



IDENTIFICATION

Department	Position Title	
Environment and Climate Change	Laboratory Assistant	
Position Number	Community	Division/Region
23-14263	Yellowknife	Water Monitoring and Stewardship/HQ

PURPOSE OF THE POSITION

The Laboratory Assistant (Assistant) supports the efficient operation of the Taiga Environmental Laboratory by receiving and analyzing samples as well as assisting the Manager with financial transactions and other administrative services.

SCOPE

Located in Yellowknife and reporting to the Manager, the Taiga Environmental Laboratory (Manager), the Laboratory Assistant supports the day-to-day operations of both the laboratory and office sections of the TEL.

The Taiga Environmental Laboratory (TEL) is the only full-service environmental analytical laboratory in northern Canada. The TEL performs a wide range of chemical, molecular and microbiological analyses on water (freshwater, ground water, drinking water, industrial effluents, and sewage). The lab is accredited by the Canadian Association for Laboratory Accreditation (CALA) and the scope of accreditation includes 248 individual parameters in four distinct sections: Inorganic, Organic, Trace Metals and Molecular/Microbiology. In addition to standard services, the TEL offers a variety of specialized services including rush sample services, scientific training, the review of QA/QC plans for regulatory permits, and public education.

The TEL provides approximately \$1.4 million of environmental testing services each year to the following clients:

- internal GNWT departments including Environment and Climate Change (ECC), Health and Social Services (HSS), and Municipal and Community Affairs (MACA);
- federal government agencies, including Crown-Indigenous Relations and Northern Affairs Canada and Environment and Climate Change Canada;
- Indigenous governments and community/municipal governments;



- industry (e.g., mines), consultants, and other local businesses; and
- researchers from academic institutions working in the north.

The TEL performs over 40,000 tests a year; analytical results provided by the TEL are used by its clients to:

- ensure the safety of drinking water in all NWT communities;
- track pathogen levels (e.g., SARS-CoV-2) in wastewater to inform public health actions;
- evaluate trends in environmental contaminant levels in freshwater from across the NWT;
- ensure regulatory compliance of communities and government with the *Public Health Act* and *Water Supply System Regulations*; and
- ensure regulatory compliance of communities, remediation projects, and industries with the conditions of their water licences under the *NWT Waters Act* and *Mackenzie Valley Resources Management Act*.

The Assistant supports the Manager in ensuring sound management of the TEL's financial resources. This includes paying suppliers, invoicing clients, and tracking expenditures against the TEL budget. The incumbent also maintains the office portion of the TEL, maintains records, and assists the Manager in the procurement of goods and services.

Approximately half of the Assistant's daily work will be performed in the laboratory sections of the TEL. The Assistant works primarily in one of the five sections of the lab: Sample Login, Inorganics, Organics, Trace Metals, or Molecular/Microbiology; however, the Assistant will be cross-trained in other sections as required for the effective operation of the TEL. When working in the lab, the Assistant is supervised by the Section Lead for whichever section the Assistant is assigned to.

The incumbent works independently and as part of the TEL team. The incumbent also meets regularly with the Manager to receive written or verbal assignments. The incumbent communicates daily by telephone or email with TEL clients, TEL suppliers, and with staff from ECC as well as financial and procurement shared services.

RESPONSIBILITIES

1. Assists in the reception and chemical analysis of water and wastewater samples using standard and CALA-accredited laboratory methods.

- Receives samples from clients and logs them into the Laboratory Information Management System (LIMS).
- Prepares samples for analysis using techniques such as decanting, subsampling, grinding, and sieving, autoclaving, filtering, digesting either manually or on specific equipment as per test requirement.



- Organizes and prioritizes samples according to sample hold times and due dates to ensure workflow is maintained in a timely manner to meet turnaround time.
- Assists in the preparation of calibration and other quality control solutions.
- Assists in the analysis of samples using complex laboratory equipment and manual techniques.
- Assists in the calibration of laboratory equipment on a scheduled and required basis.
- Continually reviews test results in accordance with approved standard operating procedures to evaluate for potential analytical errors.
- Ensures all results are accurately entered in the LIMS in a timely manner.
- Reports QC issues to the Section Lead or the Quality Assurance Officer.
- Maintains work area in a safe, clean, and orderly manner ensuring the principles of the Workplace Hazardous Materials Information System are adhered to.

2. Prepares and sends invoices to TEL's clients.

- Uses the Laboratory Information Management System (LIMS) software to prepare initial TEL invoice and cost clarifications for clients
- Prepares and sends invoices to TEL clients to ensure the GNWT is reimbursed for the use of laboratory services by non-GNWT clients.
- Uses the Laboratory Information Management System (LIMS) software to prepare initial TEL invoice and cost clarifications for clients.
- Enters TEL invoice information into the SAM for processing and approval.
- Follows all billing instructions as per formal client agreements.
- Ensures that all documents include the correct client information, amounts, and applicable taxes before sending invoices to clients directly.
- Responds to inquiries from Financial Shared Services (FSS) and clients about invoices by providing further information or correcting invoice errors.
- Completes client set-up and update requests for submission to FSS.

3. Assists with the procurement of laboratory goods and services.

- Recommends and implements processes for the timely payment of accounts payable and generation of client invoices (accounts receivable).
- Verifies the receipt of goods or services and arranges payment to vendors using credit cards or purchase orders as appropriate.
- Assists TEL staff with VISA ONE reconciliations.
- Uses a VISA ONE card holder and make purchases on behalf on the TEL. This includes exercising a payment of authority up to \$10,000 per transaction.
- Assists with records management as per GNWT policy requirements.
- Maintains accurate and easily accessible records of accounts payable and accounts receivables.



4. Assists the Manager in maintaining an efficient office and laboratory environment for the TEL.

- Maintains accurate and easily accessible records of accounts payable and accounts receivables.
- Assists the Manager in the development and implementation of efficient office procedures.
- Maintains an inventory of office supplies and orders additional supplies as required by TEL staff.
- Assists the Manager in keeping laboratory spaces orderly by preparing surplus requisitions, organizing glass and waste disposal, and identifying any building maintenance issues.
- Files client reports, TEL analytical worksheets, and Quality Assurance (QA) records.
- Disposes of files as per GNWT policies
- Provides receptionist duties related to client visits, phone calls, email, and mail.

WORKING CONDITIONS

Physical Demands

Approximately 45% of the time, the incumbent is performing work in an office environment; the other 55% of the time is spent in a laboratory environment.

When working in the laboratory, the position is required to stand for long periods when performing lab work (i.e., up to 4 hours per day with standard breaks), typically four to five days per week or more when overtime is required; on average, the incumbent will be either standing or walking for 50% of each working day. As well, the position moves and/or lifts heavy cylinders (up to 25 kg), coolers, and carts daily.

Environmental Conditions

Approximately 45% of the time, the incumbent is performing work in an office environment; the other 55% of the time is spent in a laboratory environment.

When working in the laboratory, the work is performed in an environment where there is constant exposure to dust, noise and vibrations from freezers, fans, lab instruments and equipment, and daily exposure to noxious odors, toxic and corrosive chemicals (including known carcinogens), pathogens (human and animal excrement) and various forms of radiation.

The requirement to use chemical auto-analyzers, hot plates, block digesters, fume hoods, atomic absorption spectrometers, and inductively-coupled argon plasma spectrometers presents exposure to heat, ultraviolet, radio frequency and electromagnetic radiation during normal operation approximately five days a week (or more often during staff shortages).



Due to the work environment, protective clothing (e.g., lab coats, safety eye wear, gloves) is required for work in the laboratory at all times. Some sections of the laboratory are not air-conditioned and, because of the presence of running laboratory equipment, can reach temperatures of up to 28°C between the months of April and October.

Sensory Demands

Approximately 45% of the time, the incumbent is performing work in an office environment; the other 55% of the time is spent in a laboratory environment.

The work requires visual acuity as well as precise manual dexterity and hand-eye coordination to prepare samples for testing, to handle fragile laboratory equipment parts and glassware, and to calibrate and operate a variety of laboratory equipment. The preparation of samples also requires the ability to make the appropriate motor responses at the appropriate time, and with speed to maximize efficiency.

Visual acuity and tactile sensitivity are needed to assess very subtle sample conditions based on overall visual appearance (colour, shade, intensity, clarity) and temperature.

Sensory demands occur approximately 75% of the time.

Mental Demands

The position is subject to tight timelines, fast work pace, and competing priorities, with seasonal increases in volume of work, particularly May to October, when the lab receives at least 80% of its annual sample load; during this time, staff are frequently required to work overtime (nights and weekends) to meet seasonal demands.

There is a requirement to maintain constant mental vigilance with respect to safety protocols around corrosive, damaging toxins and pathogens.

KNOWLEDGE, SKILLS AND ABILITIES

- Knowledge of the principles and theories of biology, chemistry, and physical sciences.
- Knowledge of financial management practices including familiarity with or ability to learn ENR and GNWT policies and practices.
- Knowledge of and ability to comply with the Canada Labour Code safety requirements, the NWT *Safety Act*, and Workplace Hazardous Materials Information Systems to ensure a safe working environment.
- Knowledge of information management methods and practices.
- Knowledge of laboratory quality assurance and quality control practices.
- Knowledge of International Standards Organization and Canadian Association for Laboratory Accreditation guidelines, standards and quality assurance/quality control



theories and principles.

- Interpersonal skills including the ability to communicate effectively in writing or in person.
- Organizational and time management skills, including the ability to plan, coordinate, prioritize activities, and meet deadlines.
- Ability to use computer software for word processing, electronic communications, databases (e.g., Access), portable document formats, and spreadsheets.
- Ability to use the GNWT's Digital Integrated Information Management System (DIIMS) for the management of records and files.
- Ability to use the GNWT's System of Accountability Management (SAM).
- Ability to solve problems through independent conceptual thinking.
- Ability to work cooperatively as a team member.
- Ability to take broad direction, then initiate and complete tasks on time.
- Ability to commit to actively upholding and consistently practicing personal diversity, inclusion and cultural awareness, as well as safety and sensitivity approaches in the workplace.

Typically, the above qualifications would be attained by:

A diploma from a recognized environmental or chemical laboratory technology program or a degree in a relevant field of science such as chemistry, biology, or environmental science; or

A diploma in a recognized office administration or business administration program; or

A high school diploma and two years of experience working in an environmental testing laboratory.

Equivalent combinations of education and experience will be considered.

ADDITIONAL REQUIREMENTS

Position Security (check one)

- ☒ No criminal records check required
- ☐ Position of Trust – criminal records check required
- ☐ Highly sensitive position – requires verification of identity and a criminal records check

French language (check one if applicable)

- ☐ French required (must identify required level below)
Level required for this Designated Position is:
ORAL EXPRESSION AND COMPREHENSION
Basic (B) ☐ Intermediate (I) ☐ Advanced (A) ☐
READING COMPREHENSION:



Basic (B) ☐ Intermediate (I) ☐ Advanced (A) ☐
WRITING SKILLS:

Basic (B) ☐ Intermediate (I) ☐ Advanced (A) ☐
☐ French preferred

Indigenous language: Select language

☐ Required
☐ Preferred