

## TESTING AND CALIBRATION LABORATORY ACCREDITATION PROGRAM (LAP)

### Scope of Accreditation

<b>Legal Name of Accredited Laboratory:</b>	<b>Centre d'expertise en analyse environnementale du Québec</b>
Location Name or Operating as (if applicable):	Direction de l'analyse chimique et Direction des expertises et des études
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<b>SCC File Number:</b>	15386
<b>Provider:</b>	BNQ-EL
<b>Provider File Number:</b>	45814-1
<b>Accreditation Standard(s):</b>	ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories
<b>Fields of Testing:</b>	Biological Chemical/Physical
<b>Program Specialty Area:</b>	Environmental Testing (ET)
<b>Initial Accreditation:</b>	1999-12-17
<b>Most Recent Accreditation:</b>	2023-01-04
<b>Accreditation Valid to:</b>	2023-12-17

**SCC Group Accreditation:**

This laboratory is a part of a Group Accreditation with the following facility in accordance with SCC's policy on Group Accreditation documented in the Accreditation Services Accreditation Program Overview.

- Centre d'expertise en analyse environnementale du Québec, 850, boulevard Vanier, porte Sud, Laval (Québec) H7C 2M7

*Remarque: La présente portée d'accréditation existe également en français, sous la forme d'un document distinct.*

*Note: This scope of accreditation is also available in French as a separately issued document.*

## ENVIRONMENTAL AND OCCUPATIONAL HEALTH AND SAFETY

### Environmental:

#### **Inorganic chemistry**

MA. 103 - Col. 2.0	Determination of true colour in water: UV-visible spectrophotometry method with platino-cobalt
MA. 103 - Tur 1.0	Determination of turbidity in water: nephelometric method
MA. 104 - S.S. 2.0	Determination of total suspended solids: gravimetric method
MA. 203 - Mercure	Determination of trace mercury in water: argon plasma emission spectrometry method and detection by tandem mass spectrometry
MA. 203 - Mét. ICP-MSMS	Determination of metals in water: tandem mass spectrometry method and argon plasma ionizing source (ICP-MS/MS)
MA. 203 - Mét.T. rares	Determination of rare earths in water: tandem mass spectrometry method and argon plasma ionizing source (ICP-MS/MS)
MA. 203 - Mét.Trace	Determination of trace metals in water under suitable conditions: tandem mass spectrometry method
MA. 207 - Hg 2.1	Determination of mercury in biological tissues by thermal decomposition: quantification by UV photometry
MA. 207 - Mét.T.rares TB	Determination of rare earth metals in biological tissues: tandem mass spectrometry method and argon plasma ionizing source (ICP-MS/MS)
MA. 300 - C1.0	Determination of dissolved inorganic carbon, dissolved organic carbon and total organic carbon: infrared detection method
MA. 303 - Anions 1.1	Determination of fluoride, chloride and sulfate anions in water: quantification by ion chromatography with conductivity detector
MA. 303 - ClO <sub>4</sub> 1.1	Determination of perchlorate in water: quantification by ion chromatography with conductivity detector
MA. 303 - Ions 3.2	Determination of anions in small concentrations in drinking water: ion chromatography method
MA. 303 - Nutriments	Determination of total nitrogen, nitrites and nitrates and ammoniacal nitrogen in water: automated colorimetric method
MA. 303 - P 1.1	Determination of orthophosphates in water: automated ascorbic acid colorimetry method
MA. 303 - P 5.2	Determination of total phosphorus in natural water by persulfate mineralization: automated colorimetric method and procedures adapted for low concentration phosphorus and trace phosphorus

MA. 303 - pH-con-tur	Determination of pH, conductivity and turbidity in water: robotic titrator method
MA. 403 - SABM	Determination of the methylene blue active substances – anionic surfactants
MA. 603 - Alpha-bêta brute	Determination of gross alpha and gross beta activities in drinking water, natural waters and waste water: proportional counter method
MA. 603 – Pb-210	Determination of lead-210 : coprecipitation method, purification on Sr resin and count by proportional counter
MA. 603 - Radium-226	Determination of radium-226 in drinking water, natural water and waste water: coprecipitation method, purification on cationic resin and quantification by tandem ICP-MS
MA.303 - Tritium 1.0	Determination of tritium in drinking water, surface water and ground water: liquid scintillation method

### Organic chemistry

MA. 400 - AEO	Qualitative determination of polyethoxylated alcohols: method by liquid chromatography coupled with a time-of-flight mass spectrometer (TOF).
MA. 400 - COSV 1.0	Determination of semi-volatile organic compounds in water and soil: quantification by gas chromatography coupled with a mass spectrometer
MA. 400 - COV. 2.0	Determination of volatile organic compounds in water and soil: quantification by purge and trap coupled with gas chromatography and a mass spectrometer
MA. 400 - Glyphosate	Determination of glyphosate, AMPA and glufosinate in water, plant tissue and soil: quantification by liquid chromatography coupled with a tandem mass spectrometer and Fmoc derivation
MA. 400 - NPEO 1.1	Determination of polyethoxylated nonylphenol surfactants and their degradation products: quantification by liquid chromatography coupled with a tandem mass spectrometer
MA. 400 - P. Chlp 1.0	Determination of aryloxyacid pesticides by tandem mass spectrometry in water, soil, sediment and plant tissues
MA. 400 – Pest. 1.0	Determination of organophosphate pesticides, triazine, carbamate, substituted urea, phthalimide and pyrethroid in water, soil and sediment: liquid-liquid extraction; quantification by gas chromatography coupled with a tandem mass spectrometer
MA. 400 - PFC 1.0	Determination of perfluorinated compounds: quantification by liquid chromatography coupled with a tandem mass spectrometer
MA. 400 - Pharma CL-SM 1.0	Determination of pharmaceutical compounds and antibiotics in water: quantification by liquid chromatography coupled with a mass spectrometer
MA. 400 - Pharma-GCMS 1.0	Determination of pharmaceutical compounds in water: quantification by gas chromatography coupled with a tandem mass spectrometer

MA. 403 - Carbamates	Determination of carbamate type pesticides: quantification by liquid chromatography coupled with a tandem mass spectrometer
MA. 403 - Cyanotoxines 1.0	Determination of cyanotoxins in surface water and drinking water: quantification by liquid chromatography coupled with a tandem mass spectrometer
MA. 403 - D.P. 1.3	Determination of diquat and paraquat: quantification by liquid chromatography
MA. 403 - HAA 1.1	Determination of halogenated acetic acids: quantification by gas chromatography coupled with a mass spectrometer
MA. 403 - LAS 1.0	Determination of detergents: colorimetric method with methylene blue
MA. 403 - Méthane 1.0	Determination of methane, ethane and dissolved propane in water: quantification by purge and trap coupled with a gas chromatography and a flame ionization detector
MA. 403 - NTA 1.0	Determination of nitrilotriacetic acid: quantification by gas chromatography coupled with a mass spectrometer
MA. 400 - P. Ocl.	Determination of organochlorine pesticides in water, soil and sediment. Quantification by gas chromatography coupled with a mass spectrometer
MA. 403 - Pesticides émergents	Determination of insecticides, herbicides and fungicides by liquid chromatography coupled with a tandem mass spectrometry in surface water, drinking water and ground water
MA. 403 - SP.O <sub>3</sub> 1.2	Determination of ozonation by-products: quantification by gas chromatography coupled with a mass spectrometer
MA. 404 - Stéroïdes 1.0	Determination of steroids, alkylphenols, sterols, and bisphenol A in waste water: liquid-solid extraction, derivation and quantification by gas chromatography coupled with a mass spectrometer
MA. 400 - Hydrocarbures C <sub>6</sub> -C <sub>10</sub>	Determination of C <sub>6</sub> to C <sub>10</sub> petroleum hydrocarbons in water, soil and sediment: quantification by purge and trap coupled with a gas chromatography and flame ionization detector

### Microbiology

MA. 700 - BHA35 1.0	Detection and enumeration of aerobic and facultative anaerobic heterotrophic bacteria: pour plate method
MA. 700 - Col 1.0	Detection and enumeration of total coliforms: membrane filter method
MA. 700 - Colph 1.0	Detection of F-specific coliphages: presence/absence method
MA. 700 - Ec.BCIG 1.0	Detection and enumeration of thermotolerant <i>Escherichia coli</i> in water: membrane filter method using the mFC-BCIG medium
MA. 700 - Ecct 1.0	Detection of total coliforms and <i>Escherichia coli</i> with the Colilert® culture medium: presence/absence method

MA. 700 - Ecctmi 1.0	Simultaneous detection and enumeration of total coliforms and <i>Escherichia coli</i> in drinking water with the MI culture medium: membrane filter method
MA. 700 – Ent 1.0	Detection and enumeration of enterococci: membrane filter method
MA. 700 – Ent-mEI	Detection and enumeration of enterococci: membrane filter method on mEI medium
MA. 700 - Fec.Ec 1.0	Detection and enumeration of thermotolerant (fecal) coliforms and confirmation of the species <i>Escherichia coli</i> : membrane filter method
MA. 700 - Leg 1.0	Detection and enumeration of <i>Legionella</i> : culture method
MA. 700 - PSE 1.0	Detection and enumeration of <i>Pseudomonas aeruginosa</i> : membrane filter method
MA. 700 - Sal-PA 1.0	Detection of <i>Salmonella</i> : presence/absence method
MA. 700 - STA 1.0	Detection and enumeration of <i>Staphylococcus aureus</i> : membrane filter method
MA. 705 - Ec.-BCIG 1.0	Detection and enumeration of thermotolerant <i>Escherichia coli</i> in solid or semisolid samples: membrane filter method using the mFC-BCIG medium

**Toxicology**

MA. 500 - D. mag 1.1	Determination of lethal toxicity LC <sub>50</sub> 48h <i>Daphnia magna</i>
MA. 500 - P. sub. 1.0	Determination of toxicity: growth inhibition of the algae <i>Pseudokirchneriella subcapitata</i> ( <i>Raphidocelis subcapitata</i> ).

Number of Scope Listings: 60

**Notes:**

**ISO/IEC 17025:2017:** General Requirements for the Competence of Testing and Calibration Laboratories

**MA:** CEAEQ internal analysis method.



This document forms part of the Certificate of Accreditation issued by the Standards Council of Canada (SCC). The original version is available in the Directory of Accredited Laboratories on the SCC website at [www.scc.ca](http://www.scc.ca).

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