

Job Class Profile: Water Resources Technician IIA**Pay Level: CG-31 Point Band: 690-703**

Factor	Knowledge	Interpersonal Skills	Physical Effort	Concentration	Complexity	Accountability & Decision Making	Impact	Development and Leadership	Environmental Working Conditions	Total Points
Rating	5	4	4	5	4	4	4	1	4	
Points	233	67	25	24	120	87	83	21	43	703

JOB SUMMARY

The Water Resources Technician IIA performs hydro geological work in implementing and administering the Water Resources Management Program and assists senior staff in assessing, developing, managing and controlling the province's water resources.

Key and Periodic Activities:

- Interprets and communicates the Water Resources Act and the Well Drilling Regulations to the general public, industry, public institutions and other government departments and agencies.
- Prepares and issues provincial water well construction licenses and related documentation to water well drillers in the province.
- Oversees the construction and maintenance of monitoring water wells (near real time and analog) involving sophisticated electronic equipment (programming, calibrations, etc), DC power (Solar panels, controllers, Lead-acid and AGM batteries), and establishes communication with GOES Satellite.
- Conducts water sampling for public water supplies and private water wells.
- Provides information for reports, articles, studies, etc.
- Proofreads and maintains all new entries to water well record database.
- Provincial and National travel as required for field work, courses, workshops, seminars, etc.
- Performs well inspections, investigations and field assessment for subdivisions.
- May conduct presentations and write articles as required.

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

- Relevant Acts and Regulations
- Sustainable development
- Hydrogeology, biology, chemistry

Formal Education and/or Certification(s):

- Minimum: Undergraduate Degree in Science (geology, hydrogeology and/or physical geography)

Years of Experience:

- Minimum: 2 - 3 years

Competencies:

- Written and verbal communication skills
- Analytical skills
- Assessment skills
- Ability to calibrate equipment

Interpersonal Skills

- A range of interpersonal skills such as listening, asking questions, providing routine and complex information to interpret and understand simple to complex issues in the practice of groundwater management and gaining the cooperation of others.
- Communication occurs with employees and peers within the organization as well as the general public in dealing with water quality issues. Occasionally there is a requirement to interact with students/trainees, executive members, professional associations and advisers.
- Most significant contacts are Environmental Scientist (participating in joint projects and activities); Resource Manager (for direction, assignments and approvals); and other staff (mail, messages and calendar updates).

EFFORT

Physical Effort

- The demands of the job occasionally result in considerable fatigue as a result of driving long distances to conduct inspections of wells. Performing these activities involves working in awkward or cramped positions.
- Occasionally required to lift or move objects over 50 lbs., such as batteries and coolers and use hand tools that require accurate control/steadiness, such as water quality sensors, drills, soldering equipment, heat guns and depth gauges.
- The use of fine finger/precision work when using a computer, cleaning sensors, performing calibrations, collecting water samples as well as the handling and use of field equipment is a constant occurrence.

Concentration

- **Visual** concentration and **eye/hand coordination** is required when driving, using a computer for extended periods of time, using well cameras to see and interpret images, cleaning water sensors, taking measurements/water samples and using a GPS and camera.
- **Auditory and other sensory demands** such as touch and smell are exercised when conducting well inspections and listening for depth gauges, using tools such as soldering guns, heat guns and determining if gases and other contaminants are present.
- **Time pressures and deadlines** are experienced when scheduling water sampling and accommodating other people's schedule.
- **Higher than normal levels of attentiveness** occurs mainly in the field, such as watching for driving hazards, gases around water wells and working in awkward or confined spaces.
- **Eye/hand coordination** is required when driving, cleaning/calibrating instruments, taking measurements, taking water samples, using a computer and hand tools, deploying and retrieving

water sensors, using a GPS and camera.

Complexity

- Tasks range from repetitive/well defined to different and unrelated. A broad range of skill and diversity of knowledge is required to conduct field investigations, assist with the design of a water well monitoring network, develop solutions to solve such problems as satellite communication and provide advice on water quality/quantity issues.
- Typical problems involve addressing and responding to issues/concerns from the public, industry and institutions, whereby an issue must be defined and an appropriate solution found. An example would be the determination of whether or not a well being drilled is directly interfering with another drilled well. Monitoring wells can involve many challenges including power supply, sensor activity and communications issues.
- Some challenges/problems/issues can be addressed by following procedures and/or guidelines; communicating with other technicians and scientists and occasionally creative problem definition and analysis.
- Required to keep abreast of trends and developments in the field of environmental science, engineering and health.
- Reference material available includes manuals, guidelines, policies, acts and regulations, journals, reference books, colleagues and the internet.

RESPONSIBILITY

Accountability and Decision-Making

- Work tasks and activities are moderately prescribed or controlled.
- Authority to purchase some supplies required when conducting field work.
- Travel, overtime, larger purchases, training as well as procedure and policy changes require supervisory approval.
- Discretion and judgement is exercised in providing interpretation of acts and regulations when considering a possible infraction. A decision to proceed with a charge depends on the severity of the offence and any extenuating circumstances.

Impact

- Impacts are felt internally within the immediate work area, department and organization as well as externally with clients and general public. Resources affected include equipment (used to conduct water quality samples); processes and systems (to ensure work is not hampered); information (to ensure quality sampling and results); finances (if remedial work is required due to poor decisions) health, safety and corporate image.
- The consequences of a mistake or error in water sampling and analysis or when issuing a licence for the construction of a new well can have a significant impact on public health if done incorrectly. This can also affect the above-noted resources.

Development and Leadership of Others

- There is no supervision of staff
- May provide orientation to new staff.

WORKING CONDITIONS

Environmental Working Conditions

- Occasionally safety equipment such as boots, glasses, hard hat, gas monitor/detector and gloves are required when collecting water samples.
- There is limited likelihood for injuries or illnesses resulting from hazards.
- There is occasional exposure to unusual/distracting noise, dirt, dust, glare, fumes, limited ventilation, limited lighting, hazardous chemicals, toxic or poisonous substances, odours, wet or slippery surfaces, electrical shocks, awkward or confining spaces, temperature extremes, fire, physical dangers, sharp objects, heavy machinery, adverse weather conditions and travel. This occurs when conducting field work, visiting pump houses, accessing water well pits and inspecting wells.