



October 03, 2018

Service Request No:R1808738

Ms. Alene Onion
New York State DEC
625 Broadway
Albany, NY 12233-3502

Laboratory Results for: LCI 2018

Dear Ms.Onion,

Enclosed are the results of the sample(s) submitted to our laboratory September 12, 2018
For your reference, these analyses have been assigned our service request number **R1808738**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Janice Jaeger
Project Manager

CC: Jason Fagel

ADDRESS

1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

PHONE +1 585 288 5380 | **FAX** +1 585 288 8475

ALS Group USA, Corp.
dba ALS Environmental



Narrative Documents

ALS Environmental—Rochester Laboratory

1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

Phone (585) 288-5380 Fax (585) 288-8475

www.alsglobal.com



Client: New York State DEC
Project: LCI 2018
Sample Matrix: Water

Service Request: R1808738
Date Received: 09/12/2018

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV, validation deliverables including all summary forms and associated raw data. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Any parameters that are not included in the lab's NELAC accreditation are identified on a "Non-Certified Analytes" report in the Miscellaneous Forms Section of this report. Individual analytical results requiring further explanation are flagged with qualifiers and/or discussed below. The flags are explained in the Report Qualifiers and Definitions page in the Miscellaneous Forms section of this report.

Sample Receipt:

Twenty six water samples were received for analysis at ALS Environmental on 09/12/2018. Any discrepancies noted upon initial sample inspection are noted on the cooler receipt and preservation form included in this data package. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at 6°C upon receipt at the lab except for aqueous samples designated for metals analyses, which are stored at room temperature.

Metals:

No significant anomalies were noted with this analysis.

General Chemistry:

No significant anomalies were noted with this analysis.

A handwritten signature in black ink, appearing to read "Jamaica".

Approved by _____

Date 10/03/2018



Sample Receipt Information

ALS Environmental—Rochester Laboratory

1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

Phone (585) 288-5380 Fax (585) 288-8475

www.alsglobal.com

Client: New York State DEC
Project: LCI 2018/LCI2018

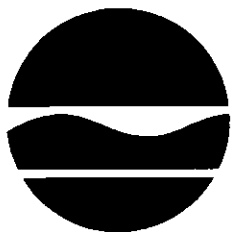
Service Request:R1808738

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R1808738-001	18LHB309	9/11/2018	0930
R1808738-002	18LHB309 Diss	9/11/2018	0930
R1808738-003	18LHB317	9/11/2018	1120
R1808738-004	18LHB317 Diss	9/11/2018	1120
R1808738-005	18LHB318	9/11/2018	1125
R1808738-006	18LHB318 Diss	9/11/2018	1125
R1808738-007	18LHB305	9/11/2018	1300
R1808738-008	18LHB305 Diss	9/11/2018	1300
R1808738-009	18LHB323	9/11/2018	1415
R1808738-010	18LHB323 Diss	9/11/2018	1415
R1808738-011	18LHB321	9/11/2018	0912
R1808738-012	18LHB321 Diss	9/11/2018	0912
R1808738-013	18LHB322	9/11/2018	0925
R1808738-014	18LHB322 Diss	9/11/2018	0925
R1808738-015	18LHB319	9/11/2018	1145
R1808738-016	18LHB319 Diss	9/11/2018	1145
R1808738-017	18LHB320	9/11/2018	1206
R1808738-018	18LHB320 Diss	9/11/2018	1206
R1808738-019	18LHB311	9/11/2018	1351
R1808738-020	18LHB311 Diss	9/11/2018	1351
R1808738-021	18LHB312	9/11/2018	1400
R1808738-022	18LHB312 Diss	9/11/2018	1400
R1808738-023	18LISO60	9/11/2018	1324
R1808738-024	18LISO60 Diss	9/11/2018	1324
R1808738-025	18LISO62	9/11/2018	1530
R1808738-026	18LISO62 Diss	9/11/2018	1530

CHAIN OF CUSTODY

Page 1 of 1



New York State Department of
Environmental Conservation –
Division of Water

Project Name: LCI	Project Number: LCI2018	NYSDEC SDG:
Sampler Collector: Sara Gonzalez	Sampler Signature: <i>Sara Gonzalez</i>	Sampler Phone No.: 845-216-9575
Project Manager: Alene Onion	X Report to Project Manager	<input type="checkbox"/> Bill to Project Manager
Address: 625 Broadway, 4 th Floor Albany, NY 12233-3502	Report to:	Bill to: Jason Fagel
Phone: (518) 402-8166	Address:	Address: 625 Broadway, 4 th Floor Albany, NY 12233-3502
Email: alene.onion@dec.ny.gov	Phone:	Phone: 518-402-8156
	Email:	Email: Jason.fagel@dec.ny.gov

Matrix Codes:

WW = Wastewater
GW = Groundwater
AW = Ambient Water
SE = Sediment
SL = Sludge
T = Tissue
O = Other _____

Analyses Ordered (list)

Preservative Codes:

0 = Cool to < 6°C
1 = HCL
2 = HNO₃
3 = H₂SO₄
4 = NaOH
5 = Zn. Acetate
6 = MeOH
7 = NaHSO₄
8 = Other _____

NYSDEC LCI Sample ID

Collection Date

Collection Time

Matrix Code

No. of Containers

3

TP, NH₄, NO_x, TKN
ANC
TP, NH₄, NO_x, TKN, NO₃

Dissolved TOP4

Fe, Mn, As,

2

Ca, Mg, Na, K
ANC
Fe, Mn, As, Ca, Mg, Na, K

0

Color

3

TOC
ANC
DOC

0

Alkalinity

0

SO₄ & UV-254
ANC
SO₄, Cl

0

SO₄, Cl, UV-254

0

Chlorophyll a |
Vol (ml)

Location Info

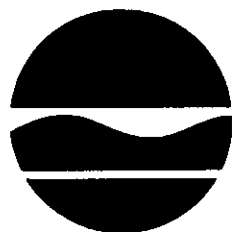
18LHB309	09/11	9:30	AW	8	X		X	X			X		X	X	X	X	X	250	Chodikee L, ep
18LHB317	09/11	11:20	AW	7	X		X	X			X		X	X	X	X	X	250	Goshen R, epi
18LHB318	09/11	11:25	AW	6	X		X	X			X		X	X	X	X	X		Goshen R, hypo
18LHB305	09/11	13:00	AW	6	X		X				X	X		X				150	Binnewater, epi
18LHB323	09/11	14:15	AW	8	X		X	X			X		X	X	X	X	X	250	Mill Pond, epi

Special Analysis Instructions:

Relinquished by Sampler: Sara Gonzalez	Date: 09/11	Time: 3:30pm	Received by:	Date:	Time:	Laboratory Receipt Notes: Sample 7 Properly Sample: R1808738 New York State DEC LCI 2018
Relinquished by:	Date:	Time:	Received by:	Date:	Time:	
Relinquished by:	Date:	Time:	Received by Laboratory: <i>[Signature]</i>	Date: 9/14/18	Time: 0930	

CHAIN OF CUSTODY

Page 1 of 1



New York State Department of
Environmental Conservation –
Division of Water

Project Name: LCI	Project Number: LCI2018	NYSDEC SDG:
Sampler Collector: Carrie Buetow	Sampler Signature: Carrie Buetow	Sampler Phone No.: 5184784975
Project Manager: Alene Onion	X Report to Project Manager	<input type="checkbox"/> Bill to Project Manager
Address: 625 Broadway, 4 th Floor Albany, NY 12233-3502	Report to:	Bill to: Jason Fagel
Phone: (518) 402-8166	Address:	Address: 625 Broadway, 4 th Floor Albany, NY 12233-3502
Email: alene.onion@dec.ny.gov	Phone:	Phone: 518-402-8156
	Email:	Email: Jason.fagel@dec.ny.gov

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Analyses Ordered (list)

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1 = HCL
2 = HNO₃
3 = H₂SO₄
4 = NaOH
5 = Zn. Acetate
6 = MeOH
7 = NaHSO₄
8 = Other _____

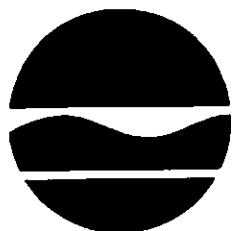
Matrix Codes: WW = Wastewater GW = Groundwater AW = Ambient Water SE = Sediment SL = Sludge T = Tissue O = Other _____	Collection Date	Collection Time	Matrix Code	No. of Containers	Analyses Ordered (list)														Preservative Codes:	
					3			2			0	3	0			0		Chlorophyll a Vol (ml)	0 = Cool to < 6°C 1 = HCL 2 = HNO ₃ 3 = H ₂ SO ₄ 4 = NaOH 5 = Zn. Acetate 6 = MeOH 7 = NaHSO ₄ 8 = Other _____	
					TP, NH ₄ , NO _x , TKN	TP, NH ₄ , NO _x , TKN, NO ₃ ^{ANC}	Dissolved TOP4	Fe, Mn, As,	Ca, Mg, Na, K	Fe, Mn, As, Ca, Mg, Na, K	Color	TOC	DOC	Alkalinity	SO ₄ & UV-254	SO ₄ , Cl ^{ANC}	SO ₄ , Cl, UV-254			
NYSDEC LCI Sample ID																			Location Info	
18 LHB 321	09/11/18	9:12	AW	6	X		X				X	X		X				X	250mL	Kinderhook epi
18 LHB 322	09/11/18	9:25	AW	4	X		X				X	X								Kinderhook, hypo
18 LHB 319	09/11/18	11:45	AW	7	X		X				X		X	X	X			X	500mL	Hollister epi
18 LHB 320	09/11/18	12:06	AW	6	X		X	X			X		X		X					Hollister, hypo
18 LHB 311	09/11/18	13:51	AW	7	X		X				X		X	X	X			X	250mL	Coxsackie epi
18 LHB 312	09/11/18	14:00	AW	6	X		X	X			X		X		X					Coxsackie hypo

Special Analysis Instructions:

Relinquished by Sampler: Carrie Buetow	Date: 9/11/18	Time: 4:00 pm	Received by:	Date:	Time:	Laboratory Receipt Notes: Sample R1808738 New York State DEC LCI 2018 5
Relinquished by:	Date:	Time:	Received by:	Date:	Time:	
Relinquished by:	Date:	Time:	Received by Laboratory: 	Date: 9/12/18	Time: 0930	

CHAIN OF CUSTODY

Page 1 of 1



New York State Department of
Environmental Conservation –
Division of Water

Project Name: LCI

Project Number: LCI2018

NYSDEC SDG:

Sampler Collector:

Alene Onion

Sampler Signature:

Alene Onion

Sampler Phone No.:

518 402 8166

Project Manager: Alene Onion

☒ Report to Project Manager

☐ Bill to Project Manager

Report to:

Bill to: Jason Fagel

Address: 625 Broadway, 4th Floor
Albany, NY 12233-3502

Address:

Address: 625 Broadway, 4th Floor
Albany, NY 12233-3502

Phone: (518) 402-8166

Phone:

Phone: 518-402-8156

Email: alene.onion@dec.ny.gov

Email:

Email: Jason.fagel@dec.ny.gov

Matrix Codes:

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AW = Ambient Water
SE = Sediment
SL = Sludge
T = Tissue
O = Other _____

Analyses Ordered (list)

Preservative Codes:

0 = Cool to < 6°C
1 = HCL
2 = HNO₃
3 = H₂SO₄
4 = NaOH
5 = Zn. Acetate
6 = MeOH
7 = NaHSO₄
8 = Other _____

NYSDEC LCI Sample ID

Collection Date

Collection Time

Matrix Code

No. of Containers

3
TP, NH₄, NO_x, TKN
ANC
TP, NH₄, NO_x, TKN, NO₃

2
Dissolved TOP4
Fe, Mn, As,
ANC
Ca, Mg, Na, K

0
Fe, Mn, As, Ca, Mg, Na, K

3
Color
ANC
TOC
DOC

0
Alkalinity
ANC
SO₄ & UV-254
SO₄, Cl

0
SO₄, Cl, UV-254

0
Chlorophyll a |
Vol (ml)

Location Info

18LIS060	9/11/18	1324	AW	6	X	X				X	X		X			X	Fresh Pond (epi)
18LIS061			AW	4	X	X				X	X						Fresh Pond (hypo)
18LIS062	9/11/18	1530	AW	6	X	X				X	X		X			X	Big Reed Pond (epi)
18LIS063			AW	4	X	X				X	X						Big Reed Pond (hypo)

Special Analysis Instructions:

Relinquished by Sampler:

Alene Onion

Date:

9/11/18

Time:

5:37

Received by:

Date:

Time:

Laboratory Receipt Notes:

Relinquished by:

Date:

Time:

Received by:

Date:

Time:

Sample Temp.:

Properly Pre

Samples Int:

Relinquished by:

Date:

Time:

Received by Laboratory:

Date:

9/12/18

Time:

0930

R1808738

5

New York State DEC
LCI 2018





Cooler Receipt and Preservation Check Form

R1808738

5

New York State DEC
LCI 2018



Project/Client LCE Folder Number _____

Cooler received on 9/12/18 by: @

COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were Custody seals on outside of cooler?	<u>(Y)</u> N
2	Custody papers properly completed (ink, signed)?	<u>(Y)</u> N
3	Did all bottles arrive in good condition (unbroken)?	<u>(Y)</u> N
4	Circle: <u>Wet Ice</u> Dry Ice Gel packs present?	<u>(Y)</u> N

5a	Perchlorate samples have required headspace?	Y N <u>NA</u>
5b	Did VOA vials, Alk or Sulfide have sig* bubbles?	Y <u>(N)</u> NA
6	Where did the bottles originate?	<u>ALS/ROC</u> CLIENT
7	Soil VOA received as: Bulk Encore 5035set	<u>NA</u>

8. Temperature Readings Date: 9/12/18 Time: 0933 ID: IR#7 IR#110 From: Temp Blank Sample Bottle

Observed Temp (°C)	<u>4.6</u>	<u>3.4</u>	<u>2.2</u>				
Correction Factor (°C)	<u>+0.4</u>	<u>+0.4</u>	<u>+0.4</u>				
Corrected Temp (°C)	<u>5.0</u>	<u>3.6</u>	<u>2.6</u>				
Temp from: Type of bottle	<u>Cap & tube</u>	<u>Cap & tube</u>	<u>Cap & tube</u>				
Within 0-6°C?	<u>(Y)</u> N	<u>(Y)</u> N	<u>(Y)</u> N	Y N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed (described below) Same Day Rule

& Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: R-002 by e on 9/12/18 at 0940
5035 samples placed in storage location: _____ by _____ on _____ at _____

Cooler Breakdown/Preservation Check**: Date: 9/13/18 Time: 0825 by: e

- Were all bottle labels complete (i.e. analysis, preservation, etc.)? YES NO
- Did all bottle labels and tags agree with custody papers? YES NO
- Were correct containers used for the tests indicated? YES NO
- Were 5035 vials acceptable (no extra labels, not leaking)? YES NO
- Air Samples: Cassettes / Tubes Intact with MS? Canisters Pressurized Tedlar® Bags Inflated NA

pH	Lot of test paper	Reagent	Preserved?		Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
			Yes	No						
≥12		NaOH								
≤2	<u>209318</u>	HNO ₃	<u>✓</u>		<u>1117092</u>					
≤2	<u>1</u>	H ₂ SO ₄	<u>✓</u>		<u>3H80071, 192169</u>					
<4		NaHSO ₄								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522			If +, contact PM to add Na ₂ S ₂ O ₃ (625, 608, CN), ascorbic (phenol).					
		Na ₂ S ₂ O ₃								
		ZnAcetate	-	-						
		HCl	**	**						

**VOAs and 1664 Not to be tested before analysis. Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).

Bottle lot numbers: W133128, P-072-001, 071611-2440

Explain all Discrepancies/ Other Comments:

UV-254 bottles
bottle = 18LH3317 CUC = 11LH808
times match
bottle = 18LH3319 CUC = 11LH830
times match

CLRES	BULK
DO	FLDT
HPROD	HGFB
HTR	LL3541
PH	SUB
SO3	MARRS
ALS	REV

Labels secondary reviewed by: @

PC Secondary Review: ams 9/13/18 *significant air bubbles: VOA > 5-6 mm : WC > 1 in. diameter



Miscellaneous Forms

ALS Environmental—Rochester Laboratory

1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623

Phone (585) 288-5380 Fax (585) 288-8475

www.alsglobal.com

REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.	+	Correlation coefficient for MSA is <0.995.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Aroclors).	N	Inorganics- Matrix spike recovery was outside laboratory limits.
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.	N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.	S	Concentration has been determined using Method of Standard Additions (MSA).
E	Organics- Concentration has exceeded the calibration range for that specific analysis.	W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.	P	Concentration >40% difference between the two GC columns.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.	C	Confirmed by GC/MS
H	Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.	Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (×100% Difference between two GC columns).
#	Spike was diluted out.	X	See Case Narrative for discussion.
		MRL	Method Reporting Limit. Also known as:
		LOQ	Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
		MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
		LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
		ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.



Rochester Lab ID # for State Certifications¹

Connecticut ID # PH0556	Maine ID #NY0032	Pennsylvania ID# 68-786
Delaware Approved	New Hampshire ID # 2941	Rhode Island ID # 158
DoD ELAP #65817	New York ID # 10145	Virginia #460167
Florida ID # E87674	North Carolina #676	

¹ Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory or go to <https://www.alsglobal.com/locations/americas/north-america/usa/new-york/rochester-environmental>

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: New York State DEC
Project: LCI 2018/LCI2018

Service Request: R1808738

Non-Certified Analytes

Certifying Agency: New York Department of Health

Method	Matrix	Analyte
SM 5910 B	Water	UV254
SM20 10200 H	Water	Chlorophyll A

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: New York State DEC
Project: LCI 2018/LCI2018

Service Request: R1808738

Sample Name: 18LHB309
Lab Code: R1808738-001
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/12/18

Analysis Method	Extracted/Digested By	Analyzed By
300.0		AMOSSES
351.2	NSMITH	CWOODS
353.2		MROGERSON
365.1	MROGERSON	MROGERSON
ASTM D6919-09		AMOSSES
SM 2120 B-2001(2011)		SCYMBAL
SM 2320 B-1997(2011)		CWOODS
SM 5910 B		MROGERSON
SM20 10200 H		NSMITH

Sample Name: 18LHB309 Diss
Lab Code: R1808738-002
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/12/18

Analysis Method	Extracted/Digested By	Analyzed By
365.1	KWONG	GNITAJOUPPI
SM 5310 C-2000(2011)		CWOODS

Sample Name: 18LHB317
Lab Code: R1808738-003
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/12/18

Analysis Method	Extracted/Digested By	Analyzed By
300.0		AMOSSES
351.2	NSMITH	CWOODS
353.2		MROGERSON
365.1	MROGERSON	MROGERSON
ASTM D6919-09		AMOSSES
SM 2120 B-2001(2011)		SCYMBAL
SM 2320 B-1997(2011)		CWOODS
SM 5910 B		MROGERSON
SM20 10200 H		NSMITH

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: New York State DEC
Project: LCI 2018/LCI2018

Service Request: R1808738

Sample Name: 18LHB317 Diss
Lab Code: R1808738-004
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/12/18

Analysis Method

365.1
SM 5310 C-2000(2011)

Extracted/Digested By

KWONG

Analyzed By

GNITAJOUPPI
CWOODS

Sample Name: 18LHB318
Lab Code: R1808738-005
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/12/18

Analysis Method

300.0
351.2
353.2
365.1
ASTM D6919-09

Extracted/Digested By

NSMITH

MROGERSON

Analyzed By

AMOSSES
CWOODS
MROGERSON
MROGERSON
AMOSSES

SM 2120 B-2001(2011)
SM 5910 B

SCYMBAL
MROGERSON

Sample Name: 18LHB318 Diss
Lab Code: R1808738-006
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/12/18

Analysis Method

365.1
SM 5310 C-2000(2011)

Extracted/Digested By

KWONG

Analyzed By

GNITAJOUPPI
CWOODS

Sample Name: 18LHB305
Lab Code: R1808738-007
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/12/18

Analysis Method

351.2
353.2

Extracted/Digested By

NSMITH

Analyzed By

CWOODS
MROGERSON

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: New York State DEC
Project: LCI 2018/LCI2018

Service Request: R1808738

Sample Name: 18LHB305
Lab Code: R1808738-007
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/12/18

Analysis Method

365.1
ASTM D6919-09
SM 2120 B-2001(2011)
SM 2320 B-1997(2011)
SM 5310 C-2000(2011)
SM20 10200 H

Extracted/Digested By

MROGERSON

Analyzed By

MROGERSON
AMOSSES
SCYMBAL
CWOODS
CWOODS
NSMITH

Sample Name: 18LHB305 Diss
Lab Code: R1808738-008
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/12/18

Analysis Method

365.1

Extracted/Digested By

KWONG

Analyzed By

GNITAJOUPPI

Sample Name: 18LHB323
Lab Code: R1808738-009
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/12/18

Analysis Method

300.0
351.2
353.2
365.1
ASTM D6919-09
SM 2120 B-2001(2011)
SM 2320 B-1997(2011)
SM 5910 B
SM20 10200 H

Extracted/Digested By

NSMITH

MROGERSON

Analyzed By

AMOSSES
CWOODS
MROGERSON
MROGERSON
AMOSSES
SCYMBAL
CWOODS
MROGERSON
NSMITH

ALS Group USA, Corp.
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Analyst Summary report

Client: New York State DEC
Project: LCI 2018/LCI2018

Service Request: R1808738

Sample Name: 18LHB323 Diss
Lab Code: R1808738-010
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/12/18

Analysis Method

365.1
SM 5310 C-2000(2011)

Extracted/Digested By

KWONG

Analyzed By

GNITAJOUPPI
CWOODS

Sample Name: 18LHB321
Lab Code: R1808738-011
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/12/18

Analysis Method

351.2
353.2
365.1
ASTM D6919-09
SM 2120 B-2001(2011)

Extracted/Digested By

NSMITH

KWONG

Analyzed By

CWOODS
MROGERSON
GNITAJOUPPI
AMOSSES
SCYMBAL

SM 2320 B-1997(2011)
SM 5310 C-2000(2011)
SM20 10200 H

CWOODS
CWOODS
NSMITH

Sample Name: 18LHB321 Diss
Lab Code: R1808738-012
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/12/18

Analysis Method

365.1

Extracted/Digested By

KWONG

Analyzed By

GNITAJOUPPI

Sample Name: 18LHB322
Lab Code: R1808738-013
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/12/18

Analysis Method

351.2
353.2

Extracted/Digested By

NSMITH

Analyzed By

CWOODS
MROGERSON

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Analyst Summary report

Client: New York State DEC
Project: LCI 2018/LCI2018

Service Request: R1808738

Sample Name: 18LHB322
Lab Code: R1808738-013
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/12/18

Analysis Method

365.1
ASTM D6919-09
SM 2120 B-2001(2011)
SM 5310 C-2000(2011)

Extracted/Digested By

KWONG

Analyzed By

GNITAJOUPPI
AMOSSES
SCYMBAL
CWOODS

Sample Name: 18LHB322 Diss
Lab Code: R1808738-014
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/12/18

Analysis Method

365.1

Extracted/Digested By

KWONG

Analyzed By

GNITAJOUPPI

Sample Name: 18LHB319
Lab Code: R1808738-015
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/12/18

Analysis Method

300.0
351.2
353.2
365.1
ASTM D6919-09
SM 2120 B-2001(2011)
SM 2320 B-1997(2011)
SM 5910 B
SM20 10200 H

Extracted/Digested By

NSMITH
KWONG

Analyzed By

AMOSSES
CWOODS
MROGERSON
GNITAJOUPPI
AMOSSES
SCYMBAL
CWOODS
MROGERSON
NSMITH

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Analyst Summary report

Client: New York State DEC
Project: LCI 2018/LCI2018

Service Request: R1808738

Sample Name: 18LHB319 Diss
Lab Code: R1808738-016
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/12/18

Analysis Method

365.1
SM 5310 C-2000(2011)

Extracted/Digested By

KWONG

Analyzed By

GNITAJOUPPI
CWOODS

Sample Name: 18LHB320
Lab Code: R1808738-017
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/12/18

Analysis Method

300.0
351.2
353.2
365.1
ASTM D6919-09
SM 2120 B-2001(2011)
SM 5910 B

Extracted/Digested By

NSMITH

KWONG

Analyzed By

AMOSSES
CWOODS
MROGERSON
GNITAJOUPPI
AMOSSES
SCYMBAL
MROGERSON

Sample Name: 18LHB320 Diss
Lab Code: R1808738-018
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/12/18

Analysis Method

365.1
SM 5310 C-2000(2011)

Extracted/Digested By

KWONG

Analyzed By

GNITAJOUPPI
CWOODS

Sample Name: 18LHB311
Lab Code: R1808738-019
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/12/18

Analysis Method

300.0
351.2

Extracted/Digested By

NSMITH

Analyzed By

AMOSSES
CWOODS

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Analyst Summary report

Client: New York State DEC
Project: LCI 2018/LCI2018

Service Request: R1808738

Sample Name: 18LHB311
Lab Code: R1808738-019
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/12/18

Analysis Method	Extracted/Digested By	Analyzed By
353.2		MROGERSON
365.1	KWONG	GNITAJOUPPI
ASTM D6919-09		AMOSSES
SM 2120 B-2001(2011)		SCYMBAL
SM 2320 B-1997(2011)		CWOODS
SM 5910 B		MROGERSON
SM20 10200 H		NSMITH

Sample Name: 18LHB311 Diss
Lab Code: R1808738-020
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/12/18

Analysis Method	Extracted/Digested By	Analyzed By
365.1	KWONG	GNITAJOUPPI
SM 5310 C-2000(2011)		CWOODS

Sample Name: 18LHB312
Lab Code: R1808738-021
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/12/18

Analysis Method	Extracted/Digested By	Analyzed By
300.0		AMOSSES
351.2	NSMITH	CWOODS
353.2		MROGERSON
365.1	KWONG	GNITAJOUPPI
ASTM D6919-09		AMOSSES
SM 2120 B-2001(2011)		SCYMBAL
SM 5910 B		MROGERSON

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Analyst Summary report

Client: New York State DEC
Project: LCI 2018/LCI2018

Service Request: R1808738

Sample Name: 18LHB312 Diss
Lab Code: R1808738-022
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/12/18

Analysis Method

365.1
SM 5310 C-2000(2011)

Extracted/Digested By

KWONG

Analyzed By

GNITAJOUPPI
CWOODS

Sample Name: 18LISO60
Lab Code: R1808738-023
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/12/18

Analysis Method

351.2
353.2
365.1
ASTM D6919-09
SM 2120 B-2001(2011)

Extracted/Digested By

NSMITH

KWONG

Analyzed By

CWOODS
MROGERSON
GNITAJOUPPI
AMOSE
SCYMBAL

SM 2320 B-1997(2011)
SM 5310 C-2000(2011)
SM20 10200 H

CWOODS
CWOODS
NSMITH

Sample Name: 18LISO60 Diss
Lab Code: R1808738-024
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/12/18

Analysis Method

365.1

Extracted/Digested By

KWONG

Analyzed By

GNITAJOUPPI

Sample Name: 18LISO62
Lab Code: R1808738-025
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/12/18

Analysis Method

351.2
353.2

Extracted/Digested By

NSMITH

Analyzed By

CWOODS
MROGERSON

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Analyst Summary report

Client: New York State DEC
Project: LCI 2018/LCI2018

Service Request: R1808738

Sample Name: 18LISO62
Lab Code: R1808738-025
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/12/18

Analysis Method

365.1
ASTM D6919-09
SM 2120 B-2001(2011)
SM 2320 B-1997(2011)
SM 5310 C-2000(2011)
SM20 10200 H

Extracted/Digested By

KWONG

Analyzed By

GNITAJOUPPI
AMOSSES
SCYMBAL
CWOODS
CWOODS
NSMITH

Sample Name: 18LISO62 Diss
Lab Code: R1808738-026
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/12/18

Analysis Method

365.1

Extracted/Digested By

KWONG

Analyzed By

GNITAJOUPPI



INORGANIC PREPARATION METHODS

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C	3005A/3010A
6020A	ILM05.3
9014 Cyanide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Acid Soluble	9030B
9056A Bomb (Halogens)	5050A
9066 Manual Distillation	9065
SM 4500-CN-E Residual Cyanide	SM 4500-CN-G
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C	3050B
6020A	3050B
6010C TCLP (1311) extract	3005A/3010A
6010 SPLP (1312) extract	3005A/3010A
7196A	3060A
7199	3060A
9056A Halogens/Halides	5050
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction

For analytical methods not listed, the preparation method is the same as the analytical method reference.



Sample Results

ALS Environmental—Rochester Laboratory

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Metals

ALS Environmental—Rochester Laboratory

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METALS
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: New York State DEC **Service Request:** LCI0910
Project No.: R1808738 **Date Collected:** 9/11/2018
Project Name: **Date Received:** 9/12/2018
Matrix: WATER **Units:** ug/L
Basis:

Sample Name: 18LHB309 **Lab Code:** R1808738-001

Analyte	Analysis Method	PQL	MDL	Dil. Factor	Result	C	Q
Arsenic	200.8	1.0	0.39	1.0	1.2		
Iron	200.7	100	13.0	1.0	470		
Manganese	200.7	10.0	1.7	1.0	479		

% Solids: 0.0

Comments:

METALS
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: New York State DEC

Service Request: LCI0910

Project No.: R1808738

Date Collected: 9/11/2018

Project Name:

Date Received: 9/12/2018

Matrix: WATER

Units: ug/L

Basis:

Sample Name: 18LHB318

Lab Code: R1808738-005

Analyte	Analysis Method	PQL	MDL	Dil. Factor	Result	C	Q
Arsenic	200.8	1.0	0.39	1.0	1.2		
Iron	200.7	100	13.0	1.0	1270		
Manganese	200.7	10.0	1.7	1.0	339		

% Solids: 0.0

Comments:

METALS
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: New York State DEC

Service Request: LCI0910

Project No.: R1808738

Date Collected: 9/11/2018

Project Name:

Date Received: 9/12/2018

Matrix: WATER

Units: ug/L

Basis:

Sample Name: 18LHB323

Lab Code: R1808738-009

Analyte	Analysis Method	PQL	MDL	Dil. Factor	Result	C	Q
Arsenic	200.8	1.0	0.39	1.0	0.88	J	
Iron	200.7	100	13.0	1.0	608		
Manganese	200.7	10.0	1.7	1.0	80.9		

% Solids: 0.0

Comments:

METALS
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: New York State DEC **Service Request:** LCI0910
Project No.: R1808738 **Date Collected:** 9/11/2018
Project Name: **Date Received:** 9/12/2018
Matrix: WATER **Units:** ug/L
Basis:

Sample Name: 18LHB320 **Lab Code:** R1808738-017

Analyte	Analysis Method	PQL	MDL	Dil. Factor	Result	C	Q
Arsenic	200.8	1.0	0.39	1.0	0.59	J	
Iron	200.7	100	13.0	1.0	401		
Manganese	200.7	10.0	1.7	1.0	1230		

% Solids: 0.0

Comments:

METALS
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: New York State DEC

Service Request: LCI0910

Project No.: R1808738

Date Collected: 9/11/2018

Project Name:

Date Received: 9/12/2018

Matrix: WATER

Units: ug/L

Basis:

Sample Name: 18LHB312

Lab Code: R1808738-021

Analyte	Analysis Method	PQL	MDL	Dil. Factor	Result	C	Q
Arsenic	200.8	1.0	0.39	1.0	1.1		
Iron	200.7	100	13.0	1.0	1600		
Manganese	200.7	10.0	1.7	1.0	1180		

% Solids: 0.0

Comments:



General Chemistry

ALS Environmental—Rochester Laboratory

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Phone (585) 288-5380 Fax (585) 288-8475

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ALS Group USA, Corp.
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Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water

Service Request: R1808738
Date Collected: 09/11/18 09:30
Date Received: 09/12/18 09:30

Sample Name: 18LHB309
Lab Code: R1808738-001

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO ₃	SM 2320 B-1997(2011)	104	mg/L	2.0	1	09/17/18 20:50	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.500	mg/L	0.0050	1	09/18/18 23:53	NA	
Chlorophyll A	SM20 10200 H	17.2	ug/L	0.64	4	09/25/18 10:35	NA	
Color, True	SM 2120 B-2001(2011)	53.0	ColorUnits	1.0	1	09/12/18 14:00	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0078	mg/L	0.0020	1	09/17/18 19:07	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	1.54	mg/L	0.10	1	09/24/18 18:39	09/21/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.48	pH Units	-	1	09/15/18 10:00	NA	*
Phosphorus, Total	365.1	0.0986	mg/L	0.0050	1	09/21/18 17:16	09/19/18	
Sulfate	300.0	5.0	mg/L	2.0	10	09/17/18 20:09	NA	
UV254	SM 5910 B	0.255	cm-1	-	1	09/12/18 22:40	NA	

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Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water

Sample Name: 18LHB309 Diss
Lab Code: R1808738-002

Service Request: R1808738
Date Collected: 09/11/18 09:30
Date Received: 09/12/18 09:30

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	8.7	mg/L	1.0	1	09/13/18 21:06	NA	
Phosphorus, Dissolved	365.1	0.0271	mg/L	0.0050	1	09/28/18 10:20	09/24/18	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water

Service Request: R1808738
Date Collected: 09/11/18 11:20
Date Received: 09/12/18 09:30

Sample Name: 18LHB317
Lab Code: R1808738-003

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	43.6	mg/L	2.0	1	09/17/18 20:55	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.147	mg/L	0.0050	1	09/19/18 00:09	NA	
Chlorophyll A	SM20 10200 H	18.1	ug/L	0.64	4	09/25/18 10:35	NA	
Color, True	SM 2120 B-2001(2011)	24.0	ColorUnits	1.0	1	09/12/18 14:00	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0129	mg/L	0.0020	1	09/17/18 19:12	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.95	mg/L	0.10	1	09/24/18 18:39	09/21/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.25	pH Units	-	1	09/15/18 10:00	NA	*
Phosphorus, Total	365.1	0.0307	mg/L	0.0050	1	09/21/18 17:17	09/19/18	
Sulfate	300.0	8.0	mg/L	2.0	10	09/17/18 20:14	NA	
UV254	SM 5910 B	0.0850	cm-1	-	1	09/12/18 22:40	NA	

ALS Group USA, Corp.
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Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water
Sample Name: 18LHB317 Diss
Lab Code: R1808738-004

Service Request: R1808738
Date Collected: 09/11/18 11:20
Date Received: 09/12/18 09:30
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	4.9	mg/L	1.0	1	09/13/18 22:51	NA	
Phosphorus, Dissolved	365.1	0.0116	mg/L	0.0050	1	09/28/18 10:23	09/24/18	

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Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water

Service Request: R1808738
Date Collected: 09/11/18 11:25
Date Received: 09/12/18 09:30

Sample Name: 18LHB318
Lab Code: R1808738-005

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.165	mg/L	0.0050	1	09/19/18 00:25	NA	
Color, True	SM 2120 B-2001(2011)	33.0	ColorUnits	1.0	1	09/12/18 14:00	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0160	mg/L	0.0020	1	09/17/18 19:13	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.82	mg/L	0.10	1	09/24/18 18:40	09/21/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.54	pH Units	-	1	09/15/18 10:00	NA	*
Phosphorus, Total	365.1	0.0441	mg/L	0.0050	1	09/21/18 17:19	09/19/18	
Sulfate	300.0	8.2	mg/L	2.0	10	09/17/18 20:19	NA	
UV254	SM 5910 B	0.0880	cm-1	-	1	09/12/18 22:40	NA	

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dba ALS Environmental

Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water
Sample Name: 18LHB318 Diss
Lab Code: R1808738-006

Service Request: R1808738
Date Collected: 09/11/18 11:25
Date Received: 09/12/18 09:30
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	4.6	mg/L	1.0	1	09/13/18 23:12	NA	
Phosphorus, Dissolved	365.1	0.0096	mg/L	0.0050	1	09/28/18 10:24	09/24/18	

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Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water
Sample Name: 18LHB305
Lab Code: R1808738-007

Service Request: R1808738
Date Collected: 09/11/18 13:00
Date Received: 09/12/18 09:30
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO ₃	SM 2320 B-1997(2011)	30.0	mg/L	2.0	1	09/17/18 20:59	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0053	mg/L	0.0050	1	09/19/18 00:41	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	10.0	mg/L	1.0	1	09/14/18 01:38	NA	
Chlorophyll A	SM20 10200 H	106	ug/L	11	40	09/25/18 10:35	NA	
Color, True	SM 2120 B-2001(2011)	110	ColorUnits	5.0	5	09/12/18 14:00	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0036	mg/L	0.0020	1	09/17/18 19:14	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	1.37	mg/L	0.10	1	09/24/18 18:42	09/21/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.02	pH Units	-	5	09/15/18 10:00	NA	*
Phosphorus, Total	365.1	0.0417	mg/L	0.0050	1	09/21/18 17:20	09/19/18	

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Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water

Sample Name: 18LHB305 Diss
Lab Code: R1808738-008

Service Request: R1808738
Date Collected: 09/11/18 13:00
Date Received: 09/12/18 09:30

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Dissolved	365.1	0.0191	mg/L	0.0050	1	09/28/18 10:26	09/24/18	

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Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water

Service Request: R1808738
Date Collected: 09/11/18 14:15
Date Received: 09/12/18 09:30

Sample Name: 18LHB323
Lab Code: R1808738-009

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO ₃	SM 2320 B-1997(2011)	54.8	mg/L	2.0	1	09/17/18 21:04	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0676	mg/L	0.0050	1	09/19/18 00:57	NA	
Chlorophyll A	SM20 10200 H	4.74	ug/L	0.16	1	09/25/18 10:35	NA	
Color, True	SM 2120 B-2001(2011)	90.0	ColorUnits	5.0	5	09/12/18 14:00	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.109	mg/L	0.0020	1	09/17/18 19:16	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.83	mg/L	0.10	1	09/24/18 18:43	09/21/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.47	pH Units	-	5	09/15/18 10:00	NA	*
Phosphorus, Total	365.1	0.0751	mg/L	0.0050	1	09/21/18 17:21	09/19/18	
Sulfate	300.0	6.2	mg/L	2.0	10	09/17/18 20:24	NA	
UV254	SM 5910 B	0.288	cm-1	-	1	09/12/18 22:40	NA	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water
Sample Name: 18LHB323 Diss
Lab Code: R1808738-010

Service Request: R1808738
Date Collected: 09/11/18 14:15
Date Received: 09/12/18 09:30
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	9.3	mg/L	1.0	1	09/13/18 23:32	NA	
Phosphorus, Dissolved	365.1	0.0408	mg/L	0.0050	1	09/28/18 10:27	09/24/18	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water
Sample Name: 18LHB321
Lab Code: R1808738-011

Service Request: R1808738
Date Collected: 09/11/18 09:12
Date Received: 09/12/18 09:30
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	66.4	mg/L	2.0	1	09/17/18 21:14	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0461	mg/L	0.0050	1	09/19/18 01:14	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	6.1	mg/L	1.0	1	09/14/18 03:22	NA	
Chlorophyll A	SM20 10200 H	20.5	ug/L	0.64	4	09/25/18 10:35	NA	
Color, True	SM 2120 B-2001(2011)	32.0	ColorUnits	1.0	1	09/12/18 14:00	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0197	mg/L	0.0020	1	09/17/18 19:17	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.69	mg/L	0.10	1	09/24/18 18:44	09/21/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.55	pH Units	-	1	09/15/18 10:00	NA	*
Phosphorus, Total	365.1	0.0272	mg/L	0.0050	1	09/28/18 11:59	09/24/18	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water

Sample Name: 18LHB321 Diss
Lab Code: R1808738-012

Service Request: R1808738
Date Collected: 09/11/18 09:12
Date Received: 09/12/18 09:30

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Dissolved	365.1	0.0054	mg/L	0.0050	1	09/28/18 11:34	09/24/18	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water
Sample Name: 18LHB322
Lab Code: R1808738-013

Service Request: R1808738
Date Collected: 09/11/18 09:25
Date Received: 09/12/18 09:30
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	1.54	mg/L	0.0050	1	09/19/18 03:22	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	5.0	mg/L	1.0	1	09/14/18 04:25	NA	
Color, True	SM 2120 B-2001(2011)	52.0	ColorUnits	1.0	1	09/12/18 14:00	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0074	mg/L	0.0020	1	09/17/18 19:18	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	1.87	mg/L	0.10	1	09/24/18 18:51	09/21/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.51	pH Units	-	1	09/15/18 10:00	NA	*
Phosphorus, Total	365.1	0.117	mg/L	0.025	5	09/28/18 12:59	09/24/18	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water

Sample Name: 18LHB322 Diss
Lab Code: R1808738-014

Service Request: R1808738
Date Collected: 09/11/18 09:25
Date Received: 09/12/18 09:30

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Dissolved	365.1	0.084	mg/L	0.025	5	09/28/18 10:31	09/24/18	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water

Service Request: R1808738
Date Collected: 09/11/18 11:45
Date Received: 09/12/18 09:30

Sample Name: 18LHB319
Lab Code: R1808738-015

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO ₃	SM 2320 B-1997(2011)	66.0	mg/L	2.0	1	09/17/18 21:24	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0050 U	mg/L	0.0050	1	09/19/18 03:38	NA	
Chlorophyll A	SM20 10200 H	10.6	ug/L	0.32	4	09/25/18 10:35	NA	
Color, True	SM 2120 B-2001(2011)	42.0	ColorUnits	1.0	1	09/12/18 14:00	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0020 U	mg/L	0.0020	1	09/17/18 19:20	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.51	mg/L	0.10	1	09/24/18 18:53	09/21/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.53	pH Units	-	1	09/15/18 10:00	NA	*
Phosphorus, Total	365.1	0.0266	mg/L	0.0050	1	09/28/18 12:04	09/24/18	
Sulfate	300.0	5.5	mg/L	2.0	10	09/17/18 20:30	NA	
UV254	SM 5910 B	0.181	cm-1	-	1	09/12/18 22:40	NA	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water

Sample Name: 18LHB319 Diss
Lab Code: R1808738-016

Service Request: R1808738
Date Collected: 09/11/18 11:45
Date Received: 09/12/18 09:30

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	6.3	mg/L	1.0	1	09/13/18 23:53	NA	
Phosphorus, Dissolved	365.1	0.0079	mg/L	0.0050	1	09/28/18 10:32	09/24/18	

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dba ALS Environmental

Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water

Sample Name: 18LHB320
Lab Code: R1808738-017

Service Request: R1808738
Date Collected: 09/11/18 12:06
Date Received: 09/12/18 09:30

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0592	mg/L	0.0050	1	09/19/18 03:54	NA	
Color, True	SM 2120 B-2001(2011)	27.0	ColorUnits	1.0	1	09/12/18 14:00	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0035	mg/L	0.0020	1	09/17/18 19:24	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.73	mg/L	0.10	1	09/24/18 18:54	09/21/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.43	pH Units	-	1	09/15/18 10:00	NA	*
Phosphorus, Total	365.1	0.0759	mg/L	0.0050	1	09/28/18 12:05	09/24/18	
Sulfate	300.0	6.1	mg/L	2.0	10	09/17/18 20:35	NA	
UV254	SM 5910 B	0.112	cm-1	-	1	09/12/18 22:40	NA	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water

Sample Name: 18LHB320 Diss
Lab Code: R1808738-018

Service Request: R1808738
Date Collected: 09/11/18 12:06
Date Received: 09/12/18 09:30

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	4.5	mg/L	1.0	1	09/14/18 00:14	NA	
Phosphorus, Dissolved	365.1	0.0307	mg/L	0.0050	1	09/28/18 10:33	09/24/18	

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dba ALS Environmental

Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water

Service Request: R1808738
Date Collected: 09/11/18 13:51
Date Received: 09/12/18 09:30

Sample Name: 18LHB311
Lab Code: R1808738-019

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO ₃	SM 2320 B-1997(2011)	18.0	mg/L	2.0	1	09/17/18 21:33	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0290	mg/L	0.0050	1	09/19/18 04:10	NA	
Chlorophyll A	SM20 10200 H	27.9	ug/L	0.64	4	09/25/18 10:35	NA	
Color, True	SM 2120 B-2001(2011)	43.0	ColorUnits	1.0	1	09/12/18 14:00	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0040	mg/L	0.0020	1	09/17/18 19:25	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.91	mg/L	0.10	1	09/24/18 18:54	09/21/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.53	pH Units	-	1	09/15/18 10:00	NA	*
Phosphorus, Total	365.1	0.0273	mg/L	0.0050	1	09/28/18 12:06	09/24/18	
Sulfate	300.0	5.4	mg/L	2.0	10	09/17/18 20:40	NA	
UV254	SM 5910 B	0.178	cm-1	-	1	09/12/18 22:40	NA	

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dba ALS Environmental

Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water

Sample Name: 18LHB311 Diss
Lab Code: R1808738-020

Service Request: R1808738
Date Collected: 09/11/18 13:51
Date Received: 09/12/18 09:30

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	7.1	mg/L	1.0	1	09/14/18 00:56	NA	
Phosphorus, Dissolved	365.1	0.0076	mg/L	0.0050	1	09/28/18 10:34	09/24/18	

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dba ALS Environmental

Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water

Service Request: R1808738
Date Collected: 09/11/18 14:00
Date Received: 09/12/18 09:30

Sample Name: 18LHB312
Lab Code: R1808738-021

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.144	mg/L	0.0050	1	09/19/18 04:26	NA	
Color, True	SM 2120 B-2001(2011)	58.0	ColorUnits	1.0	1	09/12/18 14:00	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0073	mg/L	0.0020	1	09/17/18 19:27	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.85	mg/L	0.10	1	09/24/18 19:14	09/21/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.04	pH Units	-	1	09/15/18 10:00	NA	*
Phosphorus, Total	365.1	0.0417	mg/L	0.0050	1	09/28/18 12:07	09/24/18	
Sulfate	300.0	4.7	mg/L	2.0	10	09/17/18 20:45	NA	
UV254	SM 5910 B	0.213	cm-1	-	1	09/12/18 22:40	NA	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water
Sample Name: 18LHB312 Diss
Lab Code: R1808738-022

Service Request: R1808738
Date Collected: 09/11/18 14:00
Date Received: 09/12/18 09:30
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	6.1	mg/L	1.0	1	09/14/18 01:17	NA	
Phosphorus, Dissolved	365.1	0.0125	mg/L	0.0050	1	09/28/18 10:36	09/24/18	

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Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water

Service Request: R1808738
Date Collected: 09/11/18 13:24
Date Received: 09/12/18 09:30

Sample Name: 18LISO60
Lab Code: R1808738-023

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	17.6	mg/L	2.0	1	09/17/18 21:45	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0058	mg/L	0.0050	1	09/19/18 06:34	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	13.4	mg/L	4.0	4	09/14/18 11:13	NA	
Chlorophyll A	SM20 10200 H	12.0	ug/L	0.64	4	09/25/18 10:35	NA	
Color, True	SM 2120 B-2001(2011)	80.0	ColorUnits	5.0	5	09/12/18 14:00	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0020 U	mg/L	0.0020	1	09/17/18 19:28	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	1.55	mg/L	0.10	1	09/24/18 19:32	09/21/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.37	pH Units	-	5	09/15/18 10:00	NA	*
Phosphorus, Total	365.1	0.0643	mg/L	0.0050	1	09/28/18 12:08	09/24/18	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water

Sample Name: 18LISO60 Diss
Lab Code: R1808738-024

Service Request: R1808738
Date Collected: 09/11/18 13:24
Date Received: 09/12/18 09:30

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Dissolved	365.1	0.0085	mg/L	0.0050	1	09/28/18 10:37	09/24/18	

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Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water
Sample Name: 18LISO62
Lab Code: R1808738-025

Service Request: R1808738
Date Collected: 09/11/18 15:30
Date Received: 09/12/18 09:30
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	2.0	mg/L	2.0	1	09/17/18 21:48	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0057	mg/L	0.0050	1	09/19/18 06:51	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	7.7	mg/L	2.0	2	09/14/18 11:34	NA	
Chlorophyll A	SM20 10200 H	7.72	ug/L	0.64	4	09/25/18 10:35	NA	
Color, True	SM 2120 B-2001(2011)	75.0	ColorUnits	5.0	5	09/12/18 14:00	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0020 U	mg/L	0.0020	1	09/17/18 19:29	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.53	mg/L	0.10	1	09/24/18 19:33	09/21/18	
pH of Color Analysis	SM 2120 B-2001(2011)	6.21	pH Units	-	5	09/15/18 10:00	NA	*
Phosphorus, Total	365.1	0.0273	mg/L	0.0050	1	09/28/18 12:09	09/24/18	

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dba ALS Environmental

Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water

Sample Name: 18LISO62 Diss
Lab Code: R1808738-026

Service Request: R1808738
Date Collected: 09/11/18 15:30
Date Received: 09/12/18 09:30

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Dissolved	365.1	0.0144	mg/L	0.0050	1	09/28/18 10:38	09/24/18	



QC Summary Forms

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Metals

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METALS
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BLANKS

Contract: R1808738

Lab Code: Case No.: SAS No.: SDG NO.: LCI0910

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L, ppt, or mg/kg): UG/L

Analyte	Initial Calib. Blank ug/L	Continuing Calibration Blank ug/L						Preparation Blank		M
		1	2	3						
Arsenic	0.39 U	0.39 U	0.39 U	0.39 U				0.39 U		MS
Iron	13.00 U	13.00 U	13.00 U	13.00 U				13.000 U		P
Manganese	1.70 U	1.70 U	1.70 U	1.70 U				1.700 U		P

Comments:

METALS
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BLANKS

Contract: R1808738

Lab Code: Case No.: SAS No.: SDG NO.: LCI0910

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L, ppt, or mg/kg): UG/L

Analyte	Initial Calib. Blank ug/L	Continuing Calibration Blank ug/L						Preparation Blank		M
		1	2	3						
Arsenic		0.39	13.00	1.70						MS
Iron			13.00							P
Manganese			1.70							P

Comments:

METALS

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SPIKE SAMPLE RECOVERY

SAMPLE NO.

18LHB312S

Contract: R1808738

Lab Code: Case No.: SAS No.: SDG NO.: LCI0910

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Iron	70 - 130	2520.00	1600.00	1000.0	92		P
Manganese	70 - 130	1630.00	1180.00	500.0	90		P

Comments:

METALS

-5A-

SPIKE SAMPLE RECOVERY

SAMPLE NO.

18LHB312SD

Contract: R1808738

Lab Code: Case No.: SAS No.: SDG NO.: LCI0910

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Iron	70 - 130	2490.00	1600.00	1000.0	89		P
Manganese	70 - 130	1610.00	1180.00	500.0	86		P

Comments:

METALS
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DUPLICATES

SAMPLE NO.

18LHB312SD

Contract: R1808738

Lab Code: Case No.: SAS No.: SDG NO.: LCI0910

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Iron		2520.00		2490.00		1		P
Manganese		1630.00		1610.00		1		P

Comments:

METALS

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LABORATORY CONTROL SAMPLE

Contract: R1808738

Lab Code: Case No.: SAS No.: SDG NO.: LCI0910

Solid LCS Source:

Aqueous LCS Source: ACCUSTANDARD

Analyte	Aqueous (ug/L			Solid (mg/K					
	True	Found	%R	True	Found	C	Limits	%R	
Arsenic	20.0	21.1	106						
Iron	1000	971	97						
Manganese	500	505	101						

Comments:



General Chemistry

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Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water

Sample Name: Method Blank
Lab Code: R1808738-MB1

Service Request: R1808738
Date Collected: NA
Date Received: NA

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	2.0 U	mg/L	2.0	1	09/17/18 18:37	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0050 U	mg/L	0.0050	1	09/18/18 20:25	NA	
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	1.0 U	mg/L	1.0	1	09/13/18 13:39	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	1.0 U	mg/L	1.0	1	09/13/18 22:30	NA	
Chlorophyll A	SM20 10200 H	4.0 U	ug/L	4.0	1	09/25/18 10:35	NA	
Color, True	SM 2120 B-2001(2011)	1.0	ColorUnits	1.0	1	09/12/18 14:00	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0020 U	mg/L	0.0020	1	09/17/18 18:50	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.10 U	mg/L	0.10	1	09/24/18 18:25	09/21/18	
Phosphorus, Dissolved	365.1	0.0050 U	mg/L	0.0050	1	09/28/18 10:17	09/24/18	
Phosphorus, Total	365.1	0.0050 U	mg/L	0.0050	1	09/21/18 16:47	09/19/18	
Sulfate	300.0	0.20 U	mg/L	0.20	1	09/17/18 18:51	NA	
UV254	SM 5910 B	0.00	cm-1	-	1	09/12/18 22:40	NA	

ALS Group USA, Corp.
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Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: R1808738-MB2

Service Request: R1808738
Date Collected: NA
Date Received: NA
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	2.0 U	mg/L	2.0	1	09/17/18 20:44	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0050 U	mg/L	0.0050	1	09/19/18 02:50	NA	
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	1.0 U	mg/L	1.0	1	09/13/18 22:30	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	1.0 U	mg/L	1.0	1	09/14/18 10:20	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.10 U	mg/L	0.10	1	09/24/18 18:47	09/21/18	
Phosphorus, Total	365.1	0.0050 U	mg/L	0.0050	1	09/28/18 11:45	09/24/18	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water

Service Request: R1808738
Date Collected: 09/11/18
Date Received: 09/12/18
Date Analyzed: 09/17/18

Duplicate Matrix Spike Summary
Nitrate+Nitrite as Nitrogen

Sample Name: 18LHB309
Lab Code: R1808738-001
Analysis Method: 353.2

Units: mg/L
Basis: NA

Analyte Name	Matrix Spike R1808738-001MS				Duplicate Matrix Spike R1808738-001DMS					
	Sample Result	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Nitrate+Nitrite as Nitrogen	0.0078	0.521	0.500	103	0.524	0.500	103	75-125	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water

Service Request:R1808738
Date Collected:09/11/18
Date Received:09/12/18
Date Analyzed:09/13/18 - 09/28/18

Duplicate Matrix Spike Summary
General Chemistry Parameters

Sample Name: 18LHB309 Diss **Units:**mg/L
Lab Code: R1808738-002 **Basis:**NA

Matrix Spike
R1808738-002MS

Duplicate Matrix Spike
R1808738-002DMS

Analyte Name	Method	Sample Result	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	8.7	20.0	10.0	112	19.5	10.0	108	75-125	2	20
Phosphorus, Dissolved	365.1	0.0271	0.0482	0.0250	85	0.0500	0.0250	92	75-125	4	20

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ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water

Service Request: R1808738
Date Collected: 09/11/18
Date Received: 09/12/18
Date Analyzed: 09/14/18

Duplicate Matrix Spike Summary
Carbon, Total Organic (TOC)

Sample Name: 18LHB305
Lab Code: R1808738-007
Analysis Method: SM 5310 C-2000(2011)

Units: mg/L
Basis: NA

Analyte Name	Sample Result	Matrix Spike R1808738-007MS			Duplicate Matrix Spike R1808738-007DMS			% Rec Limits	RPD	RPD Limit
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Carbon, Total Organic (TOC)	10.0	22.0	10.0	120	21.6	10.0	116	75-125	2	20

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ALS Group USA, Corp.

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QA/QC Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water

Service Request: R1808738
Date Collected: 09/11/18
Date Received: 09/12/18
Date Analyzed: 09/14/18

Duplicate Matrix Spike Summary
Carbon, Total Organic (TOC)

Sample Name: 18LHB321
Lab Code: R1808738-011
Analysis Method: SM 5310 C-2000(2011)

Units: mg/L
Basis: NA

Analyte Name	Sample Result	Matrix Spike R1808738-011MS			Duplicate Matrix Spike R1808738-011DMS			% Rec Limits	RPD	RPD Limit
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Carbon, Total Organic (TOC)	6.1	17.3	10.0	113	16.6	10.0	106	75-125	4	20

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dba ALS Environmental

QA/QC Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water

Service Request: R1808738
Date Collected: 09/11/18
Date Received: 09/12/18
Date Analyzed: 09/24/18
Date Extracted: 09/21/18

Duplicate Matrix Spike Summary
Nitrogen, Total Kjeldahl (TKN)

Sample Name: 18LHB322
Lab Code: R1808738-013
Analysis Method: 351.2
Prep Method: Method

Units: mg/L
Basis: NA

Analyte Name	Sample Result	Matrix Spike R1808738-013MS			Duplicate Matrix Spike R1808738-013DMS			% Rec Limits	RPD	RPD Limit
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Nitrogen, Total Kjeldahl (TKN)	1.87	4.23	2.50	95	4.14	2.50	91	75-125	2	20

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dba ALS Environmental

QA/QC Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water

Service Request:R1808738
Date Collected:09/11/18
Date Received:09/12/18
Date Analyzed:09/17/18 - 09/28/18

Duplicate Matrix Spike Summary
General Chemistry Parameters

Sample Name: 18LISO62 **Units:**mg/L
Lab Code: R1808738-025 **Basis:**NA

Matrix Spike
R1808738-025MS

Duplicate Matrix Spike
R1808738-025DMS

Analyte Name	Method	Sample Result	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Nitrate+Nitrite as Nitrogen	353.2	0.0020 U	0.523	0.500	105	0.520	0.500	104	75-125	<1	20
Nitrogen, Total Kjeldahl (TKN)	351.2	0.53	2.77	2.50	90	2.74	2.50	89	75-125	<1	20
Phosphorus, Total	365.1	0.0273	0.0510	0.0250	94	0.0508	0.0250	94	75-125	<1	20

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ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: New York State DEC
Project LCI 2018/LCI2018
Sample Matrix: Water

Service Request: R1808738**Date Collected:** 09/11/18**Date Received:** 09/12/18**Date Analyzed:** 09/12/18

Replicate Sample Summary
General Chemistry Parameters

Sample Name: 18LHB309
Lab Code: R1808738-001

Units: cm-1**Basis:** NA

				Duplicate Sample R1808738- 001DUP			
Analyte Name	Analysis Method	MRL	Sample Result	Result	Average	RPD	RPD Limit
UV254	SM 5910 B	-	0.255	0.257	0.256	<1	20

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dba ALS Environmental

QA/QC Report

Client: New York State DEC
Project LCI 2018/LCI2018
Sample Matrix: Water

Service Request: R1808738
Date Collected: 09/11/18
Date Received: 09/12/18
Date Analyzed: 09/17/18

Replicate Sample Summary
General Chemistry Parameters

Sample Name: 18LHB321
Lab Code: R1808738-011

Units: mg/L
Basis: NA

				Duplicate Sample R1808738- 011DUP			
Analyte Name	Analysis Method	MRL	Sample Result	Result	Average	RPD	RPD Limit
Alkalinity, Total as CaCO ₃	SM 2320 B-1997(2011)	2.0	66.4	66.0	66.2	<1	20

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ALS Group USA, Corp.

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QA/QC Report

Client: New York State DEC
Project LCI 2018/LCI2018
Sample Matrix: Water

Service Request: R1808738
Date Collected: 09/11/18
Date Received: 09/12/18
Date Analyzed: 09/17/18

Replicate Sample Summary
General Chemistry Parameters

Sample Name: 18LHB319
Lab Code: R1808738-015

Units: mg/L
Basis: NA

				Duplicate Sample R1808738- 015DUP			
Analyte Name	Analysis Method	MRL	Sample Result	Result	Average	RPD	RPD Limit
Alkalinity, Total as CaCO ₃	SM 2320 B-1997(2011)	2.0	66.0	66.0	66.0	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

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QA/QC Report

Client: New York State DEC
Project LCI 2018/LCI2018
Sample Matrix: Water

Service Request: R1808738
Date Collected: 09/11/18
Date Received: 09/12/18
Date Analyzed: 09/12/18

Replicate Sample Summary
General Chemistry Parameters

Sample Name: 18LISO62
Lab Code: R1808738-025

Units: ColorUnits
Basis: NA

					Duplicate Sample R1808738- 025DUP		
Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	RPD	RPD Limit
Color, True	SM 2120 B-2001(2011)	5.0	75.0	75.0	75.0	<1	5

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

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QA/QC Report

Client: New York State DEC
Project LCI 2018/LCI2018
Sample Matrix: Water

Service Request: R1808738
Date Collected: 09/11/18
Date Received: 09/12/18
Date Analyzed: 09/15/18

Replicate Sample Summary
General Chemistry Parameters

Sample Name: 18LISO62
Lab Code: R1808738-025

Units: pH Units
Basis: NA

					Duplicate Sample R1808738- 025DUP		
Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	RPD	RPD Limit
pH of Color Analysis	SM 2120 B-2001(2011)	-	6.21	6.21	6.21	<1	20

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Results flagged with a pound (#) indicate the control criteria is not applicable.

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dba ALS Environmental

QA/QC Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water

Service Request: R1808738
Date Analyzed: 09/13/18 - 09/28/18

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R1808738-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Alkalinity, Total as CaCO ₃	SM 2320 B-1997(2011)	20.8	20.0	104	70-130
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.529	0.500	106	70-130
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	10.1	10.0	101	70-130
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	9.62	10.0	96	70-130
Nitrate+Nitrite as Nitrogen	353.2	0.522	0.500	104	70-130
Nitrogen, Total Kjeldahl (TKN)	351.2	2.31	2.50	92	70-130
Phosphorus, Dissolved	365.1	0.0227	0.0250	91	70-130
Phosphorus, Total	365.1	0.0247	0.0250	99	70-130
Sulfate	300.0	1.92	2.00	96	70-130

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water

Service Request: R1808738
Date Analyzed: 09/14/18 - 09/28/18

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R1808738-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Alkalinity, Total as CaCO ₃	SM 2320 B-1997(2011)	20.8	20.0	104	70-130
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.500	0.500	100	70-130
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	9.6	10.0	96	70-130
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	10.1	10.0	101	70-130
Nitrogen, Total Kjeldahl (TKN)	351.2	2.34	2.50	94	70-130
Phosphorus, Total	365.1	0.0242	0.0250	97	70-130