

ANALYTICAL SOLUTIONS FOR THE MINING INDUSTRY



Environmental Chemistry

Acid Rock Drainage & Metal Leaching

Ecotoxicology Services

Radiochemistry

Accreditation

Why Maxxam?

Maxxam's Technology, Experience & Service

Companies directly and indirectly involved in the mining industry require timely, reliable data for important decision-making from resource evaluation through to environmental monitoring. With Maxxam, each customer has access to a complete scope of laboratory and support services including environmental chemistry, air, soil and water quality testing, acid rock drainage, and ecotoxicology.

Environmental Chemistry

Maxxam's technical and scientific staff are well-versed in the latest provincial and federal regulations. We provide:

- Support for baseline monitoring work
- Routine water quality monitoring (daily, weekly, monthly, quarterly, annually), including:
 - Permit stations
 - Wastewater treatment plant (effluent/influent)
 - Tailings pond characterization
 - Monitoring wells (landfills, tailings ponds)

Acid Rock Drainage & Metal Leaching

Laboratory acid rock drainage (ARD) prediction tests are used to determine the most appropriate disposal options for waste rock and tailings in order to minimize environmental impact.

Maxxam's ARD services include:

- Geochemical characterization
- Static & kinetic testing
- Customized ARD & metal leaching studies

To better approximate site conditions, larger scale tests under specific environmental conditions can be conducted. To simulate underwater disposal of water materials, custom column tests can be conducted to predict pore water quality, as well as see page quality to groundwater and surface water quality. Other custom tests such as sequential batch extractions or sequential leach tests are also offered.

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Ecotoxicology Services

With over 40 years of ecotoxicology experience, Maxxam's services include evaluation and monitoring of chemicals, contaminants, industrial effluents and environmental effects using:

- Metal Mining Effluent Regulations (MMER) – Acute & sublethal toxicity testing
- Site-specific water quality criteria
- Water effects ratio (WER) testing
- Toxicity identification and reduction evaluations (TIEs & TRES)
- Sediment and soil toxicity testing

Radiochemistry

Naturally Occurring Radioactive Material (NORM) originates from uranium and thorium naturally found in rocks and soil in the environment. Activities such as mining, phosphate fertilizer production, and oil and gas extraction can concentrate NORM. Maxxam provides analytical solutions to ensure compliance with the Federal Fisheries Act, provincial regulations and Guidelines for the Management of NORM (Health Canada).

- Comprehensive MMER compliance including analysis of Radium 226
- Testing of NORM in geological, metallurgical and environmental samples
- Waste characterization

Accreditation

Maxxam is accredited for specific tests as listed in the laboratory's current scope of accreditation from:

- Canadian Association for Laboratory Accreditation Inc. (CALA) ISO 17025: 2005
- Standards Council of Canada (SCC) ISO 17025: 2005

Why Maxxam?

Maxxam is most widely recognized for its collaborative approach to project management and attention to detail. The benefits of partnering with Maxxam include:

- Individualized support from a dedicated Project Manager
- Analyses confirmation upon sample login
- Flexible electronic data formatting
- Composite sampling support

As leaders in analytical services and solutions, one of our goals is to maintain a continuous dialogue with our customers through education, training and roundtable discussions on pertinent issues such as regulations, field techniques and analytical interpretation. Please contact us for more information on how we can contribute to your success.

Maxxam is the Canadian market leader in analytical services and solutions to the energy, environmental, food and DNA industries and a member of the Bureau Veritas Group of companies – a world leader in testing, inspection and certification services. We support critical decisions made by our customers through the application of rigorous science and the knowledge and expertise of our over 2500 employees.

Please feel free to contact us:

Email: enviro@maxxam.ca or

Call us toll-free: **1 800 563 6266**