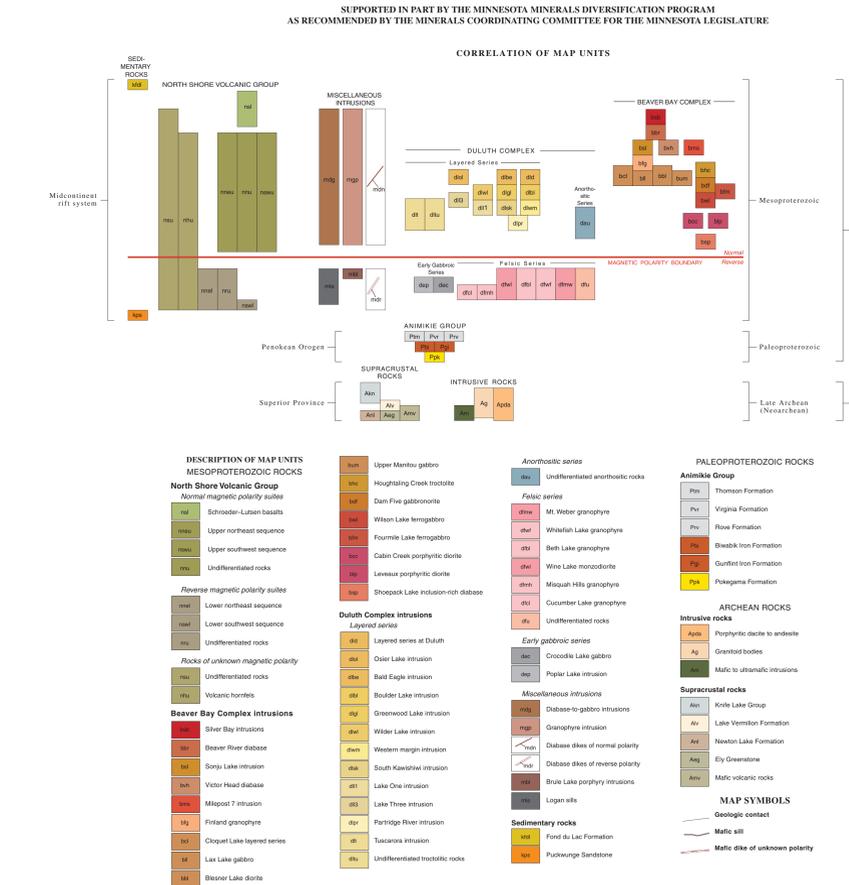


GENERALIZED DENSITY OF BEDROCK OUTCROPS AND DRILL HOLES IN NORTHEASTERN MINNESOTA



**DESCRIPTION OF MAP UNITS**

**MESOPROTEROZOIC ROCKS**

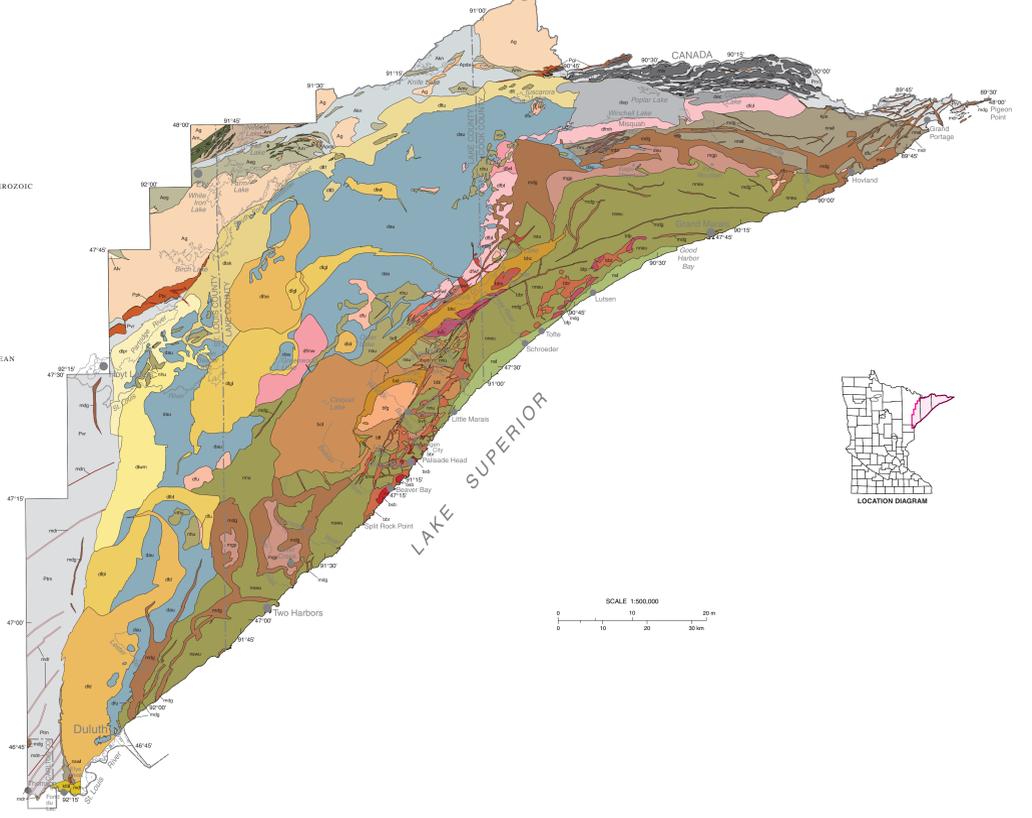
**North Shore Volcanic Group**  
Normal magnetic polarity suites  
Schroeder-Lutsen basalts  
Upper northeast sequence  
Upper southeast sequence  
Undifferentiated rocks  
Reverse magnetic polarity suites  
Lower northeast sequence  
Lower southwest sequence  
Undifferentiated rocks  
Rocks of unknown magnetic polarity  
Undifferentiated rocks  
Volcanic horizons

**Beaver Bay Complex intrusions**  
Silver Bay intrusions  
Beaver River dike  
Beaver Lake intrusion  
Victor Head dike  
Missoua 7 intrusion  
Finnert granophyre  
Chiquet Lake layered series  
Lax Lake gabbro  
Beeson Lake diorite

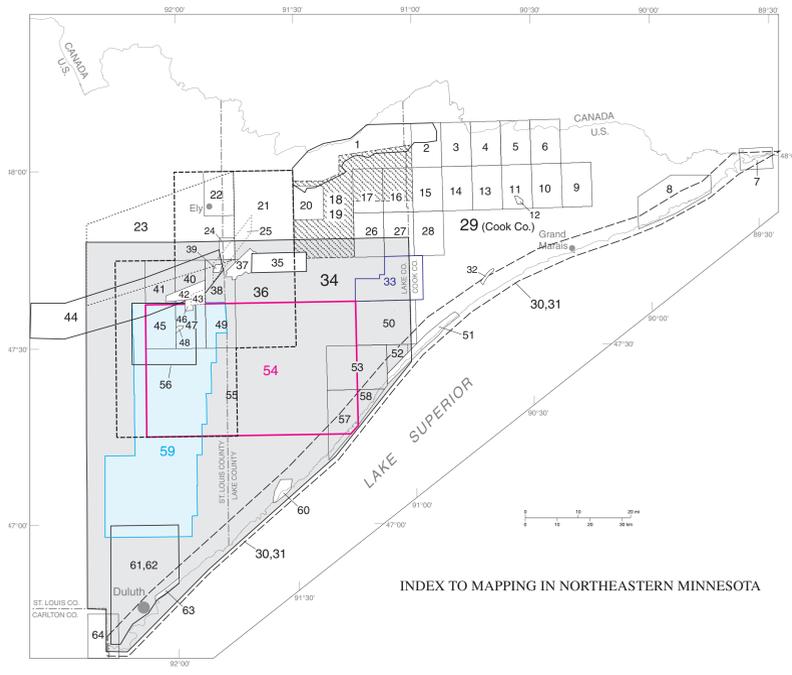
**Duluth Complex intrusions**  
Layered series at Duluth  
Oler Lake intrusion  
Bull Eagle intrusion  
Boulder Lake intrusion  
Greenwood Lake intrusion  
Wilder Lake intrusion  
Western margin intrusion  
South Kawishiwi intrusion  
Lake One intrusion  
Lake Three intrusion  
Partridge River intrusion  
Tascara intrusion  
Undifferentiated trachytic rocks

**ANIMIKIE GROUP**  
Felsic series  
M. Weber granophyre  
Whitfish Lake granophyre  
Beth Lake granophyre  
Wino Lake monodiorite  
Maquah Hills granophyre  
Cumberland Lake granophyre  
Undifferentiated rocks  
Early gabbroic series  
Crocodile Lake gabbro  
Poplar Lake intrusion  
Miscellaneous intrusions  
Duluth-to-gabbro intrusions  
Granophyre intrusion  
Duluth dikes of normal polarity  
Duluth dikes of reverse polarity  
Brule Lake porphyry intrusions  
Logan sills  
Sedimentary rocks  
Ford du Lac Formation  
Puckwaga Sandstone

**ARCHEAN ROCKS**  
Undifferentiated rocks  
Phyric diorite to andesite  
Granitoid bodies  
Mafic to ultramafic intrusions  
Supracrustal rocks  
Kettle Lake Group  
Lake Vermilion Formation  
Newton Lake Formation  
Ely Greenstone  
Mafic volcanic rocks  
Mafic dike of unknown polarity



MAP SHOWING TIME-STRATIGRAPHIC RELATIONSHIPS WITHIN THE DULUTH COMPLEX AND RELATED ROCKS, NORTHEASTERN MINNESOTA



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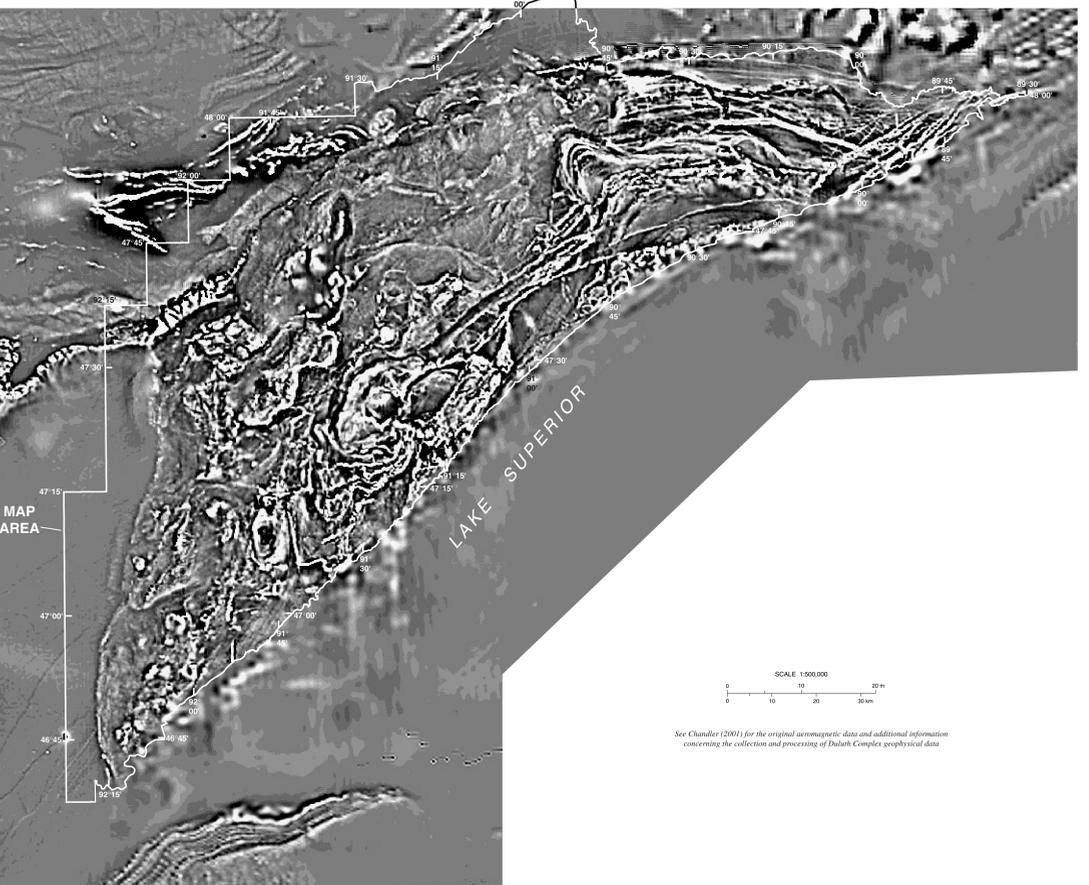
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FIRST VERTICAL DERIVATIVE OF THE AEROMAGNETIC DATA REDUCED TO POLE  
NORTHEASTERN MINNESOTA AND ADJACENT AREAS OF THE UNITED STATES AND CANADA

**GEOLOGIC MAP OF THE DULUTH COMPLEX AND RELATED ROCKS, NORTHEASTERN MINNESOTA**

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