



## **SCOPE OF ACCREDITATION**

**AGAT LABORATORIES LTD.**  
**5623 McAdam Road**  
**Mississauga, ON**  
**L4Z 1N9**

Accredited Laboratory No. 665  
(Conforms with requirements of ISO/IEC 17025:2005, RG-MINERAL)

CONTACT:	Kakale Mpaphadzi
TEL:	+ 647 948 6058
FAX:	
EMAIL:	<a href="mailto:mpaphadzi@agatlabs.com">mpaphadzi@agatlabs.com</a>
URL:	<a href="http://www.agatlabs.com/">http://www.agatlabs.com/</a>
CLIENTS SERVED:	All interested clients
FIELDS OF TESTING:	Chemical/Physical
PROGRAM SPECIALTY AREA:	Mineral Analysis
INITIAL ACCREDITATION DATE:	2010-02-17
MOST RECENT REACCREDITATION:	2017-12-04
ACCREDITATION VALID TO:	2022-02-16

The physical sample preparation involving accredited test methods as listed on the scope of accreditation may be performed at AGAT Laboratories Ltd. laboratory or at off-site sample preparation locations that are monitored regularly for quality control and quality assurance practices.



## **METALLIC ORES AND PRODUCTS**

### **Mineral Analysis Testing**

#### **Mineral Assaying**

##### Geotechnical Testing

MIN-12007	Screen Analysis and Particle Size Distribution of Mineralogical Samples
MIN-12010	Crushing and Splitting of Mineralogical Samples - Mining Geochemistry Assaying Division - Branches
MIN-200-12000	Determination of Total Carbon and Sulphur in Geological and Soil Samples Using Infrared Combustion Furnace
MIN-200-12001	Determination of Sixteen (16) Metals in Geological Samples employing Peroxide Fusion with Inductively Coupled Plasma - Optical Emission Spectroscopy (ICP-OES) finish [Cu, Ni, Co, Fe, S, Mg, Pb, Si, Ca, Al, Mn, Zn, Cr, Sn, As, Mo; ICP-OES]
MIN-200-12004	Determination of Gold and Silver in Mineralogical Samples by Lead Fusion Fire Assay with Gravimetric Finish
MIN-200-12006	Determination of Gold, Platinum and Palladium in Geological Samples by Lead Fusion Fire Assay with Inductively Coupled Plasma- Optical Emission Spectroscopy (ICP-OES) finish [Au, Pt, Pd; ICP-OES]
MIN-200-12012	Milling of Mineralogical Samples - Mining Geochemistry Assaying Division
MIN-200-12014	Determination of Total Nitrogen in Mineralogical Samples by Inert Gas Fusion - Thermal Conductivity Detection
MIN-200-12015	Determination of Oxides in Mineralogical Samples Using Lithium Metaborate Fusion and Inductively Coupled Plasma - Optical Emission Spectroscopy (ICP-OES) [SiO <sub>2</sub> , Al <sub>2</sub> O <sub>3</sub> , Fe <sub>2</sub> O <sub>3</sub> , CaO, MgO, Na <sub>2</sub> O, K <sub>2</sub> O, Cr <sub>2</sub> O <sub>3</sub> , TiO <sub>2</sub> , MnO, P <sub>2</sub> O <sub>5</sub> , SrO, BaO]
MIN-200-12016	Determination of Rare Earth Elements in Mineralogical Samples Using Lithium Borate Fusion and Inductively Coupled Plasma - Mass Spectroscopy (ICP-MS) [Ce, La, Y, Dy, Er, Eu, Gd, Ho, Lu, Tb, Tm, Yb, Nd, Pr, Sm, Th, U]
MIN-200-12018	Determination of Metals in Mineralogical Samples Using Aqua Regia (Nitric and Hydrochloric Acid) Digestion and a Combination of Inductively Coupled Plasma - Optical Emission Spectroscopy (ICP-OES) and Inductively Coupled Plasma - Mass Spectroscopy (ICP-MS) [Ag, As, Au, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Ga, Ge, Hf, Hg, In, La, Li, Mn, Mo, Ni, Nb, P, Pb, Re, Rb, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, U, V, W, Y, Zn, Zr]
MIN-200-12019	Determination of Gold in Geological Samples by Lead Fusion Fire Assay and Atomic Absorption Spectroscopy.



MIN-200-12020	Determination of Metals in Mineralogical Samples Using Aqua Regia (Nitric and Hydrochloric Acid) Digestion and Inductively Coupled Plasma - Optical Emission Spectrometry (ICP-OES) [Ag, Al, As, B, Ba, Be, Bi, Fe, Ga, Hg, In, K, La, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Rb, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zr, Zn]
MIN-200-12021	Determination of Loss on Ignition in Mineralogical Samples
MIN-200-12023	Determination of Gold, Platinum and Palladium in Mineralogical Samples by Lead Fusion Fire Assay with Inductively Coupled Plasma - Mass Spectroscopy (ICP-MS) Finish
MIN-200-12024	Determination of Specific Gravity in Mineralogical Samples by a Gas Pycnometer
MIN-200-12027	Determination of Oxide Content (Al <sub>2</sub> O <sub>3</sub> , BaO, CaO, Cr <sub>2</sub> O <sub>3</sub> , Fe <sub>2</sub> O <sub>3</sub> , K <sub>2</sub> O, MgO, MnO, Na <sub>2</sub> O, P <sub>2</sub> O <sub>5</sub> , SiO <sub>2</sub> , SrO, TiO <sub>2</sub> , and V <sub>2</sub> O <sub>5</sub> ) in Mineralogical Samples following fusion with Lithium Borate and using an X-Ray Fluorescence Spectrometer.
MIN-200-12028	Determination of Ore Grade Ba, Nb, Sb, Sn, Ta, Th, U, W, Zr content (Resistive Elements) in Mineralogical Samples by Lithium Borate Fusion and Using an X-Ray Fluorescence Spectrometer.
MIN-200-12032	Determination of Metals in Mineralogical Samples using Atomic Absorption Spectroscopy (AAS) Following Aqua Regia or Four Acid Digestion [Co, Ni, Cu, Zn, Ag and Pb].
MIN-200-12034	Determination of Metals in Mineralogical Samples Using Inductively Coupled Plasma - Optical Emission Spectroscopy (ICP-OES) Following Four Acid Digestion [Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, In, K, La, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Rb, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zr, Zn]
MIN-200-12035	Determination of Metals in Mineralogical Samples using Four Acid Digestion and a Combination of Inductively Coupled Plasma - Optical Emission Spectroscopy (ICP-OES) and Inductively Coupled Plasma - Mass Spectroscopy (ICP-MS) [Ag, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Ga, Ge, Hf, In, La, Li, Mn, Mo, Ni, Nb, P, Pb, Re, Rb, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Tl, U, V, W, Y, Zn, Zr]
MIN-200-12036	Determination of Total Inorganic Carbon and Graphitic Carbon In Mineralogical Samples and Soil Samples Using a Resistance Furnace/IR.
MIN-200-12037	Determination of Acid Soluble Sulphate (SO <sub>4</sub> <sup>2-</sup> ) in Mineralogical Samples by Infrared Combustion Furnace



**Standards Council of Canada**  
**Conseil canadien des normes**

**Notes:**

**CAN-P-1579:** Requirements for the Accreditation of Mineral Analysis Testing Laboratories

**CAN-P-4E (ISO/IEC 17025:2005):** General Requirements for the Competence of Testing and Calibration Laboratories

Sample preparation and Fire Assay testing are conducted at the laboratory located in 5616 Mc Adam road, Mississauga, ON L4Z 1P1.

---

Elias Rafoul, Vice President  
Accreditation Services

Date: 2017-12-04

Number of Scope Listings: 23  
SCC 1003-15/833  
Partner File #0  
Partner: