



Heine, T.H. 2007: Manitoba Mineral Deposits Database; *in* Report of Activities 2007, Manitoba Science, Technology, Energy and Mines, Manitoba Geological Survey, p. 209–210.

### Summary

The design of a series of data input screens in the Oracle® database for the Manitoba Mineral Deposits Database (MDD) has now been completed and work is progressing on populating the defined fields. The initial source of information is the 33 reports of the Mineral Deposit Series (MDS). To expedite the inclusion of this information, these reports have been parsed and inserted into the appropriate database fields. This process is largely complete. Information from the Mineral Inventory Cards is being incorporated at the same time. The fields that contain information from the MDS reports and Mineral Inventory Cards need to be edited to remove extraneous unacceptable characters and to confirm the accuracy of the entries.

### Introduction

The desirability of creating an inventory of all presently known mineral deposits and occurrences in the Province of Manitoba has long been recognized by the Manitoba Geological Survey. As a result, several efforts have been made to summarize the mineral inventory of the province. Bamburak (1980) has provided an excellent summary of the early efforts at establishing such an inventory.

### Mineral Inventory Cards

The 'modern' era of deposit documentation started in 1973 with the National Mineral Inventory, a joint federal-provincial project. This resulted in the creation of a series of Mineral Inventory Cards for Manitoba (Bamburak, 1980). These were designed to provide concise descriptions of metallic mineral deposits and occurrences throughout Canada. In part, these cards provided a starting point for mineral exploration and mining companies to gather additional information to guide their efforts. Once this project was completed, the index was kept up to date on an *ad hoc* basis. An update was published by Athayde (1991), and the cards were periodically updated until about 1992. Various efforts were made to export and/or save this information into a digital format that could be easily revised and where additional deposits and occurrences could be added. These proved to be largely unsuccessful, but the Mineral Inventory Cards are available online from the Mineral Resources Library at <http://www2.gov.mb.ca/itm-cat/multisearch.htm>.

One project that used the Mineral Inventory Card system was to assist in the assessment of the massive sulphide deposit potential of Manitoba. This culminated

in the publication of a report that included 23 maps of massive sulphide potential (Gale et al., 1980).

### Mineral Deposit Series

Publication of the Mineral Deposit Series reports took place during the period 1988–2003 and was limited to areas that had seen significant mining and mineral exploration activity. For the most part, the publications were organized as reports that covered single 1:50 000 scale National Topographic Series map areas. Fifty-three of the total provincial coverage of 744 sheets were documented. As with the Mineral Inventory Cards, the descriptions were designed to provide a uniformly organized summary of information about individual deposits and occurrences, including references where additional and more detailed data could be obtained.

Some effort was made to expand the coverage of the MDS reports into the area underlain by the northern Superior Province, and mineral deposits and occurrences for NTS sheets 53K, L, M and N, and 63I and P have been documented. These descriptions have remained unpublished but are available in digital format and will be incorporated into the MDD.

### Manitoba Mineral Deposits Database

Nondigital precursors to this database had a number of drawbacks and limitations. It was neither a searchable data set, nor was it easy to revise or update existing descriptions or add new ones. The MDS reports suffered a further limitation in that they covered only a limited number of topographic areas.

A digital format was required in order to create a usable relational database. The broad structure of the database has been described previously (Heine, 2006). To some degree, the data fields of the database parallel those of the previously described text-based compilations. The MDS reports had been produced largely using various word-processing programs, and were thus available in a digital format. These text files could be easily parsed and entered into the appropriate database fields. This information has provided the foundation information for the MDD. Most of these files have been imported into the database. In addition, many of the Mineral Inventory Cards are available in digital format, and parts of these files can easily be copied and inserted into the appropriate fields. Current efforts are concentrated on editing information that has been imported from the MDS reports and Mineral Inventory Cards and ensuring that

there are no formatting sequences that may cause problems for the database program (Oracle®) and to confirm that the information is correct.

Once the information from the MDS reports and Mineral Inventory Cards has been edited, nonconfidential assessment files will be reviewed to update existing information, expand the areal coverage of the database to include the entire province and add new occurrences.

### **Economic considerations**

The creation of a searchable digital mineral deposits and occurrences database for the Province of Manitoba has been a goal of the Manitoba Geological Survey for a number of years. This database is targeted specifically at the mineral exploration and mining industries. The information contained within it will serve to summarize the nonconfidential work that has been performed on specific properties, thereby enabling geologists to quickly make decisions on where future efforts should be concentrated, in order to further evaluate occurrences and deposits. References included in the database allow users to find additional information for particular occurrences.

### **References**

- Athayde, P. 1991: Mineral inventory cards (supplement to Economic Geology Report ER79-6); Manitoba Energy and Mines, Geological Services, Miscellaneous Publication 91-2, parts A, B, C, D.
- Bamburak, J.D. 1980: Mineral Inventory of Manitoba; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-6, 41 p.
- Gale, G.H., Baldwin, D.A. and Koo, J. 1980: A geological evaluation of Precambrian massive sulphide deposit potential in Manitoba; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-1, 137 p.
- Heine, T.H. 2006: Manitoba Mineral Deposits Database; *in* Report of Activities 2006, Manitoba Science, Technology, Energy and Mines, Manitoba Geological Survey, p. 255–256.