



September 05, 2018

Service Request No:R1807944

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

**Laboratory Results for: LCI 2018**

Dear Ms.Onion,

Enclosed are the results of the sample(s) submitted to our laboratory August 21, 2018  
For your reference, these analyses have been assigned our service request number **R1807944**.

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](mailto:Janice.Jaeger@alsglobal.com).

Respectfully submitted,

**ALS Group USA, Corp. dba ALS Environmental**

Janice Jaeger  
Project Manager

CC: Jason Fagel

**ADDRESS**

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

**PHONE** +1 585 288 5380 | **FAX** +1 585 288 8475

ALS Group USA, Corp.  
dba ALS Environmental



## Narrative Documents

**ALS Environmental—Rochester Laboratory**

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

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

[www.alsglobal.com](http://www.alsglobal.com)



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

**Service Request:** R1807944  
**Date Received:** 08/21/2018

### CASE NARRATIVE

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

### Sample Receipt:

Eight water samples were received for analysis at ALS Environmental on 08/21/2018. 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:

No significant anomalies were noted with this analysis.

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

Approved by \_\_\_\_\_

Date 09/05/2018

### SAMPLE DETECTION SUMMARY

CLIENT ID: 18PKTP15D			Lab ID: R1807944-001			
Analyte	Results	Flag	MDL	MRL	Units	Method
Ammonia as Nitrogen, undistilled	0.0724		0.0008	0.0050	mg/L	ASTM D6919-09
Nitrogen, Total Kjeldahl (TKN)	0.90		0.08	0.10	mg/L	351.2
Phosphorus, Total	0.0242		0.0020	0.0050	mg/L	365.1
CLIENT ID: 18PKTP15S			Lab ID: R1807944-002			
Analyte	Results	Flag	MDL	MRL	Units	Method
Ammonia as Nitrogen, undistilled	0.0141		0.0008	0.0050	mg/L	ASTM D6919-09
Nitrogen, Total Kjeldahl (TKN)	0.63		0.08	0.10	mg/L	351.2
Phosphorus, Total	0.0132		0.0020	0.0050	mg/L	365.1
CLIENT ID: 18PKTP14			Lab ID: R1807944-003			
Analyte	Results	Flag	MDL	MRL	Units	Method
Alkalinity, Total as CaCO <sub>3</sub>	56.0		1.0	2.0	mg/L	SM 2320 B-1997 (2011)
Ammonia as Nitrogen, undistilled	0.0072		0.0008	0.0050	mg/L	ASTM D6919-09
Nitrate+Nitrite as Nitrogen	0.0049		0.0007	0.0020	mg/L	353.2
Nitrogen, Total Kjeldahl (TKN)	0.76		0.08	0.10	mg/L	351.2
Phosphorus, Total	0.0131		0.0020	0.0050	mg/L	365.1
CLIENT ID: 18PKTP15			Lab ID: R1807944-004			
Analyte	Results	Flag	MDL	MRL	Units	Method
Alkalinity, Total as CaCO <sub>3</sub>	64.8		1.0	2.0	mg/L	SM 2320 B-1997 (2011)
CLIENT ID: 18PKTPTP2			Lab ID: R1807944-006			
Analyte	Results	Flag	MDL	MRL	Units	Method
Phosphorus, Total	0.0753		0.0020	0.0050	mg/L	365.1
CLIENT ID: 18PKTPBL			Lab ID: R1807944-007			
Analyte	Results	Flag	MDL	MRL	Units	Method
Phosphorus, Total	0.115		0.004	0.010	mg/L	365.1
CLIENT ID: 18PKTPPMP			Lab ID: R1807944-008			
Analyte	Results	Flag	MDL	MRL	Units	Method
Phosphorus, Total	0.0179		0.0020	0.0050	mg/L	365.1
CLIENT ID: 18PKTPSouthard			Lab ID: R1807944-009			
Analyte	Results	Flag	MDL	MRL	Units	Method
Phosphorus, Total	0.0304		0.0020	0.0050	mg/L	365.1



## Sample Receipt Information

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**Client:** New York State DEC  
**Project:** LCI 2018/PK2018

**Service Request:**R1807944

**SAMPLE CROSS-REFERENCE**

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R1807944-001	18PKTP15D	8/7/2018	1036
R1807944-002	18PKTP15S	8/7/2018	1047
R1807944-003	18PKTP14	8/7/2018	1117
R1807944-004	18PKTP15	8/7/2018	1047
R1807944-006	18PKTPTP2	8/9/2018	1045
R1807944-007	18PKTPBL	8/14/2018	1012
R1807944-008	18PKTPPMP	8/15/2018	1132
R1807944-009	18PKTPSouthard	8/16/2018	1109

# CHAIN OF CUSTODY

Page 1 of 1



New York State Department of  
Environmental Conservation –  
Division of Water

**Project Name:** LCI

**Sampler Collector:** Irene Holak  
Hunter Azkerman

**Project Manager:** Scott Kishbaugh

**Address:** 625 Broadway, 4<sup>th</sup> Floor  
Albany, NY 12233-3502

**Phone:** (518) 402-8286

**Email:** scott.kishbaugh@dec.ny.gov

**Project Number:** PK2018

**Sampler Signature:**

**X Report to Project Manager**

**Report to:** Alene Onion

**Address:** 625 Broadway, 4<sup>th</sup> Floor  
Albany, NY 12233-3502

**Phone:** (518) 402-8166

**Email:** alene.onion@dec.ny.gov

**NYSDEC SDG:**

**Sampler Phone No.:** 518-480-1373

☐ **Bill to Project Manager**

**Bill to:** Jason Fagel

**Address:** 625 Broadway, 4<sup>th</sup> Floor  
Albany, NY 12233-3502

**Phone:** 518-402-8156

**Email:** Jason.fagel@dec.ny.gov

## Matrix Codes:

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

**NYSDEC  
LCI Sample ID**

**Collection Date**

**Collection Time**

**Matrix Code**

**No. of Containers**

**NH<sub>3</sub>, TKN, NO<sub>x</sub>, TP**

**TP**

## Analyses Ordered (list)

3

2

0

3

0

0

**Alkalinity**

**Chlorophyll a |  
Vol (ml)**

## Preservative Codes:

0 = Cool to < 6°C  
1 = HCL  
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 \_\_\_\_\_

## Location Info

18PKTP15D	8-7-18	10:36	SW	1	X													Rockland Lake SP
18PKTP15S	8-7-18	10:47	SW	1	X													Rockland Lake SP
18PKTP14	8-7-18	11:17	SW	1	X													Rockland Lake SP
18PKTP15	8-7-18	10:47	SW	1								X						Rockland Lake SP
18PKTP14	8-7-18	11:17	SW	1								X						Rockland Lake SP
18PKTPTP2	8-9-18	10:45		1		X												Delta Lake SP(Turtle Pond)
18PKTPBL	8-14-18	10:12		1		X												Bear Mtn SP (Brooks Lake)
18PKTPPMP	8-15-18	11:32		1		X												Caleb Smith SP (Phillips Millpond)
18PKTPSouthard	8-16-18	11:09		1		X												Belmont Lake SP (Southards Pond)

## Special Analysis Instructions:

Relinquished by Sampler: Irene Holak	Date: 8/20/2018	Time: 11:17	Received by: Azkerman	Date: 8/20/18	Time: 10:17am	Laboratory Receipt Notes:
Relinquished by: Azkerman	Date: 8/20/18	Time: 1600	Received by: Lysa	Date: 8/20/18	Time: 0935	Sample T Properly Samples
Relinquished by:	Date:	Time:	Received by Laboratory:	Date:	Time:	

**R1807944**

**5**

New York State DEC  
LCI 2018





# Cooler Receipt and Preservation Check Form

R1807944

New York State DEC  
LCI 2018

5



Project/Client LCI Folder Number \_\_\_\_\_

Cooler received on 8/21/18 by: oe

COURIER: ALS UPS FEDEX VELOCITY CLIENT

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

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

8. Temperature Readings Date: 8/21/18 Time: 0952 ID: R#7 IR#9 From: Temp Blank Sample Bottle

Observed Temp (°C)	<u>0.8</u>						
Correction Factor (°C)	<u>-</u>						
Corrected Temp (°C)	<u>0.8</u>						
Temp from: Type of bottle	<u>-</u>						
Within 0-6°C?	<u>Y</u> N	Y N	Y N	Y N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: \_\_\_\_\_ Ice melted Poorly Packed (described below) Same Day Rule  
& Client Approval to Run Samples: \_\_\_\_\_ Standing Approval Client aware at drop-off Client notified by: \_\_\_\_\_

All samples held in storage location: R002 by oe on 8/21/18 at 1000  
5035 samples placed in storage location: \_\_\_\_\_ by \_\_\_\_\_ on \_\_\_\_\_ at \_\_\_\_\_

Cooler Breakdown/Preservation Check\*\*: Date: 8/21/18 Time: 1514 by: oe

9. Were all bottle labels complete (i.e. analysis, preservation, etc.)? YES NO  
10. Did all bottle labels and tags agree with custody papers? YES NO  
11. Were correct containers used for the tests indicated? YES NO  
12. Were 5035 vials acceptable (no extra labels, not leaking)? YES NO  
13. Air Samples: Cassettes / Tubes Intact with MS? Canisters Pressurized Tedlar® Bags Inflated NA

pH	Lot of test paper	Reagent	Preserved?		Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
≥12		NaOH	Yes	No						
≤2		HNO <sub>3</sub>								
≤2	<u>704518</u>	H <sub>2</sub> SO <sub>4</sub>	<u>✓</u>		<u>B2600020, 188709</u>	<u>5/10, 5/19</u>				
<4		NaHSO <sub>4</sub>								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For CN, Phenol, 625, 608pest, 522			If +, contact PM to add 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>								
		ZnAcetate	-	-						
		HCl	**	**						

\*\*VOAs and 1664 Not to be tested before analysis. Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).

Bottle lot numbers: alburg 041618-0442  
Explain all Discrepancies/ Other Comments: \_\_\_\_\_

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

Labels secondary reviewed by: MS 8/24/18  
PC Secondary Review: MS 8/24/18 Significant air bubbles: VOA > 5-6 mm : WC > 1 in. diameter





## Miscellaneous Forms

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## REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.	+	Correlation coefficient for MSA is <0.995.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Aroclors).	N	Inorganics- Matrix spike recovery was outside laboratory limits.
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.	N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.	S	Concentration has been determined using Method of Standard Additions (MSA).
E	Organics- Concentration has exceeded the calibration range for that specific analysis.	W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.	P	Concentration >40% difference between the two GC columns.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the öNotesö column of the Form I, this qualifier denotes analysis was performed out of Holding Time.	C	Confirmed by GC/MS
H	Analysis was performed out of hold time for tests that have an öimmediateö hold time criteria.	Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (×100% Difference between two GC columns).
#	Spike was diluted out.	X	See Case Narrative for discussion.
		MRL	Method Reporting Limit. Also known as:
		LOQ	Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
		MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
		LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
		ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.



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

# ALS Laboratory Group

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## Acronyms

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

**ALS Group USA, Corp.**

dba ALS Environmental

## Analyst Summary report

**Client:** New York State DEC  
**Project:** LCI 2018/PK2018

**Service Request:** R1807944

**Sample Name:** 18PKTP15D  
**Lab Code:** R1807944-001  
**Sample Matrix:** Water

**Date Collected:** 08/7/18  
**Date Received:** 08/21/18

**Analysis Method**

351.2  
353.2  
365.1  
ASTM D6919-09

**Extracted/Digested By**

NSMITH

AFELSER

**Analyzed By**

CWOODS  
GNITAJOUPPI  
GNITAJOUPPI  
AMOSSES

**Sample Name:** 18PKTP15S  
**Lab Code:** R1807944-002  
**Sample Matrix:** Water

**Date Collected:** 08/7/18  
**Date Received:** 08/21/18

**Analysis Method**

351.2  
353.2  
365.1  
ASTM D6919-09

**Extracted/Digested By**

NSMITH

AFELSER

**Analyzed By**

CWOODS  
GNITAJOUPPI  
GNITAJOUPPI  
AMOSSES

**Sample Name:** 18PKTP14  
**Lab Code:** R1807944-003  
**Sample Matrix:** Water

**Date Collected:** 08/7/18  
**Date Received:** 08/21/18

**Analysis Method**

351.2  
353.2  
365.1  
ASTM D6919-09  
SM 2320 B-1997(2011)

**Extracted/Digested By**

NSMITH

AFELSER

**Analyzed By**

CWOODS  
GNITAJOUPPI  
GNITAJOUPPI  
AMOSSES  
MROGERSON

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**ALS Group USA, Corp.**

dba ALS Environmental

## Analyst Summary report

**Client:** New York State DEC  
**Project:** LCI 2018/PK2018

**Service Request:** R1807944

**Sample Name:** 18PKTP15  
**Lab Code:** R1807944-004  
**Sample Matrix:** Water

**Date Collected:** 08/7/18  
**Date Received:** 08/21/18

**Analysis Method**  
SM 2320 B-1997(2011)

**Extracted/Digested By**

**Analyzed By**  
MROGERSON

**Sample Name:** 18PKTP2  
**Lab Code:** R1807944-006  
**Sample Matrix:** Water

**Date Collected:** 08/9/18  
**Date Received:** 08/21/18

**Analysis Method**  
365.1

**Extracted/Digested By**  
AFELSER

**Analyzed By**  
GNITAJOUPPI

**Sample Name:** 18PKTPBL  
**Lab Code:** R1807944-007  
**Sample Matrix:** Water

**Date Collected:** 08/14/18  
**Date Received:** 08/21/18

**Analysis Method**  
365.1

**Extracted/Digested By**  
AFELSER

**Analyzed By**  
GNITAJOUPPI

**Sample Name:** 18PKTPPMP  
**Lab Code:** R1807944-008  
**Sample Matrix:** Water

**Date Collected:** 08/15/18  
**Date Received:** 08/21/18

**Analysis Method**  
365.1

**Extracted/Digested By**  
AFELSER

**Analyzed By**  
GNITAJOUPPI

**Sample Name:** 18PKTPSouthard  
**Lab Code:** R1807944-009  
**Sample Matrix:** Water

**Date Collected:** 08/16/18  
**Date Received:** 08/21/18

**Analysis Method**  
365.1

**Extracted/Digested By**  
AFELSER

**Analyzed By**  
GNITAJOUPPI



## INORGANIC PREPARATION METHODS

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

### Water/Liquid Matrix

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

### Solid/Soil/Non-Aqueous Matrix

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

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



## Sample Results

**ALS Environmental—Rochester Laboratory**

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## General Chemistry

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Analytical Report

**Client:** New York State DEC  
**Project:** LCI 2018/PK2018  
**Sample Matrix:** Water  
  
**Sample Name:** 18PKTP15D  
**Lab Code:** R1807944-001

**Service Request:** R1807944  
**Date Collected:** 08/07/18 10:36  
**Date Received:** 08/21/18 09:35  
  
**Basis:** NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	<b>0.0724</b>	mg/L	0.0050	1	09/04/18 13:52	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0020 U	mg/L	0.0020	1	08/30/18 15:52	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	<b>0.90</b>	mg/L	0.10	1	08/31/18 13:56	08/30/18	
Phosphorus, Total	365.1	<b>0.0242</b>	mg/L	0.0050	1	08/29/18 13:32	08/28/18	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** New York State DEC  
**Project:** LCI 2018/PK2018  
**Sample Matrix:** Water  
  
**Sample Name:** 18PKTP15S  
**Lab Code:** R1807944-002

**Service Request:** R1807944  
**Date Collected:** 08/07/18 10:47  
**Date Received:** 08/21/18 09:35  
  
**Basis:** NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	<b>0.0141</b>	mg/L	0.0050	1	09/04/18 14:40	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0020 U	mg/L	0.0020	1	08/30/18 15:57	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	<b>0.63</b>	mg/L	0.10	1	08/31/18 13:57	08/30/18	
Phosphorus, Total	365.1	<b>0.0132</b>	mg/L	0.0050	1	08/29/18 13:35	08/28/18	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** New York State DEC  
**Project:** LCI 2018/PK2018  
**Sample Matrix:** Water  
  
**Sample Name:** 18PKTP14  
**Lab Code:** R1807944-003

**Service Request:** R1807944  
**Date Collected:** 08/07/18 11:17  
**Date Received:** 08/21/18 09:35  
  
**Basis:** NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date	
							Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	56.0	mg/L	2.0	1	08/23/18 00:38	NA	*
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0072	mg/L	0.0050	1	09/04/18 14:56	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0049	mg/L	0.0020	1	08/30/18 15:58	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.76	mg/L	0.10	1	08/31/18 13:57	08/30/18	
Phosphorus, Total	365.1	0.0131	mg/L	0.0050	1	08/29/18 13:36	08/28/18	

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Analytical Report

**Client:** New York State DEC  
**Project:** LCI 2018/PK2018  
**Sample Matrix:** Water  
**Sample Name:** 18PKTP15  
**Lab Code:** R1807944-004

**Service Request:** R1807944  
**Date Collected:** 08/07/18 10:47  
**Date Received:** 08/21/18 09:35  
**Basis:** NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	64.8	mg/L	2.0	1	08/23/18 00:44	*

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Analytical Report

**Client:** New York State DEC  
**Project:** LCI 2018/PK2018  
**Sample Matrix:** Water  
  
**Sample Name:** 18PKTPTP2  
**Lab Code:** R1807944-006

**Service Request:** R1807944  
**Date Collected:** 08/09/18 10:45  
**Date Received:** 08/21/18 09:35  
  
**Basis:** NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Total	365.1	0.0753	mg/L	0.0050	1	08/29/18 13:37	08/28/18	

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Analytical Report

**Client:** New York State DEC  
**Project:** LCI 2018/PK2018  
**Sample Matrix:** Water  
  
**Sample Name:** 18PKTPBL  
**Lab Code:** R1807944-007

**Service Request:** R1807944  
**Date Collected:** 08/14/18 10:12  
**Date Received:** 08/21/18 09:35  
  
**Basis:** NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Total	365.1	0.115	mg/L	0.010	2	08/29/18 14:08	08/28/18	

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Analytical Report

**Client:** New York State DEC  
**Project:** LCI 2018/PK2018  
**Sample Matrix:** Water  
**Sample Name:** 18PKTPPMP  
**Lab Code:** R1807944-008

**Service Request:** R1807944  
**Date Collected:** 08/15/18 11:32  
**Date Received:** 08/21/18 09:35  
**Basis:** NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Total	365.1	0.0179	mg/L	0.0050	1	08/29/18 13:40	08/28/18	

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Analytical Report

**Client:** New York State DEC  
**Project:** LCI 2018/PK2018  
**Sample Matrix:** Water  
  
**Sample Name:** 18PKTPSouthard  
**Lab Code:** R1807944-009

**Service Request:** R1807944  
**Date Collected:** 08/16/18 11:09  
**Date Received:** 08/21/18 09:35  
  
**Basis:** NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Phosphorus, Total	365.1	0.0304	mg/L	0.0050	1	08/29/18 13:41	08/28/18	





## QC Summary Forms

**ALS Environmental—Rochester Laboratory**

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## General Chemistry

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Analytical Report

**Client:** New York State DEC  
**Project:** LCI 2018/PK2018  
**Sample Matrix:** Water  
**Sample Name:** Method Blank  
**Lab Code:** R1807944-MB

**Service Request:** R1807944  
**Date Collected:** NA  
**Date Received:** NA  
**Basis:** NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	2.0 U	mg/L	2.0	1	08/22/18 23:54	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0050 U	mg/L	0.0050	1	09/04/18 13:19	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0020 U	mg/L	0.0020	1	08/30/18 15:28	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.10 U	mg/L	0.10	1	08/31/18 13:48	08/30/18	
Phosphorus, Total	365.1	0.0050 U	mg/L	0.0050	1	08/29/18 13:13	08/28/18	

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QA/QC Report

**Client:** New York State DEC  
**Project:** LCI 2018/PK2018  
**Sample Matrix:** Water

**Service Request:**R1807944  
**Date Collected:**08/07/18  
**Date Received:**08/21/18  
**Date Analyzed:**08/30/18 - 09/04/18

**Duplicate Matrix Spike Summary**  
**General Chemistry Parameters**

**Sample Name:** 18PKTP15D **Units:**mg/L  
**Lab Code:** R1807944-001 **Basis:**NA

**Matrix Spike**  
R1807944-001MS

**Duplicate Matrix Spike**  
R1807944-001DMS

Analyte Name	Method	Sample Result	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0724	0.517	0.500	89	0.452	0.500	76	75-125	14	20
Nitrate+Nitrite as Nitrogen	353.2	0.0020 U	0.507	0.500	101	0.506	0.500	101	75-125	<1	20

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

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

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

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QA/QC Report

**Client:** New York State DEC  
**Project:** LCI 2018/PK2018  
**Sample Matrix:** Water

**Service Request:** R1807944  
**Date Collected:** 08/16/18  
**Date Received:** 08/21/18  
**Date Analyzed:** 08/29/18  
**Date Extracted:** 08/28/18

**Duplicate Matrix Spike Summary**  
**Phosphorus, Total**

**Sample Name:** 18PKTPSouthard  
**Lab Code:** R1807944-009  
**Analysis Method:** 365.1  
**Prep Method:** Method

**Units:** mg/L  
**Basis:** NA

Analyte Name	Sample Result	Result	Matrix Spike		Result	Duplicate Matrix Spike		% Rec Limits	RPD	RPD Limit
			Spike Amount	% Rec		Spike Amount	% Rec			
Phosphorus, Total	0.0304	0.0564	0.0250	104	0.0638	0.0250	134 *	75-125	12	20

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

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

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

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QA/QC Report

**Client:** New York State DEC  
**Project:** LCI 2018/PK2018  
**Sample Matrix:** Water

**Service Request:** R1807944  
**Date Analyzed:** 08/22/18 - 09/04/18

**Lab Control Sample Summary**  
**General Chemistry Parameters**

**Units:**mg/L  
**Basis:**NA

**Lab Control Sample**  
R1807944-LCS

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Alkalinity, Total as CaCO <sub>3</sub>	SM 2320 B-1997(2011)	19.2	20.0	96	70-130
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.512	0.500	102	70-130
Nitrate+Nitrite as Nitrogen	353.2	0.520	0.500	104	70-130
Nitrogen, Total Kjeldahl (TKN)	351.2	2.36	2.50	94	70-130
Phosphorus, Total	365.1	0.0234	0.0250	94	70-130