## by T. H. Heine and D. E. Prouse

Heine, T.H. and Prouse, D.E. 2000: Activities of the Flin Flon regional office; in Report of Activities 2000, Manitoba Industry, Trade and Mines, Manitoba Geological Survey, p. 12.

## SUMMARY

The Flin Flon regional office continued to supply a variety of services to the mineral exploration and mining communities active in the Flin Flon-Snow Lake region, including recording new mineral claims, maintaining an up-to-date library of provincial claim maps, dealing with claim-status inquiries and accepting assessment-work submissions. Progress was made in the ongoing mines-documentation project for the Flin Flon-Snow Lake region. Efforts are currently being directed toward completing several outstanding reports, including three volumes of the Mineral Deposit Series. The present staff includes a Regional Geologist (Heine), a Resident Geologist (Prouse), and a Mining Recorder or Recording Clerk (position to be filled).

## MINE DOCUMENTATION PROJECT

Based on metal content per unit area, the Snow Lake-Flin Flon-Hanson Lake (Saskatchewan) greenstone belt is the most prolific Paleoproterozoic greenstone belt in the world (Franklin et al., 1995). Recent investigations, conducted mainly under the auspices of the NATMAP Shield Margin and LITHOPROBE Trans-Hudson Orogen projects (see Syme et al., 1998 for references), have made great strides in elucidating the geological framework of this region. Despite the advances made by these studies, detailed investigations of the base- and precious-metals deposits are limited to concise summaries, such as the Manitoba Industry, Trade and Mines Mineral Deposit Series reports, or descriptive papers published over a long period in a variety of journals. The detailed geology of these deposits, particularly relative to the mine workings, is generally poorly documented. Neither has a collection of rock and ore samples representative of the deposits been assembled as a resource for future reference.

This project was initiated with the documentation of the Photo Lake deposit which, at that time, was in the final stages of exploitation. Many of the underground workings were still accessible, so a representative suite of rock and ore samples could be assembled relatively easily. In addition, Hudson Bay Mining and Smelting Co. Ltd. (HBM&S) and Hudson Bay Exploration and Development Co. Ltd. (HBED) agreed to support the project and gave full access to their digital plans, sections and databases of this deposit. As a result of this invaluable co-operation, we now have a suite of reference samples, a number of complete exploration drillholes, a geochemical database for samples collected from the exploration holes, and a set of plans and sections showing the detailed geology of the mine. The sample suite and core are permanently stored indoors at the Manitoba Industry, Trade and Mines core-viewing facility, located at the reclaimed Centennial mine site near Bakers Narrows, approximately 20 km southeast of Flin Flon.

This project has now been expanded to include some of the other deposits in the Chisel Lake area, including the Ghost, Lost and Chisel mines, and the Chisel North orebody. Accurately located samples from the underground workings can no longer be obtained from the first three deposits, so this phase of the program will rely on sampling of drill core. All the mine drawings, with the exception of Chisel North and the Chisel Lake open pit, will need to be digitized, and this work is currently in progress.

It is planned to issue the data sets and interpretation for each mine, possibly as an open file report or a CD-ROM volume. The combination of samples and data will provide a valuable resource for future investigations in this prolific belt.

# REPORTS

Several reports were completed, or are in the final stages of preparation. The Mineral Deposit Series report for NTS area 63N/01 (Nightingale Lake) went to press in June. The report for 63K/10 (Iskwasum

Lake) has been sent for review, and the one for 63K/15 (Elbow Lake) is in the final stages of preparation. With the publication of these reports, coverage of the Flin Flon-Snow Lake region by the Mineral Deposit Series will be complete.

An open file report describing the geology of the Persian Lake area (NTS 63K/13) is in the final stages of preparation. The most recent mapping of this area dates from the mid-1940s and fails to mention the extensive rhyolitic sequence exposed here. This report will be completed by year end.

The activities of the mining and mineral-exploration communities within Manitoba were actively monitored, and summary reports prepared for both internal use and external publication.

# MINING RECORDING

Mining recording and associated functions continued to be supplied through this office by the Mining Recording Clerk. An up-to-date collection of claim maps for the province is maintained for public reference, new claims are recorded and assessment reports are accepted by our office. When requested, reports summarizing the status and history of specific claims are prepared for clients.

#### EXPLORATION ASSISTANCE

The main function of the Flin Flon office is to provide assistance to the mining and mineral-exploration communities, and all clients interested in the geology of the region. Clients are given access through this office to the Precambrian Drill Core Libraries, located in The Pas, Thompson and Lynn Lake. An exterior, secure core-storage repository is available adjacent to the Centennial core-viewing facility for clients who wish to protect their core from vandalism or loss.

Several nonexploration industry clients availed themselves of our services, including several educational institutions and nongeological organizations.

## REFERENCES

- Franklin, J.M., Barrie, T. and Hannington, M. 1995: Volcanic-associated massive sulphide deposits through time; in Precambrian '95, International Conference on Tectonics and Metallogeny of Early/Mid Precambrian Orogenic Belts, Programme with Abstracts, p. 315.
- Syme, E.C., Lucas, S.B., Zwanzig, H.V., Bailes, A.H., Ashton, K.E. and Haidl, F.M. 1998: Geology, NATMAP Shield Margin Project area, Flin Flon Belt, Manitoba-Saskatchewan; Manitoba Energy and Mines, Geological Services, Map A-98-2, scale 1:100 000 and 1:350 000, with accompanying notes, 54 p.

