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CORE-STORAGE PROGRAM, 2009

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ABSTRACT

The Department of Natural Resources operates six core-storage libraries located at St. John's, Springdale, Buchans, Baie Verte, Pasadena and Goose Bay. Currently, these facilities house over one million metres of core samples collected from mineral exploration projects in the Province. This report summarizes activities during 2009 and presents an overview of the operations of the core-storage program.

2009 FIELD ACTIVITIES

Approximately 13 167 m of new core samples (Table 1) were added to the core collection during 2009, bringing the total core-sample collection in storage up to 1 225 405 m.

Table 1. New core samples added in 2009

Company	Property	Length(m)
Celtic Minerals Ltd.	Kingurutik Project	1134
Monroe Minerals	Alexis River	1273
Vinland Resources Ltd.	Seal Pond	5282
Royal Roads Inc.	Buchans	4828
Falcon Ventures Inc.	Salvage Copper Prospect	650

In Labrador, the core-collection effort was limited to core samples collected from the Kingurutik project, and Discovery Consultants delivered the core samples from the Alexis River project. In insular Newfoundland, staff collected core samples from the Seal Pond and Salvage prospects whereas Royal Roads delivered core samples from their Buchans property drilling.

This year saw the beginning of what will be a yearly effort to preserve core samples stored outside the various core libraries for long-term storage. At the Baie Verte core library more than 1500 boxes of core samples were reboxed, relabelled and restacked for continued outdoor storage.

All core samples in Department core libraries are available for inspection by interested parties and a catalogue (in paper or digital format) of all core samples in storage is available, by request, from the Department of Natural Resources.

A digital database containing all relevant data available for core samples in storage can be accessed on the Department website through the Geoscience Resource Atlas at *http:/gis.geosurv.gov.nl.ca/*.

CORE-REDUCTION GUIDELINES

The process of developing core-reduction guidelines was begun this summer at the Pasadena core library. The core-sample collection from the former Daniel's Harbour mine area was selected as a case study. There are 16 416 m (1768 boxes) of core samples from 130 drillholes in storage from this area. All core from the 130 drillholes was examined for consistency in logging between the different workers at the mine while it was in operation. All of the core was photographed and the existing written logs were digitized for addition to the Target for ArcGis software. Compilation of this past summer's work will be completed this winter and after some relogging is completed in 2010, a set of core selection and reduction guidelines (based upon that used by the Geological Survey of Western Australia) will be applied to the core collection and its impact will be evaluated. This will be the starting point to developing guidelines to govern new core selection and core reduction in Department core libraries.

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 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 to properly accommodate visi-

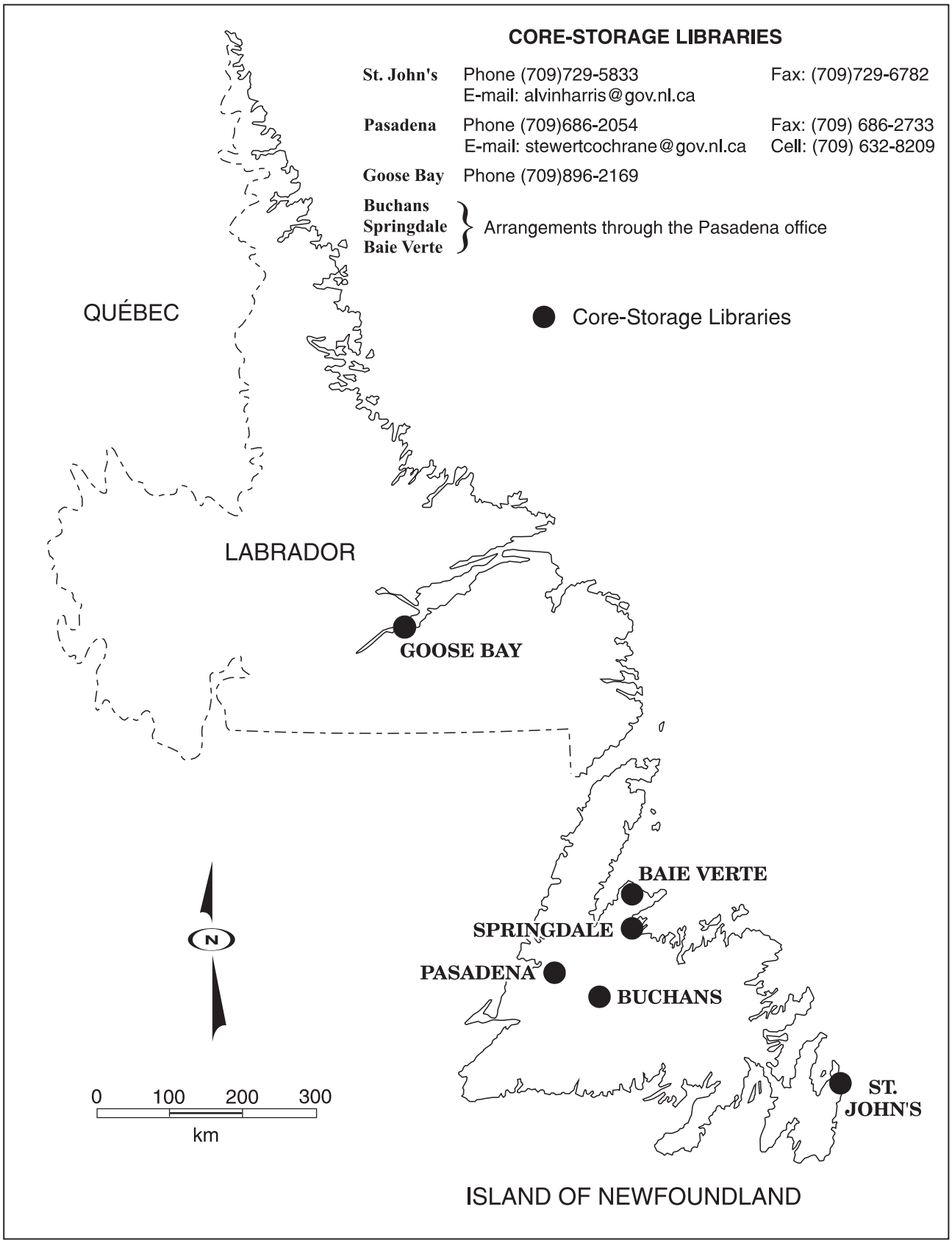

Figure 1. *Core libraries in Newfoundland and Labrador.*

tors 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.

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. 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 company drillhole number and the assessment file in which the drilling was reported are referenced in the digital drillhole database.

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 I) 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.

PLANS FOR 2010

Plans for 2010 include continuation of the core-collection effort to obtain representative core samples from selected drilling projects in Labrador and ongoing core collection in insular Newfoundland as required. The ongoing effort to preserve core samples stored outdoors at the various core libraries will be continued with work planned for the Baie Verte and Pasadena libraries.

Updates to the drillhole database will be made on a regular basis as new core is added to the core libraries; a summary of all available assay data for core samples in storage will be posted on the Department website in early 2010.

The St. John's, Springdale, Baie Verte and Pasadena core libraries are filled to capacity and new core samples are not being accepted at these facilities. Any company wishing to claim assessment credits for delivering core samples to Department core libraries (in insular Newfoundland) must deliver the samples to the Buchans core library. In Labrador, core samples may be delivered to the Goose Bay core library.

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

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E-mail: stewartcochrane@gov.nl.ca

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: _____