

Environmental Services

Organic Chemistry

We provide high quality trace organic data to meet provincial and federal guidelines. Through advances in methodology and with a team of experienced scientists we are able to meet the low-level detections of thousands of compounds required by Canadian regulations.

Some of these compounds include:

- Volatile Organic Compounds (VOCs)
- Polycyclic Aromatic Hydrocarbons (PAHs)
- Alcohols
- Sterilants (low-level)
- Pesticides and Herbicides
- Glycols
- Polychlorinated Biphenyls (PCBs)
- Amines
- Solvents
- Naphthenic Acids
- Formaldehyde and Aldehydes
- Sulfolane (low-level)
- Total and Extractable Organic Halides (TOX/EOX)
- Chlorophenolic Compounds

- Trihalomethanes (THMs)
- Oil and Grease
- Dissolved Gases

Inorganic Chemistry

We are accredited for a vast array of inorganic parameters for the analysis of soils, sludges, drinking water, groundwater, mine tailings/effluent testing and landfill analysis.

Our Environmental laboratories are equipped with advanced ICP-OES and ICP-MS instrumentation for metals analysis.

- Some of our Inorganic capabilities include:
- Trace Metals in fresh and saline waters (low-level)
- Speciated Metals (Se, As, and Cr)
- Mercury (low-level) and Methyl Mercury
- Anions (Cl, Br, F, NO₃, NO₂, SO₄)
- Cations (Na, K, Ca, Mg)
- Nutrients
- Particle Size and Texture
- TCLP and SPLP Extractions
- Total Organic and Inorganic Carbon (TOC/TIC)
- Cyanide



Microbiology

AGAT Laboratories has fully accredited microbiology laboratories to detect dangerous bacteria under strict quality assurance conditions. We can analyze the following microbial parameters in water, soil or food using a number of techniques which satisfy the strict food and drinking water regulations across Canada.

- E. coli
- Total Coliforms
- Fecal Coliforms
- Enterococci
- Yeast and Mould
- Staphylococcus
- Clostridium
- Pseudomonas
- Sulfate Reducing Bacteria (SRB)
- Iron Related Bacteria (IRB)
- Acid Producing Bacteria (APB)
- Sporulant Aerobic Bacteria
- Heterotrophic Plate Count (HPC)

Microtox (Toxicity Testing)

AGAT Laboratories is equipped to conduct sensitive toxicity testing using the Microtox Bioassay to quickly and effectively determine acute toxicity levels within soils, sludges and waters.

We also employ various methods of sample clean-up to help clients determine the best course of action when dealing with potentially toxic samples.

Air Quality Monitoring

Our Air Quality Monitoring services assist clients in achieving regulatory compliance, evaluating the effectiveness of their air quality management systems, and to give accurate assessment for environmental impact studies.

Some services that we provide include:

- Ambient Air Monitoring
- Source Emission Testing
- Passive Air Monitoring
- Data Acquisition
- Summa Canister Analysis
- Thermal Desorption Tube Analysis

Ultra-trace Organics

Our laboratories offer Ultra-trace analysis of persistent organic pollutants (POPs) such as Dioxins and Furans, PCBs and PAHs via High-resolution GCMS. AGAT has invested in increasing both its extraction productivity by recently doubling its extraction labware, as well as recently investing in the latest analytical systems, APGC Triple Quadruple Mass Spectrometers.

AGAT Laboratories has the capability to provide extraction and analysis for these compounds in varying matrices including:

Solids	<ul style="list-style-type: none">• Soil• Sediment
Semi-solids	<ul style="list-style-type: none">• Biological• Fish Tissue• Adipose Tissue
Air	<ul style="list-style-type: none">• Polyurethane Foams (PUFs)
Aqueous	<ul style="list-style-type: none">• Surface/Ground Water• Drinking Water• Effluents

AGAT Laboratories' Environmental Division provides comprehensive services to the environmental industry, environmental consultants and the government.

Applications

- Contaminated site testing
- Drilling waste services
- Detailed soil and water analysis (including drinking water)
- Compound identification
- Research and development
- Method development

Our environmental laboratories utilize EPA, ASTM, Standard Methods, NIOSH and other industry test procedures and methods in accordance with both federal and provincial legislation.

Accreditation

AGAT Laboratories is accredited to some of the following agencies for specific analysis:

- Canadian Association for Laboratory Accreditation (CALA)
- The Standards Council of Canada (SCC)
- QMI-SAI Global

AGAT Laboratories is accredited, for specific tests, to the following standard:

- ISO/IEC 17025

AGAT Laboratories is certified to the following standard:

- ISO 9001



WebEARTH is our interactive web database for environmental clients. This software package provides clients with real-time access to results while integrating features such as data-trending, guideline comparisons, quality control and customizable export functions. This includes custom downloads in client-specified formats, substitution of cross-Canada regulatory standards, various reporting formats, trending and graphing options all in a secure, managed environment.

webearth.agatlabs.com

