The exploration community in Minnesota is well served by systematic geology, geophysics, and geochemistry databases produced by the Minnesota Geological Survey, by the Department of Natural Resources, & by the Natural Resource Research Institute and the University of Minnesota Duluth.

### Minnesota Geological Survey (MGS):
- Multi-layered, digital geologic map, 2011
- Detailed geologic mapping ongoing statewide
- Statewide geochemical atlas released, 2009
- State aeromagnetic database fully reprocessed
- State gravity database fully reprocessed

http://www.mngs.umn.edu/

### Drill Core Library Webpage and Web Map Application

Drill Core Library

The Minnesota Department of Natural Resources (DNR) maintains an assessment file system that contains the historic data from exploration on State-owned lands, including more than 3 million feet of publically accessible drill core from more than 8,000 drill holes collected over a 100 year time period. The core is stored in a modern Drill Core Library that offers exploration geologists a first-hand look at core from areas with high mineral potential.

**Birch Lake Deposit**

In 1985, a DNR geologist used a hand lens to identify chromite grains in a section of core DU-15. Subsequent DNR assays revealed significant PGM content. Lehmann Exploration Management secured the state mineral rights in the vicinity of DU-15 with winning bids during a subsequent state lease sale…Their work started the exploration & delineation of what is today the Birch Lake deposit of Cu + Ni + PGM.

**Tamarack Deposit**

In 1984, the Minnesota Geological Survey drilled a very short interval of a peridotite near Tamarack, MN. In about 1999, a Rio Tinto geologist reviewing the archived core recognized that this intrusion was related to the Mid-Continent Rift, and may have high mineral potential…His work led to the Rio Tinto discovery of high grade Cu + Ni + PGM at the Tamarack deposit, and the continuing exploration today.

**Maturi Deposit**

Duluth Metals (formerly Wallbridge America Ltd) geologists examined a series of widely spaced drill holes previously drilled by DUVAL and identified a major Cu-Ni-PGM mineralization. This work helped lead them to the Maturi deposit of Cu+Ni+PGM. Twin Metals Minnesota LLC is the company developing the project.

Will the DNR Drill Core Library Be the Source for Your Company’s Next Discovery?

http://www.dnr.state.mn.us/lands_minerals/dc_library.html

This new DNR webpage greatly facilitates public access to the more than three million linear feet of drill core and other geologic materials archived within the Drill Core Library in Hibbing. The webpage outlines the Drill Core Library’s mission and provides details for those interested in viewing, sampling, and/or submitting drill core materials.

An associated interactive web map displays more than 8,500 source locations for the material archived within the Drill Core Library, with links to drilling information. This user-driven map interface allows anyone with internet access to compare locations against overlays of geologic information and state mineral leases. This kind of interactive manipulation of drill hole and geologic data previously required ArcGIS software.

http://www.dnr.state.mn.us/lands_minerals/dc_library.html