

# Tweed Laboratory Centre

Services and price list – 2021/2022



**TWEED**  
SHIRE COUNCIL



A world-class facility  
providing a local service





# Welcome to the Tweed Laboratory Centre

## The flagship laboratory of South East Queensland and Northern New South Wales

At the Tweed Laboratory Centre, we're proud to offer our customers:

- Personalised and confidential customer service. We work with you to conduct an assessment of which tests you need and then take the time discuss results with you to make sure you get the most from your testing.
- Highly experienced and qualified staff who pride themselves on the quality and integrity of their range of services.
- A comprehensive range of chemical and biological testing for soil and water.
- Reasonable prices and competitive rates.

Whether you're a consultant, developer, local government council, a business or a home owner, we have the laboratory services to meet your needs.

We trust that you will enjoy your experience with the Tweed Laboratory Centre.

**Dr Paul Wright**  
Coordinator of the  
Tweed Laboratory Centre

The Tweed Laboratory Centre is accredited for both chemical and biological testing through the National Association of Testing Authorities (NATA). Stringent processes are in place to ensure day-to-day operations conform to the Australian and International standard  
AS ISO/IEC 17025  
(Accreditation No. Chemical Testing 12754 and Biological Testing 13538)

The Tweed Laboratory Centre participates in proficiency programmes provided by PTA, Global Proficiency, NMI, NLLNCT, NSW/QLD Inter-laboratory Group and NSW Algae proficiency and QLD Algae proficiency programmes.

Scope of accreditation: [www.nata.com.au/accredited-facility](http://www.nata.com.au/accredited-facility)  
Type in Tweed Shire in the business name field.

## Water testing

Water can contain pathogens, including bacteria, viruses and protozoa which can, in some cases be harmful to your health. Contaminants may change the taste, odour or appearance of your water. Untreated water may stain clothes, harm your appliances (i.e. washing machines) and even corrode your pipes. If you are not connected to town water, you may wish to have your water tested to determine what condition it is in.

**Swimming pools** can also harbour bacteria, algae and other microbes that can not only change the colour of the water, but can also cause health issues for swimmers including ear, nose and throat infections. Regularly testing your swimming pool is recommended to ensure that it is healthy and safe to use.

If you're on the land, then you'll know just how precious your bores, wells, creeks, rivers and farm dams are. Water quality can affect plants, soils, livestock, irrigation equipment and general farm productivity. If you have any doubts about the quality of water you intend to use for irrigation, stock or domestic purposes, you should have it tested.

### Cost per sample (inclusive of GST)

#### Household/drinking water packages

<b>Tank water:</b> <i>E. coli</i> , pH, conductivity, Aluminium, Chromium, Copper, Lead and Zinc	\$ 95.00
<b>Bore/dam/creek water:</b> <i>E. coli</i> , pH, conductivity, Nitrate, Nitrite, Total Hardness, Aluminium, Arsenic, Chromium, Copper, Iron, Manganese, Nickel, Lead and Zinc.	\$ 150.00

#### Physical tests

pH, Conductivity, Salinity, Turbidity, Transmission	(each) \$ 12.00
Redox, Dis. Oxygen	(each) \$ 35.00
Colour (apparent)	\$ 14.00
Colour (true)	\$ 16.00
Solids – Air monitoring as per AS 3580.10.1 (g/m <sup>2</sup> /month)	\$ 55.00
Ash content of above	\$ 30.00
Solids – Suspended (TSS)	\$ 25.00
Solids – Volatile	\$ 20.00
Solids – Total	\$ 30.00
Solids – Total dissolved	\$ 35.00



**Cost per sample**  
(inclusive of GST)

**Chemical tests**

Alkalinity (including any derived carbonates and hydroxide)	\$ 20.00
Biological Oxygen Demand (BOD 5 Day)	\$ 49.00
Chemical Oxygen Demand (COD)	\$ 50.00
Chloride	\$ 20.00
Chlorine (total or free)	\$ 16.00
Chlorophyll	\$ 65.00
Fluoride (by ISE)	\$ 25.00
Hardness – Calcium	\$ 12.00
Hardness – Magnesium	\$ 12.00
Hardness – Total	\$ 18.00
Oil and Grease	\$ 67.00
Sulphide	\$ 40.00
Total Actual Acidity in water (APHA 2310)	\$ 45.00
TOC	\$ 60.00
DOC	\$ 65.00

**Nutrient tests**

Nitrogen – Ammonia	\$ 16.00
Nitrogen – Nitrite	\$ 16.00
Nitrogen – Nitrate (Oxidised – Nitrite)	\$ 22.00
Nitrogen – Oxidised	\$ 16.00
Nitrogen – TKN (calc TN-NOX) Free if Nox and TN already requested	\$ 52.00
Nitrogen – Total (Persulphate Digestion)	\$ 35.00
Phosphate – Total (Persulphate Digestion)	\$ 35.00
Phosphate – Ortho	\$ 16.00

## Metal testing of water and soil

The Tweed Laboratory Centre provide testing for virtually all known metals of the periodic table.

Using state of the art technology, the Tweed Laboratory Centre is able to detect metals at very low levels in water, to ensure that even trace amounts of possible contaminant metals are detected in both drinking water and environmental water samples.

We also offer metal testing for soils in relation to possible contamination.

### Cost per sample (inclusive of GST)

#### Water

<b>Suite 1 total</b> – Al, Cr, Cu, Pb and Zn	\$ 42.00
<b>Suite 1 soluble</b> – as above	\$ 36.00
<b>Suite 2 total</b> – Ca, Mg, Fe Mn, Cu, Cr, Pb, Al, As, Ni, and Zn	\$ 84.00
<b>Suite 2 soluble</b> – as above	\$ 78.00
<b>Individual elements each:</b> Total first element	\$ 18.00
Soluble first element	\$ 12.00
Each subsequent element (total or soluble)	\$ 6.00
Chromium 3 and 6	\$ 60.00

#### Soil

<b>Metals 8 suite</b> – As, Cr, Cu, Ni, Zn, Cd, Pb and Hg	\$ 72.00
<b>Metals 12 suite</b> – Al, As, Cr, Cu, Fe, Mn, Ni, Zn, Cd, Pb, Hg and Co	\$ 96.00
<b>Individual elements each:</b> First element	\$ 30.00
Each subsequent element	\$ 6.00
Composite sample preparation from discrete samples	\$ 30.00

## Organic testing of water and soil

The Tweed Laboratory Centre use sophisticated Gas Chromatography techniques to detect a range of organic compounds in water and soil.

Such compounds include:

- Pesticides (e.g. DDT, dieldrin, fenitrothion)
- Petroleum (e.g. BTEX, TRH, Phenols); and
- Disinfection byproducts (THMs)

This service is useful for environmental consultants, councils and land holders.

**Cost per sample  
(inclusive of GST)**

Analytical parameters

Analytical technique

### Volatile organic compounds

vTRH (C6-C10)	HS – GC/MS	\$ 50.00
BTEX	HS – GC/MS	\$ 50.00
TRH (C6-C10) + BTEX	HS – GC/MS	\$ 65.00
THM	HS – GC/MS	\$ 80.00

### Semi-volatile organic compounds

TRH (C10-C40)	GC/FID	\$ 70.00
TRH (C6-C40)	HS – GC/MS/FID	\$ 85.00
TRH (C6-C40) + BTEX	HS – GC/MS/FID	\$ 100.00
PAH	GC/MS	\$ 70.00
Phenols (Speciated)	GC/MS	\$ 70.00

### Pesticides

OC Pesticides	GC/MS	\$ 65.00
OP Pesticides	GC/MS	\$ 65.00
OC & OP Pesticides	GC/MS	\$ 90.00

### Other

GC/MS Scan	GC/MS	\$ 175.00
MIB/Geosmin	GC/MS	\$ 250.00

## Soil testing

**Cost per sample  
(inclusive of GST)**

### Acid sulphate soil testing

Chromium Reducible Suite – includes drying and grinding fee	\$ 165.00
pH and pHFox screening	\$ 60.00

### Other soil testing

pH 1:5 extract	\$ 40.00
pH in CaCl <sub>2</sub>	\$ 40.00
Conductivity 1:5 extract	\$ 40.00
% moisture	\$ 40.00
Loss on ignition (550°C)	\$ 40.00

**Unsure which soil tests you need?** Contact us to discuss your soil and testing options as well as advice on how to collect your soil sample.





## Microbiological testing

Microbiological testing is important in detecting water-borne diseases which pose a risk to public health.

**Cost per sample**  
(inclusive of GST)

### Membrane methods

<i>E. coli</i> (potable/treated water)	\$ 30.00
Total coliforms (treated water)	\$ 30.00
Thermotolerant (faecal) coliforms	\$ 30.00
Enterococci (membrane presumptive)	\$ 30.00

### MPN methods

<i>E. coli</i> (untreated or environmental water)	\$ 38.00
Total coliforms (untreated or environmental water)	\$ 38.00
<i>Pseudomonas aeruginosa</i>	\$ 38.00
Heterotrophic Plate Count (HPC)	\$ 38.00
<i>E. coli</i> in soil	\$ 60.00

### Packages and miscellaneous

Pool/spa suite: HPC, <i>E. coli</i> and <i>Pseudomonas aeruginosa</i>	\$ 85.00
<i>E. coli</i> and total coliforms (MPN)	\$ 60.00
PCR source tracking of human mitochondrial DNA	\$ 180.00

## Agricultural water testing

Sodium Absorption Ratio	\$ 24.00
Irrigation suitability (pH, TDS, Iron, Manganese, SAR, Chloride)	\$ 80.00



## Algae identification and enumeration

The Tweed Laboratory Centre is a leader in algae testing, identification and research. Our highly trained staff are able to identify potentially toxic cyanobacteria (blue green algae) and other algae that cause fouling.

The laboratory also provides genetic testing to determine the actual capacity to produce toxin for identified cyanobacterial species, which varies for different water sources. If present, toxins are known to be harmful to humans and can cause stock losses.

	<b>Cost per sample (inclusive of GST)</b>
<b>Blue-Green toxic species</b>	\$ 125.00
– Identification and count for potentially toxic blue-green algae taxa to species	
– Identification and count to genus for other blue-greens	
– Identification and count to division level for other algae	
<b>Blue-Green toxic species with biovolume</b>	\$ 140.00
– Identification, count and biovolume for potentially toxic blue-green algae taxa to species	
– Identification, count and biovolume to genus for other blue-greens	
– Identification and count to division level for other algae	
<b>ID only-no count:</b>	\$ 100.00
Microscopic identification to lowest level possible of dominant organisms only	
<b>Count only-no ID</b>	\$ 100.00
Total cell count of all algae only – no identification	
<b>Genetic testing for cyanobacteria toxin presence</b>	\$ 95.00
CyanoDTec PCR assay: mcyE/ndaF; cyrA; sxtA genes	



## Other charges

**Subcontracted work attracts a 10% surcharge (for handling, freight, and reporting) of provider's invoiced amount.**

	<b>Cost (inclusive of GST)</b>
24-hour turnaround (if Lab has accepted and can be achieved)	100% surcharge on listed fees
48-hour turnaround (if Lab has accepted and can be achieved)	50% surcharge on listed fees
Weekend surcharge in addition to listed fees and charges	\$ 120 per hour
On site sampling/monitoring per hour	\$ 200
Minimum Testing Report Fee for a batch of sample(s)	\$70

## Sample disposal and storage

Water samples for chemical testing will be retained for one month after final reporting.

Soil samples for chemical testing will be retained for three months after final reporting.



## Collecting water and soil samples

### LABEL your sample

Suitable containers should be sourced from the lab prior to sampling.

Include the date and time of sampling, name of the person or company and the identification/description for the sample.

Complete and sign a *Chain of Custody Form* which are available from the Laboratory or online at [www.tweed.nsw.gov.au/tweedlab/testing](http://www.tweed.nsw.gov.au/tweedlab/testing)

The laboratory holds the right to refuse any sample that does not comply with **Technical Holding Times** (time between sampling and when it is received at lab), **required container type, condition of the sample, or volume of sample.**

# 4°C

Samples must be kept at around 4°C until delivered to the Laboratory.

#### To collect a chemistry sample from a tap:

1. Source a 1L (minimum) robust polythene screw cap bottle, which is clean and free of contaminants (lab can provide these free of charge).
2. Flush the line well.
3. Half fill the bottle, then shake and discard the water.
4. Refill the bottle to the top, leaving no airspace.
5. Label and **keep the sample cool.**

#### To collect a microbiology sample from a potable water tap:

1. Source a sterile 250ml container. For chlorinated samples, use a sterile jar containing sodium thiosulphate (lab can provide these free of charge). Do not rinse the container.
2. Disinfect the tap and/or let water flow for 1 minute prior to filling the container.
3. Collect at least 200ml.
4. Label and **keep the sample cool.**

#### To collect a microbiology sample from a river, lake or reservoir:

1. Hold a sterile container (250ml capacity) near its base and plunge its neck downward below the surface (elbow deep).
2. Push the bottle forward horizontally away from the hand to collect the sample.
3. Label and **keep the sample cool.**

## Contact us



07 5569 3103



[samplerception@tweed.nsw.gov.au](mailto:samplerception@tweed.nsw.gov.au)



Sample deliveries to: 46 Enterprise Avenue, Tweed Heads South NSW 2486  
Open 7am – 5pm EST (NSW)  
**Samples must be received by 4.30pm or additional charges may apply.**



Tweed Shire Council  
c/o Tweed Laboratory Centre  
PO Box 816, Murwillumbah NSW 2484



[www.tweed.nsw.gov.au/tweedlab](http://www.tweed.nsw.gov.au/tweedlab)

