



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. 513/2022

Vodárna Zlín a.s. with registered office třída Tomáše Bati 383, Louky, 763 02 Zlín, Company Registration No. 14237083

to the Testing Laboratory No. **1781** Water Quality Control Department

Scope of accreditation:

Sampling of water, sludge and waste, chemical analysis of water and sludge, microbiological, biological and sensory analysis to the extent as specified in the appendix to this Certificate.

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

ČSN EN ISO/IEC 17025:2018

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

The Certificate of Accreditation is valid until: 31. 10. 2025

Prague: 31. 10. 2022



Lukáš Burda
Director of the Department
of Testing and Calibration Laboratories
Czech Accreditation Institute
Public Service Company



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

Vodárna Zlín a.s.

Water Quality Control Department ÚV Klečůvka, 763 11 Želechovice nad Dřevnicí

The Laboratory is qualified to carry out independent sampling.

Tests:

Ordinal number ¹	Test procedure/method name	Test procedure/method identification ²	Tested object
1	Electrometric determination of pH	S-01 (ČSN ISO 10523)	Water, liquid sludge
2	Determination of iron by spectrophotometry	S-02 (ČSN ISO 6332)	Drinking, hot, ground, surface, bottled, bathing water
3	Determination of nitrate by spectrophotometry	S-03 (Standard Methods for the Examination of Water and Wastewater, 14th Issue American Public Health Association, Washington 1975)	Drinking, hot, ground, surface, bottled, bathing water
4	Determination of ANC 4,5 by titration	S-04 (ČSN EN ISO 9963-1)	Drinking, hot, ground, surface, bottled, bathing water
5	Determination of BNC 8,3 by titration and free CO ₂ by calculation from measured values	S-05 (ČSN 75 7372)	Drinking, hot, ground, surface, bottled, bathing water
6	Determination of nitrite by spectrophotometry and nitrite nitrogen by calculation from measured values	S-06 (ČSN EN 26 777)	Water
7	Determination of ammonium by spectrophotometry ammonia nitrogen by calculation from measured values	S-07 (ČSN ISO 7150-1)	Water
8	Electrometric determination of conductivity	S-08 (ČSN EN 27888)	Water (excl. waste water)
9	Determination of hardness by titration and magnesium by calculation from measured values	S-09 (ČSN ISO 6059)	Drinking, hot, ground, surface, bottled, bathing water

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

Vodárna Zlín a.s.

Ordinal number ¹	Test procedure/method name	Test procedure/method identification ²	Tested object
10	Determination of calcium by titration	S-10 (ČSN ISO 6058)	Drinking, hot, ground, surface, bottled, bathing water
11	Determination of COD using permangate	S-11 (ČSN EN ISO 8467)	Drinking, hot, ground, surface, bottled, bathing water
12	Determination of absorbance by spectrophotometry	S-12 (ČSN 75 7360)	Drinking, hot, ground, surface, bottled, bathing water
13	Determination of turbidity by nephelometry	S-13 (HACH manual, ČSN EN ISO 7027-1)	Drinking, hot, ground, surface, bottled, bathing water
14	Determination of manganese by spectrophotometry	S-14 (ČSN ISO 6333)	Drinking, hot, ground, surface, bottled, bathing water
15	Determination of aluminium by spectrophotometry	S-15 (ČSN ISO 10566)	Drinking, hot, ground, surface, bottled, bathing water
16	Determination of odour and flavour by sensory analysis	S-16 (ČSN 75 7340, ČSN EN 1622)	Drinking, hot, ground, surface, bottled, bathing water
17	Reserved		
18	Determination of humic substances by spectrophotometry	S-18 (ČSN 75 7536)	Drinking, hot, ground, surface, bottled, bathing water
19	Determination of total cyanide by spectrophotometry	S-19 (ČSN 75 7415, MERCK manual)	Drinking, hot, ground, surface, bottled, bathing water
20	Determination of total organic carbon (TOC) by infrared spectrometry method	S-20 (ČSN EN 1484)	Water
21	Determination of colour by spectrophotometry	S-21 (ČSN EN ISO 7887)	Drinking, hot, ground, surface, bottled, bathing water
22*	Determination of dissolved oxygen by electrochemical probe method	S-22 (ČSN EN ISO 5814)	Water, liquid sludge

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

Vodárna Zlín a.s.

Ordinal number ¹	Test procedure/method name	Test procedure/method identification ²	Tested object
23*	Determination of dissolved oxygen by optical probe method	S-23 (ČSN ISO 17289)	Water
24*	Determination of free and total chlorine by spectrophotometry using HACH set and bound chlorine by calculation from measured values	S-24 (HACH manual, ČSN EN ISO 7393-2)	Drinking, hot, bathing water
25*	Determination of temperature	S-25 (ČSN 75 7342)	Water, liquid sludge
26	Determination of nitrate nitrogen by spectrophotometry and nitrates by calculation from measured values	S-26 (ČSN ISO 7890-3)	Water
27	Determination of dissolved solids, dissolved inorganic salts by gravimetry and loss on ignition of dissolved solids by calculation from measured values	S-27 (ČSN 75 7346, ČSN 75 7347)	Water, liquid sludge
28	Determination of ammonia nitrogen by titration after distillation, ammonium and inorganic nitrogen by calculation from measured values	S-28 (ČSN ISO 5664)	Drinking, hot, ground, surface and waste water, liquid sludge
29	Determination of total phosphorus by spectrophotometry with MERCK set	S-29 (MERCK manual, ČSN EN ISO 6878)	Water, liquid sludge
30	Determination of anionic surfactants by spectrophotometry using HACH set	S-30 (HACH manual, ČSN EN 903)	Water

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

Vodárna Zlín a.s.

Ordinal number ¹	Test procedure/method name	Test procedure/method identification ²	Tested object
31	Determination of biochemical oxygen demand after n days (BODn) by electrochemical probe method	S-31 (ČSN EN ISO 5815-1, ČSN EN 1899-2, ČSN EN ISO 5814)	Water, liquid sludge
32	Determination of biochemical oxygen demand after n days (BODn) by optical probe method	S-32 (ČSN EN ISO 5815-1, ČSN EN 1899-2, ČSN ISO 17289)	Water
33	Determination of suspended solids by gravimetry	S-33 (ČSN EN 872)	Water, liquid sludge
34	Determination of total solids and loss on ignition of total solids by gravimetry	S-34 (ČSN EN 12880)	Water, liquid sludge
35	Determination of total solids and loss on ignition of total solids by gravimetry	S-35 (ČSN EN 12880)	Dewatered sludge
36	Determination of fats and oils by gravimetry	S-36 (ČSN 75 7509)	Waste water
37	Determination of COD with dichromate by spectrophotometry using HACH set	S-37 (HACH manual, ČSN ISO 15705)	Water, liquid sludge
38	Determination of total nitrogen by spectrophotometry using HACH set and organic nitrogen by calculation from measured values	S-38 (HACH manual)	Drinking, hot, ground, surface and waste water, liquid sludge
39-49	Reserved		



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

Vodárna Zlín a.s.

Ordinal number ¹	Test procedure/method name	Test procedure/method identification ²	Tested object
50	Detection and enumeration of thermotolerant coliform bacteria and <i>Escherichia coli</i> by membrane filtration method	S-39 (ČSN 75 7835)	Drinking, hot, ground, surface, bottled, bathing water
51	Detection and enumeration of intestinal enterococci by membrane filtration method	S-40 (ČSN EN ISO 7899-2)	Drinking, hot, ground, surface, bottled, bathing water
52	Enumeration of culturable microorganisms at 22 °C and 36 °C by direct inoculation method	S-41 (ČSN EN ISO 6222)	Drinking, hot, ground, surface, bottled, bathing water
53	Determination of abioseston by microscopic method	S-42 (ČSN 75 7713)	Drinking, hot, ground, surface, bottled, bathing water
54	Determination of microscopic image - number of organisms, live and dead organisms - microscopic method	S-43 (ČSN 75 7712)	Drinking, hot, ground, surface, bottled, bathing water
55	Detection and enumeration of <i>Pseudomonas</i> aeruginosa by membrane filtration method	S-44 (ČSN EN ISO 16266)	Drinking, hot, ground, surface, bottled, bathing water
56	Detection and enumeration of <i>Clostridium perfringens</i> , including spores, by membrane filtration method	S-45 (Regulation No. 252/2004 Coll., as amended, Annex No. 6, ČSN EN ISO 14189)	Drinking, hot, ground, surface, bottled, bathing water
57	Enumeration of Staphylococcus aureus by membrane filtration method	S-46 (ČSN EN ISO 6888-1)	Drinking, hot, ground, surface, bottled, bathing water
58	Enumeration of coliform bacteria in non-disinfected water by membrane filtration method	S-47 (ČSN 75 7837)	Drinking, hot, ground, surface, bottled, bathing water

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

Vodárna Zlín a.s.

Water Quality Control Department ÚV Klečůvka, 763 11 Želechovice nad Dřevnicí

Ordinal number ¹	Test procedure/method name	Test procedure/method identification ²	Tested object
59	Detection and enumeration of <i>Legionella</i> by membrane filtration method	S-48 (ČSN EN ISO 11731)	Drinking, hot, ground, surface, bottled, bathing water
60	Detection and enumeration of coliform bacteria and <i>Escherichia coli</i> by membrane filtration method	S-49 (ČSN EN ISO 9308-1)	Drinking, hot, ground, surface, bottled, bathing water

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

If the document identifying the test procedure is dated, only these specific procedures are used. If the document identifying the test procedure is not dated, the latest edition of the specified procedure is used (including any changes).

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

Vodárna Zlín a.s.

Water Quality Control Department ÚV Klečůvka, 763 11 Želechovice nad Dřevnicí

Sampling:

Ordinal number	Sampling procedure name	Sampling procedure identification ¹	Sampled object
1	Drinking water sampling	S-301 (ČSN EN ISO 5667-1, ČSN EN ISO 5667-3, ČSN ISO 5667-5, ČSN EN ISO 5667-14, ČSN ISO 5667-21, ČSN EN ISO 19458)	Drinking, raw, process, hot water
2	Sampling of ground water (static, dynamic)	S-302 (ČSN EN ISO 5667-1, ČSN EN ISO 5667-3, ČSN ISO 5667-11, ČSN EN ISO 5667-14, ČSN EN ISO 19458)	Ground water
3	Sampling of surface water	S-303 (ČSN EN ISO 5667-1, ČSN EN ISO 5667-3, ČSN ISO 5667-4, ČSN EN ISO 5667-6, ČSN EN ISO 5667-14, ČSN EN ISO 19458)	Surface water
4	Sampling of waste water (manual sampling and sampling using an automatic sampler)	S-304 (ČSN EN ISO 5667-1, ČSN EN ISO 5667-3, ČSN ISO 5667-10, ČSN EN ISO 5667-14, ČSN EN ISO 19458)	Waste water
5	Sampling of sludge and waste	S-305 (ČSN EN 14899, ČSN EN ISO 5667-1, ČSN EN ISO 5667-3, ČSN EN ISO 5667-13, ČSN EN ISO 5667-14, ČSN EN ISO 5667-15, ČSN EN ISO 19458)	Liquid and dewatered sludge, liquid and solid waste, biowaste

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

Vodárna Zlín a.s.

Water Quality Control Department ÚV Klečůvka, 763 11 Želechovice nad Dřevnicí

Ordinal number	Sampling procedure name	Sampling procedure identification ¹	Sampled object
6	Sampling	S-306	Bathing water
	of bathing water	(Regulation No. 238/2011 Coll. as amended, ČSN EN ISO 5667-1, ČSN EN ISO 5667-3, ČSN ISO 5667-4, ČSN EN ISO 5667-6, ČSN EN ISO 5667-14, ČSN EN ISO 19458)	

If the document identifying the sampling procedure is dated, only these specific procedures are used. If the document identifying the sampling procedure is not dated, the latest edition of the specified procedure is used (including any changes)

Explanatory notes:

Water

- drinking (including raw, process water from WTP), hot, ground, surface, bottled, waste, bathing

water

Liquid sludge – liquid sample of sludge containing usually less than 50 g of dry matter per kilogram of sludge

S

- standard operating procedure prepared on the basis of valid standards, technical literature and firm

manuals

TNV

- Branch Technical Standard of Water Management

WTP

- Water Treatment Plant