

Potash

MANITOBA CRITICAL MINERALS



The **Manitoba Geological Survey** conducts province-wide geoscience studies and mapping at the deposit and basin scale to improve the understanding of potash occurrence and distribution in the province.

In Manitoba, potash deposits occur in the Devonian-aged Prairie Evaporite of the Williston Basin (Figure 1). This formation is a thick, evaporitic sequence, consisting dominantly of halite, anhydrite and other accessory minerals, with localized potash occurrences (Figure 2, 4). The Russell-McAuley deposit is the eastern extension of the prolific deposits in Saskatchewan and has an extensive exploration history.

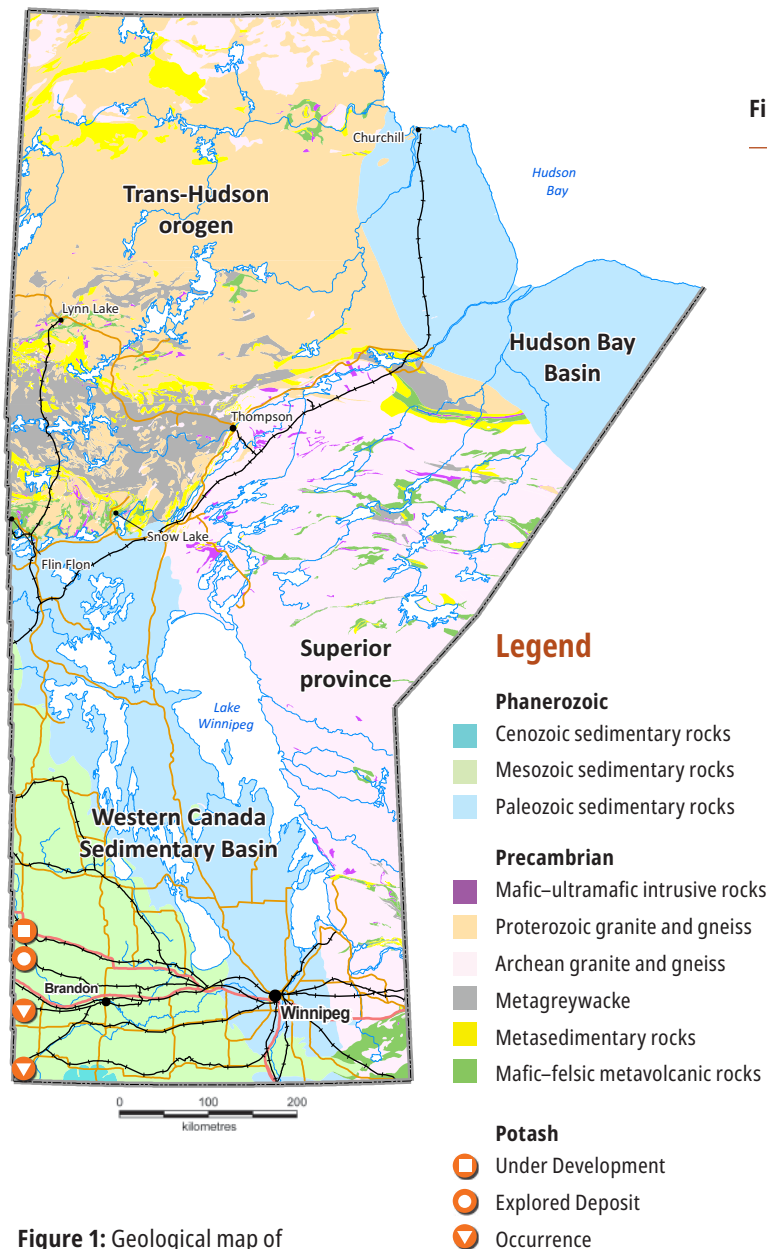
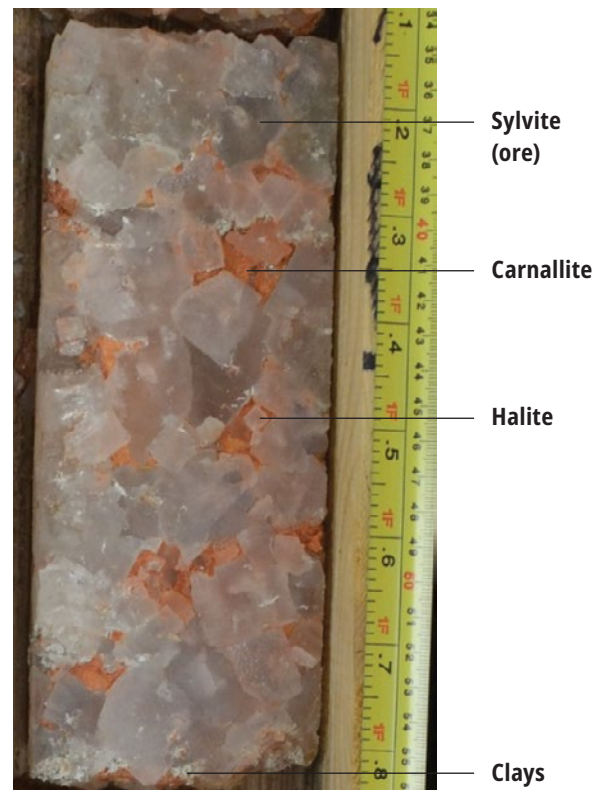


Figure 1: Geological map of Manitoba showing locations of potash occurrences.

Figure 2: Potash ore from core near St. Lazare, Manitoba



Potash Occurrences and Deposits

The known area of potash occurrences are subdivided into four areas, each separated by barren or underexplored expanses:

- Roblin-Russell area, covering townships 19 to 25, ranges 27 to 29W1
- St. Lazare-McAuley area, covering townships 14 to 18, ranges 27 to 29W1
- Daly-Sinclair area, covering townships 5 to 11, ranges 27 to 29W1
- Pierson area, occurring in township 1, range 28W1

These areas total approximately 2,879 km² of potentially mineable potash

Russell-McAuley Potash Deposits

Between the communities of Russell and McAuley, Manitoba, are the only potash deposits with an exploration history. This potash resource has been historically subdivided into two blocks:

- The northern block, referred to as the Russell deposit. It has a historical mineral resource estimated at 392 million tonnes and average ore grade of 22.5 K₂O wt. %.
- The southern block, referred to as the St. Lazare deposit. It has a historical mineral resource estimated at 650 million tonnes and average ore grade of 20.9 K₂O wt. %.

Both deposits are continuous into one another. The distinction between the two blocks reflects the extent of two longstanding potash dispositions held in the past by competing companies. Both deposits are good candidates for solution mining.

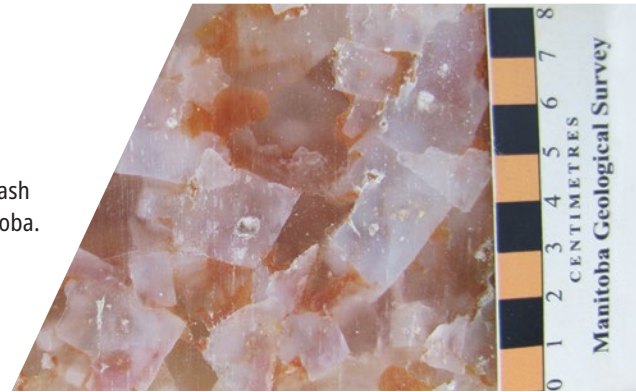


Figure 3:
Close up of potash ore from Manitoba.



Figure 4:
Potash core from the Russell deposit in Manitoba.



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

Learn more at manitoba.ca/minerals

Contact Information

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