



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. 819 / 2015

**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 analysis of water, extracts, liquids, soils, waste, sludge, oils, sediments, rocks, solid samples, emissions, immissions, working environment, gases from biogas plants and landfill gas, biological materials, food, feedstuffs, lubricants, fuels, ecotoxicological testing of waste and water; 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.: 397/2015 of 03 June 2015, or any administrative acts building upon it.

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

Prague: 30 November 2015



Jiří Růžička  
Director  
Czech Accreditation Institute  
Public Service Company

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 1 of 41

**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

**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
1A <sup>1)</sup>	Determination of elements <sup>47)</sup> by atomic emission spectrometry with inductively coupled plasma and stoichiometric calculations of compounds concentration from measured values <sup>51)</sup> 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
1B <sup>1)</sup>	Determination of elements <sup>47)</sup> by atomic emission spectrometry with inductively coupled plasma and stoichiometric calculations of compounds concentration from measured values <sup>52)</sup>	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
1C <sup>1)</sup>	Determination of elements <sup>47)</sup> by atomic emission spectrometry with inductively coupled plasma and stoichiometric calculations of compounds concentration from measured values <sup>53)</sup>	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.)	food, animal feeding stuff

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 2 of 41

**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
<b>1D<sup>1)</sup></b>	Determination of elements <sup>47)</sup> by atomic emission spectrometry with inductively coupled plasma and stoichiometric calculations of compounds concentration from measured values <sup>53)</sup>	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
<b>E1E<sup>1)</sup></b>	Determination of elements <sup>47)</sup> by atomic emission spectrometry with inductively coupled plasma and determination of Cr <sup>3+</sup> 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
<b>2A<sup>1)</sup></b>	Determination of elements <sup>41)</sup> by mass spectrometry with inductively coupled plasma and stoichiometric calculations of compounds concentration from measured values <sup>51)</sup> 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
<b>2B<sup>1)</sup></b>	Determination of elements <sup>42)</sup> 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
<b>2C<sup>1)</sup></b>	Determination of elements <sup>43)</sup> 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
<b>2D<sup>1)</sup></b>	Determination of elements <sup>44)</sup> 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
<b>E2E<sup>1)</sup></b>	Determination of elements <sup>45)</sup> by mass spectrometry with inductively coupled plasma and determination of Cr <sup>3+</sup> 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
<b>E3<sup>1)</sup></b>	Determination of Hg by atomic absorption spectrometry	CZ_SOP_D06_02_003 (ČSN 46 5735, ČSN 75 7440, samples prepared as per CZ_SOP_D06_02_J02 chap.10.1 to 10.17.14)	water, extracts, liquid samples, solid samples, food, animal feeding stuff, biological material, emission, immission

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 3 of 41

**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
4 <sup>2)</sup>	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
5A <sup>2)</sup>	Determination of elements <sup>49)</sup> 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
5B <sup>2)</sup>	Determination of elements <sup>49)</sup> 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
6A <sup>2)</sup>	Determination of elements <sup>50)</sup> 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
6B <sup>2)</sup>	Determination of elements <sup>50)</sup> 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
7A <sup>2)</sup>	Determination of Kjeldahl nitrogen by spectrophotometry	CZ_SOP_D06_07_007.A (ČSN EN 25663, ČSN ISO 7150-1)	water, extracts
7B <sup>2)</sup>	Determination of Kjeldahl nitrogen by spectrophotometry	CZ_SOP_D06_07_007.B (ČSN EN 25663, ČSN EN 13342, ČSN ISO 7150-1)	solid samples
E8 <sup>2)</sup>	Determination of Cr(VI) by spectrophotometry with diphenylcarbazide	CZ_SOP_D06_07_008 (ČSN ISO 11083)	water, extracts, absorption solutions from emission samples
9A <sup>2)</sup>	Determination of total phosphorus and orthophosphate by spectrophotometry and P <sub>2</sub> O <sub>5</sub> determination by calculation from measured values	CZ_SOP_D06_07_009.A (ČSN EN ISO 6878)	water, extracts
9B <sup>2)</sup>	Determination of total phosphorus by spectrophotometry and P <sub>2</sub> O <sub>5</sub> determination by calculation from measured values	CZ_SOP_D06_07_009.B (ČSN EN 14672, ČSN EN ISO 6878)	sludge, technological sludge products
10 <sup>2)</sup>	Determination of total cyanide by spectrophotometry and determination of complex-forming cyanides by calculation from measure values	CZ_SOP_D06_07_010 (ČSN 75 7415)	water, extracts

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 4 of 41

**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 <sup>2)</sup>	Determination of easily releasable cyanide (free cyanide) by spectrophotometry	ČSN ISO 6703-2	water, extracts
12A <sup>2)</sup>	Determination of total cyanide by spectrophotometry and determination of complex-forming cyanides by calculation from measure values	CZ_SOP_D06_07_012.A (ČSN 75 7415)	solid samples
E12B <sup>2)</sup>	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
13 <sup>2)</sup>	Determination of easily releasable cyanide (free cyanide by spectrophotometry	CZ_SOP_D06_07_013 (ČSN ISO 6703-2)	solid samples
14 <sup>2)</sup>	Determination of fluoride by electrochemical method (ISE)	CZ_SOP_D06_07_014 (ČSN ISO 10359-1, SM 4500-F C)	water, extracts
15A <sup>2)</sup>	Determination of free sulfan and sulfide by spectrophotometry	CZ_SOP_D06_07_015.A (ČSN 83 0520:1978 No. 16, ČSN 83 0530:1980 No. 31, SM 4500-S <sup>2-</sup> D)	water, extracts
15B <sup>2)</sup>	Determination of free sulfan and sulfide by spectrophotometry	CZ_SOP_D06_07_015.B (ČSN 83 0520:1978 No. 16, ČSN 83 0530:1980 No. 31)	solid samples
E15C <sup>2)</sup>	Determination of free sulfan 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
16 <sup>1)</sup>	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 <sub>4</sub> <sup>2-</sup> )	water, extracts
17 <sup>2)</sup>	Determination of sulfate by gravimetry	CZ_SOP_D06_07_017 (Uniform Methods of Chemical Analysis of Water, SNTL Prague 1965)	water, extracts
18 <sup>1)</sup>	Determination of fluoride by discrete spectrophotometry	CZ_SOP_D06_02_018 (US EPA 340.1)	water, extracts
19 <sup>1)</sup>	Determination of ammonium, nitrite and the sum of nitrite and nitrate ions by discrete spectrophotometry and determination of nitrite, nitrate, ammonia, inorganic, organic, total nitrogen and free ammonia 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 <sub>2</sub> <sup>-</sup> , SM 4500-NO <sub>3</sub> <sup>-</sup> )	water, extracts
20 <sup>2)</sup>	Determination of ammonium ions by spectrophotometry and determination of ammonia and free ammonia by calculation from measured values	CZ_SOP_D06_07_020 (ČSN ISO 7150-1)	water, extracts

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 5 of 41

**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
21 <sup>2)</sup>	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
22 <sup>1)</sup>	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
23A <sup>2)</sup>	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 <sup>-</sup> D)	water, extracts, liquid samples
23B <sup>2)</sup>	Determination of chloride by potentiometric titration	CZ_SOP_D06_07_023.B (ČSN EN 480-10)	solid samples
24 <sup>2)</sup>	Determination of non-ionic surfactants (BiAS) by spectrophotometry	CZ_SOP_D06_07_024 (ČSN ISO 7875-2)	water, extracts
25A <sup>2)</sup>	Determination of extractable organically bound halogens (EOX) by coulometry	CZ_SOP_D06_07_025.A (DIN 38409-H8, DIN 38414-S17)	water, extracts
25B <sup>2)</sup>	Determination of extractable organically bound halogens (EOX) by coulometry	CZ_SOP_D06_07_025.B (DIN 38409-H8, DIN 38414-S17)	solid samples
26 <sup>2)</sup>	Determination of adsorbable organically bound halogens (AOX by coulometry)	CZ_SOP_D06_07_026 (ČSN EN 16166, DIN 38414-S18)	solid samples
27 <sup>2)</sup>	Determination of total halogens (TX) by coulometry	CZ_SOP_D06_07_027 (US EPA Method 9076)	solid samples, oils, organic solvents
28 <sup>2)</sup>	Determination of adsorbable organically bound halogens (AOX) by coulometry	ČSN EN ISO 9562	water, extracts
29 <sup>2)</sup>	Determination of phenol index by spectrophotometric method after distillation	CZ_SOP_D06_07_029 (ČSN ISO 6439)	solid samples
E30 <sup>2)</sup>	Determination of phenol index by spectrophotometric method after distillation	CZ_SOP_D06_07_030 (ČSN ISO 6439)	water, extracts, absorption solutions from emission samples
31 <sup>2)</sup>	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
32 <sup>2)</sup>	Determination of absorbance at 254 nm by spectrophotometry	ČSN 75 7360	water, extracts
33* 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
34 <sup>2)</sup>	Determination of humic substances by spectrophotometry	CZ_SOP_D06_07_034 (ČSN 75 7536)	drinking, surface water
35 <sup>2)</sup>	Determination of water colour by visual and spectrophotometric method	CZ_SOP_D06_07_035 (ČSN EN ISO 7887)	water, extracts

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 6 of 41

**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
<b>36<sup>2)</sup></b>	Determination of electrical conductivity	ČSN EN 27888	water, extracts
<b>37<sup>2)</sup></b>	Determination of pH electrochemically	ČSN ISO 10523	water, extracts
<b>38<sup>2)</sup></b>	Determination of base neutralizing capacity (acidity) by potentiometric titration	CZ_SOP_D06_07_038 (ČSN 75 7372)	water, extracts
<b>39<sup>2)</sup></b>	Determination of acid neutralizing capacity (alkalinity) by potentiometric titration	CZ_SOP_D06_07_039 (ČSN EN ISO 9963-1)	water, extracts
<b>40<sup>2)</sup></b>	Determination of chemical oxygen demand using dichromate (COD <sub>Cr</sub> ) by titration	CZ_SOP_D06_07_040 (ČSN ISO 6060)	water, extracts
<b>40A<sup>2)</sup></b>	Biodegradation of organic compounds in aqueous medium – Static test (Zahn-Wellens method) calculated from the measured values of COD <sub>Cr</sub> )	ČSN EN ISO 9888 and OECD 302B , COD <sub>Cr</sub> determination according to CZ_SOP_D06_07_040 (ČSN ISO 6060)	chemicals and chemical products, water and waste leachate
<b>41<sup>2)</sup></b>	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 14774-1, ČSN EN 14774-2, ČSN EN 14774-3, ČSN P CEN/TS 15414-1, ČSN P CEN/TS 15414-2, ČSN EN 15414-3)	solid fossil fuels, solid biofuels, solid recovered fuels
<b>42<sup>2)</sup></b>	Determination of biochemical oxygen demand after n days (BOD <sub>n</sub> ) - Part 1: Dilution method with addition of allylthiourea	CZ_SOP_D06_07_042 (ČSN EN 1899-1)	water, extracts
<b>42A<sup>2)</sup></b>	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
<b>43<sup>2)</sup></b>	Determination of biochemical oxygen demand after n days (BOD <sub>n</sub> ) - Part 2: Method for undiluted samples	CZ_SOP_D06_07_043 (ČSN EN 1899-2)	water, extracts
<b>44*</b> <small>1) (2)(4)(5)(6)(7)(8))</small>	Determination of dissolved oxygen by electrochemical method	CZ_SOP_D06_07_044 (ČSN EN ISO 5814)	water, extracts
<b>45<sup>1)</sup></b>	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
<b>46<sup>2)</sup></b>	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
<b>47A<sup>2)</sup></b>	Determination of ash by gravimetry and determination of loss on ignition by calculation from measured values	CZ_SOP_D06_07_047.A (ČSN EN 12879, ČSN EN 15935, ČSN 72 0103, ČSN 46 5735)	solid samples
<b>47B<sup>2)</sup></b>	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

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 7 of 41

**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
47C <sup>2)</sup>	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
48 <sup>1)</sup>	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
49 <sup>2)</sup>	Determination of dry residue by gravimetry and determination of water content by calculation from measured values	ČSN EN 12880	sludge and technological sludge products
50 <sup>2)</sup>	Determination of water content by Karl Fischer method	CZ_SOP_D06_07_050 (ČSN ISO 760)	liquid samples, solid samples
51 <sup>2)</sup>	Determination of ignition residue after ignition by gravimetry and determination of loss on ignition by calculation from measured values	ČSN 72 0103	silicate materials
52 <sup>2)</sup>	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
53 <sup>2)</sup>	Determination of suspended solids using glass fibre filters by gravimetry	ČSN EN 872	water, extracts
54 <sup>2)</sup>	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
55 <sup>2)</sup>	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
56 <sup>1)</sup>	Determination of total organic carbon (TOC), dissolved organic carbon (DOC) and total inorganic carbon (TIC) by IR detection	CZ_SOP_D06_02_056 (ČSN EN 1484, ČSN EN 16192, SM 5310)	water, extracts
57 <sup>1)</sup>	Determination of nonpolar extractive substances by infrared spectrometry	CZ_SOP_D06_02_057 (ČSN 75 7505:2006, STN 830540-4, US EPA 418.1, SM 5520 F, DS/R 209)	water, extracts
58 <sup>1)</sup>	Determination of extractive and non-polar extractive compounds by infrared spectrometry	CZ_SOP_D06_02_058 (ISO/TR 11046, US EPA 418.1, SM 5520 F, DS/R 209)	solid samples
59 <sup>1)</sup>	Determination of extractive substances by infrared spectrometry	CZ_SOP_D06_02_059 (ČSN 75 7506, STN 83 0520-27, STN 83 0530-36a, STN 83 0540-4)	water, extracts
60 <sup>1)</sup>	Determination of alpha modification of silicon dioxide in respirable dust by infrared spectrometry	CZ_SOP_D06_02_060 (NIOSH 7602)	dust

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 8 of 41

**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
<b>61*</b> 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
<b>62*</b> 1)2)4)5)6)7) 8)	Field measurement of temperature	ČSN 75 7342	water
<b>63*</b> 1)2)4)5)6)7) 8))	Field measurement of electrical conductivity	CZ_SOP_D06_07_063 (ČSN EN 27888)	water
<b>64*</b> 1)2)4)5)6)7) 8)	Field determination of pH electrochemically	CZ_SOP_D06_07_064 (ČSN ISO 10523)	water
<b>65<sup>1)</sup></b>	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
<b>66<sup>1)</sup></b>	Determination of ammonium 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
<b>67<sup>1)</sup></b>	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
<b>68<sup>1)</sup></b>	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
<b>69<sup>1)</sup></b>	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
<b>70<sup>1)</sup></b>	Determination of dry suspended solids and annealed suspend solids by gravimetry and determination of loss 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
<b>71<sup>1)</sup></b>	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

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 9 of 41

**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
72 <sup>1)</sup>	Determination of acid neutralizing capacity (alkalinity) by potentiometric titration and determination of the carbonate hardness and determination of CO <sub>2</sub> forms by calculation from measured values including the calculation of total mineralization	CZ_SOP_D06_02_072 (ČSN EN ISO 9963-1)	water, extracts
73 <sup>1)</sup>	Determination of base neutralizing capacity (acidity) by potentiometric titration	CZ_SOP_D06_02_073 (ČSN 75 7372)	water, extracts
74 <sup>1)</sup>	Determination of turbidity by optical turbidimeter	CZ_SOP_D06_02_074 (ČSN EN ISO 7027)	water, extracts
75 <sup>1)</sup>	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
76 <sup>1)</sup>	Determination of chemical oxygen demand using dichromate (COD <sub>Cr</sub> ) by photometry	CZ_SOP_D06_02_076 (ČSN ISO 15705)	water, extracts
76A <sup>1)</sup>	Determination of chemical oxygen demand using dichromate (COD <sub>Cr</sub> ) by titration	CZ_SOP_D06_02_076 (ČSN ISO 15705)	water, extracts
77 <sup>1)</sup>	Determination of biochemical oxygen demand after n days (BOD <sub>n</sub> ) by dilution method with allylthiourea addition	CZ_SOP_D06_02_077 (ČSN EN 1899-1)	water, extracts
78 <sup>1)</sup>	Determination of biochemical oxygen demand after n days (BOD <sub>n</sub> ) by method for undiluted samples	CZ_SOP_D06_02_078 (ČSN EN 1899-2)	water, extracts
79 <sup>1)</sup>	Determination of colour by spectrometry	CZ_SOP_D06_02_079 (ČSN EN ISO 7887)	water, extracts
80 <sup>1)</sup>	Determination of total phosphorus by discrete spectrophotometry and determination of phosphorus as P <sub>2</sub> O <sub>5</sub> and PO <sub>4</sub> <sup>3-</sup> by calculation from measured values	CZ_SOP_D06_02_080 (ČSN EN ISO 6878, ČSN EN ISO 15681-1)	water, extracts
81 <sup>1)</sup>	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
E82 <sup>2)</sup>	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
E83 <sup>2)</sup>	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

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 10 of 41

**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
E84 <sup>2)</sup>	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
E85 <sup>2)</sup>	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
86 <sup>1)</sup>	Determination of total phosphorus by flow injection analysis with spectrophotometric detection	CZ_SOP_D06_02_086 (ČSN EN ISO 6878)	water, extracts
87 <sup>1)</sup>	Determination of pH, temperature and electrical conductivity by column test	CZ_SOP_D06_07_087 (ČSN EN PCEN/TS 14405, ČSN ISO 10523, ČSN EN 27888)	solid samples
88 <sup>1)</sup>	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
89 <sup>1)</sup>	Determination of total cyanide by spectrophotometry and determination of complex cyanide by calculation from measured values	CZ_SOP_D06_02_089 (ČSN 75 7415, ČSN EN ISO 14403-2)	water, extracts
90 <sup>1)</sup>	Determination of easily releasable cyanide (free cyanide) and cyanide dissociated by weak acid by spectrophotometry	CZ_SOP_D06_02_090 (ČSN ISO 6703-2, ČSN EN ISO 14403-2, SM 4500 CN)	water, extracts
91 <sup>1)</sup>	Determination of fluoride by electrochemical method (ISE)	CZ_SOP_D06_02_091 (ČSN ISO 10359-1, SM 4500-F C)	water, extracts
92 <sup>1)</sup>	Determination of chemical oxygen demand using permanganate (COD <sub>Mn</sub> ) by titration	CZ_SOP_D06_02_092 (ČSN EN ISO 8467, Z1)	water, extracts
93 <sup>1)</sup>	Determination of Kjeldahl nitrogen in water	CZ_SOP_D06_02_093 (ČSN EN 25663)	water, extracts
94 <sup>1)</sup>	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
95 <sup>1)</sup>	Qualitative determination of asbestos fibre by polarization microscope	CZ_SOP_D06_02_095 (NIOSH 9002)	solid samples
96A <sup>1)</sup>	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

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 11 of 41

**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
96B <sup>1)</sup>	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
96C <sup>1)</sup>	Determination of Mercury by Fluorescence Spectrometry	CZ_SOP_D06_02_096 (ČSN EN ISO 17852, 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
E96D <sup>1)</sup>	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
97	Reserved		
98 <sup>1)</sup>	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
99 <sup>1)</sup>	Determination of chloride by discrete spectrophotometry	CZ_SOP_D06_02_099 (US EPA 325.1, SM 4500-Cl)	water, extracts
100 <sup>1)</sup>	Determination of extractive substances by gravimetry	CZ_SOP_D06_02_100 (ČSN 75 7508, SM 5520)	water
101 <sup>2)</sup>	Determination of reactive and non-labile aluminium by continuous flow analysis (CFA) spectrophotometrically	CZ_SOP_D06_07_101 (company method SKALAR)	drinking, surface, waste water
102 <sup>2)</sup>	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
103 <sup>*</sup> <sub>1)(2)(4)(5)(6)(7) 8)</sub>	Determination of oxidation-reduction potential (ORP) by potentiometry	CZ_SOP_D06_07_103 (ČSN 75 7367)	water
104 <sup>1)</sup>	Determination of grease and oils by gravimetry (extraction after evaporation)	CZ_SOP_D06_02_104 (ČSN 75 7509)	water
105 <sup>1)</sup>	Determination of pH by potentiometry	CZ_SOP_D06_02_105 (ČSN ISO 10523, US EPA 150.1, ČSN EN 16192, SM 4500-H <sup>+</sup> B)	water, extracts
106 <sup>1)</sup>	Determination of hexavalent chromium by discrete spectrophotometry	CZ_SOP_D06_02_106 (ČSN ISO 11083, US EPA 7196A)	water, extracts
107 <sup>2)</sup>	Determination of total nitrogen by modified Kjeldahl method	CZ_SOP_D06_07_107 (ČSN EN 25663, ČSN ISO 7150-1, SFS 5505)	water, extracts

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 12 of 41

**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
108 <sup>1)</sup>	Determination of settle able solids by volumetry	CZ_SOP_D06_02_108 (SM 2540 F)	water, extracts
109 <sup>1)</sup>	Determination of dissolved silicates by discrete photometry and determination of H <sub>2</sub> SiO <sub>3</sub> and total mineralization by calculation from measured values	CZ_SOP_D06_02_109 (ČSN EN ISO 16264, US EPA 370.1)	water, extracts
110 <sup>1)</sup>	Determination of Chlorophyll by spectrophotometry	CZ_SOP_D06_02_110 (SM 10200 H)	surface water
111 <sup>2)</sup>	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
112 <sup>2)</sup>	Determination of phosphorus soluble in sodium hydrogen carbonate solution spectrophotometrically	CZ_SOP_D06_07_112 (ČSN ISO 11263)	solid samples
113 <sup>2)</sup>	Determination of pH electrochemically in the soils suspension in water, KCl, CaCl <sub>2</sub> , BaCl <sub>2</sub>	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
114 <sup>2)</sup>	Determination of formaldehyde by spectrophotometry	CZ_SOP_D06_07_114 (Chemical and physical methods of water analysis, SNTL Prague 1989)	water, extracts
115 <sup>2)</sup>	Determination of releasable formaldehyde by spectrophotometry	CZ_SOP_D06_07_115 (ČSN EN ISO 14184-1, PV 3925)	materials, solid samples
116 <sup>2)</sup>	Determination of iron(II) by spectrophotometry	CZ_SOP_D06_07_116 (ČSN ISO 6332)	water, extracts
117 <sup>1)</sup>	Determination of manganese(II) by discrete spectrophotometry	CZ_SOP_D06_02_117 (ČSN ISO 6333)	water, extracts
118 <sup>1)</sup>	Determination of iron(II) by discrete spectrophotometry	CZ_SOP_D06_02_118 (SM 3500-Fe, ČSN ISO 6332)	water, extracts
119 <sup>1)</sup>	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
120 <sup>2)</sup>	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)
121 <sup>2)</sup>	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 15289, ČSN EN 15104, 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

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 13 of 41

**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
<b>122A<sup>1)</sup></b>	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
<b>122B<sup>1)</sup></b>	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
<b>123A<sup>2)</sup></b>	Determination of weak acid dissociated (WAD) cyanide by spectrophotometry	CZ_SOP_D06_07_123.A (SM 4500 CN <sup>-</sup> )	water, extracts
<b>123B<sup>2)</sup></b>	Determination of weak acid dissociated (WAD) cyanide by spectrophotometry	CZ_SOP_D06_07_123.B (SM 4500 CN <sup>-</sup> )	solid samples
<b>124A<sup>2)</sup></b>	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
<b>124B<sup>2)</sup></b>	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
<b>124C<sup>2)</sup></b>	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 15289, 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
<b>124D<sup>2)</sup></b>	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
<b>125<sup>2)</sup></b>	Determination of laboratory compacted bulk density (LCBD)	CZ_SOP_D06_07_125 (ČSN EN 13040)	sludge, composts, soils meliorants and growth stimulants
<b>126<sup>2)</sup></b>	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
<b>E127<sup>1)</sup></b>	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
<b>E128<sup>1)</sup></b>	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
<b>129<sup>1)</sup></b>	Determination of sulphite by ion chromatography method	CZ_SOP_D06_02_129 (ČSN EN ISO 10304-3)	water, extracts

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 14 of 41

**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
130 <sup>2)</sup>	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
131 <sup>2)</sup>	Determination of sulphite after distillation by titration	CZ_SOP_D06_07_131 (M. Horaková et al.: <i>Chemical and physical methods of water analyses</i> )	water, extracts
132 <sup>2)</sup>	Determination of respiratory activity (AT <sub>4</sub> ) using respirometer	CZ_SOP_D06_07_132 (ÖNORM S 2027-4)	wastes, sludge, composts, soils
133* 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
E134 <sup>1)</sup>	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
135A <sup>1)</sup>	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
135B <sup>1)</sup>	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
136 <sup>1)</sup>	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
137 <sup>2)</sup>	Determination of SiO <sub>2</sub> in silicate materials after decomposition by gravimetry	CZ_SOP_D06_07_137 (ČSN 72 0105 No. 1)	solid samples
138 <sup>2)</sup>	Determination of P <sub>2</sub> O <sub>5</sub> in silicate materials after decomposition by spectrophotometry	CZ_SOP_D06_07_138 (ČSN 72 0116 No. 1)	solid samples
139 <sup>2)</sup>	Determination of total sulfur in silicate materials after decomposition by gravimetry	CZ_SOP_D06_07_139 (ČSN 72 0118)	solid samples
140 <sup>1)2)4)5)6)7) 8)</sup>	Determination of CO <sub>2</sub> in mineral water by Härt analyzer	CZ_SOP_D06_01_140 (method according to Technosklo, s.r.o.)	mineral water
141 <sup>1)2)4)5)6)7) 8)</sup>	Analysis of gases – CH <sub>4</sub> , CO <sub>2</sub> , O <sub>2</sub> , H <sub>2</sub> S – by Geotech gas analyzer and determination of N <sub>2</sub> by calculation from measured values	CZ_SOP_D06_01_141 (BIOGAS 5000 manual)	gases
142 <sup>1)2)4)5)6)7) 8)</sup>	Determination of moisture content by gas moisture content analyzer	CZ_SOP_D06_01_142 (ČSN EN 14790)	gases
143-149	Reserved		

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 15 of 41

**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**

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
150 <sup>1)</sup>	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
151 <sup>1)</sup>	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
152A <sup>1)</sup>	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
152B <sup>1)</sup>	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
E153 <sup>1)</sup>	Determination of volatile organic compounds <sup>1)</sup> 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 <sup>1)</sup> )	solid sorbent
E154 <sup>1)</sup>	Determination of volatile organic compounds <sup>2)</sup> 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
155A <sup>1)</sup>	Determination of volatile organic compounds <sup>3)</sup> 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
155B <sup>1)</sup>	Determination of volatile organic compounds <sup>3)</sup> 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
156A <sup>1)</sup>	Determination of volatile organic compounds <sup>4)</sup> 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
156B <sup>1)</sup>	Determination of volatile organic compounds <sup>4)</sup> 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

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 16 of 41

**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
157A <sup>1)</sup>	Determination of organic contaminants <sup>5)</sup> 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
157B <sup>1)</sup>	Determination of organic contaminants <sup>5)</sup> 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
158A <sup>1)</sup>	Determination of phenols, chlorinated phenols and cresols <sup>6)</sup> 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
158B <sup>1)</sup>	Determination of phenols, chlorinated phenols and cresols <sup>6)</sup> 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
E158C <sup>1)</sup>	Determination of phenols, chlorinated phenols and cresols <sup>6)</sup> 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, imission
159A <sup>1)</sup>	Determination of phthalates <sup>7)</sup> 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
159B <sup>1)</sup>	Determination of phthalates <sup>7)</sup> 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
160A <sup>1)</sup>	Determination of phenols and cresols <sup>40)</sup> 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
160B <sup>1)</sup>	Determination of phenols and cresols <sup>40)</sup> 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
161A <sup>1)</sup>	Determination of semi volatile organic compounds <sup>9)</sup> 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
161B <sup>1)</sup>	Determination of semi volatile organic compounds <sup>9)</sup> 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

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 17 of 41

**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
162 <sup>1)</sup>	Determination of polycyclic aromatic hydrocarbons <sup>10)</sup> 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
163A <sup>1)</sup>	Determination of polycyclic aromatic hydrocarbons <sup>10)</sup> 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
163B <sup>1)</sup>	Determination of polycyclic aromatic hydrocarbons <sup>10)</sup> 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
164 <sup>1)</sup>	Determination of glycols <sup>26)</sup> by gas chromatography method with MS detection	CZ_SOP_D06_03_164	water, cooling liquids, anti-freeze fluid
E165 <sup>1)</sup>	Determination of polycyclic aromatic hydrocarbons <sup>10)</sup> 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
166A <sup>1)</sup>	Determination of polychlorinated biphenyls <sup>39)</sup> -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
166B <sup>1)</sup>	Determination of polychlorinated biphenyls <sup>39)</sup> -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
167 <sup>1)</sup>	Determination of alkylphenols and alkylphenol ethoxylates <sup>28)</sup> 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
168 <sup>1)</sup>	Determination of polychlorinated biphenyls <sup>11)</sup> -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
169A <sup>1)</sup>	Determination of organochlorine pesticides <sup>12)</sup> and other halogen compounds <sup>34)</sup> 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

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 18 of 41

**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
<b>169B<sup>1)</sup></b>	Determination of organochlorine pesticides and other halogen compounds <sup>12)</sup> 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
<b>169C<sup>1)</sup></b>	Determination of organochlorine pesticides and other halogen compounds <sup>12)</sup> 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
<b>E169D<sup>1)</sup></b>	Determination of organochlorine pesticides and other halogen compounds <sup>12)</sup> 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
<b>E170<sup>3)</sup></b>	Determination of polychlorinated dibenzo-p-dioxins and dibenzofuranes <sup>13)</sup> 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
<b>171<sup>3)</sup></b>	Determination of polychlorinated dibenzo-p-dioxins and dibenzofuranes <sup>13)</sup> in immission by isotope dilution method using HRGC-HRMS and calculation of TEQ parameters from measured values	CZ_SOP_D06_06_171 (US EPA TO-9A)	immission
<b>E172<sup>3)</sup></b>	Determination of coplanar polychlorinated biphenyls <sup>14)</sup> 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, immission
<b>173A<sup>3)</sup></b>	Determination of polychlorinated biphenyls <sup>14)</sup> 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
<b>173B<sup>3)</sup></b>	Determination of polychlorinated biphenyls <sup>14)</sup> 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
<b>173C<sup>3)</sup></b>	Determination of polychlorinated biphenyls <sup>14)</sup> 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

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 19 of 41

**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
173D <sup>3)</sup>	Determination of polychlorinated biphenyls <sup>14)</sup> 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 1, 11.2.4 (US EPA 1668, modified)	SPMD extracts, food, animal feeding stuff
E174 <sup>3)</sup>	Determination of polychlorinated dibenzo-p-dioxins and dibenzofuranes <sup>13)</sup> 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
175A <sup>3)</sup>	Determination of tetra- to octa-chlorinated dioxins and furanes <sup>13)</sup> 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
175B <sup>3)</sup>	Determination of tetra- to octa-chlorinated dioxins and furanes <sup>13)</sup> 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
175C <sup>3)</sup>	Determination of tetra- to octa- chlorinated dioxins and furanes <sup>13)</sup> 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
175D <sup>3)</sup>	Determination of tetra- to octa- chlorinated dioxins and furanes <sup>13)</sup> 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
176A <sup>3)</sup>	Determination of polychlorinated dibenzodioxins (PCDD) and polychlorinated dibenzofuranes (PCDF) <sup>13)</sup> 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
176B <sup>3)</sup>	Determination of polychlorinated dibenzodioxins (PCDD) and polychlorinated dibenzofuranes (PCDF) <sup>13)</sup> 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
176C <sup>3)</sup>	Determination of polychlorinated dibenzodioxins (PCDD) and polychlorinated dibenzofuranes (PCDF) <sup>13)</sup> 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
176D <sup>3)</sup>	Determination of polychlorinated dibenzodioxins (PCDD) and polychlorinated dibenzofuranes (PCDF) <sup>13)</sup> 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

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 20 of 41

**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
177A <sup>3)</sup>	Determination of selected brominated flammable retarders (BFR) <sup>15)</sup> 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
177B <sup>3)</sup>	Determination of selected brominated flammable retarders (BFR) <sup>15)</sup> 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
177C <sup>3)</sup>	Determination of selected brominated flammable retarders (BFR) <sup>15)</sup> 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
177D <sup>3)</sup>	Determination of selected brominated flammable retarders (BFR) <sup>15)</sup> 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
178 <sup>1)</sup>	Determination of alkylphenols and alkylphenol ethoxylates <sup>16)</sup> 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
E179 <sup>3)</sup>	Determination of PCB <sup>14)</sup> 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
180A <sup>3)</sup>	Determination of polycyclic aromatic hydrocarbons <sup>54)</sup> by isotope dilution method using HRGC-HRMS and calculation of polycyclic aromatic 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
E180B <sup>3)</sup>	Determination of polycyclic aromatic hydrocarbons <sup>54)</sup> by isotope dilution method using HRGC-HRMS and calculation of polycyclic aromatic 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
180C <sup>3)</sup>	Determination of polycyclic aromatic hydrocarbons <sup>54)</sup> by isotope dilution method using HRGC-HRMS and calculation of polycyclic aromatic 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
180D <sup>3)</sup>	Determination of polycyclic aromatic hydrocarbons <sup>54)</sup> by isotope dilution method using HRGC-HRMS and calculation of polycyclic aromatic 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
180E <sup>3)</sup>	Determination of polycyclic aromatic hydrocarbons <sup>54)</sup> by isotope dilution method using HRGC-HRMS and calculation of polycyclic aromatic 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

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 21 of 41

**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
181 <sup>1)</sup>	Determination of semi-volatile organic compounds <sup>27)</sup> 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
182A <sup>1)</sup>	Determination of acidic herbicides, drug residues and other pollutants <sup>29)</sup> 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
182B <sup>1)</sup>	Determination of acidic herbicides and drug residues <sup>29A)</sup> by liquid chromatography method with MS/MS detection	CZ_SOP_D06_03_182.B (ČSN EN 15637, US EPA 1694)	solid samples
183A <sup>1)</sup>	Determination of pesticides, pesticide metabolites, drug residues and other pollutants <sup>30)</sup> 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
183B <sup>1)</sup>	Determination of pesticides, pesticide metabolites, drug residues and other pollutants <sup>30A)</sup> 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
183C <sup>1)</sup>	Determination of pesticides, pesticide metabolites, drug residues and other pollutants <sup>30A)</sup> 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
184 <sup>1)</sup>	Determination of pesticides <sup>31)</sup> 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
185A <sup>1)</sup>	Determination of pesticides and pesticide metabolites <sup>32)</sup> 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
186 <sup>1)</sup>	Determination of complexing substances <sup>33)</sup> by gas chromatography method with MS detection	CZ_SOP_D06_03_186 (ČSN EN ISO 16588)	water

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 22 of 41

**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
E187 <sup>1)</sup>	Determination of polycyclic aromatic hydrocarbons derivatives <sup>36)</sup> 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
188A <sup>1)</sup>	Determination of organic acids <sup>37)</sup> 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
188B <sup>1)</sup>	Determination of organic acids <sup>37)</sup> 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
189 <sup>1)</sup>	Determination of gases <sup>38)</sup> by gas chromatography method with detection FID and TCD	CZ_SOP_D06_03_189 (EPA Method RSK-175)	water, liquid samples
190B <sup>1)</sup>	Low limit determination of volatile organic compounds <sup>39)</sup> 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
E191 <sup>1)</sup>	Determination of semi-volatile organic compounds <sup>46)</sup> 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
192A <sup>1)</sup>	Determination of chlorinated alkanes <sup>34)</sup> by gas chromatography method with MS/MS detection	CZ_SOP_D06_03_192 (ISO 12010)	water, liquid samples
192B <sup>1)</sup>	Determination of chlorinated alkanes <sup>34)</sup> by gas chromatography method with MS/MS detection	CZ_SOP_D06_03_192.B (ISO 12010)	solid samples
193 <sup>1)</sup>	Determination of aniline and aniline derivates <sup>21)</sup> by gas chromatography method with MS detection	CZ_SOP_D06_03_193 (US EPA 8270)	solid samples
194 <sup>1)</sup>	Determination of chlorinated phenols <sup>55)</sup> by liquid chromatography method with MS/MS detection	CZ_SOP_D06_03_194	water, liquid samples
195 <sup>1)</sup>	Determination of drug residues <sup>56)</sup> 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

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 23 of 41

**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
196 <sup>1)</sup>	Determination of epichlorhydrine by gas chromatography method with MS/MS detection	CZ_SOP_D06_03_196 (Application list Agilent Technologies 5990-6433EN)	water
197 <sup>1)</sup>	Determination of perfluorinated compounds <sup>58)</sup> by liquid chromatography with MS/MS detection	CZ_SOP_D06_03_197 (US EPA 537)	water
198 <sup>1)</sup>	Determination of volatile organic compounds <sup>59)</sup> 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
199 <sup>3)</sup>	Determination of ash by gravimetry	CZ_SOP_D06_06_199 (US EPA 1613)	food, animal feeding stuff, biological material

**Tests: ORGANIC CHEMISTRY OF FOOD**

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
200 <sup>1)</sup>	Determination of 3-chlor-1,2-propandiol by gas chromatography method with MS detection	CZ_SOP_D06_03_200 (LMBG 52.02(1))	spices
201 <sup>1)</sup>	Determination of terpene <sup>17)</sup> by gas chromatography method with FID detection	CZ_SOP_D06_04_201 (AOAC 972.55)	non-chocolate water-soluble candies
202 <sup>1)</sup>	Determination of fatty acids <sup>18)</sup> by gas chromatography method with FID detection and calculation sum of SAFA, MUFA, PUFA, TFA, Omega 3, Omega 6 <sup>35)</sup>	CZ_SOP_D06_04_202 (ČSN EN ISO 5508, ČSN EN ISO 15304)	food, animal feeding stuff, food supplements
203 <sup>1)</sup>	Multiresidual determination of pesticides <sup>19)</sup> by gas chromatography method with MS detection	CZ_SOP_D06_03_203 (LMBG 00.00 34 DFG S19)	food with high content of water and their extracts
204 <sup>1)</sup>	Determination of congeners of polychlorinated biphenyls <sup>11)</sup> and organochlorine pesticides <sup>20)</sup> by gas chromatography method with ECD detection	CZ_SOP_D06_03_204 (ČSN EN 1528)	food with high content of fat
205	<b>Reserved</b>		
206 <sup>1)</sup>	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
207 <sup>1)</sup>	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

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 24 of 41

**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
208 <sup>1)</sup>	Determination of vitamin D <sup>22)</sup> 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
209 <sup>1)</sup>	Determination of substitute sweeteners <sup>23)</sup> by liquid chromatography method with PDA detection	CZ_SOP_D06_04_209 (ČSN EN 12856)	beverages, milk products, jams, food supplements, fish
210 <sup>1)</sup>	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
211 <sup>1)</sup>	Determination of preserving agents <sup>24)</sup> 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
212 <sup>1)</sup>	Determination of aflatoxin B <sub>1</sub> , B <sub>2</sub> , G <sub>1</sub> and G <sub>2</sub> 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
213 <sup>1)</sup>	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
214 <sup>1)</sup>	Determination of zearalenon by liquid chromatography method with FLD detection	CZ_SOP_D06_04_214 (ČSN EN 15850)	cereals and animal feeding stuff
215 <sup>1)</sup>	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
216 <sup>1)</sup>	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
217 <sup>1)</sup>	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
218 <sup>1)</sup>	Determination of vitamins B <sub>1</sub> , B <sub>2</sub> and B <sub>6</sub> 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
219 <sup>1)</sup>	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
220 <sup>1)</sup>	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
221 <sup>1)</sup>	Determination of gliadine (gluten) by ELISA Method – commercial set RIDASCREEN® Gliadin	CZ_SOP_D06_04_221 (manual R-Biopharm)	fats, fatty food, non-fatty food, food supplements

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 25 of 41

**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
222 <sup>1)</sup>	Determination of casein by ELISA Method – commercial set Ridascreen Fast Casein	CZ_SOP_D06_04_222 (R-Biopharm Manual)	food, food supplements
223 <sup>1)</sup>	Determination of sugars <sup>8)</sup> by liquid chromatography method with RI detection	CZ_SOP_D04_223 (ČSN EN 12630)	food, animal feeding stuff, food supplements
224 <sup>1)</sup>	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
225 <sup>1)</sup>	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
226 <sup>1)</sup>	Determination of soy protein by ELISA method – commercial set Soya assay Biokits	CZ_SOP_D06_04_226 (Biokits Neogen Manual)	meat products
227 <sup>1)</sup>	Determination of the content of parabens by liquid chromatography method with PAD detection	CZ_SOP_D06_04_227 (HPLC for Food Analysis, Agilent Technologies 1996 -2001)	cosmetics
228 - 249	reserved		

**Tests: MICROBIOLOGY OF WATER**

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
250 <sup>1)</sup>	Enumeration of mesophilic bacteria by cultivation	ČSN 75 7841	surface, ground, waste, pool water
251 <sup>1)</sup>	Enumeration of psychrophilic bacteria by cultivation	ČSN 75 7842	surface, ground, waste, pool water
252 <sup>1)</sup>	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
253 <sup>1)</sup>	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
254 <sup>1)</sup>	Enumeration of thermotolerant coliform bacteria and <i>Escherichia coli</i> by membrane filtration	ČSN 75 7835	drinking, surface, ground, pool, waste water
255 <sup>1)</sup>	Enumeration of <i>Escherichia coli</i> and coliform bacteria by membrane filtration	ČSN EN ISO 9308 – 1:2001 STN EN ISO 9308 - 1:2001	drinking, pool, bottled, raw, treated, ground water
256 <sup>1)</sup>	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
257 <sup>1)</sup>	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
258 <sup>1)</sup>	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

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 26 of 41

**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
259 <sup>1)</sup>	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
260 <sup>1)</sup>	Detection of <i>Salmonella</i> by membrane filtration	ČSN ISO 19250	drinking, surface, ground, pool, waste water
261 <sup>1)</sup>	Determination of bioseston by microscopy	ČSN 75 7712, STN 757711	drinking, bottled, raw, treated, ground water
262 <sup>1)</sup>	Determination of abioseston by microscopy	ČSN 75 7713, STN 757712	drinking, bottled, raw, treated, ground water
263A <sup>1)</sup>	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
263B <sup>1)</sup>	Detection and enumeration of <i>Legionella</i> by cultivation	CZ_SOP_D06_04_263.B (ČSN ISO 11731)	sediments, growths
263C <sup>1)</sup>	Detection and enumeration of <i>Legionella</i> by cultivation	CZ_SOP_D06_04_263.C (ČSN ISO 11731)	swabs
264 <sup>1)</sup>	Enumeration of Coliform bacteria by membrane filtration	ČSN 75 7837	non-disinfected water
265 <sup>1)</sup>	Enumeration of spore sulphite reducing anaerobes ( <i>Clostridium</i> ) by membrane filtration	ČSN EN 26461-2	water
266 – 299	Reserved		

**Tests: MICROBIOLOGY**

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
300 <sup>1)</sup>	Enumeration of microorganisms by cultivation	ČSN EN ISO 4833	food, animal feeding stuff
301 <sup>1)</sup>	Enumeration of coliform bacteria by cultivation	ČSN ISO 4832	food, animal feeding stuff
302 <sup>1)</sup>	Enumeration of enterococci by cultivation	CZ_SOP_D06_04_302 (CSN 56 0100)	food, animal feeding stuff
303 <sup>1)</sup>	Enumeration of <i>Bacillus cereus</i> by cultivation	ČSN EN ISO 7932	food, animal feeding stuff
304 <sup>1)</sup>	Enumeration of coagulase-positive staphylococci ( <i>Staphylococcus aureus</i> and other species) by cultivation	ČSN EN ISO 6888-1	food, animal feeding stuff
305 <sup>1)</sup>	Enumeration of <i>Clostridium perfringens</i> by cultivation	ČSN EN ISO 7937	food, animal feeding stuff
306 <sup>1)</sup>	Detection of <i>Salmonella</i> by cultivation	ČSN EN ISO 6579	food, animal feeding stuff
307A <sup>1)</sup>	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
307B <sup>1)</sup>	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

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 27 of 41

**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
308 <sup>1)</sup>	Determination of inhibiting substances by Delvotest method	CZ_SOP_D06_04_308 (O.K.Servis BioPro Manual)	milk
309 <sup>1)</sup>	Detection of <i>Salmonella</i> by ELISA method - commercial set Solus Salmonella	CZ-SOP-D06_04_309 (Solus Manual)	food, animal feeding stuff
310 <sup>1)</sup>	Enumeration of yeasts and moulds by cultivation	ČSN ISO 21527–1,2	food, animal feeding stuff
311 <sup>1)</sup>	Detection of <i>Enterobacteriaceae</i> by cultivation	ČSN ISO 21528-1	food, animal feeding stuff
312 <sup>1)</sup>	Enumeration of spore-forming microorganisms by cultivation	CZ_SOP_D06_04_312 (ČSN 56 0100 Article 87)	food, animal feeding stuff
313 <sup>1)</sup>	Detection of <i>Vibrio parahaemolyticus</i> and <i>Vibrio species</i> by cultivation	ČSN P ISO/TS 21872-1, 2	food, animal feeding stuff
314 <sup>1)</sup>	Enumeration of mesophilic lactic acid bacteria by cultivation	ČSN ISO 15214	food, animal feeding stuff
315 <sup>1)</sup>	Detection of <i>Shigella spp.</i> by cultivation	ČSN EN ISO 21567	food, animal feeding stuff
316 <sup>1)</sup>	Detection of <i>Campylobacter spp.</i> by cultivation	ČSN EN ISO 10272-1	food, animal feeding stuff
317 <sup>1)</sup>	Detection of presumptive pathogenic <i>Yersinia enterocolitica</i> by cultivation	ČSN EN ISO 10273	food, animal feeding stuff
318 <sup>1)</sup>	Enumeration of <i>Enterobacteriaceae</i> by cultivation	ČSN ISO 21528-2	food, animal feeding stuff
319 <sup>1)</sup>	Enumeration of beta-glucuronidase-positive <i>Escherichia coli</i> by cultivation	ČSN ISO 16649-2	food, animal feeding stuff
320 <sup>1)</sup>	Detection and enumeration of <i>Listeria monocytogenes</i> by cultivation	ČSN EN ISO 11290-1, ČSN EN ISO 11290-2	food, animal feeding stuff
321 <sup>1)</sup>	Enumeration of potentially toxinogenic moulds on special media by cultivation	CZ_SOP_D06_04_321 (AHEM No.1/2003)	food, animal feeding stuff
322 <sup>1)</sup>	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
323 <sup>1)</sup>	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
324 <sup>1)</sup>	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
325 <sup>1)</sup>	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
326 <sup>1)</sup>	Detection of <i>Listeria</i> by ELISA method - commercial set Solus Listeria	CZ-SOP-D06_04_326 (manual Solus)	food, animal feeding stuff
327 <sup>1)</sup>	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
328 <sup>1)</sup>	Detection of <i>Salmonella</i> by quick cultivation method Salmonella Precis	CZ-SOP-D06_04_328 (OXOID Manual)	food, animal feeding stuff
329 <sup>1)</sup>	Detection of <i>Cronobacter (Enterobacter) sakazakii</i> by cultivation	ČSN P ISO/TS 22964	milk and milk products
330 <sup>1)</sup>	Detection and enumeration of aerobic mesophilic bacteria by cultivation	ČSN EN ISO 21149	cosmetics

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 28 of 41

**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
331 <sup>1)</sup>	Detection of <i>Pseudomonas aeruginosa</i> by cultivation	ČSN EN ISO 22717 ČSN ISO 18415	cosmetics
332 <sup>1)</sup>	Detection of <i>Staphylococcus aureus</i> by cultivation	ČSN EN ISO 22718 ČSN ISO 18415	cosmetics
333 <sup>1)</sup>	Detection of <i>Candida albicans</i> by cultivation	ČSN EN ISO 18416 ČSN ISO 18415	cosmetics
334 <sup>1)</sup>	Detection of <i>Escherichia coli</i> by cultivation	ČSN EN ISO 21150 ČSN ISO 18415	cosmetics
335 <sup>1)</sup>	Enumeration of yeast and mould by cultivation	ČSN EN ISO 16212	cosmetics
336 <sup>1)</sup>	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
337 - 349	Reserved		

**Tests: ECOTOXICOLOGY**

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
350 <sup>2)</sup>	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
351 <sup>2)</sup>	Determination of the inhibition of the mobility of <i>Daphnia magna Straus</i> - 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
352 <sup>2)</sup>	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
353 <sup>2)</sup>	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
354 <sup>2)</sup>	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

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 29 of 41

**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
355 <sup>2)</sup>	<i>Folsomia candida</i> reproduction test – determination of the inhibition.	CZ_SOP_D06_07_355 (ČSN ISO 11267)	waste, soils, sediments
356 <sup>2)</sup>	<i>Enchytraeus crypticus</i> reproduction test – determination of the inhibition	CZ_SOP_D06_07_356 (ČSN ISO 16387)	waste, soils, sediments
357 <sup>2)</sup>	<i>Lactuca sativa</i> – determination of inhibition of root growth	CZ_SOP_D06_07_357 (ČSN ISO 11269-1)	waste, soils, sediments
358 <sup>2)</sup>	Determination of nitrification activity and its inhibition	CZ_SOP_D06_07_358 (ČSN ISO 15685)	waste, soils, sediments
359 <sup>2)</sup>	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
1350 <sup>2)</sup>	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
1351 - 1360	Reserved		

### Tests: RADIOLOGY

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
360A <sup>2)</sup>	Determination of gross alpha activity by measuring of evaporated residue in a mixture with ZnS(Ag) scintillator	ČSN 75 7611 chapter 4	water, extracts
360B <sup>2)</sup>	Determination of gross alpha activity by measuring of incinerated evaporated residue by means of proportional detector	ČSN 75 7611 chapter 5	water, extracts
361 <sup>2)</sup>	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
362 <sup>2)</sup>	Determination of radium 226 after concentration by scintillation emanometry	ČSN 75 7622	water, extracts
363A <sup>2)</sup>	Determination of radon 222 by scintillation emanometry after its transportation into scintillation chamber using under-pressure	ČSN 75 7624 chapter 5	water, extracts
363B <sup>2)</sup>	Determination of radon 222 by scintillation gamma-spectrometry with a well type NaI(Tl) crystal	ČSN 75 7624 chapter 6	water, extracts

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 30 of 41

**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
364 <sup>2)</sup>	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
365 <sup>2)</sup>	Determination of tritium volume activity concentration (liquid scintillation counting method)	ČSN ISO 9698	water, extracts
366A <sup>2)</sup>	Determination of polonium 210 after its concentration by sorption on ZnS(Ag) by the measurement of emitted scintillations	ČSN 75 7626	water, extracts
366B <sup>2)</sup>	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
367 <sup>2)</sup>	Non-destructive determination of radionuclides <sup>25)</sup> 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
368 <sup>2)</sup>	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
369 <sup>2)</sup>	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
370 <sup>2)</sup>	Determination of lead 210 after its sorption on ZnS-colloid by beta radiation analyzer	CZ_SOP_D06_07_370 (Health Phys., 46, 1984, No. 5, p. 1131)	water, extracts (with low content of suspended solids or filtrated through 0.45µm filter)
371 <sup>2)</sup>	Determination of gross alpha activity by co-precipitation method by measurement of filtrated precipitate by means of proportional detector	ČSN 75 7610	water, extracts
372 <sup>2)</sup>	Determination of total indicative dose (TID) by calculation from the volume 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)	waters
373A <sup>2)</sup>	Determination of strontium 90 by proportional detector after separation	CZ_SOP_D06_07_373 (ASTM D5811-00)	water
373B <sup>2)</sup>	Determination of strontium 90 by proportional detector after separation	CZ_SOP_D06_07_373 (ASTM D5811-00, ASTM C1507-12)	soils, sludge, sediments
373C <sup>2)</sup>	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
374 <sup>2)</sup>	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

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 31 of 41

**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
375-399	Reserved		

**Tests: TRIBOLOGY**

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
400 <sup>1)</sup>	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
401 <sup>1)</sup>	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
402 <sup>1)</sup>	Determination of liquid cleanliness code by particle counter	CZ_SOP_D06_05_402	liquid fuels, lubricating oils
403 <sup>1)</sup>	Determination of base number by potentiometric titration	CZ_SOP_D06_05_403 (ČSN ISO 3771)	lubricating oils, additives to lubricants
404 <sup>1)</sup>	Determination of neutralization number by potentiometric titration	CZ_SOP_D06_05_404 (ČSN ISO 6619)	lubricating oils, additives to lubricants
405 <sup>1)</sup>	Determination of water content by Coulometric method	CZ_SOP_D06_05_405 (ASTM D 6304, ČSN EN ISO 12937)	liquid fuels, lubricating oils
406 <sup>1)</sup>	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
407-449	Reserved		

**Tests: GENERAL FOOD CHEMISTRY**

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
450 <sup>1)</sup>	Determination of N-substances by Kjeldahl method by titration	CZ_SOP_D06_04_450 (ČSN ISO 1871)	food, animal feeding stuff, food supplements
451 <sup>1)</sup>	Determination of fat by gravimetry	CZ_SOP_D06_04_451 (ČSN ISO 1443, ČSN ISO 1444) ČSN 46 7092-7)	food, animal feeding stuff
452 <sup>1)</sup>	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
453 <sup>1)</sup>	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
454 <sup>1)</sup>	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

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 32 of 41

**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
455 <sup>1)</sup>	Methods of coffee determination: determination of water extract content	ČSN 58 0113 Article 38	coffee
456 <sup>1)</sup>	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
457 <sup>1)</sup>	Determination of phosphate by indirect method by spectrophotometry	CZ_SOP_D06_04_457 (Veterinary Laboratory Methodology, Food chemistry, Bratislava1990)	meat and milk products
458 <sup>1)</sup>	Gravimetric determination of ash	CZ_SOP_D06_04_458 (ČSN 56 0116-4)	food, animal feeding stuff
459 <sup>1)</sup>	Determination of fibre by oxidation hydrolysis method	CZ_SOP_D06_04_459 (ČSN ISO 5498)	animal feeding stuff
460 <sup>1)</sup>	Determination of pH in biological material by potentiometry	CZ_SOP_D06_04_460 (ČSN ISO 2917:2012, ČSN ISO 1842)	food, animal feeding stuff
461 <sup>1)</sup>	Determination of sand in biological material by gravimetry	CZ_SOP_D06_04_461 (ČSN 56 0246-12)	food, animal feeding stuff
462 <sup>1)</sup>	Determination of relative density of liquids by pycnometry	CZ_SOP_D06_04_462 (ČSN EN 1131)	low viscosity liquids
463 <sup>1)</sup>	Titrimetric determination of acidity	CZ_SOP_D06_04_463 (ČSN ISO 750)	fruit juices, water-soluble food
464 <sup>1)</sup>	Determination of moisture content – distillation method	CZ_SOP_D06_04_464 (ČSN ISO 939)	spices and condiments
465 <sup>1)</sup>	Determination of dietary fibre by enzymatic method	CZ_SOP_D06_04_465 (AOAC Method 985.29)	food, food supplements
466 <sup>1)</sup>	Determination of starch content by polarimetry	CZ_SOP_D06_04_466 (ČSN 46 70 92-21)	cereals, baking products, cereal feeds
467 <sup>1)</sup>	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
468 <sup>1)</sup>	Determination of reducing and non-reducing sugars by titration	CZ_SOP_D06_04_468 (ČSN 56 01 46)	food, animal feeding stuff, food supplements
469 <sup>1)</sup>	Determination of alkalinity of water-soluble ash	ČSN ISO 1578	tea
470 <sup>1)</sup>	Determination of total ash	ČSN ISO 1575	tea
471 <sup>1)</sup>	Determination of water-soluble and water-insoluble ash	ČSN ISO 1576	tea
472 <sup>1)</sup>	Determination of acid-insoluble ash	ČSN ISO 1577	tea
473 <sup>1)</sup>	Determination of water extract	ČSN ISO 9768	tea
474 <sup>1)</sup>	Determination of loos in mass at 103°C	ČSN ISO 1573	tea
475 <sup>1)</sup>	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
476 <sup>1)</sup>	Determination of volatile oils (essential oils) by distillation with steam	ČSN EN ISO 6571	spices, aromatic substances, herbs

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 33 of 41

**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
477 <sup>1)</sup>	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
478 <sup>1)</sup>	Determination of the meat content in meat products and products containing meat by calculation from measured values	CZ_SOP_D06_04_478	meat products
479 <sup>1)</sup>	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
480 <sup>1)</sup>	Determination of non-protein contents by calculation	ČSN 46 7092-24	animal feeding stuff
481 <sup>1)</sup>	Determination of 4-hydroxyproline by spectrophotometry and determination of collagen by calculation from measured values	CZ_SOP_D06_04_481 (ISO 3496)	meat products
482 <sup>1)</sup>	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
483 <sup>1)</sup>	Determination of peroxide value volumetrically	ČSN EN ISO 3960	fat, vegetable oils
484 <sup>1)</sup>	Determination of water activity by capacitive sensors method	ČSN ISO 21807	food, raw materials for production of food, food supplements
485 <sup>1)</sup>	Determination of net muscle protein by calculation from content of collagen and protein	CZ_SOP_D06_04_485	meat, meat products
486 <sup>1)</sup>	Identification of synthetic dyes <sup>57)</sup> by thin-layer chromatography method	CZ_SOP_D06_04_486 (Davídek J., Laboratory manual of Food Analysis, 1981)	food
487 <sup>1)</sup>	Determination of piperine content by spectrophotometry	ČSN ISO 5564 (580192)	black pepper and white pepper, whole or ground
488 - 500	<b>Reserved</b>		

**Used abbreviations**

SOP	Standard operating procedure
DIN	Deutscher Institut fuer Normung
ISO	International Organization for Standardization
NEN	Nederlands Normalisatie-Institut
NIOSH	National Institute for Occupation Safety and Health
NIOSH <sup>1)</sup>	Methods 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
SPIMFAB	SPI MILJOSANERINGSFOND AB – method of the Association of Swedish Oil Companies
TNV	Branch Technical Standard of Water Management
US EPA	U.S. Environmental Protection Agency
IP	International Petroleum test methods
CFA	Flow analyser
ISE	Ion selective electrode

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 34 of 41

**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

HRGC/HRMS	High-resolution gas chromatography with high-resolution mass detector
BDE	Brominated Diphenyl Ethers
BFR	Brominated flammable retarders
MS	Mass detector
FID	Flame ionization detector
ECD	Electron capture detector
FLD	Fluorescent detector
PDA	Photo-Diode-Array detector
EC	electrochemical detection
IR	Infra-red detector
RI	Refractometric detector
TCD	Thermal conductivity detector
UV	Ultraviolet detector
SAFA	Saturated fatty acids
MUFA	Mono-unsaturated fatty acids
PUFA	Poly-unsaturated fatty acids
TFA	Transfatty acids
SÚJB	State Nuclear Safety Institute
Water	Drinking, packed, natural, mineral, pool, hot, bathing, raw, ground, surface, waste, sea water
Treated water	Dialysis water, aqua purificata, process, industrial, boiler and cooling water, irrigation water, water delivered by piping or taken from various storage tanks
Extracts	Aqueous extracts of soils, sediments and waste according to valid legislation
Liquid samples	Industrial liquids, technological liquids, technological baths
Solid samples	Waste (solid, liquid), sediments, sludge, soils, rocks, filters from emission and immission samples
Emission	Filters, liquid and solid sorption matrices, condensate, fly ash
Imission	Filters, solid sorption matrices
Working environment	Filters, solid sorbents, tubes
SPMD	Semi-Permeable Membrane Device
SPMD Extracts	SPMD from surface water, ground water and immissions
Biological matrices	Blood, tissues, mother's milk, urine, sweat,
Vegetable materials	Greenery (root, flower, green parts), pollen
Animal materials	Insects
Gases	Gas from biogas stations, landfill gases
Contaminated surfaces	Food spaces, walls after fire, technological plants walls
Selected food	Food, raw materials for food production, food supplements and animal feeding stuff excluding samples of these matrices with moister higher than 95%, unprocessed grains and condensed milk
Sum of Ca+Mg	water hardness
TEQ	Toxic equivalent
Bio indicators	Freshwater and marine plankton
SM	Standard Methods – USA standard methods for drinking and waste water analyses prepared and issued by American Public Health Association, American Water Works Association a Water Environmental Federation
Extracts	Extracts are prepared according standards ČSN EN 12457-2, ČSN EN 12457-3, ČSN EN 12457-4, US EPA 1311, US EPA 1312. Extract preparation method identification is always listed on certificate of analysis..
GR	Government Regulation
AHEM	Acta hygienica, epidemiologica et microbiologica
AITM	Airbus methods

---

Tests identified by ordinal number:

- with index <sup>\*</sup> are carried out outside the laboratory premises
- with index <sup>1)</sup> are carried out on the site in Prague
- with index <sup>2)</sup> are carried out on the site in Česká Lípa
- with index <sup>3)</sup> are carried out on the site in Pardubice

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 35 of 41

**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

- with index <sup>4)</sup> are carried out on the contact and sampling place in Brno
- with index <sup>5)</sup> are carried out on the contact and sampling place in Ostrava
- with index <sup>6)</sup> are carried out on the contact and sampling place in Plzeň
- with index <sup>7)</sup> are carried out on the contact and sampling place in Lovosice
- with index <sup>8)</sup> are carried out on the contact and sampling place in Rožnov pod Radhoštěm

**Explanation**

**Volatile organic compounds<sup>1)</sup>** – 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 tert-butyl ether (ETBE), ethylbenzene, hexachlorobutadien, hexanal, chlorobenzene, chloroethane, chloromethane, chloroform, i-butyl acetate, isobutanol, isoctane, isopropylbenzene, limonene, methanol, methyl tert-butyl ether, methylcyclohexane, methylcyclopentane, methylethylketone, methylisobutylketone, 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, tert-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 compounds<sup>2)</sup>** – 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-butanol, 2-hexanone, 2-propanol, 4-ethyltoluene, acetone, benzene, bromomethane, cis-1,2-dichloroethylene, cyclohexane, dichloromethane, ethanol, ethylbenzene, hexachlorobutadien, chlorobenzene, chloroethane, chloromethane, chloroform, isoctane, isopropylbenzene, methylcyclohexane, 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 compounds<sup>3)</sup>** – 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-trichlorobenzene, 1,3,5-trimethylbenzene, 1,3-diethylbenzene, 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-tert-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, 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 compounds<sup>4)</sup>** – 1,1,1,2-tetrachloroethane, 1,1,1-trichloroethane, 1,1,2,2-tetrachloroethane, 1,1,2-trichloroethane, 1,1-dichloroethane, 1,1-dichloroethylene, 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,2-cis-dichloroethylene, 1,2-dichlorobenzene, 1,2-dichloroethane, 1,2-trans-dichloroethylene, 1,3,5-trichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,4-dioxane, benzene, dichloromethane, ethylbenzene, hydrocarbon fractions C5(C6)-C12, chlorobenzene, chloroform, methyl isobutyl ketone, m-xylene, naphthalene, o-xylene, p-xylene, styrene, tetrachloroethylene, tetrachloromethane, toluene, trichloroethylene, vinylchloride, calculation of sums according to CZ\_SOP\_D06\_03\_J02

**Organic contaminants<sup>5)</sup>** – 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-methylantracene, 1-methylantracene, 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)-

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 36 of 41

**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

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 cresols<sup>6)</sup>** – 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

**Phthalates<sup>7)</sup>** – dimethylphthalate, diethylphthalate, di-n-propylphthalate, di-n-butylphthalate, diisobutylphthalate, dipentylphthalate, di-n-octylphthalate, bis-(2-ethylhexyl)- phthalate (DEHP), butylbenzylphthalate, dicyclohexyl phthalate, di-iso-nonylphthalate, di-iso-decylphthalate, sums calculation according to CZ\_SOP\_D06\_03\_J02

**Sugars<sup>8)</sup>** – glucose, fructose, lactulose, maltose, sucrose

**Semi-volatile organic compounds<sup>9)</sup>** – 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,  $\alpha$ -endosulphane,  $\beta$ -endosulphane, endrin, telodrin, isodrin, heptachlor, cis-heptachloroepoxide, trans-heptachloroepoxide,  $\alpha$ -HCH,  $\beta$ -HCH,  $\gamma$ -HCH,  $\delta$ -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, PCB 194, dichlobenile,  $\varepsilon$ -HCH, octachlorostyrene, di-n-butylphthalate, 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

**Polyyclic aromatic hydrocarbons<sup>10)</sup>** – naphthalene, acenaphtylene, acenaphtene, 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 biphenyls<sup>11)</sup>** – PCB28, PCB52, PCB101, PCB118, PCB138, PCB153, PCB180, sums calculation according to CZ\_SOP\_D06\_03\_J02

**Organochlorine pesticides and other halogen compounds<sup>12)</sup>** – 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, hexachlorobutadien, hexachloroethane, isodrin, methoxychlor, mirex, octachlorostyrene, oxychlordane, pentachlorobenzene, telodrin (isobenzene), toxaphene, trans-heptachloroperoxide, trans-chlordane, trans-nonachlor, trifluralin,  $\alpha$ -endosulphan,  $\alpha$ -HCH,  $\beta$ -endosulphane,  $\beta$ -HCH,  $\gamma$ -HCH (Lindane),  $\delta$ -HCH,  $\varepsilon$ -HCH, calculation of sums according to CZ\_SOP\_D06\_03\_J02

**PCDD/PCDF<sup>13)</sup>** – 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

**PCB<sup>14)</sup>** – 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

**BFR<sup>15)</sup>** – 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, alkylphenolethoxylates<sup>16)</sup>** – 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

**Terpenes<sup>17)</sup>** – menthol, eucalyptol

**Fatty acids<sup>18)</sup>** – butyric, capronic, caprylic, caprinic, undecanoic, lauric, tridecanoic, myristic, pentadecanoic, palmitic, heptadecanoic, stearic, arachidic, heneicosanoic, behenic, tricosanoic, lignoceric, myristoleic, cis-10-pentadecenoic, palmitoleic, cis-10-heptadecenoic, elaidic, oleic, cis-11-eicosenoic, erucic, nervonic, linolealidic, linoleic,  $\gamma$ -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

**Pesticides<sup>19)</sup>** – allethrin, anilazine, azinphos-ethyl, azinphos-methyl, benalaxyl, bifenthrin, bromacil, bromophos-ethyl, bromophos-methyl, bromopropylate, buprofezin, cadusafos, captafol, captan, carbaryl, carbophenothion, coumaphos, cypermethrin-alpha, cypermethrin-beta, cyprodinil, diazinon, diclofop-methyl, dicloran, dicofol, dichlobenil, dichlofenthion, dichlofuanid, dichlorvos, dimethachlor, dimethoate, dinobuton, dioxathion, disulfoton, ditalimfos, endosulfansulfat, epoxiconazole, ethion, ethoprophos, etrimfos, fenamiphos, fenazaquin, fenchlorphos, fenitrothion, fenpropothrin, fenson, fensulfothion, fenthion, fenvalerate, fludioxonil, flusilazole, folpet, fonofos, formothion, heptenophos, hexaconazole, chlornane-cis, chlornane-trans, chlofenson, chlorfenvinphos, chlorothalonil, chlorpropham, chlorpyrifos, chlorpyrifos-, chlozolinate, imazalil, iodofenphos, iprodione, isofenphos, malaoxon, malathion, mecarbam, mepronil, metalaxyl, methacrifos, methidathion, methiocarb, metribuzin, mevinphos-cis, mevinphos-trans, mirex, myclobutanil, napropamide, nitrothal-isopropyl, nuarimol, ofurace, oxadixyl, oxyfluorfen, paraoxon-ethyl, paraoxon-methyl, parathion, parathion-methyl, penconazole, pendimethalin,

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 37 of 41

**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

pentachloranisol, pentachloroaniline, permethrin, phentoate, phorate, phosalone, phosmet, phosphamidon, piperonylbutoxide, pirimiphos-ethyl, pirimiphos-methyl, procymidone, profenofos, propachlor, propargite, propiconazole, propyzamide, prothiophos, pyrazophos, pyridaben, pyrifenoxy, pyrimethanil, pyriproxyfen, quinalphos, quintozene, sulfallate, sulfotep, tebuconazole, tebufenpyrad, tecnazene, terbacil, terbufos, tetradifon, tetrachlorvinphos, tetramethrin, tetrasul, tolclofos-methyl, tolyfluanid, triadimefon, triazophos, vinclozolin

**Organochlorine pesticides<sup>20)</sup>** – α-HCH, β-HCH, γ-HCH, δ-HCH, chlorobenzene, p,p'-DDT, o,p'-DDT, p,p'-DDE, p,p'-DDD

**Aniline and aniline derivates<sup>21)</sup>** – p-chloroaniline

**Vitamine D<sup>22)</sup>** – vitamine D2 and vitamine D3

**Substitute sweeteners<sup>23)</sup>** – aspartame, acesulfam-K, saccharine, neohesperidine DC

**Preservatives<sup>24)</sup>** – sorbic acid, benzoic acid

**Radionuklidy<sup>25)</sup>** – Radionuclides emitting gamma rays in the energy interval 46,5 – 1836 keV.

**Glycols<sup>26)</sup>** – 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)<sup>27)</sup>** – 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, alkylphenolethoxylates<sup>28)</sup>** – 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 pollutants<sup>29)</sup>** – 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<sup>29A)</sup>** – 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 pollutants<sup>30)</sup>** – 1-(3,4-dichlorophenyl) urea (DCPU), 17-alpha-ethinylestradiol, 17-beta-estradiol, 2-amino-N-(isopropyl)benzamide, 2-chloro-2,6-diethylacetanilide, 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, amidosulfuron, amitraz, asulam, atraton, atrazine, atrazine-2-hydroxy, atrazine-desethyl, atrazine-desethyl-desisopropyl, atrazine-desisopropyl, azinphos-ethyl, azinphos-methyl, azoxystrobin, BAM (2,6-dichlorobenzamide), BDMC, benalaxyl, bendiocarb, bentazone, bentazone methyl, bifenoxy, bifenthrin, bitertanol, boscalid, bromacil, bromophos-ethyl, bromoxynil, cadusafos, coumafos, cyanazine, cyhalothrin, cymoxanil, cypermethrin, cyprazin, cyprodinil, cyproconazole, cyromazin, DEET, deltamethrin, desmedipham, desmethrin, diafenthiuron, diafenthiuron, diazepam, diazinon, diethofencarb, diphenconazole, diphenoxuron, diflubenzuron, diflufenican, dichlofenthion, dichlormid, dichlorvos, diclofenac, dicrotophos, dikvat, dimesfuron, dimethachlor, dimethenamid, dimethoate, dimethomorph, diuron, diuron desmethyl (DCPMU), epoxiconazole, EPTC, estriol, estron, ethiofencarb, ethion, ethofumesate, ethoprophos, fenamiphos, fenarimol, fenhexamid, phenmedipham, fenoxyaprop, fenoxy carb, fenpropidin, fenpropimorph, fensulfothion, fenuron, fipronil, fipronil sulfon, florasulam, fluazifop, fluazifop-butyl, fluazifop-butyl (isomers), fluazifop-P, fluazifop-p-butyl, flusilazole, flutolanil, fonofos, foramsulfuron, phorate, fosalon, phosphamidon, phosmet, phosmet-oxon, furathiocarb, haloxyfop, haloxyfop-p-methyl, hexaconazole, hexazinone, hexythiazox, chlorantraniliprole, chlorobromuron, chlorfenvinphos, chloridazon, chloridazon-desphenyl, chloridazon-methyl desphenyl, chlormequat, chlorotoluron, chloroxuron, chlorpropham, chlorpyrifos, chlorpyrifos-methyl, chlorsulfuron, chlortoluron desmethyl, ibuprofen, imazalil, imazamethabenz-methyl, imazamox, imazapyr, imazethapyr, imidacloprid, imidacloprid olefin, imidacloprid urea, indoxacarb, iprodione, iprovalicarb, irgarol, isoproturon, isoproturon-desmethyl, isoproturon-monodesmethyl, isopyrazam, carbamazepine, carbaryl, carbendazim, carbetamide, carbofuran, carbofuran -3-hydroxy, carboxin, carfentrazone-ethyl, clodinafop, clomazone, clomeprop, clothianidin, kresoxim-methyl, crimidine, lenacil, linuron, malaoxon, malathion, mandipropamid, MCPA, MCPP, mefenpyr-diethyl, mecarbam, mepiquat metsulfuron-methyl, mesosulfuron-methyl, mesotripon, mestranol, metalaxyl, metalaxy (isomers), metamitron, metazachlor, metazachlor ESA, metazachlor OA, methabenzthiazuron, methamidophos, methidathion, methiocarb, methiocarb sulfone, methiocarb sulfoxide, methomyl, methomyl-oxim, methoxyfenoxide, metconazole, metabromuron, metolachlor (isomers), metolachlor (S), metolachlor ESA, metolachlor OA, metoxuron, metribuzin, metribuzin-desamino, metribuzin-desamino diketo, metribuzin-diketo, molinate, monocrotophos, monolinuron, monuron, napropamide, naproxen, naptalam, neburon, nicosulfuron, nuarimol, omethoate, oxadixyl, oxamyl, paclobutrazol, paracetamol, paraquat, paraoxon-ethyl, paraoxon-methyl, parathion-ethyl, pencycuron, pendimethalin, penconazole, permethrin, pethoxamid, PFOA, PFOS, picloram, picoxyrobin, pirimiphos-ethyl, pirimiphos-methyl, pirimicarb, p-isopropylaniline, pretilachlor, primisulfuron-methyl, prodiamin, profam, profenofos, prochloraz, promecarb, prometon, prometryn, propachlor, propachlor ESA, propamocarb, propanil, propaquizafop, propazine, propiconazole, propoxur, propoxycarbazone-sodium, propylene thiourea, propyzamide, prosulfocarb, prothioconazole, pyribenzoxim, pyrimethanil, pyriproxyfen, quinolac, quinmerac, quinoxifen, quizalofop, rimsulfuron, sebutylazine, secbumeton, sethoxydim, simazine, simazine-2-hydroxy, simetryn, spiroxamine, sulfamethoxazol, sulfosulfuron, tau-fluvalinate, tebuconazole, tebuthiuron, teflubenzuron, terbutylazine, terbutylazine-desethyl, terbutylazine-desethyl-2-hydroxy, terbutylazine-hydroxy, terbutryn, thiabendazole, thiacloprid, thiamefoxam, thifensulfuron-methyl, thiobencarb, thiophanate-methyl, triadimefon, triadimenol, triallate, triasulfuron, triazophos, tribenuron-methyl, tricyclazole, trifloxysulfuron-sodium, triflusulfuron-methyl, triforin, triticonazol, warfarin, calculation according to CZ\_SOP\_D06\_03\_J02

**Pesticides, pesticide metabolites and drug residues<sup>30A)</sup>** – 6-chloronicotinic acid, acetamiprid, acetochlor, alachlor, aldicarb, aldicarb sulfone, aldicarb sulfoxide, ametryn, amitraz, atrazine, atrazine-2-hydroxy, atrazine-desethyl, atrazine-desisopropyl, bifenthrin, cadusafos,

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 38 of 41

**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

cyanazine, cyhalothrin, cypermethrin, deltamethrin, desmetryn, diazinon, dichlorvos, dicrotophos, dimethoate, diuron, epoxiconazole, fenoxycarb, fipronil, fipronil sulfon, fonofos, phorate, phosalone, phosphamidon, phosmet, phosmet-oxon, hexazinone, chlorgenvinphos, 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, methiocarb sulfon, methiocarb sulfoxide, methomyl, methomyl-oxim, metconazole, metolachlor (isomers), metribuzin, pendimethalin, permethrin, pethoxamid, picloram, prochloraz, prometon, prometryn, propaquizafop, 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<sup>30B)</sup>** - 6-chloronicotinic acid, acetamiprid, acetochlor, aldicarb, 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, methiocarb sulfon, methiocarb sulfoxide, methomyl, methomyl-oxim, metconazole, metolachlor (isomers), metribuzin, pendimethalin, permethrin, pethoxamid, picloram, prochloraz, prometon, prometryn, propaquizafop, 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 detection<sup>31)</sup>** - azinphos methyl, bromophos-ethyl, bromocyclen, butralin, captan, carbophenothion, demeton-S-methyl, diazinon, dichlorvos, dimethoate, dimethipin, ethion, fenamiphos, fenthion, chlordecon, chlorgenvinphos, chlorpyrifos, chlorpyrifos methyl, malathion, monocrotophos, parathion ethyl, parathion methyl, phorate, phosmet, pirimphos ethyl, prothifos, fenitrothion, temephos, sums calculation according to CZ\_SOP\_D06\_03\_J02

**Pesticides and their metabolites MS detection<sup>32)</sup>** - amitrole, AMPA, glufosinate, glufosinate ammonium, glyphosate, sums calculation according to CZ\_SOP\_D06\_03\_J02

**Complexing substances<sup>33)</sup>** - EDTA, PDTA and NTA

**Halogen compounds<sup>34)</sup>** - chloroalkanes C10-C13

**SAFA, MUFA, PUFA, TFA, Omega 3, Omega 6<sup>35)</sup>** – 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 - linolealidic (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), linolealidic (C18:2n6t), C18:3 trans isomers, Omega 3 - linoleic (C18:3n3), cis-11,14,17-eicosatrienoic (C20:3n3), cis-5,8,11,14,18-eikosapentaenoic (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 hydrocarbons<sup>36)</sup>** – 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 acids<sup>37)</sup>** – formic acid, acetic acid, caproic acid, butyric acid, isobutyric acid, lactic acid, propionic acid, valeric acid, isovaleric acid

**Gases<sup>38)</sup>** – methane, ethane, ethylene, acetylene

**Polychlorinated biphenyls<sup>39)</sup>** - PCB28, PCB52, PCB101, PCB118, PCB138, PCB153, PCB180, PCB194, sums calculation according to CZ\_SOP\_D06\_03\_J02

**Phenols and cresols<sup>40)</sup>** – 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

**Elements<sup>41)</sup>** - 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

**Elements<sup>42)</sup>** - 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

**Elements<sup>43)</sup>** - 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

**Elements<sup>44)</sup>** - 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

**Elements<sup>45)</sup>** - 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, Ti, Tl, U, V, Zn, Zr

**Semi volatile organic compounds<sup>46)</sup>** – 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

**Elements<sup>47)</sup>** - 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

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 39 of 41

**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

**CO<sub>2</sub> forms<sup>48)</sup>** - carbonates, bicarbonates, free CO<sub>2</sub>, total CO<sub>2</sub>, aggressive CO<sub>2</sub>

**Elements<sup>49)</sup>** - Ag, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Na, Ni, Pb and Zn

**Elements<sup>50)</sup>** - 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, Tl, U, V, W, Zn and Zr

**Calculation forms of elements<sup>51)</sup>** – sum of Na + K, ionic form Cr and Fe (Cr<sup>3+</sup>, Fe<sup>3+</sup>), compounds Na<sub>2</sub>O, P<sub>2</sub>O<sub>5</sub>, SiO<sub>3</sub> and SiO<sub>2</sub>

**Stoichiometric calculation<sup>52)</sup>** - ion form Cr<sup>3+</sup>, compound PO<sub>4</sub><sup>3-</sup>

**Stoichiometric calculation<sup>53)</sup>** – compound NaCl

**Polycyclic aromatic hydrocarbons<sup>54)</sup>** – 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 phenols<sup>55)</sup>** – 2-amino-4-chlorophenol

**Drug Residues<sup>56)</sup>** – anastrozole, atenolol, azathioprin, beclometasone dipropionate, ciclosporin, cyproterone acetate, diazepam, fluticasone propionate, medroxyprogesterone acetate, megestrol acetate, methotrexate, methylprednisolone acetate, metronidazol, paclitaxel, sotalol hydrochloride, tacrolimus, tramadol hydrochloride, triamcinolone acetonide, valsartan, zolpidem tartrate

**Synthetic dyes<sup>57)</sup> – 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 compounds<sup>58)</sup>** – 6:2 FTS, 8:2 FTS, N-Et-FOSA, N-Et-FOSE, N-Me-FOSA, N-Me-FOSE, PFBA, PFBS, PFDA, PFDoA, PFDS, PFHpA, PFHpS, PFHxA, PFHxS, PFNA, PFOA, PFOS, PFOSA, PFPeA, PFTA, PFTrDA, PFUnA

**Volatile organic compounds<sup>59)</sup>** – 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

**Annex:**

**Flexible scope of accreditation**

Ordinal numbers of tests
1-96, 98-142, 150-199, 200-204, 206-227, 250-265, 300-336, 350-359, 1350, 360-374, 400-406, 450-487

The Laboratory is allowed to modify the test methods listed in the Annex in the scope of accreditation provided the measuring principle is observed in accordance with MPA 00-09-15.

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

**Sampling:**

Ordinal number	Test procedure/Method name	Test procedure/Method identification	Tested object
1 <sup>1)2)4)5)6)7)8)</sup>	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 <sup>1)2)4)5)6)7)8)</sup>	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 <sup>1)2)4)5)6)7)8)</sup>	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.,	drinking water, hot drinking water

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 40 of 41

**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
		Regulation SÚJB No. 307/2002 Sb.)	
4 <sup>1)2)4)5)6)7)8)</sup>	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 <sup>1)2)4)5)6)7)8)</sup>	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 <sup>1)2)4)5)6)7)8)</sup>	Sampling of water from artificial pool manually	CZ_SOP_D06_07_V06 (ČSN EN ISO 5667-1, ČSN EN ISO 5667-3, ČSN ISO 5667-4, 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 <sup>1)2)4)5)6)7)8)</sup>	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 <sup>1)2)4)5)6)7)8)</sup>	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 <sup>1)2)4)5)6)7)8)</sup>	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 <sup>1)2)4)5)6)7) 8)</sup>	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
11 <sup>1)2)4)5)6)7) 8)</sup>	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 <sup>1)2) 4)5)6)7)8)</sup>	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

**Appendix is an integral part of  
Certificate of Accreditation No. 819/2015 of 30/11/2015**

Page 41 of 41

**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
13 <sup>1)2)4)5)6)7) 8)</sup>	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 <sup>1)</sup>	Sampling of food by random sampling method	CZ_SOP_D06_04_V14	Packages foods and beverages
15 <sup>1)2)4)5)6) 7)8)</sup>	Gas sampling for the determination of ammonia	CZ_SOP_D069_07_V15 (ČSN 834728)	gases

Sampling identified by the ordinal number:

- with superscript <sup>1)</sup> is carried out by the workplace in Prague,
- with superscript <sup>2)</sup> is carried out by the workplace in Česká Lípa,
- with superscript <sup>4)</sup> is carried out by the contact and sampling point in Brno,
- with superscript <sup>5)</sup> is carried out by the contact and sampling point in Ostrava,
- with superscript <sup>6)</sup> is carried out by the contact and sampling point in Plzeň,
- with superscript <sup>7)</sup> is carried out by the contact and sampling point in Lovosice,
- with superscript <sup>8)</sup> is carried out by the contact and sampling point in Rožnov pod Radhoštěm.