



# eurofins

The World's Leading Laboratory Network



**Environment**

[www.eurofins.co.nz](http://www.eurofins.co.nz)



## Introduction

Eurofins-ELS is one of New Zealand's leading experts in the areas of Environmental sampling and laboratory services. We have been sampling and analysing Stormwater in New Zealand for over 20 years.

The company has its origin as part of the Hutt City Council Laboratory and became a private enterprise in 1994. We grew through natural growth as well as the acquisition of local laboratories until in December 2012 we were acquired by Eurofins - the largest laboratory network in the world.

Eurofins Scientific is the world leader in the field of environmental laboratory services. It is also number one in the world in food and pharmaceutical products testing and one of the global market leaders in agrosience, genomics, pharmaceutical discovery and central laboratory services.

We are based in a purpose built facility of 1450 m<sup>2</sup> in Lower Hutt, Wellington comprised of four separate laboratory areas – Instrumental Chemistry, General Chemistry, Biological Fluids, and Microbiology. The latter is further split into three separate rooms with clean, cleaner and ultra clean capabilities. The ultra-clean lab is used for pathogenic bacteria determinations.

We also have strategically positioned satellite facilities in Auckland and Christchurch, offering a full scope of sampling and testing services whilst ensuring that samples from around New Zealand are processed into the laboratory within 24 hours.

### Areas that we specialise in are as follows:

- Air quality monitoring
- Boiler water
- Environmental water
- Landfills
- Meat industry services
- Potable water for councils
- Sample Integrity
- Swimming pools
- Biological fluids
- Ceramicware and metal food containers
- Food and Dairy Products
- Legionella
- Metals
- Potable water for small communities
- Sewage and effluent
- Trade waste

### Who should read this brochure?

This brochure has been prepared to assist anybody who is involved in the management of resource consent compliance requirements and explains the ways in which we can assist you with your stormwater related monitoring and compliance testing.

## Stormwater Sampling and Testing

Stormwater is natural water. It is essentially rain and when it lands on the ground, is known as stormwater. Stormwater that falls from the atmosphere naturally soaks into the earth or flows overland and into streams, rivers and lakes. Of major concern for councils is when sewage enters the stormwater system and discharges into marine or freshwater ecosystems.



Laboratory analysis can be used to find sewer breaks and illegal sewer connections. Elevated microbiological counts can indicate a source of sewage, as can some chemical analyses.

Where fluoride has been dosed into a water supply, laboratory analyses can identify its presence. In a clean stormwater system there should be no fluoride except for the proportion introduced by seawater.

Where contamination of stormwater is suspected, we can analyse samples to confirm the type of contamination. This can then lead to remedial work to identify the source and to clean up the ecosystem.

The types of analyses we would usually test for include:

- Biochemical Oxygen Demand
- Enterococci
- Faecal coliforms
- Hydrocarbons

Some site-specific situations may require the use of specific tests in order to determine the contamination from the land use the stormwater has come from.

These analyses can include:

- Chemicals from industrial sites
- Nutrients from farm runoff

These types of analyses are usually requested after a pollution incident or illegal discharge.

## Basin and Swale Sampling

Eurofins staff sample from many different environments all around New Zealand. One of the newest types of sampling we perform is amongst the many modern housing subdivisions that are springing up.

Stormwater swales and Stormwater basins are used in modern urban design to capture and divert stormwater runoff away from surface waters such as creeks and rivers.



Swales are seen as a low lying channel next to a road or street. These streets do not have curbs allowing the rainwater to flow directly into the swale and down towards a stormwater basin.

A stormwater basin is a large grassy area at the end of the swale network where the stormwater is filtered through soil. The soil in the swales and basin traps sediment, heavy metals and hydrocarbons.



Eurofins-ELS is IANZ accredited for sampling the soil in the swale and basin and the process requires the removal of the grass and the collection of the soil layer beneath at the depth required by the local authority Resource Consent. It is usual for two to three samples to be collected from around the swale/basin and composited into a single sample for analysis.

Some networks also have monitoring bores which are sampled as per the consent.

## Why you should partner with us for your laboratory service requirements:

### The best analytical techniques

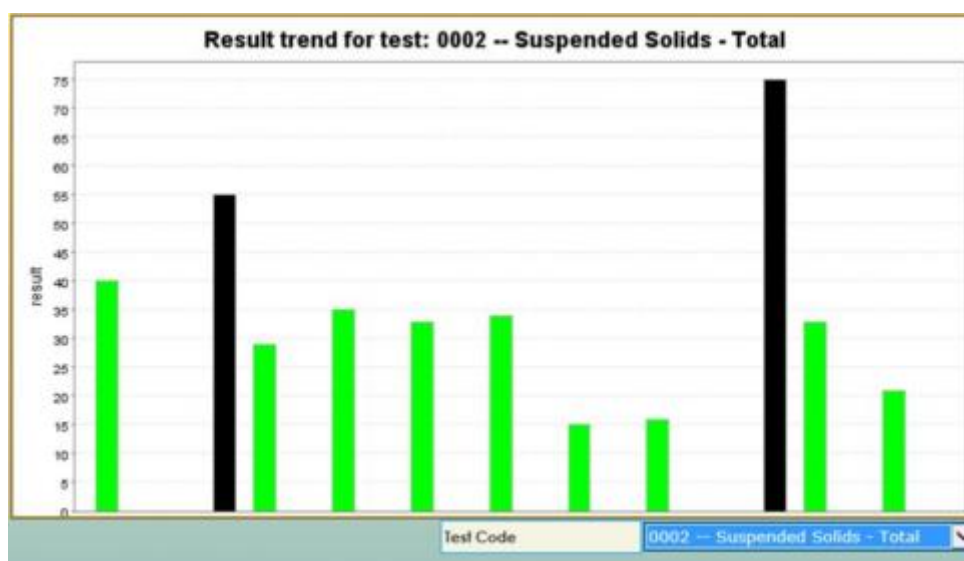
Our staff receive the best training possible to ensure we continue to provide results that our clients can rely on. We also operate one of New Zealand's most comprehensive ranges of analytical instrumentation. Our service includes all the many tests required for complete compliance to all the consents we have worked with. This includes a thorough knowledge of aspects not immediately obvious to inexperienced laboratory personnel.

### The most complete range of tests

We perform many different types of analyses, dependent on the organisation that we are testing. Some companies will only ever be tested for a small suite of tests while others will require more. We have the flexibility and range of service to meet these diverse requirements.

### Comprehensive and flexible data reporting

Often our work requires us to present our data in very specific formats. This includes spreadsheet or csv formats designed to integrate with our customers own systems.



Automation of this process using our powerful and flexible laboratory information management system (LIMS) allows for simplification and minimisation of transcription errors. These spreadsheets are used on a daily basis to ensure compliance to a range of consent conditions including:

- Geometric mean of 90 consecutive values
- Compliance against rolling month values
- Individual maximum allowable values

Each of our customers can have their own council enforced guidelines that their samples must comply to. Our reports are able to incorporate these limits so that

they clearly identify whether the sample is complaint or not. Email, text and phone alerts can also be automatically triggered when these limits are exceeded.

Alert from Environmental Laboratory Services Ltd. re: Boris and Oleg Ltd – Drinking Water Tap 1 (Office Tap)					
Batch Number:	08/12345	Order Number	BO12345	Work Area ID:	ELS
Sample Number:	03	Sample Point Code:	Boris-01	Customer Code:	9999
Sub Sample:		Version:	1	Phone:	(04) 123 4567
Date Received:	2/03/2008	Sample Type:		Primary Email:	boris@boroleg.com
Sampler:	Oleg	Variation:		Factory ID:	
Product Desc:	Drinking Water Tap 1				
Test:	0104 – E.coli				
Notes:	Office Tap				
Result	Present		DNC		Does Not Comply

We are also able to write data interrogation queries to provide incredible amounts of information, such as:

- Which of my sample sites had the highest Suspended Solids result last year? And on what date was it?
- What are all the Total Chromium results for my discharge?
- How many of my samples exceeded the Maximum Value?

All query results can be exported into any spreadsheet and emailed to you as part of our value added service. As well as this, previous reports and invoices can be found easily.

## Cost effectiveness

Of importance to everybody is the need to remain cost effective. By using the best analytical equipment available, along with the application of lean methodologies throughout our laboratory processes, we are able to streamline our systems to ensure our clients a value for money service.

## Prompt turnaround times of results

We consistently report results for the majority of our clients within 5 working days. Our client login and report emailing services can also reduce the time it takes to see your data.

## A complete service

Many things can go wrong before the sample reaches a laboratory so we offer assistance to minimise risk associated with:

- Inappropriate sample types and locations
- Incorrect sampling technique
- Sample contamination
- Incorrect labelling
- Sample homogeneity
- Delivery timeframes

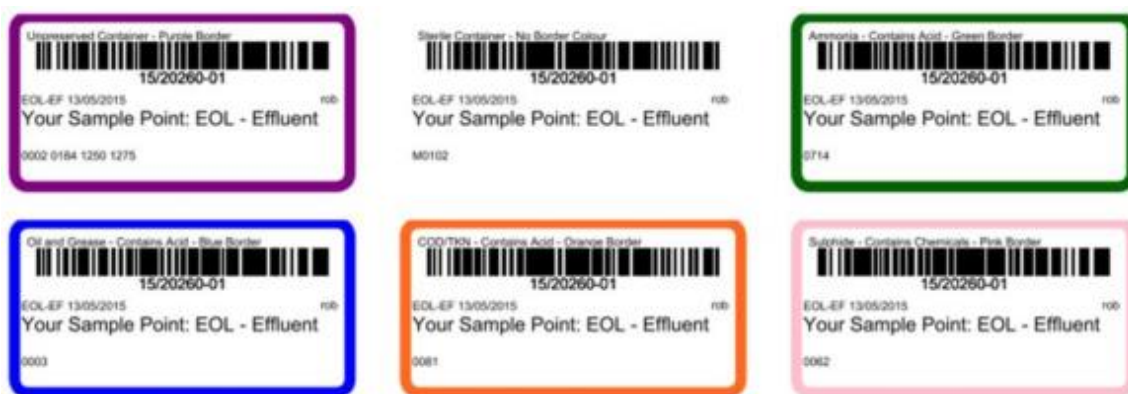
Please download from our website, or ask us for our sample integrity brochure, which explains the sampling process.



Sampling is an often underestimated but very crucial step in the process of determining sample integrity.



We have our own team of samplers so we know what is needed to ensure accurate and safe sampling under all types of conditions. We provide you with colour-coded bottles, ice packs and chilly bins to make sampling easier.



Each bottle corresponds to a particular preservative type and ensures the parameters under examination remain as constant as possible. Pre-registration of samples, barcoded labels and automated chain of custody documentation ensures traceability throughout the process from sampling through to reporting of results and invoicing.



**Stormwater 2017**  
Innovative, Resilient & Future Ready  
3–5 May 2017, Pullman Hotel, Auckland

Please come along to our stand or contact us to find out how we can help with your Stormwater laboratory service requirements

Phone: **0800 576 5016**

Email: **waterNZ@eurofins.com**

IANZ Accreditation Numbers:  
Biological 639, Drinking Water 787  
Chemistry 414, RLP 1140



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