07/01/11

REPORTING LAB: 10 EHC ALBANY
PROGRAM: 126
STATION (SOURCE) NO:
DRAINAGE BASIN: NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N, DEG ' "W
COMMON NAME INCL SUBW'SHED: PARISH

EXACT SAMPLING POINT: OLD DUG WELL HOLBROOK RES BANGALL RD
TYPE OF SAMPLE: 12 WATER, DRILLED WELL
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 06/24/13
REPORT SENT TO: CO (1) RO (2) LPHE (2) LHO (0) FED (0) CHEM (0)

PARAMETER		UNIT	RESULT	NOTATION
010001	IRON	MG/L	0.55	
010201	MANGANESE	MG/L	0.89	
309709	CADMIUM	MCG/L	2.	LT
309809	CHROMIUM	MCG/L	10.	LT
310109	LEAD	MCG/L	10.	LT
309309	ARSENIC	MCG/L	10.	LT
009401	BARIUM	MG/L	0.5	LT
010309	MERCURY, TOTAL	MCG/L	0.4	LT
010901	ZINC	MG/L	0.05	

RECEIVED
JUL 21 1980
OSWEGO COUNTY HEALTH DEPT.

THE RESULTS CIRCLED ABOVE DO NOT MEET THE RECOMMENDED STANDARDS SET FORTH IN THE N.Y.S. PART 5 SANITARY CODE

DATE COMPLETED: 7/16/80

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: NOTGIVEN

2468

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

RESULTS OF EXAMINATION
(PAGE 1 OF 1)

LAB ACCESSION NO: 01670 YR/MO/DAY/HR SAMPLE REC'D: 80/06/25/15

REPORTING LAB: 33 SYRACUSE LAB
PROGRAM: 106 TOXIC SUBST. MGT.
STATION (SOURCE) NO:
DRAINAGE BASIN: 03 NY GAZETTEER NO: 3762 COUNTY: OSWEGO
COORDINATES: DEG ' "N. DEG ' "W
COMMON NAME INCL SUBW'SHED: U

EXACT SAMPLING POINT: DIP SAMPLE HOLBROOK DUG WELL
TYPE OF SAMPLE: S7 SURV., PWS, MISCELL.
MO/DAY/HR OF SAMPLING: FROM 00/00 TO 06/25/13
REPORT SENT TO: CO (1) RO (2) LPHE (2) LHO (0) FED (0) CHEM (1)

	PARAMETER	UNIT	RESULT	NOTATION
000100	COLOR (APPARENT)		42.	
100300	ODOR, COLD		1.VEG	
001900	PH (LABORATORY)		6.5	
101501	ALKALINITY,ELECTROM.PH4.5	MG/L	45.	

THE RESULTS CIRCLED ABOVE
DO NOT MEET THE RECOMMENDED
STANDARDS SET FORTH IN THE
N.Y.S. PART 5 SANITARY CODE

RECEIVED
JUL 3 1980
OSWEGO COUNTY HEALTH DEPT.

DATE COMPLETED: 6/30/80

PUBLIC HEALTH ENGINEER
OSWEGO COUNTY HEALTH DEPARTMENT
BUNNER STREET
OSWEGO, N.Y. 13126

SUBMITTED BY: MCCARTHY