

STATE OF NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY

**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:



2021

Element One Inc.

Is hereby certified to perform environmental analysis as listed on Attachment I and report monitoring data to DEQ for compliance with NPDES effluent, surface water, groundwater, 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 12/31/2021

Certificate No. 604

Todd Crawford

Todd Crawford

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: 1/1/2021
 Expiration Date: 12/31/2021
 Date of Last Amendment: 12/3/2019

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

INORGANIC

ACIDITY	EPA 300.0, Rev. 2.1, 1993 (Aqueous)
SM 2310 B-2011(Aqueous)	EPA 300.0, Rev. 2.1, 1993 (Non-Aqueous)
ALKALINITY	HARDNESS TOTAL - METALS
SM 2320 B-2011 (Aqueous)	SM 2340 B-2011 (Ca EPA 200.8, Rev. 5.4, 1994 + Mg EPA 200.8, Rev. 5.4, 1994) (Aqueous)
BACTERIA - COLIFORM FECAL	HARDNESS TOTAL - WET CHEM
IDEXX Colilert @18 (MPN) (Aqueous)	SM 2340 C-2011 (Aqueous)
BACTERIA - COLIFORM TOTAL	IGNITABILITY
SM 9222 B-2006 (MF) (Aqueous)	SW-846 1030 (Non-Aqueous)
BOD	MBAS
SM 5210 B-2011 (Aqueous)	SM 5540 C-2011 (Aqueous)
CBOD	NITROGEN, AMMONIA
SM 5210 B-2011 (Aqueous)	SM 4500 NH3 D-2011 (Aqueous)
CHLORIDE	NITROGEN, NITRATE
SM 4500 Cl ⁻ B-2011 (Aqueous)	EPA 300.0, Rev. 2.1, 1993 (Aqueous)
EPA 300.0, Rev. 2.1, 1993 (Aqueous)	EPA 300.0, Rev. 2.1, 1993 (Non-Aqueous)
EPA 300.0, Rev. 2.1, 1993 (Non-Aqueous)	NITROGEN, NITRITE
CHLORINE, TOTAL RESIDUAL	SM 4500-NO ₂ ⁻ B-2011 (Aqueous)
Hach 8167 HR (Aqueous)	EPA 300.0, Rev. 2.1, 1993 (Aqueous)
COD	EPA 300.0, Rev. 2.1, 1993 (Non-Aqueous)
Hach 8000 (Aqueous)	NITROGEN, NO ₃ + NO ₂
COLOR, PC	SM 4500 NO ₃ ⁻ E-2011 (Aqueous)
SM 2120 B-2011 (PtCo) (Aqueous)	EPA 300.0, Rev. 2.1, 1993 (Aqueous)
CONDUCTIVITY	EPA 300.0, Rev. 2.1, 1993 (Non-Aqueous)
SM 2510 B-2011 (Aqueous)	NITROGEN, TOTAL KJELDAHL
CYANIDE	SM 4500 Norg C-2011 (SM 4500 NH ₃ D-2011) (Aqueous)
SW-846 9014 (Total) (Colorimetric) (Aqueous)	SM 4500 Norg C-2011 (SM 4500 NH ₃ D-2011) (Non-Aqueous)
SW-846 9014 (Total) (Colorimetric) (Non-Aqueous)	ORGANIC CARBON, TOTAL
SM 4500 CN ⁻ E-2011 (Total) (Aqueous)	SM 5310 B-2011 (Combustion) (Aqueous)
DISSOLVED OXYGEN	SW-846 9060 A (Combustion) (Aqueous)
SM 4500 O G-2011 (Aqueous)	pH
SM 4500 O C-2011 (Aqueous)	SM 4500 H+B-2011 (Aqueous)
FLUORIDE	SW-846 9040 C (Aqueous)
SM 4500 F ⁻ C-2011 (Aqueous)	SW-846 9045 D (Non-Aqueous)
	PHOSPHATE, ORTHO

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SM 4500 P E-2011 (Aqueous)
 EPA 300.0, Rev. 2.1, 1993 (Aqueous)
 EPA 300.0, Rev. 2.1, 1993 (Non-Aqueous)
 PHOSPHORUS, TOTAL
 SM 4500 P E-2011 (Aqueous)
 RESIDUE, DISSOLVED 180 C
 SM 2540 C-2011 (Aqueous)
 RESIDUE, SETTLEABLE
 SM 2540 F-2011 (Aqueous)
 RESIDUE, SUSPENDED
 SM 2540 D-2011 (Aqueous)
 RESIDUE, TOTAL
 SM 2540 B-2011 (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)

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CERTIFIED PARAMETERS

CHROMIUM HEXAVALENT

SM 3500-Cr-B-2011 (Aqueous)
EPA 218.6, Rev. 3.3, 1994 (Aqueous)
SW-846 7199 (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

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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)
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)

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