

# **Effluent Water Chemistry**

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 waste water and industry discharges (trade wastes) 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:
- 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
- Used by MPI (Ministry for Primary Industries), as the provider of Inter-Laboratory Comparison Programmes for the meat and food testing industries
- Accredited to ISO/IEC 17043:2010 Conformity Assessment - General Requirements for Proficiency Testing

### **ACCREDITATION**

- Global Proficiency is accredited to ISO/IEC 17043:2010 Conformity Assessment - General Requirements for Proficiency Testing; our scope includes the WaterChek programme
- Global Proficiency is also accredited to ISO 17034: General requirements for the competence of Reference Material Producers.
   For information on the range of Reference Materials offered, please visit our website.

## **SAMPLE TYPES**

- Dairy Effluent
- Meat Effluent
- Municipal Effluent





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#### **AVAILABLE TESTS**

BASE TRACE ELEMENTS

Absorbance (254 & 270nm) Aluminium Total Alkalinity (as CaCO<sub>3</sub>) Antimony Arsenic **Bromide** Barium Calcium **Bismuth** Chloride Cadmium Colour Chromium Conductivity @ 25°C Cobalt Fluoride Copper Hardness - Total (as CaCO<sub>3</sub>) Iron Magnesium Lead Ammonia-N Lithium Nitrate-N Manganese Nitrite-N Mercury NOx-N Molybdenum Nitrogen - Total Nickel

Nitrogen – Total
Nitrogen – Total Kjeldahl
Nitrogen - Organic
pH @ 25°C
Strontium
Phosphorus - Dissolved Reactive
Silver
Zinc

Phosphorus - Total Dissolved

Phosphorus - Total

Potassium DEMAND (BASE)

Silica (as SiO2)cBODSodiumBODSolids - TotalCODSolids - DissolvedTOCSolids - SuspendedNPOC

Solids - Volatile; susp or total

Sulphate FAT, OIL & GREASE Turbidity Fat, Oil & Grease

Global Proficiency also offers other WaterChek proficiency programmes including Potable Water, Sea Water and Basic Chem – please request a copy of the Programme Description if you are interested.

### FOR MORE INFORMATION PLEASE VISIT OUR WEBSITE

www.global-proficiency.com

**OR EMAIL** 

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