HELLENIC ACCREDITATION SYSTEM

Annex F1/25 to the Certificate No. **364**-8

SCOPE of ACCREDITATION

of the

Physicochemical Laboratory

of the

BUREAU VERITAS FUELS HELLAS S.M.S.A.

Materials / Products tested	Types of test / Properties measured	Applied methods / Techniques used
Physicochemical tests		
Petroleum and petroleum products	1. Determination of flash point (°C)	Pensky Martens closed cup method ISO 2719: 2025 ASTM D93: 2026 IP34: 2021 (Procedure A and B)
	2. Determination of density (Kg/m^3, g/cm^3)	Hydrometer method ISO 3675:1998 ASTM D 1298:2024 IP160:1999
	3. Determination of distillation characteristics at atmospheric pressure	Distillation at atmospheric pressure ISO 3405:2019 ASTM D 86:2023ae2 IP123:2019(R2021)
	4. Determination of moisture (mg/Kg)	Coulometric Karl Fischer titration ISO 12937:2000 ASTM D 6304:2025 IP438:2001 (R2013)
	5. Determination of sulfur content (mg/kg)	Ultraviolet fluorescence method ISO 20846:2026 ASTM D 5453:2025 IP490: 2020
	6. Determination of water content (% wt or % vol)	Distillation method ISO 3733:1999 ASTM D 95:2023e1 IP74:2000 (R2014)

Materials / Products tested	Types of test / Properties measured	Applied methods / Techniques used
Petroleum and petroleum products (continued)	7. Determination of kinematic viscosity and calculation of dynamic viscosity (mm^2/s, cSt)	Viscometer method ISO 3104:2023 ISO 3105:1994 ASTM D445:2026 ASTM D446:2024 IP 71/1: 2024 IP 71/2:1995 (R2017)
	8. Determination of pour point, (^oC)	Pour point ISO 3016:2019 ASTM D 97:2017b (R2022) IP15:2022
	9.Determination of sulfur content-energy dispersive X-ray fluorescence spectrometry	Sulfur content by XRF ISO 8754: 2025 ASTM D 4294:2024 IP 336:2004 (R2022)
	10. Determination of carbon residue-micro method (MCR)	Micro carbon residue ISO 10370:2014 ASTM D 4530:2025 IP 398:2015 (R2020)
	11. Determination of carbon, hydrogen, nitrogen	C, H, N determination by instrumental analysis ASTM D 5291: 2026
	12. Determination of ash	Ash determination ISO 6245:2001 ASTM D 482:2025 IP4:2005 (R2025)
	13. Determination of total sediment by hot filtration	IP 375:2011 (R2021) ISO 10307-1:2009 ASTM D 4870:2022
	14. Determination of total sediment by thermal ageing (Procedure A) and chemical ageing (Procedure B)	ISO 10307-2:2009 (Cor 1:2010) IP 390: 2018 (R2022) ASTM D 4870:2022
	15. Determination of aluminum and Silicon	ISO 10478:1994 (ICP technique)
	16. Determination of aluminum, silicon, sodium, vanadium, nickel, iron, calcium, zinc, phosphorous	IP 501:2005 (R2019)
	17. Heat of combustion of liquid hydrocarbon fuels by bomb calorimeter	ASTM D240:2025
Petroleum and petroleum products (continued)	18. Determination of density oscillating U-tube method	ASTM D 4052:2022 ISO 12185: 2024 IP365:1997 (R2020)

Materials / Products tested	Types of test / Properties measured	Applied methods / Techniques used
	19. Standard test method for acid number of petroleum products by potentiometric titration	ASTM D 664:2024
	20. Standard test method for dynamic viscosity and density of liquids by Stabinger viscometer (and calculation of kinematic viscosity)	ASTM D 7042:2025e1
	21. Determination of fatty acid methyl ester (FAME) in middle distillates - IR method	IP 579:2014 EN 14078: 2025
	22. Determination of asphaltenes (heptane insoluble) in crude petroleum and petroleum products	IP 143: 2021(R2022) ASTM D 6560:2022
	23. Base number of petroleum products by potentiometric perchloric acid titration	ASTM D 2896: 2026 ISO 3771:2011
	24. Standard Test Method for Sediment in Crude Oils and Fuel Oils by the Extraction Method, % wt	ISO 3735:1999 IP 53:2000(2014) ASTM D 473:2022
	25. Standard Test Method for Flash and Fire Points by Cleveland Open Cup Tester, °C	ISO 2592:2017 IP 36:2002(R2017) ASTM D 92:2024
	26. Standard Test Method for Determination of Contamination Level of Fatty Acid Methyl Esters in Middle Distillate and Residual Fuels Using Flow Analysis by Fourier Transform Infrared Spectroscopy—Rapid Screening Method	ASTM D 7963:2022
Diesel and domestic heating fuels	1. Determination of cold filter plugging point (°C)	Determination of cold filter plugging point (°C) EN 116:2015 IP 309:2016 ASTM D 6371:2024
Petroleum	1. Calculation of cetane index	CCI by four variable equation ASTM D 4737:2021 ISO 4264:2018 IP 380:2018(2020)
	2. Cloud point (°C)	ISO 3015:2019 IP 219:2020 ASTM D 2500:2023
	3. Assessment of lubricity using the high frequency reciprocating rig (HFRR)	ISO 12156-1:2023 ASTM D 6079: 2026 IP450: 2023

Materials / Products tested	Types of test / Properties measured	Applied methods / Techniques used
	4. Determination of trace elements in middle distillate fuels by inductively coupled plasma atomic emission spectrometry (ICP-AES)	ASTM D 7111:2016 (R2025)
	5. Determination of oxidation stability of middle-distillate fuels, g/cm^3	ISO 12205:1995 IP388:1997 (R2025) ASTM D 2274:2014 (R2019)

Site of asseseement: **Permanent laboratory premises, 12th km Athens-Lamia National Road, 14452, Metamorfosi, Attiki, Greece**

Approved signatories: **C.(S). Sotiriou, M. Giannopoulos, P. Kontos, K. Tsiolis, M.P. Chrysochos, A.A. Lentzou, K. Vertzagia, A. Kastamoniti, E.A. Karanika.**

This Scope of Accreditation replaces the previous one dated 06.03.2026.
The Accreditation Certificate No. **364**-8, to ELOT EN ISO/IEC 17025:2017, is valid until 09.07.2028.

Athens, 22.09.2026

Konstantinou Evangelos Apostolos
CEO of ESYD