



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

MIDWEST ANALYTICAL SERVICES, INC.
2905 Hilton Road
Ferndale, MI 48220
Alicia Decker Phone: 248-591-6660

ENVIRONMENTAL

Valid To: August 31, 2023

Certificate Number: 0381.01

In recognition of the successful completion of the A2LA evaluation process (including an assessment of the laboratory's compliance with the 2009 TNI Environmental Testing Requirements), accreditation is granted to this laboratory to perform recognized EPA methods using the following testing technologies and in the analyte categories identified below:

Testing Technologies

ICP-AES Spectrometry, Gas Chromatography, Gas Chromatography/Mass Spectrometry, Gravimetry, Misc.- Electronic Probes (pH, O₂), Oxygen Demand, Hazardous Waste Characteristics Tests, Spectrophotometry (Visible), Spectrophotometry (Automated), Titrimetry

Parameter/Analyte	Potable Water	Nonpotable Water	Solid Hazardous Waste	
			Aqueous	Solid
Metals				
Arsenic	-----	EPA 200.7	EPA 6010B	EPA 6010B
Barium	-----	EPA 200.7	EPA 6010B	EPA 6010B
Cadmium	-----	EPA 200.7	EPA 6010B	EPA 6010B
Calcium	-----	EPA 200.7	EPA 6010B	EPA 6010B
Chromium	-----	EPA 200.7	EPA 6010B	EPA 6010B
Cobalt	-----	EPA 200.7	EPA 6010B	EPA 6010B
Copper	-----	EPA 200.7	EPA 6010B	EPA 6010B
Iron	-----	EPA 200.7	EPA 6010B	EPA 6010B
Lead	-----	EPA 200.7	EPA 6010B	EPA 6010B
Magnesium	-----	EPA 200.7	EPA 6010B	EPA 6010B
Manganese	-----	EPA 200.7	EPA 6010B	EPA 6010B
Mercury	-----	EPA 245.1	EPA 7470A	EPA 7470A
Nickel	-----	EPA 200.7	EPA 6010B	EPA 6010B
Potassium	-----	EPA 200.7	EPA 6010B	EPA 6010B
Selenium	-----	EPA 200.7	EPA 6010B	EPA 6010B
Silicon	-----	EPA 200.7	EPA 6010B	EPA 6010B
Silver	-----	EPA 200.7	EPA 6010B	EPA 6010B
Sodium	-----	EPA 200.7	EPA 6010B	EPA 6010B
Zinc	-----	EPA 200.7	EPA 6010B	EPA 6010B

Parameter/Analyte	Potable Water	Nonpotable Water	Solid Hazardous Waste	
			Aqueous	Solid
<u>Nutrients</u>				
Ammonia as N	-----	EPA 350.2	-----	-----
Nitrate as N	-----	SM 4500-NO ₃ D	SM 4500-NO ₃ D	SM 4500-NO ₃ D
Total Phosphorus	-----	SM 4500-P E	-----	-----
<u>Demands</u>				
BOD	-----	SM 5210B	-----	-----
Carbonaceous BOD	-----	SM 5210B	-----	-----
Sampling	SM 1060	SM 1060	SM 1060	SM 1060
<u>Wet Chemistry</u>				
Chloride	-----	EPA 9212	EPA 9212	EPA 9212
Cyanide	-----	SM 4500 CN E	EPA 9010B	EPA 9010B
Cyanide Amenable to Chlorination	-----	SM 4500 CN-G	SM 4500 CN-G	SM 4500 CN-G
Filterable Residue	-----	SM 2540D	-----	-----
Hardness	-----	SM 2340B	-----	-----
Non-filterable Residue	-----	SM 2540C	-----	-----
Oil and Grease	-----	EPA 1664B	-----	-----
pH	-----	SM 4500-H ⁺ B	EPA 9045D	EPA 9045D
Phenols	-----	EPA 420.4	EPA 9066	EPA 9066
Specific Conductance	-----	EPA 120.1	-----	-----
Total Residue	-----	SM 2540B	-----	-----
<u>Purgeable Organics (Volatiles)</u>				
Acetone	-----	EPA 624.1	EPA 8260B	EPA 8260B
Acrylonitrile	-----	EPA 624.1	EPA 8260B	EPA 8260B
Acrolein	-----	-----	EPA 8260B	EPA 8260B
Acetonitrile	-----	EPA 624.1	EPA 8260B	EPA 8260B
Benzene	-----	EPA 624.1	EPA 8260B	EPA 8260B
Bromobenzene	-----	-----	EPA 8260B	EPA 8260B
Bromodichloromethane	-----	EPA 624.1	EPA 8260B	EPA 8260B
Bromoform	-----	EPA 624.1	EPA 8260B	EPA 8260B
Bromomethane	-----	EPA 624.1	EPA 8260B	EPA 8260B
n-Butylbenzene	-----	-----	EPA 8260B	EPA 8260B
Sec-Butylbenzene	-----	-----	EPA 8260B	EPA 8260B
Tert-Butylbenzene	-----	-----	EPA 8260B	EPA 8260B
Carbon disulfide	-----	-----	EPA 8260B	EPA 8260B
Carbon tetrachloride	-----	EPA 624.1	EPA 8260B	EPA 8260B
Chlorobenzene	-----	EPA 624.1	EPA 8260B	EPA 8260B
Chloroethane	-----	-----	EPA 8260B	EPA 8260B
2-Chloroethylvinyl ether	-----	EPA 624.1	EPA 8260B	EPA 8260B
Chloroform	-----	EPA 624.1	EPA 8260B	EPA 8260B
Chloromethane	-----	EPA 624.1	EPA 8260B	EPA 8260B
2-Chlorotoluene	-----	EPA 624.1	EPA 8260B	EPA 8260B
4-Chlorotoluene	-----	EPA 624.1	EPA 8260B	EPA 8260B
Dibromochloromethane	-----	EPA 624.1	EPA 8260B	EPA 8260B
1,2-Dibromo-3-chloropropane (DBCP)	-----	-----	EPA 8260B	EPA 8260B

Parameter/Analyte	Potable Water	Nonpotable Water	Solid Hazardous Waste	
			Aqueous	Solid
Dibromomethane	-----	-----	EPA 8260B	EPA 8260B
1,2-Dibromoethane (EDB)	-----	-----	EPA 8260B	EPA 8260B
1,2-Dichlorobenzene	-----	EPA 624.1	EPA 8260B	EPA 8260B
1,3-Dichlorobenzene	-----	EPA 624.1	EPA 8260B	EPA 8260B
1,4-Dichlorobenzene	-----	EPA 624.1	EPA 8260B	EPA 8260B
1,1-Dichloroethane	-----	EPA 624.1	EPA 8260B	EPA 8260B
1,2-Dichloroethane	-----	EPA 624.1	EPA 8260B	EPA 8260B
1,1-Dichloroethene	-----	EPA 624.1	EPA 8260B	EPA 8260B
cis-1,2-Dichloroethene	-----	-----	EPA 8260B	EPA 8260B
trans-1,2-Dichloroethene	-----	EPA 624.1	EPA 8260B	EPA 8260B
1,2-Dichloropropane	-----	EPA 624.1	EPA 8260B	EPA 8260B
1,3-Dichloropropane	-----	-----	EPA 8260B	EPA 8260B
2,2-Dichloropropane	-----	EPA 624.1	EPA 8260B	EPA 8260B
1,1-Dichloropropene	-----	-----	EPA 8260B	EPA 8260B
cis-1,3-Dichloropropene	-----	EPA 624.1	EPA 8260B	EPA 8260B
trans-1,3-Dichloropropene	-----	EPA 624.1	EPA 8260B	EPA 8260B
Ethylbenzene	-----	EPA 624.1	EPA 8260B	EPA 8260B
2-Hexanone	-----	-----	EPA 8260B	EPA 8260B
Isopropylbenzene	-----	-----	EPA 8260B	EPA 8260B
Methylene chloride	-----	EPA 624.1	EPA 8260B	EPA 8260B
Methyl ethyl ketone (MEK)	-----	EPA 624.1	EPA 8260B	EPA 8260B
Methyl isobutyl ketone	-----	EPA 624.1	EPA 8260B	EPA 8260B
n-Propylbenzene	-----	-----	EPA 8260B	EPA 8260B
Styrene	-----	-----	EPA 8260B	EPA 8260B
1,1,1,2-Tetrachloroethane	-----	-----	EPA 8260B	EPA 8260B
1,1,2,2-Tetrachloroethane	-----	EPA 624.1	EPA 8260B	EPA 8260B
Tetrachloroethene	-----	EPA 624.1	EPA 8260B	EPA 8260B
Toluene	-----	EPA 624.1	EPA 8260B	EPA 8260B
1,1,1-Trichloroethane	-----	EPA 624.1	EPA 8260B	EPA 8260B
1,1,2-Trichloroethane	-----	EPA 624.1	EPA 8260B	EPA 8260B
Trichloroethene	-----	EPA 624.1	EPA 8260B	EPA 8260B
Trichlorofluoromethane	-----	EPA 624.1	EPA 8260B	EPA 8260B
1,2,3-Trichloropropane	-----	-----	EPA 8260B	EPA 8260B
1,2,4-Trimethylbenzene	-----	-----	EPA 8260B	EPA 8260B
1,3,5-Trimethylbenzene	-----	-----	EPA 8260B	EPA 8260B
Vinyl acetate	-----	-----	EPA 8260B	EPA 8260B
Vinyl chloride	-----	EPA 624.1	EPA 8260B	EPA 8260B
Xylenes, Total	-----	EPA 624.1	EPA 8260B	EPA 8260B
Extractable Organics (Semivolatiles)				
Acenaphthene	-----	EPA 625.1	EPA 8270C	EPA 8270C
Acenaphthylene	-----	EPA 625.1	EPA 8270C	EPA 8270C
Aniline	-----	-----	EPA 8270C	EPA 8270C
Anthracene	-----	EPA 625.1	EPA 8270C	EPA 8270C
Benzidine	-----	EPA 625.1	EPA 8270C	EPA 8270C
Benzoic acid	-----	-----	EPA 8270C	EPA 8270C
Benzo (a) anthracene	-----	EPA 625.1	EPA 8270C	EPA 8270C

Parameter/Analyte	Potable Water	Nonpotable Water	Solid Hazardous Waste	
			Aqueous	Solid
Benzo (b) fluoranthene	-----	EPA 625.1	EPA 8270C	EPA 8270C
Benzo (k) fluoranthene	-----	EPA 625.1	EPA 8270C	EPA 8270C
Benzo (g,h,i) fluoranthene	-----	EPA 625.1	EPA 8270C	EPA 8270C
Benzo (a) pyrene	-----	EPA 625.1	EPA 8270C	EPA 8270C
Benzyl alcohol	-----	-----	EPA 8270C	EPA 8270C
Bis (2-chloroethoxy) methane	-----	EPA 625.1	EPA 8270C	EPA 8270C
Bis (2-chloroethyl) ether	-----	EPA 625.1	EPA 8270C	EPA 8270C
Bis (2-chloroisopropyl) ether	-----	EPA 625.1	EPA 8270C	EPA 8270C
Bis (2-ethylhexyl) phthalate	-----	EPA 625.1	EPA 8270C	EPA 8270C
4-Bromophenylphenyl ether	-----	EPA 625.1	EPA 8270C	EPA 8270C
Butyl benzyl phthalate	-----	EPA 625.1	EPA 8270C	EPA 8270C
4-Chloroaniline	-----	-----	EPA 8270C	EPA 8270C
4-Chloro-3-methylphenol	-----	EPA 625.1	EPA 8270C	EPA 8270C
2-Chloronaphthalene	-----	EPA 625.1	EPA 8270C	EPA 8270C
2-Chlorophenol	-----	EPA 625.1	EPA 8270C	EPA 8270C
4-Chlorophenol	-----	EPA 625.1	EPA 8270C	EPA 8270C
4-Chlorophenyl phenyl ether	-----	EPA 625.1	EPA 8270C	EPA 8270C
Chrysene	-----	EPA 625.1	EPA 8270C	EPA 8270C
Cresols (methyl phenols)	-----	EPA 625.1	EPA 8270C	EPA 8270C
Dibenzo (a,h) anthracene	-----	EPA 625.1	EPA 8270C	EPA 8270C
Dibenzofuran	-----	-----	EPA 8270C	EPA 8270C
1,2-Dichlorobenzene	-----	-----	EPA 8270C	EPA 8270C
1,3-Dichlorobenzene	-----	-----	EPA 8270C	EPA 8270C
1,4-Dichlorobenzene	-----	-----	EPA 8270C	EPA 8270C
3,3-Dichlorobenzidine	-----	EPA 625.1	EPA 8270C	EPA 8270C
2,4-Dichlorophenol	-----	EPA 625.1	EPA 8270C	EPA 8270C
Diethyl phthalate	-----	EPA 625.1	EPA 8270C	EPA 8270C
2,4-Dimethylphenol	-----	EPA 625.1	EPA 8270C	EPA 8270C
Dimethyl phthalate	-----	EPA 625.1	EPA 8270C	EPA 8270C
Di-n-butyl phthalate	-----	EPA 625.1	EPA 8270C	EPA 8270C
Di-n-octyl phthalate	-----	EPA 625.1	EPA 8270C	EPA 8270C
2,4-Dinitrophenol	-----	EPA 625.1	EPA 8270C	EPA 8270C
2,4-Dinitrotoluene	-----	EPA 625.1	EPA 8270C	EPA 8270C
2,6-Dinitrotoluene	-----	EPA 625.1	EPA 8270C	EPA 8270C
1,2-Diphenylhydrazine	-----	EPA 625.1	-----	-----
Fluoranthene	-----	EPA 625.1	EPA 8270C	EPA 8270C
Fluorene	-----	EPA 625.1	EPA 8270C	EPA 8270C
Hexachlorobenzene	-----	EPA 625.1	EPA 8270C	EPA 8270C
Hexachlorobutadiene	-----	EPA 625.1	EPA 8270C	EPA 8270C
Hexachloroethane	-----	EPA 625.1	EPA 8270C	EPA 8270C
Indeno (1,2,3-cd) pyrene	-----	EPA 625.1	EPA 8270C	EPA 8270C
Isophorone	-----	EPA 625.1	EPA 8270C	EPA 8270C
2-Methyl-4,6-dinitrophenol	-----	EPA 625.1	EPA 8270C	EPA 8270C
2-Methylnaphthalene	-----	-----	EPA 8270C	EPA 8270C
2-Methylphenol	-----	-----	EPA 8270C	EPA 8270C
4-Methylphenol	-----	EPA 625.1	EPA 8270C	EPA 8270C
Naphthalene	-----	EPA 625.1	EPA 8270C	EPA 8270C

Parameter/Analyte	Potable Water	Nonpotable Water	Solid Hazardous Waste	
			Aqueous	Solid
2-Nitroaniline	-----	-----	EPA 8270C	EPA 8270C
3-Nitroaniline	-----	-----	EPA 8270C	EPA 8270C
4-Nitroaniline	-----	-----	EPA 8270C	EPA 8270C
Nitrobenzene	-----	EPA 625.1	EPA 8270C	EPA 8270C
2-Nitrophenol	-----	EPA 625.1	EPA 8270C	EPA 8270C
4-Nitrophenol	-----	EPA 625.1	EPA 8270C	EPA 8270C
N-Nitrosodimethylamine	-----	EPA 625.1	EPA 8270C	EPA 8270C
N-Nitrosodi-n-propylamine	-----	EPA 625.1	EPA 8270C	EPA 8270C
N-Nitrosodiphenylamine	-----	EPA 625.1	EPA 8270C	EPA 8270C
Pentachlorophenol	-----	EPA 625.1	EPA 8270C	EPA 8270C
Phenanthrene	-----	EPA 625.1	EPA 8270C	EPA 8270C
Phenol	-----	EPA 625.1	EPA 8270C	EPA 8270C
Pyrene	-----	EPA 625.1	EPA 8270C	EPA 8270C
1,2,4-Trichlorobenzene	-----	EPA 625.1	EPA 8270C	EPA 8270C
2,4,5-Trichlorophenol	-----	EPA 625.1	EPA 8270C	EPA 8270C
2,4,6-Trichlorophenol	-----	EPA 625.1	EPA 8270C	EPA 8270C
Pesticides / Herbicides				
Aldrin	-----	EPA 625.1	EPA 8270C	EPA 8270C
alpha-BHC	-----	EPA 625.1	EPA 8270C	EPA 8270C
beta-BHC	-----	EPA 625.1	EPA 8270C	EPA 8270C
delta-BHC	-----	EPA 625.1	EPA 8270C	EPA 8270C
gamma-BHC (Lindane)	-----	EPA 625.1	EPA 8270C	EPA 8270C
alpha-Chlordane (Technical)	-----	EPA 625.1	EPA 8270C	EPA 8270C
gamma-Chlordane (Technical)	-----	EPA 625.1	EPA 8270C	EPA 8270C
4,4'-DDD	-----	EPA 625.1	EPA 8270C	EPA 8270C
4,4'-DDE	-----	EPA 625.1	EPA 8270C	EPA 8270C
4,4'-DDT	-----	EPA 625.1	EPA 8270C	EPA 8270C
Endosulfan I (alpha)	-----	EPA 625.1	EPA 8270C	EPA 8270C
Endosulfan II (beta)	-----	EPA 625.1	EPA 8270C	EPA 8270C
Endrin	-----	EPA 625.1	EPA 8270C	EPA 8270C
Endrin aldehyde	-----	EPA 625.1	EPA 8270C	EPA 8270C
Heptachlor	-----	EPA 625.1	EPA 8270C	EPA 8270C
Heptachlor epoxide	-----	EPA 625.1	EPA 8270C	EPA 8270C
PCB				
Aroclor 1016	-----	EPA 608.3	EPA 8082A	EPA 8082A
Aroclor 1221	-----	EPA 608.3	EPA 8082A	EPA 8082A
Aroclor 1232	-----	EPA 608.3	EPA 8082A	EPA 8082A
Aroclor 1242	-----	EPA 608.3	EPA 8082A	EPA 8082A
Aroclor 1248	-----	EPA 608.3	EPA 8082A	EPA 8082A
Aroclor 1254	-----	EPA 608.3	EPA 8082A	EPA 8082A
Aroclor 1260	-----	EPA 608.3	EPA 8082A	EPA 8082A

<u>Parameter/Analyte</u>	<u>Potable Water</u>	<u>Nonpotable Water</u>	<u>Solid Hazardous Waste</u>	
			<u>Aqueous</u>	<u>Solid</u>
<u>Hazardous Waste Characteristics</u>				
Corrosivity	-----	-----	EPA 9040B EPA 9045C	EPA 9040B EPA 9045C
Ignitability	-----	-----	EPA 1010	EPA 1010
Paint Filter Liquids Test	-----	-----	EPA 9095A	EPA 9095A
Reactivity	-----	-----	EPA 7.3.3.2	EPA 7.3.3.2
Toxicity Characteristic Leaching Procedure	-----	-----	EPA 1311	EPA 1311





Accredited Laboratory

A2LA has accredited

MIDWEST ANALYTICAL SERVICES, INC.

Ferndale, MI

for technical competence in the field of

Environmental 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 laboratory also meets the requirements of A2LA R206 - *Specific Requirements - Environmental Testing Laboratory Accreditation Program*. 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 16th day of September 2021.

A blue ink signature of a person, likely a representative of the Accreditation Council.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 0381.01
Valid to August 31, 2023
Revised July 31, 2023

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