

AUSTRALIAN WATER QUALITY CENTRE



NATA accredited laboratory - NATA accredited field sampling - data analysis reporting - sample and monitoring plan design - research and consultancy - analytical quality control programs - AS/NZS 4020 (products in contact with drinking water).

Sectors

- Aged care facilities
- Agriculture
- Consultants
- Consumer products (in contact with drinking water)
- Energy and Utilities
- Environmental
- Hospitals and health care facilities
- Import/export
- Mining and exploration
- Primary industries (manufacturing and processing)
- Residential services
- Small business (butchers, plumbers etc.)
- Water and wastewater service providers
- Wineries, food and beverages

Water quality testing and analysis for:

- Biofilms
- Biosolids/soils/solids
- Bore water
- Cooling towers
- Drinking water
- Effluent/influent
- Marine water
- Non-potable water
- Potable water
- Rain water
- Recycled water
- Seepage
- Source water
- Trade waste
- Wastewater
- Wetlands

Specialty services

- Algal identification
- Algal toxin testing
- Consultancy services
- *Cryptosporidium* analysis
- Emergency sampling and analysis for water quality incidents
- Endotoxin analysis
- *Giardia* analysis
- *Legionella* analysis
- Molecular (DNA) services
- Radiation Testing Services
- Sampling services
- Tailored Analytical Quality Control programs

Inorganic Chemistry

Nutrients

- Ammonia
 - Free as N and NH₃
 - Total as N
- Ammonium as N
- Bromide
- Chloride
- Ferrous Iron Soluble
- Filterable Reactive Phosphorus/Orthophosphate
 - as P
 - as PO₄
- Fluoride
- Iodide
- Nitrate and Nitrite as N (OXN)
- Nitrate as N
- Nitrite as N
- Nitrogen, Kjeldahl
 - Soluble
 - Total
- Nitrogen, Organic
- Nitrogen, Total
- Oxidisable Substances
- Phosphorus as P
 - Available
 - Dissolved Organic
 - Soluble
 - Total
- Phosphorus as PO₄
- Reactive Silica

Waste

- Biochemical Oxygen Demand (5-day)
 - Carbonaceous
 - Soluble
 - Total
- Chemical Oxygen Demand
 - Readily Biodegradable Soluble
 - Soluble
 - Total
- Chlorine
 - Free
 - Total
 - Chloramines
- Chlorine Demand
- Conductivity
- Cyanide
 - Total
 - Weak Acid Dissociable
- Grease/Oil and Grease Substances (Anionic Surfactants)
- pH
- Solids
 - ASH 550°C
 - Fixed
 - Suspended

- Total
 - Total Dissolved
 - Volatile
- UV
- Absorbance
 - Transmittance

Radiological

- Gross Alpha and Beta Activity (K-40 Corrected)
- Radon 222

Physical

- Alkalinity
 - Total, HCO₃, CO₃, OH
- Hardness
 - Calcium
 - Carbonate
 - Total
- Colour
 - Apparent
 - True
- Conductivity
- Dissolved Solids Calculation
- Free Carbon Dioxide
- pH
- Total Hardness as CaCO₃
- Turbidity

Organic Chemistry

- Anatoxin-a
- BTEX
- Chloroacetic Acids
- Cylindrospermopsin
- Disinfection by-Products
- Formaldehyde
- Glyphosate
- Haloacetic Acids
- Haloxyfop
- Herbicides
- MIB/Geosmin
- Microcystins
- NDMA
- Nodularin
- Organic Carbon
 - Dissolved
 - Total
- GCMS Scan
- Petroleum Hydrocarbon
- PSP Algal Toxins
- Total Organic Carbon
- Trihalomethanes
- Volatile Fatty Acids

Metals (Total & Soluble)

- Aluminium
- Antimony
- Arsenic
- Barium
- Beryllium
- Bismuth

- Boron
- Cadmium
- Calcium
- Chromium
- Cobalt
- Copper
- Ion Balance
- Iron
- Langelier Index
- Lanthanum
- Lead
- Larson Skold Index
- Lithium
- Magnesium
- Manganese
- Mercury
- Molybdenum
- Nickel
- Phosphorus
- Platinum
- Potassium
- Selenium
- Silica/Silicon
- Silver
- Sodium
- Strontium
- Sulphate
- Sulphur
- Thallium
- Thorium
- Tin
- Titanium
- Uranium
- Vanadium
- Zinc

Microbiology

- Coliform ID by API
- Bacteriology**
- Actinomycetes
- Aeromonas*
- Aerobic Spores
- Bacteriophage
- Campylobacter*
- Clostridium perfringens*
- Colony Count (pour plate)
 - 20°C, 22°C, 35°C, 37°C
- Endotoxins
- E. coli* and coliforms
- E. coli* and thermotolerant coliforms
- Enterococci
- Faecal Streptococci
- Pseudomonas aeruginosa*
- Fungi and Yeasts
- Salmonella*
- Staphylococcus*
- Sulphate reducing bacteria
- Filamentous bacteria

- Iron bacteria
- Legionella*

Biology

- Algal Biovolume
- Algal Enumeration
 - Direct, partial
 - Direct, total
 - Sedimented, partial
 - Sedimented, total
 - Algal scan, Total
 - Cyanobacteria (blue-green algae) identification and enumeration
- Chlorophyll a & b
- Phaeophytin
- Zooplankton
 - Identification
 - Enumeration

Molecular Biology

- Bacterial diversity profiling (bactDNA)
- Vertebrate diversity profiling (vDNA)
- CyanoDTec analyses
- DinoDTec analyses
- E. coli* capsules
- E. coli* phylogrouping
- E. coli* whole genome sequencing
- Faecal source tracking
- Toxic gene testing

Protozoology

- Amoeba (incl. *Naegleria fowleri*)
 - qualitative & quantitative
- Cryptosporidium* speciation by Fluorescence *in-situ* hybridisation (FISH)
- Giardia* speciation by FISH
- Cryptosporidium*
- C. parvum*
- C. hominis*
- Giardia*
- G. duodenalis* assemblage A or B
- All *Cryptosporidium* species and *G. duodenalis* assemblages by genotyping
- Cryptosporidium* infectivity
- Helminths

Field testing (on-site)

- Chlorine
- Conductivity
- pH
- Redox potential
- Sample collection
- Dissolved Oxygen
- Standing Water Level
- Turbidity
- Temperature