



October 02, 2018

Service Request No:R1808869

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

Laboratory Results for: LCI 2018

Dear Ms.Onion,

Enclosed are the results of the sample(s) submitted to our laboratory September 13, 2018
For your reference, these analyses have been assigned our service request number **R1808869**.

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: R1808869
Date Received: 09/13/2018

CASE NARRATIVE

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

Sample Receipt:

Twenty six water samples were received for analysis at ALS Environmental on 09/13/2018. Any discrepancies noted upon initial sample inspection are noted on the cooler receipt and preservation form included in this data package. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at 6°C upon receipt at the lab except for aqueous samples designated for metals analyses, which are stored at room temperature.

Metals:

No significant anomalies were noted with this analysis.

General Chemistry:

No significant anomalies were noted with this analysis.

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

Approved by _____

Date 10/02/2018



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

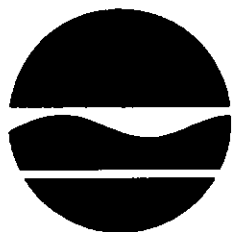
Service Request:R1808869

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R1808869-001	18LHB301	9/12/2018	0850
R1808869-002	18LHB301 Diss	9/12/2018	0850
R1808869-003	18LHB329	9/12/2018	1319
R1808869-004	18LHB329 Diss	9/12/2018	1319
R1808869-005	18LHB330	9/12/2018	1324
R1808869-006	18LHB330 Diss	9/12/2018	1324
R1808869-007	18LHB333	9/12/2018	1055
R1808869-008	18LHB333 Diss	9/12/2018	1055
R1808869-009	18LHB334	9/12/2018	1059
R1808869-010	18LHB334 Diss	9/12/2018	1059
R1808869-011	18LHB339	9/11/2018	1600
R1808869-012	18LHB339 Diss	9/11/2018	1600
R1808869-013	18LHB303	9/12/2018	0935
R1808869-014	18LHB303 Diss	9/12/2018	0935
R1808869-015	18LHB304	9/12/2018	0940
R1808869-016	18LHB304 Diss	9/12/2018	0940
R1808869-017	18LHB399	9/12/2018	0935
R1808869-018	18LHB399 Diss	9/12/2018	0935
R1808869-019	18LHB327	9/12/2018	1025
R1808869-020	18LHB327 Diss	9/12/2018	1025
R1808869-021	18LHB341	9/12/2018	1150
R1808869-022	18LHB341 Diss	9/12/2018	1150
R1808869-023	18LHB325	9/12/2018	1341
R1808869-024	18LHB325 Diss	9/12/2018	1341
R1808869-025	18LHB398	9/12/2018	1221
R1808869-026	18LHB398 Diss	9/12/2018	1221

CHAIN OF CUSTODY

Page ____ of ____



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

☐ **Bill to Project Manager**

Report to:

Bill to: Jason Fagel

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

Address:

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

Phone: (518) 402-8166

Phone:

Phone: 518-402-8156

Email: alene.onion@dec.ny.gov

Email:

Email: Jason.fagel@dec.ny.gov

Matrix Codes:

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

Analyses Ordered (list)

Preservative Codes:

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

**NYSDEC
LCI Sample ID**

Collection Date

Collection Time

Matrix Code

No. of Containers

3
TP, NH₄, NO_x, TKN

ANC
TP, NH₄, NO_x, TKN, NO₃

Dissolved TOP4

Fe, Mn, As,

Ca, Mg, Na, K

2
Fe, Mn, As, Ca, Mg, Na, K

0
Color

3
TOC

ANC
DOC

Alkalinity

0
SO₄ & UV-254

ANC
SO₄, Cl

0
SO₄, Cl, UV-254

Chlorophyll a |
Vol (ml)

Location Info

18 LHB 301	9-12-18	08:50	AW	8	X		X	X			X	X	X	X	X	X	250	Basic Creek - Epi
18 LHB 329	9-12-18	13:19	AW	6	X		X				X	X	X				250	Pensselaer Lake Epi
18 LHB 330	9-12-18	13:24	AW	4	X		X				X	X	X					Pensselaer Lake - Hypo
18 LHB 333	9-12-18	10:55	AW	7	X		X				X	X	X	X	X	X	250	Trux Reservoir - Epi
18 LHB 334	9-12-18	10:59	AW	6	X		X	X			X	X	X	X	X	X		Trux Reservoir - Hypo

Special Analysis Instructions:

Relinquished by Sampler: <i>Stephany June</i>	Date: 9-12-18	Time: 14:30	Received by: <i>[Signature]</i>	Date: 9/12/18	Time: 14:30	Laboratory Receipt Notes: Sample R1808869 5 New York State DEC LCI 2018
Relinquished by: <i>[Signature]</i>	Date: 9/12/18	Time: 16:00	Received by: <i>[Signature]</i>	Date:	Time:	
Relinquished by:	Date:	Time:	Received by Laboratory: <i>[Signature]</i>	Date: 9/13/18	Time: 0905	



Cooler Receipt and Preservation Check Form

R1808869**5**New York State DEC
LC12018

Project/Client _____ Folder Number _____

Cooler received on 9/13/14 by: eCOURIER: 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> <u>CLIENT</u>
7	Soil VOA received as:	<u>Bulk</u> Encore 5035set NA

8. Temperature Readings Date: 9/13/14 Time: 0910 ID: IR#7 (R#10) From: Temp Blank Sample Bottle

Observed Temp (°C)	<u>1.1</u>						
Correction Factor (°C)	<u>+0.4</u>						
Corrected Temp (°C)	<u>1.5</u>						
Temp from: Type of bottle	<u>cont. tank</u>						
Within 0-6°C?	<u>(Y)</u> 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: R-02 by e on 9/13/14 at 0920
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 |
| 13. | Air Samples: Cassettes / Tubes Intact with MS? Canisters Pressurized | YES | NO |
| | Tedlar® Bags Inflated | | N/A |

pH	Lot of test paper	Reagent	Preserved?		Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
			Yes	No						
≥12		NaOH								
≤2		HNO ₃								
≤2		H ₂ SO 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 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: _____

Explain all Discrepancies/ Other Comments: _____

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

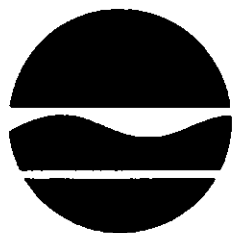
Labels secondary reviewed by: _____

PC Secondary Review: _____

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

CHAIN OF CUSTODY

Page 1 of 1



New York State Department of
Environmental Conservation –
Division of Water

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

Matrix Codes:

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

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

18LHB339	09/11	16:00	AW	6	X	X					X	X	X			X	250	Winding Hills, epi
18LHB303	09/12	9:35	AW	7	X	X					X		X	X	X	X	500	Beacon R, epi
18LHB304	09/12	9:40	AW	6	X	X	X				X		X		X			Beacon R, hypo
18LHB399	09/12	9:35	AW	7	X	X					X		X	X	X	X	500	Beacon R, epi sup
18LHB327	09/12	10:25	AW	6	X	X					X	X		X		X	250	Pudding St., epi
18LHB341	09/12	10:50	AW	6	X	X					X	X		X		X	250	Lake Carse, epi
18LHB325	09/12	10:50	AW	8	X	X	X				X		X	X	X	X	250	Lake Pocantico
18LHB398	09/12	10:50	AW	4	X	X					X	X						Hypo blank
→ 13:41	8																	
→ 12:21																		

Special Analysis Instructions:

Relinquished by Sampler: Sara Gonzalez	Date: 09/12	Time: 2:40 pm	Received by:	Date:	Time:	Laboratory Receipt Notes: Sample Temp: Properly P Samples In R1808869 New York State DEC LCI 2018
Relinquished by:	Date:	Time:	Received by:	Date:	Time:	
Relinquished by:	Date:	Time:	Received by Laboratory: <i>ALS</i>	Date: 9/13/18	Time: 0900	



Cooler Receipt and Preservation Check Form

R1808869

5

New York State DEC
LCI 2018



Project/Client _____ Folder Number _____

Cooler received on 9/13/18 by: SL

COURIER: ALS UPS FEDEX VELOCITY CLIENT

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

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

8. Temperature Readings Date: 9/13/18 Time: 0950 ID: IR#7 IR#10 From: Temp Blank Sample Bottle

Observed Temp (°C)	<u>3.3</u>							
Correction Factor (°C)	<u>+0.4</u>							
Corrected Temp (°C)	<u>3.7</u>							
Temp from: Type of bottle	<u>Left side</u>							
Within 0-6°C?	<u>Y</u>	N	Y	N	Y	N	Y	N
If <0°C, were samples frozen?	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: Box by SL on 9/13/18 at 10:00
5035 samples placed in storage location: _____ by _____ on _____ at _____

Cooler Breakdown/Preservation Check**: Date: 9/14/18 Time: 1510 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?		Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
			Yes	No						
≥12		NaOH			<u>B2806E</u>	<u>8/9</u>				
≤2	<u>209318</u>	HNO ₃	<u>✓</u>		<u>1117092</u>	<u>8/9</u>				
≤2	<u>↓</u>	H ₂ SO ₄	<u>✓</u>		<u>192169</u>	<u>8/9</u>				
<4		NaHSO ₄			<u>24450071</u>					
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: 8-072-001, 070218-2A40, 42133128
Explain all Discrepancies/ Other Comments:

18LHB303 on bott/4
same matches 18LHB304

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

Labels secondary reviewed by: @
PC Secondary Review: SL 9/17/18 *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.	+	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	Pennsylvania ID# 68-786
Delaware Approved	New Hampshire ID # 2941	Rhode Island ID # 158
DoD ELAP #65817	New York ID # 10145	Virginia #460167
Florida ID # E87674	North Carolina #676	

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

ALS Laboratory Group

Acronyms

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

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

Service Request: R1808869

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: R1808869

Sample Name: 18LHB301
Lab Code: R1808869-001
Sample Matrix: Water

Date Collected: 09/12/18
Date Received: 09/13/18

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

Sample Name: 18LHB301 Diss
Lab Code: R1808869-002
Sample Matrix: Water

Date Collected: 09/12/18
Date Received: 09/13/18

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

Sample Name: 18LHB329
Lab Code: R1808869-003
Sample Matrix: Water

Date Collected: 09/12/18
Date Received: 09/13/18

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

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

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

Service Request: R1808869

Sample Name: 18LHB329 Diss
Lab Code: R1808869-004
Sample Matrix: Water

Date Collected: 09/12/18
Date Received: 09/13/18

Analysis Method

365.1

Extracted/Digested By

KWONG

Analyzed By

GNITAJOUPPI

Sample Name: 18LHB330
Lab Code: R1808869-005
Sample Matrix: Water

Date Collected: 09/12/18
Date Received: 09/13/18

Analysis Method

351.2

Extracted/Digested By

NSMITH

Analyzed By

GNITAJOUPPI

353.2

MROGERSON

365.1

KWONG

GNITAJOUPPI

ASTM D6919-09

CWOODS

SM 2120 B-2001(2011)

SCYMBAL

SM 5310 C-2000(2011)

CWOODS

Sample Name: 18LHB330 Diss
Lab Code: R1808869-006
Sample Matrix: Water

Date Collected: 09/12/18
Date Received: 09/13/18

Analysis Method

365.1

Extracted/Digested By

KWONG

Analyzed By

GNITAJOUPPI

Sample Name: 18LHB333
Lab Code: R1808869-007
Sample Matrix: Water

Date Collected: 09/12/18
Date Received: 09/13/18

Analysis Method

300.0

Extracted/Digested By**Analyzed By**

AMOSSES

351.2

NSMITH

GNITAJOUPPI

353.2

MROGERSON

365.1

KWONG

GNITAJOUPPI

ASTM D6919-09

CWOODS

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

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

Service Request: R1808869

Sample Name: 18LHB333
Lab Code: R1808869-007
Sample Matrix: Water

Date Collected: 09/12/18
Date Received: 09/13/18

Analysis Method

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

Extracted/Digested By

Analyzed By

SCYMBAL
CWOODS
MROGERSON
NSMITH

Sample Name: 18LHB333 Diss
Lab Code: R1808869-008
Sample Matrix: Water

Date Collected: 09/12/18
Date Received: 09/13/18

Analysis Method

365.1
SM 5310 C-2000(2011)

Extracted/Digested By

KWONG

Analyzed By

GNITAJOUPPI
CWOODS

Sample Name: 18LHB334
Lab Code: R1808869-009
Sample Matrix: Water

Date Collected: 09/12/18
Date Received: 09/13/18

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
MROGERSON
GNITAJOUPPI
CWOODS
SCYMBAL
MROGERSON

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

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

Service Request: R1808869

Sample Name: 18LHB334 Diss
Lab Code: R1808869-010
Sample Matrix: Water

Date Collected: 09/12/18
Date Received: 09/13/18

Analysis Method

365.1
SM 5310 C-2000(2011)

Extracted/Digested By

KWONG

Analyzed By

GNITAJOUPPI
CWOODS

Sample Name: 18LHB339
Lab Code: R1808869-011
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/13/18

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
MROGERSON
GNITAJOUPPI
CWOODS
SCYMBAL
CWOODS
CWOODS
NSMITH

Sample Name: 18LHB339 Diss
Lab Code: R1808869-012
Sample Matrix: Water

Date Collected: 09/11/18
Date Received: 09/13/18

Analysis Method

365.1

Extracted/Digested By

KWONG

Analyzed By

GNITAJOUPPI

Sample Name: 18LHB303
Lab Code: R1808869-013
Sample Matrix: Water

Date Collected: 09/12/18
Date Received: 09/13/18

Analysis Method

300.0
351.2

Extracted/Digested By

NSMITH

Analyzed By

AMOSE
GNITAJOUPPI

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

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

Service Request: R1808869

Sample Name: 18LHB303
Lab Code: R1808869-013
Sample Matrix: Water

Date Collected: 09/12/18
Date Received: 09/13/18

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

Sample Name: 18LHB303 Diss
Lab Code: R1808869-014
Sample Matrix: Water

Date Collected: 09/12/18
Date Received: 09/13/18

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

Sample Name: 18LHB304
Lab Code: R1808869-015
Sample Matrix: Water

Date Collected: 09/12/18
Date Received: 09/13/18

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

ALS Group USA, Corp.
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Analyst Summary report

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

Service Request: R1808869

Sample Name: 18LHB304 Diss
Lab Code: R1808869-016
Sample Matrix: Water

Date Collected: 09/12/18
Date Received: 09/13/18

Analysis Method

365.1
SM 5310 C-2000(2011)

Extracted/Digested By

KWONG

Analyzed By

GNITAJOUPPI
CWOODS

Sample Name: 18LHB399
Lab Code: R1808869-017
Sample Matrix: Water

Date Collected: 09/12/18
Date Received: 09/13/18

Analysis Method

300.0
351.2
353.2
365.1
ASTM D6919-09

Extracted/Digested By

NSMITH

KWONG

Analyzed By

AMOSSES
GNITAJOUPPI
MROGERSON
GNITAJOUPPI
CWOODS

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

SCYMBAL
CWOODS
MROGERSON
NSMITH

Sample Name: 18LHB399 Diss
Lab Code: R1808869-018
Sample Matrix: Water

Date Collected: 09/12/18
Date Received: 09/13/18

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: R1808869

Sample Name: 18LHB327
Lab Code: R1808869-019
Sample Matrix: Water

Date Collected: 09/12/18
Date Received: 09/13/18

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

Sample Name: 18LHB327 Diss
Lab Code: R1808869-020
Sample Matrix: Water

Date Collected: 09/12/18
Date Received: 09/13/18

Analysis Method	Extracted/Digested By	Analyzed By
365.1	KWONG	GNITAJOUPPI

Sample Name: 18LHB341
Lab Code: R1808869-021
Sample Matrix: Water

Date Collected: 09/12/18
Date Received: 09/13/18

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

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

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

Service Request: R1808869

Sample Name: 18LHB341 Diss
Lab Code: R1808869-022
Sample Matrix: Water

Date Collected: 09/12/18
Date Received: 09/13/18

Analysis Method
365.1

Extracted/Digested By
KWONG

Analyzed By
GNITAJOUPPI

Sample Name: 18LHB325
Lab Code: R1808869-023
Sample Matrix: Water

Date Collected: 09/12/18
Date Received: 09/13/18

Analysis Method
300.0
351.2
353.2
365.1
ASTM D6919-09

Extracted/Digested By

NSMITH

KWONG

Analyzed By
AMOSSES
GNITAJOUPPI
MROGERSON
GNITAJOUPPI
CWOODS

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

SCYMBAL
CWOODS
MROGERSON
NSMITH

Sample Name: 18LHB325 Diss
Lab Code: R1808869-024
Sample Matrix: Water

Date Collected: 09/12/18
Date Received: 09/13/18

Analysis Method
365.1
SM 5310 C-2000(2011)

Extracted/Digested By
KWONG

Analyzed By
GNITAJOUPPI
CWOODS

Sample Name: 18LHB398
Lab Code: R1808869-025
Sample Matrix: Water

Date Collected: 09/12/18
Date Received: 09/13/18

Analysis Method
351.2

Extracted/Digested By
NSMITH

Analyzed By
GNITAJOUPPI

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

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

Service Request: R1808869

Sample Name: 18LHB398
Lab Code: R1808869-025
Sample Matrix: Water

Date Collected: 09/12/18
Date Received: 09/13/18

Analysis Method

353.2

365.1

ASTM D6919-09

SM 2120 B-2001(2011)

SM 5310 C-2000(2011)

Extracted/Digested By

KWONG

Analyzed By

MROGERSON

GNITAJOUPPI

CWOODS

SCYMBAL

CWOODS

Sample Name: 18LHB398 Diss
Lab Code: R1808869-026
Sample Matrix: Water

Date Collected: 09/12/18
Date Received: 09/13/18

Analysis Method

365.1

Extracted/Digested By

KWONG

Analyzed By

GNITAJOUPPI



INORGANIC PREPARATION METHODS

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

Water/Liquid Matrix

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

Solid/Soil/Non-Aqueous Matrix

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

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



Sample Results

ALS Environmental—Rochester Laboratory

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

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

www.alsglobal.com



Metals

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

METALS
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: New York State DEC **Service Request:** LCI0910
Project No.: R1808869 **Date Collected:** 9/12/2018
Project Name: **Date Received:** 9/13/2018
Matrix: WATER **Units:** ug/L
Basis:

Sample Name: 18LHB301 **Lab Code:** R1808869-001

Analyte	Analysis Method	PQL	MDL	Dil. Factor	Result	C	Q
Arsenic	200.8	1.0	0.39	1.0	2.6		
Iron	200.7	100	13.0	1.0	161		
Manganese	200.7	10.0	1.7	1.0	103		

% Solids: 0.0

Comments:

METALS
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: New York State DEC **Service Request:** LCI0910
Project No.: R1808869 **Date Collected:** 9/12/2018
Project Name: **Date Received:** 9/13/2018
Matrix: WATER **Units:** ug/L
Basis:

Sample Name: 18LHB334 **Lab Code:** R1808869-009

Analyte	Analysis Method	PQL	MDL	Dil. Factor	Result	C	Q
Arsenic	200.8	1.0	0.39	1.0	0.78	J	
Iron	200.7	100	13.0	1.0	740		
Manganese	200.7	10.0	1.7	1.0	3270		

% Solids: 0.0

Comments:

METALS
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: New York State DEC

Service Request: LCI0910

Project No.: R1808869

Date Collected: 9/12/2018

Project Name:

Date Received: 9/13/2018

Matrix: WATER

Units: ug/L

Basis:

Sample Name: 18LHB304

Lab Code: R1808869-015

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	1020		
Manganese	200.7	10.0	1.7	1.0	499		

% Solids: 0.0

Comments:

METALS
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: New York State DEC **Service Request:** LCI0910
Project No.: R1808869 **Date Collected:** 9/12/2018
Project Name: **Date Received:** 9/13/2018
Matrix: WATER **Units:** ug/L
Basis:

Sample Name: 18LHB325 **Lab Code:** R1808869-023

Analyte	Analysis Method	PQL	MDL	Dil. Factor	Result	C	Q
Arsenic	200.8	1.0	0.39	1.0	0.79	J	
Iron	200.7	100	13.0	1.0	365		
Manganese	200.7	10.0	1.7	1.0	176		

% 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

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dba ALS Environmental

Analytical Report

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

Service Request: R1808869
Date Collected: 09/12/18 08:50
Date Received: 09/13/18 09:05

Sample Name: 18LHB301
Lab Code: R1808869-001

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO ₃	SM 2320 B-1997(2011)	72.4	mg/L	2.0	1	09/17/18 13:01	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0117	mg/L	0.0050	1	09/20/18 09:59	NA	
Chlorophyll A	SM20 10200 H	24.0	ug/L	1.6	10	09/25/18 10:35	NA	
Color, True	SM 2120 B-2001(2011)	28.0	ColorUnits	1.0	1	09/13/18 14:30	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0030	mg/L	0.0020	1	09/24/18 16:40	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.64	mg/L	0.10	1	09/25/18 12:59	09/24/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.73	pH Units	-	1	09/15/18 10:00	NA	*
Phosphorus, Total	365.1	0.0374	mg/L	0.0050	1	09/28/18 12:13	09/24/18	
Sulfate	300.0	3.7	mg/L	2.0	10	09/19/18 18:40	NA	
UV254	SM 5910 B	0.124	cm-1	-	1	09/14/18 08:00	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: 18LHB301 Diss
Lab Code: R1808869-002

Service Request: R1808869
Date Collected: 09/12/18 08:50
Date Received: 09/13/18 09:05

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)	5.9	mg/L	1.0	1	09/18/18 13:40	NA	
Phosphorus, Dissolved	365.1	0.0078	mg/L	0.0050	1	09/28/18 11:31	09/24/18	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Sample Name: 18LHB329
Lab Code: R1808869-003

Service Request: R1808869
Date Collected: 09/12/18 13:19
Date Received: 09/13/18 09:05

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)	148	mg/L	2.0	1	09/17/18 13:06	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.364	mg/L	0.0050	1	09/20/18 10:47	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	5.3	mg/L	1.0	1	09/19/18 01:25	NA	
Chlorophyll A	SM20 10200 H	87.8	ug/L	6.4	40	09/25/18 10:35	NA	
Color, True	SM 2120 B-2001(2011)	31.0	ColorUnits	1.0	1	09/13/18 14:30	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0776	mg/L	0.0020	1	09/24/18 16:44	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	1.01	mg/L	0.10	1	09/25/18 13:00	09/24/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.99	pH Units	-	1	09/15/18 10:00	NA	*
Phosphorus, Total	365.1	0.0337	mg/L	0.0050	1	09/28/18 12:14	09/24/18	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Sample Name: 18LHB329 Diss
Lab Code: R1808869-004

Service Request: R1808869
Date Collected: 09/12/18 13:19
Date Received: 09/13/18 09:05

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Dissolved	365.1	0.0071	mg/L	0.0050	1	09/28/18 11:38	09/24/18	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Sample Name: 18LHB330
Lab Code: R1808869-005

Service Request: R1808869
Date Collected: 09/12/18 13:24
Date Received: 09/13/18 09:05

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.968	mg/L	0.0050	1	09/20/18 11:03	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	5.9	mg/L	1.0	1	09/19/18 01:46	NA	
Color, True	SM 2120 B-2001(2011)	34.0	ColorUnits	1.0	1	09/13/18 14:30	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.158	mg/L	0.0020	1	09/24/18 16:46	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	1.55	mg/L	0.10	1	09/25/18 13:05	09/24/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.73	pH Units	-	1	09/15/18 10:00	NA	*
Phosphorus, Total	365.1	0.0399	mg/L	0.0050	1	09/28/18 12:17	09/24/18	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Sample Name: 18LHB330 Diss
Lab Code: R1808869-006

Service Request: R1808869
Date Collected: 09/12/18 13:24
Date Received: 09/13/18 09:05

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Dissolved	365.1	0.0069	mg/L	0.0050	1	09/28/18 11:39	09/24/18	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R1808869
Date Collected: 09/12/18 10:55
Date Received: 09/13/18 09:05

Sample Name: 18LHB333
Lab Code: R1808869-007

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)	79.2	mg/L	2.0	1	09/17/18 13:12	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0123	mg/L	0.0050	1	09/20/18 11:19	NA	
Chlorophyll A	SM20 10200 H	23.4	ug/L	0.64	4	09/25/18 10:35	NA	
Color, True	SM 2120 B-2001(2011)	23.0	ColorUnits	1.0	1	09/13/18 14:30	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0028	mg/L	0.0020	1	09/24/18 16:47	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.56	mg/L	0.10	1	09/25/18 13:07	09/24/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.88	pH Units	-	1	09/15/18 10:00	NA	*
Phosphorus, Total	365.1	0.0369	mg/L	0.0050	1	09/28/18 12:18	09/24/18	
Sulfate	300.0	10.9	mg/L	2.0	10	09/19/18 18:45	NA	
UV254	SM 5910 B	0.0720	cm-1	-	1	09/14/18 08:00	NA	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Sample Name: 18LHB333 Diss
Lab Code: R1808869-008

Service Request: R1808869
Date Collected: 09/12/18 10:55
Date Received: 09/13/18 09:05

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)	3.8	mg/L	1.0	1	09/18/18 14:01	NA	
Phosphorus, Dissolved	365.1	0.0058	mg/L	0.0050	1	09/28/18 11:40	09/24/18	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R1808869
Date Collected: 09/12/18 10:59
Date Received: 09/13/18 09:05

Sample Name: 18LHB334
Lab Code: R1808869-009

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.101	mg/L	0.0050	1	09/20/18 11:35	NA	
Color, True	SM 2120 B-2001(2011)	32.0	ColorUnits	1.0	1	09/13/18 14:30	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0049	mg/L	0.0020	1	09/24/18 16:48	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.74	mg/L	0.10	1	09/25/18 13:08	09/24/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.64	pH Units	-	1	09/15/18 10:00	NA	*
Phosphorus, Total	365.1	0.084	mg/L	0.025	5	09/28/18 12:20	09/24/18	
Sulfate	300.0	7.7	mg/L	2.0	10	09/19/18 18:51	NA	
UV254	SM 5910 B	0.103	cm-1	-	1	09/14/18 08:00	NA	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Sample Name: 18LHB334 Diss
Lab Code: R1808869-010

Service Request: R1808869
Date Collected: 09/12/18 10:59
Date Received: 09/13/18 09:05

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)	4.1	mg/L	1.0	1	09/18/18 18:28	NA	
Phosphorus, Dissolved	365.1	0.0254	mg/L	0.0050	1	09/28/18 11:42	09/24/18	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Sample Name: 18LHB339
Lab Code: R1808869-011

Service Request: R1808869
Date Collected: 09/11/18 16:00
Date Received: 09/13/18 09:20

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)	48.4	mg/L	2.0	1	09/17/18 13:17	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.257	mg/L	0.0050	1	09/20/18 11:51	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	6.9	mg/L	1.0	1	09/19/18 02:28	NA	
Chlorophyll A	SM20 10200 H	39.2	ug/L	3.2	20	09/25/18 10:35	NA	
Color, True	SM 2120 B-2001(2011)	34.0	ColorUnits	1.0	1	09/13/18 14:30	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0048	mg/L	0.0020	1	09/24/18 16:50	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	1.70	mg/L	0.10	1	09/25/18 13:09	09/24/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.47	pH Units	-	1	09/15/18 10:00	NA	*
Phosphorus, Total	365.1	0.109	mg/L	0.025	5	09/28/18 13:01	09/24/18	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Sample Name: 18LHB339 Diss
Lab Code: R1808869-012

Service Request: R1808869
Date Collected: 09/11/18 16:00
Date Received: 09/13/18 09:20

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Dissolved	365.1	0.0107	mg/L	0.0050	1	09/28/18 11:43	09/24/18	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Sample Name: 18LHB303
Lab Code: R1808869-013

Service Request: R1808869
Date Collected: 09/12/18 09:35
Date Received: 09/13/18 09:20

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)	16.8	mg/L	2.0	1	09/17/18 13:21	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0050 U	mg/L	0.0050	1	09/20/18 12:07	NA	
Chlorophyll A	SM20 10200 H	9.34	ug/L	0.32	4	09/25/18 10:35	NA	
Color, True	SM 2120 B-2001(2011)	29.0	ColorUnits	1.0	1	09/13/18 14:30	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0026	mg/L	0.0020	1	09/24/18 16:51	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.48	mg/L	0.10	1	09/25/18 13:09	09/24/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.14	pH Units	-	1	09/15/18 10:00	NA	*
Phosphorus, Total	365.1	0.0126	mg/L	0.0050	1	09/28/18 12:34	09/24/18	
Sulfate	300.0	4.8	mg/L	2.0	10	09/19/18 18:56	NA	
UV254	SM 5910 B	0.121	cm-1	-	1	09/14/18 08:00	NA	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Sample Name: 18LHB303 Diss
Lab Code: R1808869-014

Service Request: R1808869
Date Collected: 09/12/18 09:35
Date Received: 09/13/18 09:20

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)	5.0	mg/L	1.0	1	09/18/18 18:48	NA	
Phosphorus, Dissolved	365.1	0.0050 U	mg/L	0.0050	1	09/28/18 11:44	09/24/18	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Sample Name: 18LHB304
Lab Code: R1808869-015

Service Request: R1808869
Date Collected: 09/12/18 09:40
Date Received: 09/13/18 09:20

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0231	mg/L	0.0050	1	09/20/18 12:55	NA	
Color, True	SM 2120 B-2001(2011)	38.0	ColorUnits	1.0	1	09/13/18 14:30	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0076	mg/L	0.0020	1	09/24/18 16:55	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.24	mg/L	0.10	1	09/25/18 13:11	09/24/18	
pH of Color Analysis	SM 2120 B-2001(2011)	6.79	pH Units	-	1	09/15/18 10:00	NA	*
Phosphorus, Total	365.1	0.0175	mg/L	0.0050	1	09/28/18 12:35	09/24/18	
Sulfate	300.0	6.1	mg/L	2.0	10	09/19/18 19:01	NA	
UV254	SM 5910 B	0.113	cm-1	-	1	09/14/18 08:00	NA	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Sample Name: 18LHB304 Diss
Lab Code: R1808869-016

Service Request: R1808869
Date Collected: 09/12/18 09:40
Date Received: 09/13/18 09:20

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)	3.2	mg/L	1.0	1	09/18/18 19:09	NA	
Phosphorus, Dissolved	365.1	0.0075	mg/L	0.0050	1	09/28/18 11:50	09/24/18	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R1808869
Date Collected: 09/12/18 09:35
Date Received: 09/13/18 09:20

Sample Name: 18LHB399
Lab Code: R1808869-017

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)	16.4	mg/L	2.0	1	09/17/18 13:25	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0050 U	mg/L	0.0050	1	09/20/18 13:11	NA	
Chlorophyll A	SM20 10200 H	9.78	ug/L	0.32	4	09/25/18 10:35	NA	
Color, True	SM 2120 B-2001(2011)	27.0	ColorUnits	1.0	1	09/13/18 14:30	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0020 U	mg/L	0.0020	1	09/24/18 16:57	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.44	mg/L	0.10	1	09/25/18 13:12	09/24/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.46	pH Units	-	1	09/15/18 10:00	NA	*
Phosphorus, Total	365.1	0.0103	mg/L	0.0050	1	09/28/18 12:36	09/24/18	
Sulfate	300.0	5.0	mg/L	2.0	10	09/19/18 19:06	NA	
UV254	SM 5910 B	0.121	cm-1	-	1	09/14/18 08:00	NA	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Sample Name: 18LHB399 Diss
Lab Code: R1808869-018

Service Request: R1808869
Date Collected: 09/12/18 09:35
Date Received: 09/13/18 09:20

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)	4.8	mg/L	1.0	1	09/18/18 20:12	NA	
Phosphorus, Dissolved	365.1	0.0050 U	mg/L	0.0050	1	09/28/18 11:52	09/24/18	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R1808869
Date Collected: 09/12/18 10:25
Date Received: 09/13/18 09:20

Sample Name: 18LHB327
Lab Code: R1808869-019

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO ₃	SM 2320 B-1997(2011)	12.8	mg/L	2.0	1	09/17/18 13:28	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0315	mg/L	0.0050	1	09/20/18 13:27	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	5.6	mg/L	1.0	1	09/19/18 02:49	NA	
Chlorophyll A	SM20 10200 H	12.5	ug/L	0.64	4	09/25/18 10:35	NA	
Color, True	SM 2120 B-2001(2011)	56.0	ColorUnits	1.0	1	09/13/18 14:30	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0049	mg/L	0.0020	1	09/24/18 16:58	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.46	mg/L	0.10	1	09/25/18 13:13	09/24/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.08	pH Units	-	1	09/15/18 10:00	NA	*
Phosphorus, Total	365.1	0.0216	mg/L	0.0050	1	09/28/18 12:37	09/24/18	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Sample Name: 18LHB327 Diss
Lab Code: R1808869-020

Service Request: R1808869
Date Collected: 09/12/18 10:25
Date Received: 09/13/18 09:20

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Dissolved	365.1	0.0050	mg/L	0.0050	1	09/28/18 11:53	09/24/18	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Service Request: R1808869
Date Collected: 09/12/18 11:50
Date Received: 09/13/18 09:20

Sample Name: 18LHB341
Lab Code: R1808869-021

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)	89.2	mg/L	2.0	1	09/17/18 13:34	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.284	mg/L	0.0050	1	09/20/18 13:44	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	9.3	mg/L	1.0	1	09/19/18 03:31	NA	
Chlorophyll A	SM20 10200 H	54.3	ug/L	1.6	10	09/25/18 10:35	NA	
Color, True	SM 2120 B-2001(2011)	34.0	ColorUnits	1.0	1	09/13/18 14:30	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0119	mg/L	0.0020	1	09/24/18 16:59	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	1.50	mg/L	0.10	1	09/25/18 13:14	09/24/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.82	pH Units	-	1	09/15/18 10:00	NA	*
Phosphorus, Total	365.1	0.0668	mg/L	0.0050	1	09/28/18 12:39	09/24/18	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Sample Name: 18LHB341 Diss
Lab Code: R1808869-022

Service Request: R1808869
Date Collected: 09/12/18 11:50
Date Received: 09/13/18 09:20

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Dissolved	365.1	0.0089	mg/L	0.0050	1	09/28/18 11:54	09/24/18	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

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

Sample Name: 18LHB325
Lab Code: R1808869-023

Service Request: R1808869
Date Collected: 09/12/18 13:41
Date Received: 09/13/18 09:20

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)	94.4	mg/L	2.0	1	09/17/18 13:48	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0923	mg/L	0.0050	1	09/20/18 14:00	NA	
Chlorophyll A	SM20 10200 H	16.1	ug/L	0.64	4	09/25/18 10:35	NA	
Color, True	SM 2120 B-2001(2011)	38.0	ColorUnits	1.0	1	09/13/18 14:30	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.412	mg/L	0.0020	1	09/24/18 17:01	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.68	mg/L	0.10	1	09/25/18 13:14	09/24/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.37	pH Units	-	1	09/15/18 10:00	NA	*
Phosphorus, Total	365.1	0.0389	mg/L	0.0050	1	09/28/18 12:40	09/24/18	
Sulfate	300.0	17.1	mg/L	2.0	10	09/19/18 19:12	NA	
UV254	SM 5910 B	0.156	cm-1	-	1	09/14/18 08:00	NA	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water
Sample Name: 18LHB325 Diss
Lab Code: R1808869-024

Service Request: R1808869
Date Collected: 09/12/18 13:41
Date Received: 09/13/18 09:20
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)	5.5	mg/L	1.0	1	09/18/18 20:33	NA	
Phosphorus, Dissolved	365.1	0.0078	mg/L	0.0050	1	09/28/18 11:55	09/24/18	

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Analytical Report

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

Sample Name: 18LHB398
Lab Code: R1808869-025

Service Request: R1808869
Date Collected: 09/12/18 12:21
Date Received: 09/13/18 09:20

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	09/20/18 14:16	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	1.0	mg/L	1.0	1	09/19/18 04:33	NA	
Color, True	SM 2120 B-2001(2011)	7.0	ColorUnits	1.0	1	09/13/18 14:30	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0020	U mg/L	0.0020	1	09/24/18 17:02	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.10	U mg/L	0.10	1	09/25/18 13:15	09/24/18	
pH of Color Analysis	SM 2120 B-2001(2011)	6.21	pH Units	-	1	09/15/18 10:00	NA	*
Phosphorus, Total	365.1	0.0050	U mg/L	0.0050	1	09/28/18 12:41	09/24/18	

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Analytical Report

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

Sample Name: 18LHB398 Diss
Lab Code: R1808869-026

Service Request: R1808869
Date Collected: 09/12/18 12:21
Date Received: 09/13/18 09:20

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	09/28/18 11:56	09/24/18	



QC Summary 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



Metals

ALS Environmental—Rochester Laboratory

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

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

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METALS
-3-
BLANKS

Contract: R1808869

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

Preparation Blank Matrix (soil/water): WATER

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

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

Comments:

METALS
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BLANKS

Contract: R1808869

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

Preparation Blank Matrix (soil/water): WATER

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

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

Comments:

METALS

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SPIKE SAMPLE RECOVERY

SAMPLE NO.

18LHB325S

Contract: R1808869

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

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

% Solids for Sample: 0.0

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

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Arsenic	70 - 130	22.50	0.79 J	20.0	109		MS
Iron	70 - 130	1340.00	365.00	1000.0	98		P
Manganese	70 - 130	682.00	176.00	500.0	101		P

Comments:

METALS

-5A-

SPIKE SAMPLE RECOVERY

SAMPLE NO.

18LHB325SD

Contract: R1808869

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

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

% Solids for Sample: 0.0

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

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Arsenic	70 - 130	22.10	0.79 J	20.0	107		MS
Iron	70 - 130	1350.00	365.00	1000.0	98		P
Manganese	70 - 130	684.00	176.00	500.0	102		P

Comments:

METALS
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DUPLICATES

SAMPLE NO.

18LHB325SD

Contract: R1808869

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

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

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

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Arsenic		22.50		22.10		2		MS
Iron		1340.00		1350.00		1		P
Manganese		682.00		684.00		0		P

Comments:

METALS

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LABORATORY CONTROL SAMPLE

Contract: R1808869

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

Solid LCS Source:

Aqueous LCS Source: ACCUSTANDARD

Analyte	Aqueous (ug/L			Solid (mg/K					
	True	Found	%R	True	Found	C	Limits	%R	
Arsenic	20.0	21.1	106						
Iron	1000	975	98						
Manganese	500	509	102						

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

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Analytical Report

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

Sample Name: Method Blank
Lab Code: R1808869-MB1

Service Request: R1808869
Date Collected: NA
Date Received: NA

Basis: NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	2.0 U	mg/L	2.0	1	09/17/18 11:44	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0050 U	mg/L	0.0050	1	09/20/18 09:27	NA	
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	1.0 U	mg/L	1.0	1	09/18/18 01:26	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	1.0 U	mg/L	1.0	1	09/18/18 14:43	NA	
Chlorophyll A	SM20 10200 H	4.0 U	ug/L	4.0	1	09/25/18 10:35	NA	
Color, True	SM 2120 B-2001(2011)	1.0	ColorUnits	1.0	1	09/13/18 14:30	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0020 U	mg/L	0.0020	1	09/24/18 16:37	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.10 U	mg/L	0.10	1	09/25/18 12:43	09/24/18	
Phosphorus, Dissolved	365.1	0.0050 U	mg/L	0.0050	1	09/28/18 10:17	09/24/18	
Phosphorus, Total	365.1	0.0050 U	mg/L	0.0050	1	09/28/18 11:45	09/24/18	
Sulfate	300.0	0.20 U	mg/L	0.20	1	09/19/18 18:19	NA	
UV254	SM 5910 B	0.00100	cm-1	-	1	09/14/18 08:00	NA	

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dba ALS Environmental

Analytical Report

Client: New York State DEC
Project: LCI 2018/LCI2018
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: R1808869-MB2

Service Request: R1808869
Date Collected: NA
Date Received: NA
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)	1.0 U	mg/L	1.0	1	09/18/18 14:43	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	1.0 U	mg/L	1.0	1	09/19/18 00:02	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.10 U	mg/L	0.10	1	09/25/18 13:03	09/24/18	
Phosphorus, Dissolved	365.1	0.0050 U	mg/L	0.0050	1	09/28/18 11:45	09/24/18	
Phosphorus, Total	365.1	0.0050 U	mg/L	0.0050	1	09/28/18 12:31	09/24/18	

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:R1808869
Date Collected:09/12/18
Date Received:09/13/18
Date Analyzed:09/20/18 - 09/24/18

Duplicate Matrix Spike Summary
General Chemistry Parameters

Sample Name: 18LHB301 **Units:**mg/L
Lab Code: R1808869-001 **Basis:**NA

Matrix Spike
R1808869-001MS

Duplicate Matrix Spike
R1808869-001DMS

Analyte Name	Method	Sample Result	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0117	0.549	0.500	107	0.551	0.500	108	75-125	<1	20
Nitrate+Nitrite as Nitrogen	353.2	0.0030	0.516	0.500	103	0.517	0.500	103	75-125	<1	20

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

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

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

ALS Group USA, Corp.
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QA/QC Report

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

Service Request: R1808869
Date Collected: 09/12/18
Date Received: 09/13/18
Date Analyzed: 09/28/18
Date Extracted: 09/24/18

Duplicate Matrix Spike Summary
Phosphorus, Dissolved

Sample Name: 18LHB301 Diss
Lab Code: R1808869-002
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	0.0078	0.0295	0.0250	87	0.0302	0.0250	90	75-125	2	20

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ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

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

Service Request: R1808869
Date Collected: 09/12/18
Date Received: 09/13/18
Date Analyzed: 09/25/18
Date Extracted: 09/24/18

Duplicate Matrix Spike Summary
Nitrogen, Total Kjeldahl (TKN)

Sample Name: 18LHB329
Lab Code: R1808869-003
Analysis Method: 351.2
Prep Method: Method

Units: mg/L
Basis: NA

Analyte Name	Sample Result	Matrix Spike R1808869-003MS			Duplicate Matrix Spike R1808869-003DMS			% Rec Limits	RPD	RPD Limit
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Nitrogen, Total Kjeldahl (TKN)	1.01	3.27	2.50	90	3.34	2.50	93	75-125	2	20

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QA/QC Report

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

Service Request: R1808869
Date Collected: 09/12/18
Date Received: 09/13/18
Date Analyzed: 09/25/18
Date Extracted: 09/24/18

Duplicate Matrix Spike Summary
Nitrogen, Total Kjeldahl (TKN)

Sample Name: 18LHB330
Lab Code: R1808869-005
Analysis Method: 351.2
Prep Method: Method

Units: mg/L
Basis: NA

Analyte Name	Sample Result	Matrix Spike R1808869-005MS			Duplicate Matrix Spike R1808869-005DMS			% Rec Limits	RPD	RPD Limit
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Nitrogen, Total Kjeldahl (TKN)	1.55	3.75	2.50	88	3.67	2.50	85	75-125	2	20

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QA/QC Report

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

Service Request: R1808869
Date Collected: 09/12/18
Date Received: 09/13/18
Date Analyzed: 09/20/18

Duplicate Matrix Spike Summary
Ammonia as Nitrogen, undistilled

Sample Name: 18LHB398
Lab Code: R1808869-025
Analysis Method: ASTM D6919-09

Units: mg/L
Basis: NA

Analyte Name	Sample Result	Matrix Spike R1808869-025MS			Duplicate Matrix Spike R1808869-025DMS			% Rec Limits	RPD	RPD Limit
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Ammonia as Nitrogen, undistilled	0.0050 U	0.538	0.500	108	0.551	0.500	110	75-125	2	20

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QA/QC Report

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

Service Request: R1808869
Date Collected: 09/12/18
Date Received: 09/13/18
Date Analyzed: 09/28/18
Date Extracted: 09/24/18

Duplicate Matrix Spike Summary
Phosphorus, Dissolved

Sample Name: 18LHB398 Diss
Lab Code: R1808869-026
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	0.0237	0.0250	95	0.0232	0.0250	93	75-125	2	20

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QA/QC Report

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

Service Request: R1808869
Date Collected: 09/12/18
Date Received: 09/13/18
Date Analyzed: 09/14/18

Replicate Sample Summary
General Chemistry Parameters

Sample Name: 18LHB399
Lab Code: R1808869-017

Units: cm-1
Basis: NA

				Duplicate Sample R1808869- 017DUP			
Analyte Name	Analysis Method	MRL	Sample Result	Result	Average	RPD	RPD Limit
UV254	SM 5910 B	-	0.121	0.124	0.122	2	20

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QA/QC Report

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

Service Request: R1808869
Date Analyzed: 09/17/18 - 09/28/18

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R1808869-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Alkalinity, Total as CaCO ₃	SM 2320 B-1997(2011)	19.6	20.0	98	70-130
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.528	0.500	106	70-130
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	10.1	10.0	101	70-130
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	9.53	10.0	95	70-130
Nitrate+Nitrite as Nitrogen	353.2	0.527	0.500	105	70-130
Nitrogen, Total Kjeldahl (TKN)	351.2	2.25	2.50	90	70-130
Phosphorus, Dissolved	365.1	0.0227	0.0250	91	70-130
Phosphorus, Total	365.1	0.0242	0.0250	97	70-130
Sulfate	300.0	2.01	2.00	101	70-130

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QA/QC Report

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

Service Request: R1808869
Date Analyzed: 09/19/18 - 09/28/18

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R1808869-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	9.5	10.0	95	70-130
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	9.88	10.0	99	70-130
Nitrogen, Total Kjeldahl (TKN)	351.2	2.37	2.50	95	70-130
Phosphorus, Dissolved	365.1	0.0242	0.0250	97	70-130
Phosphorus, Total	365.1	0.0243	0.0250	97	70-130