



# CALA

Canadian Association for  
Laboratory Accreditation Inc.

## CALA Directory of Laboratories

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**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:** September 12, 2019

**Valid To:** August 1, 2021

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### 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 (Sulfate)

**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

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

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**Solids (Inorganic)**

Extractable Metals - Solids (093)

D-HG-02; modified from EPA 1311 (PREPARATION) and SM 3112 B (ANALYSIS)

COLD VAPOUR AA - TCLP

Mercury

**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

Hexavalent Chromium

**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

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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

**Solids (Inorganic)**

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

D-ICPMS-01; modified from EPA 6020

ICP/MS - DIGESTION

Antimony

Arsenic

Selenium

Silver

Thallium

Uranium

**Water (Inorganic)**

OSDWA †

Alkalinity - Water (088)

A-ALK-03; modified from SM 2320 B

AUTO TITRIMETRIC

Alkalinity (pH 4.5)

**Water (Inorganic)**

OSDWA †

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

A-IC-01; modified from SM 4110 C

ION CHROMATOGRAPHY

Bromide

Chloride

Fluoride

Nitrate

Nitrite

Sulfate

**Water (Inorganic)**

OSDWA †

Carbon - Water (054)

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

IR-UV-PERSULFATE

Organic Carbon

**Water (Inorganic)**

OSDWA †

Chemical Oxygen Demand (COD) - Water (083)

C-COD-01; modified from SM 5220 D

COLORIMETRIC

COD

**Water (Inorganic)**

OSDWA †

Colour - Water (027)

A-COL-01; modified from SM 2120 C

SPECTROPHOTOMETRIC

True Colour

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The list of tests and measurement capabilities for which a laboratory is accredited can change at any time due to circumstances such as scope extensions, voluntary withdrawal of tests by the laboratory and suspension. Scopes are published by the CALA via the Internet at [http://www.cala.ca/cala\\_directories.html](http://www.cala.ca/cala_directories.html)

<b>Water (Inorganic)</b> Conductivity - Water (003) A-COND-01; modified from SM 2510 B CONDUCTIVITY METER Conductivity (25°C)	OSDWA †
<b>Water (Inorganic)</b> Conductivity - Water (087) A-COND-02; modified from SM 2510 B AUTO CONDUCTIVITY METER Conductivity (25°C)	OSDWA †
<b>Water (Inorganic)</b> 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 †
<b>Water (Inorganic)</b> 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

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Cobalt  
 Copper  
 Iron  
 Lead  
 Lithium  
 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)**

OSDWA †

Turbidity - Water (026)

A-TURB-01; modified from SM 2130 B

NEPHELOMETRY

Turbidity

**Water (Microbiology)**

OSDWA †

Coliforms - Water (050)

B-ECTC-01; modified from ON MOECC E3407

MEMBRANE FILTRATION (DC)

Background Bacteria

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Escherichia coli  
Total Coliforms

**Water (Microbiology)**

OSDWA †

Escherichia coli (E. coli) - Water (010)  
B-MFEC-01; modified from ON MOECC E3371  
MEMBRANE FILTRATION (EC)  
Escherichia coli

**Water (Microbiology)**

OSDWA †

Fecal (Thermotolerant) Coliforms - Water (065)  
B-MFFC-01; modified from ON MOECC E3371  
MEMBRANE FILTRATION (mFC)  
Fecal (Thermotolerant) Coliforms

**Water (Microbiology)**

OSDWA †

Heterotrophic Plate Count (HPC) - Water (021)  
B-HPC-01; modified from SM 9215 C  
SPREAD PLATE  
Heterotrophic Plate Count (HPC)

**Water (Microbiology)**

OSDWA †

Total Coliforms - Water (066)  
B-MFTC-01; modified from ON MOECC E3371  
MEMBRANE FILTRATION (mENDO)  
Background Counts  
Total Coliforms

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