

State of Wisconsin  
Department of Natural Resources



recognizes

**Wisconsin Certification under NR 149  
of  
Environmental Monitoring & Technologies(EMT)**

Laboratory Id: **999888890**

as a laboratory licensed to perform environmental sample analysis in support of covered environmental programs (ch. NR149.02 Note) for the parameter(s) specified in the attached Scope of Accreditation.

**August 31, 2017**

Expiration Date

**August 16, 2016**

Issued on



Steven Geis, Chief  
Environmental Science Services

Cathy Stepp, Secretary  
Department of Natural Resources

This certificate does not guarantee validity of data generated, but indicates the methodology, equipment, quality control practices, records, and proficiency of the laboratory have been reviewed and found to satisfy the requirements of ch. NR 149, Wis. Adm. Code.

# Scope of Accreditation

**Environmental Monitoring & Technologies(EMT)**  
**8100 N. Austin Ave.**  
**Morton Grove, IL 60053**

Laboratory Id: **999888890**  
 Expiration Date: **08/31/17**  
 Issued Date: **08/16/16**

## Wisconsin Certification under NR 149 Matrix: Aqueous (Non-potable Water)

<p><b>Class: General Chemistry</b></p> <p>Acidity as CaCO<sub>3</sub> by <i>Titration</i></p> <p>Alkalinity by <i>Titration</i></p> <p>Ammonia as N by <i>Titration</i></p> <p>Biochemical Oxygen Demand (BOD) by <i>5-d Assay</i></p> <p>Bromide by <i>IC</i></p> <p>Carbonaceous Oxygen Demand (cBOD) by <i>5-d Assay</i></p> <p>Chemical Oxygen Demand (COD) by <i>Colorimetry</i></p> <p>Chloride by <i>IC</i></p> <p>Chlorophyll by <i>Colorimetry</i></p> <p>Cyanide, Available by <i>Colorimetry</i></p> <p>Cyanide, Available by <i>Titration</i></p> <p>Cyanide, Total by <i>Colorimetry</i></p> <p>Fluoride by <i>IC</i></p> <p>Fluoride by <i>ISE</i></p> <p>Hardness, Total as CaCO<sub>3</sub> by <i>ICP</i></p> <p>Kjeldahl Nitrogen, Total by <i>Titration</i></p> <p>Nitrate by <i>IC</i></p> <p>Nitrate + Nitrite by <i>Colorimetry</i></p> <p>Nitrite by <i>Colorimetry</i></p> <p>Nitrite by <i>IC</i></p> <p>Oil&amp;Grease, Hexane Ext. Material (HEM) by <i>Grav-HEM</i></p> <p>Organic Carbon, Total (TOC) by <i>Comb-Ox</i></p> <p>Organic Halides, Extractable (EOX) by <i>ISE</i></p> <p>Organic Halides, Purgeable (POX) by <i>ISE</i></p> <p>Orthophosphate by <i>Colorimetry</i></p> <p>Phenolics, Total by <i>Colorimetry</i></p> <p>Phosphorus, Total by <i>Colorimetry</i></p> <p>Residue, Filterable (TDS) by <i>Grav</i></p> <p>Residue, Nonfilterable (TSS) by <i>Grav</i></p> <p>Residue, Total by <i>Grav</i></p> <p>Residue, Volatile (TVS) by <i>Grav</i></p> <p>Sulfate by <i>IC</i></p> <p>Sulfide by <i>Colorimetry</i></p> <p>Sulfide by <i>ISE</i></p> <p>Sulfide by <i>Titration</i></p> <p>Sulfides, Acid-Soluble and Acid-Insoluble by <i>Titration</i></p> <p>Sulfite by <i>Titration</i></p> <p>Surfactants by <i>Colorimetry</i></p> <p>pH by <i>ISE</i></p>	<p><b>Class: Metals</b></p> <p>Arsenic by <i>ICP-MS</i></p> <p>Barium by <i>ICP</i></p> <p>Barium by <i>ICP-MS</i></p> <p>Beryllium by <i>ICP</i></p> <p>Beryllium by <i>ICP-MS</i></p> <p>Boron by <i>ICP</i></p> <p>Boron by <i>ICP-MS</i></p> <p>Cadmium by <i>ICP</i></p> <p>Cadmium by <i>ICP-MS</i></p> <p>Calcium by <i>ICP</i></p> <p>Chromium (Hexavalent) by <i>Colorimetry</i></p> <p>Chromium (Total) by <i>Colorimetry</i></p> <p>Chromium (Total) by <i>ICP</i></p> <p>Chromium (Total) by <i>ICP-MS</i></p> <p>Cobalt by <i>ICP</i></p> <p>Cobalt by <i>ICP-MS</i></p> <p>Copper by <i>ICP</i></p> <p>Copper by <i>ICP-MS</i></p> <p>Iron by <i>ICP</i></p> <p>Iron by <i>ICP-MS</i></p> <p>Lead by <i>ICP</i></p> <p>Lead by <i>ICP-MS</i></p> <p>Magnesium by <i>ICP</i></p> <p>Manganese by <i>ICP</i></p> <p>Manganese by <i>ICP-MS</i></p> <p>Mercury by <i>Hyd-CVAA</i></p> <p>Molybdenum by <i>ICP</i></p> <p>Molybdenum by <i>ICP-MS</i></p> <p>Nickel by <i>ICP</i></p> <p>Nickel by <i>ICP-MS</i></p> <p>Potassium by <i>ICP</i></p> <p>Potassium by <i>ICP-MS</i></p> <p>Selenium by <i>ICP</i></p> <p>Selenium by <i>ICP-MS</i></p> <p>Silver by <i>ICP</i></p> <p>Silver by <i>ICP-MS</i></p> <p>Sodium by <i>ICP</i></p> <p>Thallium by <i>ICP</i></p> <p>Thallium by <i>ICP-MS</i></p> <p>Tin by <i>ICP</i></p> <p>Tin by <i>ICP-MS</i></p> <p>Titanium by <i>ICP</i></p> <p>Titanium by <i>ICP-MS</i></p> <p>Vanadium by <i>ICP</i></p> <p>Vanadium by <i>ICP-MS</i></p>
<p><b>Class: Metals</b></p> <p>Aluminum by <i>ICP</i></p> <p>Aluminum by <i>ICP-MS</i></p> <p>Antimony by <i>ICP</i></p> <p>Antimony by <i>ICP-MS</i></p> <p>Arsenic by <i>ICP</i></p>	

The laboratory named above is hereby licensed under ch. NR 149, Wis. Adm. Code for the parameters listed in this attachment.  
 \* Analyte groups are defined and listed at <http://dnr.wi.gov> by searching keywords "Lab Certification:".

# Scope of Accreditation

**Environmental Monitoring & Technologies(EMT)**  
**8100 N. Austin Ave.**  
**Morton Grove, IL 60053**

Laboratory Id: **999888890**  
 Expiration Date: **08/31/17**  
 Issued Date: **08/16/16**

**Wisconsin Certification under NR 149**  
**Matrix: Aqueous (Non-potable Water)**

<p><b>Class: Metals</b>                  Zinc by ICP                  Zinc by ICP-MS</p>
<p><b>Class: BNA Semivolatiles</b>                  ## SEMIVOLATILES [BNA] (group) by GC/MS</p>
<p><b>Class: PAH - Polynuclear Aromatic Hydrocarbons (BN)</b>                  ## PAH (group) by GC/MS                  ## PAH (group) by HPLC</p>
<p><b>Class: Pesticides, Acid (Herbicides)</b>                  2,4,5-T by HPLC                  2,4-D by HPLC                  2,4-DB by HPLC                  Dicamba by HPLC                  Dinoseb (2-sec-butyl-4,6-Dinitrophenol) by HPLC                  MCPA by HPLC                  MCPP (Mecoprop) by HPLC                  Pentachlorophenol by HPLC                  Silvex (2,4,5-TP) by HPLC</p>
<p><b>Class: Pesticides, Organochlorine</b>                  ## PESTICIDES, ORGANOCHLORINE (group) by GC</p>
<p><b>Class: Petroleum Hydrocarbons</b>                  ## PVOC - Petroleum VOCs by GC                  ## PVOC - Petroleum VOCs by GC/MS                  Diesel Range Organics (DRO) by GC                  Gasoline Range Organics (GRO) by GC</p>
<p><b>Class: PCBs as Aroclors</b>                  ## PCB as AROCLORS (group) by GC</p>
<p><b>Class: Volatile Organics</b>                  ## VOLATILE ORGANICS [VOC] (group) by GC/MS                  Ethanol by GC                  Ethylene Glycol by GC                  Methanol by GC</p>

The laboratory named above is hereby licensed under ch. NR 149, Wis. Adm. Code for the parameters listed in this attachment.  
 \* Analyte groups are defined and listed at <http://dnr.wi.gov> by searching keywords "Lab Certification:".

# Scope of Accreditation

**Environmental Monitoring & Technologies(EMT)**  
**8100 N. Austin Ave.**  
**Morton Grove, IL 60053**

Laboratory Id: **999888890**  
 Expiration Date: **08/31/17**  
 Issued Date: **08/16/16**

## Wisconsin Certification under NR 149 Matrix: Solid (Waste, Soil & Tissue)

<p><b>Class: General Chemistry</b></p> <p>Ammonia as N <i>by Titration</i></p> <p>Bromide <i>by IC</i></p> <p>Chloride <i>by IC</i></p> <p>Cyanide, Available <i>by Colorimetry</i></p> <p>Cyanide, Available <i>by Titration</i></p> <p>Cyanide, Total <i>by Colorimetry</i></p> <p>Fluoride <i>by IC</i></p> <p>Fluoride <i>by ISE</i></p> <p>Kjeldahl Nitrogen, Total <i>by Titration</i></p> <p>Nitrate <i>by IC</i></p> <p>Nitrate + Nitrite <i>by Colorimetry</i></p> <p>Nitrite <i>by Colorimetry</i></p> <p>Nitrite <i>by IC</i></p> <p>Organic Carbon, Total (TOC) <i>by Comb-Ox</i></p> <p>Organic Halides, Extractable (EOX) <i>by ISE</i></p> <p>Organic Halides, Purgeable (POX) <i>by ISE</i></p> <p>Orthophosphate <i>by Colorimetry</i></p> <p>Phenolics, Total <i>by Colorimetry</i></p> <p>Phosphorus, Total <i>by Colorimetry</i></p> <p>Residue, Total <i>by Grav</i></p> <p>Sulfate <i>by IC</i></p> <p>Sulfide <i>by Colorimetry</i></p> <p>Sulfide <i>by ISE</i></p> <p>Sulfide <i>by Titration</i></p> <p>Sulfides, Acid-Soluble and Acid-Insoluble <i>by Titration</i></p> <p>pH <i>by ISE</i></p>	<p><b>Class: Metals</b></p> <p>Chromium (Total) <i>by ICP-MS</i></p> <p>Cobalt <i>by ICP</i></p> <p>Cobalt <i>by ICP-MS</i></p> <p>Copper <i>by ICP</i></p> <p>Copper <i>by ICP-MS</i></p> <p>Iron <i>by ICP</i></p> <p>Iron <i>by ICP-MS</i></p> <p>Lead <i>by ICP</i></p> <p>Lead <i>by ICP-MS</i></p> <p>Magnesium <i>by ICP</i></p> <p>Manganese <i>by ICP</i></p> <p>Manganese <i>by ICP-MS</i></p> <p>Mercury <i>by Hyd-CVAA</i></p> <p>Molybdenum <i>by ICP</i></p> <p>Molybdenum <i>by ICP-MS</i></p> <p>Nickel <i>by ICP</i></p> <p>Nickel <i>by ICP-MS</i></p> <p>Potassium <i>by ICP</i></p> <p>Potassium <i>by ICP-MS</i></p> <p>Selenium <i>by ICP</i></p> <p>Selenium <i>by ICP-MS</i></p> <p>Silver <i>by ICP</i></p> <p>Silver <i>by ICP-MS</i></p> <p>Sodium <i>by ICP</i></p> <p>Thallium <i>by ICP</i></p> <p>Thallium <i>by ICP-MS</i></p> <p>Tin <i>by ICP</i></p> <p>Tin <i>by ICP-MS</i></p> <p>Titanium <i>by ICP</i></p> <p>Titanium <i>by ICP-MS</i></p> <p>Vanadium <i>by ICP</i></p> <p>Vanadium <i>by ICP-MS</i></p> <p>Zinc <i>by ICP</i></p> <p>Zinc <i>by ICP-MS</i></p>
<p><b>Class: Metals</b></p> <p>Aluminum <i>by ICP</i></p> <p>Aluminum <i>by ICP-MS</i></p> <p>Antimony <i>by ICP</i></p> <p>Antimony <i>by ICP-MS</i></p> <p>Arsenic <i>by ICP</i></p> <p>Arsenic <i>by ICP-MS</i></p> <p>Barium <i>by ICP</i></p> <p>Barium <i>by ICP-MS</i></p> <p>Beryllium <i>by ICP</i></p> <p>Beryllium <i>by ICP-MS</i></p> <p>Boron <i>by ICP</i></p> <p>Boron <i>by ICP-MS</i></p> <p>Cadmium <i>by ICP</i></p> <p>Cadmium <i>by ICP-MS</i></p> <p>Calcium <i>by ICP</i></p> <p>Chromium (Hexavalent) <i>by Colorimetry</i></p> <p>Chromium (Total) <i>by Colorimetry</i></p> <p>Chromium (Total) <i>by ICP</i></p>	<p><b>Class: BNA Semivolatiles</b></p> <p>## SEMIVOLATILES [BNA] (group) <i>by GC/MS</i></p>
	<p><b>Class: PAH - Polynuclear Aromatic Hydrocarbons (BN)</b></p> <p>## PAH (group) <i>by GC/MS</i></p> <p>## PAH (group) <i>by HPLC</i></p>
	<p><b>Class: Pesticides, Organochlorine</b></p> <p>## PESTICIDES, ORGANOCHLORINE (group) <i>by GC</i></p>
	<p><b>Class: Petroleum Hydrocarbons</b></p> <p>## PVOC - Petroleum VOCs <i>by GC</i></p>

The laboratory named above is hereby licensed under ch. NR 149, Wis. Adm. Code for the parameters listed in this attachment.  
 \* Analyte groups are defined and listed at <http://dnr.wi.gov> by searching keywords "Lab Certification".

# Scope of Accreditation

**Environmental Monitoring & Technologies(EMT)**  
8100 N. Austin Ave.  
Morton Grove, IL 60053

Laboratory Id: 999888890  
Expiration Date: 08/31/17  
Issued Date: 08/16/16

**Wisconsin Certification under NR 149**  
**Matrix: Solid (Waste, Soil & Tissue)**

<b>Class: Petroleum Hydrocarbons</b> ## PVOC - Petroleum VOCs by GC/MS Diesel Range Organics (DRO) by GC Gasoline Range Organics (GRO) by GC
<b>Class: PCBs as Aroclors</b> ## PCB as AROCLORS (group) by GC
<b>Class: Volatile Organics</b> ## VOLATILE ORGANICS [VOC] (group) by GC/MS Ethanol by GC Ethylene Glycol by GC Methanol by GC
<b>Class: Waste Characterization Extractions</b> TCLP Extraction by Waste Extractions
<b>Class: Waste Characterization Assays</b> Ignitability of Solids by Waste Assays Ignitability, Oxidizers by Waste Assays Ignitability, Pinsky-Martens Closed Cup by Waste Assays Ignitability, Setaflash Closed Cup by Waste Assays Ignitability, Small Scale Closed Cup by Waste Assays Waste Analysis, Other by Waste Assays