



CALA

Canadian Association for
Laboratory Accreditation Inc.

CALA Directory of Laboratories

Membership Number: 2644
Laboratory Name: Caduceon Environmental Laboratories (Ottawa)
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Standard: Conforms with requirements of ISO/IEC 17025
Clients Served:
Revised On: February 1, 2019
Valid To: August 1, 2021

Scope of Accreditation

Air (Inorganic)

Metals - Air [Filter] (012)
D-ICP-02; modified from NIOSH 7303 and SM 3120 B
ICP - DIGESTION
Cadmium
Copper
Lead
Zinc

Air (Inorganic)

Total Suspended Particulates - Air [Filter, Particulate] (018)
A-TSP-01; modified from ON MOECC E3288A
GRAVIMETRIC
Total Suspended Particulates

Dustfall

Dustfall - Dustfall (020)
A-DF-01; modified from ON MOECC E3043A
FILTRATION - GRAVIMETRIC
Insoluble Dustfall
Total Dustfall

Fluoride Candles

Fluoride - Fluoride Candles (019)
A-FISE-01; modified from ON MOECC FSIE-1983D
DIGESTION - ISE
Fluoride

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Solids (Inorganic)

Anions - Solids [Biosolid, Soil] (069)
A-IC-01; modified from SM 4110 C
ION CHROMATOGRAPHY - EXTRACTION
Chloride
Nitrate
Nitrite
Sulphate

Solids (Inorganic)

Boron (Hot Water Soluble) - Solids [Soil] (098)
D-ICP-02; ON MOECC E3470
ICP/AES - EXTRACTION
Boron

Solids (Inorganic)

Conductivity - Solids [Sediment, Soil] (099)
A-COND-03; modified from ON MOECC E3530 and SM 2510 B
CONDUCTIVITY METER - EXTRACTION
Conductivity

Solids (Inorganic)

Extractable Anions - Solids (090)
A-IC-01; modified from EPA 1311 (PREPARATION) and SM 4110 C (ANALYSIS)
ION CHROMATOGRAPHY - TCLP
Nitrate (Parameter suspended on 8/11/2018)
Nitrite

Solids (Inorganic)

Extractable Metals - Solids (091)
D-ICP-01; modified from EPA 1311 (PREPARATION) and SM 3120 B (ANALYSIS)
ICP/AES - TCLP
Arsenic
Barium
Beryllium
Boron
Cadmium
Chromium
Lead
Nickel
Silver
Zinc

Solids (Inorganic)

Extractable Metals - Solids (092)
D-ICPMS-01; modified from EPA 1311 (PREPARATION) and EPA 200.8 (ANALYSIS)
ICP/MS - TCLP
Antimony
Arsenic
Selenium
Uranium

Solids (Inorganic)

Extractable Metals - Solids (093)
D-HG-02; modified from EPA 1311 (PREPARATION) and SM 3112 B (ANALYSIS)
COLD VAPOUR AA - TCLP
Mercury

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Solids (Inorganic)

Flashpoint - Solids [Ash, Soil] (096)
C-FPCC-01; modified from ASTM D93
CLOSED CUP FLASH POINT TESTER
Flashpoint

Solids (Inorganic)

Hexavalent Chromium - Solids [Soil] (094)
D-CRVI-02; modified from EPA 3060A and EPA 7196A
COLORIMETRIC - MANUAL
Chromium VI

Solids (Inorganic)

Mercury - Solids [Biosolid, Soil] (017)
D-HG-01; modified from EPA 7471A
COLD VAPOUR AA - DIGESTION
Mercury

Solids (Inorganic)

Metals - Solids [Biosolid, Soil] (015)
D-ICP-02; modified from EPA 6010
ICP/OES - DIGESTION

- Aluminum
- Antimony
- Arsenic
- Barium
- Beryllium
- Boron
- Cadmium
- Calcium
- Chromium
- Cobalt
- Copper
- Iron
- Lead
- Magnesium
- Manganese
- Molybdenum
- Nickel
- Potassium
- Silver
- Sodium
- Strontium
- Tin
- Titanium
- Tungsten
- Vanadium
- Zinc

Solids (Inorganic)

pH - Solids [Sediment, Sludge, Soil] (100)
A-pH-03; modified from ON MOECC E3530 and SM 4500-H+
pH METER - EXTRACTION
pH

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Solids (Inorganic)

Total Metals - Solids [Biosolid, Soil] (070)

D-ICPMS-01; modified from EPA 6020

ICP/MS - DIGESTION

Antimony

Arsenic

Selenium

Silver

Thallium

Uranium

Solids (Organic)

Extractable Volatile Organic Compounds (VOC) - Solids (089)

C-VOC-02, C-VOC-01; modified from EPA 1311 (PREPARATION) and EPA 5030 (ANALYSIS) and EPA 8260 (ANALYSIS)

GC/MS - PURGE AND TRAP - TCLP

1,1-Dichloroethylene

1,2-Dichlorobenzene

1,2-Dichloroethane

1,4-Dichlorobenzene

Benzene

Carbon tetrachloride

Chlorobenzene

Chloroform

Dichloromethane

Methyl ethyl ketone

Tetrachloroethylene

Trichloroethylene

Vinyl chloride

Water (Inorganic)

Alkalinity - Water (088)

A-ALK-03; modified from SM 2320 B

AUTO TITRIMETRIC

Alkalinity (pH 4.5)

OSDWA †

Water (Inorganic)

Anions - Water [Liquid Biosolid, Wastewater] (002)

A-IC-01; modified from SM 4110 C

ION CHROMATOGRAPHY

Bromide

Chloride

Fluoride

Nitrate

Nitrite

Sulfate

OSDWA †

Water (Inorganic)

Carbon - Water (054)

C-OC-01; modified from EPA 415.2 and SM 5310 C

IR-UV-PERSULFATE

Organic Carbon

OSDWA †

Water (Inorganic)

Chemical Oxygen Demand (COD) - Water (083)

C-COD-01; modified from SM 5220 D

COLORIMETRIC

COD

OSDWA †

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Water (Inorganic) Colour - Water (027) A-COL-01; modified from SM 2120 C SPECTROPHOTOMETRIC True Colour	OSDWA †
Water (Inorganic) Conductivity - Water (003) A-COND-01; modified from SM 2510 B CONDUCTIVITY METER Conductivity (25°C)	OSDWA †
Water (Inorganic) Conductivity - Water (087) A-COND-02; modified from SM 2510 B AUTO CONDUCTIVITY METER Conductivity (25°C)	OSDWA †
Water (Inorganic) Dissolved and Extractable Metals - Water (004) D-ICP-01; modified from SM 3120 B ICP Aluminum Barium Beryllium Bismuth Boron Cadmium Calcium Chromium Cobalt Copper Iron Lead Lithium Magnesium Manganese Molybdenum Nickel Potassium Silicon Silver Sodium Strontium Tin Titanium Tungsten Vanadium Yttrium Zinc Zirconium	OSDWA †
Water (Inorganic) Dissolved Metals - Water (049) D-ICPMS-01; modified from EPA 200.8 ICP/MS Antimony	OSDWA †

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Arsenic
Barium
Beryllium
Cadmium
Chromium
Cobalt
Copper
Lead
Molybdenum
Selenium
Silver
Thallium
Uranium
Vanadium

Water (Inorganic)

Hexavalent Chromium - Water (095)
D-CRVI-01; modified from ON MOECC E3056
COLORIMETRIC - MANUAL
Hexavalent Chromium

Water (Inorganic)

Mercury - Water [Wastewater] (025)
D-HG-02; modified from SM 3112 B
COLD VAPOUR AA - DIGESTION
Mercury

OSDWA †

Water (Inorganic)

pH - Water (086)
A-pH-02; modified from SM 4500-H+ B
AUTO - pH METER
pH

OSDWA †

Water (Inorganic)

pH - Water [Liquid Biosolid, Wastewater] (005)
A-pH-01; modified from SM 4500-H+
pH METER
pH

OSDWA †

Water (Inorganic)

Total Metals - Water [Liquid Biosolid, Wastewater] (067)
D-ICP-01; modified from SM 3120 B
ICP/AES - DIGESTION
Aluminum
Antimony
Arsenic
Barium
Beryllium
Bismuth
Boron
Cadmium
Calcium
Chromium
Cobalt
Copper
Iron
Lead
Lithium

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Magnesium
Manganese
Molybdenum
Nickel
Potassium
Silver
Sodium
Strontium
Tin
Titanium
Tungsten
Vanadium
Yttrium
Zinc
Zirconium

Water (Inorganic)

Total Metals - Water [Liquid Biosolid, Wastewater] (071)

D-ICPMS-01; modified from EPA 6020

ICP/MS - DIGESTION

Antimony
Arsenic
Barium
Beryllium
Cadmium
Chromium
Cobalt
Copper
Lead
Molybdenum
Selenium
Silver
Vanadium

Water (Inorganic)

Turbidity - Water (026)

A-TURB-01; modified from SM 2130 B

NEPHELOMETRY

Turbidity

OSDWA †

Water (Microbiology)

Coliforms - Water (050)

B-ECTC-01; modified from ON MOECC E3407

MEMBRANE FILTRATION (DC)

Background Bacteria
Escherichia coli (E. coli)
Total Coliforms

OSDWA †

Water (Microbiology)

Escherichia coli (E. coli) - Water (010)

B-MFEC-01; modified from ON MOECC E3371

MEMBRANE FILTRATION (EC)

Escherichia coli (E. coli)

OSDWA †

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Water (Microbiology) Fecal (Thermotolerant) Coliforms - Water (065) B-MFFC-01; modified from ON MOECC E3371 MEMBRANE FILTRATION (mFC) Fecal (Thermotolerant) Coliforms	OSDWA †
Water (Microbiology) Heterotrophic Plate Count (HPC) - Water (021) B-HPC-01; modified from SM 9215 C SPREAD PLATE Heterotrophic Plate Count (HPC)	OSDWA †
Water (Microbiology) Total Coliforms - Water (066) B-MFTC-01; modified from ON MOECC E3371 MEMBRANE FILTRATION (mENDO) Background Counts Total Coliforms	OSDWA †
Water (Organic) Volatile Organic Compounds (VOC) - Water (041) C-VOC-01, C-VOC-02; modified from EPA 5030 and EPA 8260 GC/MS - PURGE AND TRAP 1,1-Dichloroethane 1,1-dichloroethylene 1,1-Dichloropropene 1,1,1-Trichloroethane 1,1,1,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1,2,2-Tetrachloroethane 1,2-Dibromo-3-chloropropane (DBCP) 1,2-dichlorobenzene 1,2-dichloroethane 1,2-Dichloropropane 1,2,3-Trichlorobenzene 1,2,3-Trichloropropane 1,2,4-Trichlorobenzene 1,2,4-Trimethylbenzene 1,3-Dichlorobenzene 1,3-Dichloropropane 1,3,5-Trimethylbenzene 1,4-dichlorobenzene 2-Chlorotoluene 2-Hexanone (MBK) 2,2-Dichloropropane 4-Chlorotoluene 4-Isopropyltoluene Acetone (2-Propanone) Benzene Bromobenzene Bromodichloromethane Bromoform Bromomethane Carbon Tetrachloride Chlorobenzene Chlorodibromomethane	OSDWA †

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Chloroform
Chloromethane
cis-1,2-Dichloroethylene
cis-1,3-Dichloropropene
Dibromomethane
Dichlorodifluoromethane
Dichloromethane
Ethylbenzene
Ethylene Dibromide
Hexachlorobutadiene
Hexane
Isopropylbenzene
m/p-xylene
Methyl Ethyl Ketone
Methyl isobutyl Ketone
Methyl t-butyl ether
n-Butylbenzene
n-Propylbenzene
Naphthalene
o-xylene
sec-Butylbenzene
Styrene
tert-Butylbenzene
Tetrachloroethylene
Toluene
trans-1,2-Dichloroethylene
trans-1,3-Dichloropropene
Trichloroethylene
Trichlorofluoromethane
Vinyl Chloride

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