September 10, 2018 Service Request No:R1807761

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

Laboratory Results for: LCI

Dear Ms.Onion,

Enclosed are the results of the sample(s) submitted to our laboratory August 15, 2018
For your reference, these analyses have been assigned our service request number **R1807761.**

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

ALS Environmental

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

Service Request: R1807761
Date Received: 08/15/2018

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:

Eighteen water samples were received for analysis at ALS Environmental on 08/15/2018. 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.

Approved by _____ Date 09/10/2018

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 **Service Request:**R1807761
Project: LCI/LCI2018

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R1807761-001	18LHB239	8/13/2018	1530
R1807761-002	18LHB239 Diss	8/13/2018	1530
R1807761-003	18LHB203	8/14/2018	0810
R1807761-004	18LHB203 Diss	8/14/2018	0810
R1807761-005	18LHB204	8/14/2018	0815
R1807761-006	18LHB204 Diss	8/14/2018	0815
R1807761-007	18LHB227	8/14/2018	1120
R1807761-008	18LHB227 Diss	8/14/2018	1120
R1807761-009	18LHB298	8/14/2018	0815
R1807761-010	18LHB298 Diss	8/14/2018	0815
R1807761-011	18LHB225	8/14/2018	1440
R1807761-012	18LHB225 Diss	8/14/2018	1440
R1807761-013	18LHB243	8/14/2018	
R1807761-014	18LHB243 Diss	8/14/2018	
R1807761-015	18LHB244	8/14/2018	
R1807761-016	18LHB244 Diss	8/14/2018	
R1807761-017	18LHB241	8/14/2018	1255
R1807761-018	18LHB241 Diss	8/14/2018	1255

CHAIN OF CUSTODY

New York State Department of Environmental Conservation – Division of Water

Project Name: LCI	**Project Number:** LCI2018	**NYSDEC SDG:**
Sampler Collector: Sara Gonzalez	**Sampler Signature:** Sara Gonzalez	**Sampler Phone No.:** 845-216-9575
Project Manager: Alene Onion	**X Report to Project Manager** **Report to:**	☐ **Bill to Project Manager** **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:
WW = Wastewater
GW = Groundwater
AW = Ambient Water
SE = Sediment
SL = Sludge
T = Tissue
O = Other _____

Preservative Codes:
0 = Cool to < 6°C
1 = HCL
2 = HNO_3
3 = H_2SO_4
4 = NaOH
5 = Zn. Acetate
6 = MeOH
7 = NaHSO4
8 = Other_____

Analyses Ordered (list)

NYSDEC LCI Sample ID	Collection Date	Collection Time	Matrix Code	No. of Containers	3: TP, NH4, NOx, TKN	3: TP, NH4, NOx, TKN, NO3 (ANC)	3: Dissolved TOP4	2: Fe, Mn, As,	2: Ca, Mg, Na, K (ANC)	2: Fe, Mn, As, Ca, Mg, Na, K	0: Color	3: TOC	3: DOC (ANC)	0: Alkalinity	0: SO4 & UV-254	0: SO4, Cl (ANC)	0: SO4, Cl, UV-254	0: Chlorophyll a | Vol (ml)		Location Info	
18LMB239	08/13	15:30	AW	6	X		X				X	X		X				X	250	Winding Hills, epi	B/C
18LMB203	08/14	8:10	AW	7	X		X				X		X	X	X			X	500	Beacon R, epi	A
18LMB204	08/14	8:15	AW	6	X		X	X			X		X		X					Beacon R, hypo	A
18LMB227	08/14	11:20	AW	6	X		X				X	X		X				X	250	Wappinger Creek/Rodding	
18LMB298	08/14	8:15	AW	6	X		X	X			X		X		X					Beacon R dup	A
18LMB225	08/14	14:40	AW	7	X		X				X		X	X	X			X	250	Pocantico, epi	A

Special Analysis Instructions:

	Date:	Time:		Date:	Time:
Relinquished by Sampler: Sara Gonzalez	08/14	3:30 pm	**Received by:**	8/15/18	0930
Relinquished by:	**Date:**	**Time:**	**Received by:**	**Date:**	**Time:**
Relinquished by:	**Date:**	**Time:**	**Received by Laboratory:**	**Date:**	**Time:**

Laboratory Receipt Notes:

Sam
Pro
Sam

R1807761 5
New York State DEC
LCI

Cooler Receipt and Preservation Check Form

R1807761 New York State DEC LCI 5

Project/Client_____ Folder Number_____

Cooler received on 8/15/18 by: SC

COURIER: ALS (UPS) FEDEX VELOCITY CLIENT

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

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

8. Temperature Readings Date: 8/15/18 Time: 1005 ID: (IR#7) IR#9 From: ~~Temp Blank~~ Sample Bottle

Observed Temp (°C)	8.1						
Correction Factor (°C)	+1.0						
Corrected Temp (°C)	9.1						
Temp from:Type of bottle	cntnr						
Within 0-6°C?	Y (N)	Y 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: J 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: RM by SC on 8/15/18 at 1010
5035 samples placed in storage location: _____ by _____ on _____ at _____

Cooler Breakdown/Preservation Check**: Date :_____ Time:_____ by:_____

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	N/A
13.	Air Samples: Cassettes / Tubes Intact with MS? Canisters Pressurized		Tedlar® Bags Inflated	N/A

pH	Lot of test paper	Reagent	Preserved? Yes	Preserved? No	Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
≥12		NaOH								
≤2		HNO_3								
≤2		H_2SO_4								
<4		$NaHSO_4$								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522			If +, contact PM to add $Na_2S_2O_3$ (625, 608, CN), ascorbic (phenol).					
		$Na_2S_2O_3$								
		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: _____

Explain all Discrepancies/ Other Comments:

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

Labels secondary reviewed by:_____

PC Secondary Review: _____

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

CHAIN OF CUSTODY

Page 1 of 2

New York State Department of Environmental Conservation – Division of Water

Project Name: LCI	**Project Number:** LCI2018	**NYSDEC SDG:**
Sampler Collector: Jesse Kurtz	**Sampler Signature:**	**Sampler Phone No:** (914) 962-0033
Project Manager: Alene Onion	**X Report to Project Manager** **Report to:**	**☐ Bill to Project Manager** **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:
WW = Wastewater
GW = Groundwater
AW = Ambient Water
SE = Sediment
SL = Sludge
T = Tissue
O = Other _____

Preservative Codes:
0 = Cool to < 6°C
1 = HCL
2 = HNO_3
3 = H_2SO_4
4 = NaOH
5 = Zn. Acetate
6 = MeOH
7 = NaHSO4
8 = Other _____

Analyses Ordered (list)

NYSDEC LCI Sample ID	Collection Date	Collection Time	Matrix Code	No. of Containers	3: TP, NH4, NOx, TKN	3 ANC: TP, NH4, NOx, TKN, NO3	3: Dissolved TOP4	2: Fe, Mn, As,	2 ANC: Ca, Mg, Na, K	2: Fe, Mn, As, Ca, Mg, Na, K	0: Color	3: TOC	0 ANC: DOC	0: Alkalinity	0: SO4 & UV-254	0 ANC: SO4, Cl	0: SO4, Cl, UV-254	0: Chlorophyll a | Vol (ml)		Location Info
18L-HB243	8-14-18		AW	7	X		X				X		X	X	X			X	520	Lindsley Epi
18L-HB244	8-14-18		AW	6	X		X	X			X		X		X					Lindsley Hypo
18LHB241	8/14	1255			X															
							X				X	X		X				X	250	

Special Analysis Instructions: 18LHB241 added as per Alene Onion via email 8/17/18

	Date	Time		Date	Time
Relinquished by Sampler:	8-14-18	1:50	Received by:	8/14/18	1:50pm
Relinquished by:	8/14/18	1600	Received by:	8/15/18	0915
Relinquished by:	Date:	Time:	Received by Laboratory:	Date:	Time:

Laboratory Receipt Notes:

Sample
Properl
Sample

R1807761 5
New York State DEC
LCI

Cooler Receipt and Preservation Check Form

R1807761 5
New York State DEC
LCI

Project/Client _____ Folder Number _____

Cooler received on 8/15/18 by: SC

COURIER: ALS UPS (FEDEX) VELOCITY CLIENT

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

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

8. Temperature Readings Date: 8/15/18 Time: 0920 ID: ~~IR#7~~ IR#9 From: Temp Blank ~~Sample Bottle~~

Observed Temp (°C)	5.1						
Correction Factor (°C)	-0						
Corrected Temp (°C)	5.1						
Temp from: Type of bottle	250ml Plastic						
Within 0-6°C?	(Y) N	Y 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: RM by SC on 8/15/18 at 0920
5035 samples placed in storage location: _____ by _____ on _____ at _____

Cooler Breakdown/Preservation Check**: Date: 8/16/18 Time: 0920 by: _____

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 N/A
13.	Air Samples: Cassettes / Tubes Intact with MS? Canisters Pressurized		Tedlar® Bags Inflated N/A

pH	Lot of test paper	Reagent	Preserved? Yes	Preserved? No	Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
≥12		NaOH								
≤2	204518	HNO_3	✓		B2805E	7/19				
≤2		H_2SO_4	✓		190642, 21HB0071	↓				
<4		$NaHSO_4$								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522			If +, contact PM to add $Na_2S_2O_3$ (625, 608, CN), ascorbic (phenol).					
		$Na_2S_2O_3$								
		ZnAcetate	-	-			**VOAs and 1664 Not to be tested before analysis. Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).			
		HCl	**	**						

Bottle lot numbers: 8-022-008, 070218-2AA0

Explain all Discrepancies/ Other Comments:

2) No collection time

Redd location not on any COC
18LHB241 8/14/18 @ 1255
Lake Cassie (ep.)
(Nutrients, diss Troy, TOC, color, alk) + CHL A

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

Labels secondary reviewed by: _____
PC Secondary Review: MS 8/17/18

*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.
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/Arclors).
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
E	Organics- Concentration has exceeded the calibration range for that specific analysis.
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.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the ñNotesò column of the Form I, this qualifier denotes analysis was performed out of Holding Time.
H	Analysis was performed out of hold time for tests that have an ñimmediateò hold time criteria.
#	Spike was diluted out.
+	Correlation coefficient for MSA is <0.995.
N	Inorganics- Matrix spike recovery was outside laboratory limits.
N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
S	Concentration has been determined using Method of Standard Additions (MSA).
W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
P	Concentration >40% difference between the two GC columns.
C	Confirmed by GC/MS
Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (Ó100% Difference between two GC columns).
X	See Case Narrative for discussion.
MRL LOQ	Method Reporting Limit. Also known as: 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 Certifications[1]

Connecticut ID # PH0556	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Delaware Approved	New Jersey ID # NY004	
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 laboratoryôs 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 **Service Request:** R1807761
Project: LCI/LCI2018

Non-Certified Analytes

Certifying Agency: New York Department of Health

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

Client: New York State DEC **Service Request:** R1807761
Project: LCI/LCI2018

Sample Name: 18LHB239 **Date Collected:** 08/13/18
Lab Code: R1807761-001 **Date Received:** 08/15/18
Sample Matrix: Water

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

Sample Name: 18LHB239 Diss **Date Collected:** 08/13/18
Lab Code: R1807761-002 **Date Received:** 08/15/18
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
365.1	KWONG	GNITAJOUPPI

Sample Name: 18LHB203 **Date Collected:** 08/14/18
Lab Code: R1807761-003 **Date Received:** 08/15/18
Sample Matrix: Water

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

Client: New York State DEC **Service Request:** R1807761
Project: LCI/LCI2018

Sample Name: 18LHB203 Diss **Date Collected:** 08/14/18
Lab Code: R1807761-004 **Date Received:** 08/15/18
Sample Matrix: Water

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

Sample Name: 18LHB204 **Date Collected:** 08/14/18
Lab Code: R1807761-005 **Date Received:** 08/15/18
Sample Matrix: Water

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

Sample Name: 18LHB204 Diss **Date Collected:** 08/14/18
Lab Code: R1807761-006 **Date Received:** 08/15/18
Sample Matrix: Water

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

Sample Name: 18LHB227 **Date Collected:** 08/14/18
Lab Code: R1807761-007 **Date Received:** 08/15/18
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
351.2	NSMITH	CWOODS
353.2		GNITAJOUPPI

Client: New York State DEC **Service Request:** R1807761
Project: LCI/LCI2018

Sample Name: 18LHB227 **Date Collected:** 08/14/18
Lab Code: R1807761-007 **Date Received:** 08/15/18
Sample Matrix: Water

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

Sample Name: 18LHB227 Diss **Date Collected:** 08/14/18
Lab Code: R1807761-008 **Date Received:** 08/15/18
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
365.1	KWONG	GNITAJOUPPI

Sample Name: 18LHB298 **Date Collected:** 08/14/18
Lab Code: R1807761-009 **Date Received:** 08/15/18
Sample Matrix: Water

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

Client: New York State DEC **Service Request:** R1807761
Project: LCI/LCI2018

Sample Name: 18LHB298 Diss **Date Collected:** 08/14/18
Lab Code: R1807761-010 **Date Received:** 08/15/18
Sample Matrix: Water

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

Sample Name: 18LHB225 **Date Collected:** 08/14/18
Lab Code: R1807761-011 **Date Received:** 08/15/18
Sample Matrix: Water

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

Sample Name: 18LHB225 Diss **Date Collected:** 08/14/18
Lab Code: R1807761-012 **Date Received:** 08/15/18
Sample Matrix: Water

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

Client: New York State DEC **Service Request:** R1807761
Project: LCI/LCI2018

Sample Name: 18LHB243 **Date Collected:** 08/14/18
Lab Code: R1807761-013 **Date Received:** 08/15/18
Sample Matrix: Water

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

Sample Name: 18LHB243 Diss **Date Collected:** 08/14/18
Lab Code: R1807761-014 **Date Received:** 08/15/18
Sample Matrix: Water

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

Sample Name: 18LHB244 **Date Collected:** 08/14/18
Lab Code: R1807761-015 **Date Received:** 08/15/18
Sample Matrix: Water

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

Client: New York State DEC **Service Request:** R1807761
Project: LCI/LCI2018

Sample Name: 18LHB244 Diss **Date Collected:** 08/14/18
Lab Code: R1807761-016 **Date Received:** 08/15/18
Sample Matrix: Water

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

Sample Name: 18LHB241 **Date Collected:** 08/14/18
Lab Code: R1807761-017 **Date Received:** 08/15/18
Sample Matrix: Water

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

Sample Name: 18LHB241 Diss **Date Collected:** 08/14/18
Lab Code: R1807761-018 **Date Received:** 08/15/18
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
365.1	KWONG	GNITAJOUPPI

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
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
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www.alsglobal.com

Metals

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
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www.alsglobal.com

METALS

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INORGANIC ANALYSIS DATA PACKAGE

Client:	New York State DEC	**Service Request:**	LCI0813
Project No.:	R1807761	**Date Collected:**	8/14/2018
Project Name:		**Date Received:**	8/15/2018
Matrix:	WATER	**Units:**	ug/L
		Basis:	

Sample Name: **18LHB204** **Lab Code:** **R1807761-005**

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**	**1110**		
Manganese	**200.7**	**10.0**	**1.7**	**1.0**	**376**		

% Solids: **0.0**

Comments:

METALS

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INORGANIC ANALYSIS DATA PACKAGE

Client:	New York State DEC	**Service Request:**	LCI0813
Project No.:	R1807761	**Date Collected:**	8/14/2018
Project Name:		**Date Received:**	8/15/2018
Matrix:	WATER	**Units:**	ug/L
		Basis:	

Sample Name: **18LHB298** **Lab Code:** **R1807761-009**

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**	**810**		
Manganese	**200.7**	**10.0**	**1.7**	**1.0**	**313**		

% Solids: **0.0**

Comments:

METALS

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INORGANIC ANALYSIS DATA PACKAGE

Client:	New York State DEC	**Service Request:**	LCI0813
Project No.:	R1807761	**Date Collected:**	8/14/2018
Project Name:		**Date Received:**	8/15/2018
Matrix:	WATER	**Units:**	ug/L
		Basis:	

Sample Name: **18LHB244** **Lab Code:** **R1807761-015**

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**	**3240**		
Manganese	**200.7**	**10.0**	**1.7**	**1.0**	**6510**		

% Solids: **0.0**

Comments:

General Chemistry

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

Analytical Report

Client:	New York State DEC	**Service Request:**	R1807761
Project:	LCI/LCI2018	**Date Collected:**	08/13/18 15:30
Sample Matrix:	Water	**Date Received:**	08/15/18 09:30
Sample Name:	18LHB239	**Basis:**	NA
Lab Code:	R1807761-001		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**46.8**	mg/L	2.0	1	08/27/18 16:36	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	**0.0332**	mg/L	0.0050	1	08/30/18 09:21	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	**8.0**	mg/L	1.0	1	08/19/18 19:39	NA	
Chlorophyll A	SM20 10200 H	**85.8**	ug/L	3.2	20	08/29/18 11:45	NA	
Color, True	SM 2120 B-2001(2011)	**65.0**	ColorUnits	5.0	5	08/15/18 11:30	NA	
Nitrate+Nitrite as Nitrogen	353.2	**0.0061**	mg/L	0.0020	1	08/29/18 19:25	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	**1.52**	mg/L	0.10	1	08/31/18 13:32	08/30/18	
pH of Color Analysis	SM 2120 B-2001(2011)	**7.71**	pH Units	-	5	08/21/18 15:00	NA	*
Phosphorus, Total	365.1	**0.104**	mg/L	0.010	2	08/29/18 13:59	08/28/18	

Analytical Report

Client:	New York State DEC	**Service Request:**	R1807761
Project:	LCI/LCI2018	**Date Collected:**	08/13/18 15:30
Sample Matrix:	Water	**Date Received:**	08/15/18 09:30
Sample Name:	18LHB239 Diss	**Basis:**	NA
Lab Code:	R1807761-002		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Dissolved	365.1	**0.0103**	mg/L	0.0050	1	08/27/18 16:00	08/23/18	

Client:	New York State DEC	**Service Request:**	R1807761
Project:	LCI/LCI2018	**Date Collected:**	08/14/18 08:10
Sample Matrix:	Water	**Date Received:**	08/15/18 09:30
Sample Name:	18LHB203	**Basis:**	NA
Lab Code:	R1807761-003		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**16.4**	mg/L	2.0	1	08/27/18 16:40	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	**0.0092**	mg/L	0.0050	1	08/30/18 09:37	NA	
Chlorophyll A	SM20 10200 H	**9.70**	ug/L	0.40	5	08/29/18 11:45	NA	
Color, True	SM 2120 B-2001(2011)	**23.0**	ColorUnits	1.0	1	08/15/18 11:30	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0020 U	mg/L	0.0020	1	08/29/18 19:29	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	**0.36**	mg/L	0.10	1	08/31/18 13:32	08/30/18	
pH of Color Analysis	SM 2120 B-2001(2011)	**7.46**	pH Units	-	1	08/21/18 15:00	NA	*
Phosphorus, Total	365.1	**0.0093**	mg/L	0.0050	1	08/29/18 12:42	08/28/18	
Sulfate	300.0	**6.1**	mg/L	2.0	10	08/29/18 22:04	NA	
UV254	SM 5910 B	**0.112**	cm-1	-	1	08/15/18 09:30	NA	

Analytical Report

Client:	New York State DEC	**Service Request:**	R1807761
Project:	LCI/LCI2018	**Date Collected:**	08/14/18 08:10
Sample Matrix:	Water	**Date Received:**	08/15/18 09:30
Sample Name:	18LHB203 Diss	**Basis:**	NA
Lab Code:	R1807761-004		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	**4.2**	mg/L	1.0	1	08/19/18 10:16	NA	
Phosphorus, Dissolved	365.1	0.0050 U	mg/L	0.0050	1	08/27/18 16:02	08/23/18	

Analytical Report

Client:	New York State DEC	**Service Request:**	R1807761
Project:	LCI/LCI2018	**Date Collected:**	08/14/18 08:15
Sample Matrix:	Water	**Date Received:**	08/15/18 09:30
Sample Name:	18LHB204	**Basis:**	NA
Lab Code:	R1807761-005		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	**0.0883**	mg/L	0.0050	1	08/30/18 09:53	NA	
Color, True	SM 2120 B-2001(2011)	**36.0**	ColorUnits	1.0	1	08/16/18 15:30	NA	*
Nitrate+Nitrite as Nitrogen	353.2	**0.0290**	mg/L	0.0020	1	08/29/18 19:30	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	**0.29**	mg/L	0.10	1	08/31/18 13:34	08/30/18	
pH of Color Analysis	SM 2120 B-2001(2011)	**6.90**	pH Units	-	1	08/21/18 15:00	NA	*
Phosphorus, Total	365.1	**0.0208**	mg/L	0.0050	1	08/29/18 12:45	08/28/18	
Sulfate	300.0	**6.4**	mg/L	2.0	10	08/29/18 22:19	NA	
UV254	SM 5910 B	**0.110**	cm-1	-	1	08/15/18 09:30	NA	

Analytical Report

Client:	New York State DEC	**Service Request:**	R1807761
Project:	LCI/LCI2018	**Date Collected:**	08/14/18 08:15
Sample Matrix:	Water	**Date Received:**	08/15/18 09:30
Sample Name:	18LHB204 Diss	**Basis:**	NA
Lab Code:	R1807761-006		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	**3.1**	mg/L	1.0	1	08/19/18 10:36	NA	
Phosphorus, Dissolved	365.1	**0.0080**	mg/L	0.0050	1	08/27/18 16:03	08/23/18	

Analytical Report

Client:	New York State DEC	**Service Request:**	R1807761
Project:	LCI/LCI2018	**Date Collected:**	08/14/18 11:20
Sample Matrix:	Water	**Date Received:**	08/15/18 09:30
Sample Name:	18LHB227	**Basis:**	NA
Lab Code:	R1807761-007		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**11.6**	mg/L	2.0	1	08/27/18 16:44	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	**0.0417**	mg/L	0.0050	1	08/30/18 10:09	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	**7.4**	mg/L	1.0	1	08/19/18 20:42	NA	
Chlorophyll A	SM20 10200 H	**41.2**	ug/L	1.6	10	08/29/18 11:45	NA	
Color, True	SM 2120 B-2001(2011)	**95.0**	ColorUnits	5.0	5	08/15/18 11:30	NA	
Nitrate+Nitrite as Nitrogen	353.2	**0.0115**	mg/L	0.0020	1	08/29/18 19:31	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	**0.57**	mg/L	0.10	1	08/31/18 13:35	08/30/18	
pH of Color Analysis	SM 2120 B-2001(2011)	**7.14**	pH Units	-	5	08/21/18 15:00	NA	*
Phosphorus, Total	365.1	**0.0210**	mg/L	0.0050	1	08/29/18 12:46	08/28/18	

Analytical Report

Client:	New York State DEC	**Service Request:**	R1807761
Project:	LCI/LCI2018	**Date Collected:**	08/14/18 11:20
Sample Matrix:	Water	**Date Received:**	08/15/18 09:30
Sample Name:	18LHB227 Diss	**Basis:**	NA
Lab Code:	R1807761-008		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Dissolved	365.1	**0.0057**	mg/L	0.0050	1	08/27/18 16:04	08/23/18	

Analytical Report

Client:	New York State DEC	**Service Request:**	R1807761
Project:	LCI/LCI2018	**Date Collected:**	08/14/18 08:15
Sample Matrix:	Water	**Date Received:**	08/15/18 09:30
Sample Name:	18LHB298	**Basis:**	NA
Lab Code:	R1807761-009		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	**0.0635**	mg/L	0.0050	1	08/30/18 10:25	NA	
Color, True	SM 2120 B-2001(2011)	**37.0**	ColorUnits	1.0	1	08/15/18 11:30	NA	
Nitrate+Nitrite as Nitrogen	353.2	**0.0287**	mg/L	0.0020	1	08/29/18 19:33	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	**0.36**	mg/L	0.10	1	08/31/18 13:36	08/30/18	
pH of Color Analysis	SM 2120 B-2001(2011)	**7.11**	pH Units	-	1	08/21/18 15:00	NA	*
Phosphorus, Total	365.1	**0.0156**	mg/L	0.0050	1	08/29/18 12:47	08/28/18	
Sulfate	300.0	**6.6**	mg/L	2.0	10	08/29/18 22:25	NA	
UV254	SM 5910 B	**0.103**	cm-1	-	1	08/15/18 09:30	NA	

Analytical Report

Client:	New York State DEC	**Service Request:**	R1807761
Project:	LCI/LCI2018	**Date Collected:**	08/14/18 08:15
Sample Matrix:	Water	**Date Received:**	08/15/18 09:30
Sample Name:	18LHB298 Diss	**Basis:**	NA
Lab Code:	R1807761-010		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	**3.2**	mg/L	1.0	1	08/19/18 10:57	NA	
Phosphorus, Dissolved	365.1	**0.0090**	mg/L	0.0050	1	08/27/18 16:05	08/23/18	

Analytical Report

Client:	New York State DEC	**Service Request:**	R1807761
Project:	LCI/LCI2018	**Date Collected:**	08/14/18 14:40
Sample Matrix:	Water	**Date Received:**	08/15/18 09:30
Sample Name:	18LHB225	**Basis:**	NA
Lab Code:	R1807761-011		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**70.4**	mg/L	2.0	1	08/27/18 16:49	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	**0.0650**	mg/L	0.0050	1	08/30/18 11:13	NA	
Chlorophyll A	SM20 10200 H	**4.61**	ug/L	0.16	1	08/29/18 11:45	NA	
Color, True	SM 2120 B-2001(2011)	**75.0**	ColorUnits	5.0	5	08/15/18 11:30	NA	
Nitrate+Nitrite as Nitrogen	353.2	**0.457**	mg/L	0.0020	1	08/29/18 19:34	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	**0.59**	mg/L	0.10	1	08/31/18 13:37	08/30/18	
pH of Color Analysis	SM 2120 B-2001(2011)	**7.92**	pH Units	-	5	08/21/18 15:00	NA	*
Phosphorus, Total	365.1	**0.0536**	mg/L	0.0050	1	08/29/18 12:48	08/28/18	
Sulfate	300.0	**14.1**	mg/L	2.0	10	08/29/18 22:30	NA	
UV254	SM 5910 B	**0.289**	cm-1	-	1	08/15/18 09:30	NA	

Analytical Report

Client:	New York State DEC	**Service Request:**	R1807761
Project:	LCI/LCI2018	**Date Collected:**	08/14/18 14:40
Sample Matrix:	Water	**Date Received:**	08/15/18 09:30
Sample Name:	18LHB225 Diss	**Basis:**	NA
Lab Code:	R1807761-012		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	**7.8**	mg/L	1.0	1	08/19/18 11:18	NA	
Phosphorus, Dissolved	365.1	**0.0376**	mg/L	0.0050	1	08/27/18 16:06	08/23/18	

Client:	New York State DEC	**Service Request:**	R1807761
Project:	LCI/LCI2018	**Date Collected:**	08/14/18
Sample Matrix:	Water	**Date Received:**	08/15/18 09:30
Sample Name:	18LHB243	**Basis:**	NA
Lab Code:	R1807761-013		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**60.0**	mg/L	2.0	1	08/27/18 17:02	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	**0.0099**	mg/L	0.0050	1	08/30/18 11:29	NA	
Chlorophyll A	SM20 10200 H	**25.0**	ug/L	0.80	10	08/29/18 11:45	NA	
Color, True	SM 2120 B-2001(2011)	**32.0**	ColorUnits	1.0	1	08/15/18 11:30	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0020 U	mg/L	0.0020	1	08/29/18 19:36	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	**0.45**	mg/L	0.10	1	08/31/18 13:37	08/30/18	
pH of Color Analysis	SM 2120 B-2001(2011)	**7.89**	pH Units	-	1	08/21/18 15:00	NA	
Phosphorus, Total	365.1	**0.0171**	mg/L	0.0050	1	08/29/18 12:49	08/28/18	
Sulfate	300.0	**5.2**	mg/L	2.0	10	08/29/18 22:35	NA	
UV254	SM 5910 B	**0.183**	cm-1	-	1	08/15/18 09:30	NA	

Analytical Report

Client:	New York State DEC	**Service Request:**	R1807761
Project:	LCI/LCI2018	**Date Collected:**	08/14/18
Sample Matrix:	Water	**Date Received:**	08/15/18 09:30
Sample Name:	18LHB243 Diss	**Basis:**	NA
Lab Code:	R1807761-014		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	**6.6**	mg/L	1.0	1	08/19/18 11:39	NA	
Phosphorus, Dissolved	365.1	**0.0056**	mg/L	0.0050	1	08/27/18 16:09	08/23/18	

Client:	New York State DEC	**Service Request:**	R1807761
Project:	LCI/LCI2018	**Date Collected:**	08/14/18
Sample Matrix:	Water	**Date Received:**	08/15/18 09:30
Sample Name:	18LHB244	**Basis:**	NA
Lab Code:	R1807761-015		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	**0.151**	mg/L	0.0050	1	08/30/18 11:45	NA	
Color, True	SM 2120 B-2001(2011)	**130**	ColorUnits	10	10	08/15/18 11:30	NA	
Nitrate+Nitrite as Nitrogen	353.2	**0.0166**	mg/L	0.0020	1	08/29/18 19:37	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	**0.78**	mg/L	0.10	1	08/31/18 13:38	08/30/18	
pH of Color Analysis	SM 2120 B-2001(2011)	**7.99**	pH Units	-	10	08/21/18 15:00	NA	
Phosphorus, Total	365.1	**0.099**	mg/L	0.025	5	08/29/18 12:51	08/28/18	
Sulfate	300.0	**2.6**	mg/L	2.0	10	08/29/18 23:11	NA	
UV254	SM 5910 B	**0.401**	cm-1	-	1	08/15/18 09:30	NA	

Analytical Report

Client:	New York State DEC	**Service Request:**	R1807761
Project:	LCI/LCI2018	**Date Collected:**	08/14/18
Sample Matrix:	Water	**Date Received:**	08/15/18 09:30
Sample Name:	18LHB244 Diss	**Basis:**	NA
Lab Code:	R1807761-016		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	**6.7**	mg/L	1.0	1	08/19/18 12:00	NA	
Phosphorus, Dissolved	365.1	**0.0559**	mg/L	0.0050	1	08/27/18 16:11	08/23/18	

Client:	New York State DEC	**Service Request:**	R1807761
Project:	LCI/LCI2018	**Date Collected:**	08/14/18 12:55
Sample Matrix:	Water	**Date Received:**	08/15/18 09:30
Sample Name:	18LHB241	**Basis:**	NA
Lab Code:	R1807761-017		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	**86.8**	mg/L	2.0	1	08/27/18 18:31	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	**0.0853**	mg/L	0.0050	1	08/30/18 12:02	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	**10.0**	mg/L	1.0	1	08/19/18 22:26	NA	
Chlorophyll A	SM20 10200 H	**71.1**	ug/L	3.2	20	08/29/18 11:45	NA	
Color, True	SM 2120 B-2001(2011)	**36.0**	ColorUnits	1.0	1	08/15/18 11:30	NA	
Nitrate+Nitrite as Nitrogen	353.2	**0.0120**	mg/L	0.0020	1	08/30/18 17:15	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	**1.75**	mg/L	0.10	1	08/31/18 13:39	08/30/18	
pH of Color Analysis	SM 2120 B-2001(2011)	**7.80**	pH Units	-	1	08/21/18 15:00	NA	*
Phosphorus, Total	365.1	**0.0700**	mg/L	0.0050	1	08/29/18 12:52	08/28/18	

Analytical Report

Client:	New York State DEC	**Service Request:**	R1807761
Project:	LCI/LCI2018	**Date Collected:**	08/14/18 12:55
Sample Matrix:	Water	**Date Received:**	08/15/18 09:30
Sample Name:	18LHB241 Diss	**Basis:**	NA
Lab Code:	R1807761-018		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Dissolved	365.1	**0.0097**	mg/L	0.0050	1	08/27/18 16:12	08/23/18	

QC Summary Forms

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Metals

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METALS

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BLANKS

Contract: R1807761

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: LCI0813

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank ug/L	C	Continuing Calibration Blank ug/L 1	C	2	C	3	C	Preparation Blank	C	M
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: R1807761

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: LCI0813

Preparation Blank Matrix (soil/water): WATER

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

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

Comments:

METALS

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LABORATORY CONTROL SAMPLE

Contract: R1807761

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: LCI0813

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	21.0	105					
Iron	1000	997	100					
Manganese	500	523	105					

Comments: _____

General Chemistry

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Analytical Report

Client:	New York State DEC	**Service Request:**	R1807761
Project:	LCI/LCI2018	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R1807761-MB1		

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	08/27/18 16:01	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0050	U	mg/L	0.0050	1	08/30/18 07:28	NA	
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	1.0	U	mg/L	1.0	1	08/19/18 04:21	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	1.0	U	mg/L	1.0	1	08/19/18 16:52	NA	
Chlorophyll A	SM20 10200 H	0.40	U	ug/L	0.40	1	08/29/18 11:45	NA	
Color, True	SM 2120 B-2001(2011)	**1.0**		ColorUnits	1.0	1	08/15/18 11:30	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0020	U	mg/L	0.0020	1	08/29/18 19:07	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.10	U	mg/L	0.10	1	08/31/18 13:26	08/30/18	
Phosphorus, Dissolved	365.1	0.0050	U	mg/L	0.0050	1	08/27/18 15:50	08/23/18	
Phosphorus, Total	365.1	0.0050	U	mg/L	0.0050	1	08/29/18 12:01	08/28/18	
Sulfate	300.0	0.20	U	mg/L	0.20	1	08/29/18 20:41	NA	
UV254	SM 5910 B	**0.00200**		cm-1	-	1	08/15/18 09:30	NA	

Client:	New York State DEC	**Service Request:**	R1807761
Project:	LCI/LCI2018	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R1807761-MB2		

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	08/27/18 17:50	NA	
Color, True	SM 2120 B-2001(2011)	**1.0**		ColorUnits	1.0	1	08/16/18 15:30	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0020	U	mg/L	0.0020	1	08/30/18 16:50	NA	
Phosphorus, Total	365.1	0.0050	U	mg/L	0.0050	1	08/29/18 12:36	08/28/18	
Sulfate	300.0	0.20	U	mg/L	0.20	1	08/29/18 22:45	NA	

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

Service Request:R1807761
Date Collected:08/13/18
Date Received:08/15/18
Date Analyzed:08/19/18 - 08/29/18

Duplicate Matrix Spike Summary
General Chemistry Parameters

Sample Name: 18LHB239
Lab Code: R1807761-001

Units:mg/L
Basis:NA

			Matrix Spike				Duplicate Matrix Spike				
			R1807761-001MS				R1807761-001DMS				
Analyte Name	**Method**	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Nitrate+Nitrite as Nitrogen	353.2	0.0061	0.469	0.500	93	0.469	0.500	93	75-125	<1	20
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	8.0	19.7	10.0	117	20.3	10.0	123	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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QA/QC Report

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

Service Request:R1807761
Date Collected:08/14/18
Date Received:08/15/18
Date Analyzed:8/29/18

Duplicate Matrix Spike Summary
General Chemistry Parameters

Sample Name: 18LHB203
Lab Code: R1807761-003

Units:mg/L
Basis:NA

			Matrix Spike R1807761-003MS			Duplicate Matrix Spike R1807761-003DMS					
Analyte Name	**Method**	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Sulfate	300.0	6.1	24.3	20.0	91	24.7	20.0	93	75-125	1	20
Phosphorus, Total	365.1	0.0093	0.0307	0.0250	85	0.0309	0.0250	87	75-125	<1	20

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QA/QC Report

Client:	New York State DEC	**Service Request:**	R1807761
Project:	LCI/LCI2018	**Date Collected:**	08/14/18
Sample Matrix:	Water	**Date Received:**	08/15/18
		Date Analyzed:	08/19/18

Duplicate Matrix Spike Summary
Carbon, Total Organic (TOC)

Sample Name:	18LHB227	**Units:**	mg/L
Lab Code:	R1807761-007	**Basis:**	NA
Analysis Method:	SM 5310 C-2000(2011)		

		Matrix Spike R1807761-007MS			**Duplicate Matrix Spike** R1807761-007DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Carbon, Total Organic (TOC)	7.4	18.1	10.0	107	18.4	10.0	110	75-125	1	20

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

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

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

Service Request:R1807761
Date Collected:08/14/18
Date Received:08/15/18
Date Analyzed:08/19/18 - 08/31/18

Duplicate Matrix Spike Summary
General Chemistry Parameters

Sample Name: 18LHB241
Lab Code: R1807761-017

Units:mg/L
Basis:NA

			Matrix Spike				Duplicate Matrix Spike				
			R1807761-017MS				R1807761-017DMS				
Analyte Name	**Method**	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Nitrate+Nitrite as Nitrogen	353.2	0.0120	0.457	0.500	89	0.473	0.500	92	75-125	3	20
Nitrogen, Total Kjeldahl (TKN)	351.2	1.75	4.02	2.50	91	3.98	2.50	89	75-125	1	20
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	10.0	21.9	10.0	119	21.7	10.0	117	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.

Client:	New York State DEC	**Service Request:**	R1807761
Project:	LCI/LCI2018	**Date Collected:**	08/14/18
Sample Matrix:	Water	**Date Received:**	08/15/18
		Date Analyzed:	08/27/18
		Date Extracted:	08/23/18

Duplicate Matrix Spike Summary
Phosphorus, Dissolved

Sample Name:	18LHB241 Diss	**Units:**	mg/L
Lab Code:	R1807761-018	**Basis:**	NA
Analysis Method:	365.1		
Prep Method:	Method		

		Matrix Spike			Duplicate Matrix Spike					
		R1807761-018MS			R1807761-018DMS					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Phosphorus, Dissolved	0.0097	0.0317	0.0250	88	0.0317	0.0250	88	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.

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QA/QC Report

Client:	New York State DEC	**Service Request:**	R1807761
Project	LCI/LCI2018	**Date Collected:**	08/14/18
Sample Matrix:	Water	**Date Received:**	08/15/18
		Date Analyzed:	08/15/18

Replicate Sample Summary

General Chemistry Parameters

Sample Name:	18LHB204	**Units:**	cm-1
Lab Code:	R1807761-005	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample R1807761-005DUP Result	Average	RPD	RPD Limit
UV254	SM 5910 B	-	0.110	0.110	0.110	<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.

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QA/QC Report

Client:	New York State DEC	**Service Request:**	R1807761
Project	LCI/LCI2018	**Date Collected:**	08/14/18
Sample Matrix:	Water	**Date Received:**	08/15/18
		Date Analyzed:	08/15/18

Replicate Sample Summary
General Chemistry Parameters

Sample Name:	18LHB225	**Units:**	cm-1
Lab Code:	R1807761-011	**Basis:**	NA

Analyte Name	Analysis Method	MRL	Sample Result	Duplicate Sample R1807761-011DUP Result	Average	RPD	RPD Limit
UV254	SM 5910 B	-	0.289	0.282	0.285	2	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.

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

Service Request: R1807761
Date Analyzed: 08/19/18 - 08/31/18

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R1807761-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	19.2	20.0	96	70-130
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.505	0.500	101	70-130
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	10.2	10.0	102	70-130
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	10.6	10.0	106	70-130
Nitrate+Nitrite as Nitrogen	353.2	0.519	0.500	104	70-130
Nitrogen, Total Kjeldahl (TKN)	351.2	2.34	2.50	94	70-130
Phosphorus, Dissolved	365.1	0.0233	0.0250	93	70-130
Phosphorus, Total	365.1	0.0224	0.0250	90	70-130
Sulfate	300.0	1.93	2.00	96	70-130

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

Service Request: R1807761
Date Analyzed: 08/27/18 - 08/30/18

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R1807761-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	19.2	20.0	96	70-130
Nitrate+Nitrite as Nitrogen	353.2	0.519	0.500	104	70-130
Phosphorus, Total	365.1	0.0233	0.0250	93	70-130
Sulfate	300.0	1.91	2.00	96	70-130