GENERAL CABLE SITE
ROD MILL PARCEL
SUPPLEMENTAL
SPILL INVESTIGATION
WORK PLAN

(Revision #1)

(Index # D6-0001-97-07)

ROME, NEW YORK 13440

JEE PROJECT NO: 03552

DATE ISSUED:
OCTOBER 29, 2003
(Revision #1)

Prepared For:
NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Prepared By:
JACK EISENBACH ENGINEERING, P.C.
291 Genesee Street
Utica, New York 13501

Mark P. Ruhnke, P.E.
Managing of Engineering Services

GENERAL CABLE SITE
ROD MILL PARCEL
SUPPLEMENTAL
SPILL INVESTIGATION
WORK PLAN

(Revision #1)

(Index # D6-0001-97-07)

ROME, NEW YORK 13440

Jack Eisenbach Engineering, P.C.
291 Genesee Street, Utica, New York 13501 · 315 735 1916 · Fax 315 735 6365 · E-mail jee@borg.com

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF APPENDIXES

1.0 INTRODUCTION

This Work Plan is being submitted to the New York State Department of Environmental Conservation ("Department"), under the Voluntary Remedial Agreement (VRA) between Charles A. Gaetano (Owner) and the Department. This Work Plan presents the proposed scope of work and procedures for performing the required supplemental investigation of petroleum spill # 0212778, located on the Rod Mill Parcel of the former General Cable Site (see Figure-1 for site location).

2.0 BACKGROUND

This supplemental investigation was requested by the Department to gather additional data to support the Departments decision on closing the Spill # 0212778. Remedial excavation was competed by the Owner in February 20, 2003 and is reported in the Rod Mill Parcel, Remedial Action Closure Report completed by JEE (see Appendix A for report extract). Complications with closure sampling analysis during this remedial excavation created sample results with elevated detection limits, above the TAGM 4046 Soil Cleanup Objectives[1]. In addition to this, oil product was observed by the Department emanating from the storm water line into the Barge Canal after remedial action was completed. Based on the complicated closure sampling results and visual impact emanating from storm line, the Department has requested the following:

a.) Verify levels of contamination remaining on the side walls of the excavation;
b.) Determine the source of the oil sheen observed in the storm sewer at the site;
c.) Evaluate groundwater to determine if a product layer and/ or sheen exists (wells to be placed on each side of excavation, both sides of storm water line, and direction of groundwater to be determined).

3.0 SCOPE OF WORK

The proposed investigation will include necessary work to determine the extent of petroleum impacted area and address the Departments following concerns:

a.) Verify levels of contamination remaining on the sidewalls of the excavation.

Eight (8) soil borings (PRSB 1,2,3,4,5,6,7 & 8) shall be installed at the Site in the areas defined on Figure-3. These soil borings and samples locations have been located in areas of the previous closure sampling, for the purpose of duplicating the previous closure samples.

Soil samples shall be field assessed and samples shall be collected for laboratory analysis from depth revealing the highest PID reading or visual staining. The samples shall be assessed, collected and analyzed as defined the following sections of this report.

[1] New York State Department of Environmental Conservation, Division of Hazardous Waste Remediation, Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives (HWR-94-4046, dated January 24, 1994, amended Dec 20, 2000).

b.) Determine the source of oil sheen observed emanating from the Storm Sewer into the Barge Canal.

Four (4) soil borings will be installed and finished with monitoring wells (PRSB - 12 13, 14 & 15) and monitoring wells (PRMW -12, 13, 14, & 15). Two shall be placed down gradient of the former spill area (PRMW-13 &14); one shall be placed adjacent to the storm line (PRMW-12) in the former spill area. The last one shall be placed adjacent to the storm line, up gradient of the former spill area (PRMW-15). Water and soil samples shall be collected and analyzed by laboratory procedure as defined the following sections of this report.

JEE shall also open the accessible manholes of the storm water line and assess the water for petroleum by visual, PID and olfactory inspection.

c.) Evaluate groundwater to determine if a product layer and/ or sheen exists.

A total of eight monitoring wells (PRMW- 9, 10, 11, 12, 13, 14, 15 & 16) will be installed at the site, as defined in Figure-3. Groundwater samples will be collected from each monitoring well and visually inspected for oil and/or sheens. Groundwater shall also be collected and analyzed by laboratory procedure as defined in the following sections of this report.

Water table elevations shall be surveyed and plotted to determine the direction of groundwater movement.

3.1 Soil Assessment

Soil borings will be installed using geoprobe push rod sampling techniques with 2-inch macro-core, teflon lined tube samplers (see Figure 3 for locations). The borings will be advanced in 4-foot intervals to depths of 20 feet below the ground surface (bgs). All liners will be disposed of after each use and all sampling tubes will be decontaminated with an Alconox detergent solution between uses.

During the installation of the soil borings, the soil will be field screened for the presence of petroleum odors, staining, and volatile organic compounds (VOCs). VOCs will be assessed using a photo-ionization detector (PID). Field observations pertaining to the soil characteristics such as soil classification (USCS), color, odor, and PID readings will be recorded in boring logs.

Soil samples will be collected from selected borings and sent to the laboratory for analysis. JEE will collect soil samples from the soil exhibiting the highest PID readings, or from the area with the greatest visual staining if no PID readings are present. If no impact is identified, a soil sample will be collected from the zone of soil in contact with the water table (capillary fringe zone). The locations of the samples will be determined in the field by the field engineer.

3.2 Groundwater Assessment

The borings identified as PRB-1, 2, 3, 4, 5, 6, 7 & 8 (see Figure 3) will be finished with 1" well points. Groundwater samples will be collected from each of the monitoring wells.

The monitoring wells will be constructed of 10-foot long sections of 1-inch PVC slotted well screen, threaded to a solid PVC riser and placed within a 2-inch diameter borehole. The screen will be placed so that it will intercept the water table (3 feet above, 7 feet below). A surface seal of bentonite chips will be placed around each PVC riser and hydrated to prevent surface infiltration into the borehole. The well points will be developed by pumping with a peristaltic pump or equivalent. Following a stabilization period of one week, depth to water measurements will be obtained. The elevation (MSL) of the water table in each well point will be determined by a survey. Elevations will be found using existing benchmarks at the site (Manhole Cover). Wells will be sampled with a hand held PVC bailer.

The direction of groundwater movement shall be determined by surveying the elevation of the water table in each monitoring well and then plotting the elevations in a groundwater contour diagram. The direction of water movement shall be determined form evaluation of the contours.

4.0 SAMPLE ANALYSIS

4.1 Soil

Soil Samples will be analyzed by EPA methods 8260 and 8270 Base Neutrals with ASP Category B deliverables. The analytical data will be summarized and compared to the NYSDEC TAGM 4046 (TAGM 4046), as amended Dec 20, 2000, Recommend Soil Cleanup Objectives.

4.2 Groundwater

The water samples will be collected from each well point and analyzed by EPA Method 620 and 625 Base Neutrals. The data will then be compared to the Groundwater Standards contained in the TAGM 4046.

4.0 QUALITY ASSURANCE

4.1 Closure Sampling

Soil and water samples will be collected by the procedures identified in the Sampling, Analysis & Monitoring Plan (SAMP, 1999) completed for the site by JEE, dated June 23, 1999.

4.2 Laboratory Qualifications and Reporting Requirements

Friends Laboratory Inc. is a contract laboratory that shall be providing analytical services for the project. All analytical reporting will be NYS DEC ASP Category B Deliverables (see Appendix B for details).

4.3 Health & Safety Plan

All work will be completed in compliance with the safety guidelines identified in Site Specific Health and Safety Plan, completed for the site by JEE, dated February 2, 1999.

4.4 Community Air Monitoring Program

Air sampling will be completed according to the Community Air Monitoring Program identified in Sampling, Analysis & Monitoring Plan the site, dated June 23, 1999.

5.0 REPORTING CONCLUSIONS AND RECOMMENDATIONS

After the analytical results have been received and validated, an investigation report will be prepared by JEE. This report will include a description of the sampling investigation including, sample procedures, collection and analysis, sample locations, sampling logs, boring logs, analytical results and data validation reports. All results will be compared to the NYS DEC TAGM 4046 Soil Cleanup Objectives and Groundwater Standards. Based on the study JEE shall provide conclusions on the following:

a.) Levels contaminants remaining at sidewalls of excavation;

b.) The source of oil sheen observed emanating from the Storm Sewer into the Barge Canal;

c.) Evaluation of groundwater to determine if a product layer and/ or sheen exists, and the direction of groundwater movement.

FIGURE 1

Site Location Map

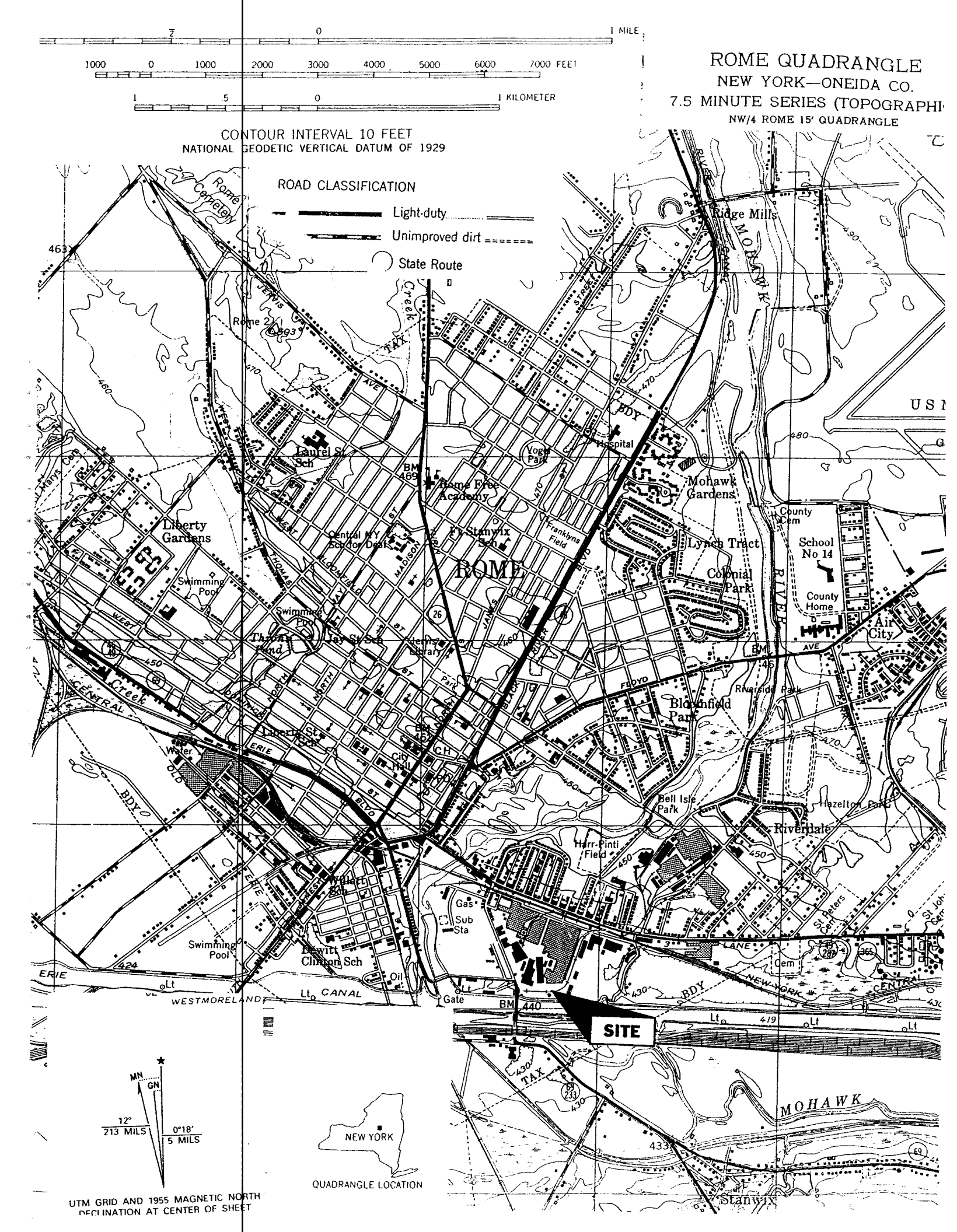

ROME QUADRANGLE
NEW YORK—ONEIDA CO.
7.5 MINUTE SERIES (TOPOGRAPHI
NW/4 ROME 15' QUADRANGLE
1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 KILOMETER
CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929
ROAD CLASSIFICATION
Light-duty
Unimproved dirt
State Route
ROME
SITE
Rome Cemetery
Ridge Mills
Rome 2
Laurel St Sch
Home Free Academy
Hospital
Vogel Park
Mohawk Gardens
Liberty Gardens
Central NY Sch for Deaf
Ft Stanwix Sch
Franklyns Field
Lynch Tract
Colonial Park
County Cem
School No 14
County Home
Air City
Swimming Pool
Thomas Pond
Jay St Sch
Library
Riverside Park
Bloomfield Park
Liberty St Sch
City Hall
Water
Bell Isle Park
Hazelton Park
Riverdale
Harr-Pinti Field
Gas
Sub Sta
Dewitt Clinton Sch
St Peters Cem
Oil
Gate
WESTMORELAND
Lt CANAL
NEW YORK CENTRAL
MOHAWK
Stanwix
NEW YORK
QUADRANGLE LOCATION
MN
GN
12° 213 MILS
0°18' 5 MILS
UTM GRID AND 1955 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

FIGURE 2

Site Plan

SCALE:
0' 50'

MOSCA BROS.

MILL STREET

PUMP HOUSE

BARGE CANAL

11
ROD MILL PARCEL

PORTION OF BUILDING TO BE REUSED

PROPOSED ROAD

CANTERBURY EXPANSION

CITY ROADWAY

SUMP

13

38

UNDERGROUND GASOLINE STORAGE TANK

STGE. SHED

SHED

MH

39

41

FUTURE ROAD

UNDERGROUND FUEL OIL TANK

9

53

39A

52

FUTURE DEVELOPMENT

33

39

WATER TOWER

FORMER OIL PUMP HOUSE

FORMER OIL TANK

LANDS N/F MOSCA BROS. MOVING AND STORAGE

PROPOSED FUTURE ROAD

34

SPILL REMEDIATION AREA

PECORARO SITE

41

LEGEND

- PROPERTY LINE
- EXISTING BUILDING LOCATION
- FORMER BUILDING LOCATION
- (34) BUILDING NUMBER
- EXISTING UNDERGROUND UTILITY TUNNEL
- ST EXISTING STORM SEWER LINE
- FO EXISTING FUEL OIL LINE

REFERENCE DWG	DESCRIPTION	NO	DRWN	DATE	REVISION	CHKD	DATE	APPVD	DATE

CURRENT DATE:

PLANNING DEPARTMENT
ROME, NEW YORK

FIGURE 2
ROD MILL PARCEL SITE PLAN

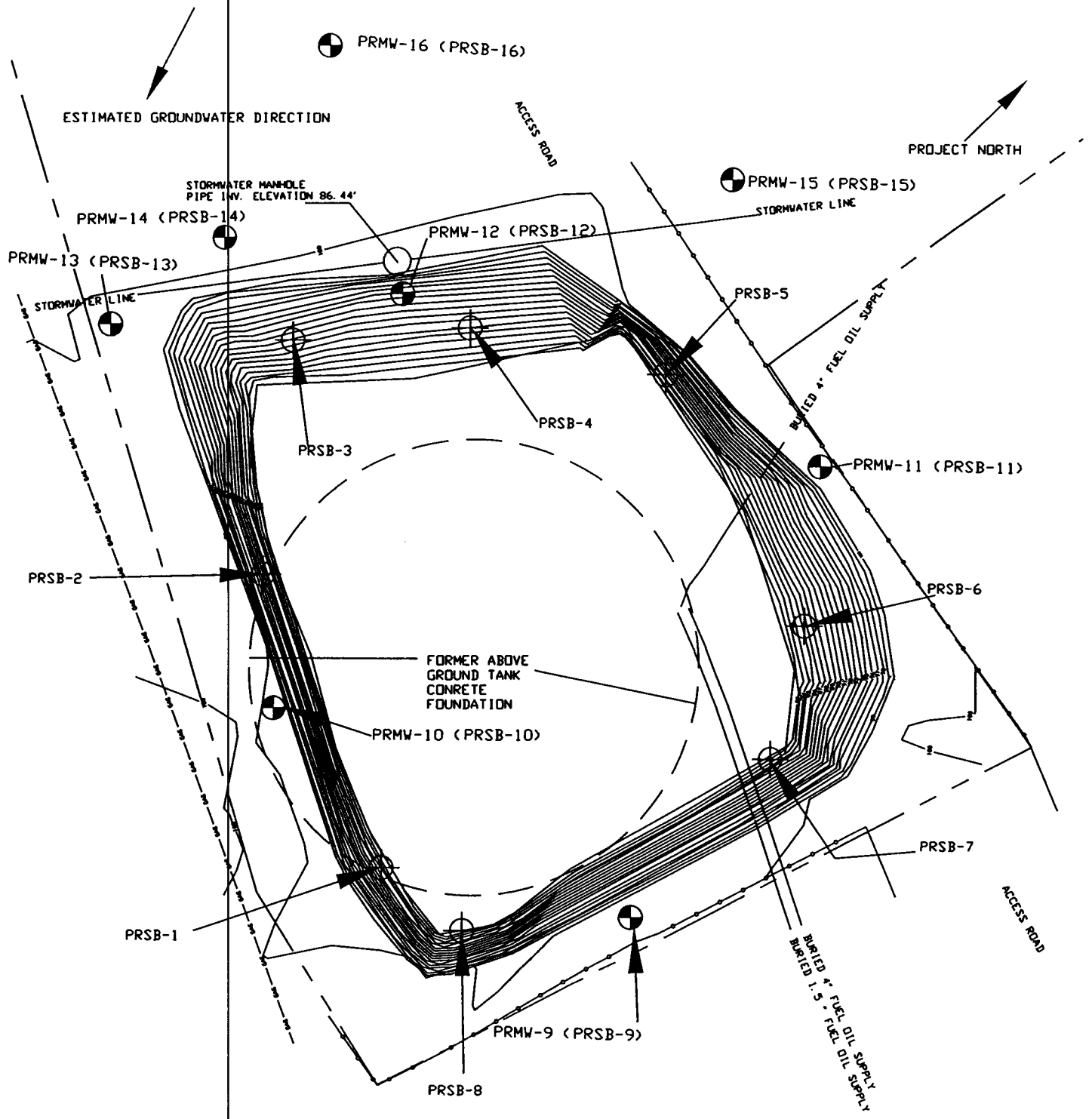
ROME, NEW YORK

JACK EISENBACH ENGINEERING, P.C.
251 Genesee Street, Utica, NY 13501 315-735-1918
181 Carlton Street, Buffalo, NY 14203 716-882-3903

3/21/01

FIGURE 3

Investigation Plan



KEY

SCALE 1' =16'

- PROPERTY LINE
- 99 DEPTH CONTOUR (1-FT CONTOUR INTERVAL)
- CHAIN LINK FENCE
- PRMW-# (PRSB-#) PROPOSED POST REMEDIATION MONITORING WELL (POST REMEDIATION SOIL BORING)
- PRSB-# PROPOSED POST REMEDIATION SOIL BORING

Jack Eisenbach Engineering, P.C.
291 Genesee Street, Utica, NY 13501 315-735-1916
Fax 315-735-6365 www.jackeisenbachengineering.com

DATE: 10/30/03 revised 11/17/03
DRAWN: MPR
NO.:

ROD MILL PARCEL
SUPPLEMENTAL INVESTIGATION SAMPLING PLAN

FIG.-3

APPENDIX A

JEE's Remedial Action Report, Extract including:
Sampling Sumary Table (Table –1)
&
Sampling Plan (Fig-6)

ROD MILL PARCEL

REMEDIAL ACTION CLOSURE REPORT

(Amendment to Environmental Remediation Closure Report April 26, 2001)

Voluntary Remedial Agreement
(Charles Gaetano-New York State Department of Environmental Conservation)
Index # D6-0001-97-07

Jack Eisenbach Engineering, P.C.
291 Genesee Street, Utica, New York 13501 · 315-735-1916 · Fax 315-735-6365 · JackEisenbachEnginneering.com

ROD MILL PARCEL

REMEDIAL ACTION CLOSURE REPORT

(Amendment to Environmental Remediation Closure Report April 26, 2001)

Voluntary Remedial Agreement
(Charles Gaetano-New York State Department of Environmental Conservation)
Index # D6-0001-97-07

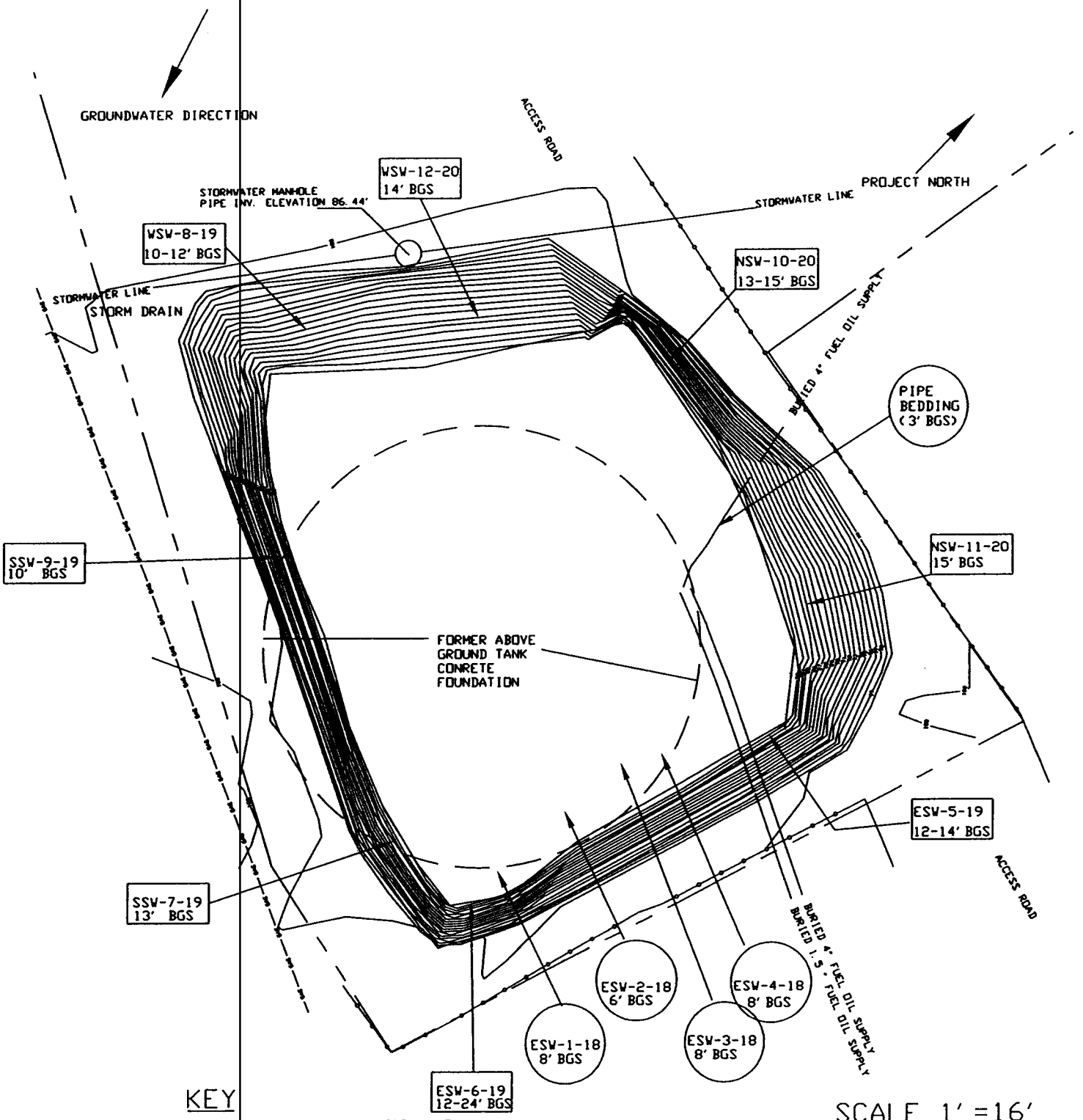
JEE Project No: 8514

Prepared For:
New York State Department of Environmental Conservation
Division of Environmental Remediation
State Office Building
317 Washington Street
Watertown, New York

Prepared By:
JACK EISENBACH ENGINEERING, P.C.
291 Genesee Street
Utica, NY 13501

Mark P. Ruhnke. P.E.
Environmental Engineer

DATE ISSUED: May 30, 2003



Jack Eisenbach Engineering, P.C.
291 Genesee Street, Utica, NY 13501 315-735-1916
Fax 315-735-6365 www.jackeisenbachengineering.com

DATE: 5/30/03
DRAWN: MPR
NO.:

ROD MILL PARCEL
REMEDIAL EXCAVATION & SAMPLING PLAN

FIG.-6

TABLE-1

Summary of Soil Sampling Results, Rod Mill Parcel-General Cable (by: Eisenbach Enfineering, P.C. 6/2/03)

	NYSDEC TAGM 4046 Soil Cleanup Levels	ESW-1-18	ESW-2-18	ESW-3-18	ESW-4-18	ESW-5- 19	ESW-6- 19	SSW-7-19	SSW-9-19	WSW-8-19**	WSW-12-20**	NSW-10-20	NSW-10-20	NSW-11-20	PIPE#1 BEDDING	WSW-8-19 DILUTED	WSW-12-20 DILUTED
	Levels					(12'-14'	(12'-24'	(13')	(10')	(10'-12')	(14')	(13'-15')	DUP	(15')		(10'-12')	(14')
		001	002	003	004	005	006	007	008	009	010	011	012	013	014	009	010
Analysis		2/18/03	2/18/03	2/18/03	2/18/03	2/19/03	2/19/03	2/19/03	2/19/03	2/19/03	2/20/03	2/20/03	2/20/03	2/20/03	2/18/03	2/19/03	2/20/03
ASP B VOLATILES-SOIL	mg/kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg
1,1,1-Trichloroethane	0.8	<62	170	<64	<14	<64	<59	<12	<11	<62	<54	<57	<52	<60	630	*	*
1,1,2,2-Tetrachloroethane	0.6	<62	<70	<64	<14	<64	<59	<12	<11	<62	<54	<57	<52	<60	<160	*	*
1,1,2-Trichloroethane		<62	<70	<64	<14	<64	<59	<12	<11	<62	<54	<57	<52	<60	<160	*	*
1,1-Dichloroethane	0.2	<62	<70	<64	<14	<64	<59	<12	<11	<62	<54	<57	<52	<60	<160	*	*
1,1-Dichloroethylene	0.4	<62	<70	<64	<14	<64	<59	<12	<11	<62	<54	<57	<52	<60	<160	*	*
1,2-Dichloroethane	0.1	<62	<70	<64	<14	<64	<59	<12	<11	<62	<54	<57	<52	<60	<160	*	*
1,2-Dichloropropane	0.3	<62	<70	<64	<14	<64	<59	<12	<11	<62	<54	<57	<52	<60	<160	*	*
2-Butanone-(MEK)	0.3	<62	<70	<64	<14	<64	<59	<12	<11	<62	<54	<57	<52	<60	<160	*	*
2-Hexanone		<62	<70	<64	<14	<64	<59	<12	<11	<62	<54	<57	<52	<60	<160	*	*
4-Methyl-2-Pentanone (MIBK)	1	<62	<70	<64	<14	<64	<59	<12	<11	<62	<54	<57	<52	<60	<160	*	*
Acetone	0.2	51	<70	79	31	84	<59	7	15	<62	<54	29	55	<60	<160	*	*
Benzene	1	<62	<70	<64	<14	<64	<59	<12	<11	<62	<54	<57	<52	<60	<160	*	*
Bromodichloromethane		<62	<70	<64	<14	<64	<59	<12	<11	<62	<54	<57	<52	<60	<160	*	*
Bromoform		<62	<70	<64	<14	<64	<59	<12	<11	<62	<54	<57	<52	<60	<160	*	*
Bromomethane		<62	<70	<64	<14	<64	<59	<12	<11	<62	<54	<57	<52	<60	<160	*	*
Carbon Disulfide	2.7	<62	<70	<64	<14	<64	<59	<12	3	<62	<54	<57	<52	<60	<160	*	*
Carbon Tetrachloride	0.6	<62	<70	<64	<14	<64	<59	<12	<11	<62	<54	<57	<52	<60	<160	*	*
Chlorobenzene	1.7	<62	<70	<64	<14	<64	<59	<12	<11	<62	<54	<57	<52	<60	<160	*	*
Chloroethane	5	<62	<70	<64	<14	<64	<59	<12	<11	<62	<54	<57	<52	<60	<160	*	*
Chloroform	0.3	<62	<70	<64	<14	<64	<59	<12	<11	<62	<54	<57	<52	<60	<160	*	*
Chloromethane		<62	<70	<64	<14	<64	<59	<12	<11	<62	<54	<57	<52	<60	<160	*	*
cis-1,2-Dichloroethylene		<62	<70	<64	<14	<64	<59	<12	<11	<62	<54	<57	<52	<60	140	*	*
cis-1,3-Dichloropropene		<62	<70	<64	<14	<64	<59	<12	<11	<62	<54	<57	<52	<60	<160	*	*
Dibromochloromethane	N/A	<62	<70	<64	<14	<64	<59	<12	<11	<62	<54	<57	<52	<60	<160	*	*
Ethylbenzene	5.5	<62	52	<64	<14	80	<59	<12	<11	94	<54	<57	<52	41	<160	*	*
M & P XYLENE	1.2	<62	120	53	<14	180	<59	<12	<11	220	55	<57	<52	140	<160	*	*
Methylene Chloride	0.1	<62	<70	<64	<14	<64	<59	<12	<11	<62	<54	<57	<52	<60	<160	*	*
O-XYLENE	1.2	<62	130	<64	<14	24	<59	<12	<11	57	<54	<57	<52	28	<160	*	*
Styrene		<62	<70	<64	<14	<64	<59	<12	<11	<62	<54	<57	<52	<60	<160	*	*
Tetrachloroethylene		<62	<70	<64	<14	<64	<59	<12	<11	<62	<54	<57	<52	<60	<160	*	*
Toluene	1.5	<62	33	<64	<14	<64	<59	<12	<11	<62	<54	<57	<52	<60	<160	*	*
trans-1,2-Dichloroethylene		<62	<70	<64	<14	<64	<59	<12	<11	<62	<54	<57	<52	<60	<160	*	*
trans-1,3-Dichloropropene		<62	<70	<64	<14	<64	<59	<12	<11	<62	<54	<57	<52	<60	<160	*	*
Trichloroethylene		<62	**820**	<64	<14	<64	<59	<12	<11	<62	<54	<57	<52	<60	**950**	*	*
Vinyl Chloride	0.2	<62	<70	<64	<14	<64	<59	<12	<11	<62	<54	<57	<52	<60	<160	*	*

Notes:

SB-Site Background

MDL - Method detection Limit

NA - Not available

BOLD - Values in black indicate compounds that have been detected and are above the NYSDEC TAGM Cleanup Levels

Blank fields indicate no analysis completed

*-Diluted sample, refer to laboratory report of analysis for detection limit

** - Sample diluted and reanalyzed due to elevated detcetion limits (results of diluted analysis posted on last two colums of Table)

TABLE-1

Summary of Soil Sampling Results, Rod Mill Parcel-General Cable (by: Eisenbach Enfineering, P.C. 6/2/03)

	NYSDEC TAGM 4046 Soil Cleanup Levels	ESW-1-18	ESW-2-18	ESW-3-18	ESW-4-18	ESW-5- 19	ESW-6- 19	SSW-7-19	SSW-9-19	WSW-8-19**	WSW-12-20**	NSW-10-20	NSW-10-20	NSW-11-20	PIPE#1 BEDDING	WSW-8-19 DILUTED	WSW-12-20 DILUTED
	Levels					(12'-14'	(12'-24'	(13')	(10')	(10'-12')	(14')	(13'-15')	DUP	(15')		(10'-12')	(14')
		001	002	003	004	005	006	007	008	009	010	011	012	013	014	009	010
Analysis		2/18/03	2/18/03	2/18/03	2/18/03	2/19/03	2/19/03	2/19/03	2/19/03	2/19/03	2/20/03	2/20/03	2/20/03	2/20/03	2/18/03	2/19/03	2/20/03
ASP B SEMIVOLATILE-SOILS	mg/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg
1,2,4-Trichlorobenzene	3.4	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*
1,2-Dichlorobenzene	7.9	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*
1,3-Dichlorobenzene	1.6	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*
1,4-Dichlorobenzene	8.5	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*
2,2'-oxybis(1-Chloropropane		<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*
2,4,5-Trichlorophenol	0.1	<27000	<150000	<100000	<22000	<130000	<150000	<25000	<26000	<140000	<22000	<120000	<27000	<130000	<260000	*	*
2,4,6-Trichlorophenol		<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*
2,4-Dichlorophenol	0.4	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*
2,4-Dimethylphenol		<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*
2,4-Dinitrophenol		<27000	<150000	<100000	<22000	<130000	<150000	<25000	<26000	<140000	<22000	<120000	<27000	<130000	<260000	*	*
2,4-Dinitrotoluene		<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*
2,6-Dinitrotoluene		<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*
2-Chloronaphthalene		<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*
2-Chlorophenol	0.8	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*
2-Methyl Naphthalene	36.4	<11000	31000	13000	970	**55000**	16000	1200	1100	32000	17000	<48000	12000	20000	<100000	12000	11000
2-Methyl Phenol	0.1/MDL	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*
2-Methyl-4,6-dinitrophenol		<27000	<150000	<100000	<22000	<130000	<150000	<25000	<26000	<140000	<22000	<120000	<27000	<130000	<260000	*	*
2-Nitroaniline	0.43/ MDL	<27000	<150000	<100000	<22000	<130000	<150000	<25000	<26000	<140000	<22000	<120000	<27000	<130000	<260000	*	*
2-Nitrophenol	0.33/MDL	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*
3&4-Methyl Phenol		<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*
3,3'-Dichlorobenzidine	N/A	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*
3-Nitroaniline	0.5 or MD	<27000	<150000	<100000	<22000	<130000	<150000	<25000	<26000	<140000	<22000	<120000	<27000	<130000	<260000	*	*
4-Bromophenyl Phenyl Ether		<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*
4-Chloro-3-methylphenol	0.24/MDL	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*
4-Chloroanaline	0.22/MDL	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*
4-Chlorophenyl Phenyl Ether		<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*
4-Nitroaniline		<27000	<150000	<100000	<22000	<130000	<150000	<25000	<26000	<140000	<22000	<120000	<27000	<130000	<260000	*	*
4-Nitrophenol	0.10/MDL	<27000	<150000	<100000	<22000	<130000	<150000	<25000	<26000	<140000	<22000	<120000	<27000	<130000	<260000	*	*
Acenaphthylene	41	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*
Acenapthene	50	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*
Anthracene	50	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	1800	2000
Benzo (g,h,i) perylene	0.061/MDL	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*
Benzo(a)anthracene	0.224/MDL	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*
Benzo(a)pyrene	0.061/MDL	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*
Benzo(b,k)fluoranthene	1.1	<21000	<120000	<82000	<18000	<100000	<120000	<20000	<21000	<120000	<18000	<95000	<21000	<100000	<210000	*	*
bis(2-Chloroethoxy)methane		<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*
bis(2-Chloroethyl)ether		<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	11000	*
bis(2-Ethylhexyl)phthalate	50	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*
Butyl Benzyl Phthalate	50	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*
Carbazole		<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*
Chrysene		<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*

Notes:

SB-Site Background

MDL - Method detection Limit

NA - Not available

BOLD - Values in black indicate compounds that have been detected and are above the NYSDEC TAGM Cleanup Levels

Blank fields indicate no analysis completed

*-Diluted sample, refer to laboratory report of analysis for detection limit

** - Sample diluted and reanalyzed due to elevated detcetion limits (results of diluted analysis posted on last two colums of Table)

TABLE-1

Summary of Soil Sampling Results, Rod Mill Parcel-General Cable (by: Eisenbach Enfineering, P.C. 6/2/03)

	NYSDEC TAGM 4046 Soil Cleanup Levels	ESW-1-18		ESW-2-18	ESW-3-18	ESW-4-18	ESW-5- 19	ESW-6- 19	SSW-7-19	SSW-9-19	WSW-8-19**	WSW-12-20**	NSW-10-20	NSW-10-20	NSW-11-20	PIPE#1 BEDDING	WSW-8-19 DILUTED	WSW-12-20 DILUTED
	Levels						(12'-14'	(12'-24"	(13')	(10')	(10'-12')	(14')	(13'-15')	DUP	(15')		(10'-12')	(14')
		001		002	003	004	005	006	007	008	009	010	011	012	013	014	009	010
Analysis			2/18/03	2/18/03	2/18/03	2/18/03	2/19/03	2/19/03	2/19/03	2/19/03	2/19/03	2/20/03	2/20/03	2/20/03	2/20/03	2/18/03	2/19/03	2/20/03
ASP B SEMIVOLATILE-SOILS	mg/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg	Ug/Kg
Dibenzo(a,h)Anthracene	0.014/MDL	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*	
Dibenzofuran	6.2	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*	
Diethyl Phthalate		<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*	
Dimethyl Phthalate	2	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*	
Di-n-butylphthalate	8.1	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*	
Di-n-octyl phthalate	50	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*	
Fluoranthene	50	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*	
Fluorene	50	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	2400	2700	
Hexachlorobenzene	0.41	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*	
Hexachlorobutadiene		<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*	
Hexachlorocyclopentadiene		<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*	
Hexachloroethane		<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*	
Indeno (1,2,3-cd)Pyrene	3.2	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*	
Isophorone	4.4	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*	
Naphthalene	13	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*	
Nitrobenzene	0.2/MDL	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*	
N-Nitroso-di-n-propylamine		<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*	
N-Nitrosodiphenylamine		<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*	
Pentachlorophenol	1.0/MDL	<27000	<150000	<100000	<22000	<130000	<150000	<25000	<26000	<140000	<22000	<120000	<27000	<130000	<260000	*	*	
Phenanthrene	50	<11000	7600	<41000	3900	6300	<59000	1600	<10000	<58000	8300	<48000	2900	5900	<100000	5100	4900	
Phenol	0.03/MDL	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	<100000	*	*	
Pyrene	50	<11000	<61000	<41000	<8800	<50000	<59000	<9900	<10000	<58000	<8900	<48000	<11000	<52000	19000	1300	*	

Notes:

SB-Site Background

MDL - Method detection Limit

NA - Not available

BOLD - Values in black indicate compounds that have been detected and are above the NYSDEC TAGM Cleanup Levels

Blank fields indicate no analysis completed

*-Diluted sample, refer to laboratory report of analysis for detection limit

** - Sample diluted and reanalyzed due to elevated detcetion limits (results of diluted analysis posted on last two colums of Table)

TABLE-1

Summary of Soil Sampling Results, Rod Mill Parcel-General Cable (by: Eisenbach Enfineering, P.C. 6/2/03)

	NYSDEC TAGM 4046 Soil Cleanup Levels	ESW-1-18		ESW-2-18	ESW-3-18	ESW-4-18	ESW-5- 19	ESW-6- 19	SSW-7-19	SSW-9-19	WSW-8-19**	WSW-12-20**	NSW-10-20	NSW-10-20	NSW-11-20	PIPE#1 BEDDING	WSW-8-19 DILUTED	WSW-12-20 DILUTED
	Levels						(12'-14'	(12'-24'	(13')	(10')	(10'-12')	(14')	(13'-15')	DUP	(15')		(10'-12')	(14')
		001		002	003	004	005	006	007	008	009	010	011	012	013	014	009	010
Analysis		2/18/03		2/18/03	2/18/03	2/18/03	2/19/03	2/19/03	2/19/03	2/19/03	2/19/03	2/20/03	2/20/03	2/20/03	2/20/03	2/18/03	2/19/03	2/20/03
PCBs EPA 8082	ug/kg	ug/kg		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
PCB-1016	1						<41	<39	<38	<36	<41	<39	<39	<37	<36			
PCB-1221	1						<82	<79	<77	<73	<84	<79	<79	<75	<74			
PCB-1232	1						<41	<39	<38	<36	<41	<39	<39	<37	<36			
PCB-1242	1						<41	<39	<38	<36	<41	<39	<39	<37	<36			
PCB-1248	1						<41	<39	<38	<36	<41	<39	<39	<37	<36			
PCB-1254	1						<41	<39	<38	<36	<41	<39	<39	<37	<36			
PCB-1260	1						<41	<39	<38	<36	<41	<39	<39	<37	<36			
TPH Fingerprint - Oil/Solid		mg/kg		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Diesel Fuel		<6.6		<6.8	<6.3	<6.5	<6.1		<5.5		<62		<5.8			<390		
Fuel Oil #2		<6.6		<6.8	<6.3	<6.5	<6.1		<5.5		<62		<5.8			<390		
Fuel Oil #4		<6.6		<6.8	<6.3	<6.5	<6.1		<5.5		<62		<5.8			<390		
Fuel Oil #6		<6.6		<6.8	<6.3	<6.5	<6.1		<5.5		<62		<5.8			<390		
Gasoline		<6.6		<6.8	<6.3	<6.5	<6.1		<5.5		<62		<5.8			<390		
Kerosene		<6.6		<6.8	<6.3	<6.5	<6.1		<5.5		<62		<5.8			<390		
Petroleum Contaminant		**1400**		**4900**	**3400**	**1100**	**3200**		**1600**		**7200**		**1300**			**45000**		

Notes:

SB-Site Background

MDL - Method detection Limit

NA - Not available

BOLD - Values in black indicate compounds that have been detected and are above the NYSDEC TAGM Cleanup Levels

Blank fields indicate no analysis completed

*-Diluted sample, refer to laboratory report of analysis for detection limit

** - Sample diluted and reanalyzed due to elevated detcetion limits (results of diluted analysis posted on last two colums of Table)

APPENDIX B

1 Quality Assurance

1.0 Quality Assurance

1.1 Laboratory Qualifications and Reporting Requirements

Friends Laboratory Inc. is a contract laboratory that shall be providing analytical services for the project. All analytical reporting will be NYS DEC ASP Category B Deliverables.

1.2 Field Replicate Samples

Field replicates, also referred to as field duplicates and split samples, are field samples obtained from one sampling point, homogenized (where appropriate), divided into separate containers, and treated as separate samples throughout the remaining sample handling and analytical processes. Replicate samples will be used to assess errors associated with sample methodology and analytical procedures. Field replicates can also be used when determining total error for critical samples with contamination concentrations near the action level. In such a case, a minimum of eight replicate samples is recommended for valid statistical analysis. Field replicates may be sent to two or more laboratories or to the same laboratory as unique samples. For total error determination, samples should be analyzed by the same laboratory. Generally, one field replicate per 20 samples per day is recommended.

1.3 Background Samples

Defining background conditions may be difficult because of natural variability and the physical characteristics of the site, but it is important in order to quantify true changes in contaminant concentrations due to a source or site. Defining background conditions is critical for avoiding false positives and for enforcement purposes in naming responsible parties. Background sampling is often required in ground-water sampling to verify plume direction, ambient conditions, and attribution of sources. A properly collected background sample serves as the baseline for the measure of contamination throughout the site. Ground-water background sample locations should be chosen carefully, usually upgradient from the suspected source of contamination where there is little or no chance of migration of contaminants of concern. Collect at least one background sample for comparison, although additional samples are often warranted by site-specific factors such as natural variability of local geology and multiple sources. Background samples may be collected to evaluate potential error associated with sampling design, sampling methodology, and analytical procedures.

1.4 Rinsate Blank Samples

A rinsate blank, also referred to as an equipment blank, is used to assess cross-contamination from improper equipment decontamination procedures. Rinsate blanks are samples obtained by running analyte-free water over decontaminated sampling equipment. Any residual contamination should appear in the rinsate sample data. The rinsate blank will be analyzed for the same analytical parameters as the field samples collected that day. The rinsate blank will be handled and shipped like a routine field sample. Where dedicated sampling equipment is not utilized, one rinsate blank will be collected per type of sampling device per day.

1.5 Field Blank Samples

Field blanks are samples prepared in the field using certified clean water (HPLC-grade water (carbon-free) for organic analyses and deionized or distilled water for inorganic analyses) which are then submitted to the laboratory for analysis. A field blank is used to evaluate contamination or error associated with sampling methodology, preservation, handling/shipping, and laboratory procedures. Field blanks will be handled, shipped, and analyzed like a routine field sample. One field blank will be submitted per day.

1.6 Blank Samples

Trip blanks are samples prepared prior to going into the field. They consist of certified clean water (HPLC-grade) and are not opened until they reach the laboratory. Trip blanks will be utilized for volatile organic analyses in an aqueous matrix only. Trip blanks will be handled, transported, and analyzed in the same manner as the other volatile organic samples collected that day. Trip blanks are used to evaluate error associated with shipping and handling and analytical procedures. A trip blank should be included with each shipment.

1.7 Field Duplicates

At least 20% of field screening and laboratory data with limited analytical deliverables will be confirmed by analyzing duplicate samples by CLP methods at a fixed off-site laboratory facility.

Field duplicate samples will be collected to demonstrate the accuracy of field screening and un-validated laboratory data with limited analytical deliverables. If all environmental samples are to be analyzed by CLP methods, duplicate samples will be taken at a frequency of at least 5% (1 in 20). However, when confirming field screening and laboratory data with limited analytical deliverables, at least 20% of the samples will be verified with duplicate samples analyzed by CLP methods for CLP TAL and TCL analytes. These CLP method duplicate sample requirements apply to each distinct matrix.

1.8 Matrix Spike/Matrix Spike Duplicate Analyses

When collecting organic samples for outside laboratory analysis, triple sample volume must be collected for one aqueous environmental sample in each Sample Delivery Group (SDG) in order to perform matrix spike and matrix spike duplicate analyses. This does not include field or trip blanks. Blanks do not require separate matrix spike or duplicate analyses regardless of their matrix.

The CLP Statement of Work defines an SDG as:

a. Each case of field samples, or
b. Each 20 field samples within a case.

Additional sample volume is not required to perform matrix spike/matrix duplicate (MS/MD) analysis on inorganic samples. However, the frequency of analysis of inorganic MS/MD samples is as stated above.