



September 17, 2018

Service Request No:R1808213

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

**Laboratory Results for: LCI**

Dear Ms.Onion,

Enclosed are the results of the sample(s) submitted to our laboratory August 28, 2018  
For your reference, these analyses have been assigned our service request number **R1808213**.

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  
**Sample Matrix:** Water

**Service Request:** R1808213  
**Date Received:** 08/28/2018

### 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:

Five water samples were received for analysis at ALS Environmental on 08/28/2018. 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.



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

Date 09/17/2018

### SAMPLE DETECTION SUMMARY

<b>CLIENT ID: 18PKTP17FW</b>	<b>Lab ID: R1808213-001</b>
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Analyte	Results	Flag	MDL	MRL	Units	Method
Ammonia as Nitrogen, undistilled	0.0231		0.0008	0.0050	mg/L	ASTM D6919-09
Nitrate+Nitrite as Nitrogen	0.0021		0.0007	0.0020	mg/L	353.2
Nitrogen, Total Kjeldahl (TKN)	0.65		0.08	0.10	mg/L	351.2
Phosphorus, Total	0.0170		0.0020	0.0050	mg/L	365.1

<b>CLIENT ID: 18PKTP17</b>	<b>Lab ID: R1808213-002</b>
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Analyte	Results	Flag	MDL	MRL	Units	Method
Alkalinity, Total as CaCO <sub>3</sub>	67.2		1.0	2.0	mg/L	SM 2320 B-1997 (2011)

<b>CLIENT ID: 18PKTP16</b>	<b>Lab ID: R1808213-003</b>
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Analyte	Results	Flag	MDL	MRL	Units	Method
Ammonia as Nitrogen, undistilled	0.0068		0.0008	0.0050	mg/L	ASTM D6919-09
Nitrogen, Total Kjeldahl (TKN)	0.65		0.08	0.10	mg/L	351.2
Phosphorus, Total	0.0160		0.0020	0.0050	mg/L	365.1

<b>CLIENT ID: 18PKTP16deep</b>	<b>Lab ID: R1808213-004</b>
--------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Ammonia as Nitrogen, undistilled	0.0101		0.0008	0.0050	mg/L	ASTM D6919-09
Nitrogen, Total Kjeldahl (TKN)	0.62		0.08	0.10	mg/L	351.2
Phosphorus, Total	0.0169		0.0020	0.0050	mg/L	365.1

<b>CLIENT ID: 18PKTP17deep</b>	<b>Lab ID: R1808213-005</b>
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Analyte	Results	Flag	MDL	MRL	Units	Method
Ammonia as Nitrogen, undistilled	3.66		0.008	0.050	mg/L	ASTM D6919-09
Nitrate+Nitrite as Nitrogen	0.0112		0.0007	0.0020	mg/L	353.2
Nitrogen, Total Kjeldahl (TKN)	4.17		0.08	0.10	mg/L	351.2
Phosphorus, Total	0.70		0.04	0.10	mg/L	365.1



## Sample Receipt Information

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

**Service Request:**R1808213

**SAMPLE CROSS-REFERENCE**

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
R1808213-001	18PKTP17FW	8/23/2018	1152
R1808213-002	18PKTP17	8/23/2018	1152
R1808213-003	18PKTP16	8/23/2018	1123
R1808213-004	18PKTP16deep	8/23/2018	1123
R1808213-005	18PKTP17deep	8/23/2018	1130





# Cooler Receipt and Preservation Check Form

R1808213

New York State DEC  
LCI

5



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

Cooler received on 8/28/18 by: SL

COURIER: ALS UPS FEDEX VELOCITY CLIENT

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

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

8. Temperature Readings Date 8/28/18 Time: 0955

ID: IR#7 IR#9

From: Temp Blank Sample Bottle

Observed Temp (°C)	<u>2.3</u>	<u>0.4</u>					
Correction Factor (°C)	<u>+1.0</u>	<u>-</u>					
Corrected Temp (°C) -	<u>3.3</u>	<u>0.4</u>					
Temp from: Type of bottle	<u>ext. tube</u>	<u>-</u>					
Within 0-6°C?	Y N	<u>Y</u> 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: PO2 by SL on 8/28/18 at 10:10  
5035 samples placed in storage location: \_\_\_\_\_ by \_\_\_\_\_ on \_\_\_\_\_ at \_\_\_\_\_

Cooler Breakdown/Preservation Check\*\*: Date: 8/28/18 Time: 1624 by: SLW

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 N/A N/A

pH	Lot of test paper	Reagent	Preserved?		Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
			Yes	No						
≥12		NaOH								
≤2		HNO <sub>3</sub>								
≤2	<u>204518</u>	H <sub>2</sub> SO <sub>4</sub>	<u>✓</u>	<u>✓</u>	<u>Client label</u>		<u>-004</u>	<u>0.5</u>	<u>19216.9</u>	<u>≤2</u>
<4		NaHSO <sub>4</sub>								
5-9		For 608pest			No=Notify for 3 day					
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: Client label  
Explain all Discrepancies/ Other Comments:

headspace: TB (bottles)  
Grab 006, 005, (8/23 - 8/24)

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

Labels secondary reviewed by: SLW  
PC Secondary Review: SLW 8/29/18 \*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.

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Analyst Summary report

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

**Service Request:** R1808213

**Sample Name:** 18PKTP17FW  
**Lab Code:** R1808213-001  
**Sample Matrix:** Water

**Date Collected:** 08/23/18  
**Date Received:** 08/28/18

**Analysis Method**

351.2  
353.2  
365.1  
ASTM D6919-09

**Extracted/Digested By**

NSMITH  
  
KWONG

**Analyzed By**

CWOODS  
AMOSEs  
GNITAJOUPPI  
BKALKMAN

**Sample Name:** 18PKTP17  
**Lab Code:** R1808213-002  
**Sample Matrix:** Water

**Date Collected:** 08/23/18  
**Date Received:** 08/28/18

**Analysis Method**

SM 2320 B-1997(2011)

**Extracted/Digested By**

**Analyzed By**

CWOODS

**Sample Name:** 18PKTP16  
**Lab Code:** R1808213-003  
**Sample Matrix:** Water

**Date Collected:** 08/23/18  
**Date Received:** 08/28/18

**Analysis Method**

351.2  
353.2  
365.1  
ASTM D6919-09

**Extracted/Digested By**

NSMITH  
  
KWONG

**Analyzed By**

CWOODS  
AMOSEs  
GNITAJOUPPI  
BKALKMAN

**Sample Name:** 18PKTP16deep  
**Lab Code:** R1808213-004  
**Sample Matrix:** Water

**Date Collected:** 08/23/18  
**Date Received:** 08/28/18

**Analysis Method**

351.2  
353.2  
365.1  
ASTM D6919-09

**Extracted/Digested By**

NSMITH  
  
KWONG

**Analyzed By**

CWOODS  
AMOSEs  
GNITAJOUPPI  
BKALKMAN

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

Analyst Summary report

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

**Service Request:** R1808213

**Sample Name:** 18PKTP17deep  
**Lab Code:** R1808213-005  
**Sample Matrix:** Water

**Date Collected:** 08/23/18  
**Date Received:** 08/28/18

**Analysis Method**

351.2  
353.2  
365.1  
ASTM D6919-09

**Extracted/Digested By**

NSMITH

KWONG

**Analyzed By**

CWOODS  
AMOSSES  
GNITAJOUPPI  
BKALKMAN



## 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

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## General Chemistry

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Analytical Report

**Client:** New York State DEC  
**Project:** LCI/PK2018  
**Sample Matrix:** Water  
  
**Sample Name:** 18PKTP17FW  
**Lab Code:** R1808213-001

**Service Request:** R1808213  
**Date Collected:** 08/23/18 11:52  
**Date Received:** 08/28/18 09:45  
  
**Basis:** NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0231	mg/L	0.0050	1	09/10/18 01:25	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0021	mg/L	0.0020	1	09/13/18 13:19	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.65	mg/L	0.10	1	09/14/18 17:41	09/13/18	
Phosphorus, Total	365.1	0.0170	mg/L	0.0050	1	09/14/18 11:49	09/11/18	

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Analytical Report

**Client:** New York State DEC  
**Project:** LCI/PK2018  
**Sample Matrix:** Water  
**Sample Name:** 18PKTP17  
**Lab Code:** R1808213-002

**Service Request:** R1808213  
**Date Collected:** 08/23/18 11:52  
**Date Received:** 08/28/18 09:45  
**Basis:** NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	67.2	mg/L	2.0	1	09/04/18 21:04	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** New York State DEC  
**Project:** LCI/PK2018  
**Sample Matrix:** Water  
  
**Sample Name:** 18PKTP16  
**Lab Code:** R1808213-003

**Service Request:** R1808213  
**Date Collected:** 08/23/18 11:23  
**Date Received:** 08/28/18 09:45  
  
**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>0.0068</b>	mg/L	0.0050	1	09/10/18 01:41	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0020 U	mg/L	0.0020	1	09/13/18 13:20	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	<b>0.65</b>	mg/L	0.10	1	09/14/18 17:41	09/13/18	
Phosphorus, Total	365.1	<b>0.0160</b>	mg/L	0.0050	1	09/14/18 11:52	09/11/18	

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Analytical Report

**Client:** New York State DEC  
**Project:** LCI/PK2018  
**Sample Matrix:** Water  
  
**Sample Name:** 18PKTP16deep  
**Lab Code:** R1808213-004

**Service Request:** R1808213  
**Date Collected:** 08/23/18 11:23  
**Date Received:** 08/28/18 09:45  
  
**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>0.0101</b>	mg/L	0.0050	1	09/10/18 01:57	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0020 U	mg/L	0.0020	1	09/13/18 13:24	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	<b>0.62</b>	mg/L	0.10	1	09/14/18 17:42	09/13/18	
Phosphorus, Total	365.1	<b>0.0169</b>	mg/L	0.0050	1	09/14/18 11:56	09/11/18	

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Analytical Report

**Client:** New York State DEC  
**Project:** LCI/PK2018  
**Sample Matrix:** Water  
  
**Sample Name:** 18PKTP17deep  
**Lab Code:** R1808213-005

**Service Request:** R1808213  
**Date Collected:** 08/23/18 11:30  
**Date Received:** 08/28/18 09:45  
  
**Basis:** NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Ammonia as Nitrogen, undistilled	ASTM D6919-09	3.66	mg/L	0.050	10	09/12/18 04:11	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0112	mg/L	0.0020	1	09/13/18 13:26	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	4.17	mg/L	0.10	1	09/14/18 17:43	09/13/18	
Phosphorus, Total	365.1	0.70	mg/L	0.10	20	09/14/18 12:53	09/11/18	



## QC Summary Forms

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## General Chemistry

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Analytical Report

**Client:** New York State DEC  
**Project:** LCI/PK2018  
**Sample Matrix:** Water  
**Sample Name:** Method Blank  
**Lab Code:** R1808213-MB1

**Service Request:** R1808213  
**Date Collected:** NA  
**Date Received:** NA  
**Basis:** NA

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Alkalinity, Total as CaCO3	SM 2320 B-1997(2011)	2.0 U	mg/L	2.0	1	09/04/18 20:19	NA	
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0050 U	mg/L	0.0050	1	09/09/18 20:52	NA	
Nitrate+Nitrite as Nitrogen	353.2	0.0020 U	mg/L	0.0020	1	09/13/18 13:15	NA	
Nitrogen, Total Kjeldahl (TKN)	351.2	0.10 U	mg/L	0.10	1	09/14/18 17:28	09/13/18	
Phosphorus, Total	365.1	0.0050 U	mg/L	0.0050	1	09/14/18 11:23	09/11/18	



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dba ALS Environmental

Analytical Report

**Client:** New York State DEC  
**Project:** LCI/PK2018  
**Sample Matrix:** Water  
  
**Sample Name:** Method Blank  
**Lab Code:** R1808213-MB2

**Service Request:** R1808213  
**Date Collected:** NA  
**Date Received:** NA  
  
**Basis:** NA

**Inorganic Parameters**

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>Dil.</b>	<b>Date Analyzed</b>	<b>Q</b>
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.0050 U	mg/L	0.0050	1	09/12/18 03:22	

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QA/QC Report

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

**Service Request:** R1808213  
**Date Collected:** 08/23/18  
**Date Received:** 08/28/18  
**Date Analyzed:** 09/14/18  
**Date Extracted:** 09/11/18

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

**Sample Name:** 18PKTP17FW  
**Lab Code:** R1808213-001  
**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	0.0170	0.0426	0.0250	102	0.0406	0.0250	94	75-125	5	20

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

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

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

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

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

**Service Request:** R1808213  
**Date Collected:** 08/23/18  
**Date Received:** 08/28/18  
**Date Analyzed:** 09/13/18

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

**Sample Name:** 18PKTP16  
**Lab Code:** R1808213-003  
**Analysis Method:** 353.2

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

Analyte Name	Sample Result	Matrix Spike R1808213-003MS			Duplicate Matrix Spike R1808213-003DMS			% Rec Limits	RPD	RPD Limit
		Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Nitrate+Nitrite as Nitrogen	0.0020 U	0.539	0.500	108	0.522	0.500	104	75-125	3	20

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QA/QC Report

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

**Service Request:** R1808213  
**Date Analyzed:** 09/04/18 - 09/14/18

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

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

**Lab Control Sample**  
R1808213-LCS1

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Alkalinity, Total as CaCO <sub>3</sub>	SM 2320 B-1997(2011)	18.8	20.0	94	70-130
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.525	0.500	105	70-130
Nitrate+Nitrite as Nitrogen	353.2	0.520	0.500	104	70-130
Nitrogen, Total Kjeldahl (TKN)	351.2	2.35	2.50	94	70-130
Phosphorus, Total	365.1	0.0245	0.0250	98	70-130

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QA/QC Report

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

**Service Request:** R1808213  
**Date Analyzed:** 09/12/18

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

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

**Lab Control Sample**  
R1808213-LCS2

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Ammonia as Nitrogen, undistilled	ASTM D6919-09	0.500	0.500	100	70-130