



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

MIDWEST ANALYTICAL SERVICES, INC.
 2905 Hilton Road
 Ferndale, MI 48220
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ENVIRONMENTAL

Valid To: April 30, 2025

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 2016 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 | ----- |
| 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 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 | ----- |
| 1,2-Dichlorobenzene | ----- | EPA 624.1 | EPA 8260B | ----- |
| 1,3-Dichlorobenzene | ----- | EPA 624.1 | 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 | ----- |
| 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 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-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 8270C | EPA 8270C |
| Fluorene | ----- | EPA 625.1 | EPA 8270C | EPA 8270C |
| Hexachlorobenzene | ----- | EPA 625.1 | EPA 8270C | EPA 8270C |
| Hexachlorobutadiene | ----- | ----- | 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 |
| 2-Nitroaniline | ----- | ----- | EPA 8270C | EPA 8270C |

| Parameter/Analyte | Potable Water | Nonpotable Water | Solid Hazardous Waste | |
|--------------------------------|---------------|------------------|-----------------------|-----------|
| | | | Aqueous | Solid |
| 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 8270C | EPA 8270C |
| N-Nitrosodi-n-propylamine | ----- | 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 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 8270C | EPA 8270C |
| Endrin aldehyde | ----- | EPA 625.1 | EPA 8270C | EPA 8270C |
| Heptachlor | ----- | EPA 625.1 | EPA 8270C | EPA 8270C |
| Heptachlor epoxide | ----- | ----- | 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 1st day of November 2023.

A blue ink signature of the Vice President of Accreditation Services.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 0381.01
Valid to April 30, 2025
Revised March 31, 2025

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