

# GIS Compilation of MN DNR Project 280: Regional Survey of Buried Glacial Drift, Saprolite, and Precambrian Bedrock in Lake of the Woods County, Minnesota

## A Minerals Diversification Project

*GIS Data Completed: January, 2014 by Kevin Hanson*

*Original Data Completed: 1991*

*Authors: D.P. Martin, D.A. Dahl, D.F. Cartwright, G.N. Meyer*

Provided here is a general description of files that are found in 'mpes280\_data.zip'

[Link to project webpage](#)

[Link to project report](#)

Abstract:

The zip file contains information for twenty-one townships in the Baudette area of Lake of the Woods County in northern Minnesota, as described in the Minnesota Department of Natural Resources (MnDNR), Division of Lands and Minerals Report "Regional Survey of Buried Glacial Drift, Saprolite, and Precambrian Bedrock in Lake of the Woods County, Minnesota – Report 280," published in 1991. Each folder contains data from the report in a different format. The data is presented in its original format, in a Microsoft Access database, dBase IV file format, and ArcGIS shapefiles/feature classes inside a file geodatabase. There are nine tables included in this report. This information shows the sample locations throughout the Baudette area and the enumerated drill hole or core sample data contains geospatial information in the form of Universal Transverse Mercator (UTM) East and North coordinates, a "Z" field with the elevation of the drill hole top, and elevation the of top and bottom of the individual samples; all elevations are in feet above sea level. The data is designed to be used as a supplement to the report and plates.

Folders and their contents:

### **ACCESS\_DB\_FROM\_RAW\_DATA**

This folder contains an access database into which the raw data was imported. Files were brought into Microsoft Access in order to assign proper field headings and proper data type, and then they were exported as dBase IV files to be brought into mapping software. At this point, all blank or "NULL" cells were replaced by "-999" to avoid replacement with zeroes.

- report280\_data.accdb

### **DBF\_EXPORTED\_FROM\_ACCESS**

- 280BED1.dbf
- 280CHEM1.dbf
- 280CHEM2.dbf
- 280DRIL.dbf
- 280MAST.dbf

- 280MIN.dbf
- 280PEB1.dbf
  - Appendix 280-M: Baudette area pebble counts. Super-category counts per 10kg sample by size fraction.
  - Table page number M-2 through M-3
- 280PEB2.dbf
- 280PHYS.dbf

## **RAW\_DATA**

This folder contains all the data in its original file format. These files were brought into Microsoft Access (database listed above).

## **FILE\_GEODATABASE**

**[Only viewable in ArcGIS 9.3 and above]**

### **File name - mpes280\_data.gdb**

- **Feature Dataset – Features**
  - project280\_bed1\_z
    - Appendix 280-I: Baudette area bedrock samples, trace element and oxide assays.
    - Table page number I-3 through I-4
    - 280BED1.dbf
  - project280\_boundary
  - project280\_chem1\_z
    - Appendix 280-G: Baudette area assays. Nonmagnetic heavy mineral concentrate and clay fraction of till and non-till samples.
    - Table page number G-2 through G-19
    - 280CHEM1.dbf
  - project280\_chem2\_z
    - Appendix 280-H: Baudette area assays. Magnetic heavy mineral concentrate samples from tills and saprolite.
    - Table page number H-2 through H-4
    - 280CHEM2.dbf
  - project280\_drillholes
    - Appendix 280-A: Synopsis of Baudette area drill site information. Map scales are 1:24,000
    - Table page number A-2; Map page number A-3 through A-6
    - 280DRIL.dbf
  - project280\_mast\_z
    - Appendix 280-F: Master index for Baudette area samples.
    - Table page number F-2 through F-4
    - 280MAST.dbf
  - project280\_min\_z
    - Appendix 280-L: Mineralogy of nonmagnetic heavy mineral concentrate fraction from till and saprolite samples in the Baudette area.
    - Table page number L-2 through L-5

- 280MIN.dbf
- project280\_peg2\_z
  - Appendix 280-N: Baudette area pebble counts, +1/4" – 3/8 pebbles.
  - Table page number N-2 through N-3
  - 280PEB2.dbf
- project280\_phys\_z
  - Appendix 280-K: Physical properties of Baudette area samples.
  - Table page number K-2 through K-4
  - 280PHYS.dbf

## **SHAPEFILES**

There is also a suite of shapefiles that contain the same information as the feature class listed above.

Any questions regarding the GIS compilation contact:

Kevin J Hanson  
*Geographer/GIS Specialist*  
Mineral Potential Evaluation Section  
Aggregate Resource Mapping Program  
MN DNR - Division of Lands & Minerals  
Work Phone - 651-259-5429  
Work Email - kevin.hanson@state.mn.us