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

ARCS II PROGRAM

FINAL
SITE INSPECTION PRIORITIZATION (SIP)
DOVER TOWN DUMP SITE
TOWN OF DOVER, DUTCHESS COUNTY
NEW YORK
CERCLIS NO.: NYD980508154

APRIL 1995

VOLUME II OF III

NOTICE

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REFERENCE 9

Reference 4
p. 1 of 19

FILE COPY

NUS CORPORATION

POTENTIAL HAZARDOUS WASTE SITE

EXECUTIVE SUMMARY

Dover Landfill #3
Site Name

NYD980508154
EPA Site ID Number

Cricket Hill Road, Dover N.Y. 12522
Address

02-8306-30
TDD Number

Date of Site Visit: October 5, 1983

SITE DESCRIPTION

The site is a 5 acre former municipal landfill which operated from 1960 to 1969, and is located in a rural area. The site was also the location of an illegal scrap yard from 1970-1974. There are some junk automobiles on site. On January 31, 1980 the Dutchess County Department of Health sampled surface water on site and detected 1191 mg/l concentration of iron. The site is currently supporting vegetation and refuse is covered.

PRIORITY FOR FURTHER ACTION: High ___ Medium ___ Low X

RECOMMENDATIONS

The iron which was detected on site can be attributed to the rusting cars and metal which were on site during the 1970's. The environmental hazard posed by the site is low. No further action is recommended.

Prepared by: Martin J. O'Neill of NUS Corporation

Date: 10/17/83

Reference 9
p. 2 of 19

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	980508154

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Dover Landfill #3	Cricket Hill Road

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Dover	NY	12522	Dutchess	027	25

09 COORDINATES LATITUDE	LONGITUDE
41° 41' 30" N	73° 34' 45" W

10 DIRECTIONS TO SITE (Starting from nearest public road)

South on Route 55 to Route 21 West. Route 21 to Route 22 North. Approximately 4 miles on Route 22 North to Cricket Hill Road. Make a right onto Cricket Hill Road. Site is 1 mile on left.

III. RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residence)
Gerald Binson	Cricket Hill Road

03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER
Dover	NY	12522	( )

07 OPERATOR (If known and different from owner)	08 STREET (Business, mailing, residence)
Town of Dover	Rural Route 2, Box 212

09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER
Dover	NY	12522	(914) 877-9105

13 TYPE OF OWNERSHIP (Check one)

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

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

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

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

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION

☒ YES DATE 10 / 5 / 83 (MONTH DAY YEAR)
☐ NO

BY (Check all that apply)

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

CONTRACTOR NAME(S): NUS Corporation

02 SITE STATUS (Check one)

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

03 YEARS OF OPERATION

± 1960 (BEGINNING YEAR) | 1969 (ENDING YEAR) ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

The site was utilized as a municipal landfill from 1960 to 1969. The Town of Dover supported 2 rubber plants and a furniture manufacter during the years of operation. Industrial wastes from these manufacturers may have been disposed of at the site.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

If site is generating leachate the potential for groundwater or surface water contamination exists.

V. PRIORITY ASSESSMENT

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

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

VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NUMBER
Mark Haulenbeek	U.S. EPA, Environmental Services Division	(201) 321-6685

04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE
Martin J. O'Neill	FIT II	NUS Corporation	(201) 225-6160	10 / 12 / 83 (MONTH DAY YEAR)

EPA FORM 2070-12 (7-81)

Reference 9
p. 3 of 19

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	0980508154

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

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

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

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

03 WASTE CHARACTERISTICS (Check all that apply)

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

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	Unknown	Unknown	Surface water samples collected by the Dutchess Co. Dept. of Health

IV. HAZARDOUS SUBSTANCES (See appendix for most commonly used CAS numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
MES	Iron		Landfill	1191	MG/L
	The facility is a closed municipal landfill. According to town officials, only municipal waste was accepted at this landfill.		Sampling by the Dutchess County Board of Health 1-31-80.		

V. FEEDSTOCKS (See appendix for CAS numbers) None

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)

Mr. Otto Sprossel, Town of Dover Supervisor, (914) 832-6243.
Mr. George Morse, Town of Dover Councilman, (914) 877-9105.
NUS FIT II Site Inspection. 10-5-83.
Preliminary Assessment dated 10-7-81 by Carol Stein, U.S. EPA Hazard Assessment.

Reference 4
p. 4 of 19

EPA

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

I. IDENTIFICATION
01 STATE: NY
02 SITE NUMBER: D980508154

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 [X] A. GROUNDWATER CONTAMINATION — 02 [ ] OBSERVED (DATE ____) — [X] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ____ — 04 NARRATIVE DESCRIPTION

No recorded history. Potential exists due to the high permeability of cover material and the nature of the underlying strata. Potential exists if site is generating leachate.

01 [X] B. SURFACE WATER CONTAMINATION — 02 [X] OBSERVED (DATE 1/31/80) — [ ] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ____ — 04 NARRATIVE DESCRIPTION

On January 31, 1980, the Dutchess County Dept. of Health collected a surface water sample. The sample detected a 1191 mg/l concentration of Iron. This information was reported on a Preliminary Assessment dated October 7, 1981, by Carol Stein of the U.S. EPA Hazard Assessment.

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

None observed. No potential exists. No exposed refuse was observed during the site inspection.

01 [ ] D. FIRE-EXPLOSIVE CONDITIONS — 02 [ ] OBSERVED (DATE ____) — [ ] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ____ — 04 NARRATIVE DESCRIPTION

None observed, no potential exists.

01 [X] E. DIRECT CONTACT — 02 [ ] OBSERVED (DATE: ____) — [X] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 100 — 04 NARRATIVE DESCRIPTION

The fill material is covered with topsoil thereby minimizing direct contact. The site is not fenced and is easily accessable to the general public.

01 [X] F. CONTAMINATION OF SOIL — 02 [ ] OBSERVED (DATE: ____) — [X] POTENTIAL [ ] ALLEGED
03 AREA POTENTIALLY AFFECTED: ____ (acres) — 04 NARRATIVE DESCRIPTION

The potential for soil contamination exists since approximately 5.0 acres of the site was utilized for municipal refuse disposal.

01 [X] G. DRINKING WATER CONTAMINATION — 02 [ ] OBSERVED (DATE: ____) — [X] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ____ — 04 NARRATIVE DESCRIPTION

No recorded history. The potential for drinking water contamination is slight since the nearest resident is 0.25 mile to the south and groundwater flow is to the north. The nearest resident to the North is 0.5 miles.

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

No recorded history. Site is inactive.

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

No recorded history. No potential exists.

Reference 9
p. 5 of 19

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	D980508154

II. HAZARDOUS CONDITIONS AND INCIDENTS

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

04 NARRATIVE DESCRIPTION

None observed, site is currently overgrown and supporting vegetation. Fill material is covered with topsoil.

01 X K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE _____) — X POTENTIAL — ☐ ALLEGED

04 NARRATIVE DESCRIPTION

No recorded history. Fill material is covered with topsoil thereby limiting direct contact with fauna. The potential for damage to aquatic ecosystems exists if the site is generating leachate which is entering nearby surface waters.

01 X L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE _____) — X POTENTIAL — ☐ ALLEGED

04 NARRATIVE DESCRIPTION

No recorded history. Potential exists if leachate is being generated and entering nearby surface waters. Tributaries to Tenmile River are 0.75 miles from the site.

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES — 02 ☐ OBSERVED (DATE _____) — ☐ POTENTIAL — ☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED _____ — 04 NARRATIVE DESCRIPTION

None observed. The existance of leachate generation could not be verified during the site inspection. There is no known liner of the fill area.

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

04 NARRATIVE DESCRIPTION

None observed, no recorded history.

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

04 NARRATIVE DESCRIPTION

None observed, no potential exists.

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

04 NARRATIVE DESCRIPTION

None observed, no recorded history. Site is accessable.

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

None

III. TOTAL POPULATION POTENTIALLY AFFECTED: 3000

IV. COMMENTS

The site is an inactive municipal landfill which was operated for approximately 10 years, and closed in the late 1960's. According to town officials, the site was used for disposal of municipal refuse only. During the years of operation of this landfill, the town supported two rubber plants, and a furniture manufacturer.

V. SOURCES OF INFORMATION

NUS FIT II, Site Inspection, 10-5-83.
Otto Sprossel, Town of Dover Supervisor, (914) 832-6243.
George Morse, Town of Dover Coulcilman, (914) 877-9105.

Reference 4
p.6 of 14

FILE COPY

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EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	D980508154

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER				
Dover Landfill #3	Cricket Hill Road				
03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Dover	NY	12522	Dutchess	027	25

09 COORDINATES: LATITUDE 41° 41' 30" N | LONGITUDE 73° 34' 46" W

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

III. INSPECTION INFORMATION

01 DATE OF INSPECTION: 10 . 5 . 83 (MONTH DAY YEAR)

02 SITE STATUS: ☐ ACTIVE ☒ INACTIVE

03 YEARS OF OPERATION: ± 1960 (BEGINNING YEAR) | 1969 (ENDING YEAR) ____ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check one or more): ☐ A. EPA ☒ B. EPA CONTRACTOR NUS Corp. (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR ____ (Name of firm) ☐ E. STATE ☐ F. STATE CONTRACTOR ____ (Name of firm) ☐ G. OTHER ____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
Martin J. O'Neill	Environmental Scientist	NUS Corp.	(201) 225-6160
09 OTHER INSPECTORS	**10 TITLE**	**11 ORGANIZATION**	**12 TELEPHONE NO.**
Arthur J. Clarke	Chemist	NUS Corp.	(201) 225-6160
Edward F. McTiernan	Environmental Scientist	NUS Corp.	(201) 225-6160
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO.
Otto Sprossel	Supervisor	Town of Dover	(914) 832-6234
George Morse	Councilman	Rural Route 2 Box 212	(914) 877-9105
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	1045	Sunny, warm 60-65°F, light wind, visibility good.

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Mark Haulenbeek	US EPA, Environmental Services Division	(201) 321-6685

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Martin J. O'Neill	FIT II	NUS Corp.	201-225-6160	10 , 10 , 83 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

Reference 9
p. 7 of 19

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	D980508154

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- [X] 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 measurements)

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

03 WASTE CHARACTERISTICS (Check all that apply)

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

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	Unknown	Unknown	Surface water samples collected by the Dutchess Co. Dept. of Health

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
MES	Iron		Landfill	1191	MG/L
	The facility is a closed municipal landfill. According to town officials, only municipal waste was accepted at this landfill.		Sampling by the Dutchess County Board of Health 1-31-80.		

V. FEEDSTOCKS (See Appendix for CAS Numbers) None

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)

Mr. Otto Sprossel, Town of Dover Supervisor, (914) 832-6243.
Mr. George Morse, Town of Dover Councilman, (914) 877-9105.
NUS FIT II Site Inspection. 10-5-83.
Preliminary Assessment dated 10-7-81 by Carol Stein, U.S. EPA Hazard Assessment.

Reference 9
p. 8 of 19

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	D980508154

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 [X] A. GROUNDWATER CONTAMINATION — 02 [ ] OBSERVED (DATE _____) — [X] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED _____ — 04 NARRATIVE DESCRIPTION

No recorded history. Potential exists due to the high permeability of cover material and the nature of the underlying strata. Potential exists if site is generating leachate.

01 [X] B. SURFACE WATER CONTAMINATION — 02 [X] OBSERVED (DATE 1/31/80) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED _____ — 04 NARRATIVE DESCRIPTION

On January 31, 1980, the Dutchess County Dept. of Health collected a surface water sample. The sample detected a 1191 mg/l concentration of Iron. This information was reported on a Preliminary Assessment dated October 7, 1981, by Carol Stein of the U.S. EPA Hazard Assessment.

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

None observed. No potential exists. No exposed refuse was observed during the site inspection.

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

None observed, no potential exists.

01 [X] E. DIRECT CONTACT — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 100 — 04 NARRATIVE DESCRIPTION

The fill material is covered with topsoil thereby minimizing direct contact. The site is not fenced and is easily accessable to the general public.

01 [X] F. CONTAMINATION OF SOIL — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL — [ ] ALLEGED
03 AREA POTENTIALLY AFFECTED: _____ (ACRES) — 04 NARRATIVE DESCRIPTION

The potential for soil contamination exists since approximately 5.0 acres of the site was utilized for municipal refuse disposal.

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

No recorded history. The potential for drinking water contamination is slight since the nearest resident is 0.25 mile to the south and groundwater flow is to the north.

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

No recorded history. Site is inactive.

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

No recorded history. No potential exists.

Reference 9
p. 9 of 19

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	D980508154

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

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

None observed, site is currently overgrown and supporting vegetation. Fill material is covered with topsoil.

01 ☒ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE _____) — ☒ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION

No recorded history. Fill material is covered with topsoil thereby limiting direct contact with fauna. The potential for damage to aquatic ecosystems exists if the site is generating leachate which is entering nearby surface waters.

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

No recorded history. Potential exists if leachate is being generated and entering nearby surface waters. Tributaries to Tenmile River are 1.0 miles from the site.

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

None observed. The existance of leachate generation could not be verified during the site inspection. There is no known liner of the fill area.

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

None observed, no recorded history.

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

None observed, no potential exists.

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

None observed, no recorded history. Site is accessable.

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

None

III. TOTAL POPULATION POTENTIALLY AFFECTED: 3000

IV. COMMENTS

The site is an inactive municipal landfill which was operated for approximately 10 years, and closed in the late 1960's. According to town officials, the site was used for disposal of municipal refuse only. During the years of operation of this landfill, the town supported two rubber plants, and a furniture manufacturer.

V. SOURCES OF INFORMATION

NUS FIT II, Site Inspection, 10-5-83.
Otto Sprossel, Town of Dover Supervisor, (914) 832-6243.
George Morse, Town of Dover Coulcilman, (914) 877-9105.

Reference 9
p. 10 of 19

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	D980508154

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
A. NPDES				
B. UIC				
C. AIR				
D. RCRA				
E. RCRA INTERIM STATUS				
F. SPCC PLAN				
G. STATE (Specify)				
H. LOCAL (Specify)				
I. OTHER (Specify)				
X J. NONE				

III. SITE DESCRIPTION

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

04 TREATMENT (Check all that apply)

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

05 OTHER

None

- A. BUILDINGS ON SITE

06 AREA OF SITE

±5 acres

07 COMMENTS

The former fill area encompasses approximately 5 acres and was utilized for a municipal landfill from 1960 to 1969. From 1970 to 1974, the same location was used for an illegal scrap yard.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

- A. ADEQUATE, SECURE
- X B. MODERATE
- C. INADEQUATE, POOR
- D. INSECURE, UNSOUND, DANGEROUS

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

No synthetic liners of the fill area.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: YES X NO

02 COMMENTS

Waste is covered with topsoil. Site is easily accessible.

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

NUS FIT II Site Inspection, 10-5-83.
Otto Sprossel, Town of Dover Supervisor , (914) 832-6243.
George Morse, Town of Dover Councilman, (914) 877-9105.

Reference 4
p. 11 of 19

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	D980508154

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as appropriate)

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

02 STATUS

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

03 DISTANCE TO SITE

A. 2.5 (mi)
B. 0.25 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

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

02 POPULATION SERVED BY GROUND WATER 6000

03 DISTANCE TO NEAREST DRINKING WATER WELL 0.25 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
6 (ft)	NNW	20-25 (ft)	High (gpd)	☐ YES ☒ NO

09 DESCRIPTION OF WELLS (including depth, diameter, and location relative to population and buildings)

Approximately 2.0 miles to the north of the site is a public drinking water well which supplies 2000 residents of Dover. The well is under the operation of the Dover Plains Water Co., a division of The Kent Water Co. of Kent, Connecticut. The nearest resident is 0.25 miles to the south of the site.

10 RECHARGE AREA
☐ YES
☒ NO
COMMENTS

11 DISCHARGE AREA
☒ YES
☐ NO
COMMENTS Site lies in the Tenmile Creek Valley.

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

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

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME	AFFECTED	DISTANCE TO SITE
Swamp Creek	☐	0.75 (mi)
Tenmile River	☐	2.5 (mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 2500 (NO. OF PERSONS)	B. 5900 (NO. OF PERSONS)	C. 7500 (NO. OF PERSONS)

02 DISTANCE TO NEAREST POPULATION 0.25 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE 850

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

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

The population within the vicinity of the site can be characterized as a sparsely populated rural town. The town of Dover Plains has a population of 7267 as of the 1980 census. Dover Plains is the closest town to the site.

Reference 4
p. 12 of 19

EPA

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

I. IDENTIFICATION
01 STATE: NY
02 SITE NUMBER: D980508154

VI. ENVIRONMENTAL INFORMATION No samples were taken

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

__ A. 10^{-1} – 10^{-4} cm/sec __ B. 10^{-4} – 10^{-6} cm/sec __ C. 10^{-6} – 10^{-8} cm/sec X D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

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

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH
80-100 (ft)	Unknown (ft)	5.0-7.5

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
15 (in)	4.0-4.5 (in)	0-8 %	North	0-10 %

09 FLOOD POTENTIAL: SITE IS IN 50 YEAR FLOODPLAIN

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

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE: A. Not Applicable (mi)

OTHER: B. < 0.25 (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

No endangered species within 10 miles. (mi)

ENDANGERED SPECIES.

13 LAND USE IN VICINITY

DISTANCE TO

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AGRICULTURAL LANDS: AG LAND
A. 2.0 (mi)	B. 0.25 (mi)	C. 1.0 (mi)	D. 1.0 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

The site is located in the Tenmile Creek Valley. The underlying bedrock is comprised of sandstone, schist, limestone, quartz and shale. The topsoil is made up of gravelly loam. The site is relatively flat in relation to the surrounding topography which is steep and hilly. Adjacent to the north of the site is a wet marshy area.

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

NUS FIT II Site Inspection 10-5-83.
Otto Sprossel, Town of Dover Supervisor, (914) 832-6243.
George Morse, Town of Dover Councilman, (914) 877-9105.

Reference 4
p. 13 of 19

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	D980508154

II. SAMPLES TAKEN No samples were taken.

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

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
Air Quality	HNU Photoionization Detector: No measurements above 0-1 ppm background.

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☒ GROUND ☐ AERIAL

02 IN CUSTODY OF Attached in Appendix A.

03 MAPS ☒ YES ☐ NO

04 LOCATION OF MAPS Attached in Appendix A.

V. OTHER FIELD DATA COLLECTED

No other field data collected.

VI. SOURCES OF INFORMATION

NUS FIT II Site Inspection 10-5-83.
Otto Sprossel, Town of Dover Supervisor, (914) 832-6243
George Morse, Town of Dover Councilman, (914) 877-9105

Reference 9
p. 14 of 19

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	D980508154

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER
Gerald Binson	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
Cricket Hill Road	
05 CITY	06 STATE	07 ZIP CODE
Dover	NY	12522

PARENT COMPANY (If applicable)

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

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

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

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

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

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

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

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

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

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

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

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

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

NUS FIT II Site Inspection 10-5-83.
Otto Sprossel, Town of Dover Supervisor , (914) 832-6243
George Morse, Town of Dover Councilman, (914) 877-9105

EPA FORM 2070-13 (7-81)

Reference 4
p. 15 of 19

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	D980508154

II. CURRENT OPERATOR		OPERATOR'S PARENT COMPANY	
01 NAME: Site is inactive	02 D+B NUMBER	10 NAME	11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	14 CITY	15 STATE / 16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER		

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from above)		PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)	
01 NAME: Town of Dover	02 D+B NUMBER	10 NAME	11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.): Rural Route #2 Box 212	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE
05 CITY: Wingdale	06 STATE: NY / 07 ZIP CODE: 12594	14 CITY	15 STATE / 16 ZIP CODE
08 YEARS OF OPERATION: ± 10	09 NAME OF OWNER DURING THIS PERIOD		
01 NAME	02 D+B NUMBER	10 NAME	11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	14 CITY	15 STATE / 16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD		
01 NAME	02 D+B NUMBER	10 NAME	11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	14 CITY	15 STATE / 16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD		

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

NUS FIT II Site Inspection, 10-5-83
Otto Sprossel, Town of Dover Supervisor (914) 832-6243
George Morse, Town of Dover Councilman (914) 877-9105

Reference 9
p. 16 of 19

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	D980508154

II. ON-SITE GENERATOR

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

Site is an inactive municipal landfill. Generators were the residents of the town of Dover, NY. Refuse was transported by the residents themselves.

III. OFF-SITE GENERATOR(S)

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

IV. TRANSPORTER(S)

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

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

NUS FIT II Site Inspection. 10-5-83
Otto Sprossel, Town of Dover Supervisor (914) 832-6243
George Morse, Town of Dover Councilman, (914) 877-9105.

Reference 9
p. 17 of 19

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	D980508154

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
No recorded history.

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

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

01 ☐ D. SPILLED MATERIAL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
No recorded history.

01 ☐ E. CONTAMINATED SOIL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
No recorded history.

01 ☐ F. WASTE REPACKAGED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
No recorded history.

01 ☐ G. WASTE DISPOSED ELSEWHERE — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
No recorded history.

01 ☐ H. ON SITE BURIAL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
No recorded history.

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

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

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

01 ☐ L. ENCAPSULATION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
No recorded history.

01 ☐ M. EMERGENCY WASTE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
No recorded history.

01 ☐ N. CUTOFF WALLS — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
No recorded history.

01 ☐ O. EMERGENCY DIKING SURFACE WATER DIVERSION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
No recorded history.

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

01 ☐ Q. SUBSURFACE CUTOFF WALL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
No recorded history.

Reference 9
p. 18 of 19

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	D9805081 54

II PAST RESPONSE ACTIVITIES (Continued)

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

No recorded history.

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

No recorded history.

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

No recorded history.

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

No recorded history.

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

No recorded history.

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

No recorded history.

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

No recorded history.

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

No recorded history.

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

No recorded history.

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

No recorded history.

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

No recorded history.

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

None

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

NUS FIT II Site Inspection 10-5-83.
Otto Sprossel, Town of Dover Supervisor, (914) 832-6243.
George Morse, Town of Dover Councilman, (914) 877-9105.

Reference 9
p. 19 of 19

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	D9805081 54

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☐ YES ☒ NO

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

The Dutchess County Board of Health sampled surface water on site on January 31, 1980. The sample detected 1191 mg/l of Iron. This information was obtained from a Preliminary Assessment dated October 7, 1981 by Carol Stein, U.S. EPA Hazard Assessment.

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

Otto Sprossel, Town of Dover Supervisor, (914) 832-6243.
George Morse, Town of Dover Councilman, (914) 877-9105.

EPA FORM 2070-13 (7-81)

REFERENCE 10

CAMO LABORATORIES

25 Albany Post Road, Hyde Park, N. Y. 12538 914/229-8337

SAMPLE IDENTIFICATION: PAGE 1 OF 2

A. 1008 - Cricket Hill - T. Dover
B. 1009 - Route 22 North - T. Dover
C. 1010 - Route 22 South - T. Dover
D. I.
E.

Comments:

CLIENT: Mr. Robert J. Vrana
Assistant Public Health Eng.
Dutchess County Health Dept.
22 Market Street
Poughkeepsie, New York 12601

FACILITY: Dover Plains Samples

DATE REC'D December 17, 1979
LABORATORY No: 79-12-6581
PURCHASE ORDER No:
METHOD of ANALYSIS: EPA
REPORT DATE: January 31, 1980
AUTH. SIGNATURE:
LAB. DIRECTOR:

	A	B	C	D	E	F	G	H	I
Chloride	10.0	27.5	12.5						
pH	6.3	4.0	6.7						
TOC	516	108	66						
Specific Conductance	2050	750	315 *uv/cm						
Oil/Grease	1.6	3.4	<0.1						
Phenol	<2	<2	3.8						
PCB (ppb) 1248	<0.091	<0.042	*						
1254	<0.036	<0.041	*						
1260	<0.039	<0.036	*						
* Iron	1191	405	30.6						
Chrome	<0.05	<0.03	<0.03						

ANALYSIS COMMENTS: *micromho's/per centimeter-(uv/cm)
*Multiple interferences, peaks prevented the evalutéon. of PCB peaks on the chromotogram. There was insufficient sample volume to rerun.

Results in mg/L unless noted otherwise.

INVOICE TO: No

TERMS: NET
AMT. DUE:

Charge Of 1½% Per Month Will Be Applied To Balances 30 Days Past Due

CLIENT

Refer to ICE IV p. 1 of 2

CAMO LABORATORIES

25 Albany Post Road, Hyde Park, N. Y. 12538 914/229-8337

SAMPLE IDENTIFICATION: PAGE 2 OF 2

A. 1008 - Cricket Hill Road - T. Dover
B. 1009 - Route 22 North G. - T. Dover
C. 1010 - Route 22 South H. - T. Dover
D. I.
E.

Comments:

CLIENT: Mr. Robert J. Vrana
Assistant Public Health Engineer
Dutchess County Health Department
22 Market Street
FACILITY Poughkeepsie, New York 12601

Dover Plains Samples

DATE REC'D December 17, 1979
LABORATORY No: 79-12-6581
PURCHASE ORDER No:
METHOD of ANALYSIS: EPA
REPORT DUE DATE: January 31, 1980
AUTH. SIGNATURE:
LAB. DIRECTOR:

	A	B	C	D	E	F	G	H	I
Chrome + 6	<0.05	<0.03	<0.03						
Mercury (ppb)	<1.0	<1.0	<1.0						
* Lead	0.02	0.02	0.01						
* Cadmium	0.01	<0.01	<0.01						

ANALYSIS COMMENTS: Please Note - All (<) signs indicate the lowest detectable concentration due to the methodology or instrumentation.

INVOICE TO: No

TERMS: NET
AMT. DUE:

Page 2 of 2

REFERENCE 11

0177 NEW YORK STATE DEPARTMENT OF HEALTH 314030
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 53330 SAMPLE RECEIVED: 85/09/12/ CHARGE: 22.00
PROGRAM: 710: INTENSIVE TOXICS SURVEYS
SOURCE ID: DRAINAGE BASIN: 16 GAZETTEER CODE: 1353
POLITICAL SUBDIVISION: DOVER COUNTY: DUTCHESS
LATITUDE: . LONGITUDE: . . Z DIRECTION:
LOCATION: MARSHLAND TO SWAMP RIVER NEAR DOVER FURNACE
DESCRIPTION: NEAR DOVER LANDFILL #3 314030
REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: PPEP: PRIORITY POLLUTANTS - PURGEABLE HALOCARBONS & AROM
SAMPLE TYPE: 210: SURFACE WATER
TIME OF SAMPLING: 85/09/11 13:00 DATE PRINTED: 85/10/02

	PARAMETER	RESULT
T62009	CHLOROMETHANE	< 1. MCG/L
T61809	BROMOMETHANE	< 1. MCG/L
T41009	VINYL CHLORIDE	< 1. MCG/L
T70209	DICHLORODIFLUOROMETHANE	< 1. MCG/L
T61909	CHLOROETHANE	< 1. MCG/L
T61709	TRICHLOROFLUOROMETHANE	< 1. MCG/L
T23809	DICHLOROMETHANE	< 1. MCG/L
T50909	1,1-DICHLOROETHENE	< 1. MCG/L
T51909	1,1-DICHLOROETHANE	< 1. MCG/L
T61209	TRANS-1,2-DICHLOROETHENE	< 1. MCG/L
T39009	CHLOROFORM	< 1. MCG/L
T50809	1,2-DICHLOROETHANE	< 1. MCG/L
T23609	1,1,1-TRICHLOROETHANE	< 1. MCG/L
T36609	CARBON TETRACHLORIDE	< 1. MCG/L
T38909	BROMODICHLOROMETHANE	< 1. MCG/L
T61309	1,2-DICHLOROPROPANE	< 1. MCG/L
T61509	TRANS-1,3-DICHLOROPROPENE	< 1. MCG/L
T41109	TRICHLOROETHYLENE	< 1. MCG/L
T44909	DIBROMOCHLOROMETHANE	< 1. MCG/L
T61409	CIS-1,3-DICHLOROPROPENE	< 1. MCG/L
T51709	1,1,2-TRICHLOROETHANE	< 1. MCG/L
T61109	2-CHLOROETHYLVINYL ETHER	< 1. MCG/L
T42109	BROMOFORM	< 1. MCG/L
T51809	1,1,2,2-TETRACHLOROETHANE	< 1. MCG/L
T41209	TETRACHLOROETHENE	< 1. MCG/L
T40909	CHLOROBENZENE	< 1. MCG/L
T49709	1,3-DICHLOROBENZENE	< 1. MCG/L
T44109	1,2-DICHLOROBENZENE	< 1. MCG/L
T44209	1,4-DICHLOROBENZENE	< 1. MCG/L
T34409	BENZENE	< 1. MCG/L
T39209	TOLUENE	< 1. MCG/L
T51009	ETHYLBENZENE	< 1. MCG/L
T85209	1-CHLOROCYCLOHEXENE-1	< 1. MCG/L

**** CONTINUED ON NEXT PAGE ****

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N.Y.S. DEPT. OF ENVIRONMENTAL CONSERVATION SUBMITTED BY: GABRIEL
50 WOLF RD., ROOM 300
ALBANY, N.Y. 12233

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 53330 SAMPLE RECEIVED: 85/09/12/ CHARGE: 22.00
POLITICAL SUBDIVISION: DOVER COUNTY: DUTCHESS
LOCATION: MARSHLAND TO SWAMP RIVER NEAR DOVER FURNACE
TIME OF SAMPLING: 85/09/11 13:00 DATE PRINTED: 85/10/0

	PARAMETER	RESULT
T70409	PARA-XYLENE	< 1. MCG/L
T70309	META-XYLENE	< 1. MCG/L
T51409	ORTHO-XYLENE	< 1. MCG/L
T85309	CUMENE	< 1. MCG/L
T85409	STYRENE	< 1. MCG/L
T85509	P-BROMOFLUOROBENZENE	< 1. MCG/L
T51109	N-PROPYLBENZENE	< 1. MCG/L
T85609	TERT-BUTYLBENZENE	< 1. MCG/L
T85709	O/P-CHLOROTOLUENE	< 1. MCG/L
T51209	BROMOBENZENE	< 1. MCG/L
T50509	META-CHLOROTOLUENE	< 1. MCG/L
T85809	1,3,5-TRIMETHYLBENZENE	< 1. MCG/L
T85909	1,2,4-TRIMETHYLBENZENE	< 1. MCG/L
T86009	P-CYMENE	< 1. MCG/L
T86109	CYCLOPROPYLBENZENE	< 1. MCG/L
T86209	SEC-BUTYLBENZENE	< 1. MCG/L
T86309	N-BUTYLBENZENE	< 1. MCG/L
T86409	2,3-BENZOFURAN	< 1. MCG/L
T52509	HEXACHLOROBUTADIENE (C-46)	< 5. MCG/L
T44009	1,2,4-TRICHLOROBENZENE	< 5. MCG/L
T65609	NAPHTHALENE	< 5. MCG/L
T43909	1,2,3-TRICHLOROBENZENE	< 5. MCG/L
T67109	PHENOL	< 10. MCG/L
T66409	2-CHLOROPHENOL	< 10. MCG/L
T66809	2-NITROPHENOL	< 10. MCG/L
T66609	2,4-DIMETHYLPHENOL	< 10. MCG/L
T66509	2,4-DICHLOROPHENOL	< 10. MCG/L
T66309	4-CHLORO-3-METHYLPHENOL	< 10. MCG/L
T67209	2,4,6-TRICHLOROPHENOL	< 10. MCG/L
T49609	2,4,5-TRICHLOROPHENOL	< 10. MCG/L
T66709	2,4-DINITROPHENOL	< 10. MCG/L
T66909	4-NITROPHENOL	< 10. MCG/L
T68509	2-METHYL-4,6-DINITROPHENOL	< 10. MCG/L
T67009	PENTACHLOROPHENOL	< 10. MCG/L
T68109	BIS(2-CHLOROISOPROPYL)ETHER	NA
T63909	BIS(2-CHLOROETHYL)ETHER	< 10. MCG/L
T65909	N-NITROSODI-N-PROPYLAMINE	< 10. MCG/L
T65309	HEXACHLOROETHANE	< 10. MCG/L
T65709	NITROBENZENE	< 10. MCG/L
T65509	ISOPHORONE	< 10. MCG/L
T68609	BIS(2-CHLOROETHOXY)METHANE	< 10. MCG/L
T49209	HEXACHLOROCYCLOPENTADIENE (C-56)	< 10. MCG/L
T64109	2-CHLORONAPHTHALENE	< 10. MCG/L
T64909	2,6-DINITROTOLUENE	< 10. MCG/L
T63109	ACENAPHTHYLENE	< 10. MCG/L
T64709	DIMETHYLPHTHALATE	< 10. MCG/L
T63009	ACENAPHTHENE	< 10. MCG/L
T64809	2,4-DINITROTOLUENE	< 10. MCG/L

**** CONTINUED ON NEXT PAGE ****

SAMPLE ID: 53330 SAMPLE RECEIVED: 85/09/12/ CHARGE: 22.00
POLITICAL SUBDIVISION: DOVER COUNTY: DUTCHESS
LOCATION: MARSHLAND TO SWAMP RIVER NEAR DOVER FURNACE
TIME OF SAMPLING: 85/09/11 13:00 DATE PRINTED: 85/10/0

	PARAMETER	RESULT	
T64609	DIETHYLPHTHALATE	< 10.	MCG/L
T65209	FLUORENE	< 10.	MCG/L
T68409	4-CHLOROPHENYL PHENYL ETHER		NA
T66009	N-NITROSODIPHENYLAMINE	< 10.	MCG/L
T65109	1,2-DIPHENYLHYDRAZINE	< 10.	MCG/L
T68309	4-BROMOPHENYL PHENYL ETHER	< 10.	MCG/L
T48809	HEXACHLOROBENZENE	< 10.	MCG/L
T66109	PHENANTHRENE	< 10.	MCG/L
T63209	ANTHRACENE	< 10.	MCG/L
T64409	DI-N-BUTYLPHTHALATE	< 10.	MCG/L
T68009	FLUORANTHENE	< 10.	MCG/L
T66209	PYRENE	< 10.	MCG/L
T63809	BENZIDINE	< 200.	MCG/L
T64009	BUTYL BENZYL PHTHALATE	< 30.	MCG/L
T63309	BENZO(A)ANTHRACENE	< 30.	MCG/L
T64509	3,3'-DICHLOROBENZIDINE	< 30.	MCG/L
T64209	CHRYSENE	< 30.	MCG/L
T67909	BIS(2-ETHYLHEXYL)PHTHALATE	< 30.	MCG/L
T65009	DI-N-OCTYL PHTHALATE	< 30.	MCG/L
T63409	BENZO(B)FLUORANTHENE	< 30.	MCG/L
T63509	BENZO(K)FLUORANTHENE	< 30.	MCG/L
T63609	BENZO(A)PYRENE	< 30.	MCG/L
T65409	INDENO(1,2,3-CD)PYRENE	< 30.	MCG/L
T64309	DIBENZO(A,H)ANTHRACENE	< 30.	MCG/L
T63709	BENZO(GHI)PERYLENE	< 30.	MCG/L
T15709	HCH,ALPHA	< 10.	MCG/L
T15809	HCH,BETA	< 10.	MCG/L
T35609	HCH,GAMMA (LINDANE)	< 10.	MCG/L
T16009	HCH,DELTA	< 10.	MCG/L
T08009	HEPTACHLOR	< 10.	MCG/L
T07709	ALDRIN	< 10.	MCG/L
T08309	HEPTACHLOR EPOXIDE	< 10.	MCG/L
T43309	ENDOSULFAN I	< 10.	MCG/L
T14809	DDE -PARA, PARA	< 10.	MCG/L
T08509	DIELDRIN	< 10.	MCG/L
T08409	ENDRIN	< 10.	MCG/L
T14909	DDD -PARA, PARA	< 10.	MCG/L
T43409	ENDOSULFAN II	< 10.	MCG/L
T67409	ENDRIN ALDEHYDE	< 10.	MCG/L
T67309	ENDOSULFAN SULFATE	< 10.	MCG/L
T14709	DDT -PARA, PARA	< 10.	MCG/L

**** END OF REPORT ****

REFERENCE 314030 D. 4 of 4

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 851007018 SAMPLE RECEIVED: 85/09/13/11 CHARGE: 6.00
PROGRAM: 710: INTENSIVE TOXICS SURVEYS
SOURCE ID: DRAINAGE BASIN: 16 GAZETTEER CODE: 1353
POLITICAL SUBDIVISION: DOVER COUNTY: DUTCHESS
LATITUDE: LONGITUDE: Z DIRECTION:
LOCATION: MARSH BND TO SWAMP RIVER NEAR DOVER FURNACE
DESCRIPTION: NEAR DOVER LANDFILL #3
REPORTING LAB: 110 LABORATORY OF INORGANIC ANALYTICAL CHEMISTRY - ALBANY
TEST PATTERN: 10-010: WQSN - NPDES PRIORITY POLLUTANT METALS
SAMPLE TYPE: 210: SURFACE WATER
TIME OF SAMPLING: 85/09/11 13:00 DATE PRINTED: 85/11/20

PARAMETER		RESULT
01ZINC	ZINC	[illegible]
02LEAD	LEAD, TOTAL RECOVERABLE	< 0.1 MG/L
02BERYL	BERYLLIUM, TOTAL RECOVERABLE	< 0.02 MG/L
02COPPER	COPPER, TOTAL RECOVERABLE	< 0.05 MG/L
02NICKEL	NICKEL, TOTAL RECOVERABLE	< 0.05 MG/L
02SILVER	SILVER, TOTAL RECOVERABLE	< 0.02 MG/L
01MERCURY	MERCURY	< 0.2 MCG/L
02CADMIUM	CADMIUM, TOTAL RECOVERABLE	< 0.02 MG/L
02CHROMIUM	CHROMIUM, TOTAL RECOVERABLE	< 0.1 MG/L
22ARSENIC	ARSENIC, TOTAL RECOVERABLE	< 10. MCG/L
22ANTIMONY	ANTIMONY, TOTAL RECOVERABLE	< 5. MCG/L
22THALLIUM	THALLIUM, TOTAL RECOVERABLE	< 10. MCG/L
22SELENIUM	SELENIUM, TOTAL RECOVERABLE	< 5.0 MCG/L
06DIGEST	DIG. OF WATER FOR TOT RECOVERABLE METALS	DONE

**** END OF REPORT ****

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ALBANY, N.Y. 12233

REFERENCE 12

Reference 12
p. 1 of 227

ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES

~~DRAFT~~

PRELIMINARY SITE ASSESSMENT

Cricket Hill Site Site No. 314030

Town of Dover Dutchess County

Prepared for:

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233
Thomas C. Jorling, *Commissioner*

RECEIVED
APR 2 - 1993
NYS - DEC
REGION 3 - NEW PALTZ

Division of Hazardous Waste Remediation
Michael J. O'Toole, Jr., *Director*

By:

DUNN GEOSCIENCE ENGINEERING COMPANY, P.C.
In association with
TAMS CONSULTANTS, INC.

Reference 12
p. 2 of 227

ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES

DRAFT

PRELIMINARY SITE ASSESSMENT

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50 Wolf Road, Albany, New York 12233
Thomas C. Jorling, Commissioner

Division of Hazardous Waste Remediation
Michael J. O'Toole, Jr., Director

Prepared By:

Dunn Geoscience Engineering Company, P.c.
in association with
TAMS Consultants, Inc.

March 1993

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NYS DEC
REGION 4

Reference 16
p. 3 of 227

TABLE OF CONTENTS

PAGE

EXECUTIVE SUMMARY IV

1.0 INTRODUCTION 1

2.0 SITE ASSESSMENT 3

2.1 Site History 3

2.2 Site Topography 3

2.3 Geology 4

2.3.1 Physiography 4

2.3.2 Unconsolidated Deposits 4

2.3.3 Bedrock 4

2.4 Hydrogeology 5

2.4.1 Ground water 5

2.5 Proximity to Potential Receptors 5

2.5.1 Surface Water 5

2.5.2 Population 6

2.5.4 Agricultural Land 6

2.5.4 Commercial Land 6

3.0 TASK DISCUSSION 7

3.1 Task 1 - Data and Records Search 7

3.1.1 Previous Investigations 7

4.0 CONCLUSIONS 9

5.0 RECOMMENDATION 10

Reference 12
p. 4 of 227

LIST OF FIGURES

Figure

ES-1 Site Location Map
ES-2 Site Features Map
1 Site Location Map
2 Site Features Map

APPENDICES

Appendix

A References
B Documents Cited
C Color Photographs
D EPA 2070 Form
E Proposed Updated NYS Registry Form

Reference 12
p. 5 of 227

EXECUTIVE SUMMARY

Site Description

The Cricket Hill Road Site occupies approximately 13 acres of a larger 200 acre parcel of land located approximately 2,500 feet east of Route 22 on Cricket Hill Road in the Town of Dover, Dutchess County, New York (Figure ES-1). The site was operated between 1969 and 1973 as the Town of Dover Landfill which accepted wastes from the Town of Dover and neighboring towns. However, supervision and maintenance of the landfill was nominal. As such, records and manifests of the materials disposed at the site were not maintained.

Investigations by the Dutchess County Department of Health (DCDOH) in 1970, and subsequent investigations by the New York State Department of Environmental Conservation (NYSDEC) identified iron stained seep areas at the toe of the landfill area. At a town meeting held in June 1972, the town supervisor stated that trenching had been performed in order to restrict seep migration onto a neighboring farmer's property. NYSDEC inspection of the site in July 1972 indicated that although materials and equipment were on-site, a proposed diversion berm had not been constructed. This berm was proposed in order to prevent seeps from entering an adjacent stream. Town meetings held in 1972 and 1973 could not confirm that this berm had been constructed. As such, uncontrolled iron stained seeps continued to be noted. The site was closed as a result of a DCDOH Closure Order dated April 11, 1972. A NYSDEC inspection on August 22, 1973 confirmed that the site was closed. However, subsequent NYSDEC inspections noted continued waste disposal activity at the site, erosion problems, and insufficient cover.

Summary of Preliminary Site Assessment

Lawler, Matusky and Skelly (LMS) Engineers performed a Phase I investigation in 1989 under contract to NYSDEC. The scope of this investigation was to compile existing information from federal, state, county and municipal offices as well as from private sources. This investigation identified a document which indicated that this site received liquid glue from Tri-Wall Cardboard Container Co. of Amenia, New York. However, examination of this document reveals that this report of November 13, 1979 was not for the Cricket Hill site. Rather, this report was for a site known as the Vincent Farm, located west of Dover Furnace Road in the Town of Dover. As such, the allegations regarding disposal of liquid glue at this site, as discussed in the LMS Report are unsubstantiated.

Analytical results obtained from one nearby residence identified trichlorofluoromethane at 4 micrograms per liter (ug/l) and 5 ug/l on February 2, 1990 and March 7, 1990, respectively. Ground water sampling at another nearby residence did not identify any organic compounds. A surface water sample collected approximately 0.75 miles northwest of the site did not contain detectable concentrations of "priority pollutant compounds", while two sediment samples collected approximately 500 feet southeast of the site contained bis (2-ethylhexyl) phthalate at concentrations of 26,230 micrograms per kilogram (ug/kg) and 33,000 ug/kg. One of the two samples also contained vinyl acetate (8 ug/kg).

Conclusions

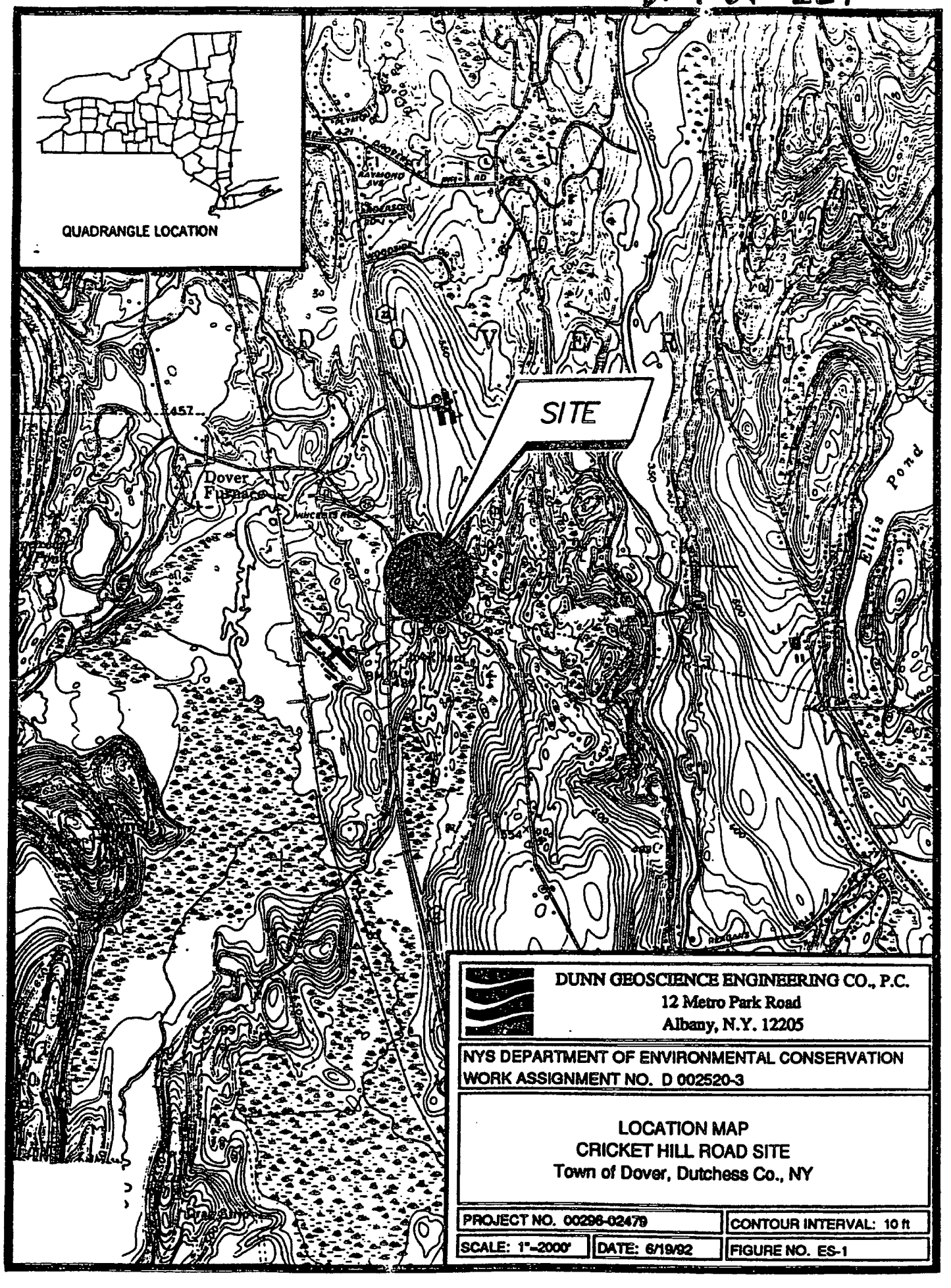
Based on the information gathered from this Preliminary Site Assessment (PSA), DUNN concludes that sufficient site specific data does not exist to characterize the nature of soils, seeps, or wastes at this site. However, DUNN further concludes that disposal of hazardous waste, as defined by 6 NYCRR Part 371, has not been documented at this site.

Recommendation

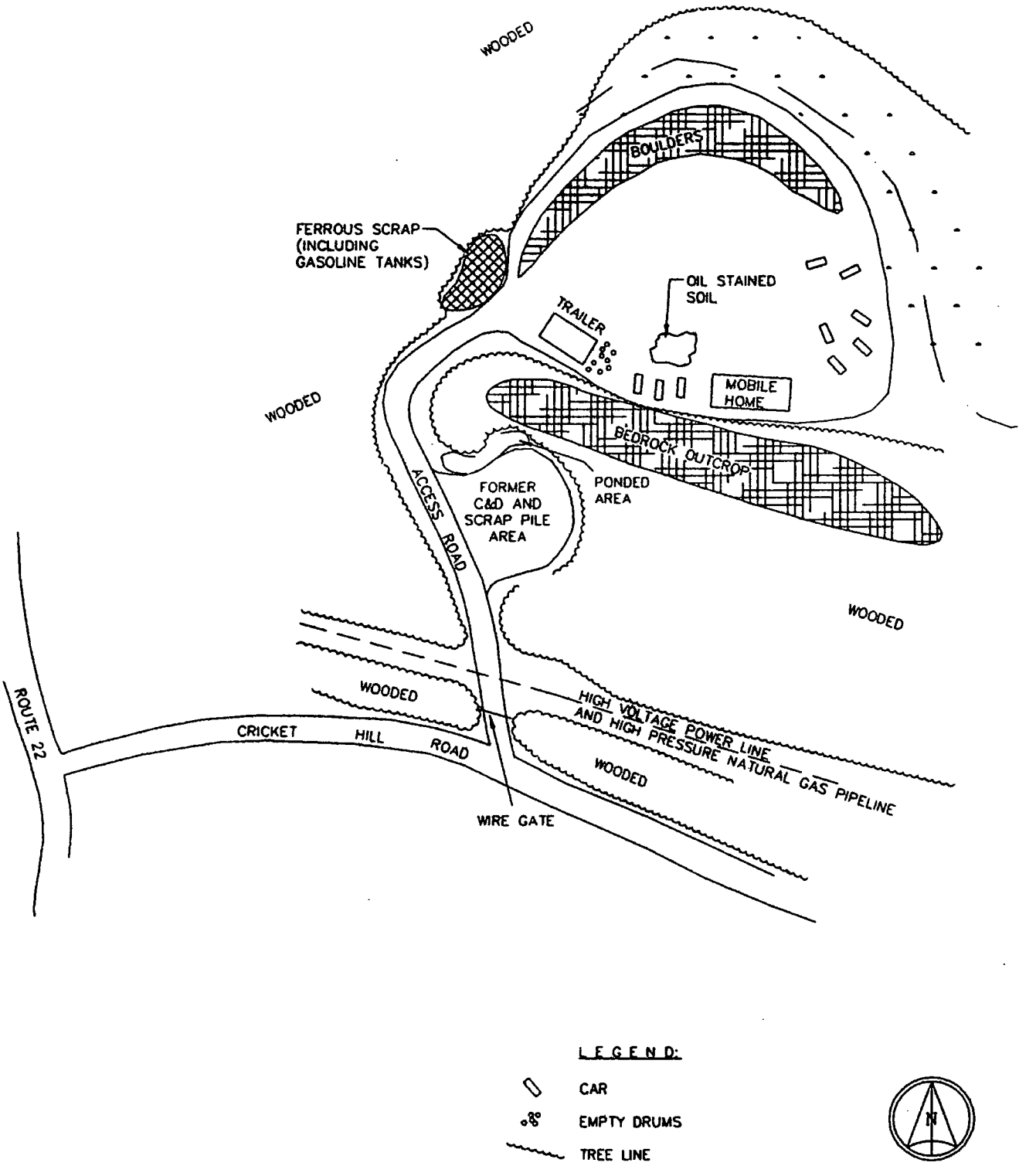
Based on the findings presented in this document, DUNN recommends that the Cricket Hill Road Site (NYS Site No. 314030) be delisted from the New York State Registry of Inactive Hazardous Waste Sites. This recommendation may be subject to modification in the future if physical conditions at the site deteriorate, or if new information becomes available.

DUNN further recommends that the site be referred to the NYSDEC - Division of Solid Waste for proper closure according to 6 NYCRR Part 360 Regulations. Proper closure and monitoring would enable NYSDEC to minimize the potential for the site to impact surrounding populations and the environment.

Reference 12
p. 7 of 227



Reference 1c
p. 8 of 227



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12 Metro Park Road
Albany, NY 12205

SITE FEATURES MAP

NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION
WORK ASSIGNMENT NUMBER: D002520-3

CRICKET HILL ROAD SITE

TOWN OF DOVER — DUTCHESS COUNTY, NY

PROJECT NO. 00296 – 02479	DATE 3/93	DWG. NO. C293A	NOT TO SCALE	FIGURE NO. ES-2

Reference 12
p. 9 of 227

1.0 INTRODUCTION

This report, prepared for the New York State Department of Environmental Conservation (NYSDEC), presents the results of a Preliminary Site Assessment (PSA) (Task 1 of the State Superfund Standby Contract Work Assignment No. D002520-3) of the Cricket Hill Road site (the site), NYS Site Number 314030, located in the Town of Dover, Dutchess County, New York.

Dunn Geoscience Engineering Company, P.C. (DUNN), in association with TAMS Consultants (TAMS), under contract with the New York State Department of Environmental Conservation (NYSDEC), performed this investigation in order to determine if hazardous waste as defined by 6 NYCRR Part 371 was disposed on-site, and if so, to determine significant threat to public health or the environment as a result of the presence of hazardous waste. With this information, the site can either be classified or delisted as defined by Article 27, Title 13, of the Environmental Conservation Law (ECL).

In order to achieve the goals of the PSA, a review of the following information regarding the site was performed:

- History of use;
- Topography;
- Geology/Hydrogeology;
- Demographics of surrounding area;
- Proximity to possible receptors;
- Previously noted contamination or regulatory actions; and
- Evaluating the adequacy of existing data in order to classify or delist the site.

Sources used to obtain the above listed information include the following:

- NYSDEC Central Office and Region 3 files;
- New York State Department of Health (NYSDOH) and Dutchess County Department of Health (DCDOH) records;
- Aerial photographs;
- Town Meeting Records;
- Topographic maps;
- Interviews with present site owner; and
- A previous Phase I report by Lawler, Matusky and Skelly Engineers (1989).

In addition, the following individuals and agencies were contacted:

- NYSDEC Region 3, Division of Hazardous Waste Remediation;
- NYSDOH Region 3;
- DCDOH;
- David Stock, homeowner, southwest of site;
- Artis Johnson, homeowner, south of site; and

- John Foley, homeowner, southeast of site.

Literature sources used to complete this report are presented in the List of References in Appendix A. Specific documentation used in the support of the text are listed in Appendix B.

On July 19, 1990, a site reconnaissance was performed by Mr. David Rollins (DUNN), Mr. Thomas Danahy (DUNN) and Ms. Laurie Gneiding (TAMS). During the site visit, Mr. C. Gerald Vincent, the current property owner, was interviewed. Color photographs of the site are presented in Appendix C and the site Inspection Form (USEPA-2070) is presented in Appendix D.

Reference 12
p. 11 of 227

2.0 SITE ASSESSMENT

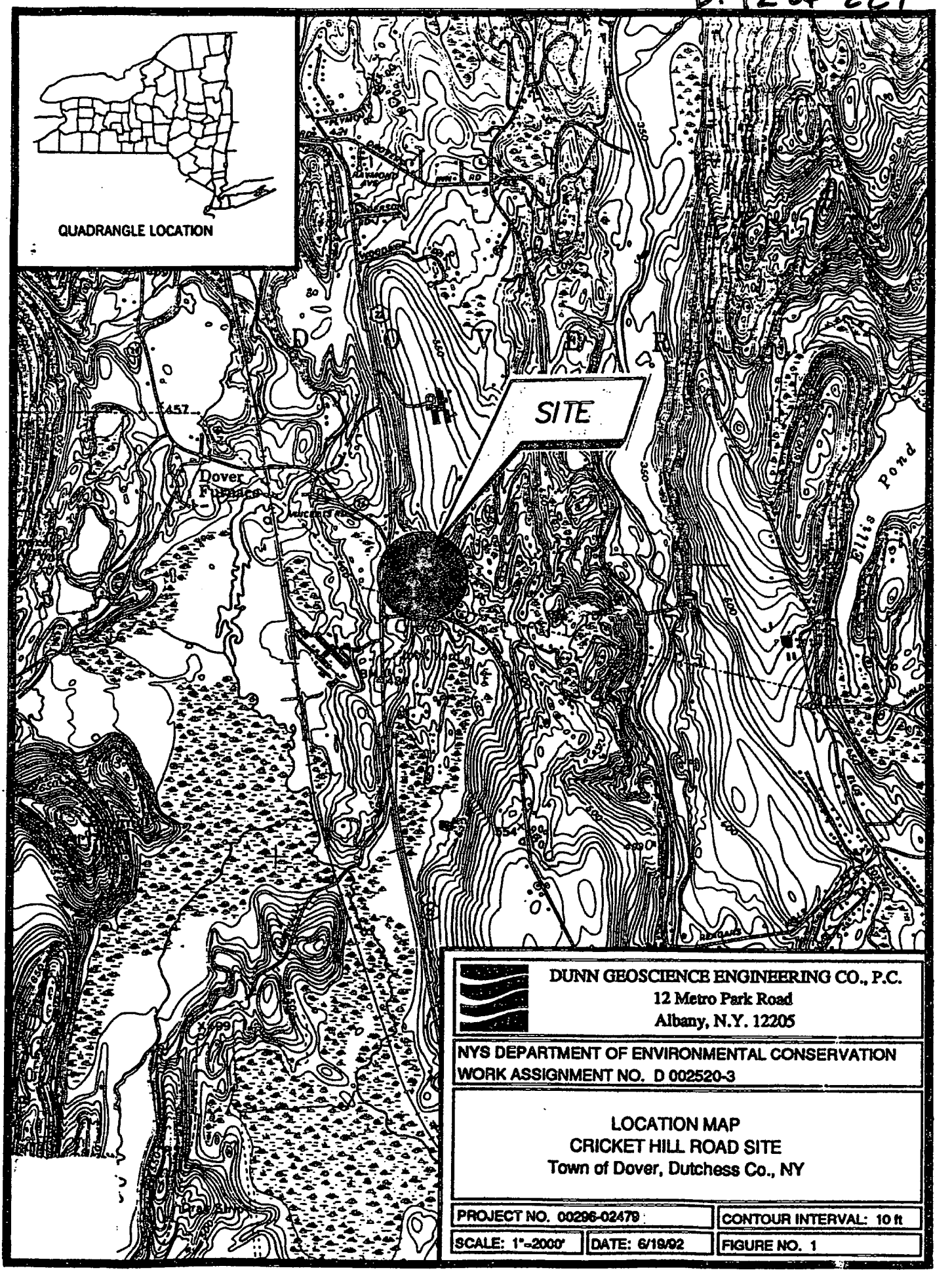
2.1 Site History

The Cricket Hill Road site occupies approximately 13 acres of a larger 200 acre parcel of land located on Cricket Hill Road, approximately 2,500 feet east of Route 22 in the Town of Dover, Dutchess County, New York (Figure 1). The site is currently owned by Mr. Gerald Vincent. The property was previously owned by Mr. Vincent's father, (Mr. Ken Vincent), who began negotiations with the Town of Dover in the late 1960s to lease a portion of the property for use as the town landfill. Prior to the site's operation as a landfill, the property was undeveloped and wooded. The site was operated between 1969 and 1973 as the Town of Dover Landfill and accepted wastes from the Town of Dover and neighboring towns. However, supervision and maintenance of the landfill was nominal. As such, records and manifests of the materials disposed at the site were not maintained.

Investigations by DCDOH in 1970, and subsequent investigations by NYSDEC, identified iron stained seep areas at the toe of the landfill area. At a town meeting held in June 1972, the town supervisor stated that trenching had been performed in order to restrict seep migration onto a neighboring farmer's property. NYSDEC inspection of the site in July 1972 indicated that although materials and equipment were on site, a proposed diversion berm had not been constructed. This berm was proposed in order to prevent seeps from entering an adjacent stream. Town meetings held in 1972 and 1973 could not confirm that this berm had been constructed. As such, uncontrolled iron stained seeps continued to be noted (Document B-5). The site was closed as a result of a DCDOH Closure Order dated April 11, 1972. An NYSDEC inspection on August 22, 1973 confirmed that the site was closed. However, subsequent NYSDEC inspections noted continued waste disposal activity at the site, erosion problems, and insufficient cover.

Aerial photographs taken March 25, 1968, April 12, 1970, and April 19, 1980, were reviewed for indications of past development and/or environmental concerns. The 1968 and 1970 photos show the site as cleared with a vegetative cover and a small wetland or pond area near the eastern side of the site. On the 1970 photo, several car-size piles of a dark colored material are observed. No excavating or other soil disturbance is noted. On the 1980 photo, the site is cleared but is mottled in color and texture, suggesting a hummocky, irregular surface and somewhat sparse vegetation.

Lawler, Matusky & Skelly, P.C. (LMS), performed a Phase I Investigation in 1989 and observed iron staining on stream sediment at the northeast end of the site. DUNN/TAMS personnel performed a site inspection on July 19,1990 and indicated that iron stained seeps were entering the stream and associated wetlands on the northeast edge of the site. During this inspection, areas of exposed debris, poor compaction, burned areas, and disposal along the access road were also noted. A subsequent site inspection on May 11, 1992 also identified these features, in addition to a large area covered with boulders blasted during the construction of a pipeline through the property. Site features are shown in Figure 2.



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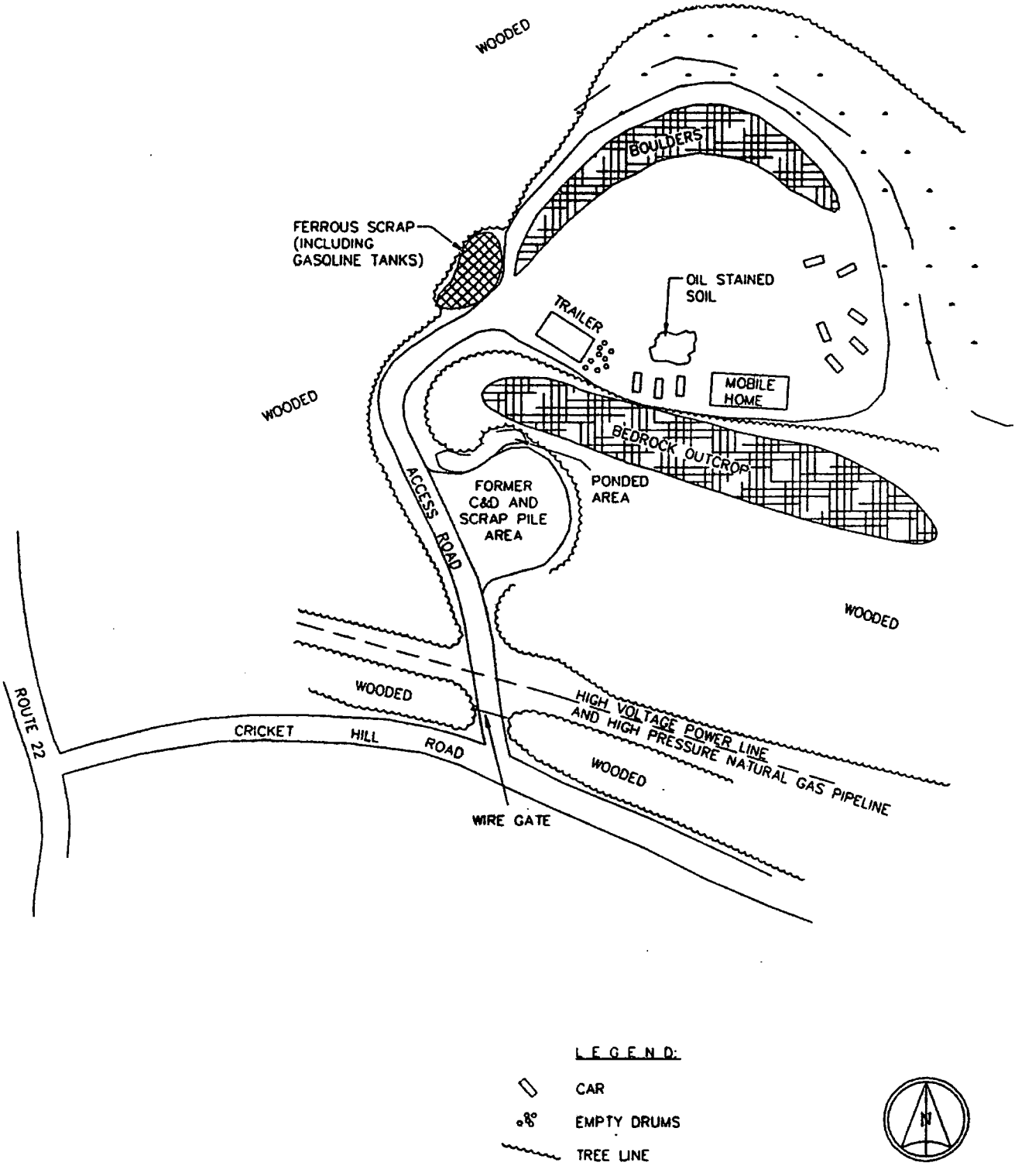
Albany, N.Y. 12205

NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION
WORK ASSIGNMENT NO. D 002520-3

LOCATION MAP
CRICKET HILL ROAD SITE
Town of Dover, Dutchess Co., NY

PROJECT NO. 00296-02479		CONTOUR INTERVAL: 10 ft
SCALE: 1"=2000'	DATE: 6/19/92	FIGURE NO. 1

Reference i-
P. 13 of 227



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12 Metro Park Road
Albany, NY 12205

SITE FEATURES MAP

NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION
WORK ASSIGNMENT NUMBER: D002520-3

CRICKET HILL ROAD SITE

TOWN OF DOVER — DUTCHESS COUNTY, NY

PROJECT NO. 00296 - 02479	DATE 3/93	DWG. NO. C293A	NOT TO SCALE	FIGURE NO. 2

2.2 Site Topography

The site is located in a hilly area at an average elevation of about 490 feet above mean sea level (MSL). Elevations range from 350 feet to over 570 feet (MSL) within one-half mile of the site. The site is not well drained and runoff generally drains to the south.

The site is located in zone C as designated by the Federal Emergency Management Agency (FEMA) Flood Zone Insurance Map, indicating that the site is outside of any 500 year floodplain (Reference A-11).

2.3 Geology

2.3.1 Physiography

New York State may be divided into nine physiographic provinces on the basis of topographic relief and geology. The Cricket Hill Road site is located within the New England Uplands province (Reference A-8). The New England Uplands are typified by topographic ridges and valleys which follow the northeast-southwest structural trends of the metamorphic and igneous rocks of the province. The region has been glaciated and valleys are dominated by glacial meltwater deposits.

The site is situated within a narrow, northerly trending valley which is bounded to the east and west by East and West Mountains, respectively. Low hills surround the site, which is at an approximate elevation of 500 feet MSL and slopes gently to the east and south.

2.3.2 Surficial Deposits

Test pitting, conducted by DCDOH prior to the commencement of landfilling activities in 1968, identified subsurface soils consisting of a near-surface, blue clay layer approximately one foot in thickness. This material is underlain by a sandy loam soil which contains minor amounts of clay. The presence of these materials was confirmed to a depth of approximately six feet where ground water was encountered. Bedrock was encountered at depths from six to seven feet in three test pits (Reference A-4). Bedrock outcrops of the Stockbridge Limestone were identified immediately south and northwest of the landfill. The maximum thickness of overburden is estimated at 10 feet.

According to the U.S. Soil Conservation Service, the site is underlain by soils classified as the Dover fine sandy loam, ledgy hilly phase (D_B) (Reference A-2). These sandy, well drained soils have developed upon a glacial till parent material containing abundant limestone and typically range in thickness from a few inches to six feet. The glacial till origin is supported by regional surficial geologic mapping (Reference A-3).

2.3.3 Bedrock

Bedrock underlying the site is the Cambrian/Ordovician aged Stockbridge Marble (Reference A-5). This unit, also known as the Stockbridge Limestone, is described as a white, blue and gray limestone and dolomite which is metamorphosed to marble in the eastern part of the county (Reference A-6). The Stockbridge is bounded by thrust faults to the east and west, and as such, is locally restricted to the valley upon which the site is situated. Bedrock outcrops are present bounding the southern portion of the fill area.

2.4 Hydrogeology

2.4.1 Ground Water

Test pitting performed by DCDOH in 1968, prior to landfilling, identified ground water within the unconsolidated materials at an approximate depth of six feet. The observed presence of iron stained seeps in the small wetland area east of the site suggests an easterly component of shallow ground water flow. Ground water flow within the Stockbridge Limestone is presumed to be toward the south-southeast in proximity to the site. The Stockbridge is the most productive water bearing bedrock unit in the county with well yields as high as 220 gallons per minute (gpm) and averaging 22 gpm (Reference A-6). Well yields in the Stockbridge are controlled primarily by secondary features such as enlargement of fractures, joints and bedding planes. Furthermore, the shallow depth to water within the thin surficial deposits, and shallow bedrock at the site suggest that these two units are hydraulically connected.

2.5 Proximity to Potential Receptors

2.5.1 Surface Water

Surface drainage at the site is generally from west to east entering a small, narrow (approximately 30 feet wide by 150 feet long) swampy area along the east boundary of the landfill. Orange colored seeps were observed throughout this swampy area east and southeast of the landfill and extending approximately 75 feet southeast. This area drains southward through narrow (10-50 feet wide) swampy lowlands which are bounded by woodland. Approximately 400 feet south of the landfill the surface drainage becomes channelized in a small stream (approximately three to five feet wide and one to two feet deep) which flows through a corrugated metal pipe (CMP) beneath the dirt access road along the east-west trending powerline.

Surface drainage continues to the south crossing beneath Cricket Hill Road, entering a NYSDEC regulated wetland (designated DP-22) located approximately 1,000 feet south of the landfill. Wetland DP-22 eventually discharges into the Swamp River approximately one mile south-southwest of the site. This portion of the Swamp River is a Class C waterway with a standard of C(T) (Reference A-1). Class C waters are designated suitable for fishing, fish propagation, boating and other purposes. Waters with a C(T) standard indicate that the presence of trout and/or trout spawning may be possible, and slightly more stringent water

quality standards are imposed (particularly for dissolved oxygen). The Swamp River flows to the north, draining into Tenmile River.

There are no critical habitats for federally designated endangered or threatened species. However, habitat for a state designated endangered species, the tall grama grass (*Bouteloua curtipendula*) is located at Nellie Hill, three miles north of the site.

2.5.2 Population

The site is located in a sparsely populated area of Dutchess County. The nearest population centers are Wingdale, located 2.3 miles south, and Dover Plains, located 3.75 miles north. The population within a four mile radius of the site is approximately 5800 persons (Reference A-10). The regional high school is located approximately 2,000 feet north-northwest, over the nearby ridge. The Harlem Valley State Hospital is located three miles south of the site. All potable water in the area near the site is derived from ground water, usually from private water supply wells.

Three residential water supply wells were identified in proximity to the site. The Johnson and Foley wells are located 700 and 1100 feet south-southeast of the site, respectively, while the Stock well is located approximately 1,200 feet to the southwest (Reference A-7, A-8). According to the property owner, the Foley well is approximately 400 feet deep with bedrock encountered at approximately 10 feet below land surface (BLS). Geologic mapping indicates that the Foley well derives ground water from the Stockbridge Limestone (Reference A-5). Likewise, both the Johnson and Stock wells are anticipated to be installed within the Stockbridge Limestone.

2.5.3 Agricultural Land

Land use within a one mile radius of the site is largely rural/residential. A farm is located on Cricket Hill Road approximately 0.25 miles east of the site.

2.5.4 Commercial Land

A junk yard is located across from the site on the south side of Cricket Hill Road, near the intersection of Route 22. The Domain Sand & Gravel facility is located approximately one mile northwest of the site, and Mica Products is located one half mile southwest of the site.

3.0 TASK DISCUSSION

The information presented herein has been developed based on the results of a Data and Records Search (Task 1) of state and local agency files.

3.1 Task 1 - Data and Records Search

Review of available DCDOH and NYSDEC site inspection reports reveals that the Cricket Hill Road site was improperly operated with minimal supervision. The working face was typically 35 to 200 feet in length and 15 to 20 feet deep. As the fill area expanded, refuse was disposed into standing water (Reference A-10). DCDOH inspections during the operation of the landfill noted insufficient cover and compaction, slope erosion, flies and rodents, blowing paper, open burning, and seep areas identified as leachate (Document B-1). Furthermore, it is alleged that industrial waste from two local rubber plants and a furniture manufacturer may have been disposed at the site (Reference A-10). However, documentation to substantiate this allegation is not known to exist.

DCDOH site inspections conducted after the site's closure in April 1972 indicate similar problems as those identified while the site was in operation. Bulky items including metal products, mattresses, automobiles, tires, etc., were identified as well as the site being improperly compacted and seeded (Document B-1). Additionally, significant erosion of the cover material had resulted in exposed refuse. Although the site was closed to the public, continued, unpermitted and unsupervised waste disposal continued at the site (Document B-1).

3.1.1 Previous Investigations

LMS performed a Phase I investigation in 1989 under contract to NYSDEC. The scope of this investigation was to compile existing information from federal, state, county and municipal offices as well as from private sources. This investigation found that a surface water sample collected in the Swamp River Marshlands, approximately 0.75 miles northwest of the site, did not contain any detectable concentrations of "priority pollutant" compounds (Reference A-10). This investigation also identified a document which indicated that this site received liquid glue from Tri-Wall Cardboard Container Co. of Amenia, New York (Document B-1). However, examination of this document reveals that this report of November 13, 1979 was not for the Cricket Hill Road site. Rather, this report was for a site known as the Vincent Farm, located west of Dover Furnace Road in the Town of Dover. As such, the allegations regarding disposal of liquid glue at this site, as discussed in the LMS Report, are unsubstantiated.

DCDOH collected ground water samples from the two nearby water supply wells at the Johnson and Stock residences in early 1990. Analytical results from the Johnson well identified trichlorofluoromethane at 4 micrograms per liter (ug/l) and chloroform at 1 ug/l on February 2, 1990. This well was resampled on March 7, 1990 and confirmed the presence of trichlorofluoromethane with a concentration of 5 ug/l. However, chloroform was not detected on this date. Analytical results from the Stock water supply well on March 7, 1990 did not identify any organic compounds above detection limits (Document B-3).

Two sediment samples were collected on March 14, 1991 by Haley & Aldrich of New York for Iroquois Gas Transmission Systems (IGTS) of Shelton, Connecticut. The samples were collected from the unnamed stream approximately 500 feet south-southeast of the landfill area where the proposed IGTS pipeline was to cross the unnamed stream. The samples were collected to identify the potential presence of hazardous materials in the area of the planned pipeline right-of-way. This information was used for health and safety purposes during pipeline construction. Analytical results indicate that vinyl acetate at a concentration of 8 micrograms per kilogram (ug/kg) and bis (2-ethylhexyl) phthalate at a concentration of 26,230 ug/kg were detected in Sample No. 12, while Sample No. 13 contained 33,000 ug/kg of bis (2-ethylhexyl) phthalate (Reference A-12). Vinyl acetate is commonly used in adhesives, paints and other coatings, while phthalates are associated with plastics.

During the site inspection conducted by DUNN and TAMS representatives in July 1990, iron stained seep areas were observed entering the stream and wetlands at the northeast end of the site. Empty drums, car parts, scrap metal and tires were observed on-site, and areas of erosion and insufficiently covered/compacted debris were evident. A subsequent site visit on May 11, 1992 revealed a large area covered with boulders blasted from the construction of the IGTS Pipeline. Iron stained seep areas, empty drums, car bodies, car parts, scrap metal, tires and an area of stained soil was also observed.

4.0 CONCLUSIONS

The purpose of the PSA at the Cricket Hill Road site is to determine if hazardous waste disposal, as defined by 6 NYCRR Part 371 had occurred, and if so, to determine significant threat to public health and/or the environment as a result of the presence of hazardous waste. With this information, the site can either be clasified or delisted as defined by Article 27, Title 13 of the Environmental Conservation Law.

The Cricket Hill Road site occupies approximately 13 acres of a larger 200 acre parcel of land located approximately 2,500 feet east of Route 22 on Cricket Hill Road in the Town of Dover, New York. The site was operated between 1969 and 1973 as the Town of Dover Landfill and accepted wastes from the Town of Dover and other neighboring towns. Operation and supervision of landfilling activities were nominal and as such, records and manifests of the wastes disposed were not maintained. DCDOH inspections noted problems such as bulky wastes, improper compaction, insufficient cover, flies and rodents during the site's operation and after its closure.

Lawler, Matusky and Skelly (LMS) Engineers performed a Phase I investigation in 1989 under contract to NYSDEC. The scope of this investigation was to compile existing information from federal, state, county and municipal offices as well as from private sources. This investigation also identified a document which indicated that this site received liquid glue from Tri-Wall Cardboard Container Co. of Amenia, New York . However, examination of this document reveals that this report of November 13, 1979 was not for the Cricket Hill site. Rather, this report was for a site known as the Vincent Farm, located west of Dover Furnace Road in the Town of Dover. As such, the allegations regarding disposal of liquid glue at this site, as discussed in the LMS Report are unsubstantiated.

Analytical results obtained from one nearby residence identified trichlorofluoromethane at 4 ug/l and 5 ug/l on February 2, 1990 and March 7, 1990, respectively. Ground water sampling at another nearby residence did not contain any organic compounds. A surface water sample collected approximately 0.75 miles northwest of the site did not contain detectable concentrations of "priority pollutant" compounds, while two sediment samples collected approximately 500 feet southeast of the site contained bis (2-ethylhexyl) phthalate at concentrations of 25,230 ug/kg and 33,000 ug/kg. One of the two samples also contained vinyl acetate (8 ug/kg).

Based on the information gathered from this Preliminary Site Assessment, DUNN concludes that sufficient site-specific data does not exist to characterize the nature of soils, seeps or wastes at this site. However, DUNN further concludes that disposal of hazardous waste, as defined by 6 NYCRR Part 371, has not been documented at this site.

5.0 RECOMMENDATION

Based on the findings presented in this document, DUNN recommends that the Cricket Hill Road site (NYS Site No. 314030) be delisted from the New York State Registry of Inactive Hazardous Waste Sites. This recommendation may be subject to modification in the future if physical conditions at the site deteriorate, or if new information becomes available.

DUNN further recommends that the site be referred to the NYSDEC - Division of Solid Waste for proper closure according to 6 NYCRR Part 360 Regulations. Proper closure and monitoring would enable NYSDEC to minimize the potential for the site to impact surrounding populations and the environment.

E:\lar\psa\cricket.doc

Reference 12
p. 21 of 227

APPENDIX A

List of References

LIST OF REFERENCES

A-1 State of New York, 1967, 6 NYCRR Conservation Vol. C, Part 825 - Housatonic River Drainage Basin.

AE-2 USDA, 1955, Soil Survey of Dutchess County, New York. U.S. Dept. of Agriculture, Series 1939 No. 23, Issued December, 1955.

A-3 Cadwell, D.H. ed., 1989, Surficial Geologic Map of New York - Lower Hudson Sheet, New York State Museum Map and Chart Series #40.

A-4 Dutchess County Department of Health, 1968, Record Memo dated November 1, 1968 from D. Ruff to Mr. Scornlick re: Test Holes - Proposed Landfill - Vincent Property, Town of Dover.

A-5 Fisher, D.W. and Isachsen, Y.W., 1970, Geologic Map of New York State - Lower Hudson Sheet, New York State Museum Map and Chart Series #15.

A-6 Simmons, E.T., Grossman, I.G. and Heath, R.C., 1961, Ground-Water Resources of Dutchess County, New York, USGS Bulletin GW-43.

A-7 Town of Dover, 1989, Real Property Tax Map, date of map - August, 1972, date of revision - July, 1989, Town of Dover, Dutchess County, New York.

A-8 Dutchess County Dept. of Health, 1990, Various water quality results for Johnson, Foley and Stock residential wells, and DUNN, 1990 and 1991, telephone interview records with residents.

A-9 Bugliosi, E.F. and Trudell, R.A., 1988, Potential Well Yields in Unconsolidated Aquifers in Upstate New York - Lower Hudson Sheet, USGS Water Resources Invest. Report 87-4274.

A-10 Lawler, Matusky, & Skelly Engineers for NYSDEC. December 1989. *Phase I Investigation, Cricket Hill Road Site*.

A-11 Federal Emergency Management Agency (FEMA), Flood Insurance Rate Map (FIRM), Town of Dover (Panel 361335-0009A) revised August 15, 1984, (Panel 361335-0013B) revised July 4, 1988, (Panel 361335-0020A) revised August 15, 1984, and (Panel 361335-0025A) revised August 15, 1984.

Reference 12
p. 23 of 227

LIST OF REFERENCES
(CONTINUED)

A-12 H & A of New York for Iroquois Gas Transmission System of Shelton, Connecticut. May 1991. *Sampling and Analysis Report Cricket Hill Road and Walter Vincent Sites, Dover, New York.*

Reference 12
p. 24 of 227

APPENDIX B

Documents Cited

Reference 12
p. 25 of 227

DOCUMENTS CITED

B-1 DCDOH Correspondence and Memoranda
B-2 NYSDEC Inspection Reports and Memoranda
B-3 NYSDOH Water Samples Laboratory Analyses
B-4 Water Well Inventory
B-5 Summary of Minutes from Town of Dover Meetings
B-6 Telephone Interview Summary

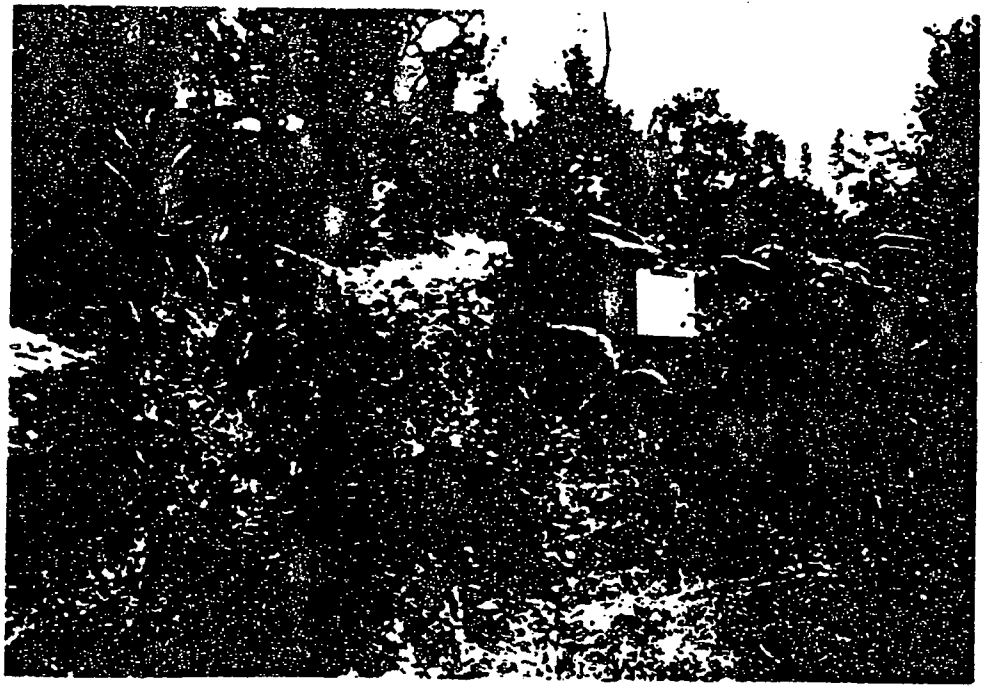
Reference 12
p. 26 of 227

APPENDIX C

Color Photographs

Reference 12
p. 27 of 227

LEACHATE IN SWAMP EAST OF FILL AREA



LOOKING SOUTH: BEDROCK OUTCROP ONSITE; STOCKBRIDGE LIMESTONE

LOOKING SOUTH: C & D DEBRIS ALONG ACCESS ROAD, SOUTH OF MUNICIPAL FILL AREA

LOOKING SOUTHWEST: FILL AREA, TRAILER, AND JUNK CARS

APPENDIX D

EPA 2070 Form

Reference 12
p. 30 of 227

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	D980508154

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER				
Cricket Hill Road Site	Cricket Hill Rd.				
03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE:	08 CONG DIST:
Dover	NY	12522	Dutchess	027	19

09 COORDINATES		10 TYPE OF OWNERSHIP (Check one)
LATITUDE	LONGITUDE	X_ A. PRIVATE __B. FEDERAL__ __C. STATE __ D. COUNTY __ E. MUNICIPAL
40 40' 48" N	72 34' 15" W	__ F. OTHER_____ __ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
7/19/90 MONTH DAY YEAR	__ACTIVE X_INACTIVE	1968 BEGINNING YEAR | 1975 ENDING YEAR __UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)

__ A. EPA __ B. EPA CONTRACTOR (Name of firm)_____ __C. MUNICIPAL __D. MUNICIPAL CONTRACTOR (Name of firm)_____

__ E. STATE X_ F. STATE CONTRACTOR (Name of firm)_Dunn Geoscience/TAMS_____ __G. OTHER_____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
Laurie Gneiding	Toxicologist	TAMS Consultants Inc.	201-338-6680
09 OTHER INSPECTORS	**10 TITLE**	**11 ORGANIZATION**	**12 TELEPHONE NO.**
Thomas Danahy	Hydrogeologist	Dunn Geoscience Corp.	518-458-1313
David Rollins	Geologist	Dunn Geoscience Corp.	518-458-1313
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS:	16 TELEPHONE NO.
Gerald Vincent	Owner	10 Broad St. P.O. Box 241 Pawling, NY 12564	( )
Steven Vincent	Owner		914-832-9605
			( )
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
X_ PERMISSION __ WARRANT	1315	Sunny, humid, 90 F.

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Mark Mateunas	NYSDEC	518-457-0639

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Laurie Gneiding		TAMS Consultants	201-338-6680	08/15/90 MO. DAY YR.

EPA FORM 2070-13 (7-81)

Reference 12
p. 31 of 227

EPA

POTENTIAL HAZARDOUS WASTE SITE

SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	D980508154

II. WASTE STATE, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

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

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

TONS __unknown_____
CUBIC YARDS __unknown___
NO. OF DRUMS ___unknown__

03 WASTE CHARACTERISTICS (Check all that apply)

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

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS	5200	@10 loads/wk/yr	Dumped over one year, see below
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

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

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONC.
OCC	Glue	N/A	Open dump	Unknown	Unknown

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS	Not applicable		FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

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

NYSDEC Reported Hazardous Wastes Sites, dated 11/13/79.

Reference 12
p. 32 of 227

EPA	POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 3 – DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS	I. IDENTIFICATION 01 STATE NY	02 SITE NUMBER D980508154

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 X_ A. GROUNDWATER CONTAMINATION — 02 __ OBSERVED (DATE: _____) — X_ POTENTIAL — __ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _7161_ — 04 NARRATIVE DESCRIPTION
The potential exists as the landfill is not lined.

01 X_ B. SURFACE WATER CONTAMINATION — 02 X_ OBSERVED (DATE: 12/17/79) — __ POTENTIAL — __ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _7161__ — 04 NARRATIVE DESCRIPTION
Dutchess Co. DOH inspectors observed refuse dumped into surface waters. Leachate has been observed in the past entering wetlands on the northern border of the landfill. A surface water sample was collected by Dutchess Co. DOH on 12/17/79. Oil and grease and high iron levels were detected. A surface water sample collected by NYSDOH on 9/11/85 and analyzed for Hazardous Substance List parameters showed no signs of contamination.

01 __ C. CONTAMINATION OF AIR — 02 __ OBSERVED (DATE: _____) — __ POTENTIAL — __ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION
No potential exists as the site is inactive.

01 X_ D. FIRE/EXPLOSIVE CONDITIONS — 02 X_ OBSERVED (DATE: _1972_____) — __ POTENTIAL — __ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION
No potential exists for fires presently; however, refuse was burned when the landfill was operating.

01 X_ E. DIRECT CONTACT — 02 __ OBSERVED (DATE: _____) — X_ POTENTIAL — __ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _2068__ — 04 NARRATIVE DESCRIPTION
The potential exists if groundwater or surface water becomes contaminated.

01 X_ F. CONTAMINATION OF SOIL — 02 __ OBSERVED (DATE: _____) — X_ POTENTIAL — __ ALLEGED
03 AREA POTENTIALLY AFFECTED: __3-5 acres__ — 04 NARRATIVE DESCRIPTION
As glue was dumped onto the ground surface, it sealed the soil creating a pond.
The potential exists as leachate is seeping from the landfill.

01 X_ G. DRINKING WATER CONTAMINATION — 02 __ OBSERVED (DATE: _____) — X_ POTENTIAL — __ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _7161__ — 04 NARRATIVE DESCRIPTION
The potential exists as groundwater is used for drinking water.

01 __ H. WORKER EXPOSURE/INJURY — 02 __ OBSERVED (DATE: _____) — __ POTENTIAL — __ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION
No potential exists presently as the site is inactive.

01 X_ I. POPULATION EXPOSURE/INJURY — 02 __ OBSERVED (DATE: _____) — X_ POTENTIAL — __ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _7161__ — 04 NARRATIVE DESCRIPTION
The potential exists if surface water or groundwater becomes contaminated.

Reference 12
p. 33 of 227

EPA

POTENTIAL HAZARDOUS WASTE SITE

SITE INSPECTION REPORT

PART 3 – DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	D980508154

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 X_ J. DAMAGE TO FLORA — 02 __ OBSERVED (DATE: _____) — X_ POTENTIAL — __ ALLEGED

04 NARRATIVE DESCRIPTION

The potential exists as leachate is entering the wetlands on the northern border of the site.
Habitat for the State designated endangered tall grama grass, Bouteloua curtipendula, is within 3 miles of the site.

01 X_ K. DAMAGE TO FAUNA — 02 __ OBSERVED (DATE: _____) — X_ POTENTIAL — __ ALLEGED

04 NARRATIVE DESCRIPTION (Include name(s) of species)

The potential exists as leachate is entering the wetlands on the northern border of the site. Dunn/TAMS personnel observed evidence of deer during the site reconnaissance.

01 X_ L. CONTAMINATION OF FOOD CHAIN — 02 __ OBSERVED (DATE: _____) — X_ POTENTIAL — __ ALLEGED

04 NARRATIVE DESCRIPTION

The potential exists if vegetation or animals become contaminated.

01 X_ M. UNSTABLE CONTAINMENT OF WASTES (Spills/Runoff/Standing liquids, Leaking drums) — 02 X_ OBSERVED (DATE: 7/19/80) — __ POTENTIAL — __ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: 2088

04 NARRATIVE DESCRIPTION

Leachate has been noted by Dutchess County DOH since 1970.
Dunn/TAMS personnel observed leachate seeping from the eastern slope of the landfill

01 X_ N. DAMAGE TO OFFSITE PROPERTY — 02 __ OBSERVED (DATE: _____) — X_ POTENTIAL — __ ALLEGED

04 NARRATIVE DESCRIPTION

The potential exists as leachate is entering the wetlands on the northern border of the site. If groundwater is contaminated, it may spread contamination offsite.

01 __ O. CONTAMINATION OF SEWERS, STORM DRAINS, OR WWTPs — 02 __ OBSERVED (DATE: _____) — __ POTENTIAL — __ ALLEGED

04 NARRATIVE DESCRIPTION

No potential exists as there are no sewers, storm drains or WWTPs near the site.

01 X_ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 __ OBSERVED (DATE: _____) — X_ POTENTIAL — __ ALLEGED

04 NARRATIVE DESCRIPTION

The potential existed when the landfill was open as operations were often left unattended.

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

None known

III. TOTAL POPULATION POTENTIALLY AFFECTED: 7161

IV. COMMENTS

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

Site reconnaissance conducted on 7/19/80 by Dunn Geoscience Corp. & TAMS Consultants, Inc.
Field notes of C.H.Wright Dutchess Co. DOH, dated 2/17/70.
Donnelly Marketing Services, 1990.
NYSDEC Reported Hazardous Waste Sites, Region 3 Dutchess Co., dated 8/14/79 and 11/13/79.
Town of Dover, Town Board meeting minutes, 1969–1974.
Analytical results, NYSDOH, dated 9/11/85.
Analytical results Dutchess Co. DOH, dated 12/17/77.

EPA FORM 2070-13(7-81)

Reference 12
p. 34 of 227

EPA

POTENTIAL HAZARDOUS WASTE SITE

SITE INSPECTION

PART 4–PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	D980508154

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
__A. NPDES				
__B. UIC				
__C. AIR				
__D. RCRA				
__E. RCRA INTERIM STATUS				
__F. SPCC PLAN				
__G. STATE(Specify)				
__H. LOCAL(Specify)				
__I. OTHER(Specify)				
X_J. NONE				

III. SITE DESCRIPTION

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

04 TREATMENT (Check all that apply)

__A. INCINERATION
__B. UNDERGROUND INJECTION
__C. CHEMICAL/PHYSICAL
__D. BIOLOGICAL
__E. WASTE OIL PROCESSING
__F. SOLVENT RECOVERY
__G. OTHER RECYCLING/RECOVERY
X_H. OTHER_open burning__ (Specify)

05 OTHER

__ A. BUILDINGS ON SITE
none

06 AREA OF SITE

__3-5_____(Acres)

07 COMMENTS

Glue was dumped in the landfill were it subsequently sealed the soils and created ponded water.

IV. CONTAINMENT

01CONTAINMENT OF WASTES(Check one)

__A. ADEQUATE,SECURE __B. MODERATE X_C. INADEQUATE,POOR __D. INSECURE,UNSOUND,DANGEROUS

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

The landfill is unlined and was never properly capped.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: __ YES X_ NO

02 COMMENTS

Site is on private land. Access road has locked gate.

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

Site reconnaissance on 7/19/90, Dunn Geoscience Corp. and TAMS Consultants, Inc.
Field notes of C.H.Wright Dutchess Co. DOH, date 2/17/79.

Reference 12
p. 35 of 227

EPA

POTENTIAL HAZARDOUS WASTE SITE

SITE INSPECTION REPORT

PART 6–WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	D090606154

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)

	SURFACE	WELL
COMMUNITY	A.___	B.__X__
NON-COMMUNITY	C.___	D.__X__

02 STATUS

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

03 DISTANCE TO SITE

A._1.52_(mi)
B._0.13_(mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

_X_A. ONLY SOURCE FOR DRINKING

__B. DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available)

__C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available)

__D. NOT USED, UNUSEABLE

02 POPULATON SERVED BY GROUNDWATER _____

03 DISTANCE TO NEAREST DRINKING WATER WELL _____(mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
___5___(ft)	_south and east_____	___5___(ft)	_19000_(gpd)	_YES X_NO

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

Wells are screened, open hole, in bedrock.

10 RECHARGE AREA		11 DISCHARGE AREA	
__YES	COMMENTS	_X_YES	COMMENTS
__NO		__NO	Wetlands associated with the Swamp River.

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

X_A. RESERVOIR, RECREATION DRINKING WATER SOURCE

__B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES

__C. COMMERCIAL, INDUSTRIAL

__D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED: (Y/N)	DISTANCE TO SITE
Wetlands associated with the Swamp River	yes	_Adjacent__(mi)
Swamp River (Class C)	potentially	___1____(mi)
Swamp River (Class A)	potentially	__2.7____(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A._2068__	B._4137__	C. 7161___
NO. OF PERSONS	NO. OF PERSONS	NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION

__0.13____(mi)

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

___1100_____

04 DISTANCE TO NEAREST OFF-SITE BUILDING

___0.13_____(mi)

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

The surrounding area is primarily rural/agricultural. The largest town nearest the site is Dover Plains, located approximately 4 miles north.

EPA FORM 2070-13(7-81)

Reference 12
p. 36 of 227

EPA

POTENTIAL HAZARDOUS WASTE SITE

SITE INSPECTION REPORT

PART 5-WATER,DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE: NY

02 SITE NUMBER: D980506154

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

__A. 10-6 to 10-8 cm/sec __B. 10-4 to 10-6 cm/sec X C. 10-4 to 10-3 cm/sec __D. GREATER THAN 10-3 cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

__A. IMPERMEABLE (Less than 10-6 cm/sec) X B. RELATIVELY IMPERMEABLE (10-4 to 10-6 cm/sec) __C. RELATIVELY PERMEABLE (10-2 to 10-4 cm/sec) __D. VERY PERMEABLE (Greater than 10-2 cm/sec)

03 DEPTH TO BEDROCK: 15-30 (ft)

04 DEPTH OF CONTAMINATED SOIL ZONE: Unknown (ft)

05 SOIL pH: 5.0-7.5

06 NET PRECIPITATION: 16 (in)

07 ONE YEAR 24 HOUR RAINFALL: 3 (in)

08 SLOPE
SITE SLOPE: 2-5 %
DIRECTION OF SITE SLOPE: southeast
TERRAIN AVERAGE SLOPE: 15-30 %

09 FLOOD POTENTIAL
SITE IS IN >500 YEAR FLOODPLAIN

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

11 DISTANCE TO WETLANDS (5 acre minimum)
ESTUARINE: A >3 (mi)
OTHER: B 0.19 (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species): 3 (mi)
ENDANGERED SPECIES: Bouteloua curtipendula: Tall grama grass

13 LAND USE IN VICINITY
DISTANCE TO:
COMMERCIAL/INDUSTRIAL
RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FOREST, OR WILDLIFE RESERVES: A Approximately 1 (mi) B 0.13 (mi)
AGRICULTURAL LANDS
PRIME AG LAND: C 0.27 (mi)
AG LAND: D <0.25 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY
Extensive wetlands are located south of the site.
The site is situated at the foot of a ridge separating Swamp Creek from the Tenmile River.
Hills in the area rise 200 feet.

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

Donnelly Marketing Services, 1990.
Simmon, Grossman, and Heath, "Groundwater Resources of Dutchess County, New York", USGS, Bulletin GW-43, 1961.
U.S. Geological Survey Topographic Maps, 7.5 minute series, "Dover Plains, New York-Conn.", 1969-photorevised 1984.
Site reconnaissance conducted on 7/19/90 by Dunn Geoscience and TAMS Consultants Inc.
Notes from D.Ruff of the Dutchess Co. DOH, dated 11/1/89.
New York State Code of Rules and Regulations, Part 825.6, 4/30/88.
Soil Survey, Dutchess County New York, USDA, December 1955.
Uncontrolled hazardous waste site ranking system, A user's manual, 40 CFR Part 300, Appendix A, 1988.

EPA FORM 2070-13(7-81)

Reference 16
p. 37 of 227

EPA	POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 6-SAMPLE AND FIELD INFORMATION	I. IDENTIFICATION 01 STATE NY	02 SITE NUMBER D980508154

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER	Not applicable		
SURFACE WATER	Not applicable		
WASTE	Not applicable		
AIR	Not applicable		
RUNOFF	Not applicable		
SPILL	Not applicable		
SOIL	Not applicable		
VEGETATION	Not applicable		
OTHER	Not applicable		

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
HNu PID	No readings above background.
Monitor 4 mini-rad	On site reading: 14 cpm

IV. PHOTOGRAPHS AND MAPS

01 TYPE _X_ GROUND ___ AERIAL

02 IN CUSTODY OF
Dunn Geoscience Corp./TAMS Consultants, Inc.
(Name of organization or individual)

03 MAPS
X YES
_ NO

04 LOCATION OF MAPS
Dunn Geoscience Corp./TAMS Consultants, Inc.

V. OTHER FIELD DATA COLLECTED (provide narrative description)

Field notes from TAMS Consultants, Inc. notebook 013R, dated 7/19/90

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

Site reconnaissance conducted on 7/19/90 by Dunn Geoscience Corp. & TAMS Consultants, Inc.

EPA FORM 2070-13(7-81)

Reference 12
p. 38 of 227

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	D980508154

II. CURRENT OWNER(S)			PARENT COMPANY(If applicable)		
01 NAME Gerald Vincent		02 D+B NUMBER	08 NAME		09 D+B NUMBER
03 STREET ADDRESS(P.O.Box,RFD#,etc.) 10 Broad St. P.O.Box 241		04 SIC CODE	10 STREET ADDRESS(P.O.Box, RFD#,etc.)		11 SIC CODE
05 CITY Pawling	06 STATE NY	07 ZIP CODE 12564	12 CITY	13 STATE	14 ZIP CODE
01 NAME		02 D+B NUMBER	08 NAME		09 D+B NUMBER
03 STREET ADDRESS(P.O.Box,RFD#,etc.)		04 SIC CODE	10 STREET ADDRESS(P.O.Box, RFD#,etc.)		11 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE
01 NAME		02 D+B NUMBER	08 NAME		09 D+B NUMBER
03 STREET ADDRESS(P.O.Box,RFD#,etc.)		04 SIC CODE	10 STREET ADDRESS(P.O.Box, RFD#,etc.)		11 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE
01 NAME		02 D+B NUMBER	08 NAME		09 D+B NUMBER
03 STREET ADDRESS(P.O.Box,RFD#,etc.)		04 SIC CODE	10 STREET ADDRESS(P.O.Box, RFD#,etc.)		11 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE

III. PREVIOUS OWNER(S)(List most recent first)			IV. REALTY OWNER(S)(If applicable;list most recent firest)		
01 NAME		02 D+B NUMBER	01 NAME		02 D+B NUMBER
03 STREET ADDRESS(P.O.Box,RFD#,etc.)		04 SIC CODE	03 STREET ADDRESS(P.O.Box,RFD#,etc.)		04 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
01 NAME		02 D+B NUMBER	01 NAME		02 D+B NUMBER
03 STREET ADDRESS(P.O.Box,RFD#,etc.)		04 SIC CODE	03 STREET ADDRESS(P.O.Box,RFD#,etc.)		04 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
01 NAME		02 D+B NUMBER	01 NAME		02 D+B NUMBER
03 STREET ADDRESS(P.O.Box,RFD#,etc.)		04 SIC CODE	03 STREET ADDRESS(P.O.Box,RFD#,etc.)		04 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

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

Site reconnassance conducted by Dunn Geoscience Engineering Co./TAMS Consultants, Inc. on 7/19/90.

EPA FORM 2070-13(7-81)

Reference 12
p. 39 of 227

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	D980508154

II. CURRENT OPERATOR(Provide if different from owner)			OPERATOR'S PARENT COMPANY(If applicable)		
01 NAME Not applicable		02 D+B NUMBER	08 NAME		09 D+B NUMBER
03 STREET ADDRESS(P.O.Box,RFD#,etc.)		04 SIC CODE	10 STREET ADDRESS(P.O.Box, RFD#,etc.)		11 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER				

III. PREVIOUS OPERATOR(S)(List most recent first; provide only if different from owner)			PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)		
01 NAME Town of Dover		02 D+B NUMBER	08 NAME		09 D+B NUMBER
03 STREET ADDRESS(P.O.Box,RFD#,etc.) East Duncan Hill Rd.		04 SIC CODE	10 STREET ADDRESS(P.O.Box, RFD#,etc.)		11 SIC CODE
05 CITY Dover Plains	06 STATE NY	07 ZIP CODE 12522	12 CITY	13 STATE	14 ZIP CODE
08 YEARS OF OPERATION 1968-1973?	09 NAME OF OWNER Walter Vincent				
01 NAME		02 D+B NUMBER	08 NAME		09 D+B NUMBER
03 STREET ADDRESS(P.O.Box,RFD#,etc.)		04 SIC CODE	10 STREET ADDRESS(P.O.Box, RFD#,etc.)		11 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER				
01 NAME		02 D+B NUMBER	08 NAME		09 D+B NUMBER
03 STREET ADDRESS(P.O.Box,RFD#,etc.)		04 SIC CODE	10 STREET ADDRESS(P.O.Box, RFD#,etc.)		11 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER				

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

Interview with Gerald Vincent on 7/19/90

EPA FORM 2070-13(7-81)

Reference 12
p. 40 of 227

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	D980508154

II. ON-SITE GENERATOR

01 NAME Not applicable		02 D+B NUMBER	
03 STREET ADDRESS(P.O.Box,RFD#,etc.)		04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	

III. OFF-SITE GENERATOR(S)

01 NAME Tri-wall Co.		02 D+B NUMBER 265	08 NAME		09 D+B NUMBER
03 STREET ADDRESS(P.O.Box,RFD#,etc.)		04 SIC CODE	10 STREET ADDRESS(P.O.Box, RFD#,etc.)		11 SIC CODE
05 CITY Amenia	06 STATE NY	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE
01 NAME Town of Dover		02 D+B NUMBER	08 NAME		09 D+B NUMBER
03 STREET ADDRESS(P.O.Box,RFD#,etc.) East Duncan Hill Road		04 SIC CODE 9111	10 STREET ADDRESS(P.O.Box, RFD#,etc.)		11 SIC CODE
05 CITY Dover Plains	06 STATE NY	07 ZIP CODE 12522	12 CITY	13 STATE	14 ZIP CODE

IV. TRANSPORTER(S)

01 NAME Commercial refuse haulers.		02 D+B NUMBER	08 NAME		09 D+B NUMBER
03 STREET ADDRESS(P.O.Box,RFD#,etc.)		04 SIC CODE 4212	10 STREET ADDRESS(P.O.Box, RFD#,etc.)		11 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE
01 NAME		02 D+B NUMBER	01 NAME		02 D+B NUMBER
03 STREET ADDRESS(P.O.Box,RFD#,etc.)		04 SIC CODE	03 STREET ADDRESS(P.O.Box,RFD#,etc.)		04 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

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

Field notes from D. Ruff, Dutchess County Health Department, dated 4/2/68 and 4/10/68.
Standard Industrial Classification Manual, Office of Management and Budget, 1987.

EPA FORM 2070-13(7-81)

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	D980508154

II. PAST RESPONSE ACTIVITIES

01 __ A. WATER SUPPLY CLOSED — 02 DATE: _____ — 03 AGENCY _____
04 DESCRIPTION
No previous history

01 __ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE: _____ — 03 AGENCY _____
04 DESCRIPTION
No previous history

01 __ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE: _____ — 03 AGENCY _____
04 DESCRIPTION
No previous history

01 __ D. SPILLED MATERIAL REMOVED — 02 DATE: _____ — 03 AGENCY _____
04 DESCRIPTION
No previous history

01 __ E. CONTAMINATED SOIL REMOVED — 02 DATE: _____ — 03 AGENCY _____
04 DESCRIPTION
No previous history

01 __ F. WASTE REPACKAGED — 02 DATE: _____ — 03 AGENCY _____
04 DESCRIPTION
No previous history

01 __ G. WASTE DISPOSED ELSEWHERE — 02 DATE: _____ — 03 AGENCY _____
04 DESCRIPTION
No previous history

01 __ H. ON SITE BURIAL — 02 DATE: _____ — 03 AGENCY _____
04 DESCRIPTION
No previous history

01 __ I. IN SITU CHEMICAL TREATMENT — 02 DATE: _____ — 03 AGENCY _____
04 DESCRIPTION
No previous history

01 __ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE: _____ — 03 AGENCY _____
04 DESCRIPTION
No previous history

01 __ K. IN SITU PHYSICAL TREATMENT — 02 DATE: _____ — 03 AGENCY _____
04 DESCRIPTION
No previous history

01 __ L. ENCAPSULATION — 02 DATE: _____ — 03 AGENCY _____
04 DESCRIPTION
No previous history

01 __ M. EMERGENCY WASTE TREATMENT — 02 DATE: _____ — 03 AGENCY _____
04 DESCRIPTION
No previous history

01 __ N. CUTOFF WALLS — 02 DATE: _____ — 03 AGENCY _____
04 DESCRIPTION
No previous history

01 __ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE: _____ — 03 AGENCY _____
04 DESCRIPTION
No previous history

01 __ P. CUTOFF TRENCHES/SUMP — 02 DATE: _____ — 03 AGENCY _____
04 DESCRIPTION
No previous history

01 __ Q. SUBSURFACE CUTOFF WALL — 02 DATE: _____ — 03 AGENCY _____
04 DESCRIPTION
No previous history

Reference 12
p. 42 of 227

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	D980508154

II. PAST RESPONSE ACTIVITIES (Continued)

01 __ R. BARRIER WALLS CONSTRUCTED — 02 DATE: _____ — 03 AGENCY _____
04 DESCRIPTION
No previous history

01 __ S. CAPPING/COVERING — 02 DATE: _____ — 03 AGENCY _____
04 DESCRIPTION
No previous history

01 __ T. BULK TANKAGE REPAIRED — 02 DATE: _____ — 03 AGENCY _____
04 DESCRIPTION
No previous history

01 __ U. GROUT CURTAIN CONSTRUCTED — 02 DATE: _____ — 03 AGENCY _____
04 DESCRIPTION
No previous history

01 __ V. BOTTOM SEALED — 02 DATE: _____ — 03 AGENCY _____
04 DESCRIPTION
No previous history

01 __ W. GAS CONTROL — 02 DATE: _____ — 03 AGENCY _____
04 DESCRIPTION
No previous history

01 __ X. FIRE CONTROL — 02 DATE: _____ — 03 AGENCY _____
04 DESCRIPTION
No previous history

01 __ Y. LEACHATE TREATMENT — 02 DATE: _____ — 03 AGENCY _____
04 DESCRIPTION
No previous history

01 __ Z. AREA EVACUATED — 02 DATE: _____ — 03 AGENCY _____
04 DESCRIPTION
No previous history

01 X_ 1. ACCESS TO SITE RESTRICTED — 02 DATE: _____ — 03 AGENCY _____
04 DESCRIPTION
The access road has a locked gate at Cricket Hill Road.

01 __ 2. POPULATION RELOCATED — 02 DATE: _____ — 03 AGENCY _____
04 DESCRIPTION
No previous history

01 __ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE: _____ — 03 AGENCY _____
04 DESCRIPTION
No previous history

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

Site reconnaissance on 7/19/90 conducted by Dunn Geoscience Corp. and TAMS Consultants, Inc.
NYSDEC Region 3 files.

Reference 12
p. 43 of 227

EPA	POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 11-ENFORCEMENT INFORMATION	I. IDENTIFICATION	
		01 STATE NY	02 SITE NUMBER D980508154

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION _X_YES ___NO

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

Violations of New York State Sanitary Code, Part 19.

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

Memo from D. Ruff to Mr. O'Donnell Dutchess County DOH, dated 6/5/72.

EPA FORM 2070-13(7-81)

APPENDIX E

Proposed Updated NYS Registry Form

Reference 12
p. 45 of 227

(FORM WILL BE UPDATED IN FINAL REPORT)
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS WASTE REMEDIATION
INACTIVE HAZARDOUS WASTE DISPOSAL REPORT

CLASSIFICATION CODE: 2a REGION: 3 SITE CODE: 314030
EPA ID: NYD980508154

NAME OF SITE: Cricket Hill Road
STREET ADDRESS: Cricket Hill Road, approximately 0.6 mile east of State Highway Route
TOWN/CITY: Dover COUNTY: Dutchess ZIP: 12522

SITE TYPE: Open Dump-X Structure- Lagoon- Landfill- Treatment Pond
ESTIMATED SIZE: 3-5 Acres

SITE OWNER/OPERATOR INFORMATION:
CURRENT OWNER NAME....: Charles G.
CURRENT OWNER ADDRESS.: Dover Furnace Road, Wingdale, NY
OWNER(S) DURING USE...: Charles K.
OPERATOR DURING USE...: Town of Dover
OPERATOR ADDRESS.....: East Duncan Hill Rd., RR#2, Box 132, Dover,
PERIOD ASSOCIATED WITH HAZARDOUS WASTE: From 1968 To 1973

SITE DESCRIPTION:

This remote site lies on flat topography and is covered and vegetated. A clear stream exists to the northeast of the site and there are no homes or wells for 1/4 mile. This site was used as a town dump, accepting various types of household waste. It also accepted liquid glue (unknown if hazardous waste) from a cardboard container company for about 2 years. A small creek flows south through marshy areas along the northeast and eastern side of the site. Water drains south from the site via the stream and marsh. No leachate has been observed, but the stream sediment has red to brown-orange stains. There is no visible sheen on the water surface. The site is fenced and has a locked gate.

An EPA Site Investigation was completed in 1983. A Phase I Investigation has been completed. A Preliminary Site Assessment is in progress.

HAZARDOUS WASTE DISPOSED: Confirmed- Suspected-X

TYPE	QUANTITY (units)

Reference 12
p. 46 of 227

SITE CODE: 314030

ANALYTICAL DATA AVAILABLE:
Air- Surface Water- X Groundwater- X Soil- Sediment-

CONTRAVENTION OF STANDARDS:
Groundwater- Drinking Water- Surface Water- Air-

LEGAL ACTION:

TYPE: State- Federal-
STATUS: Negotiation in Progress- Order Signed-

REMEDIAL ACTION:

Proposed- Under design- In Progress- Completed-
NATURE OF ACTION: None

GEOTECHNICAL INFORMATION:
SOIL TYPE: Dover fine sandy loam of the ledgy hilly phase
GROUNDWATER DEPTH: approximately 6 feet

ASSESSMENT OF ENVIRONMENTAL PROBLEMS:

A Preliminary Site Assessment is being conducted to assess any environmental problems.

ASSESSMENT OF HEALTH PROBLEMS:

Samples of leachate taken from the site contained elevated levels of iron, low levels of cadmium and lead, and oil was noted. Volatile organic compounds (VOCs) have not been analyzed for. Leachate discharging to a freshwater marsh, stains in stream sediments, and stressed vegetation have been noted. The site has a locked gate at the entrance, but is not completely fenced. Evidence of trespassing has been noted. No public water supply is located within 2000 m of the site. Private residences with wells are located within 500m of the site. The wells were sampled by Dutchess County Department of Health in February 1990. One well contained one VOC at levels equal to drinking water standards; neither well contained metals in excess of drinking water standards. The effected well was resampled in May 1990 and contained 13 ppb of the same compound. The source of the compound has not been identified. The wells will be resampled during 1992.

Reference 12
p. 47 of 227

SUPPORTING DOCUMENTATION FOR THE ~~DRAFT~~ PRELIMINARY SITE ASSESSMENT REPORT

Cricket Hill Site Site No. 314030

Town of Dover Dutchess County

Prepared for:

New York State Department of Environmental Conservation

50 Wolf Road, Albany, New York 12233
Thomas C. Jorling, *Commissioner*

Division of Hazardous Waste Remediation
Michael J. O'Toole, Jr., *Director*

By:

DUNN GEOSCIENCE ENGINEERING COMPANY, P.C.
in association with
TAMS CONSULTANTS, INC.

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NYS - DEC
REGION 3-NEW PALTZ

Reference 12
P. 48 of 227

SUPPORTING DOCUMENTATION
FOR THE
DRAFT PRELIMINARY SITE ASSESSMENT REPORT

Cricket Hill Site Site No. 314030

Town of Dover Dutchess County

Prepared for:

**New York State Department of
Environmental Conservation
50 Wolf Road, Albany, New York 12233
Thomas C. Jorling, Commissioner**

**Division of Hazardous Waste Remediation
Michael J. O'Toole, Jr., Director**

Prepared By:

**Dunn Geoscience Engineering Company, P.c.
in association with
TAMS Consultants, Inc.**

March 1993

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NYS DEC
REGION

SUPPORTING DOCUMENTATION

SECTION

1 References
2 Documents Cited

Reference 12
P. 50 of 227

Section 1

REFERENCES

LIST OF REFERENCES

A-1 State of New York, 1967, 6 NYCRR Conservation Vol. C, Part 825 - Housatonic River Drainage Basin.

A-2 USDA, 1955, Soil Survey of Dutchess County, New York. U.S. Dept. of Agriculture, Series 1939 No. 23, Issued December, 1955.

A-3 Cadwell, D.H. ed., 1989, Surficial Geologic Map of New York - Lower Hudson Sheet, New York State Museum Map and Chart Series #40.

A-4 Dutchess County Department of Health, 1968, Record Memo dated November 1, 1968 from D. Ruff to Mr. Scornlick re: Test Holes - Proposed Landfill - Vincent Property, Town of Dover.

A-5 Fisher, D.W. and Isachsen, Y.W., 1970, Geologic Map of New York State - Lower Hudson Sheet, New York State Museum Map and Chart Series #15.

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Reference 12
p. 52 of 227

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Reference 12
P. 53 of 227

REFERENCE A-1

Reference 12
p. 54 of 227

Title 6
Conservation
Vol. C

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Reference 12
p. 55 of 227

PART 825

HOUSATONIC RIVER DRAINAGE BASIN

(Statutory authority: Environmental Conservation Law, § 17-0301)

Sec.
825.1 Adopting order
825.2 Designated waters
825.3 Definitions
825.4 Special conditions
825.5 Assigned classifications and standards of quality and purity
825.6 Table I
825.7 Map 1
825.8 Map 2
825.9 Quadrangle maps

Historical Note

Part amd. filed April 18, 1966 eff. 30 days after filing. Amended statutory authority.

Section 825.1 Adopting order. (a) Pursuant to article 12 of the Public Health Law, the Water Resources Commission, after proper study and following public hearings conducted by the commission, held on due notice, hereby adopts and assigns the following classifications and standards of quality and purity to all surface waters within the Housatonic River drainage basin, as hereinafter defined. Said drainage basin includes all land and surface water areas of the Housatonic River drainage basin within New York State.

(b) This adoption and assignment of standards of quality and purity to the above designated waters shall be effective September 22, 1965.

825.2 Designated waters. The designated waters are located in the Housatonic River drainage basin within New York State, as outlined on map 1, section 825.7, *infra*, and as contained within the topographical limit line shown on the reproduced topographical reference maps in section 825.9, *infra*.

825.3 Definitions. The several terms, words or phrases hereinafter mentioned shall be construed as follows:

(a) *Item No.* In table I an item number is assigned consecutively to each specifically designated waters.

(b) *Waters index numbers* as appearing in table I shall mean that number assigned to any designated waters for the purpose of identification.

(1) The numbering or index system used to identify specific waters of New York State was adapted from that used by the New York State Conservation Department in its biological survey series of reports on the watersheds of the State. The primary waters of a drainage basin, a stream or large lake, is referred to by name or abbreviation. Ponds and lakes are numbered consecutively as they are encountered, such number being preceded by the letter P. This system also involves the consecutive numbering of tributaries as they enter a stream, progressing upstream from the mouth. Tributaries of lakes or ponds are numbered consecutively as they enter, progressing clockwise around the lake or pond from its outlet or mouth. Isolated lakes and ponds are referenced by a waters index number merely for convenience of their identification and location within a subdrainage basin, and it is not necessarily indicative of their being tributary to any waters to which no surface connection is shown on the reference maps.

Reference 12
p. 56 of 227

DOVER PLAINS

Crickett Hill Landfill

SCALE IN MILES
1/2 0

MAP 0-25ne

NYSDEC Wetland DP-22

Reference 12
P. 57 of 227

TABLE I *(cont'd)*

Item No.	Waters Index Number	Name	Description	Map Ref. No.	Class	Standards
21	Conn. 15-2-1	Subtributary of Tenmile River		O-25ne	C	C(T)
22	Conn. 15-2-P 1113c, P 1113a, P 1113d, 5, 8	Subtributaries of Tenmile River		O-25ne O-25se	C	C
23	Conn. 15-2-P 1114	Quaker Lake		O-25se	B	B
24	Conn. 15-2-P 1114-1, P 1114a	Tributaries of Quaker Lake		O-25se	C	C
25	Conn. 15-2a, 2b, 2c, 2d, 2e, 2f	Tributaries of Tenmile River and subtributary		O-25ne	C	C
26	Conn. 15-3 portion	Tributary of Tenmile River	From mouth to 1.0 mile upstream from mouth.	O-25ne	C	C(T)
27	Conn. 15-3 portion	Tributary of Tenmile River	From 1.0 mile upstream from mouth to source.	O-25ne	C	C(TS)
28	Conn. 15-3-2	Subtributary of Tenmile River		O-25ne	C	C
29	Conn. 15-4 portion	Swamp River	From mouth to trib. 6.	O-25ne	C	C(T)
30	Conn. 15-4 portion	Swamp River	From trib. 6 to trib. 8 water supply from Harlem Valley State Hospital.	O-25ne O-25se	A	A(T)

1401 CN 4-30-86

Reference 12
P. 58 of 227

1404 CN 4-30-69

TABLE I (*con'td.*)

Item No.	Waters Index Number	Name	Comments	Map Ref. No.	Class	Standards
45.1	Conn. 15-4-3-1, 3-P 1116d, 3-P 1116e, 3-1-1	Subtributaries of Swamp River		O-25ne	C	C
46	Conn. 15-4-3-P 1116	Sharparoon Pond		O-25ne	B	B
X 47	Conn. 15-4-4 portion	Burton [Pond] Brook	From mouth to 0.5 mile upstream from mouth.	O-25ne	B	B
48	Conn. 15-4-4 portion	Burton Brook	From 0.5 mile upstream from mouth to trib. 3.	O-25ne	C	C (TS)
49	Conn. 15-4-4 portion	Burton Brook	From trib. 3 to source.	O-25ne O-25nw	C	C
50	Conn. 15-4-4-2	Tributary of Burton Brook		O-25ne	C	C (TS)
50.1	Conn. 15-4-4-2a	Tributary of Burton Brook		O-25ne O-25nw	C	C (TS)
50.2	Conn. 15-4-4-2b	Tributary of Burton Brook		O-25ne	D	D
50.3	Conn. 15-4-4-3 and tribs. 2-1, 2a-1, 3-1-P 1117b, 3-1-1	Tributary of Burton Brook and sub-tributaries		O-25ne O-25nw O-25se O-25sw	C	C

Reference 12
P. 59 of 227

REFERENCE A-2

Reference 12
p. 60 of 227 [ ]

SOIL SURVEY

Dutchess County New York

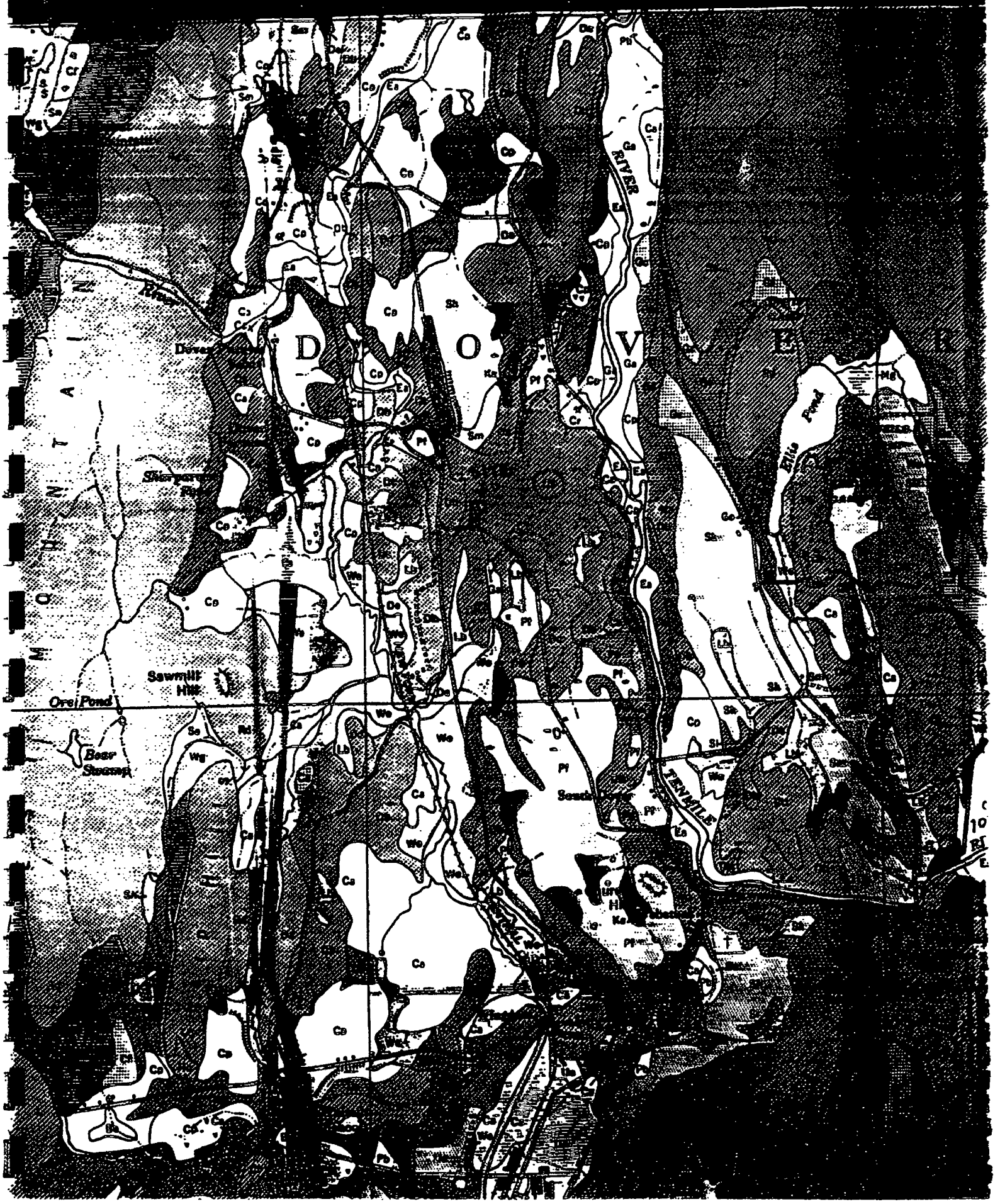
Series 1939, No. 23

Issued December 1965

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

10

Reference 12
p. 61 of 227



soil. They are sufficiently well-drained for use as cropland and are comparable in drainage to the Pittstown soils, which were derived from acid shale and slate.

The Boynton soils are poorly drained, have gray or dark grayish-brown surface soil, and are mottled within 8 or 10 inches of the surface. They are comparable in drainage to the Stissing soils of the acid shale and slate group.

The very poorly drained black-surfaced Mansfield soil has a gray-mottled subsoil. As indicated in table 4, the Mansfield soil developed both from calcareous sandstone and slate and from acid shale and slate.

SOILS FROM LIMESTONE AND SLATE

The very deep well-drained Stockbridge soils occur in scattered areas throughout the eastern half of the county in association with soils of the acid shale and slate group and of the limestone group. They are comparable to Bernardston soils, acid shale and slate group, and like them, occupy broad hills with uniform slopes. The limestone is sufficient to make them neutral or calcareous in the lower subsoil, as are soils of the Troy series. Unlike the Troy soils, their source of lime is mainly limestone, not calcareous sandstone.

SOILS FROM LIMESTONE

The soils from limestone have developed from glacial till in which the principal rock material is limestone. These soils generally have a calcareous subsoil, though the plowed layer may be slightly to moderately acid. They are darker in color and generally "stronger" than the soils derived from till that contains less lime.

The very deep well-drained Pittsfield soils are not extensive but among the most productive in the county. In association with them, where the limestone in the till is mainly crystalline (approaching a marble), the sandy well-drained Dover soils have developed. Dover soils vary from a few inches to 6 feet deep over bedrock. Areas less than 3 feet thick over bedrock are characterized by many outcrops and are separated from the deeper Dover soils as a ledgy type. The well-drained Wassaic soils—heavier textured than the Dover—have developed where the limestone in the till is not crystalline. Like the Dover, the Wassaic soils vary from a few inches to 5 or 6 feet in thickness, and a ledgy Wassaic type is separated from the deeper Wassaic soils.

The Amenia soil occupies flat or gently sloping moderately well-drained to imperfectly drained areas. It has a brown surface soil and mottling below 15 or 18 inches. The poorly drained Kendaia soil has a dark-gray surface soil and mottling below 8 or 10 inches. The very poorly drained Lyons soil has a black surface soil and a gray-mottled subsoil.

SOILS DEVELOPED FROM GLACIAL OUTWASH

The soils developed from glacial outwash occur mainly as broad nearly level plains or hilly and hummocky kames in the valleys. They were derived from layered sands and gravel deposited by running water during the melting of the glacier. They are not so extensive as the soils derived from glacial till, but their favorable relief

and general productivity place them among the best soils in the county.

SOILS FROM GRANITE AND GNEISS

The glacial outwash soils derived chiefly from granite and gneiss are the Merrimac. These sandy soils are deep, strongly acid, and well-drained or excessively drained. They have developed from glacial outwash from granite and gneiss materials. They are loose and open throughout and are underlain by deep beds of layered sands and gravel. They are low in content of plant nutrients and are inclined to be droughty. The hilly and steep phases were formerly recognized as a separate series, the Hinckley.

SOILS FROM ACID SHALE AND SLATE

Glacial outwash soils derived chiefly from acid shale and slate occur mainly in the western half of the county in the valleys of Fishkill and Wappinger Creek and on the high terraces along the Hudson River. They are deep and moderately to strongly acid throughout. They are underlain at depths between 2 and 4 feet by layered beds consisting of rounded pieces of slate, shale gravel, and sand.

The well-drained Hoosic soils range from gravelly sandy loam to loam in texture. They are not naturally high in plant nutrients but respond well to fertilization and are highly productive when properly managed. Their good internal drainage is indicated by the uniform brown to yellow colors of the profile. The hilly and steep phases were formerly recognized as a separate series, the Otisville.

In small depressions and flats associated with the Hoosic soils are areas with very compact substrata below 24 or 30 inches. These areas were mapped as Braceville, Hero, and Phelps silt loams, undifferentiated. The moderately well to imperfectly drained bodies of Braceville soil occur where internal drainage is retarded only enough to cause mottling with rusty brown and gray in the subsoil below depths of 15 to 18 inches. The Hero and Phelps soils, though mapped in the undifferentiated unit, did not develop from acid shale and slate, so are mentioned with their appropriate groups.

The Red Hook soil occurs where a high water table is maintained for long periods; its surface soil is dark gray or dark grayish brown, and its subsoil is mottled to within 8 or 10 inches of the surface. The Atherton soil is in the more poorly drained depressions; its surface soil is black, and its subsoil is gray or mottled gray and brown throughout.

SOILS FROM CALCAREOUS SANDSTONE, LIMESTONE, AND SLATE

The glacial outwash soils derived chiefly from sandstone, limestone, and slate are the Copake and Hero. The Copake soils are comparable to the Hoosic soils in being deep, well-drained, and underlain by stratified gravel and sand. They differ, however, in having free lime at depths of 3 to 8 feet and in having a slightly less acid surface soil. The hilly and steep phases of Copake soil were formerly recognized as belonging to the Schodack series. The Hero soils, mapped in an undifferentiated group with Braceville and Phelps soils, have developed from materials similar to those of the Copake soils, but they occupy depressions or flats and are moderately well to imperfectly

Reference 12
P. 62 of 227

The soil is best suited to pasture or to a 5- or 6-year rotation consisting of at least 4 years of hay and not more than 1 year of intertilled crops. Alfalfa is well suited and should be included in seeding mixtures for long-term hay. Birdsfoot trefoil may prove equally well suited to hay mixtures and better suited to pastures. The lime requirement of the soil is low, but crops respond to phosphorus.

Dover fine sandy loam, ledgy rolling phase (5–15% slopes) (Dc).—Many outcrops of crystalline limestone characterize this very shallow soil that developed from shallow deposits of glacial till and materials weathered from the underlying crystalline limestone bedrock. The principal rock constitutent of the glacial till is crystalline limestone, which weathers easily into a fine sandy loam. Other rock materials present in smaller quantity are schist, quartzite, slate, and gneiss.

The soil occurs on low hills and knolls that seldom rise more than 100 feet above the floor of the Harlem Valley. The relief is uneven. White sand is common on the surface where a rock outcrop is disintegrating. Where the surface of an outcrop joins the soil, several inches of disintegrating sandy material lie upon the soil. Both surface and internal drainage are good.

Beneath a pasture sod, the surface soil is a dark coffee-brown mellow or fluffy finely granular fine sandy loam, neutral or alkaline, well penetrated with grass roots, and about 9 inches thick. From 9 down to 17 inches, the subsoil is strongly alkaline, mellow, brown fine sandy loam. Below 17 inches to a depth of 21 inches the subsoil is light yellowish-brown fine sandy loam that is friable, mellow, and slightly calcareous. Below 21 inches and extending to 26 inches is strongly calcareous very light-gray fine sand, which rests on the crystalline limestone bedrock. Roots penetrate all layers but are most abundant in the surface soil.

The soil varies chiefly in depth. Outcrops of the underlying limestone are numerous, but in pockets between them the average depth of soil is about 24 inches. Nevertheless, the layers of bedrock are tilted on edge, and in pockets between outcrops the soil may be as much as 4 feet deep. The soil is moderately eroded in most areas. A few small included areas have been severely eroded.

Use and management.—The cultivated areas of this soil are shallow but contain fewer outcrops than normal for the entire soil. They are used principally for hay grown in rotation with corn and oats. From 10 to 12 tons of manure and 300 to 400 pounds of 20-percent superphosphate an acre are usually applied for corn, and 150 to 200 pounds of superphosphate for oats. Timothy, red clover, and alfalfa, the principal hay crops, are maintained from 3 to 5 years and then pastured 1 or 2 years before plowing. Top dressings of manure are sometimes applied to hay crops to maintain the stands longer. The soil is inclined to be droughty. Yields vary with the quantity of rainfall during the growing season. Cultivable areas like these are exceptions; the soil normally cannot be cultivated and is pastured (pl. 3, *A*).

Permanent pasture is generally good during early spring and very poor after July 15. Canada and Kentucky bluegrasses, redtop, and wild white clover are usually abundant. Chicory, thistle, wild

aster, wild carrot, and other weeds grow in the poorest pastures, and some brushy growth of hardhack, redcedar, and hawthorn is encroaching. Pastures need phosphorus but no lime.

The forests are young, and the stands are irregular. Redcedar, usually the dominant tree, occurs with some gray and white birches, locust, hard maple, and wild cherry. Redcedar and brush soon invade idle areas.

Dover fine sandy loam, ledgy hilly phase (15–30% slopes) (Db).—More strongly sloping and hilly areas associated with the ledgy rolling phase are occupied by this soil. The relief is irregular. Outcrops of distintegrating white limestone are conspicuous and somewhat more numerous than on less steeply sloping phases of Dover fine sandy loam. About 25 percent of this soil has been severely eroded; the rest, moderately eroded. The light fluffy surface soil, the shallowness of the profile, and the irregularity of relief makes danger of erosion great. Cultivation is extremely difficult and usually results in serious loss of soil.

The profile in moderately eroded areas is similar to that of the ledgy rolling phase. The surface soil in severely eroded areas is composed principally of subsoil material; it is light brown and about 6 inches thick. The subsoil, a light yellowish-brown fine sandy loam, extends to a depth of 12 inches. Below 12 inches lies a 4- or 5-inch layer of disintegrated bedrock, a light-gray fine sand that rests on the solid white limestone.

Use and management.—This soil is mostly in pasture and forest. Pasture is good in the spring but poor in summer. The bluegrass, redtop and wild white clover sods are usually heavy. About a fourth of the pasture is on eroded areas, and erosion is still active in places. Light applications of manure or phosphate would probably improve the pasture so it could hold the soil, but most pastures are not fertilized. The soil is droughty, and in dry seasons the vegetation is severely damaged. The forest is young and consists of the same species as are on the ledgy rolling phase.

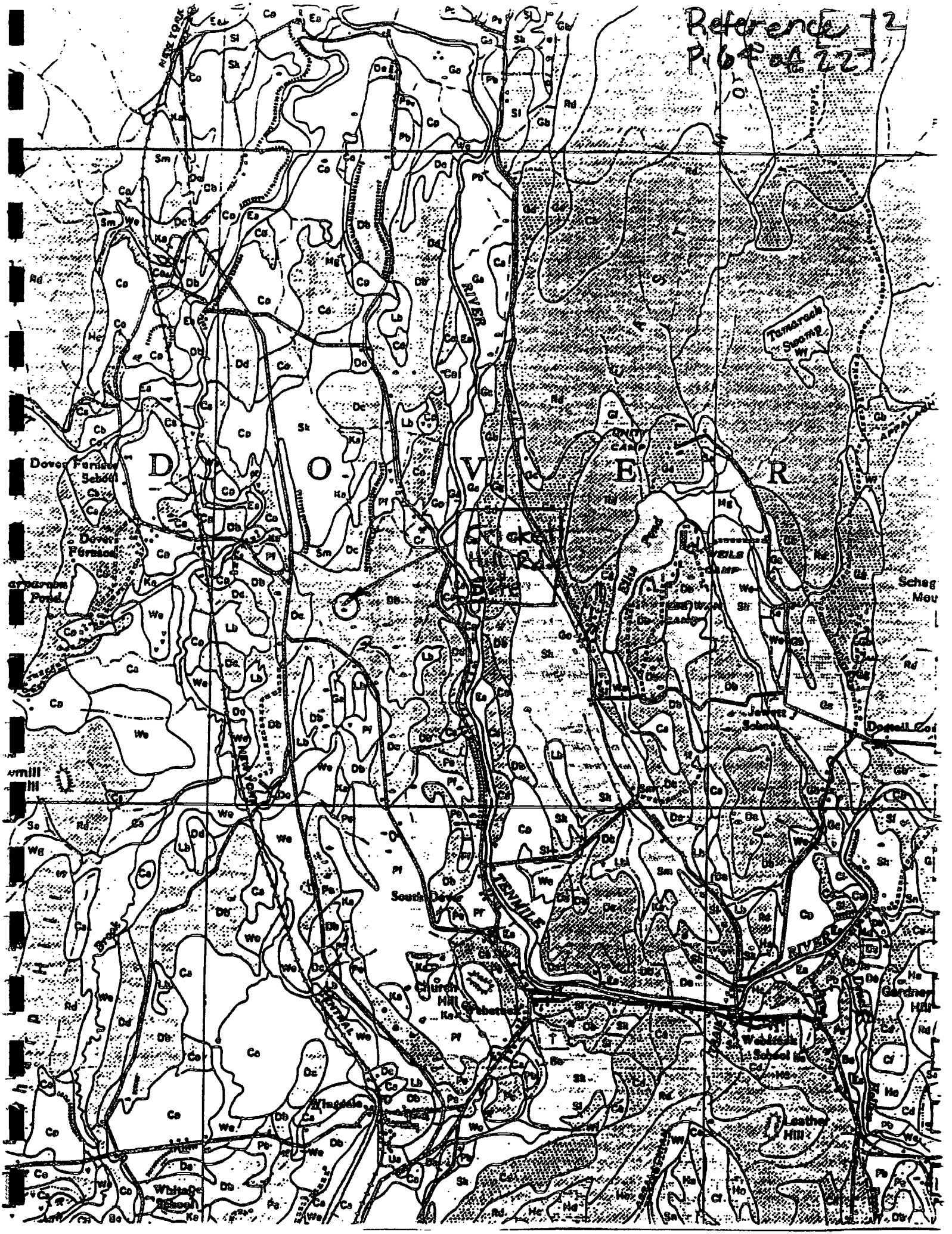
Dover fine sandy loam, ledgy steep phase (30–45% slopes) (Dd).—This soil has steep irregular slopes and many outcrops of the underlying rock. Areas vary from 2 to 70 acres in size.

The profile in the moderately eroded areas (65 percent of the phase) is generally similar to that of the ledgy rolling phase but thinner over bedrock in most places. The present surface soil in pastures is about 5 inches deep and grayish brown. Beneath the surface soil is about 3 inches of light yellowish-brown friable fine sandy loam subsoil, which rests at a depth of about 8 inches on very light-gray fine sand from disintegrated limestone. The solid bedrock normally occurs at depths of 10 to 15 inches.

Use and management.—Under forest this soil appears to be stabilized; slips develop only where forest is pastured. This soil is best used for forest in most places. Redcedar comes in rapidly and is the dominant species. Gray and white birches, white pine, black locust, and maple are also present. The forest is all young, which indicates that the soil was probably cleared at one time. Erosion is active in most pastures. The sod is not heavy enough to hold the soil; surface wash occurs and the soil slips on many of the steep slopes.

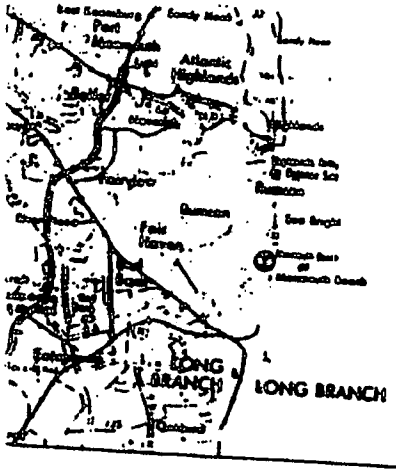
Reference 1 – p. 63 of 267

Reference 12
Pg 64 of 227



Reference 12
p. 65 of 227

REFERENCE A-3



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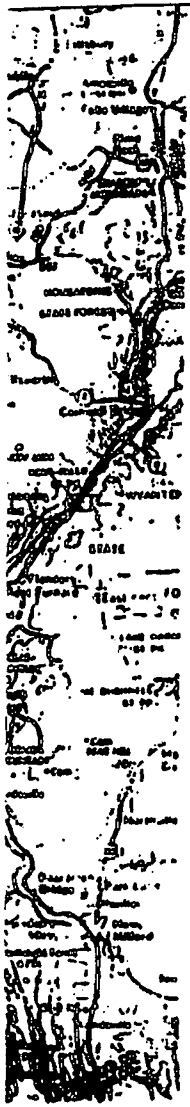
SURFICIAL GEOLOGIC MAP OF NEW YORK

LOWER HUDSON SHEET

Compiled and Edited by Donald H. Cadwell

1989

Reference 12
P. 66 of 227



EXPLANATION

al — Recent deposits
Generally confined to floodplains within a valley, oxidized, non-calcareous, fine sand to gravel, in larger valleys may be overlain by silt, subject to frequent flooding, thickness 1-10 meters.

af — Alluvial fan
Fan shaped accumulations, poorly stratified silt, sand and boulders, at the foot of steep slopes, generally permeable.

b — Beach
Sand and gravel deposit at marine shoreline, thickness variable.

bi — Barrier island
Sand and gravel deposit on barrier island, south shore of Long Island, may have associated dunes, thickness variable.

pm — Swamp deposits
Peat-muck, organic silt and sand in poorly drained areas, un-oxidized, may be overlying marl and lake silts, potential land instability, thickness generally 2-20 meters.

ld — Lacustrine delta
Coarse to fine gravel and sand, stratified, generally well sorted, deposited at a lake shoreline, thickness variable (3-15 meters).

lsc — Lacustrine silt and clay
Generally laminated silt and clay, deposited in proglacial lakes, generally calcareous, potential land instability, thickness variable (up to 100 meters).

ls — Lacustrine sand
Sand deposits associated with large bodies of water, generally a near-shore deposit or near a sand source, well sorted, stratified, generally quartz sand, thickness variable (2-20 meters).

og — Outwash sand and gravel
Coarse to fine gravel with sand, proglacial fluvial deposition, well rounded and stratified, generally finer texture away from ice border, thickness variable (2-20 meters).

fg — Fluvial sand and gravel
Deposits of sand and gravel, occasional laterally continuous lenses of silt, deposition farther from glacier, age uncertain.

k — Kame deposits
Includes kames, eskers, kame terraces, kame deltas, coarse to fine gravel and/or sand, deposition adjacent to ice, lateral variability in sorting, coarseness and thickness, locally firmly cemented with calcareous cement, thickness variable (10-30 meters).

km — Kame moraine
Variable texture (size and sorting) from boulders to sand, deposition at an ice margin during deglaciation, positive constructional relief, locally cemented with calcareous cement, thickness variable (10-30 meters).

tm — Till moraine
More variably sorted than till, generally more permeable than till, deposition adjacent to ice, more variably drained, may include ablation till, thickness variable (10-30 meters).

t — Till
Variable texture (e.g. clay, silt-clay, boulder clay), usually poorly sorted diamict, deposition beneath glacier ice, relatively impermeable (loamy matrix), variable clast content — ranging from abundant well-rounded
diverse lithologies in valley tills to relatively
angular, more limited lithologies in upland tills,
tends to be sandy in areas underlain by gneiss or sandstone,
potential land instability on steep slopes, thickness variable (1-50 meters).

af — Artificial fill

r — Bedrock
Exposed or generally within 1 meter of surface.

Bedrock stipple overprint
Bedrock may be within 1-3 meters of surface, may sporadically crop out, variable mantle of rock debris and glacial till.

RADIOCARBON D[...]

A small fraction of the carbon atoms in all living matter is made up of the [...] taneously with a half life of 5730 ± 140 years. In fossil organic material the ratio of carbon affords a basis for estimating the duration of time since the organism died.

The chronology of glacial events in New York is pegged to absolute ages by [...] are located on the Surficial Geology Map and listed below. Published references [...] are listed.

SITE	NAME TOWN	QUADRANGLE COUNTY	YEARS B.P.	[illegible]
1	IBM Poughkeepsie	Poughkeepsie Dutchess	10 410 ± 1?0	[illegible]
			11 200 ± 125	[illegible]
			11 210 ± 150	[illegible]
2	Port Washington Manhasset Neck	Sea Cliff Nassau	[illegible]	[illegible]
			22 [illegible]	[illegible]
			[illegible]	[illegible]
			26 [illegible]	[illegible]
			[illegible]	[illegible]
			27 930 ± 950	[illegible]
			28 [illegible]	[illegible]
			28 [illegible]	[illegible]
			29 [illegible]	[illegible]
			29 930 ± 940	[illegible]
			31 [illegible]	[illegible]
			32 [illegible]	[illegible]
			32 [illegible]	[illegible]
			33 [illegible]	[illegible]
			[illegible]	[illegible]
			[illegible]	[illegible]
			35 [illegible]	[illegible]
			36 [illegible]	[illegible]
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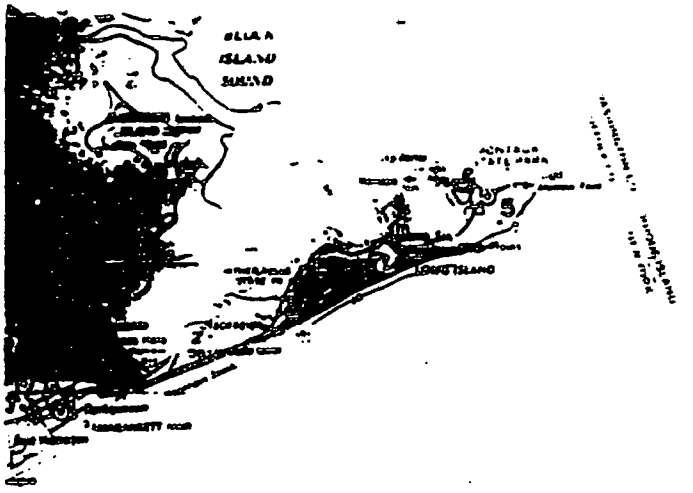
			36 [illegible]	[illegible]
			36 [illegible]	[illegible]
			37 [illegible]	[illegible]
			39 [illegible]	[illegible]
			[illegible]	
			40 [illegible]	[illegible]
			40 [illegible]	
			> 42 [illegible]	
			> 42 [illegible]	
			[illegible]	
3	New Hampton Bog Goshen	Middletown Orange	[illegible]	
4	West Point Bog Highlands	West Point Orange	[illegible]	

Reference 12
p.67 of 227

Reference 12
p. 68 of 227



GEOMORPHIC HISTORY OF SOUTHEASTERN NEW YORK

The Lower Hudson Sheet of the New York State Surficial Geologic Map includes parts of five physiographic provinces — the Appalachian Uplands, the Hudson-Mohawk Lowlands, the New England Uplands, the Triassic Lowland, and the Atlantic Coastal Lowlands. The bedrock geology varies widely among the different provinces. The bedrock beneath the Appalachian Uplands comprises sandstone, shale and limestone beds of Silurian and Devonian age that dip gently to the southwest. Beneath the Hudson-Mohawk Lowlands are beds of Ordovician shale, sandstone and limestone. The New England Uplands are composed of a diverse group of sedimentary rocks (shale, graywacke and limestone) and a suite of metamorphic rocks (phyllite, schist, quartzite and marble). The Triassic Lowland in Rockland County, is developed on shale, sandstone and diabase beds of Triassic and Jurassic ages. The Atlantic Coastal Lowlands lie upon a thick mantle of glacier-derived sediments that are draped over cuestas of Cretaceous sedimentary rocks.

The landscapes in southeastern New York have a pronounced glacial imprint. Upland and valley regions alike were reshaped by glacial erosion and deposition during both glacier advance and retreat. However, this imprint is not uniform across southeastern New York. The effects are greater in the Hudson Valley and Atlantic Coastal Plain where weaker, more easily eroded strata are present.

New York State was subjected to glaciation several times during the Pleistocene Epoch. Each successive glacial episode masked or destroyed completely the geologic record of the previous one. Glacial deposits found in the area of this Lower Hudson Sheet were derived almost entirely from Late Wisconsinan (Woodfordian) glaciation, an expansion of the ice sheet that began about 28,000 years ago and estimated perhaps 21,730 years ago on Long Island. As this Late Wisconsinan (Woodfordian) glacier advanced over the landscape the glacier incorporated and transported large quantities of rock and soil. Its erosive power was enhanced in the Hudson Valley region by the parallelism of the valley and glacier flow and also because the ice was thicker in the lowlands. Erosion was less vigorous in valleys transverse to glacier flow and in the uplands, as in the southern Catskill Mountains, where thinner ice prevailed. On Long Island a record of multiple glaciation was discovered along the north shore near Port Washington. Here, deformed masses of stratified clay, peat and oyster reef beds of pre-Woodfordian age are interbedded with Woodfordian outwash. Radiocarbon dates from the organic beds range from more than 43,800 to 21,730 yr B.P. and pollen analysis suggests a relatively warm climate developed and then ameliorated during this mid-Wisconsinan warm interval. A till beneath the organics, the Montauk Till, is assigned an early Wisconsinan age (Altonian) and the Roslyn Till (Woodfordian) caps the organic section.

Three major lobes of the Woodfordian glacier deposited moraines on Long Island. On western Long Island, deposition of the Harbor Hill Moraine was controlled by the Hudson-Champlain Lobe, with ice advancing to southern Staten Island. In central Long Island the deposition of the Ronkonkoma Moraine was controlled by the Connecticut Lobe. The deposition of moraines on eastern Long Island was controlled by the eastern Connecticut-western Rhode Island Lobe.

After formation of the complex of moraines on Long Island the Woodfordian glacier began its sporadic retreat northward to Canada, a process that produced a series of proglacial lakes and recessional moraines. Because the ice was thinner over the upland regions they were deglaciated before adjacent lowland areas. In southeastern New York, for example, the Taconic Mountains, Shawangunk Mountains, southern Catskill Mountains and the Hudson Highlands emerged through the thinning ice while a tongue of glacial ice remained active within the lower Hudson Valley. Recessional moraines, indicated in Figure 1, formed where the margin of the glacier remained stationary temporarily. Deposits of drift in the valleys are thicker (up to 100's of meters) than drift in the uplands (generally less than 5 meters).

During the retreat of the Hudson-Champlain Glacial Lobe, Glacial Lake Hudson formed in the lower Hudson Valley between the terminal moraine and the glacier margin. This lake gradually enlarged as the ice from receded northward to the Hudson Highlands. With further retreat of the ice this lake continued to enlarge throughout the mid- and upper Hudson Valley where it is known as Glacial Lake Albany. The location of the outflow channel is an enigma of these lakes. Although theories abound, it has not been determined whether outflow was south across the terminal moraine or across a bedrock divide into another drainage basin (e.g. Sparkill Gap).

The existence of Glacial Lakes Hudson and Albany has been deduced from the materials deposited in the lake and by recognition of its shoreline features. Deltas of sand and gravel developed where streams entered the lake. Examples of such deltas can be observed in Westchester County along the Peekskill Hollow Creek; in Orange County on Moodna Creek; in Dutchess County on Cruse Elbow Creek; and in Ulster county along the Esopus Creek. The dam for Lakes Hudson and Albany remained intact for 5000-6000 years. When the dam failed Lake Albany drained, leaving lacustrine deposits as evidence of its former existence.

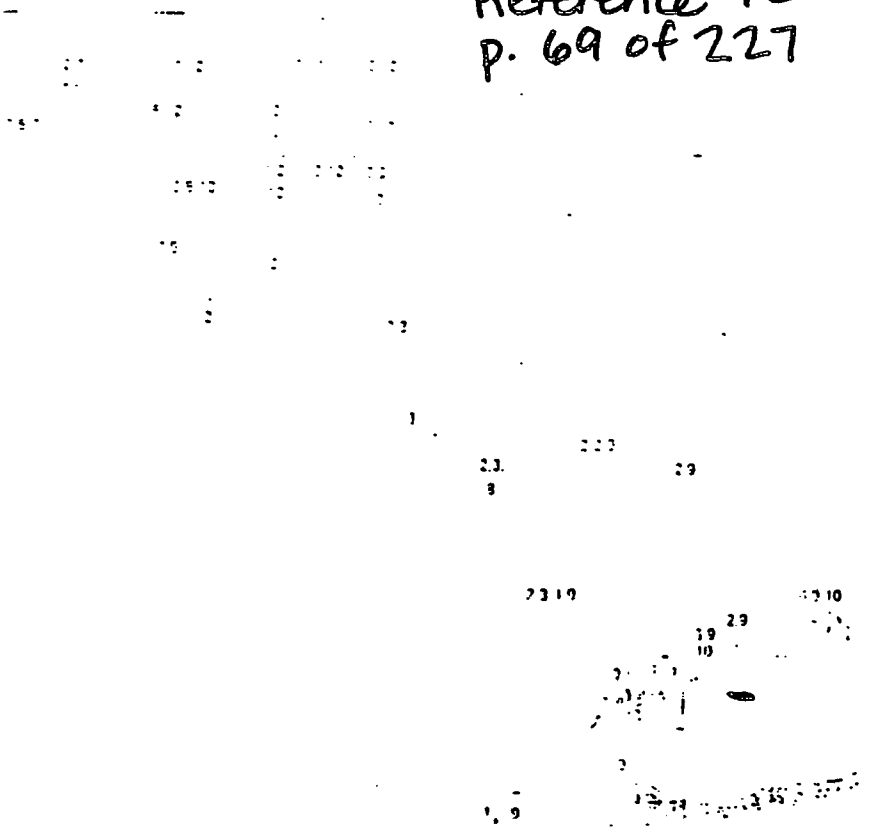
Two recessional moraines occur in the Wallkill Valley, which is west of the Hudson River and north of the Hudson Highlands. The older Pellets Island Moraine was deposited against the Hudson Highlands. North of this the Wallkill Moraine extends westward into the Mohawk Valley and Catskill Mountains. East of the Hudson River the Shenandoah and Poughkeepsie Moraines correlate with the Pellets Island and Wallkill Moraines, respectively. The younger Red Hook and Pine Plains Moraines may be correlative with Rosendale readvance ice margins in the northern Wallkill Valley.

The Wisconsinan glacier receded from New York State about 12,000 years ago. After deglaciation the landforms of New York have been reshaped only moderately by postglacial processes, mainly along the floodplains of streams and the adjacent valley walls.

Prepared with support from Empire State Electric Energy Research Corporation, whose members are:

110

Reference 12
p. 69 of 227



MAP REFERENCES

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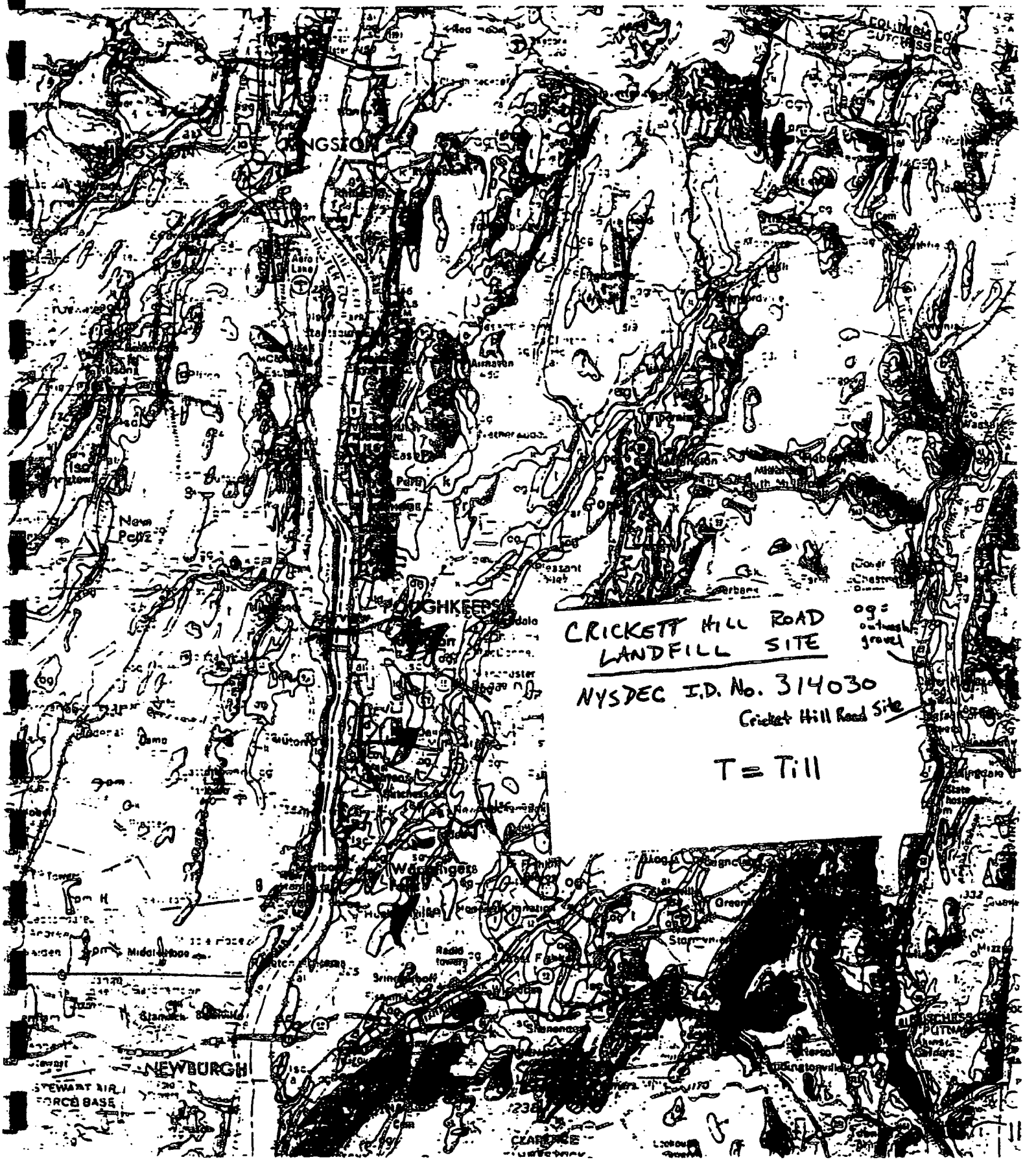
Reference 12
p. 70. of 227



Reference 12
p. 71 of 227

REFERENCE A-4

Reference 12
p. 72 of 227

DUTCHESS COUNTY DEPARTMENT OF HEALTH

RECORD MEMO

Date 11/1/68

To: Mr Sinatich

From: W Quiff

Subjedt: Deep Test Holes - Proposed Landfill - Vincent Property - T. Dover

I observed the digging of deep test holes at the above property for the purpose of establishing a sanitary landfill. All holes were dug by Seymour Green, Hwy Supt., T. Dover. The results were as follows:

Hole #1 - Depth 6½' - 1' - sand + blue clay
5½' sand with some loame
Water at 6½'

Hole #1 was dug in excavated area adjacent to access road

Hole #2 - Depth 5' 6" topsoil
1' blue clay sandy loam mixture
3'6" sandy loam - small amount of clay
Water at 5'

Hole #3 - Depth 6' - 6" topsoil
1' blue clay + sand
5' sandy loam - small amount of clay
Water + rock at 6'

D. C. San 23

Reference 12
p. 73 of 227

DUTCHESS COUNTY DEPARTMENT OF HEALTH

RECORD MEMO

Date 11/1/68

To: Mr Sinatuk

From: D Ruff

Subjedt: Deep Test Holes - Proposed Landfill - Vincent Property - T. Dover

Hole # 4 - Depth 6' - 1" topsoil
6" sandy clay
5' sandy loam - small amount of clay
Rock at 6'
No Water

Hole # 5 - Depth 7' 1' topsoil
1' clay-loam
5' sandy loam - small amount of clay
Rock & Water at 7'

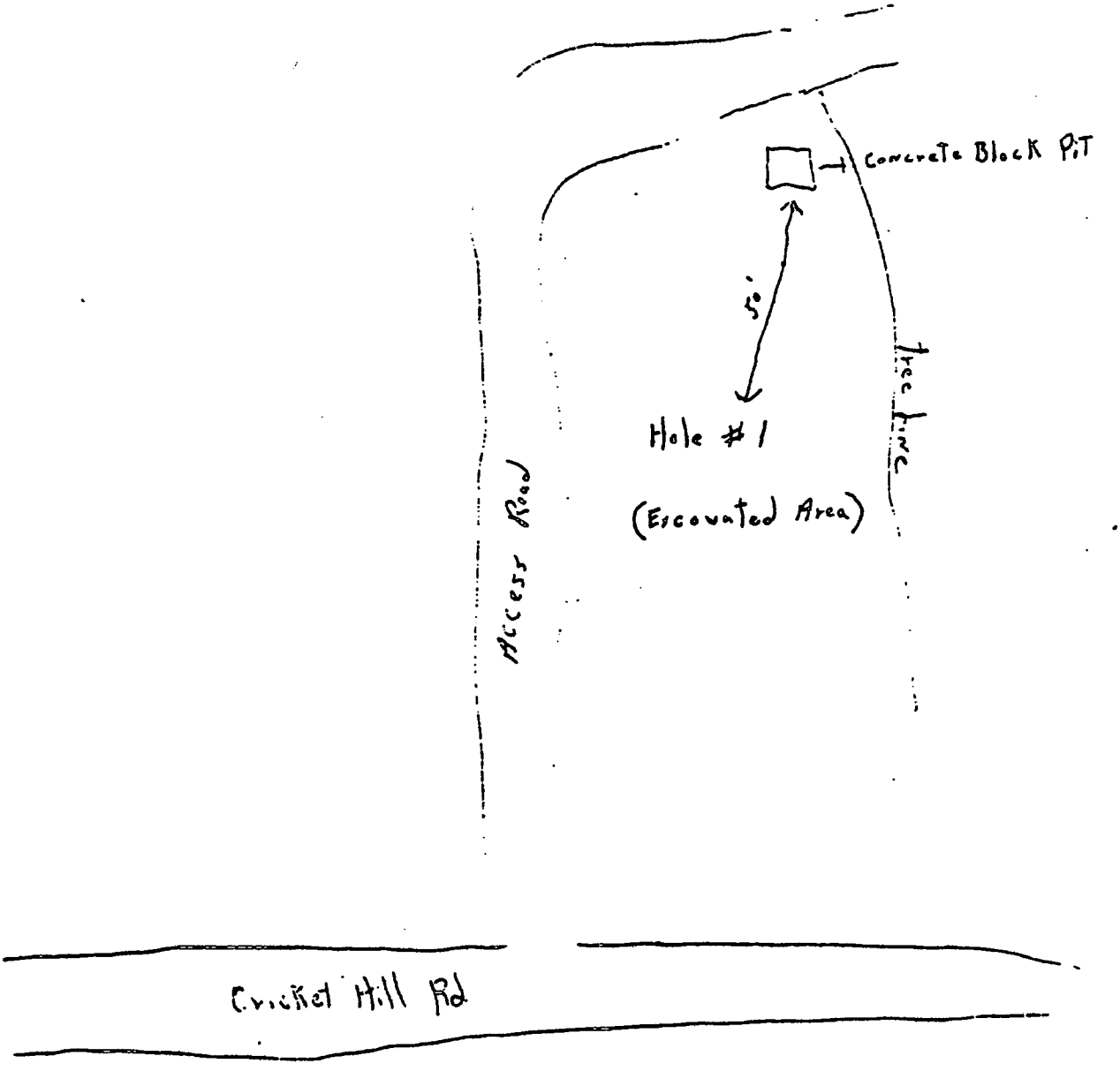
Holes # 2, 3, 4 were dug in low area which is moist + spongy. There is also a small swamp area.

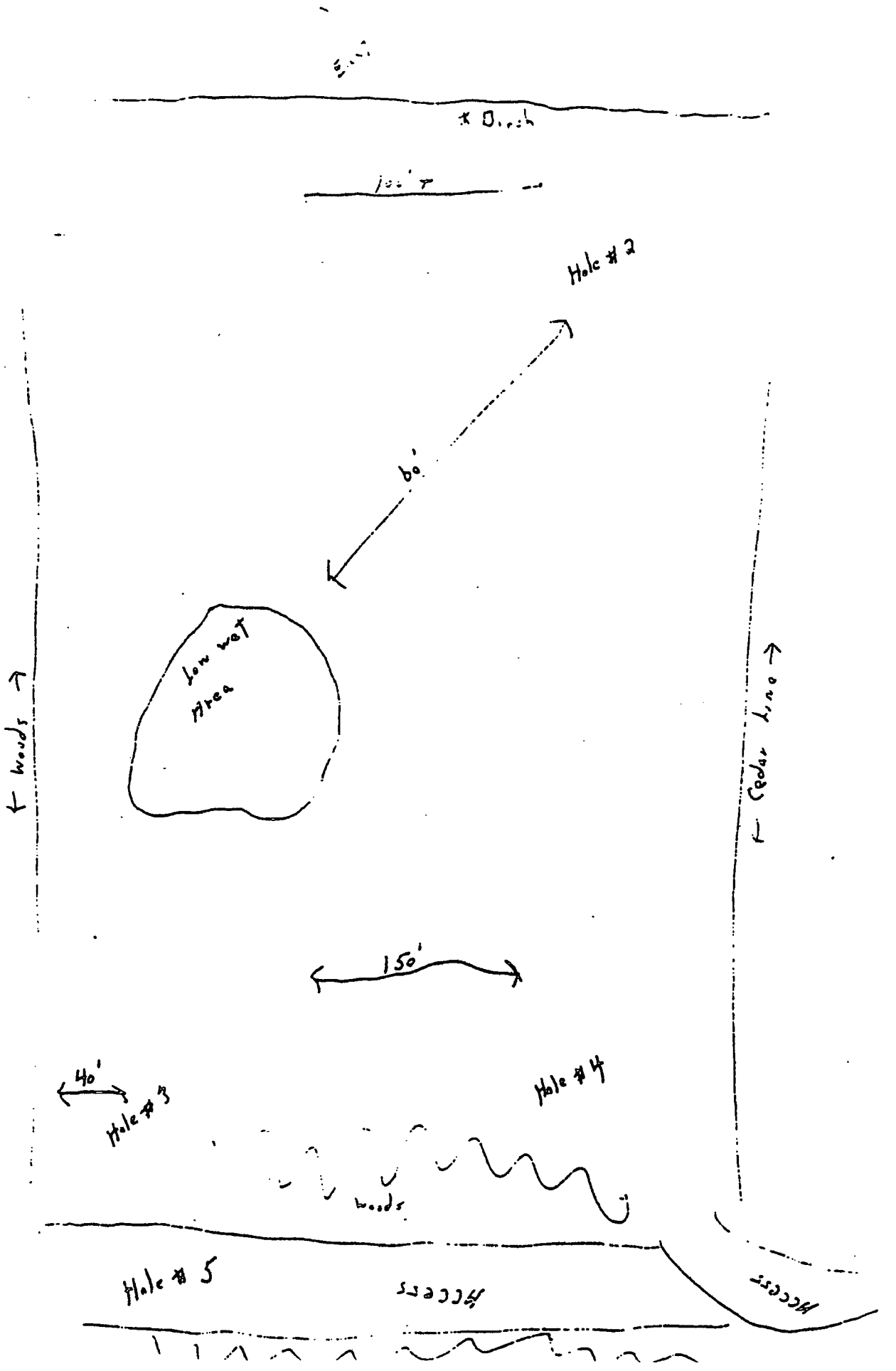
Hole # 5 was dug in higher area west of low area.

Attached is rough sketch of area with approximate location of test holes

DB

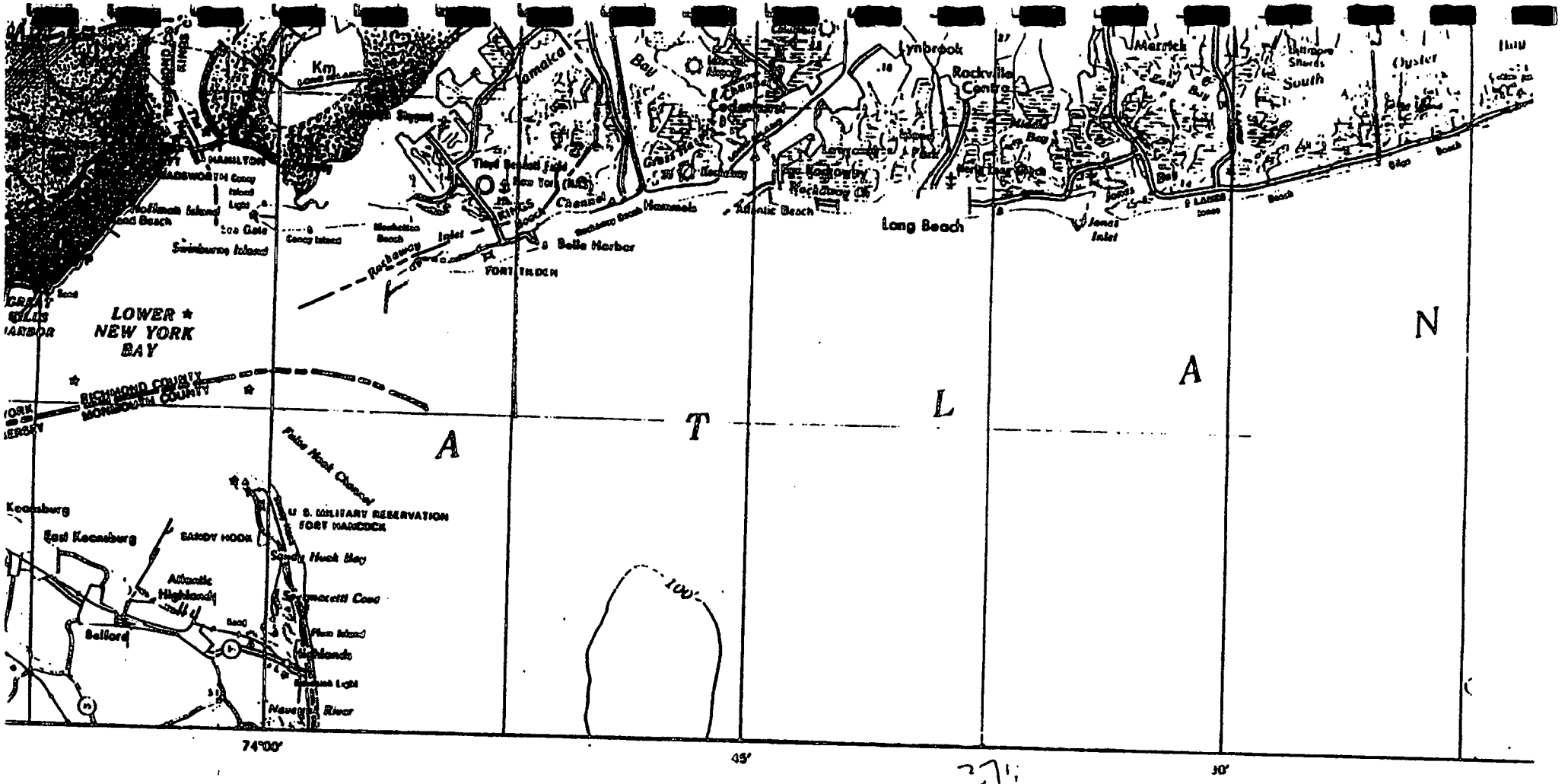
D. C. San 23


Concrete Block Pit
5'
Hole #1
(Excavated Area)
Tree Line
Access Road
Cricket Hill Rd


Hole # 2
60'
Low wet Area
Woods
Cedar Line
150'
40'
Hole # 3
Hole # 4
Woods
Hole # 5

Reference 12
p. 76 of 227

REFERENCE A-5



GEOLOGIC MAP OF NEW YORK

1970

Lower Hudson Sheet

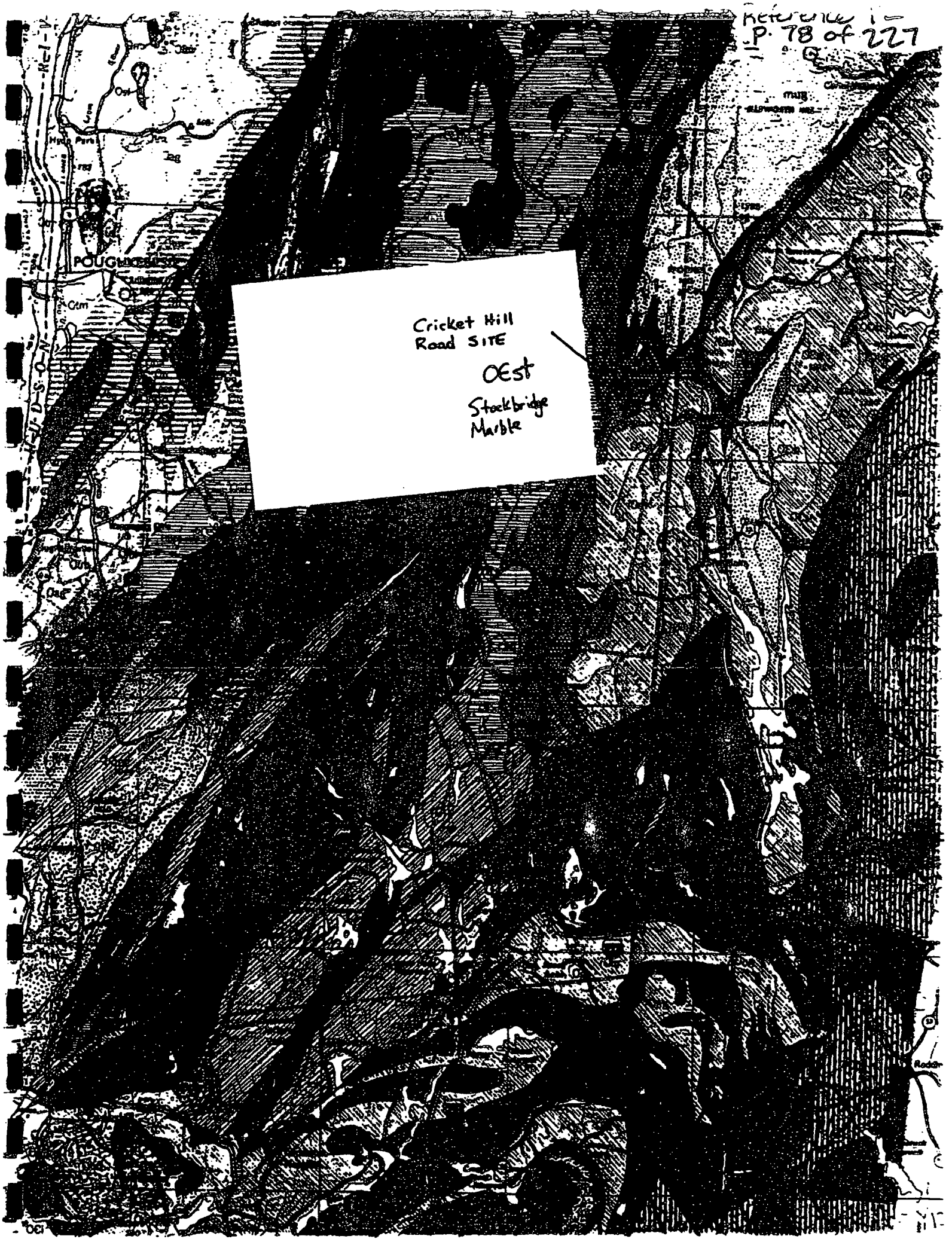
Scale 1:250,000

5 0 5 10 15 Statute Miles 20

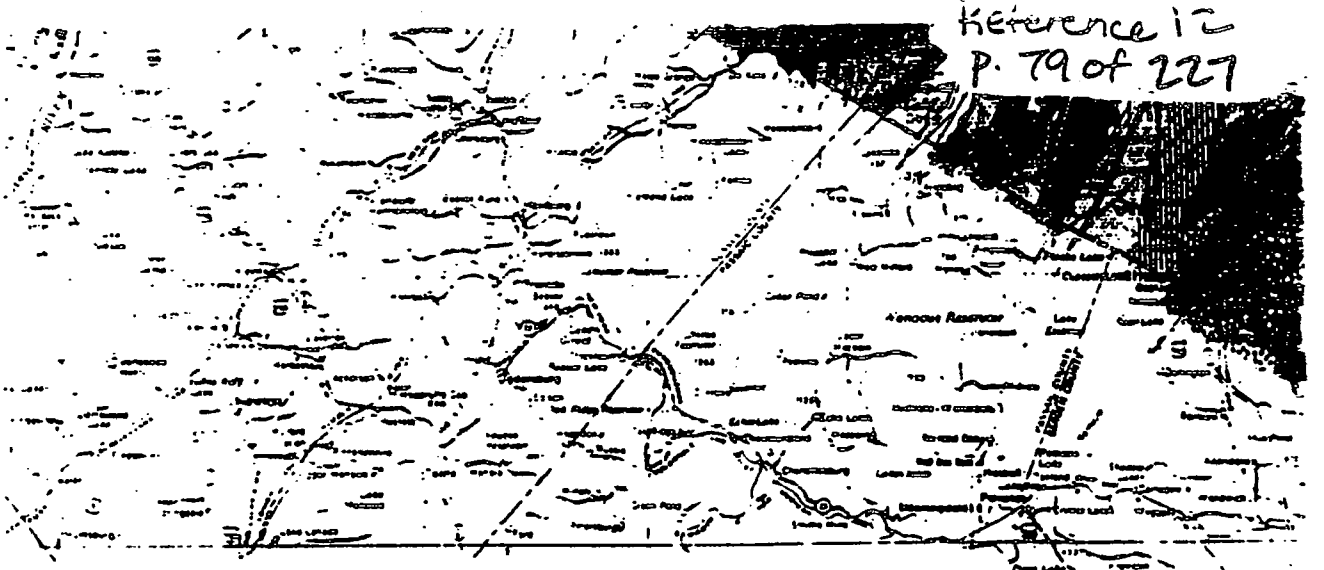
5 0 5 10 15 20 25 Kilometers 30

CONTOUR INTERVAL 100 FEET

Reference 16
P. 77 of 227


POUGHKEEPSIE
Cricket Hill
Road SITE
OEst
Stockbridge
Marble

Reference 12
P. 79 of 227



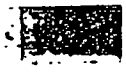
UNDIFFERENTIATED SILURIAN ROCKS I
(400 ft. (120 m)

Rondout Formation—dolostone, limestone; Bossardville Limestone; Decker Limestone; Bossardville Limestone; Poxono Island Formation—shale, dolostone.

UNDIFFERENTIATED SILURIAN ROCKS II
(1,800 ft. (550 m)

Bloomsburg Formation—shale, sandstone; Guymard Quartzite; Utsayantha Shale; Shawangunk Conglomerate—sandstone conglomerate

CORTLANDT AND SMALLER MAFIC COMPLEXES



Obsm Biotite augite norite.
Od Diorite with hornblende and/or biotite.
Ohm Hornblende norite-hornblendite-diorite-gabbro.

hornblendite.
rhombic pyroxenite, in part with pendotite hornblendite; rare peridotite.
pyroxenite.
ock complex ranging in composition from gabbro norite to hornblende diorite, with minor pyroxenite; Cretan Falls and Peach Lake complexes in New York, and Mt. Prospect Complex in Connecticut.

TRENTON GROUP AND METAMORPHIC EQUIVALENTS
(0 to 8,000 ft. (2400 m.)

Qsa Quassaic Quartzite — quartzite, sandstone, conglomerate.
Qae Austin Glen Formation—graywacke, shale.
Qn Normanskill Formation—shale, argillite, siltstone.
Qwl Walloomsac Formation—phyllite, schist, meta-graywacke.
?Qm Mechertian Formation, undivided — pelitic schists, amphibolite. Units ?Qmb, ?Qmc, and ?Qmd may be Cambrian sedimentary rocks thrust upon Qmb ?Qmd — staurolite-garnet-muscovite-biotite-plagioclase-quartz gneiss; ?Qmc — staurolite-garnet-muscovite-biotite-quartz-plagioclase schists, staurolite-andalusite, local quartz-rich layers; ?Qmb — characteristics unit of staurolite and ?Qmc-type schists Qmc — staurolite-garnet-muscovite-biotite-quartz-plagioclase schists; carbonate marble and carbonate rock at base.
?Qm—pelitic Lomoxite.
Taconic Mélange—chaotic mixture of Early Cambrian thru Middle Ordovician pelites—to block-size clasts in a pelitic matrix of Middle Ordovician (Barnevelt) age. Rare and floors earlier tectonic gravity slides of Taconian Orogeny.
Cambrian thru Middle Ordovician (Barnevelt) carbonate rocks occurring as slivers along margins of later olistostromes, or carbonate blocks in Taconic Mélange.

LOWER ORDOVICIAN INTRUSIVE

Serpentinite.

PALEOZOIC

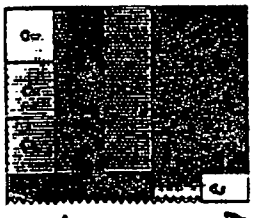
Lower Ordovician

Cambrian

Ordovician

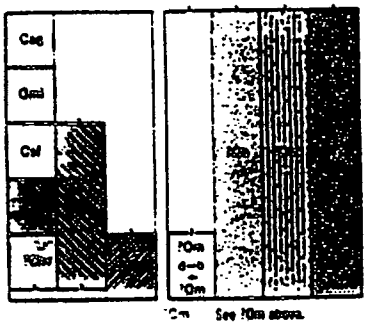
Cambrian

WAPPINGER AND STOCKBRIDGE GROUPS, POUGHQUAG QUARTZITE AND METAMORPHIC EQUIVALENTS
(0 to 4,000 ft. (1200 m)

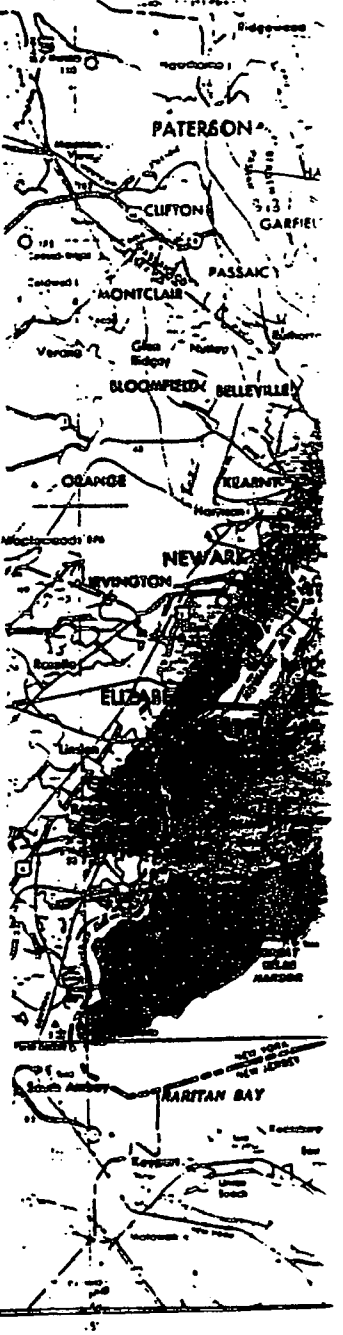


Ccw Cooper Formation—limestone, dolostone, siltstone; Rochdale Formation—limestone, dolostone; Halcyon Lake Dolostone—locally cherty.
OCw Wappinger Group (including Fishkill limestone and dolostone; Cooper Formation ?—limestone, dolostone, Rochdale Formation—limestone, dolostone; Halcyon Lake Dolostone—locally cherty; Bruncroft Dolostone; Pine Plains Formation—dolostone, shale, oolite; Stissing Formation—dolostone, shale.
?Cst Stockbridge Marble.
Ipwood Marble—dolomite marble, graphite schist, granulite, and quartzite, overlain by calcite marble; grades into underlying patchy quartzite Quartzite of Early Cambrian age.
?Cs Slivers, as OCs above.
?Cp Bruncroft Dolostone—locally cherty; Pine Plains Formation—dolostone, shale, oolite.
?Cs Stissing Formation—dolostone, shale
?Cpg Poughquag Quartzite (includes local Deltzen Formation at base—locally conglomeratic.
?Cc Chestnut Quartzite.

EUGEOSYNCLINAL (ALLOCHTHONOUS) SEQUENCE
(0 to 4,000 ? ft. (1200 m.)



?Om See ?Om above.
?Ob Bedford Gneiss—biotite-quartz-plagioclase gneiss and interlayered amphibolite; in part with augen of andesine and microcline.
?Ow Harrison Gneiss in New York and Connecticut, Brookfield diorite gneiss in Connecticut, and Ravenswood Gneiss in Brooklyn—biotite-hornblende-quartz-plagioclase gneiss with accessory garnet and sphene; plagioclase cataclasty occurs as augen.
?Ohf Hartland Formation—basal amphibolite overlain by pelitic schists.
?Oae Austin Glen Formation—graywacke, shale.
?Om Mount Merino and Indian River Formations—shale, argillite, chert.
?Os Stuyvesant Falls Formation—shale, siltstone.
?Oe Elizaville Formation—shale, argillite, quartzite.
?Ot Centerbrook Formation—shale, limestone, conglomerate.
?ON Nassau Formation—shale, quartzite.
?Oev Everett Schist—locally with minor meta-graywacke layers.



Reference 12
p. 80 of 227

REFERENCE A-6

Reference 12
p. 81 of 227

STATE OF NEW YORK
DEPARTMENT OF CONSERVATION
WATER RESOURCES COMMISSION

Ground-Water Resources of Dutchess County, New York

By 145

E. T. SIMMONS, I. G. GROSSMAN, AND R. C. HEATH
Geologists, U. S. Geological Survey

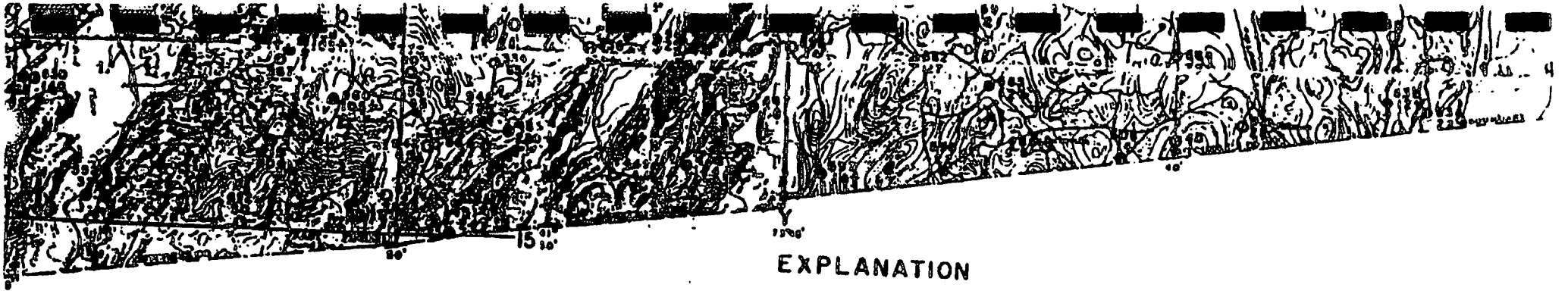
Prepared by the
U. S. GEOLOGICAL SURVEY
in cooperation with the
NEW YORK WATER RESOURCES COMMISSION

BULLETIN GW-43
ALBANY, N. Y.
1961

Table 2.--Geologic units in Dutchess County and their water-bearing properties

Class	Age	Geologic Unit		Maximum thickness (feet)	Character of material	Water-bearing properties
Unconsolidated deposits	Recent	Alluvium		30±	Clay, silt sand, and gravel deposited by present-day streams in lakes, swamps, and on flood plains.	Not important as source of water because of limited thickness and restriction to discontinuous areas adjacent to streams. Potentially important, however, in larger valleys where coarse-grained material permits induced infiltration from nearby streams.
	Pleistocene	Stratified drift	Sand and gravel	200	Irregularly interbedded and interlensing sand and gravel formed by glacial melt-water streams.	Most productive source of ground water in county, though restricted in areal extent to portions of main stream valleys. Yields moderate to large supplies from properly constructed wells. Water moderately hard in parts of the valleys underlain by Stockbridge limestone
			Lacustrine deposits	200	Clay and silt deposited in glacial lakes.	Yields little water. Generally acts as a confining bed where underlain by permeable deposits.
		Unstratified drift	Till	150	Heterogeneous mixture of boulders and clay deposited by glacial ice. In places, contains small lenses of sand and gravel. Locally called "hardpan."	Generally thin and impermeable but yields small supplies to wells of large diameter.
Consolidated rocks	Late (?) and Middle Ordovician	Hudson River formation		3,000+	Shale or slate, chiefly gray or black but locally red, purple, and green. Contains beds of grit, limestone, limestone conglomerate, and black chert. Metamorphosed to phyllite and in east to schist.	Most extensive bedrock formation in county. Yields average 16 gpm. Water moderately soft and fairly low in dissolved solids, but hydrogen sulfide reported in some wells.
	Ordovician and Cambrian		Stockbridge limestone	1,000±	White, blue, and gray limestone and dolomite metamorphosed to marble in east. Veins of calcite and quartz common.	Chiefly restricted to valley areas. Most productive bedrock formation; yields average 22 gpm and range widely from 0 to 220 gpm. Water moderately hard and relatively high in dissolved solids.
	Early Cambrian	Cheshire quartzite		600±	Strong, compact rock composed almost entirely of quartz. Generally white except locally, where impurities result in buff or pink color.	Unimportant as a source of ground water because of small areal extent. Yields of five wells in southern part of county average 10 gpm.
	Precambrian	Undifferentiated granite and gneiss		Unknown	Banded black and white gneiss and gray or pink granite. Chief minerals feldspar and quartz. Locally contains basic dikes, quartz veins, and minor amounts of schist and marble.	Principally restricted to southern part of county. Yields of wells average 11 gpm. Water generally soft and low in dissolved solids.

P. 82 of 227



EXPLANATION

SPRINGS	WELLS	WATER-BEARING MATERIAL
	○	Bedrock
	●	Unconsolidated deposits
	◐	Bedrock and unconsolidated deposits
	◎	Unknown

Symbol indicates type of water-bearing material. Upper figure is well or spring number with prefix "Du" omitted; suffix "Sp" also omitted in spring numbers. Lower figure is thickness, in feet, of unconsolidated deposits. Plus sign (+) following lower figure indicates that thickness of unconsolidated deposits is unknown but is greater than figure given.

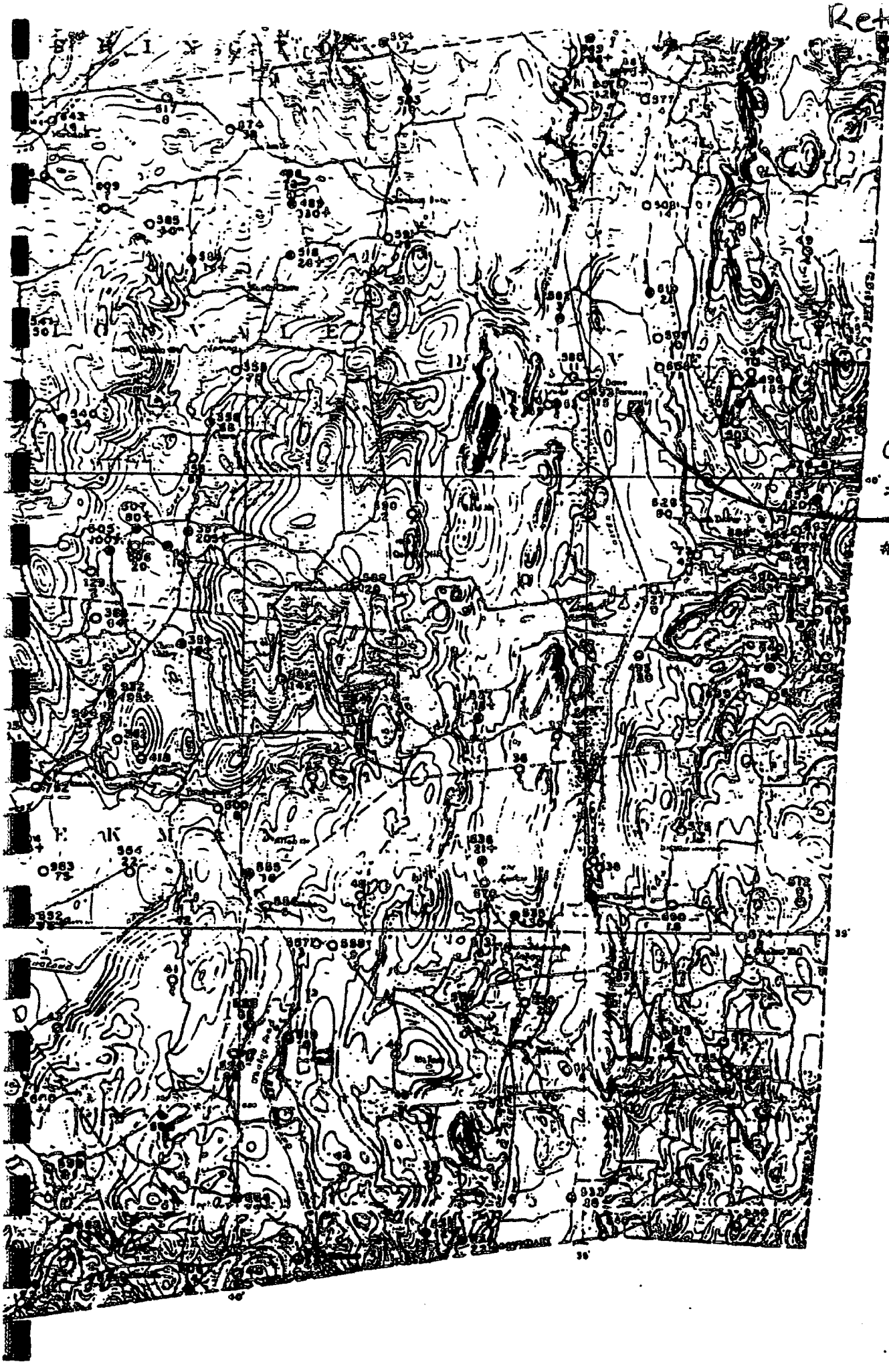
SCALE

1 0 1 2 Miles

CONTOUR INTERVAL 20 FEET
DATUM IS MEAN SEA LEVEL

Reference 12
P. 83 of 227

Reference 12
84 of 227



CRICKETT HILL ROAD LANDFILL
DEC Site I.D.
314030

Table 13.--Records of selected wells in Sullivan County (Continued)

Well number	Location	Owner or occupant	Altitude above sea level (feet)	Type of well	Depth below land surface (feet)	Diameter (inches)	Depth to bedrock (feet)	Water-bearing formation	Water level below land surface (feet)	Method of lift	Yield (gallons per minute)	Use	Remarks
Su 486	14N, 16.0S, 2.2E	W. L. Prout	800	Dri	86	6	5	Granite and gneiss, undiff.	30	Jet	2 ½	Dom	
Su 487	14N, 0.0S, 8.2E	Dover Theater	400	Dri	70	8	--	Pleistocene gravel	21	Turbine	2½	Com	Drawdown 2½ ft after pumping 2½ gpm for 24 hrs. Temperature 54°F, May 1969 (a) (b)
Su 488	14N, 2.3S, 4.0E	R. Wood	710	Dri	165	6	77	Stockbridge limestone	--	--	--	Dom	Bedrock contains seams of clay
Su 489	14N, 2.3S, 4.0E	do.	710	Dri	330	6	--	Pleistocene till	--	--	--	None	
Su 490	14N, 7.0S, 10.5E	H. Johnson	370	Dri	203	6	--	Pleistocene sand and gravel	11	Jet	3	Dom	Temperature 54°F, May 1969 (a)
Su 491	14N, 7.0S, 10.5E	do.	370	Dri	50	6	--	Pleistocene gravel	11	Suction	10	Dom	
Su 492	14N, 4.0S, 8.6E	Wingdale Chemical Corp.	440	Dri	547	10	15	Stockbridge limestone	17	Turbine	58	Ind	Drawdown 208 ft after pumping 50 gpm for 24 hrs. (a)
Su 493	14N, 8.1S, 9.3E	Wingdale Diner	490	Dri	135	6	120	do.	14	Suction	8	Com	(b).
Su 496	14N, 4.5S, 10.0E	Lake Ellis Camp Corp.	660	Dri	135	6	10	Granite and gneiss, undiff., or Stockbridge limestone	3	Gear-centrifugal	2½	Com	
Su 495	14N, 4.5S, 10.0E	do.	400	Dri	135	6	--	Pleistocene sand and gravel	--	do.	2½	Com	Well flows.
Su 498	15N, 15.2S, 9.0W	Federal Boarding Co.	100	Dri	1,156	6	27	Hudson River formation	4	Turbine	50	Ind	Drawdown 112 ft after pumping 50 gpm for 5 hrs. Temperature 55°F, May 1969. (a)
Su 500	14N, 10.0S, 4.1E	W. D. Hall	420	Dri	35	6	8	Stockbridge limestone	8	Suction	--	Dom	
Su 501	14N, 8.0S, 4.0E	Jay Malone	770	Dri	271	6	142	Hudson River formation	--	Turbine	10	Dom	(b).
Su 502	14N, 4.0S, 10.7E	Wingdale Country Club	400	Dri	480	6	--	Pleistocene sand	--	--	10	Domes	
Su 503	14N, 5.0S, 10.0E	Beacon Progressive Camps Corp.	640	Dri	300	6	5	Stockbridge limestone	--	Turbine	--	Com	Well supplies 400 campers in summer
Su 505	14N, 6.0S, 2.7E	R. McKinney	460	Dri	100	6	--	Pleistocene gravel	1	Jet	--	Farm	
Su 506	14N, 6.0S, 3.0E	do.	560	Dri	141	6	20	Stockbridge limestone	10	Suction	--	Farm	Well supplies 4 homes
Su 507	14N, 6.5S, 3.0E	do.	570	Dri	80	6	--	Pleistocene gravel	20	Gear	--	Dom	
Su 508	14N, 2.3S, 9.4E	Robert Colmore	380	Dri	117	6	14	Stockbridge limestone	20	Jet	5	Dom	
Su 509	14N, 4.0S, 9.6E	George Murphy	440	Dri	145	6	10	do.	22	Turbine	5	Farm	
Su 510	14N, 3.4S, 9.4E	do.	410	Dug	21	48	21	Pleistocene gravel	7	None	--	None	
Su 511	15N, 1.3W, 6.2W	H. Sane	520	Dri	101	6	4	Granite and gneiss, undiff.	--	Jet	4	Dom	Well flows at 4 gpm
Su 512	14N, 11.0S, 11.6E	Carroll Vacation Club, Inc.	1,100	Dri	600	8	8	Hudson River formation	--	Turbine	--	Dom	
Su 513	14N, 11.7S, 7.3E	Holiday Hills	505	Dri	225	6	8	Stockbridge limestone	13	Jet	5	Dom	Drawdown 117 ft after pumping 5 gpm for 8 hrs.
Su 514	14N, 13.3S, 8.5E	Smith Johnson	560	Dri	210	6	6	do.	--	do.	20	Dom	Driller reported sand at a depth of 100 ft. Temperature 54°F, June 1969
Su 515	14N, 12.5S, 9.0E	Robert Bucos	660	Dri	100	6	5	Hudson River formation	--	do.	50	Dom	Well has been pumped at 50 gpm for 24 hrs. Temperature 54°F, June 1969 (a)
Su 517	14N, 1.0S, 3.2E	R. Antinio	710	Dri	171	6	8	do.	18	do.	6	Dom	
Su 518	14N, 3.0S, 4.0E	J. E. Koch	620	Dug	26	54	--	Pleistocene gravel	9	Suction	--	Dom	

Reference 12
P. 85 of 227

Table 11.--Records of selected wells in Dutchess County (Continued)

Well number	Location	Owner or occupant	Altitude above sea level (feet)	Type of well	Depth below land surface (feet)	Diameter (inches)	Depth to bedrock (feet)	Water-bearing formation	Water level below land surface (feet)	Method of lift	Yield (gallons per minute)	Use	Remarks
Du 519	14V, 13.0S, 5.0E	Sanita Mills Camp	900	Dri	185	6	0	Hudson River formation	17	[illegible]	20	Dom	Three other abandoned wells on property
Du 524	14V, 11.3S, 4.3E	Interchurch Camp Society, Inc.	740	Dri	[illegible]	[illegible]	20	Cheshire quartzite and granite and gneiss, undiff.	[illegible]	do.	4	Dom	[illegible]
Du 525	14V, 12.8S, 4.5E	Whaley Lake Inn	720	Dri	72	6	62	Granite and gneiss, undiff.	[illegible]	do.		Dom	
Du 526	15V, 2.0N, 8.6W	Robert Lyons	220	Dri	30	6	--	Pleistocene sand and gravel	6	[illegible]		Dom	
Du 527	14V, 7.2S, 9.5E	Wingdale Hotel	430	Dri	130	6	0	Stockbridge limestone				Dom	
Du 528	14V, 6.2S, 10.0E	Brookshire Manor	330	Dri	180	6	80	do.	9	[illegible]		Dom	
Du 529	15V, 8.0N, 2.6W	Harry Sirkle	400	Dri	87	6	30	Hudson River formation	[illegible]	do.	6	Dom	[illegible]
Du 530	14V, 15.4S, 10.7E	G. O'Hara	1,260	Dri	185	6	2	do.	[illegible]	[illegible]	10	Dom	[illegible]
Du 531	14V, 13.8S, 7.3E	Charles Utter	520	Dri	300	6	0	Stockbridge limestone	[illegible]	[illegible]	[illegible]	Dom	
Du 532	14V, 15.5S, 6.7E	H. Kenjalis	700	Dug	17	48	--	Pleistocene sand and gravel		do.	[illegible]	Dom	
Du 533	14V, 15.0S, 8.5E	Ralph Gwinn	450	Dri	130	6	28	Stockbridge limestone	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Du 534	14V, 15.6S, 7.7E	A. Pennell	530	Dug	22	48	--	Pleistocene sand and gravel	[illegible]	[illegible]	[illegible]	[illegible]	
Du 535	14V, 11.4S, 7.8E	H. J. Burris	460	Dri	130	6	--	Pleistocene deposit	[illegible]	[illegible]	[illegible]	[illegible]	
Du 536	14V, 10.8S, 7.3E	George Dykeman	530	Dug	23	48	--	Pleistocene till	[illegible]	[illegible]	[illegible]	Dom	
Du 537	14V, 9.0S, 7.3E	William Greiner	500	Dug	15	57	--	do.	10	do.		[illegible]	
Du 539	14V, 5.7S, 1.3E	J. B. Walsh	540	Dug	27	48	--	do.	[illegible]	do.		Dom	[illegible]
Du 540	14V, 5.1S, 2.1E	A. Bromme	750	Dug	34	53	34	Pleistocene sand	[illegible]	[illegible]	--	Dom	do.
Du 541	14V, 3.9S, 1.6E	E. F. Acken	730	Dri	102	6	50	Hudson River formation	15	[illegible]	8	[illegible]	[illegible]
Du 542	14V, 1.0S, 0.8E	El Rancho	520	Dri	98	6	21	do.	[illegible]	[illegible]	7	[illegible]	[illegible]
Du 543	14V, 3.1S, 0.7E	Paul Berger	720	Dri	293	6	12	do.		[illegible]	30	[illegible]	
Du 545	14V, 4.8S, 1.0E	W. R. Portiman	580	Dri	64	6	6	do.	6	[illegible]	8	[illegible]	
Du 546	15V, 8.9S, 10.2W	Dutchess County Broadcasting Co.	1,305	Dri	185	6	0	Granite and gneiss, undiff.			[illegible]	Dom	
Du 547	14V, 0.2S, 8.6E	Carl Sahm	400	Dri	105	6	--	Pleistocene deposit		Dom	7	[illegible]	[illegible]
Du 548	15V, 11.7N, 1.5W	Dutchess Hatchery	330	Dri	115	6	16	Hudson River formation			11	[illegible]	[illegible]
Du 549	13V, 17.1S, 8.7E	F. Schern	400	Dri	155	6	110	Stockbridge limestone	[illegible]	[illegible]	[illegible]	Dom	
Du 550	14V, 12.5S, 7.9E	Pawling Rubber Corp.	440	Dri	145	6	20	do.	6	do.	[illegible]	[illegible]	[illegible]
Du 551	14V, 11.9S, 0.7E	Peter O'Brien	360	Dug	10	36	10	Pleistocene gravel	[illegible]	[illegible]	15	Dom	[illegible]
Du 552	14V, 11.5S, 1.7E	Samuel Sotillo	380	Dri	96	6	--	do.	[illegible]	[illegible]	[illegible]	Dom	[illegible]

Reference 12
p. 86 of 227

Table 11.--Records of selected wells in Dutchess County (Continued)

Well number	Location	Owner or occupant	Altitude above sea level (feet)	Type of well	Depth below land surface (feet)	Diameter (inches)	Depth to bedrock (feet)	Water-bearing formation	Water level below land surface (feet)	Method of lift	Yield (gallons per minute)	Use	Remarks
Du 551	14V, 9.2S, 0.2E	Samuel Sorrito	480	Drl	271	6	8	Hudson River formation	18	Force	9	Dom	
Du 554	14V, 10.0S, 2.9E	Randall Bros.	460	Drl	205	6	22	Stockbridge limestone	35	Jet	7	Farm	
Du 555	14V, 10.9S, 4.4E	Joseph B. Inness	560	Dug	16	36	16	Pleistocene till	6	Suction	--	Dom	
Du 556	14V, 11.3S, 4.7E	Albert Burdick	550	Drl	125	6	5	Granite and gneiss, undiff.	21	Force	25	Dom	Well supplies 3 families
Du 557	14V, 11.0S, 5.3E	John Tortora	820	Drl	50	6	13	do.	10	Suction	8	Dom	
Du 558	14V, 11.0S, 5.5E	do.	900	Drl	235	6	5	do.	17	Jet	6	Dom	Yield 2 - 3 gpm when well was 90 ft deep.
Du 559	14V, 12.7S, 7.1E	do.	580	Drl	135	6	18	Stockbridge limestone	5	Suction	20	Dom	
Du 560	14V, 13.4S, 8.3E	Bertha Van Anden	380	Drl	135	6	--	do.	10	Force	--	Farm	
Du 561	14V, 14.5S, 1.0E	A. Petersen	980	Dug	14	36	19	Pleistocene gravel	29	do.	--	Dom	
Du 562	14V, 15.2S, 1.5E	Camp Alamar, Inc.	660	Dug	37	36	27	Pleistocene sand	7	Suction	--	Dom	
Du 563	14V, 15.4S, 2.1E	C. Thornton	800	Dug	12	36	--	Pleistocene till	9	do.	--	Dom	
Du 564	14V, 15.0S, 4.3E	M. Pendley	920	Dug	29	48	--	do.	16	do.	--	Dom	
Du 566	14V, 14.0S, 3.4E	F. J. Clamp	920	Dug	14	54	12	do.	11	do.	--	Dom	
Du 567	15V, 10.5N, 6.6W	George Wolf	140	Drl	65	6	40	Hudson River formation	--	Jet	9	Dom	Well flows at 1 gpm (a)
Du 569	14V, 13.4S, 0.2E	Farm Supply Co.	340	Drl	226	6	56	Stockbridge limestone	15	Suction	45	Dom	
Du 570	14V, 11.0S, 7.4E	G. E. Siano	550	Drl	499	6	14	do.	42	Force	7	Farm	
Du 572	14V, 11.4S, 10.5E	M. Cittell	950	Drl	406	6	12	Hudson River formation	42	do.	4	Dom	
Du 573	14V, 11.0S, 10.5E	J. R. Branch	960	Drl	387	6	12	do.	42	Turbine	5	Dom	
Du 574	14V, 11.6S, 10.8E	Anna Thomas	1,260	Drl	235	6	8	do.	19	Force	--	Dom	
Du 575	14V, 10.1S, 9.9E	Quaker Lake Inc.	810	Drl	153	6	17	do.	20	Jet	18	Dom	
Du 576	14V, 12.0S, 9.2E	T. C. Bonny	770	Drl	850	8	--	do.	--	Force	--	Farm	
Du 577	14V, 1.0S, 9.4E	Dutchess County Lime Co.	480	Drl	418	6	4	Stockbridge limestone	5	--	--	None	
Du 578	13V, 16.7S, 8.9E	Charles Webster	470	Drl	55	6	39	do.	19	Jet	12	Dom	
* Du 580	14V, 4.6S, 8.4E	Fairview Manor	450	Drl	160	6	11	do.	--	do.	10	Com	(a).
Du 582	14V, 3.0S, 8.3E	John Wauff	410	Drl	100	6	3	Unknown	22	--	8	Dom	(a).
Du 583	15V, 3.0N, 8.0W	Fishkill Rural Cemetery	340	Drl	126	6	8	Stockbridge limestone	9	Centrifugal	10	Dom	(a).
Du 584	14V, 3.1S, 3.5E	E. Dunlevey	690	Dug	14	36	--	Pleistocene till	11	Suction	--	Dom	
Du 585	14V, 2.6S, 3.1E	Claude Abel	730	Drl	94	6	30	Hudson River formation	18	Jet	25+	Farm	Two other wells and several other springs also on property.
Du 586	14V, 2.0S, 1.8E	William Abel	590	Drl	100	6	10	do.	20	do.	--	Dom	
Du 587	14V, 3.7S, 6.1E	A. B. Hugas	340	Drl	450	6	18	do.	--	Force	--	Dom	
Du 588	14V, 0.3S, 0.6E	M. J. Crosbar	680	Drl	250	6	10	do.	--	Jet	60	Farm	Well supplies two homes.
Du 589	14V, 7.1S, 5.8E	A. B. Hazel	1,220	Drl	159	6	20	do.	--	Force	3	Dom	

Reference 12
P. 87 of 227

Table 13.--Records of selected wells in Dutchess County (Continued)

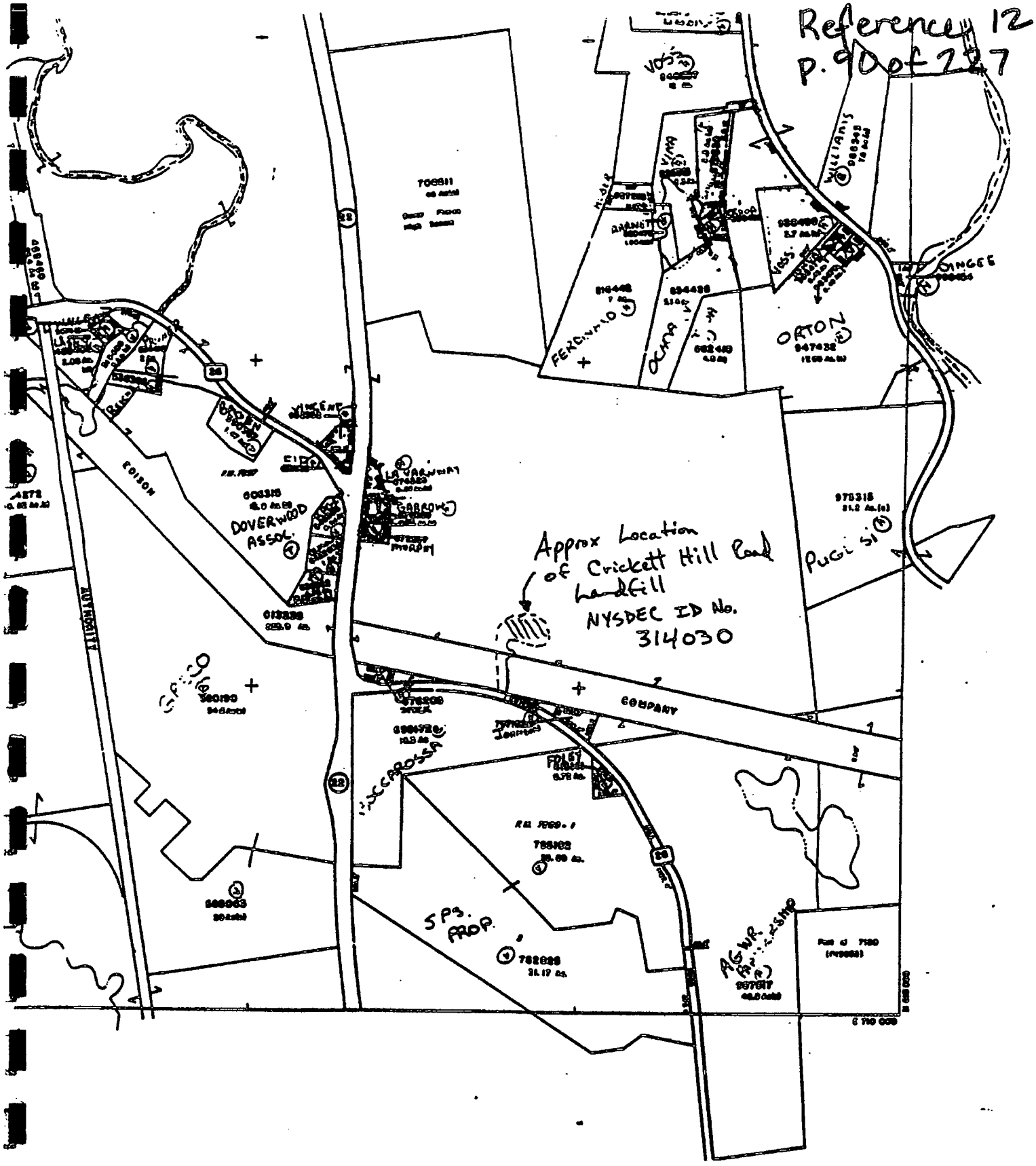
Well number	Location	Owner or occupant	Altitude above sea level (feet)	Type of well	Depth below land surface (feet)	Diameter (inches)	Depth to bedrock (feet)	Water-bearing formation	Water level below land surface (feet)	Method of lift	Yield (gallons per minute)	Use	Remarks
Du 642	15V, 10.7N, 4.0W	Robert McGinnis	520	Drl	170	6	94	Hudson River formation	--	--	6	Dom	Temperature 54°F, July 1949
Du 643	14V, 1.3S, 1.8E	Gent's Cabin Camp	560	Drl	76	6	14	do.	--	Jet	5	Dom	Well supplies camp
Du 644	14V, 0.5N, 7.0W	Theodore Thackery	360	Drl	156	6	6	do.	14	Force	--	Dom	
Du 645	14V, 0.5N, 7.0W	do.	360	Drl	400	6	10	do.	19	None	5	None	Yield inadequate
Du 651	15V, 8.1N, 2.3W	Tony Leo	200	Drl	112	6	48	do.	--	Jet	7	Dom	Temperature 51°F, July 1949. (b)
Du 654	14V, 0.5N, 8.1W	F. D. Roosevelt High School	210	Drl	200	8	25	do.	--	Turbine	50	Dom	Well supplies 650 students. Temperature 52°F, 1949. (a).
Du 655	15V, 0.4N, 4.5W	W. E. Gere	360	Drl	88	6	24	Cheshire quartzite	4	Suction	2	Farm	(a) (b).
Du 657	15V, 3.3N, 10.3W	Beacon Oil Co.	220	Drl	15	6	3	Hudson River formation	12	do.	22	Com	Temperature 48°F, July 1949 (a)
Du 658	14V, 4.4S, 9.6E	Old Brewery Inn	410	Drl	130	6	11	Stockbridge limestone	26	Force	9	Com	
Du 660	15V, 10.0N, 9.6W	International Business Machines Corp.	000	Drl	468	6	16	do.	21	--	10	--	
Du 661	15V, 10.0N, 9.6W	do.	100	Drl	400	6	--	do.	--	--	10	Ind	
Du 664	15V, 10.0N, 9.6W	do.	100	Drl	525	--	--	do.	--	--	20	--	
Du 667	13V, 8.5S, 3.0E	Rosalie Hicks	420	Drl	142	6	0	Hudson River formation	--	--	11	Dom	Yield 4 gpm when well was 15 ft deep and 11 gpm when well was 20 ft deep.
Du 669	14V, 0.2S, 8.6E	Carl Sebo	400	Drl	164	6	--	Pleistocene gravel	7	Jet	60	Dom	Well finished with 4 ft of 25-slot screen Temperature 49°F, August 1949. (a) (b).
Du 670	15V, 15.5N, 9.3W	Fairview Heights Improvement Co.	260	Drl	350	6	2	Hudson River formation	24	Turbine	12	PS	(b).
Du 673	15V, 4.2N, 3.3W	Louis Barbieri	260	Drl	165	6	12	Stockbridge limestone	21	Jet	1	Dom	Temperature 56°F, August 1949.
Du 674	14V, 1.4S, 4.1E	Greer School	240	Drl	215	8 to 6	36	Hudson River formation	42	do.	27	Dom	Drawdown 104 ft after pumping 27 gpm for 24 hrs. Temperature 51°F, August 1949. (b)
Du 675	13V, 16.9S, 7.7E	Carl Tobias	240	Drl	138	6	38	do.	15	do.	14	Dom	Drawdown 60 ft after pumping 12 gpm for 24 hrs. Temperature 51°F, August 1949 (a).
Du 677	14V, 1.7S, 0.7E	Sprout Lake Camp	500	Drl	185	6	4	do.	30	--	15	Dom	Drawdown 125 ft after pumping 15 gpm for 8 hrs.
Du 678	14V, 0.7N, 0.9W	W. P. Keston	520	Drl	145	6	4	do.	15	Jet	10	Farm	Drawdown 65 ft after pumping 10 gpm for 1 hr.
Du 680	13V, 1.9S, 4.8E	Pine Plains Water Co.	465	Drl	228	6	101	Stockbridge limestone	16	Turbine	220	PS	Drawdown about 40 ft after pumping 220 gpm for 22 hrs (a) (b).
Du 683	15V, 7.2N, 2.9W	Frank Tompkins	280	Drl	177	6	67	Hudson River formation	21	Jet	10	Dom	Temperature 52°F, August 1949
Du 684	15V, 7.3N, 9.8W	Children's Aid Society Camp	120	Drl	318	8	42	Stockbridge limestone	12	Force	20	Dom	Drawdown 173 ft after pumping 20 gpm for 24 hrs. (a) (b).
Du 685	13V, 1.8N, 4.9W	G. Soggate	240	Drl	62	6	23	Hudson River formation	30	Jet	11	Dom	Drawdown 15 ft after pumping 11 gpm for 3 hrs.
Du 686	14V, 6.7S, 10.9E	Jacob Rothstein	460	Drl	315	6	28	Stockbridge limestone	15	do.	11	Dom	Drawdown 235 ft after pumping 11 gpm for 2 hrs. (b)
Du 688	14V, 10.3N, 6.1W	Hartsborg Church	350	Bug	24	48	24	Pleistocene sand	11	Suction	--	None	(a).
Du 689	15V, 3.0N, 5.2W	Angelo Ostovlano	240	Dry	18	18	--	do.	--	do.	--	Dom	Well supplies swimming pool with capacity of 70,000 gallons (a).
Du 690	14V, 11.3S, 9.0E	R. Calder	770	Drl	114	6	16	Hudson River formation	35	Jet	4	Dom	(a)
Du 691	14V, 0.8S, 9.0E	A. W. Waugh Fruit Co.	400	Drl	285	6	120	Stockbridge limestone	--	Turbine	--	PS	Emergency supply for Village of River Plains (a)

Reference 12
P. 88 of 227

Reference 12
p. 89 of 227

REFERENCE A-7

Reference 12
p. 90 of 227



REAL PROPERTY TAX MAP

Accuracy or Completeness Not Implied

6962	7062	7162
6961	7061	7161
6960	7060	7160

N

TOWN OF DOVER

DUTCHESS COUNTY, NEW YORK

Reference 12
P. 91 of 227

REFERENCE A-8

Reference 12
p. 92 of 227

DUNN
GEOSCIENCE CORP.

12 METRO PARK RD. •
ALBANY, NEW YORK 12205
518/458-1313
FAX 518/458-2472

August 15, 1990

Mr. Steve Capowski
Dutchess County Department of Health
22 Market Street
Poughkeepsie, New York 12601

Dear Mr. Capowski:

RE: Artis Johnson Residence - Water Quality Results
Crickett Hill Road, Town of Dover

I would like to request release of the above referenced information pursuant to the Freedom of Information Act. I am updating the Phase I Assessment of the former landfill on Crickett Hill Road under contract to the NYSDEC. Specifically, I would like to request the water quality results for February 2nd, March 20th, May 17th and August 10th of 1990. Please find enclosed a check for $3.50 to cover copying expenses. Thank you.

Sincerely,

DUNN GEOSCIENCE CORPORATION

Thomas V. Danahy

Thomas V. Danahy
Hydrogeologist

TVD:ce
enclosure (check)

[redacted] RECORD OF TELEPHONE CONVERSATION

[redacted]

FILLED OUT BY: T.V. DANAHY ☒ Made ☐ Received Call

TALKED WITH: Mr. Artis Johnson DATE: 8/5/90 & 1/30/91 TIME: 8:30 pm

COMPANY: Resident ~700 ft. south of landfill on north of Crickett Hill Rd.

ADDRESS: PO Box 377 Dover Plains NY 12522 PHONE: (914) 832-3141

SUBJECT: Crickett Hill Road Landfill – Residential Well Survey

PROJECT REFERENCE: NYSDEC 00296-01680

- Follow-up to my call in August.
- Due to detection of freon- (trichlorofluoromethane) during Dutchess Co. DOH sampling, Mr. & Mrs. Johnson do not currently use well water for drinking - using bottled water. Well water used for washing, shower, bath, lawn sprinkling and some minor cooking (ie. boiling).
- Well is at least 75 feet deep, because Mr. Johnson said a serviceman installed at least 75 feet of "pipe" or hose when repairing well a few years ago.

Action Required: See DOH sampling results.

Distribution: D. Rollins, C. Juliano, TVD, (File)

Follow-Up Date:

[redacted] RECORD OF TELEPHONE CONVERSATION

[redacted]:

FILLED OUT BY: T.V. DANAHY ☒ Made ☐ Received Call

TALKED WITH: MR. JOHN FOLEY DATE: 1/28/91 TIME: 9:50

COMPANY: Resident ~ 1100 ft. SE of Landfill - South of Crickett Hill Rd.

ADDRESS: RR#2 Box 63 Crickett Hill Road Wingdale, NY 12594 PHONE: (914) 832-9047

SUBJECT: Crickett Hill Rd. Landfill - Residential Well Survey

PROJECT REFERENCE: NYSDEC 00296 - ~~00~~ 01680

Mr. FOLEY doesn't know much about the construction of his well. Well yield has generally been good (est. 1gpm). Depth unknown. FOLEY uses a water softener. Occupied this residence since June 15, 1985. Well was drilled for previous owner.

- Dutchess Co. DOH has sampled this residential well. No water quality problems detected.

Action Required: TVD to request Dutchess Co. DOH results.

Distribution: D. Rollins, C. Juliano, TVD, File

Follow-Up Date:

[redacted] RECORD OF TELEPHONE CONVERSATION

[redacted]:

FILLED OUT BY: T.V. Danahy ☒ Made ☐ Received Call

TALKED WITH: Mr. David Stock DATE: 1/28/91 TIME: 8:40

COMPANY: Resident NE corner Rt 22 & Crickett Hill Road ~ 1100 ft. SW of Site

ADDRESS: Po Box 638 Crickett Hill Rd. Wingdale, NY 12594 PHONE: (914) 832-6775

SUBJECT: Crickett Hill Road Landfill Residential Well Info.

PROJECT REFERENCE: NYSDEC 00296-01680

Stock's well was drilled approximately 10 years ago (at least if was deepened then) to a total depth of 400 feet. Yield is approx 1.5 gallons per minute. Depth to Bedrock is less than 10 or 15 feet. Pump is set at depth of approx. 70 feet.

* Dutchess Co. DOH has sampled this well and no problems with the water quality were detected. Sampling w/in last year?

Depth to water during drilling ~15 feet.

Action Required: TVD to send for Dutchess Co. DOH results.

Distribution: D. Rollins C. Juliano TVD File

Follow-Up Date:

Reference 12
p. 96 of 227

DUNN GEOSCIENCE CORPORATION
12 METRO PARK ROAD
ALBANY NY 12205
(518) 458-1313
FAX (518) 458-2472

January 29, 1991

FIRST CLASS MAIL

Mr. Steve Capowski
Dutchess County Department of Health
387-391 Main Mall
Poughkeepsie, New York 12601

Dear Mr. Capowski:

Subject: Foley and Stock Residences - Water Quality Results
Crickett Hill Road, Town of Dover

I would like to request release of the above referenced information pursuant to the Freedom of Information Act. I am updating the Phase I Assessment of the former landfill on Crickett Hill Road under contract to the NYSDEC. Specifically, I would like to request the 21 pages of water quality results for February and April of 1990. Please find enclosed a check for $5.25 to cover copying expenses. Thank you.

Sincerely,

DUNN GEOSCIENCE CORPORATION

Thomas V. Danahy

Thomas V. Danahy
Hydrogeologist

TVD:dlm

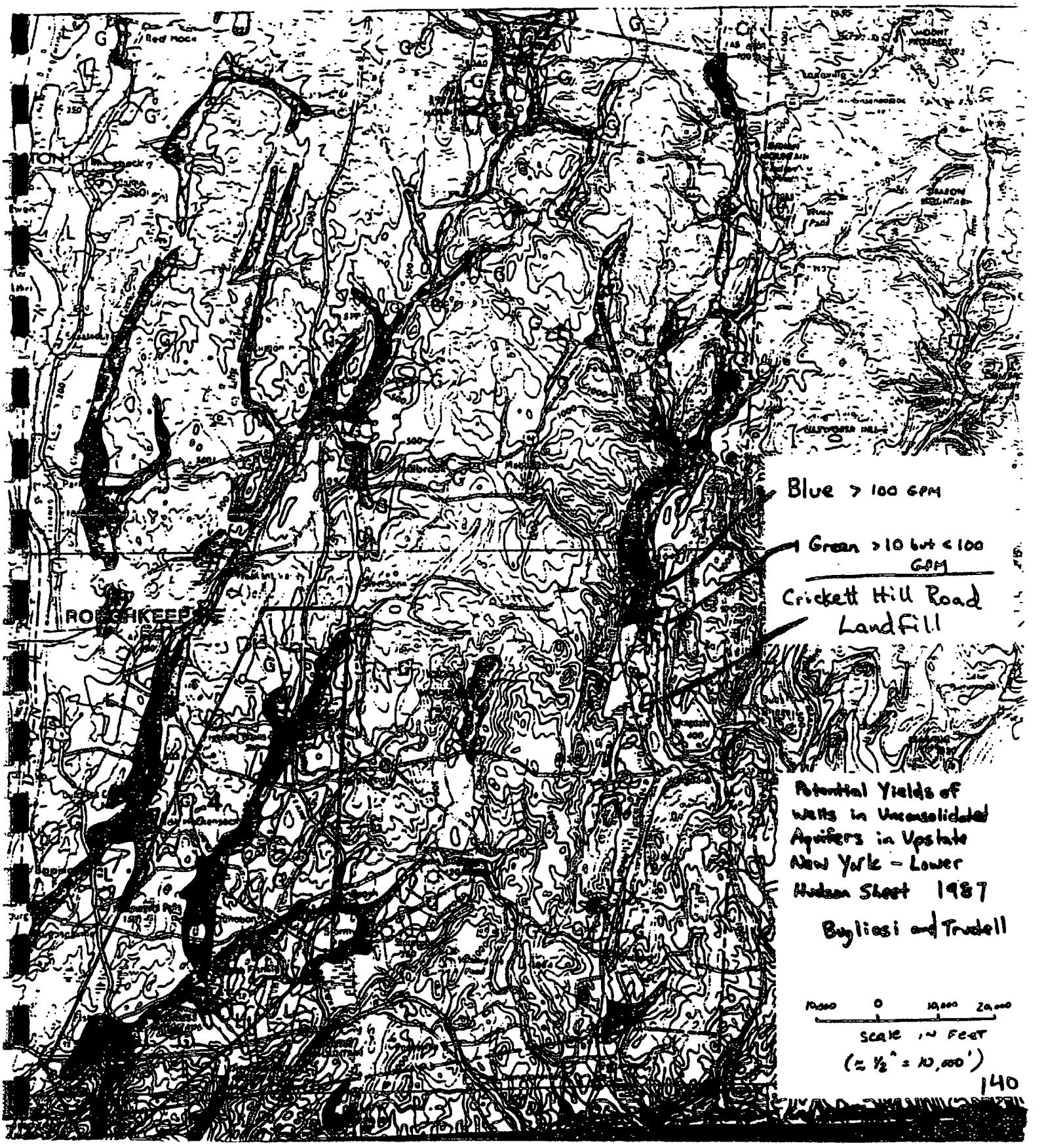
enclosure (check)

PRINTED ON RECYCLED PAPER

Reference 12
p. 97 of 227

REFERENCE A-9

PREPARED IN COOPERATION
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



EXPLANATION

POTENTIAL YIELD OF WATER TO WELLS IN UNCONSOLIDATED AQUIFERS

Green

UNCONFINED AQUIFERS, 10 to 100 GALLONS PER MINUTE--Sand and gravel with saturated zone generally less than 10 ft thick, or thicker but with less permeable silty sand and gravel. Yields in areas adjacent to streams may exceed 100 gal/min through pumping-induced infiltration, but these areas are too small to show at this scale.

Blue

UNCONFINED AQUIFERS, MORE THAN 100 GALLONS PER MINUTE--Sand and gravel of high transmissivity and with saturated thickness greater than 10 ft. Many such areas are associated with surface-water sources that can provide additional water through pumping-induced recharge.

AQUIFER OF UNKNOWN POTENTIAL--Areas of sand or sand and gravel for which little or no well data are on file to determine yield potential. Letter symbols, explained below, indicate the type of deposit.

L — Lacustrine or eolian--Fine to medium sand that probably yields less than 10 gal/min.

G — Kame, kame terrace, kame moraine, outwash, or alluvium--Sand and gravel of unknown thickness or saturation. Yield potential is greater where streams are present.

1 — PRIMARY WATER-SUPPLY AQUIFER--A highly productive aquifer that is being used as a source of water supply by major public-supply systems. Number indicates name of aquifer area (see key below) and report number in list of related publications. Reports and maps cited describe these aquifers in detail.

Primary aquifer number	Aquifer area
1	South Fallsburg-Woodbourne area
3	Ramapo and Mahwah Rivers area
4	Fishkill and Sprout Creeks area
5	Croton-Ossining area

Reference 12
p. 100 of 227

REFERENCE A-10

Reference 12
p. 101 of 227

ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES

PHASE I INVESTIGATION

Cricket Hill Road Site No. 314030
Town of Dover Dutchess County

DATE: December 1989

Prepared for:

New York State Department of Environmental Conservation

50 Wolf Road, Albany, New York 12233
Thomas C. Jorling, *Commissioner*

Division of Hazardous Waste Remediation
Michael J. O'Toole, Jr., P.E., *Director*

By:

Lawler, Matusky & Skelly Engineers

143

Reference 12
p. 102 of 227

REFERENCE A-11

Reference 12
p. 103 of 227

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

TOWN OF

DOVER,
NEW YORK

DUTCHESS COUNTY

PANEL 9 OF 25
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
361335 0009 A

EFFECTIVE DATE:
AUGUST 15, 1984

Federal Emergency Management Agency

Reference 12
p. 104 of 227

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

TOWN OF
DOVER, NEW YORK
DUTCHESS COUNTY

PANEL 13 OF 25
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
361335 0013 B

MAP REVISED:
JULY 4, 1988

Federal Emergency Management Agency

Reference 12
p. 105 of 227

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

TOWN OF

DOVER,
NEW YORK

DUTCHESS COUNTY

PANEL 20 OF 25
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
361335 0020 A

EFFECTIVE DATE:
AUGUST 15, 1984

Federal Emergency Management Agency

Reference 12
p. 106 of 227

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

TOWN OF

DOVER,
NEW YORK

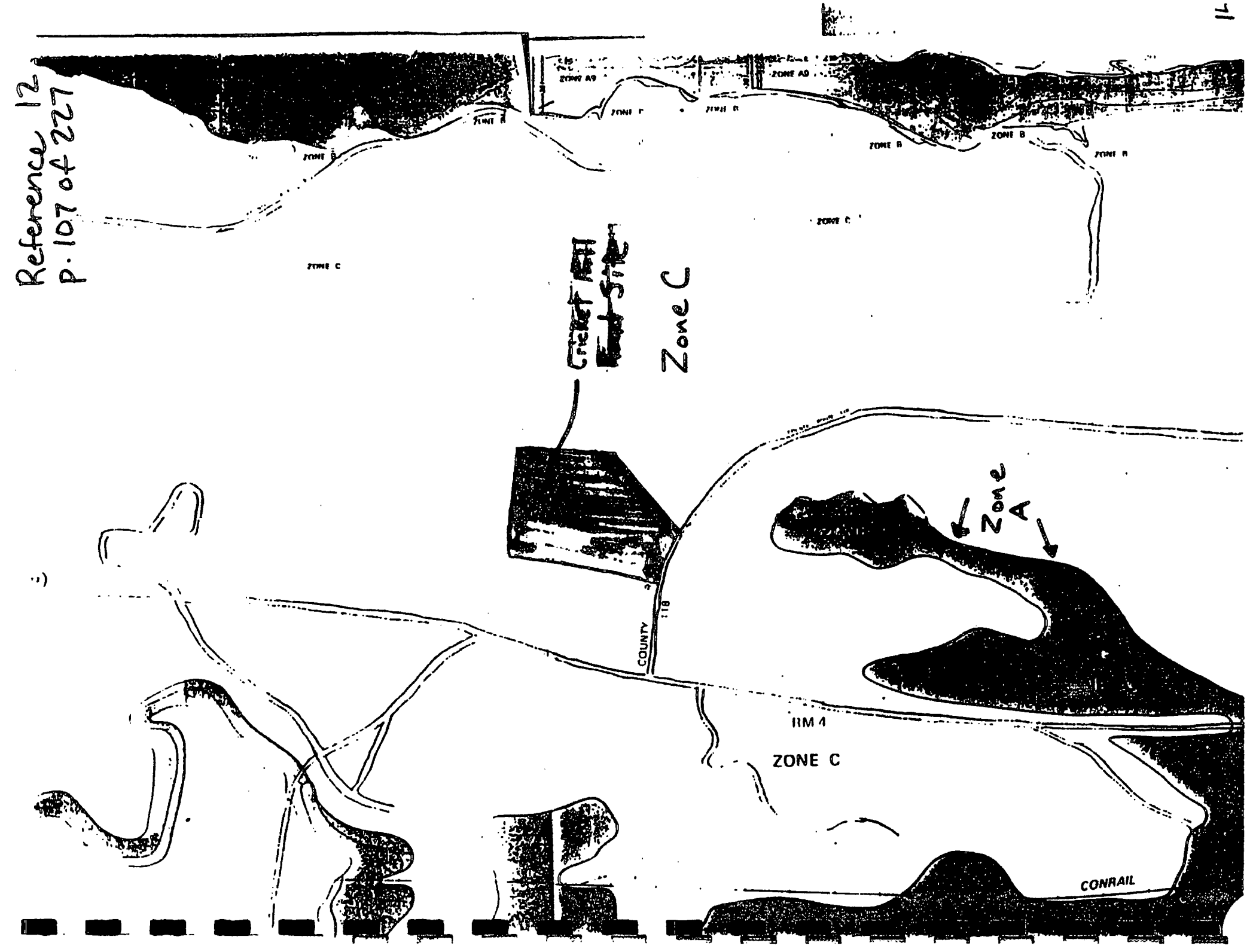
DUTCHESS COUNTY

PANEL 25 OF 25
(SEE MAP INDEX FOR PANELS NOT PRINTED)

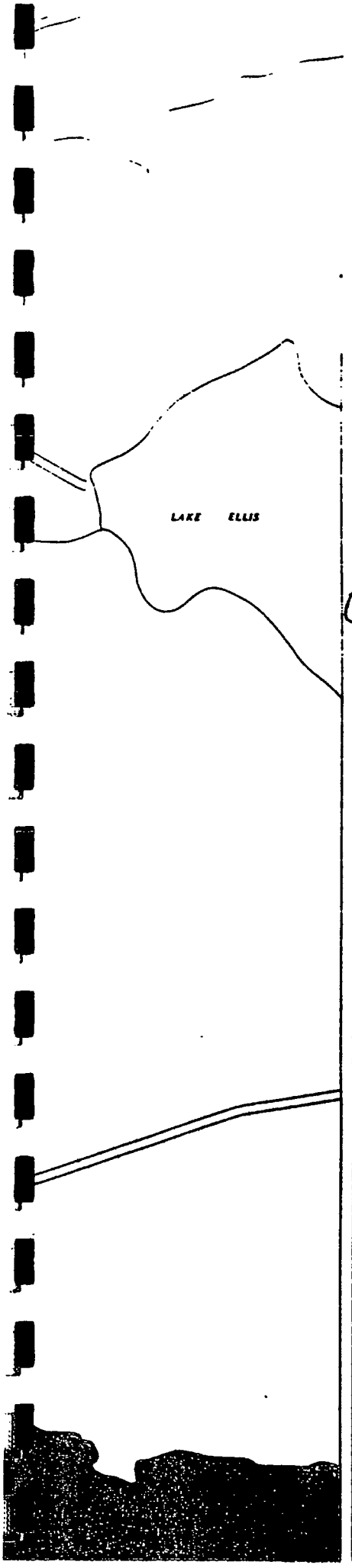
COMMUNITY-PANEL NUMBER
361335 0025 A

EFFECTIVE DATE:
AUGUST 15, 1984

Federal Emergency Management Agency


ZONE A9
ZONE A9
ZONE B
ZONE B
ZONE B
ZONE B
ZONE B
ZONE C
ZONE C
Zone C
Zone A
COUNTY 118
IIM 4
ZONE C
CONRAIL

Reference 12
p. 108 of 227



100-year flood boundary

500-year flood boundary

Zone Designations*

100-year flood boundary

500-year flood boundary

Base flood elevation line and value; elevation in feet*

513

Base flood elevation in feet where uniform within zone; elevation in feet*

El. 987

Elevation determination mark

RM7x

Zone D boundary

River Mile

•MILE 5

*Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
AO	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

For adjoining map panels, see separately printed Index To Map Panels.

INITIAL IDENTIFICATION:
DECEMBER 6, 1974

FLOOD HAZARD BOUNDARY MAP REVISIONS:
NONE

FLOOD INSURANCE RATE MAP EFFECTIVE:
AUGUST 18, 1984

FLOOD INSURANCE RATE MAP REVISIONS:

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on this map to determine when actuarial rates apply to structures in the zones where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program, at (800) 638-6620.

APPROXIMATE SCALE

400 0 400 FEET

Reference 12
p. 109 of 227

REFERENCE A-12

RECEIVED
MAY 13 1991
NYS DEC
REGION ...

Reference
p. 110 of 227

SAMPLING AND ANALYSIS REPORT
CRICKET HILL ROAD AND WALTER VINCENT SITES
DOVER, NEW YORK

by

H&A of New York
Rochester, New York

for

Iroquois Gas Transmission System
Shelton, Connecticut

File No. 7585-26

May 1991

Reference 12
p. 111 of 227

SECTION 2
DOCUMENTS CITED

Reference 12
p. 112 of 227

DOCUMENTS CITED

B-1 DCDOH Correspondence and Memoranda
B-2 NYSDEC Inspection Reports and Memoranda
B-3 NYSDOH Water Samples Laboratory Analyses
B-4 Water Well Inventory
B-5 Summary of Minutes from Town of Dover Meetings
B-6 Telephone Interview Summary

Reference 12
p. 113 of 227

DOCUMENT B-1

Reference 12
p. 114 of 227

MICHAEL J. MORRIS
ENGINEERING CONSULTANT
25 WILDWOOD DRIVE
POUGHKEEPSIE, NEW YORK 12603
914-462-6925

August 13, 1970

Mr. David Ruff
Dutchess County Health Dept.
22 Market Street
Poughkeepsie, New York

Re: Dover Land Fill
Town of Dover

Dear Mr. Ruff,

Please be advised that Mr. Richard Carlson, a Licensed Land Surveyor, and myself have been retained by the Town of Dover to prepare plans for the above captioned project.

The tentative plans are to complete the field work on the project by early September and submit the final report to your department by late September.

I hope this tentative schedule will meet with your approval. If, for any reason, you feel that it should be altered in any way please feel free to contact me.

Very truly yours,

Michael J. Morris

Michael J. Morris, P.E.

MJM/jm
cc: Mr. Richard Carlson

Reference 12
p. 115 of 227

August 14, 1970

Dutchess County Department of Health
22 Market Street
Poughkeepsie, New York

Attention: Mr. Ruff

Re: In the Matter of the complaint against the Town of Dover

Dear Mr. Ruff:

The Town of Dover is presently in the process of seeking approval for a new land fill site on the lands of Vincent.

I am advised by the Town's engineer that the engineering work will be completed in the near future.

I tis respectfully requested that the above matter be adjourned for a reasonable time to allow the Town to complete its work on the site and have its application approved.

Very truly yours,

Lawrence R. Colligan

Lawrence Colligan

Reference 12
p. 116 of 227

DUTCHESS COUNTY HEALTH DEPARTMENT

MEMORANDUM

TO: File

FROM: D. T. Ruff

SUBJECT: Town of Dover Refuse-Disposal Site- Crickett Hill

DATE: August 7, 1974

On July 30, 1974 at approximately 9:45 A.M. I conducted an inspection at the above noted facility.

This area has been closed for a considerable period of time and the disposal of refuse is not permitted.

Along the entrance road in the area that was used for disposal of bulky waste, a problem still exists. There is a tremendously large area where bulky wastes had been deposited and still remains. The type of waste includes various type of metal products, mattresses, car parts and bodies, tires, wood and miscellaneous rubbish.

The main body of the site has not been properly completed or seeded. There is a tremendous amount of erosion which exists and which has uncovered refuse. There is still a slight bit of leachate entering the stream and undoubtedly will get worse because of the failure of the town to properly compact and seed the side slope areas. The large amounts of clay areas used on the side hill areas has also eroded into the stream.

I checked the stream where it crosses Cricket Hill Road and could not observe any problems associated with leachate at the disposal site.

dtr/lb

DC: ADM 7
HD-131

Reference 12
p. 117 of 227

DUTCHESS COUNTY HEALTH DEPARTMENT

MEMORANDUM

TO: File

FROM: David T. Ruff

SUBJECT: Town of Dover Refuse Disposal Site - Cricket Hill

DATE: December 27, 1974

Conference on December 26, 1974 with Charles G. Vincent, 832-6318 relative to the above. He oversees property for his mother whose telephone number is 832 - 6104.

I explained to Mr. Vincent that this Department still had a case pending in Supreme Court relative to the above.

Mr. Vincent is very disturbed that the Town has not properly completed the site. He has talked to Mr. Pelky, but without success.

Mr. Vincent also wishes that the Town removes the bulky waste or bury same. A scavenger had been in to remove some bulky wastes, but did not have Mr. Vincent's approval, therefore, was not permitted to remove wastes.

Mr. Vincent is willing to assist this Department in any way to obtain corrections.

dtr/lb

DC: ADM 7
HD-131

SUSSEX COUNTY DEPARTMENT OF HEALTH

RECORD MEMO

Date March 3, 1975
11 AM

To: D. Ruff + File
From: E.W. Adams
Subject: Cricket Hill Refuse Site - T. Dover

Site virtually unchanged from previous inspection during December, 1974
Found following items in violation:

1. Metal wastes along access road are still piled high + uncovered - with furniture + related wastes mixed in.
2. Rubber tires everywhere - near old Bldg (remnants thereof), perimeter of site - south + east portions
3. Erosion on all slopes, eroding to expose uncovered refuse.
4. Leachate bleeding from several areas - running into stream at lowest perimeter - stream bottom is red with leachate residue
5. A pile of scattered refuse remains uncovered in center of the site.
6. Large quantity of garbage + refuse is in the ditches either side of entrance gate on Cricket Hill Road.
7. No evidence of seeding as required

Reference 12
p. 119 of 227

DOCUMENT B-2

Reference 12
Copy 120 of 229 - Town
Board - 3/6/72

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
REFUSE DISPOSAL AREA INSPECTION REPORT

NAME OF SITE Dover - Cricket Hill Site LOCATION (T,V,C) Dover COUNTY Dutchess REGION NO. 3

OPERATOR T. Dover ADDRESS Cricket Hill Site SITE NO. 2

OWNER _____ ADDRESS _____

(Explain Yes Answers On Reverse Side)

1. Burning At Time Of Inspection---------- ☐ Yes ☒ No
2. Evidence Of On-site Burning---------- ☐ Yes ☒ No
3. Dumping Into Water---------- ☐ Yes ☒ No
4. Leachate Observed At The Site---------- ☐ Yes ☒ No
5. Leaching Into A Water Course---------- ☐ Yes ☒ No
6. Refuse Not Confined To A Manageable Area---------- ☒ Yes ☐ No
7. Unsatisfactory Daily Soil Cover---------- ☒ Yes ☐ No
8. Refuse Protruding Through Completed Areas---------- ☐ Yes ☒ No
9. Improper Spreading And Compaction Of The Refuse---------- ☒ Yes ☐ No
10. Pooling Of Water, Cover Soil Cracking, Soil Erosion, Or Improper Slope On Completed Area---------- ☐ Yes ☒ No
11. Evidence Of Rodents And Insects---------- ☐ Yes ☒ No
12. Blowing Paper Problem---------- ☐ Yes ☒ No
13. Salvaging Of Refuse Creating A Nuisance---------- ☐ Yes ☒ No
14. Approach Road Impassable To Vehicular Traffic During Part Of The Year---------- Very muddy ~~☐ Yes~~ ☒ No

Control Of Site: Signs ☐ Fence And Gate ☒ Supervision ☒

Equipment At Site: Type Rubber tired Size Loader

Type Of Refuse Disposed: all except scavenger

Person Interviewed none Inspected By [signature] (Signature)

Date 3/2/72 Title Asst Proj Dir

SW-1

Reference 12
D. 121 of 227

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
REFUSE DISPOSAL AREA INSPECTION REPORT

NAME OF SITE Dover - Cricket Hill LOCATION (T,V,C) Dover COUNTY Dutchess REGION NO.

OPERATOR T. Dover ADDRESS _____ SITE NO. ___

OWNER _____ ADDRESS _____

(Explain Yes Answers On Reverse Side)

1. Burning At Time Of Inspection---------- ☐ Yes ☒ No
2. Evidence Of On-site Burning---------- ☐ Yes ☒ No
3. Dumping Into Water---------- ☐ Yes ☒ No
4. Leachate Observed At The Site---------- ☐ Yes ☒ No
5. Leaching Into A Water Course---------- ☐ Yes ☒ No
6. Refuse Not Confined To A Manageable Area---------- ☐ Yes ☒ No
7. Unsatisfactory Daily Soil Cover---------- ☐ Yes ☒ No
8. Refuse Protruding Through Completed Areas---------- ☒ Yes ☐ No
9. Improper Spreading And Compaction Of The Refuse---------- ☒ Yes ☐ No
10. Pooling Of Water, Cover Soil Cracking, Soil Erosion, Or Improper Slope On Completed Area---------- ☐ Yes ☒ No
11. Evidence Of Rodents And Insects---------- ☐ Yes ☒ No
12. Blowing Paper Problem---------- ☐ Yes ☒ No
13. Salvaging Of Refuse Creating A Nuisance---------- ☐ Yes ☒ No
14. Approach Road Impassable To Vehicular Traffic During Part Of The Year---------- ☐ Yes ☒ No

Control Of Site: Signs ☐ Fence And Gate ☒ Supervision ☒

Equipment At Site: Type Rubber Tire Size Loader

Type Of Refuse Disposed: all except scavenger

erson Interviewed Gus Choades Inspected By Evadams
(Signature)

ate 2/18/72 Title Asst Proj Dir

W-1

Reference 16
P. 122 of 227

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

REFUSE DISPOSAL AND INSPECTION REPORT

4/10/72 @

NAME OF SITE	LOCATION Town, Village, City	COUNTY	REGION NO.
Dem - Bucket Hill	T. of Dem	Dutchess	3
OPERATOR: T. Dem	ADDRESS		SITE NO.
OWNER	ADDRESS		

EXPLAIN YES ANSWERS ON REVERSE SIDE

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

CONTROL OF SITE

☐ Signs ☒ Fence and Gate not effective ☐ Supervision ☐ None

EQUIPMENT AT SITE

Type: Bucket loader on rubber

Size: inadquate

TYPE OF REFUSE DISPOSED

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

PERSON INTERVIEWED	DATE	TIME
	4/6/72	1:30 PM
INSPECTED BY (Signature)	TITLE	
E. Williams	Asst Proj Dir	

SW-1 (12/71)

Reference 16
p. 123 of 227

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

REFUSE DISPOSAL AND INSPECTION REPORT

NAME OF SITE	LOCATION (Town, Village, City)	COUNTY	REC.
Ponen - [illegible] Hill	Dover	Dutchess	3
OPERATOR: T. Dover	ADDRESS		SITE NO.
OWNER	ADDRESS		

EXPLAIN YES ANSWERS ON REVERSE SIDE

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

CONTROL OF SITE

☐ Signs ☒ Fence and Gate ☐ Supervision ☐ None

EQUIPMENT AT SITE

Type: Rubber Tired Loader — (not here but in transit)

Size:

TYPE OF REFUSE DISPOSED

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

PERSON INTERVIEWED	DATE	TIME
None (are closed)	5/24/72	11:45 AM
INSPECTED BY (Signature): [illegible]	TITLE: Asst Proj Dir	

SW-1 (12/71)

Reference 12
P. 124 of 229
7/17/72
(2)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

REFUSE DISPOSAL AND INSPECTION REPORT

NAME OF SITE	LOCATION (Town, Village, City)	COUNTY	REGION
T. Doner - Tucker Hill Site - Doner		Dutchess	3
OPERATOR: T. Doner	ADDRESS		SITE NO.
OWNER	ADDRESS		

EXPLAIN YES ANSWERS ON REVERSE SIDE

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

CONTROL OF SITE

☐ Signs ☒ Fence and Gate ☒ Supervision ☐ None

EQUIPMENT AT SITE

Type: Rubber Tired Loader

Size: Medium

TYPE OF REFUSE DISPOSED

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

PERSON INTERVIEWED	DATE	TIME
	7/7/72	11:00 AM

INSPECTED BY (Signature)	TITLE
[signature]	Asst Proj Dir

SW-1 (12/71)

Reference 12
p. 125 of 227

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

REFUSE DISPOSAL AND INSPECTION REPORT

NAME OF SITE	LOCATION (Town, Village, City)	COUNTY	REGION NO.
DOVER [illegible]	DOVER	Dutchess	3
OPERATOR: M. Rhoades	ADDRESS		SITE NO.
OWNER	ADDRESS		

EXPLAIN YES ANSWERS ON REVERSE SIDE

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

CONTROL OF SITE

☐ Signs ☒ Fence and Gate ☒ Supervision ☐ None

EQUIPMENT AT SITE

Type: Rubber Tired Loader

Size:

TYPE OF REFUSE DISPOSED

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

PERSON INTERVIEWED	DATE	TIME
Mr Rhoades	8/24/72	3-3:30 Pm ~~3:45 Pm~~
INSPECTED BY (Signature)	TITLE	
[illegible]	Asst Proj Dir	

SW-1 (12/71)

Reference 12
P. 126 of 227

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

REFUSE DISPOSAL AND INSPECTION REPORT

NAME OF SITE	LOCATION (Town, Village, City)	COUNTY	REC. UNIT
Donn - Cricket Hill	Dover	Dutchess	3
OPERATOR: George Metcalf	ADDRESS		SITE NO.
OWNER	ADDRESS		

EXPLAIN YES ANSWERS ON REVERSE SIDE

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

CONTROL OF SITE

☐ Signs ☒ Fence and Gate ☒ Supervision ☐ None

EQUIPMENT AT SITE

Type: None at site (Broken down at Wingdale Site)

Size:

TYPE OF REFUSE DISPOSED

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

PERSON INTERVIEWED	DATE	TIME
Mr. Metcalf	4/26/73	12:30 PM
INSPECTED BY (Signature): Eva Davis	TITLE: Waste Mgt. Spec.	

SW-1 (12/71)

Reference 12
p. 127 of 327

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

REFUSE DISPOSAL AND INSPECTION REPORT

NAME OF SITE	LOCATION (Town, Village, City)	COUNTY	REGION
Dover Cricket Hill	DOVER	Dutchess	3
OPERATOR: George Metcalf	ADDRESS		SITE NO.
OWNER	ADDRESS		

EXPLAIN YES ANSWERS ON REVERSE SIDE

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

CONTROL OF SITE

☐ Signs ☒ Fence and Gate ☐ Supervision ☐ None

No Supervision at time of inspection

EQUIPMENT AT SITE

Type		
None on site		
Size		

TYPE OF REFUSE DISPOSED

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

PERSON INTERVIEWED	DATE	TIME
No one on site (site open)	5/17/73	11:30 AM
INSPECTED BY (Signature)	TITLE	
Eva Lamo & D.T. Ruff	Waste Mgt Spec & Assoc. Sanitar	

SW-1 (12/71)

Site Supposedly Closed to Reference 12 p. 128 of 227

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

REFUSE DISPOSAL AND INSPECTION REPORT

NAME OF SITE	LOCATION (Town, Village, City)	COUNTY	REGION NO.
Dover Cricket Hill	Dover	Dutchess	3

OPERATOR	ADDRESS	SITE NO.

OWNER	ADDRESS

EXPLAIN YES ANSWERS ON REVERSE SIDE

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

CONTROL OF SITE

☐ Signs ☒ Fence and Gate ☒ Supervision ☐ None

EQUIPMENT AT SITE

Type: None on site

Size:

TYPE OF REFUSE DISPOSED

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

PERSON INTERVIEWED	DATE	TIME
none (area closed)	7/11/23	3:30pm

INSPECTED BY (Signature)	TITLE
[signature]	Wastewater Spec

SW-1 (12/71)

Reference 12
p. 129 of 227

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

REFUSE DISPOSAL AND INSPECTION REPORT

NAME OF SITE	LOCATION (Town, ~~Village, City~~)	COUNTY	REC ON NO.
Town of Dover - Sanitary Fill	Dover	Dutchess	
OPERATOR	**ADDRESS**		**SITE NO.**
OWNER	**ADDRESS**		
E. Vincent			

EXPLAIN YES ANSWERS ON REVERSE SIDE

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

CONTROL OF SITE

☐ Signs ☒ Fence and Gate ☐ Supervision ☐ None

EQUIPMENT AT SITE

Type		
Size		

TYPE OF REFUSE DISPOSED

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

PERSON INTERVIEWED	DATE	TIME
Site Permanently Closed	8/22/73	1:45 P.M.
INSPECTED BY (Signature)	**TITLE**	
[signature]	Associate Sanitarian	

SW-1 (12/73)

Reference 16
p. 130 of 227

QUESTION NO.	EXPLANATION OF YES ANSWERS
4 = 5	Some [illegible] into a water Course
7, 8, 9	[illegible] Area not Covered or Compacted. Some Tires + Misc [illegible] Refuse not Covered. Completed Areas not Properly Covered and Compacted
10	Site not Properly Covered and Graded to Prevent Pooling of water and Erosion and Effect Proper Runoff of Surface water. Side Slope Areas Eroding.

REFUSE SITE SKETCH	LOCATION SKETCH

Reference 12
p. 131 of 227

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
REPORTED HAZARDOUS WASTE SITES

#4-4

Date [illegible]

D.E.C. Region 3

County Dutchess

Site Owner Walter Vincent (?)

Site Name, if any Town of Dover (Municipal)

Location Cricket Hill Rd.

T. Dover Plains

Site Description-(size, topography, residences, surface water, vegetation, land use, accessibility to people, etc.)

3-5 acres, flat topo, remote with good vegetative cover. No homes or wells within ½ miles. Stream (Clear) northeast of site.

Waste Description-(containers, physical character, odors, color, source, etc)

Town Municipal - operated 5 to 6 years - closed 1975 - dead sand cover material.

Pooled leachate in northwest corner.

Remarks-(names of others who may have knowledge of this site and any additional pertinent information)

Inspected 11/2/79

Source of information Dave Ruff Phone 485-9706

Address DCHD

Information Received By Bob Vruna Phone 485-9707

Title APHE

Is this site included in the list of 520 sites in the In-Place Toxics Task Force Report? Yes ☐ No ☒

[illegible] field inspection is made, the site should be described using the [illegible] Industrial Hazardous Waste Site [illegible]

Reference 12
p. 132 of 227

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
REPORTED HAZARDOUS WASTE SITES

#4-8

Date 11/13/79
D.E.C. Region 3
County Dutchess

Site Owner Walter Vincent
Site Name, if any
Location Vincent Farm - ¼ mile through gravel bank
T. Dover west of Dover Furnace Rd.

Site Description-(size, topography, residences, surface water, vegetation, land use, accessibility to people, etc.)
< 1 Acre, hilly and thickly vegetated, glue deposited subsequently sealed ground - pond developed atop glue, no wells within ¼ mile. Very remote. Pond/Wet area 200 yds. west of site.

Waste Description-(containers, physical character, odors, color, source, etc)
Liquid glue from tri-wall cardboard container co. - Amenia, N.Y. - deposited by Scavenger Vehicles. Conducted for a couple of years and stopped 1973-1974. No leachate evidenced.

Remarks-(names of others who may have knowledge of this site and any additional pertinent information)
Inspected 11/13/79

Source of information Dave Ruff Phone 485-9706
Address DCHD
Information Received By Bob Vrana Phone 485-9707
Title APHE

Is this site included in the list of 520 sites in the In-Place Toxics Task

Reference 12
P. 133 of 227

CAMO LABORATORIES

25 Albany Post Road, Hyde Park, N. Y. 12538 914/229-8337

SAMPLE IDENTIFICATION: PAGE 1 OF 2

A. 1008 - Cricket Hill F. - T. Dover
B. 1009 - Route 22 North - T. Dover
C. 1010 - Route 22 South - T. Dover
D. I.
E.

Comments:

CLIENT Mr. Robert J. Vrana
Assistant Public Health Eng.
Dutchess County Health Dept.
22 Market Street
Poughkeepsie, New York 12601

FACILITY Dover Plains Samples

DATE REC'D December 17, 1979
LABORATORY No: 79-12-6581
PURCHASE ORDER No:
METHOD of ANALYSIS: EPA
REPORT DATE: January 31, 1980
AUTH. SIGNATURE:
LAB. DIRECTOR:

	A	B	C	D	E	F	G	H	I
Chloride	10.0	27.5	12.5						
pH	6.3	4.0	6.7						
TOC	516	108	66						
Specific Conductance	2050	750	315 *µv/cm						
Oil/Grease	1.6	3.4	<0.1						
Phenol	<2	<2	3.8						
PCB (ppb) 1248	<0.091	<0.042	*						
1254	<0.036	<0.041	*						
1260	<0.039	<0.036	*						
Iron	1191	405	30.6						
Chrome	<0.05	<0.03	<0.03						

ANALYSIS COMMENTS *micromho's/per centimeter-(µv/cm)
*Multiple interferences, peaks prevented the avalution of PCB peaks on the chromotogram. There was insufficient sample volume to rerun.

Results in mg/L unless noted otherwise.

INVOICE TO: No

TERMS: NET
AMT. DUE:

Charge Of 1.5% Per Month Will Be Applied To Balances 30 Days Past

Reference 1 - P. 134 of 227

CAMO LABORATORIES

25 Albany Post Road, Hyde Park, N. Y. 12538 914/229-8337

SAMPLE IDENTIFICATION: PAGE 2 OF 2

A. 1008 - Cricket Hill Road - T. Dover
B. 1009 - Route 22 North G. - T. Dover
C. 1010 - Route 22 South H. - T. Dover
D. I.
E.

Comments:

CLIENT Mr. Robert J. Vrana
Assistant Public Health Engineer
Dutchess County Health Department
22 Market Street
FACILITY Poughkeepise, New York 12601

Dover Plains Samples

DATE REC'D December 17, 1979
LABORATORY No: 79-12-6581
PURCHASE ORDER No:
METHOD of ANALYSIS: EPA
REPORT DUE DATE: January 31, 1980
AUTH. SIGNATURE:
LAB. DIRECTOR:

	A	B	C	D	E	F	G	H	I
Chrome + 6	< 0.05	< 0.03	< 0.03						
Mercury (ppb)	< 1.0	< 1.0	< 1.0						
Lead	0.02	0.02	0.01						
Cadmium	0.01	< 0.01	< 0.01						

ANALYSIS COMMENTS Please Note - All (<) signs indicate the lowest detectable concentration due to the methodology or instrumentation.

INVOICE TO: No

TERMS: NET
AMT. DUE:

Reference 12
p. 135 of 227

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
REGION 3
21 SOUTH PUTT CORNERS ROAD
NEW PALTZ, NY 12561
914-255-5453

SPEED MEMO

TO: Bob Cinzagatti

DATE: 6/2/87

SUBJECT: Cricket Hill Road #3140
Sampling

FROM: Sharminder Singh

This site is an former municipal landfill whic operated from 1960 to 1969. Town of Dover supported 2 rubber plant and a furniture manufacturing plant during the years of operation. Industrial wastes from these may have been disposed of at the site.

Sampling plan for this site consists of 2 soil sampling locations in the alleged drum disposal area and two surfacewater/ sedime samples in the wetland areas.

Please advise on this sampling plan

Reference 12
p. 136 of 227

DOCUMENT B-3

Reference 12
P. 137 of 227

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID 53330 SAMPLE RECEIVED 85/09/12/ CHARGE 22
PROGRAM 710 INTENSIVE TOXICS SURVEYS
SOURCE ID DRAINAGE BASIN 16 GAZETTEER CODE 1303
POLITICAL SUBDIVISION DOVER COUNTY DUTCHESS
LATITUDE LONGITUDE Z DIRECTION
LOCATION MARSHLAND TO SWAMP RIVER NEAR DOVER FURNACE
DESCRIPTION NEAR DOVER LANDFILL #3 314030
REPORTING LAB: TOX LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN PPCF PRIORITY POLLUTANTS - PURGEABLE HALOCARBONS & AROM
SAMPLE TYPE 210 SURFACE WATER
TIME OF SAMPLING: 85/09/11 13:00 DATE PRINTED 85/10/

	PARAMETER	RESULT
T62009	CHLOROMETHANE	< 1. MCG/L
T61809	BROMOMETHANE	< 1. MCG/L
T41009	VINYL CHLORIDE	< 1. MCG/L
T70209	DICHLORODIFLUOROMETHANE	< 1. MCG/L
T61909	CHLOROETHANE	< 1. MCG/L
T61709	TRICHLOROFLUOROMETHANE	< 1. MCG/L
T23809	DICHLOROMETHANE	< 1. MCG/L
T50909	1,1-DICHLOROETHENE	< 1. MCG/L
T51909	1,1-DICHLOROETHANE	< 1. MCG/L
T61209	TRANS-1,2-DICHLOROETHENE	< 1. MCG/L
T39009	CHLOROFORM	< 1. MCG/L
T50809	1,2-DICHLOROETHANE	< 1. MCG/L
T23609	1,1,1-TRICHLOROETHANE	< 1. MCG/L
T36609	CARBON TETRACHLORIDE	< 1. MCG/L
T38909	BROMODICHLOROMETHANE	< 1. MCG/L
T61309	1,2-DICHLOROPROPANE	< 1. MCG/L
T61509	TRANS-1,3-DICHLOROPROPENE	< 1. MCG/L
T41109	TRICHLOROETHYLENE	< 1. MCG/L
T44909	DIBROMOCHLOROMETHANE	< 1. MCG/L
T61409	CIS-1,3-DICHLOROPROPENE	< 1. MCG/L
T51709	1,1,2-TRICHLOROETHANE	< 1. MCG/L
T61109	2-CHLOROETHYLVINYL ETHER	< 1. MCG/L
T42109	BROMOFORM	< 1. MCG/L
T51809	1,1,2,2-TETRACHLOROETHANE	< 1. MCG/L
T41209	TETRACHLOROETHENE	< 1. MCG/L
T40909	CHLOROBENZENE	< 1. MCG/L
T49709	1,3-DICHLOROBENZENE	< 1. MCG/L
T44109	1,2-DICHLOROBENZENE	< 1. MCG/L
T44209	1,4-DICHLOROBENZENE	< 1. MCG/L
T34409	BENZENE	< 1. MCG/L
T39209	TOLUENE	< 1. MCG/L
T51009	ETHYLBENZENE	< 1. MCG/L
T85209	1-CHLOROCYCLOHEXENE-1	< 1. MCG/L

**** CONTINUED ON NEXT PAGE ****

COPIES SENT TO: CO(2), RO(0), LPHE(0), FED(0), INFO-P(0), INFO-L(0)

FRANK ESTABROOKS
TOXIC SURVEILLANCE
N.Y.S. DEPT. OF ENVIRONMENTAL CONSERVATION
50 WOLF RD., ROOM 300
ALBANY, N.Y. 12233

SUBMITTED BY: GABRIEL

NEW STATE DEPARTMENT OF HEAL
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 2 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID 53330 SAMPLE RECEIVED 85/09/12/ CHARGE 22.00
POLITICAL SUBDIVISION DOVER COUNTY DUTCHESS
LOCATION MARSHLAND TO SWAMP RIVER NEAR DOVER FURNACE
TIME OF SAMPLING 85/09/11 13.00 DATE PRINTED 85 11

	PARAMETER	RESULT	
T70409	PARA-XYLENE	< 1.	MCG/L
T70309	META-XYLENE	< 1.	MCG/L
T51409	ORTHO-XYLENE	< 1.	MCG/L
T85309	CUMENE	< 1.	MCG/L
T85409	STYRENE	< 1.	MCG/L
T85509	P-BROMOFLUOROBENZENE	< 1.	MCG/L
T51109	N-PROPYLBENZENE	< 1.	MCG/L
T85609	TERT-BUTYLBENZENE	< 1.	MCG/L
T85709	O/P-CHLOROTOLUENE	< 1.	MCG/L
T51209	BROMOBENZENE	< 1.	MCG/L
T50509	META-CHLOROTOLUENE	< 1.	MCG/L
T85809	1,3,5-TRIMETHYLBENZENE	< 1.	MCG/L
T85909	1,2,4-TRIMETHYLBENZENE	< 1.	MCG/L
T86009	P-CYMENE	< 1.	MCG/L
T86109	CYCLOPROPYLBENZENE	< 1.	MCG/L
T86209	SEC-BUTYLBENZENE	< 1.	MCG/L
T86309	N-BUTYLBENZENE	< 1.	MCG/L
T86409	2,3-BENZOFURAN	< 1.	MCG/L
T52509	HEXACHLOROBUTADIENE (C-46)	< 5.	MCG/L
T44009	1,2,4-TRICHLOROBENZENE	< 5.	MCG/L
T65609	NAPHTHALENE	< 5.	MCG/L
T43909	1,2,3-TRICHLOROBENZENE	< 5.	MCG/L
T67109	PHENOL	< 10.	MCG/L
T66409	2-CHLOROPHENOL	< 10.	MCG/L
T66809	2-NITROPHENOL	< 10.	MCG/L
T66609	2,4-DIMETHYLPHENOL	< 10.	MCG/L
T66509	2,4-DICHLOROPHENOL	< 10.	MCG/L
T66309	4-CHLORO-3-METHYLPHENOL	< 10.	MCG/L
T67209	2,4,6-TRICHLOROPHENOL	< 10.	MCG/L
T49609	2,4,5-TRICHLOROPHENOL	< 10.	MCG/L
T66709	2,4-DINITROPHENOL	< 10.	MCG/L
T66909	4-NITROPHENOL	< 10.	MCG/L
T68509	2-METHYL-4,6-DINITROPHENOL	< 10.	MCG/L
T67009	PENTACHLOROPHENOL	< 10.	MCG/L
T68109	BIS(2-CHLOROISOPROPYL)ETHER		NA
T63909	BIS(2-CHLOROETHYL)ETHER	< 10.	MCG/L
T65909	N-NITROSODI-N-PROPYLAMINE	< 10.	MCG/L
T65309	HEXACHLOROETHANE	< 10.	MCG/L
T65709	NITROBENZENE	< 10.	MCG/L
T65509	ISOPHORONE	< 10.	MCG/L
T68609	BIS(2-CHLOROETHOXY)METHANE	< 10.	MCG/L
T49209	HEXACHLOROCYCLOPENTADIENE (C-56)	< 10.	MCG/L
T64109	2-CHLORONAPHTHALENE	< 10.	MCG/L
T64909	2,6-DINITROTOLUENE	< 10.	MCG/L
T63109	ACENAPHTHYLENE	< 10.	MCG/L
T64709	DIMETHYLPHTHALATE	< 10.	MCG/L
T63009	ACENAPHTHENE	< 10.	MCG/L
T64809	2,4-DINITROTOLUENE	< 10.	MCG/L

**** CONTINUED ON NEXT PAGE ****

Reference 12
p. 139 of 227

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 3 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID 53330 SAMPLE RECEIVED 85/09/12/ CHARGE 22
POLITICAL SUBDIVISION DOVER COUNTY: DUTCHESS
LOCATION MARSHLAND TO SWAMP RIVER NEAR DOVER FURNACE
TIME OF SAMPLING 85/09/11 13.00 DATE PRINTED 85 10

	PARAMETER	RESULT		
T64609	DIETHYLPHTHALATE	< 10.	MCG/L	
T65209	FLUORENE	< 10	MCG/L	
T68409	4-CHLOROPHENYL PHENYL ETHER			NA
T63009	N-NITROSODIPHENYLAMINE	< 10	MCG/L	
T65109	1,2-DIPHENYLHYDRAZINE	< 10.	MCG/L	
T68309	4-BROMOPHENYL PHENYL ETHER	< 10.	MCG/L	
T48809	HEXACHLOROBENZENE	< 10.	MCG/L	
T66109	PHENANTHRENE	< 10.	MCG/L	
T63209	ANTHRACENE	< 10.	MCG/L	
T64409	DI-N-BUTYLPHTHALATE	< 10.	MCG/L	
T63009	FLUORANTHENE	< 10.	MCG/L	
T66209	PYRENE	< 10.	MCG/L	
T63809	BENZIDINE	< 200.	MCG/L	
T64009	BUTYL BENZYL PHTHALATE	< 30.	MCG/L	
T63309	BENZO(A)ANTHRACENE	< 30.	MCG/L	
T64509	3,3'-DICHLOROBENZIDINE	< 30.	MCG/L	
T64209	CHRYSENE	< 30.	MCG/L	
T67909	BIS(2-ETHYLHEXYL)PHTHALATE	< 30.	MCG/L	
T65009	DI-N-OCTYL PHTHALATE	< 30.	MCG/L	
T63409	BENZO(B)FLUORANTHENE	< 30.	MCG/L	
T63509	BENZO(K)FLUORANTHENE	< 30.	MCG/L	
T63609	BENZO(A)PYRENE	< 30.	MCG/L	
T65409	INDENO(1,2,3-CD)PYRENE	< 30.	MCG/L	
T64309	DIBENZO(A,H)ANTHRACENE	< 30.	MCG/L	
T63709	BENZO(GHI)PERYLENE	< 30.	MCG/L	
T15709	HCH, ALPHA	< 10.	MCG/L	
T15809	HCH, BETA	< 10.	MCG/L	
T35609	HCH, GAMMA (LINDANE)	< 10.	MCG/L	
T16009	HCH, DELTA	< 10.	MCG/L	
T08009	HEPTACHLOR	< 10.	MCG/L	
T07709	ALDRIN	< 10.	MCG/L	
T08309	HEPTACHLOR EPOXIDE	< 10.	MCG/L	
T43309	ENDOSULFAN I	< 10.	MCG/L	
T14809	DDE -PARA, PARA	< 10.	MCG/L	
T08509	DIELDRIN	< 10.	MCG/L	
T08409	ENDRIN	< 10.	MCG/L	
T14909	DDD -PARA, PARA	< 10.	MCG/L	
T43409	ENDOSULFAN II	< 10.	MCG/L	
T67409	ENDRIN ALDEHYDE	< 10.	MCG/L	
T67309	ENDOSULFAN SULFATE	< 10.	MCG/L	
T14709	DDT -PARA, PARA	< 10.	MCG/L	

**** END OF REPORT ****

Reference 12
p. 140 of 227

STATE OF NEW YORK
DEPARTMENT OF HEALTH
Corning Tower The Governor Nelson A. Rockefeller Empire State Plaza Albany, New York 12237

OFFICE OF PUBLIC HEALTH

January 26, 1990

Mr. Howard Gonia
Dutchess County Dept. of Health
Environmental Health
22 Market Street
Poughkeepsie, NY 12601

RE: Private well water sampling
Fishkill Town Landfill, ID# 314033
Pawling Village LF, ID# 314036
Cricket Hill Road LF, ID# 314030
IBM B953 (Airport), ID# 314078

Dear Mr. Gonia:

As we discussed at our meeting on January 18, 1990 in Mr. Ruff's Office, Dutchess County Department of Health has agreed to sample private wells at the above-cited inactive hazardous waste sites. NY State Department of Health (DOH) has agreed to provide sampling bottles and laboratory services for approximately one-half of the wells to be sampled.

Dutchess County indicated that the Dutchess County Airport, at which the IBM Building No. B953 is located, has been regularly sampled. Dutchess County has provided DOH with a copy of past sample results and indicated that another round of sampling will be done in early 1990. Thank you for the copies of the data and for the sampling to be done.

You and I visited the other three sites and developed a sampling plan for the private wells located near the site. The Fishkill Town Landfill, No. 314033, will require approximately 8-10 samples. The Pawling Village Landfill, No. 314036, appears to require approximately 2-4 samples, and the Cricket Hill Landfill should require approximately 2 samples.

DOH will forward to Dutchess County enough sampling materials for 10 samples, which should provide approximately one-half of the required samples, as indicated in our phone conversation of January 23.

The samples should be analyzed for the following compounds:

Keith FYI
2/5

- Purgeable halocarbons (502.1), (2) 40-ml vials, screw cap, teflon liner, with thiosulfate.
- Ketones (2) 40-ml vials, screw cap, teflon liner, with thiosulfate.
- Purgeable aromatics (503.1), (2) 40-ml vials, screw cap, teflon liner, with thiosulfate, 5 drops of 1:1 hydrochloric acid added in field.

- HSL Metals (1) 500-ml plastic container, nitric acid preserved (specify under trace metals).

Please indicate all the above test patterns on the "request for analysis" form.

General Instructions

Samples are to be submitted under Program Code 110, Hazardous waste site investigation. The "location" space should include the hazardous waste site name and number, and the "Exact description" should be the house, location, tap, etc. The "Report results" should include two copies to the Central Office (CO).

Field blanks should be included for QA/QC. A minimum of 1 blank should be included for each sampling event. For a large sampling event (10 or 12 homes) 2 or 3 blanks should be included.

Instructions for filling, packing, and shipping sample containers.

Filling- (all containers should be labelled).
Vials - Fill with no air bubbles.
Others - Fill completely with no head space.

Packing - Vials should be wrapped and carefully placed on top of plastic containers. Vials should not come in direct contact with ice.

Shipping - All samples should be delivered or shipped to the following address:

NYS Department of Health
Wadsworth Center for Laboratories and Research
Empire State Plaza - Room D519
Albany, NY 12201
ATTN: Dr. Richards

Please arrange shipping so that samples do not arrive on Friday afternoons. Please contact me at 518-458-6310 if you have any questions.

The assistance of your department in sample collection and analysis is greatly appreciated.

Sincerely,

Donald W.R. Miles
Program Research Specialist II
Bureau of Environmental Exposure

lk/00230521

cc: Mr. Tramontano
Mr. Bates
Mr. Smith
Mr. Pergadia/Mr. Greybar
Mr. Slack
Mr. Barcomb
Mr. Ruff/ Mr. Capowski

DUTCHESS COUNTY DEPARTMENT OF HEALTH
MEMORANDUM

Reference 12
p. 143 of 227

TO: Thomas V. Danahy, Hydrogeologist

FROM: W.S. Capowski, Radiological Specialist

SUBJECT: Artis Johnson Residence, Water Quality Results, Town of Dover

DATE: August 30, 1990

Enclosed is the information requested. Chemical tests taken August 10, 1990 have not been received. We will send you those results when available.

cc: file

Reference 16
p. 144 of 227

0496 NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION INTERIM REPORT

SAMPLE ID: 900703 SAMPLE RECEIVED: 90/03/08/ CHARGE: 15.00
PROGRAM: 110: STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN: GAZETTEER CODE: 1353
POLITICAL SUBDIVISION: DOVER COUNTY: DUTCHESS
LATITUDE: LONGITUDE: Z DIRECTION:
LOCATION: DOVER INACTIVE HAZARDOUS WASTE SITE
DESCRIPTION: ARTIS JOHNSON CRICKETT HILL ROAD DOVER
REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: VOL3-KET: PURGEABLES & KETONES
SAMPLE TYPE: 115: WELL SAMPLE
TIME OF SAMPLING: 90/03/07 10: LAST ACTION DATE: 90/03/15

*** THIS IS A PARTIAL REPORT, AND DATA IS ***
*** SUBJECT TO FINAL REVIEW AND REVISION. ***

ANALYSIS: VH05021 VOLATILE HALOGENATED ORGANICS (DES 310-29)
DATE PRINTED: 90/03/16 FINISHED

PARAMETER	RESULT
CHLOROMETHANE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	5. MCG/L [SU]
1,1-DICHLOROETHENE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	1. MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
2,3-DICHLOROPROPENE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
TRICHLOROETHENE	< 0.5 MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,2-DIBROMOETHANE (EDB)	< 0.5 MCG/L
2-CHLOROETHYLVINYL ETHER	< 0.5 MCG/L

**** CONTINUED ON NEXT PAGE ****

RECEIVED
MAR 21 1990
DUTCHESS CO. HEALTH DEPT.
22 MARKET ST. POUGHKEEPSIE

COPIES SENT TO: CO(2), RO(0), LPHE(1), FED( ), INFO-P( ), INFO-L( )

DIRECTOR OF ENVIRONMENTAL SANITATION
DUTCHESS COUNTY HEALTH DEPT.
22 MARKET ST.
POUGHKEEPSIE, N.Y. 12601

SUBMITTED BY: HA GONIA

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

Reference 1c
P. 145 of 227

PAGE 2 RESULTS OF EXAMINATION INTERIM REPORT

SAMPLE ID: 900703 SAMPLE RECEIVED: 90/03/08/ CHARGE: 15.00
POLITICAL SUBDIVISION: DOVER COUNTY: DUTCHESS
LOCATION: DOVER INACTIVE HAZARDOUS WASTE SITE
TIME OF SAMPLING: 90/03/07 10: LAST ACTION DATE: 90/03/15

*** THIS IS A PARTIAL REPORT, AND DATA IS ***
*** SUBJECT TO FINAL REVIEW AND REVISION. ***

PARAMETER	RESULT
BROMOFORM	< 0.5 MCG/L
1,1,1,2-TETRACHLOROETHANE	< 0.5 MCG/L
1,2,3-TRICHLOROPROPANE	< 0.5 MCG/L
1,1,2,2-TETRACHLOROETHANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
PENTACHLOROETHANE	< 0.5 MCG/L
1-CHLOROCYCLOHEXENE-1	< 0.5 MCG/L
CHLOROBENZENE	< 0.5 MCG/L
BIS(2-CHLOROETHYL)ETHER	< 0.5 MCG/L
1,2-DIBROMO-3-CHLOROPROPANE	< 0.5 MCG/L
BROMOBENZENE	< 0.5 MCG/L
O-CHLOROTOLUENE	< 0.5 MCG/L
BIS(2-CHLOROISOPROPYL)ETHER	< 0.5 MCG/L
1,3-DICHLOROBENZENE	< 0.5 MCG/L
1,2-DICHLOROBENZENE	< 0.5 MCG/L
1,4-DICHLOROBENZENE	< 0.5 MCG/L

ANALYSIS: 5031 AROMATIC PURGEABLES, EPA METHOD 503.1 (DES 310-22)
DATE PRINTED: 90/03/16 FINISHED

PARAMETER	RESULT
BENZENE	< 0.5 MCG/L
TOLUENE	< 0.5 MCG/L
ETHYLBENZENE	< 0.5 MCG/L
P-XYLENE	< 0.5 MCG/L
M-XYLENE	< 0.5 MCG/L
O-XYLENE	< 0.5 MCG/L
CUMENE	< 0.5 MCG/L
STYRENE	< 0.5 MCG/L
P-BROMOFLUOROBENZENE	< 0.5 MCG/L
N-PROPYLBENZENE	< 0.5 MCG/L
TERT-BUTYLBENZENE	< 0.5 MCG/L
P-CHLOROTOLUENE	< 0.5 MCG/L
M-CHLOROTOLUENE	< 0.5 MCG/L
1,3,5-TRIMETHYLBENZENE	< 0.5 MCG/L
1,2,4-TRIMETHYLBENZENE	< 0.5 MCG/L
P-CYMENE	< 0.5 MCG/L
CYCLOPROPYLBENZENE	< 0.5 MCG/L
SEC-BUTYLBENZENE	< 0.5 MCG/L
N-BUTYLBENZENE	< 0.5 MCG/L
2,3-BENZOFURAN	< 0.5 MCG/L
HEXACHLOROBUTADIENE (C-46)	< 0.5 MCG/L
1,2,4-TRICHLOROBENZENE	< 0.5 MCG/L
NAPHTHALENE	< 0.5 MCG/L
1,2,3-TRICHLOROBENZENE	< 0.5 MCG/L

RECEIVED
MAR 21 1990
DUTCHESS CO. HEALTH DEPT.
MARKET ST. POUGHKEEPSIE

**** CONTINUED ON NEXT PAGE ****

0498 NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

Reference 1 - p. 146 of 227

PAGE 3 RESULTS OF EXAMINATION INTERIM REPORT

SAMPLE ID: 900703 SAMPLE RECEIVED: 90/03/08/ CHARGE: 15.00
POLITICAL SUBDIVISION: DOVER COUNTY: DUTCHESS
LOCATION: DOVER INACTIVE HAZARDOUS WASTE SITE
TIME OF SAMPLING: 90/03/07 10: LAST ACTION DATE: 90/03/15

*** THIS IS A PARTIAL REPORT, AND DATA IS ***
*** SUBJECT TO FINAL REVIEW AND REVISION. ***

PARAMETER	RESULT
pH of Aromatic Aliquot	2

ANALYSIS: KET KETONES - PURGE & TRAP TECHNIQUE (DES 310-25)
DATA INCOMPLETE INTERIM REPORT
**** END OF REPORT ****

RECEIVED
MAR 21 1990
DUTCHESS CO. HEALTH DEPT.
22 MARKET ST. POUGHKEEPSIE

Reference 12
p. 147 of 222

CAMO LABORATORIES INC.
367 VIOLET AVENUE
POUGHKEEPSIE, NEW YORK 12601
(914) 473-9200
FED. I.D. #14-1725654
NYS LAB ID NO.: 10310

FEB 22 1990
DUTCHESS CO. HEALTH DE
22 MARKET ST. POUGHKEE

Dutchess County Health Department
22 Market Street
Poughkeepsie, New York 12601

Attn: Mr. David Ruff

Location: Johnson

Date of Invoice: 02/20/90
P.O. #:
Typed by: jb
Invoice #: 90-02-0528

Analytical Report

Date Samples Collected: 02/02/90
Date Samples Received: 02/02/90
Samples Collected By: Client
Samples Delivered By: Client
Matrix: Water

Sample Identification

(01) Kitchen Tap

Parameters	Unit/ Measure	(01)
Heavy Metals	mg/L	*
Method 502.1	ug/L	*
Method 503.1	ug/L	*

Analysis Comments: * See Attached Tables.

Method 502.1 subcontracted to NYS Lab 10252.

Comments: All samples will be discarded after twenty-one (21) days or EPA Holding time, whichever is shorter, unless we are notified otherwise.

Hazardous waste samples will be returned to client.

Analytical Methods: All analytical methods comply with those specified in APHA "Standard Methods" and/or EPA approved methods.

Reference 12
p. 148 of 227

CAMO LOG NO.: 90-02-0528

FEB 22 1990

DUTCHESS CO. HEALTH DEPT
22 MARKET ST. POUGHKEEPSIE

HEAVY METALS ANALYSIS

PARAMETERS	SAMPLE IDENTIFICATION (01) Kitchen Tap
Arsenic	<0.005
Barium	<0.1
Cadmium	<0.002
Chromium	<0.03
Lead	<0.005
Mercury	<0.0002
Selenium	<0.005
Silver	<0.01

NOTE: All results expressed in mg/L unless otherwise noted.

Reference 12
p. 149 of 227

RECEIVED
FEB 22 1990
DUTCHESS CO. HEALTH DEPT.
22 MARKET ST. POUGHKEEPSIE

CAMO LOG NO.: 90-02-0528

VOLATILES

DRINKING WATER
METHOD 502.1

PARAMETERS	SAMPLE ID (01) Kitchen Tap
Bromochloromethane	<0.5
Bromomethane	<0.5
Carbon Tetrachloride	<0.5
Chloroethane	<0.5
Chloromethane	<0.5
Dibromomethane	<0.5
Dichlorodifluoromethane	<0.5
1,1-Dichloroethane	<0.5
1,2-Dichloroethane	<0.5
1,1-Dichloroethylene	<0.5
cis-1,2-Dichloroethene	<0.5
trans-1,2-Dichloroethene	<0.5
1,2-Dichloropropane	<0.5
1,3-Dichloropropane	<0.5

NOTE: All results expressed in ug/L unless noted otherwise.

Reference 12
p. 150 of 227

RECEIVED
FEB 22 1990
DUTCHESS CO. HEALTH DEPT
22 MARKET ST. POUGHKEEPSIE

CAMO LOG NO.: 90-02-0528

VOLATILES

DRINKING WATER
METHOD 502.1

PARAMETERS	SAMPLE ID (01) Kitchen Tap
2,2-Dichloropropane	<0.5
1,1-Dichloropropene	<0.5
cis-1,3-Dichloropropene	<0.5
trans-1,3-Dichloropropene	<0.5
Methylene Chloride	<0.5
1,1,1,2-Tetrachloroethane	<0.5
1,1,2,2-Tetrachloroethane	<0.5
Tetrachloroethene	<0.5
1,1,1-Trichloroethane	<0.5
1,1,2-Trichloroethane	<0.5
Trichloroethene	<0.5
Trichlorofluoromethane	4
1,2,3-Trichloropropane	<0.5
Vinyl Chloride	<0.5

NOTE: All results expressed in ug/L unless noted otherwise.

Reference 12
p. 151 of 227

CAMO LOG NO.: 90-02-0528

FEB 22

DUTCHESS CO.
22 MARKET ST.

VOLATILES

DRINKING WATER
METHOD 503.1

PARAMETERS	SAMPLE ID (01) Kitchen Tap
Benzene	<0.5
Bromobenzene *	<0.5
n-Butylbenzene *	<0.5
sec-Butylbenzene	<0.5
tert-Butylbenzene	<0.5
Chlorobenzene *	<0.5
2-Chlorotoluene	<0.5
4-Chlorotoluene	<0.5
1,2-Dichlorobenzene	<0.5
1,3-Dichlorobenzene	<0.5
1,4-Dichlorobenzene	<0.5
Ethylbenzene	<0.5
Hexachlorobutadiene	<0.5
Isopropylbenzene	<0.5

NOTE: All results expressed in ug/L unless noted otherwise.

* Coelution Compounds

Reference 12
p. 152 of 227

FEB 22 1990
DUTCHESS CO. HEALTH DEPT
22 MARKET ST. POUGHKEEPSIE

CAMO LOG NO.: 90-02-0528

VOLATILES

DRINKING WATER
METHOD 503.1

PARAMETERS	SAMPLE ID (01) Kitchen Tap
p-Isopropyltoluene * (p-Cymene)	<0.5
n-Propylbenzene	<0.5
Styrene	<0.5
Toluene	<0.5
1,2,3-Trichlorobenzene	<0.5
1,2,4-Trichlorobenzene	<0.5
1,2,4-Trimethylbenzene *	<0.5
1,3,5-Trimethylbenzene	<0.5
m-Xylene *	<0.5
o-Xylene	<0.5
p-Xylene *	<0.5

NOTE: All results expressed in ug/L unless noted otherwise.

* Coelution Compounds

Reference 12
p. 153 of 227

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 1 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: R00703 SAMPLE RECEIVED: 90/03/08/ CHARGE: 19.00
PROGRAM: 110 STATE SUPERFUND ANALYTICAL SERVICES
SOURCE ID: DRAINAGE BASIN: GAZETTEER CODE: 1353
POLITICAL SUBDIVISION: DOVER COUNTY: DUTCHESS
LATITUDE: LONGITUDE: ? DIRECTION:
LOCATION: DOVER INACTIVE HAZARDOUS WASTE SITE
DESCRIPTION: ARTIS JOHNSON CRICKETT HILL ROAD DOVER
REPORTING LAB: TOX: LAB FOR ORGANIC ANALYTICAL CHEMISTRY
TEST PATTERN: VOL3-KET: PURGEABLES & KETONES
SAMPLE TYPE: 115: WELL SAMPLE
TIME OF SAMPLING: 90/03/07 10: DATE PRINTED: 90/03/20

ANALYSIS: VH05021 VOLATILE HALOGENATED ORGANICS (DES 310-29)
DATE REPORTED: 90/03/16 REPORT MAILED OUT

PARAMETER	RESULT
CHLOROMETHANE	< 0.5 MCG/L
BROMOMETHANE	< 0.5 MCG/L
VINYL CHLORIDE	< 0.5 MCG/L
DICHLORODIFLUOROMETHANE (FREON-12)	< 0.5 MCG/L
CHLOROETHANE	< 0.5 MCG/L
METHYLENE CHLORIDE (DICHLOROMETHANE)	< 0.5 MCG/L
TRICHLOROFLUOROMETHANE (FREON-11)	5. MCG/L [SU]
1,1-DICHLOROETHENE	< 0.5 MCG/L
1,1-DICHLOROETHANE	< 0.5 MCG/L
TRANS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CIS-1,2-DICHLOROETHENE	< 0.5 MCG/L
CHLOROFORM	1. MCG/L
1,2-DICHLOROETHANE	< 0.5 MCG/L
DIBROMOMETHANE	< 0.5 MCG/L
1,1,1-TRICHLOROETHANE	< 0.5 MCG/L
CARBON TETRACHLORIDE	< 0.5 MCG/L
BROMODICHLOROMETHANE	< 0.5 MCG/L
2,3-DICHLOROPROPENE	< 0.5 MCG/L
1,2-DICHLOROPROPANE	< 0.5 MCG/L
CIS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
TRICHLOROETHENE	< 0.5 MCG/L
1,3-DICHLOROPROPANE	< 0.5 MCG/L
DIBROMOCHLOROMETHANE	< 0.5 MCG/L
TRANS-1,3-DICHLOROPROPENE	< 0.5 MCG/L
1,1,2-TRICHLOROETHANE	< 0.5 MCG/L
1,2-DIBROMOETHANE (EDB)	< 0.5 MCG/L
2-CHLOROETHYLVINYL ETHER	< 0.5 MCG/L
BROMOFORM	< 0.5 MCG/L
1,1,1,2-TETRACHLOROETHANE	< 0.5 MCG/L
1,2,3-TRICHLOROPROPANE	< 0.5 MCG/L

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DUTCHESS CO. HEALTH DEPT
22 MARKET ST. POUGHKEEPSIE

**** CONTINUED ON NEXT PAGE ****

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DIRECTOR OF ENVIRONMENTAL SANITATION
DUTCHESS COUNTY HEALTH DEPT.
22 MARKET ST.
POUGHKEEPSIE, N.Y. 12601

SUBMITTED BY: HAGONIA

SAMPLE ID: 900703 SAMPLE RECEIVED: 90/03/08/ CHARGE: 19.00
POLITICAL SUBDIVISION: DOVER COUNTY: DUTCHESS
LOCATION: DOVER INACTIVE HAZARDOUS WASTE SITE
TIME OF SAMPLING: 90/03/07 10: DATE PRINTED: 90/03/20

PARAMETER	RESULT
1,1,2,2-TETRACHLOROETHANE	< 0.5 MCG/L
TETRACHLOROETHENE	< 0.5 MCG/L
PENTACHLOROETHANE	< 0.5 MCG/L
1-CHLOROCYCLOHEXENE-1	< 0.5 MCG/L
CHLOROBENZENE	< 0.5 MCG/L
BIS(2-CHLOROETHYL)ETHER	< 0.5 MCG/L
1,2-DIBROMO-3-CHLOROPROPANE	< 0.5 MCG/L
BROMOBENZENE	< 0.5 MCG/L
O-CHLOROTOLUENE	< 0.5 MCG/L
BIS(2-CHLOROISOPROPYL)ETHER	< 0.5 MCG/L
1,3-DICHLOROBENZENE	< 0.5 MCG/L
1,2-DICHLOROBENZENE	< 0.5 MCG/L
1,4-DICHLOROBENZENE	< 0.5 MCG/L

ANALYSIS: 5031 AROMATIC PURGEABLES, EPA METHOD 503.1 (DES 310-22)
DATE REPORTED: 90/03/16 REPORT MAILED OUT

PARAMETER	RESULT
BENZENE	< 0.5 MCG/L
TOLUENE	< 0.5 MCG/L
ETHYLBENZENE	< 0.5 MCG/L
P-XYLENE	< 0.5 MCG/L
M-XYLENE	< 0.5 MCG/L
O-XYLENE	< 0.5 MCG/L
CUMENE	< 0.5 MCG/L
STYRENE	< 0.5 MCG/L
P-BROMOFLUOROBENZENE	< 0.5 MCG/L
N-PROPYLBENZENE	< 0.5 MCG/L
TERT-BUTYLBENZENE	< 0.5 MCG/L
P-CHLOROTOLUENE	< 0.5 MCG/L
M-CHLOROTOLUENE	< 0.5 MCG/L
1,3,5-TRIMETHYLBENZENE	< 0.5 MCG/L
1,2,4-TRIMETHYLBENZENE	< 0.5 MCG/L
P-CYMENE	< 0.5 MCG/L
CYCLOPROPYLBENZENE	< 0.5 MCG/L
SEC-BUTYLBENZENE	< 0.5 MCG/L
N-BUTYLBENZENE	< 0.5 MCG/L
2,3-BENZOFURAN	< 0.5 MCG/L
HEXACHLOROBUTADIENE (C-46)	< 0.5 MCG/L
1,2,4-TRICHLOROBENZENE	< 0.5 MCG/L
NAPHTHALENE	< 0.5 MCG/L
1,2,3-TRICHLOROBENZENE	< 0.5 MCG/L
pH of Aromatic Aliquot	2

**** CONTINUED ON NEXT PAGE ****

1433 NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER FOR LABORATORIES AND RESEARCH

PAGE 3 RESULTS OF EXAMINATION FINAL REPORT

SAMPLE ID: 900703 SAMPLE RECEIVED: 90/03/08/ CHARGE: 19.00
POLITICAL SUBDIVISION: DOVER COUNTY: DUTCHESS
LOCATION: DOVER INACTIVE HAZARDOUS WASTE SITE
TIME OF SAMPLING 90/03/07 10: DATE PRINTED: 90/03/20

ANALYSIS: KET KETONES - PURGE & TRAP TECHNIQUE (DES 310-25)
DATE PRINTED: 90/03/20 FINAL REPORT

PARAMETER	RESULT
2-BUTANONE (METHYL ETHYL KETONE)	< 10. MCG/L
4-METHYL-2-PENTANONE (MIBK)	< 10. MCG/L
ACETONE	< 10. MCG/L
METHYL TERT BUTYL ETHER	< 10. MCG/L

**** END OF REPORT ****

Reference 12
p. 156 of 227

DUTCHESS COUNTY DEPARTMENT OF HEALTH
ENVIRONMENTAL HEALTH LABORATORY
22 MARKET STREET
POUGHKEEPSIE, NEW YORK 12601

LAB NO. 5361

FORWARD REPORT TO: (PLEASE PRINT)
NAME Cazinski
STREET ADDRESS
CITY STATE ZIP

TYPE OF FACILITY:
- [x] PUBLIC WATER SUPPLY
- [ ] PRIVATE RESIDENCE
- [ ] WASTEWATER TREATMENT FACILITY
- [ ] BEACH
- [ ] OTHER:

FACILITY NAME: Johnson TOWN: Dover PHONE #

SAMPLING POINT: Bathroom TAP
- [ ] MONITORING SAMPL
- [ ] CHECK SAMPLE

SOURCE: [x] DRINKING WATER; [ ] SURFACE WATER; [ ] WASTE WATER; [ ] OTHER:

TREATMENT: [ ] CHLORINATED (PPM [ ] FREE [ ] COMBINED [ ] TOTAL); [ ] OTHER: Sorting

COLLECTED BY: Gond TITLE: SPTS
- [x] DCHD PERSONNEL
- [ ] NON-DCHD PERSONNE

DATE SAMPLED	TIME	ICED	RECEIVED	TIME	ICED	EXAMINED	REPORTED	TECH
8/10/90	1 AM	[ ] YES [ ] NO	8/11/90	3 AM PM	[ ] YES [ ] NO	8/11/90 AM PM	8/11/90	~

- [x] MFT [ ] MPN TOTAL COLIFORM COUNT 4 PER 100 M
- [ ] MFT [ ] MPN FECAL COLIFORM COUNT PER 100 M
- [ ] MFT [ ] MPN FECAL STREP. COUNT PER 100 M
- [ ] STANDARD PLATE COUNT PER 1 ML
- [ ] MISC.

THESE RESULTS INDICATE THAT THE WATER SAMPLE [x] DID [ ] DID NOT

MEET SATISFACTORY SANITARY QUALITY FOR [x] DRINKING [ ] SWIMMING [ ] WASTEWATER EFFLUENT

WHEN THE SAMPLE WAS COLLECTED. FOR INFORMATION CONCERNING UNSATISFACTORY SAMPLES PLEASE CALL THE HEALTH DEPARTMENT AT

CLAS LAB NO. 00159

BACTERIOLOGICAL EXAMINATION OF WATER CUSTOMER'S COPY

LAB DIRECTOR

Reference 12
p. 157 of 227

DOCUMENT B-4

Crickett Hill - 314C30

Quadrangle: _____ Well No: _____
Latitude: _____ Date: 8/13/90
Longitude: _____ Survey by: Tom DANAHY

Owner: Artis Johnson
Resident: _____
Address: Crickett Hill Road
Phone # (914) 832-3141

Municipal
Industrial
Commercial
Institution
Other: _____

Domestic
Trailer Park
Apartments

Date Drilled: _____
Driller: _____

	Elevation	Depth
Ground		
Water		
Bedrock		
Bottom		

Casing Diameter: _____
Casing Length: _____

Well Yield: _____ Duration _____
Flowing?: _____
Fluctuations?: No problems with quantity.

Aquifer: Bedrock Overburden Both
Units: _____

Pumping Test
Specific Capacity: _____
Duration: _____
Date: _____

Comments: Castle [redacted] Inc. Calif

Water Quality: Hard Water
High Turbidity
Red/Brown
~~[illegible]~~

Log Available? _____

Dutchess Co. Dept. ~ High Freon → Howard Gonia last Fri. 431-2416

Purchased House 1969 - existing well; no problems
Mark Banta 462-[redacted] 1986 - Fire 1988 - installed submersible; previous Rust-Brown
Fred Stafford Approx 100-125' Occassionally high turbidity
Chlorine/Chlorides 1989 in Sept/Oct Rust-Brown Aug 90

Reference 12
p. 159 of 227

Quadrangle: _____ Well No: _____
Latitude: _____ Date: _____
Longitude: _____ Survey by: _____

Owner: Mr. John Foley
President: _____
Address: RR 2 Box 63 Crickett Hill Rd.
Phone #(914) 832-9047

Municipal
Industrial
Commercial
Institution
Other: _____

Domestic
Trailer Park
Apartments

Date Drilled: _____
Driller: _____

	Elevation	Depth
Ground		
Water		
Bedrock		
Bottom		

Casing Diameter: _____
Casing Length: _____

Well Yield: _____ Duration _____
Flowing?: _____
Fluctuations?: _____

Aquifer: Bedrock Overburden Both
Units: _____

Pumping Test
Specific Capacity: _____
Duration: _____
Date: _____

Comments: _____

Water Quality: _____

Log Available? _____

Fecal Coliform ~ replaced septic - no problem.
Moved in 1985
Mid-summer - get low yield; never ran dry.

Reference 12
p. 160 of 227

DOCUMENT B-5

SUMMARY OF MINUTES FROM TOWN MEETINGS

(Transcribed from Town of Dover Minutes
by D. Rollins, 7/19/90, Dover Town Hall)

NOTES

2/1/68 Residents present considering landfill, with names etc.

3/7/68 Walter Vincent spoke regarding piece of land he would lease to Town for landfill.

3/14/68 Attorney Whalen authorized to draw up "Ordinance for Town Dump" for next meeting.

10/24/68 Ken Vincent's (father of C. Gerald Vincent) property under consideration by Town Board ($1,000/yr. for 5 years). Dutchess County Health Commission has been requested to come and inspect location.

11/4/68 Three landfill sites up for consideration - Cricket Hill, Chippewalla and Wingdale Dump. Several persons in opposition to site at Cricket Hill.

11/13/68 Councilmen voted in favor of Cricket Hill as Town's own landfill:
- Property of K. Vincent considered centrally located.
- Rent 1K/yr. for 5 yrs.
- Road would be 1200' from 22 or Cricket Hill Rd. (Route 26).
- Health Dept. would send findings and maps to Town Board.
- Authority to advertise for 4 wheel drive landfill loader.

12/2/68 Landfill subject of much discussion.
Main Objectives:
1. Cost of new road
2. Cost of new machine (20k)
3. Too close to school (Jr. High)

Petition signed by 230 residents.
Letter of objection from school board.

12/30/68 School retracted objection.

1/2/69 Letter from Board of Health received by Super. Colligan permitting Dover Dump to be opened for one month or more.

1/2/69	Motion by Brown, seconded by Colligan, that Dover Dump (not Cricket Hill) be re-opened until further notice. Notice in Harlem Valley Times, Thursday, Friday, Saturday 9-5 Re: Landfill loader.
1/20/69	Bids opened regarding loader.
3/5/69	Cricket Hill not ready yet - still using Wingdale (Mrs. Leo Mostachetti) and Dover Dump (Mr. Fred Lee).
4/7/69	Resident requested info. on when Cricket Hill would be opened. Granted extension on present dump for no burning for another month. A rep. from County Health (Mr. Scorlick) wanted to know when new dump would be ready.
6/2/69	Question of "Dump Ordinance" reviewed and Town attorney, Mr. Frink, consulted. Continue having dump (Dover) patrolled.
7/7/69	Fred Brown = "when will new dump be ready?" Supt. Green asked when he plans to start road to new dump - said +/- 2 weeks. K. Vincent had part of his deed read pertaining to "Dump site", it must be landfill, therefore bucket loader needed.
8/7/69	Opened bids for landfill machine. Deferred due to Supervisor Colligan's absence due to back injury.
9/10/69	Motion to purchase Michigan Loader if Town attorney OK's specs. on steering, seconded ($22,900).
10/6/69	Mr. Litomy questioned...date of opening of new dump.
11/3/69	Motion that Green offer re-bid on machine for landfill - 3 "ayes", 1 "no".
11/17/69	Meeting to open bids on landfill machinery. Company reps. accepted bid from Ralph C. Herman $23,774 - per Perkins Aid.
12/1/69	Motion, seconded, that town buy landfill machine from R. Herman Co., Marlboro, New York - 3 "ayes".
2/12/70	Mr. Dennis present in question as to when new dump be opened. Supervisor informed Mr. Dennis that an engineer must be employed to survey the landfill dump site before it can be used, per County Health Dept.

Town will contact an engineer to survey the new town landfill, this to be done by Order of the Dutchess County DOH before landfill can be opened for use.

3/12/70 Letter from Dutchess County Board of Health & Sanitation was read by Supervisor in reference to present dump sites:
daily covering; extermination; surface water, pollution, etc.

11/12/70 Mr. Ruff of the Dutchess County BOH will visit Cricket Hill Disposal Area on Monday, November 16th when he will tell the Highway Superintendent where he wants the trenching done.

12/10/70 Re: stickers for cars using Town Dump.

3/8/71 Letter from Dutchess County BOH re: bad conditions at Dover and Wingdale Dumps. Complaints discussed.

4/12/71 Motion by Pelkey that Wingdale Dump be closed and Cricket Hill be used by Wingdale and Dover residents.
Ed Duncan agreed that Wingdale be closed and asked why new loader, purchased for landfill purposes, was not being used at Town Dump. Supt. Green stated that Town Dump was under Highway Dept. and the machine could be used where he thought best.

7/12/71 Mr. Davis questioned the need of having 2 dumps in Town of Dover - Supv. said having Wingdale Dump open would extend life of Cricket Hill.
Complaints regarding rats, etc. at Wingdale Dump.

8/9/71 Request by Hwy. Supt. to change days of Cricket Hill Dump.

9/7/71 Mr. A. Rhodes - attendant at Dumps.

11/8/71 New winter hrs. for Dump.

1/3/72 Re: pay scale for loader operator at dump site.

5/8/72 A letter received and read by Supv. Pelkey from Richard Darling stating that the water in a stream passing through his property was discolored and polluted by seepage from Town Dump (Cricket Hill). He pastures cows on his property and they drink water from the stream; he fears this water might contaminate the stock. Supv. Pelkey and Supt. Anderson will meet Tuesday, May 9 and see what can be done. The Dutchess County Board of Health will come and have this water tested.

6/12/72 Mr. Pelkey stated the dump was trenched and there is no runoff into Darling's property. It was tested by BOH and there is no danger to cattle. Costs of running the dump have been $5609 for 3 months.

8/14/72 Supv. Pelkey discussed setting up dump dept. - tabled until next meeting.

9/11/72 Discussion of BOH req. for dump sites. Possibility of closing them down. Want new compactor loader & garbage taken to Amenia. Supv. Pelkey and Supt. Anderson are meeting frequently with officials.

10/9/72 Discussion on dump area - needs to be better checked especially on weekends. Rhodes will be told and given 2 weeks, if situation is not better, Supv. Pelkey is authorized to have constable work Sundays.

Supv. Pelkey, Supt. Anderson, Attn. Whalen had been meeting with DCH Dept. every Monday for 5 weeks. Requested no dumping on Wed (unattended)

11/13/72 Report on dump area - good report as of today.

5/14/73 M/M Richard Darling explained that dump site on Cricket Hill was leaching onto their property. Was stopped temporarily last year with heavy rains - has started again.

George Davis and two others stated no need for two dump sites and voiced approval of closing this one. Held for executive session.

Cricket Hill site must be completely covered and seeded. Supv. Pelkey will check into John Rich crushing cars and large appliances there.

8/13/73 Gerald Vincent request some type of maintenance for the dump to be set up. Tabled until executive session.

Mostachetti seconded by Calahan to hire someone to haul dirt to cover Cricket Hill dump completely.

11/12/73 Att. Whalen reported on status of dump. Temporary restraining order to close dump requested by City Board of Health was denied. Trial is to be held during he next term of equity of calendar. They have to prove it's a health hazard.

Mr. Johnson from Poughkeepsie had cleared Cricket Hill Dump site and expects to finish in two weeks. He has cleaned up old cars in back of Davis and is now up at Metcalf's and Rhodes on Chestnut Ridge.

Supv. Pelkey requested Councilman Frankie and Justice Tabor to be a committee for checks on present dump site and to look into ways of preventing more problems. Cricket Hill site must be completed.

Reference 12
p. 166 of 227

DOCUMENT B-6

[redacted] RECORD OF TELEPHONE CONVERSATION

[redacted]:

☒ Made ☐ Received Call

FILLED OUT BY: T.V. DANAHY

DATE: 8/5/90 & 1/28/91 TIME: 8:30 PM

TALKED WITH: Mr. Artis Johnson

COMPANY: Resident ~700 ft. south of landfill on north of Crickett Hill Rd.

ADDRESS: PO Box 377 Dover Plains, NY 12522 PHONE: (914) 832-3141

SUBJECT: Crickett Hill Road Landfill – Residential Well Survey

PROJECT REFERENCE: NYSDEC 00296-01680

- Follow-up to my call in August.
- Due to detection of freon- (trichloro fluoromethane) during Dutchess Co. DOH sampling, Mr. & Mrs. Johnson do not currently use well water for drinking - using bottled water. Well water used for washing, shower, bath, lawn sprinkling and some minor cooking (ie. boiling).
- Well is at least 75 feet deep, because Mr. Johnson said a serviceman installed at least 75 feet of "pipe" or hose when repairing well a few years ago.

Action Required: See DOH sampling results.

Distribution: ~~D. Rollins~~ C. Juliano TVD

Follow-Up Date:

RECORD OF TELEPHONE CONVERSATION

[redacted]

☒ Made ☐ Received Call

FILLED OUT BY: TV. DANAHY DATE: 1/28/91 TIME: 9:50

TALKED WITH: MR. JOHN FOLEY

COMPANY: Resident ~ 1100 ft. SE of Landfill - South of Crickett Hill Rd.

ADDRESS: RR#2 Box 63 Crickett Hill Road Wingdale, NY 12594 PHONE: (914) 832-9047

SUBJECT: Crickett Hill Rd. Landfill - Residential Well Survey

PROJECT REFERENCE: NYSDEC 00296-~~00~~01680

Mr. FOLEY doesn't know much about the construction of his well. Well yield has generally been good (est. ~ 1gpm). Depth unknown. FOLEY uses a water softener. Occupied this residence since June 15, 1985. Well was drilled for previous owner.

- Dutchess Co. DOH has sampled this residential well. No water quality problems detected.

Action Required: TVD to request Dutchess Co. DOH results.

Distribution: D. Rollins, C. Juliano, TVD

Follow-Up Date:

[redacted] RECORD OF TELEPHONE CONVERSATION

[redacted]

FILLED OUT BY: T.V. DANAHY ☒ Made ☐ Received Call

TALKED WITH: MR. David Stock DATE: 1/28/91 TIME: 8:40

COMPANY: Resident NE corner Rt 22 & Crickett Hill Road ~ 1100 ft. SW of Site

ADDRESS: Po Box 638 Crickett Hill Rd. Wingdale, NY 12594 PHONE: (914) 832-6775

SUBJECT: Crickett Hill Road Landfill Residential Well Info.

PROJECT REFERENCE: NYSDEC 00296-01680

Stock's well was drilled approximately 10 years ago, at least it was deepened then to a total depth of 400 feet. Yield is approx 1.5 gallons per minute. Depth to Bedrock is less than 10 or 15 feet. Pump is set at depth of approx. 70 feet.

* Dutchess Co. DOH has sampled this well and no problems with the water quality were detected. Sampling w/in last year?

Depth to water during drilling ~15 feet.

Action Required: TVD to send for Dutchess Co. DOH results.

Distribution: D. Rollins, C. Juliano, TVD

Follow-Up Date:

Reference 12
P. 170 of 227

H & A of New York

SAMPLING AND ANALYSIS REPORT
CRICKET HILL ROAD AND WALTER VINCENT SITES
DOVER, NEW YORK

Consulting

Geotechnical Engineers,

Geologists and

Hydrogeologists

Reference 12
p. 171 of 227

RECEIVED
MAY 13 1991
NYS - DEC
REGION 3 - NEW PALTZ

3 1 030

SAMPLING AND ANALYSIS REPORT
CRICKET HILL ROAD AND WALTER VINCENT SITES
DOVER, NEW YORK

by

H&A of New York
Rochester, New York

for

Iroquois Gas Transmission System
Shelton, Connecticut

REC
MAY - 8 1992

File No. 7585-26

May 1991

Reference 12
p. 172 of 227

H & A of New York

Consulting
Geotechnical Engineers,
Geologists and
Hydrogeologists

189 North Water Street
Rochester, NY 14604
716 232-7386
Fax 716 232-6758

2 May 1991
File No. 7585-26

Iroquois Gas Transmission System
One Corporate Drive
Shelton, CT 06484

Attention: Dr. Craig Ferris

Subject: Sampling and Analysis Report
Cricket Hill Road and Walter Vincent Sites
Dover, New York

Gentlemen:

This letter report describes the results of sampling and analyses conducted along the planned Iroquois Gas Transmission System, L.P. (IGTS), pipeline right-of-way in the vicinity of the Cricket Hill Road and Walter Vincent Sites in the Town of Dover, Dutchess County, New York. The Cricket Hill Road site is registered as a New York State Department of Environmental Conservation (NYSDEC) inactive hazardous waste site (NYSDEC Site No. 314030). The Walter Vincent site reportedly received wastes similar to those present at the Cricket Hill Road site. This study was conducted in accordance with the sampling and analysis plan dated 26 February 1991 and our letter proposal dated 28 February 1991.

The sampling plan was developed based upon a review of the Phase I investigation (NYSDEC Site No. 314030) prepared for the Cricket Hill Road site by Lawler, Matusky & Skelly Engineers (1*). A site visit of each site was conducted on 14 February 1991 with Robert Werneiwski of H&A and Craig Ferris and Roderick Soper of IGTS, and a subsequent meeting with Keith Browne of the New York State Department of Environmental Conservation (NYSDEC) Region 3 on 15 February 1991. Sampling was conducted on 14 March 1991.

---

*Number in parenthesis refers to Sources of Information listed in "References" following the report text.

Affiliate of
Haley & Aldrich, Inc.
Cambridge, Massachusetts

Offices
Glastonbury, Connecticut
Portland, Maine
Bedford, New Hampshire

Reference 12
p. 173 of 227

SITE BACKGROUND

Cricket Hill Road Site

The Cricket Hill Road Site is located immediately north of Cricket Hill Road (Route 26), just east of the intersection of Route 22 in the Town of Dover, New York as shown on Figure 1.

The Cricket Hill Road Site was reportedly used as a town dump from approximately 1968 to 1973. Various household wastes, as well as liquid glue and automobile parts, have reportedly been disposed at the site. The disposal area is located north of the proposed pipeline.

The Phase I investigation, which was completed by Lawler, Matusky & Skelly Engineers in December 1989, indicated a wetland area immediately to the east of the site. This wetland appears to discharge into a stream which flows south from the site, and leachate has reportedly been observed entering this stream (1). The proposed IGTS pipeline crosses the stream downstream of the site. Analysis of one water sample collected in December 1979, indicated the presence of iron, lead, cadmium, oil and grease, chlorides and total organic carbon. Volatile organics were not analyzed for in that sample (1).

Walter Vincent Site

The Walter Vincent site is located near Dover Furnace, Dutchess County, New York. The site is approximately 6500 ft. northwest of the Cricket Hill Road Site as shown on Figure 1.

The Walter Vincent site is a potential inactive hazardous waste site, according to the NYSDEC. Liquid glue or glue wastes were reportedly disposed in a low lying area of the property owned by Walter Vincent in the 1960s. The proposed IGTS pipeline is to pass through this low lying area.

A soil sample collected in April 1988 from an unspecified location within the area of the alleged disposal was analyzed for the Target Compound List constituents. Organic compounds were detected in part per billion (ppb) concentrations including methylene chloride, acetone, carbon disulfide, toluene, chlorobenzene and xylene. Semi-volatile organics detected include 1,4-dichlorobenzene, benzoic acid, napthalene, 2-methylnapthalene phenanthrene, and bis(2-ethylhexyl) phthalate. Pesticides and PCBs were not detected above laboratory detection limits.

A number of laboratory data and data reporting problems were noted for this sample. The sample matrix and constituent concentrations necessitated diluting the sample for analysis, resulting in a potential overestimation of normal laboratory contaminants (methylene chloride, acetone) and increasing the detection limits. These problems coupled with an undefined sample collection and handling history decrease the reliability that these data actually reflect site conditions.

The objectives of this study were:

- To characterize the conditions in the limited areas where the planned pipeline will cross areas where sediment or soil may have been impacted by the Cricket Hill or Walter Vincent Sites.

- To identify any indications or conditions related to the potential presence of hazardous materials in the area of the planned pipeline right-of-way.

SAMPLE LOCATIONS

A program of sediment sampling and analyses was conducted to determine stream sediment quality where the pipeline crosses the stream at the Cricket Hill Road Site. Shallow soil sampling and analysis was conducted along the alignment of the pipeline in the area of alleged waste disposal on the Walter Vincent property.

At the Cricket Hill Road Site, two sediment samples were collected from the stream which flows south from the site. Sample No. 12 (1CH) was taken where the stream crosses the proposed pipeline route. Sample No. 13 (BCH) was collected from the stream between the site and Sample No. 12. Both sediment samples were collected from an area of apparent sedimentation in the stream channel from a depth of approximately 0 to 6 inches. Approximate sample locations at the Cricket Hill Road site are shown on Figure 2.

At the Walter Vincent Site shallow test borings and soil sampling was conducted. Three shallow test borings were performed across the proposed pipeline location in an effort to determine the potential presence of fill and/or contaminated materials from the alleged disposal activities. Borings were advanced approximately 6 to 8 ft., to the approximate depth required for the pipeline installation. Borings were advanced by appropriate drilling methodologies. Approximate boring locations at the Walter Vincent site are shown on Figure 3.

Reference 12
p. 175 of 227

SAMPLE COLLECTION AND ANALYSIS

Sediment samples at the Cricket Hill Road site were obtained with a clean steel hand shovel. The hand shovel was decontaminated prior to sampling and between collection points by washing with alconox/water mix, followed by a rinse with potable water, a 10% nitric acid rinse, and a rinse with distilled water. The sediment samples were obtained from an area of apparent sedimentation in the stream channel from an approximate depth of 0 to 6 inches and at the locations discussed previously.

At the Walter Vincent Site, test borings were advanced by Soil and Materials Testing, Inc. of Castleton, New York using a CME-55 truck mounted drill rig. Soil samples were collected continuously from the test borings using a 2.0-in. O.D. split-spoon sampler in general accordance with ASTM D1586.

The drill rig and equipment were steam cleaned prior to arriving at the site. The split spoon sampler was decontaminated prior to initial sampling and between each sample by washing with alconox/water mix, followed by a rinse with potable water. Hand tools were decontaminated prior to sampling and between collection points by washing with alconox/water mix, followed by a rinse with potable water, a 10% nitric acid rinse and a rinse with distilled water. Test boring logs for these borings are presented in Appendix A.

One composite sample from each test boring was made by combining the portion of each sample from ground surface to the bottom of the boring to form the composite sample. The samples were screened in the field using an HNu photoionization detector. Volatile organic compounds were not detected in any of the samples during this field screening.

The collected samples were placed in appropriate pre-cleaned sample containers provided by Camo Laboratories of Poughkeepsie, New York and stored in a cooler at a temperature of approximately 4 degrees centigrade. The samples were transported by H&A of New York to Camo Laboratories for analytical testing.

A sampling equipment cleaning blank (rinsate) (Sample No. 15) was obtained by performing the decontamination procedure on the steel shovel and directing the deionized water into the appropriate pre-cleaned sample containers. A trip blank (Sample No 14) was provided by Camo Laboratories and

transported to the site and returned to the laboratory in the same manner as collected samples. These blanks were collected and analyzed for quality assurance/quality control purposes.

Samples from both sites were analyzed for the EPA Target Compound List which included volatile organics, semivolatile organic compounds and metals. Laboratory reports, chain-of-custody forms and an explanation of the data reporting qualifiers are presented in Appendix B. Compound concentration values are reported if the result is a value greater than or equal to the detection limit. Otherwise, the minimum detection limit for the sample is reported with a "U" qualifier.

RESULTS

Results of the field investigation and analytical survey can be summarized as follows:

Cricket Hill Road Site

- Concentrations of inorganic compounds (metals) in soil were compared to a U.S. Geological Survey (USGS) study of element concentration in soils and other surficial materials of the Eastern United States (2,3). With one exception, all metals were within standard concentration ranges for these naturally occurring compounds. Magnesium was identified in Sample No. 12 at a concentration of 53,000 mg/kg which is essentially at the upper end of the observed range of background concentrations in the eastern United States (50-50,000 mg/kg) identified in the USGS reference. Bedrock in the vicinity of this site is metamorphic. Magnesium is a common element in metamorphic rock, therefore, the magnesium detected in this sediment is likely naturally occurring.

  Of the organic compounds analyzed for, vinyl acetate was identified at 8.0 ug/kg and bis(2-ethylhexyl)phthalate at 26,230 ug/kg in Sample No. 12. Bis(2-ethylhexyl)phthalate was identified at a concentration of 33,000 ug/kg in Sample No. 13.

  Vinyl acetate is a synthetic organic compound commonly used industrially in the formation of glues, coatings and some paints as well as other materials. There are no criteria or standards for concentrations of vinyl acetate in soil (4). The OSHA permissible exposure limit in (PEL) for vinyl acetate in air for occupational settings is 10,000

Reference 12
p. 177 of 227

ppb. Should pipeline construction cause the volatilization of this compound, the PEL would not likely be exceeded. Therefore, the very low concentration identified in the site sediment is not expected to pose a human health concern.

Phthalate compounds are associated with plastic and plasticizers and often occur as a common laboratory contaminant. The concentrations identified in sediment are such that it is not possible to rule out a site-related condition. However, the concentrations identified are less than the EPA derived Health-Based Criteria of 83,000 ug/kg (5). The concentrations of phthalates identified are not considered of concern at the site.

Walter Vincent Site

- Concentrations of inorganic compounds (metals) in soil were compared to a U.S. Geological Survey (USGS) study of element concentrations in soils and other surficial materials of the Eastern United Stated (2,3). All metals were within the standard concentration ranges for naturally occurring compounds.

- Of the volatile organic and semivolatile organic compounds analyzed for, only toluene was identified. The toluene concentrations of 7 ug/kg in the composite sample from boring B-2V is considerably less than the EPA derived Health-based criteria concentration of 2×10^7 ug/kg (5).

Based on the results of the sampling and analysis performed for this study, it does not appear that the proposed pipeline alignment will cross any areas of significant contamination resulting from past disposal at the Cricket Hill Road or Walter Vincent Sites.

LIMITATIONS

The conclusions provided by H&A are based solely on the scope of work conducted and reported herein which included a review of the Phase I report for the Cricket Hill Road Site. This work has been undertaken in accordance with generally accepted consulting engineering practices. No other warranty, expressed or implied, is made.

Reference 12
p. 178 of 227

Thank you for the opportunity to work with you on this project. Please contact us if you have any questions regarding this report.

Sincerely yours,
H&A OF NEW YORK

Cathy A. Foley

Cathy A. Foley
Staff Scientist

Robert A. Werneiwski

Robert A. Werneiwski, P.E.
Senior Engineer

Stanley E. Walker, P.E.
Vice President

RAW/SEW/gma
caf6

Enclosures:
- References
- Figure 1 - Project Locus
- Figure 2 - Sample Location Plan Cricket Hill Road Site
- Figure 3 - Test Boring Location Plan Walter Vincent Site
- Appendix A - Boring Logs
- Appendix B - Laboratory Results

REFERENCES

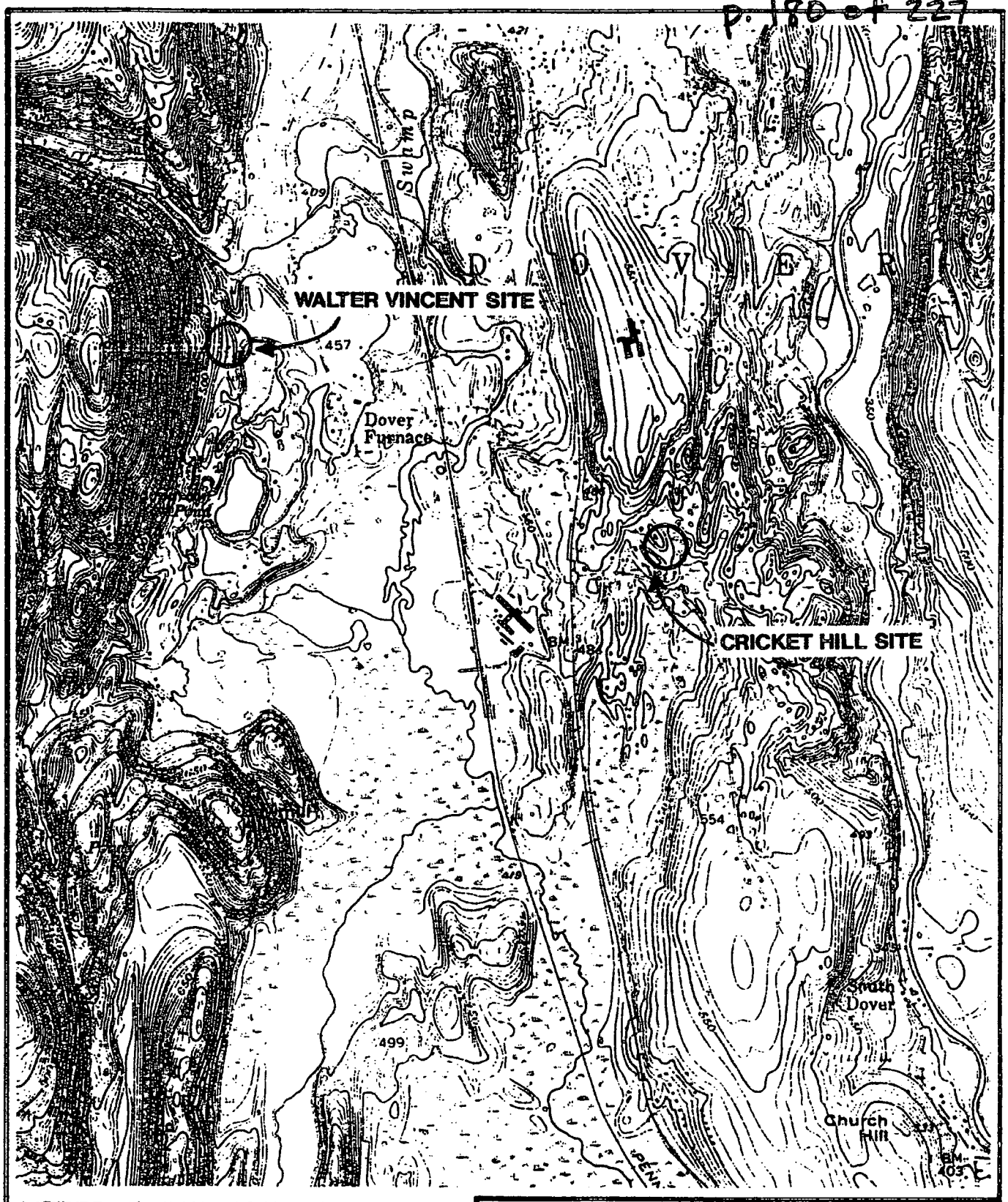
1. "Engineering Investigations at Inactive Hazardous Waste Sites in New York State, Phase I Investigation, Cricket Hill Road, Town of Dover, Dutchess County, Site No. 314030", Lawler, Matusky and Skelly Engineers, December 1989.

2. Shacklette, H.T. and Boerngen, J.G., 1984,"Element Concentrations in Soils and Other Surficial Materials of the Conterminous United States", U.S. Geological Survey Professional Paper 1270.

3. Agency for Toxic Substances and Disease Registry, 1990, Heath Assessment Guidance Manual.

4. Agency for Toxic Substances and Disease Registry, 1990, Toxicological Profile for Vinyl Acetate.

5. Environmental Protection Agency, 1989, Interim Final RCRA Facility Investigation (RFI) Guidance - Volume I



H & A of New York
Consulting Geotechnical Engineers, Geologists and Hydrogeologists

IROQUOIS GAS TRANSMISSION SYSTEM
SITE EVALUATION, DOVER, NEW YORK

PROJECT LOCUS

SCALE: 1 IN. = 2000 FT.

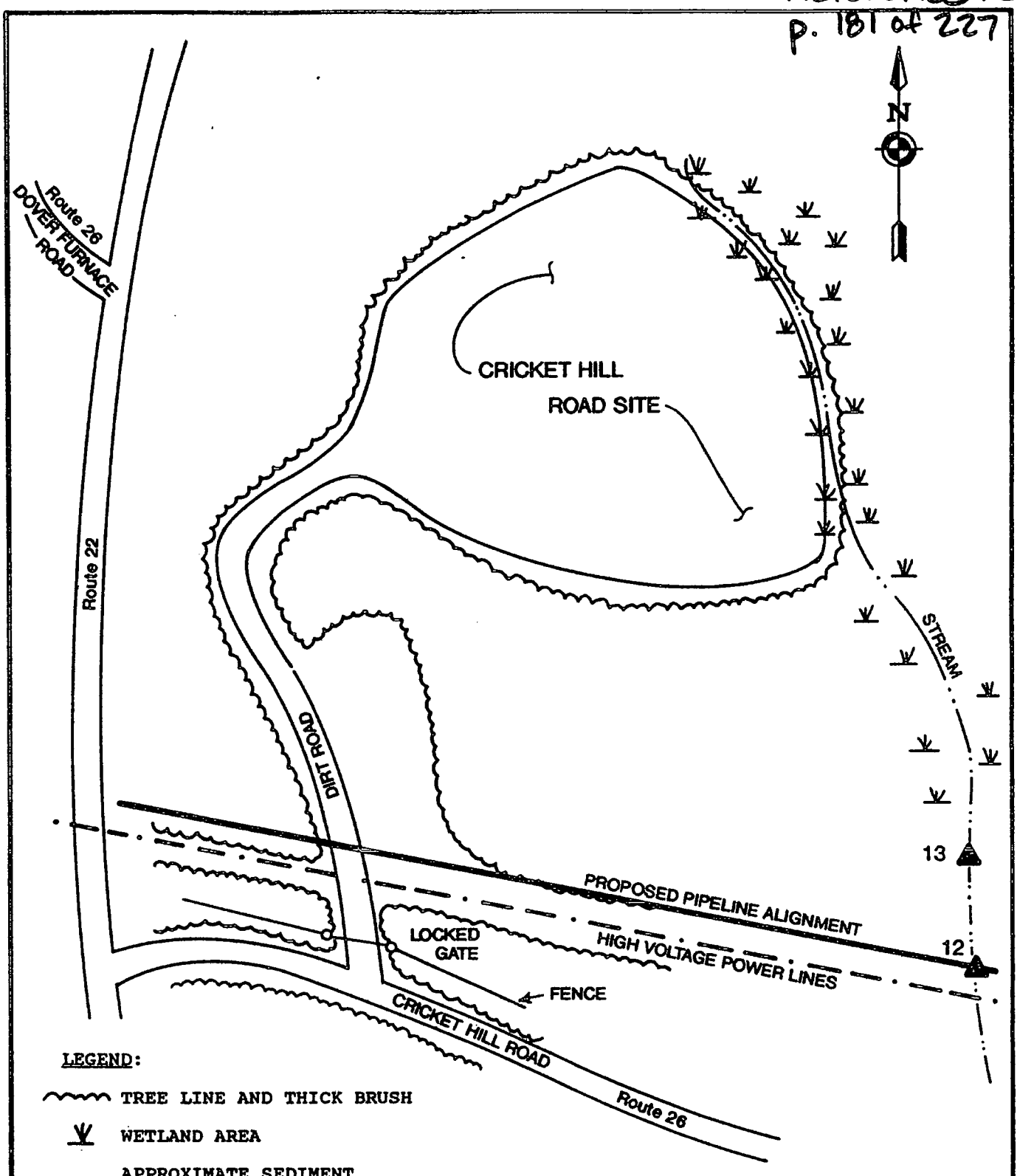
MAY 1991

FILE NO. 7585-26

CHARRETTE

FIGURE 1

Reference 12
p. 181 of 227



LEGEND:

TREE LINE AND THICK BRUSH

WETLAND AREA

APPROXIMATE SEDIMENT COLLECTION LOCATION WITH SAMPLE NUMBER

NOTE:

THIS PLAN WAS ADAPTED FROM FIGURE 1-2 CONTAINED IN THE NYSDEC PHASE I INVESTIGATION REPORT PREPARED BY LAWLER, MATUSKY AND SKELLY ENGINEERS DATED DECEMBER 1989.

H & A of New York
Consulting Geotechnical Engineers, Geologists and Hydrogeologists

IROQUOIS GAS TRANSMISSION SYSTEM
CRICKET HILL ROAD

SAMPLE LOCATION PLAN

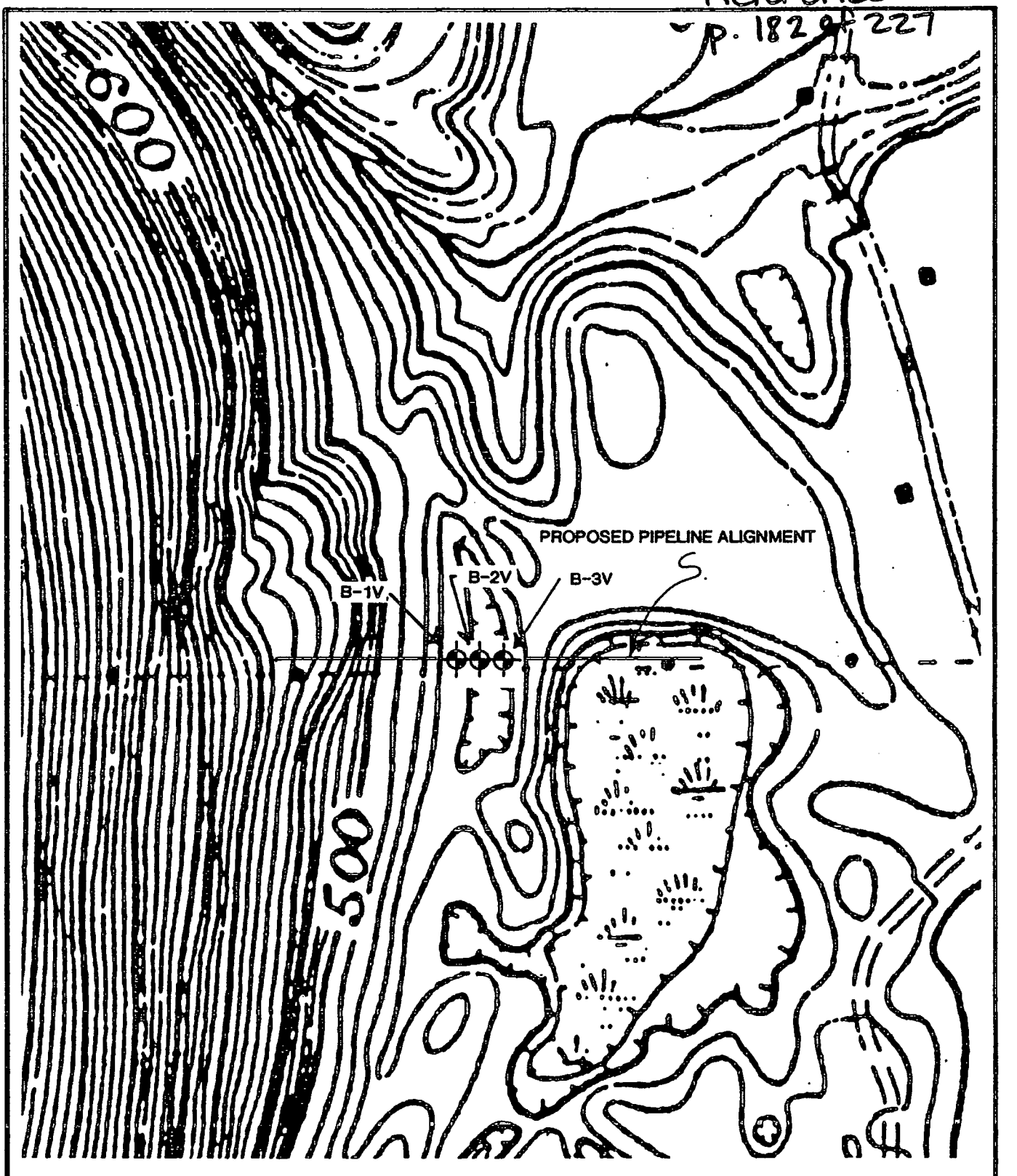
SCALE: 1 IN. = APPROX. 150 FT. MAY 1991

FILE NO. 7585-26

CHARRETTE

FIGURE 2

Reference 12
p. 182 of 227



LEGEND:

APPROXIMATE LOCATION OF TEST BORING

NOTE:

THIS PLAN WAS ADAPTED FROM THE USGS QUADRANGLE, DOVER PLAINS, NEW YORK.

H & A of New York
Consulting Geotechnical Engineers, Geologists and Hydrogeologists

IROQUOIS GAS TRANSMISSION SYSTEM
WALTER VICENT SITE

TEST BORING LOCATION PLAN

NOT TO SCALE

MAY 1991

FILE NO. 7585-26

CHARRETTE

FIGURE 3

Reference 12
p. 183 of 227

APPENDIX A

Boring Logs

Reference 16
p 184 of 227

H&A OF NEW YORK, ROCHESTER, NEW YORK Consulting Geotechnical Engineers, Geologists and Hydrogeologists	TEST BORING REPORT	BORING NO. B-1V

PROJECT: WALTER VINCENT SITE, DOVER NEW YORK
CLIENT: IROQUOIS GAS TRANSMISSION SYSTEM
CONTRACTOR: SOIL AND MATERIAL TESTING, INC.

FILE NO. 7585-26
SHEET NO. 1 OF 1
LOCATION: See Plan

ITEM	CASING	DRIVE SAMPLER	CORE BARREL
TYPE	---	S	---
INSIDE DIAMETER (IN)	---	1-3/8	---
HAMMER WEIGHT (LB)	---	140	---
HAMMER FALL (IN)	---	30	---

DRILLING EQUIPMENT & PROCEDURES

RIG TYPE: CME 55, Truck Mounted
BIT TYPE: ---
DRILL MUD: ---
OTHER: Advanced split spoon to 8.0 ft.

ELEVATION:
DATUM: NGVD
START: 14 March 1991
FINISH: 14 March 1991
DRILLER: R. Stone
H&A REP: S. DeMeo

DEPTH (FT)	CASING BLOWS PER FT	SAMPLER BLOWS PER 6 IN	SAMPLE NUMBER & RECOVERY	SAMPLE DEPTH (FT)	STRATA CHANGE (FT)	VISUAL CLASSIFICATION AND REMARKS
		3 4 5 15	S1 12"/24"	0.0 2.0		Medium dense brown to gray coarse to fine sandy GRAVEL, trace silt, moist.
		8 6 3 2	S2 4"/24"	2.0 4.0	4.0	Same. -FILL-
5		3 2 4 4	S3 18"/24"	4.0 6.0	4.5	Soft dark brown ORGANIC PEAT, moist. -BURIED TOPSOIL-
		7 7 9 10	S4 24"/24"	6.0 8.0		Medium stiff brown clayey SILT, moist. -LACUSTRINE-
						Hard tan clayey SILT, moist. -LACUSTRINE-
10						Bottom of Exploration at 8.0 ft.
15						
20						
25						

Notes:

1. An environmental composite soil sample of s1, s2, s3 and s4 was obtained from laboratory testing.
2. Split spoon borehole remained open to bottom of test boring.
3. Borehole backfilled to ground surface with soil.

WATER LEVEL DATA					
DATE	TIME	ELAPSED TIME (HR)	DEPTH (FT) TO: BOTTOM OF CASING	BOTTOM OF HOLE	WATER
NOT ENCOUNTERED					

SAMPLE IDENTIFICATION

D Open End Rod
T Thin Wall Tube
U Undisturbed Sample
S Split Spoon

SUMMARY

OVERBURDEN (LIN FT):	8.0 ft.
ROCK CORED (LIN FT):	---
SAMPLES:	4S
BORING NO.	B-1V

Reference to p. 185 of 227

H&A OF NEW YORK, ROCHESTER, NEW YORK Consulting Geotechnical Engineers, Geologists and Hydrogeologists	TEST BORING REPORT	BORING NO. B-2V

PROJECT: WALTER VINCENT SITE, DOVER NEW YORK
CLIENT: IROQUOIS GAS TRANSMISSION SYSTEM
CONTRACTOR: SOIL AND MATERIAL TESTING, INC.

FILE NO. 7585-26
SHEET NO. 1 OF 1
LOCATION: See Plan

ITEM	CASING	DRIVE SAMPLER	CORE BARREL
TYPE	---	S	---
INSIDE DIAMETER (IN)	---	1-3/8	---
HAMMER WEIGHT (LB)	---	140	---
HAMMER FALL (IN)	---	30	---

DRILLING EQUIPMENT & PROCEDURES

RIG TYPE: CME 55, Truck Mounted
BIT TYPE: ---
DRILL MUD: ---
OTHER: Advanced split spoon to 8.0 ft.

ELEVATION:
DATUM: NGVD
START: 14 March 1991
FINISH: 14 March 1991
DRILLER: R. Stone
H&A REP: S. DeMeo

DEPTH (FT)	CASING BLOWS PER FT	SAMPLER BLOWS PER 6 IN	SAMPLE NUMBER & RECOVERY	SAMPLE DEPTH (FT)	STRATA CHANGE (FT)	VISUAL CLASSIFICATION AND REMARKS
		11 22 14 14	S1 12"/24"	0.0 2.0		Medium dense brown to gray coarse to fine sandy GRAVEL, moist.
		9 5 3 4	S2 8"/24"	2.0 4.0		Loose brown to gray gravelly coarse to fine SAND, moist.
5		43 4 5 10	S3 14"/24"	4.0 6.0	5.0	-FILL-
						Stiff dark brown ORGANIC PEAT, moist. -BURIED TOPSOIL-
10						Bottom of Exploration at 6.0 ft.
15						Notes: 1. An environmental composite soil sample of s1, s2, and s3 was obtained for laboratory testing. 2. Split spoon borehole remained open to bottom of test boring. 3. Borehole backfilled to ground surface with soil.
20						
25						

WATER LEVEL DATA

DATE	TIME	ELAPSED TIME (HR)	DEPTH (FT) TO: BOTTOM OF CASING	BOTTOM OF HOLE	WATER
NOT ENCOUNTERED					

SAMPLE IDENTIFICATION

O Open End Rod
T Thin Wall Tube
U Undisturbed Sample
S Split Spoon

SUMMARY

OVERBURDEN (LIN FT):	6.0 ft.
ROCK CORED (LIN FT):	---
SAMPLES:	3S
BORING NO.	B-2V

Reference 1c
p. 186 of 227

H&A OF NEW YORK, ROCHESTER, NEW YORK Consulting Geotechnical Engineers, Geologists and Hydrogeologists	TEST BORING REPORT	BORING NO. B-3V

PROJECT: WALTER VINCENT SITE, DOVER NEW YORK
CLIENT: IROQUOIS GAS TRANSMISSION SYSTEM
CONTRACTOR: SOIL AND MATERIAL TESTING, INC.

FILE NO. 7585-26
SHEET NO. 1 OF 1
LOCATION: See Plan

ITEM	CASING	DRIVE SAMPLER	CORE BARREL
TYPE	Auger	S	---
INSIDE DIAMETER (IN)	---	1-3/8	---
HAMMER WEIGHT (LB)	---	140	---
HAMMER FALL (IN)	---	30	---

DRILLING EQUIPMENT & PROCEDURES

RIG TYPE: CME 55, Truck Mounted
BIT TYPE: ---
DRILL MUD: ---
OTHER: Advanced augers to 4.0 ft. with continuous sampling to 6.0 ft.

ELEVATION:
DATUM: NGVD
START: 14 March 1991
FINISH: 14 March 1991
DRILLER: R. Stone
H&A REP: S. DeMeo

DEPTH (FT)	CASING BLOWS PER FT	SAMPLER BLOWS PER 6 IN	SAMPLE NUMBER & RECOVERY	SAMPLE DEPTH (FT)	STRATA CHANGE (FT)	VISUAL CLASSIFICATION AND REMARKS
		47 100/.4	S1 6"/11"	0.0 1.0		Very dense brown to gray coarse to fine sandy GRAVEL, moist.
		13 5 2 2	S2 12"/24"	2.0 4.0		Loose brown to gray gravelly coarse to fine SAND, moist. -FILL-
5		1 8 8 2	S3 4"/24"	4.0 6.0	5.0	Stiff brown ORGANIC PEAT, moist. -BURIED TOPSOIL-
10						Bottom of Exploration at 6.0 ft.
15						Notes: 1. An Environmental composite soil sample of s1, s2 and s3 obt was obtained for laboratory testing. 2. Borehole backfilled to ground surface with soil.
20						
25						

WATER LEVEL DATA

DATE	TIME	ELAPSED TIME (HR)	DEPTH (FT) TO: BOTTOM OF CASING	BOTTOM OF HOLE	WATER
NOT ENCOUNTERED					

SAMPLE IDENTIFICATION

O Open End Rod
T Thin Wall Tube
U Undisturbed Sample
S Split Spoon

SUMMARY

OVERBURDEN (LIN FT):	6.0 ft.
ROCK CORED (LIN FT):	---
SAMPLES:	3S
BORING NO.	B-3V

Reference 12
p. 187 of 227

APPENDIX B

Laboratory Results

Reference 12
p. 188 of 227

DATA REPORTING QUALIFIERS

For reporting results. the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

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

U — Indicates compound was analyzed for, but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration dilution action. (This is not necessarily the instrument detection limit). The footnote should read U Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J — Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1-1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g. 10J). If the limit of detection is 10 ug and a concentration of 3 ug/L is calculated, report as 3J.

B — This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TCL compound.

D — This flag identifies all compounds identified in an analysis at a secondary dilution factor.

E — This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.

A — This flag indicates that a TIC is a suspected aldol-condensation product.

INORGANIC DATA REPORTING QUALIFIERS

For reporting results, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

FORM I-IN includes fields for three types of result qualifiers. These qualifiers must be completed as follows:

C (Concentration) qualifier - Enter "B" if the reported value is less than the Contract Required Detection Limit (CRDL) but greater than the Instrument Detection Limit (IDL). If the analyte was analyzed for but not detected, a "U" must be entered.

Q qualifier - Specified entries and their meanings are as follows:

E - The reported value is estimated because of the presence of interference. An explanatory note must be included under Comments on the Cover Page (if the problem applies to all samples) or on on the specific FORM I-IN (if it is an isolated problem).

M - Duplicate injection proclain not met.

N - Spiked sample recovery not within control limits.

S - The reported value was determined by the Method of Standard Additions (MSA).

W - Post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance. (See Exhibit E.)

* - Duplicate analysis not within control limits.

+ - Correlateion coefficient for the MSA is less than 0.995.

Entering "S", "W", or "+" is mutually exclusive. No combination of these qualifiers can appear in the same field for an analyte.

M (Method) qualifier - Enter:

"P" for ICP
"A" for Flame AA
"F" for Furnace AA
"CV" for Manual Cold Vapor AA
"AV" for Automated Cold Vapor AA
"AS" for Semi-Automated Spectrophotometric
"C" for Manual Spectrophotometric
"T" for Titrimetric
"NR" if the analyte is not required to be analyzed.

A brief physical description of the sample, both before and after digestion, must be reported in the fields for color (before and after), clarity (before and after), texture and artifacts. For water samples, report color and clarity. For soil samples, report color, texture and artifacts.

Reference 12
p. 190 of 227

CAMO LABORATORIES, INC
367 VIOLET AVENUE
POUGHKEEPSIE, NEW YORK 12601
(914) 473-9200
FED. I.D. #14-1725654
NYS LAB ID NO.: 10310

Cathy Foley
H&A of New York
39 Northwater Street
Rochester, New York 14604

Date of Invoice: 4-9-91
P.O. #:
Typed by: mlj
Invoice #: 91-03-1189

Analytical Report

Date Samples Collected: 3-13-91
Date Samples Received: 3-13-91
Samples Collected By: Client
Samples Delivered By: Client
Matrix: Soil & Sediment

Sample Identification

(08) Field Blank
(09) B-1V
(10) B-2V
(11) B-3V
(12) 1-CH
(13) B-CH
(14) Trip Blank
(15) Field Equip. Blank

Parameters	Unit/ Measure	(08)	(09)	(10)	(11)	(12)	(13)	(14)
TCL VOA		**	*	*		*	*	
TCL Semi-Volatiles(Full)		**	*	*	*	*	*	*

Analysis Comments *See Attached Reports.

** Cancelled as of 3/15/91

Comments: All samples will be discarded after twenty-one (21) days or EPA Holding time, whichever is shorter, unless we are notified otherwise.

Hazardous waste samples will be returned to client.

Analytical Methods: All analytical methods comply with those specified in APHA "Standard Methods" and/or EPA approved methods.

Reference 16
P. 191 of 227

U.S. EPA - CLP
1
Inorganic Analysis Data Sheet

EPA SAMPLE NO.
B-17

Laboratory Name: CANO Laboratories
Laboratory Code: CANO
Matrix (SOIL/WATER): Sediment
Level (LOW/MED):
Percent Solids: 80

Contract: B & A of NY
Case No.: 1189 SAS No.:

SDG No.:
Lab Sample ID: 1189-09
Dated Received: 3/13/91

Concentration Units (ug/L or mg/kg dry weight) mg/kg

CAS No.	Analyte	Concentration	C	M
7429-90-5	Aluminum	19700		P
7440-36-0	Antimony	0.6	U	P
7440-38-2	Arsenic	3.8		P
7440-39-3	Barium	70		P
7440-41-7	Beryllium	5.5		P
7440-43-9	Cadmium	1.2		P
7440-70-2	Calcium	1350		P
7440-47-3	Chromium	23		P
7440-48-4	Cobalt	19		P
7440-50-8	Copper	25		P
7440-89-6	Iron	27700		P
7439-92-1	Lead	11.5		P
7439-95-4	Magnesium	6000		P
7439-96-5	Manganese	1140		P
7439-97-6	Mercury	0.1	U	CV
7440-02-0	Nickel	32		P
7440-09-7	Potassium	1960		P
7782-49-2	Selenium	0.5	U	P
7440-22-4	Silver	1.2	U	P
7440-23-5	Sodium	74		P
7440-28-0	Thallium	1.1	U	P
7440-62-2	Vanadium	26		P
7440-66-6	Zinc	90		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

Reference 12
p. 192 of 227

U.S. EPA - CLP
1
Inorganic Analysis Data Sheet

EPA SAMPLE NO.
B-27

Laboratory Name: CANO Laboratories
Laboratory Code: CANO
Matrix (SOIL/WATER): Soil
Level (LOW/MED):
Percent Solids: 82

Contract: N & A of NY
Case No.: 1189 SAS No.:

SDG No.:
Lab Sample ID: 1189-10
Dated Received: 3/13/91

Concentration Units (ug/L or mg/kg dry weight) mg/kg

CAS No.	Analyte	Concentration	C	M
7429-90-5	Aluminum	15500		P
7440-36-0	Antimony	0.6	U	P
7440-38-2	Arsenic	4.0		F
7440-39-3	Barium	290		P
7440-41-7	Beryllium	5.1		P
7440-43-9	Cadmium	2.1		P
7440-70-2	Calcium	4620		P
7440-47-3	Chromium	21		P
7440-48-4	Cobalt	16		P
7440-50-8	Copper	30		P
7440-89-6	Iron	24900		P
7439-92-1	Lead	12.1		F
7439-95-4	Magnesium	6500		P
7439-96-5	Manganese	1070		P
7439-97-6	Mercury	0.1	U	CV
7440-02-0	Nickel	26		P
7440-09-7	Potassium	3010		P
7782-49-2	Selenium	0.6	U	F
7440-22-4	Silver	1.2	U	F
7440-23-5	Sodium	670		P
7440-28-0	Thallium	1.2	U	F
7440-62-2	Vanadium	21		P
7440-66-6	Zinc	140		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

Reference 12
p. 193 of 227

U.S. EPA - CLP
1
Inorganic Analysis Data Sheet

EPA SAMPLE NO.
B-37

Laboratory Name: CANO Laboratories
Laboratory Code: CANO
Matrix (SOIL/WATER): Soil
Level (LOW/MED):
Percent Solids: 83

Contract: H & A of NY
Case No.: 1189 SAS No.:

SDG No.:
Lab Sample ID: 1189-11
Dated Received: 3/13/91

Concentration Units (ug/L or mg/kg dry weight) mg/kg

CAS No.	Analyte	Concentration	C	M
7429-90-5	Aluminum	14500		P
7440-36-0	Antimony	0.6		P
7440-38-2	Arsenic	5.1		P
7440-39-3	Barium	63		P
7440-41-7	Beryllium	5.5		P
7440-43-9	Cadmium	1.1		P
7440-70-2	Calcium	5400		P
7440-47-3	Chromium	23		P
7440-48-4	Cobalt	17		P
7440-50-8	Copper	26		P
7440-89-6	Iron	27700		P
7439-92-1	Lead	24.8		P
7439-95-4	Magnesium	7100		P
7439-96-5	Manganese	1320		P
7439-97-6	Mercury	0.1	U	CV
7440-02-0	Nickel	27		P
7440-09-7	Potassium	1690		P
7782-49-2	Selenium	0.6	U	P
7440-22-4	Silver	1.1	U	P
7440-23-5	Sodium	74		P
7440-28-0	Thallium	1.2	U	P
7440-62-2	Vanadium	20		P
7440-66-6	Zinc	66		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

Reference 12
p. 194 of 227

U.S. EPA - CLP
1
Inorganic Analysis Data Sheet

EPA SAMPLE NO.
1-CS

Laboratory Name: CAMO Laboratories
Laboratory Code: CAMO
Matrix (SOIL/WATER): Sediment
Level (LOW/MED):
Percent Solids: 78

Contract: H & A of NY
Case No.: 1189 SAS No.:

SDG No.:
Lab Sample ID: 1189-12
Dated Received: 3/13/91

Concentration Units (ug/L or mg/kg dry weight) mg/kg

CAS No.	Analyte	Concentration	C	M
7429-90-5	Aluminum	3330.0		P
7440-36-0	Antimony	0.7		P
7440-38-2	Arsenic	1.2		P
7440-39-3	Barium	12.0		P
7440-41-7	Beryllium	1.5		P
7440-43-9	Cadmium	1.2	U	P
7440-70-2	Calcium	96200.0		P
7440-47-3	Chromium	8.6		P
7440-48-4	Cobalt	5.5		P
7440-50-8	Copper	3.7		P
7440-89-6	Iron	6990.0		P
7439-92-1	Lead	2.7		P
7439-95-4	Magnesium	53000.0		P
7439-96-5	Manganese	235.0		P
7439-97-6	Mercury	0.1	U	CV
7440-02-0	Nickel	7.0		P
7440-09-7	Potassium	440.0		P
7782-49-2	Selenium	0.5	U	P
7440-22-4	Silver	1.2		P
7440-23-5	Sodium	35.0		P
7440-28-0	Thallium	1.0	U	P
7440-62-2	Vanadium	31.0		P
7440-66-6	Zinc	18.0		P

Color Before:
Clarity Before:
Texture:

Color After:
Clarity After:
Artifacts:

Comments:

Reference 12
p. 195 of 227

U.S. EPA - CLP
1
Inorganic Analysis Data Sheet

EPA SAMPLE NO.
B-CE

Laboratory Name: CANO Laboratories
Laboratory Code: CANO
Matrix (SOIL/WATER): Sediment
Level (LOW/MED):
Percent Solids: 74

Contract: H & A of NY
Case No.: 1189 SAS No.:

SDG No.:
Lab Sample ID: 1189-13
Dated Received: 3/13/91

Concentration Units (ug/L or mg/kg dry weight) mg/kg

CAS No.	Analyte	Concentration	C	M
7429-90-5	Aluminum	3020.0		P
7440-36-0	Antimony	0.7	U	P
7440-38-2	Arsenic	1.4		P
7440-39-3	Barium	11.0		P
7440-41-7	Beryllium	1.1		P
7440-43-9	Cadmium	1.2	U	P
7440-70-2	Calcium	11500.0		P
7440-47-3	Chromium	8.0		P
7440-48-4	Cobalt	4.9		P
7440-50-8	Copper	3.4		P
7440-89-6	Iron	5960.0		P
7439-92-1	Lead	3.4		P
7439-95-4	Magnesium	19000.0		P
7439-96-5	Manganese	205.0		P
7439-97-6	Mercury	0.1	U	CV
7440-02-0	Nickel	7.0		P
7440-09-7	Potassium	380.0		P
7782-49-2	Selenium	0.5	U	P
7440-22-4	Silver	1.1	U	P
7440-23-5	Sodium	57.0	U	P
7440-28-0	Thallium	1.2	U	P
7440-62-2	Vanadium	9.7		P
7440-66-6	Zinc	30.0		P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

Reference 12
p. 196 of 227

U.S. EPA - CLP
1
Inorganic Analysis Data Sheet

EPA SAMPLE NO.
F.Eq.Blk

Laboratory Name: CANO Laboratories
Laboratory Code: CANO
Matrix (SOIL/WATER):
Level (LOW/MED):
Percent Solids: 0.0

Contract: H & A of NY
Case No.: 1189 SAS No.:

SDG No.:
Lab Sample ID: 1189-15
Dated Received: 3/13/91

Concentration Units (ug/L or mg/kg dry weight) mg/l

CAS No.	Analyte	Concentration	C	M
7429-90-5	Aluminum	0.01	U	P
7440-36-0	Antimony	0.005	U	P
7440-38-2	Arsenic	0.005	U	P
7440-39-3	Barium	0.1	U	P
7440-41-7	Beryllium	0.005	U	P
7440-43-9	Cadmium	0.005	U	P
7440-70-2	Calcium	2.9		P
7440-47-3	Chromium	0.01	U	P
7440-48-4	Cobalt	0.005	U	P
7440-50-8	Copper	0.005	U	P
7439-89-6	Iron	1.1		P
7439-92-1	Lead	0.005		P
7439-95-4	Magnesium	0.5	U	P
7439-96-5	Manganese	0.0002	U	P
7439-97-6	Mercury	0.1	U	CV
7440-02-0	Nickel	0.05	U	P
7440-09-7	Potassium	0.5	U	P
7782-49-2	Selenium	0.005	U	P
7440-22-4	Silver	0.01	U	P
7440-23-5	Sodium	1.0		P
7440-28-0	Thallium	0.01	U	P
7440-62-2	Vanadium	0.005	U	P
7440-66-6	Zinc	0.01	U	P

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

Reference 12
p. 197 of 227

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

| B-17 |

Lab Name: CAMO Laboratories
Lab Code: H & A of New York
Case No.: ____
Matrix: (soil/water) Soil
Sample wt/vol: 5 (g/ml) g
Level: (low/med) Low
% Moisture: not dec. 20
Column: (pack/cap) Pack

Contract:
SAS No.:
SDG No.: 1189-09
Lab Sample ID: 1189-09
Lab File ID: _____
Date Received: 3-14-91
Date Analyzed: 3-20-91
Dilution Factor: 1

CONCENTRATION UNITS:
ug/L or ug/kg
(Circle One)

CAS Number	COMPOUND		Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	10	B
67-64-1	Acetone	40	B
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (Total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	13	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	6	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	6	U

Reference 12
p. 198 of 227

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B-27

Lab Name: CAMO Laboratories
Lab Code: H & A of New York
Case No.: ____
Matrix: (soil/water) Soil
Sample wt/vol: 5 (g/ml) g
Level: (low/med) Low
% Moisture: not dec. 18
Column: (pack/cap) Pack

Contract:
SAS No.:
SDG No.: 1189-10
Lab Sample ID: 1189-10
Lab File ID:
Date Received: 3-14-91
Date Analyzed: 3-20-91
Dilution Factor: 1

CONCENTRATION UNITS:
ug/L or ug/kg
(Circle One)

CAS Number	COMPOUND		Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	40	B
67-64-1	Acetone	159	B
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (Total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	43	B
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	6	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	7	
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	6	U

Reference 12
p. 199 of 227

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

| 1-CH |

Lab Name: CAMO Laboratories
Lab Code: H & A of New York
Case No.: _____
Matrix: (soil/water) Sediment
Sample wt/vol: 5 (g/ml) g
Level: (low/med) Low
% Moisture: not dec. 22
Column: (pack/cap) Pack

Contract:
SAS No.: SDG No.: 1189-12
Lab Sample ID: 1189-12
Lab File ID:
Date Received: 3-14-91
Date Analyzed: 3-20-91
Dilution Factor: 1

CONCENTRATION UNITS:
ug/L or ug/kg
(Circle One)

CAS Number	COMPOUND		Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	32	B
67-64-1	Acetone	8	B
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (Total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	6	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	8	
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	6	U

Reference 12
P. 200 of 227

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

| BC.H. |

Lab Name: CAMO Laboratories
Lab Code: H & A of New York
Case No.: ____
Matrix: (soil/water) Sediment
Sample wt/vol: 5 (g/ml) g
Level: (low/med) Low
% Moisture: not dec. 26
Column: (pack/cap) Pack

Contract:
SAS No.: SDG No.: 1189-13
Lab Sample ID: 1189-13
Lab File ID:
Date Received: 3-14-91
Date Analyzed: 3-20-91
Dilution Factor: 1

CONCENTRATION UNITS:
ug/L or ug/kg
(Circle One)

CAS Number	COMPOUND		Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	24	B
67-64-1	Acetone	7	U
75-15-0	Carbon Disulfide	7	U
75-35-4	1,1-Dichloroethene	7	U
75-34-3	1,1-Dichloroethane	7	U
540-59-0	1,2-Dichloroethene (Total)	7	U
67-66-3	Chloroform	7	U
107-06-2	1,2-Dichloroethane	7	U
78-93-3	2-Butanone	7	U
71-55-6	1,1,1-Trichloroethane	7	U
56-23-5	Carbon Tetrachloride	7	U
108-05-4	Vinyl Acetate	7	U
75-27-4	Bromodichloromethane	7	U
78-87-5	1,2-Dichloropropane	7	U
10061-01-5	cis-1,3-Dichloropropene	7	U
79-01-6	Trichloroethene	7	U
124-48-1	Dibromochloromethane	7	U
79-00-5	1,1,2-Trichloroethane	7	U
71-43-2	Benzene	7	U
10061-02-6	trans-1,3-Dichloropropene	7	U
75-25-2	Bromoform	7	U
108-10-1	4-Methyl-2-Pentanone	14	U
591-78-6	2-Hexanone	14	U
127-18-4	Tetrachloroethene	7	U
79-34-5	1,1,2,2-Tetrachloroethane	7	U
108-88-3	Toluene	7	U
108-90-7	Chlorobenzene	7	U
100-41-4	Ethylbenzene	7	U
100-42-5	Styrene	7	U
1330-20-7	Total Xylenes	7	U

Reference 12
p. 201 of 227

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

| Trip Blank |

Lab Name: CAMO Laboratories
Lab Code: H & A of New York
Case No.: ____
Matrix: (soil/water) Water
Sample wt/vol: 5 (g/ml) ml
Level: (low/med) Low
% Moisture: not dec. N/A
Column: (pack/cap) Pack

Contract:
SAS No.:
SDG No.: 1189-14
Lab Sample ID: 1189-14
Lab File ID:
Date Received: 3-14-91
Date Analyzed: 3-21-91
Dilution Factor: 1

CONCENTRATION UNITS:
ug/L or ug/kg
(Circle One)

CAS Number	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (Total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

Reference 1c
p. 202 of 227

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

| Field Equip.Blank |

Lab Name: CAMO Laboratories
Lab Code: H & A of New York
Case No.: ____
Matrix: (soil/water) Water
Sample wt/vol: 5 (g/ml) ml
Level: (low/med) Low
% Moisture: not dec. N/A
Column: (pack/cap) Pack

Contract:
SAS No.:
SDG No.: 1189-15
Lab Sample ID: 1189-15
Lab File ID:
Date Received: 3-14-91
Date Analyzed: 3-21-91
Dilution Factor: 1

CONCENTRATION UNITS: ug/L or ug/kg (Circle One)

CAS Number	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (Total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

FORM I VOA

Reference 12
p. 203 of 227

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

| VBLK 0320 |

Lab Name: CAMO Laboratories
Lab Code: H & A of New York
Case No.: ____
Matrix: (soil/water) Sediment
Sample wt/vol: 5 (g/ml) g
Level: (low/med) Low
% Moisture: not dec. 0
Column: (pack/cap) Pack

Contract:
SAS No.: SDG No.: VBLK 0320
Lab Sample ID: VBLK 0320
Lab File ID:
Date Received: 3-14-91
Date Analyzed: 3-20-91
Dilution Factor: 1

CONCENTRATION UNITS:
ug/L or ug/kg
(Circle One)

CAS Number	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	4	J
67-64-1	Acetone	31	
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (Total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	8	J
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	4	J
591-78-6	2-Hexanone	22	
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

Reference 16
p. 204 of 227

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK 0321

Lab Name: CAMO Laboratories
Lab Code: H & A of New York
Case No.: ____
Matriz: (soil/water) Water
Sample wt/vol: 5 (g/ml) ml
Level: (low/med) Low
% Moisture: not dec. N/A
Column: (pack/cap) Pack

Contract:
SAS No.:
SDG No.: VBLK 0321
Lab Sample ID: VBLK 0321
Lab File ID:
Date Received: 3-14-91
Date Analyzed: 3-21-91
Dilution Factor: 1

CONCENTRATION UNITS:
ug/L or ug/kg
(Circle One)

CAS Number	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	2	J
67-64-1	Acetone	3	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (Total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	5	J
591-78-6	2-Hexanone	15	
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

Reference 12
p. 205 of 227

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE No.
B-17

Lab Name: CAMO Laboratories
Contract: H & A of NY
Lab Code:
Case No.: 1189
SAS No.:
SDG No:
Matrix: (soil/water) SOIL
Lab Sample ID: 1189-09
Sample wt/vol: 30 (g/mL) g
Lab File ID: _____
Level: (low/med) LOW
Date Received: _____
% Moisture: not dec. 20 dec.
Date Extracted: 3-18-91
Extraction: (SepF/Cont/Sonc)
Date Analyzed: 4-5-91
GPC Cleanup: (Y/N) N
pH: ____
Dilution Factor: 1

CONCENTRATION UNITS: ug/L or ug/Kg (Circle One)

CAS Number	COMPOUND		Q
108-95-2	Phenol	412.50	U
111-44-4	bis(2-Chloroethyl) ether	412.50	U
95-57-8	2-Chlorophenol	412.50	U
541-73-1	1,3-Dichlorobenzene	412.50	U
106-46-7	1,4-Dichlorobenzene	412.50	U
100-51-6	Benzyl alcohol	412.50	U
95-50-1	1,2-Dichlorobenzene	412.50	U
95-48-7	2-Methylphenol	412.50	U
108-60-1	bis(2-Chloroisopropyl) ether	412.50	U
106-44-5	4-Methylphenol	412.50	U
621-64-7	N-Nitroso-di-n-propylamine	412.50	U
67-72-1	Hexachloroethane	412.50	U
98-95-3	Nitrobenzene	412.50	U
78-59-1	Isophorone	412.50	U
88-75-5	2-Nitrophenol	412.50	U
105-67-9	2,4-Dimethylphenol	412.50	U
65-85-0	Benzoic acid	2062.50	U
111-91-1	bis(2-Chloroethoxy) methane	412.50	U
120-83-2	2,4-Dichlorophenol	412.50	U
120-82-1	1,2,4-Trichlorobenzene	412.50	U
91-20-3	Naphthalene	412.50	U
106-47-8	4-Chloroaniline	412.50	U
87-68-3	Hexachlorobutadiene	412.50	U
59-50-7	4-Chloro-3-methylphenol	412.50	U
91-57-6	2-Methylnaphthalene	412.50	U
77-47-4	Hexachlorocyclopentadiene	412.50	U
88-06-2	2,4,6-Trichlorophenol	412.50	U
95-95-4	2,4,5-Trichlorophenol	2062.50	U
91-58-7	2-Chloronaphthalene	412.50	U
88-74-4	2-Nitroaniline	2062.50	U
131-11-3	Dimethylphthalate	412.50	U
208-96-8	Acenaphthylene	412.50	U
606-20-2	2,6-Dinitrotoluene	412.50	U

Reference 12
p. 206 of 227

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE No.

B-17

Lab Name: CANO Laboratories Contract: E & A of NY
Lab Code: Case No.: 1189 SAS No.: SDG No:
Matrix: (soil/water) SOIL Lab Sample ID: 1189-09
Sample wt/vol: 30 (g/mL) g Lab File ID: _____
Level: (low/med) LOW Date Received: _____
% Moisture: not dec. 20 dec. Date Extracted: 3-18-91
Extraction: (SepF/Cont/Sonc) Date Analyzed: 4-4-91
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1

CAS Number	COMPOUND	CONCENTRATION UNITS: ug/L or ug/kg (Circle One)	Q
99-09-2	3-Nitroaniline	2062.50	U
83-32-9	Acenaphthene	412.50	U
51-28-5	2,4-Dinitrophenol	2062.50	U
100-02-7	4-Nitrophenol	2062.50	U
132-64-9	Dibenzofuran	412.50	U
121-14-2	2,4-Dinitrotoluene	412.50	U
84-66-2	Diethylphthalate	412.50	U
7005-72-3	4-Chlorophenyl-phenylether	412.50	U
86-73-7	Fluorene	412.50	U
100-01-6	4-Nitroaniline	2062.50	U
534-52-1	4,6-Dinitro-2-methylphenol	2062.50	U
86-30-6	N-Nitrosodiphenylamine (1)	412.50	U
101-55-3	4-Bromophenyl-phenylether	412.50	U
118-74-1	Hexachlorobenzene	412.50	U
87-86-5	Pentachlorophenol	2062.50	U
85-01-8	Phenanthrene	412.50	U
120-12-7	Anthracene	412.50	U
84-74-2	Di-n-butylphthalate	412.50	U
206-44-0	Fluoranthene	412.50	U
129-00-0	Pyrene	412.50	U
85-68-7	Butylbenzylphthalate	412.50	U
91-94-1	3,3'-Dichlorobenzidine	825.00	U
56-55-3	Benzo(a)anthracene	412.50	U
218-01-9	Chrysene	412.50	U
117-81-7	bis(2-Ethylhexyl) phthalate	412.50	U
117-84-0	Di-n-octylphthalate	412.50	U
205-99-2	Benzo(b)fluoranthene	412.50	U
207-08-9	Benzo(k)fluoranthene	412.50	U
50-32-8	Benzo(a)pyrene	412.50	U
193-39-5	Indeno(1,2,3-cd)pyrene	412.50	U
53-70-3	Dibenz(a,h)anthracene	412.50	U
191-24-2	Benzo(g,h,i)perylene	412.50	U

(1) Cannot be separated from Diphenylamine.

Reference 12
p. 207 of 227

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE No.
B-27

Lab Name: CAMO Laboratories Contract: H & A of NY
Lab Code: Case No.: 1189 SAS No.: SDG No:
Matrix: (soil/water) SOIL Lab Sample ID: 1189-10
Sample wt/vol: 30 (g/mL) g Lab File ID: _____
Level: (low/med) LOW Date Received: _____
% Moisture: not dec. 18 dec. Date Extracted: 3-18-91
Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 4-4-91
GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1

CAS Number	COMPOUND	CONCENTRATION UNITS: ug/L or ug/kg (Circle One)	Q
108-95-2	Phenol	402.44	U
111-44-4	bis(2-Chloroethyl) ether	402.44	U
95-57-8	2-Chlorophenol	402.44	U
541-73-1	1,3-Dichlorobenzene	402.44	U
106-46-7	1,4-Dichlorobenzene	402.44	U
100-51-6	Benzyl alcohol	402.44	U
95-50-1	1,2-Dichlorobenzene	402.44	U
95-48-7	2-Methylphenol	402.44	U
108-60-1	bis(2-Chloroisopropyl) ether	402.44	U
106-44-5	4-Methylphenol	402.44	U
621-64-7	N-Nitroso-di-n-propylamine	402.44	U
67-72-1	Hexachloroethane	402.44	U
98-95-3	Nitrobenzene	402.44	U
78-59-1	Isophorone	402.44	U
88-75-5	2-Nitrophenol	402.44	U
105-67-9	2,4-Dimethylphenol	402.44	U
65-85-0	Benzoic acid	2012.20	U
111-91-1	bis(2-Chloroethoxy) methane	402.44	U
120-83-2	2,4-Dichlorophenol	402.44	U
120-82-1	1,2,4-Trichlorobenzene	402.44	U
91-20-3	Naphthalene	402.44	U
106-47-8	4-Chloroaniline	402.44	U
87-68-3	Hexachlorobutadiene	402.44	U
59-50-7	4-Chloro-3-methylphenol	402.44	U
91-57-6	2-Methylnaphthalene	402.44	U
77-47-4	Hexachlorocyclopentadiene	402.44	U
88-06-2	2,4,6-Trichlorophenol	402.44	U
95-95-4	2,4,5-Trichlorophenol	2011.22	U
91-58-7	2-Chloronaphthalene	402.44	U
88-74-4	2-Nitroaniline	2012.20	U
131-11-3	Dimethylphthalate	402.44	U
208-96-8	Acenaphthylene	402.44	U
606-20-2	2,6-Dinitrotoluene	402.44	U

Reference 12
p. 208 of 227

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE No.

| B-2V |

Lab Name: CAMO Laboratories Contract: H & A of NY
Lab Code: Case No.: 1189 SAS No.: SDG No:
Matrix: (soil/water) SOIL Lab Sample ID: 1189-10
Sample wt/vol: 30 (g/mL) g Lab File ID: _____
Level: (low/med) LOW Date Received: _____
% Moisture: not dec. 18 dec. Date Extracted: 3-18-91
Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 4-4-91
GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1

CONCENTRATION UNITS: ug/L or ug/kg (Circle One)

CAS Number	COMPOUND		Q
99-09-2	3-Nitroaniline	2012.20	U
83-32-9	Acenaphthene	402.44	U
51-28-5	2,4-Dinitrophenol	2012.20	U
100-02-7	4-Nitrophenol	2012.20	U
132-64-9	Dibenzofuran	402.44	U
121-14-2	2,4-Dinitrotoluene	402.44	U
84-66-2	Diethylphthalate	402.44	U
7005-72-3	4-Chlorophenyl-phenylether	402.44	U
86-73-7	Fluorene	402.44	U
100-01-6	4-Nitroaniline	2012.20	U
534-52-1	4,6-Dinitro-2-methylphenol	2012.20	U
86-30-6	N-Nitrosodiphenylamine (1)	402.44	U
101-55-3	4-Bromophenyl-phenylether	402.44	U
118-74-1	Hexachlorobenzene	402.44	U
87-86-5	Pentachlorophenol	2012.20	U
85-01-8	Phenanthrene	402.44	U
120-12-7	Anthracene	402.44	U
84-74-2	Di-n-butylphthalate	402.44	U
206-44-0	Fluoranthene	402.44	U
129-00-0	Pyrene	402.44	U
85-68-7	Butylbenzylphthalate	402.44	U
91-94-1	3,3'-Dichlorobenzidine	804.88	U
56-55-3	Benzo(a)anthracene	402.44	U
218-01-9	Chrysene	402.44	U
117-81-7	bis(2-Ethylhexyl) phthalate	12475.61	J
117-84-0	Di-n-octylphthalate	402.44	U
205-99-2	Benzo(b)fluoranthene	402.44	U
207-08-9	Benzo(k)fluoranthene	402.44	U
50-32-8	Benzo(a)pyrene	402.44	U
193-39-5	Indeno(1,2,3-cd)pyrene	402.44	U
53-70-3	Dibenz(a,h)anthracene	402.44	U
191-24-2	Benzo(g,h,i)perylene	402.44	U

(1) Cannot be separated from Diphenylamine.

Reference 16
p. 209 of 227

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE No.
B-3V

Lab Name: CAMO Laboratories
Contract: H & A of NY
Lab Code:
Case No.: 1189
SAS No.:
SDG No:
Matrix: (soil/water) SOIL
Lab Sample ID: 1189-11
Sample wt/vol: 30 (g/mL) g
Lab File ID: _____
Level: (low/med) LOW
Date Received: _____
% Moisture: not dec. 17 dec.
Date Extracted: 3-18-91
Extraction: (SepF/Cont/Sonc) Sonc
Date Analyzed: 4-4-91
GPC Cleanup: (Y/N) N
pH: ____
Dilution Factor: 1

CAS Number	COMPOUND	CONCENTRATION UNITS: ug/L or ug/kg (Circle One)	Q
108-95-2	Phenol	397.59	U
111-44-4	bis(2-Chloroethyl) ether	397.59	U
95-57-8	2-Chlorophenol	397.59	U
541-73-1	1,3-Dichlorobenzene	397.59	U
106-46-7	1,4-Dichlorobenzene	397.59	U
100-51-6	Benzyl alcohol	397.59	U
95-50-1	1,2-Dichlorobenzene	397.59	U
95-48-7	2-Methylphenol	397.59	U
108-60-1	bis(2-Chloroisopropyl) ether	397.59	U
106-44-5	4-Methylphenol	397.59	U
621-64-7	N-Nitroso-di-n-propylamine	397.59	U
67-72-1	Hexachloroethane	397.59	U
98-95-3	Nitrobenzene	397.59	U
78-59-1	Isophorone	397.59	U
88-75-5	2-Nitrophenol	397.59	U
105-67-9	2,4-Dimethylphenol	397.59	U
65-85-0	Benzoic acid	1987.95	U
111-91-1	bis(2-Chloroethoxy) methane	397.59	U
120-83-2	2,4-Dichlorophenol	397.59	U
120-82-1	1,2,4-Trichlorobenzene	397.59	U
91-20-3	Naphthalene	397.59	U
106-47-8	4-Chloroaniline	397.59	U
87-68-3	Hexachlorobutadiene	397.59	U
59-50-7	4-Chloro-3-methylphenol	397.59	U
91-57-6	2-Methylnaphthalene	397.59	U
77-47-4	Hexachlorocyclopentadiene	397.59	U
88-06-2	2,4,6-Trichlorophenol	397.59	U
95-95-4	2,4,5-Trichlorophenol	1987.95	U
91-58-7	2-Chloronaphthalene	397.59	U
88-74-4	2-Nitroaniline	1987.95	U
131-11-3	Dimethylphthalate	397.59	U
208-96-8	Acenaphthylene	397.59	U
606-20-2	2,6-Dinitrotoluene	397.59	U

Reference 12
p. 210 of 227

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE No.

B-37

Lab Name: CANO Laboratories Contract: H & A of NY
Lab Code: Case No.: 1189 SAS No.: SDG No:
Matrix: (soil/water) SOIL Lab Sample ID: 1189-11
Sample wt/vol: 30 (g/mL) g Lab File ID: _____
Level: (low/med) LOW Date Received: _____
% Moisture: not dec. 17 dec. Date Extracted: 3-18-91
Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 4-4-91
GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1

CAS Number	COMPOUND	CONCENTRATION UNITS: ug/L or ug/kg (Circle One)	Q
99-09-2	3-Nitroaniline	1987.95	U
83-32-9	Acenaphthene	397.59	U
51-28-5	2,4-Dinitrophenol	1987.95	U
100-02-7	4-Nitrophenol	1987.95	U
132-64-9	Dibenzofuran	397.59	U
121-14-2	2,4-Dinitrotoluene	397.59	U
84-66-2	Diethylphthalate	397.59	U
7005-72-3	4-Chlorophenyl-phenylether	397.59	U
86-73-7	Fluorene	397.59	U
100-01-6	4-Nitroaniline	1987.95	U
534-52-1	4,6-Dinitro-2-methylphenol	1987.95	U
86-30-6	N-Nitrosodiphenylamine (1)	397.59	U
101-55-3	4-Bromophenyl-phenylether	397.59	U
118-74-1	Hexachlorobenzene	397.59	U
87-86-5	Pentachlorophenol	1987.95	U
85-01-8	Phenanthrene	397.59	U
120-12-7	Anthracene	397.59	U
87-74-2	Di-n-butylphthalate	397.59	U
206-44-0	Fluoranthene	397.59	U
129-00-0	Pyrene	397.59	U
85-68-7	Butylbenzylphthalate	397.59	U
91-94-1	3,3'-Dichlorobenzidine	795.18	U
56-55-3	Benzo(a)anthracene	397.59	U
218-01-9	Chrysene	397.59	U
117-81-7	bis(2-Ethylhexyl) phthalate	22702.41	
117-84-0	Di-n-octylphthalate	397.59	U
205-99-2	Benzo(b)fluoranthene	397.59	U
207-08-9	Benzo(k)fluoranthene	397.59	U
50-32-8	Benzo(a)pyrene	397.59	U
193-39-5	Indeno(1,2,3-cd)pyrene	397.59	U
53-70-3	Dibenz(a,h)anthracene	397.59	U
191-24-2	Benzo(g,h,i)perylene	397.59	U

(1) Cannot be separated from Diphenylamine.

Reference 16
p. 211 of 227

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE No.

1-CE

Lab Name: CAMO Laboratories Contract: H & A of NY
Lab Code: Case No.: 1189 SAS No.: SDG No:
Matrix: (soil/water) SOIL Lab Sample ID: 1189-12
Sample wt/vol: 30 (g/mL) g Lab File ID: _____
Level: (low/med) LOW Date Received: _____
% Moisture: not dec. 22 dec. Date Extracted: 3-18-91
Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 4-4-91
GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1

CAS Number	COMPOUND	CONCENTRATION UNITS: ug/L or ug/kg (Circle One)	Q
108-95-2	Phenol	423.08	U
111-44-4	bis(2-Chloroethyl) ether	423.08	U
95-57-8	2-Chlorophenol	423.08	U
541-73-1	1,3-Dichlorobenzene	423.08	U
106-46-7	1,4-Dichlorobenzene	423.08	U
100-51-6	Benzyl alcohol	423.08	U
95-50-1	1,2-Dichlorobenzene	423.08	U
95-48-7	2-Methylphenol	423.08	U
108-60-1	bis(2-Chloroisopropyl) ether	423.08	U
106-44-5	4-Methylphenol	423.08	U
621-64-7	N-Nitroso-di-n-propylamine	423.08	U
67-72-1	Hexachloroethane	423.08	U
98-95-3	Nitrobenzene	423.08	U
78-59-1	Isophorone	423.08	U
88-75-5	2-Nitrophenol	423.08	U
105-67-9	2,4-Dimethylphenol	423.08	U
65-85-0	Benzoic acid	2115.38	U
111-91-1	bis(2-Chloroethoxy) methane	423.08	U
120-83-2	2,4-Dichlorophenol	423.08	U
120-82-1	1,2,4-Trichlorobenzene	423.08	U
91-20-3	Naphthalene	423.08	U
106-47-8	4-Chloroaniline	423.08	U
87-68-3	Hexachlorobutadiene	423.08	U
59-50-7	4-Chloro-3-methylphenol	423.08	U
91-57-6	2-Methylnaphthalene	423.08	U
77-47-4	Hexachlorocyclopentadiene	423.08	U
88-06-2	2,4,6-Trichlorophenol	423.08	U
95-95-4	2,4,5-Trichlorophenol	2115.38	U
91-58-7	2-Chloronaphthalene	423.08	U
88-74-4	2-Nitroaniline	2115.38	U
131-11-3	Dimethylphthalate	423.08	U
208-96-8	Acenaphthylene	423.08	U
606-20-2	2,6-Dinitrotoluene	423.08	U

Reference 12
p. 212 of 227

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE No.

| 1-CH |

Lab Name: CAMO Laboratories Contract: H & A of NY
Lab Code: Case No.: 1189 SAS No.: SDG No:
Matrix: (soil/water) SOIL Lab Sample ID: 1189-12
Sample wt/vol: 30 (g/mL) g Lab File ID: _____
Level: (low/med) LOW Date Received: _____
% Moisture: not dec. 22 dec. Date Extracted: 3-18-91
Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 4-4-91
GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1

CAS Number	COMPOUND	CONCENTRATION UNITS: ug/L or ug/kg (Circle One)	Q
99-09-2	3-Nitroaniline	2115.38	U
83-32-9	Acenaphthene	423.08	U
51-28-5	2,4-Dinitrophenol	2115.38	U
100-02-7	4-Nitrophenol	2115.38	U
132-64-9	Dibenzofuran	423.08	U
121-14-2	2,4-Dinitrotoluene	423.08	U
84-66-2	Diethylphthalate	423.08	U
7005-72-3	4-Chlorophenyl-phenylether	423.08	U
86-73-7	Fluorene	423.08	U
100-01-6	4-Nitroaniline	2115.38	U
534-52-1	4,6-Dinitro-2-methylphenol	2115.38	U
86-30-6	N-Nitrosodiphenylamine (1)	423.08	U
101-55-3	4-Bromophenyl-phenylether	423.08	U
118-74-1	Hexachlorobenzene	423.08	U
87-86-5	Pentachlorophenol	2115.38	U
85-01-8	Phenanthrene	423.08	U
120-12-7	Anthracene	423.08	U
84-74-2	Di-n-butylphthalate	423.08	U
206-44-0	Fluoranthene	423.08	U
129-00-0	Pyrene	423.08	U
85-68-7	Butylbenzylphthalate	423.08	U
91-94-1	3,3'-Dichlorobenzidine	846.15	U
56-55-3	Benzo(a)anthracene	423.08	U
218-01-9	Chrysene	423.08	U
117-81-7	bis(2-Ethylhexyl) phthalate	26330.77	
117-84-0	Di-n-octylphthalate	423.08	U
205-99-2	Benzo(b)fluoranthene	423.08	U
207-08-9	Benzo(k)fluoranthene	423.08	U
50-32-8	Benzo(a)pyrene	423.08	U
193-39-5	Indeno(1,2,3-cd)pyrene	423.08	U
53-70-3	Dibenz(a,h)anthracene	423.08	U
191-24-2	Benzo(g,h,i)perylene	423.08	U

(1) Cannot be separated from Diphenylamine.

Reference 12
p. 213 of 227

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE No.
B-CH

Lab Name: CHMO Laboratories Contract: H & A of NY
Lab Code: Case No.: 1189 SAS No.: SDG No:
Matrix: (soil/water) SOIL Lab Sample ID: 1189-13
Sample wt/vol: 30 (g/mL) g Lab File ID: _____
Level: (low/med) LOW Date Received: _____
% Moisture: not dec. 26 dec. Date Extracted: 3-18-91
Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 4-4-91
GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1

CAS Number	COMPOUND	CONCENTRATION UNITS: ug/L or ug/kg (Circle One)	Q
108-95-2	Phenol	445.95	U
111-44-4	bis(2-Chloroethyl) ether	445.95	U
95-57-8	2-Chlorophenol	445.95	U
541-73-1	1,3-Dichlorobenzene	445.95	U
106-46-7	1,4-Dichlorobenzene	445.95	U
100-51-6	Benzyl alcohol	445.95	U
95-50-1	1,2-Dichlorobenzene	445.95	U
95-48-7	2-Methylphenol	445.95	U
108-60-1	bis(2-Chloroisopropyl) ether	445.95	U
106-44-5	4-Methylphenol	445.95	U
621-64-7	N-Nitroso-di-n-propylamine	445.95	U
67-72-1	Hexachloroethane	445.95	U
98-95-3	Nitrobenzene	445.95	U
78-59-1	Isophorone	445.95	U
88-75-5	2-Nitrophenol	445.95	U
105-67-9	2,4-Dimethylphenol	445.95	U
65-85-0	Benzoic acid	2229.73	U
111-91-1	bis(2-Chloroethoxy) methane	445.95	U
120-83-2	2,4-Dichlorophenol	445.95	U
120-82-1	1,2,4-Trichlorobenzene	445.95	U
91-20-3	Naphthalene	445.95	U
106-47-8	4-Chloroaniline	445.95	U
87-68-3	Hexachlorobutadiene	445.95	U
59-50-7	4-Chloro-3-methylphenol	445.95	U
91-57-6	2-Methylnaphthalene	445.95	U
77-47-4	Hexachlorocyclopentadiene	445.95	U
88-06-2	2,4,6-Trichlorophenol	445.95	U
95-95-4	2,4,5-Trichlorophenol	2229.73	U
91-58-7	2-Chloronaphthalene	445.95	U
88-74-4	2-Nitroaniline	2229.73	U
131-11-3	Dimethylphthalate	445.95	U
208-96-8	Acenaphthylene	445.95	U
606-20-2	2,6-Dinitrotoluene	445.95	U

Reference 12
p. 214 of 227

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE No.

B-CH

Lab Name: CAMO Laboratories Contract: H & A of NY
Lab Code: Case No.: 1189 SAS No.: SDG No:
Matrix: (soil/water) SOIL Lab Sample ID: 1189-13
Sample wt/vol: 30 (g/mL) g Lab File ID: _____
Level: (low/med) LOW Date Received: _____
% Moisture: not dec. 26 dec. Date Extracted: 3-18-91
Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 4-4-91
GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1

CAS Number	COMPOUND	CONCENTRATION UNITS: ug/L or ug/kg (Circle One)	Q
99-09-2	3-Nitroaniline	2229.73	U
83-32-9	Ancenaphthene	445.95	U
51-28-5	2,4-Dinitrophenol	2229.73	U
100-02-7	4-Nitrophenol	2229.73	U
132-64-9	Dibenzofuran	445.95	U
121-14-2	2,4-Dinitrotoluene	445.95	U
84-66-2	Diethylphthalate	445.95	U
7005-72-3	4-Chlorophenyl-phenylether	445.95	U
86-73-7	Fluorene	445.95	U
100-01-6	4-Nitroaniline	2229.73	U
534-52-1	4,6-Dinitro-2-methylphenol	2229.73	U
86-30-6	N-Nitrosodiphenylamine (1)	445.95	U
101-55-3	4-Bromophenyl-phenylether	445.95	U
118-74-1	Hexachlorobenzene	445.95	U
87-86-5	Pentachlorophenol	2229.73	U
85-01-8	Phenanthrene	445.95	U
120-12-7	Anthracene	445.95	U
87-74-2	Di-n-butylphthalate	445.95	U
206-44-0	Fluoranthene	445.95	U
129-00-0	Pyrene	445.95	U
85-68-7	Butylbenzylphthalate	445.95	U
91-94-1	3,3'-Dichlorobenzidine	891.89	U
56-55-3	Benzo(a)anthracene	445.95	U
218-01-9	Chrysene	445.95	U
117-81-7	bis(2-Ethylhexyl) phthalate	33000.00	
117-84-0	Di-n-octylphthalate	445.95	U
205-99-2	Benzo(b)fluoranthene	445.95	U
207-08-9	Benzo(k)fluoranthene	445.95	U
50-32-8	Benzo(a)pyrene	445.95	U
193-39-5	Indeno(1,2,3-cd)pyrene	445.95	U
53-70-3	Dibenz(a,h)anthracene	445.95	U
191-24-2	Benzo(g,h,i)perylene	445.95	U

(1) Cannot be separated from Diphenylamine.

Reference 12
p. 215 of 227

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTITIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE No.
B-1V

Lab Name: CAMO Laboratories Contract: H & A of NY
Lab Code: Case No.: 1189 SAS No.: SDG No.:
Matrix:(soil/water) SOIL Lab Sample ID: 1189-09
Sample wt/vol: 5 (g/mL) g Lab File ID:
Level:(low/med) LOW Date Received: 3-13-91
% Moisture: not dec. 20 Date Analyzed: 3-20-91
Column: (pack/cap) Pack Dilution Factor: 1

Number TICs found: 1 CONCENTRATION UNITS: ug/kg

CAS Number	COMPOUND NAME	SCAN	EST. CONC.	Q
1.	Unknown Alkane	361	43	BJ
2.				
3.				
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Reference 12
p. 216 of 227

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTITIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE No.
B-2V

Lab Name: CAMO Laboratories Contract: E & A of NY
Lab Code: Case No.: 1189 SAS No.: SDG No.:
Matrix:(soil/water) SOIL Lab Sample ID: 1189-10
Sample wt/vol: 5 (g/mL) g Lab File ID:
Level:(low/med) LOW Date Received: 3-13-91
% Moisture: not dec. 18 Date Analyzed: 3-20-91
Column: (pack/cap) Pack Dilution Factor: 1

Number TICs found: 3 CONCENTRATION UNITS: ug/kg

CAS Number	COMPOUND NAME	SCAN	EST. CONC.	Q
1.	Unknown	16	32	J
2.	Unknown	361	29	BJ
3.	Phenol (ACN) (DOT)	508	7	BJ
4.				
5.				
6.				
7.				
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Reference 12
p. 217 of 227

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTITIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE No.

| 1-OE |

Lab Name: CAMO Laboratories Contract: H & A of NY
Lab Code: Case No.: 1189 SAS No.: SDG No.:
Matrix:(soil/water) SOIL Lab Sample ID: 1189-12
Sample wt/vol: 5 (g/mL) g Lab File ID:
Level:(low/med) LOW Date Received: 3-13-91
% Moisture: not dec. 22 Date Analyzed: 3-20-91
Column: (pack/cap) Pack Dilution Factor: 1

Number TICs found: 6 CONCENTRATION UNITS: ug/kg

	CAS Number	COMPOUND NAME	SCAN	EST. CONC.	Q
1.		Di isopropyl ether	153	76	J
2.		Unknown	191	110	J
3.		5-methyl-2-Hexanamine	286	80	J
4.		Hexane	353	17	BJ
5.		Benzenesulfonic Acid, 4-Methyl	511	72	BJ
6.		Unknown	628	15	J
7.					
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9.					
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Reference 12
p. 218 of 227

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTITIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE No.
Trip Blank

Lab Name: CAMO Laboratories Contract: H & A of NY
Lab Code: Case No.: 1189
Matrix:(soil/water) WATER
Sample wt/vol: 5 (g/mL) ml
Level:(low/med) LOW
% Moisture: not dec.
Column: (pack/cap) Pack

SAS No.: SDG No.:
Lab Sample ID: 1189-14
Lab File ID:
Date Received: 3-13-91
Date Analyzed: 3-20-91
Dilution Factor: 1

Number TICs found: 1 CONCENTRATION UNITS: ug/l

CAS Number	COMPOUND NAME	SCAN	EST. CONC.	Q
1.	Benzenesulfonic Acid, 4-Methyl	509	6	BJ
2.			35	
3.			660	
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Reference 12
p. 219 of 227

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTITIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE No.
VBLK0320

Lab Name: CAMO Laboratories Contract: H & A of NY
Lab Code: Case No.: 1189 SAS No.: SDG No.:
Matrix:(soil/water) SOIL Lab Sample ID: VBLK0320
Sample wt/vol: 5 (g/mL) g Lab File ID:
Level:(low/med) LOW Date Received:
% Moisture: not dec. Date Analyzed: 3-20-91
Column: (pack/cap) Pack Dilution Factor: 1

Number TICs found: 5 CONCENTRATION UNITS: ug/kg

CAS Number	COMPOUND NAME	SCAN	EST. CONC.	Q
1.	Unkown	99	11	J
2.	Unkown	273	20	J
3.	Unknown Alkane	320	6	J
4.	Pentane, 3-Methyl-(or Hexane)	361	120	J
5.	Benzenesulfonic Acid, 4-Hydrox	509	11	J
6.				
7.				
8.				
9.				
10.				
11.				
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Reference 12
p. 220 of 227

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE No.

| F.Equip.Blank |

Lab Name: CAMO Laboratories Contract: N & A of NY
Lab Code: Case No.: 1189 SAS No.: SDG No:
Matrix: (soil/water) WATER Lab Sample ID: 1189-15
Sample wt/vol: 300 (g/mL) ml Lab File ID: _____
Level: (low/med) LOW Date Received: _____
% Moisture: not dec. N/A dec. Date Extracted: 3-19-91
Extraction: (SepF/Cont/Sonc) SepF Date Analyzed: 4-5-91
GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1

CONCENTRATION UNITS:
ug/L or ug/kg
(Circle One)

CAS Number	COMPOUND		Q
108-95-2	Phenol	33.00	U
111-44-4	bis(2-Chloroethyl) ether	33.00	U
95-57-8	2-Chlorophenol	33.00	U
541-73-1	1,3-Dichlorobenzene	33.00	U
106-46-7	1,4-Dichlorobenzene	33.00	U
100-51-6	Benzyl alcohol	33.00	U
95-50-1	1,2-Dichlorobenzene	33.00	U
95-48-7	2-Methylphenol	33.00	U
108-60-1	bis(2-Chloroisopropyl) ether	33.00	U
106-44-5	4-Methylphenol	33.00	U
621-64-7	N-Nitroso-di-n-propylamine	33.00	U
67-72-1	Hexachloroethane	33.00	U
98-95-3	Nitrobenzene	33.00	U
78-59-1	Isophorone	33.00	U
88-75-5	2-Nitrophenol	33.00	U
105-67-9	2,4-Dimethylphenol	33.00	U
65-85-0	Benzoic acid	170.00	U
111-91-1	bis(2-Chloroethoxy) methane	33.00	U
120-83-2	2,4-Dichlorophenol	33.00	U
120-82-1	1,2,4-Trichlorobenzene	33.00	U
91-20-3	Naphthalene	33.00	U
106-47-8	4-Chloroaniline	33.00	U
87-68-3	Hexachlorobutadiene	33.00	U
59-50-7	4-Chloro-3-methylphenol	33.00	U
91-57-6	2-Methylnaphthalene	33.00	U
77-47-4	Hexachlorocyclopentadiene	33.00	U
88-06-2	2,4,6-Trichlorophenol	33.00	U
95-95-4	2,4,5-Trichlorophenol	170.00	U
91-58-7	2-Chloronaphthalene	33.00	U
88-74-4	2-Nitroaniline	170.00	U
131-11-3	Dimethylphthalate	33.00	U
208-96-8	Acenaphthylene	33.00	U
606-20-2	2,6-Dinitrotoluene	33.00	U

Reference 12
p. 221 of 227

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE No.

| F.Equip.Blank |

Lab Name: CANO Laboratories Contract: H & A of NY

Lab Code: Case No.: 1189 SAS No.: SDG No:

Matrix: (soil/water) WATER Lab Sample ID: 1189-15

Sample wt/vol: 300 (g/mL) ml Lab File ID: _____

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. dec. Date Extracted: 3-19-91

Extraction: (SepF/Cont/Sonc) SepF Date Analyzed: 4-5-91

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1

CONCENTRATION UNITS: ug/L or ug/kg (Circle One)

CAS Number	COMPOUND		Q
99-09-2	3-Nitroaniline	170.00	U
83-32-9	Acenaphthene	33.00	U
51-28-5	2,4-Dinitrophenol	170.00	U
100-02-7	4-Nitrophenol	170.00	U
132-64-9	Dibenzofuran	33.00	U
121-14-2	2,4-Dinitrotoluene	33.00	U
84-66-2	Diethylphthalate	33.00	U
7005-72-3	4-Chlorophenyl-phenylether	33.00	U
86-73-7	Fluorene	33.00	U
100-01-6	4-Nitroaniline	170.00	U
534-52-1	4,6-Dinitro-2-methylphenol	170.00	U
86-30-6	N-Nitrosodiphenylamine (1)	33.00	U
101-55-3	4-Bromophenyl-phenylether	33.00	U
118-74-1	Hexachlorobenzene	33.00	U
87-86-5	Pentachlorophenol	170.00	U
85-01-8	Phenanthrene	33.00	U
120-12-7	Anthracene	33.00	U
84-74-2	Di-n-butylphthalate	33.00	U
206-44-0	Fluoranthene	33.00	U
129-00-0	Pyrene	33.00	U
85-68-7	Butylbenzylphthalate	33.00	U
91-94-1	3,3'-Dichlorobenzidine	67.00	U
56-55-3	Benzo(a)anthracene	33.00	U
218-01-9	Chrysene	33.00	U
117-81-7	bis(2-Ethylhexyl) phthalate	33.00	U
117-84-0	Di-n-octylphthalate	33.00	U
205-99-2	Benzo(b)fluoranthene	33.00	U
207-08-9	Benzo(k)fluoranthene	33.00	U
50-32-8	Benzo(a)pyrene	33.00	U
193-39-5	Indeno(1,2,3-cd)pyrene	33.00	U
53-70-3	Dibenz(a,h)anthracene	33.00	U
191-24-2	Benzo(g,h,i)perylene	33.00	U

(1) Cannot be separated from Diphenylamine.

Reference 1c
p. 222 of 227

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE No.

| Blank |

Lab Name: CAMO Laboratories
Contract: H & A of NY
Lab Code:
Case No.: 1189
SAS No.:
SDG No:
Matrix: (soil/water): SOIL
Lab Sample ID: SBLK318
Sample wt/vol: 30 (g/mL) g
Lab File ID: _____
Level: (low/med) LOW
Date Received: N/A
% Moisture: not dec. N/A dec. dec.
Date Extracted: 3/18/91
Extraction: (SepF/Cont/Sonc) Sonc
Date Analyzed: 4/4/91
GPC Cleanup: (Y/N) N
pH: ____
Dilution Factor: 1

CAS Number	COMPOUND	CONCENTRATION UNITS: ug/L or ug/kg (Circle One)	Q
108-95-2	Phenol	330.00	U
111-44-4	bis(2-Chloroethyl) ether	330.00	U
95-57-8	2-Chlorophenol	330.00	U
541-73-1	1,3-Dichlorobenzene	330.00	U
106-46-7	1,4-Dichlorobenzene	330.00	U
100-51-6	Benzyl alcohol	330.00	U
95-50-1	1,2-Dichlorobenzene	330.00	U
95-48-7	2-Methylphenol	330.00	U
108-60-1	bis(2-Chloroisopropyl) ether	330.00	U
106-44-5	4-Methylphenol	330.00	U
621-64-7	N-Nitroso-di-n-propylamine	330.00	U
67-72-1	Hexachloroethane	330.00	U
98-95-3	Nitrobenzene	330.00	U
78-59-1	Isophorone	330.00	U
88-75-5	2-Nitrophenol	330.00	U
105-67-9	2,4-Dimethylphenol	330.00	U
65-85-0	Benzoic acid	1600.00	U
111-91-1	bis(2-Chloroethoxy) methane	330.00	U
120-83-2	2,4-Dichlorophenol	330.00	U
120-82-1	1,2,4-Trichlorobenzene	330.00	U
91-20-3	Naphthalene	330.00	U
106-47-8	4-Chloroaniline	330.00	U
87-68-3	Hexachlorobutadiene	330.00	U
59-50-7	4-Chloro-3-methylphenol	330.00	U
91-57-6	2-Methylnaphthalene	330.00	U
77-47-4	Hexachlorocyclopentadiene	330.00	U
88-06-2	2,4,6-Trichlorophenol	330.00	U
95-95-4	2,4,5-Trichlorophenol	1600.00	U
91-58-7	2-Chloronaphthalene	330.00	U
88-74-4	2-Nitroaniline	1600.00	U
131-11-3	Dimethylphthalate	330.00	U
208-96-8	Acenapthtylene	330.00	U
606-20-2	2,6-Dinitrotoluene	330.00	U

N/A = Non Applicable

Reference 12
p. 223 of 287

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE No.

Lab Name: CAMO Laboratories
Contract:
Lab Code:
Case No.: 1189
SAS No.:
SDG No:
Matrix: (soil/water) SOIL
Lab Sample ID: SBLK318
Sample wt/vol: (g/mL)
Lab File ID:
Level: (low/med)
Date Received:
% Moisture: not dec.
dec.
Date Extracted:
Extraction: (SepF/Cont/Sonc)
Date Analyzed:
GPC Cleanup: (Y/N)
pH:
Dilution Factor:

CAS Number	COMPOUND	CONCENTRATION UNITS: ug/L or ug/kg (Circle One)	Q
99-09-2	3-Nitroaniline	1600.00	U
83-32-9	Acenaphthene	330.00	U
51-28-5	2,4-Dinitrophenol	1600.00	U
100-02-7	4-Nitrophenol	1600.00	U
132-64-9	Dibenzofuran	330.00	U
121-14-2	2,4-Dinitrotoluene	330.00	U
84-66-2	Diethylphthalate	330.00	U
7005-72-3	4-Chlorophenyl-phenylether	330.00	U
86-73-7	Fluorene	330.00	U
100-01-6	4-Nitroaniline	1600.00	U
534-52-1	4,6-Dinitro-2-methylphenol	1600.00	U
86-30-6	N-Nitrosodiphenylamine (1)	330.00	U
101-55-3	4-Bromophenyl-phenylether	330.00	U
118-74-1	Hexachlorobenzene	330.00	U
87-86-5	Pentachlorophenol	1600.00	U
85-01-8	Phenanthrene	330.00	U
120-12-7	Anthracene	330.00	U
87-74-2	Di-n-butylphthalate	330.00	U
206-44-0	Fluoranthene	330.00	U
129-00-0	Pyrene	330.00	U
85-68-7	Butylbenzylphthalate	330.00	U
91-94-1	3,3'-Dichlorobenzidine	660.00	U
56-55-3	Benzo(a)anthracene	330.00	U
218-01-9	Chrysene	330.00	U
117-81-7	bis(2-Ethylhexyl) phthalate	330.00	U
117-84-0	Di-n-octylphthalate	330.00	U
205-99-2	Benzo(b)fluoranthene	330.00	U
207-08-9	Benzo(k)fluoranthene	330.00	U
50-32-8	Benzo(a)pyrene	330.00	U
193-39-5	Indeno(1,2,3-cd)pyrene	330.00	U
53-70-3	Dibenz(a,h)anthracene	330.00	U
191-24-2	Benzo(g,h,i)perylene	330.00	U

(1) Cannot be separated from Diphenylamine.

Reference 12
p. 224 of 227

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE No.

SBLK319

Lab Name: CAMC Laboratories
Contract: H & A of NY
Lab Code:
Case No.: 1189
SAS No.:
SDG No:
Matriz: (soil/water) WATER
Lab Sample ID: SBLK319
Sample wt/vol: 1000 (g/mL) ml
Lab File ID: _____
Level: (low/med) LOW
Date Received: _____
% Moisture: not dec. N/A
dec.
Date Extracted: 3-19-91
Extraction: (SepF/Cont/Sonc) SepF
Date Analyzed: 4-5-91
GPC Cleanup: (Y/N) N
pH: ____
Dilution Factor: 1

CONCENTRATION UNITS:
ug/L or ug/kg
(Circle One)

CAS Number	COMPOUND		Q
108-95-2	Phenol	10.00	U
111-44-4	bis(2-Chloroethyl) ether	10.00	U
95-57-8	2-Chlorophenol	10.00	U
541-73-1	1,3-Dichlorobenzene	10.00	U
106-46-7	1,4-Dichlorobenzene	10.00	U
100-51-6	Benzyl alcohol	10.00	U
95-50-1	1,2-Dichlorobenzene	10.00	U
95-48-7	2-Methylphenol	10.00	U
108-60-1	bis(2-Chloroisopropyl) ether	10.00	U
106-44-5	4-Methylphenol	10.00	U
621-64-7	N-Nitroso-di-n-propylamine	10.00	U
67-72-1	Hexachloroethane	10.00	U
98-95-3	Nitrobenzene	10.00	U
78-59-1	Isophorone	10.00	U
88-75-5	2-Nitrophenol	10.00	U
105-67-9	2,4-Dimethylphenol	10.00	U
65-85-0	Benzoic acid	50.00	U
111-91-1	bis(2-Chloroethoxy) methane	10.00	U
120-83-2	2,4-Dichlorophenol	10.00	U
120-82-1	1,2,4-Trichlorobenzene	10.00	U
91-20-3	Naphthalene	10.00	U
106-47-8	4-Chloroaniline	10.00	U
87-68-3	Hexachlorobutadiene	10.00	U
59-50-7	4-Chloro-3-methylphenol	10.00	U
91-57-6	2-Methylnaphthalene	10.00	U
77-47-4	Hexachlorocyclopentadiene	10.00	U
88-06-2	2,4,6-Trichlorophenol	10.00	U
95-95-4	2,4,5-Trichlorophenol	50.00	U
91-58-7	2-Chloronaphthalene	10.00	U
88-74-4	2-Nitroaniline	50.00	U
131-11-3	Dimethylphthalate	10.00	U
208-96-8	Acenaphthylene	10.00	U
606-20-2	2,6-Dinitrotoluene	10.00	U

Reference 12
p. 225 of 227

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE No.

SBLK319

Lab Name: CAMO Laboratories
Contract: H & A of NY
Lab Code:
Case No.: 1189
SAS No.:
SDG No:
Matrix: (soil/water) WATER
Lab Sample ID: SBLK319
Sample wt/vol: 1000 (g/mL) ml
Lab File ID: _____
Level: (low/med) LOW
Date Received: _____
% Moisture: not dec. N/A
dec.
Date Extracted: 3-19-91
Extraction: (SepF/Cont/Sonc) SepF
Date Analyzed: 4-5-91
GPC Cleanup: (Y/N) N
pH: ____
Dilution Factor: 1

CONCENTRATION UNITS: ug/L or ug/kg (Circle One)

CAS Number	COMPOUND		Q
99-09-2	3-Nitroaniline	50.00	U
83-32-9	Acenaphthene	10.00	U
51-28-5	2,4-Dinitrophenol	50.00	U
100-02-7	4-Nitrophenol	50.00	U
132-64-9	Dibenzofuran	10.00	U
121-14-2	2,4-Dinitrotoluene	10.00	U
84-66-2	Diethylphthalate	10.00	U
7005-72-3	4-Chlorophenyl-phenylether	10.00	U
86-73-7	Fluorene	10.00	U
100-01-6	4-Nitroaniline	50.00	U
534-52-1	4,6-Dinitro-2-methylphenol	50.00	U
86-30-6	N-Nitrosodiphenylamine (1)	10.00	U
101-55-3	4-Bromophenyl-phenylether	10.00	U
118-74-1	Hexachlorobenzene	10.00	U
87-86-5	Pentachlorophenol	50.00	U
85-01-8	Phenanthrene	10.00	U
120-12-7	Anthracene	10.00	U
84-74-2	Di-n-butylphthalate	10.00	U
206-44-0	Fluoranthene	10.00	U
129-00-0	Pyrene	10.00	U
85-68-7	Butylbenzylphthalate	10.00	U
91-94-1	3,3'-Dichlorobenzidine	20.00	U
56-55-3	Benzo(a)anthracene	10.00	U
218-01-9	Chrysene	10.00	U
117-81-7	bis(2-Ethylhexyl) phthalate	10.00	U
117-84-0	Di-n-octylphthalate	10.00	U
205-99-2	Benzo(b)fluoranthene	10.00	U
207-08-9	Benzo(k)fluoranthene	10.00	U
50-32-8	Benzo(a)pyrene	10.00	U
193-39-5	Indeno(1,2,3-cd)pyrene	10.00	U
53-70-3	Dibenz(a,h)anthracene	10.00	U
191-24-2	Benzo(g,h,i)perylene	10.00	U

(1) Cannot be separated from Diphenylamine.

Reference 16
p. 226 of 227

CAMO LABORATORIES

POUGHKEEPSIE AREA FACILITY:
CAMO LABORATORY
367 VIOLET AVENUE
POUGHKEEPSIE, N.Y. 12601
(914) 473-9200

CHAIN OF CUSTODY

CLIENT: H&A OF New York

SAMPLER: Steve DeMeo (H&A of New York)

SAMPLE NO./ID	LOCATION/CONTAINER	DATE	TIME	SAMPLE TYPE	COMP	GRAB	No. of CONT.	ANALYSIS REQUIRED
1	B-1V	14MAR91	1030	Soil		X	1	TCL SEMI-VOA
2	B-2V	14MAR91	1220	Soil		X	1	" " "
3	B-3V	14MAR91	1300	Soil		X	1	" " "
4	1 C.H.	14MAR91	1115	Sediment		X	1	" " "
5	B C.H.	14MAR91	1128	Sediment		X	1	" " "
6	B-1V	14MAR91	1030	Soil		X	1	EPTOX ETR/ ~~TCL~~ METALS
7	B-2V	14MAR91	1220	Soil		X	1	EP TOX ETR/metal
8	B-3V	14MAR91	1300	Soil		X	1	" " " "
9	1 C.H.	14MAR91	1115	Sediment		X	1	" " "
10	B C.H.	14MAR91	1128	Sediment		X	1	" " "
11	B-1V	14MAR91	1158	Soil		X	2	VOA
12	B-2V	14MAR91	1220	Soil		X	2	VOA
13	1 C.H.	14MAR91	1115	Sediment		X	2	VOA

Relinquished by:	Received by:	Date	Time
[signature]		14MARCH91	1550

Relinquished:	Received by:	Date	Time

Dispatched by:	Date	Time	Received for Laboratory by:	Date	Time
			Janet McCarthy	3/14/91	3:59

Method of Shipment:

Comments: All soil samples are composite grab samples

CAMO Containers ☒

CAMO LABORATORIES

POUGHKEEPSIE AREA FACILITY:
CAMO LABORATORY
367 VIOLET AVENUE
POUGHKEEPSIE, N.Y. 12601
(914) 473-9200

CHAIN OF CUSTODY

CLIENT: HGA of New York

SAMPLER: Steve DeMeo (HGA of New York)

SAMPLE NO./ID	LOCATION/CONTAINER	DATE	TIME	SAMPLE TYPE	COMP	GRAB	No. of CONT.	ANALYSIS REQUIRED
14	B C.H.	14MAR91	1128	sediment		X	2	VOA
15	Trip BLANK	14MAR91	0800				1	VOA
16	Field Equipment Blank	14MAR91	1543				1	VOA
17	Field Equipment Blank	14MAR91	1543				1	EP TOX ETR/metals
18	Field Equipment Blank	14MAR91	1543				1	TCL SEMI-VOA

Relinquished by: [signature]		Received by:	Date: 14MARCH91 / Time: 1550
Relinquished:		Received by:	Date / Time
Dispatched by:	Date / Time	Received for Laboratory by: [signature]	Date: 3/14/91 / Time: 1550

Method of Shipment:

Comments:

CAMO Containers ☒

REFERENCE 13

Reference 13
p. 1 of 10 [ ]

STATE OF NEW YORK

DEPARTMENT OF CONSERVATION

WATER RESOURCES COMMISSION

Ground-Water Resourses of Dutchess County, New York

By

E. T. SIMMONS, I. G. GROSSMAN, AND R. C. HEATH

Geologists, U. S. Geological Survey

Prepared by the

U. S. GEOLOGICAL SURVEY

in cooperation with the

NEW YORK WATER RESOURCES COMMISSION

BULLETIN GW-43

ALBANY, N. Y.

1961

The Cheshire is not important as a source of ground water because of its small areal extent and because it underlies steeply sloping hillsides which are sparsely settled. Only five wells in the county are known to tap quartzite; these are listed in table 13.

Stockbridge limestone.--Over the Cheshire quartzite is a thick sequence of carbonate rocks, which underlie a much greater part of the county than the quartzite. In the east, carbonate rocks lie beneath the broad Harlem Valley, which contains Tenmile River and its principal tributaries and which extends almost without interruption from the Putnam County line to the Columbia County line. In the south, the valley of Fishkill Creek is underlain by limestone which extends from Beacon northeastward to the head of the creek. Other areas in the western and central parts of the county also are underlain by elongate masses of carbonate rocks (pl. 2).

Several different names have been applied to the carbonate rocks in different parts of the county, including Barnegat limestone (Mather, 1843, p. 410), Fishkill limestone (Gordon, 1911, p. 70), and Wappinger limestone (Gordon, p. 48). Knopf (1956, p. 1817) found that the carbonate rocks near Stissing Mountain range in age from Early Cambrian to Early Ordovician and divided them into the Stissing dolomite, Pine Plains formation, Briarcliff, dolomite, Halcyon Lake formation, and Rochdale limestone. Because there appear to be no essential differences in the water-bearing properties of the carbonate rocks, all are included in this report under the Stockbridge limestone, after the locality in Massachusetts where they were first described (Emmons, 1842, p. 154-156).

The carbonate rocks range in composition from almost pure calcium carbonate (limestone) to almost pure calcium-magnesium carbonate (dolomite). Limestone is more abundant in the upper part of the sequence and dolomite is more common in the lower part. Table 3 lists an analysis of a typical sample of dolomite from the Stockbridge limestone.

This analysis shows that more than 10 percent of the dolomite consists of impurities, chiefly silica and alumina. In some localities these impurities are abundant enough to form sandy and shaly beds in the Stockbridge.

Table 3.--Chemical composition of dolomite 1/ from the Stockbridge limestone

Determination	Percent by weight
Lime (CaO).....	29.07
Magnesia (MgO).....	16.29
Carbonic acid (H_2CO_3).....	40.76
Alumina (Al_2O_3).....	2.33
Ferric oxide (Fe_2O_3).....	.47
Silica (SiO_2).....	10.17
Total.....	99.09

1/ Collected at the Stoneco quarry of the Clinton Point Stone Co. about 4 miles south of Poughkeepsie. Analysis from Ries (1901, p. 779).

The metamorphism of the Stockbridge limestone generally increases in intensity from northwest to southeast. In the northwest and west, the formation is relatively undisturbed and original bedding is easily visible. Fossils have been found in the formation as far south as Clove Valley. Farther east, however, as in the Valley of Swamp River, the formation has been metamorphosed to a marble and the beds are severely folded. Balk noted that the folding is greater in the thin layers than in the thicker ones and that it is greatest near thrust faults. In the southeastern part of the county, the marble has been so severely deformed by plastic flow that it appears to be wrapped around stronger rocks. South of Pawling, the marble contains masses of schist that are folded and faulted into the limestone.

The deformation of the Stockbridge limestone makes it difficult to determine its thickness. In southwestern Putnam County, where the formation is relatively undisturbed, the thickness is about 1,000 feet. At Stissing Mountain, near Pine Plains in the north-central part of Dutchess County, the thickness of the different limestones and dolomites measured by Knopf (1946, p. 1211) totals 2,800 feet. The thickness of the carbonate rocks is

Reference 13
p. 4 of 10

probably about 1,000 feet in most places in the county. The Stockbridge limestone weathers readily and commonly forms valley and lowland areas. In the valley of Fishkill Creek, solution cavities filled with clay and sand have been reported.

Hudson River formation.--The Hudson River formation is the most extensive bedrock unit in the county. As may be seen from plate 2, it extends from the Hudson River in the west to the Connecticut State line in the east, interrupted by only a few relatively narrow limestone belts. The name "Hudson River slate group" was first used by Mather (1840, p. 212, 256-258) for the slaty rocks in the southeastern part of the State. Gordon (1911) mapped these rocks in the Poughkeepsie quadrangle as the "Hudson River group." Berkey and Rice (1921) mapped the same rocks in southwestern Dutchess County as "Hudson River shales and phyllites." In the southeastern part of the county these rocks are referred to as "Hudson River pelite" in publications by Balk (1936) and Barth (1936). In the Copake quadrangle in southeastern Columbia County, the names Elizaville shale (mainly Cambrian, possibly including some Lower Ordovician), Berkshire schist (Ordovician), and Trenton black slate (Ordovician) have been used by Weaver (1957, pl. 1) for rocks that extend southward into northeastern Dutchess County. Ruedemann (1942) divided the predominantly argillaceous rocks in the Catskill quadrangle, in northwestern Dutchess County, into the Nassau beds and Schodack shale (including Bomoseen grit) of Cambrian age, and the Deepkill shale and Normanskill shale (including the Mount Merino member and the Austin Glen member) of Ordovician age. As used in this report, the Hudson River formation includes all the argillaceous and schistose rocks in Dutchess County.

Although the Hudson River formation is preponderantly argillaceous, it includes a large variety of rock types. The lower part of the unit contains much sandstone ("grit") and is locally called bluestone by some well drillers. The unit also contains chert and beds of sandstone, limestone, and conglomerate. Quartz veins are very abundant. The shale itself is locally black, gray, red, or green.

The metamorphism of the Hudson River formation increases in intensity from northwest to southeast, just as in the Stockbridge limestone. At Red Hook, in the northwestern part of the county, the unit is a shale. The shale grades imperceptibly southeastward into a slate and then into a lustrous phyllite. Between the valley of Wappinger Creek and the headwaters of Fishkill Creek, it is chiefly a phyllite. Farther southeast, between Fishkill Creek and the Harlem Valley it is predominantly a garnet-bearing schist. In the extreme southeastern part of the county, east of Pawling, it is a gneissic schist. The gneissic schist in this area contains amphibolite lenses and pegmatite intrusions.

phyllite

Unconsolidated Deposits

Unconsolidated material deposited chiefly by glaciers and glacial melt water in Pleistocene time, lies on the bedrock in Dutchess County. Minor amounts of stream-laid material of Recent age mantle the Pleistocene deposits in a few narrow, discontinuous valley areas and in some lakes and swamps. The unconsolidated deposits are widespread and relatively thick, at least in lowland areas. The greatest thickness occurs in the gorge of the Hudson River, where borings for the Catskill Aqueduct of New York City penetrated several hundred feet of fill, most of which is probably of glacial origin. The deepest boring was at the Storm King crossing, near the Putnam County line, where bedrock reportedly was encountered at a depth of 608 feet below river level. If this reported depth is correct, the deepest part of the bedrock gorge probably is somewhat below 608 feet because it is unlikely that the drill was situated at exactly the deepest point. The layers penetrated by these borings ranged in composition from a mixture of clay and boulders to sand and gravel.

The Pleistocene drift is divided into three units, shown on plate 3: (1) till (unstratified drift), consisting of a mixture of rock materials deposited directly by the ice; (2) lacustrine deposits, consisting of silt and clay laid down in lakes; and (3) sand and gravel deposited in lowlands and in lakes from glacial melt water.

Till.--Till consists of a heterogeneous mixture of rock fragments of all sizes from microscopic particles of clay to large boulders several feet in diameter. As may be seen on plate 3, it is the most widespread of the Pleistocene deposits.

The till was laid down directly from the glacial ice, which was thick enough to pass over the highest peaks in the county, as well as the highest peaks of the Catskill and Taconic Mountains. The ice moved in a southerly direction, as indicated by the alinement of grooves and striations on exposed rock surfaces. Erosion was the dominant process in upland areas. Thus, the present-day cover of glacial debris in these areas is generally thin (less than 30 feet thick) or absent. Exceptions exist where thick deposits of till were laid down beneath the ice in the form of elliptical hills known as drumlins. These hills may contain as much as 200 feet of clay till. In lowland areas, the dominant process was that of deposition and the glacial deposits in these areas are relatively thick. For example, well Du 758, about 2 miles southwest of Wappingers Falls, penetrated 140 feet of unconsolidated material before reaching the Hudson River formation.

The rock fragments composing the till were derived mainly from the bedrock in the immediate area. In areas underlain by shale, slate, phyllite, and schist, the till consists largely of clay. In areas underlain by limestone, dolomite, or marble, the till contains numerous calcareous pebbles. Six mechanical analyses were made by the U.S. Department of Agriculture (Secor and others, 1955, p. 128) of samples of soil in the county

derived from glacial till. These samples consisted mainly of calcareous sandstone and some admixed shale, slate, limestone, and igneous erratics. The samples were collected from progressively greater depths. The analyses show that more than half of each sample consisted of silt and clay, and that the content of sand and fine gravel increased slightly from a low of 36.3 percent (by weight), at a depth of 0 to 10 inches, to a high of 43.0 percent, at a depth of 68 to 144 inches. In some areas, lenses of relatively clean sand may occur in till. However, sand lenses in till are generally thin and of small areal extent. Most of the till is clayey and some of it may even be cemented or compacted to form a tough aggregate referred to as "hardpan" by local drillers.

Lacustrine deposits.--Stratified drift deposited in glacial lakes underlies several areas in the county, notably along the Hudson River and in the lowland north of the Hudson Highlands in the southwestern part of the county. The approximate extent of these deposits where they compose the uppermost unconsolidated deposit is shown on plate 3. As may be seen from the plate, they underlie an irregularly shaped and relatively extensive area in the northwestern corner of the county, from the mouth of Crum Elbow Creek north to the county line. In the southwestern part of the county, they underlie numerous small areas from Poughkeepsie south to the Highlands.

Woodworth (1905, p. 175) believed that the lacustrine deposits along the Hudson River were laid down in one large lake, called glacial Lake Albany, which was dammed by a single tongue of stagnant ice. Cook (1942, p. 192) suggests, on the other hand, that the deposits were laid down in a complex series of small lakes rather than in a single lake. These lakes were largely restricted to the area adjacent to the Hudson River in the western part of the county. Thus, lacustrine deposits either are not present in the eastern part of the county or, if present, occupy relatively small areas and are covered by other unconsolidated deposits which obscure their presence.

The lacustrine deposits in the western part of the county contain layers of silt and clay that were deposited in those parts of the lakes in which the water was relatively quiet. The deposits also contain interbedded layers of sand and silt that were laid down near the mouths of streams entering the lakes. At the time the lakes drained, the lacustrine deposits formed a terrace that sloped westward toward the present channel of the Hudson River. The altitude of the terrace ranges from about 220 feet near its eastern margin to about 120 feet near the river. This terrace has been considerably modified by postglacial stream erosion.

Sand and gravel.--Stratified drift consisting principally of sand and gravel underlies extensive areas in the major stream valleys and in some tributary valleys. As shown in plate 3, the most extensive deposits are in the valleys drained by Fishkill Creek, Sprout Creek, Swamp River, Tenmile River, and Wappinger Creek.

The rate at which water moves through deposits, and thus the readiness with which it is available for withdrawal from wells, is controlled by the permeability of the material. Permeability, which is related to the size and degree of interconnection of pore spaces and other openings, is normally very low in bedrock, till, and fine-grained unconsolidated deposits, such as silt and clay. It is moderately high in deposits of coarse sand and in deposits of sand and gravel.

In view of these significant differences between the water-bearing characteristics of the unconsolidated deposits and those of the bedrock, the following discussion of the occurrence of ground water in Dutchess County is divided into two sections, one devoted to the unconsolidated deposits and one devoted to the bedrock.

Occurrence of Water in Unconsolidated Deposits

Unconsolidated surficial deposits overlie the bedrock almost everywhere in Dutchess County. These are divided into two units on the basis of their water-bearing characteristics. The first consists of unstratified deposits termed "till," which predominate in upland areas, and the second consists of stratified deposits of gravel, sand, silt, and clay, which predominate in valley areas.

Deposits in Uplands

Till, a mixture of rock materials ranging in size from clay to large boulders, is the principal unconsolidated deposit on the hills (pl. 3). Although till is generally unsorted and unstratified, in a few areas it contains lenses or irregular bodies of sand and gravel. Till overlying limestone generally consists of clay mixed with grains, pebbles, and cobbles of limestone, whereas till overlying slate and schist consists principally of clay mixed with a little quartz sand, and a small percentage of sandstone pebbles and cobbles. Granite and gneiss are generally overlain by a sandy till containing an abundance of large boulders. Till generally ranges in thickness from 10 to 20 feet on hilltops to 20 to 40 feet on the slopes. However, in a few valley areas and other places it is more than 100 feet thick. Its greatest thicknesses are generally found in drumlins-- low, elliptical hills shaped by the Pleistocene ice sheet. Osborne Hill, about 4 miles north-northeast of Beacon in the southwestern part of the county (pl. 1), is believed to be a drumlin. Well Du 455, on the east side of this hill, penetrated about 120 feet of till, as shown in the log in table 12.

Glacial till is not a productive water-bearing deposit because of its poor sorting and high clay content. Water in usable quantities can generally be obtained from till only from large-diameter wells, which provide a large area for the infiltration of water and a large volume for the storage of water between periods of use. The average yield of the six wells for which

yields have been reported is 3 gpm (gallons per minute) with a range from 1 to 4 gpm. The yields of most wells that draw from till are not known, because pumps are operated for only short periods and draw largely from water stored in the well. In general, wells tapping till may be expected to yield only a few hundred gallons a day.

The permeability of till is very low, and hence the movement of ground water into and through the deposit is extremely slow. As a result, most of the precipitation on areas underlain by till either runs off on the surface or is intercepted by plants to satisfy transpiration needs before it can reach the water table. Most wells drawing water from till are dug only a few feet below the water table. Thus, during dry periods many of these wells either "go dry" or fail to yield the required quantity of water. Most wells in Dutchess County reported to have been inadequate one or more times since construction, or to have failed completely, are dug wells tapping glacial till. Many of these wells are on hills, and the failures are largely due to seasonal decline of the water table.

Deposits in Valleys

The thickest unconsolidated deposits in Dutchess County occur in valleys and other lowland areas. These deposits consits of (1) till, (2) fine-grained stratified deposits of silt and clay, and (3) coarse-grained stratified deposits of sand and gravel. Plate 3 is a map of the county showing the principal unconsolidated deposit in each area. Areas shown as underlain by till generally do not contain any other unconsolidated deposit. Till in many of the valley areas underlies low irregularly shaped hills that are surrounded by stratified deposits. In other areas, as at Pawling in the southeast corner of the county, the till extends from the uplands across the lowlands as a relatively continuous sheet. Till in the lowlands is generally thicker than in the uplands. Its average thickness is probably between 25 and 50 feet, though the actual thickness in some areas exceeds 100 feet. The water-bearing characteristics of the till are similar to those of the till in the uplands.

The fine-grained stratified deposits are widely distributed throughout most valley areas. Those areas in which the unconsolidated deposits consist entirely or almost entirely of clay and silt are shown on plate 3. However, fine-grained stratified deposits are present also in many of the areas shown on the map to be underlain by sand and gravel. In these areas the clay and silt may either overlie, be interbedded with, or underlie the sand and gravel. Plate 3 shows that most of the areas in which clay and silt is the principal unconsolidated deposit are in the western part of the county, either adjacent to or near the Hudson River. These deposits are generally less than 50 feet thick, although they are as much as 125 feet thick in the area bordering the Hudson River south of Rhinebeck.

Reference 13
p. 9 of 10

Table 6.--Yield of wells tapping bedrock in Dutchess County

Water-bearing unit	Yield (gpm)			Number of wells	Remarks
	Average	Range			
		Low	High		
Hudson River formation	16	0	135	311	Most wells tap slate or phyllite; few tap schist or gneiss.
Stockbridge limestone	22	1	220	118	Does not include well Du 630.
Cheshire quartzite	10	2	30	5	Includes 3 wells penetrating both quartzite and other rocks.
Undifferentiated granite and gneiss	11	1	45	20	
All bedrock combined	17	0	220	454	

Table 6 shows that the yield of wells is related to the type of bedrock. The Stockbridge limestone is the most productive bedrock formation in the county, yields averaging about 22 gpm and ranging up to 220 gpm. The larger yields may indicate that joints and other openings in this formation have been enlarged by solution, although the lack of outcrops and generally thick cover of unconsolidated deposits effectively prevent observation of solutional effects. The Hudson River formation, which is the most widespread bedrock aquifer, is the second most productive. Yields from 311 wells in this unit average 16 gpm and range up to 135 gpm. The yields of 25 wells tapping granite and gneiss and the Cheshire quartzite are generally small, averaging about 10 or 11 gpm. Although some of these averages are based on a comparatively small number of records, they are believed to be representative. For example, the yields of 288 wells tapping granite and gneiss in adjacent Putnam County (Grossman, 1957, table 8) average 11 gpm.

The type of overlying material has an important effect on the yield of wells in bedrock. Table 7 shows that the average yield of wells tapping bedrock that is overlain by sand and gravel is more than 30 gpm. By contrast, the average yield of bedrock wells where the overlying material consists predominantly of clay or till is only about 13 gpm. Deposits of sand and gravel store large amounts of water and transmit water readily to the underlying bedrock where hydraulic continuity exists between the two materials. However, some of the large yields reported from bedrock wells overlain by sand and gravel may result from leakage of water from the overlying permeable deposits directly into the well. The yield of wells in bedrock where the overlying unconsolidated deposits are absent or are less than 10 feet thick is about the same, or only a little greater, than of wells where the overlying deposits are thicker but consist of impermeable till or clay. Thus, it may be concluded that thick but impermeable deposits which tend to retain the water above the bedrock have about the same effect on yield of bedrock as no overlying material at all.

Topographic location apparently affects the yield of bedrock wells in some areas (Ellis, 1909, p. 101). In Dutchess County, the yield is generally highest from bedrock wells situated in valleys and is lowest on hills. Table 8 shows that the average yield of wells in valleys is about 20 gpm compared to an average of about 16 gpm for wells on hillsides and an average of about 12 gpm for wells on hilltops. The Cheshire quartzite is not included in the table because only a few records of wells drawing from this formation are available. The influence of topography on the yields of wells apparently stems, at least in part, from the fact that the water table is generally closer to the land surface in valleys than on hills. Thus, wells of the same depth penetrate a greater thickness of saturated material in valleys than on hills and yield more water, other things being equal.

It should be emphasized that the factors affecting the yield of wells in bedrock are interdependent and tend to operate in the same direction. Thus, most wells drilled in valleys have comparatively large yields not only because of their favorable topographic location but also because the bedrock there is more permeable and is more likely to be overlain by permeable sand and gravel. Similarly, most wells drilled on hills yield smaller quantities of water not only because of a less favorable topographic situation, but also because the bedrock is less likely to be overlain by permeable deposits.

REFERENCE 14

Reference 14
p.1 of 16

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Tel: (203) 767-1254
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Sub: Dover Town Dump
Cricket Hill Rd, Dover, NY

CERCLIS: NYD980508154

Job: 50052

Site Longitude: 73-34-19 73.571953
Site Latitude : 41-40-38 41.677219

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-

Reference 14
p. 2 of 16

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

Reference 14
p. 3 of 16

Dover Town Dump
Cricket Hill Road, Dover, NY,
50052

NEW YORK PORTION

No.	City	Block Group ID	Blk Grp People	House Holds	Public Water	Drilled Wells	Dug Wells	Other
1	La Grange	36027 1800 1	3616	1356	97	80	1173	3
2	NOT IDENTIFIED	36027 6200 9	1055	231	221	0	0	0
3	Dover	36027 0400011	1015	383	27	24	348	6
4	Dover	36027 0400012	1270	472	128	45	318	0
5	Dover	36027 0400013	854	415	296	13	59	5
6	Dover	36027 0400014	1049	413	166	0	260	8
7	Dover	36027 0400021	1091	498	56	8	420	0
8	Dover	36027 0400022	771	344	27	40	279	0
9	Dover	36027 0400023	673	262	12	17	229	6
	Totals:		11394	4374	1030	227	3086	28

Reference 14
p. 4 of 16

Dover Town Dump
Cricket Hill Road, Dover, NY,
50052

NEW YORK PORTION

City	Census Tract ID	Tract People	House Count	Public Water	Drilled Wells	Dug Wells	Other Wells
Dover	36027 0400013	854	415	296	13	59	5
Dover	36027 0400014	1049	413	166	0	260	8
Dover	36027 0400011	1015	383	27	24	348	6
Dover	36027 0400012	1270	472	128	45	318	0
Dover	36027 0400023	673	262	12	17	229	6
Dover	36027 0400022	771	344	27	40	279	0
Dover	36027 0400021	1091	498	56	8	420	0
	Sub Totals:	6723	2787	712	147	1913	25
La Grange	36027 1800 1	3616	1356	97	80	1173	3
	Sub Totals:	3616	1356	97	80	1173	3
NOT IDENTIFIED	36027 6200 9	1055	231	221	0	0	0
	Sub Totals:	1055	231	221	0	0	0

Dover Town Dump
Cricket Hill Road, Dover, NY,
50052

NEW YORK PORTION

Reference 14
p. 5 of 16

For Radius of 4 Mi., Circle Area = 50.265482

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
1	La Grange	36027 18001	37.448330	3.384349	9.04
2	NOT IDENTIFIED	36027 62009	1.367208	1.367208	100.00
3	Dover	36027 400011	14.025449	8.921929	63.61
4	Dover	36027 400023	1.943830	1.421645	73.14
5	Dover	36027 400013	0.450348	0.007733	1.72
6	Dover	36027 400014	8.396948	5.349267	63.70
7	Dover	36027 400021	16.763292	13.970000	83.34
8	Dover	36027 400022	6.148765	5.528407	89.91
9	Dover	36027 400012	5.633075	5.324000	94.51
	Totals:		92.177238	45.274540	

For Radius of 3 Mi., Circle Area = 28.274334

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
2	NOT IDENTIFIED	36027 62009	1.367208	1.143228	83.62
3	Dover	36027 400011	14.025449	5.836349	41.61
6	Dover	36027 400014	8.396948	2.743324	32.67
7	Dover	36027 400021	16.763292	9.389736	56.01
8	Dover	36027 400022	6.148765	3.994077	64.96
9	Dover	36027 400012	5.633075	5.167620	91.74
	Totals:		52.334736	28.274334	

For Radius of 2 Mi., Circle Area = 12.566371

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
3	Dover	36027 400011	14.025449	2.187443	15.60
6	Dover	36027 400014	8.396948	1.009139	12.02
7	Dover	36027 400021	16.763292	4.319671	25.77
8	Dover	36027 400022	6.148765	1.518290	24.69
9	Dover	36027 400012	5.633075	3.531829	62.70
	Totals:		50.967533	12.566371	

For Radius of 1 Mi., Circle Area = 3.141593

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
6	Dover	36027 400014	8.396948	0.199811	2.38
7	Dover	36027 400021	16.763292	0.868704	5.18

Reference 14
p. 6 of 16

Dover Town Dump
Cricket Hill Road, Dover, NY, 50052

NEW YORK PORTION

8	Dover	36027 400022	6.148765	0.277631	4.52
9	Dover	36027 400012	5.633075	1.795447	31.87
	Totals:		36.942081	3.141593	

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

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
6	Dover	36027 400014	8.396948	0.014835	0.18
7	Dover	36027 400021	16.763292	0.133570	0.80
8	Dover	36027 400022	6.148765	0.066238	1.08
9	Dover	36027 400012	5.633075	0.570756	10.13
	Totals:		36.942081	0.785398	

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

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
9	Dover	36027 400012	5.633075	0.196350	3.49
	Totals:		5.633075	0.196350	

Reference 14
p. 7 of 16

Dover Town Dump
Cricket Hill Road, Dover, NY,
50052

NEW YORK PORTION

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

Population:	6005.33
Households:	2229.44
Drilled Wells:	120.32
Dug Wells:	1562.93
Other Water Sources:	13.66

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

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

Population:	2081.09
Households:	806.58
Drilled Wells:	38.58
Dug Wells:	624.96
Other Wells:	8.55

** Population On Private Wells: 1712.03 + 292.59 = 2004.62

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

Population:	2372.09
Households:	804.29
Drilled Wells:	37.84
Dug Wells:	475.95
Other Wells:	3.21

** Population On Private Wells: 1515.30 + 21.17 = 1536.47

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

Population:	1031.05
Households:	416.96
Drilled Wells:	27.33
Dug Wells:	320.12
Other Wells:	1.71

** Population On Private Wells: 859.15

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

Population:	373.57
Households:	145.38
Drilled Wells:	11.51
Dug Wells:	102.87
Other Wells:	0.18

** Population On Private Wells: 293.92

Dover Town Dump
Cricket Hill Road, Dover, NY, NEW YORK PORTION
50052

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

Population:	103.26
Households:	39.78
Drilled Wells:	3.49
Dug Wells:	27.95
Other Wells:	0.01

** Population On Private Wells: 81.61

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

Population:	44.27
Households:	16.45
Drilled Wells:	1.57
Dug Wells:	11.08
Other Wells:	0.00

** Population On Private Wells: 34.04

FROST ASSOCIATES

Reference 14
p. 9 of 16

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Nov 18, 1994

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Sub: Dover Town Dump
Cricket Hill Rd, Dover, NY

CERCLIS: NYD980508154

Job: 50052

Site Longitude: 73-34-19 73.571953
Site Latitude : 41-40-38 41.677219

Sub: Dover Town Dump
Cricket Hill Rd, Dover, NY CONNECTICUT PORTION

CERCLIS: NYD980508154

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ring from the site.

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

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

Reference 14
p. 11 of 16

mile, one from the two, etc... Population on private wells is calculated using the formula: ((Drilled + Dug Wells) / Households) * Population

Reference 14
p. 12 of 16

Dover Town Dump
Cricket Hill Road, Dover, NY,
50052

CONNECTICUT PORTION

No.	City	Block Group ID	Blk Grp	People	House Holds	Public Water	Drilled Wells	Dug Wells	Other
1	Sherman	09001 2571	1	975	445	0	359	54	11
2	New Milford	09005 2535	1	1438	570	17	448	73	18
3	Kent	09005 2661	2	1304	626	82	404	105	24
4	Kent	09005 2661	3	10	6	0	5	0	0
	Totals:			3727	1647	99	1216	232	53

Dover Town Dump
Cricket Hill Road, Dover, NY,
50052

CONNECTICUT PORTION

Reference 14
p. 13 of 16

City	Census Tract ID		Tract People	House Count	Public Water	Drilled Wells	Dug Wells	Other Wells
Kent	09005 2661	2	1304	626	82	404	105	24
Kent	09005 2661	3	10	6	0	5	0	0
	Sub Totals:		1314	632	82	409	105	24
New Milford	09005 2535	1	1438	570	17	448	73	18
	Sub Totals:		1438	570	17	448	73	18
Sherman	09001 2571	1	975	445	0	359	54	11
	Sub Totals:		975	445	0	359	54	11

Dover Town Dump
Cricket Hill Road, Dover, NY,
50052

CONNECTICUT PORTION

Reference 14
p. 14 of 16

For Radius of 4 Mi., Circle Area = 50.265482

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
1	Sherman	09001 25711	10.512354	1.598484	15.21
2	New Milford	09005 25351	13.037639	0.332529	2.55
3	Kent	09005 26612	22.894903	2.917166	12.74
4	Kent	09005 26613	0.131486	0.131486	100.00
	Totals:		46.576378	4.979664	

For Radius of 3 Mi., Circle Area = 28.274334

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
1	Sherman	09001 25711	10.512354	0.065796	0.63
3	Kent	09005 26612	22.894903	0.320427	1.40
4	Kent	09005 26613	0.131486	0.010915	8.30
	Totals:		33.538742	0.397139	

For Radius of 2 Mi., Circle Area = 12.566371

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
	Totals:		0.000000	0.000000	

For Radius of 1 Mi., Circle Area = 3.141593

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
	Totals:		0.000000	0.000000	

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

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
	Totals:		0.000000	0.000000	

Reference 14
p. 15 of 16

Dover Town Dump
Cricket Hill Road, Dover, NY,
50052

CONNECTICUT PORTION

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

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
	Totals:		0.000000	0.000000	

Reference 14
p. 16 of 16

Dover Town Dump
Cricket Hill Road, Dover, NY,
50052

--- PORTION

CONNECTICUT PORTION

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

Population:	361.08
Households:	167.97
Drilled Wells:	122.49
Dug Wells:	23.45
Other Water Sources:	5.19

47.32 assumed on municipal wells.

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

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

Population:	335.90
Households:	155.92
Drilled Wells:	114.17
Dug Wells:	21.64
Other Wells:	4.78

** Population On Private Wells: 292.59

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

Population:	25.18
Households:	12.04
Drilled Wells:	8.32
Dug Wells:	1.81
Other Wells:	0.40

Population On Private Wells: 21.17

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

Population:	0.00
Households:	0.00
Drilled Wells:	0.00
Dug Wells:	0.00
Other Wells:	0.00

opulation On Private Wells: Not Applicable

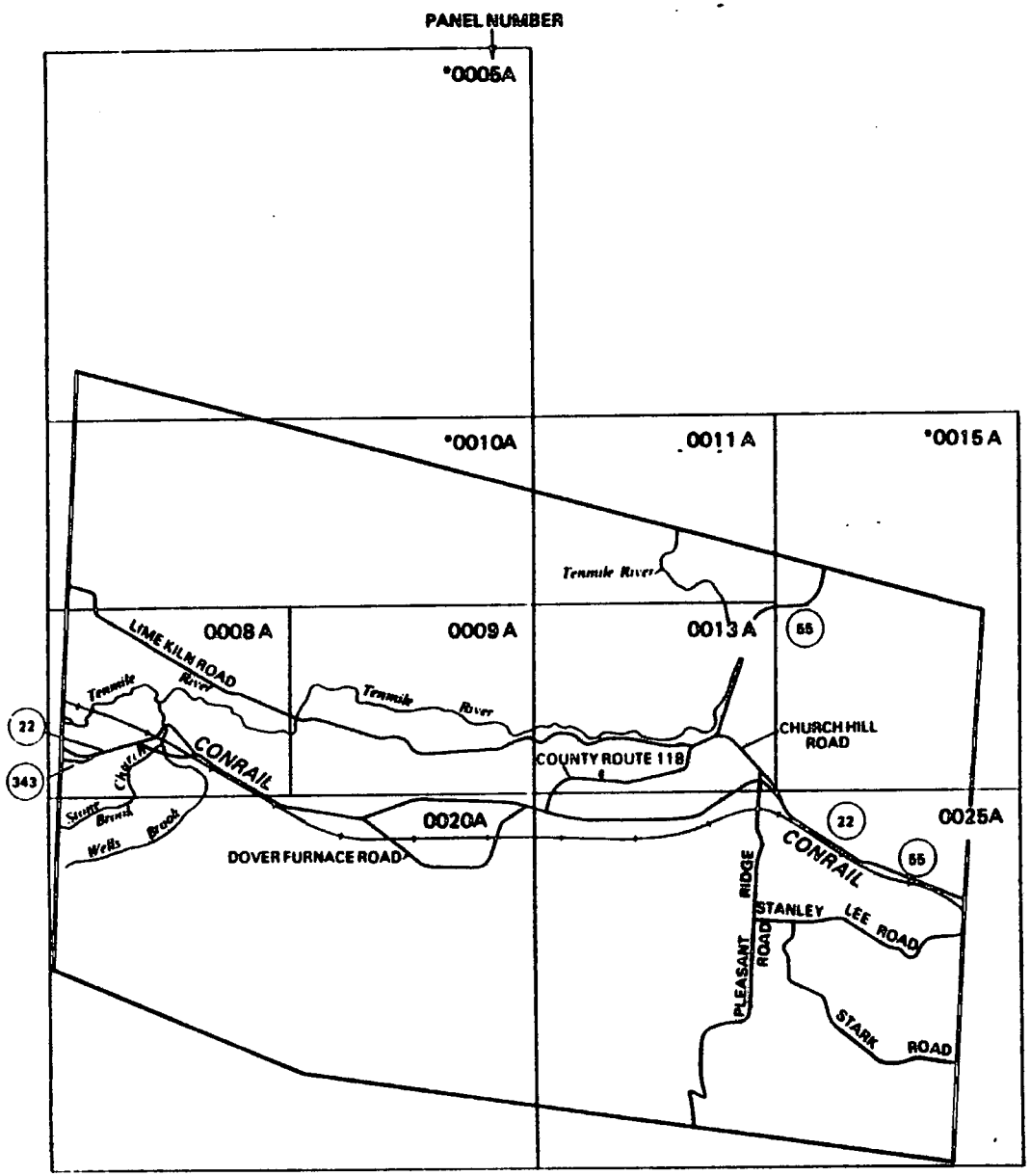
Within Ring: 1 Mile(s) and .5 Mile(s) ----

Population:	0.00
Households:	0.00
Drilled Wells:	0.00
Dug Wells:	0.00
Other Wells:	0.00

ulation On Private Wells: Not Applicable

REFERENCE 15

reference 15
P. 1 of 4



*PANEL NOT PRINTED-AREA IN ZONE C

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

TOWN OF
DOVER,
NEW YORK
DUTCHESS COUNTY

MAP INDEX

PANELS PRINTED: 8, 9, 11, 13, 20, 25

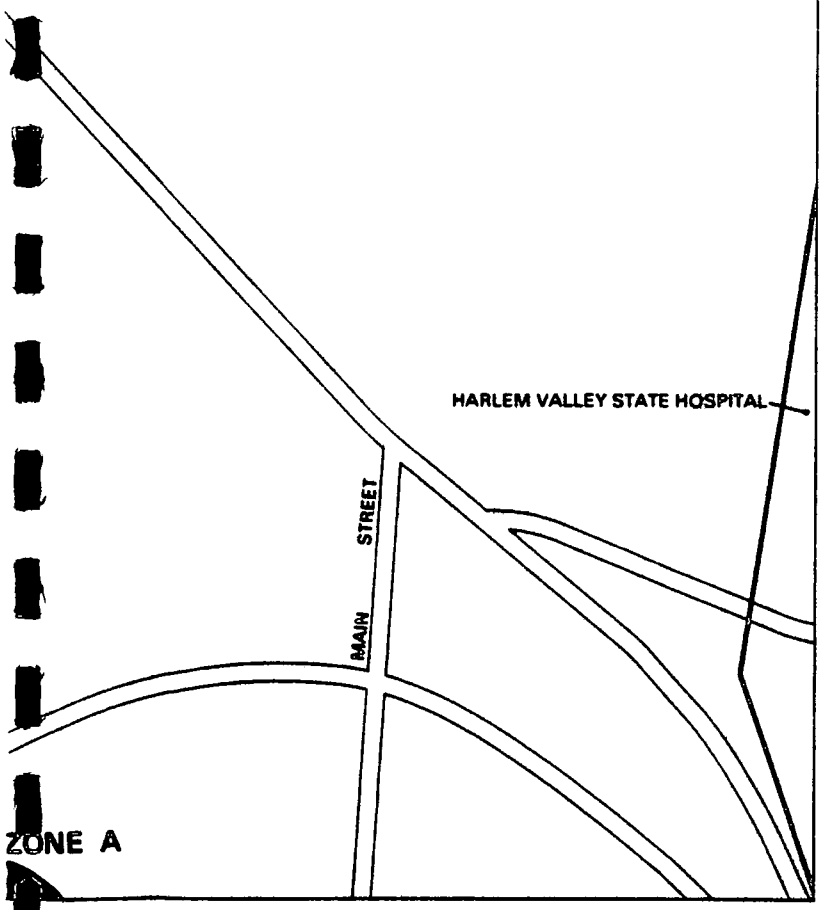
COMMUNITY-PANEL NUMBERS
361335 0001-0025

EFFECTIVE DATE:
AUGUST 15, 1984

Federal Emergency Management Agency

Reference 15
p. 2 of 4

APPROXIMATE SCALE
400 0 400 FEET



NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

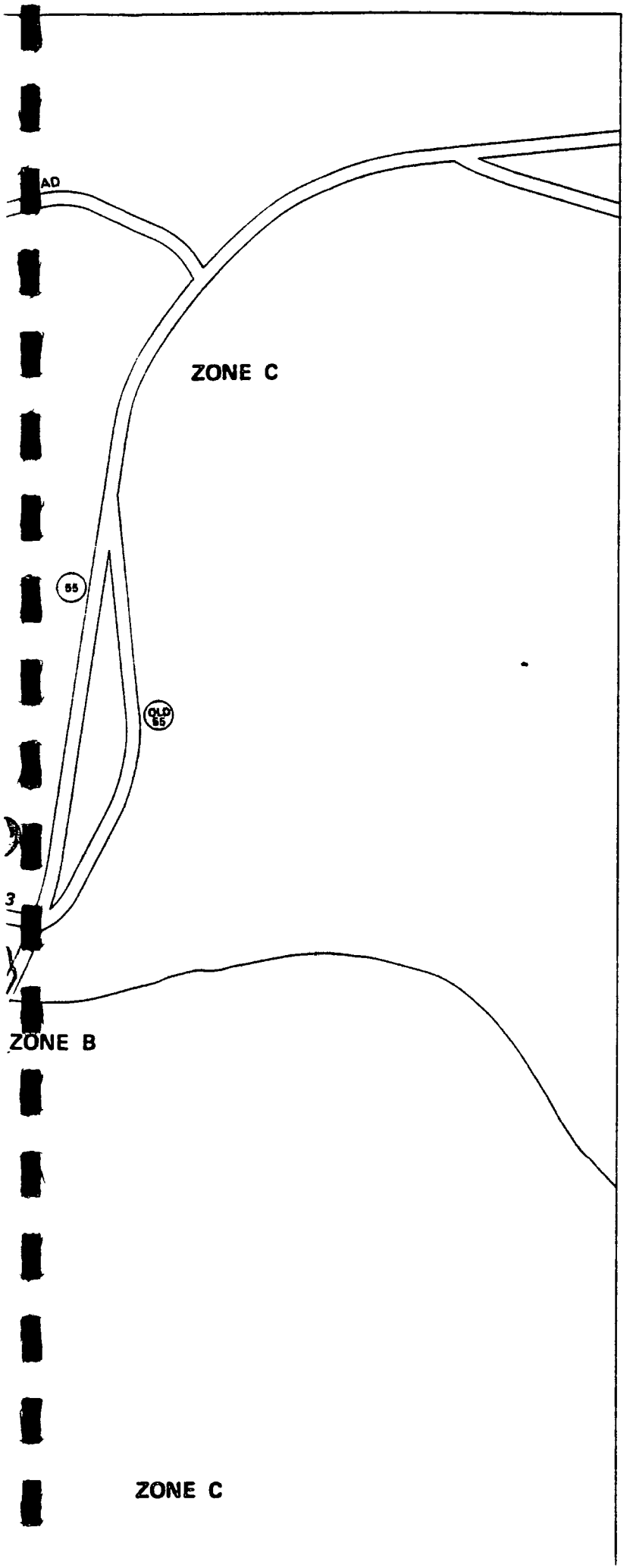
TOWN OF
DOVER,
NEW YORK
DUTCHESS COUNTY

PANEL 13 OF 25
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
361335 0013 A

EFFECTIVE DATE:
AUGUST 15, 1984

Federal Emergency Management Agency



Reference p. 3 of 4

KEY TO MAP

500-Year Flood Boundary	
100-Year Flood Boundary	
Zone Designations*	
100-Year Flood Boundary	
500-Year Flood Boundary	
Base Flood Elevation Line With Elevation In Feet**	513
Base Flood Elevation in Feet Where Uniform Within Zone**	(EL 987)
Elevation Reference Mark	RM7x
Zone D Boundary	
River Mile	•M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
AO	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

For adjoining map panels, see separately printed Index To Map Panels.

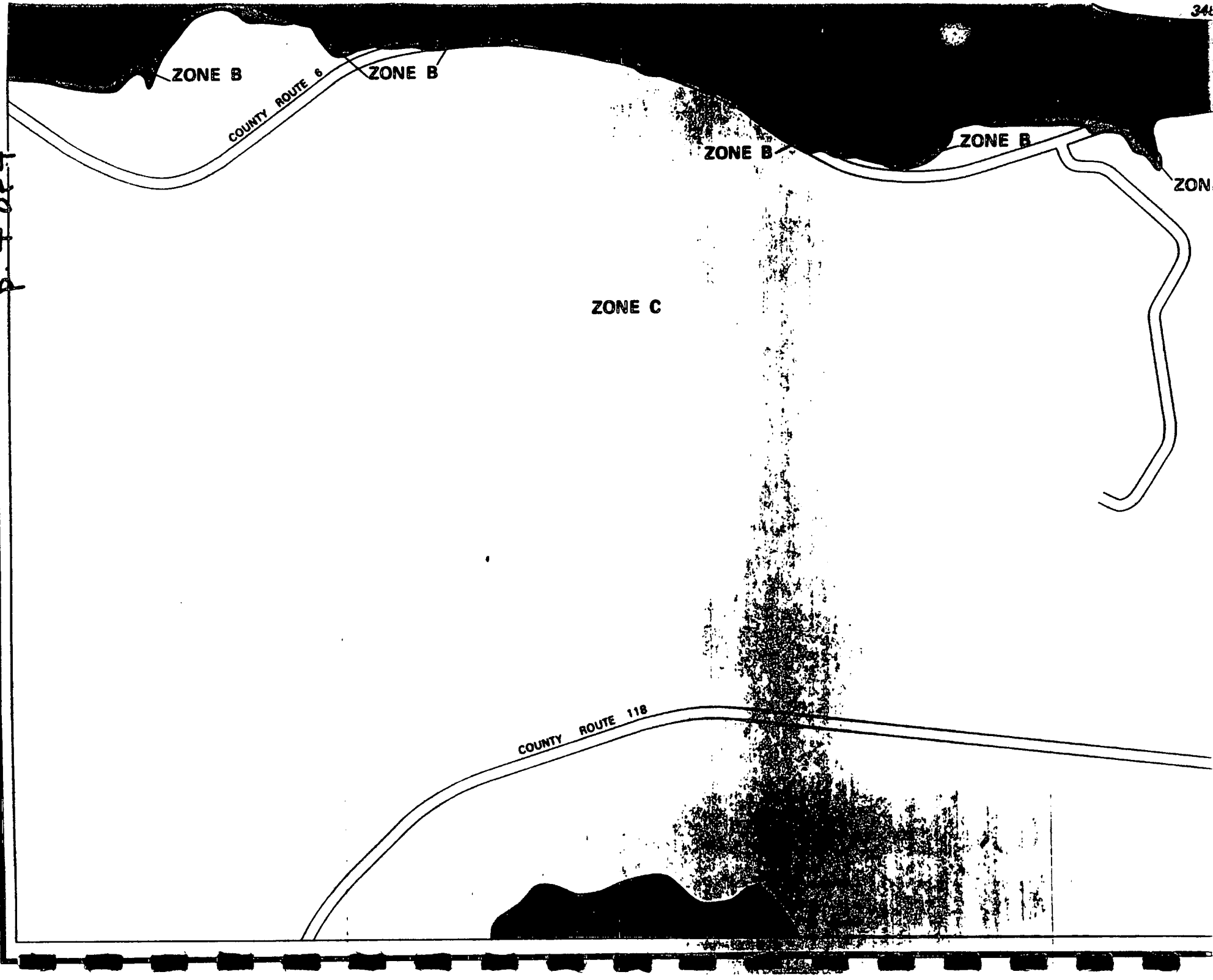
INITIAL IDENTIFICATION:

DECEMBER 6, 1974

FLOOD HAZARD BOUNDARY MAP REVISIONS:

NONE

Reference 15
p. 4 of 4



REFERENCE 16

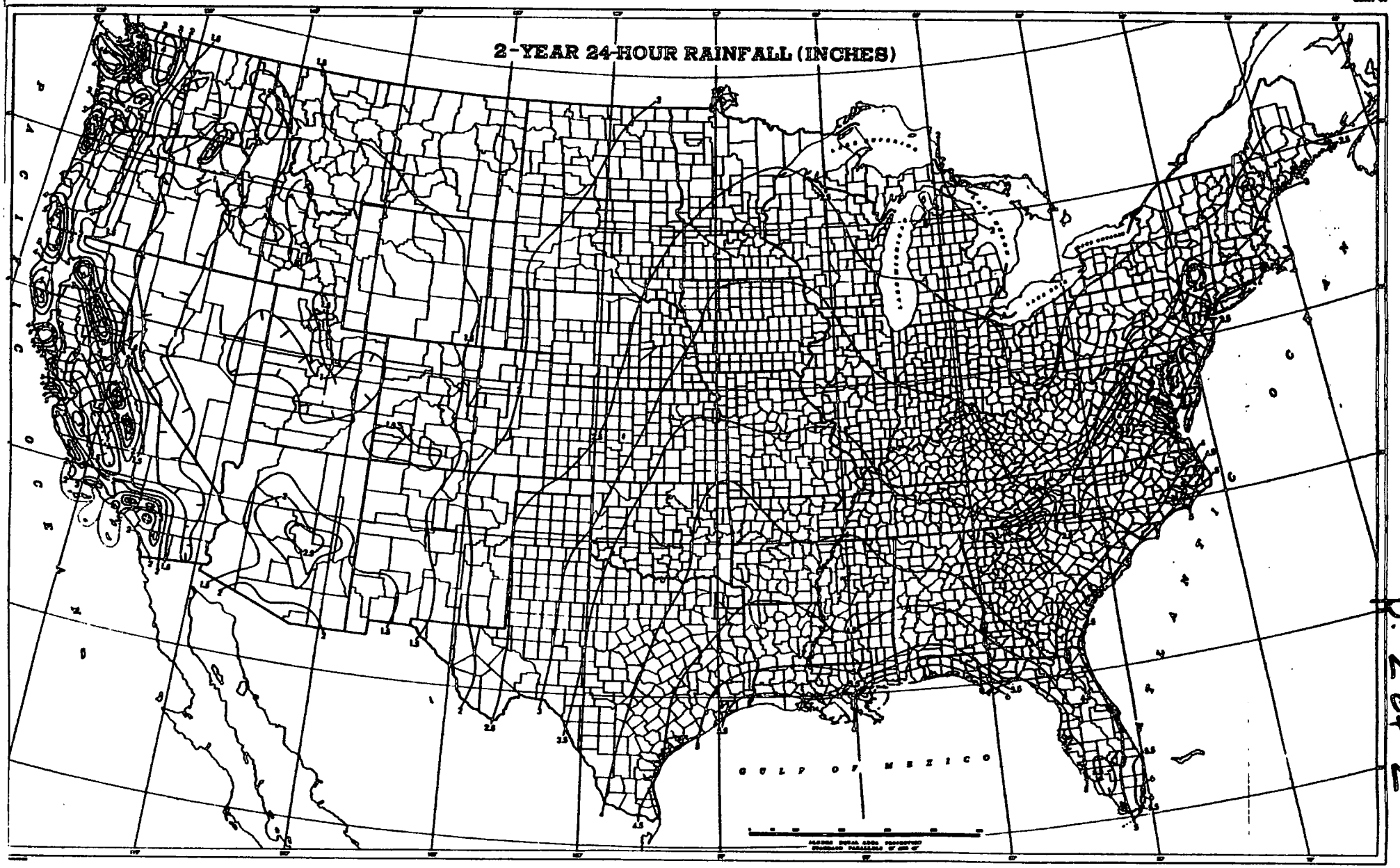
TECHNICAL PAPER NO. 40

RAINFALL FREQUENCY ATLAS OF THE UNITED STATES

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

K2.32
R

Reference 16
P. 1 of 2



Reference 16
P. 2 of 2

REFERENCE 17

Reference 17
p. 1 of 8

ARTICLE 6

Housatonic River Drainage Basin

PART

825 Housatonic River Drainage Basin

Reference 17
p: 2 of 8

SUBCHAPTER B

Classes and Standards of Quality and Purity Assigned to Fresh Surface and Tidal Salt Waters (continued)

		PART
Article 6	Housatonic River Drainage Basin	825
Article 7	Lake Champlain Drainage Basin	830
Article 8	Lake Erie—Niagara River Drainage Basin Series	835
Article 9	Lake Ontario Drainage Basin Series	845
Article 10	Lower Hudson River Drainage Basin Series	855

Reference 17
p. 3 of 8

823.6 Table I.

TABLE I

Classifications and Standards of Quality and Purity Assigned to Fresh Surface Waters within the Housatonic River Drainage Basin, Dutchess and Columbia Counties, State of New York

Item No.	Waters Index Number	Name	Comments	Map Ref. No.	Class	Standards
1	Conn. 12 portion	Tributary of Housatonic River	From New York-Conn. state line to 1000 ft. upstream.	O-25se	B	B
2	Conn. 12 portion and trib. 12-1	Tributary of Housatonic River and subtributary	From 1000 ft. upstream from state line to source.	O-25se	C	C
3	Conn. 14 portion	Tributary of Housatonic River	From New York-Conn. state line to 1000 ft. upstream.	O-25se	B	B
4	Conn. 14 portion	Tributary of Housatonic River	From 1000 ft. upstream from state line to source.	O-25se	C	C(TS)
5	Conn. 14-P 112	Brady pond		O-25se	C	C
6	Conn. 15 portion	Tenmile River	From New York-Conn. state line to Lake Ellis Road Bridge.	O-25ne	B	B(T)
6a	Conn. 15 portion	Tenmile River	From Lake Ellis Road Bridge to trib. 6.	O-25ne	C	C(T)
7	Conn. 15 portion	Tenmile River	From trib. 6 to trib. 7.	O-25ne	B	B(T)
8	Conn. 15 portion	Tenmile River	From trib. 7 to source.	N-25se	C	C(T)
9	Conn. 15-1	Tributary of Tenmile River		O-25ne	C	C(T)

Reference 11
p. 4 of 8
§ 825.6

Tenmile River

TABLE I *(cont'd)*

Item No.	Waters Index Number	Name	Description	Map Ref. No.	Class	Standards
21	Conn. 15-2-1	Subtributary of Tenmile River		O-25ne	C	C(T)
22	Conn. 15-2-P 1113c, P 1113a, P 1113d, 5, 8	Subtributaries of Tenmile River		O-25ne O-25se	C	C
23	Conn. 15-2-P 1114	Quaker Lake		O-25se	B	B
24	Conn. 15-2-P 1114-1, P 1114a	Tributaries of Quaker Lake		O-25se	C	C
25	Conn. 15-2a, 2b, 2c, 2d, 2e, 2f	Tributaries of Tenmile River and subtributary		O-25ne	C	C
26	Conn. 15-3 portion	Tributary of Tenmile River	From mouth to 1.0 mile upstream from mouth.	O-25ne	C	C(T)
27	Conn. 15-3 portion	Tributary of Tenmile River	From 1.0 mile upstream from mouth to source.	O-25ne	C	C(TS)
28	Conn. 15-3-2	Subtributary of Tenmile River		O-25ne	C	C
29	Conn. 15-4 portion	Swamp River	From mouth to trib. 6.	O-25ne	C	C(T)
30	Conn. 15-4 portion	Swamp River	From trib. 6 to trib. 8 water supply from Harlem Valley State Hospital.	O-25ne O-25se	A	A(T)

Reference 17
p. 5 of 8

Reference 17
p. 6 of 8

CHAPTER X DIVISION OF WATER RESOURCES

ARTICLE 2

Classifications and Standards of Quality and Purity

PART

700 Tests or Analytical Determinations
701 Classifications and Standards of Quality and Purity
702 Special Classifications and Standards
703 Ground Water Classifications, Quality Standards and Effluent Standards and/or Limitations
704 Criteria Governing Thermal Discharges
705 References

Reference 17
p. 7 of 8

CLASS "B"

Best usage of waters. Primary contact recreation and any other uses except as a source of water supply for drinking, culinary or food processing purposes.

Quality Standards for Class "B" Waters

Items	*Specifications*
1. Coliform.	The monthly median coliform value for 100 ml of sample shall not exceed 2,400 from a minimum of five examinations, and provided that not more than 20 percent of the samples shall exceed a coliform value of 5,000 for 100 ml of sample and the monthly geometric mean fecal coliform value for 100 ml of sample shall not exceed 200 from a minimum of five examinations. This standard shall be met during all periods when disinfection is practiced.
2. pH	Shall be between 6.5 and 8.5.
3. Total dissolved solids.	None at concentrations which will be detrimental to the growth and propagation of aquatic life. Waters having present levels less than 500 milligrams per liter shall be kept below this limit.
4. Dissolved oxygen.	For cold waters suitable for trout spawning, the DO concentration shall not be less than 7.0 mg/l from other than natural conditions. For trout waters, the minimum daily average shall not be less than 6.0 mg/l. At no time shall the DO concentration be less than 5.0 mg/l. For non-trout waters, the minimum daily average shall not be less than 5.0 mg/l. At no time shall the DO concentration be less than 4.0 mg/l.

CLASS "C"

Best usage of waters. The waters are suitable for fishing and fish propagation. The water quality shall be suitable for primary and secondary contact recreation even though other factors may limit the use for that purpose.

Quality Standards for Class "C" Waters

Items	*Specifications*
1. Coliform.	The monthly median coliform value for 100 ml of sample shall not exceed 2,400 from a minimum of five examinations, and provided that not more than 20 percent of the samples shall exceed a coliform value of 5,000 for 100 ml of sample and the monthly geometric mean fecal coliform value for 100 ml of sample shall not exceed 200 from a minimum of five examinations. This standard shall be met during all periods when disinfection is practiced.
2. pH	Shall be between 6.5 and 8.5.

Reference 17
p. 8 of 8

3. Total dissolved solids.	None at concentrations which will be detrimental to the growth and propagation of aquatic life. Waters having present levels less than 500 milligrams per liter shall be kept below this limit.
4. Dissolved oxygen.	For cold waters suitable for trout spawning, the DO concentration shall not be less than 7.0 mg/l from other than natural conditions. For trout waters, the minimum daily average shall not be less than 6.0 mg/l. At no time shall the DO concentration be less than 5.0 mg/l. For non-trout waters, the minimum daily average shall not be less than 5.0 mg/l. At no time shall the DO concentration be less than 4.0 mg/l.

CLASS "D"

Best usage of waters. The waters are suitable for fishing. The water quality shall be suitable for primary and secondary contact recreation even though other factors may limit the use for that purpose. Due to such natural conditions as intermittency of flow, water conditions not conducive to propagation of game fishery or stream bed conditions, the waters will not support fish propagation.

Conditions related to best usage of waters. The waters must be suitable for fish survival.

Quality Standards for Class "D" Waters

Items	*Specifications*
1. pH	Shall be between 6.0 and 9.5.
2. Dissolved oxygen.	Shall not be less than 3 milligrams per liter at any time.
3. Coliform.	The monthly median coliform value for 100 ml of sample shall not exceed 2,400 from a minimum of five examinations and provided that not more than 20 percent of the samples shall exceed a coliform value of 5,000 for 100 ml of sample and the monthly geometric mean fecal coliform value for 100 ml of sample shall not exceed 200 from a minimum of five examinations. This standard shall be met during all periods when disinfection is practiced.

Historical Note

Sec. added by renum. and amd. 701.4, filed July 3, 1985; amd. filed Sept. 20, 1985 eff. 30 days after filing.

701.20 Classes and standards for saline surface waters. The following items and specifications shall be the standards applicable to all New York saline surface waters which are assigned the classification of SA, SB, SC or SD, in addition to the specific standards which are found in this section under the heading of each such classification.

REFERENCE 18

Reference 18
p. 1 of 2

New York State Department of Environmental Conservation
21 South Putt Corners Road, New Paltz, NY 12561-1696
(914) 256-3000

Langdon Marsh
Commissioner

December 20, 1994

Ms. Donna J. Bolner
Wehran-New York, Inc.
PO Box 2006
Middletown, New York 10940-0858

Dear Ms. Bolner:

I have received your letters, which were forwarded to me by Paul Carella, requesting fisheries information for the Dover Cricket Hill Road and the Dover Landfill No. 2 Sites.

Based on a review of the information you provided and the Dover Plains USGS topographic map, it appears that both sites drain into the Swamp River (Conn 15-4). The Swamp River flows north and is a tributary of the Ten Mile River. The East Branch Croton River has its headwaters near Pawling and flows south to the Hudson River. Accordingly, I will focus my fisheries comments only on the Swamp River.

The Swamp River upstream of Dover Furnace is a canoeable low gradient stream passing through a large woodland swamp. Although we have no recent fisheries survey information for this section, I believe it contains some trout. Summer water temperatures, however, get too warm to provide good year-round trout habitat. This section does, however, provide some fishing opportunity for largemouth bass, sunfish and suckers. Fishing pressure is light (less than 150 hours/acre).

The Swamp River downstream of the dam at Dover Furnace has a much higher gradient and, as it flows north, gradually cools as it gains groundwater. This section contains a fair to good population of wild brown trout and a few wild brook trout. From Duncan Hill Road north 1.9 miles to its mouth, it is stocked with approximately 650 brown trout annually by the Department of Environmental Conservation. Fishing pressure is moderate (estimated 300 hours/acre). An electrofishing survey conducted on August 20, 1985 at three sites on the Swamp River downstream of Dover Furnance revealed the following fish species: brown trout, brook trout, largemouth bass, blacknose dace, longnose dace, pumpkinseed, bluegill, redbreast sunfish, golden shiner,

tesselated darter, fallfish, brown bullhead, redfin pickerel, cutlip minnows, common shiners, white suckers, rock bass and creek chub.

There is no commercial fishing on the Swamp River or the Ten Mile River.

I hope this information will be of aid to you.

Sincerely,

Ronald Pierce

Ronald Pierce
Senior Aquatic Biologist
Region 3

RP:kc
cc: Paul Carella

REFERENCE 19

Reference 19
p. 1 of 2

Low-Flow Frequency Analysis of Streams in New York

Prepared by

UNITED STATES DEPARTMENT OF INTERIOR

GEOLOGICAL SURVEY

in cooperation with

NEW YORK STATE

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

BULLETIN 74
1979

Table 1.--Location and low-flow characteristics for gaging stations and low-flow partial-record sites in New York

Station number	Station name	Latitude	Longitude	Co. code[1/]	Drainage area (mi^2)	Period of record[1/]	MA7CD Recurrence interval 2-yr (ft^3/s)	MA7CD Recurrence interval 10-yr (ft^3/s)	Remarks[1/]
	MENUNKETESUCK RIVER BASIN								
01199400	Webatuck Creek (head of Tenmile River) near Amenia	41 46 48	73 33 12	027	81.0	1956-65 1968	7.2	3.0	P
01199419	Wassaic Creek at Wassaic	41 47 36	73 33 06	027	36.6	1956-62 1964-66	3.1	1.3	P
01199420	Tenmile River near Wassaic	41 47 45	73 33 34	027	120	1956-65 1967	10	4.2	P
	Swamp River:								
01199470	Burton Brook near Wingdale	41 38 37	73 35 31	027	6.79	1960-66	.8	.4	P
01199480	Mill River at Dover Furnace	41 41 26	73 55 30	027	14.5	1960-66	.09	.01	P
01199490	Swamp River near Dover Plains	41 41 56	73 35 03	027	46.6	1961-68	2.1	.7	P
01200000	Tenmile River near Gaylordsville, Conn.	41 39 32	73 31 44	--	203	1931-75	26	12	G
	RIPPOWAM RIVER BASIN								
	Rippowam River:								
1209800	Mill River at Scott Corners	41 10 42	73 33 14	119	10.4	1956-59 1961-62	.6	.2	P
	MIANUS RIVER BASIN								
01210000	Mianus River at Bedford	41 12 06	73 38 00	119	10.4	1956-59 1961-62	1.7	.7	P
	BYRAM RIVER BASIN								
01211300	Byram River at Armonk	41 07 28	73 42 09	119	3.78	1956-59 1961-62	.5	.2	P
	BLIND BROOK BASIN								
01300000	Blind Brook at Rye	40 59 00	73 41 14	119	9.20	1945-75	1.0	.5	G
	BEAVER SWAMP BROOK BASIN								
01300500	Beaver Swamp Brook at Mamaroneck	40 57 21	73 43 07	119	4.71	1945-75	.5	.2	G
	MAMARONECK RIVER BASIN								
01301000	Mamaroneck River at Mamaroneck	40 57 14	73 44 06	119	23.4	1945-52 1956-76	.7	.3	GR
	HUTCHINSON RIVER BASIN								
01301500	Hutchinson River at Pelham	40 54 41	73 48 55	119	5.76	1945-75	.2	.05	GR
	BRONX RIVER BASIN								
01302000	Bronx River at Bronxville	40 56 09	73 50 10	119	26.5	1945-75	6.0	3.7	GR
	HUDSON RIVER BASIN								
01312000	Hudson River near Newcomb	43 58 00	74 07 55	031	192	1926-75	42	22	G
01313500	Cedar River below Chain Lakes, near Indian Lake	43 51 20	74 14 20	041	160	1931-61	40	24	G

Reference 19
P. 2 of 2

REFERENCE 20

Reference 6-U page 1 of 1

41°37'30"

73°30'

DOVER PLAINS, N. Y.-CONN.

NOTES TO THE USER

- Wetlands which have been field examined are indicated on the map by an asterisk (*).
- Additions or corrections to the wetlands information displayed on this map are solicited. Please forward such information to the address indicated.
- Subsystems, Classes, Subclasses, and Water Regimes in *italics* were developed specifically for NATIONAL WETLANDS INVENTORY mapping.
- Some areas designated as R4SB, R4SBW, OR R4SBJ (INTERMITTENT STREAMS) may not meet the definition of wetland.
- This map uses the class Unconsolidated Shore (US). On earlier NWI maps that class was designated Beach/Bar (BB), or Flat (FL). Subclasses remain the same in both versions.

U.S. DEPARTMENT OF THE INTERIOR

FISH AND WILDLIFE SERVICE

Prepared by National Wetlands Inventory

1990

AERIAL PHOTOGRAPHY

DATE: 3 / / 85	DATE: / /
SCALE: 1:58 000	SCALE:
TYPE: CIR	TYPE:

ESTUARINE — SYSTEM

2 — INTERTIDAL — SUBSYSTEM

0 — AQUATIC BED	EM — EMERGENT	SS — STREAMBED	RS — ROCKY SHORE	US — UNCONSOLIDATED SHORE	EM — EMERGENT	SS — SCRUB-SHRUB	FO — FORESTED	CLASS
1 Subtidal 2 Intertidal 3 Aquatic Bed 4 Reef 5 Rocky Shore 6 Unconsolidated Shore	3 Mollusc 3 Worm	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic	1 Bedrock 2 Rubble	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic	1 Persistent 2 Nonpersistent	1 Broad-Leaved Deciduous 2 Needle-Leaved Deciduous 3 Broad-Leaved Evergreen 4 Needle-Leaved Evergreen 5 Dead 6 Deciduous 7 Evergreen	1 Broad-Leaved Deciduous 2 Needle-Leaved Deciduous 3 Broad-Leaved Evergreen 4 Needle-Leaved Evergreen 5 Dead 6 Deciduous 7 Evergreen	Subclass

LACUSTRINE — SYSTEM

2 — LITORAL — SUBSYSTEM

RS — ROCKY BOTTOM	US — UNCONSOLIDATED BOTTOM	AB — AQUATIC BED	RS — ROCKY SHORE	US — UNCONSOLIDATED SHORE	EM — EMERGENT	OW — OPEN WATER/ Unknown Bottom	CLASS
1 Bedrock 2 Rubble	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submergent 6 Unknown Surface	1 Bedrock 2 Rubble	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic 5 Vegetated	2 Nonpersistent		Subclass

MODIFIERS

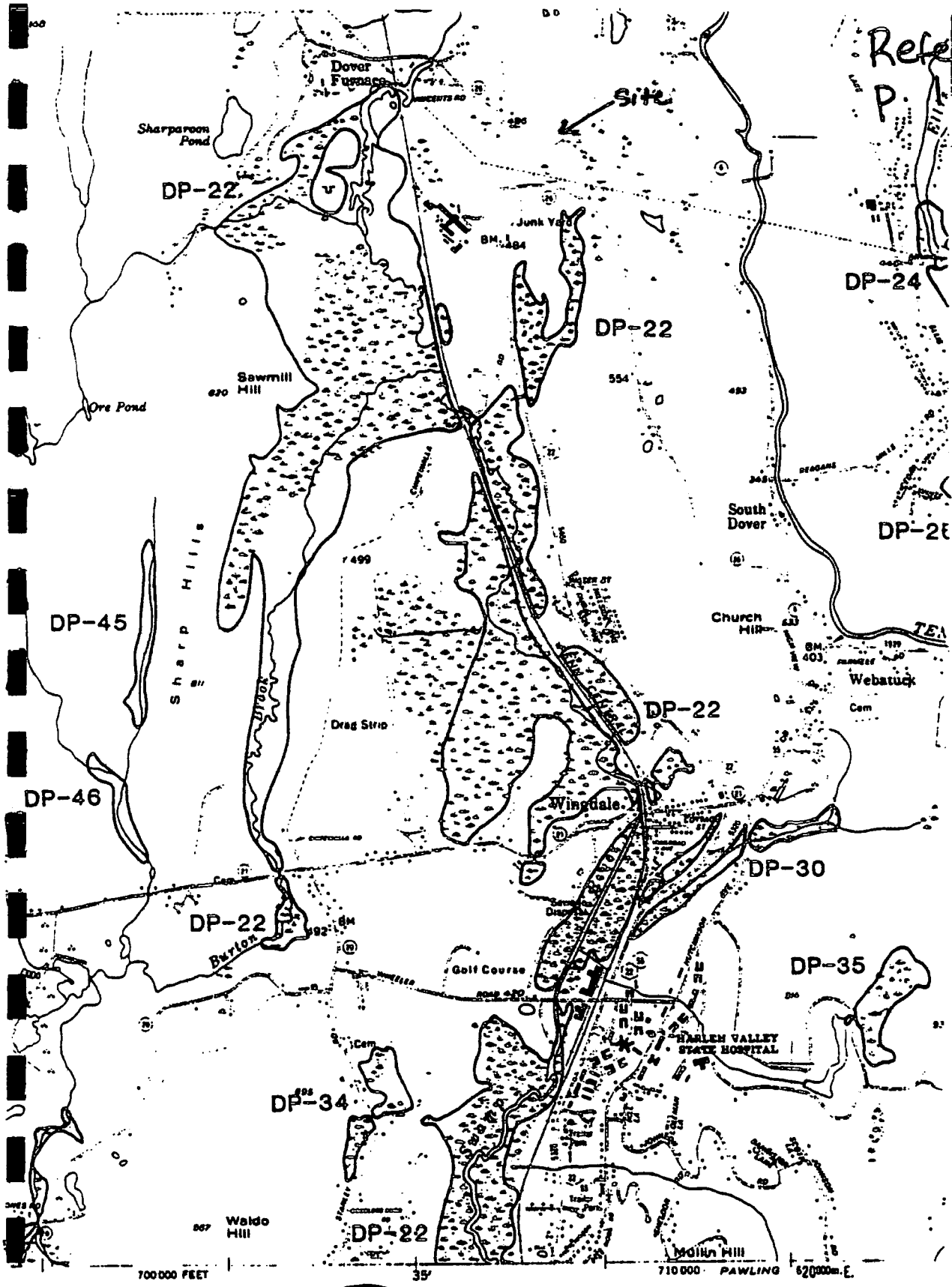
Optionally describe wetland and deepwater habitats one or more of the water regime, water chemistry, soil, or special modifiers at the class or lower level on the hierarchy. The farmed modifier may also be applied to the ecological system.

	WATER CHEMISTRY			SOIL	SPECIAL MODIFIERS	
	Coastal Salinity	Inland Salinity	pH Modifiers for all Fresh Water			
1 Hypersaline 2 Hyperhaline 3 Euhaline 4 Mixohaline (Brackish) 5 Polyhaline 6 Mesohaline 7 Oligohaline 8 Fresh		7 Hypersaline 8 Euhaline 9 Mixohaline 0 Fresh	a Acid b Circumneutral c Alkaline	a Organic b Mineral	b Diked/Impounded f Partially Drained/Ditched i Farmed	h Artificial Substrate o Spoil s Stabilized

Modifiers are only used in U.S. Geological Systems.

REFERENCE 21

Reference 21.
P. 1 of 1



5

New York State Department
th the U.S. Department of
nistration.

ey 7.5-minute quadrangle.

al photography, construction
sources. Features revised
nsportation facilities; civil
graphy; and buildings.
ed areas in which only

nal Map Accuracy Standards.

SCALE 1:24000

1000 0 1000 2000 3000 4000 5000 6000

Polyconic projection. 1927 North American datum.

1000-meter ticks based on the New York Transverse Mercator grid.
Between 72° and 78° West Longitude, this grid is identical to Zone 18 of the Universal Mercator grid. Areas east of 72° and west of 78° are direct mathematical extensions.

10,000-foot ticks based on the New York Plane Coordinate gr

REFERENCE 22

Reference 22
P. 1 of 13

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

Langdon Marsh
Acting Commissioner

December 29, 1994

Marc A. Colantuono
Wehran Emcon
666 East Main St., PO Box 2006
Middletown, New York 10940-0858

Dear Mr. Colantuono:

We have reviewed the New York Natural Heritage Program files with respect to your recent request for biological information concerning Hazardous Waste Investigations, USEPA Contract No. 68-W8-0110, Cricket Hill Road Site, as indicated on your enclosed map, located in Saratoga 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.

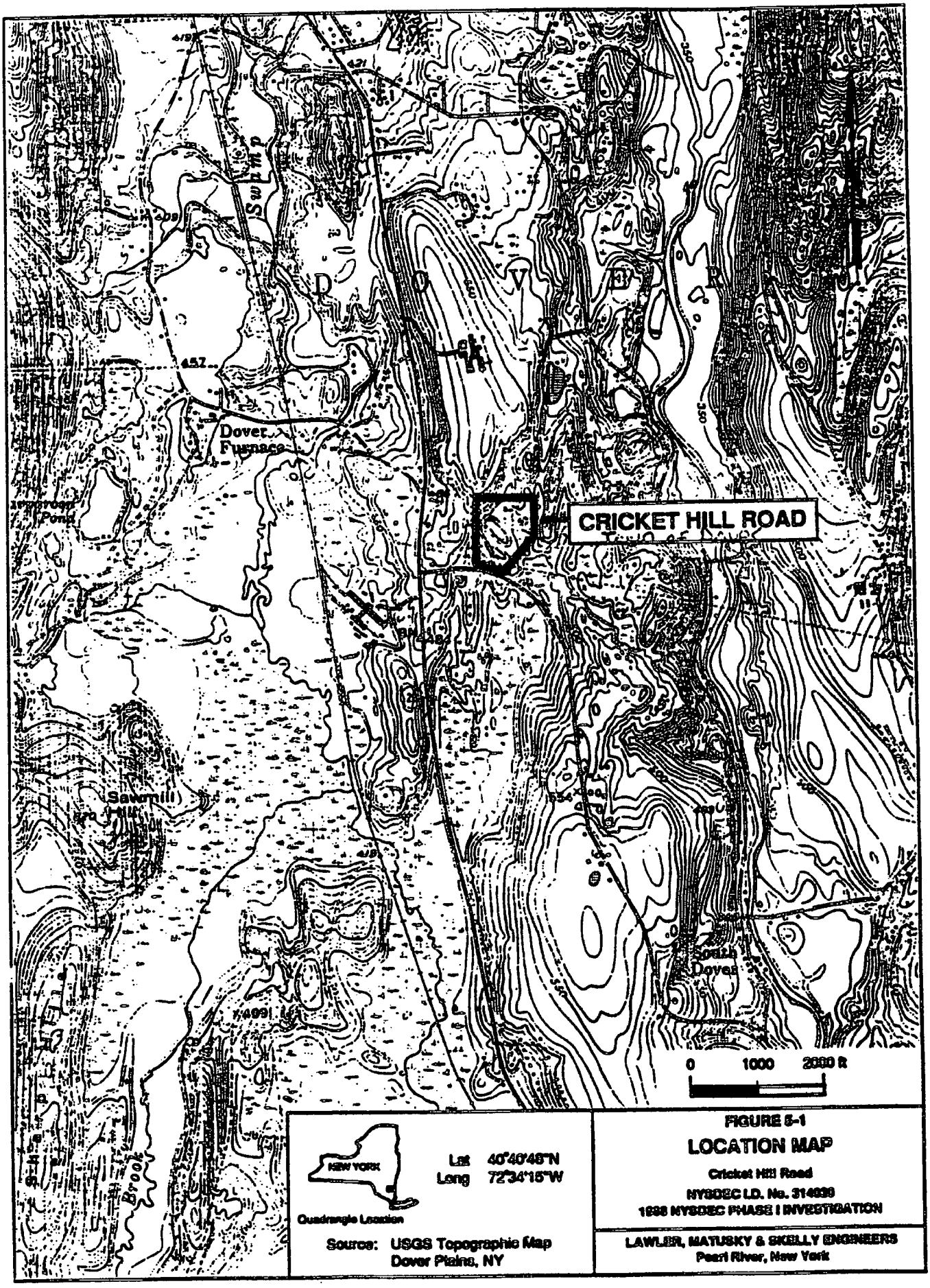
This response applies only to known occurrences of rare animals, plants and natural communities and/or significant wildlife habitats. You should contact our regional office, Division of Regulatory Affairs, at the address enclosed for information regarding any regulated areas or permits that may be required (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. 3, Wildlife Mgr.
Reg. 3, Fisheries Mgr.

Reference 22
p. 2 of 13



802E

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.	PREC- ISION	LAST SEEN	EO RANK	SCIENTIFIC NAME	COMMON NAME	ELEMENT TYPE	NY STATUS	FED. STATUS	GLOBAL RANK	STATE RANK	OFFICE	USE
DUTCHESS														
DOVER	DOVER PLAINS	414332 733452	S	1989	B	RED CEDAR ROCKY SUMMIT	RED CEDAR ROCKY SUMMIT	COMMUNITY	U		G3G4	S3	4107365	1
DOVER	DOVER PLAINS	414237 733452	S	1986	BC	RED CEDAR ROCKY SUMMIT	RED CEDAR ROCKY SUMMIT	COMMUNITY	U		G3G4	S3	4107365	12
DOVER	DOVER PLAINS	414343 733339	S	1986	B	RED CEDAR ROCKY SUMMIT	RED CEDAR ROCKY SUMMIT	COMMUNITY	U		G3G4	S3	4107365	23
DOVER	DOVER PLAINS	414343 733339	S	1986	B	RICH GRAMINOID FEN	RICH GRAMINOID FEN	COMMUNITY	U		G3	S1S2	4107365	23
DOVER	DOVER PLAINS	413747 733143	S	1965	H	CLEMMYS MUHLENBERGII	BOG TURTLE	REPTILE	E	C2	G3	S2	4107365	6
DOVER	DOVER PLAINS	414027 733525	H	1939	F	CLEMMYS MUHLENBERGII	BOG TURTLE	REPTILE	E	C2	G3	S2	4107365	11
DOVER	DOVER PLAINS	413943 733432	S	1992	E	CLEMMYS MUHLENBERGII	BOG TURTLE	REPTILE	E	C2	G3	S2	4107365	8
DOVER	DOVER PLAINS	414025 733423	S	1992	E	CLEMMYS MUHLENBERGII	BOG TURTLE	REPTILE	E	C2	G3	S2	4107365	14
DOVER	DOVER PLAINS	414236 733535	S	1988	E	CROTALUS HORRIDUS	TIMBER RATTLESNAKE	REPTILE	T		G5	S3	4107365	29
DOVER	DOVER PLAINS	414138 733607	S	1990	E	CROTALUS HORRIDUS	TIMBER RATTLESNAKE	REPTILE	T		G5	S3	4107365	30
DOVER	DOVER PLAINS	414047 733610	S	1991	C	CROTALUS HORRIDUS	TIMBER RATTLESNAKE	REPTILE	T		G5	S3	4107365	31

P. 3 of 13

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

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COUNTY & TOWN	USGS 7 1/2' TOPOGRAPHIC MAP	LAT./ LONG.	PREC- ISION	LAST SEEN	EO RANK	SCIENTIFIC NAME	COMMON NAME	ELEMENT TYPE	NY STATUS	FED. STATUS	GLOBAL RANK	STATE RANK	OFFICE	USE
DOVER	DOVER PLAINS	414324 733521	S		?	CROTALUS HORRIDUS	TIMBER RATTLESNAKE	REPTILE	T		G5	S3	4107365	3
DOVER	DOVER PLAINS	414101 733200	S		C?	CROTALUS HORRIDUS	TIMBER RATTLESNAKE	REPTILE	T		G5	S3	4107365	15
DOVER	DOVER PLAINS	414332 733452	S	1993	C	ASCLEPIAS VIRIDIFLORA	GREEN MILKWEED	VASCULAR PLANT	R		G5	S2	4107365	1
DOVER	DOVER PLAINS	414237 733452	S	1986	D	ASCLEPIAS VIRIDIFLORA	GREEN MILKWEED	VASCULAR PLANT	R		G5	S2	4107365	12
DOVER	DOVER PLAINS	414343 733339	S	1986	CD	ASCLEPIAS VIRIDIFLORA	GREEN MILKWEED	VASCULAR PLANT	R		G5	S2	4107365	23
DOVER	DOVER PLAINS	414140 733500	S	1987	CD	ASCLEPIAS VIRIDIFLORA	GREEN MILKWEED	VASCULAR PLANT	R		G5	S2	4107365	32
DOVER	DOVER PLAINS	414344 733437	S	1992	A	BOUTELOUA CURTIPENDULA	SIDE-OATS GRAMA	VASCULAR PLANT	E		G5	S1	4107365	2
DOVER	DOVER PLAINS	414237 733452	S	1986	B	BOUTELOUA CURTIPENDULA	SIDE-OATS GRAMA	VASCULAR PLANT	E		G5	S1	4107365	12
DOVER	DOVER PLAINS	414212 733414	S	1986	BC	CAREX BICKNELLII	BICKNELL SEDGE	VASCULAR PLANT	R		G5	S2	4107365	20
DOVER	DOVER PLAINS	414237 733452	S	1986	B	CAREX BICKNELLII	BICKNELL SEDGE	VASCULAR PLANT	R		G5	S2	4107365	12
DOVER	DOVER PLAINS	414343 733339	S	1986	AB	CAREX BICKNELLII	BICKNELL SEDGE	VASCULAR PLANT	R		G5	S2	4107365	23

P. 4 of 13

BIOLOGICAL AND CONSERVATION DATA SYSTEM - ELEMENT OCCURRENCE REPORT, 28 DEC 1994
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COUNTY & TOWN	USGS 7 1/2' TOPOGRAPHIC MAP	LAT./ LONG.	PREC- ISION	LAST SEEN	EO RANK	SCIENTIFIC NAME	COMMON NAME	ELEMENT TYPE	NY STATUS	FED. STATUS	GLOBAL RANK	STATE RANK	OFFICE	USE
DOVER	DOVER PLAINS	413834 733442	S	1986	C	CAREX BICKNELLII	BICKNELL SEDGE	VASCULAR PLANT	R		G5	S2	4107365	26
DOVER	DOVER PLAINS	414212 733402	S	1986	BC	CAREX BICKNELLII	BICKNELL SEDGE	VASCULAR PLANT	R		G5	S2	4107365	27
DOVER	DOVER PLAINS	414140 733500	S	1987	C	CAREX BICKNELLII	BICKNELL SEDGE	VASCULAR PLANT	R		G5	S2	4107365	32
DOVER	DOVER PLAINS	414233 733515	S	1990	AB	CHAMAELIRIUM LUTEUM	BLAZING-STAR	VASCULAR PLANT	R		G5	S2	4107365	5
DOVER	DOVER PLAINS	414338 733431	S	1993	BC	CHAMAELIRIUM LUTEUM	BLAZING-STAR	VASCULAR PLANT	R		G5	S2	4107365	17
DOVER	DOVER PLAINS	414332 733452	S	1992	B	CHAMAELIRIUM LUTEUM	BLAZING-STAR	VASCULAR PLANT	R		G5	S2	4107365	1
DOVER	DOVER PLAINS	414151 733455	S	1987	D	CHAMAELIRIUM LUTEUM	BLAZING-STAR	VASCULAR PLANT	R		G5	S2	4107365	33
DOVER	DOVER PLAINS	414343 733344	S	1986	AB	DRABA REPTANS	CAROLINA WHITLOW-GRASS	VASCULAR PLANT	R		G5	S2	4107365	23
DOVER	DOVER PLAINS	414344 733445	S	1992	AB	DRABA REPTANS	CAROLINA WHITLOW-GRASS	VASCULAR PLANT	R		G5	S2	4107365	9
DOVER	DOVER PLAINS	414140 733500	S	1987	AB	DRABA REPTANS	CAROLINA WHITLOW-GRASS	VASCULAR PLANT	R		G5	S2	4107365	32
DOVER	DOVER PLAINS	413933 733501	S	1987	B	DRABA REPTANS	CAROLINA WHITLOW-GRASS	VASCULAR PLANT	R		G5	S2	4107365	34

Referenced P. 3 of 13

BIOLOGICAL AND CONSERVATION DATA SYSTEM - ELEMENT OCCURRENCE REPORT, 28 DEC 1994
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COUNTY & TOWN	USGS 7 1/2' TOPOGRAPHIC MAP	LAT./ LONG.	PREC-ISION	LAST SEEN	EO RANK	SCIENTIFIC NAME	COMMON NAME	ELEMENT TYPE	NY STATUS	FED. STATUS	GLOBAL RANK	STATE RANK	OFFICE	USE
DOVER	DOVER PLAINS	414237 733452	S	1987	BC	DRABA REPTANS	CAROLINA WHITLOW-GRASS	VASCULAR PLANT	R		G5	S2	4107365	12
DOVER	DOVER PLAINS	414344 733437	S	1991	E	HEDEOMA HISPIDUM	MOCK-PENNYROYAL	VASCULAR PLANT	R		G5	S2S3	4107365	2
DOVER	DOVER PLAINS	414014 733443	S	1989	BC	LESPEDEZA VIOLACEA	VIOLET LESPEDEZA	VASCULAR PLANT	R		G5	S1	4107365	4
DOVER	DOVER PLAINS	414332 733452	S	1992	B	LIATRIS SCARIOSA VAR NOVAE-ANGLIAE	NEW ENGLAND BLAZING-STAR	VASCULAR PLANT	R	C2	G5?TU	S2S3	4107365	1
DOVER	DOVER PLAINS	414344 733437	S	1992	A	LINUM SULCATUM	YELLOW WILD FLAX	VASCULAR PLANT	R		G5	S2	4107365	2
DOVER	DOVER PLAINS	414343 733339	S	1986	AB	LINUM SULCATUM	YELLOW WILD FLAX	VASCULAR PLANT	R		G5	S2	4107365	23
DOVER	DOVER PLAINS	414237 733452	S	1986	B	LINUM SULCATUM	YELLOW WILD FLAX	VASCULAR PLANT	R		G5	S2	4107365	12
DOVER	DOVER PLAINS	414212 733402	S	1986	BC	LINUM SULCATUM	YELLOW WILD FLAX	VASCULAR PLANT	R		G5	S2	4107365	27
DOVER	DOVER PLAINS	414140 733500	S	1987	AB	LINUM SULCATUM	YELLOW WILD FLAX	VASCULAR PLANT	R		G5	S2	4107365	32
DOVER	DOVER PLAINS	414218 733614	S	1986	D	LIPARIS LILIFOLIA	LARGE TWAYBLADE	VASCULAR PLANT	R		G5	S1S2	4107365	20
DOVER	DOVER PLAINS	414332 733452	S	1990	C	LIPARIS LILIFOLIA	LARGE TWAYBLADE	VASCULAR PLANT	R		G5	S1S2	4107365	1

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

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COUNTY & TOWN	USGS 7 1/2' TOPOGRAPHIC MAP	LAT./ LONG.	PREC- ISION	LAST SEEN	EO RANK	SCIENTIFIC NAME	COMMON NAME	ELEMENT TYPE	NY STATUS	FED. STATUS	GLOBAL RANK	STATE RANK	OFFICE	USE
DOVER	DOVER PLAINS	414332 733452	S	1992	BC	ONOSMODIUM VIRGINIANUM	VIRGINIA FALSE GROMWELL	VASCULAR PLANT	R		G4	S1	4107365	1
DOVER	DOVER PLAINS	414332 733452	S	1991	C	PYCNANTHEMUM TORREI	TORREY'S MOUNTAIN-MINT	VASCULAR PLANT	E		G2	S1	4107365	1
DOVER	PAWLING	413702 733458	S	1986	C	RICH GRAMINOID FEN	RICH GRAMINOID FEN	COMMUNITY	U		G3	S1S2	4107355	15
DOVER	PAWLING	413659 733516	S	1992	E	CLEMMYS MUHLENBERGII	BOG TURTLE	REPTILE	E	C2	G3	S2	4107355	21
DOVER	PAWLING	413726 733319	S	1986	A	CHAMAELIRIUM LUTEUM	BLAZING-STAR	VASCULAR PLANT	R		G5	S2	4107355	8
DOVER	PAWLING	413714 733329	S	1986	B?	LINUM SULCATUM	YELLOW WILD FLAX	VASCULAR PLANT	R		G5	S2	4107355	1
DOVER	PAWLING	413652 733457	S	1986	BC	LINUM SULCATUM	YELLOW WILD FLAX	VASCULAR PLANT	R		G5	S2	4107355	16
DOVER	PAWLING	413726 733319	S	1986	C	LIPARIS LILIFOLIA	LARGE TWAYBLADE	VASCULAR PLANT	R		G5	S1S2	4107355	8
PAWLING	PAWLING	413223 733552	S	1989	AB	RED MAPLE-HARDWOOD SWAMP	RED MAPLE-HARDWOOD SWAMP	COMMUNITY	U		G5	S4S5	4107355	16
PAWLING	PAWLING	413238 733556	S	1989	AB	RICH SHRUB FEN	RICH SHRUB FEN	COMMUNITY	U		G3G4	S1S2	4107355	13
PAWLING	PAWLING	413618 733518	M	1987	E	ARDEA HERODIAS	GREAT BLUE HERON	BIRD	P		G5	S5	4107355	12

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

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COUNTY & TOWN	USGS 7 1/2' TOPOGRAPHIC MAP	LAT./ LONG.	PREC- ISION	LAST SEEN	EO RANK	SCIENTIFIC NAME	COMMON NAME	ELEMENT TYPE	NY STATUS	FED. STATUS	GLOBAL RANK	STATE RANK	OFFICE	USE
PAWLING	PAWLING	413504 733537	M	1991	?	CLEMMYS MUHLENBERGII	BOG TURTLE	REPTILE	E	C2	G3	S2	4107355	20
PAWLING	PAWLING	413238 733549	S	1989	A	BETULA PUMILA	SWAMP BIRCH	VASCULAR PLANT	R		G5	S2	4107355	3
PAWLING	PAWLING	413509 733531	S	1989	C	BETULA PUMILA	SWAMP BIRCH	VASCULAR PLANT	R		G5	S2	4107355	6
PAWLING	PAWLING	413713 733330	S	1985	D	CASTILLEJA COCCINEA	SCARLET INDIAN-PAINTBRUSH	VASCULAR PLANT	T		G5	S1	4107355	1
PAWLING	PAWLING	413713 733330	S	1992	A	CHAMAELIRIUM LUTEUM	BLAZING-STAR	VASCULAR PLANT	R		G5	S2	4107355	1
* PUTNAM														
PATTERSON	BREWSTER	412948 733659	S	1990	AB	RICH SLOPING FEN	RICH SLOPING FEN	COMMUNITY	U		G3	S1S2	4107345	7
PATTERSON	BREWSTER	412946 733624	S	1989	A	CARDAMINE LONGII	LONG'S BITTERCRESS	VASCULAR PLANT	U		G3G4Q	S1	4107345	3
PATTERSON	BREWSTER	412948 733659	S	1990	B	CHAMAELIRIUM LUTEUM	BLAZING-STAR	VASCULAR PLANT	R		G5	S2	4107345	8
PATTERSON	BREWSTER	412833 733420	S	1989	CD	CYPERUS ERYTHRORHIZOS	RED-ROOTED FLATSEDGE	VASCULAR PLANT	R		G5	S2	4107345	2
PATTERSON	BREWSTER	412948 733659	S	1990	A	TROLLIUS LAXUS SSP LAXUS	SPREADING GLOBEFLOWER	VASCULAR PLANT	T		G4T3Q	S3	4107345	7

Reference -- p. 8 of 13

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

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COUNTY & TOWN	USGS 7 1/2' TOPOGRAPHIC MAP	LAT./ LONG.	PREC-ISION	LAST SEEN	EO RANK	SCIENTIFIC NAME	COMMON NAME	ELEMENT TYPE	NY STATUS	FED. STATUS	GLOBAL RANK	STATE RANK	OFFICE	USE
PATTERSON	PAWLING	413057 733612	S	1989	BC	CAREX BUSHII	SEDGE	VASCULAR PLANT	R		G4	S2S3	4107355	10
PATTERSON	PAWLING	413028 733555	S	1989	D	CUSCUTA CAMPESTRIS	FIELD-DODDER	VASCULAR PLANT	R		G5	S1	4107355	18

67 Records Processed

Reference 22
P. 9 of 13

BIOLOGICAL AND CONSERVATION DATA SYSTEM - ELEMENT OCCURRENCE REPORT, 25 JAN 1995
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.	PREC- ISION	LAST SEEN	EO RANK	SCIENTIFIC NAME	COMMON NAME	ELEMENT TYPE	NY STATUS	FED. STATUS	GLOBAL RANK	STATE RANK	OFFICE	USE
DUTCHESS														
DOVER	DOVER PLAINS	413919 733213	M	1982	E	CLEMMYS MUHLENBERGII	BOG TURTLE	REPTILE	E	C2	G3	S2	4107365	10

Records Processed

Reference 22
P. 10 of 13

Reference 22
p. 11 of 13

Wehran EMCON
Northeast

Wehran-New York, Inc.
666 East Main Street
P.O. Box 2006
Middletown, NY 10940-0858
Tel: (914) 343-0660
Fax: (914) 343-1946

November 14, 1994

Mr. Burrell Buffington
NYSDEC Informational Services
Wildlife Resources Center
Latham, New York 12110-2400

Re: Sensitive Environment Request
WE Project No. 04821.01

Dear Mr. Buffington:

Wehran-New York, Inc. has been retained by the United States Environmental Protection Agency (USEPA), under Contract No. 68-W8-0110 to perform investigations at several sites within New York State. As part of this investigation, we would like to obtain information on the following sites:

SITE/LOCATION (COUNTY)	EPA ID	
Abalene/Orkin Pest Control Site	NYD980478663	802 A
Port Henry Mineville (aka Republic Steel No. 7)	NYD987004686	802 B
Nyack Landfill Site Missing Map	NYD980507271	
Dexter Landfill	NYD982268831	802
Dover Town Dump	NYD980508154	802 E
Dover Landfill No. 2	NYD980508139	802

? Rupert Hill

We would like to determine the presence or absence of the following within 15 miles downstream of each site:

- Critical Habitat for Federally designated endangered or threatened species
- Marine Sanctuary
- National Park
- Designated Federal Wilderness Area
- Ecologically important areas identified under the Coastal Zone Wilderness Act
- Sensitive areas identified under the National Estuary Program or Near Coastal Water Program of the Clean Water Act
- Critical Areas identified under the Clean Lakes Program of the Clean Water Act (subareas in lakes or entire small lakes)
- National Monument
- National Seashore Recreation Area
- National Lakeshore Recreation Area
- Habitat known to be used by Federally designated or proposed endangered or threatened species

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Reference 22
p. 12 of 13

- National Preserve
- National or State Wildlife Refuge
- Unit of Coastal Barrier Resources System
- Federal land designated for the protection of natural ecosystems
- Administratively proposed Federal Wilderness Area
- Spawning areas critical for the maintenance of fish/shellfish species within a river system, bay or estuary
- Migratory pathways and feeding areas critical for the maintenance of anadromous fish species in a river system
- Terrestrial area utilized by large or dense aggregations of vertebrate animals (semi-aquatic foragers) for breeding
- National river reach designated as recreational
- Habitat known to be used by State designated endangered or threatened species
- Habitat known to be used by a species under review as to its Federal endangered or threatened status
- Costal Barrier (partially developed)
- Federal designated Scenic or Wild River
- State land designated for wildlife or game management
- State designated Scenic or Wild River
- State designated Natural Area
- Particular areas, relatively small in size, important to maintenance of unique biotic communities
- State-designated areas for the protection/maintenance of aquatic life under the Clean Water Act
- Wetlands

I have enclosed a map indicating the location of the site and the areas of concern.

I look forward to hearing from you soon. If you have any questions or need further information, please do not hesitate to call.

Very truly yours,

WEHRAN-NEW YORK, INC.

Marc A. Colantuono

Marc A. Colantuono
Environmental Scientist

MAC/emk
Enclosures

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 23

Reference 23
p. 1 of 2

Wehran EMCON Northeast

TELEPHONE CONVERSATION MEMORANDUM

Client: Ebasco
Project: ARCS Program - Dover Town Dump
Call To/From: Ronald Pierce
Phone No.: 914-256-3068

Proj. No.: 04829.01
Date: 1-19-95
Time: 3:30pm
Representing: NYSDEC - New Paltz

Summary of Conversation: Mr. Pierce was asked about any known contamination of fish in the Swamp or Tenmile Rivers. Also, Mr. Pierce was asked about pounds of production of fish from both rivers.

(1) Mr. Pierce informed me that a study conducted by the State of New York, published in September 1987, had not found any toxins in fish, that would cause concern in either the Swamp or Tenmile Rivers
(Toxic Substances in Fish and Wildlife Analyses, Since 5-1-

(2) Mr. Pierce informed me that it would be impossible for him to give me a number representing pounds of production per year, because any fish taken from both rivers are for private consumption, and no commerical fishing is occuring on either river.

Copies To: File - Dover Town Dump

By: D. Bolner

Reference 23
p. 2 of 2

Wehran EMCON Northeast

TELEPHONE CONVERSATION MEMORANDUM

Client: Ebasco

Project: ARCS Program ~ Dover Town Dump

Call/To/From: Ronald Pierce

Phone No.: 914-256-3068

Proj. No.: 04829.01

Date: 1-25-95

Time: 10:30 am

Representing: NYSDEC-New Paltz

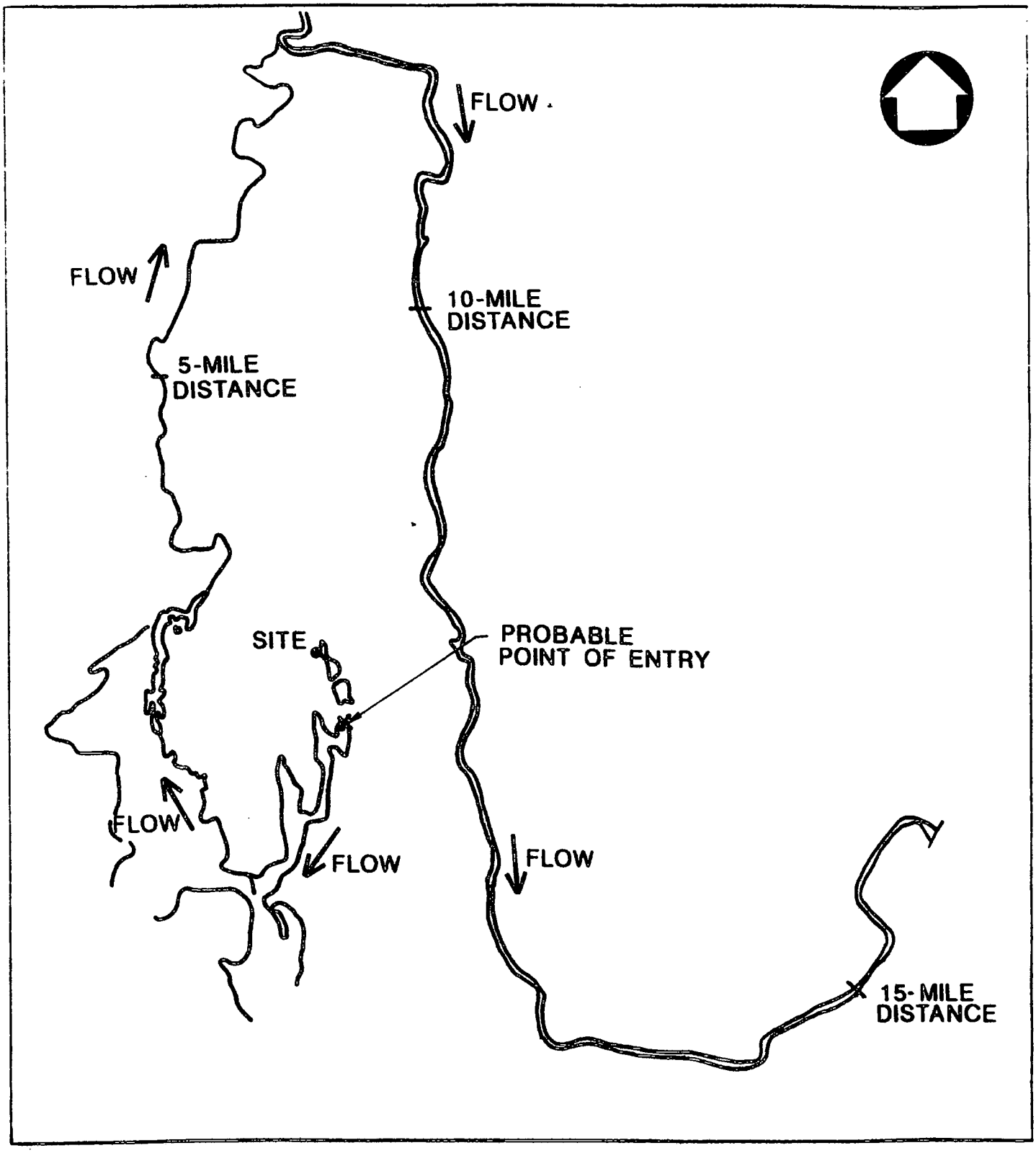
Summary of Conversation: Asked Mr. Pierce if the fish he had quoted me in his letter dated December 20, 1994, for Swamp River were the same for Tenmile. Mr. Pierce stated that since the Swamp River is a major tributary of the Tenmile River, that fish found in the Swamp River would also be found in the Tenmile River

Copies To: File - Dover Town Dump

By: D. Bolner

REFERENCE 24

Reference 67
p. 1 of 1



15 – MILE SURFACE WATER PATHWAY SKETCH

EBASCO ENVIRONMENTAL

NOT TO SCALE

DOVER TOWN DUMP
TOWN OF DOVER, NEW YORK

REFERENCE 25

Reference 25
p. 1 of 4

SOIL SURVEY

Dutchess County New York

Series 1939, No. 23

Issued December 1955

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

soil. They are sufficiently well-drained for use as cropland and are comparable in drainage to the Pittstown soils, which were derived from acid shale and slate.

The Boynton soils are poorly drained, have gray or dark grayish-brown surface soil, and are mottled within 8 or 10 inches of the surface. They are comparable in drainage to the Stissing soils of the acid shale and slate group.

The very poorly drained black-surfaced Mansfield soil has a gray-mottled subsoil. As indicated in table 4, the Mansfield soil developed both from calcareous sandstone and slate and from acid shale and slate.

SOILS FROM LIMESTONE AND SLATE

The very deep well-drained Stockbridge soils occur in scattered areas throughout the eastern half of the county in association with soils of the acid shale and slate group and of the limestone group. They are comparable to Bernardston soils, acid shale and slate group, and like them, occupy broad hills with uniform slopes. The limestone is sufficient to make them neutral or calcareous in the lower subsoil, as are soils of the Troy series. Unlike the Troy soils, their source of lime is mainly limestone, not calcareous sandstone.

SOILS FROM LIMESTONE

The soils from limestone have developed from glacial till in which the principal rock material is limestone. These soils generally have a calcareous subsoil, though the plowed layer may be slightly to moderately acid. They are darker in color and generally "stronger" than the soils derived from till that contains less lime.

The very deep well-drained Pittsfield soils are not extensive but among the most productive in the county. In association with them, where the limestone in the till is mainly crystalline (approaching a marble), the sandy well-drained Dover soils have developed. Dover soils vary from a few inches to 6 feet deep over bedrock. Areas less than 2 feet thick over bedrock are characterized by many outcrops and are separated from the deeper Dover soils as a ledgy type. The well-drained Wassaic soils—heavier textured than the Dover—have developed where the limestone in the till is not crystalline. Like the Dover, the Wassaic soils vary from a few inches to 5 or 6 feet in thickness, and a ledgy Wassaic type is separated from the deeper Wassaic soils.

The Amenia soil occupies flat or gently sloping moderately well-drained to imperfectly drained areas. It has a brown surface soil and mottling below 15 or 18 inches. The poorly drained Kendaia soil has a dark-gray surface soil and mottling below 8 or 10 inches. The very poorly drained Lyons soil has a black surface soil and a gray-mottled subsoil.

SOILS DEVELOPED FROM GLACIAL OUTWASH

The soils developed from glacial outwash occur mainly as broad nearly level plains or hilly and hummocky kames in the valleys. They were derived from layered sands and gravel deposited by running water during the melting of the glacier. They are not so extensive as the soils derived from glacial till, but their favorable relief

and general productivity place them among the best soils in the county.

SOILS FROM GRANITE AND GNEISS

The glacial outwash soils derived chiefly from granite and gneiss are the Merrimac. These sandy soils are deep, strongly acid, and well-drained or excessively drained. They have developed from glacial outwash from granite and gneiss materials. They are loose and open throughout and are underlain by deep beds of layered sands and gravel. They are low in content of plant nutrients and are inclined to be droughty. The hilly and steep phases were formerly recognized as a separate series, the Hinckley.

SOILS FROM ACID SHALE AND SLATE

Glacial outwash soils derived chiefly from acid shale and slate occur mainly in the western half of the county in the valleys of Fishkill and Wappinger Creek and on the high terraces along the Hudson River. They are deep and moderately to strongly acid throughout. They are underlain at depths between 2 and 4 feet by layered beds consisting of rounded pieces of slate, shale gravel, and sand.

The well-drained Hoosic soils range from gravelly sandy loam to loam in texture. They are not naturally high in plant nutrients but respond well to fertilization and are highly productive when properly managed. Their good internal drainage is indicated by the uniform brown to yellow colors of the profile. The hilly and steep phases were formerly recognized as a separate series, the Otisville.

In small depressions and flats associated with the Hoosic soils are areas with very compact substrata below 24 or 30 inches. These areas were mapped as Braceville, Hero, and Phelps silt loams, undifferentiated. The moderately well to imperfectly drained bodies of Braceville soil occur where internal drainage is retarded only enough to cause mottling with rusty brown and gray in the subsoil below depths of 15 to 18 inches. The Hero and Phelps soils, though mapped in the undifferentiated unit, did not develop from acid shale and slate, so are mentioned with their appropriate groups.

The Red Hook soil occurs where a high water table is maintained for long periods; its surface soil is dark gray or dark grayish brown, and its subsoil is mottled to within 8 or 10 inches of the surface. The Atherton soil is in the more poorly drained depressions; its surface soil is black, and its subsoil is gray or mottled gray and brown throughout.

SOILS FROM CALCAREOUS SANDSTONE, LIMESTONE, AND SLATE

The glacial outwash soils derived chiefly from sandstone, limestone, and slate are the Copake and Hero. The Copake soils are comparable to the Hoosic soils in being deep, well-drained, and underlain by stratified gravel and sand. They differ, however, in having free lime at depths of 3 to 8 feet and in having a slightly less acid surface soil. The hilly and steep phases of Copake soil were formerly recognized as belonging to the Schodack series. The Hero soils, mapped in an undifferentiated group with Braceville and Phelps soils, have developed from materials similar to those of the Copake soils, but they occupy depressions or flats and are moderately well to imperfectly

Reference 25
P. 2 of 4

The soil is best suited to pasture or to a 5- or 6-year rotation consisting of at least 4 years of hay and not more than 1 year of intertilled crops. Alfalfa is well suited and should be included in seeding mixtures for long-term hay. Birdsfoot trefoil may prove equally well suited to hay mixtures and better suited to pastures. The lime requirement of the soil is low, but crops respond to phosphorus.

Dover fine sandy loam, ledgy rolling phase (5–15% slopes) (Dc).—Many outcrops of crystalline limestone characterize this very shallow soil that developed from shallow deposits of glacial till and materials weathered from the underlying crystalline limestone bedrock. The principal rock constituent of the glacial till is crystalline limestone, which weathers easily into a fine sandy loam. Other rock materials present in smaller quantity are schist, quartzite, slate, and gneiss.

The soil occurs on low hills and knolls that seldom rise more than 100 feet above the floor of the Harlem Valley. The relief is uneven. White sand is common on the surface where a rock outcrop is disintegrating. Where the surface of an outcrop joins the soil, several inches of disintegrating sandy material lie upon the soil. Both surface and internal drainage are good.

Beneath a pasture sod, the surface soil is a dark coffee-brown mellow or fluffy finely granular fine sandy loam, neutral or alkaline, well penetrated with grass roots, and about 9 inches thick. From 9 down to 17 inches, the subsoil is strongly alkaline, mellow, brown fine sandy loam. Below 17 inches to a depth of 21 inches the subsoil is light yellowish-brown fine sandy loam that is friable, mellow, and slightly calcareous. Below 21 inches and extending to 26 inches is strongly calcareous very light-gray fine sand, which rests on the crystalline limestone bedrock. Roots penetrate all layers but are most abundant in the surface soil.

The soil varies chiefly in depth. Outcrops of the underlying limestone are numerous, but in pockets between them the average depth of soil is about 24 inches. Nevertheless, the layers of bedrock are tilted on edge, and in pockets between outcrops the soil may be as much as 4 feet deep. The soil is moderately eroded in most areas. A few small included areas have been severely eroded.

Use and management.—The cultivated areas of this soil are shallow but contain fewer outcrops than normal for the entire soil. They are used principally for hay grown in rotation with corn and oats. From 10 to 12 tons of manure and 300 to 400 pounds of 20-percent superphosphate an acre are usually applied for corn, and 150 to 200 pounds of superphosphate for oats. Timothy, red clover, and alfalfa, the principal hay crops, are maintained from 3 to 5 years and then pastured 1 or 2 years before plowing. Top dressings of manure are sometimes applied to hay crops to maintain the stands longer. The soil is inclined to be droughty. Yields vary with the quantity of rainfall during the growing season. Cultivable areas like these are exceptions; the soil normally cannot be cultivated and is pastured (pl. 3, *A*).

Permanent pasture is generally good during early spring and very poor after July 15. Canada and Kentucky bluegrasses, redtop, and wild white clover are usually abundant. Chicory, thistle, wild aster, wild carrot, and other weeds grow in the poorest pastures, and some brushy growth of hardhack, redcedar, and hawthorn is encroaching. Pastures need phosphorus but no lime.

The forests are young, and the stands are irregular. Redcedar, usually the dominant tree, occurs with some gray and white birches, locust, hard maple, and wild cherry. Redcedar and brush soon invade idle areas.

Dover fine sandy loam, ledgy hilly phase (15–30% slopes) (Dh).—More strongly sloping and hilly areas associated with the ledgy rolling phase are occupied by this soil. The relief is irregular. Outcrops of distintegrating white limestone are conspicuous and somewhat more numerous than on less steeply sloping phases of Dover fine sandy loam. About 25 percent of this soil has been severely eroded; the rest, moderately eroded. The light fluffy surface soil, the shallowness of the profile, and the irregularity of relief makes danger of erosion great. Cultivation is extremely difficult and usually results in serious loss of soil.

The profile in moderately eroded areas is similar to that of the ledgy rolling phase. The surface soil in severely eroded areas is composed principally of subsoil material; it is light brown and about 6 inches thick. The subsoil, a light yellowish-brown fine sandy loam, extends to a depth of 12 inches. Below 12 inches lies a 4- or 5-inch layer of disintegrated bedrock, a light-gray fine sand that rests on the solid white limestone.

Use and management.—This soil is mostly in pasture and forest. Pasture is good in the spring but poor in summer. The bluegrass, redtop and wild white clover sods are usually heavy. About a fourth of the pasture is on eroded areas, and erosion is still active in places. Light applications of manure or phosphate would probably improve the pasture so it could hold the soil, but most pastures are not fertilized. The soil is droughty, and in dry seasons the vegetation is severely damaged. The forest is young and consists of the same species as are on the ledgy rolling phase.

Dover fine sandy loam, ledgy steep phase (30–45% slopes) (Dp).—This soil has steep irregular slopes and many outcrops of the underlying rock. Areas vary from 2 to 70 acres in size.

The profile in the moderately eroded areas (65 percent of the phase) is generally similar to that of the ledgy rolling phase but thinner over bedrock in most places. The present surface soil in pastures is about 5 inches deep and grayish brown. Beneath the surface soil is about 8 inches of light yellowish-brown friable fine sandy loam subsoil, which rests at a depth of about 8 inches on very light-gray fine sand from disintegrated limestone. The solid bedrock normally occurs at depths of 10 to 15 inches.

Use and management.—Under forest this soil appears to be stabilized; slips develop only where forest is pastured. This soil is best used for forest in most places. Redcedar comes in rapidly and is the dominant species. Gray and white birches, white pine, black locust, and maple are also present. The forest is all young, which indicates that the soil was probably cleared at one time. Erosion is active in most pastures. The sod is not heavy enough to hold the soil; surface wash occurs and the soil slips on many of the steep slopes.

Reference P. 3 of 4

Reference 95
R 4 of 4

REFERENCE 26

EBASCO ENVIRONMENTAL

FOUR MILE VICINITY MAP

DOVER TOWN DUMP
TOWN OF DOVER, N.Y.

TOPOGRAPHY TAKEN FROM:

1958 DOVER PLAINS, N.Y. - CONN.
Photorevised 1984
1958 PAWLING, N.Y. - CONN.
Photorevised 1971
Photoinspected 1976
1960 POUGHQUAG, N.Y.
Photorevised 1981
1960 VERBANK, N.Y.
Photoinspected 1976

TOPOGRAPHIC QUADRANGLE 7.5 MIN. SERIES

DOVER TOWN DUMP WETLAND ACREAGE BREAKDOWN

RADIUS	ACREAGE
0–.25 miles	3.2 acres
.25–.50 miles	27.5 acres
.50–1.0 miles	268.9 acres
1.0–2.0 miles	698.6 acres
2.0–3.0 miles	524.6 acres
3.0–4.0 miles	663.3 acres
TOTAL WETLAND ACREAGE	2186.1 acres

REFERENCE # 26
PAGE 1 OF 1

REFERENCE 27

Reference 27
p. 1 of 1

Wehran EMCON Northeast

TELEPHONE CONVERSATION MEMORANDUM

Client: Ebasco
Project: ARCS Program ~ Dover Town Dump
Call To/From: Jim Napley
Phone No.: 914-431-1644

Proj. No.: 04829.01
Date: 1-25-95
Time: 10:05 am
Representing: Dutchess County Health Department

Summary of Conversation: Asked Mr. Napley about the delineations of wellhead protection areas in Dutchess County. He said that there are no set wellhead protection areas in Dutchess County. As a rule of thumb the county uses the 200 ft radius around a public well in bedrock rule, established by the State of New York.

Copies To: File ~ Dover Town Dump

By: D. Bolner

REFERENCE 28

Reference 28
p. 1 of 1

Wehran EMCON Northeast

TELEPHONE CONVERSATION MEMORANDUM

Client: Ebasco
Project: ARCS Program ~ Dover Town Dump
Call To/From: Gerald Vincent
Phone No.: 914-832-6104

Proj. No.: 04829.01
Date: 1-24-95
Time: 6:00 pm
Representing: Owner of Dover Town Dump

Summary of Conversation: Double checked with Mr. Vincent on the following information:

Zoning ~ RI/40 = Multi-family dwellings allowed

Exact time the Iroquis Pipeline was installed on the Dover Town Dump Site = December 10, 1991

Copies To: File - Dover Town Dump

By: D. Bolner