

## GS-3 Manitoba's Precambrian Drillcore Libraries Program by D.E. Prouse

Prouse, D.E. 2005: Manitoba's Precambrian Drillcore Libraries Program; in Report of Activities 2005, Manitoba Industry, Economic Development and Mines, Manitoba Geological Survey, p. 28–29.

### Summary

Manitoba's Mineral Resources Division has been storing Precambrian drillcore, obtained primarily from exploration drilling, since the early 1970s. Since that time, the Manitoba government has created a substantial repository of drillcore at five locations throughout the province. During most the 1990s, the core libraries were run on a care-and-maintenance basis. Since 2001, funding has been made available to organize drillcore additions from recent years, update core-library inventories and conduct some core-retrieval projects.

In 2005, inventory organization and updating work was conducted at the Thompson and Lynn Lake core libraries.

### Introduction

The Manitoba Mineral Resources Division considers the archiving of exploration drillcore to be a valuable data source for use by mineral-exploration companies and researchers. For this reason, the province has retrieved and stored Precambrian drillcore since the early 1970s. The construction of core-storage facilities at The Pas, Thompson and Lynn Lake in the early 1970s provided space that enabled a concerted effort toward the establishment of a comprehensive drillcore collection. In 1980, a storage facility in Winnipeg was acquired to store drillcore from southeastern Manitoba. This acquisition meant that there was now a storage facility for drillcore collected and/or donated from all of Manitoba's major mining districts.

The Canada-Manitoba Mineral Development Agreement (MDA), which ran from 1984 to 1989, provided funding for activities that were key to strengthening Manitoba's mineral industry, including Manitoba's Drillcore Libraries Program. During the term of the agreement, \$630 000 were spent on capital and operating costs, allowing for expansion of all northern core-storage facilities and proper documentation and organization of inventories. Once the expansion projects were completed, the four libraries had a combined storage capacity of approximately 330 000 m of core. During the period of the MDA, approximately 80 000 m of core were collected and added to the libraries and about 58 000 m were discarded. The libraries contained nearly 180 000 m of core at the end of the MDA in 1989 (Prouse, 1989)

In 1993, the Manitoba Geological Survey established an expediting base at the former Centennial minesite near Flin Flon. The site also provides secure outside storage for drillcore obtained from exploration programs conducted by numerous companies in the Flin Flon

area. The Centennial storage-compound holdings were reorganized and inventoried in 2001.

It is estimated that the Manitoba Geological Survey's Precambrian drillcore libraries currently contain approximately 260 000 m of core. This figure includes about 20 000 m of Precambrian core stored at the department's Midland rock lab in Winnipeg. The estimate does not include core stored at the Centennial site or recent additions to the Thompson and Lynn Lake libraries.

### The 2005 field season

The amount of work required on core inventories in the northern libraries has decreased in the last couple of years due to a reduction in core donations and retrievals. In Thompson, drillcore from ValGold Resources Ltd. drilling in the Gillam area was organized, labelled and added to the inventory. Anglo American Exploration (Canada) Ltd. delivered to the core compound 12 holes from drilling on their Thompson area properties in 2004. A total of 551 boxes of core was organized and inventoried.

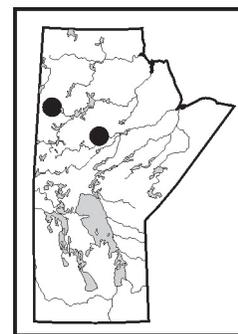
In Lynn Lake, work consisted of reboxing and labelling of historical drillcore from surface drilling during the discovery of the Fox mine copper-zinc deposit in the early 1960s. A total of 324 boxes of Fox mine core was also discarded due to a lack of technical information. This will free up valuable inside storage space at the Lynn Lake facility for future drillhole additions.

### How to use Manitoba's core libraries

All five core libraries have lighted, heated inspection rooms with benches, and most have core splitters. **Since the core libraries are not permanently manned, all enquiries and requests for access to any of the northern libraries must be made to**

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Manitoba Industry, Economic Development and Mines  
143 Main Street, Suite 201  
Flin Flon, Manitoba R8A 1K2  
Telephone: (204) 687-1632  
E-mail: [dprouse@gov.mb.ca](mailto:dprouse@gov.mb.ca)

Access to view core at the Brady Road facility in Winnipeg should be arranged with



Jim Payne, Assessment Geologist  
Mines Branch  
Manitoba Industry, Economic Development and Mines  
1395 Ellice Avenue, Suite 360  
Winnipeg, Manitoba R3G 3P2  
Telephone: (204) 945-6535  
Email: jpayne@gov.mb.ca

Once permission has been granted to view nonconfidential core in a specific library, arrangements will be made for the user to obtain keys to that facility. Keys for access to the Centennial compound near Flin Flon can be obtained from the local Manitoba Geological Survey office. Access to the Lynn Lake, Thompson and The Pas libraries must be arranged with the Resident Geologist in Flin Flon.

**Companies or individuals wishing to donate and place core in any one of Manitoba's northern drill-core libraries must first obtain permission from the Resident Geologist in Flin Flon.** In the case of the core library in Winnipeg, permission must be granted from the Assessment Geologist. Core boxes placed in a library will be managed by Manitoba Industry, Economic Development and Mines personnel. Removal of core boxes from the library premises is not permitted. Users wishing to examine core must be prepared to physically handle the core boxes and return them to their original storage location. Permission is required to sample core contained in any of the province's core libraries. Assay results and pulps from these samples must be forwarded if requested.

Quartering of previously sampled drillcore is not permitted except in rare circumstances.

### **Economic considerations**

Diamond drilling of a mineral prospect is the most important and costly phase in the evaluation of any mining property. The preservation of diamond-drill core can help reduce costs of redrilling these prospects as exploration techniques and geological concepts evolve. It also serves as a valuable asset to researchers, especially in areas of extensive overburden or, as in Manitoba's case, where Paleozoic cover rocks overlie Precambrian basement rocks. For these reasons, Manitoba's Mineral Resources Division considers the archiving of exploration drillcore to be a valuable data source.

### **Acknowledgments**

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### **References**

Prouse, D.E. 1989: Manitoba's drill core libraries system; Manitoba Energy and Mines, Minerals Division, Open File Report OF89-4, 44 p.