



**State of Rhode Island
DEPARTMENT OF HEALTH
Certifies**

LAO00346

**MICROBAC LABORATORIES, INC
61 LOUISA VIENS DRIVE
DAYVILLE CT 06241**

Laboratory Director: RONALD WARILA

for the analysis of: Potable Water Microbiology - Potable Water Organic Chemistry - Potable Water Inorganic Chemistry - Non-potable Water Microbiology - Non-potable Water Organic Chemistry - Non-potable Water Inorganic Chemistry -

This certificate is issued, pursuant to Rhode Island General Laws 23-16.2 and supersedes all previous Rhode Island certificates issued to this laboratory. Certification is no guarantee of the validity of the laboratory results.

This certificate is valid only when accompanied by the certificate and list of analytes and methods for which certification has been granted based upon the following out of state certification(s):

Certifying Authority
CT

Certification Number
PH-0465

Expiration Date
09/30/2025

MICROBAC LABORATORIES, INC is responsible for maintaining each of the certifications listed above. Failure to notify the Laboratory Certification Officer of any change in the status of these certifications may result in the suspension or revocation of certification. Contact the Laboratory Certification Officer to verify the current certification status of this laboratory.

Expires: 12/30/2025

THIS CERTIFICATE IS TO BE CONSPICUOUSLY DISPLAYED AT THE LABORATORY IN A LOCATION VISABLE TO THE PUBLIC

State of Connecticut, Department of Public Health
Approved Environmental Laboratory

THIS IS TO CERTIFY THAT THE LABORATORY DESCRIBED BELOW HAS BEEN APPROVED BY THE STATE DEPARTMENT OF PUBLIC HEALTH PURSUANT TO APPLICABLE PROVISIONS OF THE PUBLIC HEALTH CODE AND GENERAL STATUTES OF CONNECTICUT, FOR MAKING THE EXAMINATIONS, DETERMINATIONS OR TESTS SPECIFIED BELOW WHICH HAVE BEEN AUTHORIZED IN WRITING BY THAT DEPARTMENT.

MICROBAC LABORATORIES, INC. – Dayville

LOCATED AT 61 Louisa Viens Drive IN Dayville, Connecticut 06241

AND REGISTERED IN THE NAME OF J. Trevor Boyce

THIS CERTIFICATE IS ISSUED IN THE NAMES OF Ronald Warila (Micro & Chemistry) WHO HAVE BEEN DESIGNATED BY THE REGISTERED OWNER/AUTHORIZED AGENT TO BE IN CHARGE OF THE LABORATORY WORK COVERED BY THIS CERTIFICATE OF APPROVAL AS FOLLOWS:

DRINKING WATER, NON-POTABLE WATER/WASTEWATER, SOLID WASTE/SOIL ENVIRONMENTAL HEALTH & HOUSING

Examination for:
BACTERIA
INORGANIC CHEMICALS
ORGANIC CHEMICALS
RADIOCHEMICALS

Examination for:
Paint Chips
Lead Paint in Soil

SEE COMPUTER PRINT-OUT FOR SPECIFIC TESTS APPROVED

EFFECTIVE RENEWAL DATE October 1, 2023

THIS CERTIFICATE EXPIRES September 30, 2025 AND IS REVOCABLE FOR CAUSE BY THE STATE DEPARTMENT OF PUBLIC HEALTH

DATED AT HARTFORD, CONNECTICUT, THIS 26th DAY OF September, 2023



Registration No.
PH-0465

Lori J. Mathieu
Public Health Branch Chief



STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH
Environmental Health and Drinking Water Branch



ENVIRONMENTAL LABORATORY CERTIFICATION PROGRAM CERTIFIED ANALYTES REPORT FOR ALL MATRICES

Microbac Laboratories, INC. - Dayville

61 LOUISA VIENS DRIVE
DAYVILLE, CT 06241

CT REGISTRATION NUMBER :

REGISTERED OWNER / AUTHORIZED AGENT : J. Trevor Boyce

DIRECTOR : Ronald Warila

CO DIRECTOR(S) :


PHONE : (860) 774-6814

LABORATORY REGISTRATION EFFECTIVE DATE :

LABORATORY REGISTRATION EXPIRATION DATE :

LABORATORY STATUS :

APPROVED BY



Leri J Mathieu
Public Health Branch Chief
Environmental Health & Drinking Water Branch

REVIEWED BY



11/8/2023 9:54:44 AM

Dawn Shaban
Laboratory Consultant

ANY QUESTIONS CONCERNING THIS DOCUMENT SHOULD BE ADDRESSED TO THE ENVIRONMENTAL LABORATORY CERTIFICATION PROGRAM AT (860) 509-7389

DRINKING WATER (SDWA)

STATUS REPORTED ON 11/8/2023

ANALYTE NAME

MICROBIOLOGY/BACTERIA

Enterococci Enterolert	
Escherichia coli SM9223B Colilert 18 Enumeration	Escherichia coli SM9223B Colilert 18 PA
Escherichia coli SM9223B Colilert Enumeration	Escherichia coli SM9223B Colilert PA
Heterotrophic plate count SM9215B	Total coliforms SM9223B Colilert 18 Enumeration
Total coliforms SM9223B Colilert 18 PA	Total coliforms SM9223B Colilert Enumeration
Total coliforms SM9223B Colilert PA	

INORGANIC PHYSICAL PARAMETERS

Color SM2120B	
Conductivity SM2510B	Odor SM2150B
pH SM4500H+B	Turbidity SM2130B

INORGANIC MINERALS PARAMETERS

Alkalinity as CaCO ₃ SM2320B	Calcium Hardness EPA 200.7
Chloride EPA 300.0	Chloride SM 4500-Cl ⁻ E
Fluoride SM4500F C	Silica as SiO ₂ SM4500-Si E
Sulfate SM4500SO ₄ E	Total Hardness SM2340B

INORGANIC NUTRIENT PARAMETERS

Nitrate as N SM4500NO ₃ F	Nitrite as N SM4500NO ₃ F
Orthophosphate as P EPA 365.1	

METALS

Aluminum EPA 200.7	
Aluminum EPA 200.8	Antimony EPA 200.8
Arsenic EPA 200.8	Barium EPA 200.7
Barium EPA 200.8	Beryllium EPA 200.7
Beryllium EPA 200.8	Boron EPA 200.7
Cadmium EPA 200.7	Cadmium EPA 200.8
Calcium EPA 200.7	Chromium EPA 200.7
Chromium EPA 200.8	Copper EPA 200.7
Copper EPA 200.8	Iron EPA 200.7
Lead EPA 200.8	Magnesium EPA 200.7
Magnesium EPA 200.8	Manganese EPA 200.7
Manganese EPA 200.8	Mercury EPA 245.1
Molybdenum EPA 200.8	Nickel EPA 200.7
Nickel EPA 200.8	Potassium EPA 200.7

Selenium EPA 200.8	Silver EPA 200.7
Silver EPA 200.8	Sodium EPA 200.7
Thallium EPA 200.8	Uranium EPA 200.8
Vanadium EPA 200.8	Zinc EPA 200.7
Zinc EPA 200.8	

INORGANIC SOLIDS

Total Dissolved Solids (TDS) SM2540 C

INORGANIC DEMANDS

Total Organic Carbon SM5310C

INORGANIC MISCELLANEOUS PARAMETERS

Cyanide, Total EPA 335.4	Surfactants - MBAS SM5540C
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DISINFECTANT RESIDUALS

Chlorine SM4500Cl G

ORGANIC DISINFECTION BY-PRODUCTS

Dibromoacetic acid EPA 552.2	
Dichloroacetic Acid EPA 552.2	Monobromoacetic acid EPA 552.2
Monochloroacetic acid EPA 552.2	Total HAAs EPA 552.2
Trichloroacetic Acid EPA 552.2	

VOLATILE ORGANICS

1,1,1,2-Tetrachloroethane EPA 524.2	1,1,1-Trichloroethane EPA 524.2
1,1,2,2-Tetrachloroethane EPA 524.2	1,1,2-Trichloroethane EPA 524.2
1,1-Dichloroethane EPA 524.2	1,1-Dichloroethene EPA 524.2
1,1-Dichloropropene EPA 524.2	1,2,3-Trichlorobenzene EPA 524.2
1,2,3-Trichloropropane EPA 524.2	1,2,4-Trichlorobenzene EPA 524.2
1,2,4-Trimethylbenzene EPA 524.2	1,2-Dibromo-3-chloropropane (DBCP) EPA 504.1
1,2-Dibromoethane (EDB, Ethylene dibromide) EPA 504.1	1,2-Dichlorobenzene EPA 524.2
1,2-Dichloroethane EPA 524.2	1,2-Dichloropropane EPA 524.2
1,3,5-Trimethylbenzene EPA 524.3	1,3-Dichlorobenzene EPA 524.2
1,3-Dichloropropane EPA 524.2	1,4-Dichlorobenzene EPA 524.2
1,4-Dioxane EPA 522	2,2-Dichloropropane EPA 524.2
2-Chlorotoluene EPA 524.2	4-Chlorotoluene EPA 524.2
4-Isopropyltoluene EPA 524.2	Benzene EPA 524.2
Bromobenzene EPA 524.2	Bromochloromethane EPA 524.2
Bromomethane EPA 524.2	Carbon Tetrachloride EPA 524.2
Chlorobenzene EPA 524.2	Chloroethane EPA 524.2
Chloromethane EPA 524.2	cis-1,2 Dichloroethene EPA 524.2
Dibromomethane EPA 524.2	Dichlorodifluoromethane EPA 524.2
Ethylbenzene EPA 524.2	Hexachlorobutadiene EPA 524.2
Isopropylbenzene EPA 524.2	Methyl-tert-butyl-ether EPA 524.2

Methylene chloride EPA 524.2	n-Butylbenzene EPA 524.2
n-Propylbenzene EPA 524.2	Naphthalene EPA 524.2
sec-Butylbenzene EPA 524.2	Styrene EPA 524.2
tert-Butylbenzene EPA 524.2	Tetrachloroethene EPA 524.2
Toluene EPA 524.2	Total Trihalomethanes EPA 524.2
trans-1,2-Dichloroethene EPA 524.2	trans-1,3-Dichloropropene EPA 524.2
Trichloroethene EPA 524.2	Trichlorofluoromethane EPA 524.2
Vinyl Chloride EPA 524.2	XYLENES, TOTAL

PESTICIDES

Alachlor EPA 505	Aldrin EPA 505
Chlordane, Technical EPA 505	Dieldrin EPA 505
Endrin EPA 505	Heptachlor EPA 505
Heptachlor Epoxide EPA 505	Hexachlorobenzene EPA 505
Hexachlorocyclopentadiene EPA 505	Lindane EPA 505
Methoxychlor EPA 505	Toxaphene EPA 505

POLYCHLORINATED BIPHENYLS

Aroclor 1016 EPA 505	Aroclor 1221 EPA 505
Aroclor 1232 EPA 505	Aroclor 1242 EPA 505
Aroclor 1248 EPA 505	Aroclor 1254 EPA 505
Aroclor 1260 EPA 505	

HERBICIDES

2,4-D EPA 515.3	2,4-DB EPA 515.3
Dalapon EPA 515.3	Dinoseb EPA 515.3
Diquat EPA 549.2	Glyphosate EPA 547
Pentachlorophenol EPA 515.3	Picloram EPA 515.3
Silvex (2,4,5-TP) EPA 515.3	

PHTHALATE ESTERS & ADIPATES

BIS (2 - ETHYLHEXYL) ADIPATE - 525.2 (SOC)	BIS (2 - ETHYLHEXYL) PHTHALATE - 525.2 (SOC)
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PAHS

BENZO(a)PYRENE - 525.2 (SOC)

CARBAMATE PESTICIDES

Aldicarb EPA 531.2	Aldicarb Sulfone EPA 531.2
Aldicarb Sulfoxide EPA 531.2	Carbaryl EPA 531.2
Carbofuran EPA 531.2	Methomyl EPA 531.2
Oxamyl EPA 531.2	

SEMIVOLATILES

Alachlor EPA 525.2	
Atrazine EPA 525.2	Butachlor EPA 525.2
Endrin EPA 525.2	Heptachlor EPA 525.2

Heptachlor Epoxide EPA 525.2

Hexachlorocyclopentadiene EPA 525.2

Methoxychlor EPA 525.2

Propachlor (Ramrod) EPA 525.2

Hexachlorobenzene EPA 525.2

Lindane EPA 525.2

Metribuzin EPA 525.2

Simazine EPA 525.2

NON-POTABLE WATER/ WASTEWATER (CWA)

STATUS REPORTED ON 11/30/2023

ANALYTE NAME

MICROBIOLOGY/BACTERIA

Enterococci Enterolert	Enterococci EPA 1600 (mEI Agar)
ENTEROCOCCUS - MF mEI Agar (EPA1600)	Escherichia coli SM9223B Colilert Enumeration
Fecal Coliforms Colilert-18	Fecal coliforms SM9222D
Heterotrophic plate count SM9215B	

INORGANIC PHYSICAL PARAMETERS

Color SM2120B	
Conductivity SM2510B	Odor SM2150B
pH	pH SM4500H+B
Turbidity SM2130B	

INORGANIC MINERALS PARAMETERS

Acidity, as CaCO ₃ SM2310 B	
Alkalinity as CaCO ₃ SM2320B	Chloride SM 4500-Cl ⁻ E
Sulfate SM4500SO ₄ E	Total Hardness SM2340B

INORGANIC NUTRIENT PARAMETERS

Ammonia as N EPA 350.1	
Kjeldahl Nitrogen, Total EPA 351.2	Nitrate as N SM4500NO ₃ F
Nitrite as N SM4500NO ₃ F	Orthophosphate as P EPA 365.1
Phosphorus, Total EPA 365.1	

METALS

Aluminum EPA 200.7	
Aluminum EPA 200.8	Antimony EPA 200.7
Antimony EPA 200.8	Arsenic EPA 200.7
Arsenic EPA 200.8	Barium EPA 200.7
Barium EPA 200.8	Beryllium EPA 200.7
Beryllium EPA 200.8	Boron EPA 200.7
Cadmium EPA 200.7	Cadmium EPA 200.8
Calcium EPA 200.7	Chromium EPA 200.7
Chromium EPA 200.8	Cobalt EPA 200.7
Cobalt EPA 200.8	Copper EPA 200.7
Copper EPA 200.8	Iron EPA 200.7
Lead EPA 200.7	Lead EPA 200.8
Magnesium EPA 200.7	Manganese EPA 200.7
Manganese EPA 200.8	Mercury EPA 245.1

Mercury SW-846 7470A	METALS (SELECTED)
Molybdenum EPA 200.7	Molybdenum EPA 200.8
Nickel EPA 200.7	Nickel EPA 200.8
Potassium EPA 200.7	Selenium EPA 200.7
Selenium EPA 200.8	Silver EPA 200.7
Silver EPA 200.8	Sodium EPA 200.7
Thallium EPA 200.7	Thallium EPA 200.8
Tin EPA 200.7	Titanium EPA 200.7
Vanadium EPA 200.7	Vanadium EPA 200.8
Zinc EPA 200.7	Zinc EPA 200.8

INORGANIC SOLIDS

Total Dissolved Solids (TDS) SM2540 C	
Total Solids (TS) SM2540B	Total Suspended Solids (TSS) SM2540D
Total Volatile Solids SM2540 E	

INORGANIC DEMANDS

Biochemical Oxygen Demand SM 5210 B	
Carbonaceous BOD, CBOD SM 5210 B	Chemical Oxygen Demand HACH 8000
Total Organic Carbon SM5310C	

INORGANIC MISCELLANEOUS PARAMETERS

Cyanide, Amenable SM4500CN G	Cyanide, Total EPA 335.4
Hexavalent Chromium SM 3500-Cr D	Phenolics, Total EPA 420.1
Surfactants - MBAS SM5540C	

DISINFECTANT RESIDUALS

Chlorine SM4500Cl G

VOLATILE ORGANICS

1,1,1,2-Tetrachloroethane EPA 624.1	1,1,1-Trichloroethane EPA 624.1
1,1,2,2-Tetrachloroethane EPA 624.1	1,1,2-Trichloroethane EPA 624.1
1,1-Dichloroethane EPA 624.1	1,1-Dichloroethene EPA 624.1
1,2,4-Trimethylbenzene EPA 624.1	1,2-Dichlorobenzene EPA 624.1
1,2-Dichloropropane EPA 624.1	1,3,5-Trimethylbenzene EPA 624.1
1,3-Dichlorobenzene EPA 624.1	1,4-Dichlorobenzene EPA 624.1
2-Chlorotoluene EPA 624.1	2-Hexanone EPA 624.1
4-Chlorotoluene EPA 624.1	4-Methyl-2-pentanone (MIBK) EPA 624.1
Acetone EPA 624.1	Acrolein EPA 624.1
Acrylonitrile EPA 624.1	Benzene EPA 624.1
Bromodichloromethane EPA 624.1	Bromoform EPA 624.1
Bromomethane EPA 624.1	Carbon Disulfide EPA 624.1
Carbon Tetrachloride EPA 624.1	Chlorobenzene EPA 624.1
Chloroethane EPA 624.1	Chloroform EPA 624.1

Chloromethane EPA 624.1	cis-1,2-Dichloroethene EPA 624.1
cis-1,3-Dichloropropene EPA 624.1	Dibromochloromethane EPA 624.1
Ethyl Benzene EPA 624.1	Isopropylbenzene EPA 624.1
Methyl-tert-butylether (MTBE) EPA 624.1	Methylene Chloride EPA 624.1
n-Butylbenzene EPA 624.1	n-Propylbenzene EPA 624.1
p-Isopropyltoluene EPA 624.1	sec-Butylbenzene EPA 624.1
Styrene EPA 624.1	tert-Butylbenzene EPA 624.1
Tetrachloroethene EPA 624.1	Toluene EPA 624.1
trans-1,2-Dichloroethene EPA 624.1	trans-1,3-Dichloropropene EPA 624.1
Trichloroethene EPA 624.1	Trichlorofluoromethene EPA 624.1
Vinyl Chloride EPA 624.1	Xylenes, Total EPA 624.1

PESTICIDES

4,4-DDD' EPA 608.3	4,4-DDE' EPA 608.3
4,4'-DDT' EPA 608.3	
Aldrin EPA 608.3	alpha-BHC EPA 608.3
beta-BHC EPA 608.3	Chlordane, Technical EPA 608.3
Chlordane, Technical SW-846 8081B	delta-BHC EPA 608.3
Dieldrin EPA 608.3	ENDOSULFAN I
Endosulfan II EPA 608.3	Endosulfan Sulfate EPA 608.3
Endrin Aldehyde EPA 608.3	Endrin EPA 608.3
Endrin Ketone EPA 608.3	gamma-BHC (Lindane) EPA 608.3
Heptachlor EPA 608.3	Heptachlor Epoxide EPA 608.3
Methoxychlor EPA 608.3	Toxaphene EPA 608.3

SOLVENTS

CT Extractable Petroleum Hydrocarbons (ETPH)	
Oil and Grease EPA 1664B	Oil and Grease SGT EPA 1664B

POLYCHLORINATED BIPHENYLS

PCB-1016 EPA 608.3	PCB-1016 SW-846 8082A
PCB-1221 EPA 608.3	PCB-1221 SW-846 8082A
PCB-1232 EPA 608.3	PCB-1232 SW-846 8082A
PCB-1242 EPA 608.3	PCB-1242 SW-846 8082A
PCB-1248 EPA 608.3	PCB-1248 SW-846 8082A
PCB-1254 EPA 608.3	PCB-1254 SW-846 8082A
PCB-1260 EPA 608.3	PCB-1260 in Oil SW-846 8082A

RCRA (SW-846) ORGANICS

3,3'-DICHLORO BENZIDINE (SW 8270)	CHLORINATED HYDROCARBONS (SW 8270)
HALOETHERS (SW 8270)	

SEMIVOLATILES

1,2,4-Trichlorobenzene EPA 625.1

2,4,5-Trichlorophenol EPA 625.1	2,4,6-Trichlorophenol EPA 625.1
2,4-Dichlorophenol EPA 625.1	2,4-Dimethylphenol EPA 625.1
2,4-Dinitrophenol EPA 625.1	2,6-Dichlorophenol EPA 625.1
2,6-Dinitrotoluene EPA 625.1	2-Chlorophenol EPA 625.1
2-Methyl-4,6-dinitrophenol EPA 625.1	2-Methylnaphthalene EPA 625.1
2-Methylphenol EPA 625.1	2-Nitroaniline EPA 625.1
2-Nitrophenol EPA 625.1	3&4-Methylphenol EPA 625.1
3-Nitroaniline EPA 625.1	4-Bromophenyl phenyl ether EPA 625.1
4-Chloro-3-methylphenol EPA 625.1	4-Chloroaniline EPA 625.1
4-Nitroaniline EPA 625.1	4-Nitrophenol EPA 625.1
Acenaphthene EPA 625.1	Acenaphthylene EPA 625.1
Anthracene EPA 625.1	Benzidine EPA 625.1
Benzo(a)anthracene EPA 625.1	Benzo(a)pyrene EPA 625.1
Benzo(b)fluoranthene EPA 625.1	Benzo(ghi)perylene EPA 625.1
Benzo(k)fluoranthene EPA 625.1	Benzyl butyl phthalate EPA 625.1
bis(2-Chloroethoxy)methane EPA 625.1	bis(2-chloroethyl) ether EPA 625.1
bis(2-Chloroisopropyl) ether (2,2'-Oxybis[1-chloropropane]) EPA 625.1	bis(2-Ethylhexyl)phthalate EPA 625.1
Carbazole EPA 625.1	Chrysene EPA 625.1
Dibenz(a,h)anthracene EPA 625.1	Dibenzofuran EPA 625.1
Diethyl phthalate EPA 625.1	Dimethyl phthalate EPA 625.1
Di-n-butyl phthalate EPA 625.1	Di-n-octyl phthalate EPA 625.1
Fluoranthene EPA 625.1	Hexachlorobenzene EPA 625.1
Hexachlorobutadiene EPA 625.1	Hexachlorocyclopentadiene EPA 625.1
Hexachloroethane EPA 625.1	Indeno(1,2,3-cd)pyrene EPA 625.1
Isophorone EPA 625.1	N-Nitrosodi-n-propylamine EPA 625.1
Naphthalene EPA 625.1	Nitrobenzene EPA 625.1
N-nitrosodimethylamine EPA 625.1	N-nitrosodiphenylamine EPA 625.1
Pentachlorophenol EPA 625.1	Phenanthrene EPA 625.1
Phenol EPA 625.1	Pyrene EPA 625.1
Pyridine EPA 625.1	

SOLID WASTE/SOIL (RCRA)

STATUS REPORTED ON 11/30/2023

ANALYTE NAME

INORGANIC PHYSICAL PARAMETERS

pH

INORGANIC NUTRIENT PARAMETERS

Kjeldahl Nitrogen, Total EPA 351.1

Phosphorus, Total EPA 365.1

METALS

METALS (SELECTED)

INORGANIC MISCELLANEOUS PARAMETERS

Flashpoint SW-846 1010B

SPLP LEACH (1312)

PESTICIDES

Aldrin SW-846 8081B

Chlordane, Technical SW-846 8081B

SOLVENTS

CT Extractable Petroleum Hydrocarbons (ETPH)

POLYCHLORINATED BIPHENYLS

PCB-1016 in Oil SW-846 8082A

PCB-1016 SW-846 8082A

PCB-1221 EPA 608.3

PCB-1221 in Oil SW-846 8082A

PCB-1221 SW-846 8082A

PCB-1232 in Oil SW-846 8082A

PCB-1232 SW-846 8082A

PCB-1242 in Oil SW-846 8082A

PCB-1242 SW-846 8082A

PCB-1248 in Oil SW-846 8082A

PCB-1248 SW-846 8082A

PCB-1254 in Oil SW-846 8082A

PCB-1254 SW-846 8082A

PCB-1260 in Oil SW-846 8082A

PCB-1260 SW-846 8082A

RCRA (SW-846) ORGANICS

VOLATILE ORGANICS (SW 8260)

SEMIVOLATILES

SEMIVOLATILES-8270

Report Profile:

Lab Name : Microbac Laboratories, INC. - Dayville

Test Name : *

Matrix Name : *

Matrix Selection = ALL OR SOME MATRICES SELECTED

Certifications approved or provisional on 11/30/2023

THIS IS THE LAST PAGE OF THE REPORT