



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. 319 / 2016

ALS Czech Republic, s.r.o.
with registered office Na Harfě 336/9, 190 00 Praha 9 - Vysočany, Company Registration
No. 27407551

to the Testing Laboratory No. 1163

Scope of accreditation:

Chemical, radiochemical and microbiological analyses of water, water extracts, liquids, soils, waste, sludge, oils, sediments, rocks, solid samples, emissions, immissions, working environment, gases from biogas stations and landfill gases, biological materials, food, feedstuffs, lubricants, fuels, ecotoxicological testing of waste and water, sensory analyses of food; sampling of water, sediments, soils, food and working environment 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 17025:2005

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.: 819/2015 of 30 November 2015, or any administrative acts building upon it.

The Certificate of Accreditation is valid until: **2 March 2017**

Prague: 25 May 2016



Jiří Růžička
Director
Czech Accreditation Institute
Public Service Company

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 1 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Testing Laboratory's Workplaces:

1	Prague	Na Harfě 336/9, 190 00 Prague 9
2	Česká Lípa	Bendlova 1687/7, 470 01 Česká Lípa
3	Pardubice	V Ráji 906, 530 02 Pardubice
10	Praha	Na Harfě 916/9a, 190 00 Praha 9

Contact and Sampling Points:

4	Brno	Staňkova 103/18, 602 00 Brno
5	Ostrava	Vratimovská 11, 718 00 Ostrava
6	Plzeň	Lobežská 15, 301 46 Plzeň [Pilsen]
7	Lovosice	U Zdymadel 827, 410 02 Lovosice
8	Rožnov pod Radhoštěm	1. Máje 2625, 756 61 Rožnov pod

Contact Point

9	Kroměříž	Na Sádkách 3478/4a, 767 01 Kroměříž
---	----------	-------------------------------------

The Laboratory meets the requirements for periodic emission measurements as per ČSN P CEN/TS 15675:2009 for testing and collecting samples marked with ordinal number and symbol E.

The Laboratory is qualified to update standards identifying the test procedures.

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

The current list of own activities conducted within the flexible range are available at the Laboratory from the Quality Manager.

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

Tests: GENERAL CHEMISTRY

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
1 ¹⁾	Determination of elements ⁴⁷⁾ by atomic emission spectrometry with inductively coupled plasma and stoichiometric calculations of compounds concentration from measured values ⁵¹⁾ including the calculation of total mineralization and calculating the sum of Ca+Mg	CZ_SOP_D06_02_001 (US EPA 200.7, ISO 11885, ČSN EN 16192, US EPA 6010, SM 3120, samples prepared as per CZ_SOP_D06_02_J02 chap.10.1 and 10.2)	water, extracts, liquid samples
2 ¹⁾	Determination of elements ⁴⁷⁾ by atomic emission spectrometry with inductively coupled plasma and stoichiometric calculations of compounds concentration from measured values ⁵²⁾	CZ_SOP_D06_02_001 (US EPA 200.7, ISO 11885, US EPA 6010, SM 3120, samples prepared as per CZ_SOP_D06_02_J02 (US EPA 3050) chap.10.3 to 10.16, 10.17.5, 10.17.6, 10.17.9 to 10.17.14)	solid samples
3 ¹⁾	Determination of elements ⁴⁷⁾ by atomic emission spectrometry with inductively coupled plasma and stoichiometric calculations of	CZ_SOP_D06_02_001 (US EPA 200.7, ISO 11885, samples prepared as per CZ_SOP_D06_02_J02	food, animal feeding stuff

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 2 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
	compounds concentration from measured values ⁵³⁾	chap.10.17.1, 10.17.2, 10.17.4, 10.17.7, 10.17.8.)	
4 ¹⁾	Determination of elements ⁴⁷⁾ by atomic emission spectrometry with inductively coupled plasma and stoichiometric calculations of compounds concentration from measured values ⁵³⁾	CZ_SOP_D06_02_001 (US EPA 200.7, ISO 11885, samples prepared as per CZ_SOP_D06_02_J02 chap.10.17.1, 10.17.2, 10.17.4, 10.17.7, 10.17.8)	biological material
E5 ¹⁾	Determination of elements ⁴⁷⁾ by atomic emission spectrometry with inductively coupled plasma and determination of Cr ³⁺ by calculation from measured values	CZ_SOP_D06_02_001 (US EPA 200.7, ISO 11885, ČSN EN 13211, ČSN EN 14385, ČSN EN 14902 IO 3.4, US EPA 29, samples prepared as per CZ_SOP_D06_02_J02 chap. 10.1, 10.2, 10.16.1 - 10.16.4)	emission, immission
6 ¹⁾	Determination of elements ⁴⁷⁾ by inductively coupled plasma atomic emission spectrometry	CZ_SOP_D06_02_001 (US EPA 200.7, ISO 11885, ČL/PhEur/USP, samples prepared as per CZ_SOP_D06_02_J02 chap.10.20)	pharmaceutical materials
7 ¹⁾	Determination of elements ⁴¹⁾ by mass spectrometry with inductively coupled plasma and stoichiometric calculations of compounds concentration from measured values ⁵¹⁾ including the calculation of total mineralization and calculating the sum of Ca+Mg	CZ_SOP_D06_02_002 (US EPA 200.8, ČSN EN ISO 17294-2, US EPA 6020A, samples prepared as per CZ_SOP_D06_02_J02 chap.10.1 and 10.2)	water, extracts, liquid samples
8 ¹⁾	Determination of elements ⁴²⁾ by mass spectrometry with inductively coupled plasma and stoichiometric calculations of compounds concentration from measured values	CZ_SOP_D06_02_002 (US EPA 200.8, ČSN EN ISO 17294-2, US EPA 6020A, samples prepared as per CZ_SOP_D06_02_J02 chap.10.3 to 10.16, 10.17.5, 10.17.6, 10.17.9 to 10.17.14)	solid samples
9 ¹⁾	Determination of elements ⁴³⁾ by mass spectrometry with inductively coupled plasma and stoichiometric calculations of compounds concentration from measured values	CZ_SOP_D06_02_002 (US EPA 200.8, ČSN EN ISO 17294-2, ČSN EN 15111, samples prepared as per CZ_SOP_D06_02_J02 chap. 10.17.1, 10.17.2, 10.17.4, 10.17.7, 10.17.8)	Food, animal feeding stuff
10 ¹⁾	Determination of elements ⁴⁴⁾ by mass spectrometry with inductively coupled plasma and stoichiometric calculations of compounds concentration from measured values	CZ_SOP_D06_02_002 (US EPA 200.8, ČSN EN ISO 17294-2, samples prepared as per CZ_SOP_D06_02_J02 chap. 10.17.1, 10.17.2, 10.17.4, 10.17.7, 10.17.8)	biological material
E11 ¹⁾	Determination of elements ⁴⁵⁾ by mass spectrometry with inductively coupled plasma and determination of Cr ³⁺ by calculation from measured values	CZ_SOP_D06_02_002 (US EPA 200.8, ČSN EN ISO 17294-2, ČSN EN 13211, ČSN EN 14385, ČSN EN 14902 US EPA 29, samples prepared as per CZ_SOP_D06_02_J02 chap. 10.1, 10.2, 10.16.1 - 10.16.4)	emission, immission

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 3 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
12 ¹⁾	Determination of elements ⁶⁰⁾ by inductively coupled plasma mass spectrometry	CZ_SOP_D06_02_002 (US EPA 200.8, ČSN EN ISO 17294-2, ČSN EN 15111, ČL/PhEur/USP, samples prepared as per CZ_SOP_D06_02_J02 chap. 10.20)	pharmaceutical materials
E13 ¹⁾	Determination of Hg by atomic absorption spectrometry	CZ_SOP_D06_02_003 (ČSN 46 5735, ČSN 75 7440, CL, PhEur, USP, samples prepared as per CZ_SOP_D06_02_J02 chap.10.1 to 10.17.14, 10.20)	water, extracts, liquid samples, solid samples, food, animal feeding stuff, biological material, emission, imission, pharmaceutical material
14 ²⁾	Determination of Hg by single-purpose atomic absorption spectrometer	CZ_SOP_D06_07_004 (ČSN 75 7440, ČSN 46 5735, samples prepared as per CZ_SOP_D06_07_P02 chap. 10-13, 16, 20)	water, extracts, liquid samples, solid samples
15 ²⁾	Determination of elements ⁴⁹⁾ by flame AAS method and stoichiometric calculations of compounds concentration from measured values	CZ_SOP_D06_07_005 (ČSN ISO 8288, ČSN 75 7400, ČSN EN 1233, ČSN ISO 7980, ČSN ISO 9964, Perkin-Elmer specifications, samples prepared as per CZ_SOP_D06_07_P02 chap. 10, 13, 17)	water, extracts
16 ²⁾	Determination of elements ⁴⁹⁾ by flame AAS method and stoichiometric calculations of compounds concentration from measured values	CZ_SOP_D06_07_005 (ČSN ISO 8288, ČSN 75 7400, ČSN EN 1233, ČSN ISO 7980, ČSN ISO 9964, Perkin-Elmer specifications, samples prepared as per CZ_SOP_D06_07_P02 chap. 11-12, 14-16, 19)	solid samples
17 ²⁾	Determination of elements ⁵⁰⁾ by atomic emission spectrometry with inductively coupled plasma and stoichiometric calculations of compounds concentration from measured values	CZ_SOP_D06_07_006 (ČSN EN ISO 11885 AITM3-0032 samples prepared as per CZ_SOP_D06_07_P02 chap. 10, 13, 17)	water, extracts, liquid samples
18 ²⁾	Determination of elements ⁵⁰⁾ by atomic emission spectrometry with inductively coupled plasma and stoichiometric calculations of compounds concentration from measured values	CZ_SOP_D06_07_006 (ČSN EN ISO 11885 samples prepared as per CZ_SOP_D06_07_P02 chap. 11-12, 14-16, 19)	solid samples
19 ²⁾	Determination of Kjeldahl nitrogen by spectrophotometry	CZ_SOP_D06_07_007.A (ČSN EN 25663, ČSN ISO 7150-1)	water, extracts
20 ²⁾	Determination of Kjeldahl nitrogen by spectrophotometry	CZ_SOP_D06_07_007.B (ČSN EN 25663, ČSN EN 13342, ČSN ISO 7150-1)	solid samples
E21 ²⁾	Determination of Cr(VI) by spectrophotometry with diphenylcarbazide	CZ_SOP_D06_07_008 (ČSN ISO 11083)	water, extracts, absorption solutions from emission samples

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 4 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
22 ²⁾	Determination of total phosphorus and orthophosphate by spectrophotometry and P ₂ O ₅ determination by calculation from measured values	CZ_SOP_D06_07_009.A (ČSN EN ISO 6878)	water, extracts
23 ²⁾	Determination of total phosphorus by spectrophotometry and P ₂ O ₅ determination by calculation from measured values	CZ_SOP_D06_07_009.B (ČSN EN 14672, ČSN EN ISO 6878)	sludge, technological sludge products
24 ²⁾	Determination of total cyanide by spectrophotometry and determination of complex cyanides by calculation from measure values	CZ_SOP_D06_07_010 (ČSN 75 7415)	water, extracts
25 ²⁾	Determination of easily releasable cyanide (free cyanide) by spectrophotometry	CZ_SOP_D06_07_011 ČSN ISO 6703-2	water, extracts
26 ²⁾	Determination of total cyanide by spectrophotometry and determination of complex cyanides by calculation from measure values	CZ_SOP_D06_07_012.A (ČSN 75 7415, SM 4500 CN)	solid samples
E27 ²⁾	Determination of total cyanide by spectrophotometry and hydrogen cyanide determination by calculation from measured values	CZ_SOP_D06_07_012.B (ČSN 75 7415)	absorption solutions from emission samples
28 ²⁾	Determination of easily releasable cyanide (free cyanide by spectrophotometry	CZ_SOP_D06_07_013 (ČSN ISO 6703-2)	solid samples
29 ²⁾	Determination of fluoride by electrochemical method (ISE)	CZ_SOP_D06_07_014 (ČSN ISO 10359-1, SM 4500-F C)	water, extracts
30 ²⁾	Determination of the sum of sulfane and sulfide by spectrophotometry and determination of free sulfane by calculation from measured values	CZ_SOP_D06_07_015.A (ČSN 83 0520:1978 No. 16, ČSN 83 0530:1980 No. 31, SM 4500-S ²⁻ D)	water, extracts
31 ²⁾	Determination of the sum of sulfane and sulfide by spectrophotometry	CZ_SOP_D06_07_015.B (ČSN 83 0520:1978 No. 16, ČSN 83 0530:1980 No. 31)	solid samples
E32 ²⁾	Determination of the sum of sulfane and sulfide by spectrophotometry	CZ_SOP_D06_07_015.C (ČSN 83 0520:1978 No. 16, ČSN 83 0530:1980 No. 31, ČSN 83 4712 No. 3)	absorption solutions from emission samples
33 ¹⁾	Determination of sulfate by turbidimetry using discrete spectrophotometry and sulfate sulfur determination by calculation from measured values	CZ_SOP_D06_02_016 (US EPA 375.4, SM 4500-SO ₄ ²⁻)	water, extracts
34 ²⁾	Determination of sulfate by gravimetry	CZ_SOP_D06_07_017 (Uniform Methods of Chemical Analysis of Water, SNTL Prague 1965)	water, extracts
35 ¹⁾	Determination of fluoride by discrete spectrophotometry	CZ_SOP_D06_02_018 (US EPA 340.1)	water, extracts

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 5 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
36 ¹⁾	Determination of the sum of ammonia and ammonium, nitrite and the sum of nitrite and nitrate ions by discrete spectrophotometry and determination of nitrite, nitrate, ammonia, inorganic, organic, total nitrogen, free ammonia and dissociated ammonium by calculation from measured values including the calculation of total mineralization	CZ_SOP_D06_02_019 (ČSN EN ISO 11732, ČSN EN ISO 13395, ČSN EN 16192, SM 4500-NO ₂ ⁻ , SM 4500-NO ₃ ⁻)	water, extracts
37 ²⁾	Determination of the sum of ammonia and ammonium by spectrophotometry and determination of ammonia nitrogen, free ammonia and dissociated ammonium by calculation from measured values	CZ_SOP_D06_07_020 (ČSN ISO 7150-1)	water, extracts
38 ²⁾	Determination of nitrite by spectrophotometry and determination of nitrite nitrogen by calculation from measured values	CZ_SOP_D06_07_021 (ČSN EN 26777)	water, extracts
39 ¹⁾	Determination of orthophosphate by discrete spectrophotometry and determination of orthophosphate's phosphorus by calculation from measured values including the calculation of total mineralization	CZ_SOP_D06_02_022 (ČSN EN ISO 6878, SM 4500-P)	water, extracts
40 ²⁾	Determination of chloride by potentiometric titration	CZ_SOP_D06_07_023.A (ČSN 03 8526:2003, ČSN 83 0530:2000 No. 20, SM 4500-Cl ⁻ D)	water, extracts, liquid samples
41 ²⁾	Determination of chloride by potentiometric titration	CZ_SOP_D06_07_023.B (ČSN EN 480-10)	solid samples
42 ²⁾	Determination of non-ionic surfactants (BiAS) by spectrophotometry	CZ_SOP_D06_07_024 (ČSN ISO 7875-2)	water, extracts
43 ²⁾	Determination of extractable organically bound halogens (EOX) by coulometry	CZ_SOP_D06_07_025.A (DIN 38409-H8, DIN 38414-S17)	water, extracts
44 ²⁾	Determination of extractable organically bound halogens (EOX) by coulometry	CZ_SOP_D06_07_025.B (DIN 38409-H8, DIN 38414-S17)	solid samples
45 ²⁾	Determination of adsorbable organically bound halogens (AOX) by coulometry	CZ_SOP_D06_07_026 (ČSN EN 16166, DIN 38414-S18)	solid samples
46 ²⁾	Determination of total halogens (TX) by coulometry	CZ_SOP_D06_07_027 (US EPA Method 9076)	solid samples, oils, organic solvents
47 ²⁾	Determination of adsorbable organically bound halogens (AOX) by coulometry	(CZ_SOP_D06_07_028) ČSN EN ISO 9562, TNI 757531	water, extracts
48 ²⁾	Determination of phenol index by spectrophotometric method after distillation	CZ_SOP_D06_07_029 (ČSN ISO 6439)	solid samples
E49 ²⁾	Determination of phenol index by spectrophotometric method after distillation	CZ_SOP_D06_07_030 (ČSN ISO 6439)	water, extracts, absorption solutions from emission samples

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
50 ²⁾	Determination of anionic surfactants by measurement of the methylene blue index (MBAS) by spectrophotometry	CZ_SOP_D06_07_031 (ČSN EN 903, SM 5540 C)	water, extracts
51 ²⁾	Determination of absorbance and transmittance by spectrophotometry	CZ_SOP_D06_07_032 (ČSN 75 7360)	water, extracts
52* _{1) 2) 4)5)6)7)8)}	Determination of turbidity by measurement of intensity of scattered radiation	CZ_SOP_D06_07_033 (ČSN EN ISO 7027)	water, extracts
53 ²⁾	Determination of humic substances by spectrophotometry	CZ_SOP_D06_07_034 (ČSN 75 7536)	drinking, surface water
54 ²⁾	Determination of water colour by visual and spectrophotometric method	CZ_SOP_D06_07_035 (ČSN EN ISO 7887)	water, extracts
55 ²⁾	Determination of electrical conductivity	ČSN EN 27888	water, extracts
56 ²⁾	Determination of pH electrochemically	ČSN ISO 10523	water, extracts
57 ²⁾	Determination of base neutralizing capacity (acidity) by potentiometric titration	CZ_SOP_D06_07_038 (ČSN 75 7372)	water, extracts
58 ²⁾	Determination of acid neutralizing capacity (alkalinity) by potentiometric titration	CZ_SOP_D06_07_039 (ČSN EN ISO 9963-1)	water, extracts
59 ²⁾	Determination of chemical oxygen demand using dichromate (COD _{Cr}) by titration	CZ_SOP_D06_07_040 (ČSN ISO 6060)	water, extracts
60 ²⁾	Biodegradation of organic compounds in aqueous medium – Static test (Zahn-Wellens method) calculated from the measured values of COD _{Cr})	ČSN EN ISO 9888 and OECD 302B , COD _{Cr} determination according to CZ_SOP_D06_07_040 (ČSN ISO 6060)	chemicals and chemical products, water and waste leachate
61 ²⁾	Determination of analytical water and gross water by gravimetry and determination of total water by calculation from measured values	CZ_SOP_D06_07_041 (ČSN 441377, 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 15414-3)	solid fossil fuels, solid biofuels, solid recovered fuels
62 ²⁾	Determination of biochemical oxygen demand after n days (BOD _n) - Part 1: Dilution method with addition of allylthiourea	CZ_SOP_D06_07_042 (ČSN EN 1899-1)	water, extracts
63 ²⁾	Biodegradation of organic compounds in aqueous medium – Method for determination of biological oxygen demand in a closed bottle calculated from measured values of BOD	ČSN ISO 10707, Z1 and OECD 301D, BOD determination according to CZ_SOP_D06_07_042 (ČSN EN 1899-1)	chemicals and chemical products, water and waste leachate
64 ²⁾	Determination of biochemical oxygen demand after n days (BOD _n) - Part 2: Method for undiluted samples	CZ_SOP_D06_07_043 (ČSN EN 1899-2)	water, extracts
65* _{1) 2)4)5)6)7)8)}	Determination of dissolved oxygen by electrochemical method	CZ_SOP_D06_07_044 (ČSN EN ISO 5814)	water, extracts
66 ¹⁾	Determination of dry matter by gravimetry and determination of moisture by calculation from measured values	CZ_SOP_D06_01_045 (ČSN ISO 11465)	solid samples

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 7 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
67 ²⁾	Determination of dry matter by gravimetry and determination of moisture by calculation from measured values	CZ_SOP_D06_07_046 (ČSN ISO 11465)	solid samples
68 ²⁾	Determination of ash by gravimetry and determination of loss on ignition by calculation from measured values	CZ_SOP_D06_07_047.A (ČSN EN 15169, ČSN EN 15935, ČSN EN 13039, ČSN 72 0103, ČSN 46 5735)	solid samples
69 ²⁾	Determination of ash by gravimetry and determination of loss on ignition by calculation from measured values	CZ_SOP_D06_07_047.B (ČSN EN ISO 3451-1)	plastics
70 ²⁾	Determination of ash by gravimetry and determination of loss on ignition by calculation from measured values	CZ_SOP_D06_07_047.C (ČSN ISO 1171, ČSN EN 14775, ČSN EN 15403, ČSN EN ISO 6245)	solid and liquid fuels
71 ¹⁾	Determination of total nitrogen by the method of discrete spectrophotometry after mineralization with peroxodisulfate	CZ_SOP_D06_02_048 (ČSN EN ISO 11905-1)	water, extracts
72 ²⁾	Determination of dry residue by gravimetry and determination of water content by calculation from measured values	ČSN EN 12880	sludge and technological sludge products
73 ²⁾	Determination of water content by Karl Fischer method	CZ_SOP_D06_07_050 (ČSN ISO 760)	liquid samples, solid samples
74 ²⁾	Determination of ignition residue after ignition by gravimetry and determination of loss on ignition by calculation from measured values	ČSN 72 0103	silicate materials
75 ²⁾	Determination of suspended solids, fixed suspended solids, total solids and fixed total solids by gravimetry and determination of volatile suspended solids and volatile total solids by calculation from measured values	CZ_SOP_D06_07_052 (ČSN 75 7350, SM 2540 B, SM 2540 D, SM 2540 E)	water, extracts
76 ²⁾	Determination of suspended solids using glass fibre filters by gravimetry	ČSN EN 872	water, extracts
77 ²⁾	Determination of dissolved solids and fixed dissolved solids using glass fiber filters by gravimetry and determination of volatile dissolved solids by calculation from measured values	CZ_SOP_D06_07_054 (ČSN 75 7346, ČSN 75 7347)	water, extracts
78 ²⁾	Determination of total sulfur (TS), total carbon (TC) and inorganic carbon (TIC) by coulometry and determination of total organic carbon (TOC) and carbonate by calculation from measured values	CZ_SOP_D06_07_055 (ČSN ISO 10694, ČSN EN 13137, ČSN EN 15936)	solid samples
79 ¹⁾	Determination of total organic carbon (TOC), dissolved organic carbon (DOC), total inorganic carbon (TIC) and total organ (TC) by IR detection	CZ_SOP_D06_02_056 (ČSN EN 1484, ČSN EN 16192, SM 5310)	water, extracts

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 8 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
80 ¹⁾	Determination of non-polar extractives by infrared spectrometry and calculation of polar extractives from measured values	CZ_SOP_D06_02_057 (ČSN 75 7505:2006, STN 830540-4, US EPA 418.1, SM 5520 F, DS/R 209, SFS 3010)	water, extracts
81 ¹⁾	Determination of extractives and non-polar extractives by infrared spectrometry method and calculation of polar extractives from measured values	CZ_SOP_D06_02_058 (ISO/TR 11046, US EPA 418.1, SM 5520 F, DS/R 209, SFS 3010)	solid samples
82 ¹⁾	Determination of extractives by infrared spectrometry method and calculation of polar extractives from measured values	CZ_SOP_D06_02_059 (ČSN 75 7506, STN 83 0520-27, STN 83 0530-36a, STN 83 0540-4, SFS 3010)	water, extracts
83 ¹⁾	Determination of alpha modification of silicon dioxide in respirable dust by infrared spectrometry	CZ_SOP_D06_02_060 (NIOSH 7602)	dust
84* 1)2)4)5)6)7) 8)	Field determination of free and total chlorine and chlorine dioxide by DPD method using HACH sets and bound chlorine by calculation from measured values	CZ_SOP_D06_07_061 (method used by HACH COMPANY, USA, ČSN ISO 7393-2)	drinking water, hot water, raw water
85* 1)2)4)5)6)7) 8)	Field measurement of temperature	ČSN 75 7342	water
86* 1)2)4)5)6)7) 8))	Field measurement of electrical conductivity	CZ_SOP_D06_07_063 (ČSN EN 27888)	water
87* 1)2)4)5)6)7) 8)	Field determination of pH electrochemically	CZ_SOP_D06_07_064 (ČSN ISO 10523)	water
88 ¹⁾	Sensory analysis of water – determination of odour and taste	CZ_SOP_D06_04_065 (TNV 75 7340, ČSN EN 1622, STN EN 1622)	drinking water
89 ¹⁾	Determination of the sum of ammonium ions by flow injection analysis (FIA) with spectrophotometric detection and determination of ammonia nitrogen and free ammonia by calculation from measured values	CZ_SOP_D06_02_066 (ČSN ISO 11732)	water, extracts
90 ¹⁾	Determination of orthophosphate by flow injection analysis (FIA) with spectrophotometric detection and determination of orthophosphates phosphorus by calculation from measured values	CZ_SOP_D06_02_067 (ČSN EN ISO 15681-1)	water, extracts
91 ¹⁾	Determination of dissolved fluoride, chloride, nitrite, bromide, nitrate and sulphate by ion liquid chromatography and determination of nitrite nitrogen and nitrate nitrogen and sulfate sulfur by calculation from measured values including the calculation of total mineralization	CZ_SOP_D06_02_068 (ČSN ISO 10304-1, ČSN EN 16192)	water, extracts

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 9 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
92 ¹⁾	Determination of total carbon (TC), total organic carbon (TOC) by IR detection and determination of total inorganic carbon (TIC) and carbonate by calculation from measured values	CZ_SOP_D06_02_069 (ČSN EN 13137 ČSN ISO 10694)	solid samples
93 ¹⁾	Determination of dry suspended solids and annealed suspend solids by gravimetry and determination of loos of ignition of suspend solids and total solids by calculation from measured values	CZ_SOP_D06_02_070 (ČSN EN 872, ČSN 757350)	water, extracts
94 ¹⁾	Determination of dissolved solids (RL105) and dissolved solid annealed (RAS) using glass fibre filters by gravimetry and determination of loss on ignition of dissolved solids (RL550) by calculation from measured values	CZ_SOP_D06_02_071 (ČSN 75 7346, ČSN 757347, ČSN EN 16192)	water, extracts
95 ¹⁾	Determination of acid neutralizing capacity (alkalinity) by potentiometric titration and determination of the carbonate hardness and determination of CO ₂ forms by calculation from measured values including the calculation of total mineralization	CZ_SOP_D06_02_072 (ČSN EN ISO 9963-1, SM 2320)	water, extracts
96 ¹⁾	Determination of base neutralizing capacity (acidity) by potentiometric titration	CZ_SOP_D06_02_073 (ČSN 75 7372)	water, extracts
97 ¹⁾	Determination of turbidity by optical turbidimeter	CZ_SOP_D06_02_074 (ČSN EN ISO 7027)	water, extracts
98 ¹⁾	Determination of electrical conductivity by conductometer and calculation of salinity	CZ_SOP_D06_02_075 (ČSN EN 27 888, SM 2520 B, ČSN EN 16192)	water, extracts
99 ¹⁾	Determination of chemical oxygen demand using dichromate (COD _{Cr}) by photometry	CZ_SOP_D06_02_076 (ČSN ISO 15705)	water, extracts
100 ¹⁾	Determination of chemical oxygen demand using dichromate (COD _{Cr}) by titration	CZ_SOP_D06_02_076.A (ČSN ISO 15705)	water, extracts
101 ¹⁾	Determination of biochemical oxygen demand after n days (BOD _n) by dilution method with allylthiourea addition	CZ_SOP_D06_02_077 (ČSN EN 1899-1)	water, extracts
102 ¹⁾	Determination of biochemical oxygen demand after n days (BOD _n) by method for undiluted samples	CZ_SOP_D06_02_078 (ČSN EN 1899-2)	water, extracts
103 ¹⁾	Determination of colour by spectrometry	CZ_SOP_D06_02_079 (ČSN EN ISO 7887)	water, extracts
104 ¹⁾	Determination of total phosphorus by discrete spectrophotometry and determination of phosphorus as P ₂ O ₅ and PO ₄ ³⁻ by calculation from measured values	CZ_SOP_D06_02_080 (ČSN EN ISO 6878, ČSN EN ISO 15681-1)	water, extracts

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 10 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
105 ¹⁾	Determination of nitrite nitrogen and sum of nitrite and nitrate nitrogen by flow analysis with spectrophotometric detection and determination of nitrite, nitrate, inorganic, organic and total nitrogen by calculation from measured values	CZ_SOP_D06_02_081 (ČSN EN ISO 13395)	water, extracts
E106 ²⁾	Determination of chloride in absorption solution from emission sample of inorganic compounds of chlorine by potentiometric titration and hydrogen chloride determination by calculation from measured values	CZ_SOP_D06_07_082 (ČSN EN 1911)	absorption solutions from emission sampling
E107 ²⁾	Determination of fluoride in absorption solution from emission sample of inorganic compounds of fluorine after separation by distillation by direct potentiometry and hydrogen fluoride determination by calculation from measured values	CZ_SOP_D06_07_083 (ČSN 83 4752, Part 3)	absorption solutions from emission sampling
E108 ²⁾	Determination of sulfate in absorption solution from emission sample of sulfur dioxide by titration method and sulfur dioxide determination by calculation from measured values	CZ_SOP_D06_07_084 (ČSN EN 14791)	absorption solutions from emission sampling
E109 ²⁾	Determination of ammonia in absorption solution from emission sample by photometry after distillation	CZ_SOP_D06_07_085 (ČSN 83 4728, Part 4)	absorption solutions from emission sampling
110 ¹⁾	Determination of total phosphorus by flow injection analysis with spectrophotometric detection	CZ_SOP_D06_02_086 (ČSN EN ISO 6878)	water, extracts
111 ²⁾	Determination of pH, temperature and electrical conductivity by column test	CZ_SOP_D06_07_087 (ČSN PCEN/TS 14405, ČSN ISO 10523, ČSN EN 27888)	solid samples
112 ²⁾	Determination of pH, temperature and electrical conductivity by two stage batch test	CZ_SOP_D06_07_088 (ČSN EN 12457-3, ČSN ISO 10523, ČSN 75 7342, ČSN EN 27888)	solid samples
113 ¹⁾	Determination of total cyanide by spectrophotometry and determination of complex forming cyanides by calculation from measured values	CZ_SOP_D06_02_089.A (ČSN 75 7415, ČSN EN ISO 14403-2)	water, extracts
114 ¹⁾	Determination of total cyanide by spectrophotometry and determination of complex forming cyanides by calculation from measured values	CZ_SOP_D06_02_089.B (ČSN 757415, ČSN EN ISO 17380, ČSN EN ISO 14403-2)	solid samples
115 ¹⁾	Determination of easily releasable cyanide (free cyanide) and cyanide dissociated by weak acid by spectrophotometry	CZ_SOP_D06_02_090.A (ČSN ISO 6703-2, ČSN EN ISO 14403-2, SM 4500 CN)	water, extracts
116 ¹⁾	Determination of easily releasable cyanide (free cyanide) and cyanide dissociated by weak acid by spectrophotometry	CZ_SOP_D06_02_090B (ČSN 757415, ČSN EN ISO 17380, ČSN EN ISO 14403-2, SM 4500 CN)	solid samples

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 11 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
117 ¹⁾	Determination of fluoride by electrochemical method (ISE)	CZ_SOP_D06_02_091 (ČSN ISO 10359-1, SM 4500-F C)	water, extracts
118 ¹⁾	Determination of chemical oxygen demand using permanganate (COD _{Mn}) by titration	CZ_SOP_D06_02_092 (ČSN EN ISO 8467, Z1)	water, extracts
119 ¹⁾	Determination of Kjeldahl nitrogen in water	CZ_SOP_D06_02_093 (ČSN EN 25663)	water, extracts
120 ¹⁾	Determination of bound nitrogen (TNb), following oxidation to nitrogen oxides by EC or IR detection	CZ_SOP_D06_02_094 (ČSN EN 12260)	water, extracts
121 ¹⁾	Qualitative determination of asbestos fibre by polarization microscope	CZ_SOP_D06_02_095 (NIOSH 9002)	solid samples
122 ¹⁾	Determination of Mercury by Fluorescence Spectrometry	CZ_SOP_D06_02_096 (US EPA 245.7, US EPA 1631, ČSN EN ISO 178 52, ČSN EN 16192, sample preparation according to CZ_SOP_D06_02_J02 chap.10.1 and 10.2)	water, extracts
123 ¹⁾	Determination of Mercury by Fluorescence Spectrometry	CZ_SOP_D06_02_096 (ČSN EN ISO 17852, PSA Application Note 025, sample preparation according to CZ_SOP_D06_02_J02 chap. 10.3 to 10.16, 10.17.5, 10.17.6, 10.17.9 to 10.17.14)	solid samples
124 ¹⁾	Determination of Mercury by Fluorescence Spectrometry	CZ_SOP_D06_02_096 (ČSN EN ISO 178 52, samples prepared as per CZ_SOP_D06_02_J02 chap. 10.17.1, 10.17.2, 10.17.4, 10.17.7, 10.17.8)	biological material
E125 ¹⁾	Determination of Mercury by Fluorescence Spectrometry	CZ_SOP_D06_02_096 (ČSN EN ISO 17852, EN 13211, EN 1483 samples prepared as per CZ_SOP_D06_02_J02 chap. 10.17.1, 10.17.2, 10.17.4, 10.17.7, 10.17.8)	emission, immission
126 ¹⁾	Determination of mercury by fluorescence spectrometry method	CZ_SOP_D06_02_096 (US EPA 245.7, US EPA 1631, ČSN EN ISO 178 52, ČSN EN 16192, ČL/PhEur/USP, samples prepared as per CZ_SOP_D06_02_J02 chap. 10.20)	pharmaceutical materials
127	Reserved		
128 ¹⁾	Determination of dissolved bromate, chlorate and chlorite by ion liquid chromatography method and determination of sum of chlorate and chlorite by calculation from measured values	CZ_SOP_D06_02_098 (ČSN EN ISO 15061, ČSN EN ISO 10304-4)	water, extracts

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 12 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
129 ¹⁾	Determination of chloride by discrete spectrophotometry	CZ_SOP_D06_02_099 (US EPA 325.1, SM 4500-Cl ⁻)	water, extracts
130 ¹⁾	Determination of extractive substances by gravimetry	CZ_SOP_D06_02_100 (ČSN 75 7508, SM 5520)	water
131 ²⁾	Determination of reactive and non-labile aluminium by continuous flow analysis (CFA) spectrophotometrically and determination of labile aluminium by calculation from measured values	CZ_SOP_D06_07_101 (company method SKALAR)	drinking, surface, waste water
132 ²⁾	Determination of total nitrogen by modified Kjeldahl method by spectrometry	CZ_SOP_D06_07_102 (ČSN ISO 11261)	solid sample with silicate matrix containing organic compound
133 [*] 1(2)4(5)6(7) 8)	Determination of oxidation-reduction potential (ORP) by potentiometry	CZ_SOP_D06_07_103 (ČSN 75 7367)	water
134 ¹⁾	Determination of grease and oils by gravimetry (extraction after evaporation)	CZ_SOP_D06_02_104 (ČSN 75 7509)	water
135 ¹⁾	Determination of pH by potentiometry	CZ_SOP_D06_02_105 (ČSN ISO 10523, US EPA 150.1, ČSN EN 16192, SM 4500-H ⁺ B)	water, extracts
136 ¹⁾	Determination of hexavalent chromium by discrete spectrophotometry	CZ_SOP_D06_02_106 (ČSN ISO 11083, US EPA 7196A)	water, extracts
137 ²⁾	Determination of total nitrogen by modified Kjeldahl method	CZ_SOP_D06_07_107 (ČSN EN 25663, ČSN ISO 7150-1, SFS 5505)	water, extracts
138 ¹⁾	Determination of settle able solids by volumetry	CZ_SOP_D06_02_108 (SM 2540 F)	water, extracts
139 ¹⁾	Determination of dissolved silicates by discrete photometry and determination of H ₂ SiO ₃ and total mineralization by calculation from measured values	CZ_SOP_D06_02_109 (ČSN EN ISO 16264, US EPA 370.1)	water, extracts
140 ¹⁾	Determination of Chlorophyll by spectrophotometry	CZ_SOP_D06_02_110 (SM 10200 H)	surface water
141 ²⁾	Determination of nitrate nitrogen, ammonium nitrogen and total soluble nitrogen using calcium chloride solution as extractant by continuous flow analysis (CFA) spectrophotometrically	CZ_SOP_D06_07_111 (DIN ISO 14255)	solid samples
142 ²⁾	Determination of phosphorus soluble in sodium hydrogen carbonate solution spectrophotometrically	CZ_SOP_D06_07_112 (ČSN ISO 11263)	solid samples
143 ²⁾	Determination of pH electrochemically in the soils suspension in water, KCl, CaCl ₂ , BaCl ₂	CZ_SOP_D06_07_113 (ČSN ISO 10390, ČSN EN 13037, ČSN EN 15933, ČSN 46 5735 CHANGE 1, L 1086-1, US EPA Method 9045D; US EPA SW-846 Method 9040 (Liquid) and SW-846 Method 9045 (Soil))	solid samples

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 13 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
144 ²⁾	Determination of formaldehyde by spectrophotometry	CZ_SOP_D06_07_114 (Chemical and physical methods of water analysis, SNTL Prague 1989)	water, extracts
145 ²⁾	Determination of releasable formaldehyde by spectrophotometry	CZ_SOP_D06_07_115 (ČSN EN ISO 14184-1, PV 3925)	materials, solid samples
146 ²⁾	Determination of iron(II) by spectrophotometry	CZ_SOP_D06_07_116 (ČSN ISO 6332)	water, extracts
147 ¹⁾	Determination of manganese(II) by discrete spectrophotometry	CZ_SOP_D06_02_117 (ČSN ISO 6333)	water, extracts
148 ¹⁾	Determination of iron(II) by discrete spectrophotometry	CZ_SOP_D06_02_118 (SM 3500-Fe, ČSN ISO 6332)	water, extracts
149 ¹⁾	Determination of aggressive carbon dioxide by the Heyer's method using calculation from alkalinity	CZ_SOP_D06_02_119 (ČSN 83 0530-14:2000)	water
150 ²⁾	Grain size analysis of solid samples using sieve analysis and laser diffraction	CZ_SOP_D06_07_120 (BS ISO 11277:2009)	solid samples (grain size lower than 63 mm)
151 ²⁾	Determination of nitrogen, carbon, sulfur and hydrogen by combustion method using TCD and determination of oxygen by calculation	CZ_SOP_D06_07_121 (methodology of Elementar Co., ČSN ISO 29541, ČSN EN ISO 16994, ČSN EN ISO 16948, ČSN EN 15407)	solid samples, waste, sludge, lubricants, animal feeding stuff, plants, digestates, solid fossil fuels, solid biofuels, solid recovered fuel, oils, liquid fuels, carbochemical products
152 ¹⁾	Determination of hexavalent chromium by ion chromatography with spectrophotometric detection and trivalent chromium determination by calculation from measured values	CZ_SOP_D06_02_122 (ČSN EN 16192, EPA 7199, SM 3500-Cr, except chap. 10.2; 11.3.2; 11.5; 12.2.2; 15.5)	water, extracts
153 ¹⁾	Determination of hexavalent chromium by ion chromatography with spectrophotometric detection and trivalent chromium determination by calculation from measured values	CZ_SOP_D06_02_122 except chap. 10.1; 11.3.1; 12.2.1; 15.4 (ČSN EN 15192, EPA 3060A)	solid samples
154 ²⁾	Determination of weak acid dissociated (WAD) cyanide by spectrophotometry	CZ_SOP_D06_07_123.A (SM 4500 CN ⁻)	water, extracts
155 ²⁾	Determination of weak acid dissociated (WAD) cyanide by spectrophotometry	CZ_SOP_D06_07_123.B (SM 4500 CN ⁻)	solid samples
156 ²⁾	Determination of gross calorific value by calorimetric method and calculation of net calorific value and emission factor by calculation from measured values	CZ_SOP_D06_07_124.A (ČSN ISO 1928, ČSN EN 14918, ČSN EN 15400, ČSN EN 15170, ČSN DIN 51900-1, ČSN DIN 51900-2, ČSN DIN 51900-3)	solid fossil fuels, solid biofuels, solid recovered fuels, waste, sludge
157 ²⁾	Determination of gross calorific value by calorimetric method and calculation of net calorific value and emission factor by calculation from measured values	CZ_SOP_D06_07_124.B (ČSN DIN 51900-1, ČSN DIN 51900-2, ČSN DIN 51900-3)	oils, liquid fuels, carbochemical products

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 14 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
158 ²⁾	Determination of total chlorine, fluorine and sulphur by calculation from the measured values of chloride, fluoride and sulphate by IC method after burning the sample	CZ_SOP_D06_07_124.C (ČSN EN ISO 16994, ČSN EN 15408, ČSN EN 14582) with the determination of chloride, fluoride and sulfate by IC as per CZ_SOP_D06_02_068	solid fossil fuels, solid biofuels, solid recovered fuels, waste, sludge
159 ²⁾	Determination of total chlorine, fluorine and sulphur by calculation from the measured values of chloride, fluoride and sulphate by IC method after burning the sample	CZ_SOP_D06_07_124.D with the determination of chloride, fluoride and sulfate by IC as per CZ_SOP_D06_02_068	oils, liquid fuels, carbochemical products
160 ²⁾	Determination of laboratory compacted bulk density (LCBD)	CZ_SOP_D06_07_125 (ČSN EN 13040)	sludge, composts, soils meliorants and growth stimulants
161 ²⁾	Determination of electrical conductivity	CZ_SOP_D06_07_126 (ČSN EN 13038, ČSN ISO 11265, ČSN P CEN/TS 15937)	sludge, composts, soils, soil meliorants and growth stimulants, processed biowaste
E162 ¹⁾	Determination of hexavalent chromium by ion chromatography with spectrophotometric detection and trivalent chromium determination by calculation from measured values	CZ_SOP_D06_02_127 (ISO 16740, EPA 425)	emission, immission
E163 ¹⁾	Determination of nitrogen dioxide and sulfur dioxide in passive samplers by ion chromatography method and results recalculation to the volume of air	CZ_SOP_D06_02_128 (materials of Institute Fondazione Salvatore Maugeri, ČSN ISO 10304-1, ČSN EN ISO 10304-3)	emission, immission
164 ¹⁾	Determination of sulphite by ion chromatography method	CZ_SOP_D06_02_129 (ČSN EN ISO 10304-3)	water, extracts
165 ²⁾	Determination of volatile matter by gravimetry	CZ_SOP_D06_07_130 (ČSN ISO 562, ČSN ISO 5071-1, ČSN EN 15148, ČSN EN 15402)	solid fossil fuels, solid biofuels, solid recovered fuels
166 ²⁾	Determination of sulphite after distillation by titration	CZ_SOP_D06_07_131 <i>(M. Horaková et al.: Chemical and physical methods of water analyses)</i>	water, extracts
167 ²⁾	Determination of respiratory activity (AT ₄) using respirometer	CZ_SOP_D06_07_132 (ÖNORM S 2027-4)	wastes, sludge, composts, soils
168* 1)(2)(4)(5)(6)(7) 8)	Field determination of ozone using HACH sets	CZ_SOP_D06_07_133 (Method 8311 HACH Company, USA)	drinking water
E169 ¹⁾	Determination of fluoride, chloride and sulfate in absorption solution from emission sample by ion chromatographic method and determination of hydrogen fluoride, hydrogen chloride and sulfur dioxide by calculation from measured values	CZ_SOP_D06_02_134 (ČSN EN 1911, STN ISO 15713, ČSN EN 14791, ČSN EN ISO 10304-1)	emission
170 ¹⁾	Determination of non-polar extractable compounds by UV spectrometry	CZ_SOP_D06_02_135 (ČSN 83 0540-4: 1998, STN 83 0540-4)	water, extracts
171 ¹⁾	Determination of non-polar extractable compounds by UV spectrometry	CZ_SOP_D06_02_135 (ČSN 83 0540-4: 1998, STN 83 0540-4)	solid samples

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 15 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
172 ¹⁾	Determination of total dust concentration and respirable dust fraction by gravimetry and results recalculation to the volume of air	CZ_SOP_D06_02_136 (ČSN EN 481, ČSN EN 482, ČSN EN 689, NIOSH 0500, NIOSH 0600, GR No. 361/2007 Coll.)	working environment
173 ²⁾	Determination of SiO ₂ in silicate materials after decomposition by gravimetry	CZ_SOP_D06_07_137 (ČSN 72 0105 No. 1)	solid samples
174 ²⁾	Determination of P ₂ O ₅ in silicate materials after decomposition by spectrophotometry	CZ_SOP_D06_07_138 (ČSN 72 0116 No. 1)	solid samples
175 ²⁾	Determination of total sulfur in silicate materials after decomposition by gravimetry	CZ_SOP_D06_07_139 (ČSN 72 0118)	solid samples
176 _{1)2)4)5)6)7) 8)}	Determination of CO ₂ in mineral water by Härt analyzer	CZ_SOP_D06_01_140 (method according to Technosklo, s.r.o.)	mineral water
177 _{1)2)4)5)6)7) 8)}	Analysis of gases – CH ₄ , CO ₂ , O ₂ , H ₂ S – by Geotech gas analyzer and determination of N ₂ by calculation from measured values	CZ_SOP_D06_01_141 (BIOGAS 5000 manual)	gases
178 _{1)2)4)5)6)7) 8)}	Determination of moisture content by gas moisture content analyzer	CZ_SOP_D06_01_142 (ČSN EN 14790)	gases

Tests: ORGANIC CHEMISTRY

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
179 ¹⁾	Determination of extractable compounds in the range of hydrocarbons C5 – C40, their fractions calculated from the measured values by gas chromatography method with FID detection	CZ_SOP_D06_03_150 (ČSN EN 14039, US EPA 8015, US EPA 3550, TNRCC Method 1006)	solid samples
180 ¹⁾	Determination of extractable compounds in the range of hydrocarbons C5 – C40, their fractions calculated from the measured values by gas chromatography method with FID detection	CZ_SOP_D06_03_151 (ČSN EN ISO 9377-2, Z1, US EPA 8015, US EPA 3510, TNRCC Method 1006)	water, extracts
181 ¹⁾	Determination of extractable compounds in the range of hydrocarbons C5 – C40, their fractions calculated from the measured values by gas chromatography method with FID detection	CZ_SOP_D06_03_152 except chap. 9.1 (TNRCC Method 1006, TNRCC Method 1005)	water, extracts, liquid samples
182 ¹⁾	Determination of extractable compounds in the range of hydrocarbons C5 – C40, their fractions calculated from the measured values by gas chromatography method with FID detection	CZ_SOP_D06_03_152 except chap. 9.2 (TNRCC Method 1006, TNRCC Method 1005)	solid samples
E183 ¹⁾	Determination of volatile organic compounds ¹⁾ by gas chromatography method with detection FID and MS and calculation of volatile organic compounds sums from measured values and results recalculation to the volume of air	CZ_SOP_D06_03_153 (NIOSH ¹⁾)	solid sorbent

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 16 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
E184 ¹⁾	Determination of volatile organic compounds ²⁾ by gas chromatography method with thermal desorption with detection FID and MS and calculation of volatile organic compounds sums from measured values and results recalculation to the volume of air	CZ_SOP_D06_03_154 (US EPA TO-17, ČSN EN ISO 16017-1)	solid sorbent
185 ¹⁾	Determination of volatile organic compounds ³⁾ by gas chromatography method with FID and MS detection and calculation of volatile organic compounds sums from measured values	CZ_SOP_D06_03_155 except chap. 9.2 (US EPA 624, US EPA 8260, US EPA 8015, EN ISO 10301, MADEP 2004, rev. 1.1)	water, extracts
186 ¹⁾	Determination of volatile organic compounds ³⁾ by gas chromatography method with FID and MS detection and calculation of volatile organic compounds sums from measured values	CZ_SOP_D06_03_155 except chap. 9.1 (US EPA 8260, US EPA 5021A, US EPA 5021, US EPA 8015, MADEP 2004, rev. 1.1, ISO 15009)	solid samples
187 ¹⁾	Determination of volatile organic compounds ⁴⁾ by gas chromatography method with detection FID and ECD and calculation of volatile organic compounds sums from measured values	CZ_SOP_D06_03_156 except chap. 9.3 (US EPA 601, US EPA 8260, US EPA 8015, RBCA Petroleum Hydrocarbon Methods)	water, extracts
188 ¹⁾	Determination of volatile organic compounds ⁴⁾ by gas chromatography method with detection FID and ECD and calculation of volatile organic compounds sums from measured values	CZ_SOP_D06_03_156 except chap. 9.1 and 9.2 (US EPA 8260, US EPA 8015, RBCA Petroleum Hydrocarbon Methods, ISO 15009)	solid samples
189 ¹⁾	Determination of organic contaminants ⁵⁾ by gas chromatography method with MS detection (SPIMFAB) and calculation of organic contaminants sums from measured values	CZ_SOP_D06_03_157 except chap. 9.3 (SPIMFAB)	water
190 ¹⁾	Determination of organic contaminants ⁵⁾ by gas chromatography method with MS detection (SPIMFAB) and calculation of organic contaminants sums from measured values	CZ_SOP_D06_03_157 except chap. 9.1 and 9.2 (SPIMFAB)	solid samples
191 ¹⁾	Determination of phenols, chlorinated phenols and cresols ⁶⁾ by gas chromatography method with detection MS and ECD and calculation of phenols, chlorinated phenols and cresols sums from measured values	CZ_SOP_D06_03_158 Except chap. 9.2 and 9.3 (US EPA 8041, US EPA 3500, ČSN EN 12673)	water
192 ¹⁾	Determination of phenols, chlorinated phenols and cresols ⁶⁾ by gas chromatography method with detection MS and ECD and calculation of phenols, chlorinated phenols and cresols sums from measured values	CZ_SOP_D06_03_158 except chap. 9.1 and 9.3 (US EPA 8041, US EPA 3500, DIN ISO 14154)	solid samples
E193 ¹⁾	Determination of phenols, chlorinated phenols and cresols ⁶⁾ by gas chromatography method with detection MS and ECD and calculation of phenols, chlorinated phenols and cresols sums from measured values	CZ_SOP_D06_03_158 except chap. 9.1 and 9.2 (US EPA 8041, US EPA 3500, DIN ISO 14154)	emission, immission

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 17 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
194 ¹⁾	Determination of phthalates ⁷⁾ by gas chromatography method with MS detection and calculation of phthalates sums from measured values	CZ_SOP_D06_03_159 except chap. 9.2 and 9.3 (US EPA 8061A)	water
195 ¹⁾	Determination of phthalates ⁷⁾ by gas chromatography method with MS detection and calculation of phthalates sums from measured values	CZ_SOP_D06_03_159 except chap. 9.1 (US EPA 8061A, CPSC-CH-C1000-09.3)	solid samples
196 ¹⁾	Determination of phenols and cresols ⁴⁰⁾ by gas chromatography method with MS detection and calculation of phenols and cresols sums from measured values	CZ_SOP_D06_03_160 (US EPA 8041A, US EPA 3500 except chap. 9.2)	water, extracts
197 ¹⁾	Determination of phenols and cresols ⁴⁰⁾ by gas chromatography method with MS detection and calculation of phenols and cresols sums from measured values	CZ_SOP_D06_03_160 (US EPA 8041A, US EPA 3500 except chap. 9.1)	solid samples
198 ¹⁾	Determination of semi volatile organic compounds ⁹⁾ by gas chromatography-mass spectrometry or method with MS/MS detection and calculation of semi volatile organic compounds sums from measured values	CZ_SOP_D06_03_161 (US EPA 8270, ČSN EN ISO 6468, US EPA 8000C, sample preparation according to CZ_SOP_D06_03_P01 chap. 9.1, 9.4.1)	water, extracts
199 ¹⁾	Determination of semi volatile organic compounds ⁹⁾ by gas chromatography-mass spectrometry or method with MS/MS detection and calculation of semi volatile organic compounds sums from measured values	CZ_SOP_D06_03_161 (US EPA 8270, ISO 18287, samples prepared as per CZ_SOP_D06_03_P01 chap. 9.2, 9.3, 9.4.2)	solid samples
200 ¹⁾	Determination of polycyclic aromatic hydrocarbons ¹⁰⁾ by liquid chromatography method with detection FLD and PDA and calculation of polycyclic aromatic hydrocarbons sums from measured values	CZ_SOP_D06_03_162 (US EPA 550)	drinking water, table water, suckling water
201 ¹⁾	Determination of polycyclic aromatic hydrocarbons ¹⁰⁾ by liquid chromatography method with detection FLD and PDA and calculation of polycyclic aromatic hydrocarbons sums from measured values	CZ_SOP_D06_03_163 except chap. 9.1.2, 9.4.2 (US EPA 610)	water, extracts
202 ¹⁾	Determination of polycyclic aromatic hydrocarbons ¹⁰⁾ by liquid chromatography method with FLD and PDA detection and calculation of polycyclic aromatic hydrocarbons sums from measured values	CZ_SOP_D06_03_163 except chap. 9.1.1, 9.4.1 (US EPA 610, US EPA 3550, ISO 13877)	solid samples
203 ¹⁾	Determination of glycols ²⁶⁾ by gas chromatography method with MS detection	CZ_SOP_D06_03_164	water, cooling liquids, anti-freeze fluid
E204 ¹⁾	Determination of polycyclic aromatic hydrocarbons ¹⁰⁾ by liquid chromatography method with detection FLD and PDA and calculation of polycyclic aromatic hydrocarbons sums from measured values and results recalculation to the volume of air	CZ_SOP_D06_03_165 (ISO 11338-2)	emission, immission

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 18 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
205 ¹⁾	Determination of polychlorinated biphenyls ³⁹⁾ -congener analyses by gas chromatography method with ECD detection and calculation of polychlorinated biphenyls sums from measured values	CZ_SOP_D06_03_166 (DIN 38407, part 2, US EPA 8082, samples prepared as per CZ_SOP_D06_03_P01 chap. 9.1, CZ_SOP_D06_03_P02 chap. 9.1)	water, extracts
206 ¹⁾	Determination of polychlorinated biphenyls ³⁹⁾ -congener analyses by gas chromatography method with ECD detection and calculation of polychlorinated biphenyls sums from measured values	CZ_SOP_D06_03_166 (US EPA 8082, ISO 10382 samples prepared as per CZ_SOP_D06_03_P01 chap. 9.2, 9.3, CZ_SOP_D06_03_P02 chap. 9.2, 9.3, 9.4)	solid samples, sealing material
207 ¹⁾	Determination of alkylphenols and alkylphenol ethoxylates ²⁸⁾ by gas chromatography method with MS or MS/MS detection and calculation of alkylphenols and alkylphenol ethoxylates sums from measured values	CZ_SOP_D06_03_167 (European Standard BT WI CSS99040)	solid samples
208 ¹⁾	Determination of polychlorinated biphenyls ¹¹⁾ -congener analyses by gas chromatography method with ECD detection and calculation of polychlorinated biphenyls sums from measured values	CZ_SOP_D06_03_168 (ČSN EN 12766-1, ČSN EN 61619)	oil hydrocarbons, used oils, insulating liquids
209 ¹⁾	Determination of organochlorine pesticides ¹²⁾ and other halogen compounds ³⁴⁾ by gas chromatography method with ECD detection and calculation of organochlorine pesticides and other halogen compounds sums from measured values	CZ_SOP_D06_03_169 (ČSN EN ISO 6468, US EPA 8081, DIN 38407-2, samples prepared as per CZ_SOP_D06_03_P01 chap. 9.1, CZ_SOP_D06_03_P02 chap. 9.1)	water, extracts
210 ¹⁾	Determination of organochlorine pesticides and other halogen compounds ¹²⁾ by gas chromatography method with ECD detection and calculation of organochlorine pesticides and other halogen compounds sums from measured values	CZ_SOP_D06_03_169 (US EPA 8081, samples prepared as per CZ_SOP_D06_03_P01 chap. 9.2, CZ_SOP_D06_03_P02 chap. 9.2)	solid samples
211 ¹⁾	Determination of organochlorine pesticides and other halogen compounds ¹²⁾ by gas chromatography method with ECD detection and calculation of organochlorine pesticides and other halogen compounds sums from measured values	CZ_SOP_D06_03_169 (US EPA 8081, samples prepared as per CZ_SOP_D06_03_P02 chap. 9.5)	oils
E212 ¹⁾	Determination of organochlorine pesticides and other halogen compounds ¹²⁾ by gas chromatography method with ECD detection and calculation of organochlorine pesticides and other halogen compounds sums from measured values	CZ_SOP_D06_03_169 (US EPA 8081, samples prepared as per CZ_SOP_D06_03_P02 chap. 9.6)	sorption materials
E213 ³⁾	Determination of polychlorinated dibenzo-p-dioxins and dibenzofuranes ¹³⁾ in emissions by isotope dilution method using HRGC-HRMS and calculation of TEQ parameters from measured values	CZ_SOP_D06_06_170 (US EPA 23, US EPA 23A)	emission

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 19 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
214 ³⁾	Determination of polychlorinated dibenzo- <i>p</i> -dioxins and dibenzofuranes ¹³⁾ in imission by isotope dilution method using HRGC-HRMS and calculation of TEQ parameters from measured values	CZ_SOP_D06_06_171 (US EPA TO-9A)	imission
E215 ³⁾	Determination of coplanar polychlorinated biphenyls ¹⁴⁾ in stationary emission sources by isotope dilution method using HRGC-HRMS and calculation of PCB sums and TEQ parameter from measured values	CZ_SOP_D06_06_172 (JIS K 0311, modified)	emission, imission
216 ³⁾	Determination of polychlorinated biphenyls ¹⁴⁾ by isotope dilution method using HRGC-HRMS and calculation of PCB sums and TEQ parameter from measured values	CZ_SOP_D06_06_173 except chap. 8.2.11, 11.2.3.2 - 11.2.3.7, 11.2.4, 11.2.5 (US EPA 1668, modified)	water
217 ³⁾	Determination of polychlorinated biphenyls ¹⁴⁾ by isotope dilution method using HRGC-HRMS and calculation of PCB sums and TEQ parameter from measured values	CZ_SOP_D06_06_173 except chap. 8.2.11, 11.2.3.1, 11.2.3.6, 11.2.3.7, 11.2.5 (US EPA 1668, modified)	solid samples
218 ³⁾	Determination of polychlorinated biphenyls ¹⁴⁾ by isotope dilution method using HRGC-HRMS and calculation of PCB sums and TEQ parameter from measured values	CZ_SOP_D06_06_173 except chap. 8.2.11, 11.2.3.1 - 11.2.3.6, 11.2.3.7 b, c, d, g , h, i, j, k, m, n, 11.2.4 (US EPA 1668, modified)	biological matrices
219 ³⁾	Determination of polychlorinated biphenyls ¹⁴⁾ by isotope dilution method using HRGC-HRMS and calculation of PCB sum and TEQ parameter from measured values	CZ_SOP_D06_06_173 except chap. 11.2.3.1 - 11.2.3.5, 11.2.3.7 l, 11.2.4 (US EPA 1668, modified)	SPMD extracts, food, animal feeding stuff
E220 ³⁾	Determination of polychlorinated dibenzo- <i>p</i> -dioxins and dibenzofuranes ¹³⁾ in emission samples by isotope dilution method using HRGC-HRMS and calculation of TEQ parameters from measured values	CZ_SOP_D06_06_174 (ČSN EN 1948-2, 1948-3)	emission
221 ³⁾	Determination of tetra- to octa-chlorinated dioxins and furanes ¹³⁾ by isotope dilution method using HRGC-HRMS and calculation of TEQ parameters from measured values	CZ_SOP_D06_06_175 except chap. 8.2.1.1 B, 8.2.1.3 B, 8.2.1.5 B, C, D, 11.2.3.2 - 11.2.3.7, 11.2.4, 11.2.5 (US EPA 1613)	water
222 ³⁾	Determination of tetra- to octa-chlorinated dioxins and furanes ¹³⁾ by isotope dilution method using HRGC-HRMS and calculation of TEQ parameters from measured values	CZ_SOP_D06_06_175 except chap. 8.2.1.1 B, 8.2.1.3 B, 8.2.1.5 B, C, D, 11.2.3.1, 11.2.3.6, 11.2.3.7, 11.2.5 (US EPA 1613)	solid samples
223 ³⁾	Determination of tetra- to octa- chlorinated dioxins and furanes ¹³⁾ by isotope dilution method using HRGC-HRMS and calculation of TEQ parameters from measured values	CZ_SOP_D06_06_175 except chap. 8.2.1.1 A, 8.2.1.3 A, 8.2.1.5 A, 11.2.3.1 - 11.2.3.6, 11.2.3.7 b, c, d, g, h, i, j, k, m, n, 11.2.4 (US EPA 1613)	biological matrices

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 20 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
224 ³⁾	Determination of tetra- to octa- chlorinated dioxins and furanes ¹³⁾ by isotope dilution method using HRGC-HRMS and calculation of TEQ parameters from measured values	CZ_SOP_D06_06_175 except chap. 8.2.1.1 A, 8.2.1.3 A, 8.2.1.5 A, 11.2.3.1 - 11.2.3.5, 11.2.3.7 1, 11.2.4 (US EPA 1613)	SPMD extracts, food, animal feeding stuff
225 ³⁾	Determination of polychlorinated dibenzodioxins (PCDD) and polychlorinated dibenzofuranes (PCDF) ¹³⁾ using HRGC-HRMS and calculation of TEQ parameters from measured values	CZ_SOP_D06_06_176 except chap. 8.2.1.1 B, 8.2.1.3 B, 8.2.1.5 B, C, D, 11.2.3.2 - 11.2.3.6, 11.2.4, 11.2.5 (US EPA 8290)	water
226 ³⁾	Determination of polychlorinated dibenzodioxins (PCDD) and polychlorinated dibenzofuranes (PCDF) ¹³⁾ using HRGC-HRMS and calculation of TEQ parameters from measured values	CZ_SOP_D06_06_176 except chap. 8.2.1.1 B, 8.2.1.3 B, 8.2.1.5 B, C, D, 11.2.3.1, 11.2.3.6, 11.2.5 (US EPA 8290)	solid samples
227 ³⁾	Determination of polychlorinated dibenzodioxins (PCDD) and polychlorinated dibenzofuranes (PCDF) ¹³⁾ using HRGC-HRMS and calculation of TEQ parameters from measured values	CZ_SOP_D06_06_176 except chap. 8.2.1.1 A, 8.2.1.3 A, 8.2.1.5 A, 11.2.3.1 - 11.2.3.5, 11.2.3.6 b, c, d, g, h, i, j, k, m, n, 11.2.4 (US EPA 8290)	biological matrices
228 ³⁾	Determination of polychlorinated dibenzodioxins (PCDD) and polychlorinated dibenzofuranes (PCDF) ¹³⁾ using HRGC-HRMS and calculation of TEQ parameters from measured values	CZ_SOP_D06_06_176 except chap. 8.2.1.1 A, 8.2.1.3 A, 8.2.1.5 A, 11.2.3.1 - 11.2.3.5, 11.2.3.6 1, 11.2.4 (US EPA 8290)	food, animal feeding stuff
229 ³⁾	Determination of selected brominated flammable retarders (BFR) ¹⁵⁾ by isotope dilution method using HRGC-HRMS and calculation of brominated flammable retarders sums from measured values	CZ_SOP_D06_06_177 except chap. 10.2.3.2 - 10.2.3.7, 10.2.4, 10.2.5 (US EPA 1614)	water
230 ³⁾	Determination of selected brominated flammable retarders (BFR) ¹⁵⁾ by isotope dilution method using HRGC-HRMS and calculation of brominated flammable retarders sums from measured values	CZ_SOP_D06_06_177 except chap. 10.2.3.1, 10.2.3.6, 10.2.3.7, 10.2.5 (US EPA 1614, ČSN EN ISO 22032)	solid samples
231 ³⁾	Determination of selected brominated flammable retarders (BFR) ¹⁵⁾ by isotope dilution method using HRGC-HRMS and calculation of brominated flammable retarders sums from measured values	CZ_SOP_D06_06_177 except chap. 10.2.3.1 - 10.2.3.6, 10.2.3.7 b, c, d, g, h, i, j, k, m, n, 10.2.4 (US EPA 1614)	biological matrices
232 ³⁾	Determination of selected brominated flammable retarders (BFR) ¹⁵⁾ by isotope dilution method using HRGC-HRMS and calculation of brominated flammable retarders sums from measured values	CZ_SOP_D06_06_177 except chap. 10.2.3.1 - 10.2.3.5, 10.2.3.7 1, 10.2.4 (US EPA 1614)	SPMD extracts, food, animal feeding stuff
233 ¹⁾	Determination of alkylphenols and alkylphenol ethoxylates ¹⁶⁾ by gas chromatography method with MS or MS/MS detection and calculation of alkylphenols and alkylphenol ethoxylates sums from measured values	CZ_SOP_D06_03_178 (ISO 18857-2)	water

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 21 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
E234 ³⁾	Determination of PCB ¹⁴⁾ in emission samples by isotope dilution method using HRGC-HRMS and calculation of PCB sums from measured values	CZ_SOP_D06_06_179 (ČSN EN 1948-4)	emission, imission
235 ³⁾	Determination of polyaromatic hydrocarbons ⁵⁴⁾ by isotope dilution method using HRGC-HRMS and calculation of polyaromatic hydrocarbons sums from measured values	CZ_SOP_D06_06_180 except chap. 11.3.3.1 - 11.3.3.5, 11.3.3.7 - 11.3.3.9, 11.3.5, 11.3.6.1 e (US EPA 429, ISO 11338, US EPA 3540)	solid samples
E236 ³⁾	Determination of polyaromatic hydrocarbons ⁵⁴⁾ by isotope dilution method using HRGC-HRMS and calculation of polyaromatic hydrocarbons sums from measured values	CZ_SOP_D06_06_180 except chap. 11.3.3.6 - 11.3.3.9, 11.3.4, 11.3.5, 11.3.6.1 e (US EPA 429, ISO 11338)	emission, imission
237 ³⁾	Determination of polyaromatic hydrocarbons ⁵⁴⁾ by isotope dilution method using HRGC-HRMS and calculation of polyaromatic hydrocarbons sums from measured values	CZ_SOP_D06_06_180 except chap. 11.3.3.1 - 11.3.3.8, 11.3.3.9 b, c, d, g, h, i, j, k, m, n, 11.3.4 (US EPA 429, ISO 11338, IP 346)	biological matrices
238 ³⁾	Determination of polyaromatic hydrocarbons ⁵⁴⁾ by isotope dilution method using HRGC-HRMS and calculation of polyaromatic hydrocarbons sums from measured values	CZ_SOP_D06_06_180 except chap. 11.3.3.1 - 11.3.3.7, 11.3.3.9 1, 11.3.4 (US EPA 429, ISO 11338, IP 346)	SPMD extracts, food, animal feeding stuff
239 ³⁾	Determination of polyaromatic hydrocarbons ⁵⁴⁾ by isotope dilution method using HRGC-HRMS and calculation of polyaromatic hydrocarbons sums from measured values	CZ_SOP_D06_06_180 except chap. 11.3.3.1 - 11.3.3.6, 11.3.3.8, 11.3.3.9, 11.3.4, 11.3.5, 11.3.6.1 e (US EPA 429, ISO 11338, IP 346)	oils
240 ¹⁾	Determination of semi-volatile organic compounds ²⁷⁾ by isotopic dilution method using gas chromatography method with MS detection and calculation of semi-volatile organic compounds sums from measured values	CZ_SOP_D06_03_181 (US EPA 429, US EPA 1668, US EPA 3550)	solid samples
241 ¹⁾	Determination of acidic herbicides, drug residues and other pollutants ²⁹⁾ by liquid chromatography method with MS/MS detection and calculation of acidic herbicides, drug residues and other pollutants sums from measured values	CZ_SOP_D06_03_182.A (DIN 38407-35, CEN/TS 15968)	water, liquid samples
242 ¹⁾	Determination of acidic herbicides and drug residues ^{29A)} by liquid chromatography method with MS/MS detection	CZ_SOP_D06_03_182.B (ČSN EN 15637, US EPA 1694)	solid samples
243 ¹⁾	Determination of pesticides, pesticide metabolites, drug residues and other pollutants ³⁰⁾ by liquid chromatography method with MS/MS detection and calculation of pesticides, pesticide metabolites, drug residues and other pollutants from measured values	CZ_SOP_D06_03_183.A (US EPA 535, US EPA 1694)	water, liquid samples

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 22 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
244 ¹⁾	Determination of pesticides, pesticide metabolites, drug residues and other pollutants ^{30A)} by liquid chromatography method with MS/MS detection and calculation of the sum of pesticides, pesticide metabolites, drug residues and other pollutants from measured values	CZ_SOP_D06_03_183.B (ČSN EN 15637, US EPA 1694)	solid samples
245 ¹⁾	Determination of pesticides, pesticide metabolites, drug residues and other pollutants ^{30A)} by liquid chromatography method with MS/MS detection and calculation of the sum of pesticides, pesticide metabolites, drug residues and other pollutants from measured values	CZ_SOP_D06_03_183.C (ČSN EN 15662)	vegetable and animal materials
246 ¹⁾	Determination of pesticides ³¹⁾ by gas chromatography method with MS or MS/MS detection and calculation of pesticides sums from measured values	CZ_SOP_D06_03_184 (US EPA 8141B, US EPA 3535A)	water, liquid samples
247 ¹⁾	Determination of pesticides and pesticide metabolites ³²⁾ by derivatization and liquid chromatography method with MS/MS detection and calculation of pesticides and pesticide metabolites sums from measured values	CZ_SOP_D06_03_185 (ČSN ISO 21458)	water, liquid samples
248 ¹⁾	Determination of complexing substances ³³⁾ by gas chromatography method with MS detection	CZ_SOP_D06_03_186 (ČSN EN ISO 16588)	water
E249 ¹⁾	Determination of polycyclic aromatic hydrocarbons derivatives ³⁶⁾ by liquid chromatography method with MS detection	CZ_SOP_D06_03_187 (Determination of oxygenated polycyclic aromatic hydrocarbons in particulate matter using high-performance liquid chromatography–tandem mass spectrometry; J. Chrom. A, 1133 (2006) 241–247)	emission, immission
250 ¹⁾	Determination of organic acids ³⁷⁾ by capillary electrophoresis method with UV detection	CZ_SOP_D06_03_188.A (Lumex manual, Kudrjashova, M.: Capillary electrophoretic monitoring of microbial growth: determination of organic acids, COPYRIGHT 2004 Estonian Academy Publishers, June, 2004 Source Volume: 53 Source Issue: 2, ISSN: 1406-0124)	water, liquid samples
251 ¹⁾	Determination of organic acids ³⁷⁾ by capillary electrophoresis method with UV detection	CZ_SOP_D06_03_188.B (Lumex manual, Kudrjashova, M.: Capillary electrophoretic monitoring of microbial growth: determination of organic acids, COPYRIGHT 2004 Estonian Academy Publishers, June, 2004 Source Volume: 53 Source Issue: 2, ISSN: 1406-0124)	animal feeding stuff, composts, digestate, physiological fluid
252 ¹⁾	Determination of gases ³⁸⁾ by gas chromatography method with detection FID and TCD	CZ_SOP_D06_03_189 (EPA Method RSK-175)	water, liquid samples

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 23 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
253 ¹⁾	Low limit determination of volatile organic compounds ³⁾ by gas chromatography method with MS detection and calculation of volatile organic compounds sums from measured values	CZ_SOP_D06_03_190 (US EPA 5021, US EPA 8260)	water,
254 ¹⁾	Low limit determination of volatile organic compounds ³⁾ by gas chromatography method with MS detection and calculation of volatile organic compounds sums from measured values	CZ_SOP_D06_03_190 (US EPA 5021, US EPA 8260)	solid samples
E255 ¹⁾	Determination of semi-volatile organic compounds ⁴⁶⁾ by gas chromatography method with MS detection and calculation of semi-volatile organic compounds sums from measured values	CZ_SOP_D06_03_191 (ISO 11338-2)	emission, immission
256 ¹⁾	Determination of chlorinated alkanes ³⁴⁾ by gas chromatography method with MS/MS detection	CZ_SOP_D06_03_192 (ISO 12010)	water, liquid samples
257 ¹⁾	Determination of chlorinated alkanes ³⁴⁾ by gas chromatography method with MS/MS detection	CZ_SOP_D06_03_192.B (ISO 12010)	solid samples
258 ¹⁾	Determination of aniline and aniline derivates ²¹⁾ by gas chromatography method with MS detection	CZ_SOP_D06_03_193 (US EPA 8270)	solid samples
259 ¹⁾	Determination of chlorinated phenols ⁵⁵⁾ by liquid chromatography method with MS/MS detection	CZ_SOP_D06_03_194	water, liquid samples
260 ¹⁾	Determination of drug residues ⁵⁶⁾ by liquid chromatography with MS/MS detection and results recalculation to the volume of air	CZ_SOP_D06_03_195 (Jia Yu et all.: Biomed. Chromatogr. 2011; 25: 511–516)	working environment
261 ¹⁾	Determination of epichlorhydrine by gas chromatography method with MS/MS detection	CZ_SOP_D06_03_196 (Application list Agilent Technologies 5990-6433EN)	water
262 ¹⁾	Determination of perfluorinated and brominated compounds ⁵⁸⁾ by liquid chromatography with MS/MS detection	CZ_SOP_D06_03_197.A (US EPA 537)	Water, liquid samples
263 ¹⁾	Determination of perfluorinated and brominated compounds ^{58A)} by liquid chromatography with MS/MS detection	CZ_SOP_D06_03_197.B (DIN 38414)	solid samples
264 ¹⁾	Determination of volatile organic compounds ⁵⁹⁾ by gas chromatography with TCD and FID detection and calculation of percent content of volatile organic compounds from measured values	CZ_SOP_D06_03_198 (ČSN EN ISO 11890-2)	solid samples
265 ³⁾	Determination of fat by gravimetry	CZ_SOP_D06_06_199 (US EPA 1613)	food, animal feeding stuff, biological material
266 ¹⁾	Determination of the content of 3-chloro-1,2-propadiol by gas chromatography method with MS detection	CZ_SOP_D06_03_200 (LMBG 52.02(1))	spices
267 ¹⁾	Determination of residues of pharmaceuticals ⁶¹⁾ by liquid chromatography method with MS/MS detection	CZ_SOP_D06_03_201.A (US EPA 1694)	water

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Tests: ORGANIC CHEMISTRY OF FOOD

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
268 ¹⁾	Determination of fatty acids ¹⁸⁾ by gas chromatography method with FID detection and calculation sum of SAFA, MUFA, PUFA, TFA, Omega 3, Omega 6 ³⁵⁾	CZ_SOP_D06_04_202 (ČSN EN ISO 5508, ČSN EN ISO 15304)	food, animal feeding stuff, food supplements
269 ¹⁾	Determination of cholesterol by gas chromatography method with FID detection	CZ_SOP_D06_04_205 Prof. ing. Jiří Davídek, DrSc. et al., Laboratory Manual of Food Analysis, J.-Chromatogr.-A.;24 Jun 1994;672(1-2): 267-272, Determination of sterol content in different food samples by capillary gas chromatography	fatty and non-fatty food, food supplements
270 ¹⁾	Determination of retinol and alpha-tocopherol by liquid chromatography method with FLD detection	CZ_SOP_D06_04_206 (ČSN EN 128 23-1, ČSN EN 128 22)	fats, fatty food, non-fatty food, food supplements, animal feeding stuff (PET food) and premixes
271 ¹⁾	Determination of vitamin C (ascorbic acid) and ascorbyl-6-palmitate by liquid chromatography method with PDA detection	CZ_SOP_D06_04_207 (ČSN EN 14130)	beverages, candy, non-fatty food, food supplements, fruit, vegetables
272 ¹⁾	Determination of vitamin D ²²⁾ by liquid chromatography method with PDA detection	CZ_SOP_D06_04_208 (ČSN EN 12821)	fats, fatty food, non-fatty food, food supplements, animal feeding stuff (PET food) and premixes
273 ¹⁾	Determination of substitute sweeteners ²³⁾ by liquid chromatography method with PDA detection	CZ_SOP_D06_04_209 (ČSN EN 12856)	beverages, milk products, jams, food supplements, fish
274 ¹⁾	Determination of caffeine, theobromine and theophylline by liquid chromatography method with PDA detection	CZ_SOP_D06_04_210 (ČSN EN 12856)	beverages, tea, coffee, cocoa, chocolate
275 ¹⁾	Determination of preserving agents ²⁴⁾ in food by liquid chromatography method with PDA detection	CZ_SOP_D06_04_211 (ČSN EN 12856)	beverages, jams, vegetable and fruit sauces and pastes, mustard, fatty and milk products, food supplements
276 ¹⁾	Determination of aflatoxin B ₁ , B ₂ , G ₁ and G ₂ by liquid chromatography method with FLD detection	CZ_SOP_D06_04_212 (ČSN EN 14123)	food with low water content, food supplements, beverages, animal feeding stuff
277 ¹⁾	Determination of the content of ochratoxin A by liquid chromatography method with FLD detection	CZ_SOP_D06_04_213 (ČSN EN 15829, ČSN EN 14133, ČSN EN 14132)	food with low water content, food supplements, beverages, animal feeding stuff
278 ¹⁾	Determination of zearalenon by liquid chromatography method with FLD detection	CZ_SOP_D06_04_214 (ČSN EN 15850)	cereals and animal feeding stuff
279 ¹⁾	Determination of aflatoxin M1 by liquid chromatography method with FLD detection	CZ_SOP_D06_04_215 (ČSN EN ISO 14501)	milk, dried milk and products from them

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 25 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
280 ¹⁾	Determination of patulin by liquid chromatography method with PDA detection	CZ_SOP_D06_04_216 (ČSN EN 14177)	food with high water content, food supplement and beverages
281 ¹⁾	Determination of deoxynivalenol by liquid chromatography method with PDA detection	CZ_SOP_D06_04_217 (ČSN EN 15791, ČSN EN 15891)	food with low water content, food supplements, beverages, animal feeding stuff
282 ¹⁾	Determination of vitamins B ₁ , B ₂ and B ₆ by liquid chromatography method with FLD detection	CZ_SOP_D06_04_218 (ČSN EN 14122, ČSN EN 14152, ČSN EN 14663)	fats, fatty food, non-fatty food, animal feeding stuff, food supplements
283 ¹⁾	Determination of folic acid by ELISA method – commercial set Ridascreen Folic Acid	CZ_SOP_D06_04_219 (R-Biopharm Manual)	food, animal feeding stuff, food supplements
284 ¹⁾	Determination of biotin by ELISA method – commercial set Ridascreen Biotin	CZ_SOP_D06_04_220 (R-Biopharm Manual)	milk, milk products, cereals and cereal products, non-alcoholic beverages, baby food, animal feeding stuff, food supplements
285 ¹⁾	Determination of gliadine (gluten) by sandwich enzyme immunoassay ELISA method – commercial set RIDASCREEN® Gliadin	CZ_SOP_D06_04_221.A (R-Biopharm manual)	fatty food and non-fatty food and food supplements
286 ¹⁾	Determination of gliadine (gluten) by competitive immunoassay ELISA method – commercial set RIDASCREEN® Gliadin	CZ_SOP_D06_04_221.B (R-Biopharm manual)	fatty food and non-fatty food and food supplements
287 ¹⁾	Determination of casein by ELISA Method – commercial set Ridascreen Fast Casein	CZ_SOP_D06_04_222 (R-Biopharm Manual)	food, food supplements
288 ¹⁾	Determination of sugars ⁸⁾ by liquid chromatography method with RI detection	CZ_SOP_D04_223 (ČSN EN 12630)	food, animal feeding stuff, food supplements
289 ¹⁾	Determination of vitamin B12 by microbiological microtitre method – commercial set VitaFast® B12	CZ-SOP-D06_04_224 (R-Biopharm Manual)	food, animal feeding stuff, food supplements
290 ¹⁾	Determination of niacin by liquid chromatography method with PDA detection	CZ_SOP_D06_04_225 (ČSN EN 15652)	fatty and non-fatty food, animal feeding stuff, food supplements
291 ¹⁾	Determination of soy protein by ELISA method – commercial set Soya assay Biokits	CZ_SOP_D06_04_226 (Biokits Neogen Manual)	meat products
292 ¹⁾	Determination of the content of parabens by liquid chromatography method with PDA detection	CZ_SOP_D06_04_227 (HPLC for Food Analysis, Agilent Technologies 1996 -2001)	cosmetics

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 26 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Tests: MICROBIOLOGY OF WATER

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
293 ¹⁾	Enumeration of mesophilic bacteria by cultivation	ČSN 75 7841	surface, ground, waste, pool water
294 ¹⁾	Enumeration of psychrophilic bacteria by cultivation	ČSN 75 7842	surface, ground, waste, pool water
295 ¹⁾	Enumeration of intestinal enterococci by membrane filtration	ČSN EN ISO 7899 - 2 STN EN ISO 7899 - 2	drinking, bottled, pool, raw, treated, ground, surface, waste water
296 ¹⁾	Enumeration of culturable microorganisms a) at 22 °C b) at 36 °C by cultivation	ČSN EN ISO 6222 STN EN ISO 6222	drinking, bottled, natural mineral, pool, raw, treated, ground water
297 ¹⁾	Enumeration of thermotolerant coliform bacteria and <i>Escherichia coli</i> by membrane filtration	ČSN 75 7835	drinking, surface, ground, pool, waste water
298 ¹⁾	Enumeration of <i>Escherichia coli</i> and coliform bacteria by membrane filtration	ČSN EN ISO 9308 - 1:2015 STN EN ISO 9308 - 1:2015	drinking, pool, bottled, raw, treated, ground water
299 ¹⁾	Enumeration of <i>Pseudomonas aeruginosa</i> by membrane filtration	ČSN EN ISO 16266 STN EN ISO 16266	drinking, bottled, natural mineral, pool, surface, waste water
300 ¹⁾	Enumeration of coagulase-positive staphylococci (<i>Staphylococcus Aureus</i> and other species) by membrane filtration	ČSN EN ISO 6888-1	pool, surface, waste, drinking, ground water
301 ¹⁾	Enumeration of <i>Candida</i> yeasts by membrane filtration	CZ_SOP_D06_04_258 (Hausler, J.: Microbiological Culture Methods of Quality Inspection, Volume III, 1995)	pool, surface, waste water
302 ¹⁾	Enumeration of <i>Clostridium perfringens</i> by membrane filtration	CZ_SOP_D06_04_259 (GR 252/2004 Coll., Annex 6, GR No. 354/2006 Coll., Annex 1)	drinking, bottled, pool, natural mineral, raw, produced, ground water
303 ¹⁾	Detection of <i>Salmonella</i> by membrane filtration	ČSN ISO 19250	drinking, surface, ground, pool, waste water
304 ¹⁾	Determination of bioseston by microscopy	ČSN 75 7712, STN 757711	drinking, bottled, raw, treated, ground water
305 ¹⁾	Determination of abioseston by microscopy	ČSN 75 7713, STN 757712	drinking, bottled, raw, treated, ground water
306 ¹⁾	Detection and enumeration of <i>Legionella</i> by cultivation and membrane filtration	CZ_SOP_D06_04_263.A (ČSN ISO 11731, ČSN ISO 11731-2)	water, treated water
307 ¹⁾	Detection and enumeration of <i>Legionella</i> by cultivation	CZ_SOP_D06_04_263.B (ČSN ISO 11731)	sediments, growths
308 ¹⁾	Detection and enumeration of <i>Legionella</i> by cultivation	CZ_SOP_D06_04_263.C (ČSN ISO 11731)	swabs
309 ¹⁾	Enumeration of Coliform bacteria by membrane filtration	ČSN 75 7837	non-disinfected water
310 ¹⁾	Enumeration of spore sulphite reducing anaerobes (<i>Clostridium</i>) by membrane filtration	ČSN EN 26461-2	water

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 27 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
311 ¹⁾	Microbiological testing of water for haemodialysis. Enumeration of total viable microorganisms.	CZ_SOP_D06_04_266 (ISO 13959, ISO 23500)	water from dialysis
312 ¹⁾	Microbiological testing of liquids for haemodialysis. Enumeration of total viable microorganisms.	CZ_SOP_D06_04_267 (ISO 11663, ISO 23500)	liquids for dialysis
313 ¹⁾	Determination of the concentration of bacterial endotoxins by LAL test: by turbidimetric kinetic method	CZ_SOP_D06_04_268 (Ph.Eur. chapter 2.6.14)	water from dialysis, liquids for dialysis

Tests: MICROBIOLOGY

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
314 ¹⁾	Enumeration of microorganisms by cultivation	ČSN EN ISO 4833	food, animal feeding stuff
315 ¹⁾	Enumeration of coliform bacteria by cultivation	ČSN ISO 4832	food, animal feeding stuff
316 ¹⁾	Enumeration of enterococci by cultivation	CZ_SOP_D06_04_302 (CSN 56 0100)	food, animal feeding stuff
317 ¹⁾	Enumeration of <i>Bacillus cereus</i> by cultivation	ČSN EN ISO 7932	food, animal feeding stuff
318 ¹⁾	Enumeration of coagulase-positive staphylococci (<i>Staphylococcus aureus</i> and other species) by cultivation	ČSN EN ISO 6888-1	food, animal feeding stuff
319 ¹⁾	Enumeration of <i>Clostridium perfringens</i> by cultivation	ČSN EN ISO 7937	food, animal feeding stuff
320 ¹⁾	Detection of <i>Salmonella</i> by cultivation	ČSN EN ISO 6579	food, animal feeding stuff
321 ¹⁾	Detection of <i>Salmonella</i> by cultivation	CZ_SOP_D06_04_307 except chap. 9.1.2 (ČSN EN ISO 6579, AHEM No. 1/2008)	sludge, bio waste, compost, substrates, soils
322 ¹⁾	Detection of <i>Salmonella</i> by cultivation	CZ_SOP_D06_04_307 except chap. 9.1.1 (ČSN EN ISO 6579, AHEM No. 1/2008)	biological matrices
323 ¹⁾	Determination of inhibiting substances by Delvotest method	CZ_SOP_D06_04_308 (O.K.Servis BioPro Manual)	milk
324 ¹⁾	Detection of <i>Salmonella</i> by ELISA method - commercial set Solus Salmonella	CZ-SOP-D06_04_309 (Solus Manual)	food, animal feeding stuff
325 ¹⁾	Enumeration of yeasts and moulds by cultivation	ČSN ISO 21527-1,2	food, animal feeding stuff
326 ¹⁾	Detection of <i>Enterobacteriaceae</i> by cultivation	ČSN ISO 21528-1	food, animal feeding stuff
327 ¹⁾	Enumeration of spore-forming microorganisms by cultivation	CZ_SOP_D06_04_312 (ČSN 56 0100 Article 87)	food, animal feeding stuff
328 ¹⁾	Detection of <i>Vibrio parahaemolyticus</i> and <i>Vibrio species</i> by cultivation	ČSN P ISO/TS 21872-1, 2	food, animal feeding stuff
329 ¹⁾	Enumeration of mesophilic lactic acid bacteria by cultivation	ČSN ISO 15214	food, animal feeding stuff

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 28 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
330 ¹⁾	Detection of <i>Shigella spp.</i> by cultivation	ČSN EN ISO 21567	food, animal feeding stuff
331 ¹⁾	Detection of <i>Campylobacter spp.</i> by cultivation	ČSN EN ISO 10272-1	food, animal feeding stuff
332 ¹⁾	Detection of presumptive pathogenic <i>Yersinia enterocolitica</i> by cultivation	ČSN EN ISO 10273	food, animal feeding stuff
333 ¹⁾	Enumeration of Enterobacteriaceae by cultivation	ČSN ISO 21528-2	food, animal feeding stuff
334 ¹⁾	Enumeration of beta-glucuronidase-positive <i>Escherichia coli</i> by cultivation	ČSN ISO 16649-2	food, animal feeding stuff
335 ¹⁾	Detection and enumeration of <i>Listeria monocytogenes</i> by cultivation	ČSN EN ISO 11290-1, ČSN EN ISO 11290-2	food, animal feeding stuff
336 ¹⁾	Enumeration of potentially toxinogenic moulds on special media by cultivation	CZ_SOP_D06_04_321 (AHEM No.1/2003)	food, animal feeding stuff
337 ¹⁾	Enumeration of microorganisms in air by aeroscopy and sedimentation method	CZ_SOP_D06_04_322 (ČSN 56 0100 article 149, 150 AHEM No.1/2002)	Internal air environment
338 ¹⁾	Determination of microbial contamination of areas, surface of equipment and packages using swab method	CZ_SOP_D06_04_323 (ČSN 56 0100 article 145)	areas, surface, packaging material, surface of food
339 ¹⁾	Enumeration of thermotolerant coliform bacteria and <i>Escherichia coli</i> by cultivation	CZ_SOP_D06_04_324 (AHEM No. 1/2008, ČSN ISO 16649-2)	sludge, bio waste, compost, substrates, soils, sand
340 ¹⁾	Enumeration of enterococci by cultivation	CZ_SOP_D06_04_325 (AHEM No. 1/2008, ČSN EN ISO 7899-2)	sludge, bio waste, compost, substrates, soils, sand
341 ¹⁾	Detection of <i>Listeria</i> by ELISA method - commercial set Solus Listeria	CZ-SOP-D06_04_326 (manual Solus)	food, animal feeding stuff
342 ¹⁾	Detection and enumeration of <i>Listeria monocytogenes</i> by quick cultivation method Listeria Precise	CZ-SOP-D06_04_327 (OXOID Manual)	food, animal feeding stuff
343 ¹⁾	Detection of <i>Salmonella</i> by quick cultivation method Salmonella Precis	CZ-SOP-D06_04_328 (OXOID Manual)	food, animal feeding stuff
344 ¹⁾	Detection of <i>Cronobacter (Enterobacter) sakazakii</i> by cultivation	ČSN P ISO/TS 22964	milk and milk products
345 ¹⁾	Detection and enumeration of aerobic mesophilic bacteria by cultivation	ČSN EN ISO 21149	cosmetics
346 ¹⁾	Detection of <i>Pseudomonas aeruginosa</i> by cultivation	ČSN EN ISO 22717 ČSN ISO 18415	cosmetics
347 ¹⁾	Detection of <i>Staphylococcus aureus</i> by cultivation	ČSN EN ISO 22718 ČSN ISO 18415	cosmetics
348 ¹⁾	Detection of <i>Candida albicans</i> by cultivation	ČSN EN ISO 18416 ČSN ISO 18415	cosmetics
349 ¹⁾	Detection of <i>Escherichia coli</i> by cultivation	ČSN EN ISO 21150 ČSN ISO 18415	cosmetics
350 ¹⁾	Enumeration of yeast and mould by cultivation	ČSN EN ISO 16212	cosmetics
351 ¹⁾	Evaluation of antimicrobial protection of cosmetic product, test of conservation effectiveness	CZ_SOP_D06_04_336 (ČSN EN ISO 11930, Ph.Eur. chapter 5.1.3)	cosmetics
352 ¹⁾	Horizontal method for the detection and enumeration of presumptive <i>Escherichia coli</i> - Most probable number technique	ČSN ISO 7251, except p. 9.2	food, feedstuffs

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 29 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Tests: ECOTOXICOLOGY

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
353 ²⁾	Determination of the acute lethal toxicity of substance to a freshwater fish	CZ_SOP_D06_07_350 (ČSN EN ISO 7346-1, ČSN EN ISO 7346-2, STN 83 8303)	surface, underground and waste water, extracts of waste, solutions and extracts of chemical substances and agents
354 ²⁾	Determination of the inhibition of the mobility of <i>Daphnia magna</i> Straus - Acute toxicity test	CZ_SOP_D06_07_351 (ČSN EN ISO 6341, STN 83 8303)	surface, underground and waste water, extracts of waste, solutions and extracts of chemical substances and agents
355 ²⁾	Freshwater algal growth inhibition test	CZ_SOP_D06_07_352 (ČSN EN ISO 8692, STN 83 8303)	surface, underground and waste water, extracts of waste, solutions and extracts of chemical substances and agents
356 ²⁾	Toxicity test on seeds of white mustard (<i>Sinapis alba</i>)	CZ_SOP_D06_07_353 (Ministry of Environment Bulletin, Volume XVII, Part 4/2007, p. 13-14; Waste Department Guidance for the determination of waste ecotoxicity, Annex 1 "Test on the seeds of white mustard (<i>Sinapis alba</i>)")	surface, underground and waste water, extracts of waste, solutions and extracts of chemical substances and agents
357 ²⁾	Determination of the inhibitory effect of water samples on the light emission of <i>Vibrio fischeri</i>	CZ_SOP_D06_07_354 (ČSN EN ISO 11348-2)	surface, underground and waste water, extracts, percolation water, saline and brackish water
358 ²⁾	<i>Folsomia candida</i> reproduction test – determination of the inhibition.	CZ_SOP_D06_07_355 (ČSN ISO 11267)	waste, soils, sediments
359 ²⁾	<i>Enchytraeus crypticus</i> reproduction test – determination of the inhibition	CZ_SOP_D06_07_356 (ČSN ISO 16387)	waste, soils, sediments
360 ²⁾	<i>Lactuca sativa</i> – determination of inhibition of root growth	CZ_SOP_D06_07_357 (ČSN ISO 11269-1)	waste, soils, sediments
361 ²⁾	Determination of nitrification activity and its inhibition	CZ_SOP_D06_07_358 (ČSN ISO 15685)	waste, soils, sediments
362 ²⁾	Determination of the inhibition of the growth, germination and germination index (phytotoxicity) of Garden Cress (<i>Lepidium sativum</i>) - Acute toxicity test	CZ_SOP_D06_07_359 (F. Zucconi et al.: Biological evaluation of compost maturity. BioCycle, 22(2), 1981, s. 27–29.)	surface, underground and waste water, extracts of waste and composts, solutions and extracts of chemical substances and agents
363 ²⁾	Determination of the inhibition of the growth of Lesser Duckweed (<i>Lemna minor</i>) - Acute toxicity test	CZ_SOP_D06_07_1350 (ČSN EN ISO 20079)	surface, underground and waste water, extracts of waste, solutions and extracts of chemical substances and agents

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 30 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Tests: RADIOLOGY

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
364 ²⁾	Determination of gross alpha activity by measuring of evaporated residue in a mixture with ZnS(Ag) scintillator	ČSN 75 7611 chapter 4	water, extracts
365 ²⁾	Determination of gross alpha activity by measuring of incinerated evaporated residue by means of proportional detector	ČSN 75 7611 chapter 5	water, extracts
366 ²⁾	Determination of gross beta activity by measuring of evaporated residue by means of proportional detector and determination of gross beta activity corrected for potassium 40 by calculation from measured values	CZ_SOP_D06_07_361 (ČSN 75 7612; Recommendation of SÚJB „Measurement and assessment of the content of natural radionuclides in drinking water from public sources Rev. 1, SÚJB 2012)	water, extracts
367 ²⁾	Determination of radium 226 after concentration by scintillation emanometry	ČSN 75 7622	water, extracts
368 ²⁾	Determination of radon 222 by scintillation emanometry after its transportation into scintillation chamber using under-pressure	CZ_SOP_D06_07_363.A (ČSN 75 7624 chap. 5)	water, extracts
369 ²⁾	Determination of radon 222 by scintillation gamma-spectrometry with a well type NaI(Tl) crystal	CZ_SOP_D06_07_363.B (ČSN 75 7624 chap. 6)	water, extracts
370 ²⁾	Determination of radon 222 by liquid scintillation counting method (LSC)	CZ_SOP_D06_07_363.C (ČSN 75 7625)	drinking water, clear water without sediments
371 ²⁾	Determination of uranium by spectrophotometry after its separation on silica gel and determination of uranium 238 activity concentration by calculation from measured values	ČSN 75 7614	water, extracts
372 ²⁾	Determination of tritium volume activity concentration by liquid scintillation counting method (LSC)	ČSN ISO 9698	water, extracts
373 ²⁾	Determination of polonium 210 after its concentration by sorption on ZnS(Ag) by the measurement of emitted scintillations	ČSN 75 7626	water, extracts
374 ²⁾	Determination of polonium 210 after total decomposition and after its concentration by sorption on ZnS(Ag) by the measurement of emitted scintillations	CZ_SOP_D06_07_366 (ČSN 75 7626)	soils, sludge, sediments, filters
375 ²⁾	Non-destructive determination of radionuclides ²⁵⁾ by high resolution gamma-spectrometry	CZ_SOP_D06_07_367 (ČSN ISO 10 703)	solid samples with granularity up to 4 mm, food, liquid samples
376 ²⁾	Determination of gross alpha mass activity by direct measurement of the sample by means of alpha radiation analyzer	CZ_SOP_D06_07_368 (ČSN 75 7611 and ISO 9696)	all solid samples which can be pulverized to 100µm granularity, liquid samples with boiling point above 100 °C

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 31 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
377 ²⁾	Determination of gross beta mass activity by direct measurement of the sample by means of beta radiation analyzer	CZ_SOP_D06_07_369 (ČSN 75 7612 and ISO 9697)	all solid samples which can be pulverized to 100µm granularity,-liquid samples with boiling point above 100 °C
378 ²⁾	Determination of lead 210 after its sorption on ZnS-colloid by beta radiation analyzer	CZ_SOP_D06_07_370 (Health Phys., <u>46</u> , 1984, No. 5, p. 1131)	water, extracts (with low content of suspended solids or filtrated through 0.45µm filter)
379 ²⁾	Determination of gross alpha activity by co-precipitation method by measurement of filtrated precipitate by means of proportional detector	ČSN 75 7610	water, extracts
380	Determination of indicative dose (ID) by calculation from the volume activity concentrations of individual radionuclides	CZ_SOP_D06_07_372 (Recommendation of SÚJB „Measurement and assessment of the content of natural radionuclides in drinking water from public sources Rev. 1, SÚJB 2012; <u>Council Directive 2013/51/EURATOM</u> of 22/10/2013)	waters
381 ²⁾	Determination of strontium 90 by proportional detector after separation	CZ_SOP_D06_07_373 (ASTM D5811-00)	water
382 ²⁾	Determination of strontium 90 by proportional detector after separation	CZ_SOP_D06_07_373 (ASTM D5811-00, ASTM C1507-12)	soils, sludge, sediments
383 ²⁾	Determination of strontium 90 by proportional detector after separation	CZ_SOP_D06_07_373 (ASTM D5811-00, ASTM C1507-12)	biological material, food, animal feeding stuff
384 ²⁾	Determination of carbon 14 by liquid scintillation method after separation	CZ_SOP_D06_07_374 (ISO 13162:2011, US EPA 520/5-84-006)	water, soils, sludge, sediments, bio indicators, food

Tests: TRIBOLOGY

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
385 ¹⁾	Determination of kinematic viscosity by viscometer and viscosity index by calculation	CZ_SOP_D06_05_400 (ČSN EN ISO 3104, ČSN ISO 2909)	liquid fuels, lubricating oils
386 ¹⁾	Determination of flash point - Pensky-Martens closed cup method by flash point analyser	CZ_SOP_D06_05_401 (ČSN EN ISO 2719)	liquid petroleum products
387 ¹⁾	Determination of liquid cleanliness code by particle counter	CZ_SOP_D06_05_402	liquid fuels, lubricating oils
388 ¹⁾	Determination of base number by potentiometric titration	CZ_SOP_D06_05_403 (ČSN ISO 3771)	lubricating oils, additives to lubricants
389 ¹⁾	Determination of neutralization number by potentiometric titration	CZ_SOP_D06_05_404 (ČSN ISO 6619)	lubricating oils, additives to lubricants

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 32 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
390 ¹⁾	Determination of water content by Coulometric method	CZ_SOP_D06_05_405 (ASTM D 6304, ČSN EN ISO 12937)	liquid fuels, lubricating oils
391 ¹⁾	Determination of flash point-Cleveland opened-cup method by flash point analyser	CZ_SOP_D06_05_406 (ČSN EN ISO 2592)	liquid fuels, lubricating oils

Tests: GENERAL FOOD CHEMISTRY

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
392 ¹⁾	Determination of N-substances by Kjeldahl method by titration	CZ_SOP_D06_04_450 (ČSN ISO 1871)	food, animal feeding stuff, food supplements
393 ¹⁾	Determination of fat by gravimetry	CZ_SOP_D06_04_451 (ČSN ISO 1443, ČSN ISO 1444) ČSN 46 7092-7)	food, animal feeding stuff
394 ¹⁾	Determination of dry matter by gravimetry and determination of moisture by calculation from measured value	CZ_SOP_D06_04_452 (Journal of AOAC International vol 88, No1,2005; Journal of AOAC International vol 86, No6, 2003)	food, animal feeding stuff, food supplements
395 ¹⁾	Determination of nitrate and nitrite by capillary isotachophoresis	CZ_SOP_D06_04_453 (ITP: Application sheet No. 33 VILLA LABECO s.r.o.)	food, animal feeding stuff
396 ¹⁾	Determination of phosphates by capillary isotachophoresis	CZ_SOP_D06_04_454 (ITP: Application sheet No. 35 VILLA LABECO s.r.o.)	food, animal feeding stuff
397 ¹⁾	Methods of coffee determination: determination of water extract content	ČSN 58 0113 Article 38	coffee
398 ¹⁾	Animal and vegetable fats and oils – determination of acid value and acidity by titration	CZ_SOP_D06_456 (ČSN ISO 660)	animal and vegetable fats and oils
399 ¹⁾	Determination of phosphate by indirect method by spectrophotometry	CZ_SOP_D06_04_457 (Veterinary Laboratory Methodology, Food chemistry, Bratislava 1990)	meat and milk products
400 ¹⁾	Gravimetric determination of ash	CZ_SOP_D06_04_458 (ČSN 56 0116-4)	food, animal feeding stuff
401 ¹⁾	Determination of fibre by oxidation hydrolysis method	CZ_SOP_D06_04_459 (ČSN ISO 5498)	animal feeding stuff
402 ¹⁾	Determination of pH in biological material by potentiometry	CZ_SOP_D06_04_460 (ČSN ISO 2917:2012, ČSN ISO 1842)	food, animal feeding stuff
403 ¹⁾	Determination of sand in biological material by gravimetry	CZ_SOP_D06_04_461 (ČSN 56 0246-12)	food, animal feeding stuff
404 ¹⁾	Determination of relative density of liquids by pycnometry	CZ_SOP_D06_04_462 (ČSN EN 1131)	low viscosity liquids
405 ¹⁾	Titrimetric determination of acidity	CZ_SOP_D06_04_463 (ČSN ISO 750)	fruit juices, water-soluble food
406 ¹⁾	Determination of moisture content – distillation method	CZ_SOP_D06_04_464 (ČSN ISO 939)	spices and condiments

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 33 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
407 ¹⁾	Determination of dietary fibre by enzymatic method	CZ_SOP_D06_04_465 (AOAC Method 985.29)	food, food supplements
408 ¹⁾	Determination of starch content by polarimetry	CZ_SOP_D06_04_466 (ČSN 46 70 92-21)	cereals, baking products, cereal feeds
409 ¹⁾	Determination of chloride by coulometric titration	CZ_SOP_D06_04_467 (Manual to Chloride Analyse 926 analyzer from O.K.SERVIS)	food, animal feeding stuff, food supplements
410 ¹⁾	Determination of reducing and non-reducing sugars by titration	CZ_SOP_D06_04_468 (ČSN 56 01 46)	food, animal feeding stuff, food supplements
411 ¹⁾	Determination of alkalinity of water-soluble ash	ČSN ISO 1578	tea
412 ¹⁾	Determination of total ash	ČSN ISO 1575	tea
413 ¹⁾	Determination of water-soluble and water-insoluble ash	ČSN ISO 1576	tea
414 ¹⁾	Determination of acid-insoluble ash	ČSN ISO 1577	tea
415 ¹⁾	Determination of water extract	ČSN ISO 9768	tea
416 ¹⁾	Determination of loos in mass at 103°C	ČSN ISO 1573	tea
417 ¹⁾	Determination of N-substances by Dumas method	CZ_SOP_D06_04_475 (ČSN EN ISO 14891, ČSN EN ISO16634-1, ČSN P CEN ISO/TS 16634-2)	food, animal feeding stuff, food supplements
418 ¹⁾	Determination of volatile oils (essential oils) by distillation with steam	ČSN EN ISO 6571	spices, aromatic substances, herbs
419 ¹⁾	Determination of the weight of consumer packaging of food and animal feeding stuff products by gravimetry	CZ_SOP_D06_04_477 (ČSN 560305, ČSN 570146-3, ČSN 580170-3)	food, animal feeding stuff, food supplements
420 ¹⁾	Determination of the meat content in meat products and products containing meat by calculation from measured values	CZ_SOP_D06_04_478	meat products
421 ¹⁾	Determination of carbohydrates and energy values by calculation from measured values	CZ_SOP_D06_04_479	food, raw materials for production of food, food supplements
422 ¹⁾	Determination of non-protein contents by calculation	ČSN 46 7092-24	animal feeding stuff
423 ¹⁾	Determination of 4-hydroxyproline by spectrophotometry and determination of collagen by calculation from measured values	CZ_SOP_D06_04_481 (ISO 3496)	meat products
424 ¹⁾	Determination of fat content by NMR method	CZ_SOP_D06_04_482 (Journal of AOAC International vol 88, No1,2005; Journal of AOAC International vol 86, No6, 2003)	selected food, raw materials for production of food, food supplements
425 ¹⁾	Determination of peroxide value volumetrically	ČSN EN ISO 3960	fat, vegetable oils
426 ¹⁾	Determination of water activity by capacitive sensors method	ČSN ISO 21807	food, raw materials for production of food, food supplements

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 34 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
427 ¹⁾	Determination of net muscle protein by calculation from content of collagen and protein	CZ_SOP_D06_04_485	meat, meat products
428 ¹⁾	Identification of synthetic dyes ⁵⁷⁾ by thin-layer chromatography method	CZ_SOP_D06_04_486 (Davídek J., Laboratory manual of Food Analysis, 1981)	food
429 ¹⁾	Determination of piperine content by spectrophotometry	ČSN ISO 5564 (580192)	black pepper and white pepper, whole or ground
430 ¹⁾	Determination of starch in meat products	CZ_SOP_D06_04_488 (BS 4401 Part 12:1979 Determination of Starch Content of Meat Products)	meat products
431 ¹⁾	Determination of total sulphur dioxide	CZ_SOP_D06_04_489 (Prof.Ing.J.Davídek, DrSc. et al.: Laboratory Guide to Food Analysis, SNTL 1981, Aplication notes No. 33 Villa Labeco)	food and raw materials for the production of food, food supplements
432 ¹⁰⁾	Sensory analysis – descriptive test	CZ_SOP_D06_04_490 (ČSN ISO 6658, ČSN ISO 8589, ČSN ISO 13299, ČSN ISO 13300)	food, cosmetics, food packaging materials, consumer goods
433 ¹⁰⁾	Sensory analysis, comparison with a standard	CZ_SOP_D06_04_491 (ČSN ISO 6658, ČSN ISO 8589, ČSN ISO 13299, ČSN ISO 13300)	food, cosmetics, food packaging materials, consumer goods
434 ¹⁰⁾	Assessment of characteristic features of food	CZ_SOP_D06_04_492 (ČSN ISO 8589, ČSN ISO 13299, ČSN ISO 13300)	food

Used abbreviations

AHEM	Acta hygienica, epidemiologica et microbiologica
AITM	Airbus methods
BDE	Brominated Diphenyl Ethers
BFR	Brominated flame retardants
Bioindicators	Fresh water and sea water plankton
Biological material	Blood, tissues, mother's milk, urine, sweat
CFA	Continuous Flow Analyser
ČL	Czech Pharmacopoeia
DIN	Deutscher Institut fuer Normung
EC	Electrochemical detection
ECD	Electron Capture Detector
Emissions	Filters, liquid and solid sorbents, condensates, fly ash
SPMD Extracts	SPMD from surface water, ground water and immissions
FID	Flame Ionization Detector
FLD	Fluorescence Detector
HRGC/HRMS	High Resolution Gas Chromatography/High Resolution Mass Spectrometry

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 35 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Immissions	Filters, solid sorbents
IP	International Petroleum test method
IR	Infrared Region Detector
ISE	Ion Selective Electrode
ISO	International Organization for Standardisation
Liquid samples	Industrial liquids, technological liquids, technological baths
Contaminated surfaces	Food industry premises, walls after fire, walls of technological plants
LSC	Liquid Scintillation Counting method for the determination of alpha- or beta- radiation emitting radionuclides
MS	Mass Detector
MUFA	Monounsaturated Fatty Acids
NEN	Nederlands Normalisatie-Institut
NIOSH	National Institute for Occupation Safety and Health
NIOSH ¹⁾	Methods used for CZ_SOP_D06_03_153 - NIOSH 1400, NIOSH 1450, NIOSH 1457, NIOSH 1500, NIOSH 1501, NIOSH 1003, NIOSH 1005, NIOSH 1007, NIOSH 1022, NIOSH 1602, NIOSH 1609
GR	Government Regulation
PhEur	European Pharmacopoeia
PDA	Photo-Diode-Array detector
Solid samples	Waste (solid, liquid, biowaste), sediments, sludge, soils, rocks, filters from emission and immission samples
Gases	Gases from biogas plants, landfill gases
Working environment	Filters, solid sorbents, tubes
PUFA	Polyunsaturated Fatty Acids
RI	Refractometric Detector
Vegetable materials	Green plants (root, flower, green parts), pollen
SAFA	Saturated Fatty Acids
SFS	The Finish Standard Association
SM	Standard Methods – Standard US methods for the analysis of drinking and waste water prepared and issued by American Public Health Association, American Water Works Association and Water Environmental Federation
SOP	Standard operating procedure
SPIMFAB	SPI MILJOSANERINGSFOND AB – method of Swedish Petroleum Institute
SPMD	Semi-Permeable Membrane Device
SÚJB	State Office for Nuclear Safety
Sum of Ca+Mg	Water hardness
TCD	Thermal Conductivity Detector
TEQ	Toxic Equivalent
TFA	Trans Fatty Acids
TNV	Branch Technical Standard of Water Management
Treated water	Water for dialysis, aqua purificata, process, industrial, boiler and cooling water, irrigation water, water supplied by piping or taken from various reservoirs
US EPA	U.S. Environmental Protection Agency
USP	US Pharmacopoeia
UV	Ultraviolet Detector
Water	Drinking, bottled, natural, mineral, pool, hot, bathing, raw, underground, surface, waste, sea water

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 36 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Selected food	Food, raw materials for the production of food, food supplements and feedstuffs, except samples of listed matrices with humidity above 95%, unprocessed cereals and condensed milk
Extracts	Aqueous extracts of soils, sediments and waste according to valid legislation
Extracts	Extracts are usually prepared according to standards ČSN EN 12457-2, ČSN EN 12457-3, ČSN EN 12457-4, US EPA 1311, US EPA 1312. The extract preparation method is always indicated in the test report.
Animal materials	Insects

Tests identified by ordinal number:

- with index ^{*} are carried out outside the laboratory premises
- with index ¹⁾ are carried out on the site in Prague, Na Harfě 336/9
- with index ²⁾ are carried out on the site in Česká Lípa
- with index ³⁾ are carried out on the site in Pardubice
- with index ⁴⁾ are carried out on the contact and sampling place in Brno
- with index ⁵⁾ are carried out on the contact and sampling place in Ostrava
- with index ⁶⁾ are carried out on the contact and sampling place in Plzeň
- with index ⁷⁾ are carried out on the contact and sampling place in Lovosice
- with index ⁸⁾ are carried out on the contact and sampling place in Rožnov pod Radhoštěm

Explanation

Volatile organic compounds¹⁾ – 1,1,1,2-tetrachloroethane, 1,1,1-trichloroethane, 1,1,2,2-tetrachloroethane, 1,1,2-trichloroethane, 1,1-dichloroethane, 1,1-dichloroethylene, 1,1-dichloropropylene, 1,2,3-trichlorobenzene, 1,2,3-trichloropropane, 1,2,3-trimethylbenzene, 1,2,4,5-tetramethylbenzene, 1,2,4-trichlorobenzene, 1,2,4-trimethylbenzene, 1,2-dibromo-3-chloropropane, 1,2-dibromomethane, 1,2-dichlorobenzene, 1,2-dichloroethane, 1,2-dichloropropane, 1,3,5-trichlorobenzene, 1,3,5-trimethylbenzene, 1,3-dichlorobenzene, 1,3-dichloropropane, 1,4-dichlorobenzene, 1,4-dioxane, 1-chloronaphthalene, 1-propanol, 2,2-dichloropropane, 2-butanol, 2-butoxyethyl acetate, 2-ethyl-1-hexanol, 2-ethylhexanol, 2-ethyltoluene, 2-chlorotoluene, 2-methylhexane, 2-methyl-1-butanol, 2-propanol, 3-ethyltoluene, 3-caren, 4-ethyltoluene, 4-phenylcyclohexene, 4-chlorotoluene, 4-isopropyltoluene, acetone, alpha-pinene, alpha-terpinene, benzene, beta-pinene, bromobenzene, bromodichloromethane, bromochloromethane, bromomethane, bromoform, cis-1,2-dichloroethylene, cis-1,3-dichloropropylene, cyclohexane, cyclohexanone, diacetone alcohol, dibromochloromethane, dibromomethane, dichlorodifluoromethane, dichloromethane, ethanol, ethyl acetate, ethyl terc-butyl ether (ETBE), ethylbenzene, hexachlorobutadien, hexanal, chlorobenzene, chloroethane, chloromethane, chloroform, i-butyl acetate, isobutanol, isooctane, isopropylbenzene, limonene, methanol, methyl tert-butyl ether, methylecyclohexane, methylcyclopentane, methylethylketone, methylisobutylketone, methylmerkaptan, dimethylmerkaptan, m-xylene, naphthalene, n-butanol, n-butyl acetate, n-butylbenzene, n-decane, n-dodecane, n-heptane, n-hexadecane, n-hexane, n-nonane, n-octane, n-pentane, n-propylbenzene, n-tetradecane, n-tridecane, n-undecane, o-xylene, p-xylene, oil hydrocarbons, sec-butylbenzene, styrene, terc-butyl acetate, tert-butylbenzene, tetrahydrofuran, tetrachloroethene, tetrachloromethane, toluene, trans-1,2-dichloroethylene, trans-1,3-dichloropropylene, trichloroethene, trichlorofluoromethane, vinyl acetate, vinylchloride, calculation of sums according to CZ_SOP_D06_03_J02

Volatile organic compounds²⁾ – 1,1,1-trichloroethane, 1,1,2,2-tetrachloroethane, 1,1,2-trichloro-1,2,2-trifluoroethane, 1,1,2-trichloroethane, 1,1-dichloroethane, 1,1-dichloroethylene, 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,2,4-trimethylbenzene, 1,2-dichloro-1,1,2,2-tetrafluoroethane, 1,2-dichlorobenzene, 1,2-dichloroethane, 1,2-dichloropropane, 1,3,5-trichlorobenzene, 1,3,5-trimethylbenzene, 1,3-butadien, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,4-dioxane, 2-butanon, 2-hexanone, 2-propanol, 4-ethyltoluene, acetone, benzene, bromomethane, cis-1,2-dichloroethylene, cyclohexane, dichloromethane, ethanol, ethylbenzene, hexachlorobutadien, chlorobenzene, chloroethane, chloromethane, chloroform, isoocetane, isopropylbenzene, methylecyclohexane, methylisobutylketone, m-xylene, n-heptan-hexane, n-propylbenzene, o-xylene, p-xylene, carbon disulphide, styrene, tetrahydrofuran, tetrachloroethene, tetrachloromethane, toluene, trans-1,2-dichloroethylene, trichloroethene, trichlorofluoromethane, vinylchloride, calculation of sums according to CZ_SOP_D06_03_J02

Volatile organic compounds³⁾ – 1,1,1,2-tetrachloroethane, 1,1,1-trichloroethane, 1,1,2,2-tetrachloroethane, 1,1,2-trichloroethane, 1,1-dichloroethane, 1,1-dichloroethene, 1,1-dichloropropene, 1,2,3,5-tetramethylbenzene, 1,2,3-trichlorobenzene, 1,2,3-trichloropropane, 1,2,3-trimethylbenzene, 1,2,4,5-tetramethylbenzene, 1,2,4-trichlorobenzene, 1,2,4-trimethylbenzene, 1,2,5-trimethylbenzene, 1,2-dibromo-3-chloropropane, 1,2-dibromomethane, 1,2-diethylbenzene, 1,2-dichlorobenzene, 1,2-dichloroethane, 1,2-dichloropropane, 1,3,5-trimethylbenzene, 1,3-dichlorobenzene, 1,3-dichloropropane, 1,4-diethylbenzene, 1,4-dichlorobenzene, 1,4-dioxane, 1-ethyl-2-methylbenzene, 1-ethyl-2-methylbenzene, 1-ethyl-3-methylbenzene, 1-ethyl-4-methylbenzene, 2,2-dichloropropane, 2-chlorotoluene, 4-chlorotoluene, acetone, aliphates >C5-C8, aliphates >C8-C10, benzene, bromobenzene, bromodichloromethane, bromochloromethane, bromomethane, bromoform, cis-1,2-dichloroethene, cis-1,3-dichloropropene, dibromochloromethane, dibromomethane, dichlorodifluoromethane, dichloromethane, diisopropylether, ethanol, ethylbenzene, ethyl-terc-butylether, hexachlorobutadien, chlorobenzene, chloroethane, chloromethane, chloroform, indane, isobutanol, isobutylacetate, isopropylbenzene, izopropylbenzene, MTBE, m-xylene, naphthalene, n-butanol, n-butylacetate, n-butylbenzene, n-propylbenzene, o-xylene,

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 37 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

p-isopropyltoluene, p-xylene, sec-butanol, sec-butylacetate, sec-butylbenzene, styrene, TAAE, TBA, terc-amylmethylether, terc-butanol, terc-butylacetate, terc-butylbenzene, tetraethyllead, tetrachloroethene, tetrachloromethane, toluene, trans-1,2-dichloroethene, trans-1,3-dichloropropene, trichloroethene, trichlorofluoromethane, vinylchloride, calculation of sums according to CZ_SOP_D06_03_J02

Volatile organic compounds⁴⁾ – 1,1-dichlorethylene, 1,2-dichlorethane, 1,4-dioxane, benzene, dichloromethane, ethylbenzene, hydrocarbon fractions C5(C6)-C12, chloroform, cis-1,2-dichloroethylene, m-xylene, naphthalene, o-xylene, p-xylene, styrene, tetrachloroethylene, tetrachloromethane, toluene, trans-1,2-dichloroethylene, trichloroethylene, vinylchloride, calculation of sums acc. to CZ_SOP_D06_03_J02

Organic contaminants⁵⁾ – aliphates >C5-C8, aliphates >C8-C10, benzene, toluene, ethylbenzene, o-xylene, m-xylene, p-xylene, MTBE (methyl-terc-butyl ether), 1,2-dichloroethane, 1,2-dibromomethane, aliphates >C10-C12, aliphates >C12-C16, aliphates >C16-C35, 1-ethyl-3-methylbenzene, 1-ethyl-4-methylbenzene, 1-ethyl-2-methylbenzene, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene, 1,2,3-trimethylbenzene, 1,3-diethylbenzene, 1,4-diethylbenzene, 1,2-diethylbenzene, 1,2,4,5-tetramethylbenzene, naphthalene, 2-methylnaphthalene, 1-methylnaphthalene, biphenyl, 2+1-ethylnaphthalene, 1,7-dimethylnaphthalene, 2,6-dimethylnaphthalene, 1,4+2,3-dimethylnaphthalene, acenaphthylene, 1,8-dimethylnaphthalene, acenaphthene, 2,3,5-trimethylnaphthalene, fluorine, phenanthrene, anthracene, 2-methylanthracene, 1-methylanthracene, 2-methylphenanthrene, 1-methylphenanthrene, fluoranthene, pyrene, benzo-(a-anthracene, chrysene, benzo-(b)-fluoranthene, benzo-(k)-fluoranthene, benzo-(a)-pyrene, indeno-(1,2,3,c,d)-pyrene, dibenzo-(a,h)-anthracene, benzo-(g,h,i)-perylene, methylpyrenes/ methylfluoranthenes, methylchrysenes/ methylbenzo-[a]-anthracenes, 1,2-dichlorobenzen, 1,3-dichlorobenzen, 1,2,4-trichlorobenzen, 1,3,5-trichlorobenzen, 1,2,3,4-tetrachlorobenzen, 1,2,4,5-tetrachlorobenzen, 1,2,3,5-tetrachlorobenzen, pentachlorobenzene, hexachlorobenzene, PCB 28, PCB 52, PCB 101, PCB 118, PCB 153, PCB 138, PCB 180, sums calculation according to CZ_SOP_D06_03_J02

Phenols, chlorinated phenols and cresols⁶⁾ – 2-chlorophenol, 3-chlorophenol, 4-chlorophenol, 2,6-dichlorophenol, 2,4+2,5-dichlorophenol, 3,5-dichlorophenol, 2,3-dichlorophenol, 3,4-dichlorophenol, 2,4,6-trichlorophenol, 2,3,6-trichlorophenol, 2,3,5-trichlorophenol, 2,4,5-trichlorophenol, 2,3,4-trichlorophenol, 3,4,5-trichlorophenol, 2,3,5,6-tetrachlorophenol, 2,3,4,6-tetrachlorophenol, 2,3,4,5-tetrachlorophenol, pentachlorophenol, 4-chloro-2-methylphenol, 2-chloro-6-methylphenol, phenol, o-cresol, m-cresol, p-cresol, 2,3-dimethylphenol, 2,4-dimethylphenol, 2,5-dimethylphenol, 2,6-dimethylphenol, 3,5-dimethylphenol, 3,4-dimethylphenol, 1-naftole, 2-naftole, sums calculation according to CZ_SOP_D06_03_J02

Phthalates⁷⁾ – dimethylphthalate, diethylphthalate, di-n-propylphthalate, di-n-buthylphthalate, diisobutylphthalate, dipentylphthalate, di-n-octylphthalate, bis-(2-ethylhexyl)-phthalate (DEHP), butylbenzylphthalate, dicyclohexyl phthalate, di-iso-nonylphthalate, di-isodecylphthalate, sums calculation according to CZ_SOP_D06_03_J02

Sugars⁸⁾ – glucose, fructose, lactulose, maltose, sucrose

Semi-volatile organic compounds⁹⁾ – acenaphthene, acenaphthylene, anthracene, benzo-(a)-anthracene, benzo-(a)-pyrene, benzo-(a)-fluoranthene, benzo-(b)-fluoranthene, benzo-(g,h,i)-perylene, benzo-(k)-fluoranthene, dibenzo-(a,h)-anthracene, phenanthrene, fluoranthene, fluorine, chrysene, indenopyrene, naphthalene, pyrene, hexachlorobutadiene, hexachloroethane, aldrin, o,p'-DDD, o,p'-DDE, o,p'-DDT, p,p'-DDD, p,p'-DDE, p,p'-DDT, dieldrin, α -endosulphane, β -endosulphane, endrin, telodrin, isodrin, heptachlor, cis-heptachloroepoxide, trans-heptachloroepoxide, α -HCH, β -HCH, γ -HCH, δ -HCH, alachlor, methoxychlor, pentachlorobenzene, hexachlorobenzene, 1,2,3,4-tetrachlorobenzene, 1,2,3,5-tetrachlorobenzene, 1,2,4,5-tetrachlorobenzene, trifluraline, PCB28, PCB52, PCB101, PCB118, PCB138, PCB153, PCB180, PCB194, dichlobenile, ε -HCH, octachlorostyrene, di-n-buthylphthalate, bis(2-ethylhexyl) phthalate (DEHP), endosulfan-sulphate, mirex, cis-chlordane, trans-chlordane, oxychlordane, cis-nonachlor, trans-nonachlor, PBB 153, pentachlortoluene, sums calculation according to CZ_SOP_D06_03_J02

Polycyclic aromatic hydrocarbons¹⁰⁾ – naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo-(a)-anthracene, chrysene, benzo-(b)-fluoranthene, benzo-(k)-fluoranthene, benzo-(a)-pyrene, dibenzo-(a,h)-anthracene, benzo-(g,h,i)-perylene, indeno-(1,2,3,c,d)-pyrene, coronene, sums calculation according to CZ_SOP_D06_03_J02

Polychlorinated biphenyls¹¹⁾ – PCB28, PCB52, PCB101, PCB118, PCB138, PCB153, PCB180, sums calculation according to CZ_SOP_D06_03_J02

Organochlorine pesticides and other halogen compounds¹²⁾ – 1,2,3,4-tetrachlorobenzene, 1,2,3,5-tetrachlorobenzene, 1,2,4,5-tetrachlorobenzene, 2,4'-DDD (TDE), 2,4'-DDE, 2,4'-DDT, 4,4'-DDD (TDE), 4,4'-DDE, 4,4'-DDT, alachlor, aldrin, bis(2-ethylhexyl)phthalate (DEHP), cis-heptachloroperoxide, cis-chlordane, cis-nonachlor, dieldrin, dichlobenil, endosulfan-sulfate, endrin, heptachlor, hexabromobiphenyl (PBB 153), hexachlorobenzene, hexachlorobutadiene, hexachloroethane, isodrin, methoxychlor, mirex, octachlorostyrene, oxychlordane, pentachlorobenzene, telodrin (isobenzene), toxaphene, trans-heptachloroperoxide, trans-chlordane, trans-nonachlor, trifluralin, α -endosulphan, β -endosulphan, β -HCH, γ -HCH (Lindane), δ -HCH, ε -HCH, calculation of sums according to CZ_SOP_D06_03_J02

PCDD/PCDF¹³⁾ – 2,3,7,8-TCDD, 1,2,3,7,8-PeCDD, 1,2,3,4,7,8-HxCDD, 1,2,3,6,7,8-HxCDD, 1,2,3,7,8,9-HxCDD, 1,2,3,4,6,7,8-HpCDD, OCDD, 2,3,7,8-TCDF, 1,2,3,7,8-PeCDF, 2,3,4,7,8-PeCDF, 1,2,3,4,7,8-HxCDF, 1,2,3,6,7,8-HxCDF, 1,2,3,7,8,9-HxCDF, 2,3,4,6,7,8-HxCDF, 1,2,3,4,6,7,8-HpCDF, 1,2,3,4,7,8,9-HpCDF, OCDF, TEQ parameters calculation according to CZ_SOP_D06_06_J03

PCB¹⁴⁾ – PCB101, PCB105, PCB114, PCB118, PCB123, PCB126, PCB138, PCB153, PCB156, PCB157, PCB167, PCB169, PCB170, PCB180, PCB189, PCB209, PCB28, PCB52, PCB77, PCB81, PCB37, sums and TEQ parameters calculation according to CZ_SOP_D06_06_J03

BFR¹⁵⁾ – tri-BDE 28, tetra-BDE 47, tetra-BDE 66, tetra-BDE 77, penta-BDE 85, penta-BDE 99, penta-BDE 100, hexa-BDE 138, hexa-BDE 153, hexa-BDE 154, hepta-BDE 183, BDE 203, deca-BDE 209, BB 209, sums calculation according to CZ_SOP_D06_06_J03

Alkylphenols, alkylphenolethoxylates¹⁶⁾ – 4-nonylphenol (mixture of isomers), 4-n-nonylphenol, 4-nonylphenol monoethoxylate (mixture of isomers), 4-nonylphenol diethoxylate (mixture of isomers), 4-nonylphenol triethoxylate (mixture of isomers), 4-n-octylphenol, 4-tert-octylphenol, 4-tert-octylphenol monoethoxylate, 4-tert-octylphenol diethoxylate, 4-tert-octylphenol triethoxylate, bisphenol A, sums calculation according to CZ_SOP_D06_03_J02

Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016

Page 38 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Fatty acids¹⁸⁾ – butyric, caprylic, caprilic, caprinic, undecaneoic, lauric, tridecaneoic, myristic, pentadecaneoic, palmitic, heptadecaneoic, stearic, arachidic, heneicosanoic, behenic, tricosanoic, lignoceric, myristoleic, cis-10-pentadecenoic, palmitoleic, cis-10-heptadecenoic, elaidic, oleic, cis-11-eicosenoic, erucic, nervonic, linolelaidic, linoleic, γ -linolenic, linolenic, cis-11,14-eicosadienoic, cis-8,11,14-eicosatrienoic, cis-11,14,17-eicosatrienoic, arachidonic, cis-13,16-docosadienoic, cis-5,8,11,14,17-eicosapentaenoic, cis-4,7,10,13,16,19-docosahexaenoic, elaidic

Aniline and aniline derivates²¹⁾ – p-chloroaniline

Vitamine D²²⁾ – vitamine D2 and vitamine D3

Substitute sweeteners²³⁾ – aspartame, acesulfam-K, saccharine, neohesperidine DC

Preservatives²⁴⁾ – sorbic acid, benzoic acid

Radionuklidý²⁵⁾ – Radionuclides emitting gamma rays in the energy interval 46,5 – 1836 keV.

Glycols²⁶⁾ - 1,2-propandiol, monopropylenglycol (as C), ethylenglycol, ethylenglycol (as C), 1,3-butandiol, diethylenglycol, diethylenglycol (as C), triethylenglycol, triethylenglycol (as C)

Semi-volatile organic compounds (isotopic dilution)²⁷⁾ - naphthalene, acenaphthylene, acenaphthene, fluorine, phenanthrene, anthracene, fluoranthene, pyrene, benzo-(a)-anthracene, chrysene, benzo-(b)-fluoranthene, benzo-(k)-fluoranthene, benzo-(a)-pyrene, dibenzo-(a,h)-anthracene, benzo-(g,h,i)-perylene, indeno-(1,2,3,c,d)-pyrene, PCB28, PCB52, PCB101, PCB118, PCB138, PCB153, PCB180, hexachlorbenzene, sums calculation according to CZ_SOP_D06_03_J02

Alkylphenols, alkylphenolethoxylates²⁸⁾ - 4-nonylphenol (mixture of isomers), 4-nonylphenol monoethoxylate (mixture of isomers), 4-nonylphenol diethoxylate (mixture of isomers), 4-nonylphenol triethoxylate (mixture of isomers), 4-tert-octylphenol, 4-tert-octylphenol monoethoxylate, 4-tert-octylphenol diethoxylate, 4-tert-octylphenol triethoxylate, sums calculation according to CZ_SOP_D06_03_J02

Acid herbicides, drug residues and other pollutants²⁹⁾ - 2,4,5-T, 2,4,5-TP, 2,4-D, 2,4-DB, 2,4-DP, 2,4-DP (isomers), 4-CPP, acifluorfen, aminopyralid, bentazon, bromoxynil, diclofop, dichlorprop-P, dicamba, diklofenac, dinoseb, dinoterb, DNOC, fluroxypyr, ibuprofen, ioxynil, clopyralid, caffeine, MCPA, MCPB, MCPP, MCPP (isomers), mecoprop-P, PFOA, PFOS, picloram, propoxycarbazone-sodium, triclosan, triclopyr, calculation of sums according to CZ_SOP_D06_03_J02

Acid herbicides and drug residues^{29A)} - 2,4,5-T, 2,4,5-TP, 2,4-D, 2,4-DB, 2,4-DP (isomers), 4-CPP, acifluorfen, bentazone, bromoxynil, diclofop, dicamba, DNOC, fluroxypyr, ioxynil, MCPA, MCPB, MCPP (isomers), propoxycarbazone-sodium, triclosan, triclopyr

Pesticides, pesticide metabolites, drug residues and other pollutants³⁰⁾ - 1-(3,4-dichlorophenyl) urea (DCPU), 17-alpha-ethinylestradiol, 17-beta-estradiol, 2-amino-N-(isopropyl)benzamide, 2-chloro-2,6-diethylacetanilide, 2-isopropyl-6-methyl-4-pyrimidinol, 3,4-dichloroaniline (DCA), 3-chloro-4-methylaniline, 6-chloronicotinic acid, acetamiprid, acetochlor, acetochlor ESA, acetochlor OA, acibenzolar-S-methyl, aclonifen, acrylamide, alachlor, alachlor ESA, alachlor OA, aldicarb, aldicarb sulfone, aldicarb sulfoxide, aldoxycarb, ametryn, amidithion, amidosulfuron, amitraz, anilazine, asulam, atraton, atrazine, atrazine-2-hydroxy, atrazine-desethyl, atrazine-desethyl-disopropyl, atrazine-desisopropyl, azaconazole, azinphos-ethyl, azinphos-methyl, azoxystrobin, azoxystrobin o-demethyl, BAM (2,6-dichlorobenzamide), BDMC, benalaxyl, bendiocarb, bentazone, bentazone methyl, bifenox, bifenthrin, bitertanol, boskalid, bromacil, bromofos-ethyl, bromoxynil, buprofezin, cadusafos, clofentezine, coumafos, cyanazine, cyflufenamid, cyhalothrin, cymoxanil, cypermethrin, cyprazine, cyprodinil, cyproconazole, cyromazine, DEET, deltamethrin, desmedifam, desmetryn, diazinon, diethofencarb, difenconazol, difenoxuron, diflubenzuron, diflufenican, dichlofenthion, dichlormid, dichlorvos, dicrotophos, diquat, dimefuron, dimethachlor, dimethenamid, dimethylaminosulfanilid, dimethoate, dimethomorph, dimoxystrobin, diuron, diuron desmethyl (DCPMU), epoxiconazole, EPTC, estriol, estron, ethiofencarb, ethion, ethofumesate, ethoprophos, ethoxazol, famoxadon, famphur, fenamiphos, fenamiphos sulfone, fenamiphos sulfoxide, fenarimol, fenhexamid, phenmedipham, fenothiocarb, fenoxaprop, fenoxycarb, fenpropidin, fenpropimorph, fensulfothion, fenuron, fipronil, fipronil sulfone, florasulam, fluazifop, fluazifop-butyl, fluazifop-butyl (isomers), fluazifop-P, fluazifop-p-butyl, fludioxonil, fluopyram, fluquinconazole, flusilazol, flutolanil, fonofos, foramsulfuron, phorate, phosalone, phosphamidon, phosmet, phosmet-oxon, fosthiazate, furalaxy, furathiocarb, haloxyfop, haloxyfop-2-ethoxyethyl, haloxyfop-p-methyl, hexaconazole, hexazinone, hexythiazox, chlorantraniliprole, chlorbromuron, chlorfenvinphos, chloridazon, chloridazon-desphenyl, chloridazon-methyl desphenyl, chlormequat, chlorotoluron, chloroxuron, chlorpropham, chlorpyrifos, chlorpyrifos-methyl, chlorsulfuron, chlorotoluron-desmethyl, imazalil, imazamethabenz-methyl, imazamox, imazapyr, imazethapyr, imidacloprid, imidacloprid olefin, imidacloprid urea, indoxacarb, iprodione, iprovalicarb, irgarol, isoproturon, isoproturon-desmethyl, isoproturon-monodesmethyl, isopyrazam, carbamazepin, carbaryl, carbendazim, carbetamide, carbofuran, carbofuran-3-hydroxy, carboxin, carfentrazone-ethyl, clodinafop, clodinafop propargil, clomazone, clomeprop, clothianidin, kresoxim-methyl, crimidine, lenacil, linuron, malathion, mandipropamid, MCPA, MCPP, mefenpyr-diethyl, mecarbam, mepiquat metsulfuron-methyl, mesosulfuron-methyl, mesotrione, mestranol, metalaxyl, metalaxyl (isomers), metamitron, metazachlor, metazachlor ESA, metazachlor OA, methabenzthiazuron, methamidophos, methidathion, methiocarb, methiocarb sulfone, methiocarb sulfoxide, methomyl, methomyl oxime, methoxyfenozide, metconazole, metabromuron, metolachlor, metolachlor (isomers), metolachlor (S), metolachlor ESA, metolachlor OA, metoxuron, metrafenone, metribuzin, metribuzin-desamino, metribuzin-desamino diketo, metribuzin-diketo, molinate, monocrotophos, monolinuron, myclobutanil, napropamid, naptalam, neburon, nicosulfuron, norflurazon, nuarimol, omethoate, oxadiazon, oxadixyl, oxamyl, oxyfluorfen, paclbutrazol, paraquat, paraoxon-ethyl, paraoxon-methyl, parathion-ethyl, pencycuron, pendimethalin, penconazole, permethrin, pethoxamid, picloram, picoxystrobin, pirimiphos-ethyl, pirimiphos-methyl, pirimicarb, p-isopropylaniline, pretilachlor, primisulfuron-methyl, prodiamine, prophan, profenofos, prochloraz, promecarb, prometon, prometryn, propachlor, propachlor ESA, propachlor OA, propamocarb, propanil, propaquizafop, propazine, propiconazole, propoxur, propoxycarbazone-sodium, propylene thiourea, propyzamide, prosulfocarb, prothioconazol, pyraclostrobin, pyribenzoxim, pyridaben, pyrimethanil, pyriproxyfen, quinalphos, quinclorac, quinmerac, quinoxifen, quizalofop, quizalofop-p-ethyl, rimsulfuron, sebutylazine, secbumeton, sedaxane, sethoxydim, simazine, simazine-2-hydroxy, simetryn, spiroxamine, sulfamethoxazol, sulfosulfuron, tau-fluvalinate, tebufenpyrad, tebuconazole, tebutiuron, teflubenzuron, terbutylazine, terbutylazine-desethyl, terbutylazine-desethyl-2-hydroxy, terbutylazine-hydroxy, terbutryn, thiabendazole, thiacloprid, thiamethoxam, thiazafuron, thidiazuron, thifensulfuron-methyl, thiobencarb, thiophanate-methyl, tolkofof-methyl, triadimenol, tri-allate, triasulfuron, triazophos, tribenuron-methyl,

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 39 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

tricyclazole, trifloxystrobin, trifloxsulfuron sodium, triflumizole, triflumuron, triflusulfuron-methyl, triforine, trinexapac-ethyl, triticonazole, tritosulfuron, warfarin, zoxamide, calculation of sums according to CZ_SOP_D06_03_J02

Pesticides, pesticide metabolites and drug residues^{30A)} – 6-chloronicotinic acid, acetamiprid, acetochlor, alachlor, aldicarb sulfone, aldicarb sulfoxide, ametryn, amitraz, atrazine, atrazine-2-hydroxy, atrazine-desethyl, atrazine-desisopropyl, bifenthrin, cadusafos, cyanazine, cyhalothrin, cypermethrin, deltamethrin, desmetyl, diazinon, dichlorvos, dicrotophos, dimethoate, diuron, epoxiconazole, fenoxycarb, fipronil, fipronil sulfon, fonofos, phorate, phosalone, phosphamidon, phosmet, phosmet-oxon, hexazinone, chlormequat, chlorotoluron, chlorpyrifos, imidacloprid, imidacloprid olefin, imidacloprid urea, iprovalicarb, isoproturon, isoproturon-desmethyl, isoproturon-monodesmethyl, carbaryl, carbofuran, carbofuran-3-hydroxy, clomazone, clothianidin, kresoxim-methyl, malaoxon, malathion, mepiquat, metamitron, metazachlor, methidathion, methiocarb sulfon, methiocarb sulfoxide, methomyl, methomyl-oxim, metconazole, metolachlor (isomers), metribuzin, pendimethalin, permethrin, pethoxamid, picloram, prochloraz, prometon, prometryn, propaquazafop, propazine, propoxur, sebutylazine, simazine, simetryn, tau-fluvalinate, terbutylazine, terbutylazine-desethyl, terbutylazine-hydroxy, terbutryn, thiacloprid, thiameethoxam, calculation of sums according to CZ_SOP_D06_03_J02

Pesticides, pesticide metabolites and drug residues^{30B)} – 6-chloronicotinic acid, acetamiprid, acetochlor, aldicarb sulfone, aldicarb sulfoxide, amitraz, bifenthrin, cadusafos, cyhalothrin, cypermethrin, deltamethrin, diazinon, dichlorvos, dicrotophos, dimethoate, epoxiconazole, fenoxycarb, fipronil, fipronil sulfon, phosphamidon, phosmet, phosmet-oxon, chlormequat, chlorpyrifos, imidacloprid, imidacloprid olefin, imidacloprid urea, iprovalicarb, isoproturon, isoproturon-desmethyl, isoproturon-monodesmethyl, carbaryl, carbofuran, carbofuran-3-hydroxy, clomazone, clothianidin, kresoxim-methyl, malaoxon, malathion, mepiquat, metazachlor, methidathion, methiocarb sulfon, methiocarb sulfoxide, methomyl, methomyl-oxim, metconazole, metolachlor (isomers), metribuzin, pendimethalin, permethrin, pethoxamid, picloram, prochloraz, prometon, prometryn, propaquazafop, propazine, propoxur, sebutylazine, simazine, simetryn, tau-fluvalinate, terbutylazine, terbutylazine-desethyl, terbutylazine-hydroxy, terbutryn, thiacloprid, thiameethoxam, calculation of sums according to CZ_SOP_D06_03_J02

Pesticides MS detection³¹⁾ - azinphos methyl, bromophos-ethyl, bromocyclen, butralin, captan, carbophenothion, demeton-S-methyl, diazinon, dichlorvos, dimethoate, dimethylipin, ethion, fenamiphos, fenthion, chlordicon, chlormequat, chlorpyrifos, chlorpyrifos methyl, malathion, monocrotophos, parathion ethyl, parathion methyl, phorate, phosmet, pirimiphos ethyl, prothifos, fenitrothion, temephos, sums calculation according to CZ_SOP_D06_03_J02

Pesticides and their metabolites MS detection³²⁾ - amitrole, AMPA, glufosinate, glufosinate ammonium, glyphosate, sums calculation according to CZ_SOP_D06_03_J02

Complexing substances³³⁾ - EDTA, PDTA and NTA

Halogen compounds³⁴⁾ - chloroalkanes C10-C13

SAFA, MUFA, PUFA, TFA, Omega 3, Omega 6³⁵⁾ – SAFA – butyric (C4:0), caproic (C6:0), caprylic (C8:0), capric (C10:0), undecanoic (C11:0), lauric (C12:0), tridecanoic (C13:0), miristic (C14:0), pentadecanoic (C15:0), palmitic (C16:0), heptadecanoic (C17:0), stearic (C18:0), arachidic (C20:0), heneicosanoic (C21:0), behenic (C22:0), tricosanoic (C23:0), lignoceric (C24:0), MUFA - myristoleic (C14:1), cis-10-pentadecenoic (C15:1), palmitoleic (C16:1), cis-10-heptadecenoic (C17:1), oleic (C18:1n9c), cis-11-eicosenic (C20:1), erudic (C22:1n9), nervonic (C24:1), PUFA - linolelaidic (C18:2n6c), linoleic (C18:3n6), y-linoleic (C18:3n3), cis-11,14-eicosadienoic (C20:2), cis-8,11,14-eicosatrienoic (C20:3n6), cis-11,14,17-eicosatrienoic (C20:3n3), arachidonic (C20:4n6), cis-13,16-docosadienoic (C22:2), cis-5,8,11,14,18-eikosapentaenoic (C20:5n3), cis-4,7,10,13,16,19-docosahexaenoic (C22:6n3), TFA - elaidic (C18:1n9t), linolelaidic (C18:2n6t), C18:3 trans isomers, Omega 3 - linoleic (C18:3n3), cis-11,14,17-eicosatrienoic (C20:3n3), cis-5,8,11,14,18-eicosapentaenoic (C20:5n3), cis-4,7,10,13,16,19-docosahexaenoic (C22:6n3), Omega 6 - linoleic (C18:2n6c), y-linoleic (C18:3n6), cis-8,11,14-eicosatrienoic (C20:3n6), arachidonic (C20:4n6), cis-11,14,eicosadienoic (C20:2), cis-13,16-dokosadienoic (C22:2)

Derivatives of polycyclic aromatic hydrocarbons³⁶⁾ – acridine, 9,10-anthracenequinone, benz[a]anthracene-7,12-dione, benzo[h]quinoline, 1,5-dinitronaphthalene, 9H-fluoren-9-one, 2-fluorenecarboxaldehyde, 1-naphthalenecarboxaldehyde, 5,12-naphthacenedione, 1-nitronaphthalene, 5-nitroacenaphthene, 9-nitroanthracene, nitropyrene, nitrofluoranthene, 6-nitrobenzo(a)pyrene, 2-nitrofluorene, 9,10-phenanthrenequinone, phenanthridine

Organic acids³⁷⁾ – formic acid, acetic acid, caproic acid, butyric acid, isobutyric acid, lactic acid, propionic acid, valeric acid, isovaleric acid

Gases³⁸⁾ – methane, ethane, ethylene, acetylene

Polychlorinated biphenyls³⁹⁾ - PCB28, PCB52, PCB101, PCB118, PCB138, PCB153, PCB180, PCB194, sums calculation according to CZ_SOP_D06_03_J02

Phenols and cresols⁴⁰⁾ – phenol, o-cresol, m-cresol, p-cresol, 2,3-dimethylphenol, 2,4-dimethylphenol, 2,5-dimethylphenol, 2,6-dimethylphenol, 3,5-dimethylphenol, 3,4-dimethylphenol, sums calculation according to CZ_SOP_D06_03_J02

Elements⁴¹⁾ - Ag, Al, As, Au, B, Ba, Be, Bi, Br, Ca, Cd, Ce, Co, Cr, Cr(VI), Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Ge, Ho, In, Ir, K, La, Li, Lu, Mg, Mn, Mo, Na, Nd, Ni, P, Pb, Pd, Pr, Pt, Rb, Rh, Ru, Sb, Sc, Se, Si, Sm, Sn, Sr, Tb, Te, Th, Ti, Tl, Tm, U, V, W, Y, Yb, Zn, Zr

Elements⁴²⁾ - Ag, Al, As, Au, B, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cr(VI), Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Ge, Ho, In, Ir, K, La, Li, Lu, Mg, Mn, Mo, Na, Nd, Ni, P, Pb, Pd, Pr, Pt, Rb, Rh, Ru, Sb, Sc, Se, Sm, Sn, Sr, Tb, Te, Th, Ti, Tl, Tm, U, V, W, Y, Yb, Zn, Zr

Elements⁴³⁾ - Ag, Al, As, Ba, Be, Bi, Br (water extractable), Ca, Cd, Co, Cr, Cs, Cu, Fe, I (water extractable, total), K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Pd, Pt, Rb, Rh, Sb, Se, Si, Sn, Sr, Te, Th, Ti, Tl, U, V, Zn, Zr

Elements⁴⁴⁾ - Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cs, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Pd, Pt, Rb, Rh, Sb, Se, Si, Sn, Sr, Te, Th, Ti, Tl, U, V, Zn, Zr

Elements⁴⁵⁾ - Ag, Al, As, Au, Ba, Be, Bi, Br (loužitelný vodou), Ca, Cd, Co, Cr, Cr(VI), Cu, Fe, I (loužitelný vodou), K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Pd, Pt, Rh, Sb, Se, Sn, Sr, Te, Th, Ti, Tl, U, V, Zn, Zr

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 40 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Semi volatile organic compounds⁴⁶⁾ – Naphthalene, Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene, Anthracene, Fluoranthene, Pyrene, Benz(a)anthracene, Chrysene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Dibenz(a,h)anthracene, Benzo(g,h,i)perylene, Indeno(1,2,3,c,d)pyrene, Coronene, PCB28, PCB52, PCB101, PCB118, PCB138, PCB153, PCB180

Elements⁴⁷⁾ - Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cr , Cr(VI), Cu, Fe, Hg, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Se, Si, Sn, Sr, Te, Ti, Tl, V, Zn, Zr

CO₂ forms⁴⁸⁾ - carbonates, bicarbonates, free CO₂, total CO₂, aggressive CO₂

Elements⁴⁹⁾ - Ag, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Na, Ni, Pb and Zn

Elements⁵⁰⁾ - Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, S, Se, Sb, Si, Sr, Sn, Te, Th, Ti, U, V, W, Zn and Zr

Calculation forms of elements⁵¹⁾ – sum of Na + K, ionic form Cr and Fe (Cr³⁺, Fe³⁺), compounds Na₂O, P₂O₅, SiO₃ and SiO₂

Stoichiometric calculation⁵²⁾ - ion form Cr³⁺, compound PO₄³⁻

Stoichiometric calculation⁵³⁾ – compound NaCl

Polyyclic aromatic hydrocarbons⁵⁴⁾ – naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo (a) anthracene, chrysene, benzo (b) fluoranthene, benzo (k) fluoranthene, benzo (a)-pyrene, benzo-(e)-pyrene, benzo-(j)-fluoranthene, benzo-(c)-phenanthrene, dibenzo (a, h) anthracene, benzo (g, h, i)-perylene, indeno (1,2,3, c, d) pyrene, phenanthrene-1-methyl, 2-methyl-phenanthrene, 3 - methyl phenanthrene, 4-methyl-phenanthrene, 9-methyl phenanthrene sums calculation according to CZ_SOP_D06_06_J03

Chlorinated phenols⁵⁵⁾ – 2-amino-4-chlorophenol

Drug Residues⁵⁶⁾ – anastrozole, atenolol, azathioprin, beclometasone dipropionate, ciclosporin, cyproterone acetate, diazepam, fluticasone propionate, capecitabine, loperamid hydrochlorid, medroxyprogesterone acetate, megestrol acetate, methotrexate, methylprednisolone acetate, metronidazol, mometasone furoate, mycofenolate mofetil, paclitaxel, sotalol hydrochloride, tacrolimus, thebain, tramadol hydrochloride, triamcinolone acetonide, valsartan, zolpidem tartrate

Synthetic dyes⁵⁷⁾ – **E102** (Tartrazine), **E104** (Quinoline yellow), **E110** (Yellow SY), **E122** (Azorubin), **E123** (Amaranth), **E124** (Ponceau 4R), **E127** (Erythrosin), **E128** (Red 2G), **E129** (Allura Red AC), **E131** (Patent Blue V), **E132** (Indigotine), **E133** (Brilliant Blue), **E142** (Green S), **E151** (Black BN)

Perfluorinated compounds⁵⁸⁾ – 6:2 FTS, 8:2 FTS, N-Et-FOSA, N-Et-FOSE, N-Me-FOSA, N-Me-FOSE, PFBA, PFBS, PFDA, PFDoA, PFDS, PFDoS, PFHpA, PFHpS, PFHxA, PFHxS, PFNA, PFOA, PFOS, PFOSA, PFPeA, PFTA, PFTrDA, PFUnA

Perfluorinated compounds^{58A)} – 6:2 FTS, 8:2 FTS, PFBA, PFBS, PFDA, PFDoA, PFDS, PFHpA, PFHpS, PFHxA, PFHxS, PFNA, PFOA, PFOS, PFOSA, PFPeA, PFUnA

Volatile organic compounds⁵⁹⁾ – benzene, toluene, ethylbenzene, m-xylene, p-xylene, styrene, o-xylene, metanol, ethanol, acetone, benzene, ethylacetate, isobutanol, n-butanol, 2-butanol, iso-butylacetate, butylacetate, tert-butylacetate

Elements⁶⁰⁾ - Ag, Al, As, Au, B, Ba, Be, Bi, Br (water-leachable) Ca, Cd, Ce, Co, Cr, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Ge, Hg, Ho, I (water-leachable) In, Ir, K, La, Li, Lu, Mg, Mn, Mo, Na, Nb, Nd, Ni, Os, P, Pb, Pd, Pr, Pt, Rb, Rh, Ru, Sb, Sc, Se, Sm, Sn, Sr, Ta, Tb, Te, Th, Ti, Tl, Tm, U, V, W, Y, Yb, Zn, Zr

Residual pharmaceuticals⁶¹⁾ – 17-alpha-ethinylestradiol, 17-beta-estradiol, anastrozole, atenolol, azathioprin, buprenorphine, butorphanol, cyclobenzaprine, cyclofosfamide, cyproteron acetate, diazepam, diclofenac, enalapril, estriol, estrone, flutamide, fluticasone propionate, furosemide, gemfibrozil, hydrochlorothiazide, chloramphenicol, ibuprofen, ifosfamide, iohexol, iomeprol, iopamidol, iopromid, capecitabine, carbamazepine, ketoprofen, caffeine, clofibrate acid, loperamide, medroxyprogesterone acetate, megestrol acetate, metoprolol, metronidazole, mycofenolate mofetil, naproxen, oxazepam, paclitaxel, paracetamol (acetaminofen), piroxicam, propranolol, salbutamol, sotalol, sulfamethoxazole, terbutaline, tramadol, triamcinolon acetonide, trimethoprim, valsartan, warfarin, zolpidem

Annex:

Flexible scope of accreditation

Ordinal numbers of tests
1-434

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.

No changes can be made by the laboratory in the tests not included in the annex (fixed scope of accreditation).

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 41 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Sampling:

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
1 ¹⁾²⁾⁴⁾⁵⁾⁶⁾⁷⁾⁸⁾	Sampling of grab sample of surface water manually	CZ_SOP_D06_07_V01 (ČSN EN ISO 5667-1, ČSN EN ISO 5667-3, ČSN ISO 5667-4, ČSN ISO 5667-6, ČSN ISO 5667-14)	surface water
2 ¹⁾²⁾⁴⁾⁵⁾⁶⁾⁷⁾⁸⁾	Sampling of grab sample of waste water manually	CZ_SOP_D06_07_V02 (ČSN EN ISO 5667-1, ČSN EN ISO 5667-3, ČSN ISO 5667-10, ČSN ISO 5667-14),	waste water
3 ¹⁾²⁾⁴⁾⁵⁾⁶⁾⁷⁾⁸⁾	Sampling of drinking water and hot drinking water manually	CZ_SOP_D06_07_V03 (ČSN EN ISO 5667-1, ČSN EN ISO 5667-3, ČSN ISO 5667-5, ČSN ISO 5667-14, ČSN EN ISO 5667-21, ČSN EN ISO 19458 Regulation 252/2004 Sb., Regulation SÚJB No. 307/2002 Sb.)	drinking water, hot drinking water
4 ¹⁾²⁾⁴⁾⁵⁾⁶⁾⁷⁾⁸⁾	Sampling of mixed sample of waste water manually and using an automatic sampler	CZ_SOP_D06_07_V04 (ČSN EN ISO 5667-1, ČSN EN ISO 5667-3, ČSN ISO 5667-10, ČSN ISO 5667-14, Regulation 293/2002 Sb.)	waste water
5 ¹⁾²⁾⁴⁾⁵⁾⁶⁾⁷⁾⁸⁾	Sampling of treated water manually	CZ_SOP_D06_07_V05 (ČSN EN ISO 5667-1, ČSN EN ISO 5667-3, ČSN ISO 5667-5, ČSN ISO 5667-7, ČSN ISO 5667-14)	treated water
6 ¹⁾²⁾⁴⁾⁵⁾⁶⁾⁷⁾⁸⁾	Sampling of water from artificial pool manually	CZ_SOP_D06_07_V06 (ČSN EN ISO 5667-1, ČSN EN ISO 5667-3, ČSN ISO 5667-5, ČSN ISO 5667-6, ČSN ISO 5667-14, ČSN EN ISO 19458, ČSN EN ISO 15288-2, Regulation No. 238/2011 Sb.)	pools water and filling water of artificial pools
7 ¹⁾²⁾⁴⁾⁵⁾⁶⁾⁷⁾⁸⁾	Sampling of grab sample of ground water manually and using pumps	CZ_SOP_D06_07_V07 (ČSN EN ISO 5667-1, ČSN EN ISO 5667-3, ČSN ISO 5667-11, ČSN ISO 5667-14, ČSN ISO 5667-18)	Ground water from boreholes and wells
8 ¹⁾²⁾⁴⁾⁵⁾⁶⁾⁷⁾⁸⁾	Sampling of surface swab manually	CZ_SOP_D06_07_V08 (ČSN 56 0100 Change 6, ČSN ISO 18593, Regulation 289/2007 Sb., ČSN EN ISO 5667-1, ČSN EN ISO 5667-3, ČSN ISO 5667-14)	contaminated surfaces
9 ¹⁾²⁾⁴⁾⁵⁾⁶⁾⁷⁾⁸⁾	Sampling of the sludge from sewage and treatment plants manually	CZ_SOP_D06_07_V09 (ČSN EN ISO 5667-1, ČSN EN ISO 5667-3, ČSN EN ISO 5667-13, ČSN ISO 5667-14, ČSN EN ISO 5667-15, ČSN EN ISO 19458)	sludge from water treatment plants, sludge dumps
10 ^{1)2)4)5)6)7) 8)}	Sampling of bottom sediments manually	CZ_SOP_D06_07_V10 (ČSN EN ISO 5667-1, ČSN EN ISO 5667-3, ČSN ISO 5667-12, ČSN ISO 5667-14, ČSN EN ISO 5667-15, ČSN ISO 5667-17)	Bottom sediments from streams and reservoirs

**Appendix is an integral part of
Certificate of Accreditation No. 319/2016 of 25/05/2016**

Page 42 of 42

Accredited entity according to ČSN EN ISO/IEC 17025:2005:

ALS Czech Republic, s.r.o.
Na Harfě 336/9, 190 00 Praha 9 – Vysocany

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
11 ^{1)2)4)5)6)7) 8)}	Sampling of soils manually	CZ_SOP_D06_07_V11 (ČSN EN ISO 5667–1, ČSN EN ISO 5667–3, ČSN EN ISO 5667–13, ČSN ISO 5667–14, ČSN ISO 5667–15, 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 015110, ČSN 015111, ČSN EN 14899, ČSN EN ISO 19458, ČSN ISO 10381-6)	soils
12 ^{1)2) 4)5)6)7)8)}	Sampling of waste manually	CZ_SOP_D06_07_V12 (ČSN EN ISO 5667–1, ČSN EN ISO 5667–3, ČSN EN ISO 5667–13, ČSN ISO 5667–14, ČSN ISO 5667–15, 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 015110, ČSN 015111, ČSN 015112, ČSN EN 14899, ČSN EN ISO 19458, ČSN EN ISO 3170, Methodological Guide of ME for Waste Sampling 2008, 101s)	Waste
13 ^{1)2)4)5)6)7) 8)}	Air sampling by personal pump	CZ_SOP_D06_07_V13 (ČSN EN 481, ČSN EN 482, ČSN EN 689, GR No. 361/2007 Coll..)	working environment
14 ¹⁾	Sampling of food by random sampling method	CZ_SOP_D06_04_V14	Packages foods and beverages
15 ^{1)2)4)5)6) 7)8)}	Gas sampling for the determination of ammonia	CZ_SOP_D069_07_V15 (ČSN 834728)	gases