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МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ

Water quality — Sampling —

Part 4: Guidance on sampling from lakes, natural and man-made

Qualité de l'eau — Échantillonnage —

Partie 4 : Guide pour l'échantillonnage des eaux des lacs naturels et des lacs artificiels

Reference number
ISO 5667-4:1987 (E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 5667-4 was prepared by Technical Committee ISO/TC 147, *Water quality*.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

Water quality — Sampling —

Part 4:

Guidance on sampling from lakes, natural and man-made

0 Introduction

This part of ISO 5667 should be read in conjunction with ISO 5667-1, ISO 5667-2 and ISO 5667-3.

The general terminology used is in accordance with the various parts of ISO 6107 and in particular ISO 6107-2.

1 Scope and field of application

This part of ISO 5667 presents detailed principles to be applied to the design of sampling programmes, to sampling techniques and the handling and preservation of samples of water from natural and man-made lakes.

Sampling for microbiological examination is not included.

The main objectives are specified in 1.1 to 1.3.

1.1 Quality characterization measurement

Measurement of water quality over a long period of time (several years) including the total body of water.

1.2 Quality control measurement

Measurement of water quality over a long period of time at one or several defined places in a body of water where water is or may be withdrawn for use.

1.3 Measurement for specific reasons

Identification and measurement of pollution, for example fish or bird mortality, or other unusual phenomena (colour or turbidity development, formation of floating layers).

2 References

ISO 5667, *Water quality — Sampling —*

Part 1 : Guidance on the design of sampling programmes.

Part 2 : Guidance on sampling techniques.

Part 3 : Guidance on the preservation and handling of samples.

ISO 6107-2, *Water quality — Vocabulary — Part 2.*

3 Definitions

3.1 snap sample; spot sample; grab sample : A discrete sample taken randomly (with regard to time and/or location) from a body of water.

(Definition taken from ISO 6107-2.)

3.2 depth profile samples : A series of water samples taken from various depths of a body of water at a specific location.

NOTE — In order to obtain a characterization of the water quality throughout the entire water body it is necessary to take depth profile samples at various locations.

3.3 area profile samples : A series of water samples taken from a particular depth of a body of water at various locations.

3.4 Composite samples

3.4.1 depth-integrated sample : Two or more water samples taken discretely or continuously at a particular location in a body of water, either between the surface and sediment layer or between other defined depths in a vertical line and subsequently combined.

3.4.2 area-integrated sample : Water sample obtained after combining a series of samples taken at various locations of a body of water from a particular depth.

4 Sampling equipment

4.1 Materials

Sampling containers should be chosen, as far as possible, which do not give rise to any interaction between the water and the material of construction (for example stainless steel or plastic). Light may influence organisms present in the sample which may lead to undesired chemical reactions.

General guidance is given in ISO 5667-2.