



EA MLA Signatory Český institut pro akreditaci, o.p.s. (Czech Accreditation Institute) Hájkova 2747/22, Žižkov, 130 00 Praha 3

issues

according to section 16 of Act No. 22/1997 Coll., on technical requirements for products and on changes and amendments to some Acts, as amended

CERTIFICATE OF ACCREDITATION

No. 356/2025

GEOtest, a.s. with registered office Šmahova 1244/112, Slatina, 627 00 Brno Company Registration No. 46344942

for the Testing Laboratory No. **1271** GEOtest Laboratories

Scope of accreditation:

Sampling, analytical and physicochemical analysis of water, soil, sludge, waste, sediment, bio-waste, air, aqueous extracts and physicomechanical testing of soils, aggregates and building materials to the extent as specified in the appendix to this Certificate.

This Certificate of Accreditation is a proof of accreditation issued on the basis of assessment of fulfillment of the accreditation criteria in accordance with

ČSN EN ISO/IEC 17025:2018

In its activities performed within the scope and for the period of validity of this Certificate, the abovementioned Accredited Body is entitled to refer to this Certificate, provided that the accreditation is not suspended and the Accredited Body meets the specified accreditation requirements in accordance with the relevant regulations applicable to the activity of an accredited conformity assessment body.

This Certificate of Accreditation replaces, to the full extent, Certificate No.: 137/2025 of 17/03/2025, and/or any administrative acts building upon it.

The Certificate of Accreditation is valid until: 25/08/2028

Prague: 10/07/2025





Signed in the Czech original: Zdeňka Drdová on 10/07/2025

Jan Velíšek
Director of the Department
of Testing and Calibration Laboratories
Czech Accreditation Institute

This translation of the Czech original has been issued by: Eliška Frycová

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

GEOtest, a.s.

CAB No. 1271, GEOtest Laboratories Šmahova 1244/112, Slatina, 627 00 Brno

Testing laboratory locations:

Analytical Laboratories
 Šmahova 1244/112, Slatina, 627 00 Brno
 Laboratories for Soil Mechanics
 Šmahova 1244/112, Slatina, 627 00 Brno

The laboratory applies a flexible approach to the scope of accreditation.

The current list of activities carried out within the flexible scope is available on the laboratory's website https://analytickalaborator.cz/o-nas-laborator-v-brne/ in the form of the "List of activities within the flexible scope of accreditation".

The laboratory provides opinions and interpretations of the test results.

The laboratory is qualified to carry out standalone sampling.

Detailed information on activities within the scope of accreditation (determined analytes / tested subject) is given in the section "Specification of the scope of accreditation".

1. Analytical Laboratories

Tests:

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
1*	Determination of pH by potentiometry	SOP AL-01 (ČSN ISO 10523)	Drinking, ground, surface and waste water, aqueous extract, aqueous solution	-
2*	Determination of electrical conductivity	SOP AL-02 (ČSN EN 27888)	Drinking, ground, surface and waste water, aqueous extract, aqueous solution	-
3	Determination of acid neutralizing capacity (ANC) by titration	SOP AL-03 (ČSN EN ISO 9963-1)	Drinking, ground, surface and waste water, aqueous extract, aqueous solution	-
4	Determination of chloride - Silver nitrate titration	SOP AL-04 (ČSN ISO 9297)	Drinking, ground, surface and waste water, aqueous extract, aqueous solution, absorption solution	ı
5	Determination of nitrate by spectrophotometry and nitrate nitrogen by calculation from measured values	SOP AL-05 (ČSN ISO 7890-3)	Drinking, ground, surface and waste water, aqueous extract, aqueous solution, absorption solution	-

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

GEOtest, a.s.

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
6	Determination of fluorides by electrochemical method	SOP AL-06 (ČSN ISO 10359-1)	Drinking, ground, surface and waste water, aqueous extract, aqueous solution, absorption solution	-
7	Determination of ammonium by spectrophotometry, determination of ammonia nitrogen and free ammonia by calculation from measured values	SOP AL-07 (ČSN 83 0530:1978, part 26)	Drinking, ground, surface and waste water, aqueous extract, aqueous solution, absorption solution	-
8	Determination of nitrite by spectrophotometry, determination of nitrite nitrogen and inorganic nitrogen by calculation from measured values	SOP AL-08 (ČSN EN 26777)	Drinking, ground, surface and waste water, aqueous extract, aqueous solution, absorption solution	-
9	Reserved			
10	Determination of iodide by potentiometry	SOP AL-10 (HANNA Instruments manual)	Drinking, ground and surface water, aqueous solution	-
11	Determination of chemical oxygen demand with permanganate (COD-Mn)	SOP AL-11 (ČSN EN ISO 8467)	Drinking, ground and surface water	-
12	Determination of anions by ion chromatography	SOP AL-12 (ČSN EN ISO 10304-1; ČSN EN ISO 10304-4; ČSN EN ISO 15061)	Drinking, ground, surface and waste water, aqueous extract, aqueous solution	В
13	Determination of total cyanide by spectrophotometry	SOP AL-13 (ČSN 75 7415; ASTM 413 A; ASTM 413 B; ASTM 413 D)	Drinking, ground, surface and waste water, aqueous extract, aqueous solution, absorption solution	-
14	Determination of total cyanide by spectrophotometry	SOP AL-13A (ČSN 75 7415; ASTM 413 A; ASTM 413 B; ASTM 413 D)	Solid matrices	-

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

GEOtest, a.s.

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
15	Determination of easily liberatable cyanides by spectrophotometry	SOP AL-14 (ČSN ISO 6703-2; ASTM 413 A; ASTM 413 D)	Drinking, ground, surface and waste water, aqueous extract, aqueous solution	-
16	Determination of easily liberatable cyanides by spectrophotometry	SOP AL-14A (ČSN ISO 6703-2; ASTM 413 A; ASTM 413 D)	Solid matrices	-
17*	Preliminary determination of odour and taste	SOP AL-15 (ČSN 75 7340)	Drinking water	-
18	Determination of elements by ICP-OES method	SOP AL-16 (ČSN EN ISO 11885)	Drinking, ground, surface and waste water, aqueous extract, aqueous solution, absorption solution	A, B
19	Determination of selected elements by ICP-OES method	SOP AL-16A (ČSN EN ISO 22036)	Solid matrices	A, B
20	Determination of total mercury by atomic absorption spectrometry	SOP AL-17 (ČSN 75 7440)	Drinking, ground, surface and waste water, aqueous extract, aqueous solution, absorption solution	-
21	Determination of total mercury by atomic absorption spectrometry	SOP AL-17A (ČSN 75 7440)	Solid matrices	A
22	Determination of hexavalent chromium (Cr ⁶⁺) – spectrophotometric method with 1,5-diphenylcarbazide	SOP AL-18 (ČSN ISO 11083)	Drinking, ground, surface and waste water, aqueous extract, aqueous solution	-
23	Determination of bivalent iron (Fe ²⁺) - photometric method using 1,10 phenanthroline	SOP AL-19 (ČSN ISO 6332)	Drinking, ground, surface and waste water	-
24	Determination of adsorbable organically bound halogens (AOX) by coulometry	SOP AL-20 (ČSN EN ISO 9562)	Drinking, ground, surface and waste water	-
25	Determination of adsorbable organically bound halogens (AOX) by coulometry	SOP AL-20A (ČSN EN 16166)	Solid matrices	-

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

GEOtest, a.s.

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
26	Determination of extractable organically bound halogens (EOX) by coulometry	SOP AL-21 (DIN 38414-S17)	Solid matrices	-
27	Determination of phenol index with 4-aminoantipyrine by spectrophotometry after distillation	SOP AL-22 (ČSN ISO 6439)	Drinking, ground, surface and waste water, aqueous extract, aqueous solution	-
28	Determination of anionic surfactants (MBAS) by photometry	SOP AL-23 (ČSN EN 903)	Drinking, ground, surface and waste water	-
29	Determination of anionic surfactants (MBAS) by photometry - HACH LANGE commercial analytical set	SOP AL-24 (HACH LANGE Manual)	Drinking, ground, surface and waste water	-
30*	Determination of dissolved oxygen – optical method	SOP AL-25 (ČSN ISO 17289)	Drinking, ground, surface and waste water	-
31	Determination of dissolved solids and dissolved inorganic salts (DIS) by gravimetry	SOP AL-26 (ČSN 75 7346; ČSN 75 7347)	Drinking, ground, surface and waste water, aqueous extract	-
32	Determination of suspended solids by gravimetry	SOP AL-27 (ČSN EN 872)	Drinking, ground, surface and waste water	-
33	Determination of biochemical oxygen demand (BOD ₅) - optical method	SOP AL-28 (ČSN EN ISO 5815-1)	Surface, ground and waste water	-
34	Determination of total organic carbon (TOC) and dissolved organic carbon (DOC) photometrically - HACH LANGE commercial analytical kit	SOP AL-29 (HACH LANGE Manual)	Drinking, ground, surface and waste water, aqueous extract	-
35	Determination of chemical oxygen demand with dichromate (COD-Cr) by spectrophotometry - HACH LANGE commercial analytical set	SOP AL-30 (HACH LANGE Manual)	Drinking, ground, surface and waste water	-
36	Determination of total nitrogen (TN) by photometry - HACH LANGE commercial analytical set	SOP AL-31 (HACH LANGE Manual)	Drinking, ground, surface and waste water, aqueous extract	-

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

GEOtest, a.s.

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
37	Determination of carbon (TOC, TIC, TC), total nitrogen (TN) and total sulphur (TS) by combustion analyzer with TCD detection	SOP AL-32 (ČSN EN 15936; manual to Flash 2000 by Thermo Scientific, page 119)	Solid matrices, bio- waste, plant material	-
38	Determination of methyl tert- butyl ether (MTBE) and ethyl tert-butyl ether (ETBE) by GC/MS headspace method	SOP AL-33 (ČSN EN ISO 17943; EPA Method 8260C)	Drinking, ground, surface and waste water	-
39	Determination of VOC by GC/MS headspace method and calculation of the sum of VOC from the measured values	SOP AL-34 (ČSN EN ISO 10301)	Drinking, ground, surface and waste water	В
40	Determination of VOC by GC/MS headspace method and calculation of the sum of VOC from the measured values	SOP AL-34A (ČSN EN ISO 22155)	Solid matrices	A, B
41	Determination of VOC by GC/FID method and calculation of the sum of BTEX and the sum of THM from the measured values	SOP AL-35 (ČSN EN ISO 15680)	Drinking, ground, surface and waste water	В
42	Determination of attenuation gases by GC/FID headspace method	SOP AL-36 (The Validation of Methodology in the Determination of Methane in Water, Lewin, K., Blakey, N.C., Cooke, D.A., 1990)	Drinking, ground, surface and waste water	В
43	Determination of non-polar extractives by ultraviolet spectrometry method (NEL _{UV})	SOP AL-37 (ČSN 83 0540-4)	Drinking, ground, surface and waste water, aqueous extract	-
44	Determination of non-polar extractives by ultraviolet spectrometry method (NEL _{UV})	SOP AL-37A (ČSN 83 0540-4:1984)	Solid matrices	-
45	Determination of nonpolar extractives by infrared spectrometry method (NEL _{IR})	SOP AL-38 (ČSN 75 7505:1998)	Drinking, ground, surface and waste water, aqueous extract	-
46	Determination of nonpolar extractives by infrared spectrometry method (NEL _{IR})	SOP AL-38A (TNV 75 8052)	Solid matrices	-

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

GEOtest, a.s.

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
47	Determination of extractives by infrared spectrometry method (EL _{IR})	SOP AL-39 (ČSN 75 7506)	Drinking, ground, surface and waste water	-
48	Determination of the content of hydrocarbons C ₁₀ - C ₄₀ after solvent extraction by GC/FID method	SOP AL-40 (ČSN EN ISO 9377-2)	Drinking, ground, surface and waste water, aqueous extract	В
49	Determination of the content of hydrocarbons C ₁₀ - C ₄₀ after solvent extraction by GC/FID method	SOP AL-40A (ČSN EN 14039; ČSN EN ISO 16703)	Solid matrices	A, B
50	Determination of phthalic acid esters by GC/MS method	SOP AL-41 (ČSN EN ISO 18856; EPA Method 8060)	Drinking, ground, surface and waste water	В
51	Determination of PCB, OCP by GC/MS method and calculation of the sum of PCB and the sum of OCP from measured values	SOP AL-42 (ČSN EN ISO 6468; EPA Method 680)	Drinking, ground, surface and waste water, aqueous extract	В
52	Determination of PCB, OCP by GC/MS method and calculation of the sum of PCB and the sum of OCP from measured values	SOP AL-42A (ČSN EN 17322; EPA Method 680)	Solid matrices	A, B
53	Determination of PAH by HPLC/FLUD, DAD and calculation of the sum of PAH from the measured values	SOP AL-43 (ČSN EN ISO 17993)	Drinking, ground, surface and waste water, aqueous extract	В
54	Determination of PAH by HPLC/FLUD, DAD and calculation of the sum of PAH from the measured values	SOP AL-43A (ČSN EN 17503)	Solid matrices	A, B
55	Determination of pesticides by LC-MS method	SOP AL-44 (EPA Method 535; EPA Method 1694)	Drinking, ground, surface and waste water	В
56	Determination of dry matter in a solid sample by gravimetry and water content by calculation from the measured values	SOP AL-45 (ČSN EN 15934)	Solid matrices	-

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

GEOtest, a.s.

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
57	Determination of loss on ignition (combustible matter) by gravimetry and annealing residue by calculation from measured values	SOP AL-46 (ČSN EN 15935)	Solid matrices	-
58*	Indicative determination of methane and carbon dioxide by IR and carbon monoxide, hydrogen sulphide and oxygen by electrochemical method using mobile analyzer	SOP AL-47 (Hermann Sewerin manufacturer's manual)	Soil air	-
59*	Determination of the total content of elements in solid matrices by X-ray fluorescence with a manual ED-XRF analyser	SOP AL-48 (ČSN EN 16424; BAS Rudice spol. s r.o. manufacturer's manual)	Solid matrices	-
60*	Determination of free and total chlorine colorimetrically – HACH LANGE commercial analytical kit and bound chlorine by calculation	SOP AL-49 (HACH LANGE Manual)	Drinking and surface water	-
61*	Determination of temperature	SOP AL-50 (ČSN 75 7342)	Drinking, ground, surface and waste water	-
62	Determination of base neutralizing capacity (BNC) by titration and calculation of free carbon dioxide	SOP AL-51 (ČSN 75 7372; ČSN 75 7373)	Drinking, ground, surface and waste water, aqueous extract, aqueous solution	-
63*	Determination of redox potential (ORP) electrometrically	SOP AL-52 (ČSN 75 7367)	Drinking, ground, surface and waste water, aqueous extract	-
64*	Determination of turbidity by nephelometry	SOP AL-53 (ČSN EN ISO 7027-1)	Drinking, ground, surface and waste water	-
65	Determination of colour by photometry	SOP AL-54 (ČSN EN ISO 7887, method C)	Drinking, ground and surface water	
66	Determination of phenol index by CFA method	SOP AL-55 (ČSN EN ISO 14402; Skalar manual)	Drinking, ground, surface and waste water, aqueous extract, aqueous solution	-

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

GEOtest, a.s.

CAB No. 1271, GEOtest Laboratories Šmahova 1244/112, Slatina, 627 00 Brno

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
67	Determination of ammonium ions by CFA method, determination of ammonium nitrogen and free ammonia by calculation from measured values	SOP AL-56 (ČSN EN ISO 11732; Skalar manual)	Drinking, ground, surface and waste water, aqueous extract, aqueous solution, absorption solution	-

asterisk at the ordinal number identifies the tests, which the laboratory is qualified to carry out outside the permanent laboratory premises

The laboratory can modify the test procedures with the specified degree(s) of freedom in the scope of accreditation while maintaining the principle of measurement. If no degree of freedom is specified, the laboratory cannot apply a flexible approach to the scope of accreditation for the test.

Specification of the scope of accreditation:

Ordinal test number	Detailed information on activities within the scope of accreditation (determined analytes)
12	Chlorites, chlorates, bromates, fluorides, sulphates, phosphates, nitrites, nitrates, chlorides and nitrite nitrogen, nitrate nitrogen, phosphorus pentoxide, sum of chlorites and chlorates by calculation from measured values
18	Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, Li, Mn, Mo, Sb, Se, Sn, Ni, Pb, Ptot., Stot., V, Zn, Na, K, Mg, Si, Sr, Tl and silicates such as SiO ₂ , total hardness (Ca + Mg), hardness as CaCO ₃ and sulphates by calculation from measured values
19	Ag, As, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, Mn, Mo, Sn, Ni, Pb, P, S, V, Zn
39	1,1-dichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, trichloroethene, tetrachloroethene, 1,2-dichloroethane, dichloromethane, trichloromethane, tetrachloromethane, bromodichloromethane, dibromochloromethane, tribromomethane, chlorobenzene, dichlorobenzenes, vinylchloride, benzene, toluene, ethylbenzene, xylenes, 1,1-dichloroethane, 1,1,2-trichloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, sum of BTEX, by calculation: sums of selected THMs, sums of selected CLHs
40	1,1-dichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, trichloroethene, tetrachloroethene, 1,2-dichloroethane, dichloromethane, trichloromethane, tetrachloromethane, bromodichloromethane, dibromochloromethane, tribromomethane, chlorobenzene, dichlorobenzenes, benzenes, toluene, ethylbenzenes, xylenes, sum of BTEX, by calculation: sums of selected THMs, sums of selected CLHs
41	Benzene, toluene, ethylbenzene, xylenes, styrene, isopropylbenzene, cis-1,2-dichloroethene, trichloroethene, tetrachloroethene, trichloromethane, bromodichloromethane, dibromochloromethane, tribromomethane, 1,2-dichloroethane, dichloromethane, sum of BTEX, sum of THM
42	Methane, ethane, ethene, propane, ethyne
50	Di-n-butylphthalate, bis-(2-ethylhexyl)phthalate

if the document identifying the test procedure is dated, only these specific procedures are used. If the document identifying the test procedure is not dated, the latest valid edition of the specified procedure is used (including any changes)

degrees of freedom: A – Flexibility concerning materials/products (subject of the test), B – Flexibility concerning components/parameters/characteristics, C – Flexibility concerning the performance of the method, D – Flexibility concerning the method

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

GEOtest, a.s.

CAB No. 1271, GEOtest Laboratories Šmahova 1244/112, Slatina, 627 00 Brno

Ordinal test number	Detailed information on activities within the scope of accreditation (determined analytes)
51, 52	PCB – congeners 28, 52, 101, 118, 138, 153, 180, sum of PCB
	OCP – trichlorobenzenes, hexachlorobenzene, heptachlorine, heptachloroepoxide, DDD, DDE, DDT, aldrin, dieldrin, α -HCH, β -HCH, γ -HCH (lindan), δ -HCH, ϵ -HCH, isodrin, methoxychlorine, by calculation: sums of selected OCPs
53, 54	Naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, dibenzo(a,h)anthracene, benzo(ghi)perylene, indeno(1,2,3-cd)pyrene, by calculation: sums of selected PAHs
55	Ametryn, atraton, atrazine, atrazine-2-hydroxy, chloridazon, chloridazon-desphenyl, prometon, prometryn, propazine, secbumeton, simazine, simazine-2-hydroxy, simetryn, terbutylazine, terbutryn
59	P, S, K, Cl, Ca, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As, Se, Rb, Sr, Zr, Mo, Ag, Cd, Sn, Sb, W, Hg, Pb, Bi, Th, U

Specification of the scope of accreditation:

Ordinal test number	Detailed information on activities within the scope of accreditation (tested object)
1 - 8, 10, 12, 13, 15, 18, 20, 22, 27, 31, 34, 36, 43, 45, 48, 51, 53 62, 63	Aqueous extract – aqueous extract made with distilled water in ratio 1:10 on dry matter of the sample according to Decree No. 294/2005 Coll., as amended by Decree No. 387/2016 Coll. (SOP NM-9, ČSN 12457-4)
1 - 8, 10, 12, 13, 15, 18, 20, 22, 27, 62	Aqueous solution – absorption solution of a defined composition or a solution of a chemical in water
1 - 8, 12, 13, 15, 18, 20, 22 - 24, 27 - 36, 38, 39, 41 - 43, 45, 47, 48, 50, 51, 53, 55, 61 - 64	Waste water – WWTP, industrial, process
1 - 8, 10 - 13, 15, 18, 20, 22 - 24, 27 - 36, 38 - 39, 41 - 43, 45, 47, 48, 50, 51, 53, 55, 61 - 64	Ground water – mineral, spa, mine
4 - 8, 13, 18, 20	Absorption solution – absorption solutions from emission sampling
14, 16, 19, 21, 25, 26, 37, 40, 44, 46, 49, 52, 56, 57, 59	Solid matrices – various types of solid samples of soils, sediments, composts, sludge, waste, soils, building structures
54	Solid matrices – various types of solid samples of soils, sediments, composts, sludge, waste, soils, building structures, AHV, penetrating macadams
37	Bio-waste – biodegradable waste and biodegradable municipal waste that is capable of anaerobic or aerobic decomposition
37	Plant material – roots, stems, flowers and leaves of plants

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

GEOtest, a.s.

CAB No. 1271, GEOtest Laboratories Šmahova 1244/112, Slatina, 627 00 Brno

Sampling:

Ordinal number	Sampling procedure name	Sampling procedure identification ¹	Subject of sampling
1	Drinking, raw and hot water sampling	SOP VS-101 (ČSN EN ISO 5667-1; ČSN EN ISO 5667-3;	Drinking, raw and hot water
		ČSN ISO 5667-5; ČSN EN ISO 19458; ČSN ISO 5667-21)	
2	Waste water sampling (manual sampling and sampling using automatic samplers)	SOP VS-102 (ČSN EN ISO 5667-1; ČSN EN ISO 5667-3; ČSN ISO 5667-10; ČSN 75 7315)	Waste water
3	Ground water sampling (static and dynamic sampling)	SOP VS-103 (ČSN EN ISO 5667-1; ČSN EN ISO 5667-3; ČSN ISO 5667-11; ČSN EN ISO 19458)	Ground water
4	Surface water sampling (manual sampling)	SOP VS-104 (ČSN EN ISO 5667-1; ČSN EN ISO 5667-3; ČSN ISO 5667-4; ČSN EN ISO 5667-6; ČSN EN ISO 19458)	Surface water
5	Soil sampling	SOP VS-106 (ČSN 015111)	Soil
6	Sampling of bottom sediments and sludge	SOP VS-107 (ČSN EN ISO 5667-1; ČSN EN ISO 5667-3; ČSN ISO 5667-12; ČSN EN ISO 5667-13)	Bottom sediments, sludge
7	Sampling of waste, building materials, and structures	SOP VS-108 (ČSN EN 14899, MoE Bulletin No. 4, April 2008)	Waste, building materials and structures
8	Soil air sampling on a solid sorbent	SOP VS-109 (MoE Bulletin No. 3, March 2011; MoE Bulletin No.9, September 2005; MoE Bulletin No. 2, February 2007)	Soil air

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

GEOtest, a.s.

CAB No. 1271, GEOtest Laboratories Šmahova 1244/112, Slatina, 627 00 Brno

2. Laboratory for Soil Mechanics

Tests:

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
1	Determination of moisture content	ČSN EN ISO 17892-1	Soils	-
2	Determination of bulk density by direct measurement	ČSN EN ISO 17892-2, cl. 4.1, 5.1, 6.1, 7	Soils	-
3	Determination of apparent density of solid particles	ČSN EN ISO 17892-3, excl. cl. 4.4, 5.2, 6.2	Soils	-
4	Determination of grain size	ČSN EN ISO 17892-4, excl. cl. 4.4, 5.4, 6.3	Soils	-
5	Determination of Atteberg limits	ČSN EN ISO 17892-12, excl. cl. 4.3, 5.4, 6.3	Soils	-
6	Determination of carbonates	ČSN 72 1022	Soils	-
7	Determination of loss by ignition	ČGÚ 1987 Methods Chapter 8 – for other soils	Soils	-
8	Determination of compactability - Proctor compaction	ČSN EN 13286-2, Annex NB	Soils	-
9	Determination of California bearing ratio, immediate bearing index and linear swelling	ČSN EN 13286-47	Soils	-
10	Determination of compressibility in oedometer	ČSN EN ISO 17892-5	Soils	-
11	Determination of swelling- ability in oedometer	ČGÚ 1987 Methods, Chapter 20, Procedure A	Soils	-
12	Test of uniaxial compressive strength	ČSN EN ISO 17892-7	Soils	-
13	Unconsolidated undrained triaxial test for the determination of strength	ČSN EN ISO 17892-8	Soils	-
14	Direct shear test	ČSN EN ISO 17892-10	Soils	-
15*	Determination of bulk density	ČSN 72 1010, method D1	Soils	-
16*	Static loading test	ČSN 72 1006, Annex A, B, D	Soils and backfills	-

if the document identifying the sampling procedure is dated, only these specific procedures are used. If the document identifying the sampling procedure is not dated, the latest valid edition of the specified procedure is used (including any changes)

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

GEOtest, a.s.

CAB No. 1271, GEOtest Laboratories Šmahova 1244/112, Slatina, 627 00 Brno

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
17*	Impact loading test	ČSN 73 6192, Group C	Pavements and base courses	-
18*	Irregularity measurement of pavement courses by check bar	ČSN 73 6175, chapter 8	Pavement courses	-
19	Determination of the water content by drying in a ventilated oven	ČSN EN 1097-5	Aggregates	-
20	Determination of particle size distribution – sieving analysis	ČSN EN 933-1	Aggregates	-

asterisk at the ordinal number identifies the tests, which the Laboratory is qualified to carry out outside the permanent laboratory premises

- if the document identifying the test procedure is dated, only these specific procedures are used. If the document identifying the test procedure is not dated, the latest valid edition of the specified procedure is used (including any changes)
- degrees of freedom: A Flexibility concerning materials/products (subject of the test), B Flexibility concerning components/parameters/characteristics, C Flexibility concerning the performance of the method, D Flexibility concerning the method

The laboratory can modify the test procedures with the specified degree(s) of freedom in the scope of accreditation while maintaining the principle of measurement. If no degree of freedom is specified, the laboratory cannot apply a flexible approach to the scope of accreditation for the test.

Explanatory notes:

TIC

TC

Total Inorganic Carbon

Total Carbon

Explana	planatory notes:		
ČGÚ	Czech Geological Survey		
AHV	Bituminous compacted layer (according to Decree No. 130/2019 Coll.)		
MoE	Ministry of the Environment of the Czech Republic		
MZ	Ministry of Health of the Czech Republic		
AA	Inorganic analysis		
OA	Organic analysis		
ASA	Inorganic Trace Analysis		
TM	Field Measurement		
OV	Waste water		
TNV	Branch Technical Standard of Water Management		
ASTM	AMERICAN STANDARD TEST METHODS FOR THE examination of Water and Waste Water, American Public Health Association, American Water Works Association, Water Pollution Control Federation, 14th edition, Washington DC, 1975		
US-EPA	Environmental Protection Agency of the United States of America		
DIN	Deutsches Institut für Normung		
ORION	Operation manual of the manufacturer ORION Research, Cambridge, Massachusetts, U.S.A.		
PCB	Polychlorinated Biphenyls		
OCP	Organochlorine Pesticides		
PAH	Polyaromatic Hydrocarbons		
TOC	Total Organic Carbon		

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

GEOtest, a.s.

CAB No. 1271, GEOtest Laboratories Šmahova 1244/112, Slatina, 627 00 Brno

DOC Dissolved Orga	anic Carbon
--------------------	-------------

AOX Adsorbable Organically Bound Halogens
EOX Extractable Organically Bound Halogens
HPLC High-Performance Liquid Chromatography

GC Gas Chromatography
IR Infrared Spectrometry
UV Ultraviolet Spectrometry
MS Mass spectrometry

ED-XRF Energy Dispersive X-Ray Fluorescence

DAD Diode Array Detector
FID Flame Ionization Detector
FLUD Fluorescence Detector

MSD Mass Detector

TCD Thermal Conductivity Detector

THM Trihalomethanes

BTEX Benzene, toluene, ethylbenzene, xylenes

ICP/OES Inductively Coupled Plasma Optical Emission Spectrometry

ORP Redox Potential

VOC Volatile Organic Compounds CLH Chlorinated Hydrocarbons CFA Continuous Flow Analysis

[&]quot;This document is an appendix to the certificate of accreditation. In case of any discrepancies between the English and Czech versions, the Czech version shall prevail, both for the certificate appendix and the certificate itself."