

Job Class Profile: Geological Technician**Pay Level: CG-27 Point Band: 534-577**

Factor	Knowledge	Interpersonal Skills	Physical Effort	Concentration	Complexity	Accountability & Decision Making	Impact	Development and Leadership	Environmental Working Conditions	Total Points
Rating	4	4	2	6	3	3	3	1	3	
Points	187	67	13	29	90	65	62	21	32	566

JOB SUMMARY

The Geological Technician performs technical work in the compilation and scanning of mineral exploration data, statistics and maps. Work involves digitizing information, producing databases and maps, and assisting in mineral exploration site inspections.

Key and Periodic Activities:

- Performs tasks related to the Mineral Rights Scanning Project including researching archive files in the Mineral Rights Registries containing information on Title Transfers, Mining Leases, Surface Leases and Confidential Agreements; and scanning the volumes and folios using propriety software and places in directories for verification and eventual posting to an online searchable database.
- Digitizes Historical Tenure Information via ArcMap and verifies digital versions of mineral licences against hard copies by georeferencing, edits as required matching to historical tenure information and plots locations on maps; and ensures corrected tenure information is posted to the website by Geoscience Data Management Section.
- Generates and prints maps of new or changed mineral licences as issued by the Manager of Mineral Rights using MIRIAD and ArcMap application. Copies of the maps are sent to the licence holder and maintained in the records room.
- Produces Mineral Claims Maps as requested by mining companies, prospectors, and the general public. Generates maps in MIRIAD which are then printed, trimmed, folded and mailed out.
- Assists in Mineral Exploration Site inspection to identify violations of the licence approvals, the Mining Act and Regulations. Inspections include basic photography, collection of evidence and driving.
- Prepares tradeshow material for the Mineral Lands Division for the Province's annual Mineral Resources Review using maps, graphs, photos, and text supplied by various sections creates posters using image editing software.

SKILL**Knowledge****General and Specific Knowledge:**

- Knowledge of geological field survey processes
- Knowledge of graphics, spreadsheet and database software

Formal Education and/or Certification(s):

- Minimum: Completion of advanced course work in geology or physical geography at the university level leading to a degree (3+ years) supplemented by or including training in GIS software and image editing. First Aid Training is required for field work.

Years of Experience:

- Minimum: 1-2 years

Competencies:

- Computer skills (i.e. GIS, graphics, spreadsheets and database software).
- Ability to collect evidence and apply inspection techniques and processes.

Interpersonal Skills

- A range of interpersonal skills most used are to listen to, obtain and provide routine information and direction; ask questions to gather data/information. Less frequently interpersonal skills are required to communicate specialized information, and provide technical advice re use of software.
- Most significant contacts are other employees in the immediate work area and Branch, supervisor/manager and exploration industry personnel.

EFFORT

Physical Effort

- The demands of the job do not result in considerable fatigue, requiring periods of rest.
- The position requires occasional lifting of 10 -25 lbs.
- The majority of time is spent in the office at the computer.
- The use of fine finger/precision is required when using computer and mouse to generate statistical reports, spreadsheets, and maps, scan documents and maintain databases. Occasionally using hand tools that require accurate control and steadiness, gross motor skills and machinery that requires controlled movement such as bucksaws, hatchets, or rock hammers when in the field. There is also occasional hiking through rough or hazardous trails and bending and kneeling when conducting an inspection.
- Driving, walking, standing and climbing are required occasionally.

Concentration

- **Visual demands, exact results and precision and attention to detail** are required when researching and reviewing archive files on mineral claims; digitizing data and plotting maps with locations of mineral claim recordings; verifying, editing and updating claims maps and registers; and compiling and preparing graphs and statistical tables.
- Activities such as batch scanning documents and digitization of historical mineral tenure information requires looking at thousands of similar pages of text and maps to identify errors to be corrected is very **repetitious** and requires alertness.
- **Time pressures and deadlines** are experienced when information is received from outside sources and must be reviewed, entered, analyzed, synthesized and reports generated.

- **Higher than normal levels of attentiveness or alertness** occurs when inspections require going deep into wilderness locations, far from help over dangerous terrain.
- Requires **eye/hand coordination** when using mouse and computer software to generate and update maps.

Complexity

- Tasks range from repetitive/well defined to different but related requiring similar skills and knowledge. Examples of tasks include digitizing information, producing databases and maps.
- Required to keep abreast of trends and developments in technology and mineral exploration techniques.
- Challenges/problems/issues can usually be addressed by following procedures and policy.
- Reference material available includes legislation, precedents/previous decisions, policy and system manuals, professional staff and supervisor.

RESPONSIBILITY

Accountability and Decision-Making

- Work tasks and activities are moderately prescribed or controlled.
- Assignments accompanied by general explanation of requirements are received from a superior who evaluates progress on a periodic basis or at the completion of assignments for accuracy, completeness and compliance with general instructions.
- Acts independently and must exercise some discretion and judgement to determine if reports and information submitted by industry meet reporting requirements.

Impact

- Impacts are felt internally within the immediate work area/department/government as well as externally with industry clients and reporting agencies who utilize the information produced. Data submitted is required under legislation and non compliance (insufficient activity on a claim) could result in loss of exploration and mineral rights.
- The consequences of a mistake or error can impact information, systems and processes, finances, natural resources and corporate image.
- The risk or consequences of an error is mitigated by review and supervision by professional superior.

Development and Leadership of Others

- There is no supervision of staff.

WORKING CONDITIONS

Environmental Working Conditions

- Safety equipment and/or precautions are required when conducting field inspection of exploration sites. At those times there is exposure to hazards and undesirable conditions such as hiking and working in wilderness/remote locations. Some safety equipment and precautions such as steel toed boots, hardhat, safety vest, bear repellent and GPS tracking device are required

- There is a moderate likelihood for injuries or illnesses resulting from hazards.
- Majority of time is spent in an open office environment.