

**The Appendix is an integral part of
Certificate of Accreditation No. 700/2023 of 28/12/2023**

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

Monitoring, s.r.o.
CAB number 1416, Analytical Laboratory
Radiová 1122/1, Hostivař, 102 00 Praha

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

The current list of activities carried out within the flexible scope is publicly available (e.g. on the laboratory's website www.moni.cz in the form „List of activities within the flexible scope“.

The laboratory provides opinions and interpretations of test results.

The laboratory is qualified to carry out independent sampling

Detailed information on activities within the scope of accreditation (determined analytes/ subject of testing) is given in the section „Specification of the scope of accreditation“

Tests:

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Subject of the test	Degrees of freedom ³
1*	Determination of pH by potentiometry	SOP 1 part A (ČSN ISO 10523)	Drinking water, surface water, ground water, bottled water, waste water, hot water, bathing water, extracts, liquid sludge	-
2	Determination of pH by potentiometry	SOP 1 part B (ČSN 46 5735; ČSN EN ISO 10390; ČSN EN 15933:2013)	Soils, sludge, sediments, biowaste, composts	-
3	Determination of electrical conductivity	SOP 2 (ČSN EN 27888)	Drinking water, surface water, ground water, bottled water, waste water, extracts	-
4	Determination of base neutralizing capacity (BNC _{8,3} , BNC _{4,5}) by titrimetric method and free CO ₂ and aggressive CO ₂ according to Lehmann and Reuss by calculation from the measured values	SOP 3 (ČSN 75 7372; ČSN 75 7373; ČSN 83 0520-35:1978)	Drinking water, surface water, ground water, waste water	-
5	Determination of acid neutralizing capacity (ANC _{4,5} , AMC _{8,3}) by titrimetric method and carbonate (CO ₃ ²⁻), hydrogen carbonate (HCO ₃ ⁻) and hydroxide ions (OH ⁻) by calculation from the measured values	SOP 4 (ČSN EN ISO 9963-1; ČSN 75 7373)	Drinking water, surface water, ground water, waste water	-

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Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Subject of the test	Degrees of freedom ³
6	Determination of dissolved solids, dried and annealed, and of dissolved inorganic salts (DIS) by gravimetry	SOP 5 (ČSN 75 7346; ČSN 75 7347; ČSN EN 15216)	Drinking water, surface water, ground water, bottled water, waste water, extracts, liquid sludge	-
7	Determination of calcium by titrimetric method	SOP 6 (ČSN ISO 6058)	Drinking water, surface water, ground water, bottled water, waste water, extracts	-
8	Determination of the sum of calcium and magnesium (total hardness) by titrimetric method and magnesium by calculation from the measured values	SOP 7 (ČSN ISO 6059)	Drinking water, surface water, ground water, bottled water, waste water, extracts	-
9	Determination of ammonium (NH ₄ ⁺) by spectrophotometry and ammonia nitrogen (N-NH ₄ ⁺) by calculation from the measured values	SOP 8 (ČSN ISO 7150-1)	Drinking water, surface water, ground water, bottled water, waste water, bathing water, extracts	-
10	Determination of total phosphorus (P _{total}) and phosphate (PO ₄ ³⁻) by spectrophotometry	SOP 9 (ČSN EN ISO 6878, chap. 4, 7)	Drinking water, surface water, ground water, waste water, extracts	-
11	Determination of total and easily liberatable cyanides by spectrophotometry after distillation	SOP 10 (ČSN ISO 6703-2; ČSN 75 7415)	Drinking water, surface water, ground water, bottled water, waste water, extracts	-
12	Determination of total and easily liberatable cyanides by spectrophotometry after distillation	SOP 10 (ČSN ISO 6703-2; ČSN 75 7415)	Soils, sludge, waste, sediments	-
13	Determination of sulphate by titrimetric method with Chelaton III	SOP 11 (ČSN 83 0530-21:1978)	Drinking water, surface water, ground water, bottled water, waste water, extracts	-
14	Determination of chloride by titrimetric method	SOP 12 (ČSN ISO 9297)	Drinking water, surface water, ground water, bottled water, waste water, extracts	-

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15	Determination of nitrate (NO ₃ ⁻) by spectrophotometry and nitrate nitrogen (N-NO ₃ ⁻) and inorganic nitrogen (N _{inorg}) by calculation from the measured values	SOP 13 (Janoušek I., Fiala J.: Water management, 2, 1988, 51)	Drinking water, surface water, ground water, bottled water, waste water, bathing water, extracts	-
16	Determination of nitrite (NO ₂ ⁻) by spectrophotometry and nitrite nitrogen (N-NO ₂ ⁻) by calculation from the measured values	SOP 14 (ČSN EN 26777)	Drinking water, surface water, ground water, bottled water, waste water, extracts	-
17	Determination of fluoride by potentiometry (ISE)	SOP 15 (ČSN ISO 10359-1)	Drinking water, surface water, ground water, bottled water, waste water, extracts	-
18	Determination of chemical oxygen demand with dichromate (COD _{Cr}) by spectrophotometry	SOP 16 (ČSN ISO 15705)	Drinking water, surface water, ground water, waste water, extracts	-
19	Determination of chemical oxygen demand with permanganate (COD _{Mn}).	SOP 17 (ČSN EN ISO 8467)	Drinking water, surface water, ground water, bottled water, waste water, hot water, bathing water	-
20	Determination of extractible substances (ES) and nonpolar extractible substances (NES) by infrared spectrometry method	SOP 18 part A (ČSN 75 7505:1998, ČSN 75 7506)	Drinking water, surface water, ground water, bottled water, waste water, extracts	-
21	Determination of extractible substances (ES) and nonpolar extractible substances (NES) by infrared spectrometry method	SOP 18 part B (ČSN 75 7505:1998; ČSN 75 7506)	Soils, sludge, sediments, waste, composts	-
22	Determination of phenols by spectrophotometry after distillation	SOP 19 (ČSN ISO 6439)	Drinking water, surface water, ground water, waste water, extracts	-

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23	Determination of phenols by spectrophotometry after distillation	SOP 19 (ČSN ISO 6439)	Soils, sludge, sediments, waste	-
24	Determination of PAH, PCB and OCP by GC/MS method and of their sums by calculation from the measured values	SOP 20 part A (ČSN 75 7554 :1998; ČSN EN ISO 6468; ČSN ISO 28540)	Drinking water, surface water, ground water, bottled water, waste water, extracts	A, B, D
25	Determination of PAH, PCB and OCP by GC/MS method and of their sums by calculation from the measured values	SOP 20 part B (ČSN 75 7554:1998; ČSN EN ISO 6468; ČSN EN 15527:2009)	Soils, sludge, sediments, waste, composts, biowaste, siliceous and polyurethane filters	A, B, D
26	Determination of PCB by GC/MS method and their sum by calculation from the measured values	SOP 20 part C (ČSN EN ISO 6468)	Oils, insulating and flammable liquids, liquid waste	A, B, D
27	Determination of volatile organic compounds (VOC) and hydrocarbons C ₅ to C ₁₀ and up C ₅ to C ₁₆ by GC/MS method and the sum of THM by calculation from the measured values	SOP 21 part A (ČSN ISO 11423-1; ČSN ISO 11423-2; ČSN EN ISO 15680)	Drinking water, surface water, ground water, bottled water, waste water, hot water, extracts	A, B, D
28	Determination of volatile organic compounds (VOC) and hydrocarbons C ₅ to C ₁₀ and up to C ₁₆ by GC/MS method and the sum of BTEX by calculation from the measured values	SOP 21 part B (EPA-Behavior and Determination of Volatile Organic Compounds in Soil, Marti Minnich, 1993; EPA Method SW-846; EPA Method 5035A)	Soils, sludge, sediments, waste, composts	A, B, D
29	Determination of volatile organic compounds (VOC) by GC/MS method and of the sum of oils hydrocarbons by calculation from the measured values	SOP 21 part C (NIOSH Method 1003; NIOSH Method 1500; NIOSH Method 1501; NIOSH Method 1550)	Soil air captured on a solid sorbent	A, B, D

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Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Subject of the test	Degrees of freedom ³
30	Determination of metals by flame atomic absorption spectrometry (AAS) method	SOP 22 part A (ČSN ISO 9964-1; ČSN ISO 9964-2; ČSN 75 7400; ČSN ISO 8288; ČSN ISO 7980; ČSN EN ISO 12020; ČSN EN 1233; TNV 75 7408)	Drinking water, surface water, ground water, bottled water, waste water, extracts	A, B, D
31	Determination of metals by flame atomic absorption spectrometry (AAS) method	SOP 22 part B (ČSN ISO 9964-1; ČSN ISO 9964-2; ČSN 75 7400; ČSN ISO 8288; ČSN ISO 7980; ČSN EN ISO 12020; ČSN EN 1233; TNV 75 7408; ČSN 46 5735)	Soils, sludge, sediments, waste, composts, biowaste, solid pollutants, airborne dust	A, B, D
32	Determination of metals by flame atomic absorption spectrometry (AAS) method	SOP 22 part C (ČSN 75 7400; ČSN ISO 8288; ČSN ISO 7980; ČSN EN ISO 12020; ČSN EN 1233)	Oils, insulating and flammable liquids, liquid waste	A, B, D
33	Determination of metals by atomic absorption spectrometry (AAS) with graphite furnace	SOP 23 part A (ČSN EN ISO 15586 ; ČSN EN 1233)	Drinking water, surface water, ground water, bottled water, waste water, extracts	A, B, D
34	Determination of metals by atomic absorption spectrometry (AAS) with graphite furnace	SOP 23 part B (ČSN EN ISO 15586; ČSN EN 1233; ČSN 46 5735)	Soils, sludge, sediments, waste, composts, biowaste, solid pollutants, airborne dust	A, B, D
35	Determination of mercury by analyser AMA 254	SOP 24 (TNV 75 7440; ČSN 46 5735)	Drinking water, surface water, ground water, bottled water, waste water, extracts, soils, sludge, sediments, waste, composts, biowaste, solid pollutants, airborne dust, oils, insulating and flammable liquids	A, B, D

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Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Subject of the test	Degrees of freedom ³
36	Determination of triazine pesticides and their metabolites by GC/MS method and their sum by calculation from the measured values	SOP 25 part A (ČSN EN ISO 11369)	Drinking water, surface water, ground water, bottled water, waste water, extracts	A, B, D
37	Determination of triazine pesticides and their metabolites by GC/MS method and their sum by calculation from the measured values	SOP 25 part B (ČSN EN ISO 11369)	Soils, sludge, sediments, waste, composts, biowaste, solid pollutants, airborne dust	A, B, D
38	Determination of hydrocarbons C ₁₀ to C ₄₀ by GC/FID method and hydrocarbons C ₅ to C ₄₀ by calculation from the measured values	SOP 26 part A (ČSN EN ISO 9377-2; TNV 75 7507)	Drinking water, surface water, ground water, waste water, extracts	-
39	Determination of hydrocarbons C ₁₀ to C ₄₀ by GC/FID method and hydrocarbons C ₅ to C ₄₀ by calculation from the measured values	SOP 26 part B (ČSN EN 14039; ČSN EN ISO 16703)	Soils, sludge, sediments, waste, composts	-
40	Determination of dry matter, moisture, loss on ignition and combustible matter by gravimetry	SOP 27 (ČSN ISO 11465; ČSN EN 15934; ČSN EN 15935; ČSN EN 15169:2007; ČSN EN 14346:2007; ČSN 46 5735)	Soils, sludge, sediments, waste, composts, biowaste	-
41	Determination of dissolved solids, dried, annealed, and loss on ignition by gravimetry	SOP 28 (ČSN EN 872; ČSN 75 7350)	Drinking water, surface water, ground water, waste water	-
42*	Determination of free and total chlorine by HANNA analytical commercial set and bound chlorine by calculation from the measured values	SOP 29 (HANNA manual; ČSN ISO 7393-2:1995)	Drinking water, surface water, ground water, bottled water, hot water, bathing water	-

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Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Subject of the test	Degrees of freedom ³
43	Determination of biochemical oxygen demand (BOD ₅) by titrimetric method	SOP 30 (ČSN EN ISO 5815-1)	Surface water, waste water, ground water	-
44*	Determination of reduction-oxidation potential (redox potential)	SOP 31 (ČSN 75 7367)	Bathing water	-
45*	Preliminary sensory determination of odour and flavour	SOP 32 (ČSN 75 7340)	Drinking water, bottled water	-
46	Determination of colour by spectrophotometry	SOP 33 (ČSN EN ISO 7887)	Drinking water, surface water, ground water, bottled water, waste water	-
47*	Determination of turbidity by nephelometry	SOP 34 (ČSN EN ISO 7027-1)	Drinking water, surface water, ground water, bottled water, waste water, bathing water	-
48	Determination of impurities, non-degradable and undesirable impurities by gravimetry	SOP 35 (ČSN 46 5735; Regulation No. 273/2021 Coll.)	Composts, biowaste	-
49	Determination of fats and oils by gravimetry	SOP 36 (ČSN 75 7509)	Waste water	-
50*	Determination of ozone	SOP 37 (Hach manual)	Drinking water, bottled water, bathing water	-
51	Determination of total nitrogen (N _{total}) after oxidative mineralization by spectrophotometry	SOP 38 (ČSN EN ISO 11905-1)	Surface water, ground water, waste water, extracts	-
52*	Determination of dissolved oxygen electrochemically	SOP 39 (ČSN EN ISO 5814)	Drinking water, surface water, ground water, waste water	-
53	Determination of sulphane, sulphide and hydrogen sulphide by photometry	SOP 40 (Merck manual; ČSN ISO 10530)	Drinking water, surface water, ground water, bottled water, waste water, extracts	-
54	Determination of bivalent iron (Fe ^{II}) by spectrophotometry	SOP 41 (ČSN ISO 6332)	Drinking water, surface water, ground water	-

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Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Subject of the test	Degrees of freedom ³
55	Determination of anionic surfactants by spectrophotometry	SOP 42 (ČSN EN 903)	Drinking water, surface water, ground water, bottled water, waste water, extracts	-
56	Determination of total solids, dried and annealed, by gravimetric method and total mineralization by calculation from the measured values	SOP 43 (ČSN 75 7358; ČSN 75 7346)	Drinking water, surface water, ground water, bottled water, waste water, extracts	-
57	Identification of volatile and semi-volatile compounds, identification of oil pollution profile by GC/FID and GC/MS	SOP 44 part A (NIST Mass Spectral Library)	Drinking water, surface water, ground water, waste water, extracts	-
58	Identification of volatile and semi-volatile compounds, identification of oil pollution profile by GC/FID and GC/MS	SOP 44 part B (NIST Mass Spectral Library)	Soils, sludge, sediments, waste, composts	-
59	Identification of volatile and semi-volatile compounds, identification of oil pollution profile by GC/FID and GC/MS	SOP 44 part C (NIST Mass Spectral Library)	Soil air captured on a solid sorbent	-
60	Determination of methane, ethane and ethylene by GC/FID method	SOP 45 (Journal of Chromatographic Science, Vol. 49, July 2011: Rapid Analysis of Dissolved Methane, Ethylene, Acetylene and Ethane using Partition Coefficients and Headspace-Gas Chromatography)	Ground water	A, D
61	Determination of aggressive CO ₂ by marble test according to Heyer by titrimetric method	SOP 46 (ČSN 83 0520- 35:1978)	Ground water	-
62*	Determination of temperature	SOP 47 (ČSN 75 7342)	Drinking water, surface water, ground water, waste water, hot water, bathing water, free air	-

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Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Subject of the test	Degrees of freedom ³
63	Determination of anions by ion chromatography method and nitrite nitrogen (N-NO ₂ ⁻) and nitrate nitrogen (N-NO ₃ ⁻) by calculation from the measured values	SOP 48 (ČSN EN ISO 10304-1)	Drinking water, surface water, ground water, bottled water, waste water, extracts	A, D
64	Determination of boron by spectrophotometry with azomethine-H	SOP 59 (ČSN ISO 9390)	Drinking water, surface water, ground water, bottled water, waste water, extracts	-
65	Determination of extractible organically bound halogens (EOX) by coulometric titration	SOP 50 (DIN 38414-17)	Soils, sludge, sediments, waste, composts, biowaste	-
66	Determination of the inhibition of the mobility of <i>Daphnia magna</i> Straus - Acute toxicity test	SOP 51 (ČSN EN ISO 6341)	Surface water, ground water, waste water, process water, pure chemicals, extracts of wastes	-
67	Fresh water algal growth inhibition test with <i>Desmodesmus subspicatus</i>	SOP 52 (ČSN EN ISO 8692)	Surface water, ground water, waste water, process water, pure chemicals, extracts of wastes	-
68	<i>Sinapis alba</i> root growth inhibition test	SOP 53 (Guideline 8, MoE Bulletin, 2007, Volume XVII, Part 4)	Surface water, ground water, waste water, process water, pure chemicals, extracts of wastes	-
69	Determination of the acute lethal toxicity of substances to a freshwater fish	SOP 54 (ČSN EN ISO 7346-2)	Surface water, ground water, waste water, process water, pure chemicals, extracts of wastes	-
70	Test of the inhibitory effect on the light emission of bacteria (method using dried bacteria)	SOP 56 (ČSN EN ISO 11348-2)	Surface water, ground water, waste water, process water, pure chemicals, extracts of wastes and building materials	-

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Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Subject of the test	Degrees of freedom ³
71	Determination of inhibition of root growth (of <i>Lactuca sativa</i>)	SOP 58 (ČSN EN ISO 11269-1 Reg. No. 273/2021 Coll.; Reg. No. 8/2021 Coll.)	Waste, sludge, soils, sediments, chemical substances	-
72	Determination of adsorbable organically bound halogens (AOX) by coulometric titration	SOP 49 (ČSN EN ISO 9562)	Drinking water, surface water, ground water, bottled water, waste water, extracts	-
73	Determination of total organic carbon (TOC) and dissolved organic carbon (DOC) by infrared spectrometry method with thermal oxidation	SOP 60 (ČSN EN 1484)	Drinking water, surface water, ground water, bottled water, waste water, extracts	-
74	Enumeration of culturable microorganisms at 22 °C an 36 °C by inoculation in a nutrient agar culture medium	SOP 61 (ČSN EN ISO 6222)	Drinking, hot, bottled, ground, mineral, surface, waste, pool water	-
75	Detection and enumeration of coliform bacteria and <i>Escherichia coli</i> by membrane filtration method	SOP 62 (ČSN EN ISO 9308-1)	Drinking, hot, bottled, ground, pool, mineral, surface water	-
76	Detection and enumeration of <i>Escherichia coli</i> and coliform bacteria by most probable number method (MPN)	SOP 63 (ČSN EN ISO 9308-2)	Drinking, hot, ground, surface water	-
77	Detection and enumeration of thermotolerant coliform bacteria and <i>Escherichia coli</i> by membrane filtration method	SOP 64 (ČSN 75 7835)	Drinking, ground, surface, waste water	-
78	Detection and enumeration of intestinal enterococci by membrane filtration method	SOP 65 (ČSN EN ISO 7899-2)	Drinking, bottled, ground, mineral, surface, waste water	-
79	Detection and enumeration of <i>Pseudomonas aeruginosa</i> by membrane filtration method	SOP 66 (ČSN EN ISO 16266)	Drinking, bottled, hot, pool, mineral, surface water	-
80	Detection and enumeration of <i>Clostridium perfringens</i> by membrane filtration method	SOP 67 (Reg. No.252/2004 Coll., Annex No. 6)	Drinking, ground water	-
81	Detection and enumeration of <i>Clostridium perfringens</i> by membrane filtration method	SOP 68 (ČSN EN ISO 14189)	Drinking, ground, surface water	-

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82	Enumeration of <i>Staphylococcus aureus</i> by membrane filtration method	SOP 69 (ČSN EN ISO 6888-1)	Pool, mineral, hot water	-
83	Detection and enumeration of <i>Legionella spp.</i> by membrane filtration method	SOP 70 (ČSN EN ISO 11731)	Drinking, pool water	-
84	Determination of bioseston by microscopic method	SOP 71 (ČSN 75 7712)	Drinking, bottled, ground, mineral, surface water	-
85	Determination of abioseston by microscopic method	SOP 72 (ČSN 75 7713)	Drinking, ground, surface water	-
86	Determination of biochemical oxygen demand (BOD5) by electrochemical method	SOP 73 (ČSN EN ISO 5815-1)	Surface water, waste water, ground water	-
87	Detection of <i>Salmonella</i> by culture method	SOP 74 (ČSN EN ISO 6579-1; AHEM 1/2008)	Sludge, sediment, compost, biowaste, soil, sand	-
88	Enumeration of enterococci by direct inoculation onto the surface of media	SOP 75 (ČSN EN ISO 7899-2; AHEM 1/2008)	Sludge, sediment, compost, biowaste, soil, sand	-
89	Enumeration of thermotolerant coliform bacteria and <i>Escherichia coli</i> by direct inoculation onto the surface of media	SOP 76 (ČSN 75 7835; AHEM 1/2008)	Sludge, sediment, compost, biowaste, soil, sand	-

¹ asterisk at the ordinal number identifies the tests, which the laboratory is qualified to carry out outside the permanent laboratory premises; the numerical index at the test ordinal number identifies the location carrying out the test (the identification of the locations is given on the first page of this document)

² 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)

³ 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.

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Specification of the scope of accreditation:

Ordinal test number	Detailed information on activities within the scope of accreditation (determined analytes)
24, 25	<p>PAH (Polycyclic Aromatic Hydrocarbons): 1acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, pyrene</p> <p>PCB (polychlorinated biphenyls): congeners 8, 18, 28, 31, 52, 44, 70, 101, 105, 118, 138, 151, 153, 180, 194, 195, Aroclor 1242 and 1260, Delor 103 and 106</p> <p>OCP (organochlorine pesticides): aldrin, dieldrin, α-endosulfan, β- endosulfan, endrin, heptachlor, hexachlorobenzene, methoxychlor, pentachlorobenzene, trifluralin, positional isomers of the following substances - DDD, DDE, DDT, HCH including lindane (γ-HCH), heptachlor epoxide, tetrachlorobenzene, sum of individual positional isomers of the above substances</p>
26	<p>PCB (polychlorinated biphenyls): congeners 8, 18, 28, 31, 52, 44, 70, 101, 105, 118, 138, 151, 153, 180, 194, 195, Aroclor 1242 and 1260, Delor 103 and 106</p>
27	<p>VOC: dichloromethane, trichloromethane (chloroform), tetrachloromethane, 1,1-dichloroethane, 1,2-dichloroethane, 1,1,1-trichloroethane, 1,1,2-trichloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, chlorethene (vinyl chloride), 1,1-dichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, 1,1,2-trichloroethene, 1,1,2,2-tetrachloroethene, bromodichloromethane, dibromochloromethane, tribromomethane, chlorobenzene, benzene, toluene, ethylbenzene, p+m-xylene, o-xylene, styrene, n-alkanes with carbon number C6 to C16, metylterbutylether (MTBE), positional isomers of the following substances: dichlorobenzene, trichlorobenzene, trimethylbenzene, sums of individual positional isomers of the above substances</p> <p>THM (trihalomethanes): trichloromethane (chloroform), bromodichloromethane, dibromochloromethane, tribromomethane</p> <p>BTEX: benzene, toluene, ethylbenzene, p+m-xylene, o-xylene</p>
28	<p>VOC: dichloromethane, trichloromethane (chloroform), tetrachloromethane, 1,1-dichloroethane, 1,2-dichloroethane, 1,1,1-trichloroethane, 1,1,2-trichloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, chlorethene (vinyl chloride), 1,1-dichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, 1,1,2-trichloroethene, 1,1,2,2-tetrachloroethene, bromodichloromethane, dibromochloromethane, tribromomethane, chlorobenzene, benzene, toluene, ethylbenzene, p+m-xylene, o-xylene, styrene, n-alkanes with carbon number C6 to C16, metylterbutylether (MTBE), positional isomers of the following substances: dichlorobenzene, trichlorobenzene, trimethylbenzene, sums of individual positional isomers of the above substances</p>
29	<p>TOL: trichloromethane (chloroform), tetrachloromethane, 1,1,1-trichloroethane, 1,1,2-trichloroethane, cis-1,2-dichloroethene, 1,1,2-trichloroethene, 1,1,2,2-tetrachloroethene, benzene, toluene, ethylbenzene, p+m-xylene, o-xylene, styrene, n-alkanes with carbon number C6 to C16</p> <p>Oil hydrocarbons: n-alkanes with carbon number C6 to C16, benzene, toluene, ethylbenzene, p+m-xylene, o-xylene</p>
30	<p>Ag, Al, As, Au, B, Ba, Ca, Cd, Co, Cr, Cr^{VI}, Cu, Fe, K, Li, Mg, Mn, Mn^{II}, Na, Ni, Pd, Pb, Pt, Sr, V, Zn</p>
31	<p>Ag, Al, As, Au, B, Ba, Be, Ca, Cd, Co, Cr, Cr^{VI}, Cu, Fe, K, Li, Mg, Mn, Na, Ni, Pb, Pd, Sn, Sr, Tl, V, Zn</p>

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Certificate of Accreditation No. 700/2023 of 28/12/2023**

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

Monitoring, s.r.o.
CAB number 1416, Analytical Laboratory
Radiová 1122/1, Hostivař, 102 00 Praha

Ordinal test number	Detailed information on activities within the scope of accreditation (determined analytes)
32	As, Be, Cd, Co, Cr, Cr ^{VI} , Cu, Fe, Mn, Ni, Pb, Sb, Sn, Tl, V, Zn
33	As, Be, Cd, Co, Cr, Cr ^{VI} , Mo, Ni, Pb, Sb, Se, Sn, V
34	As, Cr ^{VI} , Mo, Sb, Se
36, 37	Triazine pesticides: acetochlor, alachlor, ametryn, atrazine, atrazine-desethyl, atrazine-deisoprophyl, chloridazon, metazachlor, metolachlor, prometryn, propazine, simazine, terbutylazine, terbutryn
63	Anions: fluorides, chlorides, sulphates, nitrates, nitrites, phosphates

Specification of the scope of accreditation:

Ordinal test number	Detailed information on activities within the scope of accreditation (subject of testing)
1, 3, 6 – 11, 13 – 18, 20, 22, 24, 27, 30, 33, 35, 36, 38, 51, 53, 55, 56, 57, 63, 64, 66 – 70, 72	Extract: aqueous extract of waste prepared according to ČSN EN 12457-4 in accordance with Decree 273/2021 Coll. on waste handling, extract from other matrix according to the client's requirement
1, 3, 6 – 11, 13 – 18, 20, 22, 24, 27, 30, 33, 35, 36, 38, 51, 53, 55, 56, 57, 63, 64, 66 – 70, 72	Liquid sludge: liquid sample of sludge containing usually less than 50 g dry matter per kilogram of sludge (ČSN EN 12176)
25, 31, 34, 35, 37, 40, 48, 65	Biowaste: biodegradable waste as defined in the Waste Act No. 541/2020 Coll., on Waste
12, 21, 23, 25, 26, 28, 31, 32, 34, 35, 37, 39, 40, 58, 65, 66 - 71	Waste: definition according to Act No. 541/2020 Coll., on Waste, processed according to Decree No. 273/2021 Coll., Decree No. 8/2021 Coll., Decree No. 283/2023 Coll., and the standard ČSN EN ISO 21640, as well as Decree 169/2023 Coll., 238/2011 Coll.
25	Bitumen, bitumen recyclates, bitumen mixtures: recovered bitumen mixtures and recovered penetrating macadams according to Decree 283/2023 Coll.
87, 88, 89	Sand: sand in sandboxes in outdoor playgrounds according to Decree No. 238/2011 Coll.

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Sampling:

Ordinal number	Sampling procedure name	Sampling procedure identification ¹	Subject of sampling
1	Manual sampling of waste water and liquid sludge	SOP V1 part A (ČSN EN ISO 5667-1; ČSN EN ISO 5667-3; ČSN ISO 5667-10; ČSN EN ISO 5667-14)	Waste water, liquid sludge
2	Sampling of waste water and liquid sludge by an automatic sampler	SOP V1 part B (ČSN EN ISO 5667-1; ČSN EN ISO 5667-3; ČSN ISO 5667-10;; ČSN EN ISO 5667-14)	Waste water, liquid sludge
3	Drinking and hot water sampling	SOP V2 (ČSN EN ISO 5667-1; ČSN EN ISO 5667-3; ČSN ISO 5667-5; ČSN EN ISO 5667-14; ČSN EN ISO 19458; Regulation No. 252/2004 Coll.)	Drinking water, hot water
4	Sampling of surface water	SOP V3 (ČSN EN ISO 5667-1; ČSN EN ISO 5667-3; ČSN ISO 5667-4; ČSN EN ISO 5667-6; ČSN EN ISO 5667-14; ČSN EN ISO 19458)	Surface water
5	Soil sampling	SOP V4 (ČSN EN ISO 5667-1; MoE Bulletin, 2008, Volume XVIII, Part 4; Reg. No. 275/1998 Coll.; ČSN 46 5735)	Soils, composts and input materials for composts
6	Sampling of water from artificial bathing places	SOP V5 (ČSN EN ISO 5667-1; ČSN ISO 5667-4; ČSN EN ISO 5667-6; ČSN EN ISO 19458; Regulation No. 238/2011 Coll.)	Bathing water, pool and filling water

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Ordinal number	Sampling procedure name	Sampling procedure identification ¹	Subject of sampling
7	Manual ground water sampling	SOP V6 part A (ČSN EN ISO 5667-1; ČSN EN ISO 5667-3; ČSN ISO 5667-11; ČSN EN ISO 5667-14; ČSN EN ISO 19458	Ground water
8	Ground water sampling by a pump	SOP V6 part B (ČSN EN ISO 5667-1; ČSN EN ISO 5667-3; ČSN ISO 5667-11; ČSN EN ISO 5667-14; ČSN EN ISO 19458	Ground water
9	Waste sampling	SOP V7 (ČSN EN ISO 5667-1; ČSN ISO 5667-13; ČSN EN ISO 5667-15; ČSN EN ISO 5667-16; ČSN EN 14899; ČSN 46 5735; Regulation No. 273/2021 Coll. MoE Guideline – Sampling in Rehabilitation Geology, December 2006; MoE Bulletin, 2008, Volume XVIII, Part 4; Reg. No. 130/2019 Coll.)	Solid, pasty and liquid wastes, soils, sludge, sediments, fly ash, composts and input materials for composts, biowaste, building materials, materials from construction, bitumen blocks, bitumen mixtures
10	Sampling of sediments and sludge	SOP V8 (ČSN EN ISO 5667-1; ČSN ISO 5667-12; ČSN EN ISO 5667-13; ČSN EN ISO 5667-15; ČSN EN ISO 5667-16; Regulation No. 273/2021 Coll.; Regulation No. 257/2009 Coll.)	Sediments, sludge

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Ordinal number	Sampling procedure name	Sampling procedure identification ¹	Subject of sampling
11	Sampling of building materials	SOP V9 (Regulation No. 130/2019 Coll.; ČSN EN 14899; MoE Guideline – Sampling in Rehabilitation Geology, December 2006; MoE Bulletin, 2008, Volume XVIII, Part 4)	Building materials, bitumen blocks, bitumen recyclates

¹ for dated documents identifying sampling procedures, only those specific procedures are used; for undated documents identifying sampling procedures, the most recent edition of that procedure (including any changes) is used

Explanations:

GC/FID	Gas Chromatography/Flame Ionization Detection
GC/MS	Gas Chromatography/Mass Spectrometry
ISE	Ion Selective Electrode
SOP	Standard Operating Procedure
AMA 254	Single-Purpose Atomic Absorption Spectrometer