First edition 2017-01

Soil quality — Sampling —

Part 102:

Selection and application of sampling techniques

Qualité du sol — Échantillonnage —

Partie 102: Choix et application des techniques d'échantillonnage



ISO 18400-102:2017(E)

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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).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on 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 190, *Soil quality*, Subcommittee SC 2, *Sampling*.

This first edition of ISO 18400-102, together with ISO 18400-104, ISO 18400-105 and ISO 18400-206, cancels and replaces ISO 10381-2:2002 and ISO 10381-6:2009, which have been technically and structurally revised. The new ISO 18400 series is based on a modular structure and cannot be compared to ISO 10381-2 and ISO 10381-6 clause by clause.

A list of all parts in the ISO 18400 series can be found on the ISO website.

Introduction

This document is one of a group of International Standards intended to be used in conjunction with each other where necessary. It deals with various aspects of sampling for the purposes of soil investigation including agricultural, forestry, and contamination investigations, but is not applicable to investigations for geotechnical purposes. These are dealt with in the ISO 22475 series.

ISO 22475-1 specifies the technical principles for the execution of sampling and groundwater measurements for geotechnical purposes. It describes and provides guidance on the application of many of the sampling techniques included in this document albeit in a different context. Many contractors engaged to carry out work in connection with environmental studies will be familiar with its often prescriptive requirements. It includes detailed design information for some equipment. It is to be noted that the nomenclature used in this document may differ in places from that used in ISO 22475-1 because of the different contexts and traditions in the fields of geotechnical and geo-environmental investigation.

General principles to be applied in the design of sampling programmes for the purpose of characterization of soil and identification of sources and effects of contamination of soil and related material are given in ISO $18400-104^{1}$). ISO $18400-104^{1}$) provides information about where to sample, the tests to be conducted, the type of sample, the depth of sampling and the required representativeness of the sampling system for sampling in respect of specific purposes.

This document is part of a series on sampling standards for soil. The role/position of the International Standards within the total investigation programme is shown in Figure 1.

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¹⁾ Under preparation.

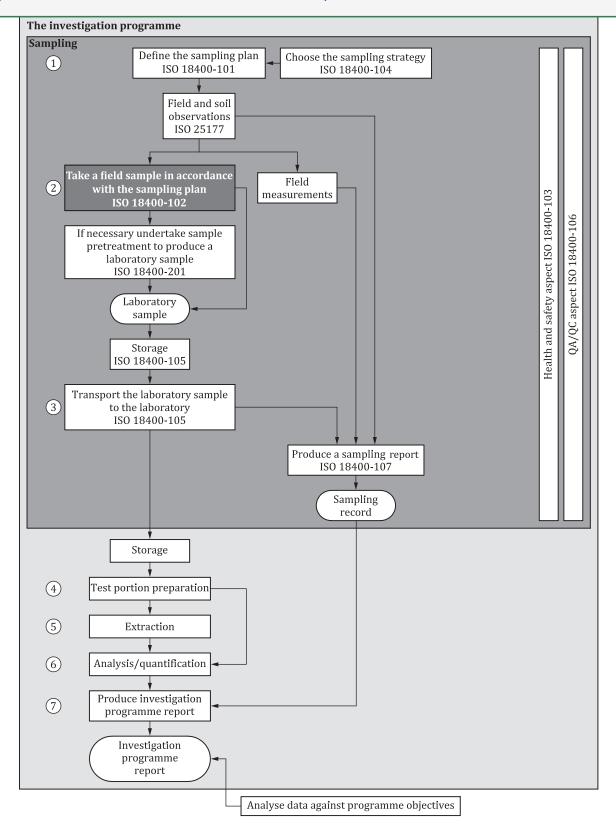


Figure 1 — Links between the essential elements of an investigation programme

- NOTE 1 The numbers in circles in Figure 1 define the key elements (1 to 7) of the investigation programme.
- NOTE 2 Figure 1 displays a generic process which can be amended when necessary.