ISO 14688-1:2017-12 (E)

Geotechnical investigation and testing - Identification and classification of soil - Part 1: Identification and description

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Terms and definitions 1

4 General 3

5 Identification of soil 4
5.1 Mineral soil 4
5.1.1 General 4
5.1.2 Composite soils 8
5.1.3 Plasticity 9
5.1.4 Organic content in mineral soils 9
5.2 Organic soils 9
5.3 Carbonate soils 10
5.4 Sulfide soils 10
5.5 Volcanic soils 10
5.6 Loess 10
5.7 Glacial soils 10
5.8 Anthropogenic soil 10
5.9 Origin of deposit 11
5.9.1 General 11
5.9.2 Depositional environment 11
5.9.3 Geological unit 11

6 Description of soil 11
6.1 Description of soil properties 11
6.1.1 Particle size distribution 11
6.1.2 Particle shape 11
6.1.3 Particle strength 12
6.1.4 Mineral composition 12
6.1.5 Fines content 12
6.1.6 Consistency 12
6.1.7 Soil colours 13
6.1.8 Organic content 14
6.1.9 Carbonate content 14
6.1.10 Degree of decomposition of peat 14
6.2 Description of different soil types 15
6.2.1 Volcanic soils 15
6.2.2 Loess 15
6.2.3 Glacial soils 15
6.2.4 Anthropogenic soil 16

7 Description of bedding and discontinuities 16
7.1 Bedding 16
7.2 Discontinuities 17

7.3 Interbedding and mixed soils 17

8 Reporting 17

Annex A (informative) Procedures for identification of the primary fraction in mineral soils 19

Bibliography 23