

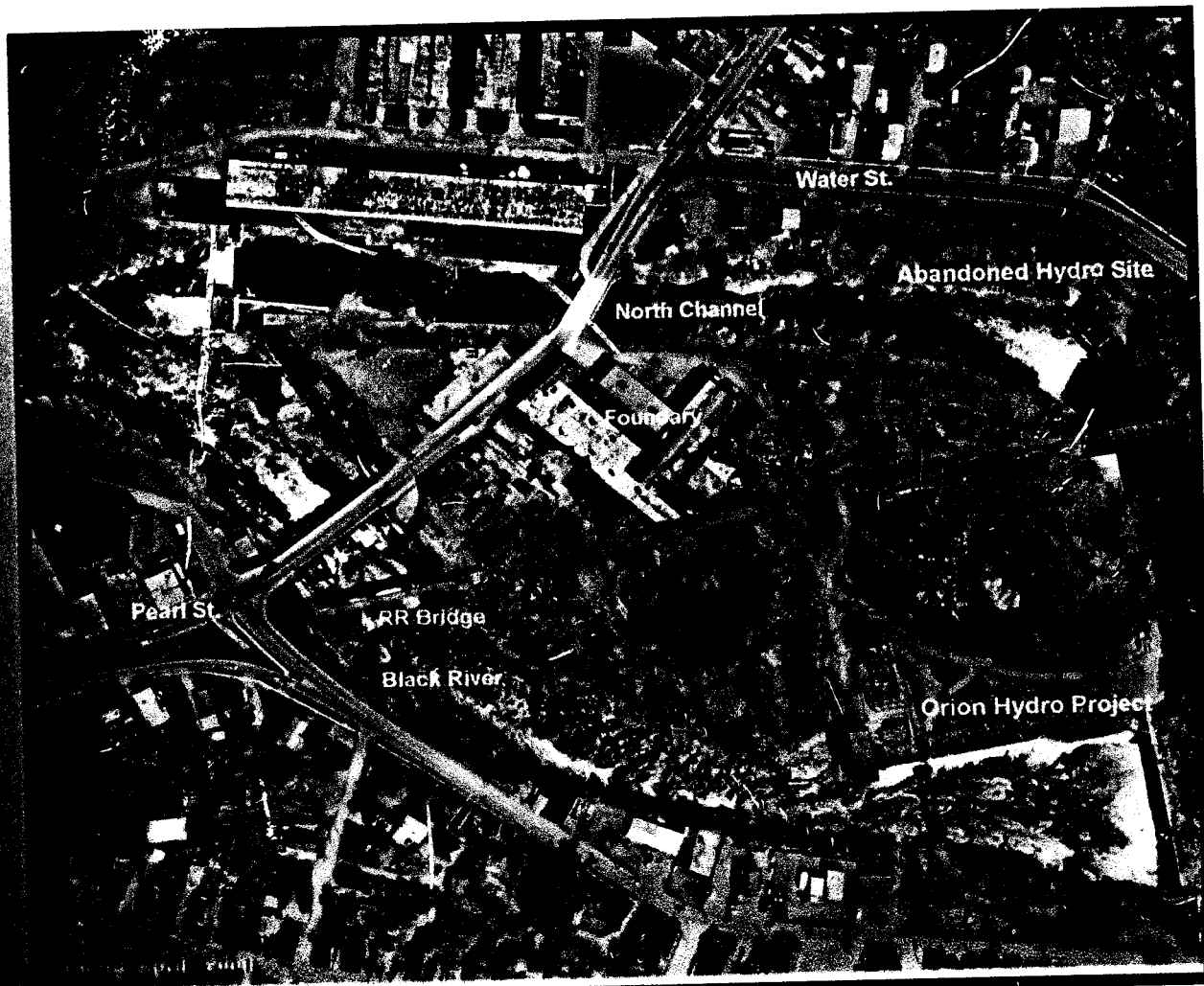
**FINAL DRAFT** REC: 5/22/03  
**SITE INVESTIGATION** BY?  
**& REMEDIAL REPORT** FILE: SPILL  
**98-10485**

**BLACK CLAWSON COMPANY**

**SEWALL'S ISLAND  
WATERTOWN, NEW YORK**

NOTE: ORIGINAL  
REPORT IN HWR  
FILE.

PT  
10/4/05



**NOVEMBER 29, 2001**

# **SITE INVESTIGATION & REMEDIAL REPORT**

***Prepared for:***

***Black Clawson Company &  
The City of Watertown***

***Site Location:***

**Sewall Island  
PEARL STREET  
WATERTOWN, NEW YORK**

MAY 22 2003

***City of Watertown***

***Tax Identification Number:***

**4 - 12 - 101**

**4 - 12 - 103**

**4 - 12 - 103.1**

**4 - 12 - 201**

***Date Last Revised:***

**November 29, 2001**

## TABLE OF CONTENTS

1.0	Introduction .....	3
2.0	Geological/Hydrogeological Conditions .....	6
3.0	Historical Information .....	7
4.0	Site Reconnaissance .....	14
5.0	Regulatory Information .....	22
6.0	Interviews .....	23
7.0	Findings and Conclusions .....	28
	Appendix A -- Asbestos Survey .....	
	Appendix B -- Hazardous Waste Disposal Documents .....	
	Appendix C -- Geoprobe Investigation Logs .....	
	Appendix D -- City of Watertown, Proposed Site Development Plan .....	
	Appendix E -- Environmental Data Resources, Inc. - Governmental Records ..	

# INTRODUCTION

## Conditions and Limitations

A site investigation and remedial report were performed for the property owned by Black Clawson Co. on Sewalls Island, Watertown, New York. This report included data collected by field observations, interviews with the owner's representative(s), neighboring land owners, local, state and federal officials, a database search, review of historic photographs and limited representative subsurface sampling. An asbestos survey of the buildings on the property in 1998 and a report regarding the chemistry of the foundry sand left on the Island were available for review. Both the documents detailing the findings have been included as part of this report.

## Executive Summary

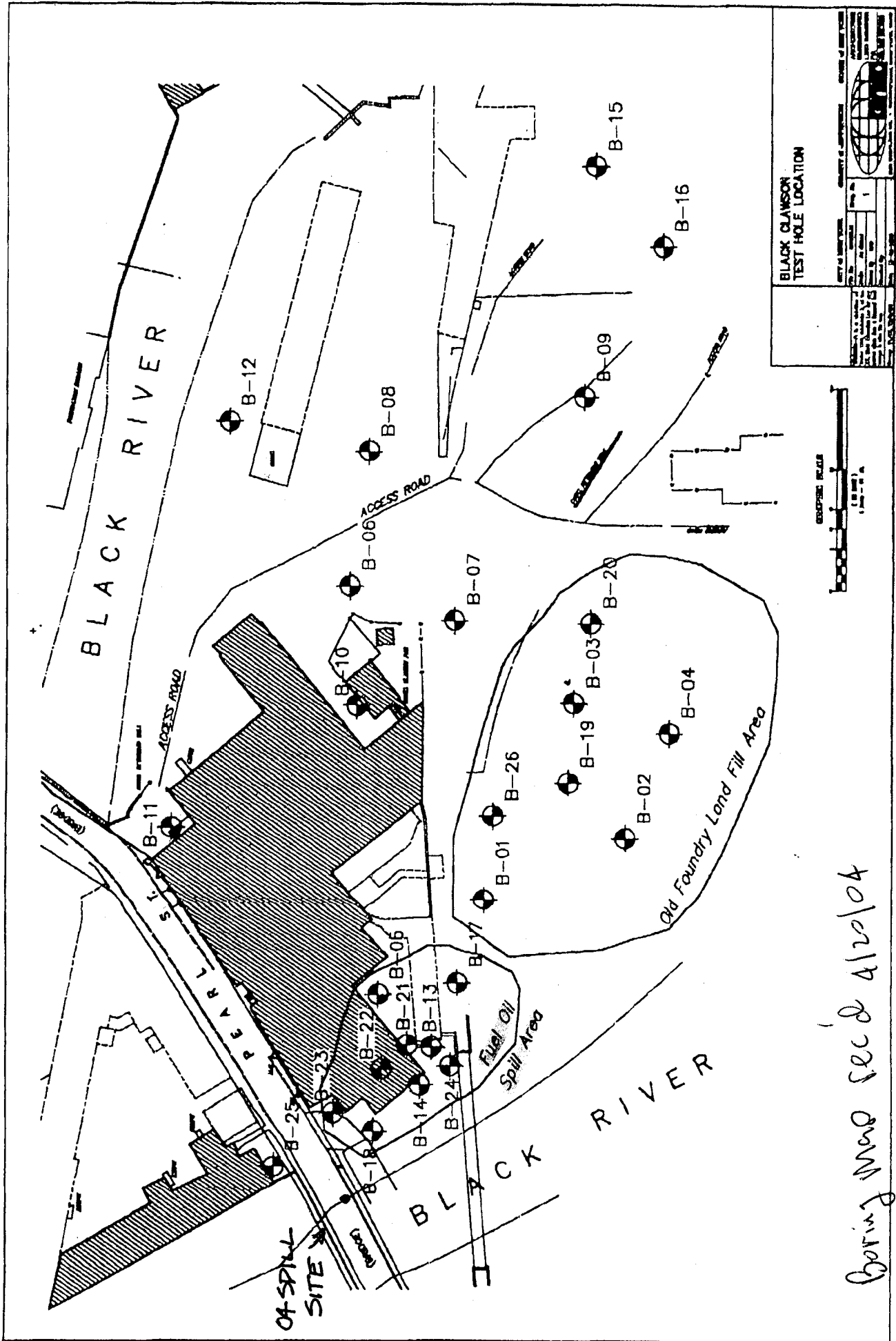
A petroleum fuel release has been identified on the southerly side of the island. The presence of the petroleum has been identified in soil borings taken in the area. The source of the spill has not been identified. The location of the spill plume is just above the bedrock plate detected at a depth of 17 feet +/- . It is believed that a portion of the plume may have traveled under Pearl St. near the bridge landing that crosses the southerly channel of the Black River on the southerly side of the Island.

In the past there have been a variety of industrial chemicals stored within the buildings. All of the chemicals found within the buildings have been collected, identified or categorized and properly disposed of off site. Based on information to date there are no known drums, petroleum storage, chemicals or storage containers remaining on the property.

Prior to demolition of the buildings an asbestos survey was conducted. There were many building materials identified as asbestos containing. All the asbestos materials were removed prior to demolition of that particular area by current regulatory standards. All known asbestos is believed to have been removed from the property. No asbestos containing materials were disposed of on site.

**APPENDIX C**

**GEOPROBE INVESTIGATION LOGS**



Boring Map sec'd 4/20/04

**STRATEGIC  
ENVIRONMENTAL  
MANAGEMENT, INC.**

**Geoprobe® Investigation Log**

Client: GYMO Architecture, Engineering, & Land Surveying, PC  
 Project Location: Former Black Clawson Facility  
Factory Street, Watertown, New York

Date: November 16, 1998  
 SEM Project No.: 250.11.98  
 Boring I.D.: B-1

Geoprobe Model: 5400  
 SEM Representatives: N. Bradford; S. Smith  
 Client Representative: Bill Plante  
 Others Present: None  
 Utility Clearance by: SEM  
 PID Calibration: 100 ppm Isobutylene/Air Mixture  
 Sampling Method: Macro-Core

**LEGEND**

*Relative Composition:*  
 and = 35 to 50%  
 some = 20 to 35%  
 little = 10 to 20%  
 trace = less than 10%

*Relative Grain Size:*  
 c = coarse  
 m = medium  
 f = fine

Sample Number	Depth (Ft.) From To		Description/Soil Characteristics/Observations (Color, Texture, Relative Moisture, Odor)	PID (ppm)
1	0.0	4.0	<u>28-inch recovery.</u> Dark Brown FILL MATERIAL comprised of cmf SAND, some SILT, trace cmf GRAVEL with glass fragment, wood fragment, paper fragment, cinder and slag fragment throughout; moist; non-plastic.	ND
2	4.0	8.0	<u>16-inch recovery.</u> Similar; moist.	ND
3	8.0	12.0	<u>22-inch recovery.</u> Similar; moist.	ND
4	12.0	15.5	<u>23-inch recovery.</u> Similar with coal fragment; wet at approximately 15.0 feet.	ND
	15.5	16.0	CRUSHED LIMESTONE fragment.	ND
5	16.0	16.5	<u>24-inch recovery.</u> Similar with trace COAL FRAGMENT and trace Brown SILT with some f SAND and little CLAY; moist; poorly sorted.	ND
	16.5	18.0	Brown SILT with some f SAND and little CLAY as above, trace m GRAVEL; moist; slightly plastic.	ND
	18.0	19.0	FILL MATERIAL as above; moist.	ND
	19.0	20.0	Similar to 16.5 to 18.0 feet interval; moist.	ND
6	20.0	22.2	<u>16-inch recovery.</u> Similar with ROCK FRAGMENT; wet.	ND

Notes: Depths noted are approximate; Soil characteristics based on visual and manual field observations only.  
 PID screening performed by headspace analysis of soil samples placed in re-sealable plastic bags, using PE/Photovac Model 2020, equipped with 10.6 eV lamp.  
 ND = None Detected; PPM = Parts Per Million.

**STRATEGIC  
ENVIRONMENTAL  
MANAGEMENT, INC.**

**Geoprobe® Investigation Log**

Client: GYMO Architecture, Engineering, & Land Surveying, PC  
 Project Location: Former Black Clawson Facility  
Factory Street, Watertown, New York

Date: November 16, 1998  
 SEM Project No.: 250.11.98  
 Boring I.D.: B-2

Geoprobe Model: 5400  
 SEM Representatives: N. Bradford; S. Smith  
 Client Representative: Bill Plante  
 Others Present: None  
 Utility Clearance by: SEM  
 PID Calibration: 100 ppm Isobutylene/Air Mixture  
 Sampling Method: Macro-Core

**LEGEND**

*Relative Composition:*  
 and = 35 to 50%  
 some = 20 to 35%  
 little = 10 to 20%  
 trace = less than 10%

*Relative Grain Size:*  
 c = coarse  
 m = medium  
 f = fine

Sample Number	Depth (Ft.)		Description/Soil Characteristics/Observations (Color, Texture, Relative Moisture, Odor)	PID (ppm)
	From	To		
1	0.0	0.2	<u>20-inch recovery.</u> Brown cmf SAND, some SILT, little ROCK FRAGMENT, trace ORGANIC MATERIAL (ROOTS); moist; non-plastic.	ND
	0.2	3.75	ROCK FRAGMENT (LIMESTONE/DOLOMITE); dry.	ND
	3.75	4.0	Brown cmf SAND and SILT; moist; non-plastic.	ND
2	4.0	4.6	<u>35-inch recovery.</u> Brown cmf SAND and SILT intermixed with ROCK FRAGMENT (LIMESTONE/DOLOMITE); moist; poorly sorted; non-plastic.	ND
	4.6	8.0	Black FILL MATERIAL comprised of mf SAND, trace BRICK FRAGMENT, trace SLAG, trace ORGANIC MATERIAL (WOOD FRAGMENT, ROOTS), trace GLASS FRAGMENT; moist; non-plastic; poorly sorted.	ND
3	8.0	12.0	<u>39-inch recovery.</u> Similar; moist.	8.0 - 11.0' - ND 11.0 - 12.0' - 8.2
4	12.0	16.0	<u>35-inch recovery.</u> Similar; moist.	ND
5	16.0	17.5	<u>26-inch recovery.</u> Similar; moist.	ND
	17.5	20.0	Red-Brown cmf SAND, some SILT, BRICK FRAGMENT, COAL FRAGMENT, SLAG; moist; non-plastic; poorly sorted.	ND
6	20.0	24.5	<u>40-inch recovery.</u> Black similar to 16.0 to 17.5 feet interval; moist; non-plastic.	20.5' - 0.4 21.0' - 3.8
	24.5	24.7	Olive cmf SAND with little SILT, ROCK FRAGMENT; wet; non-plastic.	22.0' - 3.1 23.0' - 25.9 24.0' - 3.2

Notes: Depths noted are approximate; Soil characteristics based on visual and manual field observations only.  
 PID screening performed by headspace analysis of soil samples placed in re-sealable plastic bags, using PE/Photovac Model 2020, equipped with 10.6 eV lamp.  
 ND = None Detected; PPM = Parts Per Million.



**STRATEGIC  
ENVIRONMENTAL  
MANAGEMENT, INC.**

**Geoprobe® Investigation Log**

Client: GYMO Architecture, Engineering, & Land Surveying, PC  
 Project Location: Former Black Clawson Facility  
Factory Street, Watertown, New York

Date: November 16, 1998  
 SEM Project No.: 250.11.98  
 Boring I.D.: B-3

Geoprobe Model: 5400  
 SEM Representatives: N. Bradford; S. Smith  
 Client Representative: Bill Piante  
 Others Present: None  
 Utility Clearance by: SEM  
 PID Calibration: 100 ppm Isobutylene/Air Mixture  
 Sampling Method: Macro-Core

**LEGEND**

*Relative Composition:*  
 and = 35 to 50%  
 some = 20 to 35%  
 little = 10 to 20%  
 trace = less than 10%

*Relative Grain Size:*  
 c = coarse  
 m = medium  
 f = fine

Sample Number	Depth (Ft.) From To		Description/Soil Characteristics/Observations (Color, Texture, Relative Moisture, Odor)	PID (ppm)
1	0.0	0.5	<u>36-inch recovery.</u> Brown cmf SAND, some ROCK FRAGMENT, little SILT; moist; non-plastic; poorly sorted.	ND
	0.5	4.0	FILL MATERIAL consisting of Dark Brown mf SAND, little SILT, WOOD FRAGMENT, SLAG, ROCK FRAGMENT at 2.0 to 3.0 feet interval; dry (ROCK FRAGMENT) to moist (SAND/SILT).	ND
2	4.0	8.0	<u>37-inch recovery.</u> Similar to Black similar; moist.	ND
3	8.0	12.0	<u>35-inch recovery.</u> Similar with BRICK FRAGMENT; moist.	ND
4	12.0	16.0	<u>34-inch recovery.</u> Similar; moist.	ND
5	16.0	20.0	<u>44-inch recovery.</u> Similar; moist.	ND
6	20.0	20.5	<u>22-inch recovery.</u> Similar; moist.	ND
	20.5	22.0	ASH; wet.	ND
	22.0	22.5	Dark Brown SILT and mf SAND, ROCK FRAGMENT; wet.	ND

Notes: Depths noted are approximate; Soil characteristics based on visual and manual field observations only.  
 PID screening performed by headspace analysis of soil samples placed in re-sealable plastic bags, using PE/Photovac Model 2020, equipped with 10.6 eV lamp.  
 ND = None Detected; PPM = Parts Per Million.

**STRATEGIC  
ENVIRONMENTAL  
MANAGEMENT, INC.**

**Geoprobe® Investigation Log**

Client: GYMO Architecture, Engineering, & Land Surveying, PC  
 Project Location: Former Black Clawson Facility  
Factory Street, Watertown, New York

Date: November 16, 1998  
 SEM Project No.: 250.11.98  
 Boring I.D.: B-4

Geoprobe Model: 5400  
 SEM Representatives: N. Bradford; S. Smith  
 Client Representative: Bill Plante  
 Others Present: None  
 Utility Clearance by: SEM  
 PID Calibration: 100 ppm Isobutylene/Air Mixture  
 Sampling Method: Macro-Core

**LEGEND**

*Relative Composition:*  
 and = 35 to 50%  
 some = 20 to 35%  
 little = 10 to 20%  
 trace = less than 10%

*Relative Grain Size:*  
 c = coarse  
 m = medium  
 f = fine

Sample Number	Depth (Ft.) From To	Description/Soil Characteristics/Observations (Color, Texture, Relative Moisture, Odor)	PID (ppm)
1	0.0 0.25	<u>30-inch recovery.</u> Dark Brown SILT and cmf SAND (TOPSOIL), trace ORGANIC MATERIAL (GRASS/ROOTS), ROCK FRAGMENT, CONCRETE FRAGMENT; moist; non-plastic.	ND
	0.25 4.0	Tan cmf SAND and ROCK FRAGMENT; moist (SAND) to dry (ROCK FRAGMENT).	ND
2	4.0 7.6	<u>36-inch recovery.</u> Similar with ROCK FRAGMENT comprising 5.0 to 6.25 feet and 7.0 to 7.5 feet intervals; moist (soil) to dry (ROCK FRAGMENT).  Refusal encountered at 7.6 feet in depth – timber/wood fragment recovered. Boring location moved – no sampling conducted at 0-8 feet interval at second location.	ND
3	8.0 12.0	<u>38-inch recovery.</u> Black mf SAND with ROCK FRAGMENT, BRICK FRAGMENT, SLAG, CONCRETE FRAGMENT; moist; non-plastic; poorly sorted.	ND
4	12.0 16.0	<u>39-inch recovery.</u> Similar; moist.	ND
5	16.0 20.0	<u>25-inch recovery.</u> Black mf SAND with intermittent zones of Tan and Red-Brown similar, trace SLAG; moist; non-plastic.	ND
6	20.0 25.75	<u>40-inch recovery.</u> Similar with BRICK FRAGMENT, WOOD FRAGMENT; moist.	ND
	25.75 26.0	Brown cmf SAND and SILT, ROCK FRAGMENT; wet.	ND

Notes: Depths noted are approximate; Soil characteristics based on visual and manual field observations only.  
 PID screening performed by headspace analysis of soil samples placed in re-sealable plastic bags, using PE/Photovac Model 2020, equipped with 10.6 eV lamp.  
 ND = None Detected; PPM = Parts Per Million.

**STRATEGIC  
ENVIRONMENTAL  
MANAGEMENT, INC.**

**Geoprobe® Investigation Log**

Client: GYMO Architecture, Engineering, & Land Surveying, PC  
 Project Location: Former Black Clawson Facility  
Factory Street, Watertown, New York

Date: November 16, 1998  
 SEM Project No.: 250.11.98  
 Boring I.D.: B-5

Geoprobe Model: 5400  
 SEM Representatives: N. Bradford; S. Smith  
 Client Representative: Bill Plante  
 Others Present: None  
 Utility Clearance by: SEM  
 PID Calibration: 100 ppm Isobutylene/Air Mixture  
 Sampling Method: Macro-Core

**LEGEND**

*Relative Composition:*  
 and = 35 to 50%  
 some = 20 to 35%  
 little = 10 to 20%  
 trace = less than 10%

*Relative Grain Size:*  
 c = coarse  
 m = medium  
 f = fine

Sample Number	Depth (Ft.)		Description/Soil Characteristics/Observations (Color, Texture, Relative Moisture, Odor)	PID (ppm)
	From	To		
1	0.0	4.0	<u>36-inch recovery.</u> Dark Brown to Black mf SAND with COAL FRAGMENT, SLAG, BRICK FRAGMENT; moist; non-plastic; poorly sorted.	ND
2	4.0	8.0	<u>34-inch recovery.</u> Similar; moist.	ND
3	8.0	13.0	<u>38-inch recovery.</u> Similar; moist.	2.3
4	13.0	13.7	<u>10-inch recovery.</u> Black GRANULAR MATERIAL (possible COAL FRAGMENT); wet; petroleum odor noted	75.6
	13.7	13.9	Grey ROCK FRAGMENT and Brown cmf SAND and SILT; wet.	

Notes: Depths noted are approximate; Soil characteristics based on visual and manual field observations only.  
 PID screening performed by headspace analysis of soil samples placed in re-sealable plastic bags, using PE/Photovac Model 2020, equipped with 10.6 eV lamp.  
 ND = None Detected; PPM = Parts Per Million.

**STRATEGIC  
ENVIRONMENTAL  
MANAGEMENT, INC.**

**Geoprobe® Investigation Log**

Client: GYMO Architecture, Engineering, & Land Surveying, PC  
 Project Location: Former Black Clawson Facility  
Factory Street, Watertown, New York

Date: November 16, 1998  
 SEM Project No.: 250.11.98  
 Boring I.D.: B-6

Geoprobe Model: 5400  
 SEM Representatives: N. Bradford; S. Smith  
 Client Representative: Bill Plante  
 Others Present: None  
 Utility Clearance by: SEM  
 PID Calibration: 100 ppm Isobutylene/Air Mixture  
 Sampling Method: Macro-Core

**LEGEND**

*Relative Composition:*  
 and = 35 to 50%  
 some = 20 to 35%  
 little = 10 to 20%  
 trace = less than 10%

*Relative Grain Size:*  
 c = coarse  
 m = medium  
 f = fine

Sample Number	Depth (Ft.)		Description/Soil Characteristics/Observations (Color, Texture, Relative Moisture, Odor)	PID (ppm)
	From	To		
1	0.0	4.0	<u>39-inch recovery.</u> Black mf SAND, BRICK FRAGMENT, SLAG; moist; non-plastic; poorly sorted.	ND
2	4.0	6.5	<u>36-inch recovery.</u> Similar; moist.	ND
	6.5	8.0	Dark Brown to Red-Brown SILT and mf SAND, ROCK FRAGMENT; moist; poorly sorted.	ND
3	8.0	8.2	<u>3-inch recovery.</u> ROCK FRAGMENT and Brown SILT and mf SAND.	ND

Notes: Depths noted are approximate; Soil characteristics based on visual and manual field observations only.  
 PID screening performed by headspace analysis of soil samples placed in re-sealable plastic bags, using PE/Photovac Model 2020, equipped with 10.6 eV lamp.  
 ND = None Detected; PPM = Parts Per Million.

**STRATEGIC  
ENVIRONMENTAL  
MANAGEMENT, INC.**

**Geoprobe® Investigation Log**

Client: GYMO Architecture, Engineering, & Land Surveying, PC  
 Project Location: Former Black Clawson Facility  
Factory Street, Watertown, New York

Date: November 16, 1998  
 SEM Project No.: 250.11.98  
 Boring I.D.: B-7

Geoprobe Model: 5400  
 SEM Representatives: N. Bradford; S. Smith  
 Client Representative: Bill Plante  
 Others Present: None  
 Utility Clearance by: SEM  
 PID Calibration: 100 ppm Isobutylene/Air Mixture  
 Sampling Method: Macro-Core

**LEGEND**

*Relative Composition:*  
 and = 35 to 50%  
 some = 20 to 35%  
 little = 10 to 20%  
 trace = less than 10%

*Relative Grain Size:*  
 c = coarse  
 m = medium  
 f = fine

Sample Number	Depth (Ft.)		Description/Soil Characteristics/Observations (Color, Texture, Relative Moisture, Odor)	PID (ppm)
	From	To		
1	0.0	4.0	<u>31-inch recovery.</u> Black mf SAND, BRICK FRAGMENT, SLAG; moist; poorly sorted.	ND
2	4.0	7.0	<u>26-inch recovery.</u> Similar; moist.	ND
	7.0	7.8	Brown SILT, some mf SAND, ROCK FRAGMENT; moist.	ND

Notes: Depths noted are approximate; Soil characteristics based on visual and manual field observations only.  
 PID screening performed by headspace analysis of soil samples placed in re-sealable plastic bags, using PE/Photovac Model 2020, equipped with 10.6 eV lamp.  
 ND = None Detected; PPM = Parts Per Million.

**STRATEGIC  
ENVIRONMENTAL  
MANAGEMENT, INC.**

**Geoprobe® Investigation Log**

Client: GYMO Architecture, Engineering, & Land Surveying, PC  
 Project Location: Former Black Clawson Facility  
Factory Street, Watertown, New York

Date: November 17, 1998  
 SEM Project No.: 250.11.98  
 Boring I.D.: B-8

Geoprobe Model: 5400  
 SEM Representatives: N. Bradford; S. Smith  
 Client Representative: Bill Plante  
 Others Present: None  
 Utility Clearance by: SEM  
 PID Calibration: 100 ppm Isobutylene/Air Mixture  
 Sampling Method: Macro-Core

**LEGEND**

*Relative Composition:*  
 and = 35 to 50%  
 some = 20 to 35%  
 little = 10 to 20%  
 trace = less than 10%

*Relative Grain Size:*  
 c = coarse  
 m = medium  
 f = fine

Sample Number	Depth (Ft.)		Description/Soil Characteristics/Observations (Color, Texture, Relative Moisture, Odor)	PID (ppm)
	From	To		
1	0.0	0.5	35-inch recovery. Black SILT and mf SAND, trace ORGANIC MATERIAL (LEAVES, ROOTS); moist; non-plastic.	ND
	0.5	1.5	Black cmf SAND and SLAG; moist; non-plastic.	ND
	1.5	3.0	Brown grading to Tan mf SAND with little SILT, trace ORGANIC MATERIAL (ROOTS, WOOD FRAGMENT); moist; non-plastic.	ND
	3.0	3.2	Dark Brown SILT and f SAND with trace ORGANIC MATERIAL (ROOTS: TOPSOIL); moist.	ND
	3.2	4.0	Grey ROCK FRAGMENT; dry.	ND
			Refusal encountered at 4.0 feet below grade. Three (3) additional attempts across approximately 16.0 feet area encountered refusal at similar depth.	

Notes: Depths noted are approximate; Soil characteristics based on visual and manual field observations only.  
 PID screening performed by headspace analysis of soil samples placed in re-sealable plastic bags, using PE/Photovac Model 2020, equipped with 10.6 eV lamp.  
 ND = None Detected; PPM = Parts Per Million.

**STRATEGIC  
ENVIRONMENTAL  
MANAGEMENT, INC.**

**Geoprobe® Investigation Log**

Client: GYMO Architecture, Engineering, & Land Surveying, PC  
 Project Location: Former Black Clawson Facility  
Factory Street, Watertown, New York

Date: November 17, 1998  
 SEM Project No.: 250.11.98  
 Boring I.D.: B-9

Geoprobe Model: 5400  
 SEM Representatives: N. Bradford; S. Smith  
 Client Representative: Bill Plante  
 Others Present: None  
 Utility Clearance by: SEM  
 PID Calibration: 100 ppm Isobutylene/Air Mixture  
 Sampling Method: Macro-Core

**LEGEND**

*Relative Composition:*  
 and = 35 to 50%  
 some = 20 to 35%  
 little = 10 to 20%  
 trace = less than 10%

*Relative Grain Size:*  
 c = coarse  
 m = medium  
 f = fine

Sample Number	Depth (Ft.)		Description/Soil Characteristics/Observations (Color, Texture, Relative Moisture, Odor)	PID (ppm)
	From	To		
1	0.0	2.5	<u>21-inch recovery.</u> Dark Brown SILT with little f SAND, trace ORGANIC MATERIAL (ROOTS); moist; non-plastic.	ND
	2.5	2.9	Grey ROCK FRAGMENT.	ND
			Refusal encountered at 2.9 feet below grade. Two (2) additional attempts across approximately 15.0 feet area encountered refusal at similar depth.	

Notes: Depths noted are approximate; Soil characteristics based on visual and manual field observations only.  
 PID screening performed by headspace analysis of soil samples placed in re-sealable plastic bags, using PE/Photovac Model 2020, equipped with 10.6 eV lamp.  
 ND = None Detected; PPM = Parts Per Million.

**STRATEGIC  
ENVIRONMENTAL  
MANAGEMENT, INC.**

**Geoprobe® Investigation Log**

Client: GYMO Architecture, Engineering, & Land Surveying, PC  
 Project Location: Former Black Clawson Facility  
Factory Street, Watertown, New York

Date: November 17, 1998  
 SEM Project No.: 250.11.98  
 Boring I.D.: B-10

Geoprobe Model: 5400  
 SEM Representatives: N. Bradford; S. Smith  
 Client Representative: Bill Plante  
 Others Present: None  
 Utility Clearance by: SEM  
 PID Calibration: 100 ppm Isobutylene/Air Mixture  
 Sampling Method: Macro-Core

**LEGEND**

*Relative Composition:*  
 and = 35 to 50%  
 some = 20 to 35%  
 little = 10 to 20%  
 trace = less than 10%

*Relative Grain Size:*  
 c = coarse  
 m = medium  
 f = fine

Sample Number	Depth (Ft.)		Description/Soil Characteristics/Observations (Color, Texture, Relative Moisture, Odor)	PID (ppm)
	From	To		
1	0.0	0.5	8-inch recovery. Black mf SAND; wet; non-plastic.	ND
	0.5	1.0	Grey ROCK FRAGMENT and SILT with mf SAND.	ND
			Refusal encountered at 1.0 feet below grade. Two (2) additional attempts across approximately 5.0 feet area encountered refusal at similar depth.	

Notes: Depths noted are approximate; Soil characteristics based on visual and manual field observations only.  
 PID screening performed by headspace analysis of soil samples placed in re-sealable plastic bags, using PE/Photovac Model 2020, equipped with 10.6 eV lamp.  
 ND = None Detected; PPM = Parts Per Million.



**STRATEGIC  
ENVIRONMENTAL  
MANAGEMENT, INC.**

**Geoprobe® Investigation Log**

Client: GYMO Architecture, Engineering, & Land Surveying, PC  
 Project Location: Former Black Clawson Facility  
Factory Street, Watertown, New York

Date: November 17, 1998  
 SEM Project No.: 250.11.98  
 Boring I.D.: B-11

Geoprobe Model: 5400  
 SEM Representatives: N. Bradford; S. Smith  
 Client Representative: Bill Plante  
 Others Present: None  
 Utility Clearance by: SEM  
 PID Calibration: 100 ppm Isobutylene/Air Mixture  
 Sampling Method: Macro-Core

**LEGEND**

*Relative Composition:*  
 and = 35 to 50%  
 some = 20 to 35%  
 little = 10 to 20%  
 trace = less than 10%

*Relative Grain Size:*  
 c = coarse  
 m = medium  
 f = fine

Sample Number	Depth (Ft.)		Description/Soil Characteristics/Observations (Color, Texture, Relative Moisture, Odor)	PID (ppm)
	From	To		
1	0.0	2.2	<u>17-inch recovery.</u> Dark Brown SILT with little mf SAND and ROCK FRAGMENT; moist; poorly sorted.	ND
			Refusal encountered at 2.2 feet below grade.	

Notes: Depths noted are approximate; Soil characteristics based on visual and manual field observations only.  
 PID screening performed by headspace analysis of soil samples placed in re-sealable plastic bags, using PE/Photovac Model 2020, equipped with 10.6 eV lamp.  
 ND = None Detected; PPM = Parts Per Million.

**STRATEGIC  
ENVIRONMENTAL  
MANAGEMENT, INC.**

**Geoprobe® Investigation Log**

Client: GYMO Architecture, Engineering, & Land Surveying, PC  
 Project Location: Former Black Clawson Facility  
Factory Street, Watertown, New York

Date: November 17, 1998  
 SEM Project No.: 250.11.98  
 Boring I.D.: B-12

Geoprobe Model: 5400  
 SEM Representatives: N. Bradford; S. Smith  
 Client Representative: Bill Plante  
 Others Present: None  
 Utility Clearance by: SEM  
 PID Calibration: 100 ppm Isobutylene/Air Mixture  
 Sampling Method: Macro-Core

**LEGEND**

*Relative Composition:*  
 and = 35 to 50%  
 some = 20 to 35%  
 little = 10 to 20%  
 trace = less than 10%

*Relative Grain Size:*  
 c = coarse  
 m = medium  
 f = fine

Sample Number	Depth (Ft.)		Description/Soil Characteristics/Observations (Color, Texture, Relative Moisture, Odor)	PID (ppm)
	From	To		
1	0.0	2.0	<u>40-inch recovery.</u> Dark Brown SILT and cmf SAND with little mf GRAVEL and trace BRICK FRAGMENT, COAL FRAGMENT, GLASS FRAGMENT, SLAG; moist.	ND
	2.0	2.5	Dark Brown SILT and ROCK FRAGMENT, moist.	ND
	2.5	4.0	Grey ROCK FRAGMENT; dry.	ND
			Refusal encountered at 4.0 feet, with difficult probe advancement beginning at 2.2 feet. Second attempt to advance probe at approximate 8.0 feet west of original location encountered refusal at 2.2 feet; third attempt approximately 10.0 feet east of original location encountered refusal at 4.0 feet.	

Notes: Depths noted are approximate; Soil characteristics based on visual and manual field observations only.  
 PID screening performed by headspace analysis of soil samples placed in re-sealable plastic bags, using PE/Photovac Model 2020, equipped with 10.6 eV lamp.  
 ND = None Detected; PPM = Parts Per Million.

**STRATEGIC  
ENVIRONMENTAL  
MANAGEMENT, INC.**

**Geoprobe® Investigation Log**

Client: GYMO Architecture, Engineering, & Land Surveying, PC  
 Project Location: Former Black Clawson Facility  
Factory Street, Watertown, New York

Date: November 17, 1998  
 SEM Project No.: 250.11.98  
 Boring I.D.: B-13

Geoprobe Model: 5400  
 SEM Representatives: N. Bradford; S. Smith  
 Client Representative: Bill Plante  
 Others Present: None  
 Utility Clearance by: SEM  
 PID Calibration: 100 ppm Isobutylene/Air Mixture  
 Sampling Method: Macro-Core

**LEGEND**

*Relative Composition:*  
 and = 35 to 50%  
 some = 20 to 35%  
 little = 10 to 20%  
 trace = less than 10%

*Relative Grain Size:*  
 c = coarse  
 m = medium  
 f = fine

Sample Number	Depth (Ft.)		Description/Soil Characteristics/Observations (Color, Texture, Relative Moisture, Odor)	PID (ppm)
	From	To		
1	0.0	4.0	<u>46-inch recovery.</u> Black mf SAND, little SILT, CONCRETE FRAGMENT, BRICK FRAGMENT, SLAG, WOOD FRAGMENT, ROCK FRAGMENT; moist; petroleum odor noted.	0.0-4.0' composite - 2.4
2	4.0	8.0	<u>43-inch recovery.</u> Similar; moist; petroleum odor noted.	4.0-8.0' composite - 15.9
3	8.0	8.5	<u>30-inch recovery.</u> Similar; moist; petroleum odor noted.	8.0-12.0' composite - 23.8
	8.5	12.0	Dark Brown mf SAND and mixed with SILT and ROCK FRAGMENT; wet; petroleum odor noted.	

Notes: Depths noted are approximate; Soil characteristics based on visual and manual field observations only.  
 PID screening performed by headspace analysis of soil samples placed in re-sealable plastic bags, using PE/Photovac Model 2020, equipped with 10.6 eV lamp.  
 ND = None Detected; PPM = Parts Per Million.

**STRATEGIC  
ENVIRONMENTAL  
MANAGEMENT, INC.**

**Geoprobe® Investigation Log**

Client: GYMO Architecture, Engineering, & Land Surveying, PC  
 Project Location: Former Black Clawson Facility  
Factory Street, Watertown, New York

Date: November 17, 1998  
 SEM Project No.: 250.11.98  
 Boring I.D.: B-14

Geoprobe Model: 5400  
 SEM Representatives: N. Bradford; S. Smith  
 Client Representative: Bill Plante  
 Others Present: None  
 Utility Clearance by: SEM  
 PID Calibration: 100 ppm Isobutylene/Air Mixture  
 Sampling Method: Macro-Core

**LEGEND**

*Relative Composition:*  
 and = 35 to 50%  
 some = 20 to 35%  
 little = 10 to 20%  
 trace = less than 10%

*Relative Grain Size:*  
 c = coarse  
 m = medium  
 f = fine

Sample Number	Depth (Ft.)		Description/Soil Characteristics/Observations (Color, Texture, Relative Moisture, Odor)	PID (ppm)
	From	To		
1	0.0	0.2	<u>34-inch recovery.</u> Black mf SAND with little SILT; wet; non-plastic.	ND
	0.2	4.0	Dark Brown to Black mf SAND, little SILT, ROCK FRAGMENT, SLAG, GLASS FRAGMENT, WOOD FRAGMENT, CONCRETE FRAGMENT; moist.	ND
2	4.0	7.0	<u>33-inch recovery.</u> Similar with coarse SAND; moist.	ND
	7.0	8.0	Orange-Brown similar with METAL FRAGMENT; dry.	ND
3	8.0	12.0	<u>42-inch recovery.</u> Similar to 0.2 to 7.0 feet interval; moist.	8.0-12.0' composite - 39.2
4	12.0	15.0	<u>43-inch recovery.</u> Similar; moist.	12.0-16.0' composite - 90.0
	15.0	16.0	Grey SILTY CLAY with trace mf SAND and trace ORGANIC MATERIAL (ROOTS); Faint Petroleum Odor noted.	
5	16.0	19.5	<u>38-inch recovery.</u> Grey cmf SAND, little ROCK FRAGMENT, intermittent zones of SILTY similar; wet; petroleum odor noted.	16.0-20.0' composite - 473
	19.5	20.1	Olive-Grey SILT with some CLAY, trace ORGANIC MATERIAL (ROOTS); petroleum odor noted.	

Notes: Depths noted are approximate; Soil characteristics based on visual and manual field observations only.  
 PID screening performed by headspace analysis of soil samples placed in re-sealable plastic bags, using PE/Photovac Model 2020, equipped with 10.6 eV lamp.  
 ND = None Detected; PPM = Parts Per Million.

**STRATEGIC  
ENVIRONMENTAL  
MANAGEMENT, INC.**

**Geoprobe® Investigation Log**

Client: GYMO Architecture, Engineering, & Land Surveying, PC  
 Project Location: Former Black Clawson Facility  
Factory Street, Watertown, New York

Date: November 17, 1998  
 SEM Project No.: 250.11.98  
 Boring I.D.: B-15

Geoprobe Model: 5400  
 SEM Representatives: N. Bradford; S. Smith  
 Client Representative: Bill Plante  
 Others Present: None  
 Utility Clearance by: SEM  
 PID Calibration: 100 ppm Isobutylene/Air Mixture  
 Sampling Method: Macro-Core

**LEGEND**

*Relative Composition:*  
 and = 35 to 50%  
 some = 20 to 35%  
 little = 10 to 20%  
 trace = less than 10%

*Relative Grain Size:*  
 c = coarse  
 m = medium  
 f = fine

Sample Number	Depth (Ft) From To		Description/Soil Characteristics/Observations (Color, Texture, Relative Moisture, Odor)	PID (ppm)
1	0.0	2.75	<u>32-inch recovery.</u> Tan cmf SAND, some mf GRAVEL, little SILT; moist; non-plastic; poorly sorted.	0.0-4.0' composite - ND
	2.75	3.5	Grey ROCK FRAGMENT; dry.	
	3.5	4.0	Similar to 0.0 to 2.75 feet interval; moist.	
2	4.0	4.5	<u>34-inch recovery.</u> Similar; moist.	4.0-6.7' composite - ND
	4.5	5.5	Black mf SAND, little SILT, COAL FRAGMENT, WOOD FRAGMENT, trace ORGANIC MATERIAL (ROOTS); moist.	
	5.5	6.7	Dark Brown SILT and ROCK FRAGMENT, little mf SAND; moist; poorly sorted.	

Notes: Depths noted are approximate; Soil characteristics based on visual and manual field observations only.  
 PID screening performed by headspace analysis of soil samples placed in re-sealable plastic bags, using PE/Photovac Model 2020, equipped with 10.6 eV lamp.  
 ND = None Detected; PPM = Parts Per Million.

**STRATEGIC  
ENVIRONMENTAL  
MANAGEMENT, INC.**

**Geoprobe® Investigation Log**

Client: GYMO Architecture, Engineering, & Land Surveying, PC  
 Project Location: Former Black Clawson Facility  
Factory Street, Watertown, New York

Date: November 17, 1998  
 SEM Project No.: 250.11.98  
 Boring I.D.: B-16

Geoprobe Model: 5400  
 SEM Representatives: N. Bradford; S. Smith  
 Client Representative: Bill Plante  
 Others Present: None  
 Utility Clearance by: SEM  
 PID Calibration: 100 ppm Isobutylene/Air Mixture  
 Sampling Method: Macro-Core

**LEGEND**

*Relative Composition:*  
 and = 35 to 50%  
 some = 20 to 35%  
 little = 10 to 20%  
 trace = less than 10%

*Relative Grain Size:*  
 c = coarse  
 m = medium  
 f = fine

Sample Number	Depth (Ft.)		Description/Soil Characteristics/Observations (Color, Texture, Relative Moisture, Odor)	PID (ppm)
	From	To		
1	0.0	4.0	<u>33-inch recovery.</u> Dark Brown to Black mf SAND, little SILT, SLAG, ASH, GLASS FRAGMENT, trace ORGANIC MATERIAL (ROOTS, GRASS); Tan mf SAND at 3.2 to 3.5 feet interval; moist; poorly sorted.	0.0-4.0 composite - ND
2	4.0	7.0	<u>30-inch recovery.</u> Similar with WOOD FRAGMENT; moist.	4.0-7.3' composite - ND
	7.0	7.3	Dark Brown SILT and Grey ROCK FRAGMENT, little mf SAND; dry.	

Notes: Depths noted are approximate; Soil characteristics based on visual and manual field observations only.  
 PID screening performed by headspace analysis of soil samples placed in re-sealable plastic bags, using PE/Photovac Model 2020, equipped with 10.6 eV lamp.  
 ND = None Detected; PPM = Parts Per Million.

**STRATEGIC  
ENVIRONMENTAL  
MANAGEMENT, INC.**

**Geoprobe® Investigation Log**

Client: GYMO Architecture, Engineering, & Land Surveying, PC  
 Project Location: Former Black Clawson Facility  
Factory Street, Watertown, New York

Date: November 17, 1998  
 SEM Project No.: 250.11.98  
 Boring I.D.: B-17

Geoprobe Model: 5400  
 SEM Representatives: N. Bradford; S. Smith  
 Client Representative: Bill Plante  
 Others Present: None  
 Utility Clearance by: SEM  
 PID Calibration: 100 ppm Isobutylene/Air Mixture  
 Sampling Method: Macro-Core

**LEGEND**

*Relative Composition:*  
 and = 35 to 50%  
 some = 20 to 35%  
 little = 10 to 20%  
 trace = less than 10%

*Relative Grain Size:*  
 c = coarse  
 m = medium  
 f = fine

Sample Number	Depth (Ft.)		Description/Soil Characteristics/Observations (Color, Texture, Relative Moisture, Odor)	PID (ppm)
	From	To		
1	0.0	2.0	<u>29-inch recovery.</u> Black mf SAND and SILT, little f GRAVEL, SLAG, ROCK FRAGMENT; moist.	0.0-4.0' composite - ND
	2.0	3.5	Tan cmf+ SAND, trace SILT to little SILT at 3.0 to 3.5 feet, trace ORGANIC MATERIAL (ROOTS) at 3.0 to 3.8 feet; moist.	
	3.5	4.0	Brown SILT, little f SAND; moist.	
2	4.0	8.0	<u>48-inch recovery.</u> Similar with trace ORGANIC MATERIAL (ROOTS); moist.	4.0-8.0' composite - ND
3	8.0	12.0	<u>48-inch recovery.</u> Similar; moist.	8.0-12.0' composite - ND
4	12.0	15.75	<u>44-inch recovery.</u> Similar with zones of Grey cmf SAND intermixed; moist.	12.0-16.0 composite - ND
	15.75	16.0	Grey cmf+ SAND and SILT, little f GRAVEL; moist; poorly sorted.	
5	16.0	20.0	<u>46-inch recovery.</u> Similar to 3.5 to 15.75 feet interval; Grey cmf+ SAND and SILT with little f GRAVEL at 19.5 to 20.0 feet; moist; poorly sorted.	16.0-20.0 composite - ND
6	20.0	25.0	<u>40-inch recovery.</u> Similar to 3.5 to 15.75 feet and 16.0 to 19.5 feet intervals; moist.	20.0-26.0 composite - ND
	25.0	25.75	Dark Brown mf SAND; varved; wet.	
	25.75	26.0	ROCK FRAGMENT.	

Notes: Depths noted are approximate; Soil characteristics based on visual and manual field observations only.  
 PID screening performed by headspace analysis of soil samples placed in re-sealable plastic bags, using PE/Photovac  
 Model 2020, equipped with 10.6 eV lamp.  
 ND = None Detected; PPM = Parts Per Million.

**STRATEGIC  
ENVIRONMENTAL  
MANAGEMENT, INC.**

**Geoprobe® Investigation Log**

Client: GYMO Architecture, Engineering, & Land Surveying, PC  
 Project Location: Former Black Clawson Facility  
Factory Street, Watertown, New York  
 Geoprobe Model: 5400  
 SEM Representatives: N. Bradford; S. Smith  
 Client Representative: Bill Plante  
 Others Present: None  
 Utility Clearance by: SEM  
 PID Calibration: 100 ppm Isobutylene/Air Mixture  
 Sampling Method: Macro-Core

Date: November 17, 1998  
 SEM Project No.: 250.11.98  
 Boring I.D.: B-18

**LEGEND**

*Relative Composition:*  
 and = 35 to 50%  
 some = 20 to 35%  
 little = 10 to 20%  
 trace = less than 10%

*Relative Grain Size:*  
 c = coarse  
 m = medium  
 f = fine

Sample Number	Depth (Ft.)		Description/Soil Characteristics/Observations (Color, Texture, Relative Moisture, Odor)	PID (ppm)
	From	To		
1	0.0	4.0	<u>32-inch recovery.</u> Dark Brown to Black cmf+ SAND, little SILT, SLAG, CONCRETE FRAGMENT, ROCK FRAGMENT; moist.	ND
2	4.0	8.0	<u>30-inch recovery.</u> Similar; moist.	ND
3	8.0	12.0	<u>36-inch recovery.</u> Similar; moist.	ND
4	12.0	16.75	<u>48-inch recovery.</u> Red-Brown similar; moist.	30.
	16.75	18.0	Black cmf SAND, little SILT, wet; Strong Petroleum Odor noted.	430.
5	18.0	20.6	<u>42-inch recovery.</u> Similar; wet; Strong Petroleum Odor noted.	414.

Notes: Depths noted are approximate; Soil characteristics based on visual and manual field observations only.  
 PID screening performed by headspace analysis of soil samples placed in re-sealable plastic bags, using PE/Photovac Model 2020, equipped with 10.6 eV lamp.  
 ND = None Detected; PPM = Parts Per Million.



**STRATEGIC  
ENVIRONMENTAL  
MANAGEMENT, INC.**

**Geoprobe® Investigation Log**

Client: GYMO Architecture, Engineering, & Land Surveying, PC  
 Project Location: Former Black Clawson Facility  
Factory Street, Watertown, New York

Date: December 2, 1998  
 SEM Project No.: 250.12.98  
 Boring I.D.: B-19

Geoprobe Model: 5400  
 SEM Representatives: N. Bradford; S. Smith  
 Client Representative: Bill Plante  
 Others Present: None  
 Utility Clearance by: SEM  
 PID Calibration: 100 ppm Isobutylene/Air Mixture  
 Sampling Method: Macro-Core

**LEGEND**

*Relative Composition:*  
 and = 35 to 50%  
 some = 20 to 35%  
 little = 10 to 20%  
 trace = less than 10%

*Relative Grain Size:*  
 c = coarse  
 m = medium  
 f = fine

Sample Number	Depth (Ft.) From To		Description/Soil Characteristics/Observations (Color, Texture, Relative Moisture, Odor)	PID (ppm)
1	0.0	3.5	<u>24-inch recovery.</u> CONCRETE and LIMESTONE/DOLOMITE FRAGMENT; dry.	0.0-4.0' - ND
	3.5	4.0	Dark Brown to Black cmf+ SAND, some SILT, BRICK FRAGMENT; moist; non-plastic.	
2	4.0	8.0	<u>37-inch recovery.</u> Black mf SAND with little SILT, WOOD FRAGMENT, COAL FRAGMENT, SLAG, CONCRETE FRAGMENT; moist.	4.0-8.0' - ND
3	8.0	12.0	<u>22-inch recovery.</u> Similar; moist.	8.0-12.0' - ND
4	12.0	16.0	<u>22-inch recovery.</u> Similar; moist.	12.0-16.0' - 15.1
5	16.0	22.0	<u>31-inch recovery.</u> Similar; moist.	16.0-22.0' - 97.8
6	22.0	26.3	<u>40-inch recovery.</u> Similar with ASH DEBRIS at 24.5 to 25.5 feet interval, ROCK FRAGMENT at 26.3 feet; wet at approximately 25.5 feet.	22.0-26.3' - ND

Notes: Depths noted are approximate; Soil characteristics based on visual and manual field observations only.  
 PID screening performed by headspace analysis of soil samples placed in re-sealable plastic bags, using PE/Photovac  
 Model 2020, equipped with 10.6 eV lamp.  
 ND = None Detected; PPM = Parts Per Million.

**STRATEGIC  
ENVIRONMENTAL  
MANAGEMENT, INC.**

**Geoprobe® Investigation Log**

Client: GYMO Architecture, Engineering, & Land Surveying, PC  
 Project Location: Former Black Clawson Facility  
Factory Street, Watertown, New York

Date: December 2, 1998  
 SEM Project No.: 250.12.98  
 Boring I.D.: B-20

Geoprobe Model: 5400  
 SEM Representatives: N. Bradford; S. Smith  
 Client Representative: Bill Plante  
 Others Present: None  
 Utility Clearance by: SEM  
 PID Calibration: 100 ppm Isobutylene/Air Mixture  
 Sampling Method: Macro-Core

**LEGEND**

*Relative Composition:*  
 and = 35 to 50%  
 some = 20 to 35%  
 little = 10 to 20%  
 trace = less than 10%

*Relative Grain Size:*  
 c = coarse  
 m = medium  
 f = fine

Sample Number	Depth (Ft.)		Description/Soil Characteristics/Observations (Color, Texture, Relative Moisture, Odor)	PID (ppm)
	From	To		
1	0.0	4.0	<u>34-inch recovery.</u> Dark Brown to Black mf- SAND with BRICK FRAGMENT, CONCRETE FRAGMENT; moist.	0.0-4.0' - ND
2	4.0	8.0	<u>27-inch recovery.</u> Similar with no BRICK or CONCRETE FRAGMENT; 2-inch layer of Tan mf- SAND at 7.5 feet; moist.	4.0-8.0' - ND
3	8.0	12.0	<u>20-inch recovery.</u> Similar with Tan mf SAND randomly distributed throughout; moist.	8.0-12.0' - ND
4	12.0	16.0	<u>12-inch recovery.</u> Similar; moist.	12.0-16.0' - ND
5	16.0	20.0	<u>26-inch recovery.</u> Similar; moist.	16.0-21.0' - 3.9
	20.0	22.4	ASH; wet to saturated; petroleum (fuel oil) odor and noticeable sheen at 22.0 to 22.5 feet interval.	22.0-22.5' - 23
	22.4	22.6	WOOD FRAGMENT; saturated.	

Notes: Depths noted are approximate; Soil characteristics based on visual and manual field observations only.  
 PID screening performed by headspace analysis of soil samples placed in re-sealable plastic bags, using PE/Photovac  
 Model 2020, equipped with 10.6 eV lamp.  
 ND = None Detected; PPM = Parts Per Million.

**STRATEGIC  
ENVIRONMENTAL  
MANAGEMENT, INC.**

**Geoprobe® Investigation Log**

Client: GYMO Architecture, Engineering, & Land Surveying, PC  
 Project Location: Former Black Clawson Facility  
Factory Street, Watertown, New York

Date: December 2, 1998  
 SEM Project No.: 250.12.98  
 Boring I.D.: B-21

Geoprobe Model: 5400  
 SEM Representatives: N. Bradford; S. Smith  
 Client Representative: Bill Plante  
 Others Present: None  
 Utility Clearance by: SEM  
 PID Calibration: 100 ppm Isobutylene/Air Mixture  
 Sampling Method: Macro-Core

**LEGEND**

*Relative Composition:*  
 and = 35 to 50%  
 some = 20 to 35%  
 little = 10 to 20%  
 trace = less than 10%

*Relative Grain Size:*  
 c = coarse  
 m = medium  
 f = fine

Sample Number	Depth (Ft.) From To		Description/Soil Characteristics/Observations (Color, Texture, Relative Moisture, Odor)	PID (ppm)
1	0.0	4.0	<u>29-inch recovery.</u> Dark Brown c-mf+ SAND and SILT, some mf GRAVEL and ROCK FRAGMENT; 3-inch layer of Tan cm SAND at 2.5 feet; moist; wet at 3.5 to 4.0 feet interval.	0.0-4.0' - 80
2	4.0	8.0	<u>22-inch recovery.</u> Similar without Tan SAND layer; wet.	4.0-8.0' - 35
3	8.0	12.0	<u>40-inch recovery.</u> Similar with SLAG, CONCRETE FRAGMENT; wet.	8.0-10.0' - 78.9 10.0-12.0' - 155
4	12.0	16.0	<u>29-inch recovery.</u> Grey-Black mf SAND; saturated; strong petroleum (fuel oil) odor throughout.	12.0-14.0' - 459 14.0-16.0' - 465
5	16.0	18.7	<u>21-inch recovery.</u> Similar with ROCK FRAGMENT at 18.7 feet; saturated; strong petroleum odor.	16.0-18.7' - 275

Notes: Depths noted are approximate; Soil characteristics based on visual and manual field observations only.  
 PID screening performed by headspace analysis of soil samples placed in re-sealable plastic bags, using PE/Photovac Model 2020, equipped with 10.6 eV lamp.  
 ND = None Detected; PPM = Parts Per Million.

**STRATEGIC  
ENVIRONMENTAL  
MANAGEMENT, INC.**

**Geoprobe® Investigation Log**

Client: GYMO Architecture, Engineering, & Land Surveying, PC  
 Project Location: Former Black Clawson Facility  
Factory Street, Watertown, New York

Date: December 2, 1998  
 SEM Project No.: 250.12.98  
 Boring I.D.: B-22

Geoprobe Model: 5400  
 SEM Representatives: N. Bradford; S. Smith  
 Client Representative: Bill Plante  
 Others Present: None  
 Utility Clearance by: SEM  
 PID Calibration: 100 ppm Isobutylene/Air Mixture  
 Sampling Method: Macro-Core

**LEGEND**

*Relative Composition:*  
 and = 35 to 50%  
 some = 20 to 35%  
 little = 10 to 20%  
 trace = less than 10%

*Relative Grain Size:*  
 c = coarse  
 m = medium  
 f = fine

Sample Number	Depth (Ft.)		Description/Soil Characteristics/Observations (Color, Texture, Relative Moisture, Odor)	PID (ppm)
	From	To		
1	0.0	0.3	28-inch recovery. CONCRETE FLOOR (cored).	0.0-4.0' - 19.6
	0.3	4.0	Dark Brown c-mf+ SAND and SILT with ROCK FRAGMENTS, SLAG; moist.	
2	4.0	8.0	34-inch recovery. Similar with Black mf SAND layer at approximately 5.0 to 5.5 feet; moist.	4.0-8.0' - 18.4
3	8.0	8.5	33-inch recovery. Similar with BRICK FRAGMENT; moist.	8.0-12.0' - 75.6
	8.5	9.0	FOUNDRY BRICK FRAGMENT; dry.	
	9.0	10.25	Dark Brown and Black mf SAND; moist.	
	10.25	12.0	Grey ROCK (LIMESTONE/DOLOMITE) FRAGMENTS bedded in Brown SILTY SAND matrix; moist.	
4	12.0	16.0	35-inch recovery. Similar; moist.	12.0-16.0' - 6.0
5	16.0	16.3	32-inch recovery. Black ASH and SLAG; saturated; petroleum (fuel oil) odor evident.	16.0-19.8' - 275
	16.3	17.3	DECAYED WOOD FRAGMENTS with Dark Grey mf SAND at 16.3 to 16.7 feet interval; wet; petroleum odor evident.	
	17.3	18.3	Dark Brown SILT and mf SAND; wet; petroleum odor evident.	
	18.3	19.5	Grey-Brown cmf SAND; wet; strong petroleum odor evident.	
	19.5	19.8	ROCK FRAGMENT.	

Notes: Depths noted are approximate; Soil characteristics based on visual and manual field observations only.  
 PID screening performed by headspace analysis of soil samples placed in re-sealable plastic bags, using PE/Photovac Model 2020, equipped with 10.6 eV lamp.  
 ND = None Detected; PPM = Parts Per Million.

**STRATEGIC  
ENVIRONMENTAL  
MANAGEMENT, INC.**

**Geoprobe® Investigation Log**

Client: GYMO Architecture, Engineering, & Land Surveying, PC  
 Project Location: Former Black Clawson Facility  
Factory Street, Watertown, New York

Date: December 2, 1998  
 SEM Project No.: 250.12.98  
 Boring I.D.: B-23

Geoprobe Model: 5400  
 SEM Representatives: N. Bradford; S. Smith  
 Client Representative: Bill Plante  
 Others Present: None  
 Utility Clearance by: SEM  
 PID Calibration: 100 ppm Isobutylene/Air Mixture  
 Sampling Method: Macro-Core

**LEGEND**

*Relative Composition:*  
 and = 35 to 50%  
 some = 20 to 35%  
 little = 10 to 20%  
 trace = less than 10%

*Relative Grain Size:*  
 c = coarse  
 m = medium  
 f = fine

Sample Number	Depth (Ft.)		Description/Soil Characteristics/Observations (Color, Texture, Relative Moisture, Odor)	PID (ppm)
	From	To		
1	0.0	1.0	<u>21-inch recovery.</u> ROCK (LIMESTONE/DOLOMITE) FRAGMENTS embedded in Dark Brown SILTY SAND; moist.	0.0-4.0' - 4.7
	1.0	3.5	Dark Brown cmf SAND and SILT, SLAG; moist.	
	3.5	4.0	Red-Brown cmf SAND and SLAG; moist.	
2	4.0	6.0	<u>25-inch recovery.</u> Similar; moist.	4.0-8.0' - 19.0
	6.0	7.0	SLAG.	
	7.0	8.0	Dark Brown and Black mf SAND, some SLAG, little SILT, trace ASH; Moist.	
3	8.0	12.0	<u>28-inch recovery.</u> Similar; moist.	8.0-12.0' - 21.0
4	12.0	12.3	<u>29-inch recovery.</u> Red-Brown similar; wet.	12.0-13.5' - 261
	12.3	15.4	Grey-Black mf SAND with SILT bands and trace ORGANIC MATERIAL and WOOD FRAGMENT; wet to saturated; petroleum odor evident.	13.5-15.4' - 357
	15.4	15.6	ROCK FRAGMENT.	

Notes: Depths noted are approximate; Soil characteristics based on visual and manual field observations only.  
 PID screening performed by headspace analysis of soil samples placed in re-sealable plastic bags, using PE/Photovac Model 2020, equipped with 10.6 eV lamp.  
 ND = None Detected; PPM = Parts Per Million.

**STRATEGIC  
ENVIRONMENTAL  
MANAGEMENT, INC.**

**Geoprobe® Investigation Log**

Client: GYMO Architecture, Engineering, & Land Surveying, PC  
 Project Location: Former Black Clawson Facility  
Factory Street, Watertown, New York

Date: December 2, 1998  
 SEM Project No.: 250.12.98  
 Boring I.D.: B-24

Geoprobe Model: 5400  
 SEM Representatives: N. Bradford; S. Smith  
 Client Representative: Bill Plante  
 Others Present: None  
 Utility Clearance by: SEM  
 PID Calibration: 100 ppm Isobutylene/Air Mixture  
 Sampling Method: Macro-Core

**LEGEND**

*Relative Composition:*  
 and = 35 to 50%  
 some = 20 to 35%  
 little = 10 to 20%  
 trace = less than 10%

*Relative Grain Size:*  
 c = coarse  
 m = medium  
 f = fine

Sample Number	Depth (Ft.)		Description/Soil Characteristics/Observations (Color, Texture, Relative Moisture, Odor)	PID (ppm)
	From	To		
1	0.0	0.5	<u>35-inch recovery.</u> Dark Brown mf SAND, little SILT, trace ORGANIC MATERIAL (ROOTS); moist.	0.0-4.0' - 9.5
	0.5	1.5	CRUSHED LIMESTONE with little mf SAND; dry.	
	1.5	2.0	Tan mf SAND; moist.	
	2.0	4.0	Dark Brown and Black mf SAND with little SILT, GLASS FRAGMENT, SLAG; moist.	
2	4.0	4.75	<u>36-inch recovery.</u> Similar; moist.	4.0-8.0' - 39.6
	4.75	5.0	CRUSHED LIMESTONE.	
	5.0	8.0	Dark Brown and Red-Brown mf SAND and SLAG; moist.	
3	8.0	11.5	<u>46-inch recovery.</u> Similar; moist.	8.0-10.0' - 16.2 10.0-12.0' - 104
	11.5	12.0	ROCK FRAGMENT; petroleum odor at 12.0 feet.	
4	12.0	14.3	<u>23-inch recovery.</u> Grey-Black mf SAND with DECAYED WOOD DEBRIS; strong petroleum (fuel oil) odor.	12.0-14.3' - 243

Notes: Depths noted are approximate; Soil characteristics based on visual and manual field observations only.  
 PID screening performed by headspace analysis of soil samples placed in re-sealable plastic bags, using PE/Photovac Model 2020, equipped with 10.6 eV lamp.  
 ND = None Detected; PPM = Parts Per Million.

**STRATEGIC  
ENVIRONMENTAL  
MANAGEMENT, INC.**

**Geoprobe® Investigation Log**

Client: GYMO Architecture, Engineering, & Land Surveying, PC  
 Project Location: Former Black Clawson Facility  
Factory Street, Watertown, New York

Date: December 2, 1998  
 SEM Project No.: 250.12.98  
 Boring I.D.: B-25

Geoprobe Model: 5400  
 SEM Representatives: N. Bradford; S. Smith  
 Client Representative: Bill Plante  
 Others Present: None  
 Utility Clearance by: SEM  
 PID Calibration: 100 ppm Isobutylene/Air Mixture  
 Sampling Method: Macro-Core

**LEGEND**

*Relative Composition:*  
 and = 35 to 50%  
 some = 20 to 35%  
 little = 10 to 20%  
 trace = less than 10%

*Relative Grain Size:*  
 c = coarse  
 m = medium  
 f = fine

Sample Number	Depth (Ft.)		Description/Soil Characteristics/Observations (Color, Texture, Relative Moisture, Odor)	PID (ppm)
	From	To		
1	0.0	0.3	<u>48-inch recovery.</u> TOPSOIL comprised of Dark Brown SILT and f SAND, little mf GRAVEL, trace ORGANIC MATERIAL (GRASS, ROOTS); moist.	0.0-6.0' - ND
	0.3	0.75	Grey-Brown cmf+ SAND and mf GRAVEL, little SILT; moist.	
	0.75	1.0	CONCRETE DEBRIS.	
	1.0	3.25	Dark Brown and Tan mf SAND, little SILT, SLAG; moist.	
	3.25	6.0	CONCRETE DEBRIS; dry.	
2	6.0	6.5	<u>31-inch recovery.</u> Similar; dry.	6.0-10.0' - ND
	6.5	10.0	Brown mf SAND and BRICK FRAGMENT, CRUSHED LIMESTONE; moist.	
3	10.0	11.2	<u>31-inch recovery.</u> Similar; moist.	10.0-14.0' - ND
	11.2	12.0	Tan mf SAND; moist.	
	12.0	13.2	Dark Brown mf SAND, some SILT, trace ORGANIC MATERIAL; moist.	
	13.2	14.0	Tan mf SAND; moist.	
4	14.0	15.5	<u>13-inch recovery.</u> Similar with little SILT randomly distributed throughout, trace ORGANIC MATERIAL, ROCK FRAGMENT at 15.4 to 15.5 feet interval; moist.	14.0-15.5' - ND

Notes: Depths noted are approximate; Soil characteristics based on visual and manual field observations only.  
 PID screening performed by headspace analysis of soil samples placed in re-sealable plastic bags, using PE/Photovac Model 2020, equipped with 10.6 eV lamp.  
 ND = None Detected; PPM = Parts Per Million.

**STRATEGIC  
ENVIRONMENTAL  
MANAGEMENT, INC.**

**Geoprobe® Investigation Log**

Client: GYMO Architecture, Engineering, & Land Surveying, PC  
 Project Location: Former Black Clawson Facility  
Factory Street, Watertown, New York

Geoprobe Model: 5400  
 SEM Representatives: N. Bradford; S. Smith  
 Client Representative: Bill Plante  
 Others Present: None  
 Utility Clearance by: SEM  
 PID Calibration: 100 ppm Isobutylene/Air Mixture  
 Sampling Method: Macro-Core

Date: December 2, 1998  
 SEM Project No.: 250.12.98  
 Boring I.D.: B-26

**LEGEND**

*Relative Composition:*  
 and = 35 to 50%  
 some = 20 to 35%  
 little = 10 to 20%  
 trace = less than 10%

*Relative Grain Size:*  
 c = coarse  
 m = medium  
 f = fine

Sample Number	Depth (Ft.)		Description/Soil Characteristics/Observations (Color, Texture, Relative Moisture, Odor)	PID (ppm)
	From	To		
1	0.0	4.0	<u>27-inch recovery.</u> Black mf SAND, little SILT, ROCK FRAGMENT, CONCRETE FRAGMENT, BRICK FRAGMENT, SLAG; moist.	0.0-4.0' - ND
2	4.0	10.0	<u>28-inch recovery.</u> NOTE: 6.8 to 10.0 feet interval sampled at second location, as refusal was encountered at 6.8 feet at original location. Similar; moist.	4.0-10.0' - ND
3	10.0	14.0	<u>28-inch recovery.</u> Dark Brown and Black mf SAND, some SILT, SLAG, CONCRETE DEBRIS, trace ORGANIC MATERIAL (ROOTS); moist.	10.0-14.0' - ND
4	14.0	17.1	<u>32-inch recovery.</u> Similar; moist.	14.0-17.1' - ND

Notes: Depths noted are approximate; Soil characteristics based on visual and manual field observations only.  
 PID screening performed by headspace analysis of soil samples placed in re-sealable plastic bags, using PE/Photovac Model 2020, equipped with 10.6 eV lamp.  
 ND = None Detected; PPM = Parts Per Million.





FINAL TEST Results.

## Laboratory Analysis Report

LSL Project Number: 9808266

Fran Balkema QDO 12/28/98

Reviewed By

Date

Life Science Laboratories, Inc. warrants, to the best of its knowledge and belief, the accuracy of the analytical test results contained in this report, but makes no other warranty, expressed or implied, especially no warranties of merchantability or fitness for a particular purpose. By the Client's acceptance and/or use of this report, the Client agrees that LSL is hereby released from any and all liabilities, claims, damages or causes of action affecting or which may affect the Client as regards to the results contained in this report. The Client further agrees that the only remedy available to the Client in the event of proven non-conformity with the above warranty shall be for LSL to re-perform the analytical test(s) at no charge to the Client. The data contained in this report are for the exclusive use of the Client to whom it is addressed, and the release of these data to any other party, or the use of the name, trademark or service mark of Life Science Laboratories, Inc. especially for the use of advertising to the general public, is strictly prohibited without express prior written consent of Life Science Laboratories, Inc.

-- LABORATORY ANALYSIS REPORT --

Strategic Environmental - Canton  
P.O. Box 30  
Canton, NY 13617

Attn: Mr. Sean Smith  
Phone: (315) 386-2736  
FAX: (315) 386-4736

Project No.: 250.12.98  
Authorization:

LSL Project No.: 9808266  
Report Date: 12/28/98

Sample ID: B-19 16-22'  
Source: *BOUNDARY SAND*  
Sample Matrix: SHW

LSL Sample ID: 9808266-001  
Date Sampled: 12/2/98

*Analytical Method*

<i>Parameter(s)</i>	<i>Results</i>	<i>Units</i>	<i>Analysis Date</i>	<i>Con</i>
EPA 8260B TCL Volatiles				
Acetone	<400	ug/kg	12/15/98	
Benzene	<200	ug/kg	12/15/98	
Bromodichloromethane	<200	ug/kg	12/15/98	
Bromoform	<200	ug/kg	12/15/98	
Bromomethane	<200	ug/kg	12/15/98	
2-Butanone (MEK)	<400	ug/kg	12/15/98	
Carbon disulfide	<200	ug/kg	12/15/98	
Carbon tetrachloride	<200	ug/kg	12/15/98	
Chlorobenzene	<200	ug/kg	12/15/98	
Chloroethane	<200	ug/kg	12/15/98	
Chloroform	<200	ug/kg	12/15/98	
Chloromethane	<200	ug/kg	12/15/98	
Dibromochloromethane	<200	ug/kg	12/15/98	
1,1-Dichloroethane	<200	ug/kg	12/15/98	
1,2-Dichloroethane	<200	ug/kg	12/15/98	
1,1-Dichloroethene	<200	ug/kg	12/15/98	
1,2-Dichloroethene, Total	<200	ug/kg	12/15/98	
1,2-Dichloropropane	<200	ug/kg	12/15/98	
cis-1,3-Dichloropropene	<200	ug/kg	12/15/98	
trans-1,3-Dichloropropene	<200	ug/kg	12/15/98	
Ethyl benzene	<200	ug/kg	12/15/98	
2-Hexanone	<400	ug/kg	12/15/98	
Methylene chloride	<400	ug/kg	12/15/98	
4-Methyl-2-pentanone (MIBK)	<400	ug/kg	12/15/98	
Styrene	<200	ug/kg	12/15/98	
1,1,2,2-Tetrachloroethane	<200	ug/kg	12/15/98	
Tetrachloroethene	<200	ug/kg	12/15/98	
Toluene	<200	ug/kg	12/15/98	

Life Science Laboratories, Inc.

5854 Butternut Drive, East Syracuse, New York 13057 Telephone: (315) 445-1105 Telefax: (315) 445-1105

NYS DOH ELAP No. 10248

-- LABORATORY ANALYSIS REPORT --

Strategic Environmental - Canton  
P.O. Box 30  
Canton, NY 13617

Attn: Mr. Sean Smith  
Phone: (315) 386-2736  
FAX: (315) 386-4736

Project No.: 250.12.98

LSL Project No.: 9808266

Authorization:

Report Date: 12/28/98

1,1,1-Trichloroethane	<200	ug/kg	12/15/98
1,1,2-Trichloroethane	<200	ug/kg	12/15/98
Trichloroethene	<200	ug/kg	12/15/98
Vinyl chloride	<200	ug/kg	12/15/98
Xylenes (Total)	<200	ug/kg	12/15/98 (6)

(6) Elevated detection limit due to matrix interference.

Sample ID: B-19 Composite

Source:

LSL Sample ID: 9808266-002

Sample Matrix: SHW

Date Sampled: 12/2/98

Analytical Method

Parameter(s)	Results	Units	Analysis Date	Comment
EPA 6010 Priority Pollutant Metals				
Antimony	<6	mg/kg	12/22/98	
Arsenic	5.7	mg/kg	12/22/98	
Beryllium	<1	mg/kg	12/22/98	
Cadmium	<1	mg/kg	12/22/98	
Chromium	20	mg/kg	12/22/98	
Copper	99	mg/kg	12/22/98	
Lead	130	mg/kg	12/22/98	
Nickel	18	mg/kg	12/22/98	
Selenium	2.4	mg/kg	12/22/98	
Silver	<1	mg/kg	12/22/98	
Thallium	<1	mg/kg	12/22/98	
Zinc	64	mg/kg	12/22/98	
EPA 7471 Mercury				
Mercury	<0.1	mg/kg	12/28/98	
EPA 9010 Total Cyanide				
Cyanide, Total	0.18	mg/kg	12/17/98	

Life Science Laboratories, Inc.

Page 3 of 15

5854 Butternut Drive, East Syracuse, New York 13057 Telephone: (315) 445-1105 Telefax: (315) 445-1301

NYS DOH ELAP No. 10248

# -- LABORATORY ANALYSIS REPORT --

Strategic Environmental - Canton  
 P.O. Box 30  
 Canton, NY 13617

Attn: Mr. Sean Smith  
 Phone: (315) 386-2736  
 FAX: (315) 386-4736

Project No.: 250.12.98  
 Authorization:

LSL Project No.: 9808266  
 Report Date: 12/28/98

Sample ID: B-20 22'  
 Source:  
 Sample Matrix: SHW

BOUNDARY SAND

LSL Sample ID: 9808266-003  
 Date Sampled: 12/2/98

Analytical Method	Parameter(s)	Results	Units	Analysis Date	Comments
EPA 8260B TCL	Volatiles	<400	ug/kg	12/15/98	
	Acetone	<200	ug/kg	12/15/98	
	Benzene	<200	ug/kg	12/15/98	
	Bromodichloromethane	<200	ug/kg	12/15/98	
	Bromoform	<200	ug/kg	12/15/98	
	Bromomethane	<400	ug/kg	12/15/98	
	2-Butanone (MEK)	<200	ug/kg	12/15/98	
	Carbon disulfide	<200	ug/kg	12/15/98	
	Carbon tetrachloride	<200	ug/kg	12/15/98	
	Chlorobenzene	<200	ug/kg	12/15/98	
	Chloroethane	<200	ug/kg	12/15/98	
	Chloroform	<200	ug/kg	12/15/98	
	Chloromethane	<200	ug/kg	12/15/98	
	Dibromochloromethane	<200	ug/kg	12/15/98	
	1,1-Dichloroethane	<200	ug/kg	12/15/98	
	1,2-Dichloroethane	<200	ug/kg	12/15/98	
	1,1-Dichloroethene	<200	ug/kg	12/15/98	
	1,2-Dichloroethene, Total	<200	ug/kg	12/15/98	
	1,2-Dichloropropane	<200	ug/kg	12/15/98	
	cis-1,3-Dichloropropene	<200	ug/kg	12/15/98	
	trans-1,3-Dichloropropene	<200	ug/kg	12/15/98	
	Ethyl benzene	<400	ug/kg	12/15/98	
	2-Hexanone	<400	ug/kg	12/15/98	
	Methylene chloride	<400	ug/kg	12/15/98	
	4-Methyl-2-pentanone (MIBK)	<200	ug/kg	12/15/98	
	Styrene	<200	ug/kg	12/15/98	
	1,1,2,2-Tetrachloroethane	<200	ug/kg	12/15/98	
	Tetrachloroethene	<200	ug/kg	12/15/98	
	Toluene	<200	ug/kg	12/15/98	

-- LABORATORY ANALYSIS REPORT --

Strategic Environmental - Canton  
P.O. Box 30  
Canton, NY 13617

Attn: Mr. Sean Smith  
Phone: (315) 386-2736  
FAX: (315) 386-4736

Project No.: 250.12.98

LSL Project No.: 9808266

Authorization:

Report Date: 12/28/98

Parameter	Results	Units	Analysis Date	Comment
1,1,1-Trichloroethane	<200	ug/kg	12/15/98	
1,1,2-Trichloroethane	<200	ug/kg	12/15/98	
Trichloroethene	<200	ug/kg	12/15/98	
Vinyl chloride	<200	ug/kg	12/15/98	
Xylenes (Total)	<200	ug/kg	12/15/98	(6)

(6) Elevated detection limit due to matrix interference.

Sample ID: B-20 0-21' Composite

LSL Sample ID: 9808266-004

Source:

Date Sampled: 12/2/98

Sample Matrix: SHW

Analytical Method

Parameter(s)	Results	Units	Analysis Date	Comment
EPA 6010 Priority Pollutant Metals				
Antimony	<5	mg/kg	12/22/98	
Arsenic	1.4	mg/kg	12/22/98	
Beryllium	<0.8	mg/kg	12/22/98	
Cadmium	<0.8	mg/kg	12/22/98	
Chromium	3.4	mg/kg	12/22/98	
Copper	10	mg/kg	12/22/98	
Lead	20	mg/kg	12/22/98	
Nickel	4.8	mg/kg	12/22/98	
Selenium	<0.8	mg/kg	12/22/98	
Silver	<0.8	mg/kg	12/22/98	
Thallium	<0.8	mg/kg	12/22/98	
Zinc	19	mg/kg	12/22/98	
EPA 7471 Mercury				
Mercury	<0.1	mg/kg	12/28/98	
EPA 9010 Total Cyanide				
Cyanide, Total	<0.1	mg/kg	12/17/98	

Life Science Laboratories, Inc.

Page 5 of 15

5854 Butternut Drive, East Syracuse, New York 13057 Telephone: (315) 445-1105 Telefax: (315) 445-1301

NYS DOH ELAP No. 10248

**-- LABORATORY ANALYSIS REPORT --**

Strategic Environmental - Canton  
P.O. Box 30  
Canton, NY 13617

Attn: Mr. Sean Smith  
Phone: (315) 386-2736  
FAX: (315) 386-4736

Project No.: 250.12.98  
Authorization:

LSL Project No.: 9808266  
Report Date: 12/28/98

Sample ID: B-21 12'-16'  
Source:  
Sample Matrix: SHW  
Analytical Method

*ADJACENT FUEL OIL TANKS*

LSL Sample ID: 9808266-005  
Date Sampled: 12/2/98

Parameter(s)	Results	Units	Analysis Date	Comn
EPA 6010 Priority Pollutant Metals				
Antimony	<5	mg/kg	12/22/98	
Arsenic	1.4	mg/kg	12/22/98	
Beryllium	<0.9	mg/kg	12/22/98	
Cadmium	<0.9	mg/kg	12/22/98	
Chromium	10	mg/kg	12/22/98	
Copper	1800	mg/kg	12/22/98	
Lead	300	mg/kg	12/22/98	
Nickel	22	mg/kg	12/22/98	
Selenium	<0.9	mg/kg	12/22/98	
Silver	<0.9	mg/kg	12/22/98	
Thallium	<0.9	mg/kg	12/22/98	
Zinc	510	mg/kg	12/22/98	
EPA 7471 Mercury				
Mercury	<0.1	mg/kg	12/28/98	
EPA 8260B TCL Volatiles				
Acetone	<1000	ug/kg	12/15/98	
Benzene	<500	ug/kg	12/15/98	
Bromodichloromethane	<500	ug/kg	12/15/98	
Bromoform	<500	ug/kg	12/15/98	
Bromomethane	<500	ug/kg	12/15/98	
2-Butanone (MEK)	<1000	ug/kg	12/15/98	
Carbon disulfide	<500	ug/kg	12/15/98	
Carbon tetrachloride	<500	ug/kg	12/15/98	
Chlorobenzene	<500	ug/kg	12/15/98	
Chloroethane	<500	ug/kg	12/15/98	
Chloroform	<500	ug/kg	12/15/98	
Chloromethane	<500	ug/kg	12/15/98	
Dibromochloromethane	<500	ug/kg	12/15/98	

-- LABORATORY ANALYSIS REPORT --

Strategic Environmental - Canton  
P.O. Box 30  
Canton, NY 13617

Attn: Mr. Sean Smith  
Phone: (315) 386-2736  
FAX: (315) 386-4736

Project No.: 250.12.98

LSL Project No.: 9808266

Authorization:

Report Date: 12/28/98

1,1-Dichloroethane	<500	ug/kg	12/15/98
1,2-Dichloroethane	<500	ug/kg	12/15/98
1,1-Dichloroethene	<500	ug/kg	12/15/98
1,2-Dichloroethene, Total	<500	ug/kg	12/15/98
1,2-Dichloropropane	<500	ug/kg	12/15/98
cis-1,3-Dichloropropene	<500	ug/kg	12/15/98
trans-1,3-Dichloropropene	<500	ug/kg	12/15/98
Ethyl benzene	<500	ug/kg	12/15/98
2-Hexanone	<1000	ug/kg	12/15/98
Methylene chloride	<1000	ug/kg	12/15/98
4-Methyl-2-pentanone (MIBK)	<1000	ug/kg	12/15/98
Styrene	<500	ug/kg	12/15/98
1,1,1,2-Tetrachloroethane	<500	ug/kg	12/15/98
Tetrachloroethene	<500	ug/kg	12/15/98
Toluene	<500	ug/kg	12/15/98
1,1,1-Trichloroethane	<500	ug/kg	12/15/98
1,1,2-Trichloroethane	<500	ug/kg	12/15/98
Trichloroethene	<500	ug/kg	12/15/98
Vinyl chloride	<500	ug/kg	12/15/98
Xylenes (Total)	2600	ug/kg	12/15/98
EPA 9010 Total Cyanide			
Cyanide, Total	<0.1	mg/kg	12/17/98
NYS-DEC STARS 8021 Volatiles			
Benzene	<500	ug/kg	12/15/98
n-Butylbenzene	5600	ug/kg	12/15/98
sec-Butylbenzene	5000	ug/kg	12/15/98
tert-Butylbenzene	<500	ug/kg	12/15/98
Ethyl benzene	<500	ug/kg	12/15/98
Isopropylbenzene (Cumene)	2300	ug/kg	12/15/98
4-Isopropyl toluene (Cymene)	4400	ug/kg	12/15/98
MTBE	<500	ug/kg	12/15/98
Naphthalene	27000	ug/kg	12/15/98
N-Propylbenzene	4800	ug/kg	12/15/98
Toluene	<500	ug/kg	12/15/98
1,2,4-Trimethylbenzene	39000	ug/kg	12/15/98

Life Science Laboratories, Inc.

Page 7 of 15

5854 Butternut Drive, East Syracuse, New York 13057 Telephone: (315) 445-1105 Telefax: (315) 445-1301

NYS DOH ELAP No. 10248

# -- LABORATORY ANALYSIS REPORT --

Strategic Environmental - Canton  
P.O. Box 30  
Canton, NY 13617

Attn: Mr. Sean Smith  
Phone: (315) 386-2736  
FAX: (315) 386-4736

Project No.: 250.12.98  
Authorization:

LSL Project No.: 9808266  
Report Date: 12/28/98

1,3,5-Trimethylbenzene	<500	ug/kg	12/15/98
Xylenes (Total)	2600	ug/kg	12/15/98
NYS-DEC STARS 8270 Base/Neutrals			
Acenaphthene	<10	mg/kg	12/15/98
Anthracene	<10	mg/kg	12/15/98
Benzo(a)anthracene	<10	mg/kg	12/15/98
Benzo(b)fluoranthene	<10	mg/kg	12/15/98
Benzo(k)fluoranthene	<10	mg/kg	12/15/98
Benzo(ghi)perylene	<10	mg/kg	12/15/98
Benzo(a)pyrene	<10	mg/kg	12/15/98
Chrysene	<10	mg/kg	12/15/98
Dibenz(a,h)anthracene	<10	mg/kg	12/15/98
Fluoranthene	17	mg/kg	12/15/98
Fluorene	<10	mg/kg	12/15/98
Indeno(1,2,3-c,d)pyrene	27	mg/kg	12/15/98
Phenanthrene	<10	mg/kg	12/15/98
Pyrene	<10	mg/kg	12/15/98

(6) Elevated detection limit due to matrix interference.

Sample ID: B-22 19-19.8'

*FUEL TANK LOCATION?*

LSL Sample ID: 9808266-006

Source:

Date Sampled: 12/2/98

Sample Matrix: SHW

Analytical Method

Parameter(s)	Results	Units	Analysis Date
NYS-DEC STARS 8021 Volatiles			
Benzene	<200	ug/kg	12/15/98
n-Butylbenzene	6800	ug/kg	12/15/98
sec-Butylbenzene	5600	ug/kg	12/15/98
tert-Butylbenzene	<200	ug/kg	12/15/98
Ethyl benzene	<200	ug/kg	12/15/98
Isopropylbenzene (Cumene)	2600	ug/kg	12/15/98
4-Isopropyl toluene (Cymene)	1300	ug/kg	12/15/98
MTBE	<200	ug/kg	12/15/98
Naphthalene	<200	ug/kg	12/15/98
(11) This result has been blank corrected.	5600	ug/kg	12/15/98
N-Propylbenzene			

Life Science Laboratories, Inc.

4954 Butternut Drive, East Syracuse, New York 13057 Telephone: (315) 445-1105 Telefax: (315) 44



**-- LABORATORY ANALYSIS REPORT --**

Strategic Environmental - Canton  
 P.O. Box 30  
 Canton, NY 13617

Attn: Mr. Sean Smith  
 Phone: (315) 386-2736  
 FAX: (315) 386-4736

Project No.: 250.12.98

LSL Project No.: 9808266

Report Date: 12/28/98

**Authorization:**

Toluene	<200	ug/kg	12/15/98
1,2,4-Trimethylbenzene	320	ug/kg	12/15/98
1,3,5-Trimethylbenzene	<200	ug/kg	12/15/98
Xylenes (Total)	<200	ug/kg	12/15/98
NYS-DEC STARS 8270 Base/Neutrals			
Acenaphthene	<10	mg/kg	12/15/98
Anthracene	<10	mg/kg	12/15/98
Benzo(a)anthracene	<10	mg/kg	12/15/98
Benzo(b)fluoranthene	<10	mg/kg	12/15/98
Benzo(k)fluoranthene	<10	mg/kg	12/15/98
Benzo(ghi)perylene	<10	mg/kg	12/15/98
Benzo(a)pyrene	<10	mg/kg	12/15/98
Chrysene	<10	mg/kg	12/15/98
Dibenz(a,h)anthracene	<10	mg/kg	12/15/98
Fluoranthene	10	mg/kg	12/15/98
Fluorene	<10	mg/kg	12/15/98
Indeno(1,2,3-c,d)pyrene	19	mg/kg	12/15/98
Phenanthrene	<10	mg/kg	12/15/98 (6)
Pyrene			

(6) Elevated detection limit due to matrix interference.

Sample ID: B-23 15-15.6' *EAST OF BLDG*

LSL Sample ID: 9808266-007

Source: *ADJACENT PEARL STREET*  
 Sample Matrix: SHW

Date Sampled: 12/2/98

**Analytical Method**

Parameter(s)	Results	Units	Analysis Date	Comment
EPA 6010 Priority Pollutant Metals	<6	mg/kg	12/22/98	
Antimony	2.3	mg/kg	12/22/98	
Arsenic	<1	mg/kg	12/22/98	
Beryllium	<1	mg/kg	12/22/98	
Cadmium	1.8	mg/kg	12/22/98	
Chromium	3.6	mg/kg	12/22/98	
Copper	6.0	mg/kg	12/22/98	
Lead	2.0	mg/kg	12/22/98	
Nickel				

Page 9 of 15

Life Science Laboratories, Inc.

5854 Butternut Drive, East Syracuse, New York 13057 Telephone: (315) 445-1105 Telefax: (315) 445-1301  
 NYS DOH ELAP No. 10248

-- LABORATORY ANALYSIS REPORT --

Strategic Environmental - Canton  
P.O. Box 30  
Canton, NY 13617

Attn: Mr. Sean Smith  
Phone: (315) 386-2736  
FAX: (315) 386-4736

Project No.: 250.12.98  
Authorization:

LSL Project No.: 9808266  
Report Date: 12/28/98

Selenium	<1	mg/kg	12/22/98
Silver	<1	mg/kg	12/22/98
Thallium	<1	mg/kg	12/22/98
Zinc	21	mg/kg	12/22/98
EPA 7471 Mercury			
Mercury	<0.1	mg/kg	12/28/98
NYS-DEC STARS 8021 Volatiles			
Benzene	<200	ug/kg	12/15/98
n-Butylbenzene	3800	ug/kg	12/15/98
sec-Butylbenzene	2700	ug/kg	12/15/98
tert-Butylbenzene	<200	ug/kg	12/15/98
Ethyl benzene	<200	ug/kg	12/15/98
Isopropylbenzene (Cumene)	1200	ug/kg	12/15/98
4-Isopropyl toluene (Cymene)	2400	ug/kg	12/15/98
MTBE	<200	ug/kg	12/15/98
Naphthalene	23000	ug/kg	12/15/98
N-Propylbenzene	2900	ug/kg	12/15/98
Toluene	<200	ug/kg	12/15/98
1,2,4-Trimethylbenzene	24000	ug/kg	12/15/98
1,3,5-Trimethylbenzene	5500	ug/kg	12/15/98
Xylenes (Total)	1500	ug/kg	12/15/98
NYS-DEC STARS 8270 Base/Neutrals			
Acenaphthene	<10	mg/kg	12/15/98
Anthracene	<10	mg/kg	12/15/98
Benzo(a)anthracene	<10	mg/kg	12/15/98
Benzo(b)fluoranthene	<10	mg/kg	12/15/98
Benzo(k)fluoranthene	<10	mg/kg	12/15/98
Benzo(ghi)perylene	<10	mg/kg	12/15/98
Benzo(a)pyrene	<10	mg/kg	12/15/98
Chrysene	<10	mg/kg	12/15/98
Dibenz(a,h)anthracene	<10	mg/kg	12/15/98
Fluoranthene	<10	mg/kg	12/15/98
Fluorene	<10	mg/kg	12/15/98
Indeno(1,2,3-c,d)pyrene	<10	mg/kg	12/15/98
Phenanthrene	16	mg/kg	12/15/98

-- LABORATORY ANALYSIS REPORT --

Strategic Environmental - Canton  
P.O. Box 30  
Canton, NY 13617

Attn: Mr. Sean Smith  
Phone: (315) 386-2736  
FAX: (315) 386-4736

Project No.: 250.12.98

LSL Project No.: 9808266

Authorization:

Report Date: 12/28/98

---

Pyrene	<10	mg/kg	12/15/98	(6)
--------	-----	-------	----------	-----

---

(6) Elevated detection limit due to matrix interference.

---

Sample ID: B-24 12-13'

*ADJACENT RAIL TRACKS*

Source:

LSL Sample ID: 9808266-008

Sample Matrix: SHW

Date Sampled: 12/2/98

Analytical Method

Parameter(s)	Results	Units	Analysis Date	Comment
EPA 6010 Priority Pollutant Metals				
Antimony	<6	mg/kg	12/22/98	
Arsenic	8.9	mg/kg	12/22/98	
Beryllium	<1	mg/kg	12/22/98	
Cadmium	<1	mg/kg	12/22/98	
Chromium	5.3	mg/kg	12/22/98	
Copper	1100	mg/kg	12/22/98	
Lead	110	mg/kg	12/22/98	
Nickel	6.1	mg/kg	12/22/98	
Selenium	<1	mg/kg	12/22/98	
Silver	<1	mg/kg	12/22/98	
Thallium	<1	mg/kg	12/22/98	
Zinc	86	mg/kg	12/22/98	
EPA 7471 Mercury				
Mercury	<0.1	mg/kg	12/28/98	
EPA 8260B TCL Volatiles				
Acetone	<400	ug/kg	12/15/98	
Benzene	<200	ug/kg	12/15/98	
Bromodichloromethane	<200	ug/kg	12/15/98	
Bromoform	<200	ug/kg	12/15/98	
Bromomethane	<200	ug/kg	12/15/98	
2-Butanone (MEK)	<400	ug/kg	12/15/98	
Carbon disulfide	<200	ug/kg	12/15/98	
Carbon tetrachloride	<200	ug/kg	12/15/98	
Chlorobenzene	<200	ug/kg	12/15/98	
Chloroethane	<200	ug/kg	12/15/98	
Chloroform	<200	ug/kg	12/15/98	

-- LABORATORY ANALYSIS REPORT --

Strategic Environmental - Canton  
P.O. Box 30  
Canton, NY 13617

Attn: Mr. Sean Smith  
Phone: (315) 386-2736  
FAX: (315) 386-4736

Project No.: 250.12.98  
Authorization:

LSL Project No.: 9808266  
Report Date: 12/28/98

Chloromethane	<200	ug/kg	12/15/98
Dibromochloromethane	<200	ug/kg	12/15/98
1,1-Dichloroethane	<200	ug/kg	12/15/98
1,2-Dichloroethane	<200	ug/kg	12/15/98
1,1-Dichloroethene	<200	ug/kg	12/15/98
1,2-Dichloroethene, Total	<200	ug/kg	12/15/98
1,2-Dichloropropane	<200	ug/kg	12/15/98
cis-1,3-Dichloropropene	<200	ug/kg	12/15/98
trans-1,3-Dichloropropene	<200	ug/kg	12/15/98
Ethyl benzene	<200	ug/kg	12/15/98
2-Hexanone	<400	ug/kg	12/15/98
Methylene chloride	<400	ug/kg	12/15/98
4-Methyl-2-pentanone (MIBK)	<400	ug/kg	12/15/98
Styrene	<200	ug/kg	12/15/98
1,1,2,2-Tetrachloroethane	<200	ug/kg	12/15/98
Tetrachloroethene	<200	ug/kg	12/15/98
Toluene	<200	ug/kg	12/15/98
1,1,1-Trichloroethane	<200	ug/kg	12/15/98
1,1,2-Trichloroethane	<200	ug/kg	12/15/98
Trichloroethene	<200	ug/kg	12/15/98
Vinyl chloride	<200	ug/kg	12/15/98
Xylenes (Total)	450	ug/kg	12/15/98
EPA 9010 Total Cyanide			
Cyanide, Total	<0.1	mg/kg	12/17/98
NYS-DEC STARS 8021 Volatiles			
Benzene	<200	ug/kg	12/15/98
n-Butylbenzene	1900	ug/kg	12/15/98
sec-Butylbenzene	1200	ug/kg	12/15/98
tert-Butylbenzene	<200	ug/kg	12/15/98
Ethyl benzene	<200	ug/kg	12/15/98
Isopropylbenzene (Cumene)	640	ug/kg	12/15/98
4-Isopropyl toluene (Cymene)	1400	ug/kg	12/15/98
MTBE	<200	ug/kg	12/15/98
Naphthalene	1000	ug/kg	12/15/98
N-Propylbenzene	1300	ug/kg	12/15/98

Life Science Laboratories, Inc.

Page 12 of 15

5854 Butternut Drive, East Syracuse, New York 13057 Telephone: (315) 445-1105 Telefax: (315) 445-1301

NYS DOH ELAP No. 10248

-- LABORATORY ANALYSIS REPORT --

Strategic Environmental - Canton  
P.O. Box 30  
Canton, NY 13617

Attn: Mr. Sean Smith  
Phone: (315) 386-2736  
FAX: (315) 386-4736

Project No.: 250.12.98  
Authorization:

LSL Project No.: 9808266  
Report Date: 12/28/98

Toluene	<200	ug/kg	12/15/98
1,2,4-Trimethylbenzene	12000	ug/kg	12/15/98
1,3,5-Trimethylbenzene	<200	ug/kg	12/15/98
Xylenes (Total)	450	ug/kg	12/15/98
NYS-DEC STARS 8270 Base/Neutrals			
Acenaphthene	4.0	mg/kg	12/15/98
Anthracene	2.6	mg/kg	12/15/98
Benzo(a)anthracene	<2	mg/kg	12/15/98
Benzo(b)fluoranthene	<2	mg/kg	12/15/98
Benzo(k)fluoranthene	<2	mg/kg	12/15/98
Benzo(ghi)perylene	<2	mg/kg	12/15/98
Benzo(a)pyrene	<2	mg/kg	12/15/98
Chrysene	<2	mg/kg	12/15/98
Dibenz(a,h)anthracene	<2	mg/kg	12/15/98
Fluoranthene	<2	mg/kg	12/15/98
Fluorene	4.5	mg/kg	12/15/98
Indeno(1,2,3-c,d)pyrene	<2	mg/kg	12/15/98
Phenanthrene	7.3	mg/kg	12/15/98
Pyrene	<2	mg/kg	12/15/98

Sample ID: B-26 Composite

Source:

*BOUNDARY SAND*

LSL Sample ID: 9808266-009

Sample Matrix: SHW

Date Sampled: 12/2/98

Analytical Method

Parameter(s)	Results	Units	Analysis Date	Comment
EPA 6010 Priority Pollutant Metals				
Antimony	<6	mg/kg	12/22/98	
Arsenic	9.2	mg/kg	12/22/98	
Beryllium	<1	mg/kg	12/22/98	
Cadmium	<1	mg/kg	12/22/98	
Chromium	17	mg/kg	12/22/98	
Copper	190	mg/kg	12/22/98	
Lead	190	mg/kg	12/22/98	
Nickel	15	mg/kg	12/22/98	
Selenium	1.8	mg/kg	12/22/98	

Life Science Laboratories, Inc.

Page 13 of 15

5854 Butternut Drive, East Syracuse, New York 13057 Telephone: (315) 445-1105 Telefax: (315) 445-1301

NYS DOH ELAP No. 10248

-- LABORATORY ANALYSIS REPORT --

Strategic Environmental - Canton  
P.O. Box 30  
Canton, NY 13617

Attn: Mr. Sean Smith  
Phone: (315) 386-2736  
FAX: (315) 386-4736

Project No.: 250.12.98  
Authorization:

LSL Project No.: 9808266  
Report Date: 12/28/98

Silver	<1	mg/kg	12/22/98
Thallium	<1	mg/kg	12/22/98
Zinc	110	mg/kg	12/22/98
EPA 7471 Mercury			
Mercury	<0.1	mg/kg	12/28/98
EPA 8260B TCL Volatiles			
Acetone	<400	ug/kg	12/15/98
Benzene	<200	ug/kg	12/15/98
Bromodichloromethane	<200	ug/kg	12/15/98
Bromoform	<200	ug/kg	12/15/98
Bromomethane	<200	ug/kg	12/15/98
2-Butanone (MEK)	<400	ug/kg	12/15/98
Carbon disulfide	<200	ug/kg	12/15/98
Carbon tetrachloride	<200	ug/kg	12/15/98
Chlorobenzene	<200	ug/kg	12/15/98
Chloroethane	<200	ug/kg	12/15/98
Chloroform	<200	ug/kg	12/15/98
Chloromethane	<200	ug/kg	12/15/98
Dibromochloromethane	<200	ug/kg	12/15/98
1,1-Dichloroethane	<200	ug/kg	12/15/98
1,2-Dichloroethane	<200	ug/kg	12/15/98
1,1-Dichloroethene	<200	ug/kg	12/15/98
1,2-Dichloroethene, Total	<200	ug/kg	12/15/98
1,2-Dichloropropane	<200	ug/kg	12/15/98
cis-1,3-Dichloropropene	<200	ug/kg	12/15/98
trans-1,3-Dichloropropene	<200	ug/kg	12/15/98
Ethyl benzene	<200	ug/kg	12/15/98
2-Hexanone	<400	ug/kg	12/15/98
Methylene chloride	<400	ug/kg	12/15/98
4-Methyl-2-pentanone (MIBK)	<400	ug/kg	12/15/98
Styrene	<200	ug/kg	12/15/98
1,1,2,2-Tetrachloroethane	<200	ug/kg	12/15/98
Tetrachloroethene	<200	ug/kg	12/15/98
Toluene	<200	ug/kg	12/15/98
1,1,1-Trichloroethane	<200	ug/kg	12/15/98

-- LABORATORY ANALYSIS REPORT --

Strategic Environmental - Canton  
P.O. Box 30  
Canton, NY 13617

Attn: Mr. Sean Smith  
Phone: (315) 386-2736  
FAX: (315) 386-4736

Project No.: 250.12.98  
Authorization:

LSL Project No.: 9808266  
Report Date: 12/28/98

1,1,2-Trichloroethane	<200	ug/kg	12/15/98
Trichloroethene	<200	ug/kg	12/15/98
Vinyl chloride	<200	ug/kg	12/15/98
Xylenes (Total)	<200	ug/kg	12/15/98 (6)

(6) Elevated detection limit due to matrix interference.



# Laboratory Analysis Report

LSL Project Number: 9807781

*James Balkema QDO 12/10/98*

Reviewed By

Date

Life Science Laboratories, Inc. warrants, to the best of its knowledge and belief, the accuracy of the analytical test results contained in this report, but makes no other warranty, expressed or implied, especially no warranties of merchantability or fitness for a particular purpose. By the Client's acceptance and/or use of this report, the Client agrees that LSL is hereby released from any and all liabilities, claims, damages or causes of action affecting or which may affect the Client as regards to the results contained in this report. The Client further agrees that the only remedy available to the Client in the event of proven non-conformity with the above warranty shall be for LSL to re-perform the analytical test(s) at no charge to the Client. The data contained in this report are for the exclusive use of the Client to whom it is addressed, and the release of these data to any other party, or the use of the name, trademark or service mark of Life Science Laboratories, Inc. especially for the use of advertising to the general public, is strictly prohibited without express prior written consent of Life Science Laboratories, Inc.



-- LABORATORY ANALYSIS REPORT --

Strategic Environmental - Canton  
P.O. Box 30  
Canton, NY 13617

Attn: Mr. Nevin Bradford  
Phone: (315) 386-2736  
FAX: (315) 386-4736

Project No.: 250.11.98  
Authorization:

LSL Project No.: 9807781  
Report Date: 12/10/98

**Sample ID: B-1 Composite**

Source:  
Sample Matrix: SHW

LSL Sample ID: 9807781-001  
Date Sampled: 11/17/98

*Analytical Method*

<i>Parameter(s)</i>	<i>Results</i>	<i>Units</i>	<i>Analysis Date</i>	<i>Comment</i>
NYS-DEC STARS 8021 Volatiles				
Benzene	<20	ug/kg	12/2/98	
n-Butylbenzene	<20	ug/kg	12/2/98	
sec-Butylbenzene	<20	ug/kg	12/2/98	
tert-Butylbenzene	<20	ug/kg	12/2/98	
Ethyl benzene	<20	ug/kg	12/2/98	
Isopropylbenzene (Cumene)	<20	ug/kg	12/2/98	
4-Isopropyl toluene (Cymene)	<20	ug/kg	12/2/98	
MTBE	<20	ug/kg	12/2/98	
Naphthalene	<20	ug/kg	12/2/98	
N-Propylbenzene	<20	ug/kg	12/2/98	
Toluene	<20	ug/kg	12/2/98	
1,2,4-Trimethylbenzene	<20	ug/kg	12/2/98	
1,3,5-Trimethylbenzene	<20	ug/kg	12/2/98	
Xylenes (Total)	<20	ug/kg	12/2/98	(6)
<i>(6) Elevated detection limit due to matrix interference.</i>				
NYS-DEC STARS 8270 Base/Neutrals				
Acenaphthene	<2	mg/kg	12/1/98	
Anthracene	<2	mg/kg	12/1/98	
Benzo(a)anthracene	<2	mg/kg	12/1/98	
Benzo(b)fluoranthene	<2	mg/kg	12/1/98	
Benzo(k)fluoranthene	<2	mg/kg	12/1/98	
Benzo(ghi)perylene	<2	mg/kg	12/1/98	
Benzo(a)pyrene	<2	mg/kg	12/1/98	
Chrysene	<2	mg/kg	12/1/98	
Dibenz(a,h)anthracene	<2	mg/kg	12/1/98	
Fluoranthene	<2	mg/kg	12/1/98	
Fluorene	<2	mg/kg	12/1/98	
Indeno(1,2,3-c,d)pyrene	<2	mg/kg	12/1/98	
Phenanthrene	<2	mg/kg	12/1/98	

-- LABORATORY ANALYSIS REPORT --

Strategic Environmental - Canton  
P.O. Box 30  
Canton, NY 13617

Attn: Mr. Nevin Bradford  
Phone: (315) 386-2736  
FAX: (315) 386-4736

Project No.: 250.11.98  
Authorization:

LSL Project No.: 9807781  
Report Date: 12/10/98

Pyrene	<2	mg/kg	12/1/98	(6)
<i>(6) Elevated detection limit due to matrix interference.</i>				

Sample ID: B-2 23' Grab

Source:

LSL Sample ID: 9807781-002

Sample Matrix: SHW

Date Sampled: 11/17/98

Analytical Method

Parameter(s)	Results	Units	Analysis Date	Comment
NYS-DEC STARS 8021 Volatiles				
Benzene	<200	ug/kg	12/2/98	
n-Butylbenzene	<200	ug/kg	12/2/98	
sec-Butylbenzene	<200	ug/kg	12/2/98	
tert-Butylbenzene	<200	ug/kg	12/2/98	
Ethyl benzene	<200	ug/kg	12/2/98	
Isopropylbenzene (Cumene)	<200	ug/kg	12/2/98	
4-Isopropyl toluene (Cymene)	<200	ug/kg	12/2/98	
MTBE	<200	ug/kg	12/2/98	
Naphthalene	<200	ug/kg	12/2/98	
N-Propylbenzene	<200	ug/kg	12/2/98	
Toluene	<200	ug/kg	12/2/98	
1,2,4-Trimethylbenzene	<200	ug/kg	12/2/98	
1,3,5-Trimethylbenzene	<200	ug/kg	12/2/98	
Xylenes (Total)	<200	ug/kg	12/2/98	(6)
<i>(6) Elevated detection limit due to matrix interference.</i>				
NYS-DEC STARS 8270 Base/Neutrals				
Acenaphthene	<1	mg/kg	12/1/98	
Anthracene	<1	mg/kg	12/1/98	
Benzo(a)anthracene	<1	mg/kg	12/1/98	
Benzo(b)fluoranthene	<1	mg/kg	12/1/98	
Benzo(k)fluoranthene	<1	mg/kg	12/1/98	
Benzo(ghi)perylene	<1	mg/kg	12/1/98	
Benzo(a)pyrene	<1	mg/kg	12/1/98	
Chrysene	<1	mg/kg	12/1/98	
Dibenz(a,h)anthracene	<1	mg/kg	12/1/98	
Fluoranthene	<1	mg/kg	12/1/98	
Fluorene	<1	mg/kg	12/1/98	

Life Science Laboratories, Inc.

Page 3 of 20

5854 Butternut Drive, East Syracuse, New York 13057 Telephone: (315) 445-1105 Telefax: (315) 445-1301

NYS DOH ELAP No. 10248

**-- LABORATORY ANALYSIS REPORT --**

Strategic Environmental - Canton  
P.O. Box 30  
Canton, NY 13617

Attn: Mr. Nevin Bradford  
Phone: (315) 386-2736  
FAX: (315) 386-4736

Project No.: 250.11.98  
Authorization:

LSL Project No.: 9807781  
Report Date: 12/10/98

Indeno(1,2,3-c,d)pyrene	<1	mg/kg	12/1/98
Phenanthrene	<1	mg/kg	12/1/98
Pyrene	<1	mg/kg	12/1/98 (6)

(6) Elevated detection limit due to matrix interference.

Sample ID: B-2 Composite

Source:  
Sample Matrix: SHW

LSL Sample ID: 9807781-003  
Date Sampled: 11/17/98

*Analytical Method*

<i>Parameter(s)</i>	<i>Results</i>	<i>Units</i>	<i>Analysis Date</i>	<i>Comment</i>
<b>EPA 6010 Priority Pollutant Metals</b>				
Antimony	<6	mg/kg	12/4/98	
Arsenic	36	mg/kg	12/4/98	
Beryllium	<0.9	mg/kg	12/4/98	
Cadmium	3.9	mg/kg	12/4/98	
Chromium	36	mg/kg	12/4/98	
Copper	100	mg/kg	12/4/98	
Lead	140	mg/kg	12/4/98	
Nickel	30	mg/kg	12/4/98	
Selenium	4.5	mg/kg	12/4/98	
Silver	<0.9	mg/kg	12/4/98	
Thallium	<0.9	mg/kg	12/4/98	
Zinc	360	mg/kg	12/4/98	
<b>EPA 7471 Mercury</b>				
Mercury	0.18	mg/kg	12/9/98	
<b>EPA 8082 PCB's</b>				
Arochlor-1016	<0.2	mg/kg	11/25/98	
Arochlor-1221	<0.2	mg/kg	11/25/98	
Arochlor-1232	<0.2	mg/kg	11/25/98	
Arochlor-1242	<0.2	mg/kg	11/25/98	
Arochlor-1248	<0.2	mg/kg	11/25/98	
Arochlor-1254	<0.2	mg/kg	11/25/98	
Arochlor-1260	<0.2	mg/kg	11/25/98	
<b>EPA 9010 Total Cyanide</b>				
Cyanide, Total	0.18	mg/kg	12/2/98	

**-- LABORATORY ANALYSIS REPORT --**

Strategic Environmental - Canton  
P.O. Box 30  
Canton, NY 13617

Attn: Mr. Nevin Bradford  
Phone: (315) 386-2736  
FAX: (315) 386-4736

Project No.: 250.11.98  
Authorization:

LSL Project No.: 9807781  
Report Date: 12/10/98

**Sample ID: B-3 Composite**

Source:  
Sample Matrix: SHW

LSL Sample ID: 9807781-004  
Date Sampled: 11/17/98

*Analytical Method*

<i>Parameter(s)</i>	<i>Results</i>	<i>Units</i>	<i>Analysis Date</i>	<i>Comment</i>
<b>EPA 6010 Priority Pollutant Metals</b>				
Antimony	<5	mg/kg	12/4/98	
Arsenic	9.8	mg/kg	12/4/98	
Beryllium	<0.9	mg/kg	12/4/98	
Cadmium	2.1	mg/kg	12/4/98	
Chromium	19	mg/kg	12/4/98	
Copper	440	mg/kg	12/4/98	
Lead	190	mg/kg	12/4/98	
Nickel	14	mg/kg	12/4/98	
Selenium	2.8	mg/kg	12/4/98	
Silver	<0.9	mg/kg	12/4/98	
Thallium	<0.9	mg/kg	12/4/98	
Zinc	940	mg/kg	12/4/98	
<b>EPA 7471 Mercury</b>				
Mercury	0.52	mg/kg	12/9/98	
<b>EPA 9010 Total Cyanide</b>				
Cyanide, Total	0.60	mg/kg	12/2/98	

**Sample ID: B-4 Composite**

Source:  
Sample Matrix: SHW

LSL Sample ID: 9807781-005  
Date Sampled: 11/17/98

*Analytical Method*

<i>Parameter(s)</i>	<i>Results</i>	<i>Units</i>	<i>Analysis Date</i>	<i>Comment</i>
<b>EPA 6010 Priority Pollutant Metals</b>				
Antimony	<6	mg/kg	12/4/98	
Arsenic	15	mg/kg	12/4/98	
Beryllium	<1	mg/kg	12/4/98	
Cadmium	<1	mg/kg	12/4/98	
Chromium	47	mg/kg	12/4/98	
Copper	540	mg/kg	12/4/98	

-- LABORATORY ANALYSIS REPORT --

Strategic Environmental - Canton  
P.O. Box 30  
Canton, NY 13617

Attn: Mr. Nevin Bradford  
Phone: (315) 386-2736  
FAX: (315) 386-4736

Project No.: 250.11.98

LSL Project No.: 9807781

Report Date: 12/10/98

**Authorization:**

Lead	160	mg/kg	12/4/98
Nickel	35	mg/kg	12/4/98
Selenium	2.3	mg/kg	12/4/98
Silver	<1	mg/kg	12/4/98
Thallium	<1	mg/kg	12/4/98
Zinc	410	mg/kg	12/4/98
EPA 7471 Mercury			
Mercury	0.31	mg/kg	12/9/98
EPA 9010 Total Cyanide			
Cyanide, Total	0.15	mg/kg	12/2/98
NYS DOH 310.13, TPH's			
Fuel oil #2	<20	mg/kg	12/1/98
Gasoline	Not Present		12/1/98
Kerosene	<20	mg/kg	12/1/98
Lubricating oil	Present		12/1/98
NYS-DEC STARS 8021 Volatiles			
Benzene	<200	ug/kg	12/2/98
n-Butylbenzene	<200	ug/kg	12/2/98
sec-Butylbenzene	<200	ug/kg	12/2/98
tert-Butylbenzene	<200	ug/kg	12/2/98
Ethyl benzene	<200	ug/kg	12/2/98
Isopropylbenzene (Cumene)	<200	ug/kg	12/2/98
4-Isopropyl toluene (Cymene)	<200	ug/kg	12/2/98
MTBE	<200	ug/kg	12/2/98
Naphthalene	260	ug/kg	12/2/98
N-Propylbenzene	<200	ug/kg	12/2/98
Toluene	<200	ug/kg	12/2/98
1,2,4-Trimethylbenzene	<200	ug/kg	12/2/98
1,3,5-Trimethylbenzene	<200	ug/kg	12/2/98
Xylenes (Total)	<200	ug/kg	12/2/98 (6)
<i>(6) Elevated detection limit due to matrix interference.</i>			
NYS-DEC STARS 8270 Base/Neutrals			
Acenaphthene	<1	mg/kg	12/1/98
Anthracene	<1	mg/kg	12/1/98
Benzo(a)anthracene	1.4	mg/kg	12/1/98

Life Science Laboratories, Inc.

Page 6 of 20

5854 Butternut Drive, East Syracuse, New York 13057 Telephone: (315) 445-1105 Telefax: (315) 445-1301

NYS DOH ELAP No. 10248

-- LABORATORY ANALYSIS REPORT --

Strategic Environmental - Canton  
P.O. Box 30  
Canton, NY 13617

Attn: Mr. Nevin Bradford  
Phone: (315) 386-2736  
FAX: (315) 386-4736

Project No.: 250.11.98  
Authorization:

LSL Project No.: 9807781  
Report Date: 12/10/98

Benzo(b)fluoranthene	1.4	mg/kg	12/1/98
Benzo(k)fluoranthene	<1	mg/kg	12/1/98
Benzo(ghi)perylene	1.1	mg/kg	12/1/98
Benzo(a)pyrene	1.6	mg/kg	12/1/98
Chrysene	1.2	mg/kg	12/1/98
Dibenz(a,h)anthracene	<1	mg/kg	12/1/98
Fluoranthene	1.6	mg/kg	12/1/98
Fluorene	<1	mg/kg	12/1/98
Indeno(1,2,3-c,d)pyrene	1	mg/kg	12/1/98
Phenanthrene	<1	mg/kg	12/1/98
Pyrene	1.2	mg/kg	12/1/98

Sample ID: B-5 13.5' Grab

Source:

LSL Sample ID: 9807781-006

Sample Matrix: SHW

Date Sampled: 11/17/98

*Analytical Method*

<i>Parameter(s)</i>	<i>Results</i>	<i>Units</i>	<i>Analysis Date</i>	<i>Comment</i>
NYS DOH 310.13, TPH's				
Fuel oil #2	150	mg/kg	12/1/98	(20)
<i>(20) This target analyte appears to be biologically degraded and/or environmentally weathered.</i>				
Gasoline	Not Present		12/1/98	
Kerosene	<20	mg/kg	12/1/98	
Lubricating oil	Not Present		12/1/98	
NYS-DEC STARS 8021 Volatiles				
Benzene	<200	ug/kg	12/2/98	
n-Butylbenzene	<200	ug/kg	12/2/98	
sec-Butylbenzene	<200	ug/kg	12/2/98	
tert-Butylbenzene	<200	ug/kg	12/2/98	
Ethyl benzene	<200	ug/kg	12/2/98	
Isopropylbenzene (Cumene)	<200	ug/kg	12/2/98	
4-Isopropyl toluene (Cymene)	<200	ug/kg	12/2/98	
MTBE	<200	ug/kg	12/2/98	
Naphthalene	<200	ug/kg	12/2/98	
N-Propylbenzene	<200	ug/kg	12/2/98	
Toluene	<200	ug/kg	12/2/98	

Life Science Laboratories, Inc.

Page 7 of 20

5854 Butternut Drive, East Syracuse, New York 13057 Telephone: (315) 445-1105 Telefax: (315) 445-1301

NYS DOH ELAP No. 10248

**-- LABORATORY ANALYSIS REPORT --**

Strategic Environmental - Canton  
P.O. Box 30  
Canton, NY 13617

Attn: Mr. Nevin Bradford  
Phone: (315) 386-2736  
FAX: (315) 386-4736

Project No.: 250.11.98

LSL Project No.: 9807781

Authorization:

Report Date: 12/10/98

1,2,4-Trimethylbenzene	<200	ug/kg	12/2/98	
1,3,5-Trimethylbenzene	<200	ug/kg	12/2/98	
Xylenes (Total)	<200	ug/kg	12/2/98	(6)
<i>(6) Elevated detection limit due to matrix interference.</i>				
NYS-DEC STARS 8270 Base/Neutrals				
Acenaphthene	<0.2	mg/kg	12/1/98	
Anthracene	<0.2	mg/kg	12/1/98	
Benzo(a)anthracene	<0.2	mg/kg	12/1/98	
Benzo(b)fluoranthene	<0.2	mg/kg	12/1/98	
Benzo(k)fluoranthene	<0.2	mg/kg	12/1/98	
Benzo(ghi)perylene	<0.2	mg/kg	12/1/98	
Benzo(a)pyrene	<0.2	mg/kg	12/1/98	
Chrysene	<0.2	mg/kg	12/1/98	
Dibenz(a,h)anthracene	<0.2	mg/kg	12/1/98	
Fluoranthene	<0.2	mg/kg	12/1/98	
Fluorene	<0.2	mg/kg	12/1/98	
Indeno(1,2,3-c,d)pyrene	<0.2	mg/kg	12/1/98	
Phenanthrene	<0.2	mg/kg	12/1/98	
Pyrene	<0.2	mg/kg	12/1/98	

**Sample ID: B-15 Composite**

Source:

LSL Sample ID: 9807781-007

Sample Matrix: SHW

Date Sampled: 11/17/98

*Analytical Method*

<i>Parameter(s)</i>	<i>Results</i>	<i>Units</i>	<i>Analysis Date</i>	<i>Comment</i>
EPA 6010 Priority Pollutant Metals				
Antimony	<5	mg/kg	12/4/98	
Arsenic	6.3	mg/kg	12/4/98	
Beryllium	<0.8	mg/kg	12/4/98	
Cadmium	<0.8	mg/kg	12/4/98	
Chromium	11	mg/kg	12/4/98	
Copper	57	mg/kg	12/4/98	
Lead	49	mg/kg	12/4/98	
Nickel	8.7	mg/kg	12/4/98	
Selenium	1.6	mg/kg	12/4/98	

Life Science Laboratories, Inc.

*Page 8 of 20*

5854 Butternut Drive, East Syracuse, New York 13057 Telephone: (315) 445-1105 Telefax: (315) 445-1301

NYS DOH ELAP No. 10248

**-- LABORATORY ANALYSIS REPORT --**

Strategic Environmental - Canton  
P.O. Box 30  
Canton, NY 13617

Attn: Mr. Nevin Bradford  
Phone: (315) 386-2736  
FAX: (315) 386-4736

Project No.: 250.11.98  
Authorization:

LSL Project No.: 9807781  
Report Date: 12/10/98

Silver	<0.8	mg/kg	12/4/98
Thallium	<0.8	mg/kg	12/4/98
Zinc	50	mg/kg	12/4/98
EPA 7471 Mercury			
Mercury	0.16	mg/kg	12/9/98
EPA 9010 Total Cyanide			
Cyanide, Total	0.18	mg/kg	12/2/98

**Sample ID: B-6 Composite**

Source:  
Sample Matrix: SHW

LSL Sample ID: 9807781-008  
Date Sampled: 11/17/98

*Analytical Method*

<i>Parameter(s)</i>	<i>Results</i>	<i>Units</i>	<i>Analysis Date</i>	<i>Comment</i>
EPA 6010 Priority Pollutant Metals				
Antimony	<6	mg/kg	12/4/98	
Arsenic	47	mg/kg	12/4/98	
Beryllium	<0.9	mg/kg	12/4/98	
Cadmium	<0.9	mg/kg	12/4/98	
Chromium	33	mg/kg	12/4/98	
Copper	68	mg/kg	12/4/98	
Lead	48	mg/kg	12/4/98	
Nickel	13	mg/kg	12/4/98	
Selenium	2.9	mg/kg	12/4/98	
Silver	<0.9	mg/kg	12/4/98	
Thallium	<0.9	mg/kg	12/4/98	
Zinc	48	mg/kg	12/4/98	
EPA 7471 Mercury				
Mercury	0.28	mg/kg	12/9/98	
EPA 9010 Total Cyanide				
Cyanide, Total	0.16	mg/kg	12/2/98	



**-- LABORATORY ANALYSIS REPORT --**

Strategic Environmental - Canton  
P.O. Box 30  
Canton, NY 13617

Attn: Mr. Nevin Bradford  
Phone: (315) 386-2736  
FAX: (315) 386-4736

Project No.: 250.11.98  
Authorization:

LSL Project No.: 9807781  
Report Date: 12/10/98

**Sample ID: B-7 Composite**

Source:  
Sample Matrix: SHW

LSL Sample ID: 9807781-009  
Date Sampled: 11/17/98

*Analytical Method*

<i>Parameter(s)</i>	<i>Results</i>	<i>Units</i>	<i>Analysis Date</i>	<i>Comment</i>
EPA 6010 Priority Pollutant Metals				
Antimony	<5	mg/kg	12/4/98	
Arsenic	30	mg/kg	12/4/98	
Beryllium	<0.8	mg/kg	12/4/98	
Cadmium	<0.8	mg/kg	12/4/98	
Chromium	32	mg/kg	12/4/98	
Copper	69	mg/kg	12/4/98	
Lead	140	mg/kg	12/4/98	
Nickel	21	mg/kg	12/4/98	
Selenium	1.8	mg/kg	12/4/98	
Silver	<0.8	mg/kg	12/4/98	
Thallium	<0.8	mg/kg	12/4/98	
Zinc	140	mg/kg	12/4/98	
EPA 7471 Mercury				
Mercury	0.51	mg/kg	12/9/98	

**Sample ID: B-9 Composite**

Source:  
Sample Matrix: SHW

LSL Sample ID: 9807781-010  
Date Sampled: 11/18/98

*Analytical Method*

<i>Parameter(s)</i>	<i>Results</i>	<i>Units</i>	<i>Analysis Date</i>	<i>Comment</i>
EPA 6010 Priority Pollutant Metals				
Antimony	<4	mg/kg	12/4/98	
Arsenic	9.1	mg/kg	12/4/98	
Beryllium	<0.7	mg/kg	12/4/98	
Cadmium	<0.7	mg/kg	12/4/98	
Chromium	7.9	mg/kg	12/4/98	
Copper	17	mg/kg	12/4/98	
Lead	250	mg/kg	12/4/98	
Nickel	6.4	mg/kg	12/4/98	

Life Science Laboratories, Inc.

Page 10 of 20

5854 Butternut Drive, East Syracuse, New York 13057 Telephone: (315) 445-1105 Telefax: (315) 445-1301

NYS DOH ELAP No. 10248

**-- LABORATORY ANALYSIS REPORT --**

Strategic Environmental - Canton  
P.O. Box 30  
Canton, NY 13617

Attn: Mr. Nevin Bradford  
Phone: (315) 386-2736  
FAX: (315) 386-4736

Project No.: 250.11.98  
Authorization:

LSL Project No.: 9807781  
Report Date: 12/10/98

Selenium	1.9	mg/kg	12/4/98
Silver	0.80	mg/kg	12/4/98
Thallium	<0.7	mg/kg	12/4/98
Zinc	90	mg/kg	12/4/98
EPA 7471 Mercury			
Mercury	<0.1	mg/kg	12/9/98

**Sample ID: B-10 Composite**

Source:

LSL Sample ID: 9807781-011

Sample Matrix: SHW

Date Sampled: 11/18/98

*Analytical Method*

<i>Parameter(s)</i>	<i>Results</i>	<i>Units</i>	<i>Analysis Date</i>	<i>Comment</i>
<b>EPA 6010 Priority Pollutant Metals</b>				
Antimony	<5	mg/kg	12/4/98	
Arsenic	2.6	mg/kg	12/4/98	
Beryllium	<0.8	mg/kg	12/4/98	
Cadmium	<0.8	mg/kg	12/4/98	
Chromium	4.5	mg/kg	12/4/98	
Copper	7.8	mg/kg	12/4/98	
Lead	67	mg/kg	12/4/98	
Nickel	4.5	mg/kg	12/4/98	
Selenium	5.1	mg/kg	12/4/98	
Silver	1.5	mg/kg	12/4/98	
Thallium	<0.8	mg/kg	12/4/98	
Zinc	<0.8	mg/kg	12/4/98	
EPA 7471 Mercury				
Mercury	<0.1	mg/kg	12/9/98	

**Sample ID: B-11 Composite**

Source:

LSL Sample ID: 9807781-012

Sample Matrix: SHW

Date Sampled: 11/18/98

*Analytical Method*

<i>Parameter(s)</i>	<i>Results</i>	<i>Units</i>	<i>Analysis Date</i>	<i>Comment</i>
<b>EPA 8082 PCB's</b>				
Arochlor-1016	<0.2	mg/kg	11/25/98	

Life Science Laboratories, Inc.

Page 11 of 20

5854 Butternut Drive, East Syracuse, New York 13057 Telephone: (315) 445-1105 Telefax: (315) 445-1301

NYS DOH ELAP No. 10248

-- LABORATORY ANALYSIS REPORT --

Strategic Environmental - Canton  
P.O. Box 30  
Canton, NY 13617

Attn: Mr. Nevin Bradford  
Phone: (315) 386-2736  
FAX: (315) 386-4736

Project No.: 250.11.98  
Authorization:

LSL Project No.: 9807781  
Report Date: 12/10/98

Parameter(s)	Results	Units	Analysis Date	Comment
Arochlor-1221	<0.2	mg/kg	11/25/98	
Arochlor-1232	<0.2	mg/kg	11/25/98	
Arochlor-1242	<0.2	mg/kg	11/25/98	
Arochlor-1248	<0.2	mg/kg	11/25/98	
Arochlor-1254	<0.2	mg/kg	11/25/98	
Arochlor-1260	<0.2	mg/kg	11/25/98	

Sample ID: B-12 Composite

Source:  
Sample Matrix: SHW

LSL Sample ID: 9807781-013  
Date Sampled: 11/18/98

Analytical Method

Parameter(s)	Results	Units	Analysis Date	Comment
EPA 6010 Priority Pollutant Metals				
Antimony	<6	mg/kg	12/4/98	
Arsenic	20	mg/kg	12/4/98	
Beryllium	<0.9	mg/kg	12/4/98	
Cadmium	<0.9	mg/kg	12/4/98	
Chromium	16	mg/kg	12/4/98	
Copper	240	mg/kg	12/4/98	
Lead	480	mg/kg	12/4/98	
Nickel	22	mg/kg	12/4/98	
Selenium	4.2	mg/kg	12/4/98	
Silver	1.6	mg/kg	12/4/98	
Thallium	<0.9	mg/kg	12/4/98	
Zinc	300	mg/kg	12/4/98	
EPA 7471 Mercury				
Mercury	2.0	mg/kg	12/9/98	

Sample ID: B-13 3'-8' Composite

Source:  
Sample Matrix: SHW

*ADJACENT B-21  
EAST OF FUEL TANKS*

LSL Sample ID: 9807781-014  
Date Sampled: 11/18/98

Analytical Method

Parameter(s)	Results	Units	Analysis Date	Comment
NYS DOH 310.13, TPH's				
Fuel oil #2	300	mg/kg	12/1/98	(20)
(20)	<i>This target analyte appears to be biologically degraded and/or environmentally weathered.</i>			

-- LABORATORY ANALYSIS REPORT --

Strategic Environmental - Canton  
P.O. Box 30  
Canton, NY 13617

Attn: Mr. Nevin Bradford  
Phone: (315) 386-2736  
FAX: (315) 386-4736

Project No.: 250.11.98

LSL Project No.: 9807781

Authorization:

Report Date: 12/10/98

Gasoline	Not Present		12/1/98
Kerosene	<20	mg/kg	12/1/98
Lubricating oil	Present		12/1/98
NYS-DEC STARS 8021 Volatiles			
Benzene	<200	ug/kg	12/2/98
n-Butylbenzene	<200	ug/kg	12/2/98
sec-Butylbenzene	<200	ug/kg	12/2/98
tert-Butylbenzene	<200	ug/kg	12/2/98
Ethyl benzene	<200	ug/kg	12/2/98
Isopropylbenzene (Cumene)	<200	ug/kg	12/2/98
4-Isopropyl toluene (Cymene)	<200	ug/kg	12/2/98
MTBE	<200	ug/kg	12/2/98
Naphthalene	<200	ug/kg	12/2/98
N-Propylbenzene	<200	ug/kg	12/2/98
Toluene	<200	ug/kg	12/2/98
1,2,4-Trimethylbenzene	<200	ug/kg	12/2/98
1,3,5-Trimethylbenzene	<200	ug/kg	12/2/98
Xylenes (Total)	<200	ug/kg	12/2/98 (6)
(6) Elevated detection limit due to matrix interference.			
NYS-DEC STARS 8270 Base/Neutrals			
Acenaphthene	<2	mg/kg	12/1/98
Anthracene	<2	mg/kg	12/1/98
Benzo(a)anthracene	<2	mg/kg	12/1/98
Benzo(b)fluoranthene	<2	mg/kg	12/1/98
Benzo(k)fluoranthene	<2	mg/kg	12/1/98
Benzo(ghi)perylene	<2	mg/kg	12/1/98
Benzo(a)pyrene	<2	mg/kg	12/1/98
Chrysene	<2	mg/kg	12/1/98
Dibenz(a,h)anthracene	<2	mg/kg	12/1/98
Fluoranthene	<2	mg/kg	12/1/98
Fluorene	<2	mg/kg	12/1/98
Indeno(1,2,3-c,d)pyrene	<2	mg/kg	12/1/98
Phenanthrene	<2	mg/kg	12/1/98
Pyrene	<2	mg/kg	12/1/98 (6)
(6) Elevated detection limit due to matrix interference.			

-- LABORATORY ANALYSIS REPORT --

Strategic Environmental - Canton  
P.O. Box 30  
Canton, NY 13617

Attn: Mr. Nevin Bradford  
Phone: (315) 386-2736  
FAX: (315) 386-4736

Project No.: 250.11.98  
Authorization:

LSL Project No.: 9807781  
Report Date: 12/10/98

**Sample ID: B-14 0'-16' Composite**

Source:  
Sample Matrix: SHW

LSL Sample ID: 9807781-015  
Date Sampled: 11/18/98

*Analytical Method*

<i>Parameter(s)</i>	<i>Results</i>	<i>Units</i>	<i>Analysis Date</i>	<i>Comment</i>
EPA 6010 Priority Pollutant Metals				
Antimony	<5	mg/kg	12/4/98	
Arsenic	5.5	mg/kg	12/4/98	
Beryllium	<0.8	mg/kg	12/4/98	
Cadmium	<0.8	mg/kg	12/4/98	
Chromium	7.9	mg/kg	12/4/98	
Copper	5.6	mg/kg	12/4/98	
Lead	8.2	mg/kg	12/4/98	
Nickel	8.8	mg/kg	12/4/98	
Selenium	1.8	mg/kg	12/4/98	
Silver	<0.8	mg/kg	12/4/98	
Thallium	<0.8	mg/kg	12/4/98	
Zinc	44	mg/kg	12/4/98	
EPA 7471 Mercury				
Mercury	<0.1	mg/kg	12/9/98	

**Sample ID: B-14 16'-20' Composite**

Source:  
Sample Matrix: SHW

LSL Sample ID: 9807781-016  
Date Sampled: 11/18/98

*Analytical Method*

<i>Parameter(s)</i>	<i>Results</i>	<i>Units</i>	<i>Analysis Date</i>	<i>Comment</i>
NYS-DEC STARS 8021 Volatiles				
Benzene	<20	ug/kg	12/2/98	
n-Butylbenzene	<20	ug/kg	12/2/98	
sec-Butylbenzene	<20	ug/kg	12/2/98	
tert-Butylbenzene	<20	ug/kg	12/2/98	
Ethyl benzene	<20	ug/kg	12/2/98	
Isopropylbenzene (Cumene)	<20	ug/kg	12/2/98	
4-Isopropyl toluene (Cymene)	<20	ug/kg	12/2/98	
MTBE	<20	ug/kg	12/2/98	

Life Science Laboratories, Inc.

Page 14 of 20

5854 Butternut Drive, East Syracuse, New York 13057 Telephone: (315) 445-1105 Telefax: (315) 445-1301

NYS DOH ELAP No. 10248

-- LABORATORY ANALYSIS REPORT --

Strategic Environmental - Canton  
P.O. Box 30  
Canton, NY 13617

Attn: Mr. Nevin Bradford  
Phone: (315) 386-2736  
FAX: (315) 386-4736

Project No.: 250.11.98

LSL Project No.: 9807781

Authorization:

Report Date: 12/10/98

Naphthalene	<20	ug/kg	12/2/98	
N-Propylbenzene	<20	ug/kg	12/2/98	
Toluene	<20	ug/kg	12/2/98	
1,2,4-Trimethylbenzene	<20	ug/kg	12/2/98	
1,3,5-Trimethylbenzene	<20	ug/kg	12/2/98	
Xylenes (Total)	<20	ug/kg	12/2/98	(6)
<i>(6) Elevated detection limit due to matrix interference.</i>				
NYS-DEC STARS 8270 Base/Neutrals				
Acenaphthene	<0.2	mg/kg	12/1/98	
Anthracene	<0.2	mg/kg	12/1/98	
Benzo(a)anthracene	<0.2	mg/kg	12/1/98	
Benzo(b)fluoranthene	<0.2	mg/kg	12/1/98	
Benzo(k)fluoranthene	<0.2	mg/kg	12/1/98	
Benzo(ghi)perylene	<0.2	mg/kg	12/1/98	
Benzo(a)pyrene	<0.2	mg/kg	12/1/98	
Chrysene	<0.2	mg/kg	12/1/98	
Dibenz(a,h)anthracene	<0.2	mg/kg	12/1/98	
Fluoranthene	<0.2	mg/kg	12/1/98	
Fluorene	<0.2	mg/kg	12/1/98	
Indeno(1,2,3-c,d)pyrene	<0.2	mg/kg	12/1/98	
Phenanthrene	0.24	mg/kg	12/1/98	
Pyrene	<0.2	mg/kg	12/1/98	

Sample ID: B-15 Composite

Source:

LSL Sample ID: 9807781-017

Sample Matrix: SHW

Date Sampled: 11/17/98

*Analytical Method*

<i>Parameter(s)</i>	<i>Results</i>	<i>Units</i>	<i>Analysis Date</i>	<i>Comment</i>
EPA 6010 Priority Pollutant Metals				
Antimony	<6	mg/kg	12/4/98	
Arsenic	11	mg/kg	12/4/98	
Beryllium	<1	mg/kg	12/4/98	
Cadmium	<1	mg/kg	12/4/98	
Chromium	20	mg/kg	12/4/98	
Copper	140	mg/kg	12/4/98	

Life Science Laboratories, Inc.

Page 15 of 20

5854 Butternut Drive, East Syracuse, New York 13057 Telephone: (315) 445-1105 Telefax: (315) 445-1301

NYS DOH ELAP No. 10248

**-- LABORATORY ANALYSIS REPORT --**

Strategic Environmental - Canton  
P.O. Box 30  
Canton, NY 13617

Attn: Mr. Nevin Bradford  
Phone: (315) 386-2736  
FAX: (315) 386-4736

Project No.: 250.11.98

LSL Project No.: 9807781

Authorization:

Report Date: 12/10/98

Lead	99	mg/kg	12/4/98
Nickel	17	mg/kg	12/4/98
Selenium	5.4	mg/kg	12/4/98
Silver	1.4	mg/kg	12/4/98
Thallium	<1	mg/kg	12/4/98
Zinc	110	mg/kg	12/4/98
EPA 7471 Mercury			
Mercury	<0.1	mg/kg	12/9/98
EPA 9010 Total Cyanide			
Cyanide, Total	<0.1	mg/kg	12/2/98

Sample ID: B-16 Composite

Source:

LSL Sample ID: 9807781-018

Sample Matrix: SHW

Date Sampled: 11/18/98

Analytical Method

Parameter(s)	Results	Units	Analysis Date	Comment
EPA 6010 Priority Pollutant Metals				
Antimony	<5	mg/kg	12/4/98	
Arsenic	15	mg/kg	12/4/98	
Beryllium	<0.9	mg/kg	12/4/98	
Cadmium	<0.9	mg/kg	12/4/98	
Chromium	10	mg/kg	12/4/98	
Copper	39	mg/kg	12/4/98	
Lead	120	mg/kg	12/4/98	
Nickel	11	mg/kg	12/4/98	
Selenium	2.6	mg/kg	12/4/98	
Silver	<0.9	mg/kg	12/4/98	
Thallium	<0.9	mg/kg	12/4/98	
Zinc	31	mg/kg	12/4/98	
EPA 7471 Mercury				
Mercury	<0.1	mg/kg	12/9/98	
EPA 9010 Total Cyanide				
Cyanide, Total	0.15	mg/kg	12/2/98	

-- LABORATORY ANALYSIS REPORT --

Strategic Environmental - Canton  
P.O. Box 30  
Canton, NY 13617

Attn: Mr. Nevin Bradford  
Phone: (315) 386-2736  
FAX: (315) 386-4736

Project No.: 250.11.98  
Authorization:

LSL Project No.: 9807781  
Report Date: 12/10/98

**Sample ID: B-17 Composite**

Source:  
Sample Matrix: SHW

LSL Sample ID: 9807781-019  
Date Sampled: 11/18/98

*Analytical Method*

<i>Parameter(s)</i>	<i>Results</i>	<i>Units</i>	<i>Analysis Date</i>	<i>Comment</i>
NYS-DEC STARS 8021 Volatiles				
Benzene	<5	ug/kg	12/2/98	
n-Butylbenzene	<5	ug/kg	12/2/98	
sec-Butylbenzene	<5	ug/kg	12/2/98	
tert-Butylbenzene	<5	ug/kg	12/2/98	
Ethyl benzene	<5	ug/kg	12/2/98	
Isopropylbenzene (Cumene)	<5	ug/kg	12/2/98	
4-Isopropyl toluene (Cymene)	<5	ug/kg	12/2/98	
MTBE	<5	ug/kg	12/2/98	
Naphthalene	<5	ug/kg	12/2/98	(11)
<i>(11) This result has been blank corrected.</i>				
N-Propylbenzene	<5	ug/kg	12/2/98	
Toluene	<5	ug/kg	12/2/98	
1,2,4-Trimethylbenzene	<5	ug/kg	12/2/98	
1,3,5-Trimethylbenzene	<5	ug/kg	12/2/98	
Xylenes (Total)	<5	ug/kg	12/2/98	
NYS-DEC STARS 8270 Base/Neutrals				
Acenaphthene	<0.2	mg/kg	12/1/98	
Anthracene	<0.2	mg/kg	12/1/98	
Benzo(a)anthracene	<0.2	mg/kg	12/1/98	
Benzo(b)fluoranthene	<0.2	mg/kg	12/1/98	
Benzo(k)fluoranthene	<0.2	mg/kg	12/1/98	
Benzo(ghi)perylene	<0.2	mg/kg	12/1/98	
Benzo(a)pyrene	<0.2	mg/kg	12/1/98	
Chrysene	<0.2	mg/kg	12/1/98	
Dibenz(a,h)anthracene	<0.2	mg/kg	12/1/98	
Fluoranthene	<0.2	mg/kg	12/1/98	
Fluorene	<0.2	mg/kg	12/1/98	
Indeno(1,2,3-c,d)pyrene	<0.2	mg/kg	12/1/98	
Phenanthrene	<0.2	mg/kg	12/1/98	



**-- LABORATORY ANALYSIS REPORT --**

Strategic Environmental - Canton  
P.O. Box 30  
Canton, NY 13617

Attn: Mr. Nevin Bradford  
Phone: (315) 386-2736  
FAX: (315) 386-4736

Project No.: 250.11.98  
Authorization:

LSL Project No.: 9807781  
Report Date: 12/10/98

Pyrene	<0.2	mg/kg	12/1/98
--------	------	-------	---------

Sample ID: B-18 17'-18' Grab

*TOWARD BRIDGES  
SUBMITT*

LSL Sample ID: 9807781-020  
Date Sampled: 11/18/98

Source:  
Sample Matrix: SHW  
Analytical Method

Parameter(s)	Results	Units	Analysis Date	Comment
<b>NYS DOH 310.13, TPH's</b>				
Fuel oil #2	1600	mg/kg	12/1/98	(20)
<i>(20) This target analyte appears to be biologically degraded and/or environmentally weathered.</i>				
Gasoline	Not Present		12/1/98	
Kerosene	<400	mg/kg	12/1/98	
Lubricating oil	Not Present		12/1/98	
<b>NYS-DEC STARS 8021 Volatiles</b>				
Benzene	<500	ug/kg	12/2/98	
n-Butylbenzene	3400	ug/kg	12/2/98	
sec-Butylbenzene	2200	ug/kg	12/2/98	
tert-Butylbenzene	<500	ug/kg	12/2/98	
Ethyl benzene	<500	ug/kg	12/2/98	
Isopropylbenzene (Cumene)	750	ug/kg	12/2/98	
4-Isopropyl toluene (Cymene)	<500	ug/kg	12/2/98	
MTBE	<500	ug/kg	12/2/98	
Naphthalene	<500	ug/kg	12/2/98	
N-Propylbenzene	1900	ug/kg	12/2/98	
Toluene	<500	ug/kg	12/2/98	
1,2,4-Trimethylbenzene	<500	ug/kg	12/2/98	
1,3,5-Trimethylbenzene	<500	ug/kg	12/2/98	
Xylenes (Total)	<500	ug/kg	12/2/98	(6)
<i>(6) Elevated detection limit due to matrix interference.</i>				
<b>NYS-DEC STARS 8270 Base/Neutrals</b>				
Acenaphthene	<4	mg/kg	12/1/98	
Anthracene	<4	mg/kg	12/1/98	
Benzo(a)anthracene	<4	mg/kg	12/1/98	
Benzo(b)fluoranthene	<4	mg/kg	12/1/98	
Benzo(k)fluoranthene	<4	mg/kg	12/1/98	
Benzo(ghi)perylene	<4	mg/kg	12/1/98	

**-- LABORATORY ANALYSIS REPORT --**

Strategic Environmental - Canton  
P.O. Box 30  
Canton, NY 13617

Attn: Mr. Nevin Bradford  
Phone: (315) 386-2736  
FAX: (315) 386-4736

Project No.: 250.11.98  
Authorization:

LSL Project No.: 9807781  
Report Date: 12/10/98

Benzo(a)pyrene	<4	mg/kg	12/1/98
Chrysene	<4	mg/kg	12/1/98
Dibenz(a,h)anthracene	<4	mg/kg	12/1/98
Fluoranthene	<4	mg/kg	12/1/98
Fluorene	6.2	mg/kg	12/1/98
Indeno(1,2,3-c,d)pyrene	<4	mg/kg	12/1/98
Phenanthrene	8.8	mg/kg	12/1/98
Pyrene	<4	mg/kg	12/1/98 (6)

(6) Elevated detection limit due to matrix interference.

**Sample ID: B-18 0-17' Composite**

Source:  
Sample Matrix: SHW

LSL Sample ID: 9807781-021  
Date Sampled: 11/18/98

*Analytical Method*

<i>Parameter(s)</i>	<i>Results</i>	<i>Units</i>	<i>Analysis Date</i>	<i>Comment</i>
<b>EPA 6010 Priority Pollutant Metals</b>				
Antimony	<5	mg/kg	12/4/98	
Arsenic	9.7	mg/kg	12/4/98	
Beryllium	<0.9	mg/kg	12/4/98	
Cadmium	<0.9	mg/kg	12/4/98	
Chromium	12	mg/kg	12/4/98	
Copper	40	mg/kg	12/4/98	
Lead	45	mg/kg	12/4/98	
Nickel	9.3	mg/kg	12/4/98	
Selenium	4.0	mg/kg	12/4/98	
Silver	<0.9	mg/kg	12/4/98	
Thallium	<0.9	mg/kg	12/4/98	
Zinc	49	mg/kg	12/4/98	
<b>EPA 7471 Mercury</b>				
Mercury	<0.1	mg/kg	12/9/98	
<b>EPA 8082 PCB's</b>				
Arochlor-1016	<0.2	mg/kg	11/25/98	
Arochlor-1221	<0.2	mg/kg	11/25/98	
Arochlor-1232	<0.2	mg/kg	11/25/98	
Arochlor-1242	<0.2	mg/kg	11/25/98	

-- LABORATORY ANALYSIS REPORT --

Strategic Environmental - Canton  
P.O. Box 30  
Canton, NY 13617

Attn: Mr. Nevin Bradford  
Phone: (315) 386-2736  
FAX: (315) 386-4736

Project No.: 250.11.98

LSL Project No.: 9807781

Authorization:

Report Date: 12/10/98

---

Arochlor-1248	<0.2	mg/kg	11/25/98
Arochlor-1254	<0.2	mg/kg	11/25/98
Arochlor-1260	<0.2	mg/kg	11/25/98
EPA 9010 Total Cyanide			
Cyanide, Total	0.11	mg/kg	12/2/98

---



Life Science Laboratories, Inc.  
 5854 Butternut Drive  
 East Syracuse, NY 13057

Phone # (315) 445-1105      Telefax # (315) 445-1301

# Chain of Custody Record

Client: STRATEGIC ENVIRONMENTAL MANAGEMENT, INC. Phone # (315) 386-2736  
 Address: P.O. Box 30      Telefax # (315) 386-4736

CANTON, NEW YORK 13617

Client's Sample Identifications		Sample Date	Sample Time	Authorization:	Type	Matrix	Preserv. Added	Containers # size/type	Analyses	Turnaround Time (Please circle one)			
Client's Sample Identifications		Sample Date	Sample Time	Sample Time	grab	comp.		# size/type		24 Hr	72 Hr	2 Weeks	3 Weeks
B-1	COMPOSITE	11-17-98	1000			X	4°C	2 4 oz. GLASS	EPA METHOD 8021 'STARS'	24 Hr	48 Hr		
B-2	23' GRAB	11-17-98	1115	X			4°C	1 4oz. GLASS	EPA METHOD 8021 'STARS'				
B-2	COMPOSITE	11-17-98	1135			X	4°C	2 4oz. GLASS	EPA METHOD 8021 'STARS'				
B-3	COMPOSITE	11-17-98	1155			X	4°C	2 4oz. GLASS	PRIORITY POLLUTANT METALS (13) TOTAL CYANIDE				
B-4	COMPOSITE	11-17-98	1440			X	4°C	2 1oz. GLASS	EPA METHOD 8021 'STARS'				
B-5	13.5' GRAB	11-17-98	1540	X			4°C	1 4oz. GLASS	EPA METHOD 8021 'STARS'				
B-5	COMPOSITE *	11-17-98	1550			X	4°C	2 4oz. GLASS	PRIORITY POLLUTANT METALS (13) TOTAL CYANIDE				
B-6	COMPOSITE	11-17-98	1625			X	4°C	2 4oz. GLASS	EPA METHOD 8021 'STARS'				
B-7	COMPOSITE	11-17-98	1645			X	4°C	1 4oz. GLASS	PRIORITY POLLUTANT METALS (13) TOTAL CYANIDE				

Notes and Hazard identifications:

\* Bottles labeled B-5 Composite

Custody Transfers		Date	Time
Sampled By: <i>H. M. Bradford, Jr.</i>		11-17-98	1000
Relinquished By: <i>H. M. Bradford, Jr.</i>			
Received By: <i>M. Bradburn</i>		11-24-98	0530

DELIVERY

5854 Butternut Drive  
East Syracuse, NY 13057

# Chain of Custody Record

Phone # (315) 445-1105      Telefax # (315) 445-1301

Client: STRATEGIC ENVIRONMENTAL MANAGEMENT, INC. Phone # (315) 386-2736  
Address: P.O. Box 30      Telefax # (315) 386-4736

CANTON, NEW YORK 13617

Contact Person: NEVIN BRADFORD

Authorization:

Client's Project I.D.: 250.11.98

Client's Sample Identifications	Sample Date	Sample Time	Type		Matrix	Preserv. Added	# Containers	size/type	Analyses	Preserv. Check	LSL ID#
			grab	comp.							
B-9 COMPOSITE	11-18-98	0930	X		SOIL	4°C	2	GLASS	PRIORITY POLLUTANT METALS (13)		010
B-10 COMPOSITE	11-18-98	0955	X		SOIL	4°C	2	GLASS	PRIORITY POLLUTANT METALS (13)		011
B-11 COMPOSITE	11-18-98	1045	X		SOIL	4°C	2	GLASS	PCBs		012
B-12 COMPOSITE	11-18-98	1106	X		SOIL	4°C	2	GLASS	PRIORITY POLLUTANT METALS (13)		013
B-13 3'-8' COMPOSITE	11-18-98	1125	X		SOIL	4°C	2	GLASS	EPA METHOD 8021 'STARS', EPA METHOD 8270 'STARS', OCM 310-13.		014
B-14 0'-16' COMPOSITE	11-18-98	1400	X		SOIL	4°C	2	GLASS	PRIORITY POLLUTANT METALS (13)		015
B-14 16'-20' COMPOSITE	11-18-98	1355	X		SOIL	4°C	2	GLASS	EPA METHOD 8021 'STARS', EPA METHOD 8270 'STARS'		016
B-15 COMPOSITE	11-18-98	1450	X		SOIL	4°C	2	GLASS	PRIORITY POLLUTANT METALS (13)		017
B-16 COMPOSITE	11-18-98	1500	X		SOIL	4°C	2	GLASS	TOTAL CYANIDE		018
B-17 COMPOSITE	11-18-98	1630	X		SOIL	4°C	2	GLASS	PRIORITY POLLUTANT METALS (13)		019

Notes and Hazard Identifications:

### Custody Transfers

Date	Time
11-18-98	0910
11-18-98	0530

Sampled By: H. NEVIN BRADFORD

Page 1 of 2

Relinquished By: H. NEVIN BRADFORD

Received By: H. NEVIN BRADFORD  
Received for Lab By: H. NEVIN BRADFORD



Life Science Laboratories, Inc.

5854 Butternut Drive

East Syracuse, NY 13057

Phone # (315) 445-1105

Telex # (315) 445-1301

# Chain of Custody Record

LSL Project #: <u>1907781</u>		Turnaround Time (Please circle one)									
Client's Site I.D.:		24 Hr	48 Hr								
Client's Project I.D.: <u>250.11.98</u>		72 Hr	1 Week								
Client's Project I.D.: <u>250.11.98</u>		<u>2 Weeks</u> 3 Weeks									
Contact Person: <u>NEVIN BRADFORD</u>	Client's Sample Identifications	Sample Date	Sample Time	Type	Matrix	Preserv. Added	# Containers	# size/type	Analyses	Preserv. Check	LSL ID#
	B-18 17'-18' GRAB	11-18-98	1730	X	SOIL	4°C	2	4 02 GLASS	EPA METHOD 8021 STARS? EPA METHOD 8290 STARS? DDH 310-13 PRIORITY POLLUTANT METALS (13) PCBS TOTAL CYANIDE		20
	B-18 0-17' COMPOSITE	11-18-98	1740		SOIL	4°C	2	4 02 GLASS			021
	B-B COMPOSITE	11-18-98	0910	X	SOIL	4°C	2	4 02 GLASS	[HAD]		
<p>Notes and Hazard identifications:</p> <p>Page 2 of 2</p>											
<p>Custody Transfers</p> <p>Sampled By: <u>H. Nevin Bradford III</u> Received By: <u>H. Nevin Bradford III</u> 11-18-98 0910</p> <p>Relinquished By: <u>H. Nevin Bradford III</u> Received By: <u>H. Nevin Bradford III</u> 11-24-98 0530</p>											