INTERNATIONAL STANDARD

ISO 18400-107

First edition 2017-01

Soil quality — Sampling —

Part 107: **Recording and reporting**

Oqualité du sol — Échantillonnage — . du. 3 107: En.



Reference number ISO 18400-107:2017(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: <u>www.iso.org/iso/foreword.html</u>

This document was prepared by Technical Committee ISO/TC 190, *Soil quality*, Subcommittee SC 2, *Sampling*.

This first edition of ISO 18400-107, together with ISO 18400-101 and ISO 18400-104, cancels and replaces ISO 10381-1:2002, which has been technically revised. The ISO 18400 series is based on a modular structure and cannot be compared to ISO 10381-1 clause by clause.

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

Introduction

Assembly of the field data and its presentation in an easily readable and understandable form in the sampling report is an essential precursor to understanding the laboratory results and their proper presentation and interpretation in the overall investigation report.

Documentation and data management related to sampling within an investigation programme consist of reporting the sampling procedures, recording field data and observations, and describing the samples.

Usually, the results from examinations of samples are used to gain information about the total material or population the samples were taken from.

For a final assessment, a wide variety of information sources will be used.

The sampling report deals with five major activities:

- the instruction of the sampler and any deviation from the sampling plan;
- the field observations and measurements;
- the instructions for testing and analysis;
- comments on sources of uncertainty;
- comments on accuracy, precision and variability.

The degree of detail of information required depends on the objectives of the sampling programme. This has to be defined in the sampling plan.

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.



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 <u>Figure 1</u> displays a generic process which can be amended when necessary.

Soil quality — Sampling —

Part 107: **Recording and reporting**

1 Scope

This document specifies the minimum information required for a sampling report independent of the purpose of the investigation.

The preparation of the overall investigation report is not covered by this document (see ISO/IEC 17025:2005, 5.10.3).

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 11074, Soil quality — Vocabulary

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 11074 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

NOTE ISO 11074 defines the terms "sampling record" and "sampling report" as synonyms, for in many fields of application, there is no sharp distinction between them. Within this document "record" or "recording" are used for the gathering of raw data in the field only. In all other cases, "report" or "reporting" are used.

4 General

The sampling report deals with five major activities:

- the instruction of the sampler (according to the sampling plan) and any deviations from the plan (see <u>Clause 5</u>);
- reporting the field activities, including observations and measurements (see <u>Clause 6</u>);
- the instructions for testing and analysis to the laboratory (see <u>Clause 7</u>);
- identification of any potential and actual uncertainties arising from the sampling (including information on areas that could not be sampled);
- gathering information on anything that might affect accuracy, precision and variability of the test results.

The sampling report should mention that the report has been prepared in accordance with this document.