

Modified after Green, J.C., 1982, Minnesota Geological Survey, Geologic Map of Minnesota, Two Harbors Sheet, Bedrock Geology

**MISCELLANEOUS KEWEENAW INTRUSIVE AND EXTRUSIVE ROCKS, MIDDLE PROTEROZOIC**

1) **Ku** Undivided Keweenaw rocks—probably mostly volcanic rocks of North Shore Volcanic Group; some intrusions, few or no outcrops.

**DULUTH COMPLEX, MIDDLE PROTEROZOIC, NORMAL MAGNETIC POLARITY**

2) **Df** Red, granophyric granite and adanellite.

3) **Di** Intermediate intrusive rocks—granodiorite, monzonite, gneiss, gabbro.

4) **Da** Anorthositic gabbro; anorthositic, gabbroic and troctolitic anorthosite.

5) **Dg** Cumulate troctolite—oxide-rich and layered.

6) **Dt** Troctolite and anorthositic troctolite—commonly layered.

7) **Dg** Gabbro and ferrogabbro—mostly olivine-bearing.

8) **Da** Intrusive rocks, undivided—few or no outcrops.

**INCLUSIONS OR ROOF PENDANTS IN DULUTH COMPLEX, MIDDLE PROTEROZOIC**

9) **Hm** Contact-metamorphosed mafic volcanic rocks, perhaps minor metadiabase.

**NORTH SHORE VOLCANIC GROUP, MIDDLE PROTEROZOIC, NORMAL MAGNETIC POLARITY**

10) **Nsu** Volcanic rocks, undivided

\*Number is used to identify bedrock types on the DNR Master Sample List.

**SYMBOLS**

— Contact, dashed where inferred or approximately located.

||||| Fault, dashed where inferred.

**REPORT 262  
PLATE 2: BEDROCK GEOLOGY MAP**

MINNESOTA DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF MINERALS

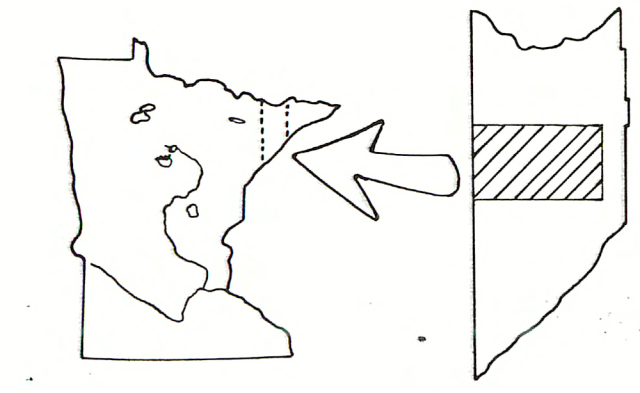
**GLACIAL DRIFT GEOCHEMISTRY  
FOR STRATEGIC MINERALS**

LAKE COUNTY

SCALE 1 inch = 1 mile

**LEGEND**

- HARD SURFACED ROADS ——— (State / County Highways)
- GRAVEL or SECONDARY ——— (NFD - National Forest Development)
- (NFB - National Forest Highway)
- (SFR - State Forest Road)
- ||||| BOUNDARY WATERS CANOE AREA WILDERNESS
- PROJECT AREA BOUNDARY



LOCATION MAP