



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

MINNESOTA DEPARTMENT OF HEALTH
 601 Robert Street North
 Saint Paul, MN 55155
 Katerina Cronin Phone: (651) 201-5872

CHEMICAL

Valid To: March 31, 2025

Certificate Number: 5403.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests using the testing technologies and in the analyte categories identified below:

Testing Technologies

Gas Chromatography, High Resolution Gas Chromatography/High Resolution Mass Spectrometry, High Pressure Liquid Chromatography/Mass Spectrometry/Mass Spectrometry, Inductively Coupled Plasma/Atomic Emission Spectroscopy, Various Wet Chemistry Technologies and Most Probable Number (MPN)

<u>Parameter/Analyte</u>	<u>Non-Potable Water</u>	<u>Drinking Water</u>
<u>Alkalinity</u>		
Alkalinity as CaCO ₃	SM 2320 B-2011	-----
<u>Nitrogen</u>		
Ammonia Nitrogen	EPA 350.1	-----
Nitrate + Nitrite Nitrogen	EPA 353.2	-----
Total Kjeldahl Nitrogen	EPA 351.2	-----
<u>Metals by ICP</u>		
Boron	EPA 200.7	-----
Calcium	EPA 200.7	-----
Iron	EPA 200.7	-----
Magnesium	EPA 200.7	-----
Potassium	EPA 200.7	-----
Sodium	EPA 200.7	-----
<u>Metals by ICP-MS</u>		
Aluminum	EPA 200.8	-----
Antimony	EPA 200.8	-----
Arsenic	EPA 200.8	-----
Barium	EPA 200.8	-----
Beryllium	EPA 200.8	-----
Cadmium	EPA 200.8	-----
Chromium	EPA 200.8	-----
Cobalt	EPA 200.8	-----
Copper	EPA 200.8	-----
Lead	EPA 200.8	-----

<u>Parameter/Analyte</u>	<u>Non-Potable Water</u>	<u>Drinking Water</u>
Lithium	EPA 200.8	-----
Manganese	EPA 200.8	-----
Molybdenum	EPA 200.8	-----
Nickel	EPA 200.8	-----
Selenium	EPA 200.8	-----
Silver	EPA 200.8	-----
Strontium	EPA 200.8	-----
Thallium	EPA 200.8	-----
Titanium	EPA 200.8	-----
Uranium	EPA 200.8	-----
Vanadium	EPA 200.8	-----
Zinc	EPA 200.8	-----
<u>Hardness</u>		
Total Hardness as CaCO ₃	SM 2340 B-2011	-----
<u>Inorganic Ions by IC</u>		
Bromide	EPA 300.1	-----
Chloride	EPA 300.1	-----
Sulfate	EPA 300.1	-----
<u>Chlorophyll</u>		
Chlorophyll <i>a</i>	SM 10200 H-2011	-----
<u>Coliform</u>		
<i>Escherichia coli</i> , MPN	SM 9223 B-2004	-----
<u>Phosphorus</u>		
Orthophosphate as Phosphorus	EPA 365.1	-----
Total Phosphorus as Phosphorus	EPA 365.1	-----
<u>Residue</u>		
Total Suspended Solids (TSS)	SM 2540 D-2011	-----
Total Volatile Suspended Solids	SM 2540 E-2011	-----
<u>pH</u>		
pH	SM 4500-H ⁺ B-2011	-----
<u>Turbidity</u>		
Turbidity	SM 2130 B-2011	-----
<u>Dioxane</u>		
1,4-Dioxane	MDH Performance-Based Method (MDH 522)	-----
<u>PFAS</u>		
Perfluorobutanoic Acid (PFBA)	MDH Performance-Based Method (MDH 555)	MDH Performance-Based Method (MDH 555)
Perfluoropentanoic Acid (PFPeA)	MDH Performance-Based Method (MDH 555)	MDH Performance-Based Method (MDH 555)
Perfluorohexanoic Acid (PFHxA)	MDH Performance-Based Method (MDH 555)	MDH Performance-Based Method (MDH 555)
Perfluorooctanoic Acid (PFOA)	MDH Performance-Based Method (MDH 555)	MDH Performance-Based Method (MDH 555)

<u>Parameter/Analyte</u>	<u>Non-Potable Water</u>	<u>Drinking Water</u>
Perfluorobutanesulfonate (PFBS)	MDH Performance-Based Method (MDH 555)	MDH Performance-Based Method (MDH 555)
Perfluorohexanesulfonate (PFHxS)	MDH Performance-Based Method (MDH 555)	MDH Performance-Based Method (MDH 555)
Perfluorooctanesulfonate (PFOS)	MDH Performance-Based Method (MDH 555)	MDH Performance-Based Method (MDH 555)
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic Acid (11Cl-PF3OUdS)	EPA 533	EPA 533
1H,1H,2H,2H-Perfluorodecane Sulfonic Acid (8:2 FTS)	EPA 533	EPA 533
1H,1H,2H,2H-Perfluorohexane Sulfonic Acid (4:2 FTS)	EPA 533	EPA 533
1H,1H,2H,2H-Perfluorooctane Sulfonic Acid (6:2 FTS)	EPA 533	EPA 533
4,8-Dioxa-3H-perfluorononanoic Acid (ADONA)	EPA 533	EPA 533
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic Acid (9Cl-PF3ONS)	EPA 533	EPA 533
Hexafluoropropylene oxide dimer Acid (HFPO-DA)	EPA 533	EPA 533
N-ethyl perfluorooctanesulfonamidoacetic Acid (N-EtFOSAA)	EPA 533	EPA 533
Nonafluoro-3,6-dioxaheptanoic Acid (NFDHA)	EPA 533	EPA 533
Perfluoro(2-ethoxyethane)sulfonic Acid (PFEESA)	EPA 533	EPA 533
Perfluoro-3-methoxypropanoic Acid (PFMPA)	EPA 533	EPA 533
Perfluoro-4-methoxybutanoic Acid (PFMBA)	EPA 533	EPA 533
Perfluorobutanesulfonate (PFBS)	EPA 533	EPA 533
Perfluorobutanoic Acid (PFBA)	EPA 533	EPA 533
Perfluorodecanoic Acid (PFDA)	EPA 533	EPA 533
Perfluorododecanoic Acid (PFDoA)	EPA 533	EPA 533
Perfluoroheptanoic Acid (PFHPA)	EPA 533	EPA 533
Perfluoroheptasulfonate (PFHpS)	EPA 533	EPA 533
Perfluorohexanesulfonate (PFHxS)	EPA 533	EPA 533
Perfluorohexanoic Acid (PFHxA)	EPA 533	EPA 533
Perfluorononanoic Acid (PFNA)	EPA 533	EPA 533
Perfluorooctanesulfonate (PFOS)	EPA 533	EPA 533
Perfluorooctanoic Acid (PFOA)	EPA 533	EPA 533
Perfluoropentanoic Acid (PFPeA)	EPA 533	EPA 533
Perfluoropentasulfonate (PFPeS)	EPA 533	EPA 533
Perfluoroundecanoic Acid (PFUnA)	EPA 533	EPA 533
Perfluorobutanoic Acid (PFBA)	EPA 1633mod	-----
Perfluoropentanoic Acid (PFPeA)	EPA 1633mod	-----
Perfluorohexanoic Acid (PFHxA)	EPA 1633mod	-----
Perfluoroheptanoic Acid (PFHpA)	EPA 1633mod	-----
Perfluorooctanoic Acid (PFOA)	EPA 1633mod	-----
Perfluorononanoic Acid (PFNA)	EPA 1633mod	-----
Perfluorodecanoic Acid (PFDA)	EPA 1633mod	-----
Perfluoroundecanoic Acid (PFUnA)	EPA 1633mod	-----
Perfluorododecanoic acid (PFDoA)	EPA 1633mod	-----
Perfluorotridecanoic acid (PFTrDA)	EPA 1633mod	-----
Perfluorotetradecanoic acid (PFTeDA)	EPA 1633mod	-----
Perfluorobutanesulfonate (PFBS)	EPA 1633mod	-----
Perfluoropentasulfonate (PFPeS)	EPA 1633mod	-----

<u>Parameter/Analyte</u>	<u>Non-Potable Water</u>	<u>Drinking Water</u>
Perfluorohexanesulfonate (PFHxS)	EPA 1633mod	-----
Perfluoroheptasulfonate (PFHpS)	EPA 1633mod	-----
Perfluorooctanesulfonate (PFOS)	EPA 1633mod	-----
Perfluorononanesulfonic acid (PFNS)	EPA 1633mod	-----
Perfluorodecanesulfonic acid (PFDS)	EPA 1633mod	-----
Perfluorododecanesulfonic acid (PFDoS)	EPA 1633mod	-----
1H,1H,2H,2H-Perfluorohexane Sulfonic Acid (4:2 FTS)	EPA 1633mod	-----
1H,1H,2H,2H-Perfluorooctane Sulfonic Acid (6:2 FTS)	EPA 1633mod	-----
1H,1H,2H,2H-Perfluorodecane Sulfonic Acid (8:2 FTS)	EPA 1633mod	-----
Perfluorooctanesulfonamide (PFOSA)	EPA 1633mod	-----
N-methyl perfluorooctanesulfonamide (NMeFOSA)	EPA 1633mod	-----
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	EPA 1633mod	-----
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	EPA 1633mod	-----
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	EPA 1633mod	-----
N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	EPA 1633mod	-----
N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	EPA 1633mod	-----
Hexafluoropropylene oxide dimer acid (HFPO-DA)	EPA 1633mod	-----
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	EPA 1633mod	-----
Perfluoro-3-methoxypropanoic acid (PFMPA)	EPA 1633mod	-----
Perfluoro-4-methoxybutanoic acid (PFMBA)	EPA 1633mod	-----
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	EPA 1633mod	-----
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	EPA 1633mod	-----
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl- PF3OUdS)	EPA 1633mod	-----
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	EPA 1633mod	-----
3-Perfluoropropyl propanoic acid (3:3FTCA)	EPA 1633mod	-----
2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	EPA 1633mod	-----
3-Perfluoroheptyl propanoic acid (7:3FTCA)	EPA 1633mod	-----
VOCs		
1,1,1,2-Tetrachloroethane	EPA 8260D	-----
1,1,1-Trichloroethane	EPA 8260D	-----
1,1,2,2-Tetrachloroethane	EPA 8260D	-----
1,1,2-Trichloroethane	EPA 8260D	-----
1,1,2-Trichlorotrifluoroethane	EPA 8260D	-----
1,1-Dichloroethane	EPA 8260D	-----
1,1-Dichloroethene	EPA 8260D	-----
1,1-Dichloropropene	EPA 8260D	-----
1,2,3-Trichlorobenzene	EPA 8260D	-----
1,2,3-Trichloropropane	EPA 8260D	-----
1,2,4-Trichlorobenzene	EPA 8260D	-----
1,2,4-Trimethylbenzene	EPA 8260D	-----
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260D	-----
1,2-Dibromomethane (EDB)	EPA 8260D	-----
1,2-Dichlorobenzene	EPA 8260D	-----
1,2-Dichloroethane	EPA 8260D	-----

<u>Parameter/Analyte</u>	<u>Non-Potable Water</u>	<u>Drinking Water</u>
1,2-Dichloropropane	EPA 8260D	-----
1,3,5-Trimethylbenzene	EPA 8260D	-----
1,3-Dichlorobenzene	EPA 8260D	-----
1,3-Dichloropropane	EPA 8260D	-----
1,4-Dichlorobenzene	EPA 8260D	-----
2,2-Dichloropropane	EPA 8260D	-----
2-Chlorotoluene	EPA 8260D	-----
4-Chlorotoluene	EPA 8260D	-----
Acetone	EPA 8260D	-----
Allyl Chloride	EPA 8260D	-----
Benzene	EPA 8260D	-----
Bromobenzene	EPA 8260D	-----
Bromochloromethane	EPA 8260D	-----
Bromodichloromethane	EPA 8260D	-----
Bromoform	EPA 8260D	-----
Bromomethane	EPA 8260D	-----
Carbon Tetrachloride	EPA 8260D	-----
Chlorobenzene	EPA 8260D	-----
Chlorobromomethane	EPA 8260D	-----
Chloroethane	EPA 8260D	-----
Chloroform	EPA 8260D	-----
Chloromethane	EPA 8260D	-----
cis-1,2-Dichloroethene	EPA 8260D	-----
cis-1,3-Dichloropropene	EPA 8260D	-----
Dibromomethane	EPA 8260D	-----
Dichlorodifluoromethane	EPA 8260D	-----
Dichlorofluoromethane	EPA 8260D	-----
Ethyl Ether	EPA 8260D	-----
Ethylbenzene	EPA 8260D	-----
Hexachlorobutadiene	EPA 8260D	-----
Isopropylbenzene	EPA 8260D	-----
Methyl Ethyl Ketone (MEK)	EPA 8260D	-----
Methyl Isobutyl Ketone (MIBK)	EPA 8260D	-----
Methyl Tertiary Butyl Ether (MTBE)	EPA 8260D	-----
Methylene Chloride	EPA 8260D	-----
Naphthalene	EPA 8260D	-----
n-Butylbenzene	EPA 8260D	-----
n-Propylbenzene	EPA 8260D	-----
o-Xylene	EPA 8260D	-----
p&m-Xylene	EPA 8260D	-----
p-Isopropyltoluene	EPA 8260D	-----
sec-Butylbenzene	EPA 8260D	-----
Styrene	EPA 8260D	-----
tert-Butylbenzene	EPA 8260D	-----
Tetrachloroethene	EPA 8260D	-----
Tetrahydrofuran (THF)	EPA 8260D	-----
Toluene	EPA 8260D	-----
trans-1,2-Dichloroethene	EPA 8260D	-----

<u>Parameter/Analyte</u>	<u>Non-Potable Water</u>	<u>Drinking Water</u>
trans-1,3-Dichloropropene	EPA 8260D	-----
Trichloroethene (TCE)	EPA 8260D	-----
Trichlorofluoromethane	EPA 8260D	-----
Vinyl Chloride	EPA 8260D	-----

<u>Parameter/Analyte</u>	<u>Tissue</u>
PFAS	
Perfluorobutanoic Acid (PFBA)	EPA 1633mod
Perfluoropentanoic Acid (PFPeA)	EPA 1633mod
Perfluorohexanoic Acid (PFHxA)	EPA 1633mod
Perfluoroheptanoic Acid (PFHpA)	EPA 1633mod
Perfluorooctanoic Acid (PFOA)	EPA 1633mod
Perfluorononanoic Acid (PFNA)	EPA 1633mod
Perfluorodecanoic Acid (PFDA)	EPA 1633mod
Perfluoroundecanoic Acid (PFUnA)	EPA 1633mod
Perfluorododecanoic acid (PFDoA)	EPA 1633mod
Perfluorotridecanoic acid (PFTrDA)	EPA 1633mod
Perfluorotetradecanoic acid (PFTeDA)	EPA 1633mod
Perfluorobutanesulfonate (PFBS)	EPA 1633mod
Perfluoropentasulfonate (PFPeS)	EPA 1633mod
Perfluorohexanesulfonate (PFHxS)	EPA 1633mod
Perfluoroheptasulfonate (PFHpS)	EPA 1633mod
Perfluorooctanesulfonate (PFOS)	EPA 1633mod
Perfluorononanesulfonic acid (PFNS)	EPA 1633mod
Perfluorodecanesulfonic acid (PFDS)	EPA 1633mod
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1H,1H,2H,2H-Perfluorooctane Sulfonic Acid (6:2 FTS)	EPA 1633mod
1H,1H,2H,2H-Perfluorodecane Sulfonic Acid (8:2 FTS)	EPA 1633mod
Perfluorooctanesulfonamide (PFOSA)	EPA 1633mod
N-methyl perfluorooctanesulfonamide (NMeFOSA)	EPA 1633mod
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	EPA 1633mod
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	EPA 1633mod
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	EPA 1633mod
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2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	EPA 1633mod
3-Perfluoroheptyl propanoic acid (7:3FTCA)	EPA 1633mod



Accredited Laboratory

A2LA has accredited

MINNESOTA DEPARTMENT OF HEALTH

Saint Paul, MN

for technical competence in the field of

Chemical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 23rd day of May 2023.

A blue ink signature of Mr. Trace McInturff, written in a cursive style.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 5403.01
Valid to March 31, 2025

For the tests to which this accreditation applies, please refer to the laboratory's Chemical Scope of Accreditation.