

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 (WEG)

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)**