

TESTING AND CALIBRATION LABORATORY ACCREDITATION PROGRAM (LAP)

Scope of Accreditation

Accredited Laboratory No. 161

Legal Name of Accredited Laboratory: **Bureau Veritas Canada (2019) Inc.,
formerly known as Maxxam Analytics
BEDFORD LABORATORY**

Location Name or Operating as (if applicable):

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SCC File Number:	15231
Accreditation Standard(s):	ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories
Fields of Testing:	Biological Chemical/Physical
Program Specialty Area:	Environmental Testing (ET)
Initial Accreditation:	1995-03-06
Most Recent Accreditation:	2021-05-11
Accreditation Valid to:	2023-03-06

ENVIRONMENTAL AND OCCUPATIONAL HEALTH AND SAFETY

Environmental (Inorganic):

Air Filter
Biological Tissues
Biota
Leachates

Paint
Soil/Sludge/Sediment
Solids
Tissue
Water

ATL SOP-00002	Particle Size Distribution by Hydrometer Gravel (>2000 µm) Sand (50-2000 µm) Silt (2-50 µm) Clay (<2 µm)
ATL SOP-00003	pH Analysis Soil/Sediment/Solids/Water (pH Meter) pH
ATL SOP-00004	Conductivity Analysis Soil/Sediment/Solids/Water (Conductivity Meter) Conductivity (25C)
ATL SOP-00007	Suspended Solid, Total (Gravimetric) Water (GRAVIMETRIC) Total Suspended Solids
ATL SOP-00008	Suspended Solid, Volatile (Gravimetric) Water (GRAVIMETRIC) Volatile Suspended Solids
ATL SOP-00009	Dissolved Solids, Total (TDS) Gravimetric Water (GRAVIMETRIC) Total Dissolved Solids
ATL SOP-00011	Turbidity (Nephelometric) Water (NEPHELOMETRY) Turbidity
ATL SOP-00012	Particle Size Distribution (Sieve/Pipette) Soil (SIEVE / PIPETTE / WENTWORTH CLASSIFICATION) < +1 PHI < +2 PHI < +3 PHI < +4 PHI < +5 PHI < +6 PHI < +7 PHI < +8 PHI < +9 PHI < 0 PHI < -1 PHI < -2 PHI < -3 PHI < -4 PHI Clay

	Gravel Sand Silt
ATL SOP-00013	Alkalinity (Total) by Discrete Analysis Water (AUTOMATED COLOURIMETRY) Alkalinity (pH 4.5)
ATL SOP-00014	Chloride by Discrete Analysis Water (AUTOMATED COLOURIMETRY) Chloride
ATL SOP-00015	Ammonia and Ammonium Nitrogen, Discrete Analysis Water (AUTOMATED COLOURIMETRY) Ammonia plus Ammonium
ATL SOP-00016	Nitrogen, Nitrate + Nitrite (NOx) Discrete Analysis Enzyme Water (AUTOMATED COLOURIMETRY) Nitrate plus Nitrite
ATL SOP-00017	Nitrogen, Nitrite (NO ₂) by Discrete Analysis Water (AUTOMATED COLOURIMETRIC) Nitrite
ATL SOP-00018	Nitrogen, Nitrate (NO ₃ , Calculated) Water (AUTOMATED COLOURIMETRY) Nitrate (Calculated)
ATL SOP-00020	Colour, Discrete Analysis Water (AUTOMATED COLOURIMETRY) Colour (460 nm)
ATL SOP-00021	Ortho Phosphorus, Discrete Analysis Water (AUTOMATED COLOURIMETRY) Orthophosphate (SRP)
ATL SOP-00022	Reactive Silica by Discrete Analysis Water (AUTOMATED COLOURIMETRY) Reactive Silica
ATL SOP-00023	Sulphate (Turbidimetric) by Discrete Analysis Water (AUTOMATED TURBIDIMETRIC) Sulfate
ATL SOP-00026	Automated Mercury Analysis CVAA Soil/Sediment/Solids Water / SPLP, TCLP, CGSB Leachate Tissue DIGESTION/COLD VAPOUR AA
ATL SOP-00027	Mercury in Coal Analysis by CVAA Coal (DIGESTION/COLD VAPOUR AA) Mercury
ATL SOP-00030	Metals in Biota Tissue/Biota/Terrestrial Biota (DIGESTION/ICP-MS)

	<p>Aluminum Antimony Arsenic Barium Beryllium Bismuth Boron Cadmium Calcium Chromium Cobalt Copper Iron Lead Lithium Magnesium Manganese Molybdenum Nickel Phosphorus Potassium Rubidium Selenium Silver Sodium Strontium Sulphur Thallium Tin Titanium Uranium Vanadium Zinc</p>
<p>ATL SOP-00031</p>	<p>Analysis of Trace Metals in Air Filters and Swabs Air Filters/Swabs (DIGESTION / ICP-MS) Aluminum Antimony Arsenic Barium Beryllium Bismuth Cadmium Calcium Chromium</p>

	<p>Cobalt Copper Iron Lead Lithium Magnesium Manganese Molybdenum Nickel Phosphorus Potassium Rubidium Selenium Silver Sodium Strontium Sulphur Thallium Tin Titanium Uranium Vanadium Zinc</p>
ATL SOP-00032	<p>Boron - Hot Aqueous Extractable Soil/Sediment/Solids (DIGESTION/ICP-MS) Hot Water Soluble Boron</p>
ATL SOP-00034	<p>MOEE/CGSB Leachate Aluminum Antimony Arsenic Barium Beryllium Bismuth Boron Cadmium Calcium Chromium Cobalt Copper Iron Lead Lithium Magnesium Manganese</p>

	<p>Molybdenum Nickel Phosphorus Potassium Rubidium Selenium Silver Sodium Strontium Sulphur Thallium Tin Titanium Uranium Vanadium Zinc</p>
<p>ATL SOP-00035</p>	<p>TCLP Extraction Solid Waste (EXTRACTION / ICP-MS) Aluminum Antimony Arsenic Barium Beryllium Bismuth Boron Cadmium Calcium Chromium Cobalt Copper Iron Lead Lithium Magnesium Manganese Molybdenum Nickel Phosphorus Potassium Rubidium Selenium Silver Strontium Sulphur</p>

	<p>Tellurium Thallium Tin Titanium Uranium Vanadium Zinc Zirconium</p>
<p>ATL SOP-00036</p>	<p>Synthetic Precipitation Leaching Procedure (SPLP) Solid Waste (EXTRACTION / ICP-MS) Aluminum Antimony Arsenic Barium Beryllium Bismuth Boron Cadmium Calcium Chromium Cobalt Copper Iron Lead Lithium Magnesium Manganese Molybdenum Nickel Phosphorus Potassium Rubidium Selenium Silver Sodium Strontium Sulphur Tellurium Thallium Tin Titanium Uranium Vanadium Zinc</p>

	Zirconium
ATL SOP-00041	Carbonaceous Biochemical Oxygen Demand (CBOD) and BOD Water (INCUBATION / D.O. METER) BOD (5 day) CBOD (5 day) Dissolved BOD (5 day) Dissolved CBOD (5 day)
ATL SOP-00042	Chemical Oxygen Demand (COD) Water (DIGESTION/COLOURIMETRY) COD Dissolved COD
ATL SOP-00043	Fluoride (Ion Specific Electrode) Water SELECTIVE ION ELECTRODE Fluoride
ATL SOP-00044	Carbon Induction Furnace Soil/Sediment/Solids (COMBUSTION Carbon - Induction Furnace IR Detection) Inorganic Carbon Organic Carbon Total Carbon
ATL SOP-00052	Total Digestion of Sediments, Soil, Sludge and Solids Soil/Sediment/Solids (DIGESTION/ICP-MS) Aluminum Antimony Arsenic Barium Beryllium Bismuth Cadmium Calcium Chromium Cobalt Copper Iron Lead Lithium Magnesium Manganese Molybdenum Nickel Phosphorus Potassium Rubidium Selenium Silver

	<p>Sodium Strontium Tellurium Thallium Tin Uranium Vanadium Zinc</p>
ATL SOP-00053	<p>Coarse / Fine Classification of Soils (Gravimetric) Soil/Sediment/Solids (WET SIEVE / GRAVIMETRIC) >75um Fraction Coarse Fraction Fine Fraction</p>
ATL SOP-00057	<p>Total Phosphorus, Discrete Analysis Water (DIGESTION / AUTOMATED COLOURIMETRY) Total Phosphorus</p>
ATL SOP-00058	<p>CRC-ICP-MS, Full Metals Scan ICPMS Air Filters/Swab Paint Soil/Sediment/Solid Solid Waste Tissue/Biota/Terrestrial Biota Water (Dissolved / Total) Leachate Extractions</p>
ATL SOP-00060	<p>Total Recoverable Metals in Water by Nitric/Hydrochloric Acid Digestion Dissolved Water / Total Water (Digestion) - ICP/MS Aluminum Antimony Arsenic Barium Beryllium Bismuth Boron Cadmium Calcium Chromium Cobalt Copper Iron Lead Lithium Magnesium Manganese Molybdenum</p>

	<p>Nickel Phosphorus Potassium Rubidium Selenium Silicon Silver Sodium Strontium Sulphur Tellurium Thallium Tin Titanium Uranium Vanadium Zinc Zirconium</p>
<p>ATL SOP-00061</p>	<p>Unified Acid Digestion of Sediments, Soil and Sludge Solid Paint (Digestion/ICP-MS) Aluminum Antimony Arsenic Barium Beryllium Bismuth Boron Cadmium Calcium Chromium Cobalt Copper Iron Lead Lithium Magnesium Manganese Mercury Molybdenum Nickel Phosphorus Potassium Rubidium Selenium</p>

	<p>Silver Sodium Strontium Sulphur Tellurium Thallium Tin Titanium Uranium Vanadium Zinc</p>
ATL SOP-00143	<p>Carbon in Coal-Resistance Furnace Coal/Ash/Coke (ASTM D5373-16: Standard Test Methods for Determination of Carbon, Hydrogen and Nitrogen in Analysis Samples of Coal and Carbon in Analysis Samples of Coal and Coke, 2016) Total Carbon</p>
ATL SOP-00203	<p>Organic Carbon Analysis, Combustion-IR Water Total Organic Carbon Dissolved Organic Carbon – Lab Filtered Dissolved Organic Carbon – Field Filtered</p>

Environmental (Organic):

- Air**
- Biota**
- Fish Tissue**
- Leachate**
- Oil**
- Soil/Solid/Sediment**
- Tissue**
- Water (Organic)**

ATL SOP-00129	<p>Haloacetic Acids in Drinking Water by GC-ECD Water (GC/ECD Extraction/Derivatization) Bromochloroacetic Acid (BCAA) Bromodichloroacetic Acid (BDCAA) Chlorodibromoacetic Acid (CDBAA) Dalapon Dibromoacetic Acid (DBAA) Dichloroacetic Acid (DCAA) Monobromoacetic Acid (MBAA) Monochloroacetic Acid (MCAA) Trichloroacetic Acid (TCAA) Tribromoacetic (TBAA) Total HAA's</p>
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<p>ATL SOP-00054</p>	<p>Zero Headspace Extractor Procedure (ZHE) Soil/Solids (Extraction / GCMS-Headspace) 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,2-Dibromoethane 1,2-Dichlorobenzene 1,2-Dichloroethane 1,2-Dichloropropane 1,3-Dichlorobenzene 1,4-Dichlorobenzene Benzene Bromodichloromethane Bromoform Bromomethane C6-C10 Hydrocarbons Carbontetrachloride Chlorobenzene Chloroethane Chloroform Chloromethane cis-1,2-Dichloroethene cis-1,3-Dichloropropene Dibromochloromethane Dichloromethane Ethylbenzene m,p-Xylene(s) MTBE o-Xylene Styrene Tetrachloroethene Toluene trans-1,2-Dichloroethene trans-1,3-Dichloropropene Trichloroethene Trichlorofluoromethane Vinyl Chloride</p>
<p>ATL SOP-00102</p>	<p>Polynuclear Aromatic Hydrocarbons in Soil and Sediment by GC-MS Soil/Sediment (GC/MS- EXTRACTION) 1-chloronaphthalene 1-methylnaphthalene 2-chloronaphthalene</p>

	<p>2-methylnaphthalene Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene Benzo (e) pyrene Benzo (g,h,i) perylene Benzo (j) fluoranthene Benzo (k) fluoranthene Chrysene Dibenz (a,h) anthracene Fluoranthene Fluorene Indeno (1,2,3 - cd) pyrene Naphthalene Perylene Phenanthrene Pyrene</p>
<p>ATL SOP-00103</p>	<p>Polynuclear Aromatic Hydrocarbons in 250 mL Water by GC-MS Water, SPLP / TCLP Leachate (GC/MS - EXTRACTION)</p> <p>1-chloronaphthalene 1-methylnaphthalene 2-chloronaphthalene 2-methylnaphthalene 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 Chrysene Dibenz (a,h) anthracene Fluoranthene Fluorene Indeno (1,2,3 - cd) pyrene Naphthalene Perylene</p>

	Phenanthrene Pyrene Quinoline
ATL SOP-00104	Polynuclear Aromatic Hydrocarbons in Fish and Shellfish by GC-MS Tissue (GC/MS- EXTRACTION) 1-chloronaphthalene 1-methylnaphthalene 2-chloronaphthalene 2-methylnaphthalene Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene Benzo (e) pyrene Benzo (g,h,i) perylene Benzo (j) fluoranthene Benzo (k) fluoranthene Chrysene Dibenz (a,h) anthracene Fluoranthene Fluorene Indeno (1,2,3 - cd) pyrene Naphthalene Perylene Phenanthrene Pyrene
ATL SOP-00105	Polychlorinated Biphenyls in Oil by GC-ECD Oil (GC/ECD-EXTRACTION) Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Aroclor 1262 Aroclor 1268 Total PCB
ATL SOP-00106	Polychlorinated Biphenyls in Soil and Sediment Soil/Sediment (GC/ECD - EXTRACTION) Aroclor 1016 Aroclor 1221

	<p>Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Aroclor 1262 Aroclor 1268 Total PCB</p>
ATL SOP-00107	<p>Polychlorinated Biphenyls in 250 mL Water By GC-ECD Water, SPLP / TCLP Leachate (GC/ECD - EXTRACTION) Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Aroclor 1262 Aroclor 1268 Total PCB</p>
ATL SOP-00110	<p>Polychlorinated Biphenyls in Fish Tissue and Biota By GC-ECD Fish Tissue / Biota (GC/ECD- EXTRACTION) Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Aroclor 1262 Aroclor 1268 Total PCB</p>
ATL SOP-00111	<p>Total Extractable Hydrocarbons in Soil Soil (GC/FID - EXTRACTION) >C10 - C16 >C16 - C21 >C21 - C32</p>
ATL SOP-00112	<p>Total Extractable Hydrocarbons (>C10 to C32) in Fish and Shellfish Fish / Tissue (GC/FID) >C10 - C16 >C16 - C21 >C21 - C32</p>
ATL SOP-00113	<p>Total Extractable Hydrocarbons (>C10 to C32) in Water Water, Low Level Water, SPLP / TCLP Leachate (GC/FID - EXTRACTION)</p>

	<p>>C10 - C16 >C16 - C21 >C21 - C32</p>
ATL SOP-00116	<p>Aliphatic / Aromatic Fractionation for Petroleum Hydrocarbons (>C10-C32) Water / Soil / Sediment / Solids (GC/FID) >C10-C12 Aliphatic >C10-C12 Aromatic >C12-C16 Aliphatic >C12-C16 Aromatic >C16-C21 Aliphatic >C16-C21 Aromatic >C21-C32 Aliphatic >C21-C32 Aromatic</p>
ATL SOP-00119	<p>Volatile Petroleum Hydrocarbons in Soil by Headspace/GCMS/FID Soil (GC/FID/MS - HEADSPACE) Benzene C6-C10 Hydrocarbons Less (BTEX) Ethylbenzene m/p-xylene MTBE o-xylene Toluene Total Xylene</p>
ATL SOP-00120	<p>Aliphatic / Aromatic Fractionation of C6 to C10 Petro. Hydrocarbons Water (PT-GCMS) / Soil / Sediment / Solids (HS-GCMS) >C8-C10 Aliphatic >C8-C10 Aromatic (-EX) Benzene C6-C8 Aliphatic Ethylbenzene m,p-xylene o-xylene Toluene Total Xylenes</p>
ATL SOP-00126	<p>Aliphatic, Aromatic Fractionation and Regular (>C6-C16) Pet. Hydrocarbons -Charcoal Tubes Air (GC/FID EXTRACTION) >C10-C12 fractions (Aromatic / Aliphatic) >C12-C16 fractions (Aromatic / Aliphatic) >C6-C8 fraction (Aliphatic) >C8-C10 fractions (Aromatic (-EX)/Aliphatic) Benzene Ethylbenzene</p>

	<p>m/p-xylene o-xylene Toluene</p>
ATL SOP-00130	<p>Volatile Petroleum Hydrocarbons in water by Headspace/GCMS/FID MTBE Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene Total Xylenes Gasoline (C6-C10) Gasoline (C6-C10) less BTEX</p>
ATL SOP-00133	<p>Volatile Organic Compounds by Headspace GC-MS/SIM Soil/Water (GC/MS - HEADSPACE) 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,2-Dibromoethane 1,2-Dichlorobenzene 1,2-Dichloroethane 1,2-Dichloropropane 1,3-Dichlorobenzene 1,4-Dichlorobenzene Benzene Bromodichloromethane Bromoform Bromomethane Carbontetrachloride Chlorobenzene Chloroethane Chloroform Chloromethane cis-1,2-Dichloroethene cis-1,3-Dichloropropene Dibromochloromethane Dichloromethane Ethylbenzene m,p-Xylene(s) MTBE o-Xylene Styrene</p>

	Tetrachloroethene Toluene trans-1,2-Dichloroethene trans-1,3-Dichloropropene Trichloroethene Trichlorofluoromethane Vinyl Chloride
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Environmental (Microbiology):

Water

ATL SOP-00096	Enumeration of Total Coliform and E. coli in Water Using the Membrane Filtration Method Escherichia coli (E. coli) Total Coliforms
ATL SOP-00097	Enumeration of Total Coliform and E. coli in Environmental Samples Using the Membrane Filtration Method Escherichia coli (E. coli) Total Coliforms
ATL SOP-00062	A1-Method for Fecal Coliform by MPN Fecal Coliforms
ATL SOP-00066	Coliforms Bacteria in Water (Colilert Method)-Enzyme Substrate Test Escherichia coli (E. coli) (Presence/Absence) Total Coliforms (Presence/Absence)
ATL SOP-00067	Determination of Coliforms, Fecal and E. coli by the Multiple Tube Method Coliforms E coli Fecal Coliforms
ATL SOP-00071	Enumeration of Fecal Coliform Using the Membrane Filtration Method Fecal Coliforms
ATL SOP-00072	Enumeration of Staphylococcus aureus Using the Membrane Filtration Method Staphylococcus aureus
ATL SOP-00073	Isolation and Identification of Salmonella in Environmental Samples Salmonella (Presence/Absence)
ATL SOP-00077	Enumeration of Pseudomonas aeruginosa Using the Membrane Filtration Method Pseudomonas aeruginosa Pseudomonas aeruginosa
ATL SOP-00079	Heterotrophic Plate Count using Membrane Filtration Method Heterotrophic Plate Count
ATL SOP-00134	Enumeration of Fecal Enterococcus Using Membrane Filtration Method Fecal Enterococcus
ATL SOP-00206	Identification and Enumeration of Legionella pneumophila and spp.

Number of Scope Listings: 68

Notes:

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

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.

Elias Rafoul
Vice-President, Accreditation Services
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