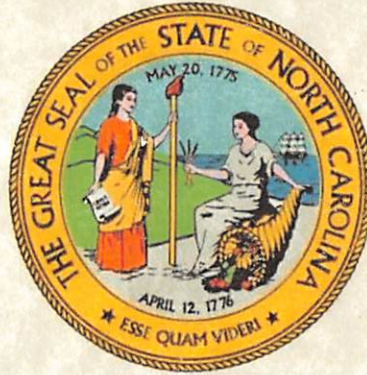


STATE OF NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY

**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:



2025

Enthalpy Analytical LLC

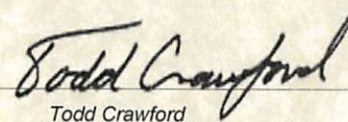
Is hereby certified to perform environmental analysis as listed on the Laboratory's Certified Parameter List and report monitoring data to DEQ for compliance with NPDES effluent, surface water, groundwater, soil and pretreatment regulations.

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.

12/31/2025

Certificate No. 495


Todd Crawford

North Carolina Wastewater/Groundwater Laboratory Certification

Certified Parameters Listing

Lab Name: Enthalpy Analytical LLC
Address: 1941 Reymet Road
Richmond, VA 23237-

Certificate Number: 495
Effective Date: 1/1/2025
Expiration Date: 12/31/2025
Date of Last Amendment: 12/4/2024

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CERTIFIED PARAMETERS

INORGANIC

ALKALINITY

SM 2320 B-2021 (Aqueous)

BACTERIA - COLIFORM FECAL

IDEXX Colilert @18 (MPN) (Aqueous)

BOD

SM 5210 B-2016 (Aqueous)

BROMIDE

EPA 300.0, Rev. 2.1, 1993 (Aqueous)

SW-846 9056 A (Aqueous)

CBOD

SM 5210 B-2016 (Aqueous)

CHLORIDE

EPA 300.0, Rev. 2.1, 1993 (Aqueous)

SW-846 9056 A (Aqueous)

SW-846 9056 A (Non-Aqueous)

COD

SM 5220 D-2011 (Aqueous)

CONDUCTIVITY

SM 2510 B-2021 (Aqueous)

CYANIDE

Lachat 10-204-00-1-X, Rev. 2.2, 2005 (SM 4500-CN E -2021 Automated) (Total) (Aqueous)

SW-846 9012 B (Total) (Aqueous)

SW-846 9012 B (Total) (Non-Aqueous)

FLASH POINT

SW-846 1010 B (ASTM D93-80) (Aqueous)

FLUORIDE

EPA 300.0, Rev. 2.1, 1993 (Aqueous)

SW-846 9056 A (Non-Aqueous)

HARDNESS TOTAL - METALS

SM 2340 B-2021 (Ca EPA 200.7, Rev. 4.4, 1994 + Mg EPA 200.7, Rev. 4.4, 1994) (Aqueous)

SM 2340 B-2021 (Ca SM 3120B-2020 + Mg SM 3120B-2020) (Aqueous)

INORGANIC PHENOLS

EPA 420.1, Rev. 1978 (Aqueous)

NITROGEN, AMMONIA

EPA 350.1, Rev. 2.0, 1993 (Aqueous)

NITROGEN, NITRATE

SM 4500-NO3⁻ F-2019 (Aqueous)

EPA 300.0, Rev. 2.1, 1993 (Aqueous)

SW-846 9056 A (Non-Aqueous)

NITROGEN, NITRITE

SM 4500-NO2⁻ B-2021 (Automated) (Aqueous)

EPA 300.0, Rev. 2.1, 1993 (Aqueous)

SW-846 9056 A (Aqueous)

SW-846 9056 A (Non-Aqueous)

NITROGEN, NO3 + NO2

SM 4500-NO3⁻ F-2019 (Aqueous)

NITROGEN, TOTAL KJELDAHL

EPA 351.2, Rev. 2.0, 1993 (Aqueous)

OIL & GREASE

EPA 1664 Rev. B (Aqueous)

ORGANIC CARBON, TOTAL

SM 5310 C-2014 (Aqueous)

SW-846 9060 A (Aqueous)

PAINT FILTER LIQUIDS

SW-846 9095 B (Aqueous)

SW-846 9095 B (Non-Aqueous)

pH

SW-846 9040 C (Aqueous)

SW-846 9045 D (Non-Aqueous)

PHOSPHATE, ORTHO

SM 4500-P E-2021 (Aqueous)

PHOSPHORUS, TOTAL

SM 4500-P E-2021 (Aqueous)

RESIDUE, DISSOLVED 180 C

SM 2540 C-2020 (Aqueous)

RESIDUE, SETTLEABLE

SM 2540 F-2020 (Aqueous)

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CERTIFIED PARAMETERS

RESIDUE, SUSPENDED

SM 2540 D-2020 (Aqueous)

RESIDUE, TOTAL

SM 2540 B-2020 (Aqueous)

SM 2540 G-2020 (Non-Aqueous)

RESIDUE, VOLATILE

SM 2540 G-2020 (Non-Aqueous)

SILICA - METALS

EPA 200.7, Rev. 4.4, 1994 (Aqueous)

SW-846 6010 D (Aqueous)

SW-846 6010 D (Non-Aqueous)

SULFATE

EPA 300.0, Rev. 2.1, 1993 (Aqueous)

SW-846 9056 A (Aqueous)

SW-846 9056 A (Non-Aqueous)

SULFIDE

SM 4500-S²⁻ D-2021 (Aqueous)

SM 4500-S²⁻ F-2021 (Aqueous)

TURBIDITY

SM 2130 B-2020 (Aqueous)

METAL

ALUMINUM

EPA 200.7, Rev. 4.4, 1994 (Aqueous)

SW-846 6010 D (Aqueous)

SW-846 6010 D (Non-Aqueous)

EPA 200.8, Rev. 5.4, 1994 (Aqueous)

SW-846 6020 B (Aqueous)

ANTIMONY

EPA 200.7, Rev. 4.4, 1994 (Aqueous)

SW-846 6010 D (Aqueous)

SW-846 6010 D (Non-Aqueous)

EPA 200.8, Rev. 5.4, 1994 (Aqueous)

SW-846 6020 B (Aqueous)

SW-846 6020 B (Non-Aqueous)

ARSENIC

EPA 200.7, Rev. 4.4, 1994 (Aqueous)

SW-846 6010 D (Aqueous)

SW-846 6010 D (Non-Aqueous)

EPA 200.8, Rev. 5.4, 1994 (Aqueous)

SW-846 6020 B (Aqueous)

SW-846 6020 B (Non-Aqueous)

BARIUM

EPA 200.7, Rev. 4.4, 1994 (Aqueous)

SW-846 6010 D (Aqueous)

SW-846 6010 D (Non-Aqueous)

EPA 200.8, Rev. 5.4, 1994 (Aqueous)

SW-846 6020 B (Aqueous)

SW-846 6020 B (Non-Aqueous)

BERYLLIUM

EPA 200.7, Rev. 4.4, 1994 (Aqueous)

SW-846 6010 D (Aqueous)

SW-846 6010 D (Non-Aqueous)

EPA 200.8, Rev. 5.4, 1994 (Aqueous)

SW-846 6020 B (Aqueous)

SW-846 6020 B (Non-Aqueous)

BORON

EPA 200.7, Rev. 4.4, 1994 (Aqueous)

SW-846 6010 D (Aqueous)

SW-846 6010 D (Non-Aqueous)

CADMIUM

EPA 200.7, Rev. 4.4, 1994 (Aqueous)

SW-846 6010 D (Aqueous)

SW-846 6010 D (Non-Aqueous)

EPA 200.8, Rev. 5.4, 1994 (Aqueous)

SW-846 6020 B (Aqueous)

SW-846 6020 B (Non-Aqueous)

CALCIUM

EPA 200.7, Rev. 4.4, 1994 (Aqueous)

North Carolina Wastewater/Groundwater Laboratory Certification

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CERTIFIED PARAMETERS

SW-846 6010 D (Aqueous)
SW-846 6010 D (Non-Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
SW-846 6020 B (Aqueous)
CHROMIUM HEXAVALENT
SM 3500-Cr B-2020 (Aqueous)
SW-846 7196 A (Aqueous)
SW-846 7196 A (Non-Aqueous)
EPA 218.6, Rev. 3.3, 1994 (Aqueous)
SW-846 7199 (Aqueous)
SW-846 7199 (Non-Aqueous)
CHROMIUM TOTAL
EPA 200.7, Rev. 4.4, 1994 (Aqueous)
SW-846 6010 D (Aqueous)
SW-846 6010 D (Non-Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
SW-846 6020 B (Aqueous)
SW-846 6020 B (Non-Aqueous)
COBALT
EPA 200.7, Rev. 4.4, 1994 (Aqueous)
SW-846 6010 D (Aqueous)
SW-846 6010 D (Non-Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
SW-846 6020 B (Aqueous)
SW-846 6020 B (Non-Aqueous)
COPPER
EPA 200.7, Rev. 4.4, 1994 (Aqueous)
SW-846 6010 D (Aqueous)
SW-846 6010 D (Non-Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
SW-846 6020 B (Aqueous)
SW-846 6020 B (Non-Aqueous)
IRON
EPA 200.7, Rev. 4.4, 1994 (Aqueous)
SW-846 6010 D (Aqueous)
SW-846 6010 D (Non-Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
SW-846 6020 B (Aqueous)
SW-846 6020 B (Non-Aqueous)
LEAD
EPA 200.7, Rev. 4.4, 1994 (Aqueous)
SW-846 6010 D (Aqueous)
SW-846 6010 D (Non-Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
SW-846 6020 B (Aqueous)
SW-846 6020 B (Non-Aqueous)
LITHIUM
SW-846 6010 D (Aqueous)
SW-846 6020 B (Aqueous)
MAGNESIUM
EPA 200.7, Rev. 4.4, 1994 (Aqueous)
SW-846 6010 D (Aqueous)
SW-846 6010 D (Non-Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
SW-846 6020 B (Aqueous)
MANGANESE
EPA 200.7, Rev. 4.4, 1994 (Aqueous)
SW-846 6010 D (Aqueous)
SW-846 6010 D (Non-Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)
SW-846 6020 B (Aqueous)
SW-846 6020 B (Non-Aqueous)
MERCURY
EPA 245.1, Rev. 3.0, 1994 (Aqueous)
SW-846 7470 A (Aqueous)
SW-846 7471 B (Non-Aqueous)
SW-846 6020 B (Aqueous)
MOLYBDENUM
EPA 200.7, Rev. 4.4, 1994 (Aqueous)

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CERTIFIED PARAMETERS

SW-846 6010 D (Aqueous)	SW-846 6010 D (Aqueous)
SW-846 6010 D (Non-Aqueous)	SW-846 6010 D (Non-Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)	EPA 200.8, Rev. 5.4, 1994 (Aqueous)
SW-846 6020 B (Aqueous)	SW-846 6020 B (Aqueous)
SW-846 6020 B (Non-Aqueous)	
NICKEL	STRONTIUM
EPA 200.7, Rev. 4.4, 1994 (Aqueous)	EPA 200.7, Rev. 4.4, 1994 (Aqueous)
SW-846 6010 D (Aqueous)	SW-846 6010 D (Aqueous)
SW-846 6010 D (Non-Aqueous)	SW-846 6010 D (Non-Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)	SW-846 6020 B (Aqueous)
SW-846 6020 B (Aqueous)	THALLIUM
SW-846 6020 B (Non-Aqueous)	EPA 200.7, Rev. 4.4, 1994 (Aqueous)
POTASSIUM	SW-846 6010 D (Aqueous)
EPA 200.7, Rev. 4.4, 1994 (Aqueous)	SW-846 6010 D (Non-Aqueous)
SW-846 6010 D (Aqueous)	EPA 200.8, Rev. 5.4, 1994 (Aqueous)
SW-846 6010 D (Non-Aqueous)	SW-846 6020 B (Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)	SW-846 6020 B (Non-Aqueous)
SW-846 6020 B (Aqueous)	TIN
SELENIUM	EPA 200.7, Rev. 4.4, 1994 (Aqueous)
EPA 200.7, Rev. 4.4, 1994 (Aqueous)	SW-846 6010 D (Aqueous)
SW-846 6010 D (Aqueous)	SW-846 6010 D (Non-Aqueous)
SW-846 6010 D (Non-Aqueous)	EPA 200.8, Rev. 5.4, 1994 (Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)	SW-846 6020 B (Aqueous)
SW-846 6020 B (Aqueous)	TITANIUM
SW-846 6020 B (Non-Aqueous)	EPA 200.7, Rev. 4.4, 1994 (Aqueous)
SILVER	SW-846 6010 D (Aqueous)
EPA 200.7, Rev. 4.4, 1994 (Aqueous)	SW-846 6010 D (Non-Aqueous)
SW-846 6010 D (Aqueous)	EPA 200.8, Rev. 5.4, 1994 (Aqueous)
SW-846 6010 D (Non-Aqueous)	SW-846 6020 B (Aqueous)
EPA 200.8, Rev. 5.4, 1994 (Aqueous)	VANADIUM
SW-846 6020 B (Aqueous)	EPA 200.7, Rev. 4.4, 1994 (Aqueous)
SW-846 6020 B (Non-Aqueous)	SW-846 6010 D (Aqueous)
SODIUM	SW-846 6010 D (Non-Aqueous)
EPA 200.7, Rev. 4.4, 1994 (Aqueous)	EPA 200.8, Rev. 5.4, 1994 (Aqueous)
	SW-846 6020 B (Aqueous)

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CERTIFIED PARAMETERS

SW-846 6020 B (Non-Aqueous)

ZINC

EPA 200.7, Rev. 4.4, 1994 (Aqueous)

SW-846 6010 D (Aqueous)

SW-846 6010 D (Non-Aqueous)

EPA 200.8, Rev. 5.4, 1994 (Aqueous)

SW-846 6020 B (Aqueous)

SW-846 6020 B (Non-Aqueous)

ORGANIC

1,2-DIBROMOETHANE (EDB)

SW-846 8011 (Includes DBCP) (Aqueous)

BASE NEUTRAL/ACID, ORGANICS

EPA 625.1, Dec 2016 (Aqueous)

SW-846 8270 E (Aqueous)

SW-846 8270 E (Non-Aqueous)

CHLORINATED ACID HERBICIDES

SW-846 8151 A (Aqueous)

SW-846 8151 A (Non-Aqueous)

EXTRACTABLE PETROLEUM HYDROCARBONS

MADEP, December 2019, Rev. 2.1 (Aqueous)

MADEP, December 2019, Rev. 2.1 (Non-Aqueous)

PESTICIDES, ORGANOCHLORINE

EPA 608.3, Dec 2016 (Aqueous)

SW-846 8081 B (Aqueous)

SW-846 8081 B (Non-Aqueous)

PESTICIDES, ORGANOPHOSPHORUS

SW-846 8141 B (Aqueous)

SW-846 8141 B (Non-Aqueous)

POLYCHLORINATED BIPHENYLS (PCBs)

EPA 608.3, Dec 2016 (Aqueous)

SW-846 8082 A (Aqueous)

SW-846 8082 A (Non-Aqueous)

SW-846 8082 A (Oil)

PURGEABLE, ORGANICS

EPA 624.1, Dec 2016 (Aqueous)

SM 6200 B-2020 (Aqueous)

SW-846 8260 D (Aqueous)

SW-846 8260 D (Non-Aqueous)

TOTAL ORGANIC HALIDES

SW-846 9020 B (Aqueous)

TPH DIESEL RANGE, ORGANICS

SW-846 8015 C (Aqueous)

SW-846 8015 C (Non-Aqueous)

TPH GASOLINE RANGE, ORGANICS

SW-846 8015 C (Aqueous)

SW-846 8015 C (Non-Aqueous)

VOLATILE PETROLEUM HYDROCARBONS

MADEP, Feb 2018, Rev. 2.1 (Aqueous)

MADEP, Feb 2018, Rev. 2.1 (Non-Aqueous)