

CALA Scope of Accreditation

Laboratory Name: Paracel Laboratories Ltd. (Hamilton)

Client ID: 1004132

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

Clients Served: All Interested Parties

Revised On: 02/06/2024

Valid To: 07/18/2025

001 - pH

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: PH METER

Preparation Method:

Lab Method ID(s): HI-010

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

Parameter
pH

002 - Conductivity

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: CONDUCTIVITY METER

Preparation Method:

Lab Method ID(s): HI-006

Method Reference	Modified From	Analytical Method	Preparation Method
SM 2510 B	No	Yes	No

Parameter
Conductivity (25C)

003 - Boron (Hot Water Soluble)

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: ICP/MS

Preparation Method:

Lab Method ID(s): HI-020, HI-025

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 6020A	No	Yes	No
GUPTA, 1967, SOIL SCIENCE 103: 424-428	No	No	Yes

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

004 - Conductivity

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: CONDUCTIVITY METER

Preparation Method:

Lab Method ID(s): HI-006

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

Parameter
Conductivity

005 - Cyanide

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: AUTOMATED COLORIMETRIC

Preparation Method:

Lab Method ID(s): HI-008

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

Parameter
Free Cyanide

006 - Hexavalent Chromium

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: COLORIMETRIC

Preparation Method:

Lab Method ID(s): HI-013

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 3060A	Yes	Yes	No

Parameter

Hexavalent Chromium

007 - Hexavalent Chromium

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: COLORIMETRIC

Preparation Method:

Lab Method ID(s): HI-013

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

Parameter

Hexavalent Chromium

008 - Mercury

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: COLD VAPOUR ATOMIC ABSORPTION (CVAA)

Preparation Method:

Lab Method ID(s): HI-015

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 7471B	Yes	Yes	No
USGS METHOD I-6463-86	Yes	Yes	No

Parameter

Mercury

009 - Mercury

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: COLD VAPOUR ATOMIC ABSORPTION (CVAA)

Preparation Method:

Lab Method ID(s): HI-015

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

Parameter

Mercury

010 - Metals

Field of Accreditation: Environmental

Matrix: Paint

Analytical Method: ICP/MS

Preparation Method: DIGESTION

Lab Method ID(s): HI-020

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

Parameter

Lead

011 - Dissolved and Extractable Metals

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: ICP/MS

Preparation Method:

Lab Method ID(s): HI-020

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

Parameter

Aluminum
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium

Parameter

Calcium
 Chromium
 Cobalt
 Copper
 Iron
 Lead
 Magnesium
 Manganese
 Molybdenum
 Nickel
 Potassium
 Selenium
 Silver
 Sodium
 Strontium
 Thallium
 Tin
 Titanium
 Uranium
 Vanadium
 Zinc

012 - Total Metals

Field of Accreditation: Environmental**Matrix:** Solids [Soil]**Analytical Method:** ICP/MS**Preparation Method:** DIGESTION**Lab Method ID(s):** HI-020

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

Parameter

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

013 - Total Metals

Field of Accreditation: Environmental**Matrix:** Water**Analytical Method:** ICP/MS**Preparation Method:** DIGESTION**Lab Method ID(s):** HI-020

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

Parameter

Aluminum
 Antimony
 Arsenic
 Barium

Parameter

Beryllium
 Boron
 Cadmium
 Calcium
 Chromium
 Cobalt
 Copper
 Iron
 Lead
 Magnesium
 Manganese
 Molybdenum
 Nickel
 Potassium
 Selenium
 Silver
 Sodium
 Strontium
 Thallium
 Titanium
 Uranium
 Vanadium
 Zinc
 Zirconium

014 - pH

Field of Accreditation: Environmental**Matrix:** Solids [Soil]**Analytical Method:** PH METER**Preparation Method:****Lab Method ID(s):** HI-010

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

Parameter

pH

015 - Metals

Field of Accreditation: Environmental**Matrix:** Solids [Soil]**Analytical Method:** ICP/MS**Preparation Method:****Lab Method ID(s):** HI-006, HI-020

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

Parameter

Calcium
 Magnesium
 Sodium
 Sodium Adsorption Ratio (SAR) (calculation)

016 - Moisture

Field of Accreditation: Environmental**Matrix:** Solids [Soil]**Analytical Method:** GRAVIMETRIC**Preparation Method:****Lab Method ID(s):** HO-010

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

Parameter

Total Solids

017 - Petroleum Hydrocarbons (PHC)

Field of Accreditation: Environmental**Matrix:** Solids [Soil]**Analytical Method:** GC/FID-PURGE AND TRAP**Preparation Method:****Lab Method ID(s):** HO-006

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

Parameter

F1: C6-C10

018 - Petroleum Hydrocarbons (PHC)

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: GC/FID

Preparation Method: COLD SHAKE EXTRACTION

Lab Method ID(s): HO-007

Method Reference

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

Parameter

F2: C10-C16

F3: C16-C34

F4: C34-C50

019 - Petroleum Hydrocarbons (PHC)

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: GC/FID

Preparation Method: EXTRACTION

Lab Method ID(s): HO-007

Method Reference

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

Parameter

F2: C10-C16

F3: C16-C34

F4: C34-C50

020 - Petroleum Hydrocarbons (PHC)

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: GRAVIMETRIC

Preparation Method: COLD SHAKE EXTRACTION

Lab Method ID(s): HO-009

Method Reference

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

Parameter

F4: Gravimetric

021 - Semi-Volatile Organic Compounds (SVOC)

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: GC/MS

Preparation Method: EXTRACTION

Lab Method ID(s): HO-003

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

1,2,4-Trichlorobenzene

1-Methylnaphthalene

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-Chlorophenol

2-Methylnaphthalene

2-Methylphenol (o-Cresol)

2-Nitrophenol

3,3'-Dichlorobenzidine

4-Chloro-3-methylphenol

4-Chloroaniline (p-Chloroaniline)

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-chloroethyl)ether

Parameter

Bis(2-ethylhexyl) phthalate (Diethylhexyl phthalate)
 Chrysene
 Dibenzo(a,h)anthracene
 Diethyl phthalate
 Dimethylphthalate
 Fluoranthene
 Fluorene
 Hexachlorobutadiene (1,1,2,3,4,4-Hexachloro-1,3-butadiene)
 Indeno(1,2,3 - cd)pyrene
 Naphthalene
 Pentachlorobenzene
 Pentachlorophenol
 Phenanthrene
 Phenol
 Pyrene

022 - Volatile Organic Compounds (VOC)

Field of Accreditation: Environmental**Matrix:** Solids [Soil]**Analytical Method:** GC/MS-PURGE AND TRAP**Preparation Method:****Lab Method ID(s):** HO-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
 1,2,3-Trimethylbenzene
 1,2,4-Trichlorobenzene
 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

023 - Petroleum Hydrocarbons (PHC)

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: GC/MS-PURGE AND TRAP

Preparation Method:

Lab Method ID(s): HO-006

Method Reference

CCME CWS PETROLEUM HYDROCARBONS IN SOIL - TIER 1 METHOD
ON MECP E3421

Modified From

Yes
Yes

Analytical Method

Yes
No

Preparation Method

No
Yes

Parameter

F1: C6-C10

024 - Semi-Volatile Organic Compounds (SVOC)

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: GC/MS

Preparation Method: EXTRACTION

Lab Method ID(s): HO-003

Method Reference

EPA 8270E

Modified From

Yes

Analytical Method

Yes

Preparation Method

No

Parameter

1,2,4-Trichlorobenzene
1-Methylnaphthalene
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-Chlorophenol
2-Methylnaphthalene
3,3'-Dichlorobenzidine
4-Chloroaniline (p-Chloroaniline)
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-chloroethyl)ether
Bis(2-ethylhexyl) phthalate (Diethylhexyl phthalate)
Chrysene
Dibenzo(a,h)anthracene
Diethyl phthalate
Dimethyl phthalate
Fluoranthene
Fluorene
Indeno(1,2,3 - cd)pyrene
Naphthalene
Pentachlorobenzene
Pentachlorophenol
Phenanthrene
Phenol
Pyrene

025 - Volatile Organic Compounds (VOC)

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: GC/MS-PURGE AND TRAP

Preparation Method:

Lab Method ID(s): HO-001

Method Reference

EPA 624

Modified From

Yes

Analytical Method

Yes

Preparation Method

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

Parameter

1,1-Dichloropropene
 1,2,3-Trichlorobenzene
 1,2,3-Trichloropropane
 1,2,4-Trichlorobenzene
 1,2,4-Trimethylbenzene
 1,2-Dibromo-3-chloropropane (DBCP)
 1,2-Dichlorobenzene
 1,2-Dichloroethane
 1,2-Dichloropropane
 1,3,5-Trimethylbenzene
 1,3-Dichlorobenzene
 1,3-Dichloropropane
 1,4-Dichlorobenzene
 2,2-Dichloropropane
 2-Chlorotoluene
 4-Chlorotoluene (p-Chlorotoluene)
 4-Isopropyltoluene (p-Cymene)
 Acetone (2-Propanone)
 Benzene
 Bromobenzene
 Bromodichloromethane
 Bromoform
 Bromomethane
 Butylbenzene (n-Butylbenzene)
 Carbon tetrachloride
 Chlorobenzene
 Chlorodibromomethane
 Chloroethane (Ethyl chloride)
 Chloroform
 Chloromethane (Methyl chloride)
 cis-1,2-Dichloroethylene
 cis-1,3-Dichloropropene
 Dibromomethane
 Dichlorodifluoromethane (CFC-12, Freon 12)
 Dichloromethane
 Ethylbenzene
 Ethylene Dibromide
 Hexane (n-Hexane)
 Isopropylbenzene (Cumene)
 m,p-Xylene
 Methyl ethyl ketone
 Methyl isobutyl ketone (MIBK)
 Methyl t-butyl ether
 n-Propylbenzene
 o-Xylene
 sec-Butylbenzene ((1-Methylpropyl)benzene)
 Styrene
 tert-Butylbenzene
 Tetrachloroethylene
 Toluene
 trans-1,2-Dichloroethylene
 trans-1,3-Dichloropropene
 Trichloroethylene
 Trichlorofluoromethane
 Vinyl chloride

026 - Metals**Field of Accreditation:** Environmental**Matrix:** Leachate**Analytical Method:** ICP/MS**Preparation Method:** MSPLP**Lab Method ID(s):** HI-020, HI-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

Parameter

Copper
Lead
Molybdenum
Nickel
Selenium
Silver
Thallium
Uranium
Vanadium
Zinc

027 - Metals

Field of Accreditation: Environmental**Matrix:** Leachate**Analytical Method:** ICP/MS**Preparation Method:** TCLP**Lab Method ID(s):** HI-020, PI-023

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

Parameter

Arsenic
Barium
Boron
Cadmium
Chromium
Lead
Selenium
Silver
Uranium

028 - Mercury

Field of Accreditation: Environmental**Matrix:** Leachate**Analytical Method:** COLD VAPOUR ATOMIC ABSORPTION (CVAA)**Preparation Method:** TCLP**Lab Method ID(s):** HI-015, PI-023

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 1311	No	No	Yes
EPA 7470A	Yes	Yes	No

Parameter

Mercury

029 - Anions

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

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

Parameter

Bromide
Chloride
Fluoride
Nitrate
Nitrite
Phosphate
Sulfate

030 - Anions

Field of Accreditation: Environmental**Matrix:** Solids [Soil]**Analytical Method:** ION CHROMATOGRAPHY (IC)**Preparation Method:** EXTRACTION**Lab Method ID(s):** HI-016

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

Parameter

Bromide
Chloride
Fluoride

Parameter

Nitrate-N
 Nitrite (NO₂)
 Phosphate-P
 Sulphate

031 - Anions

Field of Accreditation: Environmental**Matrix:** Leachate**Analytical Method:** ION CHROMATOGRAPHY (IC)**Preparation Method:** TCLP**Lab Method ID(s):** HI-016, PI-023

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

Parameter

Nitrate
 Nitrate plus Nitrite
 Nitrite (NO₂)

032 - Volatile Organic Compounds (VOC)

Field of Accreditation: Environmental**Matrix:** Leachate**Analytical Method:** GC/MS-PURGE AND TRAP**Preparation Method:** TCLP**Lab Method ID(s):** HO-001, PI-023

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 1311	No	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

033 - Volatile Organic Compounds (VOC)

Field of Accreditation: Environmental**Matrix:** Leachate**Analytical Method:** GC/MS-PURGE AND TRAP**Preparation Method:** MSPLP**Lab Method ID(s):** HI-042, HO-001

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 624	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
 1,1-Dichloroethene (1,1-Dichloroethylene)
 1,2-Dibromoethane (Ethylene dibromide)
 1,2-Dichlorobenzene
 1,2-Dichloroethane
 1,2-Dichloropropane
 1,4-Dichlorobenzene
 Bromomethane
 Carbon tetrachloride
 Chloroform
 cis-1,2-Dichloroethylene
 cis-1,3-Dichloropropene
 Tetrachloroethylene
 trans-1,2-Dichloroethylene (trans-1,2-Dichloroethene)
 trans-1,3-Dichloropropene
 Trichloroethylene

034 - Flashpoint

Field of Accreditation: Environmental

Matrix: Solids [Soil]

Analytical Method: PENSKY-MARTENS CLOSED CUP

Preparation Method:

Lab Method ID(s): HO-012

Method Reference	Modified From	Analytical Method	Preparation Method
ASTM D93-19	Yes	Yes	No

Parameter
Flashpoint

035 - Free Cyanide

Field of Accreditation: Environmental

Matrix: Leachate

Analytical Method: COLORIMETRIC

Preparation Method: TCLP

Lab Method ID(s): HI-008, PI-023

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

Parameter
Cyanide (WAD)

036 - Free Cyanide

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: AUTOMATED COLORIMETRIC

Preparation Method:

Lab Method ID(s): HI-008

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

Parameter
Free Cyanide

037 - Semi-Volatile Organic Compounds (SVOC)

Field of Accreditation: Environmental

Matrix: Leachate

Analytical Method: GC/MS

Preparation Method: TCLP

Lab Method ID(s): HO-003, PI-023

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

038 - Semi-Volatile Organic Compounds (SVOC)

Field of Accreditation: Environmental

Matrix: Leachate

Analytical Method: GC/MS

Preparation Method: MSPLP

Lab Method ID(s): HI-042, HO-003

Method Reference	Modified From	Analytical Method	Preparation Method
EPA 8270E	Yes	Yes	No
ON MECP E9003	Yes	No	Yes

Parameter
2,4,6-Trichlorophenol
2,4-Dinitrophenol
2,4-Dinitrotoluene

Parameter

2,6-Dinitrotoluene (2,6-DNT)
 3,3'-Dichlorobenzidine
 4-Chloroaniline (p-Chloroaniline)
 Bis(2-chloro-1-methylethyl) ether
 Bis(2-chloroethyl)ether
 Diethyl phthalate
 Dimethyl phthalate

039 - Fluoride**Field of Accreditation:** Environmental**Matrix:** Leachate**Analytical Method:** ION SELECTIVE ELECTRODE (ISE)**Preparation Method:** TCLP**Lab Method ID(s):** HI-007, PI-023

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

Parameter

Fluoride

040 - Perfluorinated Alkyl Substances (PFAS)**Field of Accreditation:** Environmental**Matrix:** Water**Analytical Method:** LC/MS/MS**Preparation Method:****Lab Method ID(s):** HO-017

Method Reference	Modified From	Analytical Method	Preparation Method
ON MECP E3457	Yes	Yes	No

Parameter

11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)
 4,8-Dioxa-3H-perfluorononanoic acid [ADONA, Dodecafluoro-3H-4,8-dioxananonoic acid]
 4:2 Fluorotelomer sulfonic acid (4:2 FTS)
 6:2 Fluorotelomer sulfonic acid (6:2 FTS)
 8:2 Fluorotelomer sulfonic acid (8:2 FTS)
 9-Chlorohexadecafluoro-3-oxanone-1-sulfonate (9Cl-PF3ONS, 9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid)
 Hexafluoropropylene oxide dimer acid (HFPO-DA)
 N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)
 N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)
 n-Perfluorobutanesulfonic acid (n-PFBS, n-Perfluorobutanesulfonate)
 n-Perfluorobutanoic acid (n-PFBA, n-Perfluorobutanoate)
 n-Perfluorodecanesulfonic acid (n-PFDS, n-Perfluorodecanesulfonate)
 n-Perfluorodecanoic acid (n-PFDA, n-Perfluorodecanoate)
 n-Perfluorododecanoic acid (n-PFDoA, n-Perfluorododecanoate)
 n-Perfluoroheptanoic acid (n-PFHpA, n-Perfluoroheptanoate)
 n-Perfluorohexanesulfonic acid (n-PFHxS, n-Perfluorohexanesulfonate)
 n-Perfluorohexanoic acid (n-PFHxA, n-Perfluorohexanoate)
 n-Perfluorononanoic acid (n-PFNA, n-Perfluorononanoate)
 n-Perfluorooctanesulfonamide (n-PFOSA)
 n-Perfluorooctanesulfonic acid (n-PFOS, n-Perfluorooctanesulfonate)
 n-Perfluorooctanoic acid (n-PFOA, n-Perfluorooctanoate)
 n-Perfluoropentanoic acid (n-PFPeA, n-Perfluoropentanoate)
 n-Perfluoroundecanoic acid (n-PFUnA, n-Perfluoroundecanoate)
 Perfluoroheptanesulfonic acid (PFHpS, Perfluoroheptanesulfonate)
 Perfluorononanesulfonic acid (PFNS, Perfluorononanesulfonate)
 Perfluoropentanesulfonic acid (PFPeS, Perfluoropentanesulfonate)

041 - Perfluorinated Alkyl Substances (PFAS)**Field of Accreditation:** Environmental**Matrix:** Solids**Analytical Method:** LC/MS/MS**Preparation Method:** EXTRACTION**Lab Method ID(s):** HO-018

Method Reference	Modified From	Analytical Method	Preparation Method
ON MECP E3506	Yes	Yes	Yes

Parameter

11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)
 4,8-Dioxa-3H-perfluorononanoic acid [ADONA, Dodecafluoro-3H-4,8-dioxananonoic acid]
 4:2 Fluorotelomer sulfonic acid (4:2 FTS)
 6:2 Fluorotelomer sulfonic acid (6:2 FTS)
 8:2 Fluorotelomer sulfonic acid (8:2 FTS)
 9-Chlorohexadecafluoro-3-oxanone-1-sulfonate (9Cl-PF3ONS, 9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid)
 Hexafluoropropylene oxide dimer acid (HFPO-DA)

Parameter

N-Ethylperfluorooctanesulfonamidoacetic acid (N-EtFOSAA)
N-Methylperfluorooctanesulfonamidoacetic acid (N-MeFOSAA)
n-Perfluorobutanesulfonic acid (n-PFBS, n-Perfluorobutanesulfonate)
n-Perfluorobutanoic acid (n-PFBA, n-Perfluorobutanoate)
n-Perfluorodecanesulfonic acid (n-PFDS, n-Perfluorodecanesulfonate)
n-Perfluorodecanoic acid (n-PFDA, n-Perfluorodecanoate)
n-Perfluorododecanoic acid (n-PFDoA, n-Perfluorododecanoate)
n-Perfluoroheptanoic acid (n-PFHpA, n-Perfluoroheptanoate)
n-Perfluorohexanesulfonic acid (n-PFHxS, n-Perfluorohexanesulfonate)
n-Perfluorohexanoic acid (n-PFHxA, n-Perfluorohexanoate)
n-Perfluorononanoic acid (n-PFNA, n-Perfluorononanoate)
n-Perfluorooctanesulfonamide (n-PFOSA)
n-Perfluorooctanesulfonic acid (n-PFOS, n-Perfluorooctanesulfonate)
n-Perfluorooctanoic acid (n-PFOA, n-Perfluorooctanoate)
n-Perfluoropentanoic acid (n-PFPeA, n-Perfluoropentanoate)
n-Perfluorotetradecanoic acid (n-PFTeDA, n-Perfluorotetradecanoate)
n-Perfluorotridecanoic acid (n-PFTrDA, n-Perfluorotridecanoate)
n-Perfluoroundecanoic acid (n-PFUnA, n-Perfluoroundecanoate)
Perfluoroheptanesulfonic acid (PFHpS, Perfluoroheptanesulfonate)
Perfluorononanesulfonic acid (PFNS, Perfluorononanesulfonate)
Perfluoropentanesulfonic acid (PFPeS, Perfluoropentanesulfonate)

† "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