

CORE-STORAGE PROGRAM, 2001

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ABSTRACT

The Department of Mines and Energy currently operates six core-storage libraries, located at St. John's, Springdale, Buchans, Baie Verte, Pasadena and Goose Bay. Currently, 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 2001 and presents an overview of the operations of the core-storage program.

2001 FIELD ACTIVITIES

During 2001, the core collection effort focused on collecting core samples from mineral exploration drill projects in central Newfoundland and in Labrador.

In insular Newfoundland, a total of 32 751 m of core samples (Table 1) were added to the core collection in 2001 bringing the total core sample collection in storage up to 1 033 935 m. In Labrador, approximately 1400 m of core samples from various drilling programs conducted by NDT Ventures Ltd. in 1996-97 were prepared for shipment in 2002, from Saltwater Pond to the Goose Bay core library.

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

Anyone who is planning to visit any of the core libraries (Figure 1) for the purpose of examining core samples, should provide advance notice to the person in charge of the particular core library. The Pasadena core library is staffed on a full-time basis 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 because 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.

Table 1. Cores added to the core collection facility during 2001.

Company	Property	Length(m)
Noranda Exploration	Beaver Lake	621.0
Noranda Exploration	Dragon Pond	1,446.0
Noranda Exploration	Epoch Option	1,174.5
Noranda Exploration	Glitter Advance	274.5
Noranda Exploration	Glitter Pond	180.0
Noranda Exploration	Glitter West	330.0
Noranda Exploration	Great Burnt Lake	360.0
Noranda Exploration	Haven Steady	6,061.5
Noranda Exploration	Isthmus Grid	150.0
Noranda Exploration	Jacks Pond	2,502.0
Noranda Exploration	Lemarchant Grid	1,521.0
Noranda Exploration	Rogerson Lake	1,137.0
Noranda Exploration	Point Leamington	1,309.5
Noranda Exploration	Roebucks Brook	336.0
Noranda Exploration	Skidder Brook	652.5
Noranda Exploration	Burnt Pond	90.0
Noranda Exploration	Spencers Pond	225.0
Noranda Exploration	South Quinn	306.0
Noranda Exploration	Tulks East	423.0
Noranda Exploration	Tulks West	762.0
Noranda Exploration	Victoria Lake	114.0
Altius Minerals Corp	Mustang Zone	1,282.5
Altius Minerals Corp	Rolling Pond	1,415.0
Vinland Resources	Triangle Pond	1,069.8
Vinland Resources	Farm Grid	690.0
Vinland Resources	Buchans Junction	1,931.8
Richmont Mines	Nugget Pond	4,804.6
Epoch Capital Corp	Miles Cove	260.0
Epoch Capital Corp	Lady Pond	324.0
Betts Cove Minerals	Betts Cove	537.6
Bitech Corp	Tilt Cove	460.3

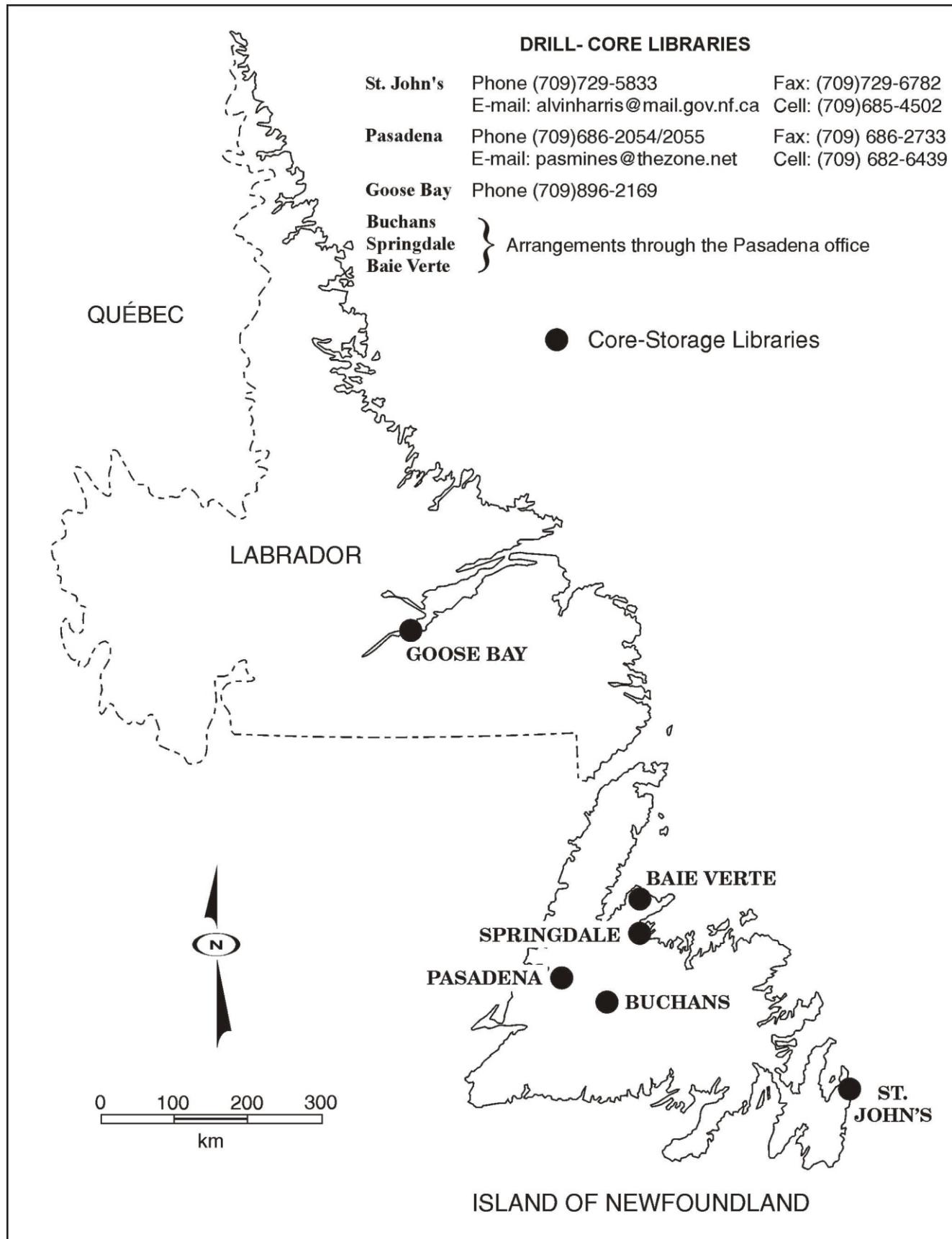


Figure 1. Core libraries in Newfoundland and Labrador.

The indexing system for all core samples in the core libraries is based on the National Topographic System (NTS). Each drillhole, for which there are core samples in storage, is 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 contains a file of all available data, i.e., drillhole logs, cross sections and assay results for all core samples stored. The Pasadena core library also houses a duplicate copy of all drillhole logs for core samples stored at the other five core libraries. The company drillhole number and the assessment file in which the drilling was reported, are referenced on the index card.

A digital database containing all relevant data available for core samples in storage can now be accessed on the Department website. This database will, over the next year, replace the manual index card and map file system currently in use in the core libraries.

All six core libraries have core examination areas; various rock cutting equipment, core splitters, and stereomicroscopes may be shared 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.

DRILLHOLE DATABASE

A digital database containing relevant data on all drillcore samples in storage is now available on the Department website. This database is now accessible as a map layer by using the "Mineral Rights Inquiry Form" page, selecting the Newfoundland or Labrador HTML/JAVA Map and then

checking the drill-core box under the select layers section. This database is updated on a regular basis and will be available in 2002 in table format that can be easily downloaded.

The following information is presented for each drillhole in the database.

MASTER NUMBER - A combination of the 1:50 000 NTS map sheet on which the drillhole collar is located and a number (**ID**) assigned to the drillhole to produce a unique label for each drillhole.

NTS MAP - The 1:50 000 map sheet on which the drillhole collar is located.

ID - Number used in combination with **NTS MAP** to produce unique **MASTER NUMBER**.

YEAR - The year the drillhole was drilled.

COMPANY - The exploration company that contracted the drilling and/or held mineral rights to the property at the time of drilling.

COMPANY NUMBER - The drillhole label assigned to the drillhole by the company that contracted the drilling and/or held mineral rights to the property at time of drilling.

PROPERTY - Informal name applied to the mineral prospect or area in which the drillhole is located or the name of a geographical feature in close proximity to the drillhole collar.

FILE - The Department Geofile number assigned to the mineral assessment report that contains the original drillhole log and location map for the drillhole.

LOG - Indicates whether the original company drillhole log is available for the drillhole.

LENGTH - The total length of the drillhole, in metres, from surface to end of hole.

DIP - The inclination of the drillhole axis recorded in degrees from horizontal.

AZIMUTH - The direction of dip of the drillhole axis.

ELEVATION - Distance above sea level of the drillhole collar, recorded in metres.

OVERBURDEN - Approximate thickness of surficial deposits between surface and bedrock, recorded in metres, at drillhole collar.

SIZE - Nominal diameter of drill core.

LIBRARY - Core library in which core samples are stored.

DATE STORED - Date on which core samples were moved into the core library and added to core collection.

%STORED - Amount of core sample in storage from a particular drillhole recorded as a percentage of drillhole length from bedrock intersection to end of hole.

BOXES - Total number of boxes of core samples in storage for the drillhole.

RACK - Rack location of core samples in core library.

EAST, NORTH, ZONE - One-thousand metre universal transverse mercator grid co-ordinates for the drillhole collar. These co-ordinates are generally taken from company drill-hole location maps found in the Department geofiles. The accuracy of recorded drillhole locations varies widely. The original company location maps should be referenced to locate drillhole collars in the field.

PLANS FOR 2002

Plans for 2002 include continuation of the core collection effort to obtain representative core samples (i.e., complete drillholes) from drilling projects in Labrador conducted during the Voisey's Bay mineral exploration rush. There are approximately 87 545 m of core samples at various field locations across northern Labrador and there will be an ongoing effort, as budgets permit, to collect and preserve representative drillholes for the use of future explorationists working in the region. Core collection will continue in insular Newfoundland as new samples become available.

Refurbishment work on the second Buchans core library is expected to be completed in the spring of 2002. Core samples, which are now stored outdoors at Buchans, will be moved into the new building.

Updates to the drillhole database discussed earlier in this report will be made on a regular basis and work is presently ongoing to summarize all available assay data for core samples in storage. This assay data will be linked to the drillhole database file and will be available on the Department website by April 2002.

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

Project Geologist - Core-Storage Unit (Alvin Harris)
Department of Mines and Energy
P.O. Box 8700
St. John's, Newfoundland
A1C 5T7
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: _____