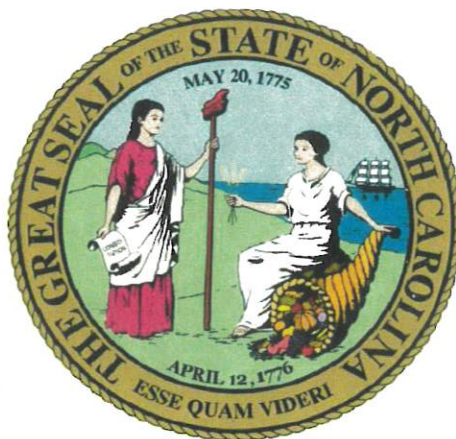


DIVISION OF WATER RESOURCES LABORATORY CERTIFICATION BRANCH

In accordance with the provisions of N.C.G.S. 143-215.3 (a) (1), 143-215.3 (a)(10) and NCAC 2H.0800:



2024

Element One Inc.


Is hereby certified to perform environmental analysis as listed on the Laboratory's Certified Parameter List and report monitoring data to DEQ for compliance with NPDES effluent, surface water, groundwater, soil and pretreatment regulations.

By reference 15A NCAC 2H .0800 is made a part of this certificate.

This certificate does not guarantee validity of data generated, but indicates the methodology, equipment, quality control procedures, records, and proficiency of the laboratory have been examined and found to be acceptable.

This certificate shall be valid until 12/31/2024

Certificate No. 604


Todd Crawford

North Carolina Wastewater/Groundwater Laboratory Certification

Certified Parameters Listing

Lab Name: Element One Inc.
 Address: 8319-D Carolina Beach Rd
 Wilmington, NC 28412-

Certificate Number: 604
 Effective Date: 1/1/2024
 Expiration Date: 12/31/2024
 Date of Last Amendment: 8/31/2023

The above named laboratory, having duly met the requirements of 15A NCAC 2H.0800, is hereby certified for the measurement of the parameters listed below.

CERTIFIED PARAMETERS

<p>INORGANIC</p> <p>ACIDITY SM 2310 B-2011(Aqueous)</p> <p>ALKALINITY SM 2320 B-2011 (Aqueous)</p> <p>BACTERIA - COLIFORM FECAL IDEXX Colilert @18 (MPN) (Aqueous)</p> <p>BOD SM 5210 B-2016 (Aqueous)</p> <p>CBOD SM 5210 B-2016 (Aqueous)</p> <p>CHLORIDE SM 4500 CF B-2011 (Aqueous) EPA 300.0, Rev. 2.1, 1993 (Aqueous) EPA 300.0, Rev. 2.1, 1993 (Non-Aqueous)</p> <p>CHLORINE, TOTAL RESIDUAL Hach 8167 HR (Aqueous)</p> <p>COD Hach 8000 (Aqueous)</p> <p>COLOR, PC SM 2120 B-2011 (PtCo) (Aqueous)</p> <p>CONDUCTIVITY SM 2510 B-2011 (Aqueous)</p> <p>CYANIDE SW-846 9014 (Total) (Colorimetric) (Aqueous) SW-846 9014 (Total) (Colorimetric) (Non-Aqueous) SM 4500 CN⁻ E-2016 (Total) (Aqueous)</p> <p>DISSOLVED OXYGEN SM 4500 O C-2016 (Aqueous) SM 4500 O G-2016 (Aqueous)</p> <p>FLUORIDE SM 4500 F⁻ C-2011 (Aqueous) EPA 300.0, Rev. 2.1, 1993 (Aqueous) EPA 300.0, Rev. 2.1, 1993 (Non-Aqueous)</p>	<p>HARDNESS TOTAL - METALS SM 2340 B-2011 (Ca EPA 200.8, Rev. 5.4, 1994 + Mg EPA 200.8, Rev. 5.4, 1994) (Aqueous)</p> <p>HARDNESS TOTAL - WET CHEM SM 2340 C-2011 (Aqueous)</p> <p>IGNITABILITY SW-846 1030 (Non-Aqueous)</p> <p>MBAS SM 5540 C-2011 (Aqueous)</p> <p>NITROGEN, AMMONIA SM 4500 NH3 D-2011 (Aqueous)</p> <p>NITROGEN, NITRATE EPA 300.0, Rev. 2.1, 1993 (Aqueous) EPA 300.0, Rev. 2.1, 1993 (Non-Aqueous)</p> <p>NITROGEN, NITRITE SM 4500-NO2⁻ B-2011 (Aqueous) EPA 300.0, Rev. 2.1, 1993 (Aqueous) EPA 300.0, Rev. 2.1, 1993 (Non-Aqueous)</p> <p>NITROGEN, NO3 + NO2 SM 4500 NO3⁻ E-2016 (Aqueous) EPA 300.0, Rev. 2.1, 1993 (Aqueous) EPA 300.0, Rev. 2.1, 1993 (Non-Aqueous)</p> <p>NITROGEN, TOTAL KJELDAHL SM 4500 Norg C-2011 (SM 4500 NH3 D-2011) (Aqueous) SM 4500 Norg C-2011 (SM 4500 NH3 D-2011) (Non-Aqueous)</p> <p>ORGANIC CARBON, TOTAL SM 5310 B-2014 (Aqueous) SW-846 9060 A (Aqueous)</p> <p>pH SM 4500 H+B-2011 (Aqueous) SW-846 9040 C (Aqueous) SW-846 9045 D (Non-Aqueous)</p> <p>PHOSPHATE, ORTHO SM 4500 P E-2011 (Aqueous) EPA 300.0, Rev. 2.1, 1993 (Aqueous)</p>
---	---

This certification requires maintenance of an acceptable quality assurance program, use of approved methodology, and satisfactory performance on evaluation samples. Laboratories are subject to civil penalties and/or decertification for infractions as set forth in 15A NCAC 2H.0807.

North Carolina Wastewater/Groundwater Laboratory Certification

Certified Parameters Listing

Lab Name: Element One Inc.
 Address: 6319-D Carolina Beach Rd
 Wilmington, NC 28412-

Certificate Number: 604
 Effective Date: 1/1/2024
 Expiration Date: 12/31/2024
 Date of Last Amendment: 8/31/2023

The above named laboratory, having duly met the requirements of 15A NCAC 2H.0800, is hereby certified for the measurement of the parameters listed below.

CERTIFIED PARAMETERS

EPA 300.0, Rev. 2.1, 1993 (Non-Aqueous)

PHOSPHORUS, TOTAL

SM 4500 P E-2011 (Aqueous)

RESIDUE, DISSOLVED 180 C

SM 2540 C-2015 (Aqueous)

RESIDUE, SETTLEABLE

SM 2540 F-2015 (Aqueous)

RESIDUE, SUSPENDED

SM 2540 D-2015 (Aqueous)

RESIDUE, TOTAL

SM 2540 B-2015 (Aqueous)

SILICA - NUTRIENTS

SM 4500 SiO2 C-2011 (Aqueous)

SULFATE

SM 4500 SO4²⁻ D-2011 (Aqueous)

EPA 300.0, Rev. 2.1, 1993 (Aqueous)

EPA 300.0, Rev. 2.1, 1993 (Non-Aqueous)

SULFIDE

Hach 8131 (Aqueous)

SM 4500 S²⁻ D-2011 (Aqueous)

SW-846 9034 (Aqueous)

TEMPERATURE

SM 2550 B-2010 (Aqueous)

TURBIDITY

SM 2130 B-2011 (Aqueous)

METAL

ALUMINUM

EPA 200.8, Rev. 5.4, 1994 (Aqueous)

EPA 200.8, Rev. 5.4, 1994 (Non-Aqueous)

SW-846 6020 B (Aqueous)

SW-846 6020 B (Non-Aqueous)

ANTIMONY

EPA 200.8, Rev. 5.4, 1994 (Aqueous)

EPA 200.8, Rev. 5.4, 1994 (Non-Aqueous)

SW-846 6020 B (Aqueous)

SW-846 6020 B (Non-Aqueous)

ARSENIC

EPA 200.8, Rev. 5.4, 1994 (Aqueous)

EPA 200.8, Rev. 5.4, 1994 (Non-Aqueous)

SW-846 6020 B (Aqueous)

SW-846 6020 B (Non-Aqueous)

BARIUM

EPA 200.8, Rev. 5.4, 1994 (Aqueous)

EPA 200.8, Rev. 5.4, 1994 (Non-Aqueous)

SW-846 6020 B (Aqueous)

SW-846 6020 B (Non-Aqueous)

BERYLLIUM

EPA 200.8, Rev. 5.4, 1994 (Aqueous)

EPA 200.8, Rev. 5.4, 1994 (Non-Aqueous)

SW-846 6020 B (Aqueous)

SW-846 6020 B (Non-Aqueous)

BORON

EPA 200.8, Rev. 5.4, 1994 (Aqueous)

EPA 200.8, Rev. 5.4, 1994 (Non-Aqueous)

SW-846 6020 B (Aqueous)

SW-846 6020 B (Non-Aqueous)

CADMIUM

EPA 200.8, Rev. 5.4, 1994 (Aqueous)

EPA 200.8, Rev. 5.4, 1994 (Non-Aqueous)

SW-846 6020 B (Aqueous)

SW-846 6020 B (Non-Aqueous)

CALCIUM

EPA 200.8, Rev. 5.4, 1994 (Aqueous)

EPA 200.8, Rev. 5.4, 1994 (Non-Aqueous)

SW-846 6020 B (Aqueous)

SW-846 6020 B (Non-Aqueous)

CHROMIUM HEXAVALENT

SM 3500 Cr B-2011 (Aqueous)

North Carolina Wastewater/Groundwater Laboratory Certification

Certified Parameters Listing

Lab Name: Element One Inc.
Address: 6319-D Carolina Beach Rd
Wilmington, NC 28412-

Certificate Number: 604
Effective Date: 1/1/2024
Expiration Date: 12/31/2024
Date of Last Amendment: 8/31/2023

The above named laboratory, having duly met the requirements of 15A NCAC 2H.0800, is hereby certified for the measurement of the parameters listed below.

CERTIFIED PARAMETERS

EPA 218.6, Rev. 3.3, 1994 (Aqueous)
SW-846 7199 (Aqueous)
SW-846 7199 (Non-Aqueous)
CHROMIUM TOTAL
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Non-Aqueous)
SW-846 6020 B (Aqueous)
SW-846 6020 B (Non-Aqueous)
COBALT
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Non-Aqueous)
SW-846 6020 B (Aqueous)
SW-846 6020 B (Non-Aqueous)
COPPER
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Non-Aqueous)
SW-846 6020 B (Aqueous)
SW-846 6020 B (Non-Aqueous)
IRON
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Non-Aqueous)
SW-846 6020 B (Aqueous)
SW-846 6020 B (Non-Aqueous)
LEAD
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Non-Aqueous)
SW-846 6020 B (Aqueous)
SW-846 6020 B (Non-Aqueous)
MAGNESIUM
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Non-Aqueous)
SW-846 6020 B (Aqueous)
SW-846 6020 B (Non-Aqueous)
MANGANESE
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Non-Aqueous)
SW-846 6020 B (Aqueous)
SW-846 6020 B (Non-Aqueous)
MERCURY
EPA 245.1, Rev. 3.0, 1994 (Aqueous)
SW-846 7471 B (Non-Aqueous)
MOLYBDENUM
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Non-Aqueous)
SW-846 6020 B (Aqueous)
SW-846 6020 B (Non-Aqueous)
NICKEL
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Non-Aqueous)
SW-846 6020 B (Aqueous)
SW-846 6020 B (Non-Aqueous)
POTASSIUM
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Non-Aqueous)
SW-846 6020 B (Aqueous)
SW-846 6020 B (Non-Aqueous)
SELENIUM
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Non-Aqueous)
SW-846 6020 B (Aqueous)
SW-846 6020 B (Non-Aqueous)
SILVER
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Non-Aqueous)
SW-846 6020 B (Aqueous)
SW-846 6020 B (Non-Aqueous)
SODIUM
EPA 200.8, Rev. 5.4, 1994 (Aqueous)

North Carolina Wastewater/Groundwater Laboratory Certification

Certified Parameters Listing

Lab Name: Element One Inc.
Address: 8319-D Carolina Beach Rd
Wilmington, NC 28412-

Certificate Number: 604
Effective Date: 1/1/2024
Expiration Date: 12/31/2024
Date of Last Amendment: 8/31/2023

The above named laboratory, having duly met the requirements of 15A NCAC 2H.0800, is hereby certified for the measurement of the parameters listed below.

CERTIFIED PARAMETERS

EPA 200.8, Rev. 5.4, 1994 (Non-Aqueous)

SW-846 6020 B (Aqueous)

SW-846 6020 B (Non-Aqueous)

STRONTIUM

SW-846 6020 B (Aqueous)

SW-846 6020 B (Non-Aqueous)

THALLIUM

EPA 200.8, Rev. 5.4, 1994 (Aqueous)

EPA 200.8, Rev. 5.4, 1994 (Non-Aqueous)

SW-846 6020 B (Aqueous)

SW-846 6020 B (Non-Aqueous)

TIN

EPA 200.8, Rev. 5.4, 1994 (Aqueous)

EPA 200.8, Rev. 5.4, 1994 (Non-Aqueous)

SW-846 6020 B (Aqueous)

SW-846 6020 B (Non-Aqueous)

TITANIUM

EPA 200.8, Rev. 5.4, 1994 (Aqueous)

EPA 200.8, Rev. 5.4, 1994 (Non-Aqueous)

SW-846 6020 B (Aqueous)

SW-846 6020 B (Non-Aqueous)

VANADIUM

EPA 200.8, Rev. 5.4, 1994 (Aqueous)

EPA 200.8, Rev. 5.4, 1994 (Non-Aqueous)

SW-846 6020 B (Aqueous)

SW-846 6020 B (Non-Aqueous)

ZINC

EPA 200.8, Rev. 5.4, 1994 (Aqueous)

EPA 200.8, Rev. 5.4, 1994 (Non-Aqueous)

SW-846 6020 B (Aqueous)

SW-846 6020 B (Non-Aqueous)