



State of Tennessee

**DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESOURCES**

Certifies That

Microbac Laboratories–New England Div, Dayville, CT

*Having Met the Requirements of the Regulations for the
Certification of Laboratories Analyzing Drinking Water
is hereby Approved as a*

State Certified Laboratory in Chemistry

*To perform the Analyses as Indicated on the Certified Parameter
List For the Public Water Systems of Tennessee*

Laboratory ID Number 04903

Prasad Subbanna
Laboratory Certification Officer
Division of Water Resources

Issue/Effective Date: 1/17/2023

Expiration Date: 1/16/2024

*This certification is subject to performance on E.P.A.
Proficiency Testing Samples, laboratory inspections,
payment of annual fees, is nontransferable, and
supersedes previously issued certificates.*

Certified Parameters - 2022

TENNESSEE

Microbac - New England Division

TN04903

EPA # CT00008

1/16/2023

Attn: Nicole Paradise
61 Louisa Viens Drive
Dayville, CT 06241

| Parameter | EPA Parameter # | Approved Method | Study Type | Date Complete | PT Provider / WS # |
|---------------------------------|--------------------|--------------------|------------------|------------------|--------------------|
| Disinfectant Residuals | | | | | |
| Free Chlorine Residual | 1013 | SM - 4500-CI G | Proficiency Test | 4/8/2022 | ABS / QTA 022322 |
| Total Chlorine Residual | 1012 | SM - 4500-CI G | Proficiency Test | 4/8/2022 | ABS / QTA 022322 |
| Disinfection By-Products | | | | | |
| HAA | | | | | |
| Dibromoacetic Acid (HAA5) | 2454 | EPA - 552.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Dichloroacetic Acid (HAA5) | 2451 | EPA - 552.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Monobromoacetic Acid (HAA5) | 2453 | EPA - 552.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Monochloroacetic Acid (HAA5) | 2450 | EPA - 552.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Trichloroacetic Acid (HAA5) | 2452 | EPA - 552.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| THM | | | | | |
| Bromodichloromethane | 2943 | EPA - 524.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Bromoform | 2942 | EPA - 524.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Chlorodibromomethane | 2944 | EPA - 524.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Chloroform | 2941 | EPA - 524.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Herbicides | | | | | |
| 2,4,5-TP (Silvex) | 2110 | EPA - 515.3 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| 2,4-D | 2105 | EPA - 515.3 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Alachlor | 2051 | EPA - 525.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Alachlor | 2051 | EPA - 505 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Dalapon | 2031 | EPA - 515.3 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Dinoseb | 2041 | EPA - 515.3 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Diquat | 2032 | EPA - 549.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Glyphosate | 2034 | EPA - 547 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Picloram | 2040 | EPA - 515.3 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Pentachlorophenol | 2326 | EPA - 515.3 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Inorganics | | | | | |
| Calcium | 1016 | EPA - 200.7 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Chloride | 1017 | SM - 4500-CI-E | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Chloride | 1017 | EPA - 300.0 | Proficiency Test | 4/8/2022 | ABS / QTA 022322 |

| <u>Parameter</u> | <u>EPA Parameter #</u> | <u>Approved Method</u> | <u>Study Type</u> | <u>Date Complete</u> | <u>PT Provider / WS #</u> |
|----------------------------|----------------------------|----------------------------|-------------------|--------------------------|---------------------------|
| Color | 1905 | SM - 2120 B | Proficiency Test | 4/8/2022 | ABS / QTA 022322 |
| Conductivity | 1064 | SM - 2510 B | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Cyanide | 1024 | EPA - 335.4 | Proficiency Test | 6/24/2022 | ABS / WS062422 |
| Fluoride | 1025 | SM - 4500-F-C | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Hardness, Total (as CaCO3) | 1915 | SM - 2340B | Proficiency Test | 4/8/2022 | ABS / QTA 022322 |
| Iron | 1028 | EPA - 200.7 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| MBAS (Foaming Agent) | 1089 | SM - 5540 C | Proficiency Test | 4/8/2022 | ABS / QTA 022322 |
| Nitrate | 1040 | SM - 4500-NO3-F | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Nitrite | 1041 | SM - 4500-NO3-F | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Ortho-phosphate | 1044 | EPA - 365.1 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| pH | 1925 | SM - 4500-H+B | Proficiency Test | 4/8/2022 | ABS / QTA 022322 |
| Potassium | 1042 | EPA - 200.7 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Silica | 1049 | SM - 4500-Si-E | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Sodium | 1052 | EPA - 200.7 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Sulfate | 1055 | SM - 4500-SO4 E | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| TOC (total organic carbon) | 2920 | SM - 5310 C | Proficiency Test | 4/8/2022 | ABS / QTA 022322 |
| Total Dissolved Solids | 1930 | SM - 2540 C | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Total Dissolved Solids | 1930 | SM - 2540 C | Proficiency Test | 4/8/2022 | ABS / QTA 022322 |
| Turbidity | 0100 | SM - 2130 B | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Alkalinity, Total | 1927 | SM - 2320 B | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Hardness, Calcium | 1919 | SM - 2340 B | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |

Metals

| | | | | | |
|-----------|------|-------------|------------------|-----------|------------------|
| Antimony | 1074 | EPA - 200.8 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Arsenic | 1005 | EPA - 200.8 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Barium | 1010 | EPA - 200.8 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Barium | 1010 | EPA - 200.7 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Beryllium | 1075 | EPA - 200.7 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Beryllium | 1075 | EPA - 200.8 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Cadmium | 1015 | EPA - 200.8 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Cadmium | 1015 | EPA - 200.7 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Chromium | 1020 | EPA - 200.7 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Chromium | 1020 | EPA - 200.8 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Copper | 1022 | EPA - 200.7 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Copper | 1022 | EPA - 200.8 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Lead | 5000 | EPA - 200.8 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Magnesium | 1031 | EPA - 200.7 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Manganese | 1032 | EPA - 200.8 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Manganese | 1032 | EPA - 200.7 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Mercury | 1035 | EPA - 245.1 | Proficiency Test | 7/8/2022 | ABS / QTA 060922 |
| Mercury | 1035 | EPA - 245.1 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Nickel | 1036 | EPA - 200.8 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |

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| Nickel | 1036 | EPA - 200.7 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Selenium | 1045 | EPA - 200.8 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Thallium | 1085 | EPA - 200.8 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Uranium (Trace Metal) | 4400 | EPA - 200.8 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Aluminum | 1002 | EPA - 200.8 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Aluminum | 1002 | EPA - 200.7 | Proficiency Test | 4/8/2022 | ABS / QTA 022322 |
| Silver | 1050 | EPA - 200.8 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Silver | 1050 | EPA - 200.7 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Zinc | 1095 | EPA - 200.8 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Zinc | 1095 | EPA - 200.7 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |

Organics

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|-----------------------------|------|-------------|------------------|-----------|-----------------|
| Aldicarb | 2047 | EPA - 531.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Aldicarb Sulfone | 2044 | EPA - 531.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Aldicarb Sulfoxide | 2043 | EPA - 531.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| DBCP (Dibromochloropropane) | 2931 | EPA - 504.1 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| EDB (Ethylene dibromide) | 2946 | EPA - 504.1 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| bis(2-ethylhexyl)phthalate | 2039 | EPA - 525.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Di(2-ethylhexyl)adipate | 2035 | EPA - 525.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |

Pesticides

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|---------------------------|------|-------------|------------------|-----------|------------------|
| Atrazine | 2050 | EPA - 525.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Hexachlorocyclopentadiene | 2042 | EPA - 505 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Hexachlorocyclopentadiene | 2042 | EPA - 525.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Carbofuran | 2046 | EPA - 531.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Chlordane | 2959 | EPA - 505 | Proficiency Test | 7/8/2022 | ABS / QTA 060922 |
| Endrin | 2005 | EPA - 525.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Endrin | 2005 | EPA - 505 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Heptachlor | 2065 | EPA - 505 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Heptachlor | 2065 | EPA - 525.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Heptachlor Epoxide | 2067 | EPA - 505 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Heptachlor Epoxide | 2067 | EPA - 525.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Hexachlorobenzene | 2274 | EPA - 505 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Hexachlorobenzene | 2274 | EPA - 525.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Lindane | 2010 | EPA - 505 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Lindane | 2010 | EPA - 505 | Proficiency Test | 7/8/2022 | ABS / QTA 060922 |
| Lindane | 2010 | EPA - 525.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Methoxychlor | 2015 | EPA - 505 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |

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| Methoxychlor | 2015 | EPA - 525.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Oxamyl (Vydate) | 2036 | EPA - 531.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Simazine | 2037 | EPA - 525.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Toxaphene | 2020 | EPA - 505 | Proficiency Test | 7/8/2022 | ABS / QTA 060922 |

VOCs - Regulated

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|--------------------------------------|------|-------------|------------------|-----------|-----------------|
| 1,1,1-Trichloroethane | 2981 | EPA - 524.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| 1,1,2-Trichloroethane | 2985 | EPA - 524.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| 1,1-Dichloroethylene | 2977 | EPA - 524.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| 1,2,4-Trichlorobenzene | 2378 | EPA - 524.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| 1,2-Dichlorobenzene | 2968 | EPA - 524.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| 1,2-Dichloroethane | 2980 | EPA - 524.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| 1,2-Dichloropropane | 2983 | EPA - 524.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| 1,4-Dichlorobenzene | 2969 | EPA - 524.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Benzene | 2990 | EPA - 524.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Carbon Tetrachloride | 2982 | EPA - 524.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Chlorobenzene | 2989 | EPA - 524.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| cis-1,2-Dichloroethylene | 2380 | EPA - 524.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Ethylbenzene | 2992 | EPA - 524.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Methylene chloride (dichloromethane) | 2964 | EPA - 524.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Styrene | 2996 | EPA - 524.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Tetrachloroethylene | 2987 | EPA - 524.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Toluene | 2991 | EPA - 524.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Total Xylenes | 2955 | EPA - 524.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| trans-1,2-dichloroethylene | 2979 | EPA - 524.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Trichloroethylene | 2984 | EPA - 524.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
| Vinyl Chloride | 2976 | EPA - 524.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |

VOCs - Synthetics

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|----------------|------|-------------|------------------|-----------|-----------------|
| Benzo(a)pyrene | 2306 | EPA - 525.2 | Proficiency Test | 5/19/2022 | NY-DH / ELAP452 |
|----------------|------|-------------|------------------|-----------|-----------------|