

CALA Scope of Accreditation

Laboratory Name: CARO Analytical Services - Kelowna

Client ID: 1003010

Parent Institution: CARO Analytical Services

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

Clients Served: All Interested Parties

Revised On: 12/14/2023

Valid To: 06/08/2025

002 - Ammonia

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: AUTOMATED COLORIMETRIC

Preparation Method:

Lab Method ID(s): CK-TM-067

Method Reference	Modified From	Analytical Method	Preparation Method
SM 4500-NH3 G	Yes	Yes	No

Parameter

Ammonia

004 - Chemical Oxygen Demand (COD)

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: COLORIMETRIC

Preparation Method: REFLUX

Lab Method ID(s): CA-TM-004

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

Parameter

COD

005 - Anions

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: ION CHROMATOGRAPHY (IC)

Preparation Method:

Lab Method ID(s): CK-TM-005

Method Reference	Modified From	Analytical Method	Preparation Method
SM 4110 B	No	Yes	No

Parameter

Bromide

Chloride

Fluoride

Nitrate

Nitrite

Phosphate

Sulfate

006 - Carbon

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: INFRARED SPECTROSCOPY (IR)

Preparation Method: COMBUSTION

Lab Method ID(s): CK-TM-008

Method Reference	Modified From	Analytical Method	Preparation Method
SM 5310 B	No	Yes	No

Parameter

Organic Carbon

012 - Total Kjeldahl Nitrogen (TKN)

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: COLORIMETRIC

Preparation Method: DIGESTION

Lab Method ID(s): CK-TM-015

Method Reference	Modified From	Analytical Method	Preparation Method
SM 4500-NORG	Yes	Yes	No

Parameter

Dissolved Kjeldahl Nitrogen
Total Kjeldahl Nitrogen

013 - Solids

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: GRAVIMETRIC

Preparation Method:

Lab Method ID(s): CA-TM-006, CK-TM-018

Method Reference	Modified From	Analytical Method	Preparation Method
SM 2540 C	Yes	Yes	No
SM 2540 D	Yes	Yes	No
SM 2540 E	Yes	Yes	No

Parameter

Total Dissolved Solids
Total Suspended Solids
Volatile Suspended Solids

022 - Fecal (Thermotolerant) Coliforms

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: MEMBRANE FILTRATION (M-FC)

Preparation Method:

Lab Method ID(s): CK-TM-020

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

Parameter

Fecal (Thermotolerant) Coliforms

023 - Escherichia coli (E. coli)

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: MEMBRANE FILTRATION (NA-MUG)

Preparation Method:

Lab Method ID(s): CK-TM-020

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

Parameter

Escherichia coli

024 - Heterotrophic Plate Count (HPC)

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: MEMBRANE FILTRATION (R2A)

Preparation Method:

Lab Method ID(s): CK-TM-023

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

Parameter

Heterotrophic Plate Count (HPC)

025 - Total Coliforms

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: MOST PROBABLE NUMBER (MULTIPLE TUBE FERMENTATION) (MPN-MTF)

Preparation Method:

Lab Method ID(s): CK-TM-024

Method Reference	Modified From	Analytical Method	Preparation Method
SM 9221 B	Yes	Yes	No
SM 9221 C	Yes	No	Yes

Parameter

Total Coliforms

026 - Fecal (Thermotolerant) Coliforms

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: MOST PROBABLE NUMBER (MULTIPLE TUBE FERMENTATION) (MPN-MTF)

Preparation Method:

Lab Method ID(s): CK-TM-024

Method Reference	Modified From	Analytical Method	Preparation Method
SM 9221 C	Yes	No	Yes
SM 9221 E	Yes	Yes	No

Parameter

Fecal (Thermotolerant) Coliforms

027 - Escherichia coli (E. coli)

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: MOST PROBABLE NUMBER (MULTIPLE TUBE FERMENTATION) (MPN-MTF)

Preparation Method:

Lab Method ID(s): CK-TM-024

Method Reference	Modified From	Analytical Method	Preparation Method
SM 9221 C	Yes	No	Yes
SM 9221 F	Yes	Yes	No

Parameter

Escherichia coli (E. coli)

028 - Coliforms

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: MEMBRANE FILTRATION (CHROMOCULT)

Preparation Method:

Lab Method ID(s): CK-TM-050

Method Reference	Modified From	Analytical Method	Preparation Method
EMD MANUAL	Yes	Yes	No
SM 9222	Yes	Yes	No

Parameter

Escherichia coli
Total Coliforms

029 - Alkalinity

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: AUTOMATED TITRIMETRIC

Preparation Method:

Lab Method ID(s): CK-TM-001

Method Reference	Modified From	Analytical Method	Preparation Method
SM 2320 B	Yes	Yes	No

Parameter

Alkalinity (pH 4.5)

030 - Conductivity

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: AUTOMATED CONDUCTIVITY METER

Preparation Method:

Lab Method ID(s): CK-TM-006

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

Parameter

Conductivity (25C)

031 - pH

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: AUTOMATED PH METER

Preparation Method:

Lab Method ID(s): CK-TM-014

Method Reference	Modified From	Analytical Method	Preparation Method
SM 4500-H+ B	No	Yes	No

Parameter

pH

032 - Biochemical Oxygen Demand (BOD)

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: DISSOLVED OXYGEN METER (DO)

Preparation Method:

Lab Method ID(s): CA-TM-003

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

Parameter

BOD (5 day)
 CBOD (5 day)
 Soluble Biochemical Oxygen Demand (SBOD)

033 - Turbidity

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: NEPHELOMETRIC

Preparation Method:

Lab Method ID(s): CK-TM-011

Method Reference	Modified From	Analytical Method	Preparation Method
SM 2130 B	No	Yes	No

Parameter

Turbidity

038 - Colour

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: SPECTROPHOTOMETRIC

Preparation Method:

Lab Method ID(s): CK-TM-049

Method Reference	Modified From	Analytical Method	Preparation Method
SM 2120 C	No	Yes	No

Parameter

True Colour

040 - Nitrate plus Nitrite

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: COLORIMETRIC

Preparation Method:

Lab Method ID(s): CK-TM-060

Method Reference	Modified From	Analytical Method	Preparation Method
SM 4500-NO3- F	Yes	Yes	No

Parameter

Nitrate plus Nitrite
 Nitrite
 Nitrogen

042 - Thiocyanate

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: COLORIMETRIC

Preparation Method:

Lab Method ID(s): CK-TM-022

Method Reference	Modified From	Analytical Method	Preparation Method
SM 4500-CN- M	No	Yes	No

Parameter

Thiocyanate

043 - Asbestos

Field of Accreditation: Environmental

Matrix: Solids [Bulk]

Analytical Method: POLARIZED LIGHT MICROSCOPY (PLM)

Preparation Method:

Lab Method ID(s): CK-TM-061

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

Parameter

Bulk Asbestos

044 - Total Phosphorus

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: COLORIMETRIC

Preparation Method: PERSULPHATE DIGESTION

Lab Method ID(s): CK-TM-033

Method Reference	Modified From	Analytical Method	Preparation Method
SM 4500-P F	Yes	Yes	No

Parameter
Dissolved Phosphorus
Total Phosphorus

045 - UV Absorbance and Transmittance

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: SPECTROPHOTOMETRIC

Preparation Method:

Lab Method ID(s): CK-TM-048

Method Reference	Modified From	Analytical Method	Preparation Method
SM 5910 B (2011)	Yes	Yes	No

Parameter
UV Absorbance
UV Transmittance

046 - Acidity

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: TITRIMETRIC

Preparation Method:

Lab Method ID(s): CK-TM-040

Method Reference	Modified From	Analytical Method	Preparation Method
SM 2310 B	Yes	Yes	No

Parameter
Acidity

047 - Organic Carbon

Field of Accreditation: Environmental

Matrix: Solids

Analytical Method: INFRARED SPECTROSCOPY (IR)

Preparation Method: COMBUSTION

Lab Method ID(s): CK-TM-041

Method Reference	Modified From	Analytical Method	Preparation Method
BC MOE LABORATORY MANUAL	No	Yes	No

Parameter
Organic Carbon

048 - Cyanide

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: AMPEROMETRIC TITRATION

Preparation Method:

Lab Method ID(s): CK-TM-069

Method Reference	Modified From	Analytical Method	Preparation Method
ASTM D7511-12	Yes	Yes	No

Parameter
Cyanide (SAD)
Cyanide (WAD)

049 - Coliforms

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: QUANTI-TRAY (COLILERT-18)

Preparation Method:

Lab Method ID(s): CA-TM-009

Method Reference	Modified From	Analytical Method	Preparation Method
SM 9223	No	No	No

Parameter
Escherichia coli (E. coli)
Fecal (Thermotolerant) Coliforms
Total Coliforms

051 - Chlorine

Field of Accreditation: Environmental

Matrix: Water

Analytical Method: COLORIMETRIC

Preparation Method:

Lab Method ID(s): CA-TM-002

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

Parameter

Free Chlorine
Total Chlorine

052 - Nitritotriacetic Acid (NTA)

Field of Accreditation: Environmental**Matrix:** Water**Analytical Method:** COLORIMETRIC**Preparation Method:****Lab Method ID(s):** CK-TM-021

Method Reference	Modified From	Analytical Method	Preparation Method
BC MOE LABORATORY MANUAL	No	Yes	No

Parameter

Nitritotriacetic acid (NTA)

053 - Legionella

Field of Accreditation: Environmental**Matrix:** Water**Analytical Method:** CULTURE**Preparation Method:****Lab Method ID(s):** CK-TM-077

Method Reference	Modified From	Analytical Method	Preparation Method
ISO 11731	No	Yes	No
SM 9268	No	Yes	No

Parameter

Legionella

† "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