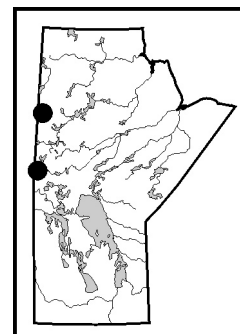


GS-32 Manitoba's Precambrian Drillcore Libraries Program by D.E. Prouse



Prouse, D.E. 2004: Manitoba's Precambrian Drillcore Libraries Program; *in* Report of Activities 2004, Manitoba Industry, Economic Development and Mines, Manitoba Geological Survey, p. 323–325.

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 of the 1990s, the core libraries were run on a care-and-maintenance basis. Beginning in 2001, funding became available to organize drillcore additions from recent years, update core-library inventories and conduct some core-retrieval projects.

In 2004, inventory organization and updating work was carried out at the Thompson, Lynn Lake and The Pas 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 research. For this reason, the province has retrieved and stored Precambrian drillcore since the early 1970s. The construction of core-storage facilities at The Pas (1972), Thompson (1973) and Lynn Lake (1974) provided space that enabled a concerted effort toward the establishment of a comprehensive drillcore collection. The acquisition of storage space in Winnipeg in 1980 for drillcore from southeastern Manitoba meant that there was 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. Nearly 80 000 m of core were collected and added to the libraries, and about 58 000 m were discarded during the period of the MDA. The libraries contained nearly 180 000 m of core, representing 54% of total capacity, at the end of the MDA in 1989 (Prouse, 1989).

In 1993, the establishment of a Manitoba Geological Survey (formerly Manitoba Geological Services) expediting base at the former Centennial minesite near Flin Flon provided secure outside storage for drillcore from the Flin Flon area. Since that time, thousands of metres of drillcore have been donated for storage by various companies. In 2001, the drillcore holdings at the Centennial site were reorganized and inventory work commenced. This inventory work is mostly completed.

In June 2004, it was estimated that the Manitoba Geological Survey's Precambrian drillcore libraries contained approximately 258 000 m of core. This figure included about 20 000 m of Precambrian core stored at the department's Midland rock lab in Winnipeg. This figure does not include the substantial holdings at the Centennial site or recent additions to the Thompson and Lynn Lake libraries.

2004 field season

The amount of work on core inventories at the northern libraries was reduced from the amounts in the previous couple of years (due to lack of a student assistant). In Thompson, the core piles located in the compound had to be reinventoried due to the expansion of the compound yard in 2003. Drillholes delivered to the library by Valgold Resources from the Gillam area were inventoried and required labelling. (**Note:** Companies conducting diamond drilling in Manitoba should be aware that Manitoba's *Mines and Minerals Act*, Regulation 63/92, Section 9(b) states that, "A person who drills a borehole or performs surface or underground off-property diamond drilling for the purpose of searching for minerals shall clearly label the containers with aluminum tape showing the hole number and depth interval of the core or chips".)

In Lynn Lake, work continued on reboxing and labelling of historical drillcore from surface drilling during the discovery of the Fox mine copper-zinc deposit in the early 1960s. Maintenance work was also completed on the library

compound yard at the Lynn Lake facility.

In The Pas, minor drillcore inventory and drillcore reduction work were completed. A local painting contractor completed the exterior painting job that was started in the fall of 2003.

Manitoba's Mineral Resources Division is in the process of reviewing and proposing changes to some of its policies regarding drillcore storage at its core libraries. These changes are being proposed in an effort to free up storage space and be more selective in the type of exploration drillcore that will be accepted for storage at its core libraries. The Mineral Resources Division intends to inform and consult with the exploration industry prior to the implementation of the proposed policy changes.

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**

Dave Prouse, Resident Geologist
Manitoba Geological Survey
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

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
E-mail: 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. In the case of Thompson and Flin Flon, keys can be obtained at the local Manitoba Geological Survey offices. Keys for access to the Lynn Lake library will only be issued from the Resident Geologist in Flin Flon. For access to the core library in The Pas, keys have been made available at the local office of Manitoba Conservation. Prior arrangements must, however, be made with the Resident Geologist in Flin Flon before the Conservation Office in The Pas can release the keys to the user.

Companies or individuals wishing to donate and place core in any one of Manitoba's northern drillcore 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 location in the storage racks. 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.

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 re-drilling 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

The author wishes to thank Neill Brandson for his logistical support and assistance with the organization of the core library compound in Thompson. Scott Anderson in the Thompson office of the Manitoba Geological Survey is thanked for his assistance in dealing with client requests for use of the Thompson and Lynn Lake library facilities throughout the year.

References

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