



Metallic Mineral Occurrences, Geochemical Anomalies and Kimberlites

- Copper (±lead, zinc, silver, gold)
- Uranium (±thorium, rare-earth elements, molybdenum, silver, zinc, lead, copper, iron, gold)
- Gold-silver (±molybdenum, tungsten, copper, lead, zinc, nickel)
- Zinc-nickel-molybdenum and zinc-lead-copper-silver (±cobalt, vanadium, gold, uranium, platinum-group elements)
- Lead-zinc (±cadmium, silver, copper, gold)
- Iron-titanium (±gold, zirconium, rare-earth elements)
- ◆ Zinc-lead (±nickel, silver, gold) from till
- Modern and preglacial placer gold (±platinum-group elements)
- ★ Oil sand tailings titanium-zirconium-gold-platinum-group elements
- Alluvial diamonds
- ◆ Lithium in formational water brines
- ◆ Potash in Prairie Evaporite Formation
- ◆ Kimberlite and related ultrabasic rocks

- ▨ Provincial parks and protected areas
- ▨ National parks

1:1 300 000
 0 100 km
 Projection: 10 Degree Transverse Mercator, NAD83

This map represents data from about 50 industry (mineral assessment) and government sources. The accuracy of the compilation is limited by the quality and quantity of geoscientific and mineral exploration history data, and by the level of geological knowledge at the time of the assessments.

The legend displays deposit models that may exist in Alberta. Geochemical data that were culled used the following cutoff values: gold in stream and lake sediments, soil, till and bedrock samples (6 ppb gold); potassium in Prairie Evaporite Formation core (10 wt. % potassium oxide); and lithium in Alberta formation water (100 mg/L lithium).

Mineral occurrence, geochemical anomaly and kimberlite data were not ranked. However, the map highlights deposits and mineral occurrences with an elevated level of exploration interest.

The base map includes the bedrock geological map of Alberta (see ERCB/AGS Map 236 for a complete legend).

References:
 Hamilton, W.N., Price, M.C. and Langenberg, C.W., compilers (1999): Geological map of Alberta, Alberta Energy and Utilities Board, EUB/AGS Map 236, scale 1:1 000 000.

INF 137
Metallic Mineral and Diamond Potential of Alberta Summary

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