

State of Wisconsin
Department of Natural Resources



recognizes

Wisconsin Certification under NR 149
of
Davy Laboratories, Div. of Davy Engineering

Laboratory Id: **632021390**

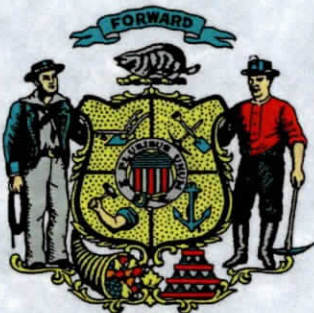
as a laboratory licensed to perform environmental sample analysis in support of covered environmental programs (ch. NR149.02 Note) for the parameter(s) specified in the attached Scope of Accreditation.

August 31, 2020

Expiration Date

August 1, 2019

Issued on



Steven Geis, Chief
Environmental Science Services

Preston D. Cole 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.

Davy Laboratories, Div. of Davy Engineering
115 South 6th Street
La Crosse, WI 54601

Laboratory Id: **632021390**
 Expiration Date: **08/31/20**
 Issued Date: **08/01/19**

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

<p>Class: General Chemistry</p> <ul style="list-style-type: none"> Alkalinity <i>by Titration</i> Ammonia as N <i>by ISE</i> Biochemical Oxygen Demand (BOD) <i>by 5-d Assay</i> Bromide <i>by IC</i> Carbonaceous Oxygen Demand (cBOD) <i>by 5-d Assay</i> Chemical Oxygen Demand (COD) <i>by Colorimetry</i> Chloride <i>by Colorimetry</i> Chloride <i>by Titration</i> Chlorine, Total Residual (TRC) <i>by Colorimetry</i> Chlorophyll <i>by Colorimetry</i> Cyanide, Available <i>by Colorimetry</i> Cyanide, Total <i>by Colorimetry</i> Fluoride <i>by ISE</i> HEM (Oil&Grease, Hexane Ext. Material (HEM)) <i>by Grav-HEM</i> Hardness, Total as CaCO₃ <i>by FLAA</i> Hardness, Total as CaCO₃ <i>by Titration</i> Kjeldahl Nitrogen, Total <i>by Colorimetry</i> Nitrate <i>by ISE</i> Nitrate + Nitrite <i>by Colorimetry</i> Nitrite <i>by Colorimetry</i> Orthophosphate <i>by Colorimetry</i> Phenolics, Total <i>by Colorimetry</i> Phosphorus, Total <i>by Colorimetry</i> Residue, Filterable (TDS) <i>by Grav</i> Residue, Nonfilterable (TSS) <i>by Grav</i> Residue, Total <i>by Grav</i> Residue, Volatile (TVS) <i>by Grav</i> Residue, Volatile, Nonfilterable (TVSS) <i>by Grav</i> SGT-HEM (Silica Gel Treated HEM) <i>by Grav-HEM</i> Sulfate <i>by Colorimetry</i> Sulfide <i>by Colorimetry</i> Surfactants <i>by Colorimetry</i> Turbidity <i>by Colorimetry</i> pH <i>by ISE</i> 	<p>Class: Metals</p> <ul style="list-style-type: none"> Cadmium <i>by FLAA</i> Cadmium <i>by GFAA</i> Cadmium <i>by ICP</i> Calcium <i>by FLAA</i> Calcium <i>by ICP</i> Chromium (Hexavalent) <i>by Colorimetry</i> Chromium (Total) <i>by FLAA</i> Chromium (Total) <i>by GFAA</i> Chromium (Total) <i>by ICP</i> Cobalt <i>by ICP</i> Copper <i>by FLAA</i> Copper <i>by GFAA</i> Copper <i>by ICP</i> Iron <i>by FLAA</i> Iron <i>by ICP</i> Lead <i>by FLAA</i> Lead <i>by GFAA</i> Lead <i>by ICP</i> Lithium <i>by ICP</i> Magnesium <i>by FLAA</i> Magnesium <i>by ICP</i> Manganese <i>by FLAA</i> Manganese <i>by ICP</i> Mercury <i>by Hyd-CVAA</i> Molybdenum <i>by GFAA</i> Molybdenum <i>by ICP</i> Nickel <i>by FLAA</i> Nickel <i>by GFAA</i> Nickel <i>by ICP</i> Potassium <i>by FLAA</i> Potassium <i>by ICP</i> Selenium <i>by GFAA</i> Selenium <i>by ICP</i> Silver <i>by FLAA</i> Silver <i>by GFAA</i> Silver <i>by ICP</i> Sodium <i>by FLAA</i> Sodium <i>by ICP</i> Strontium <i>by ICP</i> Thallium <i>by GFAA</i> Thallium <i>by ICP</i> Tin <i>by GFAA</i> Tin <i>by ICP</i> Titanium <i>by ICP</i> Vanadium <i>by ICP</i>
<p>Class: Metals</p> <ul style="list-style-type: none"> Aluminum <i>by ICP</i> Antimony <i>by GFAA</i> Antimony <i>by ICP</i> Arsenic <i>by GFAA</i> Arsenic <i>by ICP</i> Barium <i>by ICP</i> Beryllium <i>by GFAA</i> Beryllium <i>by ICP</i> Boron <i>by ICP</i> 	

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* Analyte groups are defined and listed at <http://dnr.wi.gov> by searching keywords "Lab Certification:".

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

<p>Class: Metals Zinc <i>by FLAA</i> Zinc <i>by ICP</i></p>
<p>Class: Phenols (Acids) Pentachlorophenol <i>by GC</i></p>
<p>Class: Chlorinated Hydrocarbons (BN) 1,2,4,5-Tetrachlorobenzene <i>by GC</i> Hexachlorobenzene <i>by GC</i> Hexachlorobutadiene <i>by GC</i> Hexachlorocyclopentadiene <i>by GC</i> Pentachlorobenzene <i>by GC</i></p>
<p>Class: Pesticides, Acid (Herbicides) 2,4,5-T <i>by GC</i> 2,4-D <i>by GC</i> 2,4-DB <i>by GC</i> Acifluorfen <i>by GC</i> Dalapon <i>by GC</i> Dicamba <i>by GC</i> Dichlorprop (2,4-DP) <i>by GC</i> Dinoseb (2-sec-butyl-4,6-Dinitrophenol) <i>by GC</i> Picloram <i>by GC</i> Silvex (2,4,5-TP) <i>by GC</i></p>
<p>Class: Pesticides, Nitrogen Bentazon <i>by GC</i></p>
<p>Class: Volatile Organics ## VOLATILE ORGANICS [VOC] (group) <i>by GC/MS</i></p>

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Wisconsin Certification under NR 149 Matrix: Potable Water (Drinking Water)

<p>Class: SDWA - Disinfection Byproducts ## HALOACETIC ACIDS (5) - EPA 552.2 Bromide - EPA 300.0</p>	<p>Class: SDWA - Secondary Metals Aluminum - EPA 200.7 Calcium - EPA 200.7 Calcium - SM 3111B Iron - EPA 200.7 Iron - SM 3111B Magnesium - EPA 200.7 Magnesium - SM 3111 B Manganese - EPA 200.7 Manganese - SM 3111B Silver - EPA 200.7 Silver - SM 3113B Sodium - EPA 200.7 Sodium - SM 3111B Zinc - EPA 200.7 Zinc - SM 3111B</p>
<p>Class: SDWA - Primary Non-metals Cyanide - SM 4500-CN- C,E Cyanide, Amenable - SM 4500-CN- C,G Fluoride - EPA 300.0 Fluoride - SM 4500F- C Nitrate + Nitrite - EPA 300.0 Nitrate + Nitrite - EPA 353.2 Nitrate - EPA 300.0 Nitrate - SM 4500-NO3- D Nitrite - EPA 300.0 Nitrite - SM 4500-NO2- B</p>	<p>Class: SDWA - SOC, Organochlorine Pesticides Aldrin - EPA 505 Chlordane - EPA 505 Dieldrin - EPA 505 Endrin - EPA 505 Heptachlor - EPA 505 Heptachlor epoxide - EPA 505 Lindane (gamma-BHC) - EPA 505 Methoxychlor - EPA 505 Toxaphene - EPA 505</p>
<p>Class: SDWA - Primary Metals Antimony - SM 3113B Arsenic - SM 3113B Barium - EPA 200.7 Beryllium - EPA 200.7 Beryllium - SM 3113B Cadmium - EPA 200.7 Cadmium - SM 3113B Chromium - EPA 200.7 Chromium - SM 3113B Copper - EPA 200.7 Copper - SM 3111B Copper - SM 3113B Lead - SM 3113B Mercury - EPA 245.1 Nickel - EPA 200.7 Nickel - SM 3113B Selenium - SM 3113B Thallium - EPA 200.9</p>	<p>Class: SDWA - SOC, N/P Pesticides Alachlor - EPA 505 Atrazine - EPA 505 Simazine - EPA 505</p>
<p>Class: SDWA - Secondary Non-metals Alkalinity - SM 2320B Chloride - EPA 300.0 Chlorine, Free - SM 4500-Cl G Conductivity - SM 2510 B Orthophosphate - SM 4500-P E Sulfate - EPA 300.0 TDS (Total Dissolved Solids) - SM 2540C Turbidity - SM 2130B pH - SM 4500-H+ B</p>	<p>Class: SDWA - SOC, Herbicides 2,4-D - EPA 515.3 Dalapon - EPA 515.3 Dicamba - EPA 515.3 Dinoseb - EPA 515.3 Pentachlorophenol - EPA 515.3 Picloram - EPA 515.3 Silvex (2.4.5-TP) - EPA 515.3</p>
	<p>Class: SDWA - SOC, Miscellaneous Dibromochloropropane (DBCP) - EPA 504.1 Ethylene Dibromide (EDB) - EPA 504.1 Hexachlorobenzene - EPA 505 Hexachlorocyclopentadiene - EPA 505</p>

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Scope of Accreditation

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Wisconsin Certification under NR 149
Matrix: Potable Water (Drinking Water)

Class: SDWA - Trihalomethanes

THM (group) - EPA 524.2

Class: SDWA - Volatile Organics
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VOCS, REGULATED (group) - EPA 524.2
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Scope of Accreditation

Davy Laboratories, Div. of Davy Engineering
115 South 6th Street
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Laboratory Id: **632021390**
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Wisconsin Certification under NR 149 Matrix: Solid (Waste, Soil & Tissue)

<p>Class: General Chemistry Chloride <i>by Titration</i> Cyanide, Available <i>by Colorimetry</i> Cyanide, Total <i>by Colorimetry</i> Phenolics, Total <i>by Colorimetry</i> Phosphorus, Total <i>by Colorimetry</i> Residue, Total <i>by Grav</i> Sulfate <i>by Colorimetry</i></p>	<p>Class: Metals Sodium <i>by ICP</i> Strontium <i>by ICP</i> Thallium <i>by ICP</i> Tin <i>by ICP</i> Titanium <i>by ICP</i> Vanadium <i>by ICP</i> Zinc <i>by FLAA</i> Zinc <i>by ICP</i></p>
<p>Class: Metals Aluminum <i>by ICP</i> Antimony <i>by ICP</i> Arsenic <i>by GFAA</i> Arsenic <i>by ICP</i> Barium <i>by ICP</i> Beryllium <i>by ICP</i> Boron <i>by ICP</i> Cadmium <i>by FLAA</i> Cadmium <i>by ICP</i> Calcium <i>by FLAA</i> Calcium <i>by ICP</i> Chromium (Hexavalent) <i>by Colorimetry</i> Chromium (Total) <i>by FLAA</i> Chromium (Total) <i>by ICP</i> Cobalt <i>by ICP</i> Copper <i>by FLAA</i> Copper <i>by ICP</i> Iron <i>by FLAA</i> Iron <i>by ICP</i> Lead <i>by FLAA</i> Lead <i>by ICP</i> Magnesium <i>by FLAA</i> Magnesium <i>by ICP</i> Manganese <i>by FLAA</i> Manganese <i>by ICP</i> Mercury <i>by Hyd-CVAA</i> Molybdenum <i>by GFAA</i> Molybdenum <i>by ICP</i> Nickel <i>by FLAA</i> Nickel <i>by ICP</i> Potassium <i>by FLAA</i> Potassium <i>by ICP</i> Selenium <i>by GFAA</i> Selenium <i>by ICP</i> Silver <i>by FLAA</i> Silver <i>by ICP</i> Sodium <i>by FLAA</i></p>	<p>Class: Phenols (Acids) Pentachlorophenol <i>by GC</i></p> <p>Class: Chlorinated Hydrocarbons (BN) 1,2,4,5-Tetrachlorobenzene <i>by GC</i> Hexachlorobenzene <i>by GC</i> Hexachlorobutadiene <i>by GC</i> Hexachlorocyclopentadiene <i>by GC</i> Pentachlorobenzene <i>by GC</i></p> <p>Class: Pesticides, Acid (Herbicides) 2,4,5-T <i>by GC</i> 2,4-D <i>by GC</i> 2,4-DB <i>by GC</i> 3,5-Dichlorobenzoic acid <i>by GC</i> 5-Hydroxydicamba <i>by GC</i> Acifluorfen <i>by GC</i> Dalapon <i>by GC</i> Dicamba <i>by GC</i> Dichlorprop (2,4-DP) <i>by GC</i> Dinoseb (2-sec-butyl-4,6-Dinitrophenol) <i>by GC</i> Picloram <i>by GC</i> Silvex (2,4,5-TP) <i>by GC</i></p> <p>Class: Pesticides, Nitrogen Bentazon <i>by GC</i></p> <p>Class: PCBs as Aroclors ## PCB as AROCLORS (group) <i>by GC</i></p> <p>Class: Volatile Organics ## VOLATILE ORGANICS [VOC] (group) <i>by GC/MS</i></p> <p>Class: Waste Characterization Extractions TCLP Extraction <i>by Waste Extractions</i></p> <p>Class: Waste Characterization Assays Corrosivity, Liquids <i>by Waste Assays</i></p>

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