

Service Request No:R1807070

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 26, 2018 For your reference, these analyses have been assigned our service request number **R1807070**.

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

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CC: Jason Fagel



## **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 Service Request: R1807070

Project: LCI 2018 Date Received: 07/26/2018

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:**

Twenty two water samples were received for analysis at ALS Environmental on 07/26/2018. 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.

#### **General Chemistry:**

Method SM 2120 B-2001(2011): One or more samples were received with insufficient hold time remaining to complete the analysis within the recommended limit. The analysis was performed as soon as possible after receipt by the laboratory. The data is flagged to indicate the holding time violation.

Og	manistry
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Approved by

Date	08/21/2018



CLIENT ID: 18LIS005	ID: 18LIS005 Lab ID: R1807070-001							
Analyte	Results	Flag	MDL	MRL	Units	Method		
Alkalinity, Total as CaCO3	14.8		1.0	2.0	mg/L	SM 2320 B-1997 (2011)		
Ammonia as Nitrogen, undistilled	0.0089		0.0008	0.0050	mg/L	ASTM D6919-09		
Carbon, Total Organic (TOC)	7.0		0.05	1.0	mg/L	SM 5310 C-2000 (2011)		
Chlorophyll A	139			8.0	ug/L	SM20 10200 H		
Color, True	100			5.0	ColorUnits	SM 2120 B-2001 (2011)		
Nitrogen, Total Kjeldahl (TKN)	2.95		0.08	0.10	mg/L	351.2		
pH of Color Analysis	8.00				pH Units	SM 2120 B-2001 (2011)		
Phosphorus, Total	0.48		0.04	0.10	mg/L	365.1		
CLIENT ID: 18LIS005 Diss		Lat	D: R1807	7070-002				
Analyte	Results	Flag	MDL	MRL	Units	Method		
Phosphorus, Dissolved	0.319		0.020	0.050	mg/L	365.1		
CLIENT ID: 18LIS021		Lak	D: R1807	7070-003				
Analyte	Results	Flag	MDL	MRL	Units	Method		
Alkalinity, Total as CaCO3	91.6		1.0	2.0	mg/L	SM 2320 B-1997 (2011)		
Ammonia as Nitrogen, undistilled	0.0066		0.0008	0.0050	mg/L	ASTM D6919-09		
Carbon, Total Organic (TOC)	5.4		0.05	1.0	mg/L	SM 5310 C-2000 (2011)		
Chlorophyll A	235			5.3	ug/L	SM20 10200 H		
Color, True	170			10	ColorUnits	SM 2120 B-2001 (2011)		
Nitrate+Nitrite as Nitrogen	0.303		0.0007	0.0020	mg/L	353.2		
Nitrogen, Total Kjeldahl (TKN)	1.79		0.08	0.10	mg/L	351.2		
pH of Color Analysis	7.81				pH Units	SM 2120 B-2001 (2011)		
Phosphorus, Total	0.062		0.004	0.010	mg/L	365.1		
CLIENT ID: 18LIS021 Diss		Lat	D ID: R1807	7070-004				
Analyte	Results	Flag	MDL	MRL	Units	Method		
Phosphorus, Dissolved	0.0079		0.0020	0.0050	mg/L	365.1		
CLIENT ID: 18LIS035		Lat	D: R1807	7070-005				
Analyte	Results	Flag	MDL	MRL	Units	Method		
Alkalinity, Total as CaCO3	119		1.0	2.0	mg/L	SM 2320 B-1997 (2011)		
Ammonia as Nitrogen, undistilled	0.088		0.008	0.050	mg/L	ASTM D6919-09		
Carbon, Total Organic (TOC)	3.1		0.05	1.0	mg/L	SM 5310 C-2000 (2011)		
Chlorophyll A	40.0			1.6	ug/L	SM20 10200 H		
Color, True	28.0			1.0	ColorUnits	SM 2120 B-2001 (2011)		
Nitrate+Nitrite as Nitrogen	0.736		0.0007	0.0020	mg/L	353.2		



CLIENT ID: 18LIS035		Lab ID: R1807070-005												
Analyte	Results	Flag	MDL	MRL	Units	Method								
Nitrogen, Total Kjeldahl (TKN)	1.29		0.08	0.10	mg/L	351.2								
pH of Color Analysis	7.75				pH Units	SM 2120 B-2001 (2011)								
Phosphorus, Total	0.0271		0.0020	0.0050	mg/L	365.1								
CLIENT ID: 18LIS099		Lat	D: R1807	070-007										
Analyte	Results	Flag	MDL	MRL	Units	Method								
Alkalinity, Total as CaCO3	118		1.0	2.0	mg/L	SM 2320 B-1997 (2011)								
Ammonia as Nitrogen, undistilled	0.087		0.008	0.050	mg/L	ASTM D6919-09								
Carbon, Total Organic (TOC)	3.0		0.05	1.0	mg/L	SM 5310 C-2000 (2011)								
Chlorophyll A	39.7			3.2	ug/L	SM20 10200 H								
Color, True	38.0			1.0	ColorUnits	SM 2120 B-2001 (2011)								
Nitrate+Nitrite as Nitrogen	0.735		0.0007	0.0020	mg/L	353.2								
Nitrogen, Total Kjeldahl (TKN)	1.47		0.08	0.10	mg/L	351.2								
pH of Color Analysis	7.72				pH Units	SM 2120 B-2001 (2011)								
Phosphorus, Total	0.0291		0.0020	0.0050	mg/L	365.1								
CLIENT ID: 18LIS099 Diss		Lat	D: R1807	7070-008										
Analyte	Results	Flag	MDL	MRL	Units	Method								
Phosphorus, Dissolved	0.0059		0.0020	0.0050	mg/L	365.1								
CLIENT ID: 18LIS025		Lak	D: R1807	7070-009										
Analyte	Results	Flag	MDL	MRL	Units	Method								
Alkalinity, Total as CaCO3	60.4		1.0	2.0	mg/L	SM 2320 B-1997 (2011)								
Ammonia as Nitrogen, undistilled	0.0102		0.0008	0.0050	mg/L	ASTM D6919-09								
Carbon, Total Organic (TOC)	11.5		0.05	1.0	mg/L	SM 5310 C-2000 (2011)								
Chlorophyll A	197			5.3	ug/L	SM20 10200 H								
Color, True	160			10	ColorUnits	SM 2120 B-2001 (2011)								
Nitrogen, Total Kjeldahl (TKN)	2.28		0.08	0.10	mg/L	351.2								
pH of Color Analysis	9.17				pH Units	SM 2120 B-2001 (2011)								
Phosphorus, Total	0.106		0.004	0.010	mg/L	365.1								
CLIENT ID: 18LIS025 Diss		Lat	D: R1807	7070-010										
Analyte	Results	Flag	MDL	MRL	Units	Method								
Phosphorus, Dissolved	0.0161		0.0020	0.0050	mg/L	365.1								
CLIENT ID: 18LIS098			D: R1807											
Analyte	Results	Flag	MDL	MRL	Units	Method								
Carbon, Total Organic (TOC)	1.6		0.05	1.0	mg/L	SM 5310 C-2000 (2011)								



CLIENT ID: 18LIS098	Lab ID: R1807070-011												
Analyte	Results	Flag	MDL	MRL	Units	Method							
Chlorophyll A	0.70			0.16	ug/L	SM20 10200 H							
Color, True	12.0			1.0	ColorUnits	SM 2120 B-2001 (2011)							
Nitrogen, Total Kjeldahl (TKN)	0.10		0.08	0.10	mg/L	351.2							
pH of Color Analysis	7.32				pH Units	SM 2120 B-2001 (2011)							
CLIENT ID: 18LIS013		Lab ID: R1807070-013											
Analyte	Results	Flag	MDL	MRL	Units	Method							
Alkalinity, Total as CaCO3	80.4		1.0	2.0	mg/L	SM 2320 B-1997 (2011)							
Ammonia as Nitrogen, undistilled	0.0247		0.0008	0.0050	mg/L	ASTM D6919-09							
Carbon, Total Organic (TOC)	4.7		0.05	1.0	mg/L	SM 5310 C-2000 (2011)							
Chlorophyll A	88.0			3.2	ug/L	SM20 10200 H							
Color, True	105			5.0	ColorUnits	SM 2120 B-2001 (2011)							
Nitrate+Nitrite as Nitrogen	0.252		0.0007	0.0020	mg/L	353.2							
Nitrogen, Total Kjeldahl (TKN)	0.92		0.08	0.10	mg/L	351.2							
pH of Color Analysis	7.56				pH Units	SM 2120 B-2001 (2011)							
Phosphorus, Total	0.0868		0.0020	0.0050	mg/L	365.1							
CLIENT ID: 18LIS013 Diss	Lab ID: R1807070-014												
Analyte	Results	Flag	MDL	MRL	Units	Method							
Phosphorus, Dissolved	0.0192		0.0020	0.0050	mg/L	365.1							
CLIENT ID: 18LIS037		Lal	b ID: R1807	7070-015									
Analyte	Results	Flag	MDL	MRL	Units	Method							
Alkalinity, Total as CaCO3	29.6		1.0	2.0	mg/L	SM 2320 B-1997 (2011)							
Ammonia as Nitrogen, undistilled	0.0108		0.0008	0.0050	mg/L	ASTM D6919-09							
Carbon, Total Organic (TOC)	6.4		0.05	1.0	mg/L	SM 5310 C-2000 (2011)							
Chlorophyll A	6.99			0.80	ug/L	SM20 10200 H							
Color, True	33.0			1.0	ColorUnits	SM 2120 B-2001 (2011)							
Nitrate+Nitrite as Nitrogen	0.0020		0.0007	0.0020	mg/L	353.2							
Nitrogen, Total Kjeldahl (TKN)	0.68		0.08	0.10	mg/L	351.2							
pH of Color Analysis	7.61				pH Units	SM 2120 B-2001 (2011)							
Phosphorus, Total	0.0198		0.0020	0.0050	mg/L	365.1							
CLIENT ID: 18LIS037 Diss		Lal	b ID: R1807	7070-016									
Analyte	Results	Flag	MDL	MRL	Units	Method							
Phosphorus, Dissolved	0.0091		0.0020	0.0050	mg/L	365.1							



CLIENT ID: 18LIS059	Lab ID: R1807070-017							
Analyte	Results	Flag	MDL	MRL	Units	Method		
Alkalinity, Total as CaCO3	56.4		1.0	2.0	mg/L	SM 2320 B-1997 (2011)		
Ammonia as Nitrogen, undistilled	0.0154		0.0008	0.0050	mg/L	ASTM D6919-09		
Carbon, Total Organic (TOC)	8.2		0.05	1.0	mg/L	SM 5310 C-2000 (2011)		
Chlorophyll A	80.6			5.3	ug/L	SM20 10200 H		
Color, True	210			10	ColorUnits	SM 2120 B-2001 (2011)		
Nitrate+Nitrite as Nitrogen	0.0095		0.0007	0.0020	mg/L	353.2		
Nitrogen, Total Kjeldahl (TKN)	1.53		0.08	0.10	mg/L	351.2		
pH of Color Analysis	7.58				pH Units	SM 2120 B-2001 (2011)		
Phosphorus, Total	0.172		0.010	0.025	mg/L	365.1		
CLIENT ID: 18LIS059 Diss			D: R1807					
Analyte	Results	Flag	MDL	MRL	Units	Method		
Phosphorus, Dissolved	0.0778		0.0020	0.0050	mg/L	365.1		
CLIENT ID: 18LIS001			D: R1807	7070-019				
Analyte	Results	Flag	MDL	MRL	Units	Method		
Alkalinity, Total as CaCO3	108		1.0	2.0	mg/L	SM 2320 B-1997 (2011)		
Ammonia as Nitrogen, undistilled	0.0092		0.0008	0.0050	mg/L	ASTM D6919-09		
Carbon, Total Organic (TOC)	4.8		0.05	1.0	mg/L	SM 5310 C-2000 (2011)		
Chlorophyll A	75.2			3.2	ug/L	SM20 10200 H		
Color, True	85.0			5.0	ColorUnits	SM 2120 B-2001 (2011)		
Nitrate+Nitrite as Nitrogen	0.440		0.0007	0.0020	mg/L	353.2		
Nitrogen, Total Kjeldahl (TKN)	0.72		0.08	0.10	mg/L	351.2		
pH of Color Analysis	8.37				pH Units	SM 2120 B-2001 (2011)		
Phosphorus, Total	0.0848		0.0020	0.0050	mg/L	365.1		
CLIENT ID: 18LIS001 Diss		Lal	D: R1807	7070-020				
Analyte	Results	Flag	MDL	MRL	Units	Method		
Phosphorus, Dissolved	0.0475		0.0020	0.0050	mg/L	365.1		
CLIENT ID: 18LIS038			D: R1807	7070-021				
Analyte	Results	Flag	MDL	MRL	Units	Method		
Ammonia as Nitrogen, undistilled	0.0079		0.0008	0.0050	mg/L	ASTM D6919-09		
Carbon, Total Organic (TOC)	6.2		0.05	1.0	mg/L	SM 5310 C-2000		
Color, True	43.0			1.0	ColorUnits	(2011) SM 2120 B-2001 (2011)		
Nitrogen, Total Kjeldahl (TKN)	0.56		0.08	0.10	mg/L	351.2		
pH of Color Analysis	7.59				pH Units	SM 2120 B-2001		
·		-f cc			•	(2011)		



CLIENT ID: 18LIS038		Lab ID: R1807070-021													
Analyte	Results	Results Flag MDL MRL Units													
Phosphorus, Total	0.0260		0.0020	0.0050	mg/L	365.1									
OLIENEUS AND ISSUES DI			ID D4005	7070 000											
CLIENT ID: 18LIS038 Diss		Lat	D: R1807	070-022											
Analyte	Results	Flag	MDL	MRL	Units	Method									



# 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

#### SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	<u>DATE</u>	<u>TIME</u>
R1807070-001	18LIS005	7/24/2018	1045
R1807070-002	18LIS005 Diss	7/24/2018	1045
R1807070-003	18LIS021	7/24/2018	1200
R1807070-004	18LIS021 Diss	7/24/2018	1200
R1807070-005	18LIS035	7/24/2018	1300
R1807070-006	18LIS035 Diss	7/24/2018	1300
R1807070-007	18LIS099	7/24/2018	1300
R1807070-008	18LIS099 Diss	7/24/2018	1300
R1807070-009	18LIS025	7/24/2018	1500
R1807070-010	18LIS025 Diss	7/24/2018	1500
R1807070-011	18LIS098	7/24/2018	1530
R1807070-012	18LIS098 Diss	7/24/2018	1530
R1807070-013	18LIS013	7/25/2018	0915
R1807070-014	18LIS013 Diss	7/25/2018	0915
R1807070-015	18LIS037	7/25/2018	1045
R1807070-016	18LIS037 Diss	7/25/2018	1045
R1807070-017	18LIS059	7/25/2018	1215
R1807070-018	18LIS059 Diss	7/25/2018	1215
R1807070-019	18LIS001	7/25/2018	1430
R1807070-020	18LIS001 Diss	7/25/2018	1430
R1807070-021	18LIS038	7/25/2018	1100
R1807070-022	18LIS038 Diss	7/25/2018	1100

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New York State Department of Environmental Conservation –	

**Division of Water** 

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Project Name: LCI	Project Number: LCI2018	NYSDEC SDG:
Sampler Collector:	Sampler Signature:	Sampler Phone No.:
Project Manager: Alene Onion	X Report to Project Manager Report to:	☐ Bill to Project Manager Bill to: Jason Fagel
Address: 625 Broadway, 4th Floor Albany, NY 12233-3502	Address:	Address: 625 Broadway, 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

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· · · · · · · · · · · · · · · · · · ·										Ana	lyse	s O	rde	red	(list	:)				Preservative Codes:
Matrix Codes:						3			2		0		3		0				0	0 = Cool to < 6°C 1 = HCL
<pre>WW = Wastewater GW = Groundwater AW = Ambient Water SE = Sediment SL = Sludge T = Tissue O = Other</pre>	ction Date	stion Time	x Code	f Containers	TP, NH4, NOx, TKN	, NOx, TKN, NO3 N	d TOP4	48,	Na, K	As, Ca, Mg, Na, K			ANC	У	& UV-254	ANC	UV-254		Chlorophyll 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 = NaHSO <sub>4</sub> 8 = Other
NYSDEC LCI Sample ID	Collection	Collection	Matrix	No. of	TP, NH4	TP, NH4, NOx,	Dissolved TOP4	Fe, Mn, As,	Ca, Mg, Na,	Fe, Mn, 1	Color	TOC	DOC	Alkalinity	SO4 & U	SO4. CI	CI,		Ö	Location Info
18615005	712418	10:45	AW	6	X		×				X	X		X				X/	100	Bours Pont
18L1 5 021	7/21/18	1500	AW	<u>b</u>	X		X				X `	ĸ		X				X	150	Goldenford
18/15/085	7-174/18		Àω	_{	入		X				X	X		X				X	250	Oatland Pond
1845099	7/24/1	1300	AW	6	X		K		ļ		X,	$\mathbf{x}$		X.				X	251	Dudicate OA
184 <b>5</b> 025	717410	1500	AW	_6_	X		X				ĻŽ	X		$X_{\perp}$		Ш		X_	150	Klssehin
1877018	7/24//	1530	AW	6	X		X				X	Χ		<i>×</i>				×	250	QA
	,				-															
Special Analysis Instructio	ns:	<u> </u>			1	<u> </u>	<u> </u>		<u>-</u>	1		<u> </u>	!		)	<u>!</u>	<u> </u>	<u>.                                    </u>		
Relinquished by Sampler:		7/25/17	Time: 17:00		eivod	by:					Date			T	lme:		Labo	orato	ry Receipt (	Notes:
Rolinguished by:	Ĵ	Dato:	Time:		celved	by:					Date	:		Ť	lme:		Sam	ple T	R180	7070 5
Rolinquished by:		Date:	Time:		colver		7	77			Date:	16/1	1		imo: 925—	-		erly   ples	LCI 2018	



### Cooler Receipt and Preservation Check Form

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( De le	<b>39</b> )			1									
Project/Clie	ent	$\mathcal{I}$			Folder	Number_			·	·		_	
Cooler receive	ed on	26/18	by:_ <b>_</b>	<u> </u>		COURIER	: ALS	<b>OPS</b>	FEDEX	VELO	CITY CLIE	ENT	
1 Were Cu	stody seals or	outside of coole	r?	I	Y	5a Perc	hlorate s	samples l	have requ	ired head	dspace?	Y	N (A)
2 Custody	papers prope	rly completed (in	k, signo	ed)?	Y (N)	5b Did	VOA via	ls, Alk b	r Sulfide	have sig*	* bubbles?	Y	NA NA
3 Did all bo	ottles arrive in	good condition	(unbrol	(en)?	N Q	6 Whe	re did the	e bottles	originate	?	ALS/ROC	CL	IENT
4 Circle: C	Wet Ice Dry	Ice Gel packs	pres	ent?	YN	7 Soil	VOA rec	eived as	: Bul	k Enc	ore 5035	set	$\mathbb{A}$
8. Temperatur	re Readings	Date: 7/24	Ir	Time	0946	ID	): <b>K</b> #)	IR#9		From: 7	emp Blank	) Sai	nple Bottle
Observed Te	emp (°C)	6.7										<u>                                     </u>	
Correction F	actor (°C)	11.0											
Corrected Te	emp (°C)	7.7							-			Ĺ	
Temp from:	Type of bottle	Cent tul						-					
Within 0-6°0	C?	YN	)	Y	N	YN	Y	N	Y	1	Y N		ΥN
If<0°C, wer	e samples froz	zen? Y N		Y	N	YN	Y	N	Y 1	1	YN		YN
&Client A	-	note packing/ic		_ Star		on 1/2	nt aware	•	icked (de off Clie		•	Same	e Day Rule
		orage location:	<u>~~~~~</u>		by	_ on <u></u>	at _						
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		ervation Check**				Time:	·		by:_ ES	NO	<del>,</del>		
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		ontainers used for				•	ì		ES	NO			
		ls acceptable (no				;)?		- Y	ES '	NO		N/A	
	<del></del>	Cassettes / Tubes				nisters Pressi			edlar® E			N/A	
рН	Lot of test	Reagent	Preser		Lot Rece	eived	Exp	Sampl		Vol. Added	Lot Adde	d	Final pH
≥12	рарег	NaOH	Yes	No	ļ			Ādjust	ea	Added			bu
≤12		HNO <sub>3</sub>							<del></del>	<del> </del>	<del> </del>		
≤2		H <sub>2</sub> SO <sub>4</sub>											<u> </u>
<4		NaHSO <sub>4</sub>			<del> </del>	<del></del>							
5-9		For 608 pest		· · · · · · ·	No=Notif	fy for 3day	1						
Residual		For CN,				ct PM to add							
Chlorine	1	Phenol, 625,			Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (	625, 608, rbic (phenol).							
(-)		608pest, 522		ļ	CIV), asco	tole (phenol).				·			
	<u> </u>	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>		ļ				**\/\)	c and 1664	Not to be t	ested before an	alveie	
	-	ZnAcetate HCl	**	**			+				mples with che		
		nci			1			are chec	ked (not ju	st represen	tatives).		<del></del>
Dassila las				<	3001	ast	$\bigcap_{m}$	)					
Bottle lot:		es/ Other Comme	ente:		ne	<u> </u>		$\smile$					<del></del>
Explain at	ii Discrepanci	es/ Office Commis	onts.				' /\				CLRE	es :	BULK
							$\cup$	,			DO		FLDT
				, i							HPRO		HGFB
											HTR	<del></del>	LL3541
											PH	_	SUB
						-					SO3		MARRS
											ALS	-+	REV
Labelass	econdon: ==	viewed by:				`	_	_			L.123		
	ndary Revi				<u> </u>	<b>∜al@fi66</b> ant	air bubl	bles: VO	A > 5-6	mm : Wo	C>1 in. dian	neter	

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3/12/18

			HA	IN	OF	C	U	ST	0	DY										Page of
		Project Nar	ne: LC	CI .	<u> </u>			P	roje	ct Nı	ımbe	r: L	CI	201	8			NYS	SDEC SDC	3:
Sam			r Collector:					Sampler Signature:					Z-Sampler Phone No.:							
	Ī	Project Ma			ne Onio	on			Re epor	port t to:	to F	Proje	ect l	Man	agei	•			ill to Proj to: Jason Fag	<b>ect Manager</b> gel
New Wests Charles Demonstrates		Address: 62						A	ddre	ss:								Addı		Broadway, 4 <sup>th</sup> Floor ny, NY 12233-3502
New York State Departmer Environmental Conservation	L	Phone: (518) 4	Ibany, N	47 12	233-3	502			hone									Pho	ne: 518-402-	
Division of Water		Email: alene.		ldec n	V GOV			₩	mail:											el@dec.ny.gov
	L	Email: aicile.	i i	dec.i	iy.gov							_								<u> </u>
Madrie Cadan										Ana	yse			red	(lis	)				Preservative Codes:
Matrix Codes:  Www = Wastewater						3			2		0	3	3		0				0	0 = Cool to < 6°C 1 = HCL
GW = Groundwater AW = Ambient Water SE = Sediment SL = Sludge T = Tissue O = Other  NYSDEC LCI Sample ID			A A A A Matrix Code	Anthrop No. of Containers	XXXX TP, NH4, NOx, TKN		X X X Dissolved TOP4	Fe, Mn, As,	Ca, Mg, Na, K	Fe, Mn, As, Ca, Mg, Na, K	XXXX Color	XXX TOC	DOC	XXX Alkalinity	SO4 & U.V254	SO4, CI	SO4, CI, UV-254	XXXV	Chlorophyll 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  Location Info (L)VLLMA (H)VLLMA (H)VLLM
Special Analysis Instruction	ıs:																			
Relinguished by Sagagier:	•	Date: #25/18	Time:	0	ceived b						Date		_	_ _	me:		Lab	orato	ry Receipt N	lotes:
Relinquished by:		Date:	Time:			y: 1 y Labor	ratory:	<u>z</u>	of 6	6	Onto 7/2		v	   T	me: 940		Proj	ple T perly ples	New York State LCI 2018	070 5

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### Cooler Receipt and Preservation Check Form

R1807070 New York State DEC LCI 2018	*:	5	

COURIER: ALS UPS FEDEX VELOCITY CLIENT  Were Custody seals on outside of cooler?  Custody papers properly completed (ink, signed)?  Did all bottles arrive in good condition (unbroken)?  COURIER: ALS UPS FEDEX VELOCITY CLIENT  5a Perchlorate samples have required headspace? Y N NA  5b Did VOA vials, Alk, or Sulfide have sig* bubbles? Y N NA  6 Where did the bottles originate?  ALS/ROC CLIENT	ماناک به در دران	٠. ر	- 			Eolde	NJ	<b>l</b>			•.				
Were Custody seals on outside of cooler?   Sa   Perchlorate samples have required headspace?   Y N Custody papers properly completed (ink, signed)?   Sb   Did VOA vials, Alk, or Sulfide have sig* bubbles?   Y N N N Did all bottles arrive in good condition (unbroken)?   Y N   Sb   Did VOA vials, Alk, or Sulfide have sig* bubbles?   Y N N N N P N P N P N N N N N N N N N N	-			•		roide				_	·	·· <b>- -</b> -	· · · · · · · · · · · · · · · · · · ·		<del></del> -
Cistody papers properly completed (ink, signed)  Did all bottles arrive in good condition (unbroken)  Circle: Wet Ice Dry Ice Gel packs present? Y			6/1X	·	<u> </u>		COL							ENT	
Did all bottles arrive in good condition (unbroken) N 6 Where did the bottles originate? CLEENT Circle: Wet Ice Dry Ice Gel packs present? Y 8 7 Soil VOA roceived as: Bulk Encore 5035set (A)  Temperature Readings Date: TULIN Time: 16 0557 1D: IRB 1R49 From: Temp Block Sample Bott Diserved Temp (°C)  Corrected Temp (°C)	1 Were Cu	istody seals or	outside of coole	er?		<b>E</b> 0	5a	Perch	lorate s	samples ha	ave requ	ired head	space?	Y ]	V MA
Circle: Wet Ice Dry Ice Gel packs present? Y & 7 Soil VOA received as: Bulk Encore S035set Department Readings Date: 1/11/1/W Time: 1/2 0/857 ID: (RPD) IR#9 From: 1/2 page Sample Bottl Dbserved Temp (**C)	2 Custody	papers prope	rly completed (in	ık, sign	ed)?		5b	Did V	'OA via	ls, Alk,or	Sulfide	have sig*	bubbles?	ΥÓ	NA (V
Temperature Readings Date:	3 Did all b	ottles arrive in	good condition	(unbro	ken)?	Y N	6	Where	e did the	e bottles o	riginate'	? @	ALS/ROC	CLIE	ENT
Deserved Temp (°C)	4 Circle:	Wet Ice Dry	Ice Gel packs	pre	sent?	Y (N)	7	Soil V	OA rec	eived as:	Bul	k Enc	ore 5035	set	(A)
Deserved Temp (°C) Correction Factor (°C) Correction Factor (°C) Corrected Temp (°C) C		D 1'	7/2	11.1		<u> </u>	 صرح		×570×	ID.40		P	700	C	
Corrected Temp (°C)    Corrected Temp (°C)		<u> </u>	Date: 1/4	1/11	_1 ime	× 12 07	<u> </u>	ID:	1K#D	1K#9		From: 4	emp Blank	Sam	pie Βοπί ———
Corrected Temp (°C)   7.8											<del>_</del>			ļ	
Femp from: Type of bottle within 0-6°C? YN		<u> </u>	11.0					<del></del>						<del> </del>	<del></del>
Within 0-6°C?  Within 0-6°C?  Within 0-6°C?  Within 0-6°C?  Were samples frozen?  Within 0-6°C?  Which you want of the packing/ice condition:  Common and the packing/ice condition:  Common and the packing packing of the condition:  Common and the packing packing of the condition:  Collent avare at drop-off Client notified by:  All samples held in storage location:  Same Day Rule Restricted (Gescribed below)  Same D			17.8	_											
If cot of C, were samples frozen? Y N Y N Y N Y N Y N Y N Y N Y N Y N Y		· ·	Cent tuy	$\mu$	37	NI	37	NT.	37	NI NI	37 3	τ	VNI	v	· - NT
Same Day Rule   Strip   Packed   described below    Same Day Rule   Strip   Packed   described   des			zen? V N	)										<u> </u>	
**Client Approval to Run Samples: Standing Approval Client aware at drop-off Client notified by:  **All samples held in storage location: by		<del></del>												<u> </u>	
All samples held in storage location:    Description									-		•		<del>-</del>	Saille I	Jay Kuit
Cooler Breakdown/Preservation Check**: Date: 1/11/11 Time: 1/350 by: 0  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  PH	—————	Approvat to r	cun Samples						<i> </i>	at drop-or	ı Circ	one notine	.d 09.		
Cooler Breakdown/Preservation Check**: Date: 7/21/1/ Time: 350 by: 0.  9. Were all bottle labels complete (i.e. analysis, preferration, etc.)?  10. Did all bottle labels and tags agree with custody paper?  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 CV/A  14. Dot of test Reagent Preserved? Lot Received Exp Sample ID Vol. Lot Added Pinal paper Reagent Preserved? Lot Received Exp Sample ID Vol. Lot Added Pinal paper Residual Added Pinal Ph Residual For CN, If the contact PM to bad Nas/50, (625, 608, CN), ascorbic (phenol).  5-9 For 608pest No=No+Notify for 3day Residual For CN, If the contact PM to bad Nas/50, (625, 608, CN), ascorbic (phenol).  Exp Sample ID Vol. Lot Added Pinal Ph Residual Ph Residual For CN, If the contact PM to bad Nas/50, (625, 608, CN), ascorbic (phenol).  Exp Sample ID Vol. Lot Added Pinal Ph Residual Ph Residual For CN, If the contact PM to bad Nas/50, (625, 608, CN), ascorbic (phenol).  Exp Sample ID Vol. Lot Added Pinal Ph Residual				K-a			<u></u>	1001	r at	10/0 <u> </u>					
Cooler Breakdown/Preservation Check** Date: 7/11/1/ Time: 350 by: 0  9. Were all bottle labels complete (i.e. analysis, proservation, 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  pH	5035 sampl	es placed in st	orage location:			by	OI	n '	_ at _				•		
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10. Did all bottle labels and tags agree with custody papers?  11. Were correct containers used for the tests indicated?  12. Were 5035 value acceptable (no extra labels, not leaking)?  13. Air Samples: Cassettes/Tubes Intact with MS? Canisters Pressurized  PH Lot of test Reagent Pressured?  Did all bottle labels and tags agree with custody papers?  PH Lot of test Reagent Pressured?  Did all bottle labels and tags agree with custody papers?  PH Lot of test Reagent Pressured?  Did all bottle labels and tags agree with custody papers?  Tedlar® Bags Inflated  NOTA							-			3 <i>50</i>	by:	<u>Q</u>	··· ·· ·· ·· ·· ·		
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 N/A  PH Lot of test Reagent Preserve? Lot Received Exp Sample ID Vol. Added Prinal pH  212 NaOH  22 HNO3  32 HNO3  44 NaHSO4  5-9 For 608pest No=Notify for 3day  Residual For CN, Phenol, 625, Nas505 (525, 608, CN), ascorbic (phenol).  (1) Ras503  ZnAcetate Was503  ZnAcetate - Was503  ZnAcetate Was503  ZnAcetate Was503  ZnAcetate - Was503  ZnAcetate Was503  ZnAcetate Was503  ZnAcetate - Was503  Z								3.)?			? <del>-</del>				
13. Air Samples: Cassettes / Tubes Intact with MS?   Canisters Pressurized   Tedlar® Bags Inflated   (N/2)							,,		į	The second second	š `	NO			
Description of test paper   Preserved?   Lot Received   Exp   Sample ID   Added   Added   Final pH		Were 5035 via	ls acceptable (no	extra la	abels,	not leakin	g)?			YES	3	NO		<b>M</b> /A	
Paper   NaOH   Ph   Adjusted   Added   Ph			7					Pressur	<del></del>					N/A	1 1
Secondary reviewed by:   Paramon	pH	i .	Reagent		,	Lot Red	ceived		Exp				Lot Adde	d	1
HNO3    HySO4	>12	paper	NaOH	103	1,40	<u> </u> .		•	ļ	Adjusted	-	Added			1 211
Solution									<del>                                     </del>	1					
S-9   For 608pest   No=Notify for 3day   Residual   For CN,   If +, contact PM to add   NasS203 (625, 608, CN), ascorbic (phenol).	≤2	204518	+-	V		190642	21f	BOOTI	6/19						
Residual Chlorine (-) Phenol, 625, 608pest, 522 (CN), ascorbic (phenol).    Na2S2O3			<del></del>			, ,		<del></del>							1
Chlorine (-)   Phenol, 625,   608,   CN), ascorbic (phenol).      Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>   ZnAcetate   ** ** **   Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).      Bottle lot numbers:   \( \frac{\chi_2 \cdot 00}{\chi_2 \cdot 00} \), \( \frac{\chi_{1116} \chi_3}{\chi_2 \cdot 00} \)   Explain all Discrepancies/ Other Comments:   \frac{\chi_{1116} \chi_3}{\chi_2 \chi_2 \	<del></del>			<u> </u>	-					<u> </u>			<del> </del>	-/-	<del> </del>
Coc says Toc   Coc											-		/		
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ZnAcetate  HCl ** **  Bottle lot numbers: £-072-001, \$\( \) \(			, ,												
Bottle lot numbers: F-072-001, 81116. B3  Explain all Discrepancies/ Other Comments:    Label for 18218998   DO FLDT	<del>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</del>		<del></del>				•					••			
Bottle lot numbers: \( \frac{F-072-001}{\chi_{\chi\ti}{\chi_{\chi_{\chi_{\chi_{\chi_{\chi_{\chi_{\chi_{\chi_{\chi\ti}{\chi_{\chi\ti}{\chi_{\chi_{\chi_{\chi_{\chi_{\chi_{\chi_{\chi_{\chi_{\chi}\ti}}\chi_{\chi_{\chi_{\chi_{\chi_{\chi_{\chi_{\chi_{\chi_{\chi\ti}{\chi_{\chi\ti}}\chi_{\chi_{\chi_{\chi_{\chi_{\chi_{\chi_{\chi_{\chi_{\chi}\chi_{\chi_{\chi_{\chi_{\chi_{\chi_{\chi_{\chi_{\chi_{\chi_{\chi}\chi_{\chi_{\chi_{\chi_{\chi_{\chi_{\chi_{\chi_{\chi}\chi_{\chi}\chi_{\chi}\chi_{\chi}\chi_{\chi}\chi_{\chi_{\chi_{\chi_{\chi_{\chi}\chi_{\chi}\chi_{\chi}\chi_{\chi\ti}\chi_{\chi\chi_{\chi_{\chi}\chi}\chi}\chi\chi\chi}\chi\chi\chi}\chi\chi\chi}\chi}				-	-										seemotives
Explain all Discrepancies/ Other Comments:    Label for 18118998			HCl	**	**									inicai pre	SCIVALIVES
Explain all Discrepancies/ Other Comments:    Label for 18118998	<b>.</b>														
Labels secondary reviewed by:    Cares   Bulk     DO   FLDT     HPROD   HGFB     HTR   LL3541     PH   SUB     SO3   MARRS     ALS   REV	Bottle lot	numbers:	-072-001,	81114	o. 63				·			/	<del></del>		<del></del>
Labels secondary reviewed by:	Explain al	I Discrepanci	es/ Other Comm	ents:							U		CLRE	e   DI	11 1/
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Labels secondary reviewed by:/ \( \int_{\infty} \)										say.	d !		ALS		
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		•		- QU	w	7/30/(	el gof	i <b>66</b> ant a	ir bubb	oles: VOA	> 5-6 ı	nm : WC	>1 in. dian	neter	

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## Miscellaneous Forms

ALS Environmental—Rochester Laboratory 1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623 Phone (585) 288-5380 Fax (585) 288-8475 www.alsglobal.com



#### REPORT QUALIFIERS AND DEFINITIONS

- U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
- J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).
- B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
- E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
- E Organics- Concentration has exceeded the calibration range for that specific analysis.
- D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
- \* Indicates that a quality control parameter has exceeded laboratory limits. Under the 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

<sup>&</sup>lt;sup>1</sup> 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.alselobal.com/locations/americas/north-america/usa/new-vork/rochester-environmental">https://www.alselobal.com/locations/americas/north-america/usa/new-vork/rochester-environmental</a>

### **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: R1807070

**Project:** LCI 2018/LCI2018

**Non-Certified Analytes** 

Certifying Agency: New York Department of Health

MethodMatrixAnalyteSM20 10200 HWaterChlorophyll A

Analyst Summary report

Client: New York State DEC Service Request: R1807070

**Project:** LCI 2018/LCI2018

 Sample Name:
 18LIS005
 Date Collected: 07/24/18

 Lab Code:
 R1807070-001
 Date Received: 07/26/18

Sample Matrix: Water

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

 Sample Name:
 18LIS005 Diss
 Date Collected: 07/24/18

 Lab Code:
 R1807070-002
 Date Received: 07/26/18

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By
365.1 AFELSER MROGERSON

 Sample Name:
 18LIS021
 Date Collected:
 07/24/18

 Lab Code:
 R1807070-003
 Date Received:
 07/26/18

Sample Matrix: Water

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

Analyst Summary report

Client: New York State DEC Service Request: R1807070

**Project:** LCI 2018/LCI2018

 Sample Name:
 18LIS021 Diss
 Date Collected: 07/24/18

 Lab Code:
 R1807070-004
 Date Received: 07/26/18

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

365.1 AFELSER MROGERSON

Sample Name: 18LIS035 Date Collected: 07/24/18

**Lab Code:** R1807070-005 **Date Received:** 07/26/18

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

351.2 NSMITH CWOODS

353.2 GNITAJOUPPI

365.1 MROGERSON GNITAJOUPPI

ASTM D6919-09 AMOSES

SM 2120 B-2001(2011) SCYMBAL

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

SM 5310 C-2000(2011) CWOODS SM20 10200 H NSMITH

Sample Name: 18LIS035 Diss Date Collected: 07/24/18

**Lab Code:** R1807070-006 **Date Received:** 07/26/18

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

365.1 AFELSER MROGERSON

Sample Name: 18LIS099 Date Collected: 07/24/18

**Lab Code:** R1807070-007 **Date Received:** 07/26/18

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

NSMITH CWOODS

353.2 GNITAJOUPPI

365.1 MROGERSON GNITAJOUPPI

Printed 8/21/2018 9:54:31 AM Superset Reference:18-0000475536 rev 00

Analyst Summary report

Client: New York State DEC Service Request: R1807070

**Project:** LCI 2018/LCI2018

 Sample Name:
 18LIS099
 Date Collected: 07/24/18

 Lab Code:
 R1807070-007
 Date Received: 07/26/18

Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
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		NSMITH

 Sample Name:
 18LIS099 Diss
 Date Collected: 07/24/18

 Lab Code:
 R1807070-008
 Date Received: 07/26/18

Sample Matrix: Water

Analysis MethodExtracted/Digested ByAnalyzed By365.1AFELSERMROGERSON

 Sample Name:
 18LIS025
 Date Collected:
 07/24/18

 Lab Code:
 R1807070-009
 Date Received:
 07/26/18

Sample Matrix: Water

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

Analyst Summary report

**Client:** New York State DEC Service Request: R1807070

**Project:** LCI 2018/LCI2018

**Sample Name:** 18LIS025 Diss **Date Collected:** 07/24/18 Lab Code: R1807070-010 **Date Received:** 07/26/18

**Sample Matrix:** Water

**Analyzed By Analysis Method Extracted/Digested By** 

365.1 **AFELSER MROGERSON** 

Sample Name: 18LIS098 **Date Collected:** 07/24/18

Lab Code: R1807070-011 **Date Received:** 07/26/18

Sample Matrix: Water

**Analyzed By Analysis Method Extracted/Digested By** 

351.2 **NSMITH CWOODS** 

353.2 **GNITAJOUPPI** 

365.1 **GNITAJOUPPI MROGERSON** 

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 **NSMITH** 

**Sample Name:** 18LIS098 Diss **Date Collected:** 07/24/18

Lab Code: R1807070-012 **Date Received:** 07/26/18

Sample Matrix: Water

**Analyzed By Analysis Method Extracted/Digested By** 

365.1 **AFELSER MROGERSON** 

Sample Name: **Date Collected:** 07/25/18 18LIS013

Lab Code: R1807070-013 **Date Received:** 07/26/18 Sample Matrix: Water

**Analyzed By Analysis Method Extracted/Digested By** 351.2 **NSMITH CWOODS** 

353.2 **GNITAJOUPPI** 

365.1 **GNITAJOUPPI MROGERSON** 

Printed 8/21/2018 9:54:31 AM Superset Reference:18-0000475536 rev 00

Analyst Summary report

Client: New York State DEC Service Request: R1807070

**Project:** LCI 2018/LCI2018

 Sample Name:
 18LIS013
 Date Collected:
 07/25/18

 Lab Code:
 R1807070-013
 Date Received:
 07/26/18

Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
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		NSMITH

 Sample Name:
 18LIS013 Diss
 Date Collected: 07/25/18

 Lab Code:
 R1807070-014
 Date Received: 07/26/18

Sample Matrix: Water

Analysis MethodExtracted/Digested ByAnalyzed By365.1AFELSERMROGERSON

 Sample Name:
 18LIS037
 Date Collected: 07/25/18

 Lab Code:
 R1807070-015
 Date Received: 07/26/18

Sample Matrix: Water

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

Analyst Summary report

**Client:** New York State DEC Service Request: R1807070

**Project:** LCI 2018/LCI2018

**Sample Name:** 18LIS037 Diss **Date Collected:** 07/25/18 Lab Code: R1807070-016 **Date Received:** 07/26/18

**Sample Matrix:** Water

**Analyzed By Analysis Method Extracted/Digested By** 

365.1 **AFELSER MROGERSON** 

Sample Name: 18LIS059 **Date Collected:** 07/25/18

Lab Code: R1807070-017 **Date Received:** 07/26/18

Sample Matrix: Water

**Extracted/Digested By Analyzed By Analysis Method** 

351.2 **NSMITH CWOODS** 

353.2 **GNITAJOUPPI** 

365.1

**GNITAJOUPPI MROGERSON** 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 **NSMITH** 

**Sample Name:** 18LIS059 Diss **Date Collected:** 07/25/18

Lab Code: R1807070-018 **Date Received:** 07/26/18

Sample Matrix: Water

**Analyzed By Analysis Method Extracted/Digested By** 

365.1 **MROGERSON GNITAJOUPPI** 

Sample Name: **Date Collected:** 07/25/18 18LIS001

Lab Code: R1807070-019 **Date Received:** 07/26/18

Sample Matrix: Water

**Analyzed By Analysis Method Extracted/Digested By** 

351.2 **NSMITH CWOODS** 

353.2 **GNITAJOUPPI** 

365.1 **GNITAJOUPPI MROGERSON** 

Printed 8/21/2018 9:54:31 AM Superset Reference:18-0000475536 rev 00

Analyst Summary report

Client: New York State DEC Service Request: R1807070

Project: LCI 2018/LCI2018

 Sample Name:
 18LIS001
 Date Collected: 07/25/18

 Lab Code:
 R1807070-019
 Date Received: 07/26/18

**Sample Matrix:** Water

Analysis Method Extracted/Digested By Analyzed By
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
 NSMITH

 Sample Name:
 18LIS001 Diss
 Date Collected: 07/25/18

 Lab Code:
 R1807070-020
 Date Received: 07/26/18

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

365.1 MROGERSON GNITAJOUPPI

Sample Name: 18LIS038 Date Collected: 07/25/18

Lab Code: R1807070-021 Date Received: 07/26/18
Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

351.2 NSMITH CWOODS

353.2 GNITAJOUPPI 365.1 MROGERSON GNITAJOUPPI

ASTM D6919-09 AMOSES

SM 2120 B-2001(2011) SCYMBAL

 Sample Name:
 18LIS038 Diss
 Date Collected: 07/25/18

 Lab Code:
 R1807070-022
 Date Received: 07/26/18

Sample Matrix: Water

SM 5310 C-2000(2011)

Analysis Method Extracted/Digested By Analyzed By

365.1 MROGERSON GNITAJOUPPI

Printed 8/21/2018 9:54:31 AM Superset Reference:18-0000475536 rev 00

**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/	DI extraction
353.2/ SM 2320B/ SM	
5210B/ 9056A Anions	

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



# **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

**Project:** LCI 2018/LCI2018

Sample Matrix: Water

**Sample Name:** 

18LIS005 Basis: NA

**Lab Code:** R1807070-001

#### **Inorganic Parameters**

							Date	
Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	14.8	mg/L	2.0	1	08/06/18 14:44	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0089	mg/L	0.0050	1	08/08/18 20:20	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	7.0	mg/L	1.0	1	08/06/18 19:08	NA	
Chlorophyll A	SM20 10200 H	139	ug/L	8.0	20	08/14/18 11:00	NA	
Color, True	SM 2120 B-2001(2011)	100	ColorUnits	5.0	5	07/26/18 11:45	NA	*
Nitrate+Nitrite as Nitrogen	353.2	0.0020 U	mg/L	0.0020	1	08/17/18 12:50	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	2.95	mg/L	0.10	1	08/10/18 12:19	08/07/18	
pH of Color Analysis	SM 2120 B-2001(2011)	8.00	pH Units	-	5	07/28/18 08:40	NA	*
Phosphorus, Total	365.1	0.48	mg/L	0.10	20	08/15/18 19:23	08/10/18	

**Service Request:** R1807070 **Date Collected:** 07/24/18 10:45

**Date Received:** 07/26/18 09:25

Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix:

Water

**Service Request:** R1807070

**Date Collected:** 07/24/18 10:45

**Date Received:** 07/26/18 09:25

**Sample Name:** 18LIS005 Diss

**Lab Code:** R1807070-002

Basis: NA

#### **Inorganic Parameters**

Analysis	

Analyte Name	Method	Result	Units	MRL	Dil.	Date Analyzed	<b>Date Extracted</b>	Q
Phosphorus, Dissolved	365.1	0.319	mg/L	0.050	10	08/06/18 19:11	08/01/18	

#### Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix: Water

Sample Name: 18LIS021 Basis: NA

**Lab Code:** R1807070-003

#### **Inorganic Parameters**

						Date	
Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Extracted	Q
SM 2320 B-1997(2011)	91.6	mg/L	2.0	1	08/06/18 14:58	NA	
ASTM D6919-09	0.0066	mg/L	0.0050	1	08/08/18 20:36	NA	
SM 5310 C-2000(2011)	5.4	mg/L	1.0	1	08/06/18 19:29	NA	
SM20 10200 H	235	ug/L	5.3	20	08/14/18 11:00	NA	
SM 2120 B-2001(2011)	170	ColorUnits	10	10	07/26/18 11:45	NA	
353.2	0.303	mg/L	0.0020	1	08/17/18 12:57	NA	
351.2	1.79	mg/L	0.10	1	08/10/18 12:20	08/07/18	
SM 2120 B-2001(2011)	7.81	pH Units	-	10	07/28/18 08:40	NA	*
365.1	0.062	mg/L	0.010	2	08/15/18 19:24	08/10/18	
	SM 2320 B-1997(2011) ASTM D6919-09 SM 5310 C-2000(2011) SM20 10200 H SM 2120 B-2001(2011) 353.2 351.2 SM 2120 B-2001(2011)	SM 2320 B-1997(2011)       91.6         ASTM D6919-09       0.0066         SM 5310 C-2000(2011)       5.4         SM20 10200 H       235         SM 2120 B-2001(2011)       170         353.2       0.303         351.2       1.79         SM 2120 B-2001(2011)       7.81	SM 2320 B-1997(2011)         91.6         mg/L           ASTM D6919-09         0.0066         mg/L           SM 5310 C-2000(2011)         5.4         mg/L           SM20 10200 H         235         ug/L           SM 2120 B-2001(2011)         170         ColorUnits           353.2         0.303         mg/L           351.2         1.79         mg/L           SM 2120 B-2001(2011)         7.81         pH Units	SM 2320 B-1997(2011)         91.6         mg/L         2.0           ASTM D6919-09         0.0066         mg/L         0.0050           SM 5310 C-2000(2011)         5.4         mg/L         1.0           SM20 10200 H         235         ug/L         5.3           SM 2120 B-2001(2011)         170         ColorUnits         10           353.2         0.303         mg/L         0.0020           351.2         1.79         mg/L         0.10           SM 2120 B-2001(2011)         7.81         pH Units         -	SM 2320 B-1997(2011)         91.6         mg/L         2.0         1           ASTM D6919-09         0.0066         mg/L         0.0050         1           SM 5310 C-2000(2011)         5.4         mg/L         1.0         1           SM20 10200 H         235         ug/L         5.3         20           SM 2120 B-2001(2011)         170         ColorUnits         10         10           353.2         0.303         mg/L         0.0020         1           351.2         1.79         mg/L         0.10         1           SM 2120 B-2001(2011)         7.81         pH Units         -         10	SM 2320 B-1997(2011)         91.6         mg/L         2.0         1         08/06/18 14:58           ASTM D6919-09         0.0066         mg/L         0.0050         1         08/08/18 20:36           SM 5310 C-2000(2011)         5.4         mg/L         1.0         1         08/06/18 19:29           SM20 10200 H         235         ug/L         5.3         20         08/14/18 11:00           SM 2120 B-2001(2011)         170         ColorUnits         10         10         07/26/18 11:45           353.2         0.303         mg/L         0.0020         1         08/17/18 12:57           351.2         1.79         mg/L         0.10         1         08/10/18 12:20           SM 2120 B-2001(2011)         7.81         pH Units         -         10         07/28/18 08:40	Analysis Method         Result         Units         MRL         Dil.         Date Analyzed         Extracted           SM 2320 B-1997(2011)         91.6         mg/L         2.0         1         08/06/18 14:58         NA           ASTM D6919-09         0.0066         mg/L         0.0050         1         08/08/18 20:36         NA           SM 5310 C-2000(2011)         5.4         mg/L         1.0         1         08/06/18 19:29         NA           SM20 10200 H         235         ug/L         5.3         20         08/14/18 11:00         NA           SM 2120 B-2001(2011)         170         ColorUnits         10         10         07/26/18 11:45         NA           353.2         0.303         mg/L         0.0020         1         08/17/18 12:57         NA           351.2         1.79         mg/L         0.10         1         08/10/18 12:20         08/07/18           SM 2120 B-2001(2011)         7.81         pH Units         -         10         07/28/18 08:40         NA

**Service Request:** R1807070 **Date Collected:** 07/24/18 12:00

**Date Received:** 07/26/18 09:25

Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix:

Water

**Service Request:** R1807070

**Date Collected:** 07/24/18 12:00

**Date Received:** 07/26/18 09:25

Sample Name: 18LIS021 Diss Basis: NA

**Lab Code:** R1807070-004

#### **Inorganic Parameters**

	Analysis							
Analyte Name	Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Dissolved	365.1	0.0079	mg/L	0.0050	1	08/06/18 18:43	08/01/18	

#### Analytical Report

**Client:** New York State DEC **Project:** 

LCI 2018/LCI2018

**Sample Matrix:** Water

**Sample Name:** 

18LIS035 Basis: NA

Lab Code: R1807070-005

#### **Inorganic Parameters**

							Date	
Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	119	mg/L	2.0	1	08/06/18 15:04	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.088	mg/L	0.050	10	08/07/18 18:07	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	3.1	mg/L	1.0	1	08/06/18 19:50	NA	
Chlorophyll A	SM20 10200 H	40.0	ug/L	1.6	10	08/14/18 11:00	NA	
Color, True	SM 2120 B-2001(2011)	28.0	ColorUnits	1.0	1	07/26/18 11:45	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.736	mg/L	0.0020	1	08/17/18 12:58	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	1.29	mg/L	0.10	1	08/10/18 12:22	08/07/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.75	pH Units	-	1	07/28/18 08:40	NA	*
Phosphorus, Total	365.1	0.0271	mg/L	0.0050	1	08/15/18 17:50	08/10/18	

**Service Request:** R1807070 **Date Collected:** 07/24/18 13:00

**Date Received:** 07/26/18 09:25

Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix:

Phosphorus, Dissolved

Water

365.1

Service Request: R1807070

08/06/18 18:47

08/01/18

**Date Collected:** 07/24/18 13:00

**Date Received:** 07/26/18 09:25

Sample Name: 18LIS035 Diss Basis: NA

0.0050 U

**Lab Code:** R1807070-006

#### **Inorganic Parameters**

	Analysis						
Analyte Name	Method	Result	Units	MRL	Dil.	Date Analyzed Date Extracted	Q

mg/L

0.0050

Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix: Water

Sample Name: 18LIS099

**Lab Code:** R1807070-007

Service Request: R1807070

**Date Collected:** 07/24/18 13:00

**Date Received:** 07/26/18 09:25

Basis: NA

#### **Inorganic Parameters**

							Date	
Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	118	mg/L	2.0	1	08/06/18 15:10	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.087	mg/L	0.050	10	08/07/18 18:23	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	3.0	mg/L	1.0	1	08/06/18 22:37	NA	
Chlorophyll A	SM20 10200 H	39.7	ug/L	3.2	20	08/14/18 11:00	NA	
Color, True	SM 2120 B-2001(2011)	38.0	ColorUnits	1.0	1	07/26/18 11:45	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.735	mg/L	0.0020	1	08/17/18 12:59	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	1.47	mg/L	0.10	1	08/10/18 12:23	08/07/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.72	pH Units	-	1	07/28/18 08:40	NA	*
Phosphorus, Total	365.1	0.0291	mg/L	0.0050	1	08/15/18 17:51	08/10/18	

Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix:

Water

Service Request: R1807070

**Date Collected:** 07/24/18 13:00

**Date Received:** 07/26/18 09:25

Sample Name: 18LIS099 Diss Basis: NA

**Lab Code:** R1807070-008

#### **Inorganic Parameters**

	Analysis							
Analyte Name	Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Dissolved	365.1	0.0059	mg/L	0.0050	1	08/06/18 18:48	08/01/18	

Analytical Report

**Client:** New York State DEC **Project:** 

LCI 2018/LCI2018

**Sample Matrix:** Water

**Sample Name:** 

18LIS025 Basis: NA

Lab Code: R1807070-009

#### **Inorganic Parameters**

						Date	
Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Extracted	Q
SM 2320 B-1997(2011)	60.4	mg/L	2.0	1	08/06/18 15:16	NA	
ASTM D6919-09	0.0102	mg/L	0.0050	1	08/08/18 21:08	NA	
SM 5310 C-2000(2011)	11.5	mg/L	1.0	1	08/06/18 22:58	NA	
SM20 10200 H	197	ug/L	5.3	20	08/14/18 11:00	NA	
SM 2120 B-2001(2011)	160	ColorUnits	10	10	07/26/18 11:45	NA	
353.2	0.0020 U	mg/L	0.0020	1	08/17/18 13:01	NA	
351.2	2.28	mg/L	0.10	1	08/10/18 12:23	08/07/18	
SM 2120 B-2001(2011)	9.17	pH Units	-	10	07/28/18 08:40	NA	*
365.1	0.106	mg/L	0.010	2	08/15/18 19:27	08/10/18	
	SM 2320 B-1997(2011) ASTM D6919-09 SM 5310 C-2000(2011) SM20 10200 H SM 2120 B-2001(2011) 353.2 351.2 SM 2120 B-2001(2011)	SM 2320 B-1997(2011)       60.4         ASTM D6919-09       0.0102         SM 5310 C-2000(2011)       11.5         SM20 10200 H       197         SM 2120 B-2001(2011)       160         353.2       0.0020 U         351.2       2.28         SM 2120 B-2001(2011)       9.17	SM 2320 B-1997(2011)       60.4       mg/L         ASTM D6919-09       0.0102       mg/L         SM 5310 C-2000(2011)       11.5       mg/L         SM20 10200 H       197       ug/L         SM 2120 B-2001(2011)       160       ColorUnits         353.2       0.0020 U       mg/L         351.2       2.28       mg/L         SM 2120 B-2001(2011)       9.17       pH Units	SM 2320 B-1997(2011)         60.4         mg/L         2.0           ASTM D6919-09         0.0102         mg/L         0.0050           SM 5310 C-2000(2011)         11.5         mg/L         1.0           SM20 10200 H         197         ug/L         5.3           SM 2120 B-2001(2011)         160         ColorUnits         10           353.2         0.0020 U         mg/L         0.0020           351.2         2.28         mg/L         0.10           SM 2120 B-2001(2011)         9.17         pH Units         -	SM 2320 B-1997(2011)         60.4         mg/L         2.0         1           ASTM D6919-09         0.0102         mg/L         0.0050         1           SM 5310 C-2000(2011)         11.5         mg/L         1.0         1           SM20 10200 H         197         ug/L         5.3         20           SM 2120 B-2001(2011)         160         ColorUnits         10         10           353.2         0.0020 U         mg/L         0.0020         1           351.2         2.28         mg/L         0.10         1           SM 2120 B-2001(2011)         9.17         pH Units         -         10	SM 2320 B-1997(2011)         60.4         mg/L         2.0         1         08/06/18 15:16           ASTM D6919-09         0.0102         mg/L         0.0050         1         08/08/18 21:08           SM 5310 C-2000(2011)         11.5         mg/L         1.0         1         08/06/18 22:58           SM20 10200 H         197         ug/L         5.3         20         08/14/18 11:00           SM 2120 B-2001(2011)         160         ColorUnits         10         10         07/26/18 11:45           353.2         0.0020 U         mg/L         0.0020         1         08/17/18 13:01           351.2         2.28         mg/L         0.10         1         08/10/18 12:23           SM 2120 B-2001(2011)         9.17         pH Units         -         10         07/28/18 08:40	Analysis Method         Result         Units         MRL         Dil.         Date Analyzed         Extracted           SM 2320 B-1997(2011)         60.4         mg/L         2.0         1         08/06/18 15:16         NA           ASTM D6919-09         0.0102         mg/L         0.0050         1         08/08/18 21:08         NA           SM 5310 C-2000(2011)         11.5         mg/L         1.0         1         08/06/18 22:58         NA           SM20 10200 H         197         ug/L         5.3         20         08/14/18 11:00         NA           SM 2120 B-2001(2011)         160         ColorUnits         10         10         07/26/18 11:45         NA           353.2         0.0020 U         mg/L         0.0020         1         08/17/18 13:01         NA           351.2         2.28         mg/L         0.10         1         08/10/18 12:23         08/07/18           SM 2120 B-2001(2011)         9.17         pH Units         -         10         07/28/18 08:40         NA

**Service Request:** R1807070 **Date Collected:** 07/24/18 15:00

**Date Received:** 07/26/18 09:25

Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix:

Water

Service Request: R1807070

**Date Collected:** 07/24/18 15:00

**Date Received:** 07/26/18 09:25

Sample Name: 18LIS025 Diss Basis: NA

**Lab Code:** R1807070-010

	Analysis							
Analyte Name	Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Dissolved	365.1	0.0161	mg/L	0.0050	1	08/06/18 18:51	08/01/18	

Analytical Report

**Client:** New York State DEC **Project:** 

LCI 2018/LCI2018

**Sample Matrix:** Water

**Sample Name:** 

**Date Received:** 07/26/18 09:25

**Service Request:** R1807070 **Date Collected:** 07/24/18 15:30

18LIS098 Basis: NA

Lab Code: R1807070-011

						Date	
Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Extracted	Q
SM 2320 B-1997(2011)	2.0 U	mg/L	2.0	1	08/06/18 15:18	NA	
ASTM D6919-09	0.0050 U	mg/L	0.0050	1	08/08/18 21:24	NA	
SM 5310 C-2000(2011)	1.6	mg/L	1.0	1	08/06/18 23:19	NA	
SM20 10200 H	0.70	ug/L	0.16	1	08/14/18 11:00	NA	
SM 2120 B-2001(2011)	12.0	ColorUnits	1.0	1	07/26/18 11:45	NA	
353.2	0.0020 U	mg/L	0.0020	1	08/17/18 13:02	NA	
351.2	0.10	mg/L	0.10	1	08/10/18 12:15	08/07/18	
SM 2120 B-2001(2011)	7.32	pH Units	-	1	07/28/18 08:40	NA	*
365.1	0.0050 U	mg/L	0.0050	1	08/15/18 17:53	08/10/18	
	SM 2320 B-1997(2011) ASTM D6919-09 SM 5310 C-2000(2011) SM20 10200 H SM 2120 B-2001(2011) 353.2 351.2 SM 2120 B-2001(2011)	SM 2320 B-1997(2011)       2.0 U         ASTM D6919-09       0.0050 U         SM 5310 C-2000(2011)       1.6         SM20 10200 H       0.70         SM 2120 B-2001(2011)       12.0         353.2       0.0020 U         351.2       0.10         SM 2120 B-2001(2011)       7.32	SM 2320 B-1997(2011)       2.0 U mg/L         ASTM D6919-09       0.0050 U mg/L         SM 5310 C-2000(2011)       1.6 mg/L         SM20 10200 H       0.70 ug/L         SM 2120 B-2001(2011)       12.0 ColorUnits         353.2       0.0020 U mg/L         351.2       0.10 mg/L         SM 2120 B-2001(2011)       7.32 pH Units	SM 2320 B-1997(2011)         2.0 U         mg/L         2.0           ASTM D6919-09         0.0050 U         mg/L         0.0050           SM 5310 C-2000(2011)         1.6         mg/L         1.0           SM20 10200 H         0.70         ug/L         0.16           SM 2120 B-2001(2011)         12.0         ColorUnits         1.0           353.2         0.0020 U         mg/L         0.0020           351.2         0.10         mg/L         0.10           SM 2120 B-2001(2011)         7.32         pH Units         -	SM 2320 B-1997(2011)       2.0 U       mg/L       2.0 U       1         ASTM D6919-09       0.0050 U       mg/L       0.0050 U       1         SM 5310 C-2000(2011)       1.6 mg/L       1.0 1       1         SM20 10200 H       0.70 ug/L       0.16 1       1         SM 2120 B-2001(2011)       12.0 ColorUnits 1.0 1       1         353.2 0.0020 U mg/L 0.0020 1       0.0020 U mg/L 0.0020 1       1         351.2 0.10 mg/L 0.10 1       0.10 pH Units - 1       1	SM 2320 B-1997(2011)         2.0 U         mg/L         2.0 U         08/06/18 15:18           ASTM D6919-09         0.0050 U         mg/L         0.0050 I         08/08/18 21:24           SM 5310 C-2000(2011)         1.6         mg/L         1.0         1         08/06/18 23:19           SM20 10200 H         0.70         ug/L         0.16         1         08/14/18 11:00           SM 2120 B-2001(2011)         12.0         ColorUnits         1.0         1         07/26/18 11:45           353.2         0.0020 U         mg/L         0.0020         1         08/17/18 13:02           351.2         0.10         mg/L         0.10         1         08/10/18 12:15           SM 2120 B-2001(2011)         7.32         pH Units         -         1         07/28/18 08:40	Analysis Method         Result         Units         MRL         Dil.         Date Analyzed         Extracted           SM 2320 B-1997(2011)         2.0 U         mg/L         2.0 I         08/06/18 15:18 NA           ASTM D6919-09         0.0050 U         mg/L         0.0050 I         08/08/18 21:24 NA           SM 5310 C-2000(2011)         1.6 mg/L         1.0 I         08/06/18 23:19 NA           SM20 10200 H         0.70 ug/L         0.16 I         08/14/18 11:00 NA           SM 2120 B-2001(2011)         12.0 ColorUnits         1.0 I         07/26/18 11:45 NA           353.2 0.0020 U mg/L 0.0020 I         0.0020 U mg/L 0.0020 I         08/17/18 13:02 NA           351.2 0.10 mg/L 0.10 I         0.10 0.10 I         08/10/18 12:15 08/07/18           SM 2120 B-2001(2011)         7.32 pH Units         - I 07/28/18 08:40 NA

Analytical Report

Client: New York State DEC

Project: LCI 2018/LCI2018

Sample Matrix: Wate

Water

Service Request: R1807070

**Date Collected:** 07/24/18 15:30

**Date Received:** 07/26/18 09:25

Sample Name: 18LIS098 Diss Basis: NA

**Lab Code:** R1807070-012

	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	08/06/18 18:52	08/01/18	

Analytical Report

**Client:** New York State DEC **Project:** 

LCI 2018/LCI2018

Water

18LIS013 Basis: NA

Lab Code: R1807070-013

**Sample Matrix:** 

**Sample Name:** 

#### **Inorganic Parameters**

							Date	
Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	80.4	mg/L	2.0	1	08/06/18 15:23	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0247	mg/L	0.0050	1	08/08/18 21:40	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	4.7	mg/L	1.0	1	08/06/18 23:40	NA	
Chlorophyll A	SM20 10200 H	88.0	ug/L	3.2	20	08/14/18 11:00	NA	
Color, True	SM 2120 B-2001(2011)	105	ColorUnits	5.0	5	07/26/18 11:45	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.252	mg/L	0.0020	1	08/17/18 13:04	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.92	mg/L	0.10	1	08/10/18 12:16	08/07/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.56	pH Units	-	5	07/28/18 08:40	NA	*
Phosphorus, Total	365.1	0.0868	mg/L	0.0050	1	08/15/18 17:55	08/10/18	

**Service Request:** R1807070 **Date Collected:** 07/25/18 09:15

**Date Received:** 07/26/18 09:25

Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix:

Water

**Service Request:** R1807070

**Date Collected:** 07/25/18 09:15

**Date Received:** 07/26/18 09:25

Sample Name: 18LIS013 Diss Basis: NA

**Lab Code:** R1807070-014

	Analysis							
Analyte Name	Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Dissolved	365.1	0.0192	mg/L	0.0050	1	08/06/18 18:53	08/01/18	

Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix: Water

**Date Collected:** 07/25/18 10:45

**Date Received:** 07/26/18 09:25

Basis: NA

**Service Request:** R1807070

Sample Name: 18LIS037

**Lab Code:** R1807070-015

							Date	
Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	29.6	mg/L	2.0	1	08/06/18 15:28	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0108	mg/L	0.0050	1	08/08/18 17:23	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	6.4	mg/L	1.0	1	08/07/18 01:04	NA	
Chlorophyll A	SM20 10200 H	6.99	ug/L	0.80	10	08/14/18 11:00	NA	
Color, True	SM 2120 B-2001(2011)	33.0	ColorUnits	1.0	1	07/26/18 11:45	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0020	mg/L	0.0020	1	08/17/18 13:05	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.68	mg/L	0.10	1	08/14/18 15:00	08/13/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.61	pH Units	-	1	07/28/18 08:40	NA	*
Phosphorus, Total	365.1	0.0198	mg/L	0.0050	1	08/15/18 17:56	08/10/18	

Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix:

Water

Service Request: R1807070

**Date Collected:** 07/25/18 10:45

**Date Received:** 07/26/18 09:25

Sample Name: 18LIS037 Diss Basis: NA

**Lab Code:** R1807070-016

	Analysis							
Analyte Name	Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Dissolved	365.1	0.0091	mg/L	0.0050	1	08/06/18 18:54	08/01/18	

#### Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Water

ork State DEC Service Request: R1807070
18/LCI2018 Date Collected: 07/25/18 12:15

**Date Received:** 07/26/18 09:25

Sample Name: 18LIS059 Basis: NA

**Lab Code:** R1807070-017

**Sample Matrix:** 

							Date	
Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	56.4	mg/L	2.0	1	08/06/18 15:33	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0154	mg/L	0.0050	1	08/08/18 17:39	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	8.2	mg/L	1.0	1	08/07/18 01:24	NA	
Chlorophyll A	SM20 10200 H	80.6	ug/L	5.3	20	08/14/18 11:00	NA	
Color, True	SM 2120 B-2001(2011)	210	ColorUnits	10	10	07/26/18 11:45	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0095	mg/L	0.0020	1	08/17/18 13:06	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	1.53	mg/L	0.10	1	08/14/18 15:02	08/13/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.58	pH Units	-	10	07/28/18 08:40	NA	*
Phosphorus, Total	365.1	0.172	mg/L	0.025	5	08/15/18 19:29	08/10/18	

Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix:

Water

Service Request: R1807070

**Date Collected:** 07/25/18 12:15

**Date Received:** 07/26/18 09:25

Sample Name: 18LIS059 Diss Basis: NA

**Lab Code:** R1807070-018

	Analysis							
Analyte Name	Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Dissolved	365.1	0.0778	mg/L	0.0050	1	08/15/18 16:58	08/10/18	

#### Analytical Report

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

LCI 2018/LCI2018
trix: Water

Service Request: R1807070

**Date Collected:** 07/25/18 14:30

**Date Received:** 07/26/18 09:25

Sample Name: 18LIS001 Basis: NA

**Lab Code:** R1807070-019

**Sample Matrix:** 

							Date	
Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	108	mg/L	2.0	1	08/06/18 15:40	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0092	mg/L	0.0050	1	08/08/18 17:56	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	4.8	mg/L	1.0	1	08/07/18 01:45	NA	
Chlorophyll A	SM20 10200 H	75.2	ug/L	3.2	20	08/14/18 11:00	NA	
Color, True	SM 2120 B-2001(2011)	85.0	ColorUnits	5.0	5	07/26/18 11:45	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.440	mg/L	0.0020	1	08/17/18 13:08	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.72	mg/L	0.10	1	08/14/18 15:03	08/13/18	
pH of Color Analysis	SM 2120 B-2001(2011)	8.37	pH Units	-	5	07/28/18 08:40	NA	*
Phosphorus, Total	365.1	0.0848	mg/L	0.0050	1	08/15/18 17:58	08/10/18	

Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix:

Water

Service Request: R1807070

**Date Collected:** 07/25/18 14:30

**Date Received:** 07/26/18 09:25

Sample Name: 18LIS001 Diss Basis: NA

**Lab Code:** R1807070-020

	Analysis							
Analyte Name	Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Dissolved	365.1	0.0475	mg/L	0.0050	1	08/15/18 16:59	08/10/18	

Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix: Water

**Sample Name:** 

18LIS038 Basis: NA

**Lab Code:** R1807070-021

#### **Inorganic Parameters**

							Date	
Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0079	mg/L	0.0050	1	08/08/18 18:12	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	6.2	mg/L	1.0	1	08/07/18 02:06	NA	
Color, True	SM 2120 B-2001(2011)	43.0	ColorUnits	1.0	1	07/26/18 11:45	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0020 U	mg/L	0.0020	1	08/17/18 13:09	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.56	mg/L	0.10	1	08/14/18 15:03	08/13/18	
pH of Color Analysis	SM 2120 B-2001(2011)	7.59	pH Units	-	1	07/28/18 08:40	NA	*
Phosphorus, Total	365.1	0.0260	mg/L	0.0050	1	08/15/18 18:01	08/10/18	

**Service Request:** R1807070 **Date Collected:** 07/25/18 11:00

**Date Received:** 07/26/18 09:25

Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix: V

Water

Service Request: R1807070

**Date Collected:** 07/25/18 11:00

**Date Received:** 07/26/18 09:25

 Sample Name:
 18LIS038 Diss

 Lab Code:
 R1807070-022

Basis: NA

	Analysis							
Analyte Name	Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Dissolved	365.1	0.0076	mg/L	0.0050	1	08/15/18 17:00	08/10/18	



# **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



# **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:** R1807070

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

**Sample Matrix:** 

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

Lab Code: R1807070-MB1

							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	08/06/18 13:48	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0050 U	mg/L	0.0050	1	08/07/18 13:51	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	1.0 U	mg/L	1.0	1	08/06/18 11:47	NA	
Chlorophyll A	SM20 10200 H	0.40 U	ug/L	0.40	1	08/14/18 11:00	NA	
Color, True	SM 2120 B-2001(2011)	1.0	ColorUnits	1.0	1	07/26/18 11:45	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0020 U	mg/L	0.0020	1	08/17/18 12:39	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.10 U	mg/L	0.10	1	08/10/18 12:06	08/07/18	
Phosphorus, Dissolved	365.1	0.0050 U	mg/L	0.0050	1	08/06/18 18:33	08/01/18	
Phosphorus, Total	365.1	0.0050 U	mg/L	0.0050	1	08/15/18 17:29	08/10/18	

Analytical Report

Client: New York State DEC Service Request: R1807070

Project: LCI 2018/LCI2018

Date Collected: NA

Poto Possived: NA

Sample Matrix: Water Date Received: NA

Sample Name: Method Blank Basis: NA

**Lab Code:** R1807070-MB2

							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	08/08/18 16:51	NA	
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	1.0 U	mg/L	1.0	1	08/07/18 00:22	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.10 U	mg/L	0.10	1	08/14/18 14:51	08/13/18	
Phosphorus, Dissolved	365.1	0.0050 U	mg/L	0.0050	1	08/15/18 16:54	08/10/18	

QA/QC Report

Client:New York State DECService Request:R1807070Project:LCI 2018/LCI2018Date Collected:07/24/18Sample Matrix:WaterDate Received:07/26/18Date Analyzed:08/17/18

Duplicate Matrix Spike Summary

Nitrate+Nitrite as Nitrogen

 Sample Name:
 18LIS005
 Units:
 mg/L

 Lab Code:
 R1807070-001
 Basis:
 NA

**Analysis Method:** 353.2

Matrix SpikeDuplicate Matrix SpikeR1807070-001MSR1807070-001DMS

	Sample		Spike			Spike		% Rec		RPD
Analyte Name	Result	Result	Amount	% Rec	Result	Amount	% Rec	Limits	RPD	Limit
Nitrate+Nitrite as Nitrogen	0.0020 U	0.492	0.500	98	0.491	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.

QA/QC Report

**Client:** New York State DEC **Service Request:** R1807070 **Project:** LCI 2018/LCI2018 **Date Collected:** 07/24/18 **Sample Matrix:** Water **Date Received:** 07/26/18 **Date Analyzed:** 08/15/18 **Date Extracted:** 08/10/18

> Duplicate Matrix Spike Summary Phosphorus, Total

 Sample Name:
 18LIS021
 Units:
 mg/L

 Lab Code:
 R1807070-003
 Basis:
 NA

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

Matrix Spike Duplicate Matrix Spike

R1807070-003MS R1807070-003DMS

	Sample		Spike			Spike		% Rec		RPD
Analyte Name	Result	Result	Amount	% Rec	Result	Amount	% Rec	Limits	RPD	Limit
Phosphorus, Total	0.062	0.086	0.025	96	0.126	0.025	258 *	75-125	38*	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

Water

**Service Request:** 

R1807070

**Date Collected: Date Received:** 

07/24/18 07/26/18

Date Analyzed: **Date Extracted:** 

08/6/18

08/1/18

**Duplicate Matrix Spike Summary** 

Phosphorus, Dissolved

**Sample Name:** 18LIS021 Diss Lab Code:

**Units: Basis:** 

mg/L NA

**Analysis Method:** 

**Prep Method:** 

**Sample Matrix:** 

R1807070-004

365.1 Method

**Matrix Spike** 

**Duplicate Matrix Spike** R1807070-004DMS

R1807070-004MS

**RPD** Sample Spike Spike % Rec Analyte Name Result Result Amount % Rec Amount % Rec Limits **RPD** Limit Result Phosphorus, Dissolved 0.0079 0.0309 0.0250 0.0308 0.0250 20 75-125

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:** R1807070 **Project:** LCI 2018/LCI2018 **Date Collected:** 07/24/18 **Sample Matrix:** Water **Date Received:** 07/26/18 **Date Analyzed:** 08/10/18 **Date Extracted:** 08/7/18

**Duplicate Matrix Spike Summary** 

Nitrogen, Total Kjeldahl (TKN)

 Sample Name:
 18LIS025
 Units:
 mg/L

 Lab Code:
 R1807070-009
 Basis:
 NA

**Analysis Method:** 351.2 **Prep Method:** Method

Matrix Spike Duplicate Matrix Spike

R1807070-009MS R1807070-009DMS

	Sample		Spike			Spike		% Rec		RPD
Analyte Name	Result	Result	Amount	% Rec	Result	Amount	% Rec	Limits	RPD	Limit
Nitrogen, Total Kjeldahl (TKN)	2.28	4.62	2.50	94	4.58	2.50	92	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:** R1807070 **Project:** LCI 2018/LCI2018 **Date Collected:** 07/25/18 **Sample Matrix:** Water **Date Received:** 07/26/18 **Date Analyzed:** 08/14/18 **Date Extracted:** 08/13/18

**Duplicate Matrix Spike Summary** 

Nitrogen, Total Kjeldahl (TKN)

 Sample Name:
 18LIS037
 Units:
 mg/L

 Lab Code:
 R1807070-015
 Basis:
 NA

**Analysis Method:** 351.2 **Prep Method:** Method

Matrix Spike Duplicate Matrix Spike

R1807070-015MS R1807070-015DMS

	Sample		Spike			Spike		% Rec		RPD
Analyte Name	Result	Result	Amount	% Rec	Result	Amount	% Rec	Limits	RPD	Limit
Nitrogen, Total Kjeldahl (TKN)	0.68	2.89	2.50	89	2.95	2.50	91	75-125	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 DECService Request:R1807070Project:LCI 2018/LCI2018Date Collected:07/25/18Sample Matrix:WaterDate Received:07/26/18Date Analyzed:08/6/18

Duplicate Matrix Spike Summary Phosphorus, Dissolved

 Sample Name:
 18LIS037 Diss
 Units:
 mg/L

 Lab Code:
 R1807070-016
 Basis:
 NA

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

Matrix SpikeDuplicate Matrix SpikeR1807070-016MSR1807070-016DMS

**Date Extracted:** 

08/1/18

**RPD** Sample Spike Spike % Rec Analyte Name Result Result Amount % Rec Result Amount % Rec Limits **RPD** Limit Phosphorus, Dissolved 0.0091 0.0310 0.0250 0.0325 0.0250 20 75-125

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 DECService Request:R1807070Project:LCI 2018/LCI2018Date Collected:07/25/18Sample Matrix:WaterDate Received:07/26/18Date Analyzed:08/17/18

Duplicate Matrix Spike Summary Nitrate+Nitrite as Nitrogen

 Sample Name:
 18LIS038
 Units:
 mg/L

 Lab Code:
 R1807070-021
 Basis:
 NA

**Analysis Method:** 353.2

Matrix SpikeDuplicate Matrix SpikeR1807070-021MSR1807070-021DMS

	Sample		Spike			Spike		% Rec		RPD
Analyte Name	Result	Result	Amount	% Rec	Result	Amount	% Rec	Limits	RPD	Limit
Nitrate+Nitrite as Nitrogen	0.0020 U	0.484	0.500	97	0.485	0.500	97	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:** R1807070 **Project:** LCI 2018/LCI2018 **Date Collected:** 07/25/18 **Sample Matrix:** Water **Date Received:** 07/26/18 Date Analyzed: 08/15/18 **Date Extracted:** 08/10/18

> Duplicate Matrix Spike Summary Phosphorus, Dissolved

 Sample Name:
 18LIS038 Diss
 Units:
 mg/L

 Lab Code:
 R1807070-022
 Basis:
 NA

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

Matrix SpikeDuplicate Matrix SpikeR1807070-022MSR1807070-022DMS

**RPD** Sample Spike Spike % Rec Analyte Name Result Result Amount % Rec Amount % Rec Limits **RPD** Limit Result Phosphorus, Dissolved 0.0076 0.0307 0.0250 0.0303 0.0250 20 75-125

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

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

#### ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: New York State DEC
Project LCI 2018/LCI2018

Water

Service Request: R1807070

Date Collected: 07/25/18

Date Received: 07/26/18

**Date Analyzed:** 07/26/18

Replicate Sample Summary General Chemistry Parameters

Sample Name: 18LIS013 Units: ColorUnits

**Lab Code:** R1807070-013 **Basis:** NA

Duplicate Sample R1807070-013DUP

Analyte NameAnalysis MethodMRLResultResultAverageRPDRPD LimitColor, TrueSM 2120 B-2001(2011)5.0105105105<1</td>5

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.

Sample Matrix:

#### ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: New York State DEC

**Project** 

New York State DEC

LCI 2018/LCI2018

Service Request: R1807070

Date Collected: 07/25/18

Sample Matrix: Water Date Received: 07/26/18

**Date Analyzed:** 07/28/18

Replicate Sample Summary General Chemistry Parameters

Sample Name: 18LIS013 Units: pH Units

**Lab Code:** R1807070-013 **Basis:** NA

Duplicate Sample

R1807070ple 013DUP

Analyte NameAnalysis MethodMRLResultResultAverageRPDRPD LimitpH of Color AnalysisSM 2120 B-2001(2011)-7.567.567.56<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.

QA/QC Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

**Sample Matrix:** Water

Service Request: R1807070

**Date Analyzed:** 08/06/18 - 08/17/18

**Lab Control Sample Summary General Chemistry Parameters** 

Units:mg/L Basis:NA

### **Lab Control Sample**

R1807070-LCS1

Analyte Name	<b>Analytical Method</b>	Result	Spike Amount	% Rec	% Rec Limits
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	18.0	20.0	90	70-130
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.489	0.500	98	70-130
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	9.68	10.0	97	70-130
Nitrate+Nitrite as Nitrogen	353.2	0.503	0.500	101	70-130
Nitrogen, Total Kjeldahl (TKN)	351.2	2.45	2.50	98	70-130
Phosphorus, Dissolved	365.1	0.0242	0.0250	97	70-130
Phosphorus, Total	365.1	0.0243	0.0250	97	70-130

QA/QC Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix: Water

Service Request: R1807070

**Date Analyzed:** 08/07/18 - 08/15/18

**Lab Control Sample Summary General Chemistry Parameters** 

Units:mg/L Basis:NA

### **Lab Control Sample**

R1807070-LCS2

Analyte Name	<b>Analytical Method</b>	Result	Spike Amount	% Rec	% Rec Limits
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.486	0.500	97	70-130
Carbon, Total Organic (TOC)	SM 5310 C-2000(2011)	10.3	10.0	103	70-130
Nitrogen, Total Kjeldahl (TKN)	351.2	2.30	2.50	92	70-130
Phosphorus, Dissolved	365.1	0.0233	0.0250	93	70-130