Accredited entity in accordance with ČSN EN ISO/IEC 17025:2018:

DEKONTA, a.s.

CAB number 1240, Laboratory in Ústí nad Labem - DLÚ Podhoří 328/28, 400 10 Ústí nad Labem

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 / sampling subject) is given in the section "Specification of the scope of accreditation".

Tests:

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
1*	Determination of weight concentration of CO, CO ₂ , SO ₂ by automated analyzers by means of non-dispersed infrared spectroscopy	SOP No. E1 procedure A (ČSN ISO 7935; ČSN EN 15058)	Emissions	-
2*	Determination of the flow velocity and volume flowrate	SOP No. E2 (ČSN ISO 10780; ČSN EN ISO 16911-1)	Emissions	-
3*	Determination of the volume concentration of oxygen (O ₂₎ by automated analyzer paramagnetic method	SOP No. E3 (ČSN EN 14789)	Emissions	-
4*	Determination of concentration of organic compounds expressed as total organic carbon (TOC) by automated analyzer FID	SOP No. E4 (ČSN EN 12619)	Emissions, ambient air and soil air	-
5	Determination of weight concentration and weight flow of solid pollutants in the manifold by means of the manual gravimetry method	SOP No. E5 (ČSN EN 13284-1; ČSN EN ISO 23210)	Emissions – filtration medium	-
6	Determination of weight concentration of volatile organic compounds (VOC) by gas chromatography with mass detection and VOC calculation from the measured values ⁴	SOP No. E6 (ČSN P CEN/TS 13649; ČSN EN ISO 16017-1)	Emissions, ambient air, indoor air and soil air	-
7	Determination of weight concentration of persistent organic substances by calculation from the measured values ⁴	SOP No. E7 (ČSN EN 1948-1; ČSN EN 1948-4+A1; ČSN P CEN/TS 16645; ČSN EN 15549; ČSN EN 15980)	Emissions and ambient air	-

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DEKONTA, a.s.

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
8	Determination of weight concentration of elements by the ICP-OES method and elements by calculation from the measured values ⁴	SOP No. E8 (ČSN EN 14385; ČSN EN 13211; EPA Method 29)	Emissions	-
9*	Determination of humidity of waste gas by the absorption or the absorption-condensation method	SOP No. E9 (ČSN EN 14790)	Emissions	-
10	Determination of weight concentration of suspended particulate matter and their PM10 and PM2.5 fractions by gravimetry	SOP No. E10 (ČSN EN 12341)	Ambient air	-
11	Determination of numerical concentration of asbestos and mineral fibbers by calculation from the measured values ⁴	SOP No. E11 (ČSN EN ISO 16000-7)	Ambient air and indoor air	-
12	Determination of weight concentration of vapours and gases (gas inorganic compounds of chlorine and fluorine, ammonia, sulfane, Cr ^{VI} , mineral acids and bases, oxides of sulphur and sulphuric acid, hydrogen cyanide and cyanides, phenol and phenolic compounds, oxides of nitrogen, phosphorus and its compounds) by calculation from the measured values ⁴	SOP No. E12 (ČSN 75 7415; ČSN 83 4712-1; ČSN 83 4712-2; ČSN 83 4712-3; ČSN 83 4712-4; ČSN 83 4751-3; ČSN 83 4751-4; ČSN 83 4751-6; ČSN 83 4711-1; ČSN 83 4711-2; ČSN 83 4711-3; ČSN 83 4711-4; ČSN 83 4711-5; ČSN 83 4711-6; ČSN 83 4711-7; ČSN 83 4711-6; ČSN 83 4713-2; ČSN 83 4713-3; ČSN 83 4713-2; ČSN 83 4721-1; ČSN 83 4721-2; ČSN 83 4721-1; ČSN 83 4728-1; ČSN 83 4728-2; ČSN 83 4728-3; ČSN 83 4728-2; ČSN 83 4728-5; ČSN 83 5711; ČSN EN 1911; ČSN EN 16429; ČSN ISO 4221; ČSN ISO 6439; ČSN ISO 7150-1; ČSN ISO 8756; ČSN ISO 11083; ČSN ISO 10359-1; ČSN EN ISO 6878; ČSN P CEN/TS 17340; Merck manual)	Emissions	

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DEKONTA, a.s.

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
13*	Determination of methane (CH ₄) and carbon dioxide (CO ₂), and sum of hydrocarbons expressed as (C _x H _y) by use of IR analyzers and PID detectors	SOP No. E16 (RS Dynamics manual)	Soil air, gaseous mixtures	-
14*	Determination of weight concentration of NO/NO ₂ by automatic analyzers with chemiluminescence detection	SOP No. E1, procedure B (ČSN EN 14792)	Emissions	-
15*	Determination of methane (CH ₄), carbon dioxide (CO ₂), sulfane (H ₂ S) and ammonia (NH ₃) by use of IR analyzer and electrochemical cells	SOP No. E18 (Geotech manual)	Soil air, gaseous mixtures, dump gases, gases from composting process	-
16	Quality assurance of automated measuring systems	SOP No. E19 (ČSN EN 14181:2016, cl. 8 (AST))	Automated measuring systems for emission measurement	-
17*	Determination of pH by the electrochemical method	SOP No. 01 (ČSN EN ISO 10390; ČSN ISO 10523)	Waters, aqueous leachates of sludges, soils and wastes	-
18*	Determination of electrical conductivity by electrochemical method	SOP No. 02 (ČSN EN 27888; ČSN P CEN/TS 15937)	Waters, aqueous leachates of sludges, soils and wastes	-
19*	Determination of oxidation- reduction potential (ORP) by the electrochemical method	SOP No. 66 (ČSN 75 7367)	Drinking, surface and ground waters	-
20*	Determination of dissolved oxygen by the electrochemical probe method	SOP No. 51 (ČSN EN ISO 5814)	Drinking, surface and groundwaters	-
21*	Determination of turbidity by the nephelometric method	SOP No. 63 (ČSN EN ISO 7027-1)	Drinking, surface and groundwaters	-
22*	Determination of temperature	SOP No. 65 (ČSN 75 7342)	Drinking, surface, groundwaters and wastewater	-
23	Determination of dry matter and water content by the gravimetric method	SOP No. 28 (ČSN 72 0102; ČSN ISO 11465; ČSN EN ISO 17892-1; ČSN EN 15934)	Wastes, soils, grounds, sediments and sludges	-

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DEKONTA, a.s.

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
24	Determination of ash and the loss on ignition by gravimetry	SOP No. 48 (ČSN EN 15935; ČSN EN ISO 18122)	Wastes, soils, grounds, sediments, sludges and biofuels	-
25	Determination of orthophosphates (PO ₄ ³⁻) and total phosphorus (P _{tot.}) by the spectrometric method and determination of P ₂ O ₅ by calculation from the measured values	SOP No. 16 (ČSN EN ISO 6878)	Waters and aqueous leachates	-
26	Determination of selected volatile organic compounds (VOCs) by the method of gas chromatography with the FID and MS detector and of the sum of VOCs by calculation from the measured values	SOP No. 34, procedure A (ČSN EN ISO 10301; ČSN EN ISO 17943; ČSN ISO 11423-1)	Waters	-
27	Determination of selected volatile organic compounds (VOCs) by the method of gas chromatography with the FID and MS detector and sum of VOCs by calculation from the measured values	SOP No. 34, procedure B (ČSN EN ISO 15009; ČSN EN ISO 22155)	Wastes, sediments, sludges, soils, grounds, sorbents from sampling and construction materials	-
28	Determination of selected chlorinated pesticides (OCPs) by the method of gas chromatography with the MS detection	SOP No. 33, procedure A (ČSN EN ISO 6468; ČSN P ISO/TS 28581; ČSN EN 16693)	Waters	-
29	Determination of selected chlorinated pesticides (OCPs) by the method of gas chromatography with the MS detection	SOP No. 33, procedure B (ČSN EN ISO 14181; ČSN EN 15741; DIN ISO 10382)	Wastes, sediments, sludges, soils, grounds, sorbents from sampling and construction materials	-
30	Determination of selected PCB congeners by the method of gas chromatography with the MS detection and sum of PCBs by calculation from the measured values	SOP No. 21, procedure A (ČSN EN ISO 6468; ČSN P ISO/TS 28581)	Waters	-

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DEKONTA, a.s.

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
31	Determination of selected PCB congeners by the method of gas chromatography with the MS detection and sum of PCBs by calculation from the measured values	SOP No. 21, procedure B (ČSN EN 17322; DIN ISO 10382)	Wastes, sediments, sludges, soils, grounds, sorbents from sampling and construction materials	-
32	Determination of hydrocarbons content in the range C ₁₀ to C ₄₀ by the method of gas chromatography with the FID detector	SOP No. 19, procedure A (ČSN EN ISO 9377-2)	Waters	-
33	Determination of hydrocarbons content in the range C_{10} to C_{40} by the method of gas chromatography with the FID detector	SOP No. 19, procedure B (ČSN EN 14039; ČSN EN ISO 16703)	Wastes, sediments, sludges, soils, grounds, sorbents from sampling and construction materials	-
34	Determination of PAHs by the method of gas chromatography with the MS detection and sum of PAHs by calculation from the measured values	SOP No. 20, procedure A (ČSN EN 16691; ČSN ISO 28540; ČSN P ISO/TS 28581)	Waters	-
35	Determination of PAHs by the method of gas chromatography with the MS detection and a sum of PAHs by calculation from the measured values	SOP No. 20, procedure B (ČSN EN 16181:2018; ČSN P CEN/TS 16645; ISO 18287)	Wastes, sediments, sludges, soils, grounds, sorbents from sampling and construction materials	-
36	Determination of content mercury (Hg) by use of the AMA-254 instrument by means of atomic absorption spectrometry	SOP No. 25 (ČSN 75 7440; ČSN EN 13211)	Wastes, sediments, sludges, grounds, soils, waters, absorption solution, aqueous leachates and sorbents	-
37	Determination of Non-Polar Extractable matters (NELs) and Extractable substances (ELs) by the IR spectrometry method	SOP No. 18, procedure A (ČSN 75 7505:1998; ČSN 75 7506:2002)	Waters aqueous leachates	-

Accredited entity in accordance with ČSN EN ISO/IEC 17025:2018:

DEKONTA, a.s.

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
38	Determination of Non-Polar Extractable matters (NELs) and Extractable substances (ELs) by the IR spectrometry method	SOP No. 18, procedure B (ČSN 75 7505:1998; ČSN 75 7506:2002)	Wastes, sludges, grounds, soils, and sorbents from sampling	-
39	Determination of total organic carbon (TOC), dissolved organic carbon (DOC) and total inorganic carbon (TIC) by the combustion spectrometric method	SOP No. 30, procedure A (ČSN EN 1484; ČSN EN ISO 20236; ELEMENTAR manual)	Waters and aqueous leachates	-
40	Determination of total carbon (TC) and total organic carbon (TOC) by means of the combustion spectrometric method and determination of inorganic carbon (IC) and carbonates by calculation from the measured values	SOP No. 30, procedure B (ČSN EN 15936; ELEMENTAR manual)	Wastes, sediments, sludges, soils, grounds and construction materials	-
41	Determination of the total bound nitrogen (TNb), by the combustion method with the chemiluminescence detector	SOP No. 14, procedure A (ČSN EN ISO 20236; ELEMENTAR manual)	Waters, and aqueous leachates	-
42	Determination of the total bound nitrogen (TNb), by the combustion method with the chemiluminescence detector	SOP No. 14, procedure B (ELEMENTAR manual)	Wastes, sediments, sludges, soils, grounds and construction materials	-
43	Determination of dissolved substances dried at 105°C (TDS-dry) and annealed at 550°C (TDS-annealed) by the gravimetric method	SOP No. 06, procedure A and B (ČSN 75 7346)	Waters and aqueous leachates	-
44	Determination of dissolved inorganic salts (DIS) by the gravimetric method	SOP No. 06, procedure C (ČSN 75 7347)	Waste waters	-
45	Determination of suspended solids (TSS) by the gravimetric method	SOP No. 05 (ČSN EN 872)	Waters	-

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DEKONTA, a.s.

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
46	Determination of ammonium ions (NH ₄ ⁺) the spectrometric method and ammonia nitrogen (N-NH ₄ ⁺) and inorganic nitrogen (N _{inorg}) by calculation from the measured values	SOP No. 11 (ČSN 83 4728-4; ČSN ISO 7150-1)	Waters, aqueous leachates and absorption solutions	-
47	Determination of hexavalent chromium (Cr ^{VI}) by means of the photometric method with the use of Merck commercial analytical set	SOP No. 37 (Merck manual)	Waters, aqueous leachates and absorption solutions	-
48	Determination of the Phenol Index by the spectrophotometric method with 4-aminoantipyrine after distillation	SOP No. 24, procedure A (ČSN ISO 6439)	Waters, aqueous leachates and absorption solutions	-
49	Determination of the Phenol Index by the spectrophotometric method with 4-aminoantipyrine after distillation	SOP No. 24, procedure B (ČSN ISO 6439)	Wastes, sediments, sludges, soils, grounds, sorbents from sampling and construction materials	-
50	Spectro-photometrical determination of anionic surfactants by using the methylene blue	SOP No. 23 (ČSN EN 903)	Waters and aqueous leachates	-
51	Determination of chemical oxygen demand by dichromate (COD _{Cr}) by the titration method	SOP No. 03 (ČSN ISO 6060)	Waste waters and surface waters	-
52	Determination of nitrates (NO ₃ ⁻) by the spectrophotometric method and of nitrate nitrogen (N-NO ₃ ⁻) by calculation from the measured values	SOP No. 09 (ČSN ISO 7890-3)	Waters and aqueous leachates	-
53	Determination of nitrites (NO ₂ -) by spectrophotometric method and of nitrite nitrogen N-(NO ₂ -) by calculation from the measured values	SOP No. 10 (ČSN EN 26777)	Waters and aqueous leachates	-

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DEKONTA, a.s.

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
54	Determination of chlorides (CI ⁻) by the silver nitrate titration with the chromate indicator by means of the Mohr's method	SOP No. 07 (ČSN 83 4712-3; ČSN 83 4751-3; ČSN ISO 9297)	Waters, aqueous leachates and absorption solutions	-
55	Determination of sulphates (SO ₄ ²⁻) by the gravimetric method	SOP No. 08 (ČSN ISO 9280:1995)	Waters, aqueous leachates and absorption solutions	-
56	Determination of fluorides (F ⁻) electrochemically (ISE)	SOP No. 17 (ČSN ISO 10359-1; ČSN ISO 10359-2; ČSN P CEN/TS 17340)	Waters, aqueous leachates and absorption solutions	-
57	Determination of biochemical oxygen demand after <i>n</i> days (BODn) by the electrochemical method	SOP No. 04 (ČSN EN 1899-2; ČSN EN ISO 5815-1)	Waste waters, surface waters and groundwaters	-
58	Determination of base neutralizing capacity (BNC) by titration	SOP No. 88 (ČSN 75 7372)	Waters and aqueous leachates	-
59	Determination of acidic neutralizing capacity (ANC) by titration and of hydrocarbonates, carbonates and carbon dioxide forms by calculation from the measured values	SOP No. 36 (ČSN 75 7373; ČSN EN ISO 9963-1; ČSN EN ISO 9963-2)	Waters and aqueous leachates	-
60	Determination of colour by spectrophotometry	SOP No. 67 (ČSN EN ISO 7887, cl. 5, method B, cl. C)	Waters	-
61	Determination of cyanides (CN ⁻) total and easily liberatable cyanides by the photometric method with use of the Merck commercial analytical set	SOP No. 15 (ČSN 75 7415; Merck manual)	Waters, aqueous leachates and absorption solutions	-
62*	Determination of free and total chlorine by spectrophotometry	SOP No. 68 (ČSN EN ISO 7393-2)	Drinking waters and raw waters	-
63*	Sensory analysis – preliminary determination of odour and flavour	SOP No. 12 (ČSN 75 7340)	Drinking waters and raw waters	-

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DEKONTA, a.s.

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
64	Determination of aggressive carbon dioxide content (CO ₂) by marble examination according to Heyer by titration	SOP No. 22 (ČSN EN 13577)	Groundwaters	-
65	Determination of hydrocarbons in the range C ₁₀ to C ₄₀ by gas chromatography with MS detection and of biomarker's indexes by calculation from the measured values	SOP No. 57 (Patent of Dekonta, a. s. 302 508)	Wastes, sediments, sludges, soils, grounds and construction materials	-
66	Determination of chemical oxygen demand with permanganate (COD _{Mn}) by titration	SOP No. 69 (ČSN EN ISO 8467)	Drinking waters, raw waters and groundwaters	-
67	Determination of elements by ICP-OES method and a stoichiometric calculation of substances content from the measured values, including calculation of total dissolved inorganic solids and calculation of sum of Ca and Mg	SOP No. 71, procedure A (ČSN 75 7358; ČSN EN ISO 11885; ČSN EN ISO 15587-1; ČSN EN ISO 15587-2; EPA Method 200.7; Spectro manual and application sheets)	Waters, aqueous leachates and absorption solutions	-
68	Determination of elements by ICP-OES method and a stoichiometric calculation content of substances from the measured values and determination of Cr ^(III) by calculation from the measured values	SOP No. 71, procedure B (ČSN EN 13656; ČSN EN 13657; ČSN EN 14385; ČSN EN 14902; ČSN EN 15410; ČSN EN 16173; ČSN EN ISO 11885; ČSN EN ISO 16967; ČSN EN ISO 16968; ČSN EN ISO 16994; ČSN EN ISO 54321; EPA Method 29; EPA Method 200.7; Spectro manual and application sheets)	Wastes, sediments, sludges, soils, grounds, sorbents from sampling, fuels, construction materials and biological materials	-

Accredited entity in accordance with ČSN EN ISO/IEC 17025:2018:

DEKONTA, a.s.

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
69	Identification of organic compounds by gas chromatography and MS detection	SOP No. 53 (ČSN EN ISO 21253-1; ČSN EN ISO 22892)	Wastes, sediments, sludges, soils, grounds, sorbents from sampling, gasses, liquid samples and waters	-
70	Determination of dry residues by the gravimetric method	SOP No. 73 (ČSN EN 12880)	Sludges and waters	-
71	Determination of chloride (Cl ⁻) by potentiometric titration	SOP No. 74, procedure A (ČSN 83 0530-20:1980; ČSN EN 1911)	Waters, aqueous leachates and absorption solutions	-
72	Determination of chloride (Cl ⁻) by potentiometric titration	SOP No. 74, procedure B (ČSN EN 480-10)	Wastes, sediments, sludges, soils, grounds and construction materials	-
73	Determination of absorbance at wavelength 254 nm by spectrophotometry	SOP No. 75 (ČSN 75 7360)	Waters and aqueous leachates	-
74*	Identification by mobile Raman spectrometer	SOP No. 81 (Ahura manual)	Solid, liquid and gels	-
75*	Screening analysis of elements by mobile ED-XRF analyzer	SOP No. 76 (ČSN EN 16424; ČSN EN ISO 13196)	Wastes, sediments, sludges, soils, grounds, construction materials, native materials and liquid samples	-
76	Determination of humic substances by spectrophotometry	SOP No. 77 (ČSN 75 7536)	Waters	-
77	Determination of extractive substances, fats and oils by the gravimetric method	SOP No. 78 (ČSN 75 7509)	Waste and surface waters	-
78	Determination of water by the Karl Fischer method	SOP No. 72 (ČSN ISO 760; ČSN EN ISO 8534)	Petroleum products, oils and organic solvents	-
79*	Determination of dissolved oxygen by optical sensors	SOP No. 79 (ČSN ISO 17289)	Drinking, surface a groundwaters	-
80	Determination of impurities and stones by gravimetry	SOP No. 79 (ČSN 46 5735; ČSN P CEN/TS 16202)	Sludges, composts, treated biowastes, oils and grounds	-

Accredited entity in accordance with ČSN EN ISO/IEC 17025:2018:

DEKONTA, a.s.

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
81	Determination of mechanical impurities by gravimetry after filtration	SOP No. 82 (ČSN 65 6080)	Petroleum products, oils and organic solvents	-
82	Determination of chlorides (Cl ⁻) by discrete spectrophotometry	SOP No. 83 (ČSN 83 4712-4; ČSN 83 4751-3; ČSN ISO 15923-1	Waters, aqueous leachates and absorption solutions	-
83	Determination of sulphates (SO ₄ ²⁻) turbidimetrically by discrete spectrophotometry and determination of sulphates sulphur by calculation from the measured values	SOP No. 84 (ČSN 83 4711-3; ČSN 83 4711-4; ČSN 83 4711-5; ČSN 83 4711-6; ČSN ISO 15923-1)	Waters, aqueous leachates and absorption solutions	-
84	Determination of divalent iron (Fe ²⁺) by discrete spectrophotometry	SOP No. 49 (ČSN ISO 6332)	Waters, aqueous leachates and absorption solutions	-
85	Determination of nitrites nitrogen (N-NO ²⁺) and sum of nitrites and nitrates nitrogen by discrete spectrophotometry, and nitrites, nitrates, inorganic, organic and total nitrogen by calculation from the measured values	SOP No. 85 (ČSN EN ISO 13395; ČSN ISO 15923-1)	Waters, aqueous leachates and absorption solutions	-
86	Determination of hexavalent chromium (Cr ^{VI}) by discrete spectrophotometry	SOP No. 86 (ČSN ISO 11083; EPA Method 7196A)	Waters, aqueous leachates and absorption solutions	
87	Determination of orthophosphates (PO ₄ ³⁻) by discrete spectrophotometry and of total orthophosphates phosphorus (P- PO ₄ ³⁻) by calculation from the measured values	SOP No. 87, procedure A (ČSN EN ISO 6878; ČSN ISO 15923-1)	Waters and aqueous leachates	-
88	Determination of total phosphorus (P _{TOT.}) by discrete spectrophotometry and of phosphorus in the form of P ₂ O ₅ and PO ₄ ³⁻ by calculation from the measured values	SOP No. 87, procedure B (ČSN EN ISO 6878; ČSN ISO 15923-1)	Waters, aqueous leachates and absorption solutions	-

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Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
89	Determination of gross calorific value by calorimetric method and determination of net calorific value by calculation from the measured values	SOP No. 92, procedure A (ČSN DIN 51900-1; ČSN DIN 51900-3)	Liquid fuels, oils and liquid wastes	-
90	Determination of gross calorific value by calorimetric method and net calorific value by calculation from the measured values	SOP No. 92, procedure B (ČSN ISO 1928; ČSN EN 15170; ČSN EN ISO 18125; ČSN DIN 51900-1; ČSN DIN 51900-3)	Solid fossil fuels, solid biofuels, solid alternative fuels, waste and sludge	-
91	Determination of chlorides (Cl ⁻) after combustion of sample by discrete spectrophotometry and calculation of combustible chlorine content from the measured values	SOP No. 97, Procedure A1 (ČSN EN ISO 16994; EPA Method 325.1)	Liquid fuels, oils and liquid wastes	-
92	Determination of fluorides (F) after combustion of sample electrochemically (ISE) and calculation of combustible chlorine content from the measured values	SOP No. 97, Procedure A2; (ČSN EN ISO 16994; ČSN ISO 10359-1)	Liquid fuels, oils and liquid wastes	-
93	Determination of sulphates (SO ₄ ²⁻) after combustion of sample by discrete spectrophotometry and calculation of combustible sulphur content from the measured values	SOP No. 97, Procedure A3 (ČSN EN ISO 16994; EPA Method 375.4)	Liquid fuels, oils and liquid wastes	-
94	Determination of chlorides (Cl ⁻) after combustion of sample by discrete spectrophotometry and calculation of combustible chlorine content from the measured values	SOP No. 97, Procedure B1 (ČSN EN 14582; ČSN EN 15408; EPA Method 325.1)	Solid fossil fuels, solid biofuels, solid alternative fuels, waste and sludge	-

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DEKONTA, a.s.

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested subject	Degrees of freedom ³
95	Determination of fluorides (F-) after combustion of sample electrochemically (ISE) and calculation of combustible chlorine content from the measured values	SOP No. 97, Procedure B2 (ČSN EN 14582; ČSN EN 15408; ČSN ISO 10359-1)	Solid fossil fuels, solid biofuels, solid alternative fuels, waste and sludge	-
96	Determination of sulphates (SO ₄ ²⁻) after combustion of sample by turbidity by discrete spectrophotometry and calculation of combustible sulphur content from the measured values	SOP No. 97, Procedure B3 (ČSN EN 14582; ČSN EN 15408; EPA Method 375.4)	Solid fossil fuels, solid biofuels, solid alternative fuels, waste and sludge	
97	Determination of absorbable organically bound halogens (AOX) by coulometry	SOP No. 93, procedure A (ČSN EN ISO 9562)	Water and aqueous leachates	-
98	Determination of extractable organically bound halogens (EOX) by coulometry	SOP No. 94, procedure B (ČSN EN 16179; EPA Method 9023)	Waste, sediments, sludge, soils and construction materials	-
99	Determination of total halogens (TXs) by coulometry	SOP No. 95 (EPA Method 9076)	Wastes, sediments, sludge, soils, construction materials, liquid fuels, oils, solvents and liquid wastes	-
100	Determination of ammonium ions (NH ₄ ⁺) by discrete spectrophotometry and ammonia nitrogen and free ammonia by calculation from measured values	SOP č. 85, procedure B (ČSN 83 4728-4; ČSN ISO 7150-1; ČSN ISO 15923-1)	Waters, water leachates and absorption solution	-

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

³ the laborotory does not apply the flexible approach to the scope of accreditation

⁴ laboratory determination of analytes in collected samples is carried out by an external test provider within the scope of its accreditation

Accredited entity in accordance with ČSN EN ISO/IEC 17025:2018:

DEKONTA, a.s.

CAB number 1240, Laboratory in Ústí nad Labem - DLÚ Podhoří 328/28, 400 10 Ústí nad Labem

Specification of the range of accreditation:

Ordinal number of test	Detailed information on the activities within the scope of accreditation (determined analytes)	
6, 26, 27	VOC: 1,1 - dichloroethane, 1,2 - dichloroethane, vinyl chloride, 1,1 - dichloroethane, c-1,2 - dichloroethane, t-1,2 - dichloroethene, trichloroethene, tetrachloroethene, benzene, toluene, ethylbenzene, o-, m-, p-xylenes, styrene, chlorobenzene, 1,2 - dichlorobenzene, 1,3 - dichlorobenzene, 1,4 - dichlorobenzene, methyl butyl ether (MTBE)	
7	PCDD/PCDFs, PCBs a PAHs	
8, 67, 68	Elements: Ag, Al, As, Au, B, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cu, Dy, Er, Eu, Fe, Gd, Hg, Ho, Ir, K, La, Li, Lu, Mg, Mn, Mo, Na, Nd, Ni, Os, P, Pb, Pd, Pr, Pt, Rh, Ru, S, Sb, Sc, Se, Si, Sm, Sn, Sr, Tb, Ti, Tm, U, V, Y, Yb, Zn	
28, 29	OCPs: hexachlorobenzene, alfa, beta, gamma, delta, epsilon hexachlorocyclohexane, 1, 2, 3 - trichlorobenzene, 1, 2, 3 - trichlorobenzene, 1, 2, 3 - trichlorobenzene, 1, 2, 3, 4 - tetrachlorbenzene, 1, 2, 3, 5 - tetrachlorbenzene, 1, 2, 4, 5 - tetrachlorbenzene, pentachlorbenzene. aldrin, dieldrin, isodrin, cis-heptachlorepoxide, trans-heptachlorepoxide, alfa-endosulphan, beta-endosulphan, endosulfan sulphate, o,p' - DDE, p,p' - DDE, o,p' - DDD, p,p' - DDD, o,p' - DDT, p,p' - DDT, methoxychlor, cis-chlordan, trans-chlordan, mirex, endrin, heptachlor	
30, 31	PCBs: congeners no. 28, 52, 101, 118, 138, 153, 180	
34, 35	PAHs: naphthalene, fluorene, fenantren, anthracene, fluoranthene, pyrene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, dibenzo(a,h)anthracene, benzo(g,h,i)perylene, chrysen, indeno(1, 2, 3 - c, d)pyrene, acenaften, acenaphthylene	
75	Elements: Ag, As, Bi, Ca, Cd, Cl, Co, Cr, Cu, Fe, Hg, K, Mn, Mo, Ni, P, Pb, Rb, S, Se, Sn, Sr, Ti, V, W, Zn, Zr	

Specification of the range of accreditation:

Ordinal number of test	Detailed information on the activities within the scope of accreditation (tested subject)
1, 2, 3, 4, 5, 6, 7, 8, 9, 12, 14	Emissions – waste gas containing pollutants, which is emitted by a controlled way or leaks out into atmosphere from sources of pollution of the air.
13, 15, 36, 69	Gaseous mixtures – gases from dumps, gases from reservoirs and/or compost processes.
17, 18, 19, 20, 21, 22, 25, 26, 28, 30, 32, 34, 36, 37,39, 41, 43, 44, 45, 46, 47, 48, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 67,70, 71, 73, 76, 77, 79, 82, 83, 84, 85, 86, 87, 88, 97, 100	Water – drinking, packed natural, mineral, pool, hot, intended for bathing, raw, ground, surface, wastewater (from sewage/wastewater treatment plants, separators of fat or TPHs, sewage, sewerage, cooling, technological, rinsing and industry wastewater), treated, technological, industry, boiled and cooling water, waters supplied by pipe or waters sampled from reservoirs.
17, 18, 25, 32, 36,37, 39, 41, 43, 44, 46, 47, 48, 50, 52, 53, 54, 55, 56, 58, 59, 61, 67, 71, 73, 82, 83, 84, 85, 86, 87, 88, 97	Leachates – aqueous leachates of soil, sludges, sediments, waste in accordance withthelegislation in force.

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Ordinal number of test	Detailed information on the activities within the scope of accreditation (tested subject)
23, 24, 27, 29, 31, 33, 35, 36,38, 40, 42, 49, 65, 68, 69, 72, 74, 75, 80, 98, 99, 100	Solid samples – wastes (solid, liquid, biowastes, biofuels), sediments, sludges, technological sludges products, soils, minerals and fuels.
23, 24, 27, 29, 31, 33, 35, 36, 38, 40, 42, 49, 65, 67, 68, 69, 72, 98, 99	Construction materials – materials from buildings, i.e. demolition debris, recycled materials, disposed of construction materials.
27, 29, 31, 33, 35, 36, 38, 49, 68, 69	Solid sorbents – sorbents and filters from sampling of emissions and ambient air.
36, 65, 68, 69, 74, 75, 99	Liquid samples – industry liquids, technical liquids, technological bath, fire extinguishing foam, solvents and liquid wastes.
36, 46, 47, 48, 54, 55, 56, 61, 67, 71, 82, 83, 85, 86, 87, 88, 100	Absorption solutions from sampling of emissions and ambient air.
68	Biological materials – all materials of biological origin, expect of human issues samples.

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Sampling:

Ordinal number	Sampling procedure name	Sampling procedure identification ¹	Subject of sampling
1	Sampling of groundwater by static and dynamic ways	SOP No. 40 (ČSN EN ISO 5667-1; ČSN EN ISO 5667-3; ČSN ISO 5667-11; ČSN EN ISO 5667-14; ČSN EN ISO 5667-16; ČSN EN ISO 19458; ČSN EN ISO 22475-1)	Groundwater
2	Sampling of waste	SOP No. 41 (ČSN 01 5111; ČSN 01 5112; ČSN EN 12579; ČSN EN 14899; ČSN EN 16457; ČSN EN 60475; ČSN EN ISO 5667-14; ČSN EN ISO 21645; TNI CEN/TR 15310-1; TNI CEN/TR 15310-2; TNI CEN/TR 15310-3; TNI CEN/TR 15310-4; TNI CEN/TR 15310-5)	Wastes, biowastes, composts and fugates
3	Sampling of drinking and raw waters intended for production of drinking water	SOP No. 42 (ČSN EN ISO 5667-1; ČSN EN ISO 5667-3; ČSN ISO 5667-5; ČSN EN ISO 5667-16; ČSN EN ISO 19458)	Drinking and raw water
4	Sampling of surface waters and waters intended for bathing	SOP No. 43 (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 5667-16; ČSN EN ISO 19458, Decree 238/2011 Coll.)	Surface waters and water for bathing (surface streams and ponds in free nature)
5	Sampling of wastewater by manual way and by automatic samplers	SOP No. 46 (ČSN EN ISO 5667-1; ČSN EN ISO 5667-3; ČSN ISO 5667-10; ČSN EN ISO 5667-14)	Waste waters

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Ordinal number	Sampling procedure name	Sampling procedure identification ¹	Subject of sampling
6	Sampling of grounds and soils	SOP No. 44 (ČSN 01 5110; ČSN 01 5111; ČSN EN 14899; TNI CEN/TR 15310-1; TNI CEN/TR 15310-2; TNI CEN/TR 15310-3; TNI CEN/TR 15310-4; TNI CEN/TR 15310-5)	Grounds and soils
7	Sampling of sediments, sludges and suspended sediments	SOP No. 47 (ČSN 01 5110; ČSN 01 5111; ČSN EN 14899; ČSN EN ISO 5667-1; ČSN EN ISO 5667-3; ČSN EN ISO 5667-13; ČSN EN ISO 5667-14; ČSN EN ISO 5667-15; ČSN EN ISO 5667-15; ČSN EN ISO 5667-16; ČSN EN ISO 5667-19; ČSN ISO 5667-12; ČSN ISO 5667-17)	Sediments, sludges and suspended sediments
8	Sampling of gases and vapours into sampling bags	SOP No. VE3, procedure B (ČSN EN 14662-1; ČSN EN ISO 16017-1)	Ambient air, indoor air and soil air
9	Sampling of pollutants by catchment onto a solid sorbent	SOP No. VE4, procedure B (ČSN EN 14662-1; ČSN EN ISO 16017-1; ČSN P CEN/TS 13649)	Ambient air, indoor air and soil air
10	Sampling for determination of gaseous and total Hg	SOP No. VE6, procedure B (ČSN EN 13211; ČSN EN 15852; ČSN EN 15853; ČSN EN ISO 21832)	Ambient air, indoor air and soil air
11	Sampling for determination of persistent organic substances (PCCD/PCDF, PCB and PAH) isokinetic sampling with automatic control, filtration and condensation method	SOP No. VE1, procedure A (ČSN EN 1948-1)	Emissions

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Ordinal number	Sampling procedure name	Sampling procedure identification ¹	Subject of sampling
12	Sampling of gases and vapours by absorption to liquid	SOP No. VE2 (ČSN 83 4711-1; ČSN 83 4711-2; ČSN 83 4712-1; ČSN 83 4712-2; ČSN 83 4721-1; ČSN 83 4721-2; ČSN 83 4728-1; ČSN 83 4728-2; ČSN EN 1911; EPA Method 16A; EPA Method 0061; F. Skácel a V. Tekáč - Měření emisí; V. Križan a kol Analýza ovzduší, 1981)	Emissions
13	Sampling of gases and vapours into sampling bags	SOP No. VE3, procedure A (ČSN P CEN/TS 13649)	Emissions
14	Sampling of volatile organic substances (VOC) by catchment onto a solid sorbent	SOP No. VE4, procedure A (ČSN P CEN/TS 13649)	Emissions
15	Sampling for the determination of solid pollutants and its fractions PM10 and PM2.5	SOP No. VE5 (ČSN EN 13248-1; ČSN EN ISO 23210)	Emissions
16	Sampling for determination of metals (Al, As, Be, Cd, Co, Cr, Cu, Hg, Mn, Ni, Pb, Se, Sb, Sn, Te, Tl, V, Zn) isokinetically to filter and absorption into the liquid – isokinetic sampling with automatic and manual control	SOP No. VE6, procedure A (ČSN EN 13211; ČSN EN 14385; ČSN EN 14902; ČSN EN 15841; EPA Method 29)	Emissions
17	Sampling for gravimetric determination of suspended particle matters in air and its fractions PM10 and PM2.5	SOP No. VE7 (ČSN EN 12341)	Ambient air
18	Sampling for determination of numerical concentration of asbestos and minerals fibbers	SOP No. VE8 (ČSN EN ISO 16000-7)	Ambient air and indoor air

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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Clarification of the scope of accreditation:

Ordinal number of sampling	Sampling details of the activities in the scope of accreditation (tested subject)	
11, 12, 13, 14, 15, 16	Emissions - waste gas containing pollutants that is discharged in a controlled manner or escapes into the outdoor atmosphere from sources of air pollution	

Explanatory notes and abbreviations:

AOX - Absorbable organically bound halogens

DOC - Dissolved organic carbon

ED-XRF - Energy Dispersive X-Ray Fluorescence (Roentgen fluorescence spectrometer with

dispersing energy)

EL - Extractable matters

EOX - Extractable organically bound halogens

EPA - Environmental Protection Agency of USA

FID - Flammable ionisation detector

FNI - Phenol's index

ICP-OES - Inductively Coupled Plasma Optical Emission Spectrometry

IR - Infrared

ISE - Ion selective electrode

ANC - Acid neutralisation capacity

MTBE - Methyl terc-butyl ether

MS - Mass spectrometry or mass detector

NELs - Non-polar extractable matters

OCPs - Organochlorine pesticides

ORP - Oxidation reduction potential

PAHs - Polyaromatic hydrocarbons

PCBs - Polychlorinated biphenyls

PCDDs - Polychlorinated dibenzodioxins

PCDFs - Polychlorinated dibenzofurans

PID - Photo ionisation detector

PM10 - Particles from which a measuring device is 50% likely to separate particles with an

aerodynamic diameter of 10 µm.

PM2,5 - Particles from which the measuring equipment is 50% likely to separate particles with an

aerodynamic diameter of 2.5 μm.

SOP - Standard Operating Procedure

TC - Total carbon

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$$\begin{split} TIC & - & Total \ inorganic \ carbon \\ TN_b & - & Total \ bounded \ nitrogen \\ TOC & - & Total \ organic \ carbon \end{split}$$

VOC - Volatile organic compounds

TXs - Total halogens

BNC - Base neutralisation capacity

"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."