



STUDENT WORK OPPORTUNITIES

Newfoundland and Labrador Geological Survey and Mineral Lands Divisions

Summer 2024

What type of work do we do?

- Many of the current Geological Survey staff started out as summer students assistants!
- Working at the Survey is an excellent stepping stone to a career in the minerals industry, academia, or other geoscience-related fields.

Geological Survey Division

- Bedrock Mapping Surveys
- Mineral Deposits Research
- Terrain Sciences Surveys
- Geochemical Laboratory Analyses
- Geoscience Data Management & GIS
- Geophysical Research
- Paleontology Research
- Coastal Erosion and Monitoring
- Geological Hazards Assessment

Mineral Lands Division

- Management of drill core and facilities

FIELD POSITIONS



Bedrock Mapping

In the field:

- Field discussions at the outcrop
- Mapping bedrock outcrops & structural features
- Rock sampling for lithology, mineralogy, geochemistry, geochronology, macro and microfossils
- Traversing in remote locations and challenging environments; may involve ATV, helicopter or boat work
- Prospecting and engaging with prospectors
- Navigation and map skills

In the office:

- Field data compilation
- Sample processing (cleaning, cutting, hand sample descriptions, photography and microscope work)

Bedrock Mapping in the field



Mineral Deposits

In the field:

- Field discussions at the outcrop
- Mapping and sampling mineral occurrences and prospective areas for mineralization
- Core logging & visits to active and historical mines
- Valuable interactions with the mineral exploration and mineral development industry
- May involve travel to remote locations, including helicopter or ATV work

In the office:

- Field or core data compilation
- Sample processing (cleaning, cutting, hand sample descriptions, photography and microscope work)

Mineral Deposits in the field



Terrain Sciences

In the field:

- Field discussions about landforms, glacial indicators, surficial geology, environmental change, geohazards
- Data collection: ice flow indicators, surficial mapping
- Surficial sampling (till, soil, humus) for exploration geochemistry and indicator mineralogy
- Evaluation of coastal hazards and drone surveying
- May involve travel to remote locations, including helicopter or ATV work.

In the office:

- Field data compilation and QA/QC
- Sample processing (sieving, geochemical analysis sample prep, microscope work)
- GIS: landform mapping on aerial photographs

Terrain Sciences

in the field



In the field: what to expect



LONG DAYS...



... INSPIRING SCENERY

In the field: what to expect

INCREDIBLE GEOLOGY...



**... AND TIME
TO RELAX!**

APPLY CLASSROOM SKILLS IN A FIELD SETTING



striation measurement



sample collection



wayfinding and surveying



outcrop interpretation



TRAINING & PRACTICAL SKILLS

■ Wilderness First Aid



■ ATV safety



■ Helicopter safety



FIELD TRANSPORTATION

■ **Could be by truck....**
(unless it's stuck)



... or by boat....



... or by air....



... or by ATV....



... and of course.... on foot.



FIELD ACCOMMODATIONS

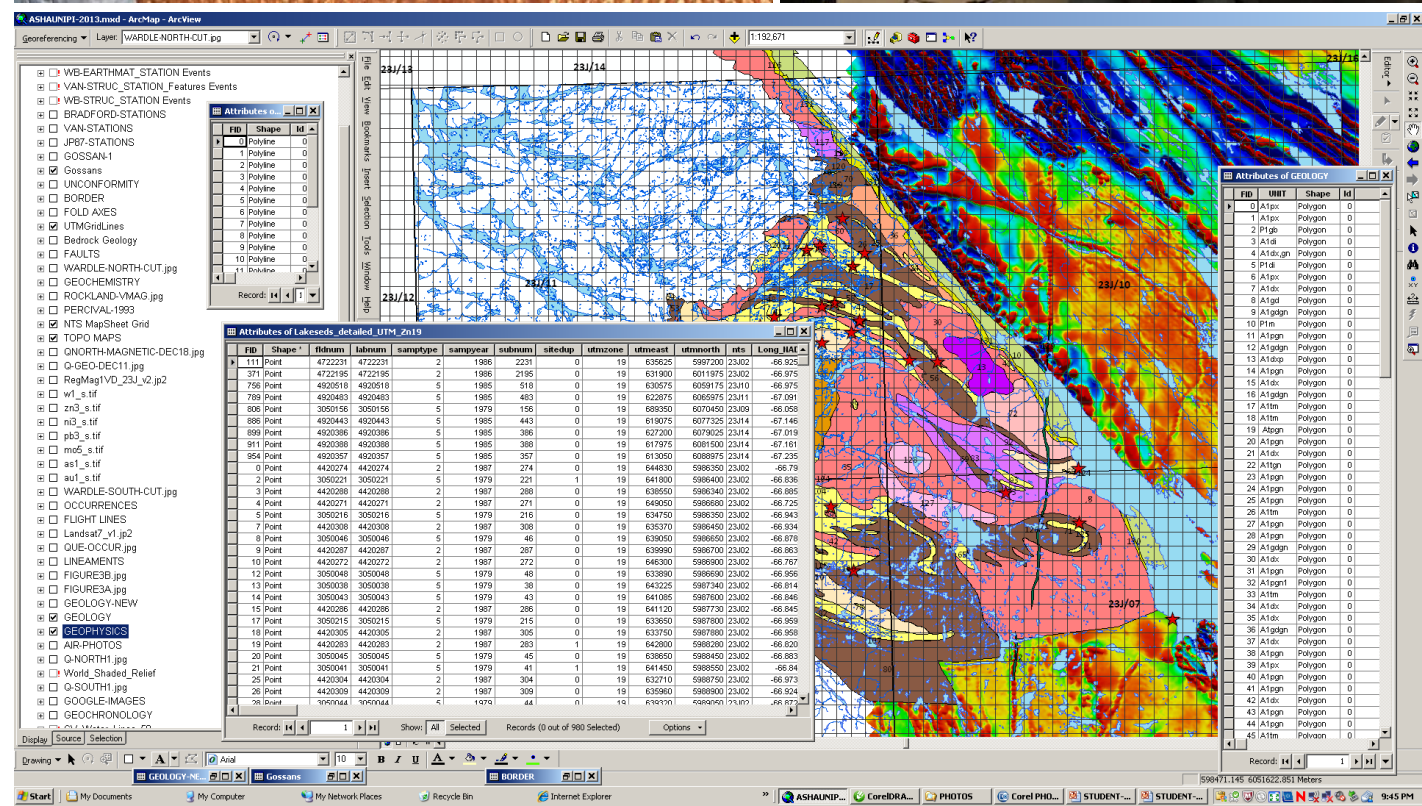


■ From rustic abodes....



... to remote camps!

OFFICE & LAB WORK



In-Office Positions

In the office:

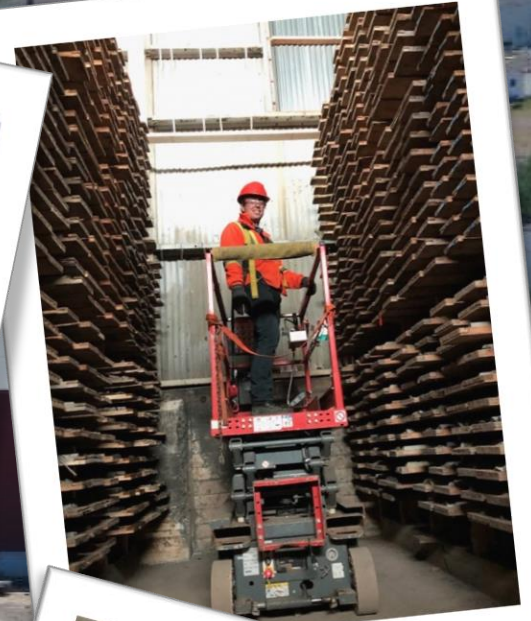
- Data compilation and management — bedrock geology, surficial geology, ice flow indicators, drillhole data, etc.
- Work with the geoscience data team to manage physical and digital archives
- Industry-standard skills: learn to use GIS software
 - Digitize information from paper maps
 - Edit and manage geospatial information in databases
 - Work with remote sensing data (satellite images, drones)
- Rock sample and thin section descriptions
 - Petrographic microscopes
 - Mineral identification with specialized laboratory equipment (e.g. SEM-MLA)
 - Pebble counts for till characterization
 - Rocksaw use and photography

Geochemical Laboratory Positions

In the Lab:

- Professional experience in the provincial Geochemical Laboratory
- Sample preparation and processing
 - Crushing, grinding, sieving, high-precision weighing
 - Sample digestion for specialized analyses
 - Lab maintenance and housekeeping
- Learn about analytical equipment (e.g. ICP-OES) and laboratory data management

Core Storage Program



Core Storage

(Mineral Lands Division)

- **In the field:**

- Travel to scenic Buchans, Baie Verte, Pasadena, Springdale and Goose Bay
- Core logging, cataloguing, geo-tech experience
- Core collection from old drill sites
- Maintenance and upkeep of drill core
- Opportunity to network with geologists working for mineral exploration companies

- **In the office:**

- Drill hole data compilation from historic assessment reports.
- Updating drill core records from field data collection.

Position Descriptions

Junior Field Assistant

QUALIFICATIONS

- Current undergraduate student in geoscience or related field
- 1+ years of degree completed
- Able to work in remote conditions
- *Driving license is an asset*

DUTIES

- Foot traversing/boat/helicopter/ATV/truck work
- Site and outcrop observations
- Sample collection (rock or sediment)
- Carrying samples and field gear over complex terrain
- Shared camp duties: cooking, housekeeping, repairs
- Evening data entry and interpretation
- Sample preparation (cutting, labelling, staining, packing)
- Facilities set-up and tear-down

Senior Field Assistant

QUALIFICATIONS

- Minimum BSc Earth Sciences or BA Geography
- 1+ season of independent field mapping experience
- Able to work in remote conditions
- Valid driving license
- *Experience with GIS is an asset*

DUTIES

- Assist 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
- Shared camp duties: cooking, housekeeping, repairs
- Evening data entry and interpretation
- Facilities set-up and tear-down

Position Descriptions

Office Assistant

QUALIFICATIONS

- Current undergraduate student in geoscience / geography / environmental science
- 1+ years of degree completed
- Regular work hours (35hr/week, M-F)
- Own transportation and accommodations in St. John's
- *Experience with GIS software (ESRI or QGIS), Microsoft Excel and Access are assets*

DUTIES

- All aspects of geoscience data management, including data compilation, map digitization, data cataloguing, file organizing and general office work
- May include rock, till, thin sample preparation, processing, and description
- May include a fieldwork component!

Laboratory Assistant

QUALIFICATIONS

- Current undergraduate student in geoscience / geography / environmental science
- 1+ years of degree completed
- Regular work hours (35hr/week, M-F)
- Own transportation and accommodations in St. John's
- *Previous analytical laboratory experience is an asset*

DUTIES

- Geochemical sample preparation (cutting, sieving, crushing), sample digestion, analysis
- Laboratory maintenance and housekeeping
- Sample archive inventory and management

Some Final Considerations

- For payment information, refer to: <https://www.gov.nl.ca/exec/tbs/working-with-us/student-employment/>
- 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

Visit <https://www.gov.nl.ca/iet/mines/>

Summer Student Hiring Information
Department of Industry, Energy and Technology (IET)

The provincial Geological Survey and Mineral Lands Divisions are hiring!

Please forward any questions to StudentHiringMinesBranch@gov.nl.ca

Dates & Deadlines for Applications

**Submission Deadline: Wednesday, March 15, 4
p.m.**

- To apply, submit your completed application and transcript (unofficial is fine) to:
StudentHiringMinesBranch@gov.nl.ca
- Ensure your application package includes your primary phone number, primary email address (check your junk mail folder for responses!) and a copy of your academic transcript.
- **Interview details, dates and times will be emailed to candidates by March 20, 2024**
- **Employment offers are usually made by mid-May**