

Service Request No:R1806972

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

Laboratory Results for: LCI 2018

Dear Ms.Onion,

Enclosed are the results of the sample(s) submitted to our laboratory July 25, 2018 For your reference, these analyses have been assigned our service request number **R1806972**.

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 DEC Service Request: R1806972

Project: LCI 2018 Date Received: 07/25/2018

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 six water samples were received for analysis at ALS Environmental on 07/25/2018. Any discrepancies noted upon initial sample inspection are noted on the cooler receipt and preservation form included in this data package. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at 6°C upon receipt at the lab except for aqueous samples designated for metals analyses, which are stored at room temperature.

Metals:

No significant anomalies were noted with this analysis.

General Chemistry:

No significant anomalies were noted with this analysis.

| | Jaman Sox |
|-------------|-----------|
| Approved by | <u> </u> |

| Date | 08/17/2018 | |
|------|------------|--|
| Date | UO/TI/ZUTO | |



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> |
|--------------|------------------|-------------|-------------|
| R1806972-001 | 18BLK101 | 7/24/2018 | 0830 |
| R1806972-002 | 18BLK101 Diss | 7/24/2018 | 0830 |
| R1806972-003 | 18BLK102 | 7/24/2018 | 0835 |
| R1806972-004 | 18BLK102 Diss | 7/24/2018 | 0835 |
| R1806972-005 | 18BLK103 | 7/24/2018 | 1055 |
| R1806972-006 | 18BLK103 Diss | 7/24/2018 | 1055 |
| R1806972-007 | 18BLK104 | 7/24/2018 | 1050 |
| R1806972-008 | 18BLK104 Diss | 7/24/2018 | 1050 |
| R1806972-009 | 18BLK111 | 7/23/2018 | 1030 |
| R1806972-010 | 18BLK111 Diss | 7/23/2018 | 1030 |
| R1806972-011 | 18BLK105 | 7/23/2018 | 1250 |
| R1806972-012 | 18BLK105 Diss | 7/23/2018 | 1250 |
| R1806972-013 | 18BLK106 | 7/23/2018 | 1255 |
| R1806972-014 | 18BLK106 Diss | 7/23/2018 | 1255 |
| R1806972-015 | 18BLK113 | 7/23/2018 | 1520 |
| R1806972-016 | 18BLK113 Diss | 7/23/2018 | 1520 |
| R1806972-017 | 18BLK114 | 7/23/2018 | 1515 |
| R1806972-018 | 18BLK114 Diss | 7/23/2018 | 1515 |
| R1806972-019 | 18BLK107 | 7/24/2018 | 1417 |
| R1806972-020 | 18BLK107 Diss | 7/24/2018 | 1417 |
| R1806972-021 | 18BLK108 | 7/24/2018 | 1412 |
| R1806972-022 | 18BLK108 Diss | 7/24/2018 | 1412 |
| R1806972-023 | 18BLK997 | 7/23/2018 | 1515 |
| R1806972-024 | 18BLK997 Diss | 7/23/2018 | 1515 |
| R1806972-025 | 18BLK996 | 7/24/2018 | 1050 |
| R1806972-026 | 18BLK996 Diss | 7/24/2018 | 1050 |
| | | | |

Page $\underline{\underline{1}}$ of $\underline{\underline{1}}$ **CHAIN OF CUSTODY** Project Number: LCI2018 Project Name: LCI NYSDEC SDG: Sampler Phone No.: 845-716-9575 Sampler Collector: Sampler Signature: Sara Gonzalez Project Manager: Alene Onion X Report to Project Manager ☐ Bill to Project Manager Bill to: Jason Fagel Report to: Address: 625 Broadway, 4th Floor Address: Address: 625 Broadway, 4th Floor Albany, NY 12233-3502 New York State Department of Albany, NY 12233-3502 **Environmental Conservation –** Phone: (518) 402-8166 Phone: Phone: 518-402-8156 Division of Water Email: alene.onion@dec.ny.gov Email: Email: Jason,fagel@dec.ny.gov **Analyses Ordered (list) Preservative Codes: Matrix Codes:** 0 = Cool to < 6°C 0 3 0 WW = Wastewater 1 = HCL ANC 2 = HNO₃ **GW** = Groundwater NO3 \mathbf{x} 3 = H₂SO₄ No. of Containers AW = Ambient Water 4 = NaOH **Collection Time Collection Date** SE = Sediment TP, NH4, NOx, TKN, Chlorophyll a j Vol (ml) 5 = Zn. Acetate Μg SL = Sludge 6 = MeOH7 = NaHSO4 T = Tissue Dissolved TOP4 යු SO4 & UV-254 8 = Other____ **O** = Other _____ Matrix Alkalinity SO4. CI, 1 **NYSDEC** Color D0C TOC **LCI Sample ID Location Info** 8 RIX 101 8:30 00 18R1K102 \overline{A} 18R1K103 AW 07/24 10:55 07/24 10:50 X Special Analysis Instructions: Relinquished by Sampler: Received by: Date: Time: Date: Time: **Laboratory Receipt Notes:** Sara Gonzalez 07/261 5:20 Relinquished by: Time: Received by: Sample R1806972 Proper! R1806972 Received by Laboratory: Date: Time: Time: Relinguished by: 1/25/18

6 of 72

CHAIN OF CUSTODY



New York State Department of Environmental Conservation – Division of Water

| Project Name: LCI | Project Number: LCI2018 | NYSDEC SDG: |
|---|--|---|
| Sampler Collector: | Sampler Signature: | Sampler Phone No.: 845-216-4575 |
| Project Manager: Alene Onion | X Report to Project Manager Report to: | ☐ Bill to Project Manager Bill to: Jason Fagel |
| Address: 625 Broadway, 4 th Floor Albany, NY 12233-3502 | Address: | Address: 625 Broadway, 4 th Floor Albany, NY 12233-3502 |
| Phone: (518) 402-8166 | Phone: | Phone: 518-402-8156 |
| Email: alene.onion@dec.ny.gov | Email: | Email: Jason,fagel@dec,ny.gov |

| | | • | | | | | | | | Anal | lyse | s O | rde | red | (list | :) | | | | Preservative Codes: |
|--|------------|-----------------|---------|---------------|-------------------|--------------------------|----------------|-------------|---------------|-------------------|----------|-------------|-------|------------|----------|---------|----------|-----------|-----------------------------|--|
| Matrix Codes: www = Wastewater | | | | | | 3 | | | 2 | | 0 | | 3 | | 0 | | | | 0 | 0 = Cool to < 6°C 1 = HCL |
| GW = Groundwater AW = Ambient Water SE = Sediment SL = Sludge T = Tissue O = Other | ction Date | Collection Time | ix Code | of Containers | TP, NH4, NOx, TKN | TP, NH4, NOx, TKN, NO3 3 | Dissolved TOP4 | As, | , Na, K | As, Ca, Mg, Na, K | | | ANC | ity | UV-254 | ANC | , UV-254 | | Chlorophyll a Vol (ml) | 2 = HNO ₃ 3 = H ₂ SO ₄ 4 = NaOH 5 = Zn. Acetate 6 = MeOH 7 = NaHSO ₄ 8 = Other |
| NYSDEC LCI Sample ID | Colle | Colle | Matrix | 8 0.0 | TP, NH | TP, NH | Dissolve | Fe, Mn, As, | Ca, Mg, Na, K | Fe, Mn, | Color | TOC | DOC . | Alkalinity | SO4 & UV | SO4. CI | SO4, CI, | | O | Location Info |
| 18BLK/11 | 07/23 | 10;30 | AW | 6 | X | | × | | | | \ | X | | X | | | | X | 250 | Whetstone epi |
| 18RLK 105 | 07/23 | 12:50 | لهاكر | 6 | X | | X | | | | Х | X | | X | | | | λ | 500 | Lonal, Ppi |
| 18 RLK 106 | 07/23 | 12:55 | لهمر | 4 | Х | | Χ | | | | χ | X | | | | | | | | lord 1, hupo |
| 18BLK 113 | 07/23 | | AN | 6 | X | | <u> ۲</u> | | | | X | X | | メ | | | | 入 | 500 | Woodheell, Cpi |
| 18B2K114 | 07/23 | 15:15 | AH | И | Х | | λ | | | | * | Х | | | | | | | | Woodhell, Lypo |
| 18BLK107 | 07/24 | 14:17 | AN | 6 | X | | λ | | | | <u>×</u> | X | | メ | | | | X | 500 | L.Bouns, Poi |
| 18BLK108 | 07/24 | 14:12 | AW | 4 | X | | ኦ | | | | × | X | | | | | | | | 6.13 rows, my 00 |
| 18BLK 997 | 07/23 | | AV | 4 | 上 | | ۴ | | | | ᅩ | > | | | | | | | | Field blank |
| 18BLK 996 | 07/24 | 10:50 | MA | 6 | X | | X | <u>X</u> | | | X | | χ | | 又 | | | | | Field duplicate |
| JEBEK | | | | | | | | | | | | | | <u> </u> | l | | | | | |
| Special Analysis Instruction | ns: | | | | | | | | _ | | | | | | | | | | | |

Relinquished by Sampler: Date: Time: Date: Time: **Laboratory Receipt Notes:** SNO GONTALEZ 07/24 5:20 Relinquished by: Date: Time: R1806972 New York State DEC LCI 2018 Sample Date: Date: Time: Proper Relinguished by: Time: Received by Laboratory: Sample



· Cooler Receipt and Preservation Check Form

| R1806972 | 5 |
|----------|---|
| LCI 2018 | |

| (AL | · / / | | 11000 | .p | *11.4 1 1 | CSCI VALIO | | | | | |
|------------------|--|---|-------------------------------|-----------------------------|---------------------------------------|--------------------------------|-----------|----------------|--|------------------------------|---------------------------|
| roject/Clie | ent | <u> </u> | | | Fold | er Number_ | | | · | | |
| Cooler receiv | ed on | 25/IV | by: | <u> </u> | _ | COURIER: | ALS | UPS FED | EX VELOC | CITY CLIEN | Т |
| 1 Were Cu | stody seals or | outside of cool | er? | | N (E | 5a Percl | ilorate s | samples have | required head: | space? | N NA |
| 2 Custody | papers prope | rly completed (in | nk, sign | ed)? | Ŷ) N | 5b Did V | /OA via | Is Alk or Sult | fide have sig* | bubbles? | (N) NA |
| B Did all b | ottles arrive in | good condition | (unbrol | cen)? | P) N | 6 Wher | e did the | bottles origin | nate? | LS/ROC) | CLIENT |
| Circle: (| Wet Ice Dry | lce Gel packs | s pres | ent? | Ý) N | 7 Soil V | /OA rec | eived as: | Bulk Enco | ore 5035set | (AM) |
| | | | | | | | | 10.110 | | | |
| | re Readings | Date: 7/25 | | | :_1020 | <u>)</u> ID: | ₩#7) | IR#9 | From: Z | emp Blank | Sample Bott |
| Observed Te | | 7.5 | 6 | ٠,٦ | | | | | | | |
| Correction F | | | | - 2 1 | | | | | | | |
| Corrected To | Type of bottle | 7.5 | | 16-d | | | | | | | |
| Within 0-6° | | Y (1) | 5 | Y (| <u>(N)</u> | ΥN | Y | N Y | N | YN | Y N |
| | re samples from | | | $\frac{1}{Y}$ | 4 | Y N | Y | N Y | | YN | $\frac{1}{Y} \frac{N}{N}$ |
| | <u> </u> | note packing/i | | | 14 | | | | (described be | | me Day Rul |
| 9. \\\10. \I | eakdown/Pres Were all bottle Did all bottle la | ervation Check* labels complete abels and tags ag | (<i>i.e.</i> ana ree with | alysis, custo | dy paper | | <u> </u> | 720 t | ру: @ NO — | | |
| 11. · \ | Were correct c | ontainers used fo | or the tes | sts ind | icated? | | | (Es) | NO | | |
| | | ls acceptable (no Cassettes / Tubes | | | | ig)? anisters Pressu | rized | YES Tedlar | NO Bags Inflate | | 739 /A) |
| pH | Lot of test | Reagent | Preser | ved? | Lot Re | | Ехр | Sample ID | Vol: | Lot Added | Final |
| ≥12 | paper | NaOH | Yes | No | · · · · · · · · · · · · · · · · · · · | | | Adjusted | Added | | pH |
| <u>≥12</u> ≤2 | 204518 | HNO ₃ | 1 | | 1117 | 092 RUD | ONOB | | | - | |
| ≤2 | • | H ₂ SO ₄ | / | V | ZHBOD | , , , | 4/19 | 9 B4K10 | 1 a. Sal | 190642 | 1/2 |
| <4 5-9 | <u> </u> | NaHSO ₄ For 608pest | - | ļ | No=Not | tify for 3day | | | | | -/ $-$ |
| Residual | - | For CN, | | | If+, con | tact PM to add | | | | ** | |
| Chlorine | | Phenol, 625, | | | | (625, 608, corbic (phenol). | | | | / | |
| (-) | | 608pest, 522 Na ₂ S ₂ O ₃ | | | 011), 201 | | <u> </u> | | | | |
| | | ZnAcetate | - | - | · · | | | **VOAs and 1 | 664 Not to be te | sted before analy: | sis. |
| | | HCl | ** | ** | | | | | bottles of all sam ot just representa | iples with chemic vives). | al preservative |
| | | | · · · | 0 | | | | | | Val. | _ |
| Bottle lot | numbers:_ _/ II Discrepanci | -072-00/, es/ Other Comm | ents: | 128 | 18-02 | + 25 | | | | | |
| эхринг и | Dioeropaire | | | | | | • | | | CLRES | BULK |
| | | | | | | 18BLK99 | 7 m | i coc 4 | ζ, | DO | FLDT |
| | | | | | | 18BLK99 18BLK99 | 5 000 | bottle | -times, | HPROD | HGFB |
| | • | | | | | 1-1360-17 | _ | -VIIIU | metc | | LL3541 |
| | | | | | | | | | | PH SO3 | SUB |
| | | • | | | | | | | | ALS | REV |
| | • | viewed by:_ | | | | | | | | | |
| PC Seco | ondary Revi | ew: | | | | | air bubb | oles: VOA > 3 | 5-6 mm : WC | >1 in. diamet | er |
| P:\INTRAN | ET\QAQC\Form | s Controlled\Cooler | Receipt r | 16.doc | | 8 of 72 | | | 3/12/18 | | |



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 Certifications¹

| 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: R1806972

Project: LCI 2018/LCI2018

Non-Certified Analytes

Certifying Agency: New York Department of Health

| Method | Matrix | Analyte |
|--------------|--------|---------------|
| SM 5910 B | Water | UV254 |
| SM20 10200 H | Water | Chlorophyll A |

Analyst Summary report

Client: New York State DEC Service Request: R1806972

Project: LCI 2018/LCI2018

 Sample Name:
 18BLK101
 Date Collected: 07/24/18

 Lab Code:
 R1806972-001
 Date Received: 07/25/18

Sample Matrix: Water

| Analysis Method | Extracted/Digested By | Analyzed By |
|----------------------|-----------------------|-------------|
| 300.0 | | AMOSES |
| 351.2 | NSMITH | CWOODS |
| 353.2 | | GNITAJOUPPI |
| 365.1 | AFELSER | MROGERSON |
| ASTM D6919-09 | | AMOSES |
| SM 2120 B-2001(2011) | | GLAFORCE |
| SM 2320 B-1997(2011) | | CWOODS |
| SM 5910 B | | NMANSEN |
| SM20 10200 H | | NSMITH |

 Sample Name:
 18BLK101 Diss
 Date Collected: 07/24/18

 Lab Code:
 R1806972-002
 Date Received: 07/25/18

Sample Matrix: Water

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

 Sample Name:
 18BLK102
 Date Collected:
 07/24/18

 Lab Code:
 R1806972-003
 Date Received:
 07/25/18

Sample Matrix: Water

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

Analyst Summary report

Client: New York State DEC Service Request: R1806972

Project: LCI 2018/LCI2018

Sample Name: 18BLK102 Diss **Date Collected:** 07/24/18 Lab Code: R1806972-004 **Date Received:** 07/25/18

Sample Matrix: Water

Analyzed By Extracted/Digested By Analysis Method

365.1 **AFELSER MROGERSON**

SM 5310 C-2000(2011) **CWOODS**

Sample Name: 18BLK103 **Date Collected:** 07/24/18

Lab Code: R1806972-005 **Date Received:** 07/25/18

Sample Matrix: Water

Analyzed By Extracted/Digested By Analysis Method

300.0 **AMOSES**

351.2 **NSMITH CWOODS**

353.2 **GNITAJOUPPI**

365.1 **AFELSER** MROGERSON ASTM D6919-09 **AMOSES**

GLAFORCE SM 2120 B-2001(2011)

CWOODS SM 2320 B-1997(2011)

SM 5910 B **NMANSEN** SM20 10200 H **NSMITH**

Sample Name: 18BLK103 Diss **Date Collected:** 07/24/18

Lab Code: R1806972-006 **Date Received:** 07/25/18 Sample Matrix: Water

Analyzed By Extracted/Digested By

AFELSER MROGERSON 365.1

CWOODS SM 5310 C-2000(2011)

Analysis Method

Analyst Summary report

Client: New York State DEC Service Request: R1806972

Project: LCI 2018/LCI2018

Sample Name: 18BLK104 **Date Collected:** 07/24/18 Lab Code: R1806972-007 **Date Received:** 07/25/18

Sample Matrix: Water

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

SM 5910 B **NMANSEN**

Date Collected: 07/24/18 **Sample Name:** 18BLK104 Diss Lab Code: R1806972-008

Sample Matrix: Water

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

Sample Name: 18BLK111 **Date Collected:** 07/23/18 Lab Code: R1806972-009 **Date Received:** 07/25/18

Sample Matrix: Water

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

Date Received: 07/25/18

Analyst Summary report

Client: New York State DEC Service Request: R1806972

Project: LCI 2018/LCI2018

Sample Name: 18BLK111 Diss **Date Collected:** 07/23/18 Lab Code: R1806972-010 **Date Received:** 07/25/18

Sample Matrix: Water

Analyzed By Analysis Method Extracted/Digested By

365.1 **AFELSER MROGERSON**

Sample Name: 18BLK105 **Date Collected:** 07/23/18

Lab Code: R1806972-011 **Date Received:** 07/25/18

Sample Matrix: Water

Extracted/Digested By Analyzed By Analysis Method

351.2 **NSMITH CWOODS**

353.2 **GNITAJOUPPI**

365.1 **AFELSER MROGERSON**

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: 18BLK105 Diss **Date Collected:** 07/23/18

Lab Code: R1806972-012 **Date Received:** 07/25/18

Sample Matrix: Water

Analyzed By Analysis Method Extracted/Digested By

365.1 **AFELSER MROGERSON**

Sample Name: **Date Collected:** 07/23/18 18BLK106

Lab Code: R1806972-013 **Date Received:** 07/25/18

Sample Matrix: Water

Analyzed By Analysis Method Extracted/Digested By

351.2 **NSMITH CWOODS**

353.2 **GNITAJOUPPI**

365.1 **AFELSER MROGERSON**

Printed 8/17/2018 9:03:52 AM Superset Reference:18-0000474358 rev 00

Analyst Summary report

Client: New York State DEC Service Request: R1806972

Project: LCI 2018/LCI2018

Sample Name: 18BLK106 **Date Collected:** 07/23/18 Lab Code: R1806972-013 **Date Received:** 07/25/18

Sample Matrix: Water

Analyzed By Analysis Method Extracted/Digested By

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

CWOODS SM 5310 C-2000(2011)

Sample Name: 18BLK106 Diss **Date Collected:** 07/23/18 Lab Code: R1806972-014 **Date Received:** 07/25/18

Sample Matrix: Water

Analyzed By Analysis Method Extracted/Digested By

365.1 **AFELSER MROGERSON**

Sample Name: 18BLK113 **Date Collected:** 07/23/18

R1806972-015 Lab Code: **Date Received:** 07/25/18 **Sample Matrix:** Water

Analyzed By Analysis Method Extracted/Digested By

NSMITH CWOODS 351.2

353.2 **GNITAJOUPPI**

AFELSER 365.1 **MROGERSON** ASTM D6919-09 **AMOSES**

GLAFORCE

SM 2120 B-2001(2011) SM 2320 B-1997(2011) **CWOODS** SM 5310 C-2000(2011) **CWOODS**

SM20 10200 H **NSMITH**

Sample Name: 18BLK113 Diss **Date Collected:** 07/23/18 R1806972-016 Lab Code: **Date Received:** 07/25/18

Sample Matrix: Water

Analyzed By Extracted/Digested By Analysis Method

365.1 **AFELSER MROGERSON**

Printed 8/17/2018 9:03:52 AM Superset Reference:18-0000474358 rev 00

Analyst Summary report

Client: New York State DEC Service Request: R1806972

Project: LCI 2018/LCI2018

 Sample Name:
 18BLK114
 Date Collected:
 07/23/18

 Lab Code:
 R1806972-017
 Date Received:
 07/25/18

Sample Matrix: Water

Analysis Method

Stracted/Digested By

Analyzed By

SSI.2

NSMITH

CWOODS

GNITAJOUPPI

365.1

AFELSER

MROGERSON

ASTM D6919-09

SM 2120 B-2001(2011)

GLAFORCE

SM 5310 C-2000(2011) CWOODS

 Sample Name:
 18BLK114 Diss
 Date Collected:
 07/23/18

 Lab Code:
 R1806972-018
 Date Received:
 07/25/18

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

365.1 AFELSER MROGERSON

Sample Name: 18BLK107 Date Collected: 07/24/18

Lab Code: R1806972-019 **Date Received:** 07/25/18

Sample Matrix: Water

Analyzed By Analysis Method Extracted/Digested By 351.2 **NSMITH CWOODS** 353.2 **GNITAJOUPPI** 365.1 **AFELSER MROGERSON** ASTM D6919-09 **AMOSES** 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: R1806972

Project: LCI 2018/LCI2018

Sample Name: 18BLK107 Diss **Date Collected:** 07/24/18 Lab Code: R1806972-020 **Date Received:** 07/25/18

Sample Matrix: Water

Analyzed By Analysis Method Extracted/Digested By

365.1 **AFELSER MROGERSON**

Sample Name: 18BLK108 **Date Collected:** 07/24/18

Lab Code: R1806972-021 **Date Received:** 07/25/18

Sample Matrix: Water

Analysis Method

Extracted/Digested By Analyzed By Analysis Method

351.2 **NSMITH CWOODS**

353.2 **GNITAJOUPPI**

365.1 **AFELSER MROGERSON** ASTM D6919-09 **AMOSES**

SM 2120 B-2001(2011) **GLAFORCE**

SM 5310 C-2000(2011) **CWOODS**

Sample Name: 18BLK108 Diss **Date Collected:** 07/24/18

Lab Code: R1806972-022 **Date Received:** 07/25/18 **Sample Matrix:** Water

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

365.1 **AFELSER** MROGERSON

Sample Name: 18BLK997 **Date Collected:** 07/23/18

Lab Code: R1806972-023 **Date Received:** 07/25/18 Sample Matrix: Water

351.2 **CWOODS NSMITH**

353.2 **GNITAJOUPPI**

365.1 **AFELSER MROGERSON**

ASTM D6919-09 **AMOSES**

SM 2120 B-2001(2011) **GLAFORCE**

Printed 8/17/2018 9:03:52 AM Superset Reference:18-0000474358 rev 00

Extracted/Digested By

Analyzed By

Analyst Summary report

Client: New York State DEC Service Request: R1806972

Project: LCI 2018/LCI2018

 Sample Name:
 18BLK997
 Date Collected: 07/23/18

 Lab Code:
 R1806972-023
 Date Received: 07/25/18

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

SM 5310 C-2000(2011) CWOODS

Sample Name: 18BLK997 Diss Date Collected: 07/23/18

Lab Code: R1806972-024 **Date Received:** 07/25/18

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

365.1 AFELSER MROGERSON

Sample Name: 18BLK996 Date Collected: 07/24/18

Lab Code: R1806972-025 **Date Received:** 07/25/18

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

300.0 AMOSES 351.2 NSMITH CWOODS

351.2 NSMITH CWOODS
353.2 GNITAJOUPPI

365.1 AFELSER MROGERSON

ASTM D6919-09 AMOSES

SM 2120 B-2001(2011) GLAFORCE

SM 5910 B NMANSEN

 Sample Name:
 18BLK996 Diss

 Lab Code:
 R1806972-026

 Date Received:
 07/24/18

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

365.1 AFELSER MROGERSON

SM 5310 C-2000(2011) CWOODS



INORGANIC PREPARATION METHODS

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

Water/Liquid Matrix

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

Solid/Soil/Non-Aqueous Matrix

| Analytical Method | Preparation |
|--------------------------|---------------|
| | Method |
| 6010C | 3050B |
| 6020A | 3050B |
| 6010C TCLP (1311) | 3005A/3010A |
| extract | |
| 6010 SPLP (1312) extract | 3005A/3010A |
| 7196A | 3060A |
| 7199 | 3060A |
| 9056A Halogens/Halides | 5050 |
| | |
| 300.0 Anions/ 350.1/ | 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



Metals

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

METALS - 1 INORGANIC ANALYSIS DATA PACKAGE

Client: New York State DEC Service Request: LCI0723

Project Name: Date Received: 7/25/2018

Matrix: WATER ug/L

Basis:

Sample Name: 18BLK102 Lab Code: R1806972-003

| Analyte | Analysis Method | PQL | MDL | Dil. Factor | Result | С | Q |
|-----------|--------------------|------|------|----------------|--------|---|---|
| Arsenic | 200.8 | 1.0 | 0.39 | 1.0 | 1.0 | υ | |
| Iron | 200.7 | 100 | 13.0 | 1.0 | 50.3 | J | |
| Manganese | 200.7 | 10.0 | 1.7 | 1.0 | 77.5 | | |

% Solids: 0.0

Comments:

METALS - 1 INORGANIC ANALYSIS DATA PACKAGE

Client: New York State DEC Service Request: LCI0723

Project No.: R1806972 Date Collected: 7/24/2018

Project Name: Date Received: 7/25/2018

Matrix: WATER ug/L

Basis:

Sample Name: 18BLK104 Lab Code: R1806972-007

| Analyte | Analysis Method | PQL | MDL | Dil. Factor | Result | С | Q |
|-----------|--------------------|------|------|----------------|--------|---|---|
| Arsenic | 200.8 | 1.0 | 0.39 | 1.0 | 0.42 | J | |
| Iron | 200.7 | 100 | 13.0 | 1.0 | 86.5 | J | |
| Manganese | 200.7 | 10.0 | 1.7 | 1.0 | 13.5 | | |

% Solids: 0.0

Comments:

METALS - 1 INORGANIC ANALYSIS DATA PACKAGE

Client: New York State DEC Service Request: LCI0723

Project No.: R1806972 **Date Collected:** 7/24/2018

Project Name: Date Received: 7/25/2018

Matrix: WATER ug/L

Basis:

Sample Name: 18BLK996 Lab Code: R1806972-025

| Analyte | Analysis Method | PQL | MDL | Dil. Factor | Result | С | Q |
|-----------|--------------------|------|------|----------------|--------|---|---|
| Arsenic | 200.8 | 1.0 | 0.39 | 1.0 | 1.0 | υ | |
| Iron | 200.7 | 100 | 13.0 | 1.0 | 50.9 | J | |
| Manganese | 200.7 | 10.0 | 1.7 | 1.0 | 11.2 | | |

% Solids: 0.0

Comments:



General Chemistry

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

Analytical Report

Client: New York State DEC

Project: LCI 2018/LCI2018

Sample Matrix: Water

Sample Name: 18BLK101

Lab Code: R1806972-001

Service Request: R1806972

Date Collected: 07/24/18 08:30

Date Received: 07/25/18 09:45

Basis: NA

| | | | | | | | Date | |
|----------------------------------|----------------------|----------|------------|--------|------|----------------|-----------|---|
| Analyte Name | Analysis Method | Result | Units | MRL | Dil. | Date Analyzed | Extracted | Q |
| Alkalinity, Total as CaCO3 | SM 2320 B-1997(2011) | 15.6 | mg/L | 2.0 | 1 | 08/06/18 18:14 | NA | |
| Ammonia as Nitrogen, undistilled | ASTM D6919-09 | 0.0066 | mg/L | 0.0050 | 1 | 07/28/18 08:14 | NA | |
| Chlorophyll A | SM20 10200 H | 1.24 | ug/L | 0.053 | 1 | 08/14/18 11:00 | NA | |
| Color, True | SM 2120 B-2001(2011) | 19.0 | ColorUnits | 1.0 | 1 | 07/24/18 19:30 | NA | |
| Nitrate+Nitrite as Nitrogen | 353.2 | 0.0020 U | mg/L | 0.0020 | 1 | 08/14/18 14:34 | NA | |
| Nitrogen, Total Kjeldahl (TKN) | 351.2 | 0.28 | mg/L | 0.10 | 1 | 08/10/18 11:37 | 08/07/18 | |
| pH of Color Analysis | SM 2120 B-2001(2011) | 7.84 | pH Units | - | 1 | 07/28/18 08:40 | NA | * |
| Phosphorus, Total | 365.1 | 0.0070 | mg/L | 0.0050 | 1 | 08/06/18 18:17 | 08/01/18 | |
| Sulfate | 300.0 | 3.1 | mg/L | 2.0 | 10 | 08/08/18 02:13 | NA | |
| UV254 | SM 5910 B | 0.0790 | cm-1 | - | 1 | 07/25/18 21:30 | NA | |

Analytical Report

Client: New York State DEC

Service Request: R1806972 **Date Collected:** 07/24/18 08:30 **Project:** LCI 2018/LCI2018

Date Received: 07/25/18 09:45 **Sample Matrix:** Water

Sample Name: 18BLK101 Diss Basis: NA

Lab Code: R1806972-002

| | | | | | | | Date | |
|---------------------------------|----------------------|--------|-------|--------|------|----------------|-----------|---|
| Analyte Name | Analysis Method | Result | Units | MRL | Dil. | Date Analyzed | Extracted | Q |
| Carbon, Dissolved Organic (DOC) | SM 5310 C-2000(2011) | 4.5 | mg/L | 1.0 | 1 | 07/28/18 01:30 | NA | |
| Phosphorus, Dissolved | 365.1 | 0.0054 | mg/L | 0.0050 | 1 | 08/06/18 17:49 | 08/01/18 | |

Analytical Report

Client: New York State DEC

Project: LCI 2018/LCI2018

Sample Matrix: Water

Sample Name:

18BLK102 Basis: NA

Lab Code: R1806972-003

Inorganic Parameters

| | | | | | | | Date | |
|----------------------------------|----------------------|----------|------------|--------|------|----------------|-----------|---|
| Analyte Name | Analysis Method | Result | Units | MRL | Dil. | Date Analyzed | Extracted | Q |
| Ammonia as Nitrogen, undistilled | ASTM D6919-09 | 0.0050 U | mg/L | 0.0050 | 1 | 08/02/18 11:43 | NA | |
| Color, True | SM 2120 B-2001(2011) | 24.0 | ColorUnits | 1.0 | 1 | 07/24/18 19:30 | NA | |
| Nitrate+Nitrite as Nitrogen | 353.2 | 0.157 | mg/L | 0.0020 | 1 | 07/31/18 14:55 | NA | |
| Nitrogen, Total Kjeldahl (TKN) | 351.2 | 0.19 | mg/L | 0.10 | 1 | 08/10/18 11:38 | 08/07/18 | |
| pH of Color Analysis | SM 2120 B-2001(2011) | 7.56 | pH Units | - | 1 | 07/28/18 08:40 | NA | * |
| Phosphorus, Total | 365.1 | 0.0072 | mg/L | 0.0050 | 1 | 08/06/18 18:19 | 08/01/18 | |
| Sulfate | 300.0 | 3.3 | mg/L | 2.0 | 10 | 08/08/18 02:36 | NA | |
| UV254 | SM 5910 B | 0.0840 | cm-1 | - | 1 | 07/25/18 21:30 | NA | |

Service Request: R1806972 **Date Collected:** 07/24/18 08:35

Date Received: 07/25/18 09:45

Analytical Report

Client: New York State DEC

Service Request: R1806972 **Date Collected:** 07/24/18 08:35 **Project:** LCI 2018/LCI2018

Date Received: 07/25/18 09:45 **Sample Matrix:** Water

Sample Name: 18BLK102 Diss Basis: NA

Lab Code: R1806972-004

| | | | | | | | Date | |
|---------------------------------|----------------------|----------|-------|--------|------|----------------|-----------|---|
| Analyte Name | Analysis Method | Result | Units | MRL | Dil. | Date Analyzed | Extracted | Q |
| Carbon, Dissolved Organic (DOC) | SM 5310 C-2000(2011) | 3.9 | mg/L | 1.0 | 1 | 07/28/18 01:51 | NA | |
| Phosphorus, Dissolved | 365.1 | 0.0050 U | mg/L | 0.0050 | 1 | 08/06/18 17:51 | 08/01/18 | |

Analytical Report

Client: New York State DEC

Project: LCI 2018/LCI2018

Sample Matrix: Water

Sample Name: 18BLK103

Lab Code: R1806972-005

Service Request: R1806972

Date Collected: 07/24/18 10:55

Date Received: 07/25/18 09:45

Basis: NA

| | | | | | | | Date | |
|----------------------------------|----------------------|----------|------------|--------|------|----------------|-----------|---|
| Analyte Name | Analysis Method | Result | Units | MRL | Dil. | Date Analyzed | Extracted | Q |
| Alkalinity, Total as CaCO3 | SM 2320 B-1997(2011) | 16.0 | mg/L | 2.0 | 1 | 07/28/18 06:35 | NA | |
| Ammonia as Nitrogen, undistilled | ASTM D6919-09 | 0.0053 | mg/L | 0.0050 | 1 | 07/28/18 08:30 | NA | |
| Chlorophyll A | SM20 10200 H | 1.90 | ug/L | 0.080 | 1 | 08/14/18 11:00 | NA | |
| Color, True | SM 2120 B-2001(2011) | 21.0 | ColorUnits | 1.0 | 1 | 07/24/18 19:30 | NA | |
| Nitrate+Nitrite as Nitrogen | 353.2 | 0.0020 U | mg/L | 0.0020 | 1 | 07/31/18 14:56 | NA | |
| Nitrogen, Total Kjeldahl (TKN) | 351.2 | 0.15 | mg/L | 0.10 | 1 | 08/10/18 11:41 | 08/07/18 | |
| pH of Color Analysis | SM 2120 B-2001(2011) | 7.52 | pH Units | - | 1 | 07/28/18 08:40 | NA | * |
| Phosphorus, Total | 365.1 | 0.0050 U | mg/L | 0.0050 | 1 | 08/06/18 18:20 | 08/01/18 | |
| Sulfate | 300.0 | 4.1 | mg/L | 2.0 | 10 | 08/08/18 02:42 | NA | |
| UV254 | SM 5910 B | 0.107 | cm-1 | - | 1 | 07/25/18 21:30 | NA | |

Analytical Report

Client: New York State DEC

Project: LCI 2018/LCI2018

Sample Matrix: Water

Service Request: R1806972

Date Collected: 07/24/18 10:55

Date Received: 07/25/18 09:45

Sample Name: 18BLK103 Diss Basis: NA

Lab Code: R1806972-006

| | | | | | | | Date | |
|---------------------------------|----------------------|----------|-------|--------|------|----------------|-----------|---|
| Analyte Name | Analysis Method | Result | Units | MRL | Dil. | Date Analyzed | Extracted | Q |
| Carbon, Dissolved Organic (DOC) | SM 5310 C-2000(2011) | 4.4 | mg/L | 1.0 | 1 | 07/28/18 02:12 | NA | |
| Phosphorus, Dissolved | 365.1 | 0.0050 U | mg/L | 0.0050 | 1 | 08/06/18 17:52 | 08/01/18 | |

Analytical Report

Client: New York State DEC

Project: LCI 2018/LCI2018

Sample Matrix: Water

Sample Name: 18BLK104 Basis: NA

Lab Code: R1806972-007

Inorganic Parameters

| | | | | | | | Date | |
|----------------------------------|----------------------|----------|------------|--------|------|----------------|-----------|---|
| Analyte Name | Analysis Method | Result | Units | MRL | Dil. | Date Analyzed | Extracted | Q |
| Ammonia as Nitrogen, undistilled | ASTM D6919-09 | 0.0050 U | mg/L | 0.0050 | 1 | 08/02/18 11:59 | NA | |
| Color, True | SM 2120 B-2001(2011) | 23.0 | ColorUnits | 1.0 | 1 | 07/24/18 19:30 | NA | |
| Nitrate+Nitrite as Nitrogen | 353.2 | 0.168 | mg/L | 0.0020 | 1 | 08/14/18 14:36 | NA | |
| Nitrogen, Total Kjeldahl (TKN) | 351.2 | 0.16 | mg/L | 0.10 | 1 | 08/10/18 11:42 | 08/07/18 | |
| pH of Color Analysis | SM 2120 B-2001(2011) | 7.37 | pH Units | - | 1 | 07/28/18 08:40 | NA | * |
| Phosphorus, Total | 365.1 | 0.0052 | mg/L | 0.0050 | 1 | 08/06/18 18:21 | 08/01/18 | |
| Sulfate | 300.0 | 3.8 | mg/L | 2.0 | 10 | 08/08/18 02:48 | NA | |
| UV254 | SM 5910 B | 0.118 | cm-1 | - | 1 | 07/25/18 21:30 | NA | |

Service Request: R1806972 **Date Collected:** 07/24/18 10:50

Date Received: 07/25/18 09:45

Analytical Report

Client: New York State DEC

Project: LCI 2018/LCI2018

Sample Matrix: Water

Service Request: R1806972

Date Collected: 07/24/18 10:50

Date Received: 07/25/18 09:45

Sample Name: 18BLK104 Diss Basis: NA

Lab Code: R1806972-008

| | | | | | | | Date | |
|---------------------------------|----------------------|--------|-------|--------|------|----------------|-----------|---|
| Analyte Name | Analysis Method | Result | Units | MRL | Dil. | Date Analyzed | Extracted | Q |
| Carbon, Dissolved Organic (DOC) | SM 5310 C-2000(2011) | 4.1 | mg/L | 1.0 | 1 | 07/28/18 02:33 | NA | |
| Phosphorus, Dissolved | 365.1 | 0.0059 | mg/L | 0.0050 | 1 | 08/06/18 17:53 | 08/01/18 | |

Analytical Report

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

LCI 2018/LCI2018

Water

Service Request: R1806972

Date Collected: 07/23/18 10:30

Date Received: 07/25/18 09:45

Sample Name: 18BLK111 Basis: NA

Lab Code: R1806972-009

Sample Matrix:

| | | | | | | | Date | |
|----------------------------------|----------------------|--------|------------|--------|------|----------------|-----------|---|
| Analyte Name | Analysis Method | Result | Units | MRL | Dil. | Date Analyzed | Extracted | Q |
| Alkalinity, Total as CaCO3 | SM 2320 B-1997(2011) | 23.6 | mg/L | 2.0 | 1 | 07/28/18 06:40 | NA | |
| Ammonia as Nitrogen, undistilled | ASTM D6919-09 | 0.0057 | mg/L | 0.0050 | 1 | 08/02/18 12:15 | NA | |
| Carbon, Total Organic (TOC) | SM 5310 C-2000(2011) | 11.9 | mg/L | 1.0 | 1 | 07/27/18 10:16 | NA | |
| Chlorophyll A | SM20 10200 H | 6.43 | ug/L | 0.16 | 1 | 08/14/18 11:00 | NA | |
| Color, True | SM 2120 B-2001(2011) | 190 | ColorUnits | 10 | 10 | 07/24/18 19:30 | NA | |
| Nitrate+Nitrite as Nitrogen | 353.2 | 0.0030 | mg/L | 0.0020 | 1 | 08/14/18 14:37 | NA | |
| Nitrogen, Total Kjeldahl (TKN) | 351.2 | 0.86 | mg/L | 0.10 | 1 | 08/10/18 11:43 | 08/07/18 | |
| pH of Color Analysis | SM 2120 B-2001(2011) | 7.43 | pH Units | - | 10 | 07/28/18 08:40 | NA | * |
| Phosphorus, Total | 365.1 | 0.0441 | mg/L | 0.0050 | 1 | 08/06/18 18:24 | 08/01/18 | |

Analytical Report

Client: New York State DEC

Project: LCI 2018/LCI2018

Sample Matrix:

Water

Service Request: R1806972

Date Collected: 07/23/18 10:30

Date Received: 07/25/18 09:45

Sample Name: 18BLK111 Diss Lab Code:

R1806972-010

Basis: NA

| | Analysis | | | | | | | |
|-----------------------|----------|--------|-------|--------|------|----------------|----------------|---|
| Analyte Name | Method | Result | Units | MRL | Dil. | Date Analyzed | Date Extracted | Q |
| Phosphorus, Dissolved | 365.1 | 0.0194 | mg/L | 0.0050 | 1 | 08/06/18 17:54 | 08/01/18 | |

Analytical Report

Client: New York State DEC

Project: LCI 2018/LCI2018

Water

Sample Name: 18BLK105 Basis: NA

Lab Code: R1806972-011

Sample Matrix:

Inorganic Parameters

| | | | | | | Date | |
|----------------------|---|--|--|---|---|---|---|
| Analysis Method | Result | Units | MRL | Dil. | Date Analyzed | Extracted | Q |
| SM 2320 B-1997(2011) | 6.8 | mg/L | 2.0 | 1 | 07/28/18 06:44 | NA | |
| ASTM D6919-09 | 0.0093 | mg/L | 0.0050 | 1 | 07/28/18 08:46 | NA | |
| SM 5310 C-2000(2011) | 4.8 | mg/L | 1.0 | 1 | 07/31/18 02:12 | NA | |
| SM20 10200 H | 1.87 | ug/L | 0.080 | 1 | 08/14/18 11:00 | NA | |
| SM 2120 B-2001(2011) | 80.0 | ColorUnits | 5.0 | 5 | 07/24/18 19:30 | NA | |
| 353.2 | 0.0025 | mg/L | 0.0020 | 1 | 08/14/18 14:38 | NA | |
| 351.2 | 0.25 | mg/L | 0.10 | 1 | 08/10/18 11:44 | 08/07/18 | |
| SM 2120 B-2001(2011) | 7.39 | pH Units | - | 5 | 07/28/18 08:40 | NA | * |
| 365.1 | 0.0094 | mg/L | 0.0050 | 1 | 08/06/18 18:27 | 08/01/18 | |
| | SM 2320 B-1997(2011) ASTM D6919-09 SM 5310 C-2000(2011) SM20 10200 H SM 2120 B-2001(2011) 353.2 351.2 SM 2120 B-2001(2011) | SM 2320 B-1997(2011) 6.8 ASTM D6919-09 0.0093 SM 5310 C-2000(2011) 4.8 SM20 10200 H 1.87 SM 2120 B-2001(2011) 80.0 353.2 0.0025 351.2 0.25 SM 2120 B-2001(2011) 7.39 | SM 2320 B-1997(2011) 6.8 mg/L ASTM D6919-09 0.0093 mg/L SM 5310 C-2000(2011) 4.8 mg/L SM20 10200 H 1.87 ug/L SM 2120 B-2001(2011) 80.0 ColorUnits 353.2 0.0025 mg/L 351.2 0.25 mg/L SM 2120 B-2001(2011) 7.39 pH Units | SM 2320 B-1997(2011) 6.8 mg/L 2.0 ASTM D6919-09 0.0093 mg/L 0.0050 SM 5310 C-2000(2011) 4.8 mg/L 1.0 SM20 10200 H 1.87 ug/L 0.080 SM 2120 B-2001(2011) 80.0 ColorUnits 5.0 353.2 0.0025 mg/L 0.0020 351.2 0.25 mg/L 0.10 SM 2120 B-2001(2011) 7.39 pH Units - | SM 2320 B-1997(2011) 6.8 mg/L 2.0 1 ASTM D6919-09 0.0093 mg/L 0.0050 1 SM 5310 C-2000(2011) 4.8 mg/L 1.0 1 SM20 10200 H 1.87 ug/L 0.080 1 SM 2120 B-2001(2011) 80.0 ColorUnits 5.0 5 353.2 0.0025 mg/L 0.0020 1 351.2 0.25 mg/L 0.10 1 SM 2120 B-2001(2011) 7.39 pH Units - 5 | SM 2320 B-1997(2011) 6.8 mg/L 2.0 1 07/28/18 06:44 ASTM D6919-09 0.0093 mg/L 0.0050 1 07/28/18 08:46 SM 5310 C-2000(2011) 4.8 mg/L 1.0 1 07/31/18 02:12 SM20 10200 H 1.87 ug/L 0.080 1 08/14/18 11:00 SM 2120 B-2001(2011) 80.0 ColorUnits 5.0 5 07/24/18 19:30 353.2 0.0025 mg/L 0.0020 1 08/14/18 14:38 351.2 0.25 mg/L 0.10 1 08/10/18 11:44 SM 2120 B-2001(2011) 7.39 pH Units - 5 07/28/18 08:40 | Analysis Method Result Units MRL Dil. Date Analyzed Extracted SM 2320 B-1997(2011) 6.8 mg/L 2.0 1 07/28/18 06:44 NA ASTM D6919-09 0.0093 mg/L 0.0050 1 07/28/18 08:46 NA SM 5310 C-2000(2011) 4.8 mg/L 1.0 1 07/31/18 02:12 NA SM20 10200 H 1.87 ug/L 0.080 1 08/14/18 11:00 NA SM 2120 B-2001(2011) 80.0 ColorUnits 5.0 5 07/24/18 19:30 NA 353.2 0.0025 mg/L 0.0020 1 08/14/18 14:38 NA 351.2 0.25 mg/L 0.10 1 08/10/18 11:44 08/07/18 SM 2120 B-2001(2011) 7.39 pH Units - 5 07/28/18 08:40 NA |

Service Request: R1806972 **Date Collected:** 07/23/18 12:50

Date Received: 07/25/18 09:45

Analytical Report

Client: New York State DEC

Project: LCI 2018/LCI2018

Sample Matrix:

Water

Service Request: R1806972

Date Collected: 07/23/18 12:50

Date Received: 07/25/18 09:45

Sample Name: 18BLK105 Diss

Lab Code: R1806972-012

Basis: NA

| Analysis |
|-----------|
| Allaiysis |
| |

| Analyte Name | Method | Result | Units | MRL | Dil. | Date Analyzed | Date Extracted | Q |
|-----------------------|--------|----------|-------|--------|------|----------------------|-----------------------|---|
| Phosphorus, Dissolved | 365.1 | 0.0050 U | mg/L | 0.0050 | 1 | 08/06/18 17:57 | 08/01/18 | |

Analytical Report

Client: New York State DEC

Project: LCI 2018/LCI2018

Sample Matrix: Water

Service Request: R1806972

Date Collected: 07/23/18 12:55

Date Received: 07/25/18 09:45

Sample Name: 18BLK106 Basis: NA

Lab Code: R1806972-013

| | | | | | | | Date | |
|----------------------------------|----------------------|--------|------------|--------|------|----------------|-----------|---|
| Analyte Name | Analysis Method | Result | Units | MRL | Dil. | Date Analyzed | Extracted | Q |
| Ammonia as Nitrogen, undistilled | ASTM D6919-09 | 0.149 | mg/L | 0.0050 | 1 | 08/02/18 12:31 | NA | |
| Carbon, Total Organic (TOC) | SM 5310 C-2000(2011) | 6.1 | mg/L | 1.0 | 1 | 07/27/18 10:36 | NA | |
| Color, True | SM 2120 B-2001(2011) | 160 | ColorUnits | 10 | 10 | 07/24/18 19:30 | NA | |
| Nitrate+Nitrite as Nitrogen | 353.2 | 0.0743 | mg/L | 0.0020 | 1 | 08/14/18 14:40 | NA | |
| Nitrogen, Total Kjeldahl (TKN) | 351.2 | 0.33 | mg/L | 0.10 | 1 | 08/10/18 11:44 | 08/07/18 | |
| pH of Color Analysis | SM 2120 B-2001(2011) | 7.25 | pH Units | - | 10 | 07/28/18 08:40 | NA | * |
| Phosphorus, Total | 365.1 | 0.0142 | mg/L | 0.0050 | 1 | 08/06/18 18:29 | 08/01/18 | |

Analytical Report

Client: New York State DEC

Project: LCI 2018/LCI2018

Sample Matrix:

Water

Service Request: R1806972

Date Collected: 07/23/18 12:55

Date Received: 07/25/18 09:45

Sample Name: 18BLK106 Diss

Lab Code: R1806972-014

Basis: NA

| | Analysis |
|--|----------|
|--|----------|

| Analyte Name | Method | Result | Units | MRL | Dil. | Date Analyzed | Date Extracted | Q |
|-----------------------|--------|--------|-------|--------|------|----------------------|-----------------------|---|
| Phosphorus, Dissolved | 365.1 | 0.0114 | mg/L | 0.0050 | 1 | 08/06/18 18:02 | 08/01/18 | |

Analytical Report

Client: New York State DEC

Project: LCI 2018/LCI2018

Water

Sample Name: 18BLK113 Basis: NA

Lab Code: R1806972-015

Sample Matrix:

Inorganic Parameters

| | | | | | | | Date | |
|----------------------------------|----------------------|----------|------------|--------|------|----------------|-----------|---|
| Analyte Name | Analysis Method | Result | Units | MRL | Dil. | Date Analyzed | Extracted | Q |
| Alkalinity, Total as CaCO3 | SM 2320 B-1997(2011) | 2.0 U | mg/L | 2.0 | 1 | 07/28/18 06:47 | NA | |
| Ammonia as Nitrogen, undistilled | ASTM D6919-09 | 0.0050 U | mg/L | 0.0050 | 1 | 08/02/18 12:47 | NA | |
| Carbon, Total Organic (TOC) | SM 5310 C-2000(2011) | 3.3 | mg/L | 1.0 | 1 | 07/27/18 10:57 | NA | |
| Chlorophyll A | SM20 10200 H | 1.67 | ug/L | 0.080 | 1 | 08/14/18 11:00 | NA | |
| Color, True | SM 2120 B-2001(2011) | 19.0 | ColorUnits | 1.0 | 1 | 07/24/18 19:30 | NA | |
| Nitrate+Nitrite as Nitrogen | 353.2 | 0.0539 | mg/L | 0.0020 | 1 | 08/14/18 14:41 | NA | |
| Nitrogen, Total Kjeldahl (TKN) | 351.2 | 0.15 | mg/L | 0.10 | 1 | 08/10/18 11:45 | 08/07/18 | |
| pH of Color Analysis | SM 2120 B-2001(2011) | 7.28 | pH Units | - | 1 | 07/28/18 08:40 | NA | * |
| Phosphorus, Total | 365.1 | 0.0060 | mg/L | 0.0050 | 1 | 08/06/18 18:30 | 08/01/18 | |

Service Request: R1806972 **Date Collected:** 07/23/18 15:20

Date Received: 07/25/18 09:45

Analytical Report

Client: New York State DEC

Project: LCI 2018/LCI2018

Sample Matrix:

Water

Service Request: R1806972

Date Collected: 07/23/18 15:20

Date Received: 07/25/18 09:45

Sample Name: 18BLK113 Diss

Lab Code: R1806972-016

Basis: NA

| | Analysis | | | | | | | |
|----------------------|----------|-----------|-------|--------|------|----------------|-----------------------|---|
| Analyte Name | Method | Result | Units | MRL | Dil. | Date Analyzed | Date Extracted | Q |
| Phosphorus Dissolved | 365.1 | 0.0050 II | mg/I | 0.0050 | 1 | 08/06/18 18:05 | 08/01/18 | |

Analytical Report

Client: New York State DEC

Project: LCI 2018/LCI2018

Sample Matrix: Water

Service Request: R1806972

Date Collected: 07/23/18 15:15

Date Received: 07/25/18 09:45

Sample Name: 18BLK114 Basis: NA

Lab Code: R1806972-017

| | | | | | | | Date | |
|----------------------------------|----------------------|----------|------------|--------|------|----------------|-----------|---|
| Analyte Name | Analysis Method | Result | Units | MRL | Dil. | Date Analyzed | Extracted | Q |
| Ammonia as Nitrogen, undistilled | ASTM D6919-09 | 0.0428 | mg/L | 0.0050 | 1 | 08/02/18 13:03 | NA | |
| Carbon, Total Organic (TOC) | SM 5310 C-2000(2011) | 2.5 | mg/L | 1.0 | 1 | 07/31/18 02:33 | NA | |
| Color, True | SM 2120 B-2001(2011) | 22.0 | ColorUnits | 1.0 | 1 | 07/24/18 19:30 | NA | |
| Nitrate+Nitrite as Nitrogen | 353.2 | 0.116 | mg/L | 0.0020 | 1 | 08/14/18 14:42 | NA | |
| Nitrogen, Total Kjeldahl (TKN) | 351.2 | 0.19 | mg/L | 0.10 | 1 | 08/10/18 11:46 | 08/07/18 | |
| pH of Color Analysis | SM 2120 B-2001(2011) | 7.13 | pH Units | - | 1 | 07/28/18 08:40 | NA | * |
| Phosphorus, Total | 365.1 | 0.0050 U | mg/L | 0.0050 | 1 | 08/06/18 18:31 | 08/01/18 | |

Analytical Report

Client: New York State DEC

Project: LCI 2018/LCI2018

Sample Matrix:

Water

Service Request: R1806972

Date Collected: 07/23/18 15:15

Basis: NA

Date Received: 07/25/18 09:45

Sample Name: 18BLK114 Diss

Lab Code: R1806972-018

Inorganic Parameters

Analysis

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

Analytical Report

Client: New York State DEC

Project: LCI 2018/LCI2018

Sample Matrix: Water

Sample Name: 18BLK107

Lab Code: R1806972-019

Service Request: R1806972

Date Collected: 07/24/18 14:17 **Date Received:** 07/25/18 09:45

Basis: NA

| | | | | | | | Date | |
|----------------------------------|----------------------|----------|------------|--------|------|----------------|-----------|---|
| Analyte Name | Analysis Method | Result | Units | MRL | Dil. | Date Analyzed | Extracted | Q |
| Alkalinity, Total as CaCO3 | SM 2320 B-1997(2011) | 5.6 | mg/L | 2.0 | 1 | 07/28/18 06:51 | NA | |
| Ammonia as Nitrogen, undistilled | ASTM D6919-09 | 0.0050 U | mg/L | 0.0050 | 1 | 08/06/18 18:44 | NA | |
| Carbon, Total Organic (TOC) | SM 5310 C-2000(2011) | 6.4 | mg/L | 1.0 | 1 | 07/27/18 11:18 | NA | |
| Chlorophyll A | SM20 10200 H | 2.80 | ug/L | 0.080 | 1 | 08/14/18 11:00 | NA | |
| Color, True | SM 2120 B-2001(2011) | 85.0 | ColorUnits | 5.0 | 5 | 07/24/18 19:30 | NA | |
| Nitrate+Nitrite as Nitrogen | 353.2 | 0.0020 U | mg/L | 0.0020 | 1 | 08/14/18 14:44 | NA | |
| Nitrogen, Total Kjeldahl (TKN) | 351.2 | 0.24 | mg/L | 0.10 | 1 | 08/10/18 11:46 | 08/07/18 | |
| pH of Color Analysis | SM 2120 B-2001(2011) | 7.12 | pH Units | - | 5 | 07/28/18 08:40 | NA | * |
| Phosphorus, Total | 365.1 | 0.0051 | mg/L | 0.0050 | 1 | 08/06/18 18:32 | 08/01/18 | |

Analytical Report

Client: New York State DEC

Project: LCI 2018/LCI2018

Sample Matrix:

Sample Name:

Water

Service Request: R1806972

Date Collected: 07/24/18 14:17

Date Received: 07/25/18 09:45

18BLK107 Diss Basis: NA

Lab Code: R1806972-020

| | Analysis | | | | | | | |
|-----------------------|----------|----------|-------|--------|------|----------------|----------------|---|
| Analyte Name | Method | Result | Units | MRL | Dil. | Date Analyzed | Date Extracted | Q |
| Phosphorus, Dissolved | 365.1 | 0.0050 U | mg/L | 0.0050 | 1 | 08/06/18 18:07 | 08/01/18 | |

Analytical Report

Client: New York State DEC

Project: LCI 2018/LCI2018

Sample Matrix: Water

Sample Name:

18BLK108 Basis: NA

Lab Code: R1806972-021

Inorganic Parameters

| | | | | | | | Date | |
|----------------------------------|----------------------|--------|------------|--------|------|----------------|-----------|---|
| Analyte Name | Analysis Method | Result | Units | MRL | Dil. | Date Analyzed | Extracted | Q |
| Ammonia as Nitrogen, undistilled | ASTM D6919-09 | 0.273 | mg/L | 0.0050 | 1 | 08/02/18 14:55 | NA | |
| Carbon, Total Organic (TOC) | SM 5310 C-2000(2011) | 7.8 | mg/L | 1.0 | 1 | 07/27/18 11:39 | NA | |
| Color, True | SM 2120 B-2001(2011) | 220 | ColorUnits | 10 | 10 | 07/24/18 19:30 | NA | |
| Nitrate+Nitrite as Nitrogen | 353.2 | 0.0224 | mg/L | 0.0020 | 1 | 08/14/18 14:45 | NA | |
| Nitrogen, Total Kjeldahl (TKN) | 351.2 | 0.55 | mg/L | 0.10 | 1 | 08/10/18 11:47 | 08/07/18 | |
| pH of Color Analysis | SM 2120 B-2001(2011) | 7.06 | pH Units | - | 10 | 07/28/18 08:40 | NA | * |
| Phosphorus, Total | 365.1 | 0.0196 | mg/L | 0.0050 | 1 | 08/06/18 18:39 | 08/01/18 | |

Service Request: R1806972 **Date Collected:** 07/24/18 14:12

Date Received: 07/25/18 09:45

Analytical Report

Client: New York State DEC

Project: LCI 2018/LCI2018

Sample Matrix:

Water

Service Request: R1806972

Date Collected: 07/24/18 14:12

Date Received: 07/25/18 09:45

Basis: NA

Sample Name: 18BLK108 Diss

Lab Code: R1806972-022

Inorganic Parameters

Analysis

Analyte NameMethodResultUnitsMRLDil.Date AnalyzedDate ExtractedQPhosphorus, Dissolved365.10.0097mg/L0.0050108/06/18 18:1108/01/18

Analytical Report

Client: New York State DEC

Project: LCI 2018/LCI2018

Sample Matrix: Water

Service Request: R1806972

Date Collected: 07/23/18 15:15

Date Received: 07/25/18 09:45

Sample Name: 18BLK997 Basis: NA

Lab Code: R1806972-023

| | | | | | | | Date | |
|----------------------------------|----------------------|----------|------------|--------|------|----------------|-----------|---|
| Analyte Name | Analysis Method | Result | Units | MRL | Dil. | Date Analyzed | Extracted | Q |
| Ammonia as Nitrogen, undistilled | ASTM D6919-09 | 0.0050 U | mg/L | 0.0050 | 1 | 07/28/18 09:02 | NA | |
| Carbon, Total Organic (TOC) | SM 5310 C-2000(2011) | 1.4 | mg/L | 1.0 | 1 | 07/27/18 12:00 | NA | |
| Color, True | SM 2120 B-2001(2011) | 14.0 | ColorUnits | 1.0 | 1 | 07/24/18 19:30 | NA | |
| Nitrate+Nitrite as Nitrogen | 353.2 | 0.0021 | mg/L | 0.0020 | 1 | 08/14/18 14:49 | NA | |
| Nitrogen, Total Kjeldahl (TKN) | 351.2 | 0.10 U | mg/L | 0.10 | 1 | 08/10/18 11:49 | 08/07/18 | |
| pH of Color Analysis | SM 2120 B-2001(2011) | 7.17 | pH Units | - | 1 | 07/28/18 08:40 | NA | * |
| Phosphorus, Total | 365.1 | 0.0050 U | mg/L | 0.0050 | 1 | 08/06/18 18:40 | 08/01/18 | |

Analytical Report

Client: New York State DEC

Project: LCI 2018/LCI2018

Sample Matrix:

Water

Service Request: R1806972

Date Collected: 07/23/18 15:15

Date Received: 07/25/18 09:45

Sample Name: 18BLK997 Diss

Lab Code: R1806972-024

Basis: NA

| | Analysis | | | | | | | |
|-----------------------|----------|----------|-------|--------|------|----------------|----------------|---|
| Analyte Name | Method | Result | Units | MRL | Dil. | Date Analyzed | Date Extracted | Q |
| Phosphorus, Dissolved | 365.1 | 0.0050 U | mg/L | 0.0050 | 1 | 08/06/18 18:12 | 08/01/18 | |

Analytical Report

Client: New York State DEC

Project: LCI 2018/LCI2018

Sample Matrix: Water

Service Request: R1806972

Date Collected: 07/24/18 10:50

Date Received: 07/25/18 09:45

Sample Name: 18BLK996 Basis: NA

Lab Code: R1806972-025

| | | | | | | | Date | |
|----------------------------------|----------------------|----------|------------|--------|------|----------------|-----------|---|
| Analyte Name | Analysis Method | Result | Units | MRL | Dil. | Date Analyzed | Extracted | Q |
| Ammonia as Nitrogen, undistilled | ASTM D6919-09 | 0.0341 | mg/L | 0.0050 | 1 | 08/02/18 15:11 | NA | |
| Color, True | SM 2120 B-2001(2011) | 28.0 | ColorUnits | 1.0 | 1 | 07/24/18 19:30 | NA | |
| Nitrate+Nitrite as Nitrogen | 353.2 | 0.163 | mg/L | 0.0020 | 1 | 08/14/18 14:53 | NA | |
| Nitrogen, Total Kjeldahl (TKN) | 351.2 | 0.18 | mg/L | 0.10 | 1 | 08/10/18 11:50 | 08/07/18 | |
| pH of Color Analysis | SM 2120 B-2001(2011) | 7.01 | pH Units | - | 1 | 07/28/18 08:40 | NA | * |
| Phosphorus, Total | 365.1 | 0.0050 U | mg/L | 0.0050 | 1 | 08/06/18 18:41 | 08/01/18 | |
| Sulfate | 300.0 | 3.8 | mg/L | 2.0 | 10 | 08/08/18 03:05 | NA | |
| UV254 | SM 5910 B | 0.123 | cm-1 | - | 1 | 07/25/18 21:30 | NA | |

Analytical Report

Client: New York State DEC

Project: LCI 2018/LCI2018 **Date Collected:** 07/24/18 10:50

Sample Matrix: Water Date Received: 07/25/18 09:45

Sample Name: 18BLK996 Diss Basis: NA

Lab Code: R1806972-026

Inorganic Parameters

| | | | | | | | Date | |
|---------------------------------|----------------------|--------|-------|--------|------|----------------|-----------|---|
| Analyte Name | Analysis Method | Result | Units | MRL | Dil. | Date Analyzed | Extracted | Q |
| Carbon, Dissolved Organic (DOC) | SM 5310 C-2000(2011) | 4.2 | mg/L | 1.0 | 1 | 07/27/18 12:21 | NA | |
| Phosphorus, Dissolved | 365.1 | 0.0054 | mg/L | 0.0050 | 1 | 08/06/18 18:13 | 08/01/18 | |

Service Request: R1806972



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



Metals

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

METALS

-3-

BLANKS

| Contract: | R1806972 | | | |
|-------------|----------------------------------|---------------------|----------|---------|
| Lab Code: | Case No.: | SAS No.: | SDG NO.: | LCI0723 |
| Preparation | Blank Matrix (soil/water): | WATER | _ | |
| Preparation | Blank Concentration Units (ug/L, | ppt, or mg/kg): UG/ | 'L | |

| | Initial Calib. Blank | | | | Continuing Calibration Blank ug/L | | | | | | | | |
|-----------|----------------------------|---|-------|---|-----------------------------------|---|-------|---|--|--------|---|---|----|
| Analyte | ug/L | С | 1 | С | 2 | С | 3 | С | | | С | | M |
| Arsenic | 0.39 | Ū | 0.39 | Ū | 0.39 | Ū | 0.39 | Ū | | 0.39 | Ū | | MS |
| Iron | 13.00 | Ū | 13.00 | Ū | 13.00 | U | 13.00 | ŭ | | 13.000 | U | Ī | P |
| Manganese | 1.70 | Ū | 1.70 | Ū | 1.70 | U | 1.70 | ŭ | | 1.700 | Ū | Ī | P |

Comments:

METALS

-3-

BLANKS

| Contract: | R1806972 | | | | | |
|-------------|---------------|--------------------|--------------------|------|----------|---------|
| Lab Code: | | Case No.: | SAS No.: | | SDG NO.: | LCI0723 |
| Preparation | Blank Matrix | (soil/water): | WATER | | | |
| Preparation | Blank Concent | cration Units (ug/ | L, ppt, or mg/kg): | UG/L | | |

| | Initial Calib. Blank | | Continuing Calibration Blank ug/L | | | | | | | Preparation Blank | | | |
|-----------|----------------------------|---|-----------------------------------|---|-------|---|-------|---|--|----------------------|---|--|----|
| Analyte | ug/L | С | 1 | С | 2 | С | 3 | С | | | С | | M |
| Arsenic | İ | | 0.39 | U | 0.39 | Ū | 0.39 | ŭ | | | | | MS |
| Iron | | | 13.00 | U | 13.00 | Ū | 13.00 | U | | | | | P |
| Manganese | | | 1.70 | ŭ | 1.70 | U | 1.70 | Ū | | | | | P |

Comments:

METALS

-7-

LABORATORY CONTROL SAMPLE

| Aqueous LCS | Source: | ACCUSTANDARD | | | | |
|-------------|----------|--------------|----------|----------|---------|--|
| Solid LCS S | ource: | | | | | |
| Lab Code: | | Case No.: | SAS No.: | SDG NO.: | LCI0723 | |
| Contract: | R1806972 | | | | | |

| | Aqueou | s (ug/L | | | | Solid | (mg/K | |
|-----------|--------|---------|-----|------|-------|-------|--------|----|
| Analyte | True | Found | %R | True | Found | С | Limits | %R |
| Arsenic | 20.0 | 22.2 | 111 | | | | | |
| Iron | 1000 | 1020 | 102 | | | | | |
| Manganese | 500 | 536 | 107 | | | | | |

Comments:



General Chemistry

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

Analytical Report

Client: New York State DEC Service Request: R1806972

Project: LCI 2018/LCI2018

Date Collected: NA

Pote Project: NA

Sample Matrix: Water Date Received: NA

Sample Name: Method Blank Basis: NA

Lab Code: R1806972-MB1

| | | | | | | Date | |
|----------------------|--|--|--|---|--|--|---|
| Analysis Method | Result | Units | MRL | Dil. | Date Analyzed | Extracted | Q |
| SM 2320 B-1997(2011) | 2.0 U | mg/L | 2.0 | 1 | 07/28/18 06:13 | NA | |
| ASTM D6919-09 | 0.0050 U | mg/L | 0.0050 | 1 | 07/28/18 04:14 | NA | |
| SM 5310 C-2000(2011) | 1.0 U | mg/L | 1.0 | 1 | 07/27/18 09:03 | NA | |
| SM 5310 C-2000(2011) | 1.0 U | mg/L | 1.0 | 1 | 07/27/18 09:03 | NA | |
| SM20 10200 H | 0.40 U | ug/L | 0.40 | 1 | 08/14/18 11:00 | NA | |
| SM 2120 B-2001(2011) | 1.0 | ColorUnits | 1.0 | 1 | 07/24/18 19:30 | NA | |
| 353.2 | 0.0020 U | mg/L | 0.0020 | 1 | 07/31/18 14:30 | NA | |
| 351.2 | 0.10 U | mg/L | 0.10 | 1 | 08/10/18 11:35 | 08/07/18 | |
| 365.1 | 0.0050 U | mg/L | 0.0050 | 1 | 08/06/18 17:22 | 08/01/18 | |
| 365.1 | 0.0050 U | mg/L | 0.0050 | 1 | 08/06/18 17:58 | 08/01/18 | |
| 300.0 | 0.20 U | mg/L | 0.20 | 1 | 08/08/18 00:04 | NA | |
| SM 5910 B | 0.00 | cm-1 | - | 1 | 07/25/18 21:30 | NA | |
| | SM 2320 B-1997(2011) ASTM D6919-09 SM 5310 C-2000(2011) SM 5310 C-2000(2011) SM20 10200 H SM 2120 B-2001(2011) 353.2 351.2 365.1 365.1 300.0 | SM 2320 B-1997(2011) 2.0 U ASTM D6919-09 0.0050 U SM 5310 C-2000(2011) 1.0 U SM 5310 C-2000(2011) 1.0 U SM20 10200 H 0.40 U SM 2120 B-2001(2011) 1.0 353.2 0.0020 U 351.2 0.10 U 365.1 0.0050 U 300.0 0.20 U | SM 2320 B-1997(2011) 2.0 U mg/L ASTM D6919-09 0.0050 U mg/L SM 5310 C-2000(2011) 1.0 U mg/L SM 5310 C-2000(2011) 1.0 U mg/L SM20 10200 H 0.40 U ug/L SM 2120 B-2001(2011) 1.0 ColorUnits 353.2 0.0020 U mg/L 351.2 0.10 U mg/L 365.1 0.0050 U mg/L 365.1 0.0050 U mg/L 300.0 0.20 U mg/L | SM 2320 B-1997(2011) 2.0 U mg/L 2.0 ASTM D6919-09 0.0050 U mg/L 0.0050 SM 5310 C-2000(2011) 1.0 U mg/L 1.0 SM 5310 C-2000(2011) 1.0 U mg/L 1.0 SM20 10200 H 0.40 U ug/L 0.40 SM 2120 B-2001(2011) 1.0 ColorUnits 1.0 353.2 0.0020 U mg/L 0.0020 351.2 0.10 U mg/L 0.0050 365.1 0.0050 U mg/L 0.0050 365.1 0.0050 U mg/L 0.0050 300.0 0.20 U mg/L 0.20 | SM 2320 B-1997(2011) 2.0 U mg/L 2.0 U ng/L 2.0 U ng/L 2.0 U ng/L 0.0050 1 ASTM D6919-09 0.0050 U mg/L 0.0050 1 SM 5310 C-2000(2011) 1.0 U mg/L 1.0 1 SM 5310 C-2000(2011) 1.0 U mg/L 0.40 1 SM20 10200 H 0.40 U ug/L 0.40 1 SM 2120 B-2001(2011) 1.0 ColorUnits 1.0 1 353.2 0.0020 U mg/L 0.0020 1 351.2 0.10 U mg/L 0.0020 1 365.1 0.0050 U mg/L 0.0050 1 365.1 0.0050 U mg/L 0.0050 1 300.0 0.20 U mg/L 0.20 1 | SM 2320 B-1997(2011) 2.0 U mg/L 2.0 U 07/28/18 06:13 ASTM D6919-09 0.0050 U mg/L 0.0050 U 1 07/28/18 04:14 SM 5310 C-2000(2011) 1.0 U mg/L 1.0 I 07/27/18 09:03 SM 5310 C-2000(2011) 1.0 U mg/L 1.0 I 07/27/18 09:03 SM20 10200 H 0.40 U ug/L 0.40 I 08/14/18 11:00 SM 2120 B-2001(2011) 1.0 ColorUnits 1.0 I 07/24/18 19:30 353.2 0.0020 U mg/L 0.0020 I 07/31/18 14:30 351.2 0.10 U mg/L 0.0020 I 08/10/18 11:35 365.1 0.0050 U mg/L 0.0050 I 08/06/18 17:22 365.1 0.0050 U mg/L 0.0050 I 08/06/18 17:58 300.0 0.20 U mg/L 0.20 I 08/08/18 00:04 | SM 2320 B-1997(2011) 2.0 U mg/L 2.0 I 07/28/18 06:13 NA ASTM D6919-09 0.0050 U mg/L 0.0050 I 07/28/18 04:14 NA SM 5310 C-2000(2011) 1.0 U mg/L 1.0 I 07/27/18 09:03 NA SM 5310 C-2000(2011) 1.0 U mg/L 1.0 I 07/27/18 09:03 NA SM20 10200 H 0.40 U ug/L 0.40 I 08/14/18 11:00 NA SM 2120 B-2001(2011) 1.0 ColorUnits 1.0 I 07/24/18 19:30 NA 353.2 0.0020 U mg/L 0.0020 I 07/31/18 14:30 NA 351.2 0.10 U mg/L 0.10 I 08/10/18 11:35 08/07/18 365.1 0.0050 U mg/L 0.0050 I 08/06/18 17:22 08/01/18 365.1 0.0050 U mg/L 0.0050 I 08/06/18 17:58 08/01/18 300.0 0.0050 U mg/L 0.20 I 08/06/18 17:58 08/01/18 |

Analytical Report

Client: New York State DEC **Service Request:** R1806972

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

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

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

Lab Code: R1806972-MB2

| | | | | | | | Date | |
|----------------------------------|----------------------|----------|-------|--------|------|----------------|-----------|---|
| Analyte Name | Analysis Method | Result | Units | MRL | Dil. | Date Analyzed | Extracted | Q |
| Alkalinity, Total as CaCO3 | SM 2320 B-1997(2011) | 2.0 U | mg/L | 2.0 | 1 | 08/06/18 17:38 | NA | |
| Ammonia as Nitrogen, undistilled | ASTM D6919-09 | 0.0050 U | mg/L | 0.0050 | 1 | 08/02/18 11:11 | NA | |
| Carbon, Dissolved Organic (DOC) | SM 5310 C-2000(2011) | 1.0 U | mg/L | 1.0 | 1 | 07/27/18 18:53 | NA | |
| Carbon, Total Organic (TOC) | SM 5310 C-2000(2011) | 1.0 U | mg/L | 1.0 | 1 | 07/30/18 20:58 | NA | |
| Nitrate+Nitrite as Nitrogen | 353.2 | 0.0020 U | mg/L | 0.0020 | 1 | 08/14/18 14:31 | NA | |
| Phosphorus, Dissolved | 365.1 | 0.0050 U | mg/L | 0.0050 | 1 | 08/06/18 17:58 | 08/01/18 | |
| Phosphorus, Total | 365.1 | 0.0050 U | mg/L | 0.0050 | 1 | 08/06/18 18:33 | 08/01/18 | |
| Sulfate | 300.0 | 0.20 U | mg/L | 0.20 | 1 | 08/08/18 02:25 | NA | |

Analytical Report

Client: New York State DEC

LCI 2018/LCI2018

Sample Matrix: Water

Project:

Sample Name:

Service Request: R1806972

Date Collected: NA

Date Received: NA

Method Blank Basis: NA

Lab Code: R1806972-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 | 08/06/18 12:20 | |

QA/QC Report

New York State DEC **Client: Service Request:** R1806972 **Project:** LCI 2018/LCI2018 **Date Collected:** 07/24/18 **Sample Matrix:** Water **Date Received:** 07/25/18 **Date Analyzed:** 08/10/18 **Date Extracted:** 08/7/18

Duplicate Matrix Spike Summary

Nitrogen, Total Kjeldahl (TKN)

 Sample Name:
 18BLK102
 Units:
 mg/L

 Lab Code:
 R1806972-003
 Basis:
 NA

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

Matrix Spike Duplicate Matrix Spike

R1806972-003MS R1806972-003DMS

| | Sample | | Spike | | | Spike | | % Rec | | RPD |
|--------------------------------|--------|--------|--------|-------|--------|--------|-------|--------|-----|-------|
| Analyte Name | Result | Result | Amount | % Rec | Result | Amount | % Rec | Limits | RPD | Limit |
| Nitrogen, Total Kjeldahl (TKN) | 0.19 | 2.40 | 2.50 | 88 | 2.39 | 2.50 | 88 | 75-125 | <1 | 20 |

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

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

QA/QC Report

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

Water

LCI 2018/LCI2018

Service Request: Date Collected: R1806972

Date Received:

07/24/18 07/25/18

Date Analyzed:

08/8/18

Duplicate Matrix Spike Summary

Sulfate

Sample Name: 18BLK104

Units:

mg/L

Lab Code:

Sample Matrix:

R1806972-007

Basis:

NA

Analysis Method: 300.0

Matrix Spike

Duplicate Matrix Spike

R1806972-007MS

R1806972-007DMS

| | Sample | | Spike | | | Spike | | % Rec | | RPD |
|--------------|--------|--------|--------|-------|--------|--------|-------|--------|-----|-------|
| Analyte Name | Result | Result | Amount | % Rec | Result | Amount | % Rec | Limits | RPD | Limit |
| Sulfate | 3.8 | 23.3 | 20.0 | 98 | 23.3 | 20.0 | 98 | 75-125 | <1 | 20 |

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

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

QA/QC Report

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

tate DEC Service Request:
CI2018 Date Collected:

 Sample Matrix:
 Water
 Date Received:
 07/25/18

 Date Analyzed:
 08/6/18

Date Analyzed: 08/6/18
Date Extracted: 08/1/18

R1806972

07/23/18

Duplicate Matrix Spike Summary Phosphorus, Total

 Sample Name:
 18BLK111
 Units: mg/L

 Lab Code:
 R1806972-009
 Basis: NA

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

Matrix Spike Duplicate Matrix Spike

R1806972-009MS R1806972-009DMS

RPD Sample Spike **Spike** % Rec Analyte Name Result Result Amount % Rec Result Amount % Rec Limits **RPD** Limit Phosphorus, Total 0.0441 0.0667 0.0250 90 0.0670 0.0250 92 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

Water

Service Request: Date Collected:

R1806972

Date Received:

07/23/18 07/25/18

Date Analyzed: Date Extracted: 08/6/18 08/1/18

Duplicate Matrix Spike Summary Phosphorus, Dissolved

Sample Name: 18BLK106 Diss Lab Code:

R1806972-014

Units: Basis:

mg/L NA

Analysis Method:

Prep Method:

Sample Matrix:

365.1 Method

Duplicate Matrix Spike

Matrix Spike R1806972-014MS

R1806972-014DMS

| | Sample | | Spike | | | Spike | | % Rec | | RPD |
|-----------------------|--------|--------|--------|-------|--------|--------|-------|--------|-----|-------|
| Analyte Name | Result | Result | Amount | % Rec | Result | Amount | % Rec | Limits | RPD | Limit |
| Phosphorus, Dissolved | 0.0114 | 0.0350 | 0.0250 | 94 | 0.0349 | 0.0250 | 94 | 75-125 | <1 | 20 |

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

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

QA/QC Report

Client: New York State DEC

Project: LCI 2018/LCI2018

Sample Matrix: Water

Service Request:R1806972

Date Collected:07/23/18 **Date Received:**07/25/18

Date Analyzed:07/28/18 - 08/14/18

Duplicate Matrix Spike Summary General Chemistry Parameters

 Sample Name:
 18BLK997
 Units:mg/L

 Lab Code:
 R1806972-023
 Basis:NA

Matrix SpikeDuplicate Matrix SpikeR1806972-023MSR1806972-023DMS

| | | Sample | | Spike | % | | Spike | % | % Rec | | RPD |
|------------------------------------|--------------|----------|--------|--------|----------|--------|--------|----------|--------|-----|-------|
| Analyte Name | Method | Result | Result | Amount | Rec | Result | Amount | Rec | Limits | RPD | Limit |
| Ammonia as Nitrogen, undistilled A | STM D6919-09 | 0.0050 U | 0.492 | 0.500 | 98 | 0.497 | 0.500 | 99 | 75-125 | 1 | 20 |
| Nitrate+Nitrite as Nitrogen | 353.2 | 0.0021 | 0.490 | 0.500 | 98 | 0.489 | 0.500 | 97 | 75-125 | <1 | 20 |

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

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

QA/QC Report

Client: New York State DEC **Service Request:** R1806972 **Project:** LCI 2018/LCI2018 **Date Collected:** 07/24/18 **Sample Matrix:** Water **Date Received:** 07/25/18 Date Analyzed: 08/10/18 **Date Extracted:** 08/7/18

> **Duplicate Matrix Spike Summary** Nitrogen, Total Kjeldahl (TKN)

Sample Name: 18BLK996

Units: mg/L Lab Code: R1806972-025 **Basis:** NA

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

> **Matrix Spike Duplicate Matrix Spike** R1806972-025MS R1806972-025DMS

RPD Sample **Spike Spike** % Rec Analyte Name Result Result **Amount** % Rec Result Amount % Rec Limits **RPD** Limit Nitrogen, Total Kjeldahl (TKN) 0.18 2.39 2.50 88 2.46 2.50

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

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

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: New York State DEC

Project

New York State DEC

LCI 2018/LCI2018

Service Request: R1806972

Date Collected: 07/24/18

Sample Matrix: Water Date Received: 07/25/18

Date Analyzed: 07/25/18

Replicate Sample Summary General Chemistry Parameters

Sample Name: 18BLK104 Units: cm-1

Lab Code: R1806972-007 **Basis:** NA

Duplicate Sample R1806972-

Sample 007DUP

Analyte NameAnalysis MethodMRLResultResultAverageRPDRPD LimitUV254SM 5910 B-0.1180.1220.120320

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: R1806972

Date Analyzed: 07/27/18 - 08/10/18

Lab Control Sample Summary General Chemistry Parameters

Units:mg/L Basis:NA

Lab Control Sample

R1806972-LCS1

| Analyte Name | Analytical Method | Result | Spike Amount | % Rec | % Rec Limits |
|----------------------------------|--------------------------|--------|--------------|-------|--------------|
| Alkalinity, Total as CaCO3 | SM 2320 B-1997(2011) | 19.2 | 20.0 | 96 | 70-130 |
| Ammonia as Nitrogen, undistilled | ASTM D6919-09 | 0.489 | 0.500 | 98 | 70-130 |
| Carbon, Dissolved Organic (DOC) | SM 5310 C-2000(2011) | 10.1 | 10.0 | 101 | 70-130 |
| Carbon, Total Organic (TOC) | SM 5310 C-2000(2011) | 10.1 | 10.0 | 101 | 70-130 |
| Nitrate+Nitrite as Nitrogen | 353.2 | 0.483 | 0.500 | 97 | 70-130 |
| Nitrogen, Total Kjeldahl (TKN) | 351.2 | 2.28 | 2.50 | 91 | 70-130 |
| Phosphorus, Dissolved | 365.1 | 0.0244 | 0.0250 | 98 | 70-130 |
| Phosphorus, Total | 365.1 | 0.0248 | 0.0250 | 99 | 70-130 |
| Sulfate | 300.0 | 2.03 | 2.00 | 101 | 70-130 |

QA/QC Report

Client: New York State DEC

Project: LCI 2018/LCI2018

Sample Matrix: Water

Service Request: R1806972

Date Analyzed: 07/27/18 - 08/14/18

Lab Control Sample Summary General Chemistry Parameters

Units:mg/L Basis:NA

Lab Control Sample

R1806972-LCS2

| Analyte Name | Analytical Method | Result | Spike Amount | % Rec | % Rec Limits |
|----------------------------------|--------------------------|--------|--------------|-------|--------------|
| Alkalinity, Total as CaCO3 | SM 2320 B-1997(2011) | 17.6 | 20.0 | 88 | 70-130 |
| Ammonia as Nitrogen, undistilled | ASTM D6919-09 | 0.490 | 0.500 | 98 | 70-130 |
| Carbon, Dissolved Organic (DOC) | SM 5310 C-2000(2011) | 10.1 | 10.0 | 101 | 70-130 |
| Carbon, Total Organic (TOC) | SM 5310 C-2000(2011) | 9.92 | 10.0 | 99 | 70-130 |
| Nitrate+Nitrite as Nitrogen | 353.2 | 0.496 | 0.500 | 99 | 70-130 |
| Phosphorus, Dissolved | 365.1 | 0.0248 | 0.0250 | 99 | 70-130 |
| Phosphorus, Total | 365.1 | 0.0242 | 0.0250 | 97 | 70-130 |
| Sulfate | 300.0 | 2.05 | 2.00 | 102 | 70-130 |

QA/QC Report

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

Sample Matrix:

Water

Service Request: R1806972 Date Analyzed: 08/06/18

Lab Control Sample Summary General Chemistry Parameters

Units:mg/L Basis:NA

Lab Control Sample

R1806972-LCS3

| Analyte Name | Analytical Method | Result | Spike Amount | % Rec | % Rec Limits |
|----------------------------------|--------------------------|--------|--------------|-------|--------------|
| Ammonia as Nitrogen, undistilled | ASTM D6919-09 | 0.507 | 0.500 | 101 | 70-130 |