



# CALA Scope of Accreditation

**Laboratory Name:** Paracel Laboratories Ltd. (Ottawa)

**Client ID:** 1001262

**Parent Institution:** Paracel Laboratories Ltd.

**Address:** 300-2319 St Laurent Blvd., Ottawa, Ontario, K1G 4J8

**Contact:** Mr. Dale Robertson

**Email:** drobertson@paracellabs.com

**Phone:** (613) 731-9577

**Fax:** (613) 731-9064

**Standard:** Conforms with requirements of ISO/IEC 17025:2017

**Clients Served:** All Interested Parties

**Revised On:** 04/14/2022

**Valid To:** 04/20/2024

## 001 - Alkalinity

**Field of Accreditation:** Environmental

**Matrix:** Water

OSDWA†

**Analytical Method:** TITRIMETRIC

**Preparation Method:**

**Lab Method ID(s):** PI-003

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 310.1	Yes	Yes	No

**Parameter**

Alkalinity (pH 4.5)

## 003 - Conductivity

**Field of Accreditation:** Environmental

**Matrix:** Water

OSDWA†

**Analytical Method:** CONDUCTIVITY METER

**Preparation Method:**

**Lab Method ID(s):** PI-006

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 120.1	Yes	Yes	No

**Parameter**

Conductivity (25C)

## 004 - Dissolved and Extractable Metals

**Field of Accreditation:** Environmental

**Matrix:** Water

OSDWA†

**Analytical Method:** ICP/MS

**Preparation Method:**

**Lab Method ID(s):** PI-020

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 200.8	Yes	Yes	No

**Parameter**

- Aluminum
- Antimony
- Arsenic
- Barium
- Beryllium
- Bismuth
- Boron
- Cadmium
- Calcium
- Chromium
- Cobalt
- Copper
- Iron
- Lead
- Magnesium
- Manganese
- Molybdenum
- Nickel
- Potassium
- Selenium
- Silicon
- Silver
- Sodium
- Strontium
- Thallium
- Tin

**Parameter**

Titanium  
 Tungsten  
 Uranium  
 Vanadium  
 Zinc  
 Zirconium

**005 - Fluoride**

---

**Field of Accreditation:** Environmental**Matrix:** Solids**Analytical Method:** ION SELECTIVE ELECTRODE (ISE)**Preparation Method:** TCLP**Lab Method ID(s):** PI-007

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 1311	Yes	Yes	Yes
EPA 340.2	Yes	Yes	No

**Parameter**

Fluoride

**007 - Volatile Organic Compounds (VOC)**

---

**Field of Accreditation:** Environmental**Matrix:** WaterOSDWA<sup>†</sup>**Analytical Method:** GC/MS-PURGE AND TRAP**Preparation Method:****Lab Method ID(s):** PO-001

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 8260	Yes	Yes	No

**Parameter**

1,1,1,2-Tetrachloroethane  
 1,1,1-Trichloroethane  
 1,1,2,2-Tetrachloroethane  
 1,1,2-Trichloroethane  
 1,1-Dichloroethane  
 1,1-Dichloroethylene  
 1,2-Dichlorobenzene  
 1,2-Dichloroethane  
 1,2-Dichloropropane  
 1,3,5-Trimethylbenzene  
 1,3-Dichlorobenzene  
 1,4-Dichlorobenzene  
 Acetone (2-Propanone)  
 Benzene  
 Bromodichloromethane  
 Bromoform  
 Bromomethane  
 Carbon tetrachloride  
 Chlorobenzene  
 Chlorodibromomethane  
 Chloroethane (Ethyl chloride)  
 Chloroform  
 Chloromethane (Methyl chloride)  
 cis-1,2-Dichloroethylene  
 cis-1,3-Dichloropropene  
 Dichlorodifluoromethane (CFC-12, Freon 12)  
 Dichloromethane  
 Ethylbenzene  
 Ethylene Dibromide  
 Hexane (n-Hexane)  
 m,p-Xylene  
 Methyl ethyl ketone  
 Methyl isobutyl ketone (MIBK)  
 Methyl t-butyl ether  
 o-Xylene  
 Styrene  
 Tetrachloroethylene  
 Toluene  
 trans-1,2-Dichloroethylene  
 trans-1,3-Dichloropropene  
 Trichloroethylene  
 Trichlorofluoromethane  
 Vinyl chloride

**008 - Total Polychlorinated Biphenyls (PCB)**

---

Field of Accreditation: Environmental

Matrix: Oil

Analytical Method: GC/ECD

Preparation Method: EXTRACTION

Lab Method ID(s): PO-002

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 8080	Yes	Yes	No

Parameter  
Total PCB

### 009 - Metals

---

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: ICP/MS

Preparation Method: DIGESTION

Lab Method ID(s): PI-020

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 6020	Yes	Yes	No

Parameter  
Antimony  
Arsenic  
Barium  
Beryllium  
Boron  
Cadmium  
Calcium  
Chromium  
Cobalt  
Copper  
Iron  
Lead  
Magnesium  
Molybdenum  
Nickel  
Selenium  
Silver  
Sodium  
Thallium  
Tin  
Uranium  
Vanadium  
Zinc

### 013 - pH

---

Field of Accreditation: Environmental

Matrix: Water

OSDWA†

Analytical Method: PH METER

Preparation Method:

Lab Method ID(s): PI-010

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 150.1	Yes	Yes	No

Parameter  
pH

### 014 - Total Mercury

---

Field of Accreditation: Environmental

Matrix: Water

OSDWA†

Analytical Method: COLD VAPOUR ATOMIC ABSORPTION (CVAA)

Preparation Method: DIGESTION

Lab Method ID(s): PI-015

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 245.1	Yes	Yes	No

Parameter  
Mercury

### 017 - Volatile Organic Compounds (VOC)

---

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: GC/MS-PURGE AND TRAP

Preparation Method:

Lab Method ID(s): PO-001

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 8260	Yes	Yes	No

**Parameter**

1,1,1,2-Tetrachloroethane  
 1,1,1-Trichloroethane  
 1,1,2,2-Tetrachloroethane  
 1,1,2-Trichloroethane  
 1,1-Dichloroethane  
 1,1-Dichloroethylene  
 1,2,3-Trichlorobenzene  
 1,2,4-Trichlorobenzene  
 1,2,4-Trimethylbenzene  
 1,2-Dichlorobenzene  
 1,2-Dichloroethane  
 1,2-Dichloropropane  
 1,3,5-Trimethylbenzene  
 1,3-Dichlorobenzene  
 1,4-Dichlorobenzene  
 Acetone (2-Propanone)  
 Benzene  
 Bromodichloromethane  
 Bromoform  
 Bromomethane  
 Carbon tetrachloride  
 Chlorobenzene  
 Chlorodibromomethane  
 Chloroethane (Ethyl chloride)  
 Chloroethene (Vinyl chloride)  
 Chloroform  
 Chloromethane (Methyl chloride)  
 cis-1,2-Dichloroethylene  
 cis-1,3-Dichloropropene  
 Dichlorodifluoromethane (CFC-12, Freon 12)  
 Dichloromethane  
 Ethylbenzene  
 Ethylene Dibromide  
 Hexane (n-Hexane)  
 m,p-Xylene  
 Methyl ethyl ketone  
 Methyl isobutyl ketone (MIBK)  
 Methyl t-butyl ether  
 o-Xylene  
 Styrene  
 Tetrachloroethylene  
 Toluene  
 trans-1,2-Dichloroethylene  
 trans-1,3-Dichloropropene  
 Trichloroethylene  
 Trichlorofluoromethane

**018 - Mercury**

---

**Field of Accreditation:** Environmental**Matrix:** Solids [Soil]**Analytical Method:** COLD VAPOUR ATOMIC ABSORPTION (CVAA)**Preparation Method:** DIGESTION**Lab Method ID(s):** PI-015

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 7471	Yes	Yes	No

**Parameter**

Mercury

**019 - Boron**

---

**Field of Accreditation:** Environmental**Matrix:** Solids [Soil]**Analytical Method:** ICP/MS**Preparation Method:** HOT WATER EXTRACTION**Lab Method ID(s):** PI-025

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 6020	Yes	Yes	No

**Parameter**

Hot Water Extractable Boron (Boron (Hot Water Soluble))

**020 - Total Petroleum Hydrocarbons (TPH)**

---

**Field of Accreditation:** Environmental**Matrix:** Solids [Soil]**Analytical Method:** GC/FID**Preparation Method:** EXTRACTION

Lab Method ID(s): PO-007

Method Reference	Modified From	Analytical Method	Preparation Method
CCME CWS PETROLEUM HYDROCARBONS IN SOIL - TIER 1 METHOD (REV. 5.0)	No	Yes	No

**Parameter**

F2: C10-C16

F3: C16-C34

F4: C34-C50

Total Petroleum Hydrocarbons (TPH): C10-C24

---

### 021 - Total Petroleum Hydrocarbons (TPH)

**Field of Accreditation:** Environmental

**Matrix:** Solids [Soil]

**Analytical Method:** GC/FID-PURGE AND TRAP

**Preparation Method:**

Lab Method ID(s): PO-006

Method Reference	Modified From	Analytical Method	Preparation Method
CCME CWS PETROLEUM HYDROCARBONS IN SOIL - TIER 1 METHOD (REV. 5.0)	No	Yes	No

**Parameter**

F1: C6-C10

Total Petroleum Hydrocarbons (TPH): C5-C10

---

### 025 - Total Petroleum Hydrocarbons (TPH)

**Field of Accreditation:** Environmental

**Matrix:** Solids [Soil]

**Analytical Method:** GRAVIMETRIC

**Preparation Method:** EXTRACTION

Lab Method ID(s): PO-009

Method Reference	Modified From	Analytical Method	Preparation Method
ON MECP E3398	Yes	Yes	No

**Parameter**

F4: Gravimetric

Total Petroleum Hydrocarbons (TPH): Heavy oils

---

### 026 - Hexavalent Chromium

**Field of Accreditation:** Environmental

**Matrix:** Solids [Soil]

**Analytical Method:** COLORIMETRIC

**Preparation Method:** EXTRACTION

Lab Method ID(s): PI-013

Method Reference	Modified From	Analytical Method	Preparation Method
ON MECP E3056A-1	Yes	Yes	No

**Parameter**

Hexavalent Chromium

---

### 027 - pH

**Field of Accreditation:** Environmental

**Matrix:** Solids [Soil]

**Analytical Method:** POTENTIOMETRIC TITRATION

**Preparation Method:**

Lab Method ID(s): PI-010

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 150.1	Yes	Yes	No
ON MECP E3137	Yes	Yes	No

**Parameter**

pH

---

### 028 - Conductivity

**Field of Accreditation:** Environmental

**Matrix:** Solids [Soil]

**Analytical Method:** CONDUCTIVITY METER

**Preparation Method:**

Lab Method ID(s): PI-006

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 120.1	Yes	Yes	No
ON MECP E3138	Yes	Yes	No

**Parameter**

Conductivity

---

### 029 - Total Polychlorinated Biphenyls (PCB)

**Field of Accreditation:** Environmental

**Matrix:** Solids [Soil]

**Analytical Method:** GC/ECD

**Preparation Method:** EXTRACTION

Lab Method ID(s): PO-002

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 8082	Yes	Yes	No

Parameter  
Total PCB

### 030 - Total Petroleum Hydrocarbons (TPH)

---

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: GC/FID-PURGE AND TRAP

Preparation Method:

Lab Method ID(s): PO-006

Method Reference	Modified From	Analytical Method	Preparation Method
ON MECP E3420	Yes	Yes	No
ON MECP E3421	Yes	Yes	No

Parameter  
Total Petroleum Hydrocarbons (TPH): C5-C10

### 031 - Total Petroleum Hydrocarbons (TPH)

---

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: GC/FID

Preparation Method: EXTRACTION

Lab Method ID(s): PO-007

Method Reference	Modified From	Analytical Method	Preparation Method
ON MECP E3421	Yes	Yes	No

Parameter  
Total Petroleum Hydrocarbons (TPH): C10-C24

### 032 - Oil and Grease

---

Field of Accreditation: Environmental

Matrix: Water

OSDWA†

Analytical Method: GRAVIMETRIC

Preparation Method: EXTRACTION

Lab Method ID(s): PO-004

Method Reference	Modified From	Analytical Method	Preparation Method
SM 5520 B	Yes	Yes	No
SM 5520 F	Yes	Yes	No

Parameter  
F4: Gravimetric  
Mineral Oil and Grease  
Total Oil and Grease

### 033 - Hexavalent Chromium

---

Field of Accreditation: Environmental

Matrix: Water

OSDWA†

Analytical Method: COLORIMETRIC

Preparation Method:

Lab Method ID(s): PI-013

Method Reference	Modified From	Analytical Method	Preparation Method
ON MECP E3056A-1	Yes	Yes	No

Parameter  
Hexavalent Chromium

### 034 - Anions

---

Field of Accreditation: Environmental

Matrix: Water

OSDWA†

Analytical Method: ION CHROMATOGRAPHY (IC)

Preparation Method:

Lab Method ID(s): PI-016

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 300.1	Yes	Yes	No

Parameter  
Bromide  
Chloride  
Fluoride  
Nitrate  
Nitrite  
Phosphate  
Sulfate

035 - Total Polychlorinated Biphenyls (PCB)

Field of Accreditation: Environmental

Matrix: Water

OSDWA†

Analytical Method: GC/ECD

Preparation Method: EXTRACTION

Lab Method ID(s): PO-002

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 8082	Yes	Yes	No

Parameter  
Total PCB

036 - Metals

Field of Accreditation: Environmental

Matrix: Air

Analytical Method: ICP/MS

Preparation Method: DIGESTION

Lab Method ID(s): PI-020

Method Reference	Modified From	Analytical Method	Preparation Method
NIOSH 7300	Yes	Yes	No

Parameter  
Arsenic  
Beryllium  
Cadmium  
Chromium  
Copper  
Lead  
Zinc

038 - Petroleum Hydrocarbons (PHC)

Field of Accreditation: Environmental

Matrix: Water

OSDWA†

Analytical Method: GC/FID-PURGE AND TRAP

Preparation Method:

Lab Method ID(s): PO-006

Method Reference	Modified From	Analytical Method	Preparation Method
CCME CWS PETROLEUM HYDROCARBONS IN SOIL - TIER 1 METHOD	Yes	Yes	No
ON MECP E3421	Yes	No	Yes

Parameter  
F1: C6-C10

039 - Petroleum Hydrocarbons (PHC)

Field of Accreditation: Environmental

Matrix: Water

OSDWA†

Analytical Method: GC/FID

Preparation Method: EXTRACTION

Lab Method ID(s): PO-007

Method Reference	Modified From	Analytical Method	Preparation Method
CCME CWS PETROLEUM HYDROCARBONS IN SOIL - TIER 1 METHOD	Yes	Yes	No
ON MECP E3421	Yes	No	Yes

Parameter  
F2: C10-C16  
F3: C16-C34  
F4: C34-C50

040 - Solids

Field of Accreditation: Environmental

Matrix: Water

OSDWA†

Analytical Method: GRAVIMETRIC

Preparation Method:

Lab Method ID(s): PI-012

Method Reference	Modified From	Analytical Method	Preparation Method
SM 2450 C	Yes	Yes	No
SM 2450 D	Yes	Yes	No

Parameter  
Total Dissolved Solids  
Total Suspended Solids  
Volatile Suspended Solids

041 - Sulphide

Field of Accreditation: Environmental

Matrix: Water

OSDWA†

Analytical Method: COLORIMETRIC

Preparation Method:

Lab Method ID(s): PI-001

Method Reference	Modified From	Analytical Method	Preparation Method
SM 4500-S2- D	Yes	Yes	No

Parameter  
Sulphide

---

#### 042 - Colour

Field of Accreditation: Environmental

Matrix: Water

OSDWA†

Analytical Method: SPECTROPHOTOMETRIC

Preparation Method:

Lab Method ID(s): PI-019

Method Reference	Modified From	Analytical Method	Preparation Method
HACH 8025	Yes	Yes	No

Parameter  
Apparent Colour  
True Colour

---

#### 043 - Fungi

Ottawa West Laboratory

Field of Accreditation: Environmental

Matrix: Solids

Analytical Method: MICROSCOPY

Preparation Method:

Lab Method ID(s): PM-002

Method Reference	Modified From	Analytical Method	Preparation Method
ASTM D7391	Yes	Yes	No

Parameter  
Fungal Propagule - Genus

---

#### 044 - Fungi

Ottawa West Laboratory

Field of Accreditation: Environmental

Matrix: Air

Analytical Method: MICROSCOPY

Preparation Method:

Lab Method ID(s): PM-002

Method Reference	Modified From	Analytical Method	Preparation Method
ASTM D7391	Yes	Yes	No

Parameter  
Fungal Propagule - Genus

---

#### 045 - Fungi

Ottawa West Laboratory

Field of Accreditation: Environmental

Matrix: Air

Analytical Method: MICROSCOPY

Preparation Method: CULTURE

Lab Method ID(s): PM-001

Method Reference	Modified From	Analytical Method	Preparation Method
AIHA GUIDELINES	Yes	Yes	No

Parameter  
Fungal Speciation

---

#### 046 - Fungi

Ottawa West Laboratory

Field of Accreditation: Environmental

Matrix: Solids

Analytical Method: MICROSCOPY

Preparation Method: CULTURE

Lab Method ID(s): PM-001

Method Reference	Modified From	Analytical Method	Preparation Method
AIHA GUIDELINES	Yes	Yes	No

Parameter  
Fungal Propagule - Genus  
Fungal Speciation

---

#### 051 - Turbidity

Field of Accreditation: Environmental

Matrix: Water

OSDWA†

Analytical Method: NEPHELOMETRIC

Preparation Method:

Lab Method ID(s): PI-017

Method Reference	Modified From	Analytical Method	Preparation Method
HACH 2100 P	Yes	Yes	No



**Parameter**

Turbidity

**052 - Cyanide****Field of Accreditation:** Environmental**Matrix:** Water

OSDWA†

**Analytical Method:** AUTOMATED COLORIMETRIC**Preparation Method:** DISTILLATION**Lab Method ID(s):** PI-008

Method Reference	Modified From	Analytical Method	Preparation Method
ON MECP E3015	Yes	Yes	No

**Parameter**Cyanide (SAD)  
Free Cyanide**053 - Chlorine****Field of Accreditation:** Environmental**Matrix:** Water

OSDWA†

**Analytical Method:** COLORIMETRIC**Preparation Method:****Lab Method ID(s):** PI-005

Method Reference	Modified From	Analytical Method	Preparation Method
SM 4500-CL G	Yes	Yes	No

**Parameter**Free Chlorine  
Total Chlorine**054 - Chemical Oxygen Demand (COD)****Field of Accreditation:** Environmental**Matrix:** Water

OSDWA†

**Analytical Method:** COLORIMETRIC**Preparation Method:** REFLUX**Lab Method ID(s):** PI-009

Method Reference	Modified From	Analytical Method	Preparation Method
SM 5220 D	Yes	Yes	No

**Parameter**

COD

**055 - Biochemical Oxygen Demand (BOD)****Field of Accreditation:** Environmental**Matrix:** Water

OSDWA†

**Analytical Method:** DISSOLVED OXYGEN METER (DO)**Preparation Method:****Lab Method ID(s):** PI-014

Method Reference	Modified From	Analytical Method	Preparation Method
SM 5210 B	Yes	Yes	No

**Parameter**BOD (5 day)  
CBOD (5 day)**056 - Carbon****Field of Accreditation:** Environmental**Matrix:** Water

OSDWA†

**Analytical Method:** INFRARED SPECTROSCOPY (IR)**Preparation Method:** COMBUSTION**Lab Method ID(s):** PO-011

Method Reference	Modified From	Analytical Method	Preparation Method
ON MECP E3247B	Yes	Yes	No

**Parameter**Organic Carbon  
Total Organic Carbon (TOC)**057 - Coliforms****Field of Accreditation:** Environmental**Matrix:** Water

OSDWA†

**Analytical Method:** MEMBRANE FILTRATION (DC)**Preparation Method:****Lab Method ID(s):** PW-001

Method Reference	Modified From	Analytical Method	Preparation Method
ON MECP E3407	Yes	Yes	No

**Parameter**

Background Counts

**Parameter**  
Escherichia coli  
Total Coliforms

### 058 - Fecal (Thermotolerant) Coliforms

**Field of Accreditation:** Environmental **Matrix:** Water OSDWA<sup>†</sup>

**Analytical Method:** MEMBRANE FILTRATION (M-FC) **Preparation Method:**

**Lab Method ID(s):** PW-002

Method Reference	Modified From	Analytical Method	Preparation Method
SM 9222 D	Yes	Yes	No

**Parameter**  
Fecal (Thermotolerant) Coliforms

### 059 - Heterotrophic Plate Count (HPC)

**Field of Accreditation:** Environmental **Matrix:** Water OSDWA<sup>†</sup>

**Analytical Method:** SPREAD PLATE (PCA) **Preparation Method:**

**Lab Method ID(s):** PW-003

Method Reference	Modified From	Analytical Method	Preparation Method
SM 9215 C	Yes	Yes	No

**Parameter**  
Heterotrophic Plate Count (HPC)

### 060 - Total Phosphorus

**Field of Accreditation:** Environmental **Matrix:** Water OSDWA<sup>†</sup>

**Analytical Method:** AUTOMATED COLORIMETRIC **Preparation Method:** DIGESTION

**Lab Method ID(s):** PI-011

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 365.1	Yes	Yes	No

**Parameter**  
Total Phosphorus

### 061 - Total Kjeldahl Nitrogen (TKN)

**Field of Accreditation:** Environmental **Matrix:** Water OSDWA<sup>†</sup>

**Analytical Method:** AUTOMATED COLORIMETRIC **Preparation Method:** DIGESTION

**Lab Method ID(s):** PI-004

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 351.2	Yes	Yes	No

**Parameter**  
Total Kjeldahl Nitrogen

### 062 - Ammonia

**Field of Accreditation:** Environmental **Matrix:** Water OSDWA<sup>†</sup>

**Analytical Method:** AUTOMATED COLORIMETRIC **Preparation Method:**

**Lab Method ID(s):** PI-004

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 351.2	Yes	Yes	No

**Parameter**  
Ammonia

### 064 - Phenols

**Field of Accreditation:** Environmental **Matrix:** Water OSDWA<sup>†</sup>

**Analytical Method:** AUTOMATED COLORIMETRIC **Preparation Method:** DISTILLATION

**Lab Method ID(s):** PI-002

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 420.2	Yes	Yes	No

**Parameter**  
Total Phenolics

### 065 - Total Metals

OSDWA<sup>†</sup>

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: ICP/MS

Preparation Method: DIGESTION

Lab Method ID(s): PI-020

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 200.8	Yes	Yes	No

**Parameter**

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

066 - Asbestos and Other Fibres

Ottawa West Laboratory

Field of Accreditation: Environmental

Matrix: Air

Analytical Method: PHASE CONTRAST MICROSCOPY (PCM)/FIBRE ANALYSIS

Preparation Method:

Lab Method ID(s): PM-003

Method Reference	Modified From	Analytical Method	Preparation Method
NIOSH 7400	Yes	Yes	No

**Parameter**

- Asbestos

069 - Metals

Field of Accreditation: Environmental

Matrix: Paint

Analytical Method: ICP/MS

Preparation Method:

Lab Method ID(s): PI-020

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 6020	Yes	Yes	No

**Parameter**

- Arsenic
- Lead

073 - Tannin and Lignin

Field of Accreditation: Environmental

Matrix: Water

OSDWA†

Analytical Method: COLORIMETRIC

Preparation Method:

Lab Method ID(s): PI-018 TANNIN AND LIGNIN

Method Reference	Modified From	Analytical Method	Preparation Method
SM 5550	No	Yes	No

**Parameter**

- Tannin and Lignin

074 - Semi-Volatile Organic Compounds (SVOC)

Field of Accreditation: Environmental

Matrix: Solids

Analytical Method: GC/MS

Preparation Method: EXTRACTION

Lab Method ID(s): PO-003 SVOC

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 8270	Yes	Yes	No

**Parameter**

1,2,4-Trichlorobenzene  
 1-Methylnaphthalene  
 2,3,4,5-Tetrachlorophenol  
 2,3,4,6-Tetrachlorophenol  
 2,4,5-Trichlorophenol  
 2,4,6-Trichlorophenol  
 2,4-Dichlorophenol  
 2,4-Dimethylphenol  
 2,4-Dinitrophenol  
 2,4-Dinitrotoluene  
 2,6-Dinitrotoluene (2,6-DNT)  
 2-Chloronaphthalene  
 2-Chlorophenol  
 2-Methylnaphthalene  
 2-Methylphenol (o-Cresol)  
 2-Nitrophenol  
 3,3-Dichlorobenzidine  
 3-Methylphenol + 4-Methylphenol (m-Cresol + p-Cresol)  
 4-Chloro-3-methylphenol  
 4-Chloroaniline (p-Chloroaniline)  
 4-Chlorophenyl phenyl ether  
 4-Nitrophenol  
 Acenaphthene  
 Acenaphthylene  
 Anthracene  
 Benzo(a)anthracene  
 Benzo(a)pyrene  
 Benzo(b)fluoranthene  
 Benzo(g,h,i)perylene  
 Benzo(k)fluoranthene  
 Biphenyl (1,1-Biphenyl)  
 Bis(2-chloro-1-methylethyl) ether  
 Bis(2-chloroethoxy)methane  
 Bis(2-chloroethyl)ether  
 Bis(2-ethylhexyl) phthalate (Diethylhexyl phthalate)  
 Butyl benzyl phthalate  
 Chrysene  
 Dibenzo(a,h)anthracene  
 Diethyl phthalate  
 Dimethyl phthalate  
 Di-n-butyl phthalate  
 Di-n-octyl phthalate  
 Fluoranthene  
 Fluorene  
 Hexachlorobenzene (HCB)  
 Hexachlorobutadiene (1,1,2,3,4,4-Hexachloro-1,3-butadiene)  
 Hexachlorocyclopentadiene  
 Hexachloroethane  
 Indeno(1,2,3 - cd)pyrene  
 Indole  
 Naphthalene  
 Nitrobenzene (NB)  
 N-Nitrosodi-n-propylamine  
 N-Nitrosodiphenylamine  
 Pentachlorophenol  
 Phenanthrene  
 Phenol  
 Pyrene  
 Quinoline

075 - Semi-Volatile Organic Compounds (SVOC)

Field of Accreditation: Environmental

Matrix: Water

OSDWA†

Analytical Method: GC/MS

Preparation Method: EXTRACTION

Lab Method ID(s): PO-003 SVOC

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 8270	Yes	Yes	No

**Parameter**

1,2,4-Trichlorobenzene  
 1-Methylnaphthalene  
 2,3,4,5-Tetrachlorophenol  
 2,3,4,6-Tetrachlorophenol  
 2,4,5-Trichlorophenol  
 2,4,6-Trichlorophenol  
 2,4-Dichlorophenol  
 2,4-Dimethylphenol  
 2,4-Dinitrophenol  
 2,4-Dinitrotoluene  
 2,6-Dinitrotoluene (2,6-DNT)  
 2-Chloronaphthalene  
 2-Chlorophenol  
 2-Methylnaphthalene  
 2-Methylphenol (o-Cresol)  
 2-Nitrophenol  
 3,3-Dichlorobenzidine  
 3-Methylphenol + 4-Methylphenol (m-Cresol + p-Cresol)  
 4-Chloro-3-methylphenol  
 4-Chloroaniline (p-Chloroaniline)  
 4-Chlorophenyl phenyl ether  
 4-Nitrophenol  
 7H-Dibenzo(c,g)carbazole  
 Acenaphthene  
 Acenaphthylene  
 Acridine  
 Anthracene  
 Benzo(a)anthracene  
 Benzo(a)pyrene  
 Benzo(b)fluoranthene  
 Benzo(e)pyrene  
 Benzo(g,h,i)perylene  
 Benzo(j)fluoranthene  
 Benzo(k)fluoranthene  
 Biphenyl (1,1-Biphenyl)  
 Bis(2-chloro-1-methylethyl) ether  
 Bis(2-chloroethoxy)methane  
 Bis(2-chloroethyl)ether  
 Bis(2-ethylhexyl) phthalate (Diethylhexyl phthalate)  
 Butyl benzyl phthalate  
 Chrysene  
 Dibenzo(a,h)anthracene  
 Dibenzo(a,i)pyrene  
 Dibenzo(a,j)acridine  
 Diethyl phthalate  
 Dimethyl phthalate  
 Di-n-butyl phthalate  
 Di-n-octyl phthalate  
 Fluoranthene  
 Fluorene  
 Hexachlorobenzene (HCB)  
 Hexachlorobutadiene (1,1,2,3,4,4-Hexachloro-1,3-butadiene)  
 Hexachlorocyclopentadiene  
 Hexachloroethane  
 Indeno(1,2,3 - cd)pyrene  
 Indole  
 Naphthalene  
 Nitrobenzene (NB)  
 N-Nitrosodiphenylamine  
 Pentachlorophenol  
 Perylene  
 Phenanthrene  
 Phenol  
 Pyrene  
 Quinoline

076 - Cyanide

**Field of Accreditation:** Environmental

**Matrix:** Solids [Soil]

**Analytical Method:** AUTOMATED COLORIMETRIC

**Preparation Method:**

**Lab Method ID(s):** PI-008

Method Reference	Modified From	Analytical Method	Preparation Method
ON MECP E3015	Yes	Yes	No

**Parameter**  
Free Cyanide

### 079 - Anions

---

**Field of Accreditation:** Environmental

**Matrix:** Solids

**Analytical Method:** ION CHROMATOGRAPHY (IC)

**Preparation Method:**

**Lab Method ID(s):** PI-016

Method Reference	Modified From	Analytical Method	Preparation Method
ON MECP E3013	Yes	Yes	No

**Parameter**  
Bromide  
Chloride  
Fluoride  
Nitrate-N  
Nitrite (NO<sub>2</sub>)  
Phosphate-P  
Sulphate

### 082 - Base Neutral Acid Extractables (BNA)

---

**Field of Accreditation:** Environmental

**Matrix:** Solids

**Analytical Method:** GC/MS

**Preparation Method:** TCLP

**Lab Method ID(s):** PO-003

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 1311	Yes	No	Yes
EPA 8270	Yes	Yes	No

**Parameter**  
2,3,4,6-Tetrachlorophenol  
2,4,5-Trichlorophenol  
2,4,6-Trichlorophenol  
2,4-Dichlorophenol  
2,4-Dinitrotoluene  
2-Methylphenol (o-Cresol)  
3-Methylphenol + 4-Methylphenol (m-Cresol + p-Cresol)  
Benzo(a)pyrene  
Hexachlorobenzene (HCB)  
Hexachlorobutadiene (1,1,2,3,4,4-Hexachloro-1,3-butadiene)  
Hexachloroethane  
Nitrobenzene (NB)  
Pentachlorophenol  
Pyridine  
Total Cresols

### 083 - Polychlorinated Biphenyls (PCB)

---

**Field of Accreditation:** Environmental

**Matrix:** Solids

**Analytical Method:** GC/ECD

**Preparation Method:** TCLP

**Lab Method ID(s):** PO-002

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 1311	Yes	No	Yes
EPA 8082	Yes	Yes	No

**Parameter**  
Aroclor 1242  
Aroclor 1248  
Aroclor 1254  
Aroclor 1260

### 084 - Metals

---

**Field of Accreditation:** Environmental

**Matrix:** Solids

**Analytical Method:** ICP/MS

**Preparation Method:** TCLP

**Lab Method ID(s):** PI-020

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 1311	Yes	No	Yes
EPA 200.8	Yes	Yes	No

**Parameter**

Arsenic  
Barium  
Boron  
Cadmium  
Chromium  
Lead  
Selenium  
Silver  
Uranium

**085 - Mercury**

---

**Field of Accreditation:** Environmental**Matrix:** Solids**Analytical Method:** COLD VAPOUR ATOMIC ABSORPTION (CVAA)**Preparation Method:** TCLP**Lab Method ID(s):** PI-015

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 1311	Yes	No	Yes
EPA 245.1	Yes	Yes	No

**Parameter**

Mercury

**086 - Anions**

---

**Field of Accreditation:** Environmental**Matrix:** Solids**Analytical Method:** ION CHROMATOGRAPHY (IC)**Preparation Method:** TCLP**Lab Method ID(s):** PI-016

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 1311	Yes	No	Yes
EPA 300.1	Yes	Yes	No

**Parameter**

Nitrate  
Nitrite (NO2)

**087 - Cyanide**

---

**Field of Accreditation:** Environmental**Matrix:** Solids**Analytical Method:** COLORIMETRIC**Preparation Method:** TCLP, DISTILLATION**Lab Method ID(s):** PI-008

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 1311	Yes	No	Yes
ON MECP E3015	Yes	Yes	No

**Parameter**

Cyanide (WAD)

**088 - Volatile Organic Compounds (VOC)**

---

**Field of Accreditation:** Environmental**Matrix:** Solids**Analytical Method:** GC/MS-PURGE AND TRAP**Preparation Method:** TCLP**Lab Method ID(s):** PO-001

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 1311	Yes	No	Yes
EPA 624	Yes	Yes	No

**Parameter**

1,1-Dichloroethene (1,1-Dichloroethylene)  
1,2-Dichlorobenzene  
1,2-Dichloroethane  
1,4-Dichlorobenzene  
Benzene  
Carbon tetrachloride  
Chlorobenzene  
Chloroethene (Vinyl chloride)  
Chloroform  
Dichloromethane  
Methyl ethyl ketone  
Tetrachloroethylene  
Trichloroethylene

**089 - Formaldehyde**

---

Field of Accreditation: Environmental

Matrix: Water [Wastewater]

OSDWA<sup>†</sup>

Analytical Method: GC/ECD

Preparation Method:

Lab Method ID(s): PO-014

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 556.1	Yes	Yes	No

**Parameter**

Formaldehyde

---

090 - Glycols

Field of Accreditation: Environmental

Matrix: Water [Wastewater]

Analytical Method: GC/FID

Preparation Method:

Lab Method ID(s): PO-015

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 8015	Yes	Yes	No

**Parameter**

Diethylene glycol

Ethylene glycol

Propylene glycol

Triethylene glycol

Trimethylene glycol

---

091 - Organochlorine (OC) Pesticides

Field of Accreditation: Environmental

Matrix: Water [Wastewater]

Analytical Method: GC/ECD

Preparation Method: EXTRACTION

Lab Method ID(s): PO-016

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 8081	Yes	Yes	No

**Parameter**

2,4'-DDD (o,p'-DDD)

2,4'-DDE (o,p'-DDE)

4,4'-DDD (p,p'-DDD)

4,4'-DDE (p,p'-DDE)

a - Chlordane

A -BHC

Aldrin

beta-Hexachlorocyclohexane (b-HCH, b-BHC, beta-HCH, beta-BHC)

delta-Hexachlorocyclohexane (d-HCH, d-BHC, delta-HCH, delta-BHC)

Dieldrin

Endosulfan I

Endosulfan II

Endrin

Endrin aldehyde

Endrin ketone

g - Chlordane

Heptachlor

Heptachlor epoxide

Hexachlorobenzene (HCB)

Hexachlorobutadiene (1,1,2,3,4,4-Hexachloro-1,3-butadiene)

Hexachloroethane

Lindane (gamma-BHC)

o,p' - DDT

p,p' - DDT

p,p' Methoxychlor

---

092 - Legionella

Field of Accreditation: Environmental

Matrix: Water [Wastewater]

OSDWA<sup>†</sup>

Analytical Method: MEMBRANE FILTRATION

Preparation Method:

Lab Method ID(s): PW-004

Method Reference	Modified From	Analytical Method	Preparation Method
ISO 11731	No	Yes	No
SM 9260 J	No	Yes	No

**Parameter**

Legionella spp.

---

093 - Glycols



**Field of Accreditation:** Environmental

**Matrix:** Solids [Soil]

**Analytical Method:** GC/FID

**Preparation Method:**

**Lab Method ID(s):** PO-015

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 8015	Yes	Yes	No

**Parameter**

Diethylene glycol  
Ethylene glycol  
Propylene glycol  
Triethylene glycol  
Trimethylene glycol

---

094 - Organochlorine (OC) Pesticides

**Field of Accreditation:** Environmental

**Matrix:** Solids [Soil]

**Analytical Method:** GC/ECD

**Preparation Method:** EXTRACTION

**Lab Method ID(s):** PO-016

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 8081	Yes	Yes	No

**Parameter**

2,4'-DDD (o,p'-DDD)  
2,4'-DDE (o,p'-DDE)  
2,4'-DDT (o,p'-DDT)  
4,4'-DDD (p,p'-DDD)  
4,4'-DDE (p,p'-DDE)  
4,4'-DDT (p,p'-DDT)  
4,4'-Methoxychlor (p,p'-Methoxychlor)  
Aldrin  
alpha-BHC  
alpha-Chlordane  
beta-BHC  
delta-Hexachlorocyclohexane (d-HCH, d-BHC, delta-HCH, delta-BHC)  
Dieldrin  
Endosulfan I (a-Endosulfan)  
Endosulfan II (b-Endosulfan)  
Endrin  
Endrin aldehyde  
Endrin ketone  
gamma-Chlordane  
Heptachlor  
Heptachlor epoxide  
Hexachlorobenzene (HCB)  
Hexachlorobutadiene (1,1,2,3,4,4-Hexachloro-1,3-butadiene)  
Hexachloroethane  
Lindane (gamma-BHC)

---

095 - Legionella

**Field of Accreditation:** Environmental

**Matrix:** Water [Wastewater]

**Analytical Method:** QUANTITATIVE POLYMERASE CHAIN REACTION (PCR)

**Preparation Method:**

**Lab Method ID(s):** PW-008

Method Reference	Modified From	Analytical Method	Preparation Method
ISO 12869	Yes	Yes	No

**Parameter**

Legionella pneumophila

---

096 - Flashpoint

**Field of Accreditation:** Environmental

**Matrix:** Solids [Ash, Soil]

**Analytical Method:** PENSKY-MARTENS CLOSED CUP

**Preparation Method:**

**Lab Method ID(s):** PO-012

Method Reference	Modified From	Analytical Method	Preparation Method
ASTM D93	Yes	Yes	No

**Parameter**

Flashpoint

---

097 - Asbestos

**Field of Accreditation:** Environmental

**Matrix:** Solids [Bulk]

**Analytical Method:** POLARIZED LIGHT MICROSCOPY (PLM)

**Preparation Method:**

**Lab Method ID(s):** PM-004

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 600/M4-82/020	Yes	Yes	No
EPA 600/R-93/116	Yes	Yes	No

**Parameter**

Bulk Asbestos

---

098 - Metals

**Field of Accreditation:** Environmental

**Matrix:** Leachate

**Analytical Method:** ICP/MS

**Preparation Method:** MSPLP

**Lab Method ID(s):** PI-020, PI-042

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 200.8	Yes	Yes	No
ON MECP E9003	Yes	No	Yes

**Parameter**

Antimony  
Arsenic  
Barium  
Beryllium  
Boron  
Cadmium  
Chromium  
Cobalt  
Copper  
Lead  
Molybdenum  
Nickel  
Selenium  
Silver  
Thallium  
Uranium  
Vanadium  
Zinc

---

099 - Volatile Organic Compounds (VOC)

**Field of Accreditation:** Environmental

**Matrix:** Leachate

**Analytical Method:** GC/MS-PURGE AND TRAP

**Preparation Method:** MSPLP

**Lab Method ID(s):** PI-042, PO-001

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 8260	Yes	Yes	No
ON MECP E9003	Yes	No	Yes

**Parameter**

1,1,1,2-Tetrachloroethane  
1,1,2,2-Tetrachloroethane  
1,1,2-Trichloroethane  
1,1-Dichloroethane  
1,2-Dichlorobenzene  
Bromomethane  
cis-1,2-Dichloroethylene  
cis-1,3-Dichloropropene  
Tetrachloroethylene

+ "OSDWA" indicates the appendix is used for the analysis of Ontario drinking water samples, which is subject to the rules and related regulations under the Ontario "Safe Drinking Water Act" (2002).

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)