The State of Wisconsin Department of Natural Resources

has granted

Accreditation under NR 149

to

Northern Lake Service Inc. (Crandon)
FID: 721026460

The laboratory is accredited to perform environmental sample analysis in support of covered environmental programs per matrix for the combination of analyte and technology or analyte and method as specified in the attached Scopes of Accreditation.

Printed on: August 31, 2023

Expires on: August 31, 2024

Steven Geis, Chief Certification Services

Adam N. Payna

Col. Page

Adam N. Payne Department of Natural Resources







Laboratory FID: 721026460 CERTIFICATION Aqueous (Non-potable Water) Page 1 of 5

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Oxygen Demand Assays (BOD or cBOD)	Biochemical Oxygen Demand (BOD)
	Carbonaceous Biochemical Oxygen Demand (cBOD)
Colorimetric or Turbidimetric	Ammonia as N
	Chlorophyll
	Chromium, Hexavalent
	Cyanide, Available
	Cyanide, Total
	Kjeldahl Nitrogen, Total
	Nitrate + Nitrite
	Orthophosphate
	Phenolics, Total
	Phosphorus, Total
Nondispersive Infrared (NDIR) or Microcoulometry	Organic Carbon, Total (TOC)
Electrometric Assays (ISE)	рН
	Specific Conductance
Gravimetric Assays - Residue (solids)	Residue, Filterable (TDS)
	Residue, Nonfilterable (TSS)
	Residue, Total (Total Solids)
	Residue, Volatile (TVS)
	Residue, Volatile, Nonfilterable (TVSS)
Extraction/Gravimetric Assays - Oil & Grease as HEM	Oil & Grease as HEM



Laboratory FID: 721026460 CERTIFICATION Aqueous (Non-potable Water) Page 2 of 5

Extraction/Gravimetric Assays - Oil & Grease as HEM	Oil & Grease as HEM, Silica Gel Treated (SGT)
Ion Chromatography (IC)	Chloride
	Fluoride
	Nitrate
	Nitrate + Nitrite
	Nitrite
	Sulfate
Titrimetric or Potentiometric Titration Assays	Alkalinity
	Chemical Oxygen Demand (COD)
	Sulfide
Cold Vapor Atomic Absorption Spectrophotometry (CVAA)	Mercury
Inductively Coupled Plasma Emission Spectrophotometry (ICP)	Aluminum
	Antimony
	Arsenic
	Barium
	Beryllium
	Boron
	Cadmium
	Calcium
	Chromium, Total
	Cobalt
	Copper



Laboratory FID: 721026460 CERTIFICATION Aqueous (Non-potable Water) Page 3 of 5

Inductively Coupled Plasma Emission Spectrophotometry (ICP)	Hardness, Total as CaCO3
	Iron
	Lead
	Lithium
	Magnesium
	Manganese
	Molybdenum
	Nickel
	Potassium
	Selenium
	Silver
	Sodium
	Strontium
	Thallium
	Tin
	Titanium
	Vanadium
	Zinc
Inductively Coupled Plasma-Mass Spectrometry (ICP/MS)	Aluminum
	Antimony
	Arsenic
	Barium
	1



Laboratory FID: 721026460 CERTIFICATION Aqueous (Non-potable Water) Page 4 of 5

Inductively Coupled Plasma-Mass Spectrometry (ICP/MS)	Beryllium
	Cadmium
	Calcium
	Chromium, Total
	Cobalt
	Copper
	Iron
	Lead
	Lithium
	Magnesium
	Manganese
	Mercury
	Molybdenum
	Nickel
	Potassium
	Selenium
	Silver
	Sodium
	Strontium
	Thallium
	Tin
	Titanium



Laboratory FID: 721026460 CERTIFICATION Aqueous (Non-potable Water) Page 5 of 5

Inductively Coupled Plasma-Mass Spectrometry (ICP/MS)	Vanadium
	Zinc
Gas Chromatography (GC)	## PCB as AROCLORS (group)
	## PESTICIDES, ORGANOCHLORINE (group)
Gas Chromatography-Mass Spectrometry (GC/MS)	## BNA - SEMIVOLATILE ORGANICS (group)
	## PAH (group)
	## VOC - VOLATILE ORGANICS (group)
Liquid Chromatography-Mass Spectrometry (LC/MS)	## PFAS (group)
Cold Vapor Atomic Fluorescence Spectrophotometry (CVAFS)	Mercury, Low Level



Laboratory FID: 721026460 CERTIFICATION **Drinking Water (Potable Water)** Page 1 of 4

8/31/2023

8/31/2024

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Northern Lake Service Inc. (Crandon) 400 North Lake Ave

Crandon, WI 54520-1286

Disinfection By-products ## HALOACETIC ACIDS (5) - EPA 552.3 ## THM (group) - EPA 524.2 **Primary Inorganics Contaminants (Non-Metals)** Cyanide - SM 4500-CN C, E Fluoride - EPA 300.0 Nitrate - EPA 300.0 Nitrate + Nitrite - EPA 300.0 Nitrate + Nitrite - SM 4500-NO3 F Nitrite - EPA 300.0 Antimony - EPA 200.8 **Primary Inorganics Contaminants (Metals)** Arsenic - EPA 200.8 Barium - EPA 200.7 Barium - EPA 200.8 Beryllium - EPA 200.7 Beryllium - EPA 200.8 Cadmium - EPA 200.7 Cadmium - EPA 200.8 Chromium - EPA 200.7 Chromium - EPA 200.8 Copper - EPA 200.7 Copper - EPA 200.8 Lead - EPA 200.8



Laboratory FID: 721026460 CERTIFICATION Drinking Water (Potable Water) Page 2 of 4

	water (Foliable Water)
Primary Inorganics Contaminants (Metals)	Mercury - EPA 200.8
	Mercury - EPA 245.1
	Nickel - EPA 200.7
	Nickel - EPA 200.8
	Selenium - EPA 200.8
	Thallium - EPA 200.8
Secondary Inorganic Contaminants (Non-Metals)	Alkalinity - SM 2320B
	Chloride - EPA 300.0
	Orthophosphate - SM 4500-P E
	Sulfate - EPA 300.0
Secondary Inorganic Contaminants (Metals)	Aluminum - EPA 200.7
	Aluminum - EPA 200.8
	Calcium - EPA 200.7
	Iron - EPA 200.7
	Magnesium - EPA 200.7
	Manganese - EPA 200.7
	Manganese - EPA 200.8
	Silver - EPA 200.7
	Silver - EPA 200.8
	Sodium - EPA 200.7
	Zinc - EPA 200.7
	Zinc - EPA 200.8



Laboratory FID: 721026460 CERTIFICATION Drinking Water (Potable Water) Page 3 of 4

	Diffixing water (1 stable water)
SOC - Organochlorine Pesticides	Aldrin - EPA 525.2
	Chlordane - EPA 505
	Dieldrin - EPA 525.2
	Endrin - EPA 525.2
	Heptachlor - EPA 525.2
	Heptachlor epoxide - EPA 525.2
	Lindane (gamma-BHC) - EPA 525.2
	Methoxychlor - EPA 525.2
	Toxaphene - EPA 505
SOC - N/P Pesticides	Alachlor - EPA 525.2
	Atrazine - EPA 525.2
	Butachlor - EPA 525.2
	Metolachlor - EPA 525.2
	Metribuzin - EPA 525.2
	Propachlor - EPA 525.2
	Simazine - EPA 525.2
SOC - Miscellaneous	## PFAS (group) – EPA 537.1 (18)
	3-Hydroxycarbofuran - EPA 531.1
	Aldicarb - EPA 531.1
	Aldicarb Sulfone - EPA 531.1
	Aldicarb Sulfoxide - EPA 531.1
	Benzo[a]pyrene - EPA 525.2



Laboratory FID: 721026460 CERTIFICATION Drinking Water (Potable Water) Page 4 of 4

SOC - Miscellaneous	Carbaryl - EPA 531.1
	Carbofuran - EPA 531.1
	Di(2-ethylhexyl)adipate - EPA 525.2
	Di(2-ethylhexyl)phthalate - EPA 525.2
	Dibromochloropropane (DBCP) - EPA 504.1
	Diquat - EPA 549.2
	Endothall - EPA 548.1
	Ethylene Dibromide (EDB) - EPA 504.1
	Glyphosate - EPA 547
	Hexachlorobenzene - EPA 525.2
	Hexachlorocyclopentadiene - EPA 525.2
	Methomyl - EPA 531.1
	Oxamyl (Vydate) - EPA 531.1
	PCBs (as Aroclors) Screening - EPA 505
Volatile Organic Compounds (VOC)	## VOCS, REGULATED (group) - EPA 524.2
	## VOCS, UNREGULATED (group) - EPA 524.2



Laboratory FID: 721026460
CERTIFICATION
GOUG (Biosolide Leachates Soils Tissues & Waste

Page 1 of 4

Non-Aqueous (Biosolids, Leachates, Soils, Tissues, & Wastes)

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400 North Lake Ave
Crandon, WI 54520-1286

Printed on: 8/31/2023
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Colorimetric or Turbidimetric	Ammonia as N
	Cyanide, Total
	Kjeldahl Nitrogen, Total
	Nitrate + Nitrite
	Orthophosphate
	Phenolics, Total
	Phosphorus, Total
Gravimetric Assays - Residue (solids)	Residue, Total
Ion Chromatography (IC)	Chloride
	Sulfate
Titrimetric or Potentiometric Titration Assays	Chemical Oxygen Demand (COD)
	Sulfide
Cold Vapor Atomic Absorption Spectrophotometry (CVAA)	Mercury
Inductively Coupled Plasma Emission Spectrophotometry (ICP)	Aluminum
	Antimony
	Arsenic
	Barium
	Beryllium
	Boron
	Cadmium
	Calcium



Laboratory FID: 721026460 Page 2 of 4
CERTIFICATION

CERTIFICATION
Non-Aqueous (Biosolids, Leachates, Soils, Tissues, & Wastes)

Inductively Coupled Plasma Emission Spectrophotometry (ICP)	Chromium, Total
	Cobalt
	Copper
	Iron
	Lead
	Lithium
	Magnesium
	Manganese
	Molybdenum
	Nickel
	Potassium
	Selenium
	Silver
	Sodium
	Strontium
	Thallium
	Tin
	Titanium
	Vanadium
	Zinc
Inductively Coupled Plasma-Mass Spectrometry (ICP/MS)	Aluminum
	Antimony
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Laboratory FID: 721026460 CERTIFICATION Non-Aqueous (Biosolids, Leachates, Soils, Tissues, & Wastes) Page 3 of 4

Inductively Coupled Plasma-Mass Spectrometry (ICP/MS)	Arsenic
	Barium
	Beryllium
	Cadmium
	Calcium
	Chromium, Total
	Cobalt
	Copper
	Iron
	Lead
	Magnesium
	Manganese
	Mercury
	Molybdenum
	Nickel
	Potassium
	Selenium
	Silver
	Sodium
	Strontium
	Thallium
	Tin



Page 4 of 4

Laboratory FID: 721026460 CERTIFICATION Non-Aqueous (Biosolids, Leachates, Soils, Tissues, & Wastes)

Inductively Coupled Plasma-Mass Spectrometry (ICP/MS)	Titanium
	Vanadium
	Zinc
Gas Chromatography (GC)	## PCB as AROCLORS (group)
	## PESTICIDES, ORGANOCHLORINE (group)
Gas Chromatography-Mass Spectrometry (GC/MS)	## BNA - SEMIVOLATILE ORGANICS (group)
	## PAH (group)
	## VOC - VOLATILE ORGANICS (group)
Liquid Chromatography-Mass Spectrometry (LC/MS)	## PFAS (group)
Solid Waste Leaching Procedures	Reagent Water Shake Extraction (ASTM Leach)
	SPLP Extraction
Hazardous Waste Characteristics	Corrosivity, Liquids
	TCLP Extraction