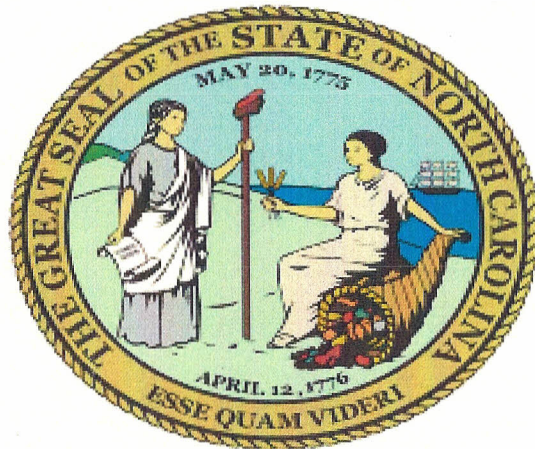


STATE OF NORTH CAROLINA DEPARTMENT OF THE
ENVIRONMENT AND NATURAL RESOURCES

DIVISION OF WATER QUALITY LABORATORY CERTIFICATION PROGRAM

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



2012

MICROBAC LABORATORIES INC.

Is hereby certified to perform environmental analysis as listed on Attachment I and report monitoring data to DWQ 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 December 31, 2012

Certificate N

583

J. Kent Wiggins
J. Kent Wiggins

Attachment I
North Carolina Wastewater/Groundwater Laboratory Certification
Certified Parameters Listing

Lab Name: Microbac Laboratories Inc.
 Address: 158 Starlite Drive
 Marietta, OH 45750-

Certificate Number: 583
 Effective Date: 01/01/2012
 Expiration Date: 12/31/2012
 Date of Last Amendment:

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

INORGANICS

ALKALINITY
 Std Method 2320B

COD
 EPA Method 410.4
 Hach Method 8000

CHLORIDE
 Std Method 4500 Cl E
 SW846 Method 9056A

CYANIDE
 Std Method 4500 CN E (Total)
 SW846 Method 9014 (Colorimetric)

HARDNESS TOTAL
 Std Method 2340C

IGNITABILITY
 SW846 Method 1010A

AMMONIA NITROGEN
 EPA Method 350.1

TOTAL KJELDAHL NITROGEN
 EPA Method 351.2

NO₂ + NO₃ NITROGEN
 EPA Method 353.2

NITRATE NITROGEN
 SW846 Method 9056A

NITRITE NITROGEN
 SW846 Method 9056A

TOTAL PHOSPHORUS
 EPA Method 365.4

ORTHOPHOSPHATE
 Std Method 4500 P E

OIL & GREASE
 EPA Method 1664 Rev A

pH
 Std Method 4500 H B
 SW846 Method 9040C
 SW846 Method 9045D

INORGANIC PHENOLS
 EPA Method 420.1

RESIDUE DISSOLVED 180 C
 Std Method 2540C

RESIDUE SUSPENDED
 Std Method 2540D

SULFATE
 Std Method 426C 15th Ed
 SW846 Method 9056A

TOTAL ORGANIC CARBON
 Std Method 5310C

METALS

ALUMINUM
 EPA Method 200.7
 SW846 Method 6010C

ANTIMONY
 EPA Method 200.7
 EPA Method 200.8
 SW846 Method 6010C

ARSENIC
 EPA Method 200.7
 EPA Method 200.8
 SW846 Method 6010C
 SW846 Method 6020A

BARIUM
 EPA Method 200.7
 SW846 Method 6010C

BERYLLIUM
 EPA Method 200.7
 SW846 Method 6010C

CADMIUM
 EPA Method 200.7
 SW846 Method 6010C

CALCIUM
 EPA Method 200.7
 SW846 Method 6010C

CHROMIUM TOTAL
 EPA Method 200.7
 SW846 Method 6010C

CHROMIUM HEXAVALENT
 Std Method 3500 Cr D

COBALT
 EPA Method 200.7
 SW846 Method 6010C

COPPER
 EPA Method 200.7
 SW846 Method 6010C

IRON
 EPA Method 200.7
 SW846 Method 6010C

LEAD
 EPA Method 200.7
 EPA Method 200.8
 SW846 Method 6010C
 SW846 Method 6020A

MAGNESIUM
 EPA Method 200.7
 SW846 Method 6010C

MANGANESE
 EPA Method 200.7

SW846 Method 6010C

MERCURY
 EPA Method 245.1
 SW846 Method 7470A

MOLYBDENUM
 EPA Method 200.7
 SW846 Method 6010C

NICKEL
 EPA Method 200.7
 SW846 Method 6010C

POTASSIUM
 EPA Method 200.7
 SW846 Method 6010C

SELENIUM
 EPA Method 200.7
 EPA Method 200.8
 SW846 Method 6010C
 SW846 Method 6020A

SILVER
 EPA Method 200.7
 SW846 Method 6010C

SODIUM
 EPA Method 200.7
 SW846 Method 6010C

THALLIUM
 EPA Method 200.7
 EPA Method 200.8
 SW846 Method 6010C
 SW846 Method 6020A

VANADIUM
 EPA Method 200.7
 SW846 Method 6010C

ZINC
 EPA Method 200.7
 SW846 Method 6010C

TCLP METALS
 SW846 Method 1311

SPLP METALS
 SW846 Method 1312

ORGANICS

ORGANOCHLORINE PESTICIDES & PCBs
 EPA Method 608

ORGANOCHLORINE PESTICIDES
 SW846 Method 8081B

POLYCHLORINATED BIPHENYLS (PCB's)
 SW846 Method 8082A

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Effective Date: 01/01/2012
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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

NITROAROMATICS & NITRAMINES

SW846 Method 8330A

PURGEABLE ORGANICS

EPA Method 624

SW846 Method 8260B

BASE NEUTRAL/ACID ORGANICS

EPA Method 625

SW846 Method 8270D

CHLORINATED ACID HERBICIDES

SW846 Method 8151A

TPH DIESEL RANGE ORGANICS

SW846 Method 8015C

TPH GASOLINE RANGE ORGANICS

SW846 Method 8015C

TCLP ORGANICS

SW846 Method 1311

SPLP ORGANICS

SW846 Method 1312