



## ENVIRONMENTAL TESTING CAPABILITIES

Specialising in chemical and microbiological testing, Cawthron's Environmental Laboratory covers a wide range of sample matrices, from checking council and private drinking water supplies for potability to testing effluent, trade and industrial wastes for resource consent purposes.



The laboratory undertakes analysis of State of Environment samples, process and saline waters, leachates, agricultural and horticultural products, soils, air particulate monitoring, mercury testing and other environmental samples. The dynamic team provides a high level of technical expertise, service, efficient turnaround times and up to date instrumentation.

## FUTURE DEVELOPMENTS

We are committed to being innovative and responsive to our customers' changing needs in relation to services and value for money. We will accomplish this through monitoring new industry developments and investing in instrumentation.

## ANALYSIS AND INSTRUMENTATION

The Environmental Laboratory consists of two main groups, water chemistry and trace elements, but also works closely with the Microalgae and Microbiology laboratory to provide a complete service to our customers.

The laboratories offer a comprehensive range of analyses including the following parameters:

- trace elements
- Anions / cations
- solids
- oil and grease
- pH
- BOD and COD
- total phenols
- total cyanide
- total sulphide
- chlorophyll a
- AFDW & grain size
- air particulate monitoring
- nutrients
- SOE Monitoring
- recreational waters and swimming pools monitoring.
- resource consent monitoring.
- new bores and well testing.

A wide range of instrumentation is used including:

- Inductively Coupled Plasma-Optical Emission Spectrometer (ICP-OES) for trace metals
- Flow Injection Analyser (FIA) for nutrients
- Ion Chromatograph (IC) for anions
- Flow Injection Mercury System (FIMS) for mercury

This equipment enables us to provide clients with lower detection levels and higher quality results.

## QUALITY CONTROL & ACCREDITATIONS

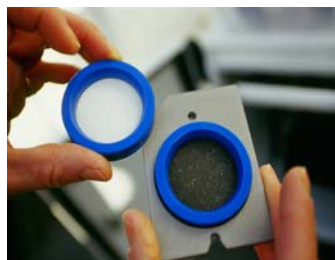
Our laboratory is ISO 17025 accredited and audited annually by IANZ (International Accreditation NZ).

We are also registered to test for industry compliance to LAS (Laboratory Approval Scheme) rules.

Our test methods are fully validated, and are structured around an ongoing quality control system, which includes Inter-Laboratory Comparison Programmes (ILCP's).

Currently the laboratory is participating in the following ILCP:

- IANZ Water Test (nutrient, general chemical properties and trace elements on a range of effluent and water samples).
- National Low-level Nutrient Collaborative Trials (co-ordinated by Queensland Health Scientific Services)
- LAS Programme Quasimeme (heavy metals in shellfish testing)
- LAS Proficiency Programme (metals in meat products)
- Wageningen International Soil Analytical Exchange Programme (trace metals in soils)



## CAWTHRON LABORATORY SERVICES

Cawthron is an independent research organisation providing science and technology solutions to enable the sustainable management and development of New Zealand's coastal and freshwater systems and resources for the benefit of the region and the nation.

Cawthron Laboratory Services provides comprehensive analytical services across a range of sectors including; food and natural products, environmental, and natural toxin testing. We also work with Cawthron's Freshwater and Coastal consultants for resource consent applications and compliance monitoring.

## SERVICE SPECIFICATIONS

### Hours of Operation

Cawthron's laboratory operates 7 days a week. Our Customer Service sample reception area is open from 8.00am to 5.00pm on weekdays and Saturdays 9.00am-12.00pm. Samples can be received outside of these hours by prior arrangement.

### Sample Transfer : Courier Information

Our Customer Services team can be contacted to arrange delivery of appropriate sample containers, and co-ordinate the collection of samples for delivery to our Nelson Laboratory.



**For enquiries please contact:**  
**Tracey Jary**  
**Section Head**  
**Environmental Laboratory**  
**Cawthron Laboratory Services**

**Phone (03) 548 2319**

**Fax (03) 546 9464**

**Email:lab@cawthron.org.nz**

### Reporting of Results of Analyses

The turn-around time for analyses is 10 working days.

Cawthron is able to offer full electronic result processing for all analyses and provide reports in both hard copy and electronic format.

### Invoicing and Payment

We offer our clients the option of being invoiced per job, or on a monthly basis covering all the jobs for that month.

Payment is required by the 20<sup>th</sup> of the following month.

### Customer Feedback & Complaints

We value all feedback from our clients and on occasions when there are complaints, we view these as an opportunity to improve services and systems.



## CAWTHRON'S OTHER SERVICES INCLUDE:

*Marine Biotoxins* – shellfish testing for export and public health purposes; risk management advice, test method development.

*Microalgae* – early warning systems for shellfish industry and regulatory bodies; harmful algal blooms; analysis of fresh water algae and toxins.

*Food Chemistry analysis* – for production and regulation, export Certificates of Analysis, and label claims.

*Nutraceuticals testing* – for Good Manufacturing Practice certification of natural remedies.

*Consultancy* - working with Cawthron Freshwater and Coastal consultants for resource consent applications and compliance monitoring.



## CAWTHRON IS COMMITTED TO:

- Having a customer-focused culture, striving to provide a high level of service to our clients and working with them to ensure their analytical needs are met.
- Adding value to our services by offering a high level of technical expertise and experience to our customers.
- Being available to “trouble shoot” and problem solve with industry.
- Taking advantage of the link we have with research groups and consultants based at Cawthron, enabling us to offer clients a complete service from results to interpretation to recommendations.
- Being innovative and responsive to customers' changing needs.

