
Water quality — Sampling —

Part 12:

**Guidance on sampling of bottom
sediments from rivers, lakes and
estuarine areas**

Qualité de l'eau — Échantillonnage —

*Partie 12: Recommandations concernant l'échantillonnage des
sédiments dans les rivières, les lacs et les estuaires*



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Contents

	Page
Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Sampling strategy	3
4.1 General.....	3
4.2 Type of investigation.....	3
4.2.1 General.....	3
4.2.2 Chemical investigation.....	3
4.2.3 Physical investigation.....	3
4.2.4 Biological and microbiological investigation.....	4
4.3 Choice of sampling site.....	4
4.4 Choice of sampling point.....	4
4.5 Choice of sampling method.....	5
4.5.1 General.....	5
4.5.2 Consolidated bottom sediment.....	5
4.5.3 Unconsolidated bottom sediment.....	6
4.6 Frequency and time of sampling.....	6
4.7 Site conditions.....	6
4.7.1 General.....	6
4.7.2 Meteorological and climatic conditions.....	6
4.7.3 Hydrological conditions.....	7
5 Sampling equipment	8
5.1 General.....	8
5.2 Grab systems.....	8
5.3 Corer systems.....	10
6 Sampling procedure	13
6.1 Sampling container materials and types.....	13
6.2 Composite samples.....	13
7 Storage, transport and stabilization of samples	14
8 Safety	15
9 Sample identification and records	15
Annex A (informative) Description of the scissor-grab system (van Veen type)	17
Annex B (informative) Description of the piston drill system	19
Annex C (informative) Description of the corer system involving a diver	21
Annex D (informative) Description of the Beeker sampler system	22
Annex E (informative) Description of the sealed core sampler system	25
Annex F (informative) Description of the wedge core or Vrijwit drill system	27
Annex G (informative) Description of the gravity corer system	29
Annex H (informative) Description of the Jenkins mud sampler system	31
Annex I (informative) Description of the Craib corer system	33
Annex J (informative) Description of a piston corer	35
Annex K (informative) Description of peat borers	38
Annex L (informative) Freeze coring	40

Annex M (informative) Description of sediment sampler with slicing mechanism	44
Bibliography	46

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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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 147, *Water quality*, Subcommittee SC 6, *Sampling (general methods)*.

This second edition cancels and replaces the first edition (ISO 5667-12:1995), which has been technically revised.

A list of all parts in the ISO 5667 series can be found on the ISO website.

Introduction

This document should be read in conjunction with ISO 5667-1 and ISO 5667-15.

The general terminology used is in accordance with the various parts of ISO 6107, and more particularly, with the terminology on sampling given in ISO 6107-2.

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Water quality — Sampling —

Part 12:

Guidance on sampling of bottom sediments from rivers, lakes and estuarine areas

1 Scope

This document provides guidance on the sampling of unconsolidated sediments for the determination of their geological, physical and chemical properties, as well as the determination of biological, microbiological and chemical properties at the water and sediment interface. Guidance on achieving sediment cores is given specifically for the measurement of rates of deposition and detailed strata delineation. The main emphasis of this document is to provide methods that achieve sediment samples.

The environments considered are

- limnic (rivers, streams and lakes, natural and man-made), and
- estuarine, including harbours.

Industrial and sewage works for sludges, paleolimnological sampling and sampling of open ocean sediments are specifically excluded from this document (and are addressed in ISO 5667-15), although some techniques may apply to these situations. Sampling of suspended solids is outside the scope of this document and reference can be made to ISO 5667-17 for such guidance.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 5667-1, *Water quality — Sampling — Part 1: Guidance on the design of sampling programmes and sampling techniques*

ISO 5667-15, *Water quality — Sampling — Part 15: Guidance on the preservation and handling of sludge and sediment samples*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>