

MINERAL OCCURRENCE DATA SYSTEM

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The Mineral Occurrence Data System (MODS) is a two-part project designed to offer an efficient information service on all the mineral occurrences in Newfoundland and Labrador. It consists of a manual Mineral Inventory File and a computerized Mineral Index.

The Mineral Inventory File is part of the National Mineral Inventory and consists of mineral-occurrence descriptions that summarize all data on known mineral occurrences in the province. The file presently contains approximately 3,500 descriptions, including all mineral occurrences for the Island of Newfoundland (Figure 1) and selected areas in Labrador (Figure 2). The file and topographic location maps have been microfiched and duplicates are available upon request.

At present, the Mineral Inventory File for the Island of Newfoundland is being updated. This file was started in 1978, and since then, much new geological mapping and exploration have been carried out and many new occurrences have been discovered. Updates were done in the past only on land tenure and major mineral occurrences. Areas that have been updated over this past year include a major part of 12B and the White Bay area of 12H. It is hoped that all mineral occurrences for the Island of Newfoundland will be updated over the next year.

Compilation in Labrador is continuing in the southern Labrador Trough. We anticipate that with additional compilers, most areas in Labrador will be completed in the next year and prior compilations will be updated.

Mineral-occurrence maps that have updated geological bases have been published at a 1:250,000 scale and are available upon request. In addition selected areas have been published at 1:50,000 and 1:100,000 scales. These maps contain locations, a listing and a brief description of the occurrences. During the next year 1:250,000 mineral-occurrence maps will be released for areas 1M and 12A.

The computerized Mineral Index contains information selectively extracted from the Mineral Inventory File. The purpose of the index is to organize important data so that a wide variety of retrievals can be made. It is presently being transferred from the Newfoundland and Labrador Computer

Services, where it has previously resided, to the Division's computing system. Work will be done on the file over the next year in order to make it more accessible to people who want to use it.

The manual Mineral Inventory File is used as a quick reference to specific deposits. Exploration company personnel frequently request information on a particular mineral showing or prospect. This is particularly true of those companies new to the province or those moving into new areas. Generally, this preliminary research is done at the Department of Mines by government personnel. However, since a large part of the file has been microfiched, it is available to all companies at a reasonable cost.

The Mineral Inventory File is used daily by government geologists in land-use planning. Advice is given to various departments of government in establishing wilderness areas, hydro developments, provincial and national parks, and any other developments that may conflict with future mineral exploration and development. In addition, municipal councils and the Department of Municipal Affairs are advised of the location, extent, and nature of mineral deposits in specific areas, so that new housing and commercial developments, municipal parks, water reservoirs and sewage-disposal systems can be located, where possible, in areas of low mineral potential.

Copies of the file are made available to the various agencies of the federal government such as the Mineral Policy Sector and the Geological Survey of Canada. These are then adapted to the National Mineral Inventory, MINSYS and CANMINDEX.

The file is available to anyone who is researching mineral deposits in the province. It is useful to students who are writing papers on specific mineral deposits and to company and government personnel who are writing proposals for future work, or preparing information brochures about particular areas.

Using computers, the retrieval capability of the Mineral Index is optimized and complex retrievals can be made that would be virtually impossible if a manual system were used.

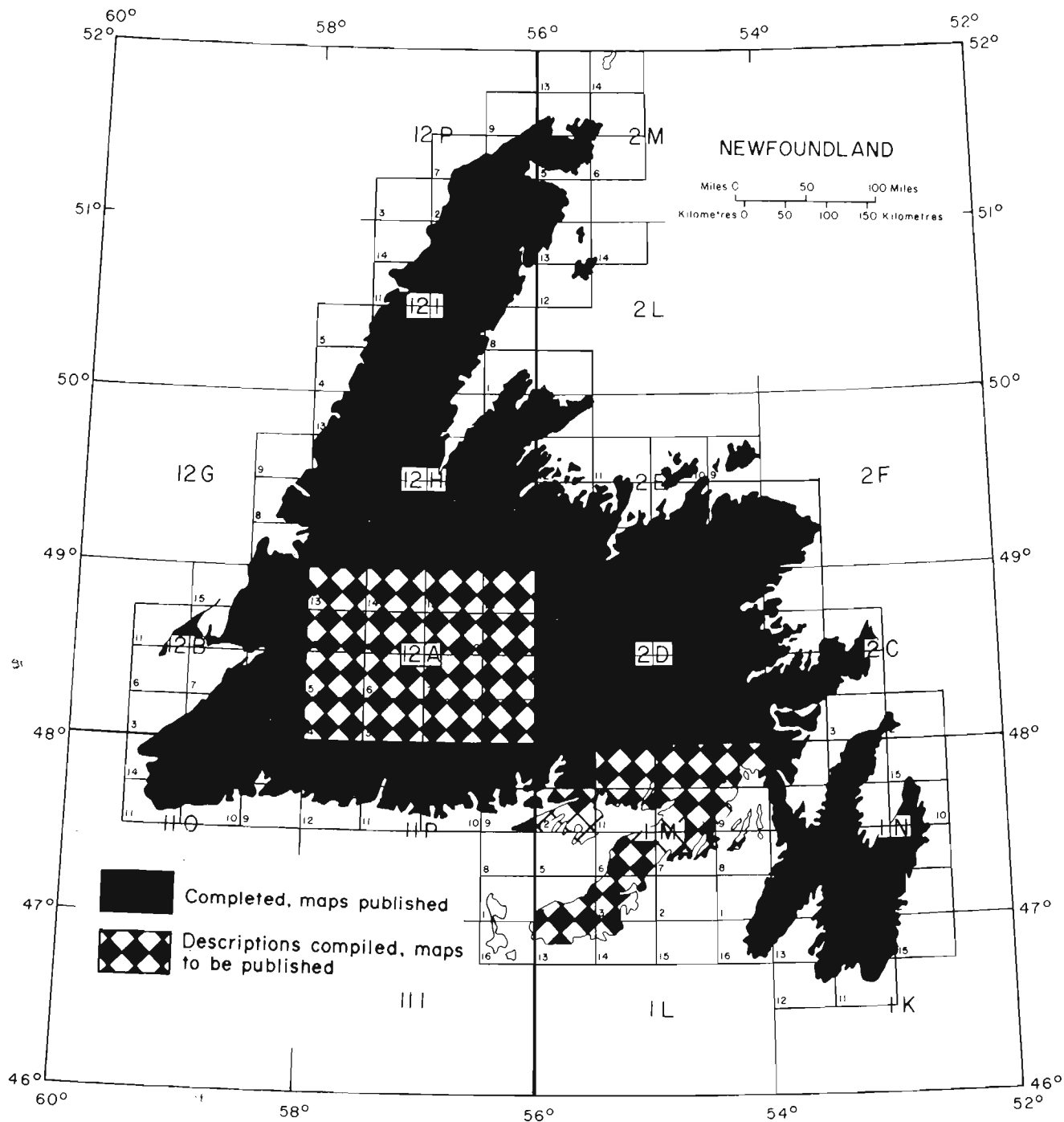


Figure 1. Index map for Mineral Occurrence Data System project, insular Newfoundland.

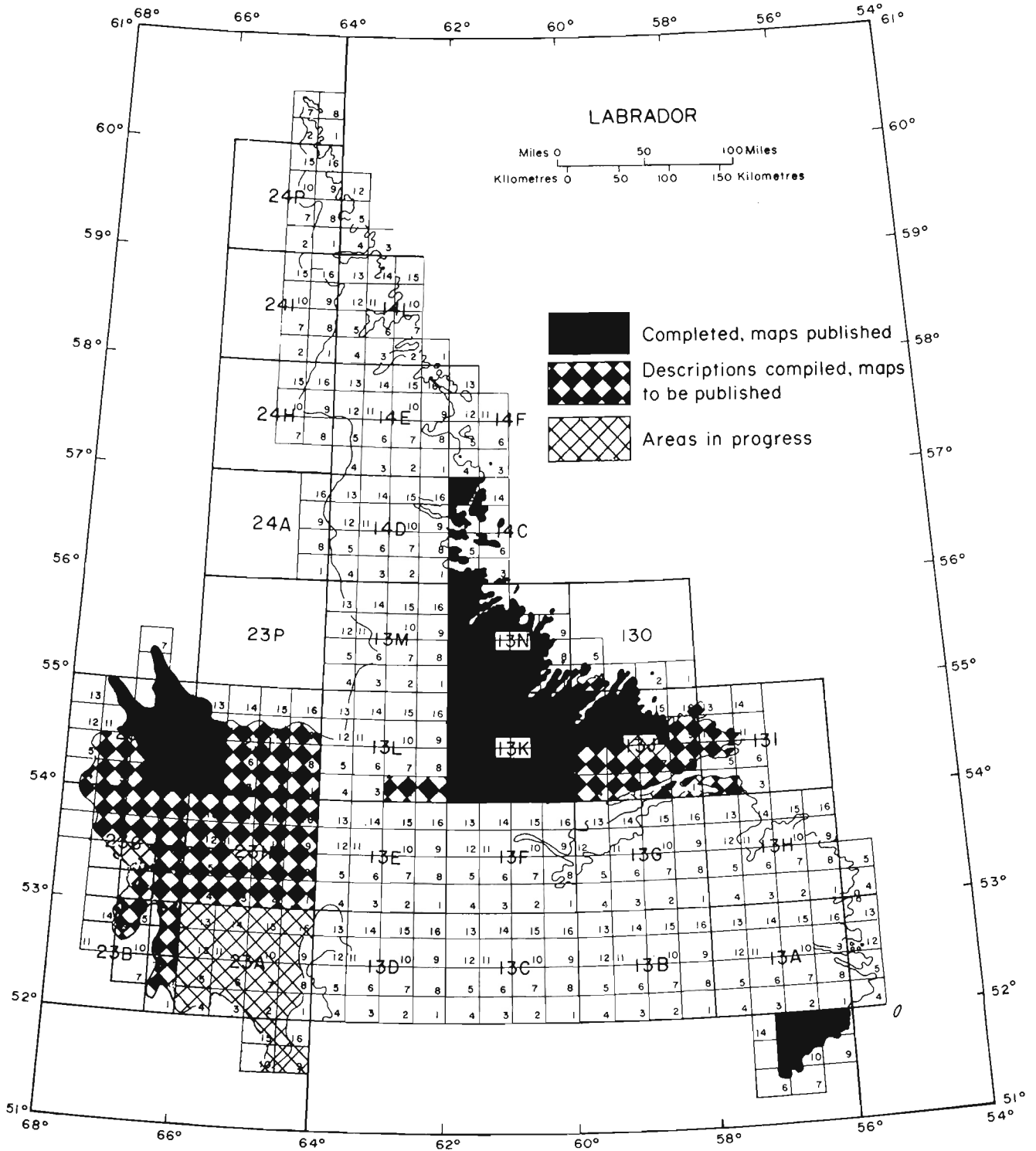


Figure 2. Index map for Mineral Occurrence Data System project, Labrador.