

Service Request No:R1807466

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 08, 2018 For your reference, these analyses have been assigned our service request number **R1807466**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Janice Jaeger Project Manager

Jamansto

CC: Jason Fagel



## **Narrative Documents**

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 DECService Request: R1807466Project:LCI 2018Date Received: 08/08/2018

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

Approved by

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.

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| Date | 08/30/2018  |
|------|-------------|
| Date | U0/3U/ZU I0 |



| CLIENT ID: 18CMG205            |                      | Lak   | D: R1807 | 466-001 |            |                          |
|--------------------------------|----------------------|-------|----------|---------|------------|--------------------------|
| Analyte                        | Results              | Flag  | MDL      | MRL     | Units      | Method                   |
| Alkalinity, Total as CaCO3     | 21.2                 |       | 1.0      | 2.0     | mg/L       | SM 2320 B-1997<br>(2011) |
| Carbon, Total Organic (TOC)    | 5.6                  |       | 0.05     | 1.0     | mg/L       | SM 5310 C-2000<br>(2011) |
| Chlorophyll A                  | 10.2                 |       |          | 0.64    | ug/L       | SM20 10200 H             |
| Color, True                    | 29.0                 |       |          | 1.0     | ColorUnits | SM 2120 B-2001<br>(2011) |
| Nitrogen, Total Kjeldahl (TKN) | 0.51                 |       | 80.0     | 0.10    | mg/L       | 351.2                    |
| pH of Color Analysis           | 7.50                 |       |          | 10      | pH Units   | SM 2120 B-2001<br>(2011) |
| Phosphorus, Total              | 0.0213               |       | 0.0020   | 0.0050  | mg/L       | 365.1                    |
| CLIENT ID: 18CMG205 Diss       | Lab ID: R1807466-002 |       |          |         |            |                          |
| Analyte                        | Results              | Flag  | MDL      | MRL     | Units      | Method                   |
| Phosphorus, Dissolved          | 0.0073               |       | 0.0020   | 0.0050  | mg/L       | 365.1                    |
| CLIENT ID: 18CMG206            |                      | Lak   | D: R1807 | 466-003 |            |                          |
| Analyte                        | Results              | Flag  | MDL      | MRL     | Units      | Method                   |
| Carbon, Total Organic (TOC)    | 5.7                  |       | 0.05     | 1.0     | mg/L       | SM 5310 C-2000<br>(2011) |
| Color, True                    | 47.0                 |       |          | 1.0     | ColorUnits | SM 2120 B-2001<br>(2011) |
| Nitrogen, Total Kjeldahl (TKN) | 0.57                 |       | 80.0     | 0.10    | mg/L       | 351.2                    |
| pH of Color Analysis           | 7.16                 |       |          | 10      | pH Units   | SM 2120 B-2001<br>(2011) |
| Phosphorus, Total              | 0.0270               |       | 0.0020   | 0.0050  | mg/L       | 365.1                    |
| CLIENT ID: 18CMG206 Diss       |                      | Lak   | D: R1807 | 466-004 |            |                          |
| Analyte                        | Results              | Flag  | MDL      | MRL     | Units      | Method                   |
| Phosphorus, Dissolved          | 0.0102               |       | 0.0020   | 0.0050  | mg/L       | 365.1                    |
| CLIENT ID: 18CMG213            |                      | Lat   | D: R1807 | 466-005 |            |                          |
| Analyte                        | Results              | Flag  | MDL      | MRL     | Units      | Method                   |
| Alkalinity, Total as CaCO3     | 41.2                 |       | 1.0      | 2.0     | mg/L       | SM 2320 B-1997<br>(2011) |
| Carbon, Total Organic (TOC)    | 6.3                  |       | 0.05     | 1.0     | mg/L       | SM 5310 C-2000<br>(2011) |
| Chlorophyll A                  | 17.9                 |       |          | 0.64    | ug/L       | SM20 10200 H             |
| Color, True                    | 34.0                 |       |          | 1.0     | ColorUnits | SM 2120 B-2001<br>(2011) |
| Nitrate+Nitrite as Nitrogen    | 0.0027               |       | 0.0007   | 0.0020  | mg/L       | 353.2                    |
| Nitrogen, Total Kjeldahl (TKN) | 0.81                 |       | 0.08     | 0.10    | mg/L       | 351.2                    |
| pH of Color Analysis           | 7.46                 |       |          | 10      | pH Units   | SM 2120 B-2001<br>(2011) |
| Phosphorus, Total              | 0.0419               |       | 0.0020   | 0.0050  | mg/L       | 365.1                    |
| CLIENT ID: 18CMG213 Diss       |                      |       | D: R1807 | 466-006 |            |                          |
| Analyte                        | Results              | Flag  | MDL      | MRL     | Units      | Method                   |
| Phosphorus, Dissolved          | 0.0105<br>4 c        | of 62 | 0.0020   | 0.0050  | mg/L       | 365.1                    |



| CLIENT ID: 18CMG213 Diss         |         | Lal  | D: R1807    | 7466-006 |            |                          |
|----------------------------------|---------|------|-------------|----------|------------|--------------------------|
| Analyte                          | Results | Flag | MDL         | MRL      | Units      | Method                   |
| CLIENT ID: 18CMG203              |         | Lal  | o ID: R1807 | 7466-007 |            |                          |
| Analyte                          | Results | Flag | MDL         | MRL      | Units      | Method                   |
| Alkalinity, Total as CaCO3       | 73.6    |      | 1.0         | 2.0      | mg/L       | SM 2320 B-1997<br>(2011) |
| Ammonia as Nitrogen, undistilled | 0.0052  |      | 0.0008      | 0.0050   | mg/L       | ASTM D6919-09            |
| Carbon, Total Organic (TOC)      | 13.2    |      | 0.05        | 1.0      | mg/L       | SM 5310 C-2000<br>(2011) |
| Chlorophyll A                    | 99.7    |      |             | 6.4      | ug/L       | SM20 10200 H             |
| Color, True                      | 290     |      |             | 10       | ColorUnits | SM 2120 B-2001<br>(2011) |
| Nitrate+Nitrite as Nitrogen      | 0.0095  |      | 0.0007      | 0.0020   | mg/L       | 353.2                    |
| Nitrogen, Total Kjeldahl (TKN)   | 1.51    |      | 0.08        | 0.10     | mg/L       | 351.2                    |
| pH of Color Analysis             | 7.44    |      |             | 10       | pH Units   | SM 2120 B-2001<br>(2011) |
| Phosphorus, Total                | 0.128   |      | 0.010       | 0.025    | mg/L       | 365.1                    |
| CLIENT ID: 18CMG203 Diss         |         | Lal  | D: R1807    | 7466-008 |            |                          |
| Analyte                          | Results | Flag | MDL         | MRL      | Units      | Method                   |
| Phosphorus, Dissolved            | 0.0785  |      | 0.0020      | 0.0050   | mg/L       | 365.1                    |
| CLIENT ID: 18CMG215              |         | Lal  | D: R1807    | 7466-009 |            |                          |
| Analyte                          | Results | Flag | MDL         | MRL      | Units      | Method                   |
| Alkalinity, Total as CaCO3       | 128     |      | 1.0         | 2.0      | mg/L       | SM 2320 B-1997<br>(2011) |
| Ammonia as Nitrogen, undistilled | 0.0100  |      | 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<br>(2011) |
| Chlorophyll A                    | 4.50    |      |             | 0.32     | ug/L       | SM20 10200 H             |
| Color, True                      | 31.0    |      |             | 1.0      | ColorUnits | SM 2120 B-2001<br>(2011) |
| Nitrogen, Total Kjeldahl (TKN)   | 0.51    |      | 0.08        | 0.10     | mg/L       | 351.2                    |
| pH of Color Analysis             | 7.84    |      |             | 10       | pH Units   | SM 2120 B-2001<br>(2011) |
| Phosphorus, Total                | 0.0167  |      | 0.0020      | 0.0050   | mg/L       | 365.1                    |
| CLIENT ID: 18CMG215 Diss         |         | Lal  | D: R1807    | 7466-010 |            |                          |
| Analyte                          | Results | Flag | MDL         | MRL      | Units      | Method                   |
| Phosphorus, Dissolved            | 0.0064  |      | 0.0020      | 0.0050   | mg/L       | 365.1                    |
| CLIENT ID: 18CMG216              |         | Lal  | D: R1807    | 7466-011 |            |                          |
| Analyte                          | Results | Flag | MDL         | MRL      | Units      | Method                   |
| Ammonia as Nitrogen, undistilled | 0.306   |      | 0.0008      | 0.0050   | mg/L       | ASTM D6919-09            |
| Carbon, Total Organic (TOC)      | 5.8     |      | 0.05        | 1.0      | mg/L       | SM 5310 C-2000<br>(2011) |
| Color, True                      | 55.0    |      |             | 1.0      | ColorUnits | SM 2120 B-2001<br>(2011) |
| Nitrate+Nitrite as Nitrogen      | 0.0033  |      | 0.0007      | 0.0020   | mg/L       | 353.2                    |



| CLIENT ID: 18CMG216              | Lab ID: R1807466-011 |      |           |         |            |                          |
|----------------------------------|----------------------|------|-----------|---------|------------|--------------------------|
| Analyte                          | Results              | Flag | MDL       | MRL     | Units      | Method                   |
| Nitrogen, Total Kjeldahl (TKN)   | 1.07                 |      | 0.08      | 0.10    | mg/L       | 351.2                    |
| pH of Color Analysis             | 7.76                 |      |           | 10      | pH Units   | SM 2120 B-2001<br>(2011) |
| Phosphorus, Total                | 0.0770               |      | 0.0020    | 0.0050  | mg/L       | 365.1                    |
| CLIENT ID: 18CMG216 Diss         |                      | Lak  | ID: R1807 | 466-012 |            |                          |
| Analyte                          | Results              | Flag | MDL       | MRL     | Units      | Method                   |
| Phosphorus, Dissolved            | 0.0127               |      | 0.0020    | 0.0050  | mg/L       | 365.1                    |
| CLIENT ID: 18CMG209              |                      | Lak  | D: R1807  | 466-013 |            |                          |
| Analyte                          | Results              | Flag | MDL       | MRL     | Units      | Method                   |
| Alkalinity, Total as CaCO3       | 35.2                 |      | 1.0       | 2.0     | mg/L       | SM 2320 B-1997<br>(2011) |
| Carbon, Total Organic (TOC)      | 8.0                  |      | 0.05      | 1.0     | mg/L       | SM 5310 C-2000<br>(2011) |
| Chlorophyll A                    | 10.3                 |      |           | 0.64    | ug/L       | SM20 10200 H             |
| Color, True                      | 36.0                 |      |           | 1.0     | ColorUnits | SM 2120 B-2001<br>(2011) |
| Nitrate+Nitrite as Nitrogen      | 0.0028               |      | 0.0007    | 0.0020  | mg/L       | 353.2                    |
| Nitrogen, Total Kjeldahl (TKN)   | 0.81                 |      | 0.08      | 0.10    | mg/L       | 351.2                    |
| pH of Color Analysis             | 7.52                 |      |           | 10      | pH Units   | SM 2120 B-2001<br>(2011) |
| Phosphorus, Total                | 0.0313               |      | 0.0020    | 0.0050  | mg/L       | 365.1                    |
| CLIENT ID: 18CMG209 Diss         |                      | Lak  | ID: R1807 | 466-014 |            |                          |
| Analyte                          | Results              | Flag | MDL       | MRL     | Units      | Method                   |
| Phosphorus, Dissolved            | 0.0093               |      | 0.0020    | 0.0050  | mg/L       | 365.1                    |
| CLIENT ID: 18CMG201              |                      | Lak  | ID: R1807 | 466-015 |            |                          |
| Analyte                          | Results              | Flag | MDL       | MRL     | Units      | Method                   |
| Alkalinity, Total as CaCO3       | 46.8                 |      | 1.0       | 2.0     | mg/L       | SM 2320 B-1997<br>(2011) |
| Ammonia as Nitrogen, undistilled | 0.0063               |      | 0.0008    | 0.0050  | mg/L       | ASTM D6919-09            |
| Carbon, Total Organic (TOC)      | 10.6                 |      | 0.05      | 1.0     | mg/L       | SM 5310 C-2000<br>(2011) |
| Chlorophyll A                    | 30.4                 |      |           | 6.4     | ug/L       | SM20 10200 H             |
| Color, True                      | 150                  |      |           | 10      | ColorUnits | SM 2120 B-2001<br>(2011) |
| Nitrate+Nitrite as Nitrogen      | 0.0041               |      | 0.0007    | 0.0020  | mg/L       | 353.2                    |
| Nitrogen, Total Kjeldahl (TKN)   | 0.82                 |      | 0.08      | 0.10    | mg/L       | 351.2                    |
| pH of Color Analysis             | 7.38                 |      |           | 10      | pH Units   | SM 2120 B-2001<br>(2011) |
| Phosphorus, Total                | 0.0462               |      | 0.0020    | 0.0050  | mg/L       | 365.1                    |
| CLIENT ID: 18CMG201 Diss         |                      |      | D: R1807  | 466-016 |            |                          |
| Analyte                          | Results              | Flag | MDL       | MRL     | Units      | Method                   |
| Phosphorus, Dissolved            | 0.0161               |      | 0.0020    | 0.0050  | mg/L       | 365.1                    |



| CLIENT ID: 18CMG207                         |                      | Lal         | D: R1807              | 7466-017 |               |                          |  |
|---|----------------------|-------------|-----------------------|----------|---------------|--------------------------|--|
| Analyte                                     | Results              | Flag        | MDL                   | MRL      | Units         | Method                   |  |
| Alkalinity, Total as CaCO3                  | 132                  |             | 1.0                   | 2.0      | mg/L          | SM 2320 B-1997<br>(2011) |  |
| Ammonia as Nitrogen, undistilled            | 0.0069               |             | 0.0008                | 0.0050   | mg/L          | ASTM D6919-09            |  |
| Carbon, Total Organic (TOC)                 | 7.8                  |             | 0.05                  | 1.0      | mg/L          | SM 5310 C-2000<br>(2011) |  |
| Chlorophyll A                               | 22.9                 |             |                       | 3.2      | ug/L          | SM20 10200 H             |  |
| Color, True                                 | 42.0                 |             |                       | 1.0      | ColorUnits    | SM 2120 B-2001<br>(2011) |  |
| Nitrate+Nitrite as Nitrogen                 | 0.0026               |             | 0.0007                | 0.0020   | mg/L          | 353.2                    |  |
| Nitrogen, Total Kjeldahl (TKN)              | 1.51                 |             | 0.08                  | 0.10     | mg/L          | 351.2                    |  |
| pH of Color Analysis                        | 8.12                 |             |                       | 10       | pH Units      | SM 2120 B-2001<br>(2011) |  |
| Phosphorus, Total                           | 0.0473               |             | 0.0020                | 0.0050   | mg/L          | 365.1                    |  |
| CLIENT ID: 18CMG207 Diss                    |                      | Lal         | D: R1807              | 7466-018 |               |                          |  |
| Analyte                                     | Results              | Flag        | MDL                   | MRL      | Units         | Method                   |  |
| Phosphorus, Dissolved                       | 0.0112               |             | 0.0020                | 0.0050   | mg/L          | 365.1                    |  |
| CLIENT ID: 18CMG211                         | Lab ID: R1807466-019 |             |                       |          |               |                          |  |
| Analyte                                     | Results              | Flag        | MDL                   | MRL      | Units         | Method                   |  |
| Alkalinity, Total as CaCO3                  | 242                  |             | 1.0                   | 2.0      | mg/L          | SM 2320 B-1997<br>(2011) |  |
| Ammonia as Nitrogen, undistilled            | 0.0707               |             | 0.0008                | 0.0050   | mg/L          | ASTM D6919-09            |  |
| Carbon, Total Organic (TOC)                 | 5.3                  |             | 0.05                  | 1.0      | mg/L          | SM 5310 C-2000<br>(2011) |  |
| Chlorophyll A                               | 36.5                 |             |                       | 1.6      | ug/L          | SM20 10200 H             |  |
| Color, True                                 | 22.0                 |             |                       | 1.0      | ColorUnits    | SM 2120 B-2001<br>(2011) |  |
| Nitrate+Nitrite as Nitrogen                 | 0.757                |             | 0.0007                | 0.0020   | mg/L          | 353.2                    |  |
| Nitrogen, Total Kjeldahl (TKN)              | 0.71                 |             | 0.08                  | 0.10     | mg/L          | 351.2                    |  |
|   | 0.00                 |             |                       | 10       | pH Units      | SM 2120 B-2001           |  |
| pH of Color Analysis                        | 8.02                 |             |                       |          |               | (2011)                   |  |
| pH of Color Analysis Phosphorus, Total      | 0.0336               |             | 0.0020                | 0.0050   | mg/L          | 365.1                    |  |
| Phosphorus, Total                           |                      | Lal         | 0.0020<br>o ID: R1807 |          | mg/L          | , ,                      |  |
| Phosphorus, Total                           |                      | Lal<br>Flag |                       |          | mg/L<br>Units | , ,                      |  |
| Phosphorus, Total  CLIENT ID: 18CMG211 Diss | 0.0336               |             | o ID: R1807           | 7466-020 |               | 365.1                    |  |



## 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> |
|--------------|------------------|-------------|-------------|
| R1807466-001 | 18CMG205         | 8/6/2018    | 1135        |
| R1807466-002 | 18CMG205 Diss    | 8/6/2018    | 1135        |
| R1807466-003 | 18CMG206         | 8/6/2018    | 1130        |
| R1807466-004 | 18CMG206 Diss    | 8/6/2018    | 1130        |
| R1807466-005 | 18CMG213         | 8/6/2018    | 1500        |
| R1807466-006 | 18CMG213 Diss    | 8/6/2018    | 1500        |
| R1807466-007 | 18CMG203         | 8/6/2018    | 1620        |
| R1807466-008 | 18CMG203 Diss    | 8/6/2018    | 1620        |
| R1807466-009 | 18CMG215         | 8/6/2018    | 1738        |
| R1807466-010 | 18CMG215 Diss    | 8/6/2018    | 1738        |
| R1807466-011 | 18CMG216         | 8/6/2018    | 1733        |
| R1807466-012 | 18CMG216 Diss    | 8/6/2018    | 1733        |
| R1807466-013 | 18CMG209         | 8/7/2018    | 0720        |
| R1807466-014 | 18CMG209 Diss    | 8/7/2018    | 0720        |
| R1807466-015 | 18CMG201         | 8/7/2018    | 0850        |
| R1807466-016 | 18CMG201 Diss    | 8/7/2018    | 0850        |
| R1807466-017 | 18CMG207         | 8/7/2018    | 1000        |
| R1807466-018 | 18CMG207 Diss    | 8/7/2018    | 1000        |
| R1807466-019 | 18CMG211         | 8/7/2018    | 1106        |
| R1807466-020 | 18CMG211 Diss    | 8/7/2018    | 1106        |

#### **CHAIN OF CUSTODY** Page <u>| of 2</u> Project Number: LCI2018**NYSDEC SDG:** Project Name: LCI Sampler Phone No.: Sampler Collector: Sampler Signature: 5184028166 Alene Onion Project Manager: Alene Onion ☐ Bill to Project Manager X Report to Project Manager Bill to: Jason Fagel Report to: Address: 625 Broadway, 4th Floor Address: 625 Broadway, 4th Floor Address: Albany, NY 12233-3502 Albany, NY 12233-3502 New York State Department of **Environmental Conservation** -Phone: 518-402-8156 Phone: (518) 402-8166 Phone: **Division of Water** Email: Jason,fagel@dec.ny.gov Email: alene.onion@dec.ny.gov Email: **Analyses Ordered (list) Preservative Codes: Matrix Codes:** 0 = Cool to < 6°C 3 1 = HCL WW = Wastewater ANC ANC ANC 2 = HNO<sub>3</sub> GW = Groundwater N03 ¥ $3 = H_2SO_4$ No. of Containers AW = Ambient Water 4 = NaOH Date **Collection Time** SE = Sediment TKN, 5 = Zn. Acetate Chlorophyll a | Vol (ml) TP, NH4, NOx, TKN Σg 6 = MeOH SL = Sludge Code 7 = NaHSO4 CI, UV-254 **T** = Tissue Collection NH4, NOx, Ĉa, 8 = Other & UV-254 ¥ **O** = Other \_\_\_\_\_ Mg, Na, Fe, Mn, As, Matrix Alkalinity Fe, Mn, 뎌 Color NYSDEC DOC Toc SQ4 **Location Info** LCI Sample ID Erwin Pand AW 1135 18CM6, 205 08/06 Erwin Pond hupo AW 18CM6 206 08/06 1130 250 ml Mosey Dank Park Pond Ep 08/06 1500 AW 18CM 6213 250m/Birdsere Holon C. Es 08/06 AW 18CM 670\$ 1620 500 ml Sanfred Lake Foi 08/06 1738 AW × × 18CM 621 Sanford Late hypo ابد 08/06 1733 AW 18 CM 6 216 Inthe **Special Analysis Instructions:** 9318 Time: Relinguished by Sampler: Dato: Time: **Laboratory Receipt Notes:** 09130 1500 R1807466 Time: Date: Rölingulshod by: Time: Sample LCI 2018 Date: Time: Received by Laboratory: Date: Time: Rolinquished by:

#### **CHAIN OF CUSTODY** Page Z of Z **NYSDEC SDG:** Project Number: LCI2018 Project Name: LCI Sampler Signature: Sampler Phone No.: Sampler Collector: Alene Onion 518 402 8166 Project Manager: Alene Onion ☐ Bill to Project Manager X Report to Project Manager Bill to: Jason Fagel Report to: Address: 625 Broadway, 4th Floor Address: 625 Broadway, 4th Floor Address: Albany, NY 12233-3502 Albany, NY 12233-3502 New York State Department of **Environmental Conservation –** Phone: 518-402-8156 Phone: (518) 402-8166 Phone: Division of Water Email: Email: Jason.fagel@dec.ny.gov Email: alene.onion@dec.ny.gov **Analyses Ordered (list) Preservative Codes: Matrix Codes:** 0 = Cool to < 6°C 3 2 1 = HCL WW = Wastewater ANC ANC. $2 = HNO_3$ **GW** = Groundwater NO3 3 = H2SO4 Containers AW = Ambient Water ža 4 = NaOH **Collection Time** SE = Sediment TKN, 5 = Zn. Acetate Chlorophyll a | Vol (ml) TP, NH4, NOx, TKN Σ ŝ 6 = MeOH SL = Sludge Code 7 = NaHSO4 T = Tissue Cl, UV-254 Ça, TP, NH4, NOx, 8 = Other SO4 & UV-254 **0** = Other \_\_\_\_ Ca, Mg, Na, Fe, Mn, As, Matrix of Alkalinity Fe, Mn, 1 Ö **NYSDEC** 200 SO4. **Location Info LCI Sample ID** 8CM 6309 Au8/07 850 Dul 18 CM6 207 8/01 1000 18 CMG 8/07 4W 1106 Special Analysis Instructions: 11mo: 09:30 %\*\*\*\*18 Relinguished by Sampler: **Laboratory Receipt Notes:** 8/7/8 12:00 Date: Time: Rollinguished by: Sample Ten R1807466 Properly Pre LCI 2018 Date: Time: Date: Time: Received by Laboratory: Relinguished by:

Samples Int

| ALS) Co              | ooler Receipt a | and Preservation | n Check Form    | R1807466    |
|----------------------|-----------------|------------------|-----------------|-------------|
| ject/Client NYSIEC L | a a             | Folder Number_   |                 |             |
| 4414                 | , 99            | COUDIED.         | ALC (IDC) CEDEV | VELOCITY CH |

| (AL             | <b>S</b> )                            |   | IXCCC.   | ıpı a                                 | ina i ic   | sci vano      | пСп            | CK I OI III                     |                |               |               |   |
|-----------------|---------------------------------------|---|--|---------------------------------------|--|---------------|----------------|---------------------------------|----------------|---------------|---------------|---|
| roject/Clie     | ent NYSK                              | <u>CLC1</u>                                   | - n b  |                                       | Folder   | Number_       |                |                                 |                |               |               |   |
| Cooler receive  | ed on BB                              | 14  | by: <u>112</u>                                   | <u></u>                               | · (  | COURIER:      | ALS (          | UPS FEDI                        | EX VELO        | OCITY C       | LIENT         |   |
| 1 Were Cu       | stody seals on                        | outside of coole                              | r?   | (                                     | V N [  | 5a Percl      | hlorate s      | amples have r                   | equired hea    | dspace?       | Y 1           | N NA  |
| 2 Custody       | papers proper                         | rly completed (in                             | k, signe   | ed)?                                  | Ý) N   | 5b Did V      | /OA vial       | ls, Alk,or Sulfi                | de have sig    | * bubbles     | s? Y 1        | N (NA   |
| 3 Did all be    | ottles arrive in                      | good condition                                | (unbrok  | en)?                                  | Ø N  | 6 When        | e did the      | bottles origin                  | ate? (         | ALS/RO        | CLI           | ENT   |
| 4 Circle: (     | Wet Ice Dry                           | Ice Gel packs                                 | pres   | ent?                                  | YN   | 7 Soil        | VOA rec        | eived as:                       | Bulk Er        | icore 5       | 035set C      | NA)   |
| . Temperatur    | re Readings                           | Date: 8-8-                                    | 18   | Time                                  | 10:24  | _ ID          | (IR#7          | ) <sub>IR#9</sub>               | From:          | Temp Bla      | n Sam         | ple Bottle  |
| Observed Te     | emp (°C)                              | 14.5  |  | 0                                     | <del></del>                                      |               | $\widetilde{}$ |                                 |                |               |               |   |
| Correction F    | actor (°C)                            | 41.0  | 11,  | 10                                    |  |               |                |                                 |                | <del>-</del>  |               |   |
| Corrected Te    | , ,                                   | 5,5   | \$.  |                                       |  |               |                | •                               |                |               |               |   |
|                 | Type of bottle                        | Centrula                                      |  | A. 1                                  | ulm  |               |                |                                 |                |               |               |   |
| Within 0-6°     | _ <del>-</del>                        | 8D N  | . <u>C.</u>                                      | (\$)                                  | N N  | Y N           | Y              | N Y                             | N              | YN            | Y             | N   |
|                 | e samples froz                        |   | <del></del>                                      | Y                                     | N  | YN            | Y              | N Y                             | N              | YN            | Y             |   |
|                 |                                       | note packing/ic                               |  | itian.                                |  | Ice mel       |                | oorly Packed                    |                |               |               | Day Rule  |
|                 |                                       | tun Samples:                                  |  |                                       |  |               |                | -                               | •              | ,             | Samo          | Day Raic  |
| &Chent A        | Approval to R                         | un Sampies:                                   |  |                                       |  |               |                |                                 | JIICH HOU      | ied by        |               | <del></del>                                       |
| All samples     | held in storag                        | ge location:                                  | 12-00  | ) 1                                   | oy Ite   | on 8%/        | 8 at [[        | )433                            |                |               |               |   |
| 5035 sample     | es placed in st                       | orage location:                               |  |                                       | ру   | on            | at             |                                 |                |               |               |   |
| _               |                                       |   | •          |                                       |  |               |                |                                 |                |               |               |   |
| Cooler Bro      | eakdown/Prese                         | rvation Check**                               | : Date   | :<br>:                                | 8/8/18   | Time:         | 184            | 16 b                            | y: <i>a</i> o  |               |               |   |
| 9. \            | Were all bottle                       | labels complete                               | (i.e. ana  | ılysis,                               | preservatio                                      |               | , -            | (EX)                            | V: <u>NO</u>   |               |               |   |
|                 |                                       | bels and tags agr                             |  |                                       |  |               |                | VE 2                            | NO             |               |               |   |
|                 |                                       | ontainers used for                            |  |                                       |  |               |                | (ES)                            | NO             |               | ~             |   |
|                 |                                       | s acceptable (no                              |  |                                       |  |               |                | YES                             | NO             |               | (N/A          |   |
|                 | · · · · · · · · · · · · · · · · · · · | Cassettes / Tubes                             | <del></del>                                      |                                       |  | isters Pressu |                |                                 | Bags Infl      |               |               | l et al   |
| рH              | Lot of test                           | Reagent                                       | Preser   | · · · · · · · · · · · · · · · · · · · | Lot Rece   | ived          | Exp            | Sample ID                       | Vol.<br>Added  | Lot A         | aaea          | Final<br>pH /                                     |
| 10              | paper                                 | NEOU  | Yes  | No                                    |  |               | -              | Adjusted                        | Added          | <u> </u>      | <u></u>       | Pii /   |
| ≥12             |                                       | NaOH  | 1  |                                       |  |               | <del> </del>   |                                 |                | <del></del>   |               | <del> - /-</del>                                  |
| <u>≤2</u><br>≤2 | <u> </u>                              | HNO₃<br>H <sub>2</sub> SO₄                    | <del>                                     </del> | -                                     | 2100000  | 190642        | 7/19           |                                 | -              | -             |               | <del>  / -</del>                                  |
| <4              |                                       | NaHSO <sub>4</sub>                            | <i> </i>   |                                       | At30071,   | 110672        | 11/17          |                                 | -              | <del></del>   |               | <del>  /                                   </del> |
| 5-9             |                                       | For 608 pest                                  | <del> </del>                                     |                                       | No=Notify  | v for 3day    |                |                                 | -              |               |               | /   |
| Residual        |                                       | For CN,                                       | 1  |                                       | <u> </u>   | ct PM to add  |                |                                 | +              | <del></del>   | 7             | 1   |
| Chlorine        |                                       | Phenol, 625,                                  |  |                                       | Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (6 | 25, 608,      | -              |                                 |                |               |               |   |
| (-)             |                                       | 608pest, 522                                  |  |                                       | CN), ascor                                       | bic (phenol). |                |                                 |                |               |               |   |
| <del></del>     |                                       | Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> | 1  |                                       |  |               | 1              | •                               |                | -             | $\overline{}$ |   |
|                 |                                       | ZnAcetate                                     | -  | † <del>-</del>                        |  |               |                | **VOAs and I                    | 64 Not to be   | tested before | e analysis.   | _   |
|                 |                                       | HCI   | **   | **                                    | 7  |               | <u> </u>       | Otherwise, all tare checked (no |                |               | chemical pr   | eservatives                                       |
|                 |                                       |   | L  |                                       | I  |               |                | ате спескей (по                 | i jusi represe | matives)      |               |   |

Bottle lot numbers: 8-072-001 671618- 2000 Explain all Discrepancies/ Other Comments:

2 samples on COC Augs 18CMG205

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

| Labels secondary reviewed by:           | Ø 1.              |                           |                                     |
|---|-------------------|---------------------------|-------------------------------------|
| PC Secondary Review:                    | JM 8/19/1         | *significant air bubbles: | VOA > 5-6  mm: WC > 1  in. diameter |
| P:\INTRANET\QAQC\Forms Controlled\Coole | r Receipt r16.doc |                           |                                     |



## 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        |

¹ Analyses were performed according to our laboratory

NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory or go to <a href="https://www.alsglobal.com/locations/americas/north-

### **ALS Laboratory Group**

### Acronyms

ASTM American Society for Testing and Materials

A2LA American Association for Laboratory Accreditation

CARB California Air Resources Board

CAS Number Chemical Abstract Service registry Number

CFC Chlorofluorocarbon CFU Colony-Forming Unit

DEC Department of Environmental Conservation

DEQ Department of Environmental Quality

DHS Department of Health Services

DOE Department of Ecology DOH Department of Health

EPA U. S. Environmental Protection Agency

ELAP Environmental Laboratory Accreditation Program

GC Gas Chromatography

GC/MS Gas Chromatography/Mass Spectrometry

LUFT Leaking Underground Fuel Tank

M Modified

MCL Maximum Contaminant Level is the highest permissible concentration of a

substance allowed in drinking water as established by the USEPA.

MDL Method Detection Limit
MPN Most Probable Number
MRL Method Reporting Limit

NA Not Applicable NC Not Calculated

NCASI National Council of the Paper Industry for Air and Stream Improvement

ND Not Detected

NIOSH National Institute for Occupational Safety and Health

PQL Practical Quantitation Limit

RCRA Resource Conservation and Recovery Act

SIM Selected Ion Monitoring

TPH Total Petroleum Hydrocarbons

tr Trace level is the concentration of an analyte that is less than the PQL but

greater than or equal to the MDL.

Client: New York State DEC Service Request: R1807466

**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: R1807466

**Project:** LCI 2018/LCI2018

Sample Name: 18CMG205 Date Collected: 08/6/18

**Lab Code:** R1807466-001 **Date Received:** 08/8/18

Sample Matrix: Water

Analysis MethodExtracted/Digested ByAnalyzed By351.2NSMITHGNITAJOUPPI353.2GNITAJOUPPI365.1GNITAJOUPPINMANSENASTM D6919-09AMOSES

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

SM20 10200 H NSMITH

 Sample Name:
 18CMG205 Diss
 Date Collected:
 08/6/18

 Lab Code:
 R1807466-002
 Date Received:
 08/8/18

**Sample Matrix:** Water

SM 2120 B-2001(2011)

Analysis Method Extracted/Digested By Analyzed By

365.1 KWONG GNITAJOUPPI

Sample Name: 18CMG206 Date Collected: 08/6/18

**Lab Code:** R1807466-003 **Date Received:** 08/8/18

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

NSMITH GNITAJOUPPI

353.2 GNITAJOUPPI 365.1 GNITAJOUPPI NMANSEN

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

SM 5310 C-2000(2011) CWOODS

**GLAFORCE** 

Analyst Summary report

Client: New York State DEC Service Request: R1807466

**Project:** LCI 2018/LCI2018

 Sample Name:
 18CMG206 Diss

 Date Collected:
 08/6/18

 Lab Code:
 R1807466-004

 Date Received:
 08/8/18

**Sample Matrix:** Water

Analysis Method Extracted/Digested By Analyzed By

365.1 KWONG GNITAJOUPPI

Sample Name: 18CMG213 Date Collected: 08/6/18

**Lab Code:** R1807466-005 **Date Received:** 08/8/18

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

351.2 NSMITH GNITAJOUPPI

353.2 GNITAJOUPPI

365.1 GNITAJOUPPI NMANSEN

ASTM D6919-09 FNAEGLER

SM 2120 B-2001(2011) GLAFORCE

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

SM20 10200 H NSMITH

Sample Name: 18CMG213 Diss Date Collected: 08/6/18

**Lab Code:** R1807466-006 **Date Received:** 08/8/18

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

365.1 KWONG GNITAJOUPPI

Sample Name: 18CMG203 Date Collected: 08/6/18

**Lab Code:** R1807466-007 **Date Received:** 08/8/18

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

351.2 NSMITH GNITAJOUPPI

353.2 GNITAJOUPPI

365.1 GNITAJOUPPI NMANSEN

Printed 8/30/2018 12:13:50 PM Superset Reference:18-0000476544 rev 00

Analyst Summary report

Client: New York State DEC Service Request: R1807466

**Project:** LCI 2018/LCI2018

Sample Name: 18CMG203 Date Collected: 08/6/18

**Lab Code:** R1807466-007 **Date Received:** 08/8/18

Sample Matrix: Water

 Analysis Method
 Extracted/Digested By
 Analyzed By

 ASTM D6919-09
 AMOSES

 SM 2120 B-2001(2011)
 GLAFORCE

 SM 2320 B-1997(2011)
 CWOODS

 SM 5310 C-2000(2011)
 CWOODS

 SM20 10200 H
 NSMITH

Sample Name: 18CMG203 Diss Date Collected: 08/6/18

**Lab Code:** R1807466-008 **Date Received:** 08/8/18

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

365.1 KWONG GNITAJOUPPI

Sample Name: 18CMG215 Date Collected: 08/6/18

**Lab Code:** R1807466-009 **Date Received:** 08/8/18

Sample Matrix: Water

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

Analyst Summary report

Client: New York State DEC Service Request: R1807466

**Project:** LCI 2018/LCI2018

Sample Name: 18CMG215 Diss Date Collected: 08/6/18

**Lab Code:** R1807466-010 **Date Received:** 08/8/18

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

365.1 KWONG GNITAJOUPPI

Sample Name: 18CMG216 Date Collected: 08/6/18

**Lab Code:** R1807466-011 **Date Received:** 08/8/18

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

351.2 NSMITH GNITAJOUPPI

353.2 GNITAJOUPPI

365.1 GNITAJOUPPI NMANSEN

ASTM D6919-09 FNAEGLER

SM 2120 B-2001(2011) GLAFORCE

SM 5310 C-2000(2011) CWOODS

Sample Name: 18CMG216 Diss Date Collected: 08/6/18

**Lab Code:** R1807466-012 **Date Received:** 08/8/18

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

365.1 KWONG GNITAJOUPPI

Sample Name: 18CMG209 Date Collected: 08/7/18

**Lab Code:** R1807466-013 **Date Received:** 08/8/18

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

351.2 NSMITH GNITAJOUPPI

353.2 GNITAJOUPPI

GIVEN TO THE TAXABLE TO THE TAXABLE

365.1 GNITAJOUPPI NMANSEN

ASTM D6919-09 FNAEGLER

SM 2120 B-2001(2011) GLAFORCE

Printed 8/30/2018 12:13:51 PM Superset Reference:18-0000476544 rev 00 20 of 62

Analyst Summary report

Client: New York State DEC Service Request: R1807466

Project: LCI 2018/LCI2018

Sample Name: 18CMG209 Date Collected: 08/7/18

**Lab Code:** R1807466-013 **Date Received:** 08/8/18

**Sample Matrix:** Water

Analysis Method Extracted/Digested By Analyzed By

 SM 2320 B-1997(2011)
 CWOODS

 SM 5310 C-2000(2011)
 CWOODS

 SM20 10200 H
 NSMITH

 Sample Name:
 18CMG209 Diss
 Date Collected: 08/7/18

 Lab Code:
 R1807466-014
 Date Received: 08/8/18

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

365.1 KWONG GNITAJOUPPI

Sample Name: 18CMG201 Date Collected: 08/7/18

**Lab Code:** R1807466-015 **Date Received:** 08/8/18

**Sample Matrix:** Water

Analysis Method Extracted/Digested By Analyzed By

351.2 NSMITH GNITAJOUPPI 353.2 GNITAJOUPPI

365.1 GNITAJOUPPI NMANSEN

ASTM D6919-09 AMOSES

SM 2120 B-2001(2011) GLAFORCE

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

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

Sample Name: 18CMG201 Diss Date Collected: 08/7/18

Lab Code: R1807466-016 Date Received: 08/8/18
Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

365.1 KWONG GNITAJOUPPI

Printed 8/30/2018 12:13:51 PM Superset Reference:18-0000476544 rev 00

Analyst Summary report

**Client:** New York State DEC Service Request: R1807466

**Project:** LCI 2018/LCI2018

**Sample Name:** 18CMG207 **Date Collected:** 08/7/18**Date Received:** 08/8/18

Lab Code: R1807466-017

Sample Matrix: Water

**Analyzed By Extracted/Digested By Analysis Method** 351.2 **NSMITH GNITAJOUPPI** 353.2 **GNITAJOUPPI** 365.1 **GNITAJOUPPI NMANSEN** ASTM D6919-09 **AMOSES** SM 2120 B-2001(2011) **GLAFORCE** SM 2320 B-1997(2011) **CWOODS** 

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

**Sample Name:** 18CMG207 Diss **Date Collected:** 08/7/18 Lab Code: R1807466-018 **Date Received:** 08/8/18

Sample Matrix: Water

**Analyzed By Analysis Method Extracted/Digested By KWONG GNITAJOUPPI** 365.1

**Sample Name:** 18CMG211 **Date Collected:** 08/7/18 Lab Code: R1807466-019 **Date Received:** 08/8/18

**Sample Matrix:** Water

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

Analyst Summary report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Service Request: R1807466

 Sample Name:
 18CMG211 Diss

 Lab Code:
 R1807466-020

Sample Matrix: Water

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

**Date Received:** 08/8/18

Analysis Method Extracted/Digested By Analyzed By

365.1 KWONG 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           | 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<br>Cyanide | SM 4500-CN-I       |
| Cyaniue                     |                    |

### 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

Water

**Project:** LCI 2018/LCI2018

**Service Request:** R1807466 **Date Collected:** 08/06/18 11:35

**Date Received:** 08/08/18 09:30

Sample Name: 18CMG205 Basis: NA

**Lab Code:** R1807466-001

**Sample Matrix:** 

|                                  |                      |          |            |        |      |                | Date      |   |
|----------------------------------|----------------------|----------|------------|--------|------|----------------|-----------|---|
| Analyte Name                     | Analysis Method      | Result   | Units      | MRL    | Dil. | Date Analyzed  | Extracted | Q |
| Alkalinity, Total as CaCO3       | SM 2320 B-1997(2011) | 21.2     | mg/L       | 2.0    | 1    | 08/09/18 19:22 | NA        |   |
| Ammonia as Nitrogen, undistilled | ASTM D6919-09        | 0.0050 U | mg/L       | 0.0050 | 1    | 08/19/18 22:53 | NA        |   |
| Carbon, Total Organic (TOC)      | SM 5310 C-2000(2011) | 5.6      | mg/L       | 1.0    | 1    | 08/14/18 06:39 | NA        |   |
| Chlorophyll A                    | SM20 10200 H         | 10.2     | ug/L       | 0.64   | 4    | 08/25/18 12:00 | NA        |   |
| Color, True                      | SM 2120 B-2001(2011) | 29.0     | ColorUnits | 1.0    | 1    | 08/08/18 19:30 | NA        | * |
| Nitrate+Nitrite as Nitrogen      | 353.2                | 0.0020 U | mg/L       | 0.0020 | 1    | 08/29/18 17:24 | NA        |   |
| Nitrogen, Total Kjeldahl (TKN)   | 351.2                | 0.51     | mg/L       | 0.10   | 1    | 08/24/18 17:58 | 08/23/18  |   |
| pH of Color Analysis             | SM 2120 B-2001(2011) | 7.50     | pH Units   | 10     | 1    | 08/11/18 12:42 | NA        | * |
| Phosphorus, Total                | 365.1                | 0.0213   | mg/L       | 0.0050 | 1    | 08/18/18 16:22 | 08/17/18  |   |

Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix: Wa

Water

Service Request: R1807466

**Date Collected:** 08/06/18 11:35

**Date Received:** 08/08/18 09:30

Sample Name: 18CMG205 Diss

**Lab Code:** R1807466-002

Basis: NA

|                      | Analysis |        |       |        |      |                |                       |   |
|----------------------|----------|--------|-------|--------|------|----------------|-----------------------|---|
| Analyte Name         | Method   | Result | Units | MRL    | Dil. | Date Analyzed  | <b>Date Extracted</b> | Q |
| Phosphorus Dissolved | 365.1    | 0.0073 | mg/I  | 0.0050 | 1    | 08/27/18 12:11 | 08/21/18              |   |

Analytical Report

Client: New York State DEC

Project: LCI 2018/LCI2018

Sample Matrix: Water

**Sample Name:** 

**Date Collected:** 08/06/18 11:30 **Date Received:** 08/08/18 09:30

**Service Request:** R1807466

18CMG206 Basis: NA

**Lab Code:** R1807466-003

|                                  |                        |          |            |        |      |                | Date      |   |  |
|----------------------------------|------------------------|----------|------------|--------|------|----------------|-----------|---|--|
| Analyte Name                     | <b>Analysis Method</b> | Result   | Units      | MRL    | Dil. | Date Analyzed  | Extracted | Q |  |
| Ammonia as Nitrogen, undistilled | ASTM D6919-09          | 0.0050 U | mg/L       | 0.0050 | 1    | 08/19/18 23:09 | NA        |   |  |
| Carbon, Total Organic (TOC)      | SM 5310 C-2000(2011)   | 5.7      | mg/L       | 1.0    | 1    | 08/14/18 07:00 | NA        |   |  |
| Color, True                      | SM 2120 B-2001(2011)   | 47.0     | ColorUnits | 1.0    | 1    | 08/08/18 19:30 | NA        | * |  |
| Nitrate+Nitrite as Nitrogen      | 353.2                  | 0.0020 U | mg/L       | 0.0020 | 1    | 08/29/18 17:25 | NA        |   |  |
| Nitrogen, Total Kjeldahl (TKN)   | 351.2                  | 0.57     | mg/L       | 0.10   | 1    | 08/24/18 17:59 | 08/23/18  |   |  |
| pH of Color Analysis             | SM 2120 B-2001(2011)   | 7.16     | pH Units   | 10     | 1    | 08/11/18 12:42 | NA        | * |  |
| Phosphorus, Total                | 365.1                  | 0.0270   | mg/L       | 0.0050 | 1    | 08/18/18 16:23 | 08/17/18  |   |  |

Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix:

Water

**Service Request:** R1807466

**Date Collected:** 08/06/18 11:30

**Date Received:** 08/08/18 09:30

Sample Name: 18CMG206 Diss Basis: NA

**Lab Code:** R1807466-004

|                       | Analysis |        |       |        |      |                |                |   |
|-----------------------|----------|--------|-------|--------|------|----------------|----------------|---|
| Analyte Name          | Method   | Result | Units | MRL    | Dil. | Date Analyzed  | Date Extracted | Q |
| Phosphorus, Dissolved | 365.1    | 0.0102 | mg/L  | 0.0050 | 1    | 08/27/18 12:12 | 08/21/18       |   |

### Analytical Report

**Client:** New York State DEC

**Project:** 

Water

LCI 2018/LCI2018

18CMG213 Basis: NA

Lab Code: R1807466-005

**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) | 41.2     | mg/L       | 2.0    | 1    | 08/09/18 19:30 | NA        |   |
| Ammonia as Nitrogen, undistilled | ASTM D6919-09        | 0.0050 U | mg/L       | 0.0050 | 1    | 08/21/18 12:42 | NA        |   |
| Carbon, Total Organic (TOC)      | SM 5310 C-2000(2011) | 6.3      | mg/L       | 1.0    | 1    | 08/14/18 07:21 | NA        |   |
| Chlorophyll A                    | SM20 10200 H         | 17.9     | ug/L       | 0.64   | 4    | 08/25/18 12:00 | NA        |   |
| Color, True                      | SM 2120 B-2001(2011) | 34.0     | ColorUnits | 1.0    | 1    | 08/08/18 19:30 | NA        | * |
| Nitrate+Nitrite as Nitrogen      | 353.2                | 0.0027   | mg/L       | 0.0020 | 1    | 08/29/18 17:27 | NA        |   |
| Nitrogen, Total Kjeldahl (TKN)   | 351.2                | 0.81     | mg/L       | 0.10   | 1    | 08/24/18 17:59 | 08/23/18  |   |
| pH of Color Analysis             | SM 2120 B-2001(2011) | 7.46     | pH Units   | 10     | 1    | 08/11/18 12:42 | NA        | * |
| Phosphorus, Total                | 365.1                | 0.0419   | mg/L       | 0.0050 | 1    | 08/18/18 16:26 | 08/17/18  |   |

**Service Request:** R1807466 **Date Collected:** 08/06/18 15:00

**Date Received:** 08/08/18 09:30

Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix:

Water

**Service Request:** R1807466

**Date Collected:** 08/06/18 15:00

**Date Received:** 08/08/18 09:30

Sample Name: 18CMG213 Diss Basis: NA

**Lab Code:** R1807466-006

|                      | Analysis |        |       |        |      |                |                       |   |
|----------------------|----------|--------|-------|--------|------|----------------|-----------------------|---|
| Analyte Name         | Method   | Result | Units | MRL    | Dil. | Date Analyzed  | <b>Date Extracted</b> | Q |
| Phosphorus Dissolved | 365.1    | 0.0105 | mg/I  | 0.0050 | 1    | 08/27/18 12:14 | 08/21/18              |   |

Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix: Water

**Sample Name:** 

18CMG203 Basis: NA

**Lab Code:** R1807466-007

### **Inorganic Parameters**

|                                  |                      |        |            |        |      |                | Date      |   |
|----------------------------------|----------------------|--------|------------|--------|------|----------------|-----------|---|
| Analyte Name                     | Analysis Method      | Result | Units      | MRL    | Dil. | Date Analyzed  | Extracted | Q |
| Alkalinity, Total as CaCO3       | SM 2320 B-1997(2011) | 73.6   | mg/L       | 2.0    | 1    | 08/09/18 19:36 | NA        |   |
| Ammonia as Nitrogen, undistilled | ASTM D6919-09        | 0.0052 | mg/L       | 0.0050 | 1    | 08/19/18 23:25 | NA        |   |
| Carbon, Total Organic (TOC)      | SM 5310 C-2000(2011) | 13.2   | mg/L       | 1.0    | 1    | 08/14/18 16:49 | NA        |   |
| Chlorophyll A                    | SM20 10200 H         | 99.7   | ug/L       | 6.4    | 40   | 08/25/18 12:00 | NA        |   |
| Color, True                      | SM 2120 B-2001(2011) | 290    | ColorUnits | 10     | 10   | 08/08/18 19:30 | NA        | * |
| Nitrate+Nitrite as Nitrogen      | 353.2                | 0.0095 | mg/L       | 0.0020 | 1    | 08/29/18 17:28 | NA        |   |
| Nitrogen, Total Kjeldahl (TKN)   | 351.2                | 1.51   | mg/L       | 0.10   | 1    | 08/24/18 18:02 | 08/23/18  |   |
| pH of Color Analysis             | SM 2120 B-2001(2011) | 7.44   | pH Units   | 10     | 10   | 08/11/18 12:42 | NA        | * |
| Phosphorus, Total                | 365.1                | 0.128  | mg/L       | 0.025  | 5    | 08/18/18 17:04 | 08/17/18  |   |

**Service Request:** R1807466 **Date Collected:** 08/06/18 16:20

**Date Received:** 08/08/18 09:30

Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix: V

Water

Service Request: R1807466

**Date Collected:** 08/06/18 16:20

**Date Received:** 08/08/18 09:30

Sample Name: 18CMG203 Diss Basis: NA

**Lab Code:** R1807466-008

|                       | Analysis |        |       |        |      |                |                |   |
|-----------------------|----------|--------|-------|--------|------|----------------|----------------|---|
| Analyte Name          | Method   | Result | Units | MRL    | Dil. | Date Analyzed  | Date Extracted | Q |
| Phosphorus, Dissolved | 365.1    | 0.0785 | mg/L  | 0.0050 | 1    | 08/27/18 12:17 | 08/21/18       |   |

### Analytical Report

Client: New York State DEC

Project: LCI 2018/LCI2018

Sample Matrix: Water

Sample Name: 18CMG215 Basis: NA

**Lab Code:** R1807466-009

### **Inorganic Parameters**

|                                  |                      |          |            |        |      |                | Date      |   |
|----------------------------------|----------------------|----------|------------|--------|------|----------------|-----------|---|
| Analyte Name                     | Analysis Method      | Result   | Units      | MRL    | Dil. | Date Analyzed  | Extracted | Q |
| Alkalinity, Total as CaCO3       | SM 2320 B-1997(2011) | 128      | mg/L       | 2.0    | 1    | 08/09/18 21:34 | NA        |   |
| Ammonia as Nitrogen, undistilled | ASTM D6919-09        | 0.0100   | mg/L       | 0.0050 | 1    | 08/21/18 12:58 | NA        |   |
| Carbon, Total Organic (TOC)      | SM 5310 C-2000(2011) | 6.2      | mg/L       | 1.0    | 1    | 08/14/18 17:10 | NA        |   |
| Chlorophyll A                    | SM20 10200 H         | 4.50     | ug/L       | 0.32   | 4    | 08/25/18 12:00 | NA        |   |
| Color, True                      | SM 2120 B-2001(2011) | 31.0     | ColorUnits | 1.0    | 1    | 08/08/18 19:30 | NA        | * |
| Nitrate+Nitrite as Nitrogen      | 353.2                | 0.0020 U | mg/L       | 0.0020 | 1    | 08/29/18 17:32 | NA        |   |
| Nitrogen, Total Kjeldahl (TKN)   | 351.2                | 0.51     | mg/L       | 0.10   | 1    | 08/24/18 18:02 | 08/23/18  |   |
| pH of Color Analysis             | SM 2120 B-2001(2011) | 7.84     | pH Units   | 10     | 1    | 08/11/18 12:42 | NA        | * |
| Phosphorus, Total                | 365.1                | 0.0167   | mg/L       | 0.0050 | 1    | 08/18/18 16:28 | 08/17/18  |   |

**Service Request:** R1807466 **Date Collected:** 08/06/18 17:38

**Date Received:** 08/08/18 09:30

Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix:

Water

**Service Request:** R1807466

**Date Collected:** 08/06/18 17:38

**Date Received:** 08/08/18 09:30

 Sample Name:
 18CMG215 Diss

 Lab Code:
 R1807466-010

CMG215 Diss Basis: NA

|                       | Analysis |        |       |        |      |                |                |   |
|-----------------------|----------|--------|-------|--------|------|----------------|----------------|---|
| Analyte Name          | Method   | Result | Units | MRL    | Dil. | Date Analyzed  | Date Extracted | Q |
| Phosphorus, Dissolved | 365.1    | 0.0064 | mg/L  | 0.0050 | 1    | 08/27/18 12:18 | 08/21/18       |   |

#### Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix: Water

**Sample Name:** 

18CMG216 Basis: NA

**Lab Code:** R1807466-011

#### **Inorganic Parameters**

|                                  |                      |        |            |        |      |                | Date      |   |
|----------------------------------|----------------------|--------|------------|--------|------|----------------|-----------|---|
| Analyte Name                     | Analysis Method      | Result | Units      | MRL    | Dil. | Date Analyzed  | Extracted | Q |
| Ammonia as Nitrogen, undistilled | ASTM D6919-09        | 0.306  | mg/L       | 0.0050 | 1    | 08/21/18 13:14 | NA        |   |
| Carbon, Total Organic (TOC)      | SM 5310 C-2000(2011) | 5.8    | mg/L       | 1.0    | 1    | 08/17/18 01:56 | NA        |   |
| Color, True                      | SM 2120 B-2001(2011) | 55.0   | ColorUnits | 1.0    | 1    | 08/08/18 19:30 | NA        | * |
| Nitrate+Nitrite as Nitrogen      | 353.2                | 0.0033 | mg/L       | 0.0020 | 1    | 08/29/18 17:34 | NA        |   |
| Nitrogen, Total Kjeldahl (TKN)   | 351.2                | 1.07   | mg/L       | 0.10   | 1    | 08/24/18 18:03 | 08/23/18  |   |
| pH of Color Analysis             | SM 2120 B-2001(2011) | 7.76   | pH Units   | 10     | 1    | 08/11/18 12:42 | NA        | * |
| Phosphorus, Total                | 365.1                | 0.0770 | mg/L       | 0.0050 | 1    | 08/18/18 16:29 | 08/17/18  |   |

**Service Request:** R1807466 **Date Collected:** 08/06/18 17:33

**Date Received:** 08/08/18 09:30

Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix:

Water

**Service Request:** R1807466

**Date Collected:** 08/06/18 17:33

**Date Received:** 08/08/18 09:30

 Sample Name:
 18CMG216 Diss

 Lab Code:
 R1807466-012

Basis: NA

|                       | Analysis |        |       |        |      |                |                |   |
|-----------------------|----------|--------|-------|--------|------|----------------|----------------|---|
| Analyte Name          | Method   | Result | Units | MRL    | Dil. | Date Analyzed  | Date Extracted | Q |
| Phosphorus, Dissolved | 365.1    | 0.0127 | mg/L  | 0.0050 | 1    | 08/27/18 14:18 | 08/21/18       |   |

#### Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix: Water

Sample Name: 18CMG209

**Lab Code:** R1807466-013

Service Request: R1807466

**Date Collected:** 08/07/18 07:20

**Date Received:** 08/08/18 09:30

Basis: NA

|                                  |                      |          |            |        |      |                | Date      |   |
|----------------------------------|----------------------|----------|------------|--------|------|----------------|-----------|---|
| Analyte Name                     | Analysis Method      | Result   | Units      | MRL    | Dil. | Date Analyzed  | Extracted | Q |
| Alkalinity, Total as CaCO3       | SM 2320 B-1997(2011) | 35.2     | mg/L       | 2.0    | 1    | 08/09/18 19:41 | NA        |   |
| Ammonia as Nitrogen, undistilled | ASTM D6919-09        | 0.0050 U | mg/L       | 0.0050 | 1    | 08/21/18 18:35 | NA        |   |
| Carbon, Total Organic (TOC)      | SM 5310 C-2000(2011) | 8.0      | mg/L       | 1.0    | 1    | 08/17/18 02:59 | NA        |   |
| Chlorophyll A                    | SM20 10200 H         | 10.3     | ug/L       | 0.64   | 4    | 08/25/18 12:00 | NA        |   |
| Color, True                      | SM 2120 B-2001(2011) | 36.0     | ColorUnits | 1.0    | 1    | 08/08/18 19:30 | NA        |   |
| Nitrate+Nitrite as Nitrogen      | 353.2                | 0.0028   | mg/L       | 0.0020 | 1    | 08/29/18 17:35 | NA        |   |
| Nitrogen, Total Kjeldahl (TKN)   | 351.2                | 0.81     | mg/L       | 0.10   | 1    | 08/24/18 18:04 | 08/23/18  |   |
| pH of Color Analysis             | SM 2120 B-2001(2011) | 7.52     | pH Units   | 10     | 1    | 08/11/18 12:42 | NA        | * |
| Phosphorus, Total                | 365.1                | 0.0313   | mg/L       | 0.0050 | 1    | 08/18/18 16:31 | 08/17/18  |   |

Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix:

Water

**Service Request:** R1807466

**Date Collected:** 08/07/18 07:20

**Date Received:** 08/08/18 09:30

Sample Name: 18CMG209 Diss Basis: NA

**Lab Code:** R1807466-014

|                      | Analysis |        |       |        |      |                |                       |   |
|----------------------|----------|--------|-------|--------|------|----------------|-----------------------|---|
| Analyte Name         | Method   | Result | Units | MRL    | Dil. | Date Analyzed  | <b>Date Extracted</b> | Q |
| Phosphorus Dissolved | 365.1    | 0.0093 | mg/I  | 0.0050 | 1    | 08/27/18 12:23 | 08/21/18              |   |

#### Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Water

**Service Request:** R1807466 **Date Collected:** 08/07/18 08:50

**Date Received:** 08/08/18 09:30

Sample Name: 18CMG201 Basis: NA

**Lab Code:** R1807466-015

**Sample Matrix:** 

|                                  |                      |        |            |        |      |                | Date      |   |
|----------------------------------|----------------------|--------|------------|--------|------|----------------|-----------|---|
| Analyte Name                     | Analysis Method      | Result | Units      | MRL    | Dil. | Date Analyzed  | Extracted | Q |
| Alkalinity, Total as CaCO3       | SM 2320 B-1997(2011) | 46.8   | mg/L       | 2.0    | 1    | 08/09/18 19:46 | NA        |   |
| Ammonia as Nitrogen, undistilled | ASTM D6919-09        | 0.0063 | mg/L       | 0.0050 | 1    | 08/19/18 23:41 | NA        |   |
| Carbon, Total Organic (TOC)      | SM 5310 C-2000(2011) | 10.6   | mg/L       | 1.0    | 1    | 08/14/18 11:53 | NA        |   |
| Chlorophyll A                    | SM20 10200 H         | 30.4   | ug/L       | 6.4    | 40   | 08/25/18 12:00 | NA        |   |
| Color, True                      | SM 2120 B-2001(2011) | 150    | ColorUnits | 10     | 10   | 08/08/18 19:30 | NA        |   |
| Nitrate+Nitrite as Nitrogen      | 353.2                | 0.0041 | mg/L       | 0.0020 | 1    | 08/29/18 17:36 | NA        |   |
| Nitrogen, Total Kjeldahl (TKN)   | 351.2                | 0.82   | mg/L       | 0.10   | 1    | 08/24/18 18:04 | 08/23/18  |   |
| pH of Color Analysis             | SM 2120 B-2001(2011) | 7.38   | pH Units   | 10     | 10   | 08/11/18 12:42 | NA        | * |
| Phosphorus, Total                | 365.1                | 0.0462 | mg/L       | 0.0050 | 1    | 08/18/18 16:32 | 08/17/18  |   |

Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix:

Water

**Service Request:** R1807466

**Date Collected:** 08/07/18 08:50

**Date Received:** 08/08/18 09:30

**Sample Name:** 18CMG201 Diss

**Lab Code:** R1807466-016

Basis: NA

|                      | Analysis |        |       |        |      |                |                       |   |
|----------------------|----------|--------|-------|--------|------|----------------|-----------------------|---|
| Analyte Name         | Method   | Result | Units | MRL    | Dil. | Date Analyzed  | <b>Date Extracted</b> | Q |
| Phosphorus Dissolved | 365.1    | 0.0161 | mg/I  | 0.0050 | 1    | 08/27/18 12:24 | 08/21/18              |   |

Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix: Water

Sample Name: 18CMG207

**Lab Code:** R1807466-017

Service Request: R1807466

**Date Collected:** 08/07/18 10:00

**Date Received:** 08/08/18 09:30

Basis: NA

|                                  |                      |        |            |        |      |                | Date      |   |
|----------------------------------|----------------------|--------|------------|--------|------|----------------|-----------|---|
| Analyte Name                     | Analysis Method      | Result | Units      | MRL    | Dil. | Date Analyzed  | Extracted | Q |
| Alkalinity, Total as CaCO3       | SM 2320 B-1997(2011) | 132    | mg/L       | 2.0    | 1    | 08/09/18 19:57 | NA        |   |
| Ammonia as Nitrogen, undistilled | ASTM D6919-09        | 0.0069 | mg/L       | 0.0050 | 1    | 08/19/18 23:57 | NA        |   |
| Carbon, Total Organic (TOC)      | SM 5310 C-2000(2011) | 7.8    | mg/L       | 1.0    | 1    | 08/17/18 03:20 | NA        |   |
| Chlorophyll A                    | SM20 10200 H         | 22.9   | ug/L       | 3.2    | 20   | 08/25/18 12:00 | NA        |   |
| Color, True                      | SM 2120 B-2001(2011) | 42.0   | ColorUnits | 1.0    | 1    | 08/08/18 19:30 | NA        |   |
| Nitrate+Nitrite as Nitrogen      | 353.2                | 0.0026 | mg/L       | 0.0020 | 1    | 08/29/18 17:38 | NA        |   |
| Nitrogen, Total Kjeldahl (TKN)   | 351.2                | 1.51   | mg/L       | 0.10   | 1    | 08/24/18 18:05 | 08/23/18  |   |
| pH of Color Analysis             | SM 2120 B-2001(2011) | 8.12   | pH Units   | 10     | 1    | 08/11/18 12:42 | NA        | * |
| Phosphorus, Total                | 365.1                | 0.0473 | mg/L       | 0.0050 | 1    | 08/18/18 16:33 | 08/17/18  |   |

Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix:

Water

**Service Request:** R1807466

**Date Collected:** 08/07/18 10:00

**Date Received:** 08/08/18 09:30

Sample Name: 18CMG207 Diss

**Lab Code:** R1807466-018

Basis: NA

|                      | Analysis |        |       |        |      |                |                       |   |
|----------------------|----------|--------|-------|--------|------|----------------|-----------------------|---|
| Analyte Name         | Method   | Result | Units | MRL    | Dil. | Date Analyzed  | <b>Date Extracted</b> | Q |
| Phosphorus Dissolved | 365.1    | 0.0112 | mg/I  | 0.0050 | 1    | 08/27/18 12:25 | 08/21/18              |   |

Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix: Water

Sample Name: 18CMG211

**Lab Code:** R1807466-019

Service Request: R1807466

**Date Collected:** 08/07/18 11:06

**Date Received:** 08/08/18 09:30

Basis: NA

|                                  |                      |        |            |        |      |                | Date      |   |
|----------------------------------|----------------------|--------|------------|--------|------|----------------|-----------|---|
| Analyte Name                     | Analysis Method      | Result | Units      | MRL    | Dil. | Date Analyzed  | Extracted | Q |
| Alkalinity, Total as CaCO3       | SM 2320 B-1997(2011) | 242    | mg/L       | 2.0    | 1    | 08/09/18 21:40 | NA        |   |
| Ammonia as Nitrogen, undistilled | ASTM D6919-09        | 0.0707 | mg/L       | 0.0050 | 1    | 08/21/18 14:34 | NA        |   |
| Carbon, Total Organic (TOC)      | SM 5310 C-2000(2011) | 5.3    | mg/L       | 1.0    | 1    | 08/17/18 03:40 | NA        |   |
| Chlorophyll A                    | SM20 10200 H         | 36.5   | ug/L       | 1.6    | 10   | 08/25/18 12:00 | NA        |   |
| Color, True                      | SM 2120 B-2001(2011) | 22.0   | ColorUnits | 1.0    | 1    | 08/08/18 19:30 | NA        |   |
| Nitrate+Nitrite as Nitrogen      | 353.2                | 0.757  | mg/L       | 0.0020 | 1    | 08/29/18 17:40 | NA        |   |
| Nitrogen, Total Kjeldahl (TKN)   | 351.2                | 0.71   | mg/L       | 0.10   | 1    | 08/24/18 18:06 | 08/23/18  |   |
| pH of Color Analysis             | SM 2120 B-2001(2011) | 8.02   | pH Units   | 10     | 1    | 08/11/18 12:42 | NA        | * |
| Phosphorus, Total                | 365.1                | 0.0336 | mg/L       | 0.0050 | 1    | 08/18/18 16:34 | 08/17/18  |   |

Analytical Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix: V

Water

Service Request: R1807466

**Date Collected:** 08/07/18 11:06

**Date Received:** 08/08/18 09:30

Sample Name: 18CMG211 Diss Basis: NA

**Lab Code:** R1807466-020

|                       | Analysis |        |       |        |      |                |                |   |
|-----------------------|----------|--------|-------|--------|------|----------------|----------------|---|
| Analyte Name          | Method   | Result | Units | MRL    | Dil. | Date Analyzed  | Date Extracted | Q |
| Phosphorus, Dissolved | 365.1    | 0.0060 | mg/L  | 0.0050 | 1    | 08/27/18 12:26 | 08/21/18       |   |



# **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:** R1807466

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

Date Received: NA **Sample Matrix:** Water

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

Lab Code: R1807466-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    | 08/09/18 16:59 | NA        |   |
| Ammonia as Nitrogen, undistilled | ASTM D6919-09        | 0.0050 U | mg/L       | 0.0050 | 1    | 08/19/18 22:20 | NA        |   |
| Carbon, Total Organic (TOC)      | SM 5310 C-2000(2011) | 1.0 U    | mg/L       | 1.0    | 1    | 08/13/18 19:52 | NA        |   |
| Chlorophyll A                    | SM20 10200 H         | 0.40 U   | ug/L       | 0.40   | 1    | 08/25/18 12:00 | NA        |   |
| Color, True                      | SM 2120 B-2001(2011) | 1.0      | ColorUnits | 1.0    | 1    | 08/08/18 19:30 | NA        |   |
| Nitrate+Nitrite as Nitrogen      | 353.2                | 0.0020 U | mg/L       | 0.0020 | 1    | 08/29/18 16:58 | NA        |   |
| Nitrogen, Total Kjeldahl (TKN)   | 351.2                | 0.10 U   | mg/L       | 0.10   | 1    | 08/24/18 17:50 | 08/23/18  |   |
| Phosphorus, Dissolved            | 365.1                | 0.0050 U | mg/L       | 0.0050 | 1    | 08/27/18 11:55 | 08/21/18  |   |
| Phosphorus, Total                | 365.1                | 0.0050 U | mg/L       | 0.0050 | 1    | 08/18/18 16:04 | 08/17/18  |   |

Analytical Report

Client: New York State DEC Service Request: R1807466

Project:LCI 2018/LCI2018Date Collected:NASample Matrix:WaterDate Received:NA

Sample Name: Method Blank Basis: NA

**Lab Code:** R1807466-MB2

| Analyte Name                     | Analysis Method      | Result   | Units | MRL    | Dil. | Date Analyzed  | Q |
|----------------------------------|----------------------|----------|-------|--------|------|----------------|---|
| Alkalinity, Total as CaCO3       | SM 2320 B-1997(2011) | 2.0 U    | mg/L  | 2.0    | 1    | 08/09/18 19:17 |   |
| Ammonia as Nitrogen, undistilled | ASTM D6919-09        | 0.0050 U | mg/L  | 0.0050 | 1    | 08/21/18 10:50 |   |
| Carbon, Total Organic (TOC)      | SM 5310 C-2000(2011) | 1.0 U    | mg/L  | 1.0    | 1    | 08/14/18 08:23 |   |
| Nitrate+Nitrite as Nitrogen      | 353.2                | 0.0020 U | mg/L  | 0.0020 | 1    | 08/29/18 17:31 |   |

Analytical Report

Client: New York State DEC Service Request: R1807466

Project:LCI 2018/LCI2018Date Collected:NASample Matrix:WaterDate Received:NA

Sample Name: Method Blank Basis: NA

Lab Code: R1807466-MB3

| Analyte Name                     | Analysis Method      | Result   | Units | MRL    | Dil. | Date Analyzed  | Q |
|----------------------------------|----------------------|----------|-------|--------|------|----------------|---|
| Ammonia as Nitrogen, undistilled | ASTM D6919-09        | 0.0050 U | mg/L  | 0.0050 | 1    | 08/21/18 16:27 |   |
| Carbon, Total Organic (TOC)      | SM 5310 C-2000(2011) | 1.0 U    | mg/L  | 1.0    | 1    | 08/14/18 12:35 |   |

Analytical Report

Client: New York State DEC

York State DEC Service Request: R1807466

Project:LCI 2018/LCI2018Date Collected:NASample Matrix:WaterDate Received:NA

Sample Name: Method Blank Basis: NA

**Lab Code:** R1807466-MB4

| Analyte Name                | Analysis Method      | Result | Units | MRL | Dil. | Date Analyzed  | Q |
|-----------------------------|----------------------|--------|-------|-----|------|----------------|---|
| Carbon, Total Organic (TOC) | SM 5310 C-2000(2011) | 1.0 U  | mg/L  | 1.0 | 1    | 08/16/18 18:16 |   |

QA/QC Report

Client: New York State DEC **Service Request:** R1807466 **Project:** LCI 2018/LCI2018 **Date Collected:** 08/06/18 **Sample Matrix:** Water **Date Received:** 08/08/18 Date Analyzed: 08/27/18 **Date Extracted:** 08/21/18

> Duplicate Matrix Spike Summary Phosphorus, Dissolved

 Sample Name:
 18CMG213 Diss
 Units:
 mg/L

 Lab Code:
 R1807466-006
 Basis:
 NA

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

Matrix SpikeDuplicate Matrix SpikeR1807466-006MSR1807466-006DMS

**RPD** Sample Spike Spike % Rec Analyte Name Result Result Amount % Rec Amount % Rec Limits **RPD** Limit Result Phosphorus, Dissolved 0.0105 0.0318 0.0250 0.0317 0.0250 85 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
Project: LCI 2018/LCI2018

Sample Matrix: Water

Service Request:R1807466

**Date Collected:**08/07/18 **Date Received:**08/08/18

**Date Analyzed:**08/24/18 - 08/29/18

Duplicate Matrix Spike Summary General Chemistry Parameters

 Sample Name:
 18CMG211
 Units:mg/L

 Lab Code:
 R1807466-019
 Basis:NA

**Matrix Spike** 

**Duplicate Matrix Spike** 

R1807466-019MS

R1807466-019DMS

|                                |        | Sample |        | Spike  |       |        | Spike  |       | % Rec  |     | RPD   |
|--------------------------------|--------|--------|--------|--------|-------|--------|--------|-------|--------|-----|-------|
| Analyte Name                   | Method | Result | Result | Amount | % Rec | Result | Amount | % Rec | Limits | RPD | Limit |
| Nitrate+Nitrite as Nitrogen    | 353.2  | 0.757  | 1.19   | 0.500  | 86    | 1.19   | 0.500  | 86    | 75-125 | <1  | 20    |
| Nitrogen, Total Kjeldahl (TKN) | 351.2  | 0.71   | 3.11   | 2.50   | 96    | 3.24   | 2.50   | 101   | 75-125 | 4   | 20    |

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

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

dba ALS Environmental

QA/QC Report

Client: New York State DEC **Project** 

LCI 2018/LCI2018

**Date Collected:** 08/06/18 **Date Received:** 08/08/18

Service Request: R1807466

Sample Matrix:

Water

**Date Analyzed:** 08/09/18

**Replicate Sample Summary General Chemistry Parameters** 

Sample Name:

18CMG205

Units: mg/L

Lab Code:

R1807466-001

Basis: NA

**Duplicate** Sample

R1807466-

Sample

**001DUP** 

Analyte Name **Analysis Method** Result **MRL** Result **RPD Limit** Average Alkalinity, Total as CaCO3 SM 2320 B-1997(2011) 2.0 21.2 20.8 21.0

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

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

dba ALS Environmental

QA/QC Report

Client: New York State DEC **Project** 

LCI 2018/LCI2018

Service Request: R1807466 **Date Collected:** 08/07/18

Sample Matrix: Water

**Date Received:** 08/08/18 **Date Analyzed:** 08/09/18

**Replicate Sample Summary General Chemistry Parameters** 

Sample Name: 18CMG207 Units: mg/L

Lab Code: R1807466-017

Basis: NA

**Duplicate** 

Sample R1807466-

Sample **017DUP** Analyte Name **Analysis Method** Result **MRL** Result

**RPD Limit** Average Alkalinity, Total as CaCO3 SM 2320 B-1997(2011) 2.0 132 132 132

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

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

dba ALS Environmental

QA/QC Report

Client: New York State DEC **Project** 

Water

Sample Matrix:

LCI 2018/LCI2018

Service Request: R1807466

**Date Collected:** 08/07/18

**Date Received:** 08/08/18 **Date Analyzed:** 08/08/18

**Units:** ColorUnits

**Replicate Sample Summary** 

**General Chemistry Parameters** 

Sample Name: 18CMG211

Lab Code: R1807466-019 Basis: NA

> **Duplicate** Sample

R1807466-

019DUP

Sample **Analysis Method** Result RPD Limit Analyte Name **MRL** Result Average Color, True SM 2120 B-2001(2011) 1.0 22.0 22.0 22.0

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

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

dba ALS Environmental

QA/QC Report

Client: New York State DEC
Project LCI 2018/LCI2018

New York State DEC

LCI 2018/LCI2018

Service Request: R1807466

Date Collected: 08/07/18

Sample Matrix: Water Date Received: 08/08/18

Replicate Sample Summary General Chemistry Parameters

Sample Name: 18CMG211 Units: pH Units

**Lab Code:** R1807466-019 **Basis:** NA

Duplicate Sample **Date Analyzed:** 08/11/18

R1807466-

Sample 019DUP

Analyte NameAnalysis MethodMRLResultResultAverageRPDRPD LimitpH of Color AnalysisSM 2120 B-2001(2011)108.028.028.02<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: R1807466

**Date Analyzed:** 08/09/18 - 08/29/18

**Lab Control Sample Summary General Chemistry Parameters** 

> Units:mg/L Basis:NA

### **Lab Control Sample**

R1807466-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            | 0.494  | 0.500        | 99    | 70-130       |
| Carbon, Total Organic (TOC)      | SM 5310 C-2000(2011)     | 10.6   | 10.0         | 106   | 70-130       |
| Nitrate+Nitrite as Nitrogen      | 353.2                    | 0.511  | 0.500        | 102   | 70-130       |
| Nitrogen, Total Kjeldahl (TKN)   | 351.2                    | 2.35   | 2.50         | 94    | 70-130       |
| Phosphorus, Dissolved            | 365.1                    | 0.0241 | 0.0250       | 96    | 70-130       |
| Phosphorus, Total                | 365.1                    | 0.0227 | 0.0250       | 91    | 70-130       |

QA/QC Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

**Sample Matrix:** Water

Service Request: R1807466

**Date Analyzed:** 08/09/18 - 08/29/18

**Lab Control Sample Summary General Chemistry Parameters** 

Units:mg/L Basis:NA

### **Lab Control Sample**

R1807466-LCS2

| Analyte Name                     | <b>Analytical Method</b> | Result | Spike Amount | % Rec | % Rec Limits |
|----------------------------------|--------------------------|--------|--------------|-------|--------------|
| Alkalinity, Total as CaCO3       | SM 2320 B-1997(2011)     | 20.4   | 20.0         | 102   | 70-130       |
| Ammonia as Nitrogen, undistilled | ASTM D6919-09            | 0.502  | 0.500        | 100   | 70-130       |
| Carbon, Total Organic (TOC)      | SM 5310 C-2000(2011)     | 10.1   | 10.0         | 101   | 70-130       |
| Nitrate+Nitrite as Nitrogen      | 353.2                    | 0.515  | 0.500        | 103   | 70-130       |

QA/QC Report

Client: New York State DEC

**Project:** LCI 2018/LCI2018

Sample Matrix: Water

Service Request: R1807466

**Date Analyzed:** 08/14/18 - 08/21/18

**Lab Control Sample Summary General Chemistry Parameters** 

Units:mg/L Basis:NA

#### **Lab Control Sample** R1807466-LCS3

**Analyte Name Analytical Method** Result **Spike Amount** % Rec % Rec Limits Ammonia as Nitrogen, undistilled ASTM D6919-09 0.498 0.500 100 70-130 Carbon, Total Organic (TOC) SM 5310 C-2000(2011) 9.95 10.0 100 70-130

QA/QC Report

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

Sample Matrix:

Water

Service Request: R1807466 Date Analyzed: 08/16/18

**Lab Control Sample Summary General Chemistry Parameters** 

Units:mg/L Basis:NA

Lab Control Sample

R1807466-LCS4

| Analyte Name                | <b>Analytical Method</b> | Result | Spike Amount | % Rec | % Rec Limits |
|-----------------------------|--------------------------|--------|--------------|-------|--------------|
| Carbon, Total Organic (TOC) | SM 5310 C-2000(2011)     | 10.8   | 10.0         | 108   | 70-130       |