NYSEG

September 26, 1991
GEMDEC-91-0213
GEM.325.CGME

SEP 30 1991

DEPT. OF ENVIRONMENTAL CONSERVATION
REGIONAL ENGINEER REGION 5
RAY BROOK, NEW YORK 12977

Mr. Daniel L. Steenberge, P.E.
New York Department of
Environmental Conservation
Ray Brook, New York 12977

Subject: NYSEG's Mechanicville Former Gas Plant Site #546033

Dear Mr. Steenberge:

In reference to your memo of September 11, 1991, NYSEG provides for your review and consideration the attached summary of NYSEG's voluntary environmental investigation of the Central Avenue former manufactured gas plant(MGP) site.

NYSEG's environmental investigation thoroughly assessed all the applicable environmental issues associated with the former MGP operation. Numerous soil borings, testpits, and monitoring wells were installed to give an assessment of the geological profile and MGP residue distribution throughout the site. Soil, sediment, ground water, surface water, and air samples were collected and analyzed. The results of the investigation were previously submitted to your office in the form of a Task 1, Task 2, Task 3, and Task 4 Reports.

NYSEG has contracted with ABB Environmental of Portland, Maine. ABB is currently developing a list of relevant remedial options for the site. NYSEG will forward a copy of the proposed remedial options that have been identified for the site to your attention by **October 18, 1991.**

Upon review of the NYSEG's Investigation Summary and the proposed remedial options, it would be beneficial for NYSEG and the Region 5 staff to discuss the development of a Work Plan for the site. I would like to meet with you and your staff on October 23, 1991 to discuss the development of a Feasibility Study Work Plan. Please let me know if this meeting date is convenient with your schedule.

Sincerely,

Thomas M. O'Meara
Supervisor, Remedial Investigation

TMO/fl
cc: D. Tuohy (NYSDEC-Albany)
James McClain (NYSDEC-Ray Brook)

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b:TMO2.79

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NEW YORK STATE ELECTRIC & GAS CORPORATION

SUMMARY OF SITE INVESTIGATIONS

MECHANICVILLE - CENTRAL AVENUE
FORMER MANUFACTURED GAS PLANT SITE

MECHANICVILLE, NY

September 1991

b:29.rmk

In order to evaluate any possible impact and assess potential threats to public health or the environment, New York State Electric & Gas Corporation (NYSEG) contracted E.C. Jordan (now ABB Environmental) to perform a field investigation program for NYSEG's Mechanicville - Central Avenue former manufactured gas plant (MGP) site. This four-phase investigation, conducted from 1986 until 1990, consisted of a preliminary site investigation (Task 1), an initial field investigation (Task 2), an expanded problem definition (Task 3) and a risk assessment (Task 4). A synopsis of these four phases is presented below.

TASK 1 - PRELIMINARY SITE EVALUATION

The purpose of this phase was to develop an understanding of the site's history, environmental setting and current condition based on available information and direct observation. From the site reconnaissance, interviews and file reviews, it was learned that:

* Coal gas was produced at the site for a period of 54 years from 1901 until 1955. The carburetted water gas process was utilized from 1911 until the plant's closure.

* Coal tar residues accumulated in the base of the relief gas holder. During the plant's operating years, coal tar was periodically pumped into a truck and hauled off-site. In the early operating years, the coal tar was likely sold as raw material to tar distilleries. Coal tar was reportedly left in the relief gas holder when it was demolished in 1955. During collection of a sample from the relief holder in November 1981, NYSEG employees reported petroleum odors and visible coal tar residues in the soil at depths of 3 to 5 feet.

* Condensate from the water gas process was treated in a tar dehydrator and filter bed system before discharge to Anthony Kill, the stream forming the northern border of the site. After the plant's decommissioning, these coke-filled filter beds were covered with soil, apparently without prior removal of the coke. NYSEG employees noted petroleum odors and tar residues in the filter bed area during collection of a sample in November 1981.

* Residual ash from the gas generator was reportedly stored on the site before removal by various users.

* Wood chips and oxide wastes from the purifying house were hauled off-site for final disposal. Some spent chips were taken to the Mechanicville-Coons Crossing Site.

Upon completion of Task 1 activities, it was recommended that further investigations into possible environmental contamination problems of the Mechanicville site be conducted. This recommendation was based on the above information which suggests that coal gasification-related residues were likely to be present in the subsurface environment of the site. The Task 1 Report was issued in August 1986.

TASK 2 - INITIAL FIELD INVESTIGATION

The second phase of the investigation was designed to: develop an understanding of the site hydrogeologic setting; determine the identity and concentrations of chemicals present in the soils, groundwater, surface water and sediments; and perform a preliminary risk assessment of the possible risks of those chemicals to human and environmental receptors.

Significant findings from the Task 2 field investigation at the Mechanicville Site were as follows:

* The unconsolidated deposits at the site consist primarily of fill soils of varying composition overlying a fractured shale bedrock. Up to 9 feet of silty shale fill exists in the southeast portion of the site.

* The bedrock is laminated gray shale with calcite inclusions and was encountered 9 to 18 feet below ground surface. The upper 1 to 2 feet of the bedrock is highly weathered. The bedrock surface slopes to the north and east. A small east-trending bedrock depression was mapped near the former relief gas holder.

* Groundwater flow appears to be north-northeast across the site, although flow near the former relief gas holder may be more easterly. Groundwater in the soil and shallow bedrock system likely discharges to the Anthony Kill, either adjacent to the site or slightly further downstream.

* There are other potential contributors of chemicals to groundwater and surface water (i.e., tanks, drums, a railroad yard, and other industrial property) within a half-mile radius of the site.

* Volatile Organic Compounds (VOC's) and Polynuclear Aromatic Hydrocarbons (PAH's) were detected in on-site soils. Concentrations were highest near the former relief holder and the filter beds (see Figure 1-5, Tables 1 and 2).

* VOC's and PAH's were detected in groundwater on-site. The highest concentrations of PAH's and VOC's were found at MW-4 and MW-6 (downgradient of the relief gas holder), MW-3 (downgradient of the oxide house), and MW-5 (downgradient of the coal storage shed and filter beds, see Table 3). Vertical profiles of the borings/ monitoring wells are depicted in Figures 3-1, 3-2, 3-3 and 3-4.

* Organic compounds typically associated with coal gasification residues were found in only one round of surface water samples taken from the Anthony Kill (see Table 4).

* PAH's were detected in sediments from the Anthony Kill adjacent to the site, but not upstream or downstream of the site using GC/MS analytical techniques; the HPLC results showed PAH's at all three locations (see Table 5).

A preliminary conclusion could be drawn from these findings, that there are coal gasification residues in the subsurface environment which are a continuing source of chemicals to site soil and groundwater. However, the preliminary exposure assessment suggested no immediate threat to the public was posed by on-site soils and groundwater because the entire site is paved, access to the site is restricted by fencing, and there are no local users of the shallow groundwater. It was recommended that further investigations be done to more specifically identify and quantify chemicals, further evaluate chemical migration pathways and potential receptors, and increase the chemical data on groundwater in the deep bedrock and in soil and bedrock off-site. The Task 2 Report was issued in December 1987.

TASK 3 - EXPANDED PROBLEM DEFINITION

The Task 3 program was designed and implemented to confirm Task 2 results; further define chemical distribution and types of chemicals on-site; assess air quality within buildings on the site; give a more detailed assessment of the potential for chemical migration in groundwater; and identify areas/populations which might be impacted by chemicals on-site or chemicals migrating off-site.

The findings from the Task 3 program confirmed the results from the Task 2 investigation regarding site geology and hydrogeology, and chemical presence in site soils, groundwater, surface water and sediments (see Tables 3-1 through 3-5). The Task 3 investigation also yielded the following information:

* The concentrations of seven chemicals (i.e., benzo(a)pyrene, benzene, styrene, total cyanide, iron, regulated organics, and phenolics) in shallow and deep groundwater exceeded the applicable state standards for those chemicals (see Tables 3-2, 4-3).

* Benzene and toluene were found in all air quality samples collected, in concentrations below applicable OSHA, ACGIH, and NIOSH standards (see Tables 3-5, 4-4). High benzene levels detected in the storeroom may be attributed to volatilized gasoline from a forklift that was parked there. Toluene was detected at higher levels in background samples than in indoor samples. It is likely that these samples were affected by general vehicle use in the area.

* The primary routes identified for off-site chemical migration are via groundwater in the shallow and deep bedrock fractures and the silty shale fill. Chemical migration is influenced by an east-trending shallow bedrock trough located downgradient of the relief gas holder.

* Potential receptors for chemicals found at the site include more sensitive segments of the population. This is due to the location of day care centers, schools, recreational areas, nursing homes and elderly housing projects in the vicinity of the Mechanicville Site.

* Because the site is paved and fenced, any potential exposure to the public would be primarily through airborne chemicals during major on-site excavation activities.

Based on the results of the Task 2 and Task 3 investigations, it was recommended that a risk assessment be conducted. This phase will assess the risks associated with exposure to site-related contaminants under both existing and future use conditions at the site. The Task 3 Report was issued in September 1989.

TASK 4 - RISK ASSESSMENT

This study identifies and estimates the potential risks associated with the chemicals present in the soil, sediment, groundwater and air at the site by selecting "contaminants of concern" that represent potential hazards; identifying potential exposure pathways and exposed populations at or near the site; and assessing the public health and environmental risks associated with exposure to site-related chemicals through the use of dose/response data and relevant standards and criteria.

The significant findings and conclusions of this risk assessment are as follows:

* The contaminants of concern identified in the soil and sediment at the site include carcinogenic PAH's and benzene and several noncarcinogens (toluene, trimethylbenzene, ethyl benzene, styrene, PAH's, xylenes and cyanide).

* Under current site conditions, the potential for public exposure to contaminants of concern is low. This is because the site is paved and fenced, thus restricting the possibility of contact with contaminated soil or volatilized contaminants. Also, the groundwater at the site is not used as a drinking water source.

* The probable exposure pathways by which people could come in contact with the site-derived chemicals under current and future conditions, assuming no remedial action at the site, include: direct contact with and incidental ingestion of subsurface soil and Anthony Kill sediment; and inhalation of volatile compounds and soil particulates.

* Potential carcinogenic and noncarcinogenic risks to human health were estimated under these assumed exposure pathways. Estimated incremental lifetime carcinogenic risks were within the USEPA target range for both the most probable and realistic worst exposure scenarios for all of the exposure pathways identified. The noncarcinogenic hazard indices were all well below the cutoff of 1.0, indicating that no significant adverse noncarcinogenic effects would be expected. Therefore, it was concluded that under the assumed conditions of exposure, no significant adverse health effects would be anticipated.

* Because Mechanicville site groundwater is not currently used or expected to be used in the foreseeable future as a source of drinking water, public health risks associated with the groundwater were deemed negligible.

* Aquatic organisms in the Anthony Kill, immediately adjacent to the site, were determined to be the environmental receptors most likely to be affected by site-related contamination. The results of the environmental risk assessment indicated that some potential for impact does exist for these organisms. However, these risks appear to be relatively minor for several reasons: few compounds were present at levels in excess of their environmental criteria; the extent of exceedances was minimal; potential impacts were associated only with "worst case" conditions, with no impacts expected under typical conditions; the amount of benthic habitat is naturally limited due to stream bed morphology and exposed bed rock, with little sediment accumulation; and there is no evidence that contaminants are being transported downstream at significant levels. Levels of contaminants detected in the downstream surface water and sediment samples never exceeded relevant protective criteria, even under the most conservative assumptions.

* It is unlikely that the site is significantly utilized by wildlife because of the industrial nature of the area and the lack of suitable habitats.

Taking into account all of the four investigative phases, no further site investigation activities are deemed necessary. However, it is recommended that a site Health and Safety Plan should be developed for any future excavation work on the Mechanicville - Central Avenue site to prevent or minimize undue exposure.

CONCLUSION

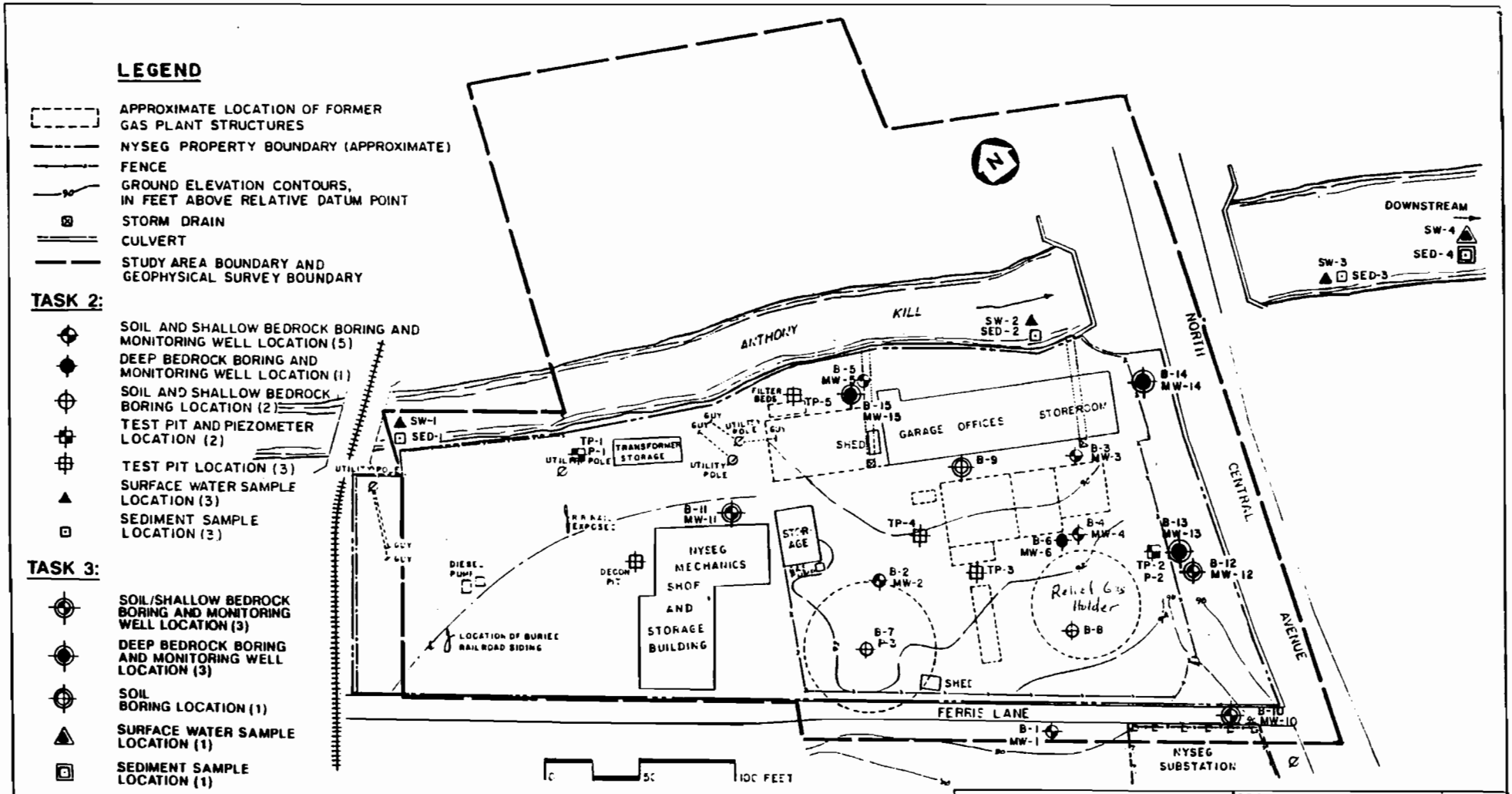
Although NYSEG consultant, ABB, recommended that no remediation efforts were justified based on health threats, NYSEG recommends that measures be take to ensure residues associated with the former gas plant are not discharging to the environment. Therefore, NYSEG requests that the DEC support NYSEG by assisting with the design and implementation of remedial actions to control MGP residues from entering the Anthony Kill.

FIGURES

Figure 1-5 (Task 3)	Task 2 and Task 3 Exploration Locations
Figure 3-1 (Task 3)	Geologic Profile Locations
Figure 3-2 (Task 3)	Interpretive Geologic Profile A-A'
Figure 3-3 (Task 3)	Interpretive Geologic Profile B-B'
Figure 3-4 (Task 3)	Interpretive Geologic Provile C-C'

TABLES

Table 1 (Task 2)	Chemicals Found in Soil Boring Samples
Table 2 (Task 2)	Chemicals Found in Test Pit Samples
Table 3 (Task 2)	Chemicals Found in Groundwater Samples
Table 4 (Task 2)	Chemicals Found in Surface Water Samples
Table 5 (Task 2)	Chemicals Found in Sediment Samples
Table 3-1 (Task 3)	Task 3 Soil Boring Analytical Results
Table 3-2 (Task 3)	Task 3 Groundwater Analytical Results
Table 3-3 (Task 3)	Task 3 Surface Water Analytical Results
Table 3-4 (Task 3)	Task 3 Sediment Analytical Results
Table 3-5 (Task 3)	Task 3 Air Analytical Results
Table 4-3 (Task 3)	Task 3 Groundwater Samples Containing Chemicals in Excess of New York State Guidance Values
Table 4-4 (Task 3)	Permissible Exposure Limits - Air



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT RR SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.

E.C. JORDAN CO.
CONSULTING ENGINEERS

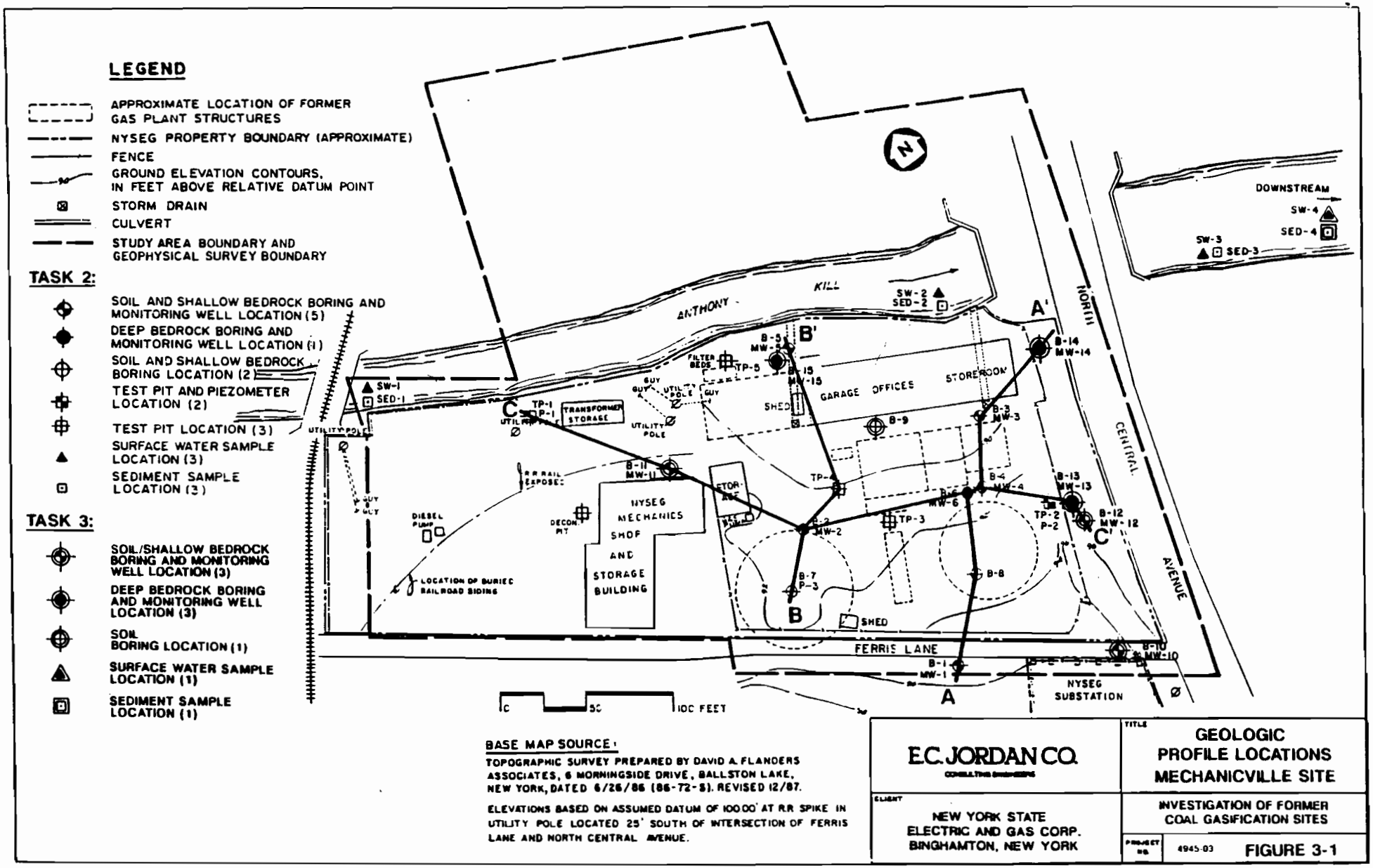
CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

TITLE
TASK 2 AND TASK 3 EXPLORATION LOCATIONS MECHANICVILLE SITE

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO 4945-03

FIGURE 1-5



BASE MAP SOURCE:

TOPOGRAPHIC SURVEY PREPARED BY DAVID A. FLANDERS ASSOCIATES, 6 MORNINGSIDE DRIVE, BALLSTON LAKE, NEW YORK, DATED 6/26/86 (86-72-S). REVISED 12/87.

ELEVATIONS BASED ON ASSUMED DATUM OF 10000' AT RR SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.

E.C. JORDAN CO.
CONSULTING ENGINEERS

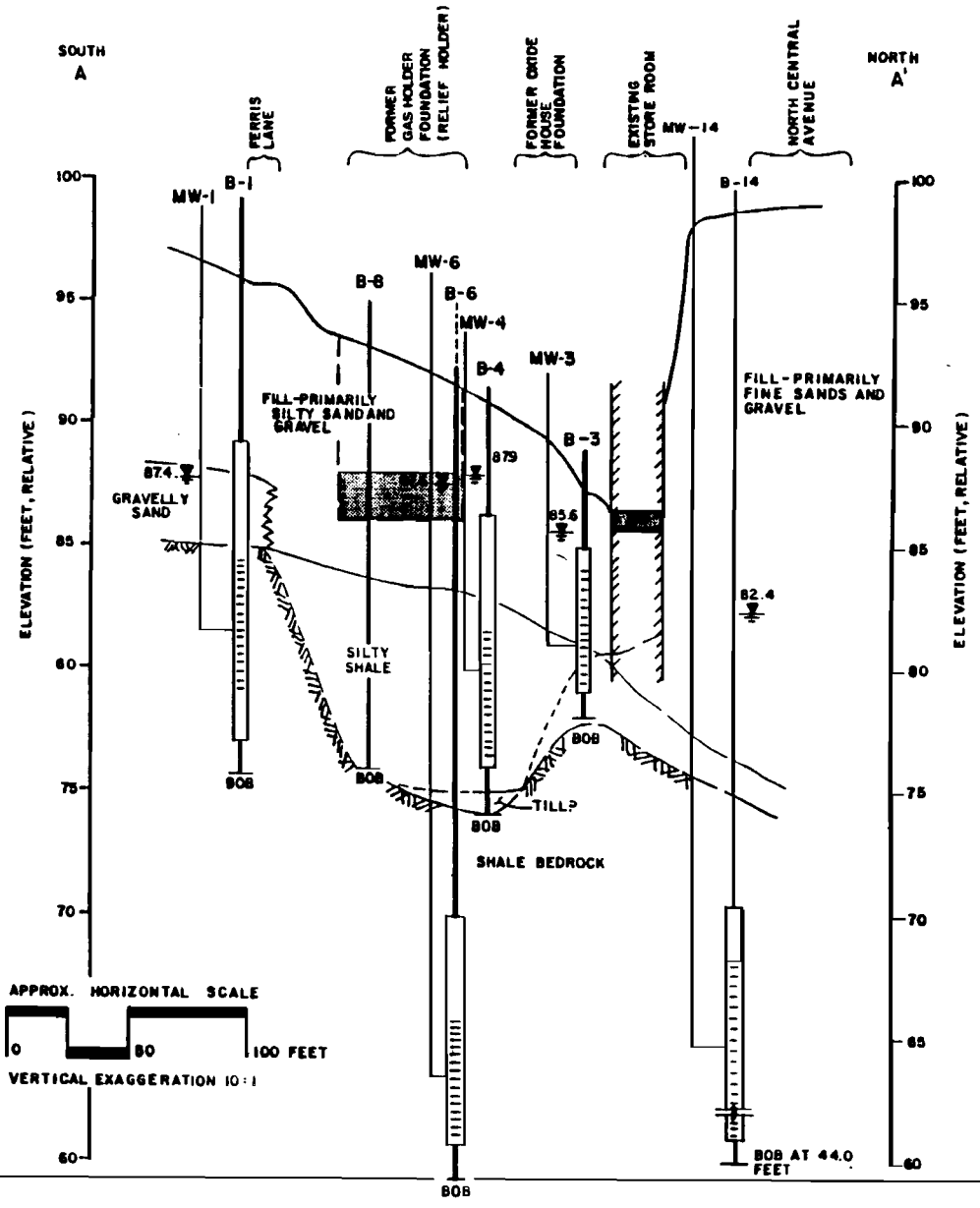
CLIENT
NEW YORK STATE ELECTRIC AND GAS CORP.
BINGHAMTON, NEW YORK

TITLE
GEOLOGIC PROFILE LOCATIONS MECHANICVILLE SITE

INVESTIGATION OF FORMER COAL GASIFICATION SITES

PROJECT NO. 4945-03

FIGURE 3-1



GEOLOGIC DESCRIPTIONS

FILL: PRIMARILY SILTY SAND AND GRAVEL WITH ORGANIC MATTER, ASH, BRICK FRAGMENTS, GLASS, AND WOOD CHIPS WITH ZONES OF HIGHER CLAYEY SILT AND FRACTURED SHALE CONTENT.

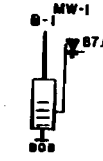
GRAVELLY SAND: DISCONTINUOUS BROWN TO DARK GRAY SAND AND GRAVEL.

SILTY SHALE: BLACK TO GRAY PLATY SHALE FRAGMENTS WITH INTERSTITIAL SILT. LOOSE AND SATURATED. POSSIBLY FILL.

TILL: DISCONTINUOUS TAN TO LIGHT GRAY SILTY CLAY TILL WITH FINE GRAVEL.

SHALE BEDROCK: LAMINATED, BROKEN, DARK GRAY SHALE WITH CALCITE VEINS AND INCLUSIONS. BEDDING DIPS 30-40° FROM HORIZONTAL; FRACTURES ARE 0-90° FROM BEDDING PLANES. UPPER 1 TO 2 FEET SEVERELY WEATHERED.

LEGEND



BORING AND MONITORING WELL LOCATION

OBSERVED WATER LEVEL (FEET, RELATIVE) ON MARCH 29, 1988

EFFECTIVE SCREEN LENGTH (ACTUAL SCREEN SHOWN AS ⊟)

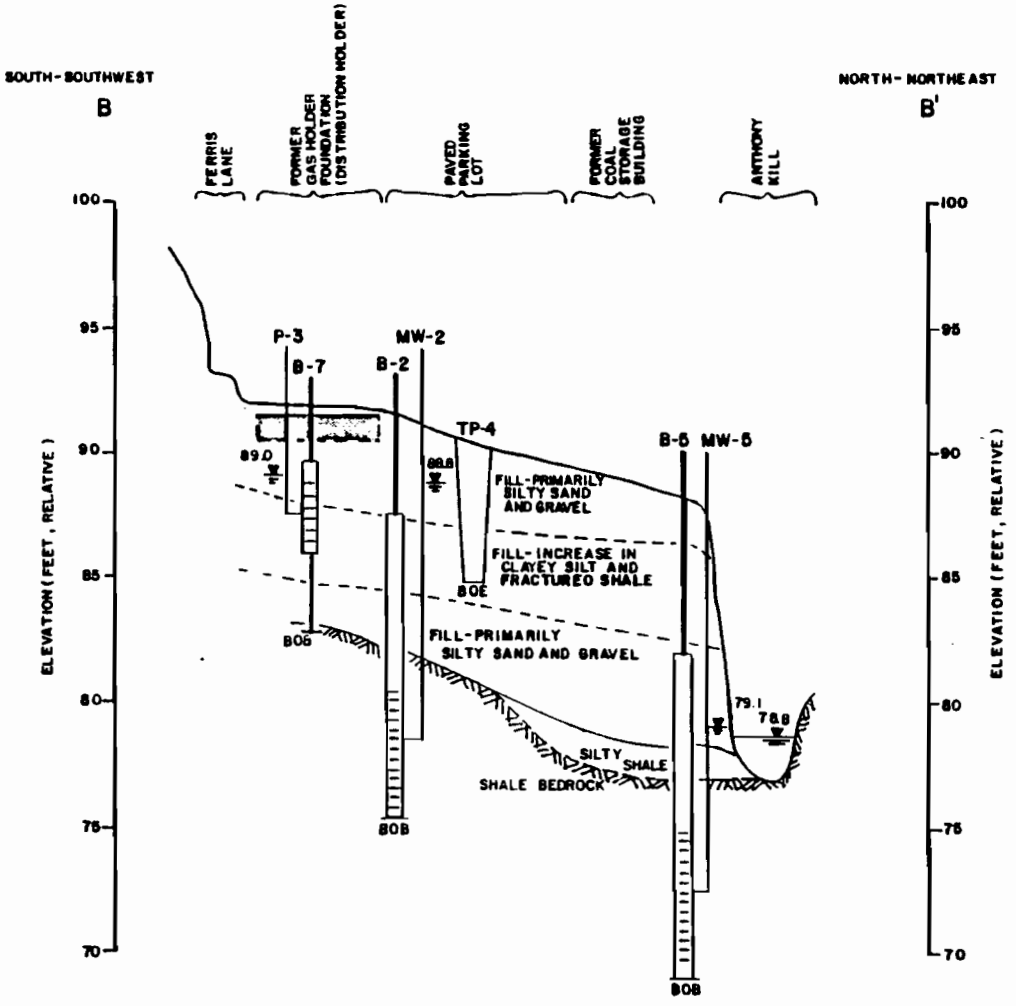
BOTTOM OF BORING

79.3 OBSERVED SURFACE WATER LEVEL (FEET, RELATIVE) ON MARCH 29, 1988

NOTES

1. SEE FIGURE 3-1 FOR LOCATION AND ORIENTATION OF PROFILE.
2. PROFILE IS BASED ON AN INTERPRETATION OF AVAILABLE SUBSURFACE EXPLORATIONS. ACTUAL CONDITIONS MAY VARY FROM THOSE SHOWN.
3. ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.
4. FOUNDATION STRUCTURE LOCATIONS SHOWN ARE APPROXIMATE.

E.C. JORDAN CO. CONSULTING ENGINEERS	INTERPRETIVE GEOLOGIC PROFILE A-A' MECHANICVILLE SITE
NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES
4045-83	FIGURE 3-2



APPROX. HORIZONTAL SCALE

0 80 100 FEET

VERTICAL EXAGGERATION 10:1

GEOLOGIC DESCRIPTIONS

FILL: PRIMARILY SILTY SAND AND GRAVEL WITH ORGANIC MATTER, ASH, BRICK FRAGMENTS, GLASS, AND WOOD CHIPS WITH ZONES OF HIGHER CLAYEY SILT AND FRACTURED SHALE CONTENT.

GRAVELLY SAND: DISCONTINUOUS BROWN TO DARK GRAY SAND AND GRAVEL.

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LEGEND

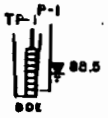


BORING AND MONITORING WELL LOCATION

OBSERVED WATER LEVEL (FEET, RELATIVE) ON MARCH 29, 1988

EFFECTIVE SCREEN LENGTH (ACTUAL SCREEN SHOWN AS ⊟)

BOTTOM OF BORING



TEST PIT AND PIEZOMETER LOCATION

OBSERVED WATER LEVEL (FEET, RELATIVE) ON MARCH 29, 1988

PIEZOMETER SCREEN

BOTTOM OF EXPLORATION

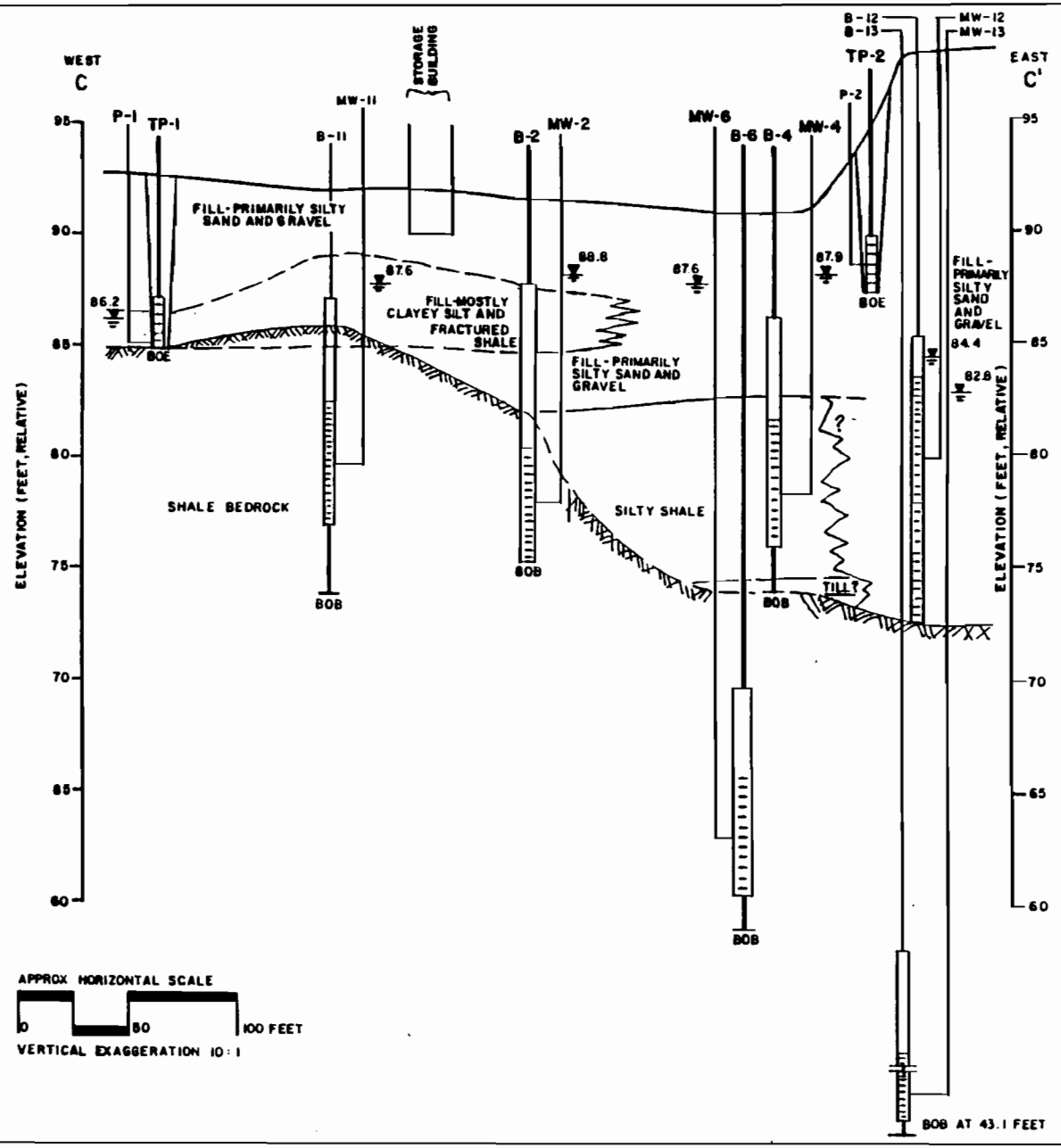


OBSERVED SURFACE WATER LEVEL (FEET, RELATIVE) ON MARCH 29, 1988

NOTES

1. SEE FIGURE 3-1 FOR LOCATION AND ORIENTATION OF PROFILE.
2. PROFILE IS BASED ON AN INTERPRETATION OF AVAILABLE SUBSURFACE EXPLORATIONS. ACTUAL CONDITIONS MAY VARY FROM THOSE SHOWN.
3. ELEVATIONS BASED ON ASSUMED DATUM OF 100.00' AT R.R. SPIKE IN UTILITY POLE LOCATED 25' SOUTH OF INTERSECTION OF FERRIS LANE AND NORTH CENTRAL AVENUE.
4. FOUNDATION STRUCTURE LOCATIONS SHOWN ARE APPROXIMATE.

E.C. JORDAN CO. CONSULTING ENGINEERS	INTERPRETIVE GEOLOGIC PROFILE B-B' MECHANICVILLE SITE
NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES
4945-83	FIGURE 3-3



GEOLOGIC DESCRIPTIONS

FILL: PRIMARILY SILTY SAND AND GRAVEL WITH ORGANIC MATTER, ASH, BRICK FRAGMENTS, GLASS, AND WOOD CHIPS WITH ZONES OF HIGHER CLAYEY SILT AND FRACTURED SHALE CONTENT.

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LEGEND



BORING AND MONITORING WELL LOCATION

OBSERVED WATER LEVEL (FEET, RELATIVE) ON MARCH 29, 1988

EFFECTIVE SCREEN LENGTH (ACTUAL SCREEN SHOWN AS ⊟)

BOTTOM OF BORING

TEST PIT AND PIEZOMETER LOCATION

OBSERVED WATER LEVEL (FEET, RELATIVE) ON MARCH 29, 1988

PIEZOMETER SCREEN

BOTTOM OF EXPLORATION

NOTES

1. SEE FIGURE 3-1 FOR LOCATION AND ORIENTATION OF PROFILE.
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4. FOUNDATION STRUCTURE LOCATIONS SHOWN ARE APPROXIMATE.

E.C. JORDAN CO. CONSULTING ENGINEERS	INTERPRETIVE GEOLOGIC PROFILE C–C' MECHANICVILLE SITE
NEW YORK STATE ELECTRIC AND GAS CORP. BINGHAMTON, NEW YORK	INVESTIGATION OF FORMER COAL GASIFICATION SITES
4848-83	FIGURE 3-4

12/17/87

TABLE 1
CHEMICALS FOUND IN SOIL BORING SAMPLES
MECHANICVILLE SITE

SAMPLE IDENTIFIER	B-1/S-1	B-2/S-1	B-3/S-1	B-4/S-1	B-5/S-1	B-7/S-1	B-8/S-1	B-8/S-1
ORGANICS ANALYSIS (1)	HPLC	HPLC	HPLC	HPLC	HPLC	HPLC	HPLC	GC/MS
DATE OF SAMPLE COLLECTION	7/23/86	8/1/86	8/5/86	7/29/86	8/4/86	7/31/86	8/6/86	8/6/86
SAMPLE DEPTH (FT)	8.0-10.0	8.0-9.5	4.0-6.0	6.0-8.0	10.0-11.0	7.0-9.0	13.5-15.5	15.5-17.5
ZONE SAMPLED	GRAVELLY SAND	FILL	FILL AND SILTY SHALE	FILL AND SILTY SHALE	SILTY SHALE	FILL	SILTY SHALE	SILTY SHALE
VOLATILE ORGANICS (MG/KG)								
-VOLATILE AROMATICS-								
BENZENE	ND (2)	ND	13.000	ND	0.880	2.400	640.000	380.000
TOLUENE	ND	ND	8.600	0.310	1.600	1.300	840.000	660.000
ETHYLBENZENE	ND	ND	120.000	2.300	6.300	0.170	440.000	250.000
STYRENE	ND	ND	ND	ND	ND	0.180	780.000	720.000
TOTAL XYLENES	-- (3)	--	--	--	--	--	--	1400.000
m-XYLENE	ND	ND	25.000	0.640	1.500	0.180	400.000	--
o-XYLENE	ND	ND	44.000	2.400	ND	ND	320.000	--
p-XYLENE	ND	ND	25.000	0.870	1.500	0.075	210.000	--
TRIMETHYLBENZENE	ND	ND	35.000	3.800	4.200	ND	170.000	--
n-PROPYLBENZENE	ND	ND	ND	ND	ND	ND	ND	--
-OTHER-								
ACETONE	--	--	--	--	--	--	--	ND
METHYLENE CHLORIDE	--	--	--	--	--	--	--	ND
CARBON DISULFIDE	--	--	--	--	--	--	--	ND
TOTAL VOLATILE AROMATICS	ND	ND	270.600	10.320	15.980	4.305	3800.000	3410.000
SEMIVOLATILE ORGANICS (MG/KG)								
-PAH-								
ACENAPHTHENE	9.000	(4)	380.000	42.000	250.000	(4)	600.000	(4)
ACENAPHTHYLENE	ND	(5)	(5)	(5)	(5)	(5)	(5)	670.000
ANTHRACENE	8.000	(4)	670.000	80.000	450.000	(4)	550.000	270.000
BENZO(b)FLUORANTHENE	5.700	ND	(4)	ND	120.000	(4)	200.000	(4)
BENZO(k)FLUORANTHENE	(4)	ND	240.000	ND	ND	0.980	ND	(4)
BENZO(g,h,i)PERYLENE	(4)	ND	(4)	ND	ND	1.400	140.000	(4)
BENZO(a)ANTHRACENE	(6)	(6)	(6)	(6)	ND	(6)	(6)	(4)
BENZO(a)PYRENE	6.200	ND	200.000	(4)	94.000	1.100	140.000	(4)
CHRYSENE	17.000	(4)	780.000	100.000	ND	0.800	480.000	(4)
DIBENZO(a,h)ANTHRACENE	6.300	ND	ND	ND	ND	1.300	ND	ND
FLUORANTHENE	44.000	(4)	1100.000	130.000	730.000	0.890	850.000	290.000
FLUORENE	34.000	(4)	1300.000	120.000	620.000	1.100	2100.000	380.000
INDENO(1,2,3-cd)-PYRENE	ND	ND	ND	ND	ND	ND	ND	(4)
NAPHTHALENE	ND	(4)	2300.000	44.000	760.000	1.900	1500.000	2500.000
PHENANTHRENE	13.000	(4)	940.000	110.000	630.000	0.870	760.000	870.000
PYRENE	11.000	(4)	1400.000	170.000	980.000	0.870	1400.000	460.000
-OTHER-								
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	--	--	--	--	--	ND
TOTAL PAH	154.200	(4)	9310.000	796.000	4654.000	11.210	8720.000	5440.000
OTHER CHEMICALS (MG/KG)								
-METALS-								
IRON	34000	30000	31000	35000	27000	26000	19000	--
ZINC	190	75	130	80	1600	320	61	--
-CYANIDE-								
TOTAL CYANIDE	ND	ND	3.2	1.0	ND	ND	ND	--
AMENABLE CYANIDE	ND	ND	3.2	1.0	ND	ND	ND	--
FERRO-FERRI CYANIDE	ND	ND	ND	ND	ND	ND	ND	--
-OTHER-								
TOTAL RECOVERABLE PHENOLICS	ND	ND	3.6	ND	2.6	ND	ND	--
TOTAL ORGANIC CARBON	110000	6800	100000	23000	110000	76000	190000	--

NOTES:
(1) INDICATES SAMPLE WAS ANALYZED BY GC/MS (EPA METHODS 8240 AND 8270) OR BY HPLC (EPA METHODS 8020 AND 8310).
(2) ND = NOT DETECTED (SEE APPENDIX B-2 FOR MINIMUM DETECTION LIMITS).
(3) -- = NOT ANALYZED
(4) TRACE CONCENTRATIONS DETECTED BELOW THE QUANTIFIABLE REPORTING LIMIT.
(5) ACENAPHTHYLENE AND NAPHTHALENE, COELUTED.
(6) BENZO(a)ANTHRACENE AND CHRYSENE, COELUTED.

12/17/87

TABLE 2
CHEMICALS FOUND IN TEST PIT SAMPLES
MECHANICVILLE SITE

SAMPLE IDENTIFIER	TP-1/S-1	TP-2/S-1	TP-4/S-1	TP-5/S-1	TP-5/S-1	TP-5/S-1
ORGANICS ANALYSIS (1)	HPLC	HPLC	HPLC	HPLC	HPLC DUP	GC/MS
DATE OF SAMPLE COLLECTION	7/21/86	7/21/86	7/21/86	7/21/86	7/21/86	7/21/86
SAMPLE DEPTH (FT)	6.5-7.0	7.0-7.5	3.0-4.0	3.0-4.0	3.0-4.0	4.0-6.0
ZONE SAMPLED	FILL	FILL	FILL	FILL	FILL	FILL
VOLATILE ORGANICS (MG/KG)						
-VOLATILE AROMATICS-						
BENZENE	ND (2)	ND	0.220	ND	ND	ND
TOLUENE	ND	ND	0.160	1.000	0.750	0.640
ETHYLBENZENE	ND	ND	0.150	6.600	6.100	2.200
STYRENE	ND	ND	ND	ND	ND	ND
TOTAL XYLENES	-- (3)	--	--	--	--	11.000
o-XYLENE	ND	ND	0.091	4.100	3.100	--
m-XYLENE	ND	ND	0.082	3.900	3.000	--
p-XYLENE	ND	ND	0.062	2.100	1.600	--
TRIMETHYLBENZENE	ND	ND	ND	4.600	5.100	--
n-PROPYLBENZENE	ND	ND	0.083	2.100	2.000	--
-OTHER-						
ACETONE	--	--	--	--	--	ND
METHYLENE CHLORIDE	--	--	--	--	--	1.000
CARBON DISULFIDE	--	--	--	--	--	0.110
TOTAL VOLATILE AROMATICS	ND	ND	0.848	24.400	21.650	13.840
SEMIVOLATILE ORGANICS (MG/KG)						
-PAH-						
ACENAPHTHENE	ND	(4)	ND	290.000	(4)	140.000
ACENAPHTHYLENE	ND	ND	(5)	(5)	(5)	33.000
ANTHRACENE	ND	ND	25.000	470.000	220.000	67.000
BENZO(b)FLUORANTHENE	ND	ND	23.000	ND	ND	13.000
BENZO(k)FLUORANTHENE	ND	ND	ND	ND	ND	21.000
BENZO(g,h,i)PERYLENE	ND	ND	18.000	ND	ND	13.000
BENZO(a)ANTHRACENE	ND	ND	(6)	(6)	ND	35.000
BENZO(a)PYRENE	ND	(4)	13.000	(4)	ND	36.000
CHRYSENE	ND	ND	59.000	110.000	ND	32.000
DIBENZO(a,h)ANTHRACENE	ND	ND	13.000	ND	ND	(4)
FLUORANTHENE	ND	45.000	84.000	880.000	220.000	78.000
FLUORENE	ND	18.000	31.000	620.000	2600.000	89.000
INDENO(1,2,3-cd)-PYRENE	ND	ND	ND	ND	ND	ND
NAPHTHALENE	ND	ND	19.000	350.000	5200.000	120.000
PHENANTHRENE	ND	12.000	31.000	810.000	260.000	210.000
PYRENE	ND	45.000	96.000	1100.000	ND	250.000
-OTHER-						
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	--	--	--	ND
TOTAL PAH	ND	120.000	412.000	4630.000	8500.000	1137.000
OTHER CHEMICALS (MG/KG)						
-METALS-						
IRON	27000	35000	27000	31000	35000	--
ZINC	260	120	87	79	220	--
-CYANIDE-						
TOTAL CYANIDE	ND	2.0	ND	ND	ND	--
AMENABLE CYANIDE	ND	ND	ND	ND	ND	--
FERRO-FERRI CYANIDE	ND	2.0	ND	ND	ND	--
-OTHER-						
TOTAL RECOVERABLE PHENOLICS	ND	ND	ND	ND	ND	--
TOTAL ORGANIC CARBON	8300	1400	10000	30000	26000	--

NOTES:
(1) INDICATES SAMPLE WAS ANALYZED BY GC/MS (EPA METHODS 8240 AND 8270) OR BY HPLC (EPA METHODS 8020 AND 8310).
(2) ND = NOT DETECTED (SEE APPENDIX B-2 FOR MINIMUM DETECTION LIMITS).
(3) -- = NOT ANALYZED OR NOT APPLICABLE.
(4) TRACE CONCENTRATIONS DETECTED BELOW THE QUANTIFIABLE REPORTING LIMIT.
(5) ACENAPHTHYLENE AND NAPHTHALENE, COELUTED.
(6) BENZO(a)ANTHRACENE AND CHRYSENE, COELUTED.

TABLE 3
CHEMICALS FOUND IN GROUNDWATER SAMPLES
MECHANICVILLE SITE

WELL IDENTIFIER	MW-1					MW-2					MW-3				
SAMPLE IDENTIFIER	MW-101	MW-101	MW-201	MW-301	MW-401	MW-102	MW-202	MW-202 DUP	MW-302	MW-402	MW-103	MW-103	MW-203	MW-303	MW-403
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	12/2/86	3/10/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87
VOLATILE ORGANICS (MG/L)															
-VOLATILE AROMATICS-															
BENZENE	ND (2)	ND	0.0055	ND	ND	ND	ND	ND	ND	ND	0.530	0.560	0.608	0.429	0.230
TOLUENE	ND	ND	(4)	ND	ND	ND	ND	ND	ND	ND	0.100	0.120	(4)	0.0576	ND
ETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.640	0.910	0.719	ND	ND
STYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL XYLENE	-- (3)	ND	0.010	ND	ND	--	ND	ND	ND	ND	--	0.770	0.640	0.0329	0.379
m - XYLENE	ND	--	--	--	--	ND	--	--	--	--	0.110	--	--	--	--
o - XYLENE	ND	--	--	--	--	ND	--	--	--	--	0.300	--	--	--	--
p - XYLENE	ND	--	--	--	--	ND	--	--	--	--	0.140	--	--	--	--
TRIMETHYLBENZENE	ND	--	--	--	--	ND	--	--	--	--	ND	--	--	--	--
-OTHER-															
ACETONE	--	0.220	3.780	0.059	ND	--	ND	ND	0.0536	ND	--	ND	ND	ND	ND
METHYLENE CHLORIDE	--	ND	ND	ND	ND	--	ND	ND	0.0086	ND	--	ND	ND	ND	ND
TOTAL VOLATILE AROMATICS	ND	ND	0.0155	ND	ND	ND	ND	ND	ND	ND	1.820	2.360	1.967	0.5195	0.609
SEMIVOLATILE ORGANICS (MG/L)															
-PAH-															
ACENAPHTHENE	0.110	0.022	0.012	ND	ND	ND	ND	ND	1.030	0.902	ND	0.420	ND	0.537	0.524
ACENAPHTHYLENE	0.250	0.048	0.018	ND	ND	ND	ND	ND	ND	0.084	2.500	(4)	ND	ND	ND
ANTHRACENE	(4)	(4)	0.031	ND	ND	ND	ND	ND	ND	ND	0.300	(4)	ND	0.226	0.140
BENZO(b)FLUORANTHENE	ND	(4,5)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(k)FLUORANTHENE	ND	(5)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(g,h,i)PERYLENE	ND	(4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(a)ANTHRACENE	(6)	(4)	ND	ND	ND	ND	ND	ND	ND	ND	(6)	(4)	ND	0.102	ND
BENZO(a)PYRENE	(4)	(4)	ND	ND	ND	ND	ND	ND	ND	ND	0.280	(4)	ND	ND	ND
CHRYSENE	0.024	(4)	ND	ND	ND	ND	ND	ND	ND	ND	0.880	(4)	ND	ND	ND
DIBENZO(a,h)ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORANTHENE	0.061	0.024	ND	ND	ND	ND	ND	ND	0.930	ND	2.700	(4)	0.680	0.223	0.174
FLUORENE	0.240	0.026	0.010	ND	ND	ND	ND	ND	ND	ND	4.700	(4)	0.660	0.197	0.198
INDENO(1,2,3,-cd)PYRENE	ND	(4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	(4)	ND	ND	ND
NAPHTHALENE	1.200	0.260	0.136	ND	ND	ND	ND	ND	6.034	0.445	13.000	2.600	4.130	2.480	1.914
PHENANTHRENE	0.051	0.039	0.028	ND	ND	ND	ND	ND	1.700	ND	1.300	0.440	ND	0.624	0.140
PYRENE	0.044	0.025	0.017	(4)	ND	ND	ND	ND	ND	ND	0.660	0.200	0.690	0.431	0.264
-OTHER-															
BIS(2-ETHYLHEXYL)PHTHALATE	--	0.073	0.016	(4)	0.040	--	0.016	0.018	1.710	ND	--	0.250	ND	ND	ND
2-METHYLNAPHTHALENE	--	ND	ND	ND	ND	--	ND	ND	ND	0.144	--	ND	ND	ND	0.856
TOTAL PAH	1.980	0.444	0.252	(4)	ND	ND	ND	ND	9.694	1.431	26.320	3.660	6.160	4.820	3.354

TABLE 3 (CON'T)
CHEMICALS FOUND IN GROUNDWATER SAMPLES
MECHANICVILLE SITE

WELL IDENTIFIER	MW-1					MW-2					MW-3				
SAMPLE IDENTIFIER	MW-101	MW-101	MW-201	MW-301	MW-401	MW-102	MW-202	MW-202 DUP	MW-302	MW-402	MW-103	MW-103	MW-203	MW-303	MW-403
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	12/2/86	3/10/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87
OTHER CHEMICALS (MG/L)															
-METALS-															
IRON	ND	--	ND	ND	0.05	0.50	0.07	0.06	ND	0.10	20.00	--	6.60	9.70	4.90
ZINC	ND	--	0.007	ND	ND	ND	0.072	0.005	ND	0.09	0.11	--	0.008	0.03	0.02
-CYANIDE-															
TOTAL CYANIDE	ND	--	0.01	ND	0.01	ND	ND	ND	ND	0.01	0.46	--	ND	0.320	0.42
AMENABLE CYANIDE	ND	--	--	ND	ND	ND	ND	--	ND	ND	ND	--	--	ND	ND
FERRO-FERRI CYANIDE	ND	--	0.03	ND	0.01	ND	ND	0.02	ND	0.01	0.46	--	0.05	0.320	0.42
-OTHER-															
TOTAL RECOVERABLE PHENOLICS	ND	--	--	--	ND	ND	--	--	--	0.008	0.020	--	--	--	0.015
TOTAL ORGANIC CARBON	4.1	--	14	3.2	4.2	4.6	9	6	3.7	4.1	11	--	24	15.3	11
SULFATE	--	--	74.6	--	--	--	65.2	60.6	--	--	--	--	17.7	--	--
TOTAL NEW YORK STATE REGULATED ORGANICS (7)	1.730	0.396	0.250	0.000	ND	ND	ND	ND	9.694	1.355	25.660	6.020	8.127	5.340	3.978
FIELD MEASUREMENTS															
pH (8)	5.3	5.3	6.7	7.5	6.6	6.0	6.4	6.4	7.6	6.8	(11)	(11)	(11)	(11)	(11)
CONDUCTIVITY (9)	1830	1830	370	2040	1315	1680	786	786	1890	1225	(11)	(11)	(11)	(11)	(11)
TEMPERATURE (10)	11.2	11.2	8.4	9.9	10.0	17.8	13.3	13.3	3.2	12.6	(11)	(11)	(11)	(11)	(11)

NOTES:
(1) INDICATES WHETHER SAMPLE VALUES WERE OBTAINED BY GC/MS OR HPLC METHODS.
(2) ND = NOT DETECTED (SEE APPENDIX B-2 FOR MINIMUM DETECTION LIMITS).
(3) -- = NOT ANALYZED
(4) TRACE CONCENTRATIONS DETECTED BELOW QUANTIFIABLE REPORTING LIMIT.
(5) BENZO(b)FLOURANTHENE AND BENZO(k)FLOURANTHENE, COELUTED.
(6) BENZO(a)ANTHRACENE AND CHRYSENE, COELUTED.
(7) THE N.Y. STATE CLASS GA GROUNDWATER STANDARD FOR ORGANICS INCLUDES PHENOLIC COMPOUNDS, VOLATILE ORGANICS, AND SEMIVOLATILE ORGANICS EXCEPT FOR ACETONE, STYRENE, ACENAPHTHALENE, BENZO(g,h,i)PERYLENE, DIBENZO(a,h)ANTHRACENE, AND BIS(2-ETHYLHEXYL)PHTHALATE.
(8) pH READINGS IN STANDARD UNITS
(9) CONDUCTIVITY IN MICROMHOS/CM
(10) TEMPERATURE IN DEGREES CELSIUS
(11) INDICATES SAMPLE TOO CONTAMINATED TO SUBMERGE PROBES.

TABLE 3 (CON'T)
CHEMICALS FOUND IN GROUNDWATER SAMPLES
MECHANICVILLE SITE

WELL IDENTIFIER	MW-4				MW-5-(12)				MW-6					
SAMPLE IDENTIFIER	MW-104	MW-204	MW-304	MW-404	MW-105	MW-205	MW-405	MW-405 DUP	MW-106	MW-106 DUP	MW-206	MW-306	MW-306 DUP	MW-406
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	HPLC	HPLC	GC/MS	GC/MS	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	6/2/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	3/10/87	6/2/87
VOLATILE ORGANICS (MG/L)														
-VOLATILE AROMATICS-														
BENZENE	0.950	0.673	0.482	0.494	0.240	0.298	0.412	0.440	1.900	1.600	1.690	1.520	1.630	1.613
TOLUENE	0.760	0.487	0.335	0.409	0.200	0.295	0.400	0.362	1.600	1.200	0.815	0.353	0.353	0.616
ETHYLBENZENE	2.300	0.803	1.140	0.378	0.071	0.270	0.541	0.464	1.700	1.300	0.855	0.943	1.500	1.956
STYRENE	ND	ND	0.051	ND	ND	ND	ND	ND	0.920	0.610	ND	ND	1.370	ND
TOTAL XYLENE	--	1.230	1.440	1.347	--	ND	0.273	0.227	--	--	1.220	1.270	ND	1.452
a - XYLENE	0.850	--	--	--	0.065	--	--	--	1.200	1.000	--	--	--	--
o - XYLENE	0.810	--	--	--	0.120	--	--	--	0.940	0.770	--	--	--	--
p - XYLENE	0.430	--	--	--	0.058	--	--	--	0.570	0.450	--	--	--	--
TRIMETHYLBENZENE	0.088	--	--	--	0.046	--	--	--	0.120	0.100	--	--	--	--
-OTHER-														
ACETONE	--	ND	ND	ND	--	ND	ND	ND	--	--	0.850	ND	ND	ND
METHYLENE CHLORIDE	--	ND	ND	ND	--	ND	ND	ND	--	--	0.350	ND	ND	ND
TOTAL VOLATILE AROMATICS	6.188	3.193	3.448	2.628	0.800	0.863	1.626	1.493	8.950	7.030	4.580	4.086	4.853	5.637
SEMIVOLATILE ORGANICS (MG/L)														
-PAH-														
ACENAPHTHENE	0.980	0.240	0.187	0.218	0.260	17.300	150.280	195.500	37.000	48.000	ND	0.890	1.200	3.580
ACENAPHTHYLENE	8.300	ND	0.041	0.218	2.400	ND	150.280	197.200	26.000	59.000	ND	ND	ND	3.300
ANTHRACENE	0.510	ND	ND	ND	ND	7.600	178.330	227.800	11.000	16.000	ND	ND	ND	5.290
BENZO(b)FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	4.000	6.600	ND	ND	ND	0.540
BENZO(k)FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	7.200	4.100	ND	ND	ND	0.580
BENZO(g,h,i)PERYLENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(a)ANTHRACENE	(6)	ND	ND	ND	ND	ND	18.360	23.970	(6)	(6)	ND	ND	ND	ND
BENZO(a)PYRENE	0.290	ND	ND	ND	ND	ND	ND	ND	4.800	6.500	ND	ND	ND	0.560
CHRYSENE	1.400	ND	ND	ND	ND	ND	ND	26.350	25.000	17.000	ND	ND	ND	0.680
DIBENZO(a,h)ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORANTHENE	4.200	ND	0.014	ND	0.150	6.300	43.860	59.500	93.000	74.000	ND	ND	1.310	2.510
FLUORENE	13.000	ND	0.026	0.100	3.900	7.600	62.220	80.920	120.000	140.000	ND	ND	ND	1.980
INDENO(1,2,3,-cd)PYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NAPHTHALENE	33.000	6.120	3.970	2.392	11.000	39.400	331.500	413.100	280.000	300.000	6.980	5.040	5.910	18.760
PHENANTHRENE	2.000	ND	ND	ND	ND	6.700	178.330	227.800	36.000	45.000	ND	1.340	1.530	5.290
PYRENE	1.000	ND	0.027	ND	(4)	8.100	93.450	112.370	36.000	30.000	ND	0.843	ND	ND
-OTHER-														
BIS(2-ETHYLHEXYL)PHTHALATE	--	ND	0.013	ND	--	ND	ND	ND	--	--	ND	ND	ND	ND
2-METHYLNAPHTHALENE	--	ND	ND	0.580	--	ND	197.200	247.690	--	--	ND	ND	ND	7.170
TOTAL PAH	64.680	6.360	4.265	2.928	17.710	93.000	1206.610	1564.510	680.000	746.200	6.980	8.113	9.950	43.070

TABLE 3 (CON'T)
CHEMICALS FOUND IN GROUNDWATER SAMPLES
MECHANICVILLE SITE

WELL IDENTIFIER	MW-4				MW-5-(12)				MW-6					
SAMPLE IDENTIFIER	MW-104	MW-204	MW-304	MW-404	MW-105	MW-205	MW-405	MW-405 DUP	MW-106	MW-106 DUP	MW-206	MW-306	MW-306 DUP	MW-406
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	HPLC	HPLC	GC/MS	GC/MS	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	6/2/87	9/9/86	12/2/86	6/2/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	3/10/87	6/2/87
OTHER CHEMICALS (MG/L)														
-METALS-														
IRON	61.00	6.50	3.86	5.10	1.10	7.50	5.10	9.40	5.50	14.00	7.60	10.10	9.70	4.80
ZINC	0.29	0.02	0.02	0.01	ND	0.021	0.16	0.33	ND	ND	ND	0.01	0.01	0.03
-CYANIDE-														
TOTAL CYANIDE	0.072	0.06	0.050	0.06	0.013	0.02	0.01	ND	0.075	0.081	0.12	0.060	0.050	0.07
AMENABLE CYANIDE	ND	0.04	ND	ND	0.013	--	ND	ND	0.026	0.024	0.10	ND	ND	ND
FERRO-FERRI CYANIDE	0.072	0.02	0.050	0.06	ND	0.06	0.01	0.01	0.049	0.057	0.02	0.060	0.050	0.07
-OTHER-														
TOTAL RECOVERABLE PHENOLICS	0.043	--	--	0.014	0.019	--	0.43	0.017	0.050	0.043	--	--	--	0.031
TOTAL ORGANIC CARBON	12	20	5.2	9.4	7.4	30	16	12	16	16	28	12.5	13.7	14
SULFATE	--	30.9	--	--	--	84.0	--	--	--	--	14.5	--	--	--
TOTAL NEW YORK STATE REGULATED ORGANICS (7)	62.611	9.553	7.621	5.352	16.129	93.863	1058.386	1368.820	662.080	693.663	11.910	12.199	13.433	45.438
FIELD MEASUREMENTS														
pH (8)	(11)	(11)	(11)	(11)	5.8	6.4	(11)	(11)	5.7	5.7	6.9	7.7	7.7	6.7
CONDUCTIVITY (9)	(11)	(11)	(11)	(11)	1640	680	(11)	(11)	1930	1930	1138	2300	2300	1385
TEMPERATURE (10)	(11)	(11)	(11)	(11)	12.7	12.0	(11)	(11)	16.0	16.0	14.3	6.0	6.0	13.1

NOTES:

(1) INDICATES WHETHER SAMPLE VALUES WERE OBTAINED BY GC/MS OR HPLC METHODS.
(2) ND = NOT DETECTED (SEE APPENDIX B-2 FOR MINIMUM DETECTION LIMITS).
(3) -- = NOT ANALYZED
(4) TRACE CONCENTRATIONS DETECTED BELOW QUANTIFIABLE REPORTING LIMIT.
(5) BENZO(b)FLOURANTHENE AND BENZO(k)FLOURANTHENE, COELUTED.
(6) BENZO(a)ANTHRACENE AND CHRYSENE, COELUTED.
(7) THE N.Y. STATE CLASS GA GROUNDWATER STANDARD FOR ORGANICS INCLUDES PHENOLIC COMPOUNDS, VOLATILE ORGANICS, AND SEMIVOLATILE ORGANICS EXCEPT FOR ACETONE, STYRENE, ACENAPHTHALENE, BENZO(g,h,i)PERYLENE, DIBENZO(a,h)ANTHRACENE, AND BIS(2-ETHYLHEXYL)PHTHALATE.
(8) pH READINGS IN STANDARD UNITS
(9) CONDUCTIVITY IN MICROMHOS/CM
(10) TEMPERATURE IN DEGREES CELSIUS
(11) INDICATES SAMPLE TOO CONTAMINATED TO SUBMERGE PROBES.
(12) MW-5 ROUND 3 SAMPLING WAS NOT CONDUCTED DUE TO WEATHER OBSTRUCTIONS.

TABLE 4
CHEMICALS FOUND IN SURFACE WATER SAMPLES
MECHANICVILLE SITE

SITE IDENTIFIER	SW-1					SW-2						SW-3				
SAMPLE IDENTIFIER	SW-101	SW-201	SW-301	SW-301 DUP	SW-401	SW-102	SW-202	SW-202 DUP	SW-302	SW-402	SW-402 DUP	SW-103	SW-103 DUP	SW-203	SW-303	SW-403
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	HPLC	GC/MS	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	3/10/87	6/2/87	9/9/86	12/2/86	12/2/86	3/10/87	6/2/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87
VOLATILE ORGANICS (MG/L)																
-VOLATILE AROMATICS-																
BENZENE	ND (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOLUENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL XYLENE	-- (3)	ND	ND	ND	ND	--	ND	ND	ND	ND	ND	--	--	ND	ND	ND
a - XYLENE	ND	--	--	--	--	ND	--	--	--	--	--	ND	ND	--	--	--
o - XYLENE	ND	--	--	--	--	ND	--	--	--	--	--	ND	ND	--	--	--
p - XYLENE	ND	--	--	--	--	ND	--	--	--	--	--	ND	ND	--	--	--
TRIMETHYLBENZENE	ND	--	--	--	--	ND	--	--	--	--	--	ND	ND	--	--	--
-OTHER-																
ACETONE	--	ND	ND	ND	ND	--	ND	0.010	ND	ND	ND	--	--	ND	ND	ND
METHYLENE CHLORIDE	--	--	0.0054	ND	ND	--	--	--	ND	ND	ND	--	--	--	ND	ND
TOTAL VOLATILE AROMATICS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SEMIVOLATILE ORGANICS (MG/L)																
-PAH-																
ACENAPHTHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.042	ND	ND	ND	ND	ND	ND
ACENAPHTHYLENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.043	ND	ND	ND	ND	ND	ND
ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(b)FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(k)FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(g,h,i)PERYLENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(a)ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZO(a)PYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CHRYSENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DIBENZO(a,h)ANTHRACENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORANTHENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
INDENO(1,2,3,-cd)PYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NAPHTHALENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PHENANTHRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.020	ND	ND	ND	ND	ND	ND
-OTHER-																
BIS(2-ETHYLHEXYL)PHTHALATE	--	ND	ND	ND	0.016	--	ND	ND	ND	ND	0.012	--	--	0.025	ND	0.030
2-METHYLNAPHTHALENE	--	ND	ND	ND	ND	--	ND	ND	ND	0.069	ND	--	--	ND	ND	ND
TOTAL PAH	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.105	ND	ND	ND	ND	ND	ND

TABLE 4 (CON'T)
CHEMICALS FOUND IN SURFACE WATER SAMPLES
MECHANICVILLE SITE

SITE IDENTIFIER	SW-1					SW-2						SW-3				
SAMPLE IDENTIFIER	SW-101	SW-201	SW-301	SW-301 DUP	SW-401	SW-102	SW-202	SW-202 DUP	SW-302	SW-402	SW-402 DUP	SW-103	SW-103 DUP	SW-203	SW-303	SW-403
ORGANICS ANALYSIS (1)	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	GC/MS	GC/MS	GC/MS	GC/MS	GC/MS	HPLC	HPLC	GC/MS	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	3/10/87	6/2/87	9/9/86	12/2/86	12/2/86	3/10/87	6/2/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87
								##OTHER CHEMICALS (MG/L)##								
-METALS-																
IRON	0.23	0.47	1.09	0.99	0.037	0.23	0.40	0.45	0.79	0.36	0.33	0.22	0.24	0.41	0.78	0.33
ZINC	ND	ND	ND	ND	0.010	ND	ND	ND	ND	ND	0.01	ND	ND	ND	ND	0.01
-CYANIDE-																
TOTAL CYANIDE	ND	0.01	ND	ND	ND	ND	0.01	ND	ND	0.01	ND	ND	ND	ND	ND	0.01
AMENABLE CYANIDE	ND	ND	ND	ND	ND	ND	--	--	ND	ND	ND	ND	ND	--	ND	ND
FERRO-FERRI CYANIDE	ND	0.01	ND	ND	ND	ND	0.02	0.03	ND	0.01	ND	ND	ND	0.01	ND	0.01
-OTHER-																
TOTAL RECOVERABLE PHENOLICS	ND	--	--	--	0.24	ND	--	--	--	0.013	0.005	ND	0.037	--	--	ND
TOTAL ORGANIC CARBON	5.5	11	11.9	7.3	6.4	ND	10	9	7.5	6.0	6.0	5.0	5.4	10.0	6.2	5.5
OIL AND GREASE	11	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	--
SULFATE	--	16.4	--	--	--	--	19.3	18.6	--	--	--	--	--	18.4	--	--

NOTES:
(1) INDICATES SAMPLE VALUES WERE OBTAINED BY GC/MS (EPA METHODS 624 AND 625) OR BY HPLC (EPA METHODS 602 AND 610).
(2) ND = NOT DETECTED (SEE APPENDIX B-2 FOR MINIMUM DETECTION LIMITS).
(3) -- = NOT ANALYZED

TABLE 5
CHEMICALS FOUND IN SEDIMENT SAMPLES
MECHANICVILLE SITE

SITE IDENTIFIER	SED-1					SED-2						SED-3				
SAMPLE IDENTIFIER	SED-101	SED-201	SED-301	SED-301 DUP	SED-401	SED-102	SED-202	SED-202 DUP	SED-302	SED-402	SED-402 DUP	SED-103	SED-103 DUP	SED-203	SED-303	SED-403
ORGANICS ANALYSIS (1)	HPLC	HPLC	GC/MS	GC/MS	GC/MS	HPLC	HPLC	HPLC	GC/MS	GC/MS	GC/MS	HPLC	HPLC	HPLC	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	3/10/87	6/2/87	9/9/86	12/2/86	12/2/86	3/10/87	6/2/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87
VOLATILE ORGANICS (MG/KG)																
-VOLATILE AROMATICS-																
BENZENE	ND (2)	ND	ND	ND	ND	ND	ND	ND	0.07	ND	ND	ND	ND	ND	ND	ND
TOLUENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.070	ND
ETHYLBENZENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
STYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL XYLENE	-- (3)	--	ND	ND	ND	--	--	--	ND	ND	ND	--	--	--	ND	ND
a - XYLENE	ND	ND	--	--	--	ND	ND	ND	--	--	--	ND	ND	ND	--	--
o - XYLENE	ND	ND	--	--	--	ND	ND	ND	--	--	--	ND	ND	ND	--	--
p - XYLENE	ND	ND	--	--	--	ND	ND	ND	--	--	--	ND	ND	ND	--	--
-OTHER-																
ACETONE	--	--	ND	ND	5.300	--	--	--	ND	6.600	3.800	--	--	--	ND	4.000
METHYLENE CHLORIDE	--	--	ND	ND	2.400	--	--	--	ND	3.000	2.900	--	--	--	ND	2.300
TOTAL VOLATILE AROMATICS	ND	ND	ND	ND	ND	ND	ND	ND	0.07	ND	ND	ND	ND	ND	0.07	ND
SEMIVOLATILE ORGANICS (MG/KG)																
-PAH-																
ACENAPHTHENE	(4)	ND	ND	ND	ND	(4)	ND	ND	ND	0.700	1.600	0.910	1.100	(4)	ND	ND
ACENAPHTHYLENE	0.740	ND	ND	ND	ND	0.900	ND	ND	ND	ND	1.300	2.700	3.500	8.800	ND	ND
ANTHRACENE	(4)	(4)	ND	ND	ND	(4)	(4)	(4)	(4)	ND	ND	1.100	1.200	(4)	(4)	ND
BENZO(b)FLUORANTHENE	(4)	0.580	ND	ND	ND	(4)	(4)	2.000	(4,5)	ND	ND	1.000	0.940	0.630	(4,5)	ND
BENZO(k)FLUORANTHENE	(4)	(5)	ND	ND	ND	(4)	(5)	4.800	(4,5)	ND	ND	0.930	1.000	(5)	(4,5)	ND
BENZO(g,h,i)PERYLENE	ND	3.100	ND	ND	ND	ND	(4)	15.000	ND	ND	ND	ND	ND	4.400	(4)	ND
BENZO(a)ANTHRACENE	(6)	(6)	ND	ND	ND	(6)	(6)	(6)	(4)	ND	ND	(6)	(6)	(6)	(4)	ND
BENZO(a)PYRENE	(4)	0.450	ND	ND	ND	(4)	(4)	6.100	(4)	ND	ND	0.740	0.800	0.650	(4)	ND
CHRYSENE	0.520	0.610	ND	ND	ND	0.460	(4)	8.500	(4)	ND	ND	2.000	2.100	(4)	(4)	ND
DIBENZO(a,h)ANTHRACENE	ND	0.930	ND	ND	ND	(4)	ND	7.100	ND	ND	ND	ND	1.600	2.300	ND	ND
FLUORANTHENE	0.960	0.470	ND	ND	ND	0.920	(4)	5.600	(4)	ND	ND	2.200	4.700	(4)	(4)	ND
FLUORENE	1.500	ND	ND	ND	ND	1.400	ND	ND	ND	ND	0.500	4.000	4.300	ND	ND	ND
INDENO(1,2,3,-cd)PYRENE	ND	(7)	ND	ND	ND	(4)	ND	(7)	ND	ND	ND	(4)	(4)	(7)	(4)	ND
NAPHTHALENE	3.600	ND	ND	ND	ND	3.300	ND	19.000	(4)	4.400	13.000	10.000	19.000	ND	ND	ND
PHENANTHRENE	0.570	0.390	ND	ND	ND	(4)	(4)	1.800	(4)	ND	ND	2.000	2.300	(4)	(4)	ND
PYRENE	0.690	0.770	ND	ND	ND	0.960	(4)	5.900	(4)	ND	ND	1.900	3.100	(4)	(4)	ND
-OTHER-																
BIS(2-ETHYLHEXYL)PHTHALATE	--	--	(4)	ND	ND	--	--	--	(4)	ND	ND	--	--	--	(4)	ND
2-METHYLNAPHTHALENE	--	--	ND	ND	ND	--	--	--	ND	0.900	ND	--	--	--	ND	ND
DI-N-BUTYL PHTHALATE	--	--	--	--	2.100	--	--	--	--	ND	4.000	--	--	--	--	3.200
TOTAL PAH	8.580	7.300	ND	ND	ND	7.940	(3)	75.800	(4)	5.100	16.400	29.480	45.640	16.780	(4)	ND

TABLE 5 (CON'T)
CHEMICALS FOUND IN SEDIMENT SAMPLES
MECHANICVILLE SITE

SITE IDENTIFIER	SED-1					SED-2						SED-3				
SAMPLE IDENTIFIER	SED-101	SED-201	SED-301	SED-301 DUP	SED-401	SED-102	SED-202	SED-202 DUP	SED-302	SED-402	SED-402 DUP	SED-103	SED-103 DUP	SED-203	SED-303	SED-403
ORGANICS ANALYSIS (1)	HPLC	HPLC	GC/MS	GC/MS	GC/MS	HPLC	HPLC	HPLC	GC/MS	GC/MS	GC/MS	HPLC	HPLC	HPLC	GC/MS	GC/MS
DATE OF SAMPLE COLLECTION	9/9/86	12/2/86	3/10/87	3/10/87	6/2/87	9/9/86	12/2/86	12/2/86	3/10/87	6/2/87	6/2/87	9/9/86	9/9/86	12/2/86	3/10/87	6/2/87
##OTHER CHEMICALS (MG/KG)##																
-METALS-																
IRON	16000	9200	10800	8320	15600	21000	19000	16000	9980	30800	23600	13000	13000	20000	13000	33100
ZINC	47	36	37	31	--	51	69	100	46	--	--	65	60	88	76	--
-CYANIDE-																
TOTAL CYANIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AMENABLE CYANIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--
FERRO-FERRI CYANIDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--
-OTHER-																
TOTAL RECOVERABLE PHENOLICS	ND	ND	ND	ND	3.1	ND	ND	ND	ND	6.1	3.1	ND	ND	ND	ND	1.8
TOTAL ORGANIC CARBON	3000	4600	4790	3320	9700	7700	3500	7600	16100	11000	22000	4500	4600	4600	9350	15000
SULFATE	--	ND	--	--	--	--	60	40	--	--	--	--	--	30	--	--

NOTES:
(1) INDICATES WHETHER SAMPLE VALUES WERE OBTAINED BY GC/MS OR HPLC METHODS.
(2) ND = NOT DETECTED (SEE APPENDIX B-2 FOR MINIMUM DETECTION LIMITS).
(3) -- = NOT ANALYZED
(4) TRACE CONCENTRATIONS DETECTED BELOW THE REPORTING LIMIT.
(5) BENZO(b)FLUORANTHENE AND BENZO(k)FLUORANTHENE, COELUTED.
(6) BENZO(a)ANTHRACENE AND CHRYSENE, COELUTED.
(7) INDENO(1,2,3-cd)PYRENE AND BENZO(g,h,i)PERYLENE, COELUTED.

TABLE 3-1
Task 3 Soil Boring Analytical Results
Mechanicville Site

SAMPLE IDENTIFIER:	B-09(S-1)	B-10(S-2)	B-10(S-2) DUP-503	B-12(S-2)	B-14(S-2)	B-15(S-1)
DATE OF SAMPLE COLLECTION:	11/17/87	11/17/87	11/17/87	11/19/87	11/17/87	11/19/87
DEPTH (Ft.):	4-5.5	16-18	16-18	22-24	18-20	4-8
ZONE SAMPLED:	Silty sand	Silty sand	Silty sand	Silty fine sand	Silty fine sand	Fill
**** Volatile Organics (mg/kg) (1) ****						
-VOLATILE AROMATICS-						
Benzene	-- (2)	--	--	ND	--	ND
Toluene	--	--	--	ND	--	ND
Ethylbenzene	--	--	--	ND	--	0.570
Styrene	--	--	--	ND	--	ND
Total Xylenes	--	--	--	ND	--	0.880
- OTHER -						
Methylene Chloride	--	--	--	ND	--	ND
2-Butanone	--	--	--	ND	--	ND
Total Volatile Aromatics	--	--	--	ND	--	1.4
Total Volatile Organics	--	--	--	ND	--	1.4
**** Semi-Volatile Organics (mg/kg) (1) ****						
-PAH-						
Acenaphthene	T (3)	T	0.53	2.35	ND	ND
Acenaphthylene	ND (4)	T	T	ND	ND	ND
Anthracene	T	T	T	0.8	ND	ND
Benzo(b)Fluoranthene	T	T	ND	ND	ND	ND
Benzo(k)Fluoranthene	(5)	(5)	ND	ND	ND	ND
Benzo(g,h,i,)Peryiene	T	ND	ND	ND	ND	ND
Benzo(a)Anthracene	T	T	T	ND	ND	ND
Benzo(e)Pyrene	T	T	T	ND	ND	ND
Chrysene	T	T	T	ND	ND	ND
Fluoranthene	T	T	T	1.01	ND	ND
Fluorene	T	T	T	1.25	ND	ND
Indeno(1,2,3-cd)Pyrene	T	ND	ND	ND	ND	ND
Naphthalene	60	T	0.45	ND	ND	ND
Phenanthrene	58	0.88	1.1	0.8	ND	ND
Pyrene	T	0.6	T	1.39	ND	ND
-OTHER-						
2-Methylnaphthalene	T	T	T	ND	ND	ND
Dibenzofuran	ND	T	T	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ND	ND	ND	R (6)	T	R
Total PAH	120	1.5	2.1	7.6	ND	ND
Total Semi-Volatile Organic	120	1.5	2.1	7.6	T	ND
**** Other Chemicals (mg/kg) ****						
-METALS-						
Iron	28000	24000	22000	18000	21000	23000
Zinc	59	42	44	32	49	390
-CYANIDE-						
Total Cyanide	ND	ND	ND	ND	ND	ND
Undistilled Cyanide (7)	ND	ND	ND	ND	ND	ND
-OTHER-						
Total Recoverable Phenolics	0.74	ND	ND	ND	ND	2.6
Total Organic Carbon	33000	22000	24000	22000	32000	42000

NOTES:
(1) VOCs and SVOCs analyzed by GC/MS (USEPA Method 8240 and 8270).
(2) -- = Not analyzed (Laboratory Error).
(3) T = Trace concentrations detected below the quantifiable reporting limit.
(4) ND = Not detected (See Appendix B-4 for minimum detection limits).
(5) Benzo(b)Fluoranthene and Benzo(k)Fluoranthene coeluted.
(6) Data rejected because analysis of blank indicated sampling or lab-derived contamination.
(7) Undistilled CN = Free and dissociable CN-; method used detected most, but not necessarily all, of amenable CN- present.

TABLE 3-2
Task 3 Groundwater Analytical Results
Mechanicville Site

WELL IDENTIFIER	MW-01		MW-02		
SCREENED ZONE	SOIL/SHALLOW BEDROCK		SOIL/SHALLOW BEDROCK		
SAMPLE IDENTIFIER	MW-01	MW-01	MW-02	MW-02	MW-02 DUP
DATE OF SAMPLE COLLECTION	12/22/87	3/29/88	12/22/87	3/29/88	3/29/88
-VOLATILE AROMATICS-			** Volatile Organics (mg/l) (1) **		
Benzene	ND (2)	ND	ND	ND	-- (4)
Toluene	ND	ND	ND	ND	--
Ethylbenzene	ND	ND	ND	ND	--
Styrene	ND	ND	ND	ND	--
Total Xylenes	ND	ND	ND	ND	--
-OTHER-					
Methylene Chloride	ND	ND	ND	ND	--
2-Butanone	ND	ND	ND	ND	--
1,1,1-Trichloroethane	ND	ND	ND	ND	--
Vinyl Acetate	ND	ND	ND	ND	--
2-Hexanone	ND	ND	ND	ND	--
Chlorobenzene	ND	T	ND	T	--
1,1-Dichloroethane	ND	ND	ND	ND	--
Trichloroethene	ND	ND	ND	ND	--
Total Volatile Aromatics	ND	ND	ND	ND	--
Total Volatile Organics	ND	T	ND	T	--
			** Semi-Volatile Organics (mg/l) (1) **		
-PAH-					
Acenaphthene	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	ND
Benzo(b)Fluoranthene	ND	ND	ND	ND	ND
Benzo(k)Fluoranthene (9)	ND	ND	ND	ND	ND
Benzo(g,h,i)Perylene	ND	ND	ND	ND	ND
Benzo(a)Anthracene	ND	ND	ND	ND	ND
Benzo(a)Pyrene	ND	ND	ND	ND	ND
Chrysene	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)Pyrene	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND
Phenanthrene	ND	ND	ND	ND	ND
Pyrene	ND	ND	ND	ND	ND
-OTHER-					
2,4 - Dimethylphenol	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	ND	ND	ND
2-Methylphenol	ND	ND	ND	ND	ND
2-Nitroaniline	ND	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND
4,6 - Dinitro-2-Methylphenol	ND	ND	ND	ND	ND
4-Methylphenol	ND	ND	ND	ND	ND
4-Nitroaniline	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND
Benzoic Acid	ND	ND	ND	ND	ND
Benzyl Alcohol	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND
Phenol	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	T (3)	ND	T	ND	ND
Total PAH	ND	ND	ND	ND	ND
Total Semi-Volatile Organics	T	ND	T	ND	ND
			** Other Chemicals (mg/l) **		
-DISSOLVED METALS-					
Iron	0.07	ND	0.04	0.12	0.23
Zinc	ND	0.02	ND	0.02	0.1
-CYANIDE-					
Total Cyanide (13)	0.01	ND	ND	ND	ND
Undistilled Cyanide (10)	ND	ND	ND	ND	ND
-OTHER-					
Total Recoverable Phenolics	0.006	ND	0.016	0.006	0.011
Total Organic Carbon	3.4	2.8	2.9	2.2	2.8
Total New York State Regulated Organics (5)	0.006	ND	0.0160	0.006	0.011
pH (6)	7.5	6.5	7.7	6.6	6.7
Conductivity (7)	1125	1389	1153	1159	1302
Temperature (8)	11.1	10.2	11.9	7.0	7.0

NOTES:
(1) Sample values were obtained by GC/MS (USEPA Methods 624 and 625).
(2) ND = Not detected (see Appendix B-4 for Minimum Detection Limits).
(3) T = Trace (Concentrations detected below quantifiable reporting limits).
(4) -- = Not analyzed (Laboratory reported vial was received broken).
(5) The N.Y. State Class GA Groundwater Standard for Organics includes phenolic compounds, volatile organics and semivolatile organics; except for Acetone, Styrene, Acenaphthalene, Benzo(g,h,i)Perylene, Dibenzo(a,h)Anthracene and bis(2-Ethylhexyl)phthalate.
(6) pH readings in standard units.
(7) Conductivity readings in micromhos/cm.
(8) Temperature in degrees Celsius.
(9) Benzo(b)Fluoranthene and Benzo(k)Fluoranthene coelute.
(10) Undistilled CN = Free and dissociable CN-; method used and detected most, but not necessarily all, of the amenable CN- present.
(11) Sample too contaminated to submerge probes.
(12) Free Product in well.
(13) Total cyanide concentration may be less than distilled cyanide concentration due to analytical methods used and low detection levels.
(14) NR = Not Reported.

TABLE 3-2 (Continued)
Task 3 Groundwater Analytical Results
Mechanicville Site

WELL IDENTIFIER	MW-03		MW-04		MW-05	
SCREENED ZONE	SOIL		SOIL		SOIL/SHALLOW BEDROCK	
SAMPLE IDENTIFIER	MW-03	MW-03	MW-04	MW-04	MW-05	MW-05
DATE OF SAMPLE COLLECTION	12/22/87	3/30/88	12/22/87	3/30/88	12/22/87	3/30/88
-VOLATILE AROMATICS-	** Volatile Organics (mg/l) (1) **					
Benzene	0.17	0.15	0.26	0.2	0.15	T
Toluene	0.021	ND	0.23	ND	0.094	ND
Ethylbenzene	0.11	ND	0.058	0.17	ND	0.054
Styrene	ND (2)	ND	ND	ND	ND	ND
Total Xylenes	0.40	0.42	2.2	1.3	0.19	0.16
-OTHER-						
Methylene Chloride	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND
Vinyl Acetate	ND	ND	ND	T	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND
Total Volatile Aromatics	0.70	0.57	2.8	1.67	0.43	0.214
Total Volatile Organics	0.70	0.57	2.8	1.67	0.43	0.214
	** Semi-Volatile Organics (mg/l) (1) **					
-PAH-						
Acenaphthene	30	ND	T	T	0.51	22
Acenaphthylene	T (3)	ND	T	T	T	2.7
Anthracene	9.7	ND	ND	T	T	ND
Benzo(b)Fluoranthene	T	ND	ND	ND	ND	ND
Benzo(k)Fluoranthene (9)	ND	ND	ND	ND	ND	1.3
Benzo(g,h,i)Perylene	ND	ND	ND	ND	ND	ND
Benzo(a)Anthracene	T	ND	ND	ND	ND	2.6
Benzo(a)Pyrene	T	T	ND	ND	ND	2.4
Chrysene	T	ND	ND	ND	ND	ND
Fluoranthene	12	T	ND	T	T	9.4
Fluorene	13	ND	T	T	T	10
Indeno(1,2,3-cd)Pyrene	ND	ND	ND	ND	ND	ND
Naphthalene	64	ND	1.9	1.4	3.6	30
Phenanthrene	38	ND	T	T	0.32	26
Pyrene	21	ND	ND	ND	T	1.4
-OTHER-						
2,4 - Dimethylphenol	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	ND	T	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	T
2-Chloronaphthalene	ND	ND	ND	ND	ND	T
2-Methylnaphthalene	34	ND	0.65	0.78	1.1	35
2-Methylphenol	ND	ND	ND	ND	ND	ND
2-Nitroaniline	ND	T	ND	ND	ND	T
3-Nitroaniline	ND	ND	ND	ND	ND	T
4,6 - Dinitro-2-Methylphenol	ND	ND	ND	ND	ND	ND
4-Methylphenol	ND	ND	ND	ND	ND	T
4-Nitroaniline	ND	T	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND
Benzoic Acid	ND	ND	ND	ND	ND	T
Benzyl Alcohol	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	T	ND	ND
Dibenzofuran	T	T	ND	ND	T	2
Hexachloroethane	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND	T
Nitrobenzene	ND	ND	ND	ND	ND	ND
Phenol	ND	ND	T	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ND	ND	ND	ND	T	ND
Total PAH	190	ND	1.9	1.4	4.4	110
Total Semi-Volatile Organics	220	ND	2.6	2.18	5.5	142.2
	** Other Chemicals (mg/l) **					
-DISSOLVED METALS-						
Iron	8.8	14.4	20	9.25	13	25
Zinc	0.11	0.2	0.52	0.05	0.54	1.09
-CYANIDE-						
Total Cyanide (13)	ND	0.27	0.05	0.05	ND	0.05
Undistilled Cyanide (10)	--	ND	ND	ND	ND	ND
-OTHER-						
Total Recoverable Phenolics	17	0.025	0.021	0.027	0.028	0.026
Total Organic Carbon	50,000 (12)	42	8.4	9.9	8,000 (12)	21
Total New York State Regulated Organics (5)	237.7	0.595	5.421	3.877	5.598	142.34
pH (6)	(11)	(11)	(11)	(11)	(11)	(11)
Conductivity (7)	(11)	(11)	(11)	(11)	(11)	(11)
Temperature (8)	(11)	(11)	(11)	(11)	(11)	(11)

NOTES:
(1) Sample values were obtained by GC/MS (USEPA Methods 624 and 625).
(2) ND = Not detected (see Appendix B-4 for Minimum Detection Limits).
(3) T = Trace (Concentrations detected below quantifiable reporting limits).
(4) -- = Not analyzed (Laboratory reported vial was received broken).
(5) The N.Y. State Class 6A Groundwater Standard for Organics includes phenolic compounds, volatile organics and semivolatile organics; except for Acetone, Styrene, Acenaphthalene, Benzo(g,h,i)Perylene, Dibenzo(a,h)Anthracene and bis(2-Ethylhexyl)phthalate.
(6) pH readings in standard units.
(7) Conductivity readings in micromhos/cm.
(8) Temperature in degrees Celsius.
(9) Benzo(b)Fluoranthene and Benzo(k)Fluoranthene coelute.
(10) Undistilled CN = Free and dissociable CN-; method used and detected most, but not necessarily all, of the amenable CN- present.
(11) Sample too contaminated to submerge probes.
(12) Free Product in well. e CN- present.
(13) Total cyanide concentration may be less than distilled cyanide concentration due to analytical methods used and low detection levels.
(14) NR = Not Reported.

TABLE 3-2 (Continued)
Task 3 Groundwater Analytical Results
Mechanicville Site

WELL IDENTIFIER	MW-06		MW-10	
SCREENED ZONE	BEDROCK		SOIL	
SAMPLE IDENTIFIER	MW-06	MW-06	MW-10	MW-10
DATE OF SAMPLE COLLECTION	12/22/87	3/30/88	12/22/87	3/29/88
-VOLATILE AROMATICS-		** Volatile Organics (mg/l) (1) **		
Benzene	0.88	0.06	ND (2)	-- (4)
Toluene	0.13	ND	ND	--
Ethylbenzene	0.14	ND	ND	--
Styrene	ND	ND	ND	--
Total Xylenes	2.4	0.04	0.012	--
-OTHER-				
Methylene Chloride	ND	ND	ND	--
2-Butanone	ND	ND	ND	--
1,1,1-Trichloroethane	ND	ND	ND	--
Vinyl Acetate	ND	ND	ND	--
2-Hexanone	ND	ND	ND	--
Chlorobenzene	ND	ND	ND	--
1,1-Dichloroethane	ND	ND	ND	--
Trichloroethene	ND	ND	ND	--
Total Volatile Aromatics	3.6	0.1	0.012	--
Total Volatile Organics	3.6	0.1	0.012	--
		** Semi-Volatile Organics (mg/l) (1) **		
-PAH-				
Acenaphthene	2.2	T	0.10	T
Acenaphthylene	T	T	T (3)	ND
Anthracene	0.89	T	T	ND
Benzo(b)Fluoranthene	T	T	ND	T
Benzo(k)Fluoranthene (9)	T	ND	ND	ND
Benzo(g,h,i)Perylene	T	ND	ND	ND
Benzo(a)Anthracene	T	T	ND	T
Benzo(a)Pyrene	T	ND	ND	ND
Chrysene	T	ND	ND	T
Fluoranthene	1.0	T	T	ND
Fluorene	1.1	ND	0.028	T
Indeno(1,2,3-cd)Pyrene	T	ND	ND	ND
Naphthalene	12	ND	ND	ND
Phenanthrene	3.5	T	T	ND
Pyrene	1.6	T	T	ND
-OTHER-				
2,4 - Dimethylphenol	ND	ND	ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	T
2-Chloronaphthalene	ND	ND	ND	ND
2-Methylnaphthalene	4.6	ND	T	ND
2-Methylphenol	ND	ND	ND	ND
2-Nitroaniline	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND
4,6 - Dinitro-2-Methylphenol	ND	ND	ND	T
4-Methylphenol	ND	ND	ND	ND
4-Nitroaniline	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	T
Benzoic Acid	ND	ND	ND	ND
Benzyl Alcohol	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	ND
Dibenzofuran	T	ND	T	ND
Hexachloroethane	ND	ND	ND	T
N-Nitrosodiphenylamine	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND
Phenol	ND	T	ND	ND
bis(2-Ethylhexyl)phthalate	ND	ND	ND	0.41
Total PAH	22	ND	0.13	ND
Total Semi-Volatile Organics	27	ND	0.13	0.41
		** Other Chemicals (mg/l) **		
-DISSOLVED METALS-				
Iron	11	5.95	0.64	1.41
Zinc	0.048	0.02	ND	0.02
-CYANIDE-				
Total Cyanide (13)	0.06	0.01	0.01	ND
Undistilled Cyanide (10)	0.07	ND	ND	ND
-OTHER-				
Total Recoverable Phenolics	0.056	0.037	ND	0.029
Total Organic Carbon	10,000 (12)	31	61	11
Total New York State Regulated Organics (5)	30.656	0.137	0.142	0.439
pH (6)	7.7	(11)	7.5	6.6
Conductivity (7)	1154	(11)	1262	1576
Temperature (8)	12.0	(11)	12.4	9.6

NOTES:
(1) Sample values were obtained by GC/MS (USEPA Methods 624 and 625).
(2) ND = Not detected (see Appendix B-4 for Minimum Detection Limits).
(3) T = Trace (Concentrations detected below quantifiable reporting limits).
(4) -- = Not analyzed (Laboratory reported vial was received broken).
(5) The N.Y. State Class GA Groundwater Standard for Organics includes phenolic compounds, volatile organics and semivolatile organics; except for Acetone, Styrene, Acenaphthalene, Benzo(g,h,i)Perylene, Dibenzo(a,h)Anthracene and bis(2-Ethylhexyl)phthalate.
(6) pH readings in standard units.
(7) Conductivity readings in micromhos/cm.
(8) Temperature in degrees Celsius.
(9) Benzo(b)Fluoranthene and Benzo(k)Fluoranthene coelute.
(10) Undistilled CN = Free and dissociable CN-; method used and detected most, but not necessarily all, of the amenable CN- present.
(11) Sample too contaminated to submerge probes.
(12) Free Product in well.
(13) Total cyanide concentration may be less than distilled cyanide concentration due to analytical methods used and low detection levels.
(14) NR = Not Reported.

TABLE 3-2 (Continued)
Task 3 Groundwater Analytical Results
Mechanicville Site

WELL IDENTIFIER	MW-11			MW-12	
SCREENED ZONE	SOIL/SHALLOW BEDROCK			SOIL	
SAMPLE IDENTIFIER	MW-11	MW-11 Dup	MW-11	MW-12	MW-12
DATE OF SAMPLE COLLECTION	12/22/87	12/22/87	3/29/88	12/22/87	3/29/88
-VOLATILE AROMATICS-	** Volatile Organics (mg/l) (1) **				
Benzene	ND	ND	ND	ND	0.12
Toluene	ND	ND	ND	ND	T
Ethylbenzene	ND	ND	ND	ND	1.1
Styrene	ND	ND	ND	ND	ND
Total Xylenes	ND	ND	ND	0.075	1.2
-OTHER-					
Methylene Chloride	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	T
1,1,1-Trichloroethane	0.0026	0.0044	ND	ND	ND
Vinyl Acetate	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND
Total Volatile Aromatics	ND	ND	ND	0.075	2.4
Total Volatile Organics	0.0026	0.0044	ND	0.075	2.4
	** Semi-Volatile Organics (mg/l) (1) **				
-PAH-					
Acenaphthene	ND	ND	ND	ND	210
Acenaphthylene	ND	ND	ND	ND	T
Anthracene	ND	ND	ND	ND	86
Benzo(b)fluoranthene	ND	ND	ND	ND	T
Benzo(k)fluoranthene (9)	ND	ND	ND	ND	T
Benzo(g,h,i)Perylene	ND	ND	ND	ND	ND
Benzo(a)Anthracene	ND	ND	ND	ND	T
Benzo(a)Pyrene	ND	ND	ND	ND	T
Chrysene	ND	ND	ND	ND	T
Fluoranthene	ND	ND	ND	ND	82
Fluorene	ND	ND	ND	ND	110
Indeno(1,2,3-cd)Pyrene	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	580
Phenanthrene	ND	ND	ND	ND	320
Pyrene	ND	ND	ND	ND	130
-OTHER-					
2,4 - Dimethylphenol	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	ND	ND	540
2-Methylphenol	ND	ND	ND	ND	ND
2-Nitroaniline	ND	ND	T	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND
4,6 - Dinitro-2-Methylphenol	ND	ND	ND	ND	ND
4-Methylphenol	ND	ND	ND	ND	ND
4-Nitroaniline	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND
Benzoic Acid	ND	ND	ND	ND	ND
Benzyl Alcohol	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	ND	T
Hexachloroethane	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND
Phenol	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ND	T	ND	T	ND
Total PAH	ND	ND	ND	ND	1500
Total Semi-Volatile Organics	ND	T	ND	ND	2100
	** Other Chemicals (mg/l) **				
-DISSOLVED METALS-					
Iron	0.15	0.26	0.28	2.7	4.45
Zinc	ND	ND	0.01	ND	0.02
-CYANIDE-					
Total Cyanide (13)	ND	ND	ND	0.8	0.58
Undistilled Cyanide (10)	ND	ND	ND	0.02	ND
-OTHER-					
Total Recoverable Phenolics	0.005	0.01	ND	0.016	0.2
Total Organic Carbon	5.4	8.9	4.9	18	13
Total New York State Regulated Organics (5)	0.0076	0.0144	ND	0.091	2060.6
pH (6)	7.6	7.6	6.9	7.4	(11)
Conductivity (7)	785	1098	939	1470	(11)
Temperature (8)	11.7	11.1	9.1	11.3	(11)

NOTES:
(1) Sample values were obtained by GC/MS (USEPA Methods 624 and 625).
(2) ND = Not detected (see Appendix B-4 for Minimum Detection Limits).
(3) T = Trace (Concentrations detected below quantifiable reporting limits).
(4) -- = Not analyzed (Laboratory reported vial was received broken).
(5) The N.Y. State Class GA Groundwater Standard for Organics includes phenolic compounds, volatile organics and semivolatile organics; except for Acetone, Styrene, Acenaphthalene, Benzo(g,h,i)Perylene, Dibenzo(a,h)Anthracene and bis(2-Ethylhexyl)phthalate.
(6) pH readings in standard units.
(7) Conductivity readings in micromhos/cm.
(8) Temperature in degrees Celsius.
(9) Benzo(b)Fluoranthene and Benzo(k)Fluoranthene coelute.
(10) Undistilled CN = Free and dissociable CN-; method used and detected most, but not necessarily all, of the amenable CN- present.
(11) Sample too contaminated to submerge probes.
(12) Free Product in well.
(13) Total cyanide concentration may be less than distilled cyanide concentration due to analytical methods used and low detection levels.
(14) NR = Not Reported

TABLE 3-2 (Continued)
Task 3 Groundwater Analytical Results
Mechanicville Site

WELL IDENTIFIER	MW-13			MW-14	
SCREENED ZONE	BEDROCK			BEDROCK	
SAMPLE IDENTIFIER	MW-13	MW-13	MW-13 Dup	MW-14	MW-14
DATE OF SAMPLE COLLECTION	12/22/87	3/29/88	3/29/88	12/22/87	3/29/88
-VOLATILE AROMATICS-	** Volatile Organics (mg/l) (1) **				
Benzene	9.6	12	-- (4)	2.3	2.2
Toluene	3.6	6.4	--	0.34	ND
Ethylbenzene	2.0	2	--	0.061	T
Styrene	0.94	1.8	--	ND	ND
Total Xylenes	2.2	3.5	--	0.79	0.16
-OTHER-					
Methylene Chloride	ND	36	--	ND	ND
2-Butanone	ND	ND	--	ND	ND
1,1,1-Trichloroethane	ND	ND	--	ND	ND
Vinyl Acatate	ND	ND	--	ND	ND
2-Hexanone	ND	ND	--	ND	ND
Chlorobenzene	ND	ND	--	ND	ND
1,1-Dichloroethane	ND	ND	--	ND	ND
Trichloroethene	0.053	ND	--	ND	ND
Total Volatile Aromatics	18	26	--	3.5	2.4
Total Volatile Organics	18	62	--	3.5	2.4
	** Semi-Volatile Organics (mg/l) (1) **				
-PAH-					
Acenaphthene	T	T	T	0.069	0.076
Acenaphthylene	T	0.94	0.72	T	T
Anthracene	ND	T	T	T	ND
Benzo(b)Fluoranthene	ND	T	T	ND	ND
Benzo(k)Fluoranthene (9)	ND	T	ND	ND	ND
Benzo(g,h,i)Perylene	ND	ND	ND	ND	ND
Benzo(a)Anthracene	ND	T	T	ND	ND
Benzo(a)Pyrene	ND	T	T	ND	ND
Chrysene	ND	T	T	ND	ND
Fluoranthene	ND	0.3	T	ND	ND
Fluorene	T	ND	ND	T	T
Indeno(1,2,3-cd)Pyrene	ND	ND	ND	ND	ND
Naphthalene	4.6	8.1	7.8	T	1.8
Phenanthrene	T	1.3	0.92	T	T
Pyrene	ND	0.45	0.33	ND	ND
-OTHER-					
2,4 - Dimethylphenol	ND	ND	ND	ND	T
2,4-Dinitrotoluene	ND	T	ND	ND	ND
2,6-Dinitrotoluene	ND	T	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	ND	ND
2-Methylnaphthalene	0.78	2.7	2.1	0.080	0.22
2-Methylphenol	T	ND	ND	T	T
2-Nitroaniline	ND	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND
4,6 - Dinitro-2-Methylphenol	ND	ND	ND	ND	ND
4-Methylphenol	T	ND	ND	0.029	ND
4-Nitroaniline	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND
Benzoic Acid	ND	ND	ND	ND	T
Benzyl Alcohol	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	ND	ND
Dibenzofuran	ND	T	T	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND
Phenol	0.58	ND	ND	0.36	T
bis(2-Ethylhexyl)phthalate	ND	ND	ND	T	ND
Total PAH	4.6	11	9.8	0.069	1.9
Total Semi-Volatile Organics	6.0	14	12	0.54	2.1
	** Other Chemicals (mg/l) **				
-DISSOLVED METALS-					
Iron	0.14	0.26	0.18	0.4	0.16
Zinc	ND	0.01	0.02	ND	0.03
-CYANIDE-					
Total Cyanide (13)	0.15	0.1	0.13	0.12	0.09
Undistilled Cyanide (10)	ND	ND	ND	0.02	ND
-OTHER-					
Total Recoverable Phenolics	0.053	0.064	0.058	0.063	0.3
Total Organic Carbon	9	7.6	8.5	9.2	8.6
Total New York State Regulated Organics (5)	23.113	42.814	11.928	4.103	4.756
pH (6)	7.7	6.7	6.4	7.6	6.6
Conductivity (7)	1133	1332	1589	1157	1450
Temperature (8)	12.1	11.6	10.9	12.1	10.1

NOTES:
(1) Sample values were obtained by GC/MS (USEPA Methods 624 and 625).
(2) ND = Not detected (see Appendix B-4 for Minimum Detection Limits).
(3) T = Trace (Concentrations detected below quantifiable reporting limits).
(4) -- = Not analyzed (Laboratory reported vial was received broken).
(5) The N.Y. State Class GA Groundwater Standard for Organics includes phenolic compounds, volatile organics and semivolatile organics; except for Acetone, Styrene, Acenaphthalene, Benzo(g,h,i)Perylene, Dibenzo(a,h)Anthracene and bis(2-Ethylhexyl)phthalate.
(6) pH readings in standard units.
(7) Conductivity readings in micromhos/cm.
(8) Temperature in degrees Celsius.
(9) Benzo(b)Fluoranthene and Benzo(k)Fluoranthene coelute.
(10) Undistilled CN = Free and dissociable CN-; method used and detected most, but not necessarily all, of the amenable CN- present.
(11) Sample too contaminated to submerge probes.
(12) Free Product in well.
(13) Total cyanide concentration may be less than distilled cyanide concentration due to analytical methods used and low detection levels.
(14) NR = Not Reported

Task 3 Groundwater Analytical Results
Mechanicville Site

WELL IDENTIFIER	MW-15	MW-15	MW-15
SCREENED ZONE	BEDROCK	BEDROCK	BEDROCK
SAMPLE IDENTIFIER	MW-15	MW-15 Dup	MW-15
DATE OF SAMPLE COLLECTION	12/22/87	12/22/87	3/29/88
-VOLATILE AROMATICS-		** Volatile Organics (mg/l) (1) **	
Benzene	0.0026	0.0058	0.018
Toluene	ND	ND	ND
Ethylbenzene	ND	ND	ND
Styrene	ND	ND	ND
Total Xylenes	0.0027	0.0031	0.013
-OTHER-			
Methylene Chloride	ND	ND	ND
2-Butanone	ND	ND	ND
1,1,1-Trichloroethane	0.017	0.025	0.012
Vinyl Acetate	ND	ND	ND
2-Hexanone	ND	ND	T
Chlorobenzene	ND	ND	ND
1,1-Dichloroethane	0.0033	0.0031	ND
Trichloroethene	ND	ND	ND
Total Volatile Aromatics	0.0053	0.0089	0.031
Total Volatile Organics	0.026	0.037	0.043
		** Semi-Volatile Organics (mg/l) (1) **	
-PAH-			
Acenaphthene	0.040	0.026	0.031
Acenaphthylene	0.045	0.027	T
Anthracene	ND	ND	ND
Benzo(b)Fluoranthene	ND	ND	ND
Benzo(k)Fluoranthene (9)	ND	ND	ND
Benzo(g,h,i)Perylene	ND	ND	ND
Benzo(a)Anthracene	ND	ND	ND
Benzo(a)Pyrene	ND	ND	ND
Chrysene	ND	ND	ND
Fluoranthene	ND	ND	ND
Fluorene	T	T	0.011
Indeno(1,2,3-cd)Pyrene	ND	ND	ND
Naphthalene	0.091	T	T
Phenanthrene	T	T	T
Pyrene	ND	ND	T
-OTHER-			
2,4 - Dimethylphenol	ND	ND	ND
2,4-Dinitrotoluene	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND
2-Methylnaphthalene	0.030	T	ND
2-Methylphenol	ND	ND	ND
2-Nitroaniline	ND	ND	ND
3-Nitroaniline	ND	ND	ND
4,6 - Dinitro-2-Methylphenol	ND	ND	ND
4-Methylphenol	ND	ND	ND
4-Nitroaniline	ND	ND	ND
4-Nitrophenol	ND	ND	ND
Benzoic Acid	ND	ND	ND
Benzyl Alcohol	ND	ND	T
Butylbenzylphthalate	ND	ND	ND
Dibenzofuran	ND	ND	T
Hexachloroethane	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	ND
Nitrobenzene	ND	ND	T
Phenol	ND	ND	T
bis(2-Ethylhexyl)phthalate	ND	ND	ND
Total PAH	0.18	0.053	0.042
Total Semi-Volatile Organics	0.21	0.053	0.042
-DISSOLVED METALS-		** Other Chemicals (mg/l) **	
Iron	0.13	ND	0.16
Zinc	ND	0.014	0.01
-CYANIDE-			
Total Cyanide (13)	ND	0.06	ND
Undistilled Cyanide (10)	ND	ND	ND
-OTHER-			
Total Recoverable Phenolics	0.006	0.006	ND
Total Organic Carbon	2.9	3.2	3.9
Total New York State Regulated Organics (5)	0.242	0.069	0.085
pH (6)	7.9	7.9	7.2
Conductivity (7)	949	1125	1029
Temperature (8)	12.1	11.4	13.4

NOTES:
(1) Sample values were obtained by GC/MS (USEPA Methods 624 and 625).
(2) ND = Not detected (see Appendix B-4 for Minimum Detection Limits).
(3) T = Trace (Concentrations detected below quantifiable reporting limits).
(4) -- = Not analyzed (Laboratory reported vial was received broken).
(5) The N.Y. State Class GA Groundwater Standard for Organics includes phenolic compounds, volatile organics and semivolatile organics; except for Acetone, Styrene, Acenaphthalene, Benzo(g,h,i)Perylene, Dibenzo(a,h)Anthracene and bis(2-Ethylhexyl)phthalate.
(6) pH readings in standard units.
(7) Conductivity readings in micromhos/cm.
(8) Temperature in degrees Celsius.
(9) Benzo(b)Fluoranthene and Benzo(k)Fluoranthene coelute.
(10) Undistilled CN = Free and dissociable CN-; method used and detected most, but not necessarily all, of the amenable CN- present.
(11) Sample too contaminated to submerge probes.
(12) Free Product in well.
(13) Total cyanide concentration may be less than diatilled cyanide concentration due to analytical methods used and low detection levels.
(14) NR = Not Reported.

TABLE 3-3
Task 3 Surface Water Analytical Results
Mechanicville Site

SITE IDENTIFIER:	------UPSTREAM------		------ADJACENT------		-----DOWNSTREAM------	
SAMPLE IDENTIFIER:	SW-01	SW-01	SW-02	SW-02	SW-04	SW-04
DATE OF SAMPLE COLLECTION:	12/22/87	3/30/88	12/22/87	3/30/88	12/22/87	3/30/88
**** Volatile Organics (mg/l) ****						
- VOLATILE AROMATICS -						
Benzene	ND (1)	ND	ND	-- (2)		
Toluene	ND	ND	ND	--	ND	--
Ethylbenzene	ND	ND	ND	--	ND	--
Styrene	ND	ND	ND	--	ND	--
Total Xylenes	ND	ND	ND	--	ND	--
- OTHER -						
Methylene Chloride	ND	ND	ND	--	ND	--
2-Butanone	ND	ND	ND	--	ND	--
Total Volatile Aromatics	ND	ND	ND	--	ND	--
Total Volatile Organics	ND	ND	ND	--	ND	--
**** Semi-Volatile Organics (mg/l) ****						
-PAH-						
Acenaphthene	ND	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	ND	ND
Benzo(b)Fluoranthene	ND	ND	ND	ND	ND	ND
Benzo(k)Fluoranthene	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)Perylene	ND	ND	ND	ND	ND	ND
Benzo(a)Anthracene	ND	ND	ND	ND	ND	ND
Benzo(a)Pyrene	ND	ND	ND	ND	ND	ND
Chrysene	ND	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)Pyrene	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND	ND
Phenanthrene	ND	ND	ND	ND	ND	ND
Pyrene	ND	ND	ND	ND	ND	ND
-OTHER-						
bis (2-Ethylhexyl) Phthalate	0.39	0.034	ND	ND	ND	ND
Total PAH	ND	ND	ND	ND	ND	ND
Total Semi-Volatile Organics	0.39	0.034	ND	ND	ND	ND
**** Other Chemicals (mg/l) ****						
-METALS-						
Iron	0.20	0.38	1.1	1.8	0.24	0.42
Zinc	ND	0.03	0.014	0.02	ND	ND
-CYANIDE-						
Total Cyanide	ND	ND	ND	ND	ND	ND
Undistilled Cyanide (3)	ND	ND	ND	ND	ND	ND
-OTHER-						
Total Recoverable Phenolics	ND	ND	ND	ND	ND	0.011
Total Organic Carbon	6.1	4.2	6.1	4.9	4.8	4.7

NOTES:
(1) ND = Not detected (see Appendix B-4 for minimum detection limits).
(2) NA = Not analyzed (laboratory reported vial was received broken).
(3) Undistilled CN = Free dissociable CN-; method used detected most, but not necessarily all, of amenable CN- present

TABLE 3-4
Task 3 Sediment Analytical Results
Mechanicville Site

SITE IDENTIFIER	----UPSTREAM----		----ADJACENT----		----------DOWNSTREAM----------			
SAMPLE IDENTIFIER	SD-01	SD-01	SD-02	SD-02	SD-04	DUP-01	SD-04	SD-DUP
DATE OF SAMPLE COLLECTION	12/22/87	3/30/88	12/22/87	3/30/88	12/22/87	12/22/87	3/30/88	3/30/88
** Volatile Organics (mg/kg) **								
-VOLATILE AROMATICS-								
Benzene	ND (1)	ND	ND	T	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	0.087	ND	ND	ND	ND	ND
Styrene	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	ND	ND	ND	ND	ND	ND	ND	ND
-OTHER-								
Methylene Chloride	ND	R (3)	ND	R	ND	ND	R	R
2-Butanone	ND	R	ND	R	ND	ND	R	R
Total Volatile Aromatics	ND	ND	0.087	T	ND	ND	ND	ND
Total Volatile Organics	ND	ND	0.087	T	ND	ND	ND	ND
** Semi-Volatile Organics (mg/kg) **								
-PAH-								
Acenaphthene	ND	ND	T	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	T	ND	ND	ND	ND	ND
Anthracene	ND	ND	T	ND	ND	ND	ND	ND
Benzo(a)Anthracene	T	ND	0.53	ND	ND	ND	ND	ND
Benzo(b)Fluoranthene	ND	ND	0.94	ND	ND	ND	ND	ND
Benzo(k)Fluoranthene	ND	ND	(5)	ND	ND	ND	ND	ND
Benzo(g,h,i,)Perylene	ND	ND	T	ND	ND	ND	ND	ND
Benzo(a)Pyrene	ND	ND	0.59	ND	ND	ND	ND	ND
Chrysene	T (2)	ND	0.58	ND	ND	ND	ND	ND
Dibenz(a,h)Anthracene	ND	ND	T	ND	ND	ND	ND	ND
Fluoranthene	T	ND	T	ND	T	T	ND	ND
Fluorene	ND	ND	T	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)Pyrene	ND	ND	T	ND	ND	ND	ND	ND
Naphthalene	ND	ND	0.48	ND	ND	T	ND	ND
Phenanthrene	T	ND	0.9	T	T	T	ND	ND
Pyrene	T	ND	1.1	ND	T	T	ND	ND
-OTHER-								
4-Methylphenol	ND	ND	T	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	T	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	T	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ND	ND	T	ND	ND	ND	ND	ND
Di-n-octylphthalate	ND	25	ND	T	ND	ND	T	T
Total PAH	T	ND	5.1	T	T	T	ND	ND
Total Semi-Volatile Organics	T	25	5.1	T	T	T	T	T
-METALS-								
Iron	7700	NR (4)	8400	NR	8700	7100	NR	NR
Zinc	27	NR	45	NR	25	28	NR	NR
-CYANIDE-								
Total Cyanide (ppm) (6)	ND	NR	1.3	NR	ND	ND	NR	NR
Undistilled Cyanide	ND	NR	ND	NR	ND	ND	NR	NR
-OTHER-								
Total Recoverable Phenolics	1.3	NR	2.3	NR	1.2	0.68	NR	NR
Total Organic Carbon	12000	NR	32000	NR	18000	11000	NR	NR

NOTES:
(1) ND = Not detected (See Appendix B-4 for minimum detection limits).
(2) T = Trace concentrations detected below the quantifiable reporting limits.
(3) R = Data rejected because analysis of blank indicated sampling or lab-derived contamination
(4) NR = Analysis not requested
(5) Benzo(b)Fluoranthene and Benzo(k)Fluoranthene coeluted.
(6) Undistilled CN = Free and dissociable CN-; method used detected most, but not necessarily all, of the amenable CN- present.

TABLE 3-5

TASK 3 AIR ANALYTICAL RESULTS - ppm
MECHANICVILLE SITE

	Office		Garage		Storeroom		Background	
Sample Identifier	OF-01	OF-02	GA-01	GA-02	ST-01	ST-02	BA-01	BA-01
Date of Sample Collection	12/28/88	12/28/88	12/28/88	12/28/88	12/28/88	12/28/88	12/28/88	12/28/88
Volatile Aromatics[1]								
Benzene	0.03	0.031	0.016	0.015	0.043	0.043	ND[2]	ND
Toluene	0.009	0.009	0.048	0.048	0.012	0.012	0.037	0.028
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes	ND	ND	ND	ND	ND	ND	ND	ND
Total Volatile Aromatics	0.039	0.040	0.064	0.063	0.055	0.055	0.037	0.028

NOTES:

[1] Samples analyzed by NIOSH Method 1501 by ESA Laboratories in Bedford, MA.

[2] ND = Not detected. The minimum detection limits are: benzene - 0.013 ppm; ethylbenzene and xylenes - 0.01 ppm.