TOWNSVILLE LABORATORY SERVICES

ABOUT US

Townsville Laboratory Services is an advanced analytical laboratory located at the Douglas Water Treatment Plant, Angus Smith Drive, Townsville, Queensland.

The laboratory is composed of a chemical laboratory and a microbiological laboratory.

We currently service a range of organisations throughout Queensland including local government shires and councils, hospitals, universities, schools and other institutions in North Queensland.

Our services extend to the following industries:

- >> Agriculture
- >> Industrial
- >> Livestock
- >> Power and energy
- >> Trade waste
- >> Medical
- >> Chemical processing
- >> Mining and mineral processing
- » Solid waste
- >> Paper
- » Oil and gas
- >> Transport
- » Food and beverages



ANALYTICAL CAPABILITIES

Water supply analysis

- >> Physico-chemical parameters
- >> Metals
- >> Disinfection by-products
- » Water microbiology

Biological analysis

- » Coliforms (including E coli)
- >> Thermotolerant coliforms
- >> Pseudomonas aeruginosa
- >> Faecal Streptococcus
- >> Heterotrophic Plate Count

Wastewater analysis

- » Biological oxygen demand
- » Chemical oxygen demand
- >> Total organic carbon
- » Suspended solids
- » Oil and grease and/or total petroleum hydrocarbons
- >> Volatile suspended liquids
- >> Free and total nutrients

Natural and digester gas analysis

- >> Hydrogen sulphide
- >> Carbon dioxide
- >> Methane
- >> Carbon Monoxide
- >> Nitrogen

Environmental analysis

- » Free nutrients (ammonia, nitrates and phosphates)
- >> Total nitrogen and phosphorus
- » Algae identification
- » Counting and microphotography
- >> Metals analysis
- » Heavy and major metals
- » Acid sulphate soils
- >> Field analysis for
 - » pH
 - » conductivity
 - >> dissolved oxygen
 - » chlorophyll
 - >> temperature





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SAMPLE TYPES

Townsville Laboratory Services analyses the following samples:

- >> Boilers
- >> Bore water
- » Cooling towers
- >> Drinking water
- » Dust and dust fallouts
- >> Effluents
- >> Ground waters
- >> Impingers

- >> Irrigation waters
- >> Marine waters
- >> Raw sewerage
- >> Recreational waters
- » Rivers, lakes, stream waters, dams
- >> Sediments
- >> Sewage digester gas

- » Sludges
- » Soils and acid sulphate soils
- >> Swimming pools
- » Tip leachates
- >> Trade waste
- » Other special samples







EQUIPMENT

The laboratory houses state of the art equipment including:

- Inductively Coupled PlasmaMass Spectrometry
- >> UV-VIS Spectrophotometer
- >> Total Organic Carbon Analyser
- >> Ion chromatograph
- >> Flow Injection and Discrete Analysers
- Portable pH, conductivity and dissolved oxygen meters
- » GC-MS and GC-ECD-Purge and Trap
- >> GC FPD/TCD for natural gas analysis
- » Microscope with digital image capture system

ACCREDITATION AND QUALITY ASSURANCE

Townsville Laboratory Services has been NATA accredited for chemical testing (accreditation number 14698) since 2002 and biological testing (accreditation number 14699) since 2006.

Townsville Laboratory Services obtained quality system certification to ISO 9001 in 2003.

Our NATA accreditation ensures compliancy to the international standard ISO 17025 which includes:

- The competency of the laboratory in performing test in its scope of accreditation
- The validity of the systems and procedures used in the laboratory and the robustness and level of uncertainty in the results.

- The quality systems used within the laboratory are comparable to other ISO/IEC 17025 accredited laboratories throughout the world.
- The laboratory has a system of auditing that ensures its independence and that its results are kept secure and confidential.

Townsville Laboratory Services is staffed by a team of highly skilled scientists and microbiologists who have tertiary qualifications and expertise in chemistry, microbiology, molecular genetics, organic chemistry, analysis of food, water, wastewater, environmental and refinery samples for chemical, biological and microbiological constituents, food production and safety, algal identification and bacterial pathogens.

CONTACT DETAILS

Townsville Laboratory Services

Douglas Water Treatment Plant Angus Smith Drive, Douglas, QLD PO Box 1268 Townsville QLD 4810

6 (07) 4727 8666

& 1300 878 001

labenquiries@townsville.qld.gov.au

www.townsville.qld.gov.au







