

**The Appendix is an integral part of
Certificate of Accreditation No. 420/2023 of 07/08/2023**

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

LB MINERALS, s.r.o.
CAB number 1173, Central Laboratory
Tovární 431, 330 12 Horní Bříza

The Laboratory is qualified to carry out independent sampling.

Tests:

Ordinal number ¹	Test procedure/method name	Test procedure/method identification ²	Tested object
1.1	Chemical analysis of silicates by X-ray fluorescence spectrometer - Chemical analysis of silicate by X-ray fluorescence spectrometer – determination of SiO ₂ , Al ₂ O ₃ , TiO ₂ , Fe ₂ O ₃ , CaO, MgO, Na ₂ O, K ₂ O, P ₂ O ₅ , ZrO ₂	KP 31 – 201 A (ČSN EN ISO 12677; PANalytical manual)	Raw materials and products of the silicate industry
1.2	Determination of the loss on ignition by gravimetry	KP 31 – 201 B (ČSN 72 0103)	Raw materials and products of the silicate industry
2*	Measurement of dust nuisance	KP 31 – 203 (Government Regulation No. 361/2007 Coll., Annex 3, Part D; ČSN EN 481)	Working air
3*	Measurement of noise	KP 31 – 258 (ČSN EN ISO 9612; Guideline – MoE Bulletin No. 4/2013)	Working environment
4.1	Determination of dissolved solids (RL 105), annealed dissolved solids (RL 550), dissolved inorganic salts (RAS) by gravimetry using glass fibre filters	KP 31 – 282 (ČSN 75 7346; ČSN 75 7347)	Waste water, surface water
4.2	Determination of suspended solids (NL 105), annealed suspended solids (NL 550), loss on ignition of suspended solids (ZZ) _{NL} by gravimetry	KP 31 – 283 (ČSN EN 872; ČSN 75 7350)	Waste water, surface water
4.3	Determination of sulphate (SO ₄ ²⁻) by spectrophotometry - HACH LANGE commercial analytical set	KP 31 – 272 (HACH LANGE Manual)	Waste water, surface water aqueous extract

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Ordinal number ¹	Test procedure/method name	Test procedure/method identification ²	Tested object
4.4	Determination of chemical oxygen demand with dichromate (COD _{Cr}) by spectrophotometry - HACH LANGE commercial analytical set	KP 31 – 263 (ČSN ISO 15705; HACH LANGE Manual)	Waste water, surface water
4.5	Determination of biochemical oxygen demand after n days (BOD _n) - method for diluted samples	KP 31 – 281 A (ČSN EN ISO 5815-1)	Waste water, surface water
4.6	Determination of biochemical oxygen demand after n days (BOD _n) - method for undiluted samples	KP 31 – 281 B (ČSN EN 1899-2)	Waste water, surface water
4.7	Determination of pH by potentiometry	KP 31 – 280 (ČSN ISO 10 523)	Waste water, surface water, aqueous extract
4.8*	Determination of dissolved oxygen electrochemically	KP 31 – 286 A (ČSN EN ISO 5814)	Waste water, surface water
4.9*	Determination of temperature	KP 31 – 286 B (ČSN 75 7342)	Waste water, surface water
4.10	Determination of the sum of calcium and magnesium by titration, determination of magnesium by calculation	KP 31 – 276 A (ČSN ISO 6058; ČSN ISO 6059)	Waste water, surface water , aqueous extract
4.11	Determination of calcium by titration	KP 31 – 276 B (ČSN ISO 6058)	Waste water, surface water , aqueous extract
4.12	Determination of acid neutralizing capacity (ANC _{4,5}) by titration	KP 31 – 277 (ČSN EN ISO 9963 – 1)	Waste water, surface water
4.13	Determination of chloride (Cl ⁻) by titration by argentometry	KP 31 – 278 (ČSN ISO 9297)	Waste water, surface water, aqueous extract
4.14	Determination of ammonia nitrogen (N-NH ₄) by distillation	KP 31 – 279 (ČSN ISO 5664)	Waste water, surface water
4.15	Determination of ammonium (NH ₄ ⁺), ammonia nitrogen (N-NH ₄) by spectrophotometry, HACH LANGE commercial analytical set	KP 31 – 264 (ČSN ISO 7150 – 1; HACH LANGE Manual)	Waste water, surface water
4.16*	Determination of pH by potentiometry	KP 31 – 286 C (ČSN ISO 10523)	Waste water, surface water

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Ordinal number ¹	Test procedure/method name	Test procedure/method identification ²	Tested object
4.17	Determination of nitrate (NO ₃ ⁻), nitrate nitrogen (N-NO ₃) by spectrometry, HACH LANGE commercial analytical set	KP 31 – 265 (ČSN ISO 7890 – 3; HACH LANGE Manual)	Waste water, surface water
4.18	Determination of total phosphorus (P _c), phosphate (PO ₄ ³⁻) by spectrophotometry, HACH LANGE commercial analytical set	KP 31 – 266 (ČSN EN ISO 6878; HACH LANGE Manual)	Waste water, surface water
4.19	Determination of nitrite (NO ₂ ⁻), nitrite nitrogen (N-NO ₂) by spectrophotometry	KP 31 – 267 (ČSN EN 26777)	Waste water, surface water
4.20*	Determination of conductivity by conductometry	KP 31 – 286 D (ČSN EN 27888)	Waste water, surface water
4.21	Determination of iron (Fe) by spectrophotometry	KP 31 – 268 (ČSN ISO 6332)	Waste water, surface water
5	Determination of coefficient of linear expansion	KP 31 – 274 (ČSN EN ISO 10545–8; ČSN 72 6031; ČSN 72 1083; ČSN EN ISO 17562; Netzsch Manual)	Raw materials and products of the silicate industry
6*	Measurement of vibration	KP 31 – 261 (ČSN ISO 2631–1; ČSN EN ISO 5349–2; Guideline – MoE Bulletin No. 4/2013)	Working environment

¹ asterisk at the ordinal number identifies the tests, which the Laboratory is qualified to carry out outside the permanent laboratory premises

² if the document identifying the test procedure is dated, only these specific procedures are used. If the document identifying the test procedure is not dated, the latest edition of the specified procedure is used (including any changes)

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Sampling:

Ordinal number	Sampling procedure name	Sampling procedure identification ¹	Sampled object
1	Waste water sampling (manual sampling and sampling using an automatic sampler)	KP 31 – 237 (ČSN EN ISO 5667-1; ČSN EN ISO 5667-3; ČSN ISO 5667-10; ČSN EN ISO 5667-14)	Waste water, surface water

¹ 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)

Explanations and abbreviations:

KP
MoH CR Bulletin 4/2013

Control procedure
MoH CR Bulletin vol. 4, part 4 Guideline for the measurement and evaluation of noise and vibrations at workplace and vibrations in protected indoor areas of buildings