



Biological Testing ISO/IEC 17025 Application Document

Annex A: Accreditation of facilities for testing of water samples for Cryptosporidium and Giardia

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Biological Testing Annex A: Accreditation of facilities for testing of water samples for *Cryptosporidium* and *Giardia*

This document provides interpretative criteria and recommendations for the application of ISO/IEC 17025 for accreditation of tests for parasitic protozoa under the following class for both applicant and accredited facilities.

8.65 Aquatic biology (of specified water source)

- .31 Identification of enteric protozoa to specified level
- .32 Enumeration of enteric protozoa to specified level
- .33 General biomass of enteric protozoa
- .38 Sampling of enteric protozoa

Applicant and accredited facilities must also comply with the ISO/IEC 17025 standard application document and any field application documents, annexes, policies and/or technical circulars (refer to *NATA Procedures for Accreditation*).

The clause numbers in this document follow those of ISO/IEC 17025 but since not all clauses require interpretation the numbering may not be consecutive.

5.2.1 Staff competence and technical control

A supervisor for parasitic protozoa is expected to hold a degree or equivalent in a relevant science plus have analysed a minimum of 100 samples with at least 10 positives.

An analyst for parasitic protozoa is expected to hold a degree or equivalent in a relevant science plus have analysed a minimum of 50 samples with at least 5 positives.

5.9 Assuring the quality of test and calibration results

Proficiency testing

The acceptable range for percentage recoveries is 10% - 110% in relevant parasitic protozoan proficiency testing programs.

Internal quality control

Recovery rates of positive controls from each sample matrix (one per ten samples) and from reagent water (each sample) must be established and on-going charts of recovery efficiency be maintained. Positive controls must be identified by source, method purification, propagation/age, preservation and percent of cysts and oocysts that meet confirmation criteria (e.g. DAPI positive).

5.10 Reporting of results

Results of *Cryptosporidium*/*Giardia* detection must be reported in the context of quality control data on established on-going recovery from a matrix and current recovery from reagent water. The report must also have clear indication of percentage of sample analysed.