

# COMMONWEALTH OF KENTUCKY

## Energy and Environment Cabinet

2022

Wastewater Laboratory Certification Program  
In Accordance with KRS 224.10-670 and 401 KAR Chapter 5:320



### THIS CERTIFIES THAT

Microbac Laboratories Inc - Knoxville Division  
505 E Broadway Ave  
Maryville, TN 37804  
Laboratory ID Number: KY98025



The above laboratory has complied with Kentucky Administrative Regulation 401 KAR 5:320, Wastewater Laboratory Certification Program, for the analyses of wastewater samples, as specified in 33 U.S.C. 1342, for the method-analyte pairs specified on the attached certification list.

Effective From: January 1, 2022

To: December 31, 2022

*Kevin Stewart*

Certification Program Manager

Signed by: Kevin Stewart

Microbac Laboratories Inc - Knoxville Division  
98025

Effective: January 1, 2022

KY Category	CAS #	Analyte	Status	Reference Method	Method Code for PT Reporting	MRL	MRL Units
Inorganic/General Chemistry		Alkalinity, Total (as CaCO <sub>3</sub> )	Certified	SM 2320 B-2011	20045618	5	mg/L
Inorganic/General Chemistry	7664-41-7	Ammonia	Certified	EPA 350.1 Rev. 2.0 (1993)	10063602	0.20	mg/L
Inorganic/General Chemistry		BOD, 5-day	Certified	SM 5210 B-2011	20135266	2	mg/L
Inorganic/General Chemistry	24959-67-9	Bromide	Certified	EPA 300.0 Rev 2.1 (1993)	10053200	0.20	mg/L
Inorganic/General Chemistry		Carbonaceous Biochemical Oxygen Demand (CBOD <sub>5</sub> )	Certified	SM 5210 B-2011	20135266	2	mg/L
Inorganic/General Chemistry		Chemical Oxygen Demand (COD)	Certified	SM 5220 D-2011	20136816	10	mg/L
Inorganic/General Chemistry	16887-00-6	Chloride	Certified	EPA 300.0 Rev 2.1 (1993)	10053200	0.20	mg/L
Inorganic/General Chemistry		Chromium (VI)	Certified	SM 3500-Cr B-2011	20066266	0.01	mg/L
Inorganic/General Chemistry		Color	Certified	SM 2120 B-2011	20039310	5	Color Units
Inorganic/General Chemistry	57-12-5	Cyanide, Total (as Cn)	Certified	EPA 335.4 Rev. 1.0 (1993)	10061402	0.0050	mg/L
Inorganic/General Chemistry	16984-48-8	Fluoride	Certified	EPA 300.0 Rev 2.1 (1993)	10053200	0.20	mg/L
Inorganic/General Chemistry		Hardness, Total (as CaCO <sub>3</sub> )	Certified	SM 2340 B-2011	20046611	0.0750	mg/L
Inorganic/General Chemistry	84145-82-4	Nitrate	Certified	EPA 300.0 Rev 2.1 (1993)	10053200	0.0113	mg/L
Inorganic/General Chemistry		Nitrate-Nitrite (as N)	Certified	EPA 300.0 Rev 2.1 (1993)	10053200	0.0152	mg/L
Inorganic/General Chemistry	14797-65-0	Nitrite	Certified	EPA 300.0 Rev 2.1 (1993)	10053200	0.0152	mg/L
Inorganic/General Chemistry		Nitrogen, Kjeldahl Total (TKN)	Certified	EPA 350.1 Rev. 2.0 (1993)	10063602	0.20	mg/L
Inorganic/General Chemistry		Nitrogen, Organic Total (as N)	Certified	Calculation		0.20	mg/L
Inorganic/General Chemistry	7727-37-9	Nitrogen, Total	Certified	Calculation		0.20	mg/L
Inorganic/General Chemistry		Oil and Grease	Certified	EPA 1664 Rev. B	10261617	5	mg/L
Inorganic/General Chemistry	7723-14-0	Phosphorus, Total (as P)	Certified	EPA 200.7, Rev. 4.4 (1994)	10013806	0.0750	mg/L
Inorganic/General Chemistry		Solids, Settleable	Certified	SM 2540 F-2011	20052215	0.10	mL/L
Inorganic/General Chemistry		Solids, Total	Certified	SM 2540 B-2011	20049416	4	mg/L



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Inorganic/General Chemistry		Solids, Total Dissolved	Certified	SM 2540 C-2011	20050413	10	mg/L
Inorganic/General Chemistry		Solids, Total Suspended (TSS)	Certified	SM 2540 D-2011	20051212	5	mg/L
Inorganic/General Chemistry	14808-79-8	Sulfate, Total (as SO <sub>4</sub> )	Certified	EPA 300.0 Rev 2.1 (1993)	10053200	0.20	mg/L
Inorganic/General Chemistry	264888-19-9	o-Phosphate	Certified	EPA 300.0 Rev 2.1 (1993)	10053200	0.20	mg/L
Inorganic/Metals	7429-90-5	Aluminum, Total (as Al)	Certified	EPA 200.7, Rev. 4.4 (1994)	10013806	0.0375	mg/L
Inorganic/Metals	7440-36-0	Antimony, Total (as Sb)	Certified	EPA 200.7, Rev. 4.4 (1994)	10013806	0.0150	mg/L
Inorganic/Metals	7440-38-2	Arsenic, Total (as As)	Certified	EPA 200.7, Rev. 4.4 (1994)	10013806	0.0150	mg/L
Inorganic/Metals	7440-39-3	Barium, Total (as Ba)	Certified	EPA 200.7, Rev. 4.4 (1994)	10013806	0.0040	mg/L
Inorganic/Metals	7440-41-7	Beryllium, Total	Certified	EPA 200.7, Rev. 4.4 (1994)	10013806	0.0010	mg/L
Inorganic/Metals	7440-42-8	Boron	Certified	EPA 200.7, Rev. 4.4 (1994)	10013806	0.02	mg/L
Inorganic/Metals	7440-43-9	Cadmium, Total (as Cd)	Certified	EPA 200.7, Rev. 4.4 (1994)	10013806	0.0075	mg/L
Inorganic/Metals	7440-70-2	Calcium, total [as Ca]	Certified	EPA 200.7, Rev. 4.4 (1994)	10013806	0.0750	mg/L
Inorganic/Metals	7440-47-3	Chromium, Total (as Cr)	Certified	EPA 200.7, Rev. 4.4 (1994)	10013806	0.0075	mg/L
Inorganic/Metals	7440-48-4	Cobalt, Total	Certified	EPA 200.7, Rev. 4.4 (1994)	10013806	0.01	mg/L
Inorganic/Metals	7440-50-8	Copper, Total	Certified	EPA 200.7, Rev. 4.4 (1994)	10013806	0.02	mg/L
Inorganic/Metals	7439-89-6	Iron, Total (as Fe)	Certified	EPA 200.7, Rev. 4.4 (1994)	10013806	0.09	mg/L
Inorganic/Metals	7439-92-1	Lead, Total (as Pb)	Certified	EPA 200.7, Rev. 4.4 (1994)	10013806	0.0120	mg/L
Inorganic/Metals	7439-95-4	Magnesium, Total (as Mg)	Certified	EPA 200.7, Rev. 4.4 (1994)	10013806	0.0050	mg/L
Inorganic/Metals	7439-96-5	Manganese, Total (as Mn)	Certified	EPA 200.7, Rev. 4.4 (1994)	10013806	0.0375	mg/L
Inorganic/Metals	7439-97-6	Mercury, Total (as Hg)	Certified	EPA 245.1 Rev 3.0	10036609	0.0002	mg/L
Inorganic/Metals	7439-98-7	Molybdenum, Total (as Mo)	Certified	EPA 200.7, Rev. 4.4 (1994)	10013806	0.0150	mg/L
Inorganic/Metals	7440-02-0	Nickel, Total (as Ni)	Certified	EPA 200.7, Rev. 4.4 (1994)	10013806	0.01	mg/L
Inorganic/Metals	7440-09-7	Potassium, Total (as K)	Certified	EPA 200.7, Rev. 4.4 (1994)	10013806	0.3750	mg/L



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Inorganic/Metals	7782-49-2	Selenium, Total (as Se)	Certified	EPA 200.7, Rev. 4.4 (1994)	10013806	0.02	mg/L
Inorganic/Metals		Silica, Dissolved	Certified	EPA 200.7, Rev. 4.4 (1994)	10013806	0.0250	mg/L
Inorganic/Metals	7440-22-4	Silver, Total (as Ag)	Certified	EPA 200.7, Rev. 4.4 (1994)	10013806	0.0010	mg/L
Inorganic/Metals	7440-23-5	Sodium, Total (as Na)	Certified	EPA 200.7, Rev. 4.4 (1994)	10013806	0.15	mg/L
Inorganic/Metals	7440-28-0	Thallium, Total	Certified	EPA 200.8, Rev. 5.4 (1994)	10014605	0.000250	mg/L
Inorganic/Metals	7440-31-5	Tin, Total	Certified	EPA 200.7, Rev. 4.4 (1994)	10013806	0.02	mg/L
Inorganic/Metals	7440-32-6	Titanium, Total (as Ti)	Certified	EPA 200.7, Rev. 4.4 (1994)	10013806	0.0075	mg/L
Inorganic/Metals	7440-62-2	Vanadium, Total	Certified	EPA 200.7, Rev. 4.4 (1994)	10013806	0.0050	mg/L
Inorganic/Metals	7440-66-6	Zinc, Total (as Zn)	Certified	EPA 200.7, Rev. 4.4 (1994)	10013806	0.0040	mg/L

