EA MLA Signatory
Český institut pro akreditaci, o.p.s.
(Czech Accreditation Institute)
Hájkova 2747/22, Žižkov, 130 00 Praha 3

issues

according to section 16 of Act No. 22/1997 Coll., on technical requirements for products and on changes and amendments to some Acts, as amended

CERTIFICATE OF ACCREDITATION

No. **29/2026**

ORLEN Unipetrol RPA s.r.o.
with registered office Litvínov - Záluží 1, PSČ 436 70
Company Registration No. 27597075

for the Testing Laboratory No. **1515**
Refinery Laboratory

Scope of accreditation:

Chemical and physicochemical analyses of petroleum and petroleum products including sampling, chemical analyses of ground water and waste water, sampling of waste water and surface 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 abovementioned Accredited 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.: 662/2024 of 05/12/2024, and/or any administrative acts building upon it.

The Certificate of Accreditation is valid until: **13/01/2031**

Prague: 13/01/2026

Signed in the Czech original:
Gor Petrosjan on 13/01/2026

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

This translation of the Czech original has been issued by: Eliška Frycová

The Appendix is an integral part of
Certificate of Accreditation No. 29/2026 of 13/01/2026

Accredited entity according to ČSN EN ISO 17025:2018:

ORLEN Unipetrol RPA s.r.o.

CAB number 1515, Refinery Laboratory
Záluží 1, 436 70 Litvínov

Testing laboratory locations:

1	**Litvínov Laboratories**	Záluží 1, 436 70 Litvínov
2	**Kralupy Laboratories**	Wichterleho 809, 278 01 Kralupy nad Vltavou

The Laboratory is qualified to carry out standalone sampling.
Detailed information on activities within the scope of accreditation (determined analytes) is given in the section „Specification of the scope of accreditation".

1 **Litvínov Laboratories**

Tests:

Ordinal number[1]	Test procedure / method name	Test procedure / method identification[2]	Tested subject	Degrees of freedom[3]
1	Determination of distillation characteristics at atmospheric pressure	LP-0013L (ČSN EN ISO 3405; ASTM D86)	Liquid hydrocarbons	-
2	Determination of kinematic viscosity by Stabinger viscometer	LP-0040L (ASTM D7042)	Liquid hydrocarbons	-
3	Determination of saturated vapour pressure and calculation of (DVPE)	LP-0021L (ČSN EN 13016-1)	Liquid hydrocarbons	-
4	Determination of flash point – Pensky-Martens closed cup	LP-0023L (ČSN EN ISO 2719)	Motor fuels and heating oils	-
5	Determination of fatty acid methyl esters (FAME) by IR method	LP-0244L (ČSN EN 14078; ASTM D7371)	Motor fuels	-
6	Determination of the content of hydrocarbon groups, benzene an oxygenates by multidimensional GC/FID method	LP-0063RL (ČSN EN ISO 22854)	Liquid hydrocarbons	-
7	Determination of sulphur content by UV fluorescence method	LP-0025L (ČSN EN ISO 20846; ASTM D5453)	Liquid hydrocarbons	-
8	Determination of cold filter plugging point (CFPP) using an automatic analyzer	LP-0012L (ČSN EN 116; ASTM D6371)	Motor fuels	-
9	Determination of knock characteristics by research method	LP-0045L (ČSN EN ISO 5164; ASTM D2699)	Motor fuels	-
10	Determination of knock characteristics by engine method	LP-0046L (ČSN EN ISO 5163; ASTM D2700)	Motor fuels	-

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Ordinal number[1]	Test procedure / method name	Test procedure / method identification[2]	Tested subject	Degrees of freedom[3]
11	Determination of chlorides by electrometric method	LP-0014L (ASTM D3230)	Liquid hydrocarbons	-
12	Determination of sulphur content by X-ray fluorescence method	LP-0033L (ČSN EN ISO 8754; ASTM D4294)	Liquid hydrocarbons	-
13	Determination of water content by titration – Karl Fischer method	LP-0037L (ČSN ISO 760)	Liquid hydrocarbons	-
14	Determination of density by densitometer	LP-0008L, method A (ČSN EN ISO 12185; ASTM D4052)	Liquid hydrocarbons	-
15	Determination of density by glass densitometer	LP-0008/L, method B (ČSN EN ISO 3675)	Liquid hydrocarbons	-
16	Determination of mechanical impurities by filtration	LP-0055L (ČSN 65 6080)	Liquid hydrocarbons	-
17	Determination of refinery gas composition by GC/FID, TCD method	LP-0026L (ČSN EN ISO 6974-6; ISO 7941)	Refinery gas	-
18	Determination of hydrogen and carbon content by elemental analyzer	LP-0198AL (ASTM D5291)	Liquid hydrocarbons	-
19	Determination of water – Coulometric Karl Fischer titration method	LP-0031L (ČSN EN ISO 12937)	Liquid hydrocarbons	-
20	Determination of cloud point by automatic analyzer	LP-0011L (ASTM D7689; ČSN EN ISO 3015)	Motor fuels	-
21	Determination of net calorific value by calorimeter	LP-0067L (ASTM D240)	Liquid hydrocarbons	-
22	Determination of aromatic hydrocarbons by HPLC method	LP-0120L (ČSN EN 12916; ASTM D 6379)	Aviation fuel	-
23	Determination of flash point acc. to Tag	LP 0009L (ASTM D56)	Aviation fuel	-
24	Determination of derived cetane number (DCN) by analyzer	LP-0235L (ASTM D 7668)	Motor fuels	-
25	Determination of hydrocarbons C1 – C5 by GC/FID method	LP-0075L (ČSN EN 27941)	Gaseous hydrocarbon mixtures, LPG	-

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[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 valid edition of the specified procedure is used (including any changes)

[3] the laboratory does not apply a flexible approach to the scope of accreditation

Specification of the scope of accreditation:

Ordinal test number	Detailed information on activities within the scope of accreditation (determined analytes)
6	benzene, methanol, ethanol, isopropylalcohol, isobutylalcohol, tercbutylalcohol, methyltercbutylether (MTBE), ethyltercbutylether (ETBE), aromatics, olefins, total oxygen content
17	hydrogen, nitrogen, CO, CO_2, methane, ethane, ethylene, propane, propylene, isobutane, n-butane, t-butene, n-butene, i-butene, c-butene, isopentane, n-pentane, C6-hydrocarbons+higher, sum of hydrocarbons, water content
25	methane, ethane, ethylene, propane, propylene, isobutane, n-butane, t-butene, n-butene, i-butene, c-butene, isopentane, n-pentane

Sampling:

Ordinal number	Sampling procedure name	Sampling procedure identification[1]	Subject of sampling
1	Sampling of petroleum products	LP-0251L (ČSN EN ISO 3170)	Petroleum products
2	Sampling of waste water	LP-0253L (ČSN ISO 5667-10)	Waste water
3	Sampling of surface water	LP-0253L, procedure B ČSN ISO 5667-4)	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 valid edition of the specified procedure is used (including any changes)

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2 Kralupy Laboratories

Tests:

Ordinal number[1]	Test procedure / method name	Test procedure / method identification[2]	Tested subject	Degrees of freedom[3]
1	Determination of distillation characteristics at atmospheric pressure	LP-0013K (ČSN EN ISO 3405; ASTM D86)	Liquid hydrocarbons	-
2	Determination of polyaromatic hydrocarbons by HPLC/FLD method	LP-0140K (ČSN 75 7554)	Ground water, waste water	-
3	Determination of kinematic viscosity by Stabinger viscometer	LP-0040K (ASTM D7042)	Liquid hydrocarbons	-
4	Determination of saturated vapour pressure and calculation of DVPE	LP-0021K (ČSN EN 13016-1)	Liquid hydrocarbons	-
5	Determination of flash point – Pensky-Martens closed cup	LP-0023K (ČSN EN ISO 2719)	Motor fuels and heating oils	-
6	Determination of fatty acid methyl esters (FAME) by IR method	LP-0244K (ČSN EN 14078; ASTM D7371)	Motor fuels	-
7	Determination of the content of hydrocarbon groups, benzene an oxygenates by multidimensional GC/FID method	LP-0063RK (ČSN EN ISO 22854)	Liquid hydrocarbons	-
8	Determination of hydrocarbons C10 – C40 by GC/FID method	LP-0164K (ČSN EN ISO 9377-2)	Waste water	-
9	Determination of sulphur content by UV fluorescence method	LP-0025K (ČSN EN ISO 20846; ASTM D5453)	Liquid hydrocarbons	-
10	Determination of density by densitometer	LP-0008KA (ČSN EN ISO 12185)	Liquid hydrocarbons	-
11	Determination of density by glass densitometer	LP-0008KB (ČSN EN ISO 3675)	Liquid hydrocarbons	-
12	Determination of water content by titration – Karl Fischer method	LP-0037K (ČSN ISO 760)	Liquid hydrocarbons	-
13	Determination of cold filter plugging point (CFPP) using an automatic analyzer	LP-0012K (ČSN EN 116; ASTM D6371)	Motor fuels	-
14	Determination of biochemical oxygen demand (BODn) using a commercial analytical kit photometrically	LP-0135K (MERCK manual)	Ground water, waste water	-

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Ordinal number[1]	Test procedure / method name	Test procedure / method identification[2]	Tested subject	Degrees of freedom[3]
15	Determination of chemical oxygen demand with dichromate (COD-Cr) using a commercial analytical kit	LP-0161K (ASTM D5220; (MERCK manual)	Ground water, waste water	-
16	Determination of suspended solids by gravimetry	LP-0122K (ČSN EN 872)	Ground water, waste water	-
17	Determination of knock characteristics by research method	LP-0045K (ČSN EN ISO 5164; ASTM D2699)	Motor fuels	-
18	Determination of knock characteristics by engine method	LP-0046K (ČSN EN ISO 5163; ASTM D2700)	Motor fuels	-
19	Determination of refinery gas composition by GC/FID, TCD method	LP-0026K (ČSN EN ISO 6974-6; ISO 7941)	Refinery gas	-
20	Determination of water content by titration – Karl Fischer method	LP-0037K (ČSN EN ISO 10101-2)	Refinery gas	-
21	Determination of net calorific value by calorimeter	LP-0067K (ASTM D240)	Liquid hydrocarbons	-
22	Determination of sulphur content by X-ray fluorescence method	LP-0033K (ASTM D4294; ČSN EN ISO 8754)	Liquid hydrocarbons	-
23	Determination of water – Coulometric Karl Fischer titration method	LP-0031K (ČSN EN ISO 12937)	Liquid hydrocarbons	-
24	Determination of MTBE and ETBE by GC/MS method (headspace)	LP-0128K (ČSN ISO 11423-1; EPA 8260B)	Ground water, waste water	-
25	Determination of BTEX in water by GC/MS method (headspace)	LP-0129K (ČSN ISO 11423-1; EPA 8260B)	Ground water, waste water	-
26	Determination of cloud point by automatic analyzer	LP-0011K (ASTM D5771; ČSN EN ISO 3015)	Motor fuels	-
27	Determination of crystallization point	LP-0010K (ASTM D5972)	Aviation fuel	-
28	Determination of flash point acc. to Tag	LP-0009K (ASTM D56)	Aviation fuel	-

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Ordinal number[1]	Test procedure / method name	Test procedure / method identification[2]	Tested subject	Degrees of freedom[3]
29	Determination of cetane number by engine method	LP-0235K (ČSN EN ISO 5165)	Motor fuels	-
30	Determination of derived cetane number (DCN) by CID analyzer	LP-0238K (ASTM D 7668)	Motor fuels	-
31	Determination of hydrocarbons C1 – C5 by GC/FID method	LP 0075K (ČSN EN 27941)	Gaseous hydrocarbon mixtures, LPG	-

[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 valid edition of the specified procedure is used (including any changes)

[3] the laboratory does not apply a flexible approach to the scope of accreditation

Specification of the scope of accreditation:

Ordinal test number	Detailed information on activities within the scope of accreditation (determined analytes)
2	fluoranthene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[ghi]perylene, indeno[1,2,3-cd]pyrene, sum of 6 PAH by calculation
7	benzene, methanol, ethanol, isopropylalcohol, isobutylalcohol, tercbutylalcohol, methyltercbutylether (MTBE), ethyltercbutylether (ETBE), aromatics, olefins, total oxygen content.
19	hydrogen, nitrogen, CO, CO_2, methane, ethane, ethylene, propane, propylene, isobutane, n-butane, t-butene, n-butene, i-butene, c-butene, i-pentane, n-pentane, C6-hydrocarbons+higher, sum of hydrocarbons, water content.
25	benzene, toluene, ethylbenzene, o-, m-, p-xylene, total xylenes by calculation
31	methane, ethane, ethylene, propane, propylene, isobutane, n-butane, t-butene, n-butene, i-butene, c-butene, isopentane, n-pentane

Sampling:

Ordinal number	Sampling procedure name	Sampling procedure identification[1]	Subject of sampling
1	Sampling of petroleum products	LP 0251K (ČSN EN ISO 3170)	Petroleum products
2	Sampling of waste water	LP 0253K (ČSN ISO 5667-10)	Waste water
3	Sampling of surface water	LP-0253K, procedure B ČSN ISO 5667-4)	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 valid edition of the specified procedure is used (including any changes)

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Abbreviations used:

DCN	Derived Cetane Number
DVPE	Dry Vapour Pressure Equivalent
ETBE	Ethyl-tert-butyl ether
FID	Flame Ionization Detector
FLD	Fluorescence Detector
GC	Gas Chromatography
HPLC	High-Performance Liquid Chromatography
IR	Infrared Spectroscopy
Liquid hydrocarbons	Motor fuels, heating oils, aviation kerosene, LPG
LPG	Liquefied Petroleum Gases
MS	Mass detector
MTBE	Methyl-t-butyl ether
X-ray	X-ray fluorescence spectrometry
TCD	Thermal Conductivity Detector
UV	Ultraviolet Fluorescence

"This document is an appendix to the certificate of accreditation. In case of any discrepancies between the English and Czech versions, the Czech version shall prevail, both for the certificate appendix and the certificate itself. "