

Service Request No:R1807155

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 July 31, 2018 For your reference, these analyses have been assigned our service request number **R1807155**.

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

Jamansto

CC: Jason Fagel



# **Narrative Documents**



Client:New York State DECService Request: R1807155Project:LCI 2018Date Received: 07/31/2018

Sample Matrix: Water

#### **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:**

Twelve water samples were received for analysis at ALS Environmental on 07/31/2018. 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.

	Jaman Sox
Approved by	<u> </u>

D - 4 -	00/04/0040
Date	08/24/2018



# Sample Receipt Information

Service Request:R1807155

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

### **SAMPLE CROSS-REFERENCE**

SAMPLE #	CLIENT SAMPLE ID	<u>DATE</u>	<u>TIME</u>
R1807155-001	18SRB005	7/30/2018	1120
R1807155-002	18SRB005 Diss	7/30/2018	1120
R1807155-003	18SRB006	7/30/2018	1135
R1807155-004	18SRB006 Diss	7/30/2018	1135
R1807155-005	18SRB001	7/30/2018	1315
R1807155-006	18SRB001 Diss	7/30/2018	1315
R1807155-007	18SRB002	7/30/2018	1330
R1807155-008	18SRB002 Diss	7/30/2018	1330
R1807155-009	18SRB003	7/30/2018	1505
R1807155-010	18SRB003 Diss	7/30/2018	1505
R1807155-011	18SRB004	7/30/2018	1510
R1807155-012	18SRB004 Diss	7/30/2018	1510

## CHAIN OF CUSTODY

Page <u>1</u> of <u>1</u>



New York State Department of Environmental Conservation – Division of Water

Project Name: LCI	Project Number: LCI2018	NYSDEC SDG:		
Sampler Collector:  SOSA Con 2018 Z	Sampler Signature:	Sampler Phone No.: 845-716-9575		
Project Manager: Alene Onion	X Report to Project Manager Report to:	☐ Bill to Project Manager Bill to: Jason Fagel		
Address: 625 Broadway, 4 <sup>th</sup> Floor Albany, NY 12233-3502	Address:	Address: 625 Broadway, 4 <sup>th</sup> 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		

										Ana	lyse	s C	rde	red	(list	:)				Preservative Codes:
Matrix Codes:						3			2		0		3		0				0	0 = Cool to < 6°C 1 = HCL
WW = Wastewater GW = Groundwater AW = Ambient Water SE = Sediment SL = Sludge T = Tissue O = Other  NYSDEC	Collection Date	Collection Time	Matrix Code	No. of Containers	TP, NH4, NOx, TKN	TP, NH4, NOx, TKN, NO3 3	Dissolved TOP4	Fe, Mn, As,	Ca, Mg, Na, K	Fe, Mn, As, Ca, Mg, Na, K	Color	TOC	DOC	Alkalinity	SO4 & UV-254	SO4. CI	SO4, CI, UV-254		Chiorophyll a   Vol (ml)	2 = HNO <sub>3</sub> 3 = H <sub>2</sub> SO <sub>4</sub> 4 = NaOH 5 = Zn. Acetate 6 = MeOH 7 = NaHSO4 8 = Other
LCI Sample ID			-			Ţ	-	단	0				9	- <u>`</u>	<del></del>	S	S	- 14		<del></del>
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185RB006	7 30 18		AW		V)		-	X			<del>- /</del>	Ø	~	×	Q				750	Goeg P- hypo
185RB001	7.30-18			6	X		8		<del> </del>	<b> -</b>		1-	<del></del>	~		╁─		14	750	Arnold L- epi
IXSPBOOL	7.30-(8		AW	4	X		A		<del> </del>	-		×	<u>.</u>	Ø	10					Arnold L-hypo
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18528004	7-30-18	15:10	AW	6	<del>\/</del>	<u> </u>	<del> "</del>	×	├	-	W	╂	D	-	$\sim$	$\vdash$				Gilbert L. hypo
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### Special Analysis Instructions:

Relinquished by Sampler:	Date:	Time:	Received by:	Date:	Time:	Laboratory Receipt Notes:
Sara Gonzalez	07 30	5.00			•	1
Relinquished by:	Date:	Time:	Received by:	Date:	Time:	
						Sample Te R1807155 5
Relinquished by:	Date:	Time:	Received by Laboratopy:	Date: /	Time:	Property P New York State DEC
1			Dug 15	7/31/11	0925	Samples II
	<u> </u>		6 of 50		<del></del>	- 1 SEE (B (SE) (SEE )



P:\INTRANET\QAQC\Forms Controlled\Cooler Receipt r16.doc

### **Cooler Receipt and Preservation Check Form**

Were Castedy seals on outside of cooler   Seal	Project/Clie	ent /	CE			Folde	er Nur	nber					\\ <b>\</b>		
Were Custedy seats on outside of cooler?   Samples have required headspace?   Y N N N Did all bottles arrive in good condition (unbroken)?   N So Did VOA viais, Alkor Sulfide have sig* bubbles?   Y N N N Did all bottles arrive in good condition (unbroken)?   N So Did VOA viais, Alkor Sulfide have sig* bubbles?   Y N N N Did VOA viais, Alkor Sulfide have sig* bubbles?   Y N N N Did VOA viais, Alkor Sulfide have sig* bubbles?   Y N N N Did VOA viais, Alkor Sulfide have sig* bubbles?   Y N N N Did VOA viais, Alkor Sulfide have sig* bubbles?   Y N N N Did VOA viais, Alkor Sulfide have sig* bubbles?   Y N N N Did VOA viais, Alkor Sulfide have sig* bubbles?   Y N N N Did VOA viais, Alkor Sulfide have sig* bubbles?   Y N N N Did VOA viais, Alkor Sulfide have sig* bubbles?   Y N N Did VOA viais, Alkor Sulfide	•		Izilir	bv: 🚄	Ð				ALS	ØPS)	FEDE	 X VE	LOCIT	Y CLIEN	Г
Custody papers properly completed (ink, signed)?   N   N   N   N   N   N   N   N   N			n outside of cool												
Did all bottles arrive in good condition (unbroken)*   N   O   N   O   O   O   O   O   O   O		· · · · · · · · · · · · · · · · · · ·			ed)?		5b			-		<u>-</u>	_		
Temperature Readings Date: 1/3/hr Time: 0/3/0. ID: RFD 1R#9 From: Temp Blank Semiple Bott Disserved Temp (°C) 2.3  Corrected Temp (°C) 2.3  Ferm from: Type of bottle  Within 0/8/C?  Ferm from: Type of bottle  Ferm from: Type of bottle  Same Day Rule  All samples held in storage location:  Ferm from: Type of bottle  Ferm from: Type of bottle  Same Day Rule  Same Day Packed (described below)  Same Day Rule  Same Day Ru															
Diserved Temp (°C) Correction Factor (°C) Correction Factor (°C) Corrected Temp (°C) C	4 Circle:	Wet Ice Dr	y Ice Gel packs	pre:	sent?	Ϋ́N	7	Soil \	OA rec	eived a	s: B	ulk l	Encore	5035set	(NA)
Diserved Temp (°C) Correction Factor (°C) Correction Factor (°C) Corrected Temp (°C) C	B. Temperatur	re Readings	Date: 1/3	ilir	Time	<u> </u>	 ?∧	ID:	AR#7)	IR#9		From	: Temr	Blank S	ample Bott
Corrected Temp (°C) Colled Temp (°C) C	•	· ·	····		_								·	<b>`</b>	
Corrected Temp (**C)    Pemp from:Type of bottle   Pom:Type of bottle			<u> </u>												
Femp from: Type of bottle  Within 0-6°C?  ON YN			7.3												
Within 0-6°C?    Y N Y N Y N Y N Y N Y N Y N Y N Y N Y															
For C   were samples frozen?   Y   Y   Y   Y   Y   Y   Y   Y   Y					v	NI	v	N	v	NI I	v	N	v	N	V N
Fout 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:				<del></del>						<del></del>					
All samples held in storage location:    Part			1 '	L L											
All samples held in storage location:    Secondary Preservation Check**: Date:		-				'				-	•			•	ne Day Rule
Cooler Breakdown/Preservation Check**: Date:	&Client A	Approval to 1	Run Samples:		_ Star	nding App	oroval	Clien	t aware	at drop-	off C	lient no	tified by	/:	·
Cooler Breakdown/Preservation Check**: Date:	All camples	hald in ctora	as location:	D ele	<u>-</u>	by 🕢	or	1 7/3/	// at	0931	7				
Cooler Breakdown/Preservation Check**: Date: 7/31/1/ Time: 1/3 // by: 65  9. Were all bottle labels complete (i.e. analysis, preservation, etc.)?  10. Did all bottle labels and tags agree with custody papers?  11. Were correct containers used for the tests indicated?  12. Were 5035 vials acceptable (no extra labels, not leaking)?  13. Air Samples: Cassettes / Tubes Intact with MS? Canisters Pressurized Tedlar® Bags Inflated //A  14. Lot of test Reagent Preserved? Lot Received Exp Sample ID Vol. Lot Added Pinal paper  15. NaOH  21. NaOH  22. JUST HNO3 / 1/17972 7/9  23. HSO4 /				K-CO	<u></u>	ے <u>عد</u> hv	<u> </u>		<u>'</u> -	-, -,					
9. Were all bottle labels complete (i.e. analysis, preservation, etc.)? 10. Did all bottle labels and tags agree with custody papers? 11. Were correct containers used for the tests indicated? 12. Were 5035 vials acceptable (no extra labels, not leaking)? 13. Air Samples: Cassettes / Tubes Intact with MS? Canisters Pressurized 14. Lot of test Reagent Preserved? Lot Received Exp Simple ID Vol. Lot Added Phane Pha	Joss sampl	es praeca in s	torage rocation.				"	<u> </u>	<u> </u>						
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10. Did all bottle labels and tags agree with custody papers?   NO   NO	Cooler Br	eakdown/Pres	servation Check*	*: Date	e :	<i>7/31/1</i>	<i>y</i>			3 M	by				
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12. Were 5035 vials acceptable (no extra labels, not leaking)?   YES NO   NA							s?			- Q					
13. Air Samples: Cassettes / Tubes Intact with MS? Canisters Pressurized  PH Lot of fest Reagent Preserved? Lot Received Exp Sample ID Vol. Lot Added Final Adjusted Added Ph							10			Œ	ES.			<b>3</b> -+	<b>≻</b> 4
PH Lot of test paper   Preserved?   Lot Received   Exp   Sample ID   Adjusted   Added   Final pH			-					D	.:1				Andah	<b>∠</b> 1√/	<i>5</i> 4
Paper			· · · · · · · · · · · · · · · · · · ·	_				Pressui						ot Added	A)   Final
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Signature   Sign		DUELT		<del>  .</del> /		///	71197		2/9						
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Residual Chlorine (-) Phenol, 625, 608, CN), ascorbic (phenol).    Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>						<del></del>									
Chlorine (-)   Phenol, 625, 608pest, 522   Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (625, 608, CN), ascorbic (phenol).    Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>   **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:   1/5-01-35   5-072-00 ,   8/3/14/-0    Explain all Discrepancies/ Other Comments:    CLRES   BULK   DO   FLDT   HPROD   HGFB   HTR   LL3541   PH   SUB   SO3   MARRS   ALS   REV   Labels secondary reviewed by:   Q     / 1/45	ļ		·+	1		<u> </u>			†			1			
(-) 608pest, 522 CN), ascorbic (phenol).  Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ZnAcetate	ſ					Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	(625, 60	08,							
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	1			1	1	CN), asc	orbic (pl	henol).							
Bottle lot numbers:   15-01-25   5-072-001   8/21111-0   Explain all Discrepancies   Other Comments:    CLRES   BULK   DO   FLDT   HPROD   HGFB   HTR   LL3541   PH   SUB   SO3   MARRS   ALS   REV     Labels secondary reviewed by:   Q   1/100			<del></del>			1									
Bottle lot numbers:			<del></del>	-	-										
Bottle lot numbers:   S-01-25   S-072-00 ,   S 2 MJ-0    Explain all Discrepancies Other Comments:    CLRES   BULK     DO   FLDT     HPROD   HGFB     HTR   LL3541     PH   SUB     SO3   MARRS     ALS   REV		`	HC1	**	**	1									al preservatives
Explain all Discrepancies/ Other Comments:  CLRES BULK DO FLDT HPROD HGFB HTR LL3541 PH SUB SO3 MARRS ALS REV  Labels secondary reviewed by:									1	are che	cked (not	Just repres	semanyes	5).	
Explain all Discrepancies/ Other Comments:  CLRES BULK DO FLDT HPROD HGFB HTR LL3541 PH SUB SO3 MARRS ALS REV  Labels secondary reviewed by:	Bottle lot	numbers	16-11-20	8-17	7 - 2121	1 01-	1111-1								
CLRES BULK DO FLDT HPROD HGFB HTR LL3541 PH SUB SO3 MARRS ALS REV  Labels secondary reviewed by:	Explain al	I Discrepanc	ies/ Other Comm	ients:		101.0	7.7.0	<del>'/</del>							
DO FLDT HPROD HGFB HTR LL3541 PH SUB SO3 MARRS ALS REV  Labels secondary reviewed by:	21.,514	· z .oo. opano												CLRES	BULK
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Labels secondary reviewed by:											*				
														ALS	REV
PC Secondary Review: (MA Q / //Y) *significant air-bubbles: VOA > 5.6 mm : WC > 1 in diameter					0	1/0	<b>.</b> .	. ~			<b>.</b>	,	WC · ·		

7 of 50

3/12/18



# Miscellaneous Forms



### **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 õNotesö 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 õimmediateö 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 (×100% Difference between two GC columns).
- 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 Certifications<sup>1</sup>

Connecticut ID # PH0556	Maine ID #NY0032	New Hampshire ID #
Delaware Approved	New Jersey ID # NY004	294100 A/B
DoD ELAP #65817	New York ID # 10145	Pennsylvania ID# 68-786
Florida ID # E87674	North Carolina #676	Rhode Island ID # 158
		Virginia #460167

¹ Analyses were performed according to our laboratory

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 <a href="https://www.alsglobal.com/locations/americas/north-

### **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: R1807155

**Project:** LCI 2018/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

Analyst Summary report

Client: New York State DEC Service Request: R1807155

**Project:** LCI 2018/LCI2018

 Sample Name:
 18SRB005
 Date Collected:
 07/30/18

 Lab Code:
 R1807155-001
 Date Received:
 07/31/18

Sample Matrix: Water

Extracted/Digested By	Analyzed By
	AMOSES
NSMITH	CWOODS
	GNITAJOUPPI
GNITAJOUPPI	GNITAJOUPPI
	AMOSES
	SCYMBAL
	CWOODS
	MROGERSON
	GNITAJOUPPI
	NSMITH

 Sample Name:
 18SRB005 Diss
 Date Collected:
 07/30/18

 Lab Code:
 R1807155-002
 Date Received:
 07/31/18

Sample Matrix: Water

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

 Sample Name:
 18SRB006
 Date Collected: 07/30/18

 Lab Code:
 R1807155-003
 Date Received: 07/31/18

Sample Matrix: Water

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

Analyst Summary report

Client: New York State DEC Service Request: R1807155

**Project:** LCI 2018/LCI2018

 Sample Name:
 18SRB006 Diss

 Lab Code:
 R1807155-004

 Date Received:
 07/30/18

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

365.1 MROGERSON GNITAJOUPPI

SM 5310 C-2000(2011) CWOODS

Sample Name: 18SRB001 Date Collected: 07/30/18

**Lab Code:** R1807155-005 **Date Received:** 07/31/18

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

351.2 NSMITH CWOODS

353.2 GNITAJOUPPI 365.1 GNITAJOUPPI GNITAJOUPPI

ASTM D6919-09 AMOSES

SM 2120 B-2001(2011) SCYMBAL

SM 2320 B-1997(2011) CWOODS SM 5310 C-2000(2011) CWOODS

SM20 10200 H GNITAJOUPPI

 Sample Name:
 18SRB001 Diss
 Date Collected: 07/30/18

 Lab Code:
 R1807155-006
 Date Received: 07/31/18

Lab Code: R1807155-006 Date R
Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

365.1 MROGERSON GNITAJOUPPI

Sample Name: 18SRB002 Date Collected: 07/30/18

**Lab Code:** R1807155-007 **Date Received:** 07/31/18

Sample Matrix: Water

Analysis MethodExtracted/Digested ByAnalyzed By351.2NSMITHCWOODS

353.2 GNITAJOUPPI

Printed 8/24/2018 2:52:26 PM Superset Reference:18-0000475363 rev 00

Analyst Summary report

Client: New York State DEC Service Request: R1807155

**Project:** LCI 2018/LCI2018

 Sample Name:
 18SRB002
 Date Collected:
 07/30/18

 Lab Code:
 R1807155-007
 Date Received:
 07/31/18

Sample Matrix: Water

Analysis MethodExtracted/Digested ByAnalyzed By365.1GNITAJOUPPIGNITAJOUPPI

ASTM D6919-09 AMOSES

ASTM D6919-09 AMOSES SM 2120 B-2001(2011) SCYMBAL

SM 5310 C-2000(2011) CWOODS

Sample Name: 18SRB002 Diss Date Collected: 07/30/18

**Lab Code:** R1807155-008 **Date Received:** 07/31/18

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

365.1 MROGERSON GNITAJOUPPI

Sample Name: 18SRB003 Date Collected: 07/30/18

**Lab Code:** R1807155-009 **Date Received:** 07/31/18

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

300.0 AMOSES 351.2 NSMITH CWOODS

353.2 GNITAJOUPPI

365.1 GNITAJOUPPI GNITAJOUPPI

ASTM D6919-09 AMOSES

SM 2120 B-2001(2011) SCYMBAL SM 2320 B 1007(2011) CWOODS

SM 2320 B-1997(2011) CWOODS SM 5910 B MROGERSON

SM20 10200 H GNITAJOUPPI

Analyst Summary report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Service Request: R1807155

 Sample Name:
 18SRB003 Diss

 Lab Code:
 R1807155-010

 Date Received:
 07/30/18

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

365.1 MROGERSON GNITAJOUPPI

SM 5310 C-2000(2011) CWOODS

Sample Name: 18SRB004 Date Collected: 07/30/18

**Lab Code:** R1807155-011 **Date Received:** 07/31/18

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

300.0 AMOSES

351.2 NSMITH CWOODS

353.2 GNITAJOUPPI

365.1 GNITAJOUPPI GNITAJOUPPI

ASTM D6919-09 AMOSES

SM 2120 B-2001(2011) SCYMBAL

SM 5910 B MROGERSON

 Sample Name:
 18SRB004 Diss
 Date Collected: 07/30/18

 Lab Code:
 R1807155-012
 Date Received: 07/31/18

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

365.1 MROGERSON GNITAJOUPPI

SM 5310 C-2000(2011) CWOODS



### **INORGANIC PREPARATION METHODS**

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

### Water/Liquid Matrix

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

### Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation
	Method
6010C	3050B
6020A	3050B
6010C TCLP (1311)	3005A/3010A
extract	
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



# Metals

### METALS - 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: New York State DEC Service Request: LCI0723

**Project No.:** R1807155 **Date Collected:** 7/30/2018

Project Name: Date Received: 7/31/2018

Matrix: WATER ug/L

Basis:

Sample Name: 18SRB006 Lab Code: R1807155-003

Analyte	Analysis Method	PQL	MDL	Dil. Factor	Result	С	Q
Arsenic	200.8	1.0	0.39	1.0	1.0	Ū	
Iron	200.7	100	13.0	1.0	319		
Manganese	200.7	10.0	1.7	1.0	361		

% Solids: 0.0

Comments:

### METALS - 1 -

### INORGANIC ANALYSIS DATA PACKAGE

Client: New York State DEC Service Request: LCI0723

**Project No.:** R1807155 **Date Collected:** 7/30/2018

Project Name: Date Received: 7/31/2018

Matrix: WATER ug/L

Basis:

Sample Name: 18SRB004 Lab Code: R1807155-011

Analyte	Analysis Method	PQL	MDL	Dil. Factor	Result	С	Q
Arsenic	200.8	1.0	0.39	1.0	1.0	Ū	
Iron	200.7	100	13.0	1.0	958		
Manganese	200.7	10.0	1.7	1.0	668		

% Solids: 0.0

Comments:



# **General Chemistry**

### Analytical Report

Client: New York State DEC

Project: LCI 2018/LCI2018

Sample Matrix: Water

**Sample Name:** 

18SRB005 Basis: NA

**Lab Code:** R1807155-001

### **Inorganic Parameters**

							Date	
Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	8.0	mg/L	2.0	1	08/07/18 04:37	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0050 U	mg/L	0.0050	1	08/13/18 18:30	NA	
Chlorophyll A	SM20 10200 H	1.46	ug/L	0.040	1	08/20/18 09:30	NA	
Color, True	SM 2120 B-2001(2011)	16.0	ColorUnits	1.0	1	07/31/18 12:10	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0020 U	mg/L	0.0020	1	08/17/18 16:00	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.26	mg/L	0.10	1	08/19/18 14:58	08/16/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.24	pH Units	-	1	07/31/18 15:10	NA	
Phosphorus, Total	365.1	0.0050 U	mg/L	0.0050	1	08/16/18 16:07	08/16/18	
Sulfate	300.0	3.3	mg/L	2.0	10	07/31/18 21:28	NA	
UV254	SM 5910 B	0.0350	cm-1	-	1	07/31/18 19:21	NA	

**Service Request:** R1807155 **Date Collected:** 07/30/18 11:20

**Date Received:** 07/31/18 09:25

Analytical Report

Client: New York State DEC

Project: LCI 2018/LCI2018

Sample Matrix: Water

 Water
 Date Received: 07/31/18 09:25

 18SRB005 Diss
 Basis: NA

**Lab Code:** R1807155-002

**Sample Name:** 

### **Inorganic Parameters**

							Date	
Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Extracted	Q
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	3.0	mg/L	1.0	1	08/06/18 21:35	NA	
Phosphorus, Dissolved	365.1	0.0050 U	mg/L	0.0050	1	08/15/18 17:10	08/10/18	

**Service Request:** R1807155 **Date Collected:** 07/30/18 11:20

Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix: Water

Service Request: R1807155

**Date Collected:** 07/30/18 11:35

**Date Received:** 07/31/18 09:25

Sample Name: 18SRB006 Basis: NA

**Lab Code:** R1807155-003

							Date	
Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0421	mg/L	0.0050	1	08/13/18 18:46	NA	
Color, True	SM 2120 B-2001(2011)	26.0	ColorUnits	1.0	1	07/31/18 12:10	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0093	mg/L	0.0020	1	08/17/18 16:02	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.43	mg/L	0.10	1	08/19/18 13:37	08/16/18	
pH of Color Analysis	SM 2120 B-2001(2011)	6.97	pH Units	-	1	07/31/18 15:10	NA	
Phosphorus, Total	365.1	0.0167	mg/L	0.0050	1	08/16/18 16:11	08/16/18	
Sulfate	300.0	2.7	mg/L	2.0	10	07/31/18 21:34	NA	
UV254	SM 5910 B	0.0460	cm-1	-	1	07/31/18 19:21	NA	

Analytical Report

**Client:** New York State DEC

Service Request: R1807155 **Date Collected:** 07/30/18 11:35 **Project:** LCI 2018/LCI2018

**Date Received:** 07/31/18 09:25 **Sample Matrix:** Water

**Sample Name:** 18SRB006 Diss Basis: NA

Lab Code: R1807155-004

							Date	
Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Extracted	Q
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	2.5	mg/L	1.0	1	08/06/18 21:56	NA	
Phosphorus, Dissolved	365.1	0.0050 U	mg/L	0.0050	1	08/15/18 17:11	08/10/18	

### Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Water

**Service Request:** R1807155 **Date Collected:** 07/30/18 13:15

**Date Received:** 07/31/18 09:25

Sample Name: 18SRB001 Basis: NA

**Lab Code:** R1807155-005

**Sample Matrix:** 

							Date	
Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	17.6	mg/L	2.0	1	08/07/18 04:45	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0050 U	mg/L	0.0050	1	08/13/18 19:02	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	2.3	mg/L	1.0	1	08/08/18 09:32	NA	
Chlorophyll A	SM20 10200 H	1.53	ug/L	0.11	2	08/20/18 09:30	NA	
Color, True	SM 2120 B-2001(2011)	15.0	ColorUnits	1.0	1	07/31/18 12:10	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0038	mg/L	0.0020	1	08/17/18 16:03	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.23	mg/L	0.10	1	08/19/18 13:37	08/16/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.53	pH Units	-	1	07/31/18 15:10	NA	
Phosphorus, Total	365.1	0.0050 U	mg/L	0.0050	1	08/16/18 16:12	08/16/18	

Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix:

Water

Service Request: R1807155

**Date Collected:** 07/30/18 13:15

**Date Received:** 07/31/18 09:25

Sample Name: 18SRB001 Diss Basis: NA

**Lab Code:** R1807155-006

	Analysis							
Analyte Name	Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Dissolved	365.1	0.0050 U	mg/L	0.0050	1	08/15/18 17:12	08/10/18	

Analytical Report

Client: New York State DEC

Project: LCI 2018/LCI2018

Sample Matrix: Water

er **Date Received:** 07/31/18 09:25

Sample Name: 18SRB002 Basis: NA

**Lab Code:** R1807155-007

### **Inorganic Parameters**

							Date	
Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0485	mg/L	0.0050	1	08/13/18 19:18	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	2.1	mg/L	1.0	1	08/08/18 16:59	NA	
Color, True	SM 2120 B-2001(2011)	38.0	ColorUnits	1.0	1	07/31/18 12:10	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0569	mg/L	0.0020	1	08/17/18 16:04	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.35	mg/L	0.10	1	08/19/18 13:38	08/16/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.11	pH Units	-	1	07/31/18 15:10	NA	
Phosphorus, Total	365.1	0.0301	mg/L	0.0050	1	08/16/18 16:13	08/16/18	

**Service Request:** R1807155 **Date Collected:** 07/30/18 13:30

Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix:

Water

Service Request: R1807155

**Date Collected:** 07/30/18 13:30

**Date Received:** 07/31/18 09:25

Sample Name: 18SRB002 Diss

**Lab Code:** R1807155-008

Basis: NA

	Analysis							
Analyte Name	Method	Result	Units	MRL	Dil.	Date Analyzed	<b>Date Extracted</b>	Q
Phosphorus Dissolved	365.1	0.0055	mg/I	0.0050	1	08/15/18 17:13	08/10/18	

#### Analytical Report

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

Project: LCI 2016/LCI2018

Sample Matrix: Water

Sample Name: 18SRB003

**Lab Code:** R1807155-009

Service Request: R1807155

**Date Collected:** 07/30/18 15:05

**Date Received:** 07/31/18 09:25

Basis: NA

							Date		
Analyte Name	Analysis Method	Result	Units	MRL	Dil.	<b>Date Analyzed</b>	Extracted	Q	
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	15.6	mg/L	2.0	1	08/07/18 04:58	NA		
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0050 U	mg/L	0.0050	1	08/13/18 19:35	NA		
Chlorophyll A	SM20 10200 H	1.85	ug/L	0.080	1	08/20/18 09:30	NA		
Color, True	SM 2120 B-2001(2011)	22.0	ColorUnits	1.0	1	07/31/18 12:10	NA		
Nitrate+Nitrite as Nitrogen	353.2	0.0020 U	mg/L	0.0020	1	08/17/18 16:06	NA		
Nitrogen, Total Kjeldahl (TKN)	351.2	0.39	mg/L	0.10	1	08/19/18 13:39	08/16/18		
pH of Color Analysis	SM 2120 B-2001(2011)	7.36	pH Units	-	1	07/31/18 15:10	NA		
Phosphorus, Total	365.1	0.0050 U	mg/L	0.0050	1	08/16/18 16:14	08/16/18		
Sulfate	300.0	3.4	mg/L	2.0	10	07/31/18 21:40	NA		
UV254	SM 5910 B	0.0875	cm-1	-	1	07/31/18 19:21	NA		

Analytical Report

**Client:** New York State DEC

Service Request: R1807155 **Date Collected:** 07/30/18 15:05 **Project:** LCI 2018/LCI2018

**Sample Matrix:** Water

**Sample Name:** 

18SRB003 Diss Basis: NA

Lab Code: R1807155-010

### **Inorganic Parameters**

							Date	
Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Extracted	Q
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	4.0	mg/L	1.0	1	08/06/18 22:16	NA	
Phosphorus, Dissolved	365.1	0.0050 U	mg/L	0.0050	1	08/15/18 17:14	08/10/18	

**Date Received:** 07/31/18 09:25

Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix: Water

**Sample Name:** 

18SRB004 Basis: NA

**Lab Code:** R1807155-011

### **Inorganic Parameters**

							Date	
Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0050 U	mg/L	0.0050	1	08/13/18 19:51	NA	
Color, True	SM 2120 B-2001(2011)	39.0	ColorUnits	1.0	1	07/31/18 12:10	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0020 U	mg/L	0.0020	1	08/17/18 16:11	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.36	mg/L	0.10	1	08/19/18 13:39	08/16/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.06	pH Units	-	1	07/31/18 15:10	NA	
Phosphorus, Total	365.1	0.0355	mg/L	0.0050	1	08/16/18 16:17	08/16/18	
Sulfate	300.0	3.5	mg/L	2.0	10	07/31/18 21:46	NA	
UV254	SM 5910 B	0.126	cm-1	-	1	07/31/18 19:21	NA	

**Service Request:** R1807155 **Date Collected:** 07/30/18 15:10

**Date Received:** 07/31/18 09:25

Analytical Report

**Client:** New York State DEC

**Project:** LCI 2018/LCI2018

**Sample Matrix:** Water

**Date Collected:** 07/30/18 15:10

**Sample Name:** 18SRB004 Diss Lab Code: R1807155-012

Basis: NA

**Date Received:** 07/31/18 09:25

Service Request: R1807155

							Date	
Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Extracted	Q
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	4.1	mg/L	1.0	1	08/08/18 06:23	NA	
Phosphorus, Dissolved	365.1	0.0059	mg/L	0.0050	1	08/15/18 17:15	08/10/18	



# **QC Summary Forms**



# Metals

### **METALS**

-3-

**BLANKS** 

Contract:	R1807155			
Lab Code:	Case No.:	SAS No.:	SDG NO.:	LCI0723
Preparation	Blank Matrix (soil/water):	WATER	_	
Preparation	Blank Concentration Units (ug/L	, ppt, or mg/kg): UG/1	<u>.</u>	

	Initial Calib. Blank		Conti	Continuing Calibration Blank ug/L					Preparation Blank			
Analyte	ug/L	С	1	С	2	С	3	С			С	М
Arsenic	0.39	ט	0.39	Ū	0.39	Ū	0.39	Ū		0.39	U	MS
Iron	13.00	Ū	13.00	Ū	13.00	U	13.00	Ū		13.000	U	P
Manganese	1.70	ŭ	1.70	Ū	1.70	U	1.70	Ū		1.700	U	P

Comments:

### **METALS**

-3-

**BLANKS** 

Contract:	R1807155					
Lab Code:		Case No.:	SAS No.:		SDG NO.:	LCI0723
Preparation	Blank Matrix	(soil/water):	WATER			
Preparation	Blank Concent	cration Units (ug/	L, ppt, or mg/kg):	UG/L		

	Initial Calib. Blank		Cont	inu	ing Calibrati	lon	Blank ug/L		Preparation Blank		
Analyte	ug/L	С	1	С	2	С	3	С		С	M
Arsenic	İ		0.39	Ū	0.39	U	0.39	Ū			MS
Iron			13.00	U	13.00	U				Ī	P
Manganese			1.70	ŭ	1.70	Ū					P

Comments:

## **METALS**

-3-

**BLANKS** 

Contract:	R1807155			
Lab Code:	Case No.:	SAS No.:	SDG NO.:	LCI0723
Preparation	Blank Matrix (soil/water):	WATER		
Preparation	Blank Concentration Units (ug/L	, ppt, or mg/kg):	UG/L	

	Continuing Calibration Blank ug/L						Preparation Blank					
Analyte	ug/L	С	1	С	2	С	3	С		С	M	A.
Arsenic	ĺ		0.3	ט ( פּ							MS	s

Comments:

### **METALS**

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### LABORATORY CONTROL SAMPLE

Aqueous LCS	Source:	ACCUSTANDARD				
Solid LCS S	Source:					
Lab Code:		Case No.:	SAS No.:	SDG NO.:	LCI0723	
Contract:	R1807155					

	Aqueous	Aqueous (ug/L				Solid (mg/K				
Analyte	True	Found	%R	True	Found	С	Limits	%R		
Arsenic	20.0	20.1	100							
Iron	1000	1010	101							
Manganese	500	522	104							

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: R1807155

Date Collected: NA **Project:** LCI 2018/LCI2018 Date Received: NA Water

**Sample Matrix:** 

Basis: NA **Sample Name:** Method Blank

Lab Code: R1807155-MB1

### **Inorganic Parameters**

							Date	
Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	2.0 U	mg/L	2.0	1	08/07/18 02:51	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0050 U	mg/L	0.0050	1	08/13/18 17:58	NA	
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	1.0 U	mg/L	1.0	1	08/06/18 11:47	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	1.0 U	mg/L	1.0	1	08/08/18 00:50	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0020 U	mg/L	0.0020	1	08/17/18 15:19	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.10 U	mg/L	0.10	1	08/19/18 13:28	08/16/18	
Phosphorus, Dissolved	365.1	0.0050 U	mg/L	0.0050	1	08/15/18 16:54	08/10/18	
Phosphorus, Total	365.1	0.0050 U	mg/L	0.0050	1	08/16/18 16:04	08/16/18	
Sulfate	300.0	0.20 U	mg/L	0.20	1	07/31/18 21:05	NA	
UV254	SM 5910 B	0.00200	cm-1	-	1	07/31/18 19:21	NA	

Analytical Report

Client: New York State DEC Service Request: R1807155

Project: LCI 2018/LCI2018 Date Collected: NA

Sample Matrix: Water Date Received: NA

Sample Name: Method Blank Basis: NA

**Lab Code:** R1807155-MB2

### **Inorganic Parameters**

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	1.0 U	mg/L	1.0	1	08/08/18 10:14	
Nitrate+Nitrite as Nitrogen	353.2	0.0020 U	mg/L	0.0020	1	08/17/18 16:09	

QA/QC Report

**Client:** New York State DEC **Service Request:** R1807155 **Project:** LCI 2018/LCI2018 **Date Collected:** 07/30/18 **Sample Matrix:** Water **Date Received:** 07/31/18 **Date Analyzed:** 08/16/18 **Date Extracted:** 08/16/18

> Duplicate Matrix Spike Summary Phosphorus, Total

 Sample Name:
 18SRB005
 Units: mg/L

 Lab Code:
 R1807155-001
 Basis: NA

**Analysis Method:** 365.1 **Prep Method:** Method

Matrix Spike Duplicate Matrix Spike

R1807155-001MS R1807155-001DMS

	Sample		Spike			Spike		% Rec		RPD
Analyte Name	Result	Result	Amount	% Rec	Result	Amount	% Rec	Limits	RPD	Limit
Phosphorus, Total	0.0050 U	0.0273	0.0250	109	0.0273	0.0250	109	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.

QA/QC Report

**Client:** New York State DEC **Service Request:** R1807155 **Project:** LCI 2018/LCI2018 **Date Collected:** 07/30/18 **Date Received: Sample Matrix:** Water 07/31/18 08/17/18

Date Analyzed:

**Duplicate Matrix Spike Summary** Nitrate+Nitrite as Nitrogen

**Sample Name:** 18SRB004 **Units:** mg/LLab Code: R1807155-011 **Basis:** NA

**Analysis Method:** 353.2

> **Matrix Spike Duplicate Matrix Spike** R1807155-011MS R1807155-011DMS

	Sample		Spike			Spike		% Rec		RPD
Analyte Name	Result	Result	Amount	% Rec	Result	Amount	% Rec	Limits	RPD	Limit
Nitrate+Nitrite as Nitrogen	0.0020 U	0.489	0.500	98	0.490	0.500	98	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.

dba ALS Environmental

QA/QC Report

Client: New York State DEC

Service Request: R1807155

Date Collected: 07/30/18

Project LCI 2018/LCI2018

Water

**Date Received:** 07/31/18

**Date Analyzed:** 08/07/18

Replicate Sample Summary General Chemistry Parameters

Sample Name: 18SRB005

Units: mg/L

Basis: NA

Duplicate Sample

R1807155-

R18071

Analyte Name Analysis Method

R1807155-001

Sample Result 001DUP Result Average

RPD RPD Limit

Alkalinity, Total as CaCO3

Sample Matrix:

Lab Code:

SM 2320 B-1997(2011)

**MRL** 2.0

8.0

8.0

8.00

:1

20

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

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

dba ALS Environmental

QA/QC Report

Client: New York State DEC Service Request: R1807155

**Project** LCI 2018/LCI2018 **Date Collected:** 07/30/18

Sample Matrix: Water

Sample Name:

Lab Code:

**Date Received:** 07/31/18 **Date Analyzed:** 07/31/18

**Replicate Sample Summary General Chemistry Parameters** 

**MRL** 

1.0

18SRB006

R1807155-003

**Units:** ColorUnits

Basis: NA

**Duplicate** Sample

R1807155-

Sample **003DUP** 

**Analysis Method** Analyte Name Color, True SM 2120 B-2001(2011)

Result 26.0

Result 26.0

RPD Limit Average 26.0

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

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

dba ALS Environmental

QA/QC Report

Client: New York State DEC
Project LCI 2018/LCI2018

Sample Matrix: Water Date Received: 07/31/18

**Date Analyzed:** 07/31/18

Service Request: R1807155

Replicate Sample Summary General Chemistry Parameters

Sample Name: 18SRB006 Units: pH Units

**Lab Code:** R1807155-003 **Basis:** NA

Duplicate Sample R1807155-

Sample 003DUP

Analyte NameAnalysis MethodMRLResultResultAverageRPDRPD LimitpH of Color AnalysisSM 2120 B-2001(2011)-6.976.966.97<1</td>20

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

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

dba ALS Environmental

QA/QC Report

Client: New York State DEC

**Project** 

w York State DEC Service Request: R1807155

LCI 2018/LCI2018 **Date Collected:** 07/30/18

Sample Matrix: Water Date Received: 07/31/18
Date Analyzed: 07/31/18

Replicate Sample Summary

**General Chemistry Parameters** 

Sample Name: 18SRB003 Units: cm-1

**Lab Code:** R1807155-009 **Basis:** NA

Duplicate Sample

R1807155ple 009DUP

 Analyte Name
 Analysis Method
 MRL
 Result
 Result
 Average
 RPD
 RPD Limit

 UV254
 SM 5910 B
 0.0875
 0.0890
 0.0883
 2
 20

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

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

QA/QC Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

**Sample Matrix:** Water

Service Request: R1807155

**Date Analyzed:** 07/31/18 - 08/19/18

**Lab Control Sample Summary General Chemistry Parameters** 

Units:mg/L Basis:NA

### **Lab Control Sample**

R1807155-LCS1

Analyte Name	<b>Analytical Method</b>	Result	Spike Amount	% Rec	% Rec Limits
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	17.6	20.0	88	70-130
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.494	0.500	99	70-130
Carbon, Dissolved Organic (DOC)	SM 5310 C-2000(2011)	9.68	10.0	97	70-130
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	10.2	10.0	102	70-130
Nitrate+Nitrite as Nitrogen	353.2	0.512	0.500	102	70-130
Nitrogen, Total Kjeldahl (TKN)	351.2	2.36	2.50	95	70-130
Phosphorus, Dissolved	365.1	0.0233	0.0250	93	70-130
Phosphorus, Total	365.1	0.0236	0.0250	94	70-130
Sulfate	300.0	2.04	2.00	102	70-130

QA/QC Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

**Sample Matrix:** Water

Service Request: R1807155

**Date Analyzed:** 08/08/18 - 08/17/18

**Lab Control Sample Summary General Chemistry Parameters** 

Units:mg/L Basis:NA

### **Lab Control Sample**

R1807155-LCS2

Analyte Name	<b>Analytical Method</b>	Result	Spike Amount	% Rec	% Rec Limits
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	9.67	10.0	97	70-130
Nitrate+Nitrite as Nitrogen	353.2	0.515	0.500	103	70-130