



September 20, 2018

Service Request No:R1808357

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 August 30, 2018
For your reference, these analyses have been assigned our service request number **R1808357**.

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: R1808357
Date Received: 08/30/2018

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:

Thirty water samples were received for analysis at ALS Environmental on 08/30/2018. 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:

Method SM 2120 B-2001(2011), One or more samples were received past the recommended holding time. The customer was notified when the discrepancy was found and instructed the laboratory to proceed with processing. The analysis was performed as soon as possible after receipt by the laboratory. The data is flagged to indicate the holding time violation.

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

Approved by _____

Date 09/20/2018



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

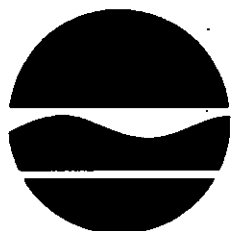
Service Request:R1808357

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R1808357-001	18LCB025	8/28/2018	1000
R1808357-002	18LCB025 Diss	8/28/2018	1000
R1808357-003	18LCB026	8/28/2018	1005
R1808357-004	18LCB026 Diss	8/28/2018	1005
R1808357-005	18LCB019	8/28/2018	1150
R1808357-006	18LCB019 Diss	8/28/2018	1150
R1808357-007	18LCB020	8/28/2018	1155
R1808357-008	18LCB020 Diss	8/28/2018	1155
R1808357-009	18LCB023	8/29/2018	0910
R1808357-010	18LCB023 Diss	8/29/2018	0910
R1808357-011	18LCB097	8/28/2018	1155
R1808357-012	18LCB097 Diss	8/28/2018	1155
R1808357-013	18LCB003	8/29/2018	1045
R1808357-014	18LCB003 Diss	8/29/2018	1045
R1808357-015	18LCB009	8/29/2018	1255
R1808357-016	18LCB009 Diss	8/29/2018	1255
R1808357-017	18LCB005	8/29/2018	1435
R1808357-018	18LCB005 Diss	8/29/2018	1435
R1808357-019	18LCB013	8/29/2018	0833
R1808357-020	18LCB013 Diss	8/29/2018	0833
R1808357-021	18LCB014	8/29/2018	0852
R1808357-022	18LCB014 Diss	8/29/2018	0852
R1808357-023	18LCB001	8/29/2018	1050
R1808357-024	18LCB001 Diss	8/29/2018	1050
R1808357-025	18LCB011	8/29/2018	1202
R1808357-026	18LCB011 Diss	8/29/2018	1202
R1808357-027	18LCB012	8/29/2018	1211
R1808357-028	18LCB012 Diss	8/29/2018	1211
R1808357-029	18LCB198	8/29/2018	1202
R1808357-030	18LCB198 Diss	8/29/2018	1202

CHAIN OF CUSTODY

Page 1 of 1



New York State Department of
Environmental Conservation –
Division of Water

Project Name: LCI
Sampler Collector:
Sara Gonzalez
Project Manager: Alene Onion
Address: 625 Broadway, 4th Floor
Albany, NY 12233-3502
Phone: (518) 402-8166
Email: alene.onion@dec.ny.gov

Project Number: LCI2018
Sampler Signature:
Sara Gonzalez
X Report to Project Manager
Report to:
Address:
Phone:
Email:

NYSDEC SDG:
Sampler Phone No.:
945-218-9575
☐ **Bill to Project Manager**
Bill to: Jason Fagel
Address: 625 Broadway, 4th Floor
Albany, NY 12233-3502
Phone: 518-402-8156
Email: Jason.fagel@dec.ny.gov

Matrix Codes:

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

NYSDEC
LCI Sample ID

Collection Date

Collection Time

Matrix Code

No. of Containers

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 _____

Location Info

18LCB025	08/28	10:00	AW	6	X	X				X	X		X				X	500	Russell P, epi
18LCB026	08/28	10:05	AW	4	X	X				X	X								Russell P, hyp
18LCB019	08/28	11:50	AW	6	X	X				X	X		X				X	500	Mill Pond, epi
18LCB020	08/28	11:55	AW	4	X	X				X	X								Mill Pond, hyp
18LCB023	08/29	9:10	AW	6	X	X				X	X		X				X	250	Pearfield P, epi
18LCB097	08/28	11:55	AW	4	X	X				X	X								Blank hyp
18LCB003	08/29	10:45	AW	8	X	X	X			X		X	X	X			X	750	Bark P, epi
18LCB009	08/29	12:55	AW	8	X	X	X			X		X	X	X			X	750	Jake Pond, epi
19LCB005	08/29	14:35	AW	8	X	X	X			X		X	X	X			X	250	Cranberry P, epi

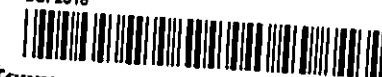
Special Analysis Instructions:

Relinquished by Sampler: <i>Sara Gonzalez</i>	Date: <i>08/29</i>	Time: <i>3:45</i>	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by Laboratory: <i>Jason Fagel</i>	Date: <i>8/30/18</i>	Time: <i>0935</i>

Laborato

R1808357
New York State DEC
LCI 2018

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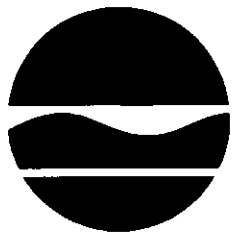
Sample Temp.:

Properly Preserved: Y / N

Samples Intact: Y / N

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:	Sampler Signature:	Sampler Phone No.:
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	2	0	3	0	0	0
TP, NH ₄ , NO _x , TKN	TP, NH ₄ , NO _x , TKN, NO ₃	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
						SO ₄ , Cl, UV-254

Chlorophyll a |
Vol (ml)

Location Info

18LCB013	8-29-18	08:33	AW	6	X		X				X	X		X			X	750	Lake Kushaga - epi
18LCB014	8-29-18	08:52	AW	4	X		X				X	X							Lake Kushaga - hypo
18LCB001	8-29-18	10:50	AW	6	X		X				X	X		X				250	Barnum Pond - epi
18LCB011	8-29-18	12:02	AW	7	X		X				X		X	X				500	Lake Colby - epi
18LCB012	8-29-18	12:11	AW	6	X		X	X			X		X	X					Lake Colby - hypo
18LCB198	8-29-18	12:02	AW	7	X		X	X			X		X	X				500	Lake Colby - Dye - epi

Special Analysis Instructions:

Relinquished by Sampler: Stephouse Line	Date: 8/29/18	Time: 13:30	Received by:	Date:	Time:	Labor: Sample Temp.: _____ °C Properly Preserved: Y / N Samples Intact: Y / N
Relinquished by:	Date:	Time:	Received by:	Date:	Time:	
Relinquished by:	Date:	Time:	Received by Laboratory: [Signature]	Date: 8/30/18	Time: 0935	

R1808357

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New York State DEC
LCI 2018





Cooler Receipt and Preservation Check Form

R1808357

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New York State DEC
LCI 2018Project/Client LCI Folder Number _____Cooler received on 8/30/18 by: @/SCCOURIER: 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 <u>Alk.</u> 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: 8/30/18 Time: 0928 ID: IR#7 IR#9 From: Temp Blank Sample Bottle

Observed Temp (°C)	<u>2.2</u>	<u>3.6</u>					
Correction Factor (°C)	<u>+1.0</u>	<u>+1.0</u>					
Corrected Temp (°C)	<u>3.2</u>	<u>4.6</u>					
Temp from: Type of bottle	<u>Client label</u>						
Within 0-6°C?	<u>(Y)</u> N	<u>(Y)</u> N	Y 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: FS/R002 by @ on 8/30/18 at 0935
5035 samples placed in storage location: _____ by _____ on _____ at _____Cooler Breakdown/Preservation Check**: Date: 8/30/18 Time: 1858 by: shw

9. Were all bottle labels complete (i.e. analysis, preservation, etc.)? YES NO
10. Did all bottle labels and tags agree with custody papers? YES NO
11. Were correct containers used for the tests indicated? YES NO
12. Were 5035 vials acceptable (no extra labels, not leaking)? YES NO
13. 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>204518</u>	HNO ₃	<u>✓</u>		<u>Client label</u>					
≤2	<u>↓</u>	H ₂ SO ₄	<u>✓</u>		<u>↓</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: 8-072-col, client label

Explain all Discrepancies/ Other Comments:

CLRES	BULK
DO	FLDT
HPROD	HGFB
<u>HTR</u>	LL3541
PH	SUB
SO3	MARRS
ALS	REV

Labels secondary reviewed by: shwPC Secondary Review: shw 9/4/18 *significant air bubbles: VOA > 5-6 mm : WC > 1 in. diameter



Miscellaneous Forms

ALS Environmental—Rochester Laboratory

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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 öNotesö 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 öimmediateö 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	New Hampshire ID #
Delaware Approved	New Jersey ID # NY004	294100 A/B
DoD ELAP #65817	New York ID # 10145	Pennsylvania ID# 68-786
Florida ID # E87674	North Carolina #676	Rhode Island ID # 158
		Virginia #460167

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.

ALS Group USA, Corp.
dba ALS Environmental

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

Service Request: R1808357

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: R1808357

Sample Name: 18LCB025
Lab Code: R1808357-001
Sample Matrix: Water

Date Collected: 08/28/18
Date Received: 08/30/18

Analysis Method	Extracted/Digested By	Analyzed By
351.2	NSMITH	GNITAJOUPPI
353.2		AMOSSES
365.1	KWONG	GNITAJOUPPI
ASTM D6919-09		BKALKMAN
SM 2120 B-2001(2011)		BKALKMAN
SM 2320 B-1997(2011)		CWOODS
SM 5310 C-2000(2011)		CWOODS
SM20 10200 H		GNITAJOUPPI

Sample Name: 18LCB025 Diss
Lab Code: R1808357-002
Sample Matrix: Water

Date Collected: 08/28/18
Date Received: 08/30/18

Analysis Method	Extracted/Digested By	Analyzed By
365.1	KWONG	GNITAJOUPPI

Sample Name: 18LCB026
Lab Code: R1808357-003
Sample Matrix: Water

Date Collected: 08/28/18
Date Received: 08/30/18

Analysis Method	Extracted/Digested By	Analyzed By
351.2	NSMITH	GNITAJOUPPI
353.2		AMOSSES
365.1	KWONG	GNITAJOUPPI
ASTM D6919-09		BKALKMAN
SM 2120 B-2001(2011)		BKALKMAN
SM 5310 C-2000(2011)		CWOODS

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

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

Service Request: R1808357

Sample Name: 18LCB026 Diss
Lab Code: R1808357-004
Sample Matrix: Water

Date Collected: 08/28/18
Date Received: 08/30/18

Analysis Method

365.1

Extracted/Digested By

KWONG

Analyzed By

GNITAJOUPPI

Sample Name: 18LCB019
Lab Code: R1808357-005
Sample Matrix: Water

Date Collected: 08/28/18
Date Received: 08/30/18

Analysis Method

351.2

Extracted/Digested By

NSMITH

Analyzed By

GNITAJOUPPI

353.2

AMOSSES

365.1

KWONG

GNITAJOUPPI

ASTM D6919-09

BKALKMAN

SM 2120 B-2001(2011)

BKALKMAN

SM 2320 B-1997(2011)

CWOODS

SM 5310 C-2000(2011)

CWOODS

SM20 10200 H

GNITAJOUPPI

Sample Name: 18LCB019 Diss
Lab Code: R1808357-006
Sample Matrix: Water

Date Collected: 08/28/18
Date Received: 08/30/18

Analysis Method

365.1

Extracted/Digested By

KWONG

Analyzed By

GNITAJOUPPI

Sample Name: 18LCB020
Lab Code: R1808357-007
Sample Matrix: Water

Date Collected: 08/28/18
Date Received: 08/30/18

Analysis Method

351.2

Extracted/Digested By

NSMITH

Analyzed By

GNITAJOUPPI

353.2

AMOSSES

365.1

KWONG

GNITAJOUPPI

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

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

Service Request: R1808357

Sample Name: 18LCB020
Lab Code: R1808357-007
Sample Matrix: Water

Date Collected: 08/28/18
Date Received: 08/30/18

Analysis Method

ASTM D6919-09

SM 2120 B-2001(2011)

SM 5310 C-2000(2011)

Extracted/Digested By

Analyzed By

BKALKMAN

BKALKMAN

CWOODS

Sample Name: 18LCB020 Diss
Lab Code: R1808357-008
Sample Matrix: Water

Date Collected: 08/28/18
Date Received: 08/30/18

Analysis Method

365.1

Extracted/Digested By

KWONG

Analyzed By

GNITAJOUPPI

Sample Name: 18LCB023
Lab Code: R1808357-009
Sample Matrix: Water

Date Collected: 08/29/18
Date Received: 08/30/18

Analysis Method

351.2

353.2

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

NSMITH

KWONG

Analyzed By

GNITAJOUPPI

AMOSSES

GNITAJOUPPI

BKALKMAN

BKALKMAN

CWOODS

CWOODS

GNITAJOUPPI

Sample Name: 18LCB023 Diss
Lab Code: R1808357-010
Sample Matrix: Water

Date Collected: 08/29/18
Date Received: 08/30/18

Analysis Method

365.1

Extracted/Digested By

KWONG

Analyzed By

GNITAJOUPPI

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

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

Service Request: R1808357

Sample Name: 18LCB097
Lab Code: R1808357-011
Sample Matrix: Water

Date Collected: 08/28/18
Date Received: 08/30/18

Analysis Method	Extracted/Digested By	Analyzed By
351.2	NSMITH	GNITAJOUPPI
353.2		AMOSSES
365.1	KWONG	GNITAJOUPPI
ASTM D6919-09		BKALKMAN
SM 2120 B-2001(2011)		BKALKMAN
SM 5310 C-2000(2011)		CWOODS

Sample Name: 18LCB097 Diss
Lab Code: R1808357-012
Sample Matrix: Water

Date Collected: 08/28/18
Date Received: 08/30/18

Analysis Method	Extracted/Digested By	Analyzed By
365.1	KWONG	GNITAJOUPPI

Sample Name: 18LCB003
Lab Code: R1808357-013
Sample Matrix: Water

Date Collected: 08/29/18
Date Received: 08/30/18

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

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Analyst Summary report

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

Service Request: R1808357

Sample Name: 18LCB003 Diss
Lab Code: R1808357-014
Sample Matrix: Water

Date Collected: 08/29/18
Date Received: 08/30/18

Analysis Method
365.1
SM 5310 C-2000(2011)

Extracted/Digested By
KWONG

Analyzed By
GNITAJOUPPI
CWOODS

Sample Name: 18LCB009
Lab Code: R1808357-015
Sample Matrix: Water

Date Collected: 08/29/18
Date Received: 08/30/18

Analysis Method
300.0
351.2
353.2
365.1
ASTM D6919-09

Extracted/Digested By

NSMITH

KWONG

Analyzed By
AMOSSES
GNITAJOUPPI
AMOSSES
GNITAJOUPPI
BKALKMAN

SM 2120 B-2001(2011)
SM 2320 B-1997(2011)
SM 5910 B
SM20 10200 H

BKALKMAN
CWOODS
MROGERSON
GNITAJOUPPI

Sample Name: 18LCB009 Diss
Lab Code: R1808357-016
Sample Matrix: Water

Date Collected: 08/29/18
Date Received: 08/30/18

Analysis Method
365.1
SM 5310 C-2000(2011)

Extracted/Digested By
KWONG

Analyzed By
GNITAJOUPPI
CWOODS

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

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

Service Request: R1808357

Sample Name: 18LCB005
Lab Code: R1808357-017
Sample Matrix: Water

Date Collected: 08/29/18
Date Received: 08/30/18

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

Sample Name: 18LCB005 Diss
Lab Code: R1808357-018
Sample Matrix: Water

Date Collected: 08/29/18
Date Received: 08/30/18

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

Sample Name: 18LCB013
Lab Code: R1808357-019
Sample Matrix: Water

Date Collected: 08/29/18
Date Received: 08/30/18

Analysis Method	Extracted/Digested By	Analyzed By
351.2	NSMITH	GNITAJOUPPI
353.2		AMOSSES
365.1	KWONG	GNITAJOUPPI
ASTM D6919-09		BKALKMAN
SM 2120 B-2001(2011)		BKALKMAN
SM 2320 B-1997(2011)		CWOODS
SM 5310 C-2000(2011)		CWOODS
SM20 10200 H		GNITAJOUPPI

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Analyst Summary report

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

Service Request: R1808357

Sample Name: 18LCB013 Diss
Lab Code: R1808357-020
Sample Matrix: Water

Date Collected: 08/29/18
Date Received: 08/30/18

Analysis Method

365.1

Extracted/Digested By

KWONG

Analyzed By

GNITAJOUPPI

Sample Name: 18LCB014
Lab Code: R1808357-021
Sample Matrix: Water

Date Collected: 08/29/18
Date Received: 08/30/18

Analysis Method

351.2

Extracted/Digested By

NSMITH

Analyzed By

GNITAJOUPPI

353.2

AMOSSES

365.1

KWONG

GNITAJOUPPI

ASTM D6919-09

BKALKMAN

SM 2120 B-2001(2011)

BKALKMAN

SM 5310 C-2000(2011)

CWOODS

Sample Name: 18LCB014 Diss
Lab Code: R1808357-022
Sample Matrix: Water

Date Collected: 08/29/18
Date Received: 08/30/18

Analysis Method

365.1

Extracted/Digested By

KWONG

Analyzed By

GNITAJOUPPI

Sample Name: 18LCB001
Lab Code: R1808357-023
Sample Matrix: Water

Date Collected: 08/29/18
Date Received: 08/30/18

Analysis Method

351.2

Extracted/Digested By

NSMITH

Analyzed By

GNITAJOUPPI

353.2

AMOSSES

365.1

KWONG

GNITAJOUPPI

ASTM D6919-09

BKALKMAN

SM 2120 B-2001(2011)

BKALKMAN

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Analyst Summary report

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

Service Request: R1808357

Sample Name: 18LCB001
Lab Code: R1808357-023
Sample Matrix: Water

Date Collected: 08/29/18
Date Received: 08/30/18

Analysis Method

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

Extracted/Digested By

Analyzed By

CWOODS
CWOODS
GNITAJOUPPI

Sample Name: 18LCB001 Diss
Lab Code: R1808357-024
Sample Matrix: Water

Date Collected: 08/29/18
Date Received: 08/30/18

Analysis Method

365.1

Extracted/Digested By

KWONG

Analyzed By

GNITAJOUPPI

Sample Name: 18LCB011
Lab Code: R1808357-025
Sample Matrix: Water

Date Collected: 08/29/18
Date Received: 08/30/18

Analysis Method

300.0
351.2
353.2
365.1
ASTM D6919-09

Extracted/Digested By

NSMITH

KWONG

Analyzed By

AMOSSES
GNITAJOUPPI
AMOSSES
GNITAJOUPPI
BKALKMAN

SM 2120 B-2001(2011)
SM 2320 B-1997(2011)
SM 5910 B
SM20 10200 H

BKALKMAN
CWOODS
MROGERSON
GNITAJOUPPI

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Analyst Summary report

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

Service Request: R1808357

Sample Name: 18LCB011 Diss
Lab Code: R1808357-026
Sample Matrix: Water

Date Collected: 08/29/18
Date Received: 08/30/18

Analysis Method
365.1
SM 5310 C-2000(2011)

Extracted/Digested By
KWONG

Analyzed By
GNITAJOUPPI
CWOODS

Sample Name: 18LCB012
Lab Code: R1808357-027
Sample Matrix: Water

Date Collected: 08/29/18
Date Received: 08/30/18

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
GNITAJOUPPI
AMOSSES
GNITAJOUPPI
BKALKMAN
BKALKMAN
MROGERSON

Sample Name: 18LCB012 Diss
Lab Code: R1808357-028
Sample Matrix: Water

Date Collected: 08/29/18
Date Received: 08/30/18

Analysis Method
365.1
SM 5310 C-2000(2011)

Extracted/Digested By
KWONG

Analyzed By
GNITAJOUPPI
CWOODS

Sample Name: 18LCB198
Lab Code: R1808357-029
Sample Matrix: Water

Date Collected: 08/29/18
Date Received: 08/30/18

Analysis Method
300.0
351.2

Extracted/Digested By

NSMITH

Analyzed By
AMOSSES
GNITAJOUPPI

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Analyst Summary report

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

Service Request: R1808357

Sample Name: 18LCB198
Lab Code: R1808357-029
Sample Matrix: Water

Date Collected: 08/29/18
Date Received: 08/30/18

Analysis Method

Extracted/Digested By

Analyzed By

353.2

AMOSSES

365.1

KWONG

GNITAJOUPPI

ASTM D6919-09

BKALKMAN

SM 2120 B-2001(2011)

BKALKMAN

SM 2320 B-1997(2011)

CWOODS

SM 5910 B

MROGERSON

SM20 10200 H

GNITAJOUPPI

Sample Name: 18LCB198 Diss

Date Collected: 08/29/18

Lab Code: R1808357-030

Date Received: 08/30/18

Sample Matrix: Water

Analysis Method

Extracted/Digested By

Analyzed By

365.1

KWONG

GNITAJOUPPI

SM 5310 C-2000(2011)

CWOODS



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

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Metals

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METALS
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: New York State DEC **Service Request:** LCI0827
Project No.: R1808357 **Date Collected:** 8/29/2018
Project Name: **Date Received:** 8/30/2018
Matrix: WATER **Units:** ug/L
Basis:

Sample Name: 18LCB003 **Lab Code:** R1808357-013

Analyte	Analysis Method	PQL	MDL	Dil. Factor	Result	C	Q
Arsenic	200.8	1.0	0.39	1.0	1.0	U	
Iron	200.7	100	13.0	1.0	415		
Manganese	200.7	10.0	1.7	1.0	21.1		

% Solids: 0.0

Comments:

METALS
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: New York State DEC

Service Request: LCI0827

Project No.: R1808357

Date Collected: 8/29/2018

Project Name:

Date Received: 8/30/2018

Matrix: WATER

Units: ug/L

Basis:

Sample Name: 18LCB009

Lab Code: R1808357-015

Analyte	Analysis Method	PQL	MDL	Dil. Factor	Result	C	Q
Arsenic	200.8	1.0	0.39	1.0	1.0	U	
Iron	200.7	100	13.0	1.0	32.3	J	
Manganese	200.7	10.0	1.7	1.0	10.1		

% Solids: 0.0

Comments:

METALS
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: New York State DEC

Service Request: LCI0827

Project No.: R1808357

Date Collected: 8/29/2018

Project Name:

Date Received: 8/30/2018

Matrix: WATER

Units: ug/L

Basis:

Sample Name: 18LCB005

Lab Code: R1808357-017

Analyte	Analysis Method	PQL	MDL	Dil. Factor	Result	C	Q
Arsenic	200.8	1.0	0.39	1.0	1.0	U	
Iron	200.7	100	13.0	1.0	508		
Manganese	200.7	10.0	1.7	1.0	16.6		

% Solids: 0.0

Comments:

- 1 -

Basis:

Comments:



General Chemistry

ALS Environmental—Rochester Laboratory

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Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water
Sample Name: 18LCB025
Lab Code: R1808357-001

Service Request: R1808357
Date Collected: 08/28/18 10:00
Date Received: 08/30/18 09:35
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)	14.4	mg/L	2.0	1	09/10/18 14:50	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0050 U	mg/L	0.0050	1	09/09/18 19:16	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	6.8	mg/L	1.0	1	09/11/18 00:16	NA	
Chlorophyll A	SM20 10200 H	2.69	ug/L	0.32	4	09/13/18 08:30	NA	
Color, True	SM 2120 B-2001(2011)	34.0	ColorUnits	1.0	1	08/30/18 10:15	NA	*
Nitrate+Nitrite as Nitrogen	353.2	0.0020 U	mg/L	0.0020	1	09/13/18 13:42	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.76	mg/L	0.10	1	09/19/18 13:40	09/18/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.51	pH Units	-	1	09/01/18 08:30	NA	*
Phosphorus, Total	365.1	0.0114	mg/L	0.0050	1	09/14/18 12:11	09/11/18	

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Analytical Report

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

Sample Name: 18LCB025 Diss
Lab Code: R1808357-002

Service Request: R1808357
Date Collected: 08/28/18 10:00
Date Received: 08/30/18 09:35

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Dissolved	365.1	0.0050 U	mg/L	0.0050	1	09/14/18 11:02	09/11/18	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Sample Name: 18LCB026
Lab Code: R1808357-003

Service Request: R1808357
Date Collected: 08/28/18 10:05
Date Received: 08/30/18 09:35

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0050	U mg/L	0.0050	1	09/11/18 19:37	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	6.1	mg/L	1.0	1	09/11/18 00:36	NA	
Color, True	SM 2120 B-2001(2011)	36.0	ColorUnits	1.0	1	08/30/18 10:15	NA	*
Nitrate+Nitrite as Nitrogen	353.2	0.0020	U mg/L	0.0020	1	09/13/18 13:50	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.38	mg/L	0.10	1	09/19/18 13:50	09/18/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.00	pH Units	-	1	09/01/18 08:30	NA	*
Phosphorus, Total	365.1	0.0191	mg/L	0.0050	1	09/14/18 12:12	09/11/18	

ALS Group USA, Corp.
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Analytical Report

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

Sample Name: 18LCB026 Diss
Lab Code: R1808357-004

Service Request: R1808357
Date Collected: 08/28/18 10:05
Date Received: 08/30/18 09:35

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Dissolved	365.1	0.0055	mg/L	0.0050	1	09/14/18 11:03	09/11/18	

ALS Group USA, Corp.
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Analytical Report

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

Sample Name: 18LCB019
Lab Code: R1808357-005

Service Request: R1808357
Date Collected: 08/28/18 11:50
Date Received: 08/30/18 09:35

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)	15.6	mg/L	2.0	1	09/10/18 14:59	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0064	mg/L	0.0050	1	09/11/18 21:29	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	7.1	mg/L	1.0	1	09/11/18 00:57	NA	
Chlorophyll A	SM20 10200 H	3.16	ug/L	0.16	2	09/13/18 08:30	NA	
Color, True	SM 2120 B-2001(2011)	38.0	ColorUnits	1.0	1	08/30/18 10:15	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0020	U mg/L	0.0020	1	09/13/18 13:52	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.51	mg/L	0.10	1	09/19/18 13:51	09/18/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.43	pH Units	-	1	09/01/18 08:30	NA	*
Phosphorus, Total	365.1	0.0134	mg/L	0.0050	1	09/14/18 12:55	09/11/18	

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Analytical Report

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

Sample Name: 18LCB019 Diss
Lab Code: R1808357-006

Service Request: R1808357
Date Collected: 08/28/18 11:50
Date Received: 08/30/18 09:35

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Dissolved	365.1	0.0062	mg/L	0.0050	1	09/14/18 11:04	09/11/18	

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Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water
Sample Name: 18LCB020
Lab Code: R1808357-007

Service Request: R1808357
Date Collected: 08/28/18 11:55
Date Received: 08/30/18 09:35
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0050 U	mg/L	0.0050	1	09/11/18 21:45	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	5.5	mg/L	1.0	1	09/11/18 01:18	NA	
Color, True	SM 2120 B-2001(2011)	60.0	ColorUnits	5.0	5	08/30/18 10:15	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0037	mg/L	0.0020	1	09/13/18 13:53	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.34	mg/L	0.10	1	09/19/18 13:42	09/18/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.07	pH Units	-	5	09/01/18 08:30	NA	*
Phosphorus, Total	365.1	0.0153	mg/L	0.0050	1	09/14/18 12:15	09/11/18	

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Analytical Report

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

Sample Name: 18LCB020 Diss
Lab Code: R1808357-008

Service Request: R1808357
Date Collected: 08/28/18 11:55
Date Received: 08/30/18 09:35

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Dissolved	365.1	0.0050 U	mg/L	0.0050	1	09/14/18 11:05	09/11/18	

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Analytical Report

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

Sample Name: 18LCB023
Lab Code: R1808357-009

Service Request: R1808357
Date Collected: 08/29/18 09:10
Date Received: 08/30/18 09:35

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)	78.4	mg/L	2.0	1	09/10/18 16:25	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0091	mg/L	0.0050	1	09/11/18 22:01	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	8.3	mg/L	1.0	1	09/11/18 02:21	NA	
Chlorophyll A	SM20 10200 H	76.9	ug/L	3.2	20	09/13/18 08:30	NA	
Color, True	SM 2120 B-2001(2011)	110	ColorUnits	5.0	5	08/30/18 10:15	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0076	mg/L	0.0020	1	09/13/18 13:55	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.72	mg/L	0.10	1	09/19/18 15:56	09/18/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.59	pH Units	-	5	09/01/18 08:30	NA	*
Phosphorus, Total	365.1	0.0565	mg/L	0.0050	1	09/14/18 12:16	09/11/18	

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dba ALS Environmental

Analytical Report

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

Sample Name: 18LCB023 Diss
Lab Code: R1808357-010

Service Request: R1808357
Date Collected: 08/29/18 09:10
Date Received: 08/30/18 09:35

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Dissolved	365.1	0.0262	mg/L	0.0050	1	09/14/18 11:06	09/11/18	

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Analytical Report

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

Sample Name: 18LCB097
Lab Code: R1808357-011

Service Request: R1808357
Date Collected: 08/28/18 11:55
Date Received: 08/30/18 09:35

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0080	mg/L	0.0050	1	09/11/18 22:17	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	1.0 U	mg/L	1.0	1	09/11/18 02:42	NA	
Color, True	SM 2120 B-2001(2011)	8.0	ColorUnits	1.0	1	08/30/18 10:15	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0020 U	mg/L	0.0020	1	09/13/18 13:56	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.10 U	mg/L	0.10	1	09/19/18 15:58	09/18/18	
pH of Color Analysis	SM 2120 B-2001(2011)	6.53	pH Units	-	1	09/01/18 08:30	NA	*
Phosphorus, Total	365.1	0.0050 U	mg/L	0.0050	1	09/14/18 12:17	09/11/18	

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Analytical Report

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

Sample Name: 18LCB097 Diss
Lab Code: R1808357-012

Service Request: R1808357
Date Collected: 08/28/18 11:55
Date Received: 08/30/18 09:35

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Dissolved	365.1	0.0050 U	mg/L	0.0050	1	09/14/18 11:08	09/11/18	

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Analytical Report

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

Sample Name: 18LCB003
Lab Code: R1808357-013

Service Request: R1808357
Date Collected: 08/29/18 10:45
Date Received: 08/30/18 09:35

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)	21.2	mg/L	2.0	1	09/10/18 16:30	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0178	mg/L	0.0050	1	09/11/18 22:33	NA	
Chlorophyll A	SM20 10200 H	1.82	ug/L	0.053	1	09/13/18 08:30	NA	
Color, True	SM 2120 B-2001(2011)	29.0	ColorUnits	1.0	1	08/30/18 10:15	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0024	mg/L	0.0020	1	09/13/18 13:57	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.33	mg/L	0.10	1	09/19/18 17:04	09/18/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.61	pH Units	-	1	09/01/18 08:30	NA	*
Phosphorus, Total	365.1	0.0140	mg/L	0.0050	1	09/14/18 12:18	09/11/18	
Sulfate	300.0	2.0 U	mg/L	2.0	10	09/06/18 20:51	NA	
UV254	SM 5910 B	0.117	cm-1	-	1	08/30/18 14:28	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: 18LCB003 Diss
Lab Code: R1808357-014

Service Request: R1808357
Date Collected: 08/29/18 10:45
Date Received: 08/30/18 09:35

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)	5.1	mg/L	1.0	1	09/10/18 10:16	NA	
Phosphorus, Dissolved	365.1	0.0064	mg/L	0.0050	1	09/14/18 11:09	09/11/18	

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Analytical Report

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

Sample Name: 18LCB009
Lab Code: R1808357-015

Service Request: R1808357
Date Collected: 08/29/18 12:55
Date Received: 08/30/18 09:35

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)	8.0	mg/L	2.0	1	09/10/18 16:34	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0050 U	mg/L	0.0050	1	09/11/18 22:50	NA	
Chlorophyll A	SM20 10200 H	1.28	ug/L	0.11	2	09/13/18 08:30	NA	
Color, True	SM 2120 B-2001(2011)	12.0	ColorUnits	1.0	1	08/30/18 10:15	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0020 U	mg/L	0.0020	1	09/13/18 13:59	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.32	mg/L	0.10	1	09/19/18 15:59	09/18/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.05	pH Units	-	1	09/01/18 08:30	NA	*
Phosphorus, Total	365.1	0.0058	mg/L	0.0050	1	09/14/18 12:19	09/11/18	
Sulfate	300.0	3.2	mg/L	2.0	10	09/06/18 20:56	NA	
UV254	SM 5910 B	0.0480	cm-1	-	1	08/30/18 14:28	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: 18LCB009 Diss
Lab Code: R1808357-016

Service Request: R1808357
Date Collected: 08/29/18 12:55
Date Received: 08/30/18 09:35
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)	4.0	mg/L	1.0	1	09/10/18 10:37	NA	
Phosphorus, Dissolved	365.1	0.0050 U	mg/L	0.0050	1	09/14/18 11:10	09/11/18	

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Analytical Report

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

Sample Name: 18LCB005
Lab Code: R1808357-017

Service Request: R1808357
Date Collected: 08/29/18 14:35
Date Received: 08/30/18 09:35

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)	9.6	mg/L	2.0	1	09/10/18 16:51	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0062	mg/L	0.0050	1	09/12/18 00:26	NA	
Chlorophyll A	SM20 10200 H	12.0	ug/L	0.64	4	09/13/18 08:30	NA	
Color, True	SM 2120 B-2001(2011)	29.0	ColorUnits	1.0	1	08/30/18 10:15	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0036	mg/L	0.0020	1	09/13/18 14:00	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.45	mg/L	0.10	1	09/19/18 16:00	09/18/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.27	pH Units	-	1	09/01/18 08:30	NA	*
Phosphorus, Total	365.1	0.0198	mg/L	0.0050	1	09/14/18 12:22	09/11/18	
Sulfate	300.0	2.0 U	mg/L	2.0	10	09/06/18 21:17	NA	
UV254	SM 5910 B	0.102	cm-1	-	1	08/30/18 14:28	NA	

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Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water
Sample Name: 18LCB005 Diss
Lab Code: R1808357-018

Service Request: R1808357
Date Collected: 08/29/18 14:35
Date Received: 08/30/18 09:35
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)	5.6	mg/L	1.0	1	09/10/18 10:58	NA	
Phosphorus, Dissolved	365.1	0.0050 U	mg/L	0.0050	1	09/14/18 11:11	09/11/18	

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Analytical Report

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

Service Request: R1808357
Date Collected: 08/29/18 08:33
Date Received: 08/30/18 09:35

Sample Name: 18LCB013
Lab Code: R1808357-019

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)	18.0	mg/L	2.0	1	09/10/18 16:59	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0075	mg/L	0.0050	1	09/12/18 00:42	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	5.4	mg/L	1.0	1	09/11/18 03:03	NA	
Chlorophyll A	SM20 10200 H	3.30	ug/L	0.11	2	09/13/18 08:30	NA	
Color, True	SM 2120 B-2001(2011)	37.0	ColorUnits	1.0	1	08/30/18 10:15	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0020	U mg/L	0.0020	1	09/13/18 14:01	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.28	mg/L	0.10	1	09/19/18 16:02	09/18/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.40	pH Units	-	1	09/01/18 08:30	NA	*
Phosphorus, Total	365.1	0.0121	mg/L	0.0050	1	09/14/18 12:24	09/11/18	

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Analytical Report

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

Sample Name: 18LCB013 Diss
Lab Code: R1808357-020

Service Request: R1808357
Date Collected: 08/29/18 08:33
Date Received: 08/30/18 09:35

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Dissolved	365.1	0.0050 U	mg/L	0.0050	1	09/14/18 11:17	09/11/18	

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Analytical Report

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

Sample Name: 18LCB014
Lab Code: R1808357-021

Service Request: R1808357
Date Collected: 08/29/18 08:52
Date Received: 08/30/18 09:35

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0296	mg/L	0.0050	1	09/12/18 00:58	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	6.5	mg/L	1.0	1	09/11/18 03:24	NA	
Color, True	SM 2120 B-2001(2011)	155	ColorUnits	5.0	5	08/30/18 10:15	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.261	mg/L	0.0020	1	09/13/18 14:05	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.25	mg/L	0.10	1	09/19/18 17:05	09/18/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.03	pH Units	-	5	09/01/18 08:30	NA	*
Phosphorus, Total	365.1	0.0211	mg/L	0.0050	1	09/14/18 12:25	09/11/18	

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Analytical Report

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

Sample Name: 18LCB014 Diss
Lab Code: R1808357-022

Service Request: R1808357
Date Collected: 08/29/18 08:52
Date Received: 08/30/18 09:35

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Dissolved	365.1	0.0076	mg/L	0.0050	1	09/14/18 11:18	09/11/18	

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Analytical Report

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

Sample Name: 18LCB001
Lab Code: R1808357-023

Service Request: R1808357
Date Collected: 08/29/18 10:50
Date Received: 08/30/18 09:35

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)	10.0	mg/L	2.0	1	09/10/18 17:03	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0095	mg/L	0.0050	1	09/12/18 01:14	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	8.7	mg/L	1.0	1	09/11/18 03:44	NA	
Chlorophyll A	SM20 10200 H	26.6	ug/L	0.64	4	09/13/18 08:30	NA	
Color, True	SM 2120 B-2001(2011)	110	ColorUnits	5.0	5	08/30/18 10:15	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0058	mg/L	0.0020	1	09/13/18 14:07	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.76	mg/L	0.10	1	09/19/18 16:04	09/18/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.07	pH Units	-	5	09/01/18 08:30	NA	*
Phosphorus, Total	365.1	0.0261	mg/L	0.0050	1	09/14/18 12:28	09/11/18	

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Analytical Report

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

Sample Name: 18LCB001 Diss
Lab Code: R1808357-024

Service Request: R1808357
Date Collected: 08/29/18 10:50
Date Received: 08/30/18 09:35

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Dissolved	365.1	0.0094	mg/L	0.0050	1	09/14/18 11:19	09/11/18	

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Analytical Report

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

Service Request: R1808357
Date Collected: 08/29/18 12:02
Date Received: 08/30/18 09:35

Sample Name: 18LCB011
Lab Code: R1808357-025

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)	31.2	mg/L	2.0	1	09/10/18 17:08	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0142	mg/L	0.0050	1	09/12/18 01:30	NA	
Chlorophyll A	SM20 10200 H	1.79	ug/L	0.080	1	09/13/18 08:30	NA	
Color, True	SM 2120 B-2001(2011)	17.0	ColorUnits	1.0	1	08/30/18 10:15	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0020 U	mg/L	0.0020	1	09/13/18 14:11	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.22	mg/L	0.10	1	09/19/18 16:04	09/18/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.58	pH Units	-	1	09/01/18 08:30	NA	*
Phosphorus, Total	365.1	0.0072	mg/L	0.0050	1	09/14/18 12:29	09/11/18	
Sulfate	300.0	4.7	mg/L	2.0	10	09/06/18 21:22	NA	
UV254	SM 5910 B	0.112	cm-1	-	1	08/30/18 14:28	NA	

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Analytical Report

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

Sample Name: 18LCB011 Diss
Lab Code: R1808357-026

Service Request: R1808357
Date Collected: 08/29/18 12:02
Date Received: 08/30/18 09:35

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)	5.6	mg/L	1.0	1	09/10/18 11:19	NA	
Phosphorus, Dissolved	365.1	0.0050 U	mg/L	0.0050	1	09/14/18 11:20	09/11/18	

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Analytical Report

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

Service Request: R1808357
Date Collected: 08/29/18 12:11
Date Received: 08/30/18 09:35

Sample Name: 18LCB012
Lab Code: R1808357-027

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0240	mg/L	0.0050	1	09/12/18 01:46	NA	
Color, True	SM 2120 B-2001(2011)	34.0	ColorUnits	1.0	1	08/30/18 10:15	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0030	mg/L	0.0020	1	09/13/18 14:12	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.49	mg/L	0.10	1	09/19/18 17:15	09/18/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.20	pH Units	-	1	09/01/18 08:30	NA	*
Phosphorus, Total	365.1	0.0407	mg/L	0.0050	1	09/14/18 12:30	09/11/18	
Sulfate	300.0	4.2	mg/L	2.0	10	09/06/18 21:27	NA	
UV254	SM 5910 B	0.155	cm-1	-	1	08/30/18 14:28	NA	

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Analytical Report

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

Sample Name: 18LCB012 Diss
Lab Code: R1808357-028

Service Request: R1808357
Date Collected: 08/29/18 12:11
Date Received: 08/30/18 09:35

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	09/10/18 11:39	NA	
Phosphorus, Dissolved	365.1	0.0130	mg/L	0.0050	1	09/14/18 11:21	09/11/18	

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Analytical Report

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

Sample Name: 18LCB198
Lab Code: R1808357-029

Service Request: R1808357
Date Collected: 08/29/18 12:02
Date Received: 08/30/18 09:35

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)	31.2	mg/L	2.0	1	09/10/18 17:12	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0050 U	mg/L	0.0050	1	09/12/18 02:02	NA	
Chlorophyll A	SM20 10200 H	2.16	ug/L	0.080	1	09/13/18 08:30	NA	
Color, True	SM 2120 B-2001(2011)	18.0	ColorUnits	1.0	1	08/30/18 10:15	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0020 U	mg/L	0.0020	1	09/13/18 14:14	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.25	mg/L	0.10	1	09/19/18 16:06	09/18/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.64	pH Units	-	1	09/01/18 08:30	NA	*
Phosphorus, Total	365.1	0.0070	mg/L	0.0050	1	09/14/18 12:31	09/11/18	
Sulfate	300.0	4.8	mg/L	2.0	10	09/06/18 21:32	NA	
UV254	SM 5910 B	0.109	cm-1	-	1	08/30/18 14:28	NA	

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Analytical Report

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

Sample Name: 18LCB198 Diss
Lab Code: R1808357-030

Service Request: R1808357
Date Collected: 08/29/18 12:02
Date Received: 08/30/18 09:35

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)	5.4	mg/L	1.0	1	09/10/18 12:00	NA	
Phosphorus, Dissolved	365.1	0.0050 U	mg/L	0.0050	1	09/14/18 11:22	09/11/18	



QC Summary Forms

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Metals

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METALS
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BLANKS

Contract: R1808357

Lab Code: Case No.: SAS No.: SDG NO.: LCI0827

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: R1808357

Lab Code: Case No.: SAS No.: SDG NO.: LCI0827

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	0.39	0.39	U	U	U			MS
Iron		13.00	13.00	13.00	U	U	U			P
Manganese		1.70	1.70	1.70	U	U	U			P

Comments:

METALS

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LABORATORY CONTROL SAMPLE

Contract: R1808357

Lab Code: Case No.: SAS No.: SDG NO.: LCI0827

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	21.4	107						
Iron	1000	969	97						
Manganese	500	499	100						

Comments:



General Chemistry

ALS Environmental—Rochester Laboratory

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Analytical Report

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

Sample Name: Method Blank
Lab Code: R1808357-MB1

Service Request: R1808357
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	09/10/18 14:30	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0050 U	mg/L	0.0050	1	09/09/18 14:27	NA	
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	1.0 U	mg/L	1.0	1	09/10/18 19:02	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	1.0 U	mg/L	1.0	1	09/10/18 17:17	NA	
Chlorophyll A	SM20 10200 H	0.16 U	ug/L	0.16	1	09/13/18 08:30	NA	
Color, True	SM 2120 B-2001(2011)	1.0	ColorUnits	1.0	1	08/30/18 10:15	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0020 U	mg/L	0.0020	1	09/13/18 13:15	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.10 U	mg/L	0.10	1	09/19/18 13:25	09/18/18	
Phosphorus, Dissolved	365.1	0.0050 U	mg/L	0.0050	1	09/14/18 10:49	09/11/18	
Phosphorus, Total	365.1	0.0050 U	mg/L	0.0050	1	09/14/18 12:00	09/11/18	
Sulfate	300.0	0.20 U	mg/L	0.20	1	09/06/18 19:02	NA	
UV254	SM 5910 B	0.00150	cm-1	-	1	08/30/18 14:28	NA	

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Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: R1808357-MB2

Service Request: R1808357
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	09/10/18 16:42	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0050 U	mg/L	0.0050	1	09/11/18 13:45	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0020 U	mg/L	0.0020	1	09/13/18 13:48	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.10 U	mg/L	0.10	1	09/19/18 15:54	09/18/18	
Sulfate	300.0	0.20 U	mg/L	0.20	1	09/06/18 21:06	NA	

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Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: R1808357-MB3

Service Request: R1808357
Date Collected: NA
Date Received: NA
Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0050	U mg/L	0.0050	1	09/11/18 20:57	

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QA/QC Report

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

Service Request: R1808357
Date Collected: 08/28/18
Date Received: 08/30/18
Date Analyzed: 09/13/18

Duplicate Matrix Spike Summary
Nitrate+Nitrite as Nitrogen

Sample Name: 18LCB025
Lab Code: R1808357-001
Analysis Method: 353.2

Units: mg/L
Basis: NA

Analyte Name	Sample Result	Matrix Spike R1808357-001MS			Duplicate Matrix Spike R1808357-001DMS			% Rec Limits	RPD	RPD Limit
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Nitrate+Nitrite as Nitrogen	0.0020 U	0.538	0.500	108	0.554	0.500	111	75-125	3	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.

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dba ALS Environmental

QA/QC Report

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

Service Request: R1808357
Date Collected: 08/28/18
Date Received: 08/30/18
Date Analyzed: 09/19/18
Date Extracted: 09/18/18

Duplicate Matrix Spike Summary
Nitrogen, Total Kjeldahl (TKN)

Sample Name: 18LCB020
Lab Code: R1808357-007
Analysis Method: 351.2
Prep Method: Method

Units: mg/L
Basis: NA

Analyte Name	Sample Result	Matrix Spike R1808357-007MS			Duplicate Matrix Spike R1808357-007DMS			% Rec Limits	RPD	RPD Limit
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Nitrogen, Total Kjeldahl (TKN)	0.34	2.69	2.50	94	2.73	2.50	95	75-125	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: R1808357
Date Collected: 08/29/18
Date Received: 08/30/18
Date Analyzed: 09/19/18
Date Extracted: 09/18/18

Duplicate Matrix Spike Summary
Nitrogen, Total Kjeldahl (TKN)

Sample Name: 18LCB023
Lab Code: R1808357-009
Analysis Method: 351.2
Prep Method: Method

Units: mg/L
Basis: NA

Analyte Name	Sample Result	Matrix Spike R1808357-009MS			Duplicate Matrix Spike R1808357-009DMS			% Rec Limits	RPD	RPD Limit
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Nitrogen, Total Kjeldahl (TKN)	0.72	3.09	2.50	94	2.94	2.50	89	75-125	5	20

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QA/QC Report

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

Service Request: R1808357
Date Collected: 08/29/18
Date Received: 08/30/18
Date Analyzed: 09/14/18
Date Extracted: 09/11/18

Duplicate Matrix Spike Summary
Phosphorus, Dissolved

Sample Name: 18LCB005 Diss
Lab Code: R1808357-018
Analysis Method: 365.1
Prep Method: Method

Units: mg/L
Basis: NA

Analyte Name	Sample Result	Result	Matrix Spike		Duplicate Matrix Spike		% Rec	Limits	RPD	RPD Limit
			Spike Amount	% Rec	Result	Spike Amount	% Rec			
Phosphorus, Dissolved	0.0050 U	0.0269	0.0250	108	0.0270	0.0250	108	75-125	<1	20

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QA/QC Report

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

Service Request: R1808357
Date Collected: 08/29/18
Date Received: 08/30/18
Date Analyzed: 09/14/18
Date Extracted: 09/11/18

Duplicate Matrix Spike Summary
Phosphorus, Total

Sample Name: 18LCB014
Lab Code: R1808357-021
Analysis Method: 365.1
Prep Method: Method

Units: mg/L
Basis: NA

Analyte Name	Sample Result	Result	Matrix Spike		Result	Duplicate Matrix Spike		% Rec Limits	RPD	RPD Limit
			Spike Amount	% Rec		Spike Amount	% Rec			
Phosphorus, Total	0.0211	0.0447	0.0250	94	0.0453	0.0250	97	75-125	1	20

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QA/QC Report

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

Service Request: R1808357
Date Collected: 08/29/18
Date Received: 08/30/18
Date Analyzed: 09/13/18

Duplicate Matrix Spike Summary
Nitrate+Nitrite as Nitrogen

Sample Name: 18LCB001
Lab Code: R1808357-023
Analysis Method: 353.2

Units: mg/L
Basis: NA

Analyte Name	Matrix Spike R1808357-023MS				Duplicate Matrix Spike R1808357-023DMS					
	Sample Result	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Nitrate+Nitrite as Nitrogen	0.0058	0.501	0.500	99	0.496	0.500	98	75-125	1	20

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QA/QC Report

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

Service Request: R1808357
Date Collected: 08/28/18
Date Received: 08/30/18
Date Analyzed: 09/10/18

Replicate Sample Summary
General Chemistry Parameters

Sample Name: 18LCB025
Lab Code: R1808357-001

Units: mg/L
Basis: NA

				Duplicate Sample R1808357- 001DUP			
Analyte Name	Analysis Method	MRL	Sample Result	Result	Average	RPD	RPD Limit
Alkalinity, Total as CaCO ₃	SM 2320 B-1997(2011)	2.0	14.4	14.4	14.4	<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: R1808357
Date Collected: 08/28/18
Date Received: 08/30/18
Date Analyzed: 09/10/18

Replicate Sample Summary
General Chemistry Parameters

Sample Name: 18LCB019
Lab Code: R1808357-005

Units: mg/L
Basis: NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample R1808357-005DUP Result	Average	RPD	RPD Limit
Alkalinity, Total as CaCO ₃	SM 2320 B-1997(2011)	2.0	15.6	15.2	15.4	3	20

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QA/QC Report

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

Service Request: R1808357
Date Collected: 08/29/18
Date Received: 08/30/18
Date Analyzed: 09/10/18

Replicate Sample Summary
General Chemistry Parameters

Sample Name: 18LCB005
Lab Code: R1808357-017

Units: mg/L
Basis: NA

				Duplicate Sample R1808357- 017DUP			
Analyte Name	Analysis Method	MRL	Sample Result	Result	Average	RPD	RPD Limit
Alkalinity, Total as CaCO ₃	SM 2320 B-1997(2011)	2.0	9.6	9.6	9.60	<1	20

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QA/QC Report

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

Service Request: R1808357
Date Collected: 08/29/18
Date Received: 08/30/18
Date Analyzed: 08/30/18

Replicate Sample Summary
General Chemistry Parameters

Sample Name: 18LCB005
Lab Code: R1808357-017

Units: ColorUnits
Basis: NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample R1808357-017DUP Result	Average	RPD	RPD Limit
Color, True	SM 2120 B-2001(2011)	1.0	29.0	29.0	29.0	<1	5

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QA/QC Report

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

Service Request: R1808357
Date Collected: 08/29/18
Date Received: 08/30/18
Date Analyzed: 09/01/18

Replicate Sample Summary
General Chemistry Parameters

Sample Name: 18LCB005
Lab Code: R1808357-017

Units: pH Units
Basis: NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample R1808357-017DUP Result	Average	RPD	RPD Limit
pH of Color Analysis	SM 2120 B-2001(2011)	-	7.27	7.27	7.27	<1	20

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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: R1808357
Date Collected: 08/29/18
Date Received: 08/30/18
Date Analyzed: 08/30/18

Replicate Sample Summary
General Chemistry Parameters

Sample Name: 18LCB011
Lab Code: R1808357-025

Units: cm-1
Basis: NA

				Duplicate Sample R1808357- 025DUP			
Analyte Name	Analysis Method	MRL	Sample Result	Result	Average	RPD	RPD Limit
UV254	SM 5910 B	-	0.112	0.112	0.112	<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: R1808357
Date Analyzed: 09/06/18 - 09/19/18

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R1808357-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Alkalinity, Total as CaCO ₃	SM 2320 B-1997(2011)	17.2	20.0	86	70-130
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.533	0.500	107	70-130
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	10.5	10.0	105	70-130
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	10.3	10.0	103	70-130
Nitrate+Nitrite as Nitrogen	353.2	0.520	0.500	104	70-130
Nitrogen, Total Kjeldahl (TKN)	351.2	2.38	2.50	95	70-130
Phosphorus, Dissolved	365.1	0.0229	0.0250	92	70-130
Phosphorus, Total	365.1	0.0245	0.0250	98	70-130
Sulfate	300.0	1.96	2.00	98	70-130

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dba ALS Environmental

QA/QC Report

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

Service Request: R1808357
Date Analyzed: 09/06/18 - 09/19/18

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R1808357-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	17.2	20.0	86	70-130
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.503	0.500	101	70-130
Nitrate+Nitrite as Nitrogen	353.2	0.520	0.500	104	70-130
Nitrogen, Total Kjeldahl (TKN)	351.2	2.26	2.50	90	70-130
Sulfate	300.0	1.97	2.00	98	70-130

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QA/QC Report

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

Service Request: R1808357
Date Analyzed: 09/11/18

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R1808357-LCS3

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.485	0.500	97	70-130