



State of Tennessee

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

Certifies That

Microbac Knoxville

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


State Certified Laboratory

To perform

Parameters as listed on the certified parameter list

For the Public Water Systems of Tennessee

Laboratory ID Number TN 02017 Effective through April 30, 2014


Troy D. Taubert
Lab Certification Officer
Tennessee Division of Water Supply

*This certification is subject to laboratory inspections, is nontransferable and supersedes
previously issued certificates*

Certified Parameters - 2011

TENNESSEE

Microbac Laboratories, Inc. – Knoxville

TN02017

EPA # TN00018

10/24/2011

Attn: Troy Taubert
505 East Broadway Ave.
Maryville, TN 37804

<u>Parameter</u>	<u>EPA Parameter #</u>	<u>Approved Method</u>	<u>Study Type</u>	<u>Date Complete</u>	<u>PT Provider / WS #</u>
Disinfectant Residuals					
Total Chlorine Residual	1012	SM - 4500-CI G	Proficiency Test	5/19/2011	Wibby / WS0411
Disinfection By-Products					
UV 254 Absorbance	2922	SM - 5910 B	Proficiency Test	5/19/2011	Wibby / WS0411
HAA					
Total Haloacetic Acids(five)(HAA5)	2456	SM - 6251 B	Proficiency Test	7/7/2011	Wibby / RR-08348
THM					
Total Trihalomethanes (TTHM)	2950	EPA - 524.2	Proficiency Test	5/19/2011	Wibby / WS0411
Inorganics					
Alkalinity	1928	SM - 2320 B	Proficiency Test	5/19/2011	Wibby / WS0411
Chloride	1017	EPA - 300.0	Proficiency Test	5/19/2011	Wibby / WS0411
Color	1905	SM - 2120 B	Proficiency Test	5/19/2011	Wibby / WS0411
Cyanide	1024	SM - 4500-CN-E	Proficiency Test	5/19/2011	Wibby / WS0411
Fluoride	1025	EPA - 300.0	Proficiency Test	5/19/2011	Wibby / WS0411
Iron	1028	EPA - 200.7	Proficiency Test	5/19/2011	Wibby / WS0411
MBAS (Foaming Agent)	1089	SM - 5540 C	Proficiency Test	5/19/2011	Wibby / WS0411
Nitrate	1040	EPA - 300.0	Proficiency Test	5/19/2011	Wibby / WS0411
Nitrate + Nitrite	1038	EPA - 300.0	Proficiency Test	5/19/2011	Wibby / WS0411
Nitrite	1041	EPA - 300.0	Proficiency Test	5/19/2011	Wibby / WS0411
Potassium	1042	EPA - 200.7	Proficiency Test	5/19/2011	Wibby / WS0411
Silica	1049	EPA - 200.7	Proficiency Test	5/19/2011	Wibby / WS0411
Sodium	1052	EPA - 200.7	Proficiency Test	5/19/2011	Wibby / WS0411
Sulfate	1055	EPA - 300.0	Proficiency Test	5/19/2011	Wibby / WS0411
TDS	1930	SM - 2540 C	Proficiency Test	5/19/2011	Wibby / WS0411
Turbidity	0100	EPA - 180.1	Proficiency Test	5/19/2011	Wibby / WS0411
Metals					
Antimony	1074	EPA - 200.8	Proficiency Test	9/29/2011	Wibby / WS-RR-08703
Arsenic	1005	EPA - 200.8	Proficiency Test	9/29/2011	Wibby / WS-RR-08703
Barium	1010	EPA - 200.7	Proficiency Test	5/19/2011	Wibby / WS0411
Barium	1010	EPA - 200.8	Proficiency Test	9/29/2011	Wibby / WS-RR-08703
Beryllium	1075	EPA - 200.7	Proficiency Test	11/18/2010	Wibby / WS1010
Beryllium	1075	EPA - 200.8	Proficiency Test	9/29/2011	Wibby / WS-RR-08703
Cadmium	1015	EPA - 200.8	Proficiency Test	9/29/2011	Wibby / WS-RR-08703
Cadmium	1015	EPA - 200.7	Proficiency Test	5/19/2011	Wibby / WS0411
Chromium	1020	EPA - 200.7	Proficiency Test	11/18/2010	Wibby / WS1010
Chromium	1020	EPA - 200.8	Proficiency Test	9/29/2011	Wibby / WS-RR-08703
Copper	1022	EPA - 200.7	Proficiency Test	5/19/2011	Wibby / WS0411
Copper	1022	EPA - 200.8	Proficiency Test	9/29/2011	Wibby / WS-RR-08703
Lead	5000	EPA - 200.8	Proficiency Test	9/29/2011	Wibby / WS-RR-08703
Magnesium	1031	EPA - 200.7	Proficiency Test	3/1/2011	Wibby / RR-07722
Manganese	1032	EPA - 200.8	Proficiency Test	9/29/2011	Wibby / WS-RR-08703
Manganese	1032	EPA - 200.7	Proficiency Test	5/19/2011	Wibby / WS0411

<u>Parameter</u>	<u>EPA Parameter #</u>	<u>Approved Method</u>	<u>Date Study Type</u>	<u>Complete</u>	<u>PT Provider / WS #</u>
Metals					
Mercury	1035	EPA - 245.1	Proficiency Test	5/19/2011	Wibby / WS0411
Nickel	1036	EPA - 200.8	Proficiency Test	9/29/2011	Wibby / WS-RR-08703
Nickel	1036	EPA - 200.7	Proficiency Test	5/19/2011	Wibby / WS0411
Selenium	1045	EPA - 200.8	Proficiency Test	9/29/2011	Wibby / WS-RR-08703
Thallium	1085	EPA - 200.8	Proficiency Test	9/29/2011	Wibby / WS-RR-08703
Aluminum	1002	EPA - 200.8	Proficiency Test	9/29/2011	Wibby / WS-RR-08703
Aluminum	1002	EPA - 200.7	Proficiency Test	5/19/2011	Wibby / WS0411
Silver	1050	EPA - 200.8	Proficiency Test	9/29/2011	Wibby / WS-RR-08703
Silver	1050	EPA - 200.7	Proficiency Test	11/18/2010	Wibby / WS1010
Zinc	1095	EPA - 200.7	Proficiency Test	11/18/2010	Wibby / WS1010
Microbiologicals					
Escherichia coli, MI Medium	3014	EPA - 1604	Proficiency Test	6/30/2011	Wibby / WSM0611
Fecal Coliforms,mFC	3013	SM - 9222 D	Proficiency Test	6/30/2011	Wibby / WSM0611
Total Coliform, MI Medium	3000	EPA - 1604	Proficiency Test	6/30/2011	Wibby / WSM0611
VOCs - Regulated					
1,1,1-Trichloroethane	2981	EPA - 524.2	Proficiency Test	5/19/2011	Wibby / WS0411
1,1,2-Trichloroethane	2985	EPA - 524.2	Proficiency Test	5/19/2011	Wibby / WS0411
1,1-Dichloroethylene	2977	EPA - 524.2	Proficiency Test	5/19/2011	Wibby / WS0411
1,2,4-Trichlorobenzene	2378	EPA - 524.2	Proficiency Test	5/19/2011	Wibby / WS0411
1,2-Dichlorobenzene	2968	EPA - 524.2	Proficiency Test	5/19/2011	Wibby / WS0411
1,2-Dichloroethane	2980	EPA - 524.2	Proficiency Test	5/19/2011	Wibby / WS0411
1,2-Dichloropropane	2983	EPA - 524.2	Proficiency Test	5/19/2011	Wibby / WS0411
1,4-Dichlorobenzene	2969	EPA - 524.2	Proficiency Test	5/19/2011	Wibby / WS0411
Benzene	2990	EPA - 524.2	Proficiency Test	5/19/2011	Wibby / WS0411
Carbon Tetrachloride	2982	EPA - 524.2	Proficiency Test	5/19/2011	Wibby / WS0411
Chlorobenzene	2989	EPA - 524.2	Proficiency Test	5/19/2011	Wibby / WS0411
cis-1,2-Dichloroethylene	2380	EPA - 524.2	Proficiency Test	5/19/2011	Wibby / WS0411
Dichloromethane (methylene chloride)	2964	EPA - 524.2	Proficiency Test	5/19/2011	Wibby / WS0411
Ethylbenzene	2992	EPA - 524.2	Proficiency Test	5/19/2011	Wibby / WS0411
Styrene	2996	EPA - 524.2	Proficiency Test	5/19/2011	Wibby / WS0411
Tetrachloroethylene	2987	EPA - 524.2	Proficiency Test	5/19/2011	Wibby / WS0411
Toluene	2991	EPA - 524.2	Proficiency Test	5/19/2011	Wibby / WS0411
trans-1,2-dichloroethylene	2979	EPA - 524.2	Proficiency Test	5/19/2011	Wibby / WS0411
Trichloroethylene	2984	EPA - 524.2	Proficiency Test	5/19/2011	Wibby / WS0411
Vinyl Chloride	2976	EPA - 524.2	Proficiency Test	5/19/2011	Wibby / WS0411
Xylenes	2955	EPA - 524.2	Proficiency Test	5/19/2011	Wibby / WS0411