

**Job Class Profile:        Soils 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	3	3	3	3	2	3	2	4	
Points	187	50	19	14	90	43	62	43	43	551

**JOB SUMMARY**

The Soils Technician performs soil data development and mapping services. Conducts field work and utilizes computer software for the input/output of soils data and geographical information.

**Key and Periodic Activities**

- Collects soil data and compiles field maps displaying geographical information and the compilation of soils suitability and capability maps for the Soils Resource Mapping Program.
- Compiles all background information including topographical maps and aerial photographs for specified mapping areas.
- Conducts field work and records specific soils data; collects and processes soil samples in accordance with samples.
- Provides technical support for the use of data loggers.
- Performs equipment, soils reports and map inventory and facilitates inventory and maintenance schedule for ATV's, field equipment and logistical supplies.
- Maintains liaison with other staff in the Agrifoods Branch, other government departments and agriculture industry groups to acquire data for the completion of field mapping projects.
- Prepares activities and attends agricultural fairs and workshops and liaises with public to promote the Soils Resource Mapping Program.
- Conducts routine office duties such as annual soils reports, maintaining map inventory and report filing.

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

- Soils surveying and data collection techniques
- GIS and related mapping application software
- Use of data logger equipment

**Formal Education and/or Certification(s):**

- Minimum: 2 Year Specialized Diploma in Natural Resource Management

**Years of Experience:**

- Minimum: 2 - 3 years

**Competencies:**

- Written and verbal communication skills
- Word processing, spreadsheet and database skills
- GPS and GIS usage

**Interpersonal Skills**

- A range of interpersonal skills are used such as listening, asking questions, providing routine information and maintains liaison with other staff in the Agrifoods Branch, other government departments and agriculture industry groups to acquire data for the completion of field mapping projects. Makes formal presentations when required.
- Communications typically occur within the immediate work area, department and Agrifoods industry.
- Most significant contacts are Soil Specialists to obtain advice and guidance; GIS Staff for day to day activities and Manager and/or Director.

**EFFORT****Physical Effort**

- The demands of the job occasionally result in considerable fatigue when performing field work as a result of walking distances over various levels of topography often in remote locations.
- Lifting or moving objects when conducting soil survey work results from using a shovel, auger and pick.
- The use of fine finger/precision work when using a computer to input and manipulate data is a constant occurrence. The majority of work is performed in an office environment.

**Concentration**

- **Visual concentration** is required when entering data into database, using other software for the output of maps and when operating an ATV during field work.
- **Auditory concentration** is required to liaise with other staff in the Agrifoods Branch, other government departments and agriculture industry groups to acquire data for the completion of field mapping projects.
- **Repetition requiring alertness** is required when entering soil data and using ArcGIS.
- **Higher than normal levels of attentiveness** is required to operate an ATV in remote locations.
- **Time pressures and deadlines** are experienced regularly when field work surveys and other data has to be compiled for soil reports.
- Entering soil data, note taking and the use of GPS while performing soil survey field work to gather information for the output of maps requires **eye/hand coordination** and **exact results and precision**.

**Complexity**

- Tasks and activities are different but allow for the use of similar skills and knowledge and tend to be repetitive and well defined.
- A typical challenge is likely to occur when using GIS for mapping design and preparation.

Most work is performed with defined and standard work processes that can be addressed by following procedures and/or guidelines or may be provided in a team setting.

- Reference material available includes manual, guidelines, references, peers and other staff as well as the internet.

## RESPONSIBILITY

### Accountability and Decision-Making

- Work tasks and activities are generally prescribed or controlled.
- All decisions require the approval of a Supervisor/Manager.
- Discretion can be exercised when prioritizing daily activities and performing time management.

### Impact

- Impacts are felt internally within the immediate work area and department as well as externally with the agriculture industry and general public. Soils mapping and data are widely distributed for respective usage. Resources impacted are processes and systems, information, material and human resources, health, safety and corporate image.
- The consequences of a mistake or error can have a moderate to significant impact on the above mentioned people and resources, however, checks and balances are in place to avoid inaccurate information being distributed.
- A typical error is data being entered into the system incorrectly. Consequences of mistakes or errors are typically identified and resolved quickly.

### Development and Leadership of Others

- Not responsible for the supervision of staff; however, it is involved in development and leadership activities such as providing feedback, orientation and on-the-job training to students hired on a seasonal basis.

## WORKING CONDITIONS

### Environmental Working Conditions

- Occasionally safety equipment is required, such as when operating an ATV. This typically includes a helmet and gloves. Safety precautions such as wearing highly visible vests and hats should be taken when conducting field work.
- There is limited likelihood of injuries or illness resulting from hazards.
- There is occasional exposure to wet or slippery surfaces, temperature extremes, adverse weather conditions and travel. Glare from a computer screen is constant as a result of data input and mapping.