



ATLANTIC TESTING LABORATORIES

WBE certified company

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November 21, 2016

Milone & MacBroom
1 South Main Street, 2nd Floor
Waterbury, Vermont 05676

Attn: Mr. Roy Schiff, PhD, PE
Water Recourse Scientist and Engineer

Re: Subsurface Investigation Services
Rome Dam Initiative
Essex County, New York
ATL Report No. CD4136CE-01-11-16

Ladies/Gentlemen:

Enclosed is a copy of the Subsurface Investigation Services report prepared for the referenced sites. This project was completed in accordance with the scope of work outlined in Atlantic Testing Laboratories, Limited (ATL) contract number CD998-1561X-07-16, dated July 18, 2016.

Please contact our office should you have any questions, or if we may be of further assistance.

Sincerely,
ATLANTIC TESTING LABORATORIES, Limited

Tiernan W. Smith
Project Manager

TSP/CJD/tp

**SUBSURFACE INVESTIGATION SERVICES
ROME DAM INITIATIVE
ESSEX COUNTY, NEW YORK**



WBE certified company

PREPARED FOR:

**Milone & MacBroom
1 South Main Street, 2nd Floor
Waterbury, Vermont 05676**

PREPARED BY:

**Atlantic Testing Laboratories, Limited
6431 US Highway 11
Canton, New York 13617**

ATL REPORT NO. CD4136CE-01-11-16

NOVEMBER 21, 2016

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1.0 INTRODUCTION

In accordance with Atlantic Testing Laboratories, Limited (ATL) contract number CD998-1561x-07-16, dated July 18, 2016, a subsurface investigation was conducted at the subject site on November 2, 2016. The subsurface investigation services were conducted to characterize sediment conditions in designated areas of the subject site, prior to proposed dam removal activities.

2.0 SITE DESCRIPTION

The subject site includes sections of Ausable River above and below the Rome Dam in Ausable Forks, Essex County, New York. A Site Location Map, depicting the subject property locations and pertinent area features, is contained in Appendix A.

The areas of investigation included portions of the Ausable River bottom that may need to be dredged for dam removal work. Boring Location Plan is contained in Appendix B.

3.0 SUBSURFACE INVESTIGATION

3.1 Sediment Borings

The subsurface investigation included the advancement of 5 soil borings. The sediment borings were advanced to depths ranging from 1 to 4 feet below the river bottom surface. The sediment borings were advanced manually, using steel anvil rods and a slide hammer.

Sediment samples were collected continuously throughout each boring, utilizing Geoboring Systems' Macro-Core Soil Sampler system, by advancing a 1.75-inch diameter by 48-inch long steel sampling barrel equipped with expendable PVC liners. The recovered sediment samples were examined for detectable odors and visual indicators of contamination.

A Boring Location Plan, depicting boring locations and pertinent site features, is contained in Appendix B. Table I summarizes general sediment boring information. Various additional sounding probes were also advanced throughout the site to identify depths of water and sediment in different areas of the site. Table II summarizes depths to water and depths of sediment for the boring.

Table I
Summary of Boring Data
Borings Advanced November 2, 2016

Boring Number	Location	Boring Depth (Feet)
B-1*	Above Dam	1.0
B-2	Above Dam	3.0
B-3	Above Dam	4.0
B-4	Above Dam	4.0
B-5	Below Dam	2.5
Notes: Boring Depth = Feet below river bottom surface * The sample at boring location B-1 was collected as an upstream background sample to compare to the sediments directly behind the dam.		

Table II
Summary of Additional Sounding Probes
Probes Advanced November 2, 2016

Probe No.	Water Depth (Feet)	Probe Depth (Feet)	Comments
P-1	2.0	0.1	Cobbles and boulders
P-2	7.0	0.1	Hard bottom; assuming cobbles and boulders
P-3	0.4	0.2	Hard bottom; assuming cobbles and boulders
P-4	9.5	0.1	Hard bottom; assuming bedrock (probe rod scrapes across bottom)
P-5	10.0	0.2	Hard bottom; assuming bedrock (probe rod scrapes across bottom)
P-6	9.5	0.5	Small amount of sediment on top of hard bottom
P-7	15.0	3.0+	Soft top of sediment; starts to get harder at 2.5; unable to probe further because of water depth
P-8	18.0	2.0+	Soft bottom; Only 20-feet of probe rod; unable to probe further because of water depth
P-9	4.0	6.1	Soft to refusal; possible cobbles
P-10	2.0	6.0	Soft to refusal; possible cobbles
P-11	0.5	10.0	Soft to 6.8 feet, encountered harder layer; unable to push further than 10 feet (assuming side friction on rods)
P-12	2.5	4.3	Soft to refusal, likely cobble or boulder
P-13	2.2	4.6	Soft to refusal, likely cobble or boulder
P-14	6.1	3.1	Soft to refusal on hard bottom, possible dam or bedrock
P-15	3.0	3.0	Soft to refusal on hard bottom, possible dam or bedrock
P-16	9.0	5.2	Soft to refusal on hard bottom, possible dam or bedrock
P-17	12.8	6.0	Soft to refusal on hard bottom, possible dam or bedrock
P-18	11.3	9.8	Soft to refusal on hard bottom, possible dam or bedrock

3.2 Subsurface Conditions

Sediment conditions encountered during the course of the subsurface sampling generally consisted of sand and gravel material, with varying proportions of silt and clay. Boring Logs, summarizing the sediment characteristics and properties are contained in Appendix C.

4.0 SEDIMENT SAMPLING AND ANALYSIS

4.1 Sampling Methodology

Sediment samples were submitted to SGS Accutest, located in Dayton, New York, New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) approved laboratory (ELAP No. 10983). The samples were laboratory analyzed for Total Organic Carbon (TOC), in accordance with EPA Method 89060A; polychlorinated biphenyls (PCB), in accordance with EPA method 8082; pesticides and herbicides, in accordance with EPA method 8081; total polyaromatic hydrocarbons (PAH), in accordance with EPA method 8270; target metals (including arsenic, cadmium, copper, and lead), in accordance with EPA method 6010B; and mercury, in accordance with EPA

method 7470A. A copy of the laboratory report and associated sample custody documentation for the referenced samples are contained in Appendix D.

Sediment samples were collected in clean laboratory glassware, with Teflon-lined lids, in accordance with industry standard protocol. Disposable sampling equipment (i.e., plastic bags, and nitrile gloves) was utilized to collect samples. Samples were stored in a cooler, with ice, and maintained at approximately 4°C during storage and delivery to the laboratory.

4.2 Summary of Laboratory Data

A total of 5 composite sediment samples (one for each boring) were collected for laboratory analysis during the subsurface sampling. The composite samples were comprised of 3 to 4 grabs of sediment from within the entire boring depth. In addition, gravel larger than ½-inch in diameter, if encountered, was excluded from samples retained for laboratory analysis. Table E-1, contained in Appendix E, summarize analytical results for the soil samples that were collected.

Laboratory analysis of the sediment samples collected at each of the boring locations identified detectable concentrations of target semi-VOC and the target metal iron, in addition to lead in the sample from location B-4. The sample from location B-1 identified a detectable concentration of the target pesticide chlordane. None of the collected samples exhibited PCB at concentrations exceeding the respective laboratory method detection limits. Of the detected concentrations of target compounds, none of the detections were above New York State Department of Environmental Conservation (NYSDEC) TOGS 5.1.9 Thresholds for Class A Sediments.

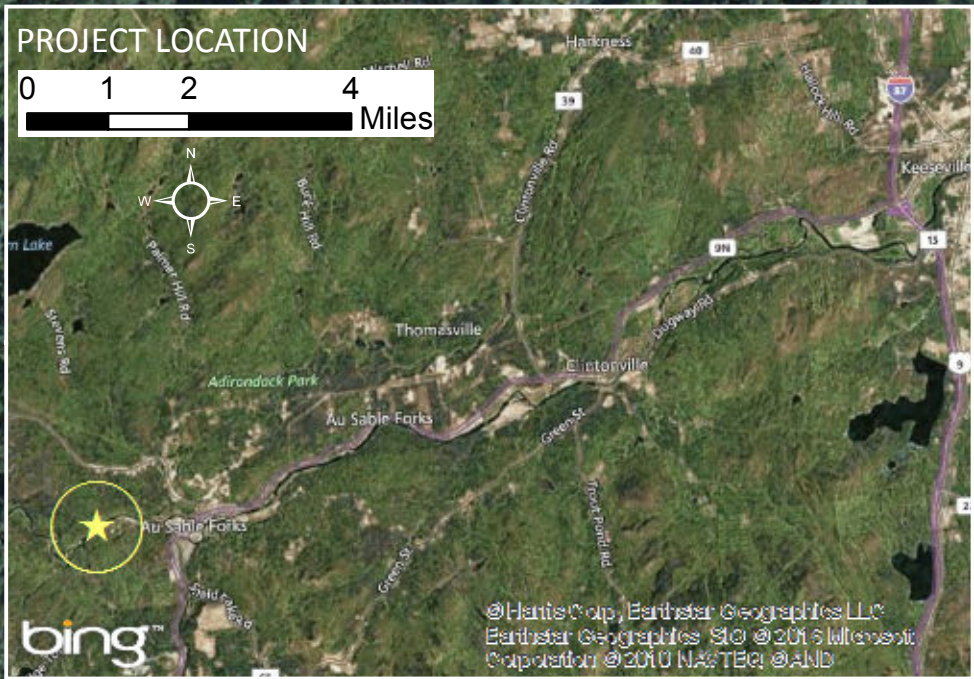
5.0 CONCLUSIONS AND RECOMMENDATIONS

The following is a summary of findings from the soil sampling performed by ATL. Recommendations for further investigation and/or soil disposal activities are also provided, as warranted.

For the target analytes, the sediment sampling did not identify concentrations exceeding NYSDEC TOGS 5.1.9 Thresholds for Class A Sediment.

Based on the information collected during the sediment sampling and analysis, sediment located behind the dam appears to be typical of the subsurface material found through the river bottom. If this material is to be removed, it should be managed under an appropriate approved reuse option, via a Beneficial Use Determination, or properly disposed of per NYSDEC regulations. It is noted that ATL cannot warrant similar conditions would be encountered in other areas not specifically investigated.

APPENDIX A
SITE LOCATION MAP



SOURCE(S):
Imagery - Microsoft Virtual Earth Aerial (Bing)

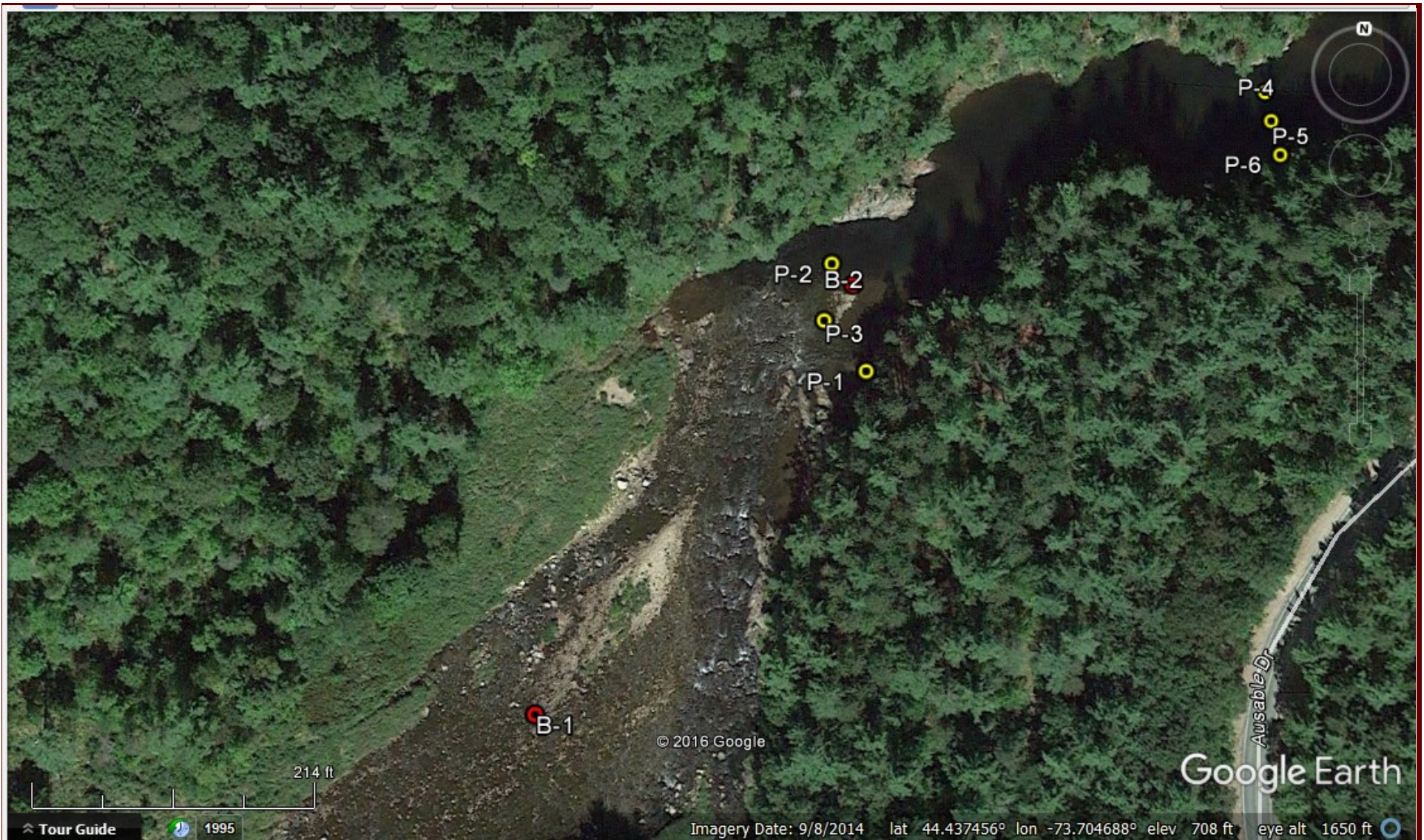
Proposed Sediment Sampling Locations
ROME DAM REMOVAL FEASIBILITY STUDY
JAY, NEW YORK

Map By: RKS
MMI#: 5810-01
MXD: Y:\5810-01\Maps\Sediment sampling.mxd
1st Version: July 6, 2016
Revision:
Scale: See scale bar

SEDIMENT

MILONE & MACBROOM
1 South Main Street
Waterbury, VT 05676
(802) 882-8335
www.miloneandmacbroom.com

APPENDIX B
BORING LOCATION PLANS



Site Location Map	Drawn by: TJG	Scale: Not to scale	Project No.: CD4136	Date: November 2016
Rome Dam Ausable, New York	ATLANTIC TESTING LABORATORIES, Limited			
	Albany, NY	Binghamton, NY	Canton, NY	Elmira, NY
	Poughkeepsie, NY	Syracuse, NY	Rochester, NY	Utica, NY
Watertown, NY				



Sample Location Plan	Drawn by: TJG	Scale: Not to scale	Project No.: CD4136	Date: November 2016
Rome Dam Ausable, New York	ATLANTIC TESTING LABORATORIES, Limited			
	Albany, NY	Binghamton, NY	Canton, NY	Elmira, NY
	Poughkeepsie, NY	Syracuse, NY	Rochester, NY	Utica, NY
			Watertown,	

APPENDIX C

BORING LOGS

ATLANTIC TESTING LABORATORIES, Limited

Subsurface Investigation

Client: Milone & MacBroom, Inc.
 Project: Subsurface Investigation
Rome Dam Initiative
Rome, New York

Report No.: CD4136
 Boring Location: See Boring Location Plan

Boring No.: B-1 Sheet 1 of 1

Coordinates
 Latitude _____
 Longitude _____

Sampler Hammer
 Weight: _____ lbs.
 Fall: _____ in.
 Hammer Type: _____

Ground Elev.: _____ Boring Advance By:
Hand Sample

Start Date: 11/2/2016 Finish Date: 11/2/2016

Groundwater Observations

Date	Time	Depth	Casing
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE		SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL	Recovery (Inches)
			From	To					
1	HAND		0.0	1.0	GRAB	HAND SAMPLE	1.0	f - fine m - medium c - coarse and - 35-50% some - 20-35% little - 10-20% trace - 0-10% Unable to advance sampler in cobble and boulder. Brown cm+f SAND; trace mf GRAVEL; trace SILT Boring terminated at 1.0 feet.	
2	SAMPLE							Notes: 1. Boring referenced at the mudline. 2. Water depth was 6-inches.	
3									
4									
5									
6									
7									
8									
9									
10									

ATL-LOG1 LL CD4136 MILONE & MACBROOM, INC.- ROME.GPJ ATL4-08.GDT 11/17/16

SS Split Spoon Sample
 NX Rock Core
 SH Undisturbed Sample (Shelby Tube)
 Estimated Groundwater

Drillers: Tim Gavin
 Inspector: _____

ATLANTIC TESTING LABORATORIES, Limited

Subsurface Investigation

Client: Milone & MacBroom, Inc.
 Project: Subsurface Investigation
Rome Dam Initiative
Rome, New York

Report No.: CD4136
 Boring Location: See Boring Location Plan

Boring No.: B-2 Sheet 1 of 1

Start Date: 11/2/2016 Finish Date: 11/2/2016

Coordinates
 Latitude _____
 Longitude _____
 Sampler Hammer
 Weight: _____ lbs.
 Fall: _____ in.
 Hammer Type: _____
 Ground Elev.: _____
 Boring Advance By:
Macro Core

Groundwater Observations
 Date Time Depth Casing

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE		SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL f - fine m - medium c - coarse and - 35-50% some - 20-35% little - 10-20% trace - 0-10%	Recovery (Inches)
			From	To					
1	MACRO CORE		0.0	3.0		HAND SAMPLE		Brown cmf+ GRAVEL and cm+f SAND; trace SILT	
2									
3									
4							3.0		
5									
6									
7									
8									
9									
10									
								Boring terminated at 3.0 feet. Notes: 1. 3 attempts composited into one sample. Attempt 1=24" recovery, attempt 2=18" recovery, attempt 3=30" recovery 2. Boring referenced to the mudline. 3. Water depth was 3.0 feet.	

ATL-LOG1 LL CD4136 MILONE & MACBROOM, INC.- ROME.GPJ ATL4-08.GDT 11/17/16

SS Split Spoon Sample
 NX Rock Core
 SH Undisturbed Sample (Shelby Tube)
 Estimated Groundwater

Drillers: Tim Gavin
 Inspector: _____

ATLANTIC TESTING LABORATORIES, Limited

Subsurface Investigation

Client: Milone & MacBroom, Inc.
 Project: Subsurface Investigation
Rome Dam Initiative
Rome, New York

Report No.: CD4136
 Boring Location: See Boring Location Plan

Boring No.: B-3 Sheet 1 of 1

Start Date: 11/2/2016 Finish Date: 11/2/2016

Coordinates
 Latitude _____
 Longitude _____
 Sampler Hammer
 Weight: _____ lbs.
 Fall: _____ in.
 Hammer Type: _____
 Ground Elev.: _____
 Boring Advance By:
Macro Core

Groundwater Observations
 Date Time Depth Casing

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE		SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL f - fine m - medium c - coarse and - 35-50% some - 20-35% little - 10-20% trace - 0-10%	Recovery (Inches)
			From	To					
1	MACRO CORE		0.0	4.0		HAND SAMPLE		Dark-Brown mf+ SAND; trace SILT	
2									
3									
4							4.0		
5								Boring terminated at 4.0 feet.	
6								Notes: 1. 2 attempts composited into one sample. Attempt 1=36" recovery, attempt 2=24" recovery 2. Boring referenced to the mudline. 3. Water depth was 4.0 feet.	
7									
8									
9									
10									

ATL-LOG1 LL CD4136 MILONE & MACBROOM, INC.- ROME.GPJ ATL4-08.GDT 11/17/16

SS Split Spoon Sample
 NX Rock Core
 SH Undisturbed Sample (Shelby Tube)
 Estimated Groundwater

Drillers: Tim Gavin
 Inspector: _____

ATLANTIC TESTING LABORATORIES, Limited

Subsurface Investigation

Client: Milone & MacBroom, Inc.
 Project: Subsurface Investigation
Rome Dam Initiative
Rome, New York

Report No.: CD4136
 Boring Location: See Boring Location Plan

Boring No.: B-4 Sheet 1 of 1

Coordinates
 Latitude _____
 Longitude _____

Sampler Hammer
 Weight: _____ lbs.
 Fall: _____ in.
 Hammer Type: _____

Ground Elev.: _____ Boring Advance By:
Macro Core

Start Date: 11/2/2016 Finish Date: 11/2/2016

Groundwater Observations
 Date Time Depth Casing

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE		SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL f - fine m - medium c - coarse and - 35-50% some - 20-35% little - 10-20% trace - 0-10%	Recovery (Inches)
			From	To					
1	MACRO CORE		0.0	4.0		HAND SAMPLE		Brown mf SAND; trace SILT	42
2									
3									
4							4.0		
5								Boring terminated at 4.0 feet.	
6								Notes: 1. Boring referenced to the mudline. 2. Water depth was 1.0 foot.	
7									
8									
9									
10									

ATL-LOG1 LL CD4136 MILONE & MACBROOM, INC.- ROME.GPJ ATL4-08.GDT 11/17/16

SS Split Spoon Sample
 NX Rock Core
 SH Undisturbed Sample (Shelby Tube)
 Estimated Groundwater

Drillers: Tim Gavin
 Inspector: _____

ATLANTIC TESTING LABORATORIES, Limited

Subsurface Investigation

Client: Milone & MacBroom, Inc.
 Project: Subsurface Investigation
Rome Dam Initiative
Rome, New York

Report No.: CD4136
 Boring Location: See Boring Location Plan

Boring No.: B-5 Sheet 1 of 1

Start Date: 11/2/2016 Finish Date: 11/2/2016

Coordinates
 Latitude _____
 Longitude _____
 Sampler Hammer
 Weight: _____ lbs.
 Fall: _____ in.
 Hammer Type: _____
 Ground Elev.: _____
 Boring Advance By:
Macro Core

Groundwater Observations
 Date Time Depth Casing

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE		SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL f - fine m - medium c - coarse and - 35-50% some - 20-35% little - 10-20% trace - 0-10%	Recovery (Inches)
			From	To					
1	MACRO CORE		0.0	2.5		HAND SAMPLE		Brown cm+f SAND; trace mf GRAVEL; trace SILT	
2									
3									
4							3.5	Boring terminated at 3.5 feet.	
5								Notes: 1. 2 attempts composited into one sample. Attempt 1=30" recovery, attempt 2=24" recovery 2. Boring referenced to the mudline. 3. Water depth was 2.0 feet.	
6									
7									
8									
9									
10									

ATL-LOG1 LL CD4136 MILONE & MACBROOM, INC.- ROME.GPJ ATL4-08.GDT 11/17/16

SS Split Spoon Sample
 NX Rock Core
 SH Undisturbed Sample (Shelby Tube)
 Estimated Groundwater

Drillers: Tim Gavin
 Inspector: _____

APPENDIX D

LABORATORY RESULTS AND SAMPLE CUSTODY DOCUMENTATION

Sample Summary

Atlantic Testing Laboratories

Job No: JC31104

Rome Dam Initiative, Essex County, NY

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JC31104-1	11/02/16	11:30 TS	11/04/16	SO	Soil	CD4136-PO1
JC31104-2	11/02/16	10:30 TS	11/04/16	SO	Soil	CD4136-PO2
JC31104-3	11/02/16	13:00 TS	11/04/16	SO	Soil	CD4136-PO3
JC31104-4	11/02/16	14:00 TS	11/04/16	SO	Soil	CD4136-PO4
JC31104-5	11/02/16	16:30 TS	11/04/16	SO	Soil	CD4136-PO5

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Report of Analysis

Page 1 of 1

Client Sample ID:	CD4136-PO1	Date Sampled:	11/02/16
Lab Sample ID:	JC31104-1	Date Received:	11/04/16
Matrix:	SO - Soil	Percent Solids:	80.6
Method:	SW846 8270D SW846 3546		
Project:	Rome Dam Initiative, Essex County, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z116068.D	1	11/09/16	AC	11/06/16	OP98347	EZ5780
Run #2							

	Initial Weight	Final Volume
Run #1	32.2 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	39	13	ug/kg	
208-96-8	Acenaphthylene	ND	39	20	ug/kg	
120-12-7	Anthracene	ND	39	24	ug/kg	
56-55-3	Benzo(a)anthracene	15.6	39	11	ug/kg	J
50-32-8	Benzo(a)pyrene	ND	39	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	21.5	39	17	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	ND	39	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	39	18	ug/kg	
218-01-9	Chrysene	ND	39	12	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	39	17	ug/kg	
206-44-0	Fluoranthene	21.7	39	17	ug/kg	J
86-73-7	Fluorene	ND	39	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	39	18	ug/kg	
91-20-3	Naphthalene	ND	39	11	ug/kg	
85-01-8	Phenanthrene	ND	39	13	ug/kg	
129-00-0	Pyrene	23.0	39	12	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	73%		26-122%
321-60-8	2-Fluorobiphenyl	84%		36-112%
1718-51-0	Terphenyl-d14	97%		36-132%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	CD4136-PO1		
Lab Sample ID:	JC31104-1	Date Sampled:	11/02/16
Matrix:	SO - Soil	Date Received:	11/04/16
Method:	SW846 8081B SW846 3546	Percent Solids:	80.6
Project:	Rome Dam Initiative, Essex County, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4G74702.D	1	11/09/16	KD	11/06/16	OP98353	G4G1946
Run #2							

	Initial Weight	Final Volume
Run #1	16.7 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
57-74-9	Chlordane (alpha and gamma)	1.1	0.74	0.33	ug/kg	
60-57-1	Dieldrin	ND	0.74	0.37	ug/kg	
72-54-8	4,4' -DDD	ND	0.74	0.48	ug/kg	
72-55-9	4,4' -DDE	ND	0.74	0.39	ug/kg	
50-29-3	4,4' -DDT	ND	0.74	0.44	ug/kg	
2385-85-5	Mirex	ND	1.5	0.44	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	91%		24-136%
877-09-8	Tetrachloro-m-xylene	83%		24-136%
2051-24-3	Decachlorobiphenyl	68%		10-153%
2051-24-3	Decachlorobiphenyl	81%		10-153%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	CD4136-PO1		
Lab Sample ID:	JC31104-1	Date Sampled:	11/02/16
Matrix:	SO - Soil	Date Received:	11/04/16
Method:	SW846 8082A SW846 3546	Percent Solids:	80.6
Project:	Rome Dam Initiative, Essex County, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF163401.D	1	11/08/16	HB	11/06/16	OP98352	GEF5800
Run #2							

	Initial Weight	Final Volume
Run #1	16.7 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	18	ug/kg	
11104-28-2	Aroclor 1221	ND	37	18	ug/kg	
11141-16-5	Aroclor 1232	ND	37	15	ug/kg	
53469-21-9	Aroclor 1242	ND	37	13	ug/kg	
12672-29-6	Aroclor 1248	ND	37	23	ug/kg	
11097-69-1	Aroclor 1254	ND	37	19	ug/kg	
11096-82-5	Aroclor 1260	ND	37	16	ug/kg	
11100-14-4	Aroclor 1268	ND	37	13	ug/kg	
37324-23-5	Aroclor 1262	ND	37	25	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	90%		20-152%
877-09-8	Tetrachloro-m-xylene	115%		20-152%
2051-24-3	Decachlorobiphenyl	99%		12-157%
2051-24-3	Decachlorobiphenyl	98%		12-157%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	CD4136-PO1	Date Sampled:	11/02/16
Lab Sample ID:	JC31104-1	Date Received:	11/04/16
Matrix:	SO - Soil	Percent Solids:	80.6
Project:	Rome Dam Initiative, Essex County, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Arsenic	< 2.5	2.5	mg/kg	1	11/06/16	11/07/16 KS	SW846 6010C ²	SW846 3050B ⁴
Cadmium	< 0.63	0.63	mg/kg	1	11/06/16	11/07/16 KS	SW846 6010C ²	SW846 3050B ⁴
Copper	< 3.1	3.1	mg/kg	1	11/06/16	11/07/16 KS	SW846 6010C ²	SW846 3050B ⁴
Iron	8350	63	mg/kg	1	11/06/16	11/08/16 DE	SW846 6010C ³	SW846 3050B ⁴
Lead	< 2.5	2.5	mg/kg	1	11/06/16	11/07/16 KS	SW846 6010C ²	SW846 3050B ⁴
Mercury	< 0.041	0.041	mg/kg	1	11/07/16	11/07/16 JPM	SW846 7471B ¹	SW846 7471B ⁵

(1) Instrument QC Batch: MA40713

(2) Instrument QC Batch: MA40717

(3) Instrument QC Batch: MA40724

(4) Prep QC Batch: MP97005

(5) Prep QC Batch: MP97017

RL = Reporting Limit

Report of Analysis

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Client Sample ID: CD4136-PO1**Lab Sample ID:** JC31104-1**Matrix:** SO - Soil**Project:** Rome Dam Initiative, Essex County, NY**Date Sampled:** 11/02/16**Date Received:** 11/04/16**Percent Solids:** 80.6**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.24	0.24	mg/kg	1	11/07/16 10:40	YZ	SW846 9012B/LACHAT
Solids, Percent	80.6		%	1	11/07/16 14:50	MH	SM2540 G-97
Total Organic Carbon	1690	1200	mg/kg	1	11/05/16 16:19	YZ	ACOE 81M/9060A M

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID:	CD4136-PO2		
Lab Sample ID:	JC31104-2	Date Sampled:	11/02/16
Matrix:	SO - Soil	Date Received:	11/04/16
Method:	SW846 8270D SW846 3546	Percent Solids:	73.4
Project:	Rome Dam Initiative, Essex County, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z116069.D	1	11/09/16	AC	11/06/16	OP98347	EZ5780
Run #2							

	Initial Weight	Final Volume
Run #1	32.1 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	42	15	ug/kg	
208-96-8	Acenaphthylene	ND	42	22	ug/kg	
120-12-7	Anthracene	ND	42	26	ug/kg	
56-55-3	Benzo(a)anthracene	ND	42	12	ug/kg	
50-32-8	Benzo(a)pyrene	ND	42	19	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	42	19	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	42	21	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	42	20	ug/kg	
218-01-9	Chrysene	ND	42	13	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	42	19	ug/kg	
206-44-0	Fluoranthene	ND	42	19	ug/kg	
86-73-7	Fluorene	ND	42	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	42	20	ug/kg	
91-20-3	Naphthalene	ND	42	12	ug/kg	
85-01-8	Phenanthrene	ND	42	14	ug/kg	
129-00-0	Pyrene	17.0	42	14	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	75%		26-122%
321-60-8	2-Fluorobiphenyl	81%		36-112%
1718-51-0	Terphenyl-d14	94%		36-132%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	CD4136-PO2		
Lab Sample ID:	JC31104-2	Date Sampled:	11/02/16
Matrix:	SO - Soil	Date Received:	11/04/16
Method:	SW846 8081B SW846 3546	Percent Solids:	73.4
Project:	Rome Dam Initiative, Essex County, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4G74736.D	1	11/10/16	KD	11/06/16	OP98353	G4G1947
Run #2							

	Initial Weight	Final Volume
Run #1	16.0 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
57-74-9	Chlordane (alpha and gamma)	ND	0.85	0.38	ug/kg	
60-57-1	Dieldrin	ND	0.85	0.43	ug/kg	
72-54-8	4,4' -DDD	ND	0.85	0.55	ug/kg	
72-55-9	4,4' -DDE	ND	0.85	0.44	ug/kg	
50-29-3	4,4' -DDT	ND	0.85	0.51	ug/kg	
2385-85-5	Mirex	ND	1.7	0.50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	82%		24-136%
877-09-8	Tetrachloro-m-xylene	76%		24-136%
2051-24-3	Decachlorobiphenyl	70%		10-153%
2051-24-3	Decachlorobiphenyl	77%		10-153%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	CD4136-PO2		
Lab Sample ID:	JC31104-2	Date Sampled:	11/02/16
Matrix:	SO - Soil	Date Received:	11/04/16
Method:	SW846 8082A SW846 3546	Percent Solids:	73.4
Project:	Rome Dam Initiative, Essex County, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF163402.D	1	11/08/16	HB	11/06/16	OP98352	GEF5800
Run #2							

	Initial Weight	Final Volume
Run #1	16.0 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	43	21	ug/kg	
11104-28-2	Aroclor 1221	ND	43	21	ug/kg	
11141-16-5	Aroclor 1232	ND	43	17	ug/kg	
53469-21-9	Aroclor 1242	ND	43	15	ug/kg	
12672-29-6	Aroclor 1248	ND	43	27	ug/kg	
11097-69-1	Aroclor 1254	ND	43	21	ug/kg	
11096-82-5	Aroclor 1260	ND	43	18	ug/kg	
11100-14-4	Aroclor 1268	ND	43	15	ug/kg	
37324-23-5	Aroclor 1262	ND	43	29	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	81%		20-152%
877-09-8	Tetrachloro-m-xylene	115%		20-152%
2051-24-3	Decachlorobiphenyl	89%		12-157%
2051-24-3	Decachlorobiphenyl	91%		12-157%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	CD4136-PO2	Date Sampled:	11/02/16
Lab Sample ID:	JC31104-2	Date Received:	11/04/16
Matrix:	SO - Soil	Percent Solids:	73.4
Project:	Rome Dam Initiative, Essex County, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Arsenic	< 2.7	2.7	mg/kg	1	11/06/16	11/07/16 KS	SW846 6010C ²	SW846 3050B ³
Cadmium	< 0.67	0.67	mg/kg	1	11/06/16	11/07/16 KS	SW846 6010C ²	SW846 3050B ³
Copper	< 3.3	3.3	mg/kg	1	11/06/16	11/07/16 KS	SW846 6010C ²	SW846 3050B ³
Iron	6570	67	mg/kg	1	11/06/16	11/07/16 KS	SW846 6010C ²	SW846 3050B ³
Lead	< 2.7	2.7	mg/kg	1	11/06/16	11/07/16 KS	SW846 6010C ²	SW846 3050B ³
Mercury	< 0.045	0.045	mg/kg	1	11/07/16	11/07/16 JPM	SW846 7471B ¹	SW846 7471B ⁴

(1) Instrument QC Batch: MA40713

(2) Instrument QC Batch: MA40717

(3) Prep QC Batch: MP97005

(4) Prep QC Batch: MP97017

 RL = Reporting Limit

Report of Analysis

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Client Sample ID:	CD4136-PO2	Date Sampled:	11/02/16
Lab Sample ID:	JC31104-2	Date Received:	11/04/16
Matrix:	SO - Soil	Percent Solids:	73.4
Project:	Rome Dam Initiative, Essex County, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.30	0.30	mg/kg	1	11/07/16 10:41	YZ	SW846 9012B/LACHAT
Solids, Percent	73.4		%	1	11/07/16 14:50	MH	SM2540 G-97
Total Organic Carbon ^a	3830	1400	mg/kg	1	11/05/16 16:40	YZ	ACOE 81M/9060A M

(a) Multiple injections indicate possible sample non-homogeneity.

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	CD4136-PO3		
Lab Sample ID:	JC31104-3	Date Sampled:	11/02/16
Matrix:	SO - Soil	Date Received:	11/04/16
Method:	SW846 8270D SW846 3546	Percent Solids:	75.4
Project:	Rome Dam Initiative, Essex County, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z116066.D	1	11/09/16	AC	11/06/16	OP98347	EZ5780
Run #2							

	Initial Weight	Final Volume
Run #1	32.4 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	41	14	ug/kg	
208-96-8	Acenaphthylene	ND	41	21	ug/kg	
120-12-7	Anthracene	ND	41	25	ug/kg	
56-55-3	Benzo(a)anthracene	25.2	41	12	ug/kg	J
50-32-8	Benzo(a)pyrene	21.8	41	19	ug/kg	J
205-99-2	Benzo(b)fluoranthene	29.8	41	18	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	ND	41	20	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	41	19	ug/kg	
218-01-9	Chrysene	22.2	41	13	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	ND	41	18	ug/kg	
206-44-0	Fluoranthene	44.7	41	18	ug/kg	
86-73-7	Fluorene	ND	41	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	41	19	ug/kg	
91-20-3	Naphthalene	ND	41	12	ug/kg	
85-01-8	Phenanthrene	24.4	41	14	ug/kg	J
129-00-0	Pyrene	41.3	41	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	74%		26-122%
321-60-8	2-Fluorobiphenyl	81%		36-112%
1718-51-0	Terphenyl-d14	96%		36-132%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	CD4136-PO3		
Lab Sample ID:	JC31104-3	Date Sampled:	11/02/16
Matrix:	SO - Soil	Date Received:	11/04/16
Method:	SW846 8081B SW846 3546	Percent Solids:	75.4
Project:	Rome Dam Initiative, Essex County, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4G74737.D	1	11/10/16	KD	11/06/16	OP98353	G4G1947
Run #2							

	Initial Weight	Final Volume
Run #1	15.9 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
57-74-9	Chlordane (alpha and gamma)	ND	0.83	0.37	ug/kg	
60-57-1	Dieldrin	ND	0.83	0.42	ug/kg	
72-54-8	4,4' -DDD	ND	0.83	0.53	ug/kg	
72-55-9	4,4' -DDE	ND	0.83	0.43	ug/kg	
50-29-3	4,4' -DDT	ND	0.83	0.50	ug/kg	
2385-85-5	Mirex	ND	1.7	0.49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	97%		24-136%
877-09-8	Tetrachloro-m-xylene	90%		24-136%
2051-24-3	Decachlorobiphenyl	65%		10-153%
2051-24-3	Decachlorobiphenyl	97%		10-153%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	CD4136-PO3		
Lab Sample ID:	JC31104-3	Date Sampled:	11/02/16
Matrix:	SO - Soil	Date Received:	11/04/16
Method:	SW846 8082A SW846 3546	Percent Solids:	75.4
Project:	Rome Dam Initiative, Essex County, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF163403.D	1	11/08/16	HB	11/06/16	OP98352	GEF5800
Run #2							

	Initial Weight	Final Volume
Run #1	15.9 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	42	21	ug/kg	
11104-28-2	Aroclor 1221	ND	42	20	ug/kg	
11141-16-5	Aroclor 1232	ND	42	16	ug/kg	
53469-21-9	Aroclor 1242	ND	42	15	ug/kg	
12672-29-6	Aroclor 1248	ND	42	26	ug/kg	
11097-69-1	Aroclor 1254	ND	42	21	ug/kg	
11096-82-5	Aroclor 1260	ND	42	18	ug/kg	
11100-14-4	Aroclor 1268	ND	42	15	ug/kg	
37324-23-5	Aroclor 1262	ND	42	28	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	95%		20-152%
877-09-8	Tetrachloro-m-xylene	142%		20-152%
2051-24-3	Decachlorobiphenyl	107%		12-157%
2051-24-3	Decachlorobiphenyl	108%		12-157%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	CD4136-PO3	Date Sampled:	11/02/16
Lab Sample ID:	JC31104-3	Date Received:	11/04/16
Matrix:	SO - Soil	Percent Solids:	75.4
Project:	Rome Dam Initiative, Essex County, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Arsenic	< 2.8	2.8	mg/kg	1	11/06/16	11/07/16 KS	SW846 6010C ²	SW846 3050B ³
Cadmium	< 0.69	0.69	mg/kg	1	11/06/16	11/07/16 KS	SW846 6010C ²	SW846 3050B ³
Copper	< 3.5	3.5	mg/kg	1	11/06/16	11/07/16 KS	SW846 6010C ²	SW846 3050B ³
Iron	8970	69	mg/kg	1	11/06/16	11/07/16 KS	SW846 6010C ²	SW846 3050B ³
Lead	< 2.8	2.8	mg/kg	1	11/06/16	11/07/16 KS	SW846 6010C ²	SW846 3050B ³
Mercury	< 0.042	0.042	mg/kg	1	11/07/16	11/07/16 JPM	SW846 7471B ¹	SW846 7471B ⁴

(1) Instrument QC Batch: MA40713

(2) Instrument QC Batch: MA40717

(3) Prep QC Batch: MP97005

(4) Prep QC Batch: MP97017

 RL = Reporting Limit

Report of Analysis

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Client Sample ID: CD4136-PO3**Lab Sample ID:** JC31104-3**Matrix:** SO - Soil**Project:** Rome Dam Initiative, Essex County, NY**Date Sampled:** 11/02/16**Date Received:** 11/04/16**Percent Solids:** 75.4**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.26	0.26	mg/kg	1	11/07/16 10:44	YZ	SW846 9012B/LACHAT
Solids, Percent	75.4		%	1	11/07/16 14:50	MH	SM2540 G-97
Total Organic Carbon	10700	1300	mg/kg	1	11/05/16 17:03	YZ	ACOE 81M/9060A M

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	CD4136-PO4		
Lab Sample ID:	JC31104-4	Date Sampled:	11/02/16
Matrix:	SO - Soil	Date Received:	11/04/16
Method:	SW846 8270D SW846 3546	Percent Solids:	80.8
Project:	Rome Dam Initiative, Essex County, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z116065.D	1	11/09/16	AC	11/06/16	OP98347	EZ5780
Run #2							

	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	41	14	ug/kg	
208-96-8	Acenaphthylene	ND	41	21	ug/kg	
120-12-7	Anthracene	ND	41	25	ug/kg	
56-55-3	Benzo(a)anthracene	32.9	41	12	ug/kg	J
50-32-8	Benzo(a)pyrene	31.4	41	19	ug/kg	J
205-99-2	Benzo(b)fluoranthene	42.9	41	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	21.5	41	20	ug/kg	J
207-08-9	Benzo(k)fluoranthene	ND	41	19	ug/kg	
218-01-9	Chrysene	36.2	41	13	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	ND	41	18	ug/kg	
206-44-0	Fluoranthene	67.2	41	18	ug/kg	
86-73-7	Fluorene	ND	41	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	24.3	41	19	ug/kg	J
91-20-3	Naphthalene	ND	41	11	ug/kg	
85-01-8	Phenanthrene	46.0	41	14	ug/kg	
129-00-0	Pyrene	61.2	41	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	56%		26-122%
321-60-8	2-Fluorobiphenyl	64%		36-112%
1718-51-0	Terphenyl-d14	79%		36-132%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	CD4136-PO4		
Lab Sample ID:	JC31104-4	Date Sampled:	11/02/16
Matrix:	SO - Soil	Date Received:	11/04/16
Method:	SW846 8081B SW846 3546	Percent Solids:	80.8
Project:	Rome Dam Initiative, Essex County, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4G74738.D	1	11/10/16	KD	11/06/16	OP98353	G4G1947
Run #2							

	Initial Weight	Final Volume
Run #1	15.8 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
57-74-9	Chlordane (alpha and gamma)	ND	0.78	0.35	ug/kg	
60-57-1	Dieldrin	ND	0.78	0.39	ug/kg	
72-54-8	4,4' -DDD	ND	0.78	0.50	ug/kg	
72-55-9	4,4' -DDE	ND	0.78	0.41	ug/kg	
50-29-3	4,4' -DDT	ND	0.78	0.47	ug/kg	
2385-85-5	Mirex	ND	1.6	0.46	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	93%		24-136%
877-09-8	Tetrachloro-m-xylene	84%		24-136%
2051-24-3	Decachlorobiphenyl	63%		10-153%
2051-24-3	Decachlorobiphenyl	93%		10-153%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	CD4136-PO4		
Lab Sample ID:	JC31104-4	Date Sampled:	11/02/16
Matrix:	SO - Soil	Date Received:	11/04/16
Method:	SW846 8082A SW846 3546	Percent Solids:	80.8
Project:	Rome Dam Initiative, Essex County, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF163404.D	1	11/08/16	HB	11/06/16	OP98352	GEF5800
Run #2							

	Initial Weight	Final Volume
Run #1	15.8 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	39	19	ug/kg	
11104-28-2	Aroclor 1221	ND	39	19	ug/kg	
11141-16-5	Aroclor 1232	ND	39	15	ug/kg	
53469-21-9	Aroclor 1242	ND	39	14	ug/kg	
12672-29-6	Aroclor 1248	ND	39	25	ug/kg	
11097-69-1	Aroclor 1254	ND	39	20	ug/kg	
11096-82-5	Aroclor 1260	ND	39	17	ug/kg	
11100-14-4	Aroclor 1268	ND	39	14	ug/kg	
37324-23-5	Aroclor 1262	ND	39	26	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	87%		20-152%
877-09-8	Tetrachloro-m-xylene	109%		20-152%
2051-24-3	Decachlorobiphenyl	94%		12-157%
2051-24-3	Decachlorobiphenyl	106%		12-157%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	CD4136-PO4	Date Sampled:	11/02/16
Lab Sample ID:	JC31104-4	Date Received:	11/04/16
Matrix:	SO - Soil	Percent Solids:	80.8
Project:	Rome Dam Initiative, Essex County, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Arsenic	< 2.5	2.5	mg/kg	1	11/06/16	11/07/16 KS	SW846 6010C ²	SW846 3050B ³
Cadmium	< 0.61	0.61	mg/kg	1	11/06/16	11/07/16 KS	SW846 6010C ²	SW846 3050B ³
Copper	< 3.1	3.1	mg/kg	1	11/06/16	11/07/16 KS	SW846 6010C ²	SW846 3050B ³
Iron	5680	61	mg/kg	1	11/06/16	11/07/16 KS	SW846 6010C ²	SW846 3050B ³
Lead	2.9	2.5	mg/kg	1	11/06/16	11/07/16 KS	SW846 6010C ²	SW846 3050B ³
Mercury	< 0.041	0.041	mg/kg	1	11/07/16	11/07/16 JPM	SW846 7471B ¹	SW846 7471B ⁴

(1) Instrument QC Batch: MA40713

(2) Instrument QC Batch: MA40717

(3) Prep QC Batch: MP97005

(4) Prep QC Batch: MP97017

 RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID:	CD4136-PO4	Date Sampled:	11/02/16
Lab Sample ID:	JC31104-4	Date Received:	11/04/16
Matrix:	SO - Soil	Percent Solids:	80.8
Project:	Rome Dam Initiative, Essex County, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.25	0.25	mg/kg	1	11/07/16 10:45	YZ	SW846 9012B/LACHAT
Solids, Percent	80.8		%	1	11/07/16 14:50	MH	SM2540 G-97
Total Organic Carbon	16600	1200	mg/kg	1	11/05/16 17:28	YZ	ACOE 81M/9060A M

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID:	CD4136-PO5		
Lab Sample ID:	JC31104-5	Date Sampled:	11/02/16
Matrix:	SO - Soil	Date Received:	11/04/16
Method:	SW846 8270D SW846 3546	Percent Solids:	85.9
Project:	Rome Dam Initiative, Essex County, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z116064.D	1	11/09/16	AC	11/06/16	OP98347	EZ5780
Run #2							

	Initial Weight	Final Volume
Run #1	31.6 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	37	13	ug/kg	
208-96-8	Acenaphthylene	ND	37	19	ug/kg	
120-12-7	Anthracene	ND	37	23	ug/kg	
56-55-3	Benzo(a)anthracene	39.5	37	10	ug/kg	
50-32-8	Benzo(a)pyrene	35.5	37	17	ug/kg	J
205-99-2	Benzo(b)fluoranthene	46.0	37	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	23.7	37	18	ug/kg	J
207-08-9	Benzo(k)fluoranthene	17.3	37	17	ug/kg	J
218-01-9	Chrysene	40.2	37	12	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	37	16	ug/kg	
206-44-0	Fluoranthene	82.0	37	16	ug/kg	
86-73-7	Fluorene	ND	37	17	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	26.9	37	17	ug/kg	J
91-20-3	Naphthalene	ND	37	10	ug/kg	
85-01-8	Phenanthrene	33.0	37	12	ug/kg	J
129-00-0	Pyrene	75.4	37	12	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	72%		26-122%
321-60-8	2-Fluorobiphenyl	79%		36-112%
1718-51-0	Terphenyl-d14	107%		36-132%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	CD4136-PO5		
Lab Sample ID:	JC31104-5	Date Sampled:	11/02/16
Matrix:	SO - Soil	Date Received:	11/04/16
Method:	SW846 8081B SW846 3546	Percent Solids:	85.9
Project:	Rome Dam Initiative, Essex County, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4G74739.D	1	11/10/16	KD	11/06/16	OP98353	G4G1947
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
57-74-9	Chlordane (alpha and gamma)	ND	0.76	0.33	ug/kg	
60-57-1	Dieldrin	ND	0.76	0.38	ug/kg	
72-54-8	4,4' -DDD	ND	0.76	0.48	ug/kg	
72-55-9	4,4' -DDE	ND	0.76	0.39	ug/kg	
50-29-3	4,4' -DDT	ND	0.76	0.45	ug/kg	
2385-85-5	Mirex	ND	1.5	0.45	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	88%		24-136%
877-09-8	Tetrachloro-m-xylene	84%		24-136%
2051-24-3	Decachlorobiphenyl	76%		10-153%
2051-24-3	Decachlorobiphenyl	83%		10-153%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	CD4136-PO5		
Lab Sample ID:	JC31104-5	Date Sampled:	11/02/16
Matrix:	SO - Soil	Date Received:	11/04/16
Method:	SW846 8082A SW846 3546	Percent Solids:	85.9
Project:	Rome Dam Initiative, Essex County, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF163405.D	1	11/08/16	HB	11/06/16	OP98352	GEF5800
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	38	19	ug/kg	
11104-28-2	Aroclor 1221	ND	38	19	ug/kg	
11141-16-5	Aroclor 1232	ND	38	15	ug/kg	
53469-21-9	Aroclor 1242	ND	38	13	ug/kg	
12672-29-6	Aroclor 1248	ND	38	24	ug/kg	
11097-69-1	Aroclor 1254	ND	38	19	ug/kg	
11096-82-5	Aroclor 1260	ND	38	16	ug/kg	
11100-14-4	Aroclor 1268	ND	38	13	ug/kg	
37324-23-5	Aroclor 1262	ND	38	26	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	98%		20-152%
877-09-8	Tetrachloro-m-xylene	121%		20-152%
2051-24-3	Decachlorobiphenyl	108%		12-157%
2051-24-3	Decachlorobiphenyl	108%		12-157%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	CD4136-PO5	Date Sampled:	11/02/16
Lab Sample ID:	JC31104-5	Date Received:	11/04/16
Matrix:	SO - Soil	Percent Solids:	85.9
Project:	Rome Dam Initiative, Essex County, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Arsenic	< 2.3	2.3	mg/kg	1	11/06/16	11/07/16 KS	SW846 6010C ²	SW846 3050B ³
Cadmium	< 0.57	0.57	mg/kg	1	11/06/16	11/07/16 KS	SW846 6010C ²	SW846 3050B ³
Copper	< 2.8	2.8	mg/kg	1	11/06/16	11/07/16 KS	SW846 6010C ²	SW846 3050B ³
Iron	7840	57	mg/kg	1	11/06/16	11/07/16 KS	SW846 6010C ²	SW846 3050B ³
Lead	< 2.3	2.3	mg/kg	1	11/06/16	11/07/16 KS	SW846 6010C ²	SW846 3050B ³
Mercury	< 0.035	0.035	mg/kg	1	11/07/16	11/07/16 JPM	SW846 7471B ¹	SW846 7471B ⁴

(1) Instrument QC Batch: MA40713

(2) Instrument QC Batch: MA40717

(3) Prep QC Batch: MP97005

(4) Prep QC Batch: MP97017

 RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID:	CD4136-PO5	Date Sampled:	11/02/16
Lab Sample ID:	JC31104-5	Date Received:	11/04/16
Matrix:	SO - Soil	Percent Solids:	85.9
Project:	Rome Dam Initiative, Essex County, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.23	0.23	mg/kg	1	11/07/16 10:46	YZ	SW846 9012B/LACHAT
Solids, Percent	85.9		%	1	11/05/16 17:15	KP	SM2540 G-97
Total Organic Carbon	< 1200	1200	mg/kg	1	11/05/16 17:40	YZ	ACOE 81M/9060A M

RL = Reporting Limit

SGS



ATLANTIC TESTING LABORATORIES

Environmental Chain-Of-Custody Record

No 11358

JC31104

Albany 22 Corporate Drive Clifton Park, NY 12065 518/383-9144 (T) 518/383-9166 (F)
Binghamton 126 Park Avenue Binghamton, NY 13903 607/733-1812 (T) 607/733-1835 (F)
Canton 6431 U.S. Highway 11 Canton, NY 13617 315/386-4578 (T) 315/386-1012 (F)
Elmira 2330 Route 352 Elmira, NY 14903 607/737-0700 (T) 607/737-0714 (F)
Plattsburgh 130 Arizona Ave Plattsburgh, NY 12903 518/563-5878 (T) 518/562-1321 (F)
Poughkeepsie 251 Upper North Road Highland, NY 12528 845/691-6098 (T) 845/691-6099 (F)
Rochester 3445 Winton Place Rochester, NY 14623 585/427-9020 (T) 585/427-9021 (F)
Syracuse 6085 Court Street Road Syracuse, NY 13206 315/699-5281 (T) 315/699-3374 (F)
Utica 301 St. Anthony Street Utica, NY 13501 315/735-3309 (T) 315/735-0742 (F)
Watertown 26581 NYS Route 283 Watertown, NY 13601 315/786-7887 (T) 315/786-2022 (F)

Project No.		Client Name		QA/QC Code		Parameters						Report Distribution	
CD4136		M. lone & Max Brown		<input type="checkbox"/> NYSDEC <input type="checkbox"/> SW-846 <input type="checkbox"/> NYSDOH <input type="checkbox"/> CLP <input type="checkbox"/> Other		MS/SC/10, Cadmium, Copper, Lead, Iron, Manganese, Cyanide, 8270 PAH, PCB, TOC, 900A, Mibx, Chloride, Nitrate (Sample EPA 9091)						Dates Required: 1-week DA Send Report To: C Dashnaw@TW Smith@ E-mail Results: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO Notes:	
Page 1 of 1		Project Contact: Tiernan Smith / Daylene Dashnaw		Project Location: Essex County, NY								Laboratory Sample ID No.	
Project Name: Rome Dam Initiative													
Date	Time	Field Sample No.	Sample Location	Sample Type	No. of Containers								
11/2/16	11:30	✓	CD4136- P01	C, S	5	X	X	X	X	X	X		
11/2/16	10:30	✓	CD4136- P02	C, S	5	X	X	X	X	X	X		D13
11/2/16	13:00	✓	CD4136- P03	C, S	5	X	X	X	X	X	X		E771
11/2/16	14:00	✓	CD4136- P04	C, S	5	X	X	X	X	X	X		P28
11/2/16	16:30	✓	CD4136- P05	C, S	5	X	X	X	X	X	X		
INITIAL ASSESSMENT: 2A													
LABEL VERIFICATION:													
Samplers Name: Tiernan W. Smith		Date: 11/2/16		Received For Name:								Date: 11/4/16	
Samplers Signature: [Signature]		Time: 17:00		Laboratory Signature: [Signature]								Time: 09:30	
Samples Relinquished By:				Samples Received By:				Sample Type Code Key:				Laboratory Remarks	
Name: Tiernan W. Smith		Date: 11/3/16		Name: Fed Ex		Date: 11/4/16		Description Matrix C Composite DW Drinking Water G Grab GW Groundwater Q QA/QC O Oil O Other S Soil SL Sludge WW Wastewater					
Signature: [Signature]		Time: 15:08		Signature: [Signature]		Time: 09:30							
Name: Fed Ex		Date: 11/4/16		Name: ANDREW SM		Date: 11/4/16							
Signature: [Signature]		Time: 09:30		Signature: [Signature]		Time: 09:30							

Think Quality

Distribution: White with Samples
 Yellow to Laboratory
 Pink to ATL Files

Tracking #: 7776 3264 7393

2-39c DP
 ENV-001B
 pdrive:Forms\Environmental\OfficeForms\Environmental Chain-Of-Custody Record rev 3: 02/14

JC31104: Chain of Custody

Page 1 of 3

SGS Accutest Sample Receipt Summary

Job Number: JC31104

Client: _____

Project: _____

Date / Time Received: 11/4/2016 9:30:00 AM

Delivery Method: _____

Airbill #s: _____

Cooler Temps (Raw Measured) °C: Cooler 1: (2.3);

Cooler Temps (Corrected) °C: Cooler 1: (3.2);

Cooler Security

Y or N

1. Custody Seals Present: ☒ ☐
2. Custody Seals Intact: ☒ ☐

Y or N

3. COC Present: ☒ ☐
4. Smp/ Dates/Time OK ☒ ☐

Cooler Temperature

Y or N

1. Temp criteria achieved: ☒ ☐
2. Cooler temp verification: IR Gun
3. Cooler media: Ice (Bag)
4. No. Coolers: 1

Quality Control Preservation

Y or N

N/A

1. Trip Blank present / cooler: ☐ ☒ ☐
2. Trip Blank listed on COC: ☐ ☒ ☐
3. Samples preserved properly: ☒ ☐ ☐
4. VOCs headspace free: ☐ ☐ ☒

Sample Integrity - Documentation

Y or N

1. Sample labels present on bottles: ☒ ☐
2. Container labeling complete: ☒ ☐
3. Sample container label / COC agree: ☒ ☐

Sample Integrity - Condition

Y or N

1. Sample recvd within HT: ☒ ☐
2. All containers accounted for: ☒ ☐
3. Condition of sample: Intact

Sample Integrity - Instructions

Y or N N/A

1. Analysis requested is clear: ☒ ☐
2. Bottles received for unspecified tests: ☐ ☒
3. Sufficient volume recvd for analysis: ☒ ☐
4. Compositing instructions clear: ☐ ☐ ☒
5. Filtering instructions clear: ☐ ☐ ☒

Comments

JC31104: Chain of Custody

Page 2 of 3

Job Change Order: JC31104

Requested Date:	11/14/2016	Received Date:	11/4/2016
Account Name:	Atlantic Testing Laboratories	Due Date:	11/11/2016
Project Description:	Rome Dam Initiative, Essex County, NY	Deliverable:	COMMB
CSR:	kellyp	TAT (Days):	7

=====

Sample #:	JC31104-1 through 5	Change:
Dept:		Please removed PGC+24DDD, PGC+24DDT, and PGC+24DDE. Lab does not have standards for these compounds
TAT:	7	

=====

Above Changes Per: Date/Time: 11/14/2016 3:02:27 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the SGS Accutest Client Service Representative.

APPENDIX E

SUMMARY OF LABORATORY ANALYSIS RESULTS

Table E-1
Summary of Laboratory Analysis Results
Rome Dam Initiative, Ausable Forks, Essex County, New York
Soil Samples Collected November 2, 2016

Sample Identification	CD4136-B-01	CD4136-B-02	CD4136-B-03	CD4136-B-04	CD4136-B-05	NYSDEC TOGS 5.1.9 Thresholds for Class A Sediments
Sampling Date	11/02/16	11/02/16	11/02/16	11/02/16	11/02/16	
Metals (ppm)						
Arsenic	ND	ND	ND	ND	ND	14
Cadmium	ND	ND	ND	ND	ND	1.2
Copper	ND	ND	ND	ND	ND	33
Cyanide	ND	ND	ND	ND	ND	---
Iron	8,350	6,570	8,970	5,680	7,840	---
Lead	ND	ND	ND	2.9	ND	33
Mercury	ND	ND	ND	ND	ND	0.17
Percent Solids (%)						
Percent Solids	80.6	73.4	75.4	80.8	85.9	---
Total Organic Carbon (TOC) (ppm)						
TOC	1,690	3,830	10,700	16,600	ND	---
Polychlorinated Biphenyls (PCB)						
PCB	ND	ND	ND	ND	ND	0.1
Pesticides and Herbicides (ppm)						
Chlordane	0.0011	ND	ND	ND	ND	0.003
All Other Target Compounds	ND	ND	ND	ND	ND	---
Polyromantic Hydrocarbons (PAH) (ppm)						
benzo(a)anthracene	0.0156	ND	0.0252	0.0329	0.0395	---
benzo(a)pyrene	ND	ND	0.0218	0.0314	0.0355	---
benzo(b)fluoranthene	0.0215	ND	0.0298	0.0429	0.0460	---
Benzo(ghi)perylene	ND	ND	ND	0.0215	0.0237	---
benzo(k)fluoranthene	ND	ND	ND	ND	0.0173	---
chrysene	ND	ND	0.0222	0.0362	0.0402	---
fluoranthene	0.0217	ND	0.0447	0.0672	0.0820	---
fluorene	ND	ND	ND	ND	ND	---
Indeno(1,2,3-cd)pyrene	ND	ND	ND	0.0243	0.0269	---
phenanthrene	ND	ND	0.0244	0.046	0.0330	---
pyrene	0.023	0.017	0.0413	0.0612	0.0754	---
Total PAH	0.0818	0.017	0.2094	0.3636	0.4195	4
All other target compounds	ND	ND	ND	ND	ND	---

NOTES:

Samples collected by representatives of Atlantic Testing Laboratories, Limited, on November 2, 2016, and analyzed by SGS ACCUTEST New Jersey, located in Dayton, New Jersey (NYSDOH ELAP No. 10983).

All laboratory results and regulatory guidance values are expressed in parts per million (ppm), or mg/kg.

ND = Not detected above respective method detection limit

Values in bold font exceed the NYSDEC Unrestricted Use Soil Cleanup Objective.

NYSDEC Soil Cleanup Objectives were obtained from the NYSDEC Final Commissioner Policy, CP-51, dated October 21, 2010, and are representative of the 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives.

¹NYSDEC Soil Cleanup Objectives for Industrial Use are provided for reference and additional comparison.