



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. 576/2023

**Gas Storage CZ, s.r.o.**  
with registered office Limuzská 3135/12, Strašnice, 108 00 Praha 10,  
Company Registration No. 27892077

for the Testing Laboratory No. 1652  
Testlab Geo - Services

Scope of accreditation:

Chemical and physico-chemical tests of gases and water 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 Conformity Assessment Body is entitled to refer to this Certificate, provided that the accreditation is not suspended and the Accredited 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.: 600/2021 of 12. 11. 2021, or any administrative acts building upon it.

The Certificate of Accreditation is valid until: **12. 11. 2026**

Prague: 6. 11. 2023



Jan Velíšek  
Director of the Department  
of Testing and Calibration Laboratories  
Czech Accreditation Institute



**The Appendix is an integral part of  
Certificate of Accreditation No: 576/2023 of 06/11/2023**

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

**Gas Storage CZ, s.r.o.**  
CAB number 1652, Testlab Geo - Services  
Tuřanka 1554/115b, 627 00 Brno - Slatina

*Detailed information on activities within the scope of accreditation (determined analytes/ subject of testing / calculations) is given in the section „Specification of the scope of accreditation“.*

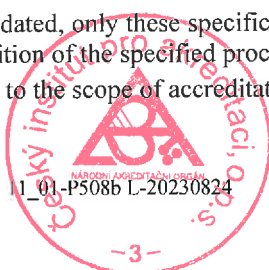
**Tests:**

Ordinal number <sup>1</sup>	Test procedure / method name	Test procedure / method identification <sup>2</sup>	Subject of the test	Degrees of freedom <sup>3</sup>
1	Determination of the composition of natural gas by gas chromatography with TCD-TCD- FID and its physico-chemical parameters by calculation from measured values	SOP 01 (ČSN EN ISO 6974-3; ČSN EN ISO 6974-5; ČSN EN ISO 6976; ČSN EN ISO 15403-1)	Gas	-
2	Determination of $\delta^{13}\text{C}$ in methane by CRDS method	SOP 03 (User Manual for G2201- <i>i</i> Analyzer for Isotopic CO <sub>2</sub> / CH <sub>4</sub> )	Gas	-
3	Determination of $\delta^{13}\text{C}$ in carbon dioxide by CRDS method	SOP 04 (User Manual for G2201- <i>i</i> Analyzer for Isotopic CO <sub>2</sub> / CH <sub>4</sub> )	Gas	-
4	Determination of $\delta^{18}\text{O}$ and $\delta\text{D}$ in water by CRDS method	SOP 06 (User Manual for L2140- <i>i</i> Analyzer for Isotopic H <sub>2</sub> O)	Water	-
5	Determination of $\delta\text{D}$ in methane by CRDS method	SOP 08 (User Manual for G2182- <i>i</i> Analyzer of $\delta\text{D}$ & $\delta^{13}\text{C}$ in CH <sub>4</sub> )	Gas	-
6	Determination of water dew point by chilled mirror method	SOP 09 (ČSN EN ISO 6327; User Manual for Dew point analyzer Hygrovision BL)	Gas	-
7	Determination of hydrocarbon dew point by chilled mirror method	SOP 10 (ISO/TR 11150; User Manual for Dew point analyzer Hygrovision BL)	Gas	-

<sup>1</sup> asterisk at the ordinal number identifies the tests, which the laboratory is qualified to carry out outside the permanent laboratory premises

<sup>2</sup> 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 valid edition of the specified procedure is used (including any changes)

<sup>3</sup> the laboratory does not apply a flexible approach to the scope of accreditation



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Certificate of Accreditation No: 576/2023 of 06/11/2023**

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

**Gas Storage CZ, s.r.o.**  
CAB number 1652, Testlab Geo - Services  
Tuřanka 1554/115b, 627 00 Brno - Slatina

**Specification of the scope of accreditation:**

Ordinal test number	Detailed information on activities within the scope of accreditation (determined analytes)
1	Composition: hydrocarbons C1 – C6, oxygen, nitrogen, carbon dioxide, hydrogen, helium Physico-chemical parameters: gross calorific value (MJ/m <sup>3</sup> ), net calorific value (MJ/m <sup>3</sup> ), Wobbe index (MJ/m <sup>3</sup> ), gross calorific value (kWh/m <sup>3</sup> ), net calorific value (kWh/m <sup>3</sup> ), Wobbe index (kWh/m <sup>3</sup> ), specific gravity, density (kg/m <sup>3</sup> )
2, 3	$\delta^{13}\text{C}$ is specified according to the standard Vienna Pee Dee Belemnite
4, 5	$\delta^{18}\text{O}$ a $\delta\text{D}$ jsou vztaženy ke standardu Vienna Standard Mean Ocean Water

**Specification of the scope of accreditation:**

Ordinal test number	Detailed information on activities within the scope of accreditation (subject of testing)
1, 2, 3, 5, 6, 7	Natural gas, biogas, soil gas, synthetic gas, gas mixtures (enriched natural gas), fuel gasses (propane, propane-butane), carbon dioxide
4	Surface water, ground water, reservoir water, technological water

**Specification of the scope of accreditation:**

Ordinal test number	Detailed information on activities within the scope of accreditation (calculations)
2, 3, 4, 5	The calculations in the tests No. 2, 3, 4 and 5 are carried out automatically as: $\delta nX = 1000 \times [(R_S - R_{ref}) / R_{ref}]$ , where $X$ is the monitored element, $n$ is the nucleon number of the heavier isotope, $R_S$ is the ratio of heavier and lighter- isotopes in the sample and $R_{ref}$ is the ratio of heavier and lighter isotopes of the reference material

**Abbreviations:**

TCD Thermal Conductivity Detector

FID Flame Ionization Detector

CRDS Cavity ring down spectroscopy

