

CORE-STORAGE PROGRAM, 2000

A. Harris and S. Cochrane
Mineral Lands Division
Mines Branch

ABSTRACT

The Department of Mines and Energy currently operates six core-storage libraries that are located at St. John's, Springdale, Buchans, Baie Verte, Pasadena and Goose Bay. These facilities house in excess of one million metres of core samples collected from mineral exploration projects in Newfoundland and Labrador. This report summarizes activities during 2000 and presents an overview of the operations of the core-storage program.

PROGRAM REVIEW

In 1979, the Department of Mines and Energy, recognizing the technical value and potential economic value of drill-core samples produced by mineral exploration companies in the province, began a systematic program of core collection and storage.

The first years of the program were devoted to locating and salvaging core samples at abandoned mineral exploration drill projects throughout the province, and transporting them to temporary storage sites. Initially, three core-storage libraries were constructed, with the St. John's library opening in 1980, and the Goose Bay and Pasadena core libraries opening in 1982. The core collection in these libraries totalled 120 306 m by November, 1982.

During the 1980s, the Department acquired three additional core libraries in central Newfoundland. A core library at Springdale was acquired from British-Newfoundland Exploration Company in 1987, complete with their total drill-core collection of 48 880 m from more than 25 years of mineral exploration in Newfoundland. The Buchans cotenancy of ASARCO/Abitibi Price donated a building and the Buchans core collection, of approximately 420 983 m of core samples, to the Department in 1988. Subsequently, the Department established its largest core library at that location. The sixth core library was established at Baie Verte in 1989 and by that time the core sample collection had grown to 675 783 m.

Core collection and donations by mining and mineral exploration companies to the core-storage program continued during the 1990s to the point where five of the six libraries in the system are now filled to capacity and outdoor storage is utilized at all locations except Goose Bay. A mile-

stone of 1 000 000 m of core samples in storage was reached in 2000 and the current core collection stands at approximately 1 001 184 m. The Department is currently investigating the possibility of acquiring a second core library in Buchans, which would effectively increase core-storage capacity by approximately 360 000 to 400 000 m.

Use of the core-storage libraries and the core collection has remained at a high level since visitation statistics were first kept in 1982. Since 1982, the client groups (primarily mineral exploration industry personnel) have made 1 100 separate visits to the core libraries and have conducted 3 465 mandays of work in the facilities. They have examined 317 277 m of core samples from 2082 drillholes and have taken 8162 core samples for further analytical work.

2000 FIELD ACTIVITIES

During 2000, the core-collection effort focused on collecting core samples from mineral exploration drill projects in central Newfoundland and in Labrador.

A total of 23 418 m of core samples, Table 1, were added to our core collection in 2000 bringing our total core-sample collection in storage up to 1 001 184 m.

All core samples in Department core libraries are available for inspection by interested parties and a catalogue of all core samples is available, free of charge, from the Department of Mines and Energy.

USING THE CORE LIBRARIES

Any person who wishes to visit either of the core libraries (Figure 1) for the purpose of examining core samples should provide advance notice to the person in charge

Table 1. New cores added to the core-storage collection

Company	Property	Length(m)
Royal Oak Mines	Hope Brook	3294
Fort Knox Gold	Wings Point	360
Fort Knox Gold	Twilite Property	1820
Noranda Exploration	Glitter Advance	1763
Noranda Exploration	Lake Bond	1900
Noranda Exploration	Long Lake	6479
Noranda Exploration	Burnt Pond	803
Corner Brook Pulp and Paper	Hughes Lake	403
Braithwaite Minerals Inc.	Colblow Pond	347
Voisey's Bay Nickel	Kiglapaits	1431
Columbia Yukon	VBE	164
Tagalder Inc.	Kiglapaits	360
Pacific Golden Spike	Annakhtalak Bay	1200
Kernow Resources	Sachem Bay	933
Tapestry/Portman	Okak Bay	420
Agra Earth & Environmental	Muskrat Falls	612

of the particular core library. The Pasadena core library is staffed on a full-time basis by one employee and is open to the public during regular government office hours. Advance notice of one day is required in order to properly accommodate visitors to the Pasadena core library. Visitors to the St. John's core library should also provide advance notice of one day and advance notice of one week is required to properly accommodate visitors to the Goose Bay core library since it is not staffed on a full time basis. Visits to the Springdale, Buchans and Baie Verte core libraries require a minimum notice of two days.

The indexing system in all three core libraries is based on the National Topographic System (NTS). Core samples from each drillhole are assigned a unique master number based on the 1:50 000-scale topographic sheet on which the drillhole collar is located. A manual index card file forms the basis of this system in conjunction with a 1:50 000-scale drillhole location map file, which shows the location of all drillholes from which core samples have been catalogued.

Each core library also contains a file of all available data, i.e., drillhole logs, cross sections, and assay results for all core samples stored. The company drillhole number and the assessment file in which the drilling was reported are referenced on the index card. The manual index card file and the map index are supplemented by a computerized drillhole index, which contains all of the information on the previous two indexes. The computer drillhole index file functions as

a permanent master file from which catalogues of all of our drill-core holdings are updated yearly and printed for distribution at the Department's annual Review of Activities each November. The file is resident on microcomputers in the Department's St. John's office and in the Pasadena core library where it is available for production of customized indexes.

All six core libraries have core examination areas that contain or share rock cutting equipment, a core splitter and a stereomicroscope with another core library.

The taking of samples is generally permitted where doing so does not destroy any lithological sequence or leave gaps in the drillhole record. The smallest size sample that is useful is taken and the minimum amount of core that must be left in each core box is a one quarter size split of the original core. The user must complete a '*Request to Sample Form*' (Appendix 1) before sampling is permitted. All core samples, pulps, powders, thin sections, and any other materials generated from the core samples must be returned (along with a copy of the results of any work done on the samples) to the core library within one year from the date the samples were taken. The user shall be responsible for costs incurred in returning samples to the core library.

There are no fees charged for the services provided by the core-storage program, however, patrons making extensive use of the trim saws to sample drill core are required to supply their own blades or replace the blades that are used.

PLANS FOR 2001

Plans for 2001 include collection of representative core samples (complete drillholes) from drilling projects in Labrador conducted during the Voisey's Bay mineral exploration rush and the collection of all available core samples from the Tally Pond and adjacent areas in central Newfoundland. There are approximately 87 545 m of core samples at various field locations across northern Labrador and the effort to collect and preserve representative drillholes for the use of future explorationists working in the region is projected to begin in 2001.

The core-storage information on the Department website is being upgraded and a listing of all core samples in the system complete with locational and other related data should be posted to the site in 2001.

Anyone requiring further information on the core-storage program or wishing to visit either of the core libraries should contact the people listed below.

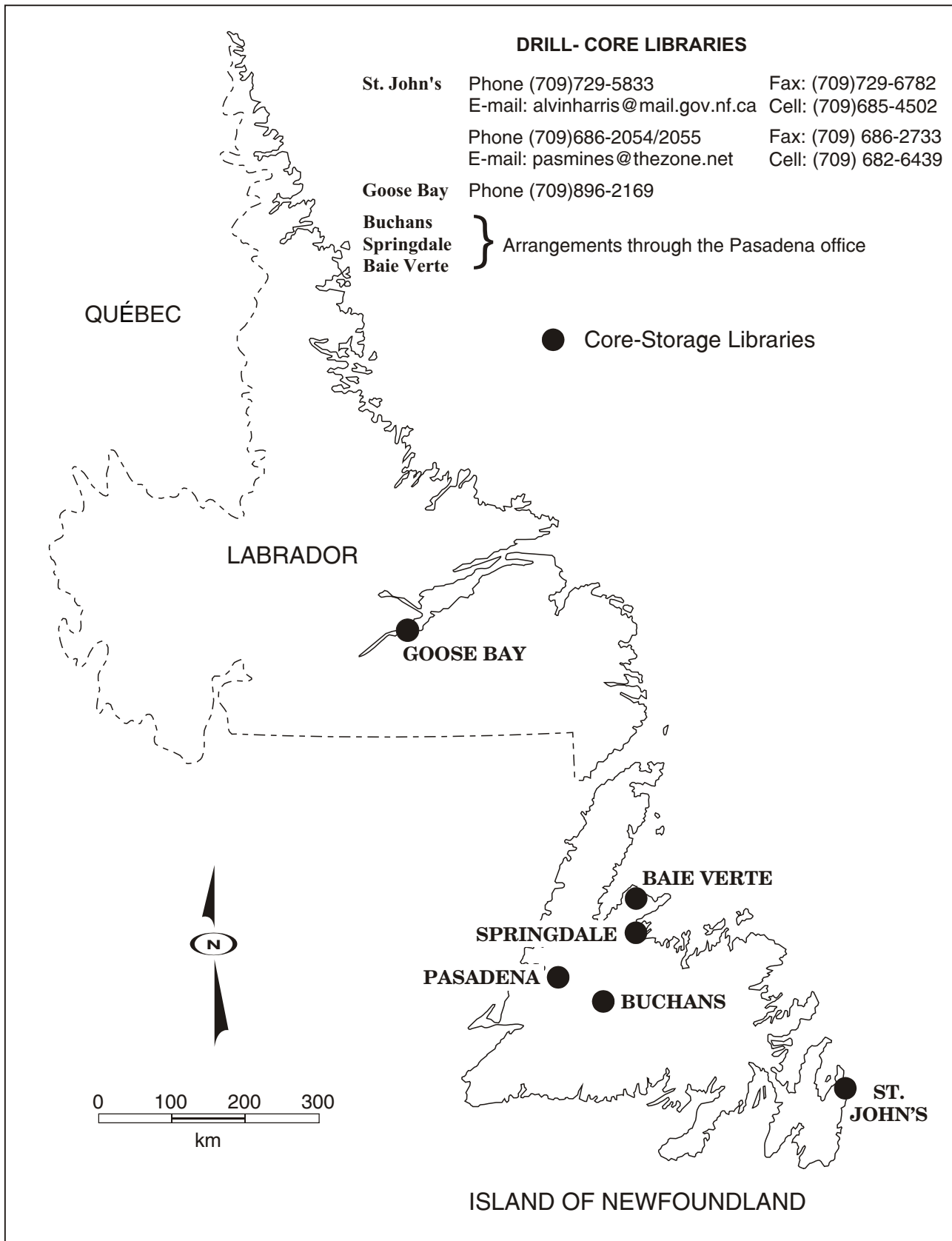


Figure 1. Core libraries in Newfoundland and Labrador.

Project Geologist - Core-Storage Unit (Alvin Harris)
Department of Mines and Energy
P.O. Box 8700
St. John's, Newfoundland
A1B 4J6
Phone: (709) 729-5833 Fax: (709) 729-6782
Cell: (709) 685-4502
E-mail: alvinharris@mail.gov.nf.ca

Core-Storage Geologist (Pasadena) (Stewart Cochrane)
Department of Mines and Energy
Dr. A.K. Snelgrove Core Library
Pasadena, Newfoundland
A0L 1K0
Phone: (709) 686-2054, 2055 Fax: (709) 686-2733
Cell: (709) 682-6439
E-mail: pasmines@thezone.net

APPENDIX 1

CORE-STORAGE UNIT

Request to Sample Core

USER NAME: _____

COMPANY/AFFILIATION: _____

ADDRESS: _____

NATURE OF PROJECT: _____

WORK TO BE CONDUCTED
ON SAMPLES: _____

DRILLHOLE NOS: _____

SAMPLE INTERVALS: _____

SIZE AND SHAPE OF SAMPLES: _____

REQUEST DENIED/GRANTED (REASON): _____

DATE: _____ CORE-STORAGE GEOLOGIST: _____

NOTE: All core samples and/or pulps, powders and thin sections, etc., generated from core samples must be returned to the core library at the end of a previously specified period. A copy of all assays and other analytical work conducted on the samples is also required at the end of this period.

RETURN DATE: _____ SIGNATURE: _____