COMMONWEALTH OF KENTUCKY

Energy and Environment Cabinet

2023

Drinking Water Laboratory Certification Program Under The Safe Drinking Water Act and In Accordance with 401 KAR Chapter 8



THIS CERTIFIES THAT

Microbac Laboratories Ohio Division 158 Starlite Dr Marietta, OH 45750 Laboratory ID Number: KY98026



The above laboratory has complied with Kentucky Administrative Regulation 401 KAR 8:040, Drinking Water Laboratory Certification Program, for the analyses of drinking water samples, as specified in 42 U.S.C. 300f-300j-26, for the method-analyte pairs specified on the attached certification list.

Effective From: March 31, 2023

Patrick S. Garrity

Laboratory Certification Officer Signed by: Patrick Garrity

To: December 31, 2023

Komin Stormet

Certification Program Manager Signed by: Kevin Stewart

Microbac Laboratories Ohio Division 98026

Effective: March 31, 2023

| KY Category | CAS # | Analyte | Status | Reference Method | Method Code for PT Reporting | MRL | MRL Units |
|--|-----------|----------------------------|-----------|--------------------|------------------------------------|--------|-----------|
| All Other DW Chem Analysis (Incl. RADs) | 7440-36-0 | Antimony, Total (as Sb) | Certified | EPA 200.8 | 10014605 | 0.0020 | mg/L |
| All Other DW Chem Analysis (Incl. RADs) | 7440-39-3 | Barium, Total (as Ba) | Certified | EPA 200.7 | 10013806 | 0.01 | mg/L |
| All Other DW Chem Analysis (Incl. RADs) | 7440-39-3 | Barium, Total (as Ba) | Certified | EPA 200.8 | 10014605 | 0.0030 | mg/L |
| All Other DW Chem Analysis (Incl. RADs) | 7440-43-9 | Cadmium, Total (as Cd) | Certified | EPA 200.8 | 10014605 | 0.0006 | mg/L |
| All Other DW Chem Analysis (Incl. RADs) | 7440-47-3 | Chromium, Total (as Cr) | Certified | EPA 200.7 | 10013806 | 0.0050 | mg/L |
| All Other DW Chem Analysis (Incl. RADs) | 7440-47-3 | Chromium, Total (as Cr) | Certified | EPA 200.8 | 10014605 | 0.0070 | mg/L |
| All Other DW Chem Analysis (Incl. RADs) | 7440-50-8 | Copper, Total | Certified | EPA 200.7 | 10013806 | 0.01 | mg/L |
| All Other DW Chem Analysis (Incl. RADs) | 7440-50-8 | Copper, Total | Certified | EPA 200.8 | 10014605 | 0.0020 | mg/L |
| All Other DW Chem Analysis (Incl. RADs) | | Foaming Agents | Certified | SM 5540 C 22nd Ed. | 20144814 | 0.20 | mg/L |
| All Other DW Chem Analysis (Incl. RADs) | | Hardness, Total (as CaCO3) | Certified | SM 2340 B 22nd Ed. | 20046417 | | mg/L |
| All Other DW Chem Analysis (Incl. RADs) | 7439-89-6 | Iron, Total (as Fe) | Certified | EPA 200.7 | 10013806 | 0.10 | mg/L |
| All Other DW Chem Analysis (Incl. RADs) | 7439-92-1 | Lead, Total (as Pb) | Certified | EPA 200.8 | 10014605 | 0.0010 | mg/L |
| All Other DW Chem Analysis (Incl. RADs) | 7439-95-4 | Magnesium, Total (as Mg) | Certified | EPA 200.7 | 10013806 | 0.50 | mg/L |
| All Other DW Chem Analysis (Incl. RADs) | 7439-96-5 | Manganese, Total (as Mn) | Certified | EPA 200.7 | 10013806 | 0.01 | mg/L |
| All Other DW Chem Analysis (Incl. RADs) | 7439-96-5 | Manganese, Total (as Mn) | Certified | EPA 200.8 | 10014605 | 0.0040 | mg/L |
| All Other DW Chem Analysis (Incl. RADs) | 7439-97-6 | Mercury, Total (as Hg) | Certified | EPA 245.1 | 10036609 | 0.0002 | mg/L |



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|--|------------|-------------------------|-----------|-------------------------------------|------------------------------------|--------|-----------|
| All Other DW Chem Analysis (Incl. RADs) | 7440-02-0 | Nickel, Total (as Ni) | Certified | EPA 200.7 | 10013806 | 0.02 | mg/L |
| All Other DW Chem Analysis (Incl. RADs) | 7440-02-0 | Nickel, Total (as Ni) | Certified | EPA 200.8 | 10014605 | 0.0040 | mg/L |
| All Other DW Chem Analysis (Incl. RADs) | 84145-82-4 | Nitrate | Certified | EPA 300.0 | 10053200 | 0.60 | mg/L |
| All Other DW Chem Analysis (Incl. RADs) | 84145-82-4 | Nitrate | Certified | EPA 353.2 | 10067604 | 0.05 | mg/L |
| All Other DW Chem Analysis (Incl. RADs) | 84145-82-4 | Nitrate | Certified | SM 4500-NO3 ⁻ F 22nd Ed. | 20116410 | 0.05 | mg/L |
| All Other DW Chem Analysis (Incl. RADs) | 7782-49-2 | Selenium, Total (as Se) | Certified | EPA 200.8 | 10014605 | 0.0010 | mg/L |
| All Other DW Chem Analysis (Incl. RADs) | 7440-22-4 | Silver, Total (as Ag) | Certified | EPA 200.7 | 10013806 | 0.01 | mg/L |
| All Other DW Chem Analysis (Incl. RADs) | 7440-22-4 | Silver, Total (as Ag) | Certified | EPA 200.8 | 10014605 | 0.0010 | mg/L |
| All Other DW Chem Analysis (Incl. RADs) | 7440-23-5 | Sodium, Total (as Na) | Certified | EPA 200.7 | 10013806 | 0.50 | mg/L |
| All Other DW Chem Analysis (Incl. RADs) | | Solids, Total Dissolved | Certified | SM 2540 C 23rd Ed. | 20050457 | 20 | mg/L |
| All Other DW Chem Analysis (Incl. RADs) | 14808-79-8 | Sulfate, Total (as SO4) | Certified | EPA 300.0 | 10053200 | 1 | mg/L |
| All Other DW Chem Analysis (Incl. RADs) | 14808-79-8 | Sulfate, Total (as SO4) | Certified | EPA 375.4 | 10073800 | 5 | mg/L |
| All Other DW Chem Analysis (Incl. RADs) | 14808-79-8 | Sulfate, Total (as SO4) | Certified | SM 4500-SO4 ⁻ E 22nd Ed. | 20132836 | 5 | mg/L |
| All Other DW Chem Analysis (Incl. RADs) | 7440-28-0 | Thallium, Total | Certified | EPA 200.8 | 10014605 | 0.0002 | mg/L |
| All Other DW Chem Analysis (Incl. RADs) | 7440-66-6 | Zinc, Total (as Zn) | Certified | EPA 200.7 | 10013806 | 0.0250 | mg/L |
| All Other DW Chem Analysis (Incl. RADs) | 7440-66-6 | Zinc, Total (as Zn) | Certified | EPA 200.8 | 10014605 | 0.03 | mg/L |



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|--|------------|--|-----------|-----------------------|------------------------------------|--------|-----------|
| All Other DW Chem Analysis (Incl. RADs) | | рН | Certified | EPA 150.1 | 10008409 | | S.U. |
| All Other DW Chem Analysis (Incl. RADs) | | рН | Certified | SM 4500-H+ B 22nd Ed. | 20105015 | | S.U. |
| Synthetic Organic Chemicals | 96-12-8 | 1,2-Dibromo-3- chloropropane | Certified | EPA 504.1 | 10082801 | 0.0220 | ug/L |
| Synthetic Organic Chemicals | 106-93-4 | 1,2-Dibromoethane (EDB) | Certified | EPA 504.1 | 10082801 | 0.0220 | ug/L |
| Synthetic Organic Chemicals | 13252-13-6 | Hexafluoropropylene Oxide Dimer Acid (HFPO-DA) (GenX) | Certified | EPA 533 | 10091619 | 2 | ng/L |
| Synthetic Organic Chemicals | 13252-13-6 | Hexafluoropropylene Oxide Dimer Acid (HFPO-DA) (GenX) | Certified | EPA 537.1 | 10091642 | 2 | ng/L |
| Synthetic Organic Chemicals | 375-73-5 | Perfluorobutanesulfonic Acid (PFBS) | Certified | EPA 533 | 10091619 | 2 | ng/L |
| Synthetic Organic Chemicals | 375-73-5 | Perfluorobutanesulfonic Acid (PFBS) | Certified | EPA 537.1 | 10091642 | 2 | ng/L |
| Synthetic Organic Chemicals | 355-46-4 | Perfluorohexanesulfonic Acid (PFHxS) | Certified | EPA 533 | 10091619 | 2 | ng/L |
| Synthetic Organic Chemicals | 355-46-4 | Perfluorohexanesulfonic Acid (PFHxS) | Certified | EPA 537.1 | 10091642 | 2 | ng/L |
| Synthetic Organic Chemicals | 375-95-1 | Perfluorononanoic Acid (PFNA) | Certified | EPA 533 | 10091619 | 2 | ng/L |
| Synthetic Organic Chemicals | 375-95-1 | Perfluorononanoic Acid (PFNA) | Certified | EPA 537.1 | 10091642 | 2 | ng/L |
| Synthetic Organic Chemicals | 335-67-1 | Perfluorooctanoic Acid (PFOA) | Certified | EPA 533 | 10091619 | 2 | ng/L |
| Synthetic Organic Chemicals | 335-67-1 | Perfluorooctanoic Acid (PFOA) | Certified | EPA 537.1 | 10091642 | 2 | ng/L |
| Synthetic Organic Chemicals | 1763-23-1 | Perflurooctanesulfonic acid (PFOS) | Certified | EPA 533 | 10091619 | 2 | ng/L |
| Synthetic Organic Chemicals | 1763-23-1 | Perflurooctanesulfonic acid (PFOS) | Certified | EPA 537.1 | 10091642 | 2 | ng/L |

