NÁRODNÍ AKREDITAČNÍ ORGÁN

EA MLA Signatory
Český institut pro akreditaci, o.p.s.
Olšanská 54/3, 130 00 Praha 3

issues

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

CERTIFICATE OF ACCREDITATION

No. **719/2020**

DEKONTA, a.s.
with registered office Dřetovice 109, 273 42 Stehelčeves, Company Registration No. 25006096

to the Testing Laboratory No. **1240**
Dekonta, a.s. - Laboratory Ústí n/L

Scope of accreditation:

Sampling of water, waste, soil, sludge, sediments, materials, soil air, emission, outdoor and indoor air, emission measurement, soil air, outdoor and indoor air, physico-chemical analyses of water, leaches, waste, soils, sludge, sediments, oils, materials, gases and fuels to the extent as specified in the appendix to this Certificate.

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

ČSN EN ISO/IEC 17025:2018

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

This Certificate of Accreditation replaces, to the full extent, Certificate No.: 376/2019 of 25. 7. 2019, or any administrative acts building upon it.

The Certificate of Accreditation is valid until: **2. 2. 2023**

Prague: 30. 11. 2020

Český institut pro akreditaci, o.p.s.
-2-

Jiří Růžička
Director
Czech Accreditation Institute
Public Service Company

The Appendix is an interval part of the
Certificate of Accreditation No. 719/2020 of 30/11/2020

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

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

The up-to-date list of activities carried out within the flexible scope of accreditation is available in the laboratory from the Laboratory Manager.

The Laboratory is qualified to provide expert opinions and interpret test results.

Tests:

Ordinal number [1]	Test procedure/method name	Test procedure/method identification [2]	Test object
1*	Determination of weight concentration of gaseous pollutants by automated analyzers (non dispersed infrared spectroscopy(CO, SO_2) and chemiluminescence analyzers (NO/NO_2)	SOP no. E1 (ČSN ISO 7935, ČSN ISO 10849, 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 oxygen concentration (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 of weight flow of solid pollutants in the manifold (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 by gas chromatography, calculation from measured values	SOP no. E6 (ČSN ISO 13649:2002 ČSN EN ISO 16017-1)	Emissions, ambient air, indoor air and soil air
7	Determination of weight concentration of persistent organic substances (PCDD/PCDF, PCB and PAH) by calculation from measured values	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
8	Determination of weight concentration of metals and metalloids by calculation from measured values)	SOP no. E8 (ČSN EN 14385, ČSN EN 13211 EPA method 29)	Emissions
9*	Determination of humidity of flue gas	SOP no. E9 (ČSN EN 14790)	Emissions

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Ordinal number [1]	Test procedure/method name	Test procedure/method identification [2]	Test object
10	Determination of suspended particulate matter in the air and its mass fraction PM10 and PM2.5 (gravimetry)	SOP no. E10 (ČSN EN 12341)	Ambient air
11	Determination of numerical concentration of asbestos and minerals fibbers[8], by calculation from the measured values	SOP no. E11 (ČSN EN ISO 16000-7)	Ambient air and indoor air
12	Determination of weight concentration of vapours and gases by sampled by absorption to liquid (gas inorganic compounds chlorine and fluorine, ammonia, sulfane, chromium (VI+), mineral acids and bases, oxides of sulphur and sulphuric acid, hydrogen cyanide and cyanides, phenol and phenol's compounds, oxides of nitrogen, phosphorus and its compounds)	SOP no. E12 (ČSN ISO 11083, ČSN 83 4728-1, ČSN 83 4728-2, ČSN 83 4728-3, ČSN 83 4728-4, ČSN 83 4728-5, ČSN 83 4712-1, ČSN 83 4712-2, ČSN 83 4712-3, ČSN 83 4712-4, manuál f. Merck, ČSN 83 4752-1, ČSN 83 4752-2, ČSN 83 4752-3, ČSN 83 4752-4, ČSN 83 4752-5, ČSN 83 4751-3, ČSN 83 4751-4, ČSN 83 4751-6, ČSN EN 1911, ČSN ISO 6439, ČSN P CEN/TS 16429, 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 4713-1, ČSN 83 4713-2, ČSN 83 4713-3, ČSN 83 4713-4, ČSN IS0-7150-1, ČSN EN ISO 6878, ČSN 83 4721-1, ČSN 83 4721-2, ČSN 83 4721-3, ČSN 83 4721-4, ČSN 75 7415, ČSN ISO 8756, ČSN 83 5711, ČSN ISO 4221 ČSN ISO 10359-1, ČSN ISO 10359-2)	Emissions
13*	Determination of methane (CH_4) and carbon dioxide (CO_2), and sum of hydrocarbons expressed as (C_xH_y) by use of IR analyzers and PID detectors	SOP no. E16 (Geotech comp. manual, RS Dynamics comp. manual)	Soil air, gaseous mixtures and air
14*	Determination of methane (CH_4), carbon, carbon monoxide (CO), hydrogen (H_2) and sum of hydrocarbons expressed as C_xH_y by use of NDIR analyzer, TCD detectors and electrochemical cells	SOP no.E17 (ČSN EN 1 5058, ČSN EN ISO 13199, manuál f. GEIT)	Synthesis gases, gases from gasification and gases from thermal process

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Ordinal number [1]	Test procedure/method name	Test procedure/method identification [2]	Test object
15*	Determination of methane (CH_4), carbon dioxide (CO_2), sulfane (H_2S) and ammonia (NH_3) by use of IR analyzer and electrochemical cells	SOP no. E18 (manuál f. Geotech, RS Dynamics comp. manual)	Soil air, gaseous mixtures, dump gases, gases from composting process and gasses from pressure tank
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 electrochemical method	SOP no. 01 (ČSN ISO 10523, ČSN EN 12176, ČSN ISO 10390, ČSN EN 15933)	Waters, aqueous leaches 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 leaches of sludges, soils and wastes
19*	Determination of oxidation-reduction potential (ORP) by electrochemical method	SOP no. 66 (ČSN 757367)	Drinking, surface and ground waters
20*	Determination of dissolved oxygen by electrochemical probe method	SOP no. 51 (ČSN EN ISO 25814)	Drinking, surface and groundwaters
21*	Determination of turbidity by nephelometric method	SOP no. 63 (ČSN EN ISO 7027)	Drinking, surface and groundwaters
22*	Determination of temperature	SOP no. 65 (ČSN 75 7342)	Drinking, surface, groundwaters waste water
23	Determination of dry matter and water content by the gravimetric method	SOP no. 28 (ČSN 720102, ČSN ISO 11465, ČSN EN ISO 17892-1, ČSN EN 14346, ČSN 465735, ČSN EN 15934)	Wastes, soils, grounds, sediments and sludges
24	Determination of ash and loss on ignition of dry mass	SOP no. 48 (ČSN EN 12879:2001, ČSN EN 15169, ČSN EN 15935, CSN 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_2O_5 by calculation from the measured values	SOP no. 16 (ČSN EN ISO 6878)	Waters and aqueous leaches

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Ordinal number [1]	Test procedure/method name	Test procedure/method identification [2]	Test object
26	Determination of selected volatile organic compound (VOC)[7] by the method of gas chromatography with the FID and MS detector and sum of VOC by calculation from the measured values	SOP no. 34, procedure A (ČSN EN ISO 10301, ČSN ISO 11423-1, ČSN EN ISO 17943)	Waters
27	Determination of selected volatile organic compound (VOC)[7] by the method of gas chromatography with the FID and MS detector and sum of VOC 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 (OCP)[3] by the method of gas chromatography with the MS detection	SOP no. 33, procedure A (ČSN EN ISO 6468, ČSN P ISO/TS 28581, CSN EN 16693)	Waters
29	Determination of selected chlorinated pesticides (OCP)[3] by the method of gas chromatography with the MS detection	SOP no. 33, procedure B (DIN ISO 10382 ČSN EN ISO 14181)	Wastes, sediments, sludges, soils, grounds, sorbents from sampling and construction materials
30	Determination of selected congeners of PCB[4] by the method of gas chromatography with the MS detection and sum of PCB by calculation from the measured values	SOP no. 21, procedure A (ČSN EN ISO 6468, ČSN P ISO/TS 28581)	Waters
31	Determination of selected congeners of PCB[4] by the method of gas chromatography with the MS detection and sum of PCB by calculation from the measured values	SOP no. 21, procedure B (ČSN EN 15308, DIN ISO 10382, ČSN EN 16167)	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

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Ordinal number [1]	Test procedure/method name	Test procedure/method identification [2]	Test object
34	Determination of PAH[6] by the method of gas chromatography with the MS detection and sum of PAH by calculation from the measured values	SOP no. 20, procedure A (ČSN 757554, ČSN ISO 28540, ČSN P ISO/TS 28581, CSN EN 16691)	Waters
35	Determination of PAH[6] by the method of gas chromatography with the MS detection and a sum of PAH by calculation from the measured values	SOP no. 20, procedure B (ČSN EN 15527, ISO 18287, ČSN P CEN/TS 16181, ČSN P CEN/TS 16645)	Wastes, sediments, sludges, soils, grounds, sorbents from sampling and construction materials
36.	Determination of content the mercury (Hg) by use of the TMA-254 instrument, the spectrometric method	SOP no. 25 (ČSN 757440, ČSN EN 13211)	Wastes, sediments, sludges, grounds, soils, waters, solutions from absorption, aqueous leaches and sorbents
37	Determination of Non-Polar Extractable matters (NEL) and Extractable substances (EL - the spectrometric method	SOP no. 18, procedure A (ČSN 757505:1998, ČSN 757506:2002)	Waters aqueous leaches
38	Determination of Non-Polar Extractable Substances (NEL) and Extractable matters (EL) by the spectrometric method	SOP no. 18, procedure B (ČSN 757505:1998, ČSN 757506:2002)	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, the manual ELEMENTAR comp.)	Waters and aqueous leaches
40	Determination of total carbon (TC) and total organic carbon (TOC), the combustion spectrometric method and determination inorganic carbon and carbonates by calculation from the measured values	SOP no. 30, procedure B (ČSN EN 13137, ČSN EN 15936 the manual ELEMENTAR comp.)	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 12260, the ELEMENTAR comp. manual)	Waters, and aqueous leaches
42	Determination of the total bound nitrogen (TNb), by the combustion method with the chemiluminescence detector	SOP no. 14, procedure B (the ELEMENTAR comp. manual)	Wastes, sediments, sludges, soils, grounds and construction materials

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Ordinal number [1]	Test procedure/method name	Test procedure/method identification [2]	Test object
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 (ČSN 757346)	Waters and aqueous leaches
44	Determination of dissolved inorganic salts (DIS) by the gravimetric method	SOP no. 06, procedure B (ČSN 757347)	Waste waters
45	Determination of suspended solids (TSS) by the gravimetric method	SOP no. 05 (ČSN EN 872)	Waters
46	Determination of ammonium ions (NH_4^+) the spectrometric method and ammonia nitrogen ($N\text{-}NH_4^+$) and inorganic nitrogen (N_{inorg}) by calculation from the measured values	SOP no. 11 (ČSN ISO 7150-1)	Waters, aqueous leaches and absorption solutions from sampling
47	Determination of hexavalent chromium (Cr^{VI}), photometric method with the use of Merck commercial analytic set	SOP no. 37 (the manual Merck comp.)	Waters, aqueous leaches and absorption solutions from sampling
48	Determination of phenols index by the spectrophotometric method with 4-aminoantipyrine after distillation	SOP no. 24, procedure A (ČSN ISO 6439)	Waters, aqueous leaches and absorption solutions from sampling
49	Determination of phenols 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	Determination of anionic surfactants, spectrophotopetrically by the methylene blue	SOP no. 23 (ČSN EN 903)	Waters and aqueous leaches
51	Determination of chemical oxygen demand by dichromate by the titration method, (COD_{Cr})	SOP no. 03 (ČSN ISO 6060)	Waste waters and surface waters
52	Determination of nitrates (NO_3^-) and nitrate nitrogen ($N\text{-}NO_3^-$) by calculation from the measured values, spectrophotometric method	SOP no. 09 (ČSN ISO 7890-3)	Waters and aqueous leaches

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Ordinal number [1]	Test procedure/method name	Test procedure/method identification [2]	Test object
53	Determination of nitrites (NO_2^-) and nitrite nitrogen N-(NO_2^-) by calculation from the measured values, manual spectrophotometric method	SOP no. 10 (ČSN EN 26777)	Waters and aqueous leaches
54	Determination of chlorides (Cl^-) by the silver nitrate titration with the chromate indicator, Mohr's method	SOP no. 07 (ČSN ISO 9297)	Waters, aqueous leaches and absorption solutions from sampling
55	Determination of sulphates (SO_4^{2-}) by the gravimetric method	SOP no. 08 (ČSN ISO 9280:1995)	Waters, aqueous leaches and absorption solutions from sampling
56	Determination of fluorides (F^-) electrochemically (ISE)	SOP no. 17 (ČSN ISO10359-1, ČSN ISO10359-2)	Waters, aqueous leaches and absorption solutions from sampling
57	Determination of biochemical oxygen demand after n days (BOD_n)	SOP no. 04 (ČSN EN 1899- 1, ČSN EN 1899- 2)	Waste waters, surface waters and groundwaters
58	Determination of base neutralizing capacity (BNC) – acidity by titration	SOP no. 88 (ČSN 757372)	Waters and aqueous leaches
59	Determination of acidic neutralizing capacity (ANC) - alkalinity by titration and determination hydrocarbonates, carbonates and carbon dioxide forms by calculation from the measured values	SOP no. 36 (ČSN EN ISO 9963-1 ČSN EN ISO 9963-2, ČSN 757373)	Waters and aqueous leaches
60	Determination of colour	SOP no. 67 (ČSN EN ISO 7887)	Waters
61	Determination of total and easily liberatable cyanides (CN^-) by the photometric method with use of the Merck commercial analytical set	SOP no. 15 (the Merck comp. manual)	Waters, aqueous leaches and absorption solutions from sampling
62*	Field determination of free and total chorine, the spectrophotometric method (DPD) in waters	SOP no. 68 (ČSN ISO 7393-2)	Drinking waters and raw waters
63*	Sensorial analyse of water	SOP no. 12 (TNV 757340)	Drinking waters and raw waters
64	Determination of aggressive carbon dioxide (CO_2) content in water	SOP no. 22 (ČSN EN 13577)	Groundwaters

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Ordinal number [1]	Test procedure/method name	Test procedure/method identification [2]	Test object
65	Determination of Biomarkers index	SOP no. 57 (patent of Dekonta, a.s. 302 508)	Wastes, sediments, sludges, soils, grounds and construction materials
66	Determination of chemical oxygen demand by permanganate by the titration method, (COD_{Mn})	SOP no. 69 (ČSN EN ISO 8467+Z1)	Drinking waters, raw waters and groundwaters
67	Determination of elements[5] by ICP-OES method and a stoichiometric calculation content of substances from the measured values, including calculation total inorganic dissolved solid and calculation of sum of Ca and Mg	SOP no. 71, procedure A (ČSN EN ISO 15587-1, ČSN EN ISO 15587-2, ČSN EN ISO 11885, EPA method 200.7, ČSN 757358, the manual and application sheets of the Spectro comp.)	Waters, aqueous leaches and absorption solutions from sampling
68	Determination of elements[5] 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 ISO 11885, ČSN EN 13346, EPA method 200.7, ČSN EN 14385, ČSN EN 16173, ČSN EN 16174, US EPA method 29, ČSN EN 15410, ČSN EN 14902 ČSN EN ISO 16967, ČSN EN ISO 16968 ČSN EN ISO 16994 the manual and application sheets of the Spectro comp.)	Wastes, sediments, sludges, soils, grounds, sorbents from sampling, fuels, construction materials and biological materials
69	Identification of organic compounds by gas chromatography and mass spectrometry	SOP no. 53 (ČSN EN ISO 22892)	Wastes, sediments, sludges, soils, grounds, sorbents from sampling, gasses, liquid samples and waters
70	Determination of dry residues by gravimetric method and water content by calculation from the measured values	SOP no. 73 (ČSN EN 12880)	Sludges and waters
71	Determination of chloride (Cl^-) by potentiometric titration	SOP no. 74, procedure A (ČSN 830530-20:1980, ČSN EN 1911)	Waters, aqueous leaches and absorption solutions from sampling
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

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Ordinal number [1]	Test procedure/method name	Test procedure/method identification [2]	Test object
73	Determination of absorbance at wavelength 254 nm by spectrophotometry	SOP no. 75 (ČSN 757360)	Waters and aqueous leaches
74*	Identification by mobile Raman spectrometer	SOP no .81 (the manual of the Ahura comp)	Solid, liquid and gels
75*	Screening analysis of elements by mobile XRF spectrometer	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	SOP no. 77 (ČSN 757536)	Waters
77	Determination of extractive substances, fats and oils by gravimetric method	SOP no. 78A (ČSN 757509)	Waste and surface waters
78	Determination of water by the method according to Karl Fischer	SOP no. 72 (CSN ISO 760, CSN 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 ground waters
80	Determination of impurities and stones	SOP no. 79 (ČSN CEN/TS16202 ČSN 465735, public notice 341/2008)	Sludges, composts, treated biowastes, oils and grounds
81	Determination of mechanical impurities by gravimetry after filtration	SOP no. 82 (CSN 656080)	Petroleum products, oils and organic solvents
82	Determination of chlorides (Cl^-) by discrete spectrophotometry	SOP no. 83 (US EPA 325.1	Waters, aqueous leaches and absorption solutions from sampling
83	Determination of sulphates (SO_4^{2-}) tubidimetric by discrete spectrophotometry and determination of suphates sulphur by calculation from the measured values	SOP no. 84 (US EPA 375.4)	Waters, aqueous leaches and absorption solutions from sampling
84	Determination of divalent Iron (Fe^{2+}) by discrete spectrophotometry	SOP no. 49 (CSN ISO 6332)	Waters, aqueous leaches and absorption solutions from sampling

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Ordinal number [1]	Test procedure/method name	Test procedure/method identification [2]	Test object
85	Determination of ammonic ions (NH_4^+), nitrites nitrogen ($N\text{-}NO^{2+}$) and sum of nitrites and nitrates nitrogen by discrete spectrophotometry and ammonium, inorganic, organic, total nitrogen and free ammonium by calculation from the measured values	SOP no 86 (CSN ISO 7150-1, CSN EN ISO 13395, , Standard method 4500-NO3H, Standard method 450-NO2B),	Waters, aqueous leaches and absorption solutions from sampling
86	Determination of hexavalent chromium (Cr^{6+})by discrete spectrophotometry	SOP no. 86 (CSN ISO 11083, US EPA 7196A)	Waters, aqueous leaches and absorption solutions from sampling
87	Determination of orthophosphates (PO_4^{3-}) and total phosphates phosphorus ($P\text{-}PO_4^{3-}$) by discrete spectrophotometry and by calculation from the measured values	SOP no. 87, procedure A CSN EN ISO 6878, Standard methods 4500-PE)	Waters and aqueous leaches
88	Determination of total phosphorus ($P_{TOT.}$) by discrete spectrophotometry and determination of phosphorus as P_2O_5 an PO_4^{3-} by calculation from the measured values	SOP no. 87, procedure B CSN EN ISO 6878, Standard methods 4500-PE)	Waters, aqueous leaches and absorption solutions from sampling
89	Determination of gross calorific value by calorimetric method and determination of net calorific value by calculation from measured values	SOP č. 92A (ČSN 65 6169, 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 measured values	SOP No. 92B (ČSN ISO 1928, ČSN EN ISO 18125, ČSN EN 15170, ČSN DIN 51900-1, ČSN DIN 51900-3)	solid fossil fuels, solid biofuels, solid alternative fuels, waste and sludge
91	Determination of chlorine, fluorine and sulfur content by calculation from measured values of chlorides, fluorides and sulphates after previous combustion of the sample	SOP No. 97A (ČSN 65 6169, ČSN DIN 51900-1, ČSN DIN 51900-3, ČSN EN 14582, determination of sulphates according to SOP No. 84, fluorides according to SOP No. 17 and chlorides according to SOP No. 83)	liquid fuels, oils and liquid wastes

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Ordinal number [1]	Test procedure/method name	Test procedure/method identification [2]	Test object
92	Determination of chlorine, fluorine and sulfur content by calculation from measured values of chlorides, fluorides and sulphates after previous combustion of the sample	SOP č. 97A (ČSN DIN 51900-1, ČSN DIN 51900-3, ČSN EN 14582, ČSN EN 15408, ČSN EN ISO 16994, determination of sulphates according to SOP No. 84, fluorides according to SOP No. 17 and chlorides according to SOP No. 83)	solid fossil fuels, solid biofuels, solid alternative fuels, waste and sludge
93	Determination of absorbable organically bound halogens (AOX) by coulometry	SOP č. 93A (ČSN EN ISO 9562)	Water and aqueous extracts
94	Determination of extractable organically bound halogens (EOX) by coulometry.	SOP No. 94B (EPA Method 9023, ČSN EN 16179)	waste, sediments, sludge, soils and building materials
95	Determination of total halogens (TX) by coulometry	SOP No. 95 (EPA Method 9076)	wastes, sediments, sludge, soils, building materials, liquid fuels, oils, solvents and liquid wastes

[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).

[3] OCP – Chlorinated pesticides – hexachlorobenzene, alpha, beta, gamma, delta, epsilon hexachlorocyclohexane, 1,2,3-trichlorobenzene, 1,2,3-trichlorobenzene, 1,3,5-trichlorobenzene, 1,2,3,4-tetrachlorobenzene, 1,2,3,5-tetrachlorobenzene, 1,2,4,5-tetrachlorobenzene, pentachlorobenzene. Aldrin, Dieldrin, Isodrin, cis-heptachloroepoxide, trans-heptachloroepoxide, alpha-endosulfan, beta-endosulfan, endosulfan sulfate, o, p′-DDE, p, p′-DDE, o, p′-DDD, p, p ′ -DDD, o, p′-DDT, p, p′-DDT, methoxychlor, cis-chlordane, trans-chlordane, Mirex, Endrin, heptachlor.

[4] PCB – polychlorinated biphenyls – congener number 28, 52, 101, 118, 138, 153, 180

[5] 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, Tl, Tm, U, V, Y, Yb, Zn.

[6] PAU(PAH) – polycyclic aromatic hydrocarbons – naphthalene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, dibenzo(a,h)anthracene, benzo(g,h,i)perylene, chrysene, indeno(1,2,3- c,d)pyrene, acenaphthene, acenaphthylene

[7] TOL (VOC) – volatile organic compounds -1,1-dichloroethane, 1,2-dichloroethane, vinyl chloride, 1,1-dichloroethene, c-1,2-dichloroethene, t-1,2-dichloroethene, trichloroethene, tetrachloroethene, benzene, toluene, ethylbenzene, o-, m-, p-xylene, styrene, chlorobenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, methyltercbutylether (MTBE)

[8] The laboratory ensures the determination of analytes at an external supplier

The Appendix is an interval part of the
Certificate of Accreditation No. 719/2020 of 30/11/2020

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

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Annex:

Flexible scope of accreditation

Ordinal numbers of tests
2, 7, 8, 12, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 39, 40, 61, 65, 67, 68.

The Laboratory is allowed to modify the examination procedures 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 examinations not included in the Annex.

Sampling:

Ordinal number	Sampling procedure name	Sampling procedure identification	Sampled object
96	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 ISO 5667-14, ČSN ISO 5667-16, ČSN ISO 5667-18, ČSN EN ISO 19458, ČSN EN ISO 22475-1)	Groundwater
97	Sampling of waste	SOP no. 41 (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, ČSN 015112, ČSN 015111, ČSN EN 14899, ČSN EN 15442, ČSN EN 16457, ČSN EN ISO 5667-14, ČSN EN 60475, ČSN EN 12579)	Wastes, biowastes, composts and fugates
98	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
99	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 ISO 5667-6, ČSN ISO 5667-7,	Surface waters and waters for bathing (surface streams and ponds in free nature)

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Ordinal number	Sampling procedure name	Sampling procedure identification	Sampled object
		ČSN ISO 5667-8, ČSN ISO 5667-14, ČSN EN ISO 5667-16, ČSN EN ISO 19458 Decree 238/2011 Coll.)	
100	Sampling of waste water 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 ISO 5667-14)	Waste waters
101	Sampling of grounds and soils	SOP no. 44 (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, ČSN 015111, ČSN 015110, ČSN EN 14899, ČSN ISO 10381-6)	Grounds and soils
102	Sampling of sediments, sludges and suspended sediments	SOP no. 47 (ČSN EN ISO 5667-1, ČSN EN ISO 5667-3, ČSN ISO 5667-12, ČSN EN ISO 5667-13, ČSN ISO 5667-14, ČSN EN ISO 5667-15, ČSN EN ISO 5667-16, ČSN ISO 5667-17, ČSN EN ISO 5667-19, ČSN 015110, ČSN 015111, ČSN EN 14899, ČSN ISO 10381-6)	Sediments, sludges and suspended sediments
103	Sampling of gases and vapours by absorption to liquid	SOP no. VE2, procedure B (ČSN 835711, ČSN ISO 4221)	Ambient air, indoor air and soil air
104	Sampling of gases and vapours into sampling bags	SOP no. VE3, procedure B (ČSN EN ISO 16017-1, ČSN EN 14662-1)	Ambient air, indoor air and soil air
105	Sampling of pollutants by catchment onto a solid sorbent	SOP no. VE4, procedure B (ČSN EN 13649, ČSN EN ISO 16017-1, ČSN EN 14662-1)	Ambient air, indoor air and soil air
106	Sampling for determination of gaseous and total Hg	SOP no. VE6, procedure B (ČSN EN 15852, ČSN EN 15853, ČSN EN 13211, ČSN EN 13890)	Ambient air, indoor air and soil air

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Ordinal number	Sampling procedure name	Sampling procedure identification	Sampled object
107	Sampling for determination of persistent organic substances (PCCD/PCDF, PCB and PAH) – isokinetic sampling with automatic control, filtration and condensation method	SOP no. VE1A (ČSN EN 1948-1)	Emissions
108	Sampling of gases and vapours by absorption to liquid (gas inorganic compounds chlorine and fluorine, ammonia, sulfane, chromium (VI+), mineral acids and bases, oxides of sulphur and sulphuric acid, hydrogen cyanide and cyanides, phenol and phenol compounds, oxides of nitrogen, phosphorus and its compounds)	SOP no. VE2, procedure A (ČSN 834728-1, ČSN 834728-2, ČSN 834712-1, ČSN 834712-2, ČSN 834752-1, ČSN 834752-1, ČSN 834711-1, ČSN 834711-2, ČSN EN 1911, ČSN 834721-1, ČSN 834721-2, EPA method 16A. EPA method 0061 F. Skácel a V. Teskáč, Měření emisí, V. Križan a kol., Analýza ovzduší, 1981)	Emissions
109	Sampling of gases and vapours into sampling bags	SOP no. VE3, procedure A (ČSN EN 13649)	Emissions
110	Sampling of volatile organic substances (VOC) by catchment onto a solid sorbent	SOP no. VE4, procedure A ČSN EN 13649)	Emissions
111	Reserved		
112	Sampling for determination of metals (As, Cd, Be, Cr, Co, Ni, Tl, Se, Te, Sb, Sn, Mn, Cu, Pb, V, Zn, Al, Hg), isokinetically by absorption to liquid (isokinetic sampling with automatic control and isokinetic sampling with manual control)	SOP no. VE6, procedure A (ČSN EN 14385, ČSN EN 14902, ČSN EN 15841, ČSN EN 13211, EPA method 29)	Emissions
113	Sampling for gravimetric determination of suspended particle matters in air and its mass fractions PM10 and PM2.5	SOP no. VE7 (ČSN EN 12341)	Ambient air
114	Sampling for determination of numerical concentration of asbestos and minerals fibbers	SOP no. VE8 (ČSN EN ISO 16000-7)	Ambient air and indoor air

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Explanatory notes on used abbreviations and terms:

- SOP – standard operating procedure
- ISE – ion selective electrode
- DPD – N,N-Diethyl-p-phenylenediamine sulfate
- TOC – total organic carbon
- DOC – total dissolved organic carbon
- TN_b – total bound nitrogen
- VOC – volatile organic compounds
- PCDD – polychlorinated dibenzodioxenes
- PCDF – polychlorinated dibenzofurans
- PCB – Polychlorinated biphenyls
- PAH – Polyaromatic hydrocarbons
- Waters – drinking, raw, surface, ground and waste water
- Wastes – liquid and solid wastes
- Emissions – Waste gas containing pollutants released in a controlled manner or leaking into atmosphere from stationary sources of pollution.
- Gas mixtures – gases flowing in the pipeline, or stored in reservoirs
- Ambient air – air outside buildings, to which humans, plants, animals, or materials are exposed
- Indoor air – air within an enclosed space, for example in public building or residential houses
- PM10 – particles out of which the measuring device extracts particles with an aerodynamic diameter of 10 μm with the probability of 50%
- PM2,5 – particles out of which the measuring device extracts particles with an aerodynamic diameter of 2.5 μm with the probability of 50%
- ICP-MS – Inductively coupled plasma with mass spectrometry detector
- MS – mass spectrometer or mass detector
- FID – flame ionization detector
- NEL – extractable non polar matters
- EL – extractable matters
- ICP-OES – Inductively coupled plasma with optical emission spectrometry detector
- ED-XRF Energy dispersive X-Ray florescence spectrometer
- Biological materials – all materials of biological origin, except human tissue samples

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