

# Mineral Inventory activities for 1998

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## Introduction

During 1998 staff of the Mineral Inventory Program focused their activities in two main areas (Fig. 1): the eastern mainland (O'Reilly) and western Cape Breton Island (DeMont). The program to check mineral deposits in the field and update mineral occurrence information for the eastern mainland region is a continuation of an initiative begun in 1997. This initiative resulted from a recognition that although the Eastern Shore region hosts most of the province's significant gold districts, information on them in the Mineral Occurrence Database

is lacking. Program activities in western Cape Breton Island included study of: (1) the Blair River Complex in the northern Cape Breton Highlands; (2) the Mabou Highlands; (3) the Indian Brook - Barachois River area; and (4) examination and sampling of diamond-drill core from the INCO-Scominex gold prospects in the McMillan Flowage area of the central highlands.

Information included in the database during 1998 was publicly released in February 1999 as Version 3 of DP-001b, Mineral Occurrence Database.

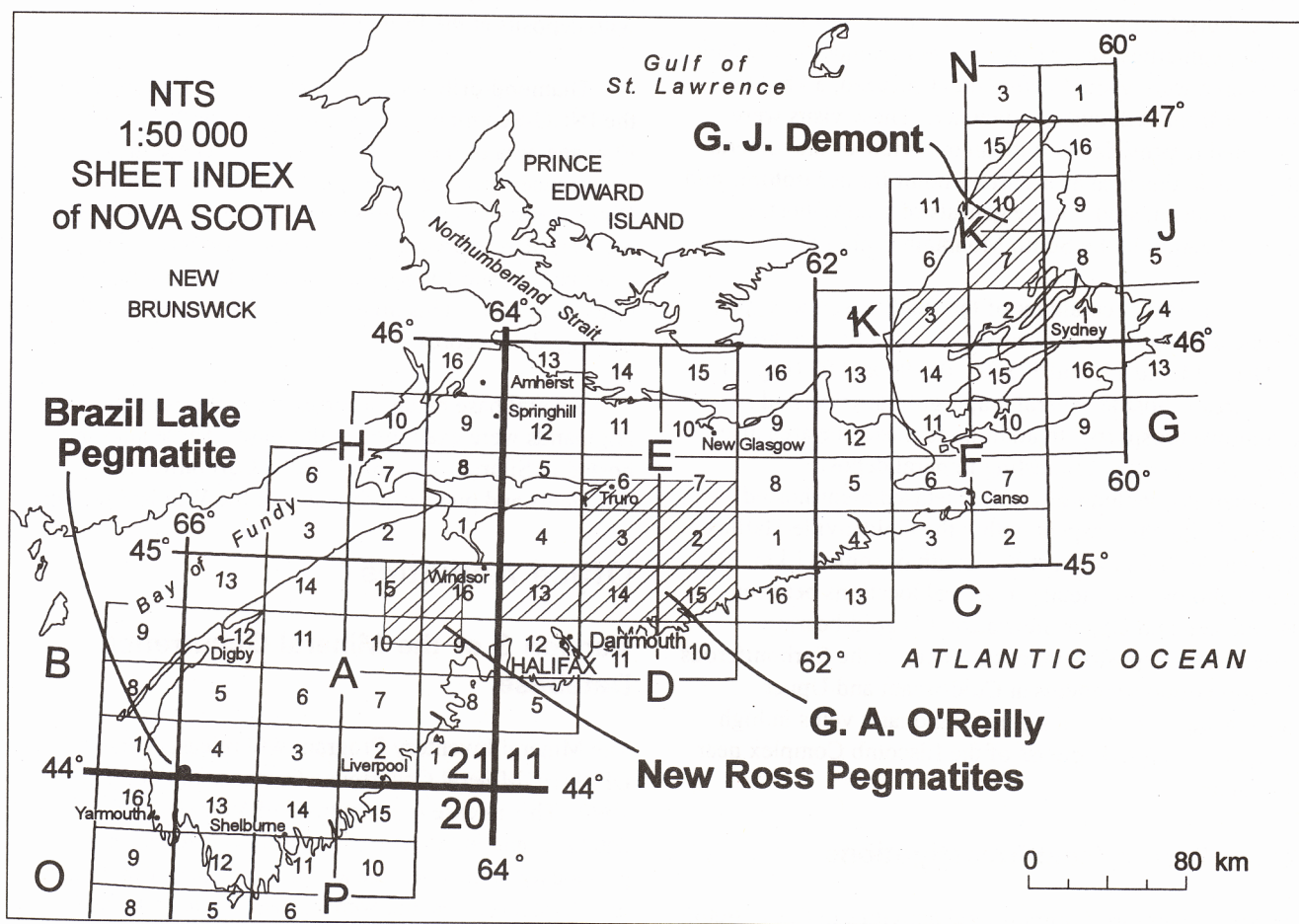


Figure 1. NTS index map of Nova Scotia showing areas of Mineral Inventory Program field activities for 1998.

## Field Activities

Figure 1 illustrates the NTS map areas in Nova Scotia where mineral occurrences were examined by staff of the Mineral Inventory Program in 1998.

### Mainland Mineral Occurrence Investigations

A strong market for tantalum resulted in renewed exploration of our rare-metal pegmatites in southwest Nova Scotia, many of which had never been examined with potential for this metal in mind. During the first part of the field season, field activities on the mainland supported this exploration effort with particular interest being shown in the albite-spodumene pegmatite(s) at Brazil Lake, Yarmouth County, and the columbite-bearing Keddy Mo pegmatite southwest of New Ross, Lunenburg County. In addition to the interest in rare-metal pegmatites, several mineral occurrences in the New Ross area were visited with Sarah Carruzzo, a Ph. D. student from Dalhousie University. These visits were intended to provide her with an overview of the mineral deposits in this area as a starting point for her isotopic and fluid inclusion study of the genesis of granite-hosted mineralization in the South Mountain Batholith.

Most of the remainder of the field season was spent field checking mineral occurrences on NTS map areas 11D/13, 14 and 15, and 11E/02, 03, 06 and 07 (Fig. 1). This area is host to several major gold districts and numerous prospects. In addition to these, the area also hosts several other interesting mineral deposit associations, including: (1) the metasediment-hosted Eastville Zn-Pb prospect within the Goldenville-Halifax Transition Zone over a strike length of some 11 km; (2) barite and/or base metals at several locations between Brookfield and Upper Stewiacke; (3) gold-bearing paleoplacer deposits and occurrences in the Carboniferous Horton Group sediments at Coldstream and Upper Stewiacke; and (4) Pb-Ag-bearing quartz veins in high metamorphic grade gneiss of the Liscomb Complex near Trafalgar.

### Cape Breton Field Investigations

Mineral Inventory Program field activities in Cape Breton Island focused on four main areas. The Blair River Complex north of the Cape Breton Highlands National Park is host to the 3.5 million ton Meat Cove Zn deposit. However, mineral exploration throughout that region

during the development of the Meat Cove skarn deposit resulted in discovery of about a dozen other mineral occurrences. These sites were field checked during the past season and will be added to the Mineral Occurrence Database. In addition, the industrial mineral potential of anorthosite and syenite units of the Blair River Complex was also examined.

The area between Indian Brook and the Barachois River on the eastern margin of the Cape Breton Highlands hosts several prospects and occurrences of a Au-Ag-Te association. This mineral association is little understood and poorly documented, but has interesting potential. Minerals occur as sulphide-telluride-bearing quartz veins hosted in shear zones, a mineralization style and elemental association comparable to veins mined at the former Franey Mine on Clyburn Brook in Cape Breton Highlands National Park. The Indian Brook-Barachois occurrences were examined in order to compare them with deposits at the former Franey Mine.

Diamond-drill core was examined and sampled from the INCO-Scominex gold prospects in the McMillan Flowage area of the central highlands. These mineral occurrences were added to the Mineral Occurrence Database prior to the 1998 field season. The drill core was sampled to provide thin sections for petrographic examination and for assays to determine elemental levels other than gold. This information will be added to the existing data records.

Several base metal occurrences in the Mabou Highlands were examined in the field. These sites are hosted in Silurian volcanics, and in Carboniferous sediments and marine carbonates of the Windsor Group.

## Office Activities

### Version 3 of the Mineral Occurrence Database

The Mineral Inventory Program will release Version 3 of DP-001b, Mineral Occurrence Database in February 1999. This release is an upgrade of Version 2 of the database, and includes 104 mineral occurrences not previously in the database as well as information updates to 190 occurrences that were already in the database. With Version 3, the Mineral Occurrence Database now has information on 1164 metallic mineral occurrences and 849 industrial mineral occurrences.

The release of Version 3 also marks a change in Branch policy regarding the Mineral Occurrence Database. Previous releases required that clients purchase the two-disk set containing the updated files. With Version 3, and future releases of the Mineral Occurrence Database, all clients who have purchased earlier versions of the database may obtain the latest version by mailing or bringing in their original data disks and the data files will be updated to the current version free-of-charge.

We also wish to clarify that the Mineral Occurrence Query Program, the computer program used to browse and query the Mineral Occurrence Database, remains as Version 2, DP-001a. Data files in the new release (Version 3) of the Mineral Occurrence Database are completely compatible with Version 2 of the Query Program.

