

The WaterChek Effluent Water Chemistry programme has been designed as a multi-purpose service for water chemistry laboratories engaged in research, industry, environmental and public health testing. WaterChek provides independent verification of test performance across a wide range of tests and sample matrices.



## PROGRAMME OBJECTIVE

Monitoring of municipal wastewater and industry discharges (trade waste) is important to ensure adherence to local bylaws and regulatory requirements including resource consents.

The WaterChek Proficiency Testing scheme has been developed over many years to provide a system for laboratories to validate their testing capability and benchmark their results. Sample preparation has been designed to cover a range of concentrations for major analytes – ensuring sample properties are representative of samples most often tested in participating laboratories.

## BENEFITS OF PARTICIPATING IN WATERCHEK

### ➤ Confidence in Results

Measurement of performance in comparison with other laboratories provides:

- Confidence that Precision and Accuracy of test results are within expected limits.
- Confirmation of differences between methods where this may be expected.

### ➤ Credibility

Test performance can be demonstrated to:

- Customers
- Regulatory Authorities
- Accreditation Agencies

### ➤ Compliance with

- Laboratory Standards (e.g. ISO 17025)
- Regulatory, environmental and customer requirements

### ➤ Training

- Test performance from individual analysts can be monitored and reported over time.

## PROGRAMME FEATURES

- Comprehensive range of proven sample formats covering a wide range of tests in each round
- Participation by many accredited laboratories gives high quality, robust data sets with low variation.
- Guidance from independent Technical Advisory Group ensures relevance to current industry needs.

## ACCREDITATION

Global Proficiency is accredited to ISO/IEC 17043: Conformity Assessment - General Requirements for the competence of proficiency testing providers; our scope includes the WaterChek Effluent Water programme.

## SAMPLE TYPES

- Trade Waste Effluent (April Round)
- Dairy Waste Effluent (September Round)
- Meat Waste Effluent (December Round)
- Municipal Effluent (All Rounds)

## AVAILABLE TESTS

Effluent Water rounds offering the full suite of tests are available three times per year.

### Base (WEB)

Absorbance - filtered (254nm)  
Total Alkalinity (as CaCO<sub>3</sub>)  
Ammonia-N  
Boron  
Bromide  
Calcium  
Chloride  
Colour True  
Conductivity @ 25°C  
Fluoride  
Hardness - Total (as CaCO<sub>3</sub>)  
Magnesium  
Nitrate-N  
Nitrite-N  
NOx-N  
Nitrogen – Total  
Nitrogen – Total Kjeldahl  
Nitrogen - Organic  
pH @ 25°C  
Phosphorus - Dissolved Reactive  
Phosphorus - Total Dissolved  
Phosphorus - Total  
Potassium  
Silica (as SiO<sub>2</sub>)  
Sodium  
Solids - Total  
Solids - Dissolved  
Solids - Suspended  
Solids - Volatile; susp or total  
Sulphate  
Turbidity

### Trace Elements (WET)

Aluminium  
Antimony  
Arsenic  
Barium  
Bismuth  
Cadmium  
Chromium  
Cobalt  
Copper  
Iron  
Lead  
Lithium  
Manganese  
Mercury  
Molybdenum  
Nickel  
Selenium  
Strontium  
Vanadium  
Zinc

### Demand (Base)

cBOD  
TBOD  
COD  
TOC  
NPOC

### Fat, Oil & Grease (WEF)

Fat, Oil & Grease

### Chlorine (WEC) - (optional)

Total Chlorine

Global Proficiency also offers two “Basic Chemistry” rounds per year for our customers whose testing requirements are limited to the basic chemistry tests.

## AVAILABLE TESTS

### Base (WBB)

Conductivity @ 25°C  
pH @ 25°C  
Turbidity  
Solids - Suspended

### Chlorine (WCL)

(optional)

FAC  
Total Chlorine

## FOR MORE INFORMATION, PLEASE VISIT OUR WEBSITE

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OR EMAIL [enquiries@global-proficiency.com](mailto:enquiries@global-proficiency.com)