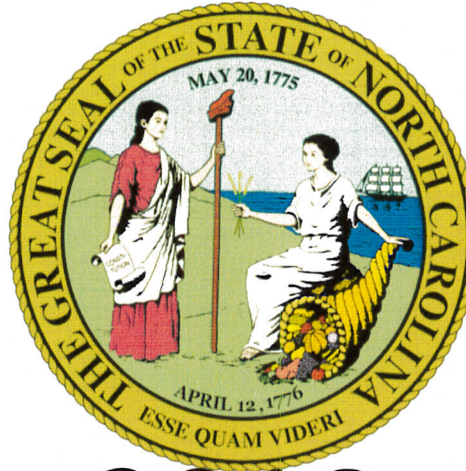


DIVISION OF WATER RESOURCES LABORATORY CERTIFICATION BRANCH

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



2018

Rogers & Callcott Engineers Inc.

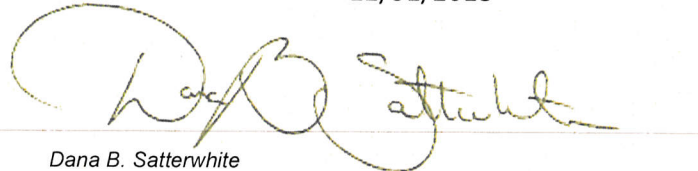
Is hereby certified to perform environmental analysis as listed on Attachment I and report monitoring data to DEQ for compliance with NPDES effluent, surface water, groundwater, and pretreatment regulations.

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 12/31/2018

Certificate No. 27



Dana B. Satterwhite

North Carolina Wastewater/Groundwater Laboratory Certification

Certified Parameters Listing

Lab Name: Rogers & Callcott Engineers Inc.
 Address: P.O. Box 5655
 Greenville, SC 29606-

Certificate Number: 27
 Effective Date: 1/1/2018
 Expiration Date: 12/31/2018
 Date of Last Amendment: 5/14/2018

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>ALKALINITY</p> <p>SM 2320 B-2011 (Aqueous)</p> <p>BACTERIA - COLIFORM FECAL</p> <p>IDEXX Colilert®18 (MPN) (Aqueous)</p> <p>SM 9221C E-2006 (MPN) (Aqueous)</p> <p>SM 9221C E-2006 (MPN) 24hr 503 (Non-Aqueous)</p> <p>BACTERIA - E. coli</p> <p>IDEXX Colilert® (24 hr) (MPN) (Aqueous)</p> <p>BOD</p> <p>SM 5210 B-2011 (Aqueous)</p> <p>CHLORIDE</p> <p>EPA 300.0, Rev. 2.1, 1993 (Aqueous)</p> <p>EPA 300.0, Rev. 2.1, 1993 (Non-Aqueous)</p> <p>SW-846 9056 A (Aqueous)</p> <p>SW-846 9056 A (Non-Aqueous)</p> <p>CHLORINE, TOTAL RESIDUAL</p> <p>SM 4500 Cl G-2011 (Aqueous)</p> <p>COD</p> <p>EPA 410.4, Rev. 2.0, 1993 (Aqueous)</p> <p>COLOR, ADMI</p> <p>SM 2120 E-1993 (ADMI) (Aqueous)</p> <p>COLOR, PC</p> <p>SM 2120 B-2011 (PtCo) (Aqueous)</p> <p>CONDUCTIVITY</p> <p>SM 2510 B-2011 (Aqueous)</p> <p>SW-846 9050 A (Aqueous)</p> <p>CYANIDE</p> <p>SW-846 9014 (Total) (Colorimetric) (Aqueous)</p> <p>SW-846 9014 (Total) (Colorimetric) (Non-Aqueous)</p> <p>SM 4500 CN⁻ E-2011 (Total) (Aqueous)</p> <p>DISSOLVED OXYGEN</p> <p>SM 4500 O G-2011 (Aqueous)</p> <p>FLUORIDE</p> <p>EPA 300.0, Rev. 2.1, 1993 (Aqueous)</p> | <p>EPA 300.0, Rev. 2.1, 1993 (Non-Aqueous)</p> <p>SW-846 9056 A (Aqueous)</p> <p>SW-846 9056 A (Non-Aqueous)</p> <p>HARDNESS TOTAL</p> <p>SM 2340 B-2011 (Ca EPA 200.7, Rev. 4.4, 1994 + Mg EPA 200.7, Rev. 4.4, 1994) (Aqueous)</p> <p>IGNITABILITY</p> <p>SW-846 1010 A (Pensky-Martens) (Aqueous)</p> <p>INORGANIC PHENOLS</p> <p>EPA 420.1, Rev. 1978 (Aqueous)</p> <p>SW-846 9065 (Aqueous)</p> <p>MBAS</p> <p>SM 5540 C-2011 (Aqueous)</p> <p>NITROGEN, AMMONIA</p> <p>EPA 350.1, Rev. 2.0, 1993 (Aqueous)</p> <p>NITROGEN, NITRATE</p> <p>EPA 300.0, Rev. 2.1, 1993 (Aqueous)</p> <p>EPA 300.0, Rev. 2.1, 1993 (Non-Aqueous)</p> <p>SW-846 9056 A (Aqueous)</p> <p>SW-846 9056 A (Non-Aqueous)</p> <p>NITROGEN, NITRITE</p> <p>SM 4500-NO2⁻ B-2011 (Automated) (Aqueous)</p> <p>EPA 300.0, Rev. 2.1, 1993 (Aqueous)</p> <p>EPA 300.0, Rev. 2.1, 1993 (Non-Aqueous)</p> <p>SW-846 9056 A (Aqueous)</p> <p>SW-846 9056 A (Non-Aqueous)</p> <p>NITROGEN, NO3 + NO2</p> <p>SM 4500 NO3⁻ H-2011 (Aqueous)</p> <p>NITROGEN, TOTAL KjELDAHL</p> <p>EPA 351.2, Rev. 2.0, 1993 (Aqueous)</p> <p>OIL & GREASE</p> <p>EPA 1664 Rev. B (Aqueous)</p> <p>ORGANIC CARBON, TOTAL</p> <p>SM 5310 B-2011 (Combustion) (Aqueous)</p> <p>SW-846 9060 A (Combustion) (Aqueous)</p> <p>PAINT FILTER LIQUIDS</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: Rogers & Callcott Engineers Inc.
 Address: P.O. Box 5655
 Greenville, SC 29606-

Certificate Number: 27
 Effective Date: 1/1/2018
 Expiration Date: 12/31/2018
 Date of Last Amendment: 5/14/2018

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>SW-846 9095B</p> <p>pH</p> <p>SM 4500 H+B-2011 (Aqueous)</p> <p>SW-846 9040 C (Aqueous)</p> <p>SW-846 9045 D (Non-Aqueous)</p> <p>PHOSPHATE, ORTHO</p> <p>SM 4500 P E-2011 (Aqueous)</p> <p>PHOSPHORUS, TOTAL</p> <p>SM 4500 P E-2011 (Aqueous)</p> <p>EPA 200.7, Rev. 4.4 (1994) (Aqueous)</p> <p>SW-846 6010 D (Aqueous)</p> <p>SW-846 6010 D (Non-Aqueous)</p> <p>RESIDUE, DISSOLVED 180 C</p> <p>SM 2540 C-2011 (Aqueous)</p> <p>RESIDUE, SETTLEABLE</p> <p>SM 2540 F-2011 (Aqueous)</p> <p>RESIDUE, SUSPENDED</p> <p>SM 2540 D-2011 (Aqueous)</p> <p>RESIDUE, TOTAL</p> <p>SM 2540 B-2011 (Aqueous)</p> <p>RESIDUE, TOTAL VOLATILE</p> <p>SM 2540 G-2011 (Non-Aqueous)</p> <p>SILICA</p> <p>SM 4500 SiO₂ C-2011 (Aqueous)</p> <p>SULFATE</p> <p>EPA 300.0, Rev. 2.1, 1993 (Aqueous)</p> <p>EPA 300.0, Rev. 2.1, 1993 (Non-Aqueous)</p> <p>SW-846 9056 A (Aqueous)</p> <p>SW-846 9056 A (Non-Aqueous)</p> <p>SULFIDE</p> <p>SM 4500 S²⁻ F-2011 (Aqueous)</p> <p>TEMPERATURE</p> <p>SM 2550 B-2010 (Aqueous)</p> <p>TURBIDITY</p> <p>EPA 180.1, Rev. 2.0, 1993 (Aqueous)</p> | <p>VECTOR ATTRACTION REDUCTION</p> <p>Option 1: Reduction in Volatile Solids</p> <p>Option 4: Specific Oxygen Uptake Rate</p> <p>METAL</p> <p>TCLP METALS</p> <p>SW-846 1311 (Aqueous)</p> <p>SW-846 1311 (Non-Aqueous)</p> <p>ALUMINUM</p> <p>EPA 200.7, Rev. 4.4, 1994 (Aqueous)</p> <p>SW-846 6010 D (Aqueous)</p> <p>SW-846 6010 D (Non-Aqueous)</p> <p>ANTIMONY</p> <p>EPA 200.7, Rev. 4.4, 1994 (Aqueous)</p> <p>SW-846 6010 D (Aqueous)</p> <p>SW-846 6010 D (Non-Aqueous)</p> <p>EPA 200.8, Rev. 5.4, 1994 (Aqueous)</p> <p>SW-846 6020 B (Aqueous)</p> <p>ARSENIC</p> <p>EPA 200.7, Rev. 4.4, 1994 (Aqueous)</p> <p>SW-846 6010 D (Aqueous)</p> <p>SW-846 6010 D (Non-Aqueous)</p> <p>EPA 200.8, Rev. 5.4, 1994 (Aqueous)</p> <p>SW-846 6020 B (Aqueous)</p> <p>BARIUM</p> <p>EPA 200.7, Rev. 4.4, 1994 (Aqueous)</p> <p>SW-846 6010 D (Aqueous)</p> <p>SW-846 6010 D (Non-Aqueous)</p> <p>SW-846 6020 B (Aqueous)</p> <p>BERYLLIUM</p> <p>EPA 200.7, Rev. 4.4, 1994 (Aqueous)</p> <p>SW-846 6010 D (Aqueous)</p> <p>SW-846 6010 D (Non-Aqueous)</p> <p>EPA 200.8, Rev. 5.4, 1994 (Aqueous)</p> <p>SW-846 6020 B (Aqueous)</p> <p>BORON</p> |
|--|---|

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North Carolina Wastewater/Groundwater Laboratory Certification

Certified Parameters Listing

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CERTIFIED PARAMETERS

| | |
|-------------------------------------|-------------------------------------|
| EPA 200.7, Rev. 4.4, 1994 (Aqueous) | IRON |
| SW-846 6010 D (Aqueous) | EPA 200.7, Rev. 4.4, 1994 (Aqueous) |
| SW-846 6010 D (Non-Aqueous) | SW-846 6010 D (Aqueous) |
| CADMIUM | SW-846 6010 D (Non-Aqueous) |
| EPA 200.7, Rev. 4.4, 1994 (Aqueous) | EPA 200.8, Rev. 5.4, 1994 (Aqueous) |
| SW-846 6010 D (Aqueous) | SW-846 6020 B (Aqueous) |
| SW-846 6010 D (Non-Aqueous) | LEAD |
| EPA 200.8, Rev. 5.4, 1994 (Aqueous) | EPA 200.7, Rev. 4.4, 1994 (Aqueous) |
| SW-846 6020 B (Aqueous) | SW-846 6010 D (Aqueous) |
| CALCIUM | SW-846 6010 D (Non-Aqueous) |
| EPA 200.7, Rev. 4.4, 1994 (Aqueous) | EPA 200.8, Rev. 5.4, 1994 (Aqueous) |
| SW-846 6010 D (Aqueous) | SW-846 6020 B (Aqueous) |
| SW-846 6010 D (Non-Aqueous) | LITHIUM |
| CHROMIUM HEXAVALENT | EPA 200.7, Rev. 4.4, 1994 (Aqueous) |
| SM 3500-Cr-B-2011 (Aqueous) | SW-846 6010 D (Aqueous) |
| SW-846 7196 A (Aqueous) | SW-846 6010 D (Non-Aqueous) |
| SW-846 7196 A (Non-Aqueous) | MAGNESIUM |
| CHROMIUM TOTAL | 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) | MANGANESE |
| SW-846 6020 B (Aqueous) | EPA 200.7, Rev. 4.4, 1994 (Aqueous) |
| COBALT | 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) | MERCURY |
| SW-846 6020 B (Aqueous) | EPA 245.1, Rev. 3.0, 1994 (Aqueous) |
| COPPER | SW-846 7470 A (Aqueous) |
| EPA 200.7, Rev. 4.4, 1994 (Aqueous) | SW-846 7471 B (Non-Aqueous) |
| SW-846 6010 D (Aqueous) | MOLYBDENUM |
| SW-846 6010 D (Non-Aqueous) | EPA 200.7, Rev. 4.4, 1994 (Aqueous) |
| EPA 200.8, Rev. 5.4, 1994 (Aqueous) | SW-846 6010 D (Aqueous) |
| SW-846 6020 B (Aqueous) | SW-846 6010 D (Non-Aqueous) |

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North Carolina Wastewater/Groundwater Laboratory Certification
Certified Parameters Listing

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CERTIFIED PARAMETERS

| | |
|---|--|
| EPA 200.8, Rev. 5.4, 1994 (Aqueous) SW-846 6020 B (Aqueous) | THALLIUM EPA 200.7, Rev. 4.4, 1994 (Aqueous) SW-846 6010 D (Aqueous) SW-846 6010 D (Non-Aqueous) |
| NICKEL 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) |
| EPA 200.8, Rev. 5.4, 1994 (Aqueous) SW-846 6020 B (Aqueous) | TIN EPA 200.7, Rev. 4.4, 1994 (Aqueous) SW-846 6010 D (Aqueous) SW-846 6010 D (Non-Aqueous) |
| POTASSIUM 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) |
| EPA 200.8, Rev. 5.4, 1994 (Aqueous) SW-846 6020 B (Aqueous) | TITANIUM EPA 200.7, Rev. 4.4, 1994 (Aqueous) SW-846 6010 D (Aqueous) SW-846 6010 D (Non-Aqueous) |
| SELENIUM 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) |
| EPA 200.8, Rev. 5.4, 1994 (Aqueous) SW-846 6020 B (Aqueous) | VANADIUM EPA 200.7, Rev. 4.4, 1994 (Aqueous) SW-846 6010 D (Aqueous) SW-846 6010 D (Non-Aqueous) |
| SILVER 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) |
| EPA 200.8, Rev. 5.4, 1994 (Aqueous) SW-846 6020 B (Aqueous) | ZINC EPA 200.7, Rev. 4.4, 1994 (Aqueous) SW-846 6010 D (Aqueous) SW-846 6010 D (Non-Aqueous) |
| SODIUM 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) |
| EPA 200.8, Rev. 5.4, 1994 (Aqueous) SW-846 6020 B (Aqueous) | ORGANIC TCLP ORGANICS SW-846 1311 (Aqueous) SW-846 1311 (Non-Aqueous) |
| STRONTIUM EPA 200.7, Rev. 4.4, 1994 (Aqueous) SW-846 6010 D (Aqueous) SW-846 6010 D (Non-Aqueous) | BASE NEUTRAL/ACID, ORGANICS EPA 625.1 (Aqueous) SW-846 8270 D (Aqueous) |

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CERTIFIED PARAMETERS

- SW-846 8270 D (Non-Aqueous)
- PESTICIDES, ORGANOCHLORINE
 - EPA 608.2 (Aqueous)
 - EPA 608.3 (Aqueous)
 - SW-846 8081 B (Aqueous)
 - SW-846 8081 B (Non-Aqueous)
- POLYCHLORINATED BIPHENYLS (PCBs)
 - EPA 608.3 (Aqueous)
 - SW-846 8082 A (Aqueous)
 - SW-846 8082 A (Non-Aqueous)
- PURGEABLE, ORGANICS
 - EPA 624.1 (Aqueous)
 - SM 6200 B-2011 (Aqueous)
 - SW-846 8260 B (Aqueous)
 - SW-846 8260 B (Non-Aqueous)