



MANITOBA Critical Minerals

The **Manitoba Geological Survey** is committed, through thematic geoscience studies and mapping at a regional scale to improve the understanding of critical minerals in the province.

Critical minerals are crucial to Manitoba's economy and national security. They fuel our society and have a variety of uses in industry, manufacturing, modern technology, and clean or low-carbon technologies (e.g., solar panels, wind turbines, and electric vehicles).

Critical minerals are mineral commodities in strong demand with important uses that have no readily available substitutes and can face potential disruption of supply. Graphite, nickel, vanadium, cobalt, lithium, rare-earth elements and tantalum are a few examples.

Critical minerals occur in a variety of deposits, geological settings and mineral associations. Manitoba is well-endowed with these commodities and positioned to offer a competitive supply.

MANITOBA'S CRITICAL MINERALS GEOLOGICAL ADVANTAGE

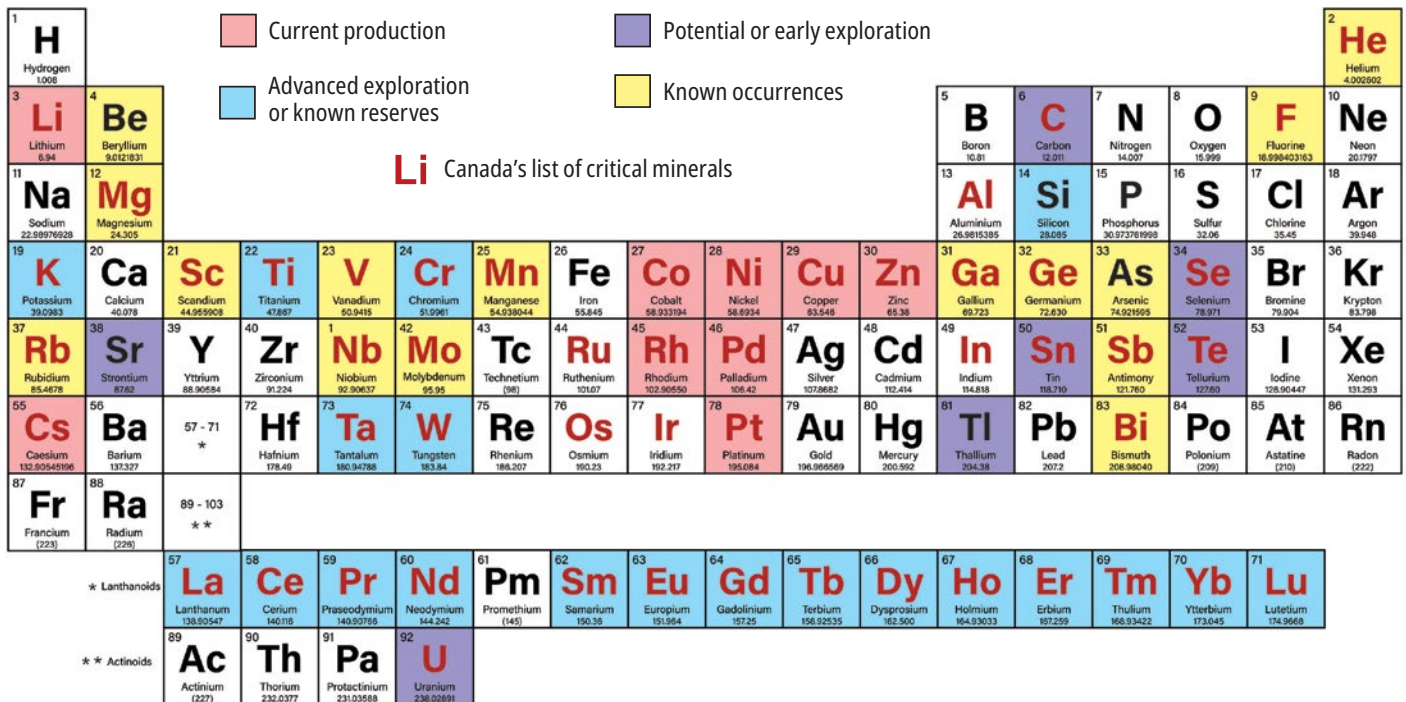
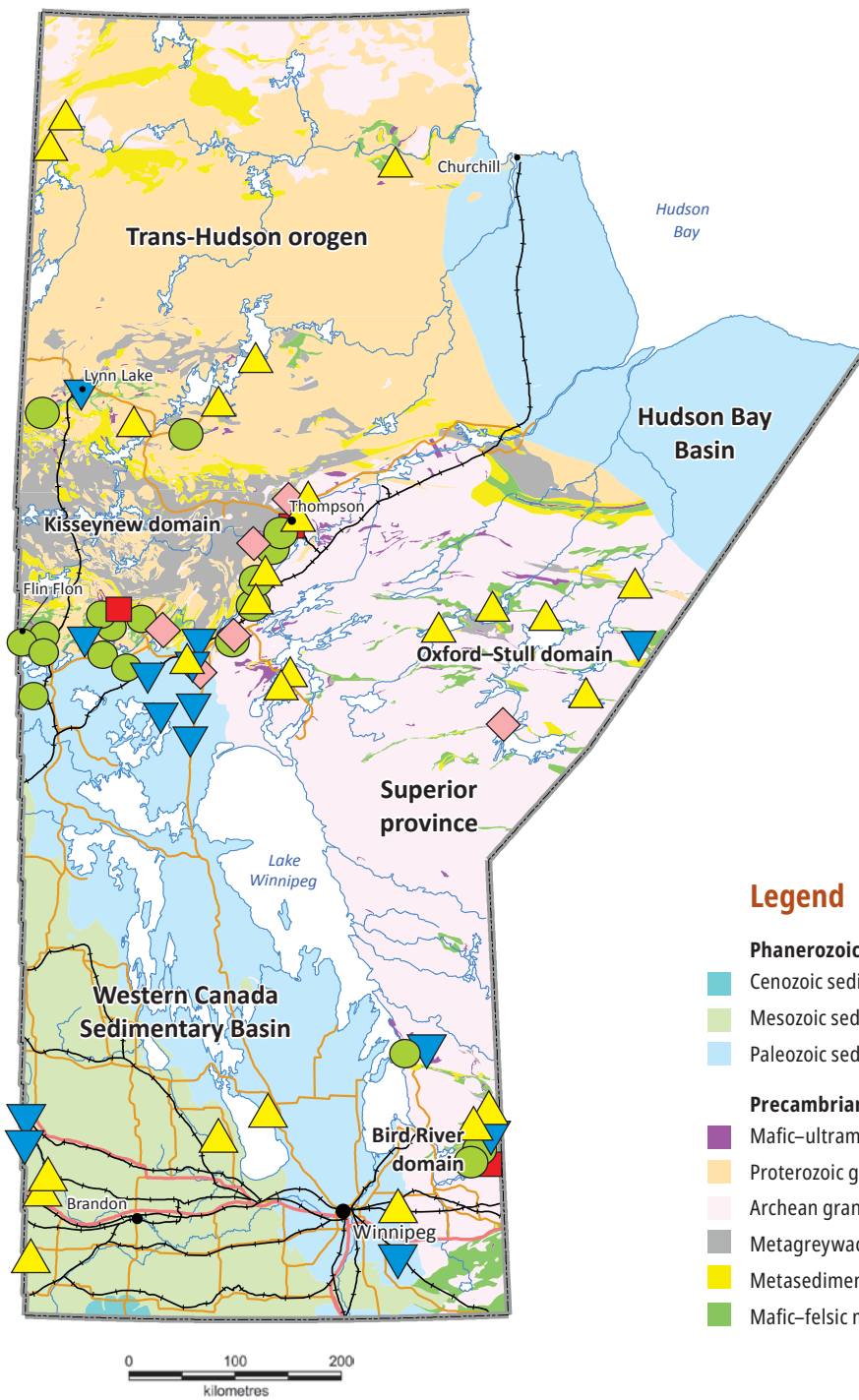


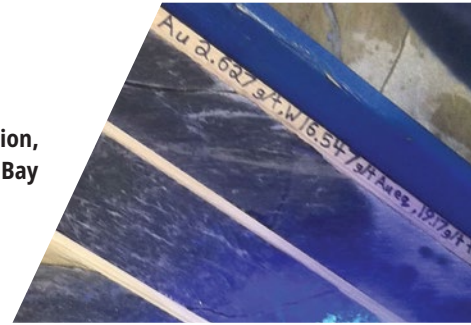
Figure 1: Periodic table showing the elements considered critical minerals for Canada (in red), and considering resources, exploration and mineral production in Manitoba.



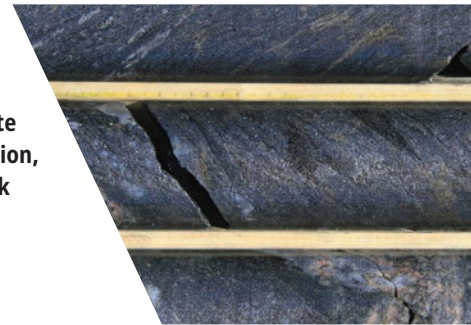
Surface Showing, Mayville Cu-PGE



Scheelite Mineralization, Monument Bay Deposit



Vanadium and Graphite Mineralization, Huzyk Creek Property



Legend

Phanerozoic

- Cenozoic sedimentary rocks
- Mesozoic sedimentary rocks
- Paleozoic sedimentary rocks

Precambrian

- Mafic-ultramafic intrusive rocks
- Proterozoic granite and gneiss
- Archean granite and gneiss
- Metagreywacke
- Metasedimentary rocks
- Mafic-felsic metavolcanic rocks

- ◆ Exploration project
- ▲ Deposit/occurrence
- ▼ Advanced project
- Current producer
- Past producer

Figure 2: Geological map of Manitoba highlighting areas with critical mineral occurrences.



Manitoba is home to world-class deposits and high mineral potential in extensive underexplored terrains.

Learn more at manitoba.ca/minerals

Contact Information

Manitoba Business, Mining, Trade and Job Creation
 360-1395 Ellice Avenue, Winnipeg, Manitoba, R3G 3P2
 Phone: 204-945-1119; toll free: 1-800-223-5215
 Email: minesinfo@gov.mb.ca