

Laboratory Technician

Position Title	Laboratory Technician	Role ID	WBLAB1
Division	Engineering	Unit	Water and Wastewater - Business and Assets
Job Grade	5	Award	35
Reports To	Principal Scientific Officer		
Revised/Created	January 2020 – Template updated		

Primary Objective

- To provide a high quality analytical service, within a set time frame, on a variety of matrices: water, wastewater, soils and solids utilising both instrumental and Classical techniques, including troubleshooting a variety of complex instrumentation
- Communicate results in accordance with our NATA accreditation and give some interpretation to clients both within Council and external. Ensuring that all results are valid and fit for purpose.
- To ensure that all sample submissions are correctly documented, in appropriate containers and in appropriate condition. Are stored correctly within the unit, are traceable and can be located with relative ease.

Values Statement

What We Value

Living and loving the Tweed.

We look after people and places, explore all opportunities and are proud of our passionate approach.

We care about each other, choose to be here, and are in this together.

We have conversations where everyone can contribute and we are willing to have a go.

We put back in to make a difference, so that our Tweed community is even better tomorrow than it is today.

Organisational Environment

ENGINEERING

The Engineering Division provides roads, footpath and cycleway, stormwater, flood mitigation, water supply and wastewater services to the Tweed community and is responsible for the planning, design, construction, operations and maintenance of the associated infrastructure.



Laboratory Technician

Water and Wastewater - Business and Assets Unit

The Water and Wastewater Business and Assets Unit is one of four within the Division and provides high quality and reliable water supply and wastewater services to the Tweed Community. The Unit is responsible for business and asset planning, asset management, and the capital delivery, of Water Supply and Wastewater systems and also includes the Tweed Laboratory Centre.

As the Tweed Shire is a rapidly growing area, the demand for infrastructure is high. Efficient provision of this infrastructure must be balanced against the environmental concerns that accompany an area that is geographically and ecologically unique.

The work environment is busy, responsive to customer demands and requires regular adjustment of priorities and activities.

Council is committed to the principles of ecological sustainability in all operations and responsibilities.

Laboratory:

The Tweed Laboratory Centre is a multi-million dollar facility offering a comprehensive range of chemical and biological testing service for soil and water to a wide range of clients both internal and external. The Laboratory acts as a relatively independent business unit of Council in accordance with its adopted Business Plan.

The work environment is busy, responsive to customer demands and requires regular adjustment of priorities and activities.

Council is committed to the principles of ecological sustainability in all operations and responsibilities.

The Position

The position is responsible for the provision of a high quality scientific service relating to primarily water/wastewater, soil and Biosolid samples, but could include any matrices submitted by a client within our capabilities.

The position requires a high level of skill in chemical analysis, including both instrumental and Classical techniques, microbiological and physiological analysis.

Within the organization the position is required to communicate results to all levels of Council and to external clients, it therefore requires the incumbent to possess good communication skills both oral and written.

The position is responsible for the operation, calibration and maintenance of complex scientific instruments to ensure that they comply with the specified methods and procedures.

The position is required to perform Calibrations, Audits and Proficiency testing in accordance with NATA accreditation





Laboratory Technician

The position is required to take part in sampling surveys with the Field Officer.

The Laboratory operates a number of instruments that are computer controlled this requires that the technician position has familiarity with the use of computers and is reasonably computer literate.

The position is required to assist in the training and supervision of junior staff:

The position is required to manage the receivable, registration and storage of samples into the laboratory system and utilise the Laboratory Information Management System for logging and recording sample data for final reporting. This again requires familiarity with computers and requires that the incumbent is attentive to detail.

In general the position will work in each of the following main areas as required:

- General Chemistry
- FIA (Flow injection analysis) nutrients
- ICP metals
- GCMS organics (mainly preparation)
- Sample receiver
- Microbiology
- Phycology
- Acid Sulphate Soils

Rotation between areas is required but may be limited by business circumstances.

An individual may be required to have specific responsibility in one of more of these areas.

This position would require the incumbent to have at least 5 years' experience within a laboratory, preferably in the water/ wastewater arena but other science fields may be acceptable.

Lunch breaks are 30 minutes duration and the successful incumbent will be entitled to a 15 minute unpaid morning tea break in accordance with the Tweed Shire Council Renewal Agreement - Laboratory Hours of Work, as amended from time to time.

The position is required to perform any other duties as directed by your Supervisor (within broad scope of job grade, skills and training).

Laboratory Technician



The work of the position includes, but is not limited to, the following:

Key Responsibility Areas	Responsibility Areas Associated Key Duties		
1. Technical	• Analyse samples of water, wastewater, soil, Biosolid and other matrices as submitted by clients using both classical wet chemical techniques, in a timely manner.		
	 Perform analytical procedures utilising complex instrumentation such as Atomic Absorption, Gas Chromatography, and Flow Injection Analyser, as directed by a Senior Technical Officer (Chemical). 		
	 Perform microbiological and phycology analysi as required by Senior Technical Officers 		
	 Calibrate, operate and maintain instruments (a above) but also such as pH, Ion Selective Electrodes, Dissolved Oxygen, Oil and Grease and Kjeldahl Digestion in accordance with manufacturer's instructions and documentation 		
	• Prepare, standardise and label reagents, mediand standard solutions in accordance with our procedures and NATA accreditation.		
	 Prepare specialised samples for analysis utilising classical scientific knowledge and techniques. 		
	• Commission instrumentation and assist in the commissioning of more complex instrumentation as directed by a Senior Technical Officer (chemistry).		
	 Perform on-site survey work to assist the Field Officer as required. 		
	 Perform calibrations, Audits and take part in proficiency testing as per our NATA accreditation and NATA guidelines. 		
	 Receive samples from clients and prepare sub samples for analysis. 		
	• Ensure all samples are received in appropriate condition (container, holding times and preservation), advise the client when they do not, either directly or by a sample receiver email.		
	 Awareness of Council's WHS policies and procedures in relation to the performance of their duties. 		

Laboratory Technician



	•	Maintain the sample storage area (Cool Room) so samples can be found easily and discarded as required.
2. Administration	•	Document all results in a clear, concise and accurate manner and in accordance with our NATA accreditation.
	•	Communicate results and provide interpretation to both internal and external clients, within the scope of their expertise.
	•	Document all client and sample information in an appropriate registration system (LIMs) in accordance with the laboratories procedures manual and our NATA accreditation.
	•	Maintain instrument/method log books in accordance with the Laboratory procedures manual and our NATA accreditation
	•	Inform appropriate staff when consumable items require purchasing and document as required in the Laboratories procedures manual.
	•	Perform and document any NATA calibrations as directed by a Senior Technical Officer.
	•	Work and contribute to a team environment.
3. Specialist Knowledge	•	Provide advice and interpretation of results to both Internal and external clients.
	•	Provide clients with information regarding sample containers, preservation and appropriate holding times.
	•	Train junior staff in all aspects of analysis, procedures, safety and any other matter as requested by a Senior Technical Officer.
	•	Inform appropriate staff members and clients of any failures or anomalies observed in test results based on knowledge of appropriate licence or health guidelines requirements eg: ANZEEC, WHO, EPA etc
	•	Provide specialised information on WHS matters with regard to both analysis and sampling procedures.
4. Work Health and Safety	•	Maintain all work areas and equipment used in those areas in a clean and tidy manner.
	•	Wear appropriate personal protective equipment in accordance with Tweed Laboratory Centre policy and all other relevant authorities and guidelines.

Laboratory Technician



The position requires attention to detail, flexibility and the ability to contribute to the provision of client services across the work of the Unit. Also the capacity to respond to a busy work environment and provide other team members with assistance in times of high demand.

The position will apply Council's Enterprise Risk Management Policy and Protocol objectives as they relate to the position.

Health Safety and Environmental System (HSES) Responsibilities

In accordance with Council's Work Health and Safety Responsibility, Authority and Accountability Protocol all employees are required to perform their duties in accordance with their job category. WHS Risk Assessments, Safe Work Methods Statements, Standard Operating Procedures and site specific requirements and instructions.

For details of WHS Responsibilities, Authority and Accountabilities, staff and candidates are to refer to the following Protocol: WHS Responsibilities, Authority and Accountabilities Protocol

Compliance Training Requirements

In accordance with Council's legislative requirement under the Work, Health and Safety Regulation 2017, new staff will be provided with access to relevant training, information and instruction in order to safely perform their duties.

Infection Control and Immunisation Requirements

Council requires all incumbents occupying an identified position to undertake the course of immunisation outlined in the Infection Control Standard Operating Procedure.

For a complete list of identified positions and recommended immunisations, staff are to refer to the following Standard Operating Procedure: WHS Infection Control Standard Operating Procedure



Laboratory Technician

Organisational and External Relationships

Organisational Relationships

- Liaise with plant operators, Supervisors and other Council staff to provide results and interpretation on an as required basis.
- Liaise with senior laboratory staff with regard to the operational aspects of the laboratory including: instrumentation, calibration, servicing, documentation and NATA accreditation.
- Liaise with junior staff to ensure that correct procedures are followed and that appropriate WHS procedures and policies are followed.

External Relationships

- Liaise with external clients to provide results and interpretation of those results within their area of expertise. Provide information regarding testing and charges for the provision of laboratory services along with sample preservation and storage information.
- Liaise with instrument manufacturers to ensure the correct performance of instrumentation within the laboratory and appropriate servicing is performed.
- Liaise with members of the general public and others when performing sampling surveys.

Location of Position

The position will be required to work out of any of Council's administrative offices, Depots or any other location within the Shire as directed by the supervisor. Transportation to and from work and to perform the duties of the position, is the responsibility of the employee. When a driver's licence is a requirement of a position, the licence class is included in the Selection Criteria.

Selection Criteria

Knowledge and Competence: (to be addressed in full when making application)

- 1. Minimum Certificate IV in Laboratory Techniques/Operations, Analytical Chemistry, Microbiology or acceptable equivalent science.
- 2. Current Vehicle Licence Car.
- 3. Demonstrated competence within a Commercial Laboratory Environment in instrumental analysis of water, wastewater and soil utilizing instruments such as: FIA, ICP, GC
- 4. Demonstrated competence within a Commercial Laboratory Environment in the Classical analysis of water, wastewater and soil.
- 5. Demonstrated competency in troubleshooting complex instrumentation
- 6. Well-developed communication and interpersonal skills.
- 7. Demonstrated competency in the use of computers and instrumentation software
- 8. Knowledge of WHS in relation to performance of analytical techniques both classical and instrumentation.
- 9. Demonstrated knowledge of NATA and associated guidelines.



Laboratory Technician

- 10. Demonstrated knowledge of wastewater and water quality guidelines such as NH and MRC, WHO, ANZECC, EPA.
- 11. Demonstrated ability to work as part of a team.
- 12. Demonstrated knowledge of sample storage and preservation.

Desirable:

- 13. Work-Cover WHS Induction Training for Construction Work.
- 14. Demonstrated competence in performing calibration checks on general laboratory equipment.
- 15. Demonstrated competency in classical wet and instrumental chemical techniques.

Personal Attributes:

Personal Attributes and Cultural Fit will be addressed at interview.

Council is seeking personal attributes and work values consistent with Council's Corporate Values.

The table below details the minimum behavioural standards expected of incumbents of this position. <u>View the full Tweed Shire Council Capability Framework</u>

Personal Attributes	Minimum Standard			
Manage Self	Intermediate			
Display Resilience and Adaptability	Intermediate			
Act with Integrity	Intermediate			
Demonstrate Accountability	Intermediate			
Relationships				
Work Collaboratively	Intermediate			
Communicate with a Customer and Community Focus	Intermediate			
Influence and Negotiate	N/A			
Results				
Plan and Prioritise	N/A			
Think and Solve Problems	Intermediate			
Deliver Results	Intermediate			
Workforce Leadership (supervisory roles only)				
Manage and Develop People	N/A			