(12-75)

New York State Department of Environmental Conservation

ROD signed

FILE

MEMORANDUM

TO: Ann Hill DeBarbieri, Deputy Commissioner
FROM: Michael J. O'Toole, Jr., Director, DHWR
SUBJECT: Record of Decision (ROD) for the Stark Oil Area of Concern, G.E. Main Plant Site, ID #447004
DATE: DEC 14 1992

Michael J. O'Toole Jr.

Attached for your review and approval is the Record of Decision for the Stark Oil Area at the G.E. Main Plant site in Schenectady.

The PRAP was available for public comment over a 30-day period, and no public comment was received. G.E. also declined to comment, except to indicate support for the selected remedy. There are, therefore, no revisions to the proposed remedy in this ROD.

It is recommended that the attached ROD be approved.

bcc: M. O'Toole (2)
C. Goddard
S. Hammond
W. Daigle
K. Farrar
file

KLF:sab

DEC 14

ROD Summary Sheet

Site Number: 447004
Site Name: GE Main Plant - Stark Oil Area
Site Location: Schenectady, Schenectady County

Prepared By: Central Technical Support Section
Bureau of Central Remedial Action

A. **Description of Problem:**

This site is one area of concern on the GE Main Plant Site. This site is a former bulk petroleum storage/ wholesaling facility which GE bought in 1977. A major removal action under the spill program took place in 1986. The remaining environmental problem is the presence of a layer of floating petroleum product in one portion of the site, along with a limited area of significant aqueous phase contamination with petroleum hydrocarbons and VOCs.

Aqueous Phase Contaminants

Petroleum Hydrocarbons

- Benzene - up to 9 ppm, usually 1-5 ppm.
- Toluene - up to 4 ppm, usually approx. 1ppm.
- Xylene - up to 19 ppm, usually 1-10 ppm.
- Napthalene - up to 320 ppm, in the vicinity of product.

Volatile Organic Compounds

- Tetrachlorethene - up to 54 ppb.
- Trichloroethene - up to 52 ppb.
- 1,1 dichloroethane - up to 460 ppb.
- 1,1 dichloroethene - up to 3300 ppb.
- Methyl ethyl ketone - up to 2100 ppb.

B. **Description of Remedy:**

The remedy at the Stark Oil Site will consist of groundwater recovery and treatment, along with floating product recovery and treatment. The depression of water levels will be used to induce product flow into the recovery wells. A pilot test of vacuum extraction will also be performed to evaluate this technology's applicability to the Stark Oil Site.

C. **Issues**:

1. The remedy described above has already been pilot tested and designed, and is currently being implemented under an executed IRM Order. BCRA staff have concluded that full implementation of the IRM Order will constitute complete remediation of the Stark Oil Site under 6NYCRR Part 375-1.10(b). Therefore, it is proposed that, under 375-1.11(a), public comment on the remedial action be solicited, and a Record of Decision is issued.

2. This will be the first final remedy selected for any portion of the GE Main Plant Site. It is likely that the terms of this decision, especially the goals of the remedial program, will be the basis for any future remedial actions involving separate phase contamination and groundwater remediation, which is common beneath the Main Plant Site.

RECORD OF DECISION

GENERAL ELECTRIC MAIN PLANT SITE

STARK OIL AREA OF CONCERN

SCHENECTADY, NEW YORK

#447004

GE Main Plant - Stark Oil Area, Schenectady County

STATEMENT OF PURPOSE:

This document describes the New York State Department of Environmental Conservation's (NYSDEC) selected alternative for remediating the source of contamination and for controlling the migration of the contaminants at the former Stark Oil Area of the GE Main Plant Site (#447004) hereinafter referred to as "the site." The selected alternative has been selected by the NYSDEC, as the State agency having primary responsibility for oversight of site activities. The selected remedial alternative is based on several investigations and corresponding reports with various dates and the Interim Remedial Measures (IRM) Work Plan, dated February 1992. These reports were prepared for the Responsible Party, General Electric, by their consultant, Law Environmental.

This document provides background on the site, and presents the rationale for selecting the remedial action.

ASSESSMENT OF THE SITE:

Actual or threatened releases of hazardous substances from this site, if not addressed by implementing the response action selected this Record of Decision, present a potential threat to public health and welfare and the environment.

STATEMENT OF BASIS:

This decision is based upon the administrative record for the Former Stark Oil Area of the GE Main Plan Site. A copy of the documents in the record is available for public review and copying at the following locations:

Schenectady County Public Library
Corner of Clinton and Liberty
Schenectady, New York 12305
(518) 388-4500 - Call for hours

NYS Department of Environmental Conservation
Division of Hazardous Waste Remediation
50 Wolf Road, Room 222
Albany, New York 12233-7010
(518) 457-5637 - Monday through Friday; 8:30 - 4:45

GOVERNMENT'S DECISION:

The Government's selected remedy is to complete implementation of the Interim Remedial Measure (IRM) already under way at the Former Stark Oil Site. The remedial actions being undertaken at the site include recovery of floating product, recovery of contaminated groundwater, and vacuum extraction of vapor phase contaminations. The total cost of the remedy is estimated to be $1,000,000.

DECLARATION:

The selected remedy for this site is designed to be protective of human health and the environment, is designed to comply with New York State Regulations and Standards to the extent practicable, and is cost effective. This remedy satisfies the Department's preference for actions that reduce the volume, toxicity, and mobility of hazardous substances, pollutants or contaminants through treatment as the principal goal.

_____ _____

Date

Ann Hill DeBarbieri
Deputy Commissioner
Office of Environmental Remediation

I. Site Description and History

The site is located on Edison Avenue in the City of Schenectady, immediately across the street from the Main gate entrance to the GE Main Plant facility. The site is approximately one acre in size. Adjacent land use includes a rail line, the GE Main Plant, and businesses north and east of the site on Erie Boulevard (See Figure 1). A portion of I-890 is bridged over the site.

General Electric purchased the former Stark Oil facility in 1977. The site had been used by Stark Oil Company as a petroleum transfer facility, with some alleged handling of solvents, probably for use in automobile repair facilities.

A major remedial action undertaken by GE was completed by August of 1986, after the petroleum business ceased operating. This action consisted of dismantling and removal of surface and buried tanks and structures, and excavation of contaminated soils in the vicinity of the tanks (on the western portion of the site) down to the water table. The excavation was then backfilled with clean soils.

Subsequent investigations have shown that the groundwater beneath a portion of the site along the western property line near Edison Avenue continued to be contaminated with petroleum hydrocarbons and organic solvents. This western portion of the site also contains a floating layer of petroleum product on top of the water table.

Site Geology

The site is underlain by several feet of coarse fill down to the water table, approximately seven to fifteen feet. This fill is a result of backfilling from the prior removal action at the site, and from areas of old railroad bedding materials. The Stark Site is one of the former main rail accesses to the Main Plant.

Underlying the fill materials are five to fifteen feet of silty floodplain deposits, which appear to be retarding the downward migration of site contaminants (See Figure 2).

Site Surface Water Hydrology

All runoff from the site flows into storm sewers along Edison Avenue, which are directed into the Main Plant and discharged through General Electric's wastewater management facility.

II. Results of Site Investigations

Since the removal action in 1986, several investigations have been performed to define the scope of the environmental problems associated with the site.

In 1988 and 1989, as a part of a comprehensive GE Main Plant perimeter study, seven groundwater monitoring wells were installed at or near the former Stark Oil facility. Results of analyses of groundwater from these wells showed high concentrations of petroleum hydrocarbons, as well as the presence of organic solvents and a floating petroleum layer (gasoline and kerosene) at the water table in one well. (See Table 1)

General Electric, from December 1989 to the present, has been performing a series of investigations and Interim Remedial Measures at the site at the State's request.

Investigations at the site have included:

- ten test borings to define the extent of separate-phase petroleum contamination and for geotechnical information;
- soil gas survey to define the extent of vapor phase contamination;
- installation of nine monitoring/recovery wells;
- four sets of groundwater samples; and
- catch basin survey.

The results of these investigations are listed in Table 2. Generally, these results reflect our current understanding of conditions at the site.

Remedial measures taken at the site have included:

- manual product recovery (via bailer);
- automated product skimming using a flexible axial peristaltic (FAP) pump; and
- two phase (water and product) recovery via automated pumping.

General Electric performed an extended pilot test of two phase recovery and treatment from October to December 1991, which was successful in enhancing the recovery of floating product from the site.

Current Status

General Electric, in 1992, entered into an Order on Consent to implement an Interim Remedial Measure (IRM) for the Stark Oil site, consisting of groundwater and floating product recovery and on-site treatment. The details in this IRM are presented below in the "Description of Proposed Remedy."

It is the Department's assessment that satisfactory completion of the approved IRM plan will meet the goals of a completed remedial program for the Stark Oil site, in that the remedy brought about by the IRM shall eliminate or mitigate all significant threats to public health and the environment presented by hazardous waste at the site through proper application of scientific and engineering principles.

III. Description of the Proposed Remedy

Goals of the Remedial Program

The specific goals for the remedial program at the Stark Oil site are:

1) Prevent the future off-site migration of floating product from the site, and to recover and treat the floating product to the extent feasible.

2) Prevent the future off-site migration of contaminated groundwater from the site, and to recover and treat the contaminated groundwater to the extent feasible, with a goal of achieving groundwater standards.

Applicable Standards, Criteria and Guidelines (SCGs)

The SCGs which apply to the remedial program at the former Stark Oil site include:

1) 6NYCRR Part 375 (Remedial Program)
2) 6NYCRR Part 703 (Groundwater Quality)
3) Air Guide 1, Part 212 (Air Quality)
4) 6NYCRR Parts 370-373 (Hazardous Waste Management)

The proposed remedy for the Stark Oil portion of the Main Plant site will consist of four phases:

1) Groundwater recovery and treatment
2) Floating product recovery and treatment
3) Vacuum extraction of contaminated soils
4) Long-term monitoring

Following are separate discussions of each of the four remedy phases:

1. **Groundwater Recovery and Treatment**

This phase of the remedial action will consist of pumping four recovery wells. The depth of the recovery wells ranges from 15-20 feet. Submersible pumps powered by compressed air will be utilized in this effort, which will pump contaminated groundwater through the groundwater treatment system on site.

The groundwater treatment system consists of passing the water through a particulate filter to screen out suspended solids, and then through a granular activated carbon filter system. The water will then be discharged to an on-site infiltration trench, east (upgradient) of the recovery well network. The input of clean, treated water in this location will aid in directing the flow of contaminated groundwater to the recovery wells. General Electric shall meet the substantive requirements of a SPDES permit for this water discharge.

2) **Product Recovery and Treatment**

The operation of the groundwater recovery and treatment system will create a drawdown in the water table at each operating recovery well, which should intersect to create a trough of water table depression. Since the petroleum product present at the site floats on top of the groundwater, this depression of the water table, centered around the recovery wells, will cause the petroleum product to flow to the recovery wells.

As the product accumulates in the wells, it will be removed by pumping and collected for treatment. It is believed that this product represents the bulk of the contaminant mass remaining at the site and that its removal increases the likelihood that the groundwater can be successfully remediated.

3) **Vacuum Extraction and Treatment**

As part of the remedial program for this site, a pilot test of vacuum extraction and treatment technology will be conducted. If successful, the groundwater and product recovery and treatment remedial program will be enhanced by the use of vacuum extraction and treatment.

Vacuum extraction technology consists of the use of wells screened in the unsaturated or "vadose" zone (that portion of the subsurface above the water table) to draw air through contaminated soils. If the contaminants are volatile (evaporate readily), then the air passing through the soil will pick up the contaminants, and be pumped by vacuum pumps out of the wells to an air treatment system. Granular activated carbon filters are proposed for the pilot test at the Stark Site, which will consist of the use of up to five vacuum extraction wells over a period of up to six months to evaluate the effectiveness of this technology for use at this site. General Electric shall meet the substantive requirement of an air discharge permit for this effluent.

4. **Long-Term Monitoring**

A key part of the proposed remedy is long-term monitoring. While the two phase collection and treatment is under way, groundwater at the site will be sampled in a periodic basis to enable the Department and GE to evaluate the effectiveness of the remedy. This monitoring will continue for a period of time after completion of the remedy as well to confirm the effect of the remedial action.

IV. Summary

General Electric has previously entered into an agreement with the Department to perform an Interim Remedial Measure (IRM) for the Former Stark Oil Facility. It is now recognized that the performance of this IRM will successfully complete the remedial program for the Former Stark Oil Site.

V. Administrative Record

The following documents constitute the administrative record for this Record of Decision:

- Consent Order Index #A402519011; IBM Order, dated 5/11/92
- Revised IRM Work Plan, dated 2/26/92; Law Environmental
- IRM Pilot Study Progress Report, dated 12/3/91; Law Environmental
- Results of Groundwater Sampling, IRM Pilot Study, dated 10/4/91; Law Environmental
- Interim Remedial Measures Work Plan, dated 8/12/91; Law Environmental

- Data Summary Report, Former Stark Oil Site, dated 6/13/91; Law Environmental

- Progress Report of Interim Remedial Measures, dated 1/14/91; Law Environmental

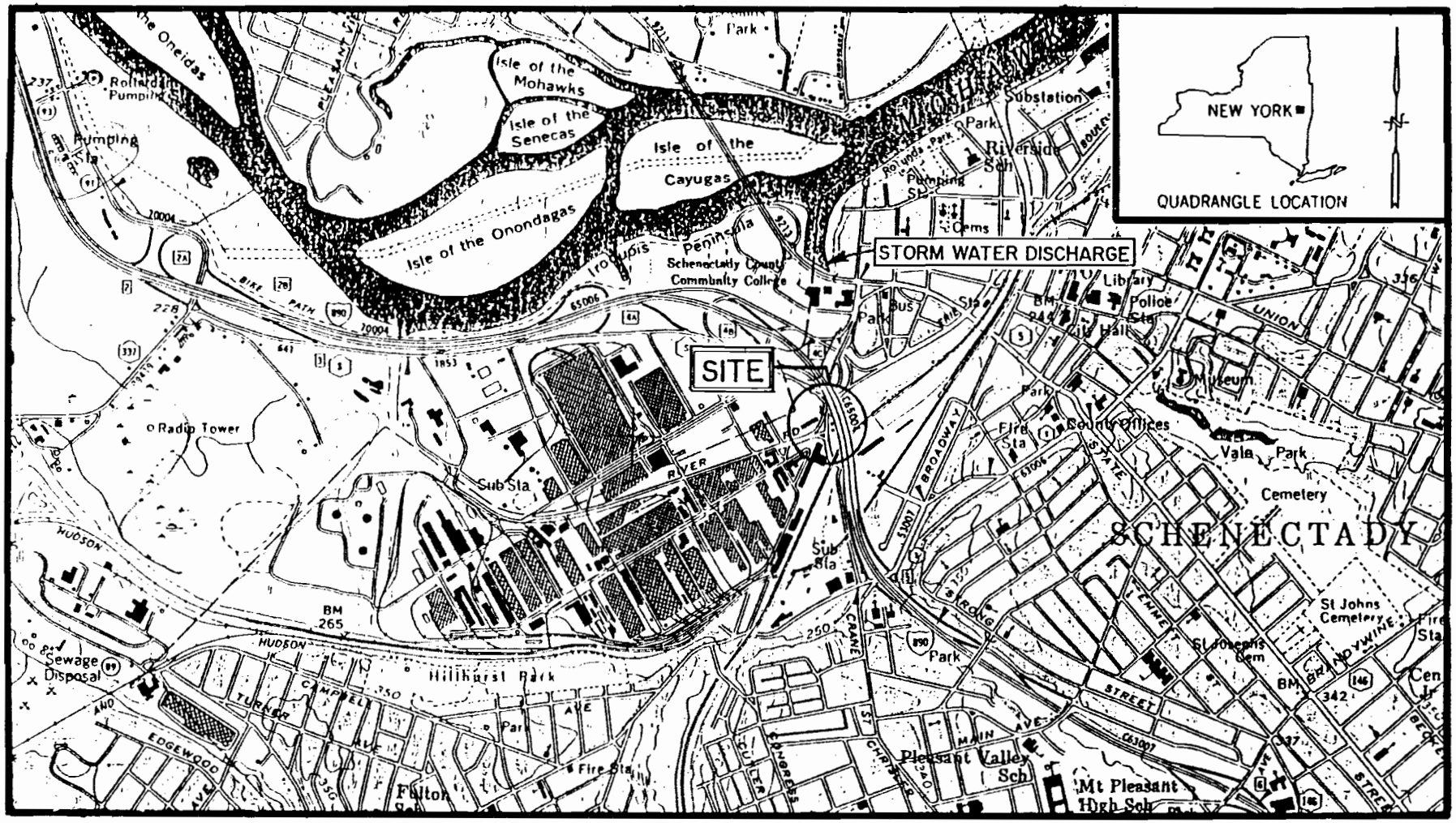
VI. **Responsiveness Summary**

No public comments were received on the Proposed Remedial Action Plan for the Stark Oil Area at the G.E. Main Plant Site. No revisions have been made to the proposed remedy.

F I G U R E 1

SITE MAPS

1a - Site Location
1b - Former Tank Locations
1c - Well Locations



SOURCE NOTE: NEW YORK STATE D.O.T. MAP SCHENECTADY QUADRANGLE, 1983

SCALE

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

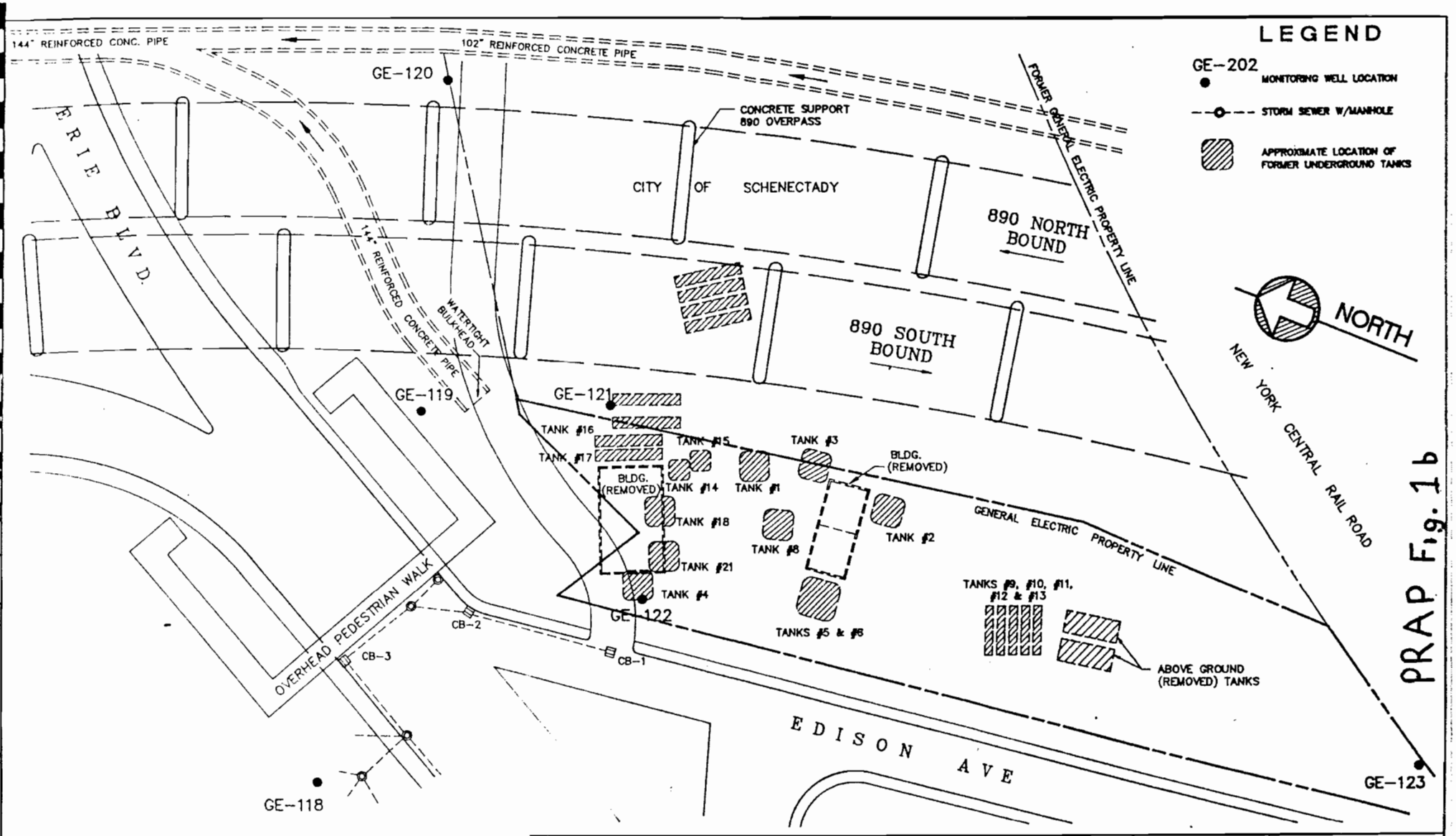
GENERAL ELECTRIC
STARK OIL
SCHENECTADY, NEW YORK

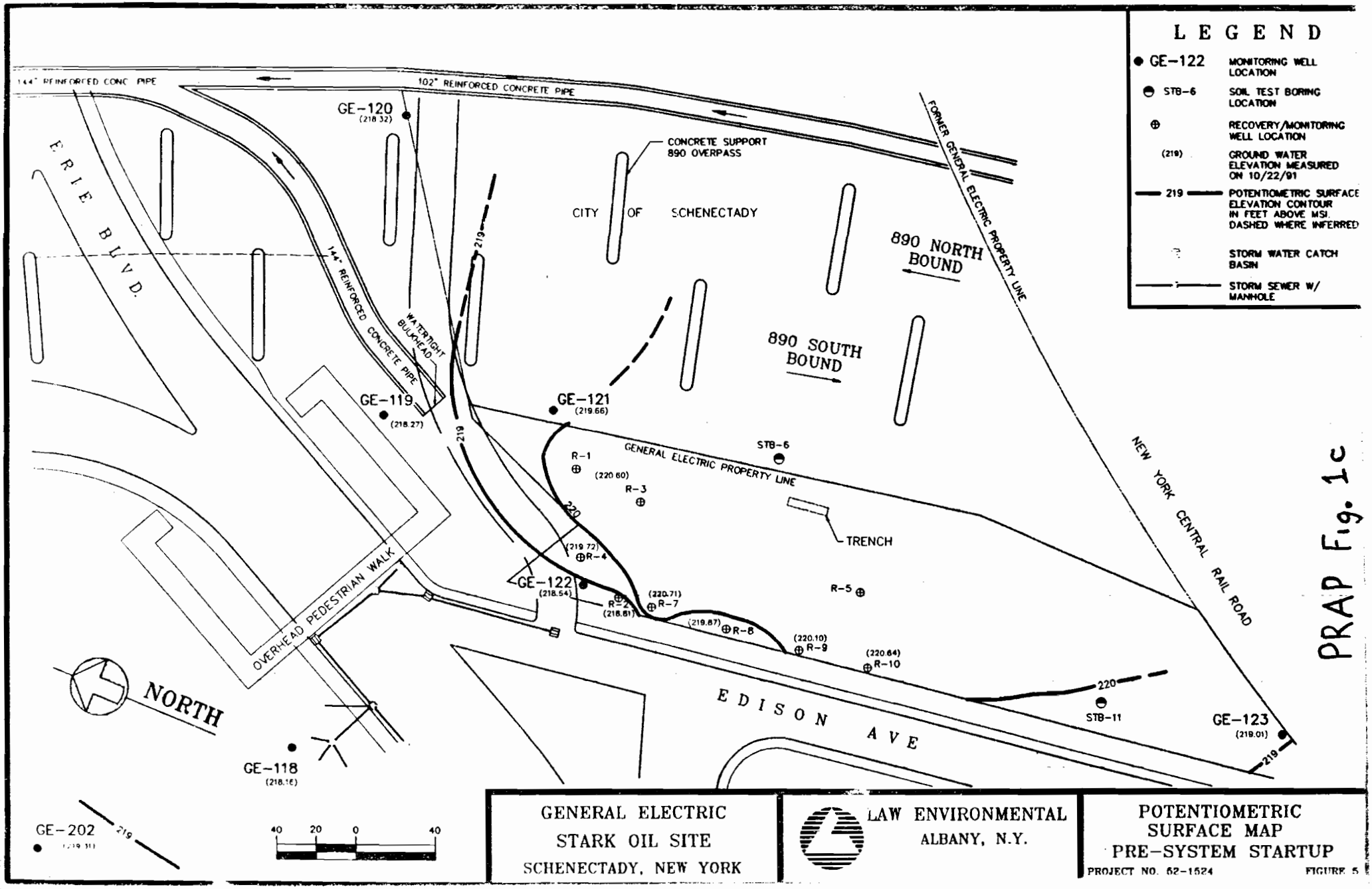
LAW ENVIRONMENTAL
ALBANY, NEW YORK

SITE LOCATION MAP

PROJECT NO. 52-9552 FIGURE 1

PRAD Fig 1a


LEGEND
GE-202
MONITORING WELL LOCATION
STORM SEWER W/MANHOLE
APPROXIMATE LOCATION OF FORMER UNDERGROUND TANKS
144" REINFORCED CONC. PIPE
102" REINFORCED CONCRETE PIPE
GE-120
CONCRETE SUPPORT 890 OVERPASS
FORMER GENERAL ELECTRIC PROPERTY LINE
ERIE BLVD.
CITY OF SCHENECTADY
890 NORTH BOUND
890 SOUTH BOUND
144" REINFORCED CONCRETE PIPE
WATERTIGHT BULKHEAD
NORTH
NEW YORK CENTRAL RAIL ROAD
GE-119
GE-121
TANK #16
TANK #17
TANK #15
TANK #3
BLDG. (REMOVED)
BLDG. (REMOVED)
TANK #14
TANK #1
TANK #18
TANK #6
TANK #2
GENERAL ELECTRIC PROPERTY LINE
TANK #21
TANK #4
GE-122
TANKS #9, #10, #11, #12 & #13
TANKS #5 & #6
ABOVE GROUND (REMOVED) TANKS
OVERHEAD PEDESTRIAN WALK
CB-2
CB-3
CB-1
EDISON AVE
GE-123
GE-118
GE-202
40 20 0 40
GENERAL ELECTRIC
STARK OIL
SCHENECTADY, NEW YORK
LAW ENVIRONMENTAL
ALBANY, NEW YORK
FORMER TANK LOCATION MAP
PROJECT 52-9552
FIGURE 2
PRAP Fig. 1b


LEGEND
GE-122 MONITORING WELL LOCATION
STB-6 SOIL TEST BORING LOCATION
RECOVERY/MONITORING WELL LOCATION
(219) GROUND WATER ELEVATION MEASURED ON 10/22/91
219 POTENTIOMETRIC SURFACE ELEVATION CONTOUR IN FEET ABOVE MSL. DASHED WHERE INFERRED
STORM WATER CATCH BASIN
STORM SEWER W/ MANHOLE
144" REINFORCED CONC PIPE
102" REINFORCED CONCRETE PIPE
GE-120 (218.32)
CONCRETE SUPPORT 890 OVERPASS
ERIE BLVD.
CITY OF SCHENECTADY
890 NORTH BOUND
890 SOUTH BOUND
FORMER GENERAL ELECTRIC PROPERTY LINE
144" REINFORCED CONCRETE PIPE
WATERTIGHT BULKHEAD
GE-119 (218.27)
GE-121 (219.66)
STB-6
R-1 (220.60)
R-3
GENERAL ELECTRIC PROPERTY LINE
NEW YORK CENTRAL RAIL ROAD
TRENCH
(219.72) R-4
GE-122 (218.54)
R-2 (218.61)
(220.71) R-7
(219.87) R-8
(220.10) R-9
(220.64) R-10
R-5
OVERHEAD PEDESTRIAN WALK
NORTH
EDISON AVE
STB-11
GE-123 (219.01)
GE-118 (218.16)
GE-202
40 20 0 40
GENERAL ELECTRIC
STARK OIL SITE
SCHENECTADY, NEW YORK
LAW ENVIRONMENTAL
ALBANY, N.Y.
POTENTIOMETRIC SURFACE MAP
PRE-SYSTEM STARTUP
PROJECT NO. 62-1524
FIGURE 5

PRAP Fig. 1c

F I G U R E 2

GEOLOGIC CROSS SECTION

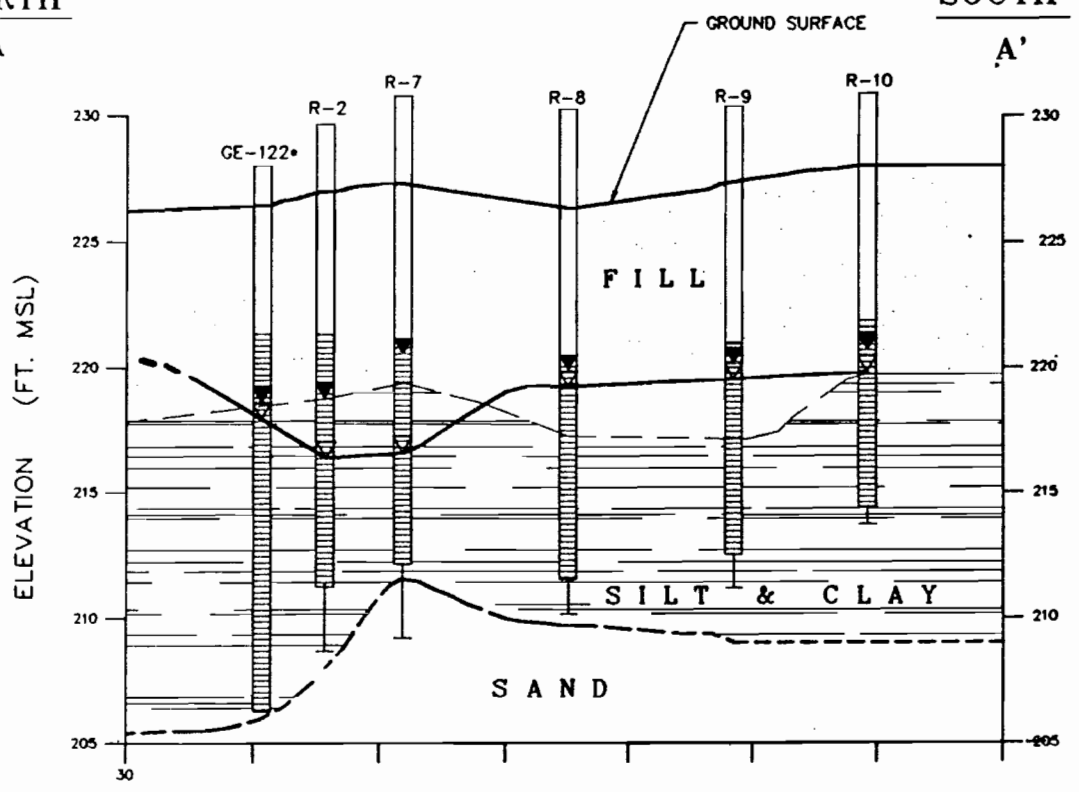
\52-1524\SECTA-A 12/2/91

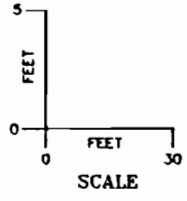
NORTH

A

SOUTH

A'





SCALE

LEGEND

R-7 RECOVERY/MONITORING WELL

WATER LEVEL MEASURED ON 10/22/91

WATER LEVEL MEASURED ON 11/8/91

SCREENED INTERVAL

POTENTIOMETRIC SURFACE

* INFORMATION BASED ON DATA COLLECTED BY OTHERS

GENERAL ELECTRIC STARK OIL SITE SCHENECTADY, NEW YORK	LAW ENVIRONMENTAL ALBANY, N.Y.	CROSS – SECTION A – A' PROJECT NO. 52-1524 FIGURE

T A B L E 1

1988 Monitoring Well Data

TABLE 2-3

STARK AREA WELLS

BASE NEUTRAL ORGANICS ANALYSIS FOR SAMPLES OF APRIL 1988
(results in ppb or ug/l)

SAMPLE LOCATION	GE-118	GE-118 DUP	GE-119	GE-120	GE-121	GE-122	GE-123	GE-202	IDL
1,3-dichlorobenzene	u	u	u	u	u	u	u	u	10
1,4-dichlorobenzene	u	u	u	u	u	u	u	u	10
naphthalene	u	u	u	u	210	320,000	u	u	10
acenaphthylene	u	u	u	u	u	u	u	u	10
acenaphthene	u	u	u	u	u	u	u	u	10
diethyl phthalate	u	u	u	u	u	u	u	u	10
fluorene	u	u	u	u	u	u	u	u	10
phenanthrene	u	u	u	u	u	11,000J	u	u	10
anthracene	u	u	u	u	u	u	u	u	10
di-n-butyl phthalate	u	u	u	u	u	u	u	u	10
fluoranthene	u	u	2J	u	u	7,400J	u	u	10
pyrene	u	u	1J	u	u	u	u	u	10
butyl benzyl phthalate	u	u	u	u	u	J	u	u	10
bis (2-ethyl hexyl) phthalate	u	u	u	u	u	u	u	u	10
Total Compounds	0	0	3J	0	210	338,40J	0	0	

J = estimated value
u = undetected
DUP = duplicate sample

TABLE 1-3

STARK AREA WELL SAMPLES

VOLATILE ORGANICS ANALYSIS FOR SAMPLES OF APRIL 1988
(results in ppb or ug/l)

SAMPLE LOCATION:	GE-118	GE-118 DUP	GE-119	GE-120	GE-121	GE-122	GE-123	GE-202	IDL
Vinyl Chloride	u	u	u	u	u	u	u	u	10
Methylene Chloride	u	u	u	u	u	260JB	u	2JB	5
Acrylontrile	u	u	u	u	u	u	u	u	35
Benzene	u	u	u	u	260	8,700	u	u	5
Total 1,2-Dichloroethenes	u	u	u	7	u	u	u	u	5
1,2-Dichoroethane	u	u	u	u	u	u	u	u	5
Trichloroethylene	u	3J	u	4J	u	u	u	u	5
Toluene	u	u	1JB	u	180B	3,900	u	u	5
Chlorobenzene	u	u	u	u	u	u	u	u	5
Ethylbenzene	u	u	u	u	460	19,000	u	u	5
1,1-Dichloroethane	u	u	u	u	u	u	u	u	5
1,1,1-Trichloroethane	u	u	u	u	u	u	u		5
Bromoform	u	u	u	u	u	u	u	u	5
Tetrachloroethylene	u	u	u	9	u	u	u	u	5
1,1,2,2,-Tetrachloroethane	u	u	u	u	u	u	u	u	5
Total Known Volatile Compounds	u	3J	1J	20	900	31,860	u	2J	
Total Tentatively Identified Volatiles	0	0	0	0	4,970J	606,000J	0	0	

IDL = laboratory detection limit
J = estimated value
B = analyte found in laboratory blank
u = undetected
DUP = duplicate sample

TABLE 3-4

STARK AREA WELLS

METALS ANALYSES FOR SAMPLES OF APRIL 1988
(results in ppb or ug/l)

SAMPLE LOCATION:	GE-202	GE-118 (a)	GE-118 (a)	GE-119	GE-120	GE-121	GE-122	GE-123	IDL
Antimony	<60.0	<60.0	<60.0	86.5	<60.0	<60.0	<60.0	<60.0	60.0
Arsenic	7.9	101	100	226	55.7	75.7	89.1	111	3.5
Beryllium	<0.5	<0.50	<0.50	2.1	0.70	<0.50	0.51	<0.50	0.5
Cadmium	<1.5	5.1	3.3	11.0	3.8	<1.5	3.8	4.3	1.5
Chromium	20.5	161	161	332	82.0	16.0	131	204	3.0
Copper	47.0	500	502	993	234	30.0	244	314	4.0
Lead	14.6	328	319	740	362	34.6	1370	254	0.8
Mercury	<0.2	1.2	1.2	1.3	0.84	0.20	0.76	0.38	0.2
Nickel	20.3	224	235	573	131	18.0	193	286	7.0
Selenium	<1.2	11.1	6.7	<6.7	<6.7	7.2	10.0	14.4	1.2
Silver	<2.0	3.4	2.3	5.3	2.5	<2.0	<2.0	2.1	2.0
Thallium	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	2.8
Zinc	57.4	1080	1040	2890	1330	111	741	941	9.0

IDL = laboratory detection limit
(a) = duplicate field samples
NA = not analyzed
Footnotes on Zinc also detected in associated field blank samples in the following concentrations:
(b) 24.0 ppb (c) 33.0 ppb (d) 36.0 ppb

JP89-38234
Page 1 of 1

TABLE 4

RESULTS OF OTHER LABORATORY ANALYSES

(results in ppb or ug/l)

Parameter:	Total Cyanide		Total Phenolics		Petroleum Hydrocarbons	
Date Sampled:	4/88	7/89	4/88	7/89	4/88	7/89
Stark Area Wells						
GE-202	<10	NA	<5.0	NA	<1,000	NA
GE-118	<10/<10(a)	NA	<5.0/<5.0(a)	NA	<1,000/<1,000(a)	NA
GE-119	<10	NA	29.0	NA	12,800	NA
GE-120	<10	NA	<5.0	NA	1,400	NA
GE-121	<10	NA	<5.0	NA	2,390	NA
GE-122	<10	NA	137	NA	6,080,000	NA
GE-123	<10	NA	<5.0	NA	<1,000	NA
Surface Water Samples						
SW-1	<10	NA	7.0	9.0	1,180	<340
SW-2	<10	NA	<5.0	8.3	1,030	<360
SW-3	<10	NA	8.0	<5.0	<1,000	<290
SW-4	<10	NA	<5.0	<5.0	<1,000	<300
SW-5	<10	NA	<5.0	NA	<1,000	NA

(a) Analyses of duplicate field samples. NA - Not analyzed.

T A B L E 2

Data Collected During

IRM Studies

TABLE 11
GROUND-WATER ANALYTICAL RESULTS
METALS

Former Stark Oil Site
General Electric - Schenectady, NY
October 22, 1990 Sampling
All results in ug/L (ppb)

	NYS	GE 118		GE 119		GE 120		GE 121		GE 122		GE 123		GE 202	
	Standard*	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
Arsenic	25	25.0(2)	<10.0	16.9(2)	<10.0	63.8(2)	<10.0	122(2)	62.8(2)	42.7(2)	24.3(2)	12.5(2)	<10.0	12.7(2)	11.1(2)
Barium	1000	761	<200	276	<200	1860	579	<200	<200	271	<200	1330	<200	582	420
Cadmium	10	12.4(1)	<5.0(1)	9.8(1)	<5.0(1)	24.1(1)	8.0(1)	13.1(1)	<5.0(1)	14.2(1)	<5.0(1)	40.0(1)	<5.0(1)	18.2(1)	8.2(1)
Chromium	50	67.5(1)	<10.0(1)	90.1(1)	<10.0(1)	156(1)	<10.0(1)	14.7(1)	<10.0(1)	62.2(1)	<10.0(1)	361(1)	<10.0(1)	21.6(1)	<10.0(1)
Lead	25	114(2)	<3.0	520(2)	<3.0(3)	530(2)	<3.0(3)	117(2)	<3.0(3)	149(2)	3.1(2)	295(2)	<3.0(3)	20.0(2)	<3.0
Mercury	2	0.39(2)	<0.20	1.0(2)	<0.20	2.9(2)	<0.20	<0.20	<0.20	0.34(2)	<0.20	0.23(2)	<0.20	<0.20	<0.20
Selenium	10	<50(4)	<5.0(4)	<5.0(4)	<5.0(4)	<50.0(4)	<5.0(4)	<50.0(4)	<50.0(4)	<50.0(4)	<50.0(4)	<50.0(4)	<50.0(4)	<50.0(4)	<50.0(4)
Silver	50	<10(1)	<10.0(1)	<10.0(1)	<10.0(1)	<10.0(1)	<10.0(1)	<10.0(1)	<10.0(1)	<10.0(1)	<10.0(1)	<10.0(1)	<10.0(1)	<10.0(1)	<10.0(1)

NOTES:

* - In accordance with 6NYCRR 703, New York State Ground-Water Quality Standards shall be the most stringent of Part 703.5 standards, Part 5 MCLs, Part 170 standards, or EPA MCLs promulgated under the Safe Drinking Water Act.

(1) - Data cannot presently be validated due to the possibility of interferences and lack of sufficient QC data.

(2) - Estimated values based upon results of Data Quality Evaluation Report.

(3) - Reported value below Contract Required Detection Limit (CRDL) replaced by CRDL as recommended by Data Quality Evaluation Report.

(4) - All values for Selenium listed as estimated based upon results of Data Quality Evaluation Report.

Analyses performed by Aquatec Environmental Services using appropriate EPA methods.

TABLE 10
SUMMARY OF DETECTED PRINCIPAL ORGANIC CONTAMINANTS

Former Stark Oil Site
General Electric - Schenectady, NY
May 4 and October 22, 1990 Sampling
All results in ug/L (ppb)

Parameter	NYS Standard*	GE-118		GE-119		GE-120		GE-121		GE-122		GE-123		GE-202	
		5/4/90	10/22/90	5/4/90	10/22/90	5/4/90	10/22/90	5/4/90	10/22/90	5/4/90	10/22/90	5/4/90	10/22/90	5/4/90	10/22/90
Benzene	n.d.	-	-	-	-	20	-	62	84	NA	5700	-	-	-	-
Ethylbenzene	5	-	-	-	-	-	-	2.3	-	NA	1800	-	-	-	-
Isopropyl benzene	5	-	-	-	-	-	-	-	-	NA	100	-	-	-	-
Napthalene	50	-	-	-	-	-	-	-	-	NA	660	-	-	-	-
n-butylbenzene	5	-	-	-	-	-	-	-	-	NA	210	-	-	-	-
n-propyl benzene	5	-	-	-	-	-	-	-	-	NA	240	-	-	-	-
Toluene	5	-	-	-	-	-	-	130	69	NA	200	-	-	-	-
Total Xylenes	**	-	-	-	-	-	-	590	700	NA	7000	-	-	-	-
Tetrachloroethylene	5	-	-	-	-	54	48	-	-	NA	-	-	-	-	-
Trichloroethylene	5	1.6	-	-	-	52	18	-	-	NA	-	-	-	-	-
1,1-Dichloroethylene	5	-	-	-	-	3.6	-	-	-	NA	-	-	-	-	-
cis-1,2-Dichloroethylene	5	-	-	-	-	3300	460	8.6	-	NA	-	-	-	-	-
trans-1,2-Dichloroethylene	5	-	-	-	-	11	-	-	-	NA	-	-	-	-	-
Vinyl chloride	5	-	-	-	-	250	45	-	-	NA	-	-	-	-	-
Methylene chloride	5	-	-	-	-	-	-	-	14	NA	-	-	-	-	-
1,1,2-Trichloroethane	5	-	-	-	-	4.7	-	-	-	NA	-	-	-	-	-
1,2,4-Trimethylbenzene	5	-	-	-	-	-	-	280	610	NA	2600	0.5	-	-	-
1,3,5-Trimethylbenzene	5	-	-	-	-	-	-	78	100	NA	670	-	-	-	-

NOTES:

* : In accordance with 6NYCRR 703, New York State Ground-Water Quality Standards shall be the most stringent of Part 703.5 standards, Part 5 MCLs, Part 170 standards, or EPA MCLs promulgated under the Safe Drinking Water Act.

** : Standard applies to each O-, m- and p- isomer.

- : Indictes constituent not detected at method reporting limit.

NA : Indicates analysis not performed.

Analyses performed by Aquatec Environmental Services using EPA method 524.2

TABLE 1

GROUND WATER ANALYTICAL RESULTS

PRINCIPAL ORGANIC CONTAMINANTS

FORMER STARK OIL SITE

GENERAL ELECTRIC - SCHENECTADY, NY

OCTOBER 22, 1990 SAMPLING

All results in ug/L (ppb)

Parameter	NYS Standard*	GE-118	GE-119	GE-120	GE-121	GE-122	GE-123	GE-202
benzene	n.d.	<0.5	<0.5	5(J)	84	5700	<0.5	<0.5
bromobenzene	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
bromochloromethane	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
bromodichloromethane	**	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
bromoform	**	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
bromomethane	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
n-butylbenzene	5	<0.5	<0.5	<5	<20	210	<0.5	<0.5
sec-butylbenzene	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
tert-butylbenzene	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
carbon tetrachloride	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
chlorobenzene	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
chloroethane	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
chloroform	**	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
chloromethane	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
2-chlorotoluene	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
4-chlorotoluene	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
dibromochloromethane	**	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
1,2-dibromo-3-chloropropane	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
1,2-dibromoethane	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
dibromomethane	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
1,2-dichlorobenzene	4.7***	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
1,3-dichlorobenzene	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
1,4-dichlorobenzene	4.7***	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
dichlorodifluoromethane	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
1,1-dichloroethane	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
1,2-dichloroethane	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
1,1-dichloroethylene	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
cis-1,2-dichloroethylene	5	<0.5	<0.5	460	<20	<100	<0.5	<0.5
trans-1,2-dichloroethylene	5	<0.5	<0.5	4(J)	<20	<100	<0.5	<0.5
1,2-dichloropropane	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
1,3-dichloropropane	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
2,2-dichloropropane	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
1,1-dichloropropene	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
cis-1,3-dichloropropene	5	0.3(J)	<0.5	<5	<20	<100	<0.5	<0.5
trans-1,3-dichloropropene	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
ethylbenzene	5	<0.5	<0.5	<5	<20	1800	<0.5	<0.5
hexachlorobutadiene	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
Isopropyl benzene	5	<0.5	<0.5	<5	<20	100	<0.5	<0.5
p-Isopropyltoluene	5	<0.5	<0.5	<5	<20	69(J)	<0.5	<0.5
methylene chloride	5	<0.5	<0.5	4(BJ)	14	75(J)	<0.5	<0.5
naphthalene	50	<0.5	<0.5	<5	<20	660	<0.5	<0.5
n-propylbenzene	5	<0.5	<0.5	<5	<20	240	<0.5	<0.5
styrene	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
1,1,1,2-tetrachloroethane	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
1,1,2,2-tetrachloroethane	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
tetrachloroethylene	5	<0.5	0.4(J)	48	<20	<100	<0.5	<0.5
toluene	5	<0.5	<0.5	<5	69	200	<0.5	<0.5
1,2,3-trichlorobenzene	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
1,2,4-trichlorobenzene	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
1,1,1-trichloroethane	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
1,1,2-trichloroethane	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
trichloroethylene	5	0.5(J)	<0.5	18	<20	<100	<0.5	<0.5
1,2,3-trichloropropane	5	<0.5	<0.5	<5	<20	<100	<0.5	<0.5
1,2,4-trimethylbenzene	5	<0.5	<0.5	<5	610	2600	<0.5	<0.5
1,3,5-trimethylbenzene	5	<0.5	<0.5	<5	100	670	<0.5	<0.5
vinyl chloride	2	<0.5	<0.5	45	<20	<100	<0.5	<0.5
Total Xylenes	5****	<0.5	<0.5	<5	700	7000	<0.5	<0.5

NOTES:

*In accordance with 6NYCRR 703, New York State Ground-Water Quality Standards shall be the most stringent of Part 703.5 standards, Part 5 MCLs, Part 170 standards, or EPA MCLs promulgated under the Safe Drinking Water Act.

**Total concentration of these four trihalomethanes shall not exceed 100 ppb.

***Standard applies to the sum of 1,2- and 1,4- isomers only.

**** Standard applies to each o-, m- and p- isomer.

(B) - Present in the method blank.

(J) - Compound is present at an estimated concentration less than method reporting limit.

Analyses performed by Aquatec Environmental Services using EPA Method 524.2

TABLE 2

SUMMARY OF DETECTED PRINCIPAL ORGANIC CONTAMINANTS

FORMER STARK OIL SITE

GENERAL ELECTRIC - SCHENECTADY, NY

MAY 4 AND OCTOBER 22, 1990 SAMPLINGS

All results in ug/L (ppb)

Parameter	NYS Standard*	GE-118		GE-119		GE-120		GE-121		GE-122		GE-123		GE-202	
		5/4/90	10/22/90	5/4/90	10/22/90	5/4/90	10/22/90	5/4/90	10/22/90	5/4/90	10/22/90	5/4/90	10/22/90	5/4/90	10/22/90
Benzene	n.d.	-	-	-	-	20	-	62	84	NA	5700	-	-	-	-
Ethylbenzene	5	-	-	-	-	-	-	2.3	-	NA	1800	-	-	-	-
Isopropyl benzene	5	-	-	-	-	-	-	-	-	NA	100	-	-	-	-
Napthalene	50	-	-	-	-	-	-	-	-	NA	660	-	-	-	-
n-butylbenzene	5	-	-	-	-	-	-	-	-	NA	210	-	-	-	-
n-propyl benzene	5	-	-	-	-	-	-	-	-	NA	240	-	-	-	-
Toluene	5	-	-	-	-	-	-	130	69	NA	200	-	-	-	-
Total Xylenes	**	-	-	-	-	-	-	590	700	NA	7000	-	-	-	-
Tetrachloroethylene	5	-	-	-	-	54	48	-	-	NA	-	-	-	-	-
Trichloroethylene	5	1.6	-	-	-	52	18	-	-	NA	-	-	-	-	-
1,1-Dichloroethylene	5	-	-	-	-	3.6	-	-	-	NA	-	-	-	-	-
cis-1,2-Dichloroethylene	5	-	-	-	-	3300	460	8.6	-	NA	-	-	-	-	-
trans-1,2-Dichloroethylene	5	-	-	-	-	11	-	-	-	NA	-	-	-	-	-
Vinyl chloride	5	-	-	-	-	250	45	-	-	NA	-	-	-	-	-
Methylene chloride	5	-	-	-	-	-	-	-	14	NA	-	-	-	-	-
1,1,2-Trichloroethane	5	-	-	-	-	4.7	-	-	-	NA	-	-	-	-	-
1,2,4-Trimethylbenzene	5	-	-	-	-	-	-	280	610	NA	2600	0.5	-	-	-
1,3,5-Trimethylbenzene	5	-	-	-	-	-	-	78	100	NA	670	-	-	-	-

NOTES

*In accordance with 6NYCRR 703, New York State Ground-Water Quality Standards shall be the most stringent of Part 703.5 standards, Part 5 MCLs, Part 170 standards, or EPA MCLs promulgated under the Safe Drinking Water Act.

**Standard applies to each O-, m- and p- isomer.

Blank (-) indictes constituent not detected at method reporting limit.

NA indictes analysis not performed.

Analyses performed by Aquatec Environmental Services using EPA method 524.2

TABLE 3
GROUND-WATER ANALYTICAL RESULTS
METALS
FORMER STARK OIL SITE
GENERAL ELECTRIC-SCHENECTADY, NY
OCTOBER 22, 1990 SAMPLING
All results in ug/L (ppb)

	NYS	GE 118		GE 119		GE 120		GE 121		GE 122		GE 123		GE 202	
	Standard*	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
Arsenic	25	25.0	<10.0	16.9	<10.0	63.8	<10.0	122	62.8	42.7	24.3	12.5	<10.0	12.7	11.1
Barium	1000	761	<200	276	<200	1860	579	<200	<200	271	<200	1330	<200	582	420
Cadmium	10	12.4	<5.0	9.8	<5.0	24.1	8.0	13.1	<5.0	14.2	<5.0	40.0	<5.0	18.2	8.2
Chromium	50	67.5	<10.0	90.1	<10.0	156	<10.0	14.7	<10.0	62.2	<10.0	361	<10.0	21.6	<10.0
Lead	25	114	<3.0	520	1.1(B)	530	1.2(B)	117	1.1(B)	149	3.1	295	1.2(B)	20.0	<3.0
Mercury	2	0.39	<0.20	1.0	<0.20	2.9	<0.20	<0.20	<0.20	0.34	<0.20	0.23	<0.20	<0.20	<0.20
Selenium	10	<50	<5.0	<5.0	<5.0	<50.0	<5.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
Silver	50	<10	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0

NOTES

*In accordance with 6NYCRR 703, New York State Ground-Water Quality Standards shall be the most stringent of Part 703.5 standards, Part 5 MCLs, Part 170 standards, or EPA MCLs promulgated under the Safe Drinking Water Act.

(B) - present in method blank.

Analyses performed by Aquatec Environmental Services using appropriate EPA methods.

TABLE 7

TPH AND INORGANIC ANALYSIS DATA

Former Stark Oil Site
General Electric - Schenectady, NY
March 1991

All results in milligrams per kilogram (mg/kg)

SAMPLE NO.	STB-1	STB-2	STB-2	STB-3	STB-5	STB-6	STB-7	STB-8	STB-9	STB-10	STB-11
DEPTH(feet)	10-12	8-10	12-14	8-10	8-10	12-14	6-8	6-8	8-10	8-10	10-12
Total Petroleum Hydrocarbons (l)	1460(e)	6180(e)	-	1410(e)	143(e)	<15(e)	1490(e)	440(e)	1430(e)	2140(e)	<17(e)
METALS											
Aluminum	-	-	10100	-	-	-	12700	-	-	-	-
Antimony	-	-	<9.8(E)	-	-	-	<14.6(E)	-	-	-	-
Arsenic	-	-	3.1(E)	-	-	-	3.9(E)	-	-	-	-
Barium	-	-	66.7	-	-	-	95.1	-	-	-	-
Beryllium	-	-	<0.82	-	-	-	0.89(B)	-	-	-	-
Cadmium	-	-	2.3(E)	-	-	-	3.2(E)	-	-	-	-
Calcium	-	-	14000(E)	-	-	-	3200	-	-	-	-
Chromium	-	-	12.3(E)	-	-	-	16.6(E)	-	-	-	-
Cobalt	-	-	<8.2	-	-	-	10.0(B)	-	-	-	-
Copper	-	-	27.1(E)	-	-	-	26.3	-	-	-	-
Iron	-	-	18200	-	-	-	22200	-	-	-	-
Lead	-	-	18.9(E)	-	-	-	35.8(E)	-	-	-	-
Magnesium	-	-	3740	-	-	-	3520	-	-	-	-
Manganese	-	-	315	-	-	-	313	-	-	-	-
Mercury	-	-	<0.12	-	-	-	0.20	-	-	-	-
Nickel	-	-	17.8	-	-	-	27.1	-	-	-	-
Potassium	-	-	1330	-	-	-	2010	-	-	-	-
Selenium	-	-	<6.4(E)	-	-	-	<7.4(E)	-	-	-	-
Silver	-	-	<1.6	-	-	-	<2.4	-	-	-	-
Sodium	-	-	<816	-	-	-	<1210	-	-	-	-
Thallium	-	-	<1.3(E)	-	-	-	<1.5(E)	-	-	-	-
Vanadium	-	-	15.7	-	-	-	22.9	-	-	-	-
Zinc	-	-	63.6	-	-	-	87.2	-	-	-	-
Cyanide	-	-	<0.66	-	-	-	<0.66	-	-	-	-

NOTES: (e) = Results in mg/kg as received

(E) = Estimated value, due to QC problems. Reference Data Validation Report.

(B) = Reported value is less than the Contract Required Detection Limit (CRDL) but greater than the Instrument Detection Limit (IDL)

(l) = Total Petroleum Hydrocarbons by EPA Method 418.1. This methodology is meant for screening of liquid samples for light to medium petroleum hydrocarbons, not as a definitive test for all fuels. Modification of method to apply to soils is prone to inaccuracy as poor precision and false positives are possible. All data should be considered estimated.

Analyses performed by Aquatec Environmental Services

TABLE 8
VOLATILE ORGANICS ANALYSIS DATA

Former Stark Oil Site
General Electric - Schenectady, NY
March 1991

All results in micrograms per kilogram (ug/kg)

SAMPLE NO.	STB-2	STB-7
DEPTH (feet)	10-12	6-8
COMPOUND		
Chloromethane	<6000	<1500
Bromomethane	<6000	<1500
Vinyl Chloride	<6000	<1500
Chlorethane	<6000	<1500
Methylene Chloride	2600(BJ)	1300(B)
Acetone	12000(B)	5500(B)
Carbon Disulfide	<3000	<730
1,1-Dichloroethene	<3000	<730
1,1-Dichloroethane	<3000	<730
1,2-Dichloroethene(total)	<3000	<730
Chloroform	<3000	<730
1,2-Dichlorethane	<3000	<730
2-Butanone	<6000	<1500
1,1,1-Trichloroethane	<3000	<730
Carbon Tetrachloride	<3000	<730
Vinyl Acetate	<6000	<1500
Bromodichloromethane	<3000	<730
1,2-Dichloropropane	<3000	<730
cis-1,3-Dichloropropene	<3000	<730
Trichloroethene	<3000	<730
Dibromochloromethane	<3000	<730
1,1,2-Trichloromethane	<3000	<730
Benzene	6400	3200
trans-1,3-Dichloropropene	<3000	<730
Bromoform	<3000	<730
4-Methyl-2-Pentanone	<6000	<1500
2-Hexanone	<6000	<1500
Tetrachloroethene	<3000	<730
1,1,2,2-Tetrachloroethane	<3000	<730
Toluene	18000	2000
Chlorobenzer	<3000	<730
Ethylbenzene	42000	9100
Styrene	<3000	<730
Xylene(total)	200000(B)	24000(B)
2-Chloroethyl vinyl ether	<6000	<1500
Dichlorobenzene	<6000	<1500
Trichlorobenzene	<6000	<1500
Methylcyclohexane	67000	7100
Cyclopentane	2900(J)	<730

NOTE: (B) = Present in method blank
(J) = Compound is present at an estimated limit concentration less than the reporting limit

Analyses performed by Aquatec Environmental Services using EPA Method 8240

TABLE 9
SEMIVOLATILE ORGANICS, PESTICIDES AND PCB's ANALYSIS DATA

Former Stark Oil Site
General Electric - Schenectady, NY
March 1991

All results in micrograms per kilogram (ug/kg)

COMPOUND	STB-2	STB-7
DEPTH (feet)		6-8
Phenol	<840	<810
bis(2-Chloroethyl)ether	<840	<810
2-Chorophenol	<840	<810
1,3-Dichlorobenzene	<840	<810
1,4-Dichlorobenzene	<840	<810
Benzyl alcohol	<840	<810
1,2-Dichlorobenzene	<840	<810
2-Methylphenol	<840	<810
bis(2-Chloroisopropyl)ether	<840	<810
4-Methylphenol	<840	<810
N-Nitroso-di-n-propylamine	<840	<810
Hexachloroethane	<840	<810
Nitrobenzene	<840	<810
Isophorone	<840	<810
2-Nitrophenol	<840	<810
2,4-Dimethylphenol	<840	<810
Benzoic Acid	<4100	<3900
bis(2-Chloroethoxy)methane	<840	<810
2,4-Dichlorophenol	<840	<810
1,2,4-Trichlorobenzene	<840	<810
Naphthalene	1400	26000(JD)
4-Chloroaniline	<840	<810
Hexachlorobutadiene	<840	<810
4-Chloro-3-methylphenol	<840	<810
2-Methylnaphthalene	1900	38000(JD)
Hexachlorocyclopentadiene	<840	<810
2,4,6-Trichlorophenol	<840	<810
2,4,5-Trichlorophenol	<4100	<3900
2-Chloronaphthalene	<840	<810
2-Nitroaniline	<4100	<3900
Dimethylphthalate	<840	<810
Acenaphthylene	<840	<810
2,6-Dinitrotoluene	<840	<810
3-Nitroaniline	<4100	<3900
Acenaphthene	<840	<810
2,4-Dintorophenol	<4100	<3900
4-Nitrophenol	<4100	<3900
Dibenzofuran	<840	<810
2,4-Dinitrotoluene	<840	<810
Diethylphthalate	<840	<810
4-Chlorophenyl-phenylether	<840	<810
Fluorene	<840	970

NOTES: (1) = Cannot be separated from Diphenylamine
(J) = Compound is present at an estimated concentration less than method reporting permit.
(D) = Indicates Indicates reported concentration derived from diluted sample.

Analyses performed by Aquatec Environmental Services

TABLE 9 (Con't)
SEMIVOLATILE ORGANICS, PESTICIDES AND PCBs ANALYSIS DATA

Former Stark Oil Site
General Electric - Schenectady, NY
March 1991

All results in micrograms per kilogram (ug/kg)

COMPOUND	STB-2	STB-7
DEPTH (feet)		6-8
4,6-Dinitro-2-methylphenol	<4100	<3900
N-Nitrosodiphenylamine (1)	<840	<810
4-Bromophenyl-phenylether	<840	<810
Hexachlorobenzene	<840	<810
Pentachlorophenol	<4100	1100(JD)
Phenanthrene	<840	520(J)
Anthracene	<840	<810
Di-n-butylphthalate	<840	<810
Fluoroanthene	<840	350(J)
Pyrene	<840	300(J)
Butylbenzylphthalate	<840	<810
3,3'-Dichlorobenzidine	<1700	<1600
Benzo(a)anthracene	<840	190(J)
Chrysene	<840	240(J)
bis(2-Ethylhexyl)phtalate	520(J)	<810
Di-n-octylphthalate	<840	<810
Benzo(b)fluoranthene	<840	220(J)
Benzo(k)fluoranthene	<840	150(J)
Benzo(a)pyrene	<840	200(J)
Indeno(1,2,3-cd)pyrene	<840	160(J)
Dibenz(a,h)anthracene	<840	<810
Benzo(g,h,i)perylene	<840	200(J)
alpha-BHC	<20	<20
beta-BHC	<20	<20
delta-BHC	<20	<20
gamma-BHC (Lindane)	<20	<20
Heptachlor	<20	<20
Aldrin	<20	<20
Heptachlor epoxide	<20	<20
Endosulfan I	<20	<20
Dieldrin	<40	<39
4,4'-DDE	<40	<39
Endrin	<40	<39
Endosulfan II	<40	<39
4,4'-DDD	<40	<39
Endosulfan sulfate	<40	<39
4,4'-DDT	<40	<39
Methoxychlor	<200	<200
Endrin Ketone	<40	<39
Toxaphene	<400	<390
Technical chlordane	<200	<200
Aroclor-1016	<200	<200
Aroclor-1221	<200	<200
Aroclor-1232	<200	<200
Aroclor-1242	<200	<200
Aroclor-1248	<200	<200
Aroclor-1254	<400	<390
Aroclor-1260	<400	<390

NOTE: (1) = Cannot be separated from Diphenylamine
(J) = Compound is present at an estimated concentration less than method reporting limit.
(D) = Indicates reported concentration derived from diluted sample.

Analyses performed by Aquatec Environmental Services

TABLE 7
WELL DEVELOPMENT
TREATMENT SYSTEM
INFLUENT/EFFLUENT ANALYSES

Former Stark Oil Site
General Electric - Schenectady, NY
April 1991

	4/15/91		4/18/91		4/24/91	
PARAMETER	R-1 Influent (1)	Effluent (2)	R-8 Influent	Effluent	R-2 Influent	Effluent
Chloromethane	<10	<10	<10	<10	<1000	<10
Bromomethane	<10	<10	<10	<10	<1000	<10
Vinyl Chloride	<10	<10	<10	<10	<1000	<10
Chloroethane	<10	<10	<10	<10	<1000	<10
Methylene Chloride	<5	<5	<5.0	<5.0	<500	<5.0
Acetone	<10	<10	39	10	22000	<10
Carbon Disulfide	<5	<5	<5.0	<5.0	<500	<5.0
1,1-Dichloroethane	<5	<5	<5.0	<5.0	<500	<5.0
1,1-Dichloroethene	<5	<5	<5.0	<5.0	<500	<5.0
1,2-Dichloroethene	<5	<5	<5.0	<5.0	<500	<5.0
Chloroform	<5	<5	<5.0	<5.0	<500	<5.0
1,2-Dichloroethane	<5	<5	<5.0	<5.0	<500	<5.0
2-Chloroethylvinyl Ether	<10	<10	<10	<10	<1000	<10
2-Butanone	60	<10	12	<10	<1000	<10
1,1,1-Trichloroethane	<5	<5	<5.0	<5.0	<1000	<5.0
Carbon Tetrachloride	<5	<5	<5.0	<5.0	<500	<5.0
Vinyl Acetate	<10	<10	26	<10	<1000	<10
Bromodichloromethane	<5	<5	<5.0	<5.0	<500	<5.0
1,2-Dichloropropane	<5	<5	<5.0	<5.0	<500	<5.0
cis-1,3-Dichloropropene	<5	<5	<5.0	<5.0	<500	<5.0
Trichloroethene	<5	<5	<5.0	<5.0	<500	<5.0
Dibromochloromethane	<5	<5	<5.0	<5.0	<500	<5.0
1,1,2-Trichloroethane	<5	<5	<5.0	<5.0	<500	<5.0
Benzene	73	9	18	22	14000	<5.0
trans-1,3-Dichloropropene	<5	<5	<5.0	<5.0	<500	<5.0
Bromoform	<5	<5	<5.0	<5.0	<500	<5.0
4-Methyl-2-Pentanone	<10	<10	42	<10	<1000	<10
2-Hexanone	<10	<10	88	<10	<1000	<10
Tetrachloroethene	<5	<5	<5.0	<5.0	<500	<5.0
1,1,2,2-Tetrachlorethane	<5	<5	<5.0	<5.0	<500	<5.0
Toluene	10	<5	10	<5.0	<500	<5.0
Chlorobenzene	<5	<5	<5.0	<5.0	<500	<5.0
Ethylbenzene	11	<5	<5.0	<5.0	<500	<5.0
Styrene	<5	<5	<5.0	<5.0	<500	<5.0
Total Xylenes	67	<5	43	<5.0	<500	<5.0

Analyses performed by Hudson Environmental Services, Inc. using EPA Method 8240

(1) Influent samples were obtained using pre-cleaned beakers for recovery/monitoring wells as indicated.

(2) Effluent samples were obtianed from the discharge line after treatment on date indicated. Results do not correspond to specific recovery/monitoring wells.

TABLE 1
RESULTS OF GROUND-WATER SAMPLING
VOLATILE ORGANIC COMPOUND ANALYSES
INTERIM REMEDIAL MEASURES
FORMER STARK OIL SITE
GENERAL ELECTRIC - SCHENECTADY, NY
August 1991

All results in parts per billion (ppb)

PARAMETER	NEW YORK STATE G.W. QUALITY STANDARD (1)	R-1	R-3	R-5	R-8	R-9	R-10	GE-118	GE-119	GE-120	GE-121	GE-122	GE-123	GE 202
Chloromethane	--	<10	<330	<10	<450	<25	<10	<10	<10	<10	<10	<10	<10	<10
Bromomethane	5	<10	<330	<10	<450	<25	<10	<10	<10	<10	<10	<10	<10	<10
Vinyl Chloride	2	<10	400	<10	<450	<25	<10	<10	<10	<10	<10	<10	<10	<10
Chloroethane	5	<10	<330	<10	<450	<25	<10	<10	<10	<10	<10	<10	<10	<10
Methylene Chloride	5	<5	150(BJ)	3(BJ)	82(BJ)	3(BJ)	2(BJ)	<5	<5	<5	4(BJ)	87(BJ)	1(BJ)	<5
Acetone	50	<5	<330	10	1000(B)	30(B)	<10	<10	<10	<10	24(BJ)	820(B)	<5	<5
Carbon Disulfide	50	<5	<170	<5	<230	<12	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethene	5	<5	<170	<5	<230	<12	<5	<5	<5	<5	<5	<5	<5	<5
1,1-Dichloroethane	5	<5	<170	<5	<230	<12	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichloroethene(total)	5	<5	290	<5	<230	<12	<5	<5	<5	13	4(J)	<5	<5	<5
Chloroform	**	<5	<170	<5	<230	<12	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichloroethane	5	<5	<170	<5	<230	<12	<5	<5	<5	<5	<5	<5	<5	<5
2-Butanone	--	<10	<330	12	2100	300	<10	<10	<10	<10	<10	<10	<10	<10
1,1,1-Trichloroethane	5	<5	<170	<5	<230	<12	<5	<5	<5	<5	<5	<5	<5	<5
Carbon Tetrachloride	5	<5	<170	<5	<230	<12	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl Acetate	50	<10	<330	<10	<450	<25	<10	<10	<10	<10	<10	<10	<10	<10
Bromodichloromethane	**	<5	<170	<5	<230	<12	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichloropropane	5	<5	<170	<5	<230	<12	<5	<5	<5	<5	<5	<5	<5	<5
cis-1,3-Dichloropropene	5	<5	<170	<5	<230	7(J)	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	5	<5	<170	<5	<230	<12	<5	3(J)	<5	1(J)	<5	<5	<5	<5
Dibromochloromethane	**	<5	<170	<5	<230	<12	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2-Trichloroethane	5	<5	<170	<5	<230	<12	<5	<5	<5	<5	<5	<5	<5	<5
Benzene	n.d.	<5	5700	26	5800	230	2(J)	<5	<5	<5	60	5400	<5	<5
trans-1,3-Dichloropropene	5	<5	<170	<5	<230	<12	<5	<5	<5	<5	<5	<5	<5	<5
Bromoform	**	<5	<170	<5	<230	<12	<5	<5	<5	<5	<5	<5	<5	<5
4-Methyl-2-Pentanone	--	<10	<330	<10	<450	<25	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	50	<10	<330	<10	<450	<25	<10	<10	<10	<10	<10	<10	<10	<10
Tetrachloroethene	5	4(J)	<170	<5	<230	<12	<5	<5	<5	4(J)	<5	<5	<5	<5
1,1,2,2-Tetrachloroethane	5	<5	<170	<5	<230	<12	<5	<5	<5	<5	<5	<5	<5	<5
Toluene	5	<5	740	<5	620	7(J)	<5	<5	<5	<5	84	250	<5	<5
Chlorobenzene	5	<5	<170	<5	<230	<12	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	5	<5	560	6	980	26	<5	<5	<5	<5	170	1800	<5	<5
Styrene	5	<5	<170	<5	<230	<12	<5	<5	<5	<5	<5	<5	<5	<5
Xylenes (Total)	5	<5	1100	<5	5600	19	<5	<5	<5	<5	470	6900	<5	<5
2-chloroethyl vinyl ether	--	<10	<330	<10	<450	25	<10	<10	<10	<10	<25	<450	<10	<10

NOTES

(1) In accordance with 6 NYCRR 703, New York State Ground-Water Quality Standards shall be the most stringent of Part 703.5 standards, Part 5 MCLs, Part 170 standards, or EPA MCLs promulgated under the Safe Drinking Water Act

** Total concentration of these four trihalomethanes shall not exceed 100 ug/l

Blank (--) indicates no applicable standards or guidance value.

J Indicates that the compound may be present at levels below the method detection limit (MDL), but not subject to accurate quantitation.

B Indicates that the compound was detected in one or more of the QA/QC blanks.

Analyses performed by Law Environmental National Laboratories, Kennesaw, GA, using EPA Method 8240.