

**Appendix is an integral part of
Certificate of Accreditation No. 3/2023 of 4. 1. 2023**

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The laboratory has a flexible scope of accreditation as detailed in the Annex.

The current list of activities carried out within the flexible scope is available in the laboratory from the head of the laboratory.

Tests:

Ordinal number ¹	Test procedure - method name	Test procedure – method identification ²	Tested object
1.1*	Determination of base neutralizing capacity (BNC _{8,3} , BNC _{4,5}) by titration and free carbon dioxide (CO ₂) by calculation	000.ZP.CL.CL.3_2_1.xx ¹⁰ (ČSN 75 7372, ČSN 75 7373)	Drinking water, surface water, ground water, waste water, process water ⁸
1.2*	Determination of acid neutralizing capacity (ANC _{8,3} , ANC _{4,5}) by titration and bicarbonates (HCO ₃ ⁻), carbonates (CO ₃ ²⁻) and hydroxides (OH ⁻) by calculation	000.ZP.CL.CL.3_2_2.xx ¹⁰ (ČSN EN ISO 9963-1, ČSN 75 7373)	Drinking water, surface water, ground water, waste water, process water ⁸
1.3	Determination of calcium (Ca), the sum of calcium and magnesium (Ca+Mg) by titration, determination magnesium (Mg) by calculation	000.ZP.CL.CL.3_2_3.xx ¹⁰ (ČSN ISO 6059, ČSN ISO 6058)	Drinking water, surface water, ground water, waste water, process water ⁸ , aqueous extracts
1.4	Determination of chemical oxygen demand using permanganate (COD _{Mn}) by titration	000.ZP.CL.CL.3_2_4.xx ¹⁰ (ČSN EN ISO 8467)	Drinking water, surface water, ground water, waste water, process water ⁸
1.5*	Determination of electrical conductivity by potentiometry	000.ZP.CL.CL.3_2_5.xx ¹⁰ (ČSN EN 27888)	Drinking water, surface water, ground water, waste water, process water ⁸ , aqueous extracts
1.6	Determination of chlorides (Cl ⁻) by titration	000.ZP.CL.CL.3_2_6.xx ¹⁰ (ASTM D 512-12, method A:2012)	Drinking water, surface water, ground water, waste water, process water ⁸ , aqueous extracts
1.7	Determination of sulphate (SO ₄ ²⁻) by spectrophotometry using the HACH cuvette test	000.ZP.CL.CL.3_2_63.xx ¹⁰ (methods manual HACH)	Drinking water, surface water, ground water, waste water, process water ⁸ , aqueous extracts
1.8	Determination of chemical oxygen demand using permanganate (COD _{Mn}) by spectrophotometry with HACH cuvette test	000.ZP.CL.CL.3_2_66.xx ¹⁰ (ČSN EN ISO 8467, (HACH manual))	Surface, ground, waste and process water ⁸

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Ordinal number ¹	Test procedure - method name	Test procedure – method identification ²	Tested object
1.9	Determination of nitrate (NO_3^-) after distillation by titration and nitrate nitrogen (N-NO_3) by calculation	000.ZP.CL.CL.3_2_45.xx ¹⁰ (professional literature: Hofmann a collective: Uniform methods of chemical analysis of water, SNTL, 1965)	Surface water, ground water, waste water
1.10	Determination of nitrite (NO_2^-) by spectrophotometry and nitrite nitrogen (N-NO_2) by calculation	000.ZP.CL.CL.3_2_46.xx ¹⁰ (ČSN EN 26777)	Drinking water, surface water, ground water, waste water
1.11	Determination of ammonium (NH_4^+) by spectrophotometry with HACH cuvette test and ammonia nitrogen (N-NH_4^+) by calculation	000.ZP.CL.CL.3_2_64.xx ¹⁰ (ČSN ISO 7150-1, (HACH manual))	Drinking water, surface water, ground water, waste water, process water ⁸ , aqueous extracts
1.12	Determination of ammonium ions (NH_4^+) after distillation by titration and ammonia nitrogen (N-NH_4) by calculation	000.ZP.CL.CL.3_2_48.xx ¹⁰ (ČSN ISO 5664)	Drinking water, surface water, ground water, waste water, aqueous extracts
1.13	Determination of total nitrogen (N_{tot}) by spectrophotometry with HACH cuvette test and inorganic nitrogen (N_{inorg}), organic nitrogen (N_{org}) by calculation	000.ZP.CL.CL.3_2_65.xx ¹⁰ (ČSN EN ISO 11905-1, (HACH manual))	Drinking water, surface water, ground water, waste water, aqueous extracts
1.14*	Measurement of temperature	000.ZP.CL.CL.3_2_9.xx ¹⁰ (ČSN 75 7342)	Drinking water, surface water, ground water, waste water, process water ⁸ , aqueous extracts
1.15	Determination of nitrate (NO_3^-) and nitrate nitrogen (N-NO_3) by spectrophotometry using the HACH cuvette test	000.ZP.CL.CL.3_2_59.xx ¹⁰ (ČSN ISO 7890-1:1995, ČSN 75 7455, methods manual HACH)	Drinking water, surface water, ground water, waste water, process water ⁸
1.16	Determination of aluminium (Al) by spectrophotometry using the HACH cuvette test	000.ZP.CL.CL.3_2_62.xx ¹⁰ (methods manual HACH)	Drinking water, surface water, ground water, waste water, process water ⁸
1.17	Reserved		

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Ordinal number ¹	Test procedure - method name	Test procedure – method identification ²	Tested object
1.18	Determination of dissolved inorganic orthophosphate (PO_4^{3-}) and total phosphorus (Pc) by spectrophotometry and of phosphate phosphorus (P-PO_4^{3-}) and phosphoric pentoxide (P_2O_5) by calculation	000.ZP.CL.CL.3_2_16.xx ¹⁰ (ČSN EN ISO 6878, chapter 4 and 7)	Drinking water, surface water, ground water, waste water, process water ⁸ , aqueous extracts
1.19	Determination of phenol index by spectrophotometry	000.ZP.CL.CL.3_2_17.xx ¹⁰ (ČSN ISO 6439)	Drinking water, surface water, ground water, waste water, process water ⁸ , aqueous extracts
1.20*	Determination of pH electrochemically	000.ZP.CL.CL.3_2_18.xx ¹⁰ (ČSN ISO 10523)	Drinking water, surface water, ground water, waste water, process water ⁸ , aqueous extracts
1.21	Determination of suspended solids (NL105, NL550) by gravimetry	000.ZP.CL.CL.3_2_19.xx ¹⁰ (ČSN EN 872, ČSN 75 7350)	Drinking water, surface water, ground water, waste water, process water ⁸
1.22	Reserved		
1.23	Determination of biochemical oxygen demand (BOD_5) electrochemically using membrane electrode - method for diluted samples	000.ZP.CL.CL.3_2_22.xx ¹⁰ method A (ČSN EN ISO 5815-1)	Surface water, ground water, waste water
1.24	Determination of biochemical oxygen demand (BOD_5) electrochemically using membrane electrode - method for undiluted samples	000.ZP.CL.CL.3_2_22.xx ¹⁰ method B (ČSN EN 1899-2)	Surface water, ground water, waste water
1.25*	Determination of dissolved oxygen (O_2) electrochemically using membrane electrode	000.ZP.CL.CL.3_2_22.xx ¹⁰ method C (ČSN EN ISO 5814)	Surface water, ground water, waste water
1.26	Determination of iron (Fe) by spectrophotometry	000.ZP.CL.CL.3_2_23.xx ¹⁰ (ČSN ISO 6332)	Drinking water, surface water, ground water, waste water, process water ⁸
1.27	Reserved		
1.28	Determination of total cyanide and easily liberatable cyanide by spectrophotometry	000.ZP.CL.CL.3_2_25.xx ¹⁰ (ČSN ISO 6703-2, ČSN 75 7415)	Drinking water, surface water, ground water, waste water, process water ⁸ , aqueous extracts

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1.29	Determination of dissolved solids (RL105, RL550) and dissolved inorganic salts (RAS) by gravimetry and total mineralization by calculation	000.ZP.CL.CL.3_2_42.xx ¹⁰ (ČSN 75 7346, ČSN EN 15216, ČSN 75 7358, ČSN 75 7347)	Drinking water, surface water, ground water, waste water, process water ⁸ , aqueous extracts
1.30	Determination of chemical oxygen demand using dichromate (COD _{Cr}) by spectrophotometry using the HACH cuvette test	000.ZP.CL.CL.3_2_57.xx ¹⁰ (ČSN ISO 15705)	Drinking water, surface water, ground water, waste water, aqueous extracts
1.31	Determination of fluoride (F ⁻) by spectrophotometry using the HACH cuvette test	000.ZP.CL.CL.3_2_60.xx ¹⁰ (Methods manual HACH)	Surface water, ground water, waste water, aqueous extracts
1.32	Determination of anionic surfactants (MBAS) by spectrophotometry using the HACH cuvette test	000.ZP.CL.CL.3_2_61.xx ¹⁰ (Methods manual HACH)	Drinking water, surface water, waste water, ground water, process water
2.1	Determination of metals by AAS/Electrothermal Atomization (Ba, Be, Cr, Al, Cd, Co, Mn, Mo, Cu, Ni, Pb, Ag, Tl, V)	000.ZP.CL.CL.2_2_1.xx ¹⁰ method A (ČSN EN ISO 15586, ČSN EN ISO 12020, ČSN EN 1233, ČSN EN ISO 5961, TNV 75 7408, ČSN 75 7400, Methods manual AAS Solaar M6, WinAAS cookbook Zeenit 700P)	Drinking water, surface water, ground water, waste water, process water ⁸ , aqueous extracts
2.2	Determination of metals by AAS/Electrothermal Atomization (Ba, Be, Cr, Cd, Al, Co, Mo, Cu, Ni, Pb, Ag, Si, Tl, V)	000.ZP.CL.CL.2_2_1.xx ¹⁰ method B (ČSN EN ISO 15586, ČSN EN ISO 12020, ČSN EN 1233, ČSN EN ISO 5961, TNV 75 7408, ČSN 75 7400, ČSN EN ISO, ČSN EN ISO 16967, Methods manual AAS Solaar M6, WinAAS cookbook Zeenit 700P)	Soil, waste, sludge ¹⁴ , solid fuels (TFP, TAP, TBP), VEP ¹⁶ and products ¹³ from these matrices

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Ordinal number ¹	Test procedure - method name	Test procedure – method identification ²	Tested object
2.3	Determination of metals by AAS/Electrothermal Atomization (Ag, Be, Cr, Cd, Co, Mn, Cu, Ni, Pb, V)	000.ZP.CL.CL.2_2_1.xx ¹⁰ method C (ČSN EN ISO 15586, ČSN EN 1233, ČSN EN 14902, ČSN 75 7400, Methods manual AAS Solaar M6, WinAAS cookbook Zeenit 700P)	Outdoor air, working environment
2.4	Determination of metals by AAS/Electrothermal Atomization (Cr, Cd, Cu, Pb)	000.ZP.CL.CL.2_2_1.xx ¹⁰ method D (ČSN EN ISO 15586, ČSN EN 1233, ČSN EN ISO 5961)	Sulfuric acid
2.5	Determination of metals by AAS/Electrothermal Atomization (Ba, Be, Cr, Al, Cd, Co, Si, Mn, Mo, Cu, Ni, Pb, Ag, Tl, V)	000.ZP.CL.CL.2_2_1.xx ¹⁰ method E (ČSN EN ISO 15586, ČSN EN ISO 12020, ČSN EN 1233, ČSN EN ISO 5961, TNV 75 7408, ČSN 75 7400, Methods manual AAS Solaar M6, WinAAS cookbook Zeenit 700P)	Oils, liquid fuels, carbochemical products ⁹
2.6	Determination of mass concentration of metals by calculation from measured values (As, Be, Cd, Co, Cr, Cu, Hg, Mn, Ni, Pb, Sb, Se, Sn, Te, Tl, V, Zn)	000.ZP.CL.CL.2_2_8.xx ¹⁰ (ČSN EN 14385, ČSN EN 13211, ČSN ISO 8288, method A, ČSN P ISO/TS 17379-2, Methods manual AAS Solaar M6 and Solaar 939, WinAAS cookbook Zeenit 700P)	Emissions
2.7	Determination of metals by AAS/Flame method (Ba, Be, K, Al, Mg, Cr, Cd, Co, Sn, Mn, Cu, Mo, Ni, Pb, Na, Ca, Zn, Fe, Li)	000.ZP.CL.CL.2_2_2.xx ¹⁰ method A (ČSN ISO 7980, TNV 75 7408, ČSN ISO 9964-1, ČSN ISO 9964-2, ČSN ISO 8288, method A, ČSN EN ISO 12020, ČSN EN ISO 5961, ČSN EN 1233,	Drinking water, surface water, ground water, waste water, process water ⁸ , aqueous extracts

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Ordinal number ¹	Test procedure - method name	Test procedure – method identification ²	Tested object
		ČSN 75 7385, Methods manual AAS Solaar 939)	
2.8	Determination of metals by AAS/Flame method and stoichiometric calculations of compounds concentration (Ba, Be, Sn, K, Al, Mg, Cr, Cd, Co, Si, Mn, Cu, Mo, Ni, Pb, Na, Ca, Zn, Fe, Li)	000.ZP.CL.CL.2_2_xx ¹⁰ method B (ČSN ISO 7980, TNV 75 7408, ČSN ISO 9964-1, ČSN ISO 9964-2, ČSN ISO 8288, method A, ČSN EN ISO 12020, ČSN EN ISO 5961, ČSN EN 1233, ČSN 75 7385, ČSN EN ISO 16968, ČSN EN ISO 16967, Methods manual AAS Solaar 939)	Soil, waste, sludge ¹⁴ , solid fuels (TFP, TAP, TBP), VEP ¹⁶ and products ¹³ from these matrices
2.9	Determination of metals by AAS/Flame method (Be, Cr, Cd, Co, Cu, Mn, Ni, Pb, Zn)	000.ZP.CL.CL.2_2_xx ¹⁰ method C (ČSN ISO 8288, method A, ČSN EN ISO 5961, ČSN EN 1233, ČSN 75 7385, Methods manual AAS Solaar 939)	Outdoor air, working environment
2.10	Determination of metals by AAS/Flame method (Cr, Cd, Cu, Pb, Fe)	000.ZP.CL.CL.2_2_xx ¹⁰ method D (ČSN EN 1233, ČSN ISO 8288, method A, ČSN EN ISO 5961, ČSN 75 7385)	Sulfuric acid
2.11	Determination of metals by AAS/Flame method (Ba, Be, Sn, K, Al, Mg, Cr, Cd, Co, Si, Mn, Cu, Mo, Ni, Pb, Na, Ca, Zn, Fe, Li)	000.ZP.CL.CL.2_2_xx ¹⁰ method E (ČSN ISO 7980, TNV 75 7408, ČSN ISO 9964-1, ČSN ISO 9964-2, ČSN ISO 8288, method A, ČSN EN ISO 12020, ČSN EN ISO 5961, ČSN EN 1233, ČSN 75 7385, Methods manual AAS Solaar 939)	Oils, liquid fuels, carbochemical products ⁹

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Ordinal number ¹	Test procedure - method name	Test procedure – method identification ²	Tested object
2.12	Determination of metals by AAS/Hydride method (Sb, As, Sn, Se)	000.ZP.CL.CL.2_2_7.xx ¹⁰ method A (ČSN ISO 17378-2, ČSN P ISO/TS 17379-2, Methods manual AAS Solaar 939)	Drinking water, surface water, ground water, waste water, process water ⁸ , aqueous extracts
2.13	Determination of metals by AAS/Hydride method (Sb, As, Sn, Se)	000.ZP.CL.CL.2_2_7.xx ¹⁰ method B (ČSN ISO 17378-2, ČSN P ISO/TS 17379-2, ČSN EN ISO 16968, Methods manual AAS Solaar 939)	Soil, waste, sludge ¹⁴ , solid fuels (TFP, TAP, TBP), VEP ¹⁶ and products ¹³ from these matrices
2.14	Determination of metals by AAS/Hydride method (As)	000.ZP.CL.CL.2_2_7.xx ¹⁰ method C (ČSN EN 14902)	Outdoor air, working environment
2.15	Determination of metals by AAS/Hydride method (As, Se)	000.ZP.CL.CL.2_2_7.xx ¹⁰ method D (ČSN ISO 17378-2, ČSN P ISO/TS 17379-2)	Sulfuric acid
2.16	Determination of metals by AAS/Hydride method (Sb, As, Sn, Se)	000.ZP.CL.CL.2_2_7.xx ¹⁰ method E (ČSN ISO 17378-2, ČSN P ISO/TS 17379-2, Methods manual AAS Solaar 939)	Oils, liquid fuels, carbochemical products ⁹
2.17	Determination of mercury (Hg) by analyser AMA	000.ZP.CL.CL.2_2_3.xx ¹⁰ (ČSN 75 7440, ČSN EN ISO 16968)	Drinking water, surface water, ground water, waste water, process water ⁸ , aqueous extracts, soil, waste, sludge ¹⁴ , outdoor air, working environment, sulfuric acid, carbochemical products ⁹ , oils, liquid fuels; solid fuels (TFP, TAP, TBP), VEP ¹⁶ and products ¹³ from these matrices
2.18	Determination of adsorbable organically bound halogens (AOX) by coulometry	000.ZP.CL.CL.2_2_4.xx ¹⁰ method A (ČSN EN ISO 9562, TNI 75 7531)	Drinking water, surface water, ground water, waste water, aqueous extracts
2.19	Determination of adsorbable organically bound halogens (AOX) by coulometry	000.ZP.CL.CL.2_2_4.xx ¹⁰ method B (DIN 38414-18, ČSN EN 16166)	Sludge ¹⁴ , soil

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Ordinal number ¹	Test procedure - method name	Test procedure – method identification ²	Tested object
2.20	Determination of extractable organically bound halogens (EOX) by coulometry	000.ZP.CL.CL.2_2_6.xx ¹⁰ (DIN 38409-8:1984, DIN 38414-17)	Soil, waste, sludge ¹⁴ and products ¹¹ from these matrices
2.21	Determination of dry matter and ignition residue after ignition by gravimetry, determination of water content, of moisture and of loss on ignition by calculation	000.ZP.CL.CL.2_3_9.xx ¹⁰ (ČSN ISO 11465, ČSN EN 12880, ČSN EN ISO 17892-1, ČSN 72 0103, ČSN EN 15935, ČSN EN 15934, method A)	Soil, waste, sludge ¹⁴ , VEP ¹⁶ and products ¹³ from these matrices
2.22	Determination of titanium (Ti) by spectrophotometry and titanium dioxide (TiO ₂) by calculation	000.ZP.CL.CL.2_5_2.xx ¹⁰ (ČSN 44 1358, ČSN EN ISO 16967)	Soil, waste, sludge ¹⁴ , solid fuels (TFP, TAP, TBP), VEP ¹⁶ and products ¹³ from these matrices
2.23	Determination of orthophosphate (PO ₄ ³⁻) by spectrophotometry and phosphoric pentoxide (P ₂ O ₅) and phosphorus (P) by calculation	000.ZP.CL.CL.2_5_3.xx ¹⁰ (ČSN 44 1380: 1987, ČSN EN ISO 16967)	Soil, waste, sludge ¹⁴ , solid fuels (TFP, TAP, TBP), VEP ¹⁶ and products ¹³ from these matrices
2.24	Determination of gaseous inorganic compounds of chlorine by spectrophotometry and determination of HCl by calculation	000.ZP.CL.CL.2_5_6.xx ¹⁰ (ČSN EN 1911)	Emissions
2.25	Determination of concentration of chlorides by spectrophotometry after burning	000.ZP.CL.CL.2_5_8.xx ¹⁰ (ČSN EN 1911, ČSN ISO 18806)	Soil, waste, sludge ¹⁴ , solid fuels (TFP, TAP, TBP), VEP ¹⁶ and products ¹³ from these matrices
2.26	Reserved		
2.27	Reserved		
2.28	Determination of concentration of fluorides by spectrophotometry after burning	000.ZP.CL.CL.2_5_9.xx ¹⁰ (TNV 75 7431, ČSN ISO 11724)	Soil, waste, sludge ¹⁴ , solid fuels (TFP, TAP, TBP), VEP ¹⁶ and products ¹³ from these matrices
2.29	Reserved		
2.30	Measurement of noise in working environment	000.PPO.CL.CL.1_5_5_1.xx ¹⁰ (ČSN EN ISO 9612, ČSN EN ISO 11201, ČSN EN ISO 11202, ČSN ISO 1996-1, MoH Bulletin, 2013, Part 4)	Working environment

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Ordinal number ¹	Test procedure - method name	Test procedure – method identification ²	Tested object
2.31	Measurement of noise in non-working environment	000.PPO.CL.CL.1_5_5_3.xx ¹⁰ (ČSN ISO 1996-1, ČSN ISO 1996-2, MoH Bulletin, 2017, Part 11 ^j)	Non-working environment (noise in protected outdoor areas of buildings, in protected outdoor areas and on the border of outdoor areas)
2.32	Determination of concentration of inhalable and respirable fraction of airborne dust	000.ZP.CL.CL.2_9_1.xx ¹⁰ (ČSN EN 481, NV 361/2007 Sb.)	Working environment
2.33	Determination of selected elements by ICP/OES method and stoichiometric calculations of their compounds concentration (Al, As, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, Pb, Sb, Se, Sn, Sr, Ti, Tl, V, Zn)	000.ZP.CL.CL.2_2_9.xx ¹⁰ method A (ČSN EN ISO 11885)	Drinking water, surface water, ground water, waste water, process water ⁸ , aqueous extracts
2.34	Determination of selected elements by ICP/OES method and stoichiometric calculations of their compounds concentration (Al, As, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, Pb, Sb, Se, Sn, Sr, Ti, Tl, V, Zn)	000.ZP.CL.CL.2_2_9.xx ¹⁰ method B (ČSN EN ISO 11885, ČSN EN 16170, ČSN EN ISO 16968, ČSN EN ISO 16967)	Soil, waste, sludge ¹⁴ , solid fuels (TFP, TBP, TAP), VEP ¹⁶ and products ¹³ from these matrices
2.35	Determination of selected elements by ICP/OES method and stoichiometric calculations of their compounds concentration (As, Be, Cd, Co, Cr, Cu, Mn, Ni, Pb, V, Zn)	000.ZP.CL.CL.2_2_9.xx ¹⁰ method C (ČSN EN ISO 11885)	Outdoor air, working environment
2.36	Determination of selected elements by ICP/OES method and stoichiometric calculations of their compounds concentration (Al, As, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, Pb, Sb, Se, Sn, Ti, Tl, V, Zn)	000.ZP.CL.CL.2_2_9.xx ¹⁰ method D (ČSN EN ISO 11885)	Oils, liquid fuels

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Ordinal number ¹	Test procedure - method name	Test procedure – method identification ²	Tested object
3.1	Determination of polycyclic aromatic hydrocarbons (PAH ⁶) by high-performance liquid chromatography (HPLC) method with fluorescence detection	000.ZP.CL.CL.4_2_1.xx ¹⁰ method A (ČSN EN ISO 17993, ČSN 75 7554:1998)	Drinking water, surface water, ground water, waste water, aqueous extracts
3.2	Determination of polycyclic aromatic hydrocarbons (PAH ⁶) by high-performance liquid chromatography (HPLC) method with fluorescence detection	000.ZP.CL.CL.4_2_1.xx ¹⁰ method B (US EPA TO 13, NIOSH 5506)	Outdoor air, working environment, emissions
3.3	Determination of polycyclic aromatic hydrocarbons (PAH ⁶) high-performance liquid chromatography (HPLC) method with fluorescence detection	000.ZP.CL.CL.4_2_1.xx ¹⁰ method C (ČSN EN 17503)	Waste, soil, sludge ¹⁴ and products ¹³ from these matrices, bituminous mixtures
3.4	Determination of polychlorinated biphenyls (PCB ⁷) by gas chromatography (GC/ECD)	000.ZP.CL.CL.4_3_1.xx ¹⁰ method A (ČSN EN ISO 6468)	Drinking water, surface water, ground water, waste water, process water ⁸ , aqueous extracts
3.5	Determination of polychlorinated biphenyls (PCB ⁷) by gas chromatography (GC/ECD)	000.ZP.CL.CL.4_3_1.xx ¹⁰ method B (ČSN EN 15308, ČSN EN 16167)	Waste, soil, sludge ¹⁴ and products ¹³ from these matrices
3.6	Determination of polychlorinated biphenyls (PCB ⁷) by gas chromatography (GC/ECD)	000.ZP.CL.CL.4_3_1.xx ¹⁰ method C (ČSN EN 61619, ČSN EN 12766-1, ČSN EN 12766-2)	Oils, liquid fuels, carbochemical products ⁹
3.7	Reserved		
3.8	Determination of volatile organic compounds (in the range of BTEX ³ , CLU ⁴) by gas chromatography (GC/FID)	000.ZP.CL.CL.4_4_1.xx ¹⁰ (ČSN P CEN/TS 13649, ČSN EN 14662-2)	Outdoor air, working environment, emissions
3.9	Reserved		
3.10	Determination of hydrocarbons C10 to C40 by gas chromatography (GC/FID)	000.ZP.CL.CL.4_5_1.xx ¹⁰ method A (ČSN EN ISO 9377-2)	Surface water, waste water, ground water, process water ⁸

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Ordinal number ¹	Test procedure - method name	Test procedure – method identification ²	Tested object
3.11	Determination of hydrocarbons C10 to C40 by gas chromatography (GC/FID)	000.ZP.CL.CL.4_5_1.xx ¹⁰ method B (ČSN EN 14039, ČSN EN ISO 16703)	Waste, soil, sludge ¹⁴ and products ¹³ from these matrices
3.12	Reserved		
3.13	Determination of volatile organic compounds (in the range of BTEX ³ , CLU ⁵) by gas chromatography by SPME method (GC/FID+ECD)	000.ZP.CL.CL.4_8_1.xx ¹⁰ method A (TNV 75 7552, ČSN EN ISO 10301)	Drinking water, surface water, ground water, waste water
3.14	Determination of volatile organic compounds (in the range of BTEX ³ , CLU ⁴) by gas chromatography by SPME method (GC/FID+ECD)	000.ZP.CL.CL.4_8_1.xx ¹⁰ method B (TNV 75 7552)	Waste, soil, sludge ¹² and products ¹¹ from these matrices
4.1	Determination of ash content by gravimetry ⁹	000.PPO.CL.CL.7_2_2.xx ¹⁰ (ČSN ISO 1171, ČSN EN ISO 18122, ČSN EN ISO 21656, ČSN EN 15935)	Solid fuels (TFP, TAP, TBP), VEP ¹⁶ , waste, sludge ¹⁴ and products ¹³ from these matrices
4.2	Determination of water content by gravimetry ¹¹	000.ZP.CL.CL.7_2_3.xx ¹⁰ (ČSN 44 1377, ČSN EN ISO 18134-1, ČSN EN ISO 18134-2, ČSN EN ISO 18134-3, ČSN P CEN/TS 15414-1, ČSN P CEN/TS 15414-2, ČSN EN ISO 21660-3, ČSN ISO 579, ČSN EN 15934, method A, ČSN EN 12880)	Solid fuels (TFP, TAP, TBP), VEP ¹⁶ , waste, sludge ¹⁴ and products ¹³ from these matrices
4.3	Determination of water content and ash content by thermogravimetry and determination of unburned residue by calculation ¹¹	000.ZP.CL.CL.7_2_8.xx ¹⁰ (ČSN ISO 1171, ČSN 44 1377, ČSN EN ISO 18122, ČSN EN ISO 18134-3, ČSN EN ISO 21656, ČSN EN ISO 21660-3, ČSN ISO 579, ČSN EN 15935, ČSN EN 12880, ČSN EN 15934, method A)	Solid fuels (TFP, TAP, TBP), VEP ¹⁶ , waste, sludge ¹⁴ and products ¹³ from these matrices

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Ordinal number ¹	Test procedure - method name	Test procedure – method identification ²	Tested object
4.4	Determination of gross calorific value by calorimetry and determination of net calorific value by calculation ¹¹	000.ZP.CL.CL.7_2_5.xx ¹⁰ method A (ČSN ISO 1928, ČSN EN ISO 18125, ČSN EN 15400, ČSN EN 15170, ČSN P CEN/TS 16023)	Solid fuels (TFP, TAP, TBP), waste, sludge ¹⁴ and products ¹³ from these matrices
4.5	Determination of gross calorific value by calorimetry and determination of net calorific value by calculation ¹¹	000.ZP.CL.CL.7_2_5.xx ¹⁰ method B (ČSN DIN 51900-1, ČSN DIN 51900-2)	Oils, liquid fuels, carbochemical products ⁹
4.6	Determination of total carbon (TC), total organic carbon (TOC) by IR spectrometry and total inorganic carbon (TIC) by calculation	000.ZP.CL.CL.7_2_4.xx ¹⁰ (ČSN ISO 10694, ČSN EN 15936)	Solid fuels (TFP, TAP, TBP), soils, waste, sludge ¹⁴ , VEP ¹⁶ and products ¹³ from these matrices
4.7	Determination of sulphur (S), of hydrogen (H), of carbon (C) by IR spectrometry with CNH+S analyzer and determination of emission factor, of specific sulphur content, of sulphur dioxide and of oxygen by calculation ¹¹	000.ZP.CL.CL.7_2_11.xx ¹⁰ method A (ČSN ISO 19579, ČSN ISO 29541, ČSN EN ISO 16948, ČSN EN ISO 21663, ČSN ISO 17247)	Solid fuels (TFP, TAP, TBP), waste, sludge ¹⁴ , VEP ¹⁶ , peloid ¹⁷ (only for S) and products ¹³ from these matrices
4.8	Determination of sulphur (S), of hydrogen (H), of carbon (C) by IR spectrometry with CNH+S analyzer and determination of emission factor, of specific sulphur content, of sulphur dioxide and of oxygen by calculation ¹¹	000.ZP.CL.CL.7_2_11.xx ¹⁰ method B (Analyzer Manual CHN 628 with additional module for sulphur)	Oils, liquid fuels, carbochemical products ⁹
4.9	Determination of nitrogen (N) by thermal conductivity detection with CHN analyzer ¹¹	000.ZP.CL.CL.7_2_11.xx ¹⁰ method C (ČSN ISO 29541, ČSN EN ISO 16948, ČSN EN ISO 21663)	Solid fuels (TFP, TAP, TBP), waste, sludge ¹⁴ , VEP ¹⁶ and products ¹³ from these matrices

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Ordinal number ¹	Test procedure - method name	Test procedure – method identification ²	Tested object
4.10	Determination of nitrogen (N) by thermal conductivity detection with CHN analyzer ¹¹	000.ZP.CL.CL.7_2_11.xx ¹⁰ method D (Analyzer Manual CHN 628 with additional module for sulphur)	Oils, liquid fuels, carbochemical products ⁹
4.11	Determination of volatile matter content by gravimetry and determination of fixed carbon by calculation	000.ZP.CL.CL.7_3_3.xx ¹⁰ (ČSN ISO 5071-1, ČSN ISO 562, ČSN EN ISO 18123, ČSN ISO 17246)	Solid fuels (TFP, TBP)
4.12	Fraction size analysis by dry sieving	000.ZP.CL.CL.7_3_4.xx ¹⁰ (ČSN 44 1340, ČSN EN ISO 17892-4, article 5.2.)	Solid fuels (TFP), VEP ¹⁶
5.1	Determination of kinematic viscosity by glass capillary viscometer Ubbelohde and determination of viscosity index, of dynamic viscosity by calculation	000.ZP.CL.CL.5_3_6.xx ¹⁰ (ČSN EN ISO 3104, ČSN ISO 2909)	Oils, liquid fuels (crude oil, petroleum), carbochemical products ⁹
5.2	Determination of flash point - Cleveland opened-cup method	000.ZP.CL.CL.5_3_7.xx ¹⁰ (ČSN EN ISO 2592)	Oils
5.3	Determination of flash point - Pensky-Martens closed cup method	000.ZP.CL.CL.5_3_13.xx ¹⁰ (ČSN EN ISO 2719)	Oils, liquid fuels (crude oil, petroleum), carbochemical products ⁹
5.4	Determination of density by U-tube method	000.ZP.CL.CL.5_3_9.xx ¹⁰ (ČSN EN ISO 12185)	Oils, liquid fuels (crude oil, petroleum), carbochemical products ⁹
6.1	Determination of mass concentration of solid pollutants by gravimetry	000.ZP.CL.CL.6_3_5.xx ¹⁰ (ČSN EN 13284-1)	Emissions
7.1 *	Determination of mass concentration of gas pollutants (SO ₂ , NO _x , CO, CO ₂) with automated analyzer (non-dispersive IR spectroscopy)	000.PPO.CL.CL.1_5_1_13.xx ¹⁰ method A (STN ISO 12039, ČSN ISO 7935, ČSN ISO 10849, ČSN EN 15058)	Emissions
7.2 *	Determination of volumetric concentration of oxygen (O ₂) with automated analyzer (paramagnetic method)	000.PPO.CL.CL.1_5_1_13.xx ¹⁰ method B (ČSN EN 14789)	Emissions

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Ordinal number ¹	Test procedure - method name	Test procedure – method identification ²	Tested object
7.3 *	Determination of total mass concentration of organic compounds expressed as total organic carbon (TOC) by automated analyzer (FID)	000.PPO.CL.CL.1_5_1_14.xx ¹⁰ (ČSN EN 12619)	Emissions
7.4 *	Determination of velocity, volume flow rate	000.ZP.CL.CL.8_1_3.xx ¹⁰ method A (ČSN ISO 10780)	Emissions
7.5 *	Determination of water vapour (condensation method)	000.ZP.CL.CL.8_1_3.xx ¹⁰ method B (ČSN EN 14790)	Emissions
7.6	Determination of mass concentration of persistent organic compounds by calculation from measured values ¹⁵ (PCDD/PCDF, PCB ⁷ , PAH ⁶)	000.ZP.CL.CL.8_1_4.xx ¹⁰ (ČSN EN 1948-3, ČSN EN 1948-4+A1)	Emissions

¹ asterisk at the ordinal number identifies the tests, which the Laboratory is qualified to carry out outside the permanent laboratory premises

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 edition of the specified procedure is used (including any changes)

Annex:

Flexible range of accreditation

Ordinal numbers of tests
1.1-1.16, 1.18 -1.21, 1.23-1.26, 1.28-1.32, 2.1-2.25, 2.28, 2.30-2.36, 3.1-3.6,
3.8, 3.10, 3.11, 3.13, 3.14, 4.1-4.12, 5.1–5.4, 6.1, 7.1-7.6

The Laboratory is allowed to modify the test methods listed in the Annex within the specified scope of accreditation provided the measuring principle is observed. The flexible approach to the scope of accreditation cannot be applied to the tests not included in the Annex.

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Sampling:

Ordinal number	Test procedure – sampling method name	Test procedure – method identification ¹	Tested object
1	Sampling from water reservoirs (manually)	000.PPO.CL.CL. 1_5_6_1.xx ¹⁰ (ČSN EN ISO 5667-1, ČSN EN ISO 5667-3, ČSN ISO 5667-4, ČSN EN ISO 5667-14, ČSN EN ISO 19458, TNV 75 7055)	Surface water
2	Sampling from monitoring sites of rivers and streams (manually and automatically)	000.PPO.CL.CL. 1_5_6_3.xx ¹⁰ (ČSN EN ISO 5667-1, ČSN EN ISO 5667-3, ČSN EN ISO 5667-6, ČSN EN ISO 5667-14, ČSN EN ISO 19458, TNV 75 7055)	Surface water
3	Sampling of waste water (manually and automatically)	000.PPO.CL.CL. 1_5_6_4.xx ¹⁰ (ČSN EN ISO 5667-1, ČSN EN ISO 5667-3, ČSN ISO 5667-10, ČSN EN ISO 5667-14, ČSN EN ISO 19458, TNV 75 7055, ČSN 75 7315)	Waste water
4	Sampling of groundwater from monitoring wells (submersible pump sampling, manual sampling)	000.PPO.CL.CL. 1_5_6_5.xx ¹⁰ (ČSN EN ISO 5667-1, ČSN EN ISO 5667-3, ČSN ISO 5667-11, ČSN EN ISO 5667-14, ČSN EN ISO 19458, TNV 75 7055)	Ground water
5	Sampling of sludge from sewage and treatment plants and other sludge using probes, paddles and needles	000.PPO.CL.CL. 1_5_6_6.xx ¹⁰ (ČSN EN ISO 5667-1, ČSN EN ISO 5667-13, ČSN EN ISO 5667-15, ČSN EN 14899, ČSN EN 15002, ČSN EN 16179, ČSN ISO 5667-12)	Sludge ¹⁴
6	Sampling of solid waste using probes, paddles and needles	000.PPO.CL.CL.1_5_7_1.xx ¹⁰ (ČSN EN 14899, ČSN EN 15002, ČSN EN 16179)	Waste, soil, VEP ¹⁶

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Ordinal number	Test procedure – sampling method name	Test procedure – method identification ¹	Tested object
7	Sampling of aerosols on a capture medium (PAH ⁶ , Ag, Be, Co, Cr, Cd, Mn, Cu, Ni, Pb, As, V, Zn)	000.PPO.CL.CL.1_5_8_1.xx ¹⁰ (US EPA TO 13, ČSN EN 689+AC)	Outdoor air, working environment
8	Sampling of inhalable and respirable fraction of airborne dust	000.PPO.CL.CL.1_5_5_2.xx ¹⁰ (ČSN EN 481, NV 361/2007 Sb.)	Working environment
9	Sampling for the determination of persistent organic compounds (PCDD/PCDF, PCB ⁷ , PAH ⁶) - sampling with automatic isokinetic control, filtration condensation method)	000.PPO.CL.CL.1_5_1_6.xx ¹⁰ (ČSN EN 1948-1)	Emissions
10	Sampling for the determination of heavy metals (As, Be, Cd, Co, Cr, Cu, Hg, Mn, Ni, Pb, Sb, Se, Sn, Te, Tl, V, Zn) - sampling with automatic isokinetic control and absorption into liquid	000.PPO.CL.CL.1_5_1_7.xx ¹⁰ (ČSN EN 14385, ČSN EN 13211)	Emissions
11	Sampling of solid pollutants (isokinetic sampling with automatic isokinetic control)	000.PPO.CL.CL.1_5_1_10.xx ¹⁰ (ČSN EN 13284-1)	Emissions
12	Sampling of gas and vapour into absorption solution (F ⁻ , Cl ⁻)	000.PPO.CL.CL.1_5_8_5.xx ¹⁰ (ČSN EN 1911, ČSN P CEN/TS 17340)	Emissions
13	Sampling of volatile organic compounds (BTEX ³ , CLU ⁴ , formaldehyde) by catching on a solid sorbent	000.PPO.CL.CL.1_5_8_4.xx ¹⁰ (ČSN P CEN/TS 13649)	Emissions
14	Sampling of gas and vapour (BTEX ³ , CLU ⁴ , Hg, PAH ⁶) by catching on a solid sorbent	000.PPO.CL.CL.1_5_8_2.xx ¹⁰ (ČSN EN 689+AC, ČSN EN ISO 16017-1, ČSN EN 14662-2, NIOSH 5506)	Outdoor air, working environment

¹ 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 edition of the specified procedure is used (including any changes)

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Specification of substances or parameters determined within a test procedure:

- ³ BTEX – benzene, toluene, ethylbenzene, o-xylene, m,p-xylene, sum of BTEX by calculation, sum of xylenes by calculation
- ⁴ CLU - trichloroethene, tetrachloroethene, sum of trichloroethene and tetrachloroethene by calculation
- ⁵ CLU – trichloromethane, 1,2-dichloroethane, tetrachloromethane, trichloroethene, tetrachloroethene, chlorobenzene
- ⁶ PAH – naphthalene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, dibenzo(a,h)anthracene, indeno(1,2,3,-cd)pyrene, benzo(ghi)perylene, sum of PAH by calculation
- ⁷ PCB – congeners 28, 52, 101, 118, 138, 153, 180, sum of PCB by calculation
- ⁸ Process water – cooling water, irrigation water, boiler water, condensates and other similar water
- ⁹ Carbochemical products - brown coal producer gas tar, phenol concentrate, waste raw petrol, organic substances and other similar substances
- ¹⁰ “xx” – indicates the year of publication, as amended
- ¹¹ Calculations of weighted averages from the measured values
- ¹² Guideline for the measurement and evaluation of noise in non-working environment of 10/2017
- ¹³ Products – materials prepared from VEP, waste, soils, sludge or solid fuels (list according to the matrices at the specific test). Processing and analysis procedures correspond to the processing and analysis of the most represented matrix.
- ¹⁴ Sludge - sludge from sewage and treatment plants and other sludge; bottom sediments
- ¹⁵ Analyte determination is provided by an external test supplier
- ¹⁶ VEP - ash, slag, energy gypsum, industrial settling and deposits
- ¹⁷ peloid – natural substance, a mixture of inorganic and organic compounds

Abbreviations and explanations:

- AAS – Atomic Absorption Spectrometry
- AOX – Absorbable Organically Bound Halogens
- ASTM – American Society for Testing and Materials
- BTEX – benzene, toluene, ethylbenzene, xylenes
- CLU – chlorinated hydrocarbons
- ČSN – Czech technical standard
- EN – European standard
- EOX – Extractable Organically Bound Halogens
- GC/ECD – Gas Chromatography/Electron Capture Detector
- HPLC – High-Performance Liquid Chromatography
- ICP/OES – Inductively Coupled Plasma Optical Emission Spectrometry
- ISO – International Standards
- ANC – Acid Neutralizing Capacity
- MBAS – Methylene Blue Active Substances
- MoH – Ministry of Health
- MoE – Ministry of Environment
- N-NH₄ – ammonia nitrogen
- N-NO₂ – nitrite nitrogen
- N-NO₃ – nitrate nitrogen
- N_{inorg} – inorganic nitrogen
- N_{tot} – total nitrogen
- N_{org} – organic nitrogen
- GR – Government Regulation

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PAH – Polycyclic Aromatic Hydrocarbons
PCB – Polychlorinated Biphenyls
PCDD – Polychlorinated dibenzodioxins
PCDF – Polychlorinated dibenzofurans
PPO – Working Procedure
TAP – Solid Alternative Fuels
TBP – Solid Biofuels
TC – Total Carbon
TFS – Solid Fossil Fuels
TIC – Total Inorganic Carbon
TNV – Branch Technical Standard
TOC – Total Organic Carbon
US EPA – US Environmental Protection Agency
VEP – Secondary energy products
BNC – Basic Neutralizing Capacity
ZP – Testing Procedure

Emission – Waste gas containing pollutants released in a controlled manner or leaking into atmosphere from stationary sources of pollution.