
Soil quality — Sampling —
Part 106:
Quality control and quality assurance

Qualité du sol — Échantillonnage —

Partie 106: Contrôle de la qualité et assurance de la qualité

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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.

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

Introduction

Quality assurance (QA) comprises all those measures taken to ensure that results of the investigation are “fit for purpose”, including documentation, procedures to be followed, the setting of data quality objectives (i.e. for type, quality, and quantity) and reporting.

The overall quality of soil and site investigations and assessments depends on the quality of each separate step of the overall process, i.e. planning, sampling, pretreatment, analysis and evaluation, and interpretation of all results. This document only applies to sampling. Sampling is a very critical step in the whole procedure because errors made can usually not be recognized nor corrected in the laboratory or in the office afterwards.

A prerequisite for fit for purpose and reproducible analytical and test results is QA for sampling, including assuring:

- representativeness of samples;
- avoiding cross-contamination and unwanted changes or alterations of the sample during sampling, on-site pretreatment, transport, and delivery;
- making, recording, and reporting appropriate field observations;
- fit for purpose field measurements;
- a defined chain of custody process.

In [Figure 1](#), the different steps of an investigation programme are given. This document describes the QA in the first three steps.

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 also shown in [Figure 1](#).