Working for the Newfoundland and Labrador Geological Survey and Mineral Lands Divisions
What type of work do we do?

Geological Survey Division
- Terrain Sciences Surveys
- Bedrock Mapping Surveys
- Mineral Deposits Research
- Geoscience Data Management
- Climate Change Research
- Geological Hazard Assessment
- Geophysical Research
- Laboratory Analyses

Mineral Lands Division
- Management of drill core and facilities
Terrain Sciences: Applied Quaternary Geology

- Surficial mapping
- Surficial geology
- Geomorphology
- Reconstruct the paleo environment
- Landform mapping of glacial indicators
- Hazard and materials analysis
- Land use planning,
- Till geochemistry
- Element signature associated with underlying bedrock
- Indicator mineralogy
- Ore and indicator minerals associated with buried mineralization

Applied Quaternary Geology
Surficial geochemistry & Surficial sampling
Surficial mapping: 97% of Canada is modified by glaciation and/or covered in glacial deposits (concealing bedrock).

Frost polygons mapped in the Northern Peninsula.

Ice flow mapping by boat off the coast of the Northern Peninsula.
Surficial sampling for mineral exploration: Exploration geochemistry is often not taught at BSc level, but essential, for working in industry.

Till sampling for geochemistry and indicator mineralogy.
Geochemical results are the first step in defining areas of mineral potential that may (or may not) lead to a deposit.

Ice-flow indicator mapping at Sail Pond deposit

Till sampling at Sail Pond deposit
Lake sediment and water surveys
Climate change studies; monitoring coastal erosion rates

Study at Mistaken Point (UNESCO World Heritage location – No boots allowed!)
Bedrock mapping
Data collection, sampling, prospecting, geochemistry and geochronology to produce geological maps and reports
Mineral Deposits Section
- Mineral deposit research
- Mineral Exploration and Development
- Repository of geoscientific expertise on all types of mineral occurrences
Mapping and sampling mineral occurrences and prospective areas/ core logging/ mine visits
Paleontology research
St. John’s Office Positions

- Database compilation and management
  - Managing geoscience databases
- Geographic Information System (GIS)
  - Digitizing maps
  - Geoprocessing (Managing geodatabases)
- Data archiving
  - Scanning documents and maps
  - Copying and filing
  - Cataloging
- General office duties
Data entry, digitizing geological and geophysical maps, sample processing and cataloging, general office-related duties.
Laboratory Assistant
St. John’s

- Weighing samples, cleaning glass ware, and sample digestions
- Plus sample preparation crushing, grinding and sieving
We provide field-related training in ATV use.
Wilderness First Aid
Helicopter safety
Setting out for the field...

What to expect...
We provide your accommodations in the field!

From rustic abodes ...
...or maybe a small camp

Lake Menihek - 2013
How do we get around in the field?

Sometimes by helicopter....
...float plane
...truck
and of course by foot...
You will apply topics learned in the classroom to a field setting and acquire new skills.
Outcrop interpretation

Measuring glacial striae and landforms
You will get wet, dirty, buggy and... compete with nature!
...but there will also be time to relax!
...visit scenic places
See great geology...
Working for the Geological Survey is a great stepping stone...

Many of the current Geological Survey staff started out as a summer student assistant.

And numerous other former assistants work in Geoscience-related industry and academic fields.
Junior Field Assistant

QUALIFICATIONS

- Undergraduate student with at least 1st year Geoscience/Geography/Environmental studies
- Good health (fit to work in isolated conditions)
- Driver’s license a definite asset!

Duties

- **Field Work**
  - Foot traversing/boat/ATV/helicopter/truck work
  - Site/outcrop observations
  - Compass/GPS work
  - Sampling
  - Data recording
  - Carrying samples and field gear

- **Camp Work**
  - Cooking
  - Camp chores (dishes, clean up, garbage, water, equipment repairs and maintenance)
  - Data entry/interpretation
  - Cutting, labeling, staining and packing samples
  - Camp set-up and take-down
**Senior Field Assistant**

**QUALIFICATIONS**
- Minimum B.Sc. in Earth Sciences or B.A. in Geography
- At least 1 season experience carrying out independent field mapping
- Be in good health and able to work in isolated conditions
- Possess a valid driver’s license
- Familiar with GIS software a definite asset

**DUTIES**

- Assist the project geologist in all aspects of the field project
- Conduct independent daily traversing, field mapping/sampling and data compilation under the supervision of the project geologist
- Supervise junior field assistants in their daily tasks
Office Assistant (St. John’s Office)

QUALIFICATIONS
Undergraduate student with at least 1st year Geoscience / Geography or Environmental courses
Regular office hours (7 hours/day x 5 days/week)
Need to provide your own accommodations

Duties
- Data compilation, map digitization, sample processing / cataloging, file organizing and general office work.
- Familiarity with Geographic Information Systems (e.g. ArcMap©) and database software (e.g. Microsoft Access© ) is a definite asset!
- May include some minor field work
QUALIFICATIONS
At least 1st year geoscience/chemistry and some experience in geochemical laboratory techniques and methods is preferred.

Duties
- General laboratory assistant work (weighing samples, cleaning glass ware, and sample digestions)
- Sample preparation (crushing, grinding and sieving).
Field conditions vary considerably depending on the specific project.

Accommodations may range from a house in a community to isolated field camps.

Daily working conditions can be strenuous and the weather is commonly inclement.

Although field work may be postponed due to inclement weather, field crews may be required to work in poor weather conditions.

Overtime hours are worked most days and this may result in occasional long, tiring work days.
How to apply for summer employment with the Newfoundland Geological Survey?

Visit
www.gov.nl.ca/iet/mines/
The Application Process

Email application to StudentHiringMinesBranch@gov.nl.ca

Approval by Minister

Decision

Employment offer
When filling out application:

- Include your transcript
- List primary phone number
- List primary email address

(check your junk email folder!)
Apply to work for the Geological Survey of Newfoundland and Labrador this summer!

For more information visit:

www.gov.nl.ca/iet/mines/