**Job Class Profile:** Petroleum Technologist

**Pay Level:** CG-29  
**Point Band:** 622-675

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**JOB SUMMARY**

The Petroleum Technologist performs responsible technical, administrative, promotional and compliance work related to oil and gas exploration, reservoir engineering and drilling and production operations in the province.

**Key and Periodic Activities**

- Participates in the promotion, analysis and regulation of onshore petroleum exploration/resources in Western Newfoundland.
- Participates in the promotion and analysis of offshore petroleum exploration/resources for the province.
- Analyzes geological and geochemical data, information and studies for local and regional assessment of hydrocarbon potential and identification of oil and gas prospects for onshore Western NL and where applicable, offshore NL.
- Assists with the monitoring and review of technical data, such as mudlog and daily drilling reports, submitted by operators during drilling operations, as required by the petroleum regulations.
- Organizes and maintains technical reports, files and geoscience information utilizing PC based graphic software, such as Corel Draw, Corel Photo-Paint, ArcGis and numeric software, such as Excel.
- Represents the Department at petroleum related exhibits and conferences, both in and out of province.
- Assists Manager of Petroleum Geoscience with geological interpretation of Petroleum systems, including but not limited to, reservoir type, locations of petroleum traps (i.e. structural & stratigraphic traps), potential seal rocks for the possible petroleum pool (i.e. tight rock or tight fault), and possible migration pathways.
- Assists in preparing graphics to aid in the evaluation of proposed development plans for oil and gas wells in western NL. Utilizes graphic software (i.e. Corel Draw) to represent hydrocarbon potential and for the collection/representation of hydrocarbon data. Also, develops new promotional / interpretive graphics, Excel worksheets (geochem data), etc.
- Assists with the review of the Authority to Drill a Well document & Final Well Reports according to the geological section of the Petroleum Regulations.
### Key and Periodic Activities

- Stays abreast of the latest technologies (from a geochemical, geophysical and petrophysical point of view) to be able to read and interpret the data from the companies and the results can be used to evaluate hydrocarbon potential in Western NL.
- Conducts site visits to onshore drilling and production operations.

### SKILL

#### Knowledge

**General and Specific Knowledge:**
- Geology
- All aspects of petroleum related activities such as drilling, reservoir and production engineering, geophysical processes and petroleum geology.
- Petroleum geoscience related software and office software

**Formal Education and/or Certification(s):**
- Minimum: 3-Year Diploma in Petroleum Engineering Technology

**Years of Experience:**
- Minimum: 2-3 years combined industry and government experience

**Competencies:**
- Operate a computer to produce geoscience information
- Written and Oral communication skills
- Analytical skills

#### Interpersonal Skills

- A range of interpersonal skills are used such as listening, asking questions, providing routine and complex information, promoting services, gaining the cooperation of others, facilitating meetings, providing advice and specialized information.
- Communications typically occur with employees within the immediate work area, department and in other government departments.
- Most significant contacts are with peers in work area for collaboration in completing tasks; Supervisor/Manager to provide updates on activities and receive assignments and direction and employees in other sections of the department and Government to obtain and disseminate information.

### EFFORT

#### Physical Effort

- The demands of the job do not result in considerable fatigue as majority of tasks and activities are performed in an office environment.
- Lifting or moving objects over 10 lbs is not required.
- Sitting constantly with occasional standing, walking, climbing and driving.
- The use of fine finger/precision work when using a computer to evaluate data is constant.
- Occasionally may be required to travel and hike over rough terrain when on geological field
Concentration

— **Visual concentration** is a regular requirement when looking/working on text and spreadsheets containing geochemistry data, graphs, graphics, photos, diagrams and seismic sections.

— **Auditory concentration** is required to work cooperatively with other technologists to complete work tasks.

— **Repetition requiring alertness** is evident when entering geochemical data into a spreadsheet so as to not enter incorrect values causing errors in interpretation of data. Also, graphics require a high degree of alertness, especially when constructing lithology logs, etc.

— **Higher than normal levels of attentiveness for health and safety** are required when on field trips.

— **Time pressures and deadlines** are occasionally experienced when responding to requests for information from the public and Department Executive.

— **Exact results and precision** are required in the preparation of graphics, for example to represent geochemical diagrams that show thermal maturation data for petroleum potential.

Complexity

— Majority of tasks range from repetitive/well defined to different but related requiring similar skills and knowledge. Tasks tend to be highly technical as they relate to petroleum geoscience.

— Typical problems are associated with petroleum geology relating to onshore Western NL and questions and/or proposals are received regarding the Petroleum Exploration Enhancement Program for Western NL.

— Majority of challenges/problems/issues can be addressed by following procedures and/or guidelines for which a limited number of solutions exist.

— Required to keep abreast of trends and developments in the petroleum industry.

— References available include supervisors and co-workers, published academic papers, Graduate thesis, petroleum regulations, manuals, procedures, technical analysis, review and assessment.

RESPONSIBILITY

**Accountability and Decision-Making**

— Works tasks and activities are generally prescribed or controlled.

— Exercise some discretion and judgement in the performance of technical tasks; interpretation and representation of geological data and disseminating possibly confidential information to the general public.

— Travel, training and purchases require supervisory approval.

— Work is generally reviewed by immediate supervisor.

**Impact**

— Impacts are felt mainly internally within the immediate work area and department.

— Resources affected include information, resource development and corporate image.
— The consequences of a mistake or error such as misrepresenting the potential of oil and gas or releasing confidential information can have an impact on information and corporate image.

— Mistakes or errors are typically resolved within hours of problem identification due to supervisory review of work performed.

## Development and Leadership of Others

— Not responsible for the supervision of staff.

## WORKING CONDITIONS

### Environmental Working Conditions

— Safety equipment such as hard hats, safety boots and glasses and special precautions are occasionally required when working in the field.

— Limited likelihood of minor cuts, bruises, abrasions, minor illnesses, fractures or injuries resulting in partial or total disability.

— Occasional exposure to wet or slippery surfaces, physical dangers, sharp objects and adverse weather conditions when on a geological field trip.