

Hellenic Accreditation System



ACCREDITATION CERTIFICATE No. 1021

The Hellenic Accreditation System S.A. (ESYD), as the national accreditation body of Greece in accordance with the Law 3066/2002 and the Law 4109/2013

ACCREDITS

the
Analytical Chemistry Department
of the
Hellenic Research Center for Metals (ELKEME) S.A.
in Oinofyta, Viotia, Greece

under the terms of the ELOT EN ISO/IEC 17025: 2005 Standard and the ESYD Criteria, to carry out tests, as specified in the attached Scope of the Accreditation, which may be revised by decisions of ESYD.

This Certificate is valid until 21.02.2020, provided that the accredited body will comply with the above Standard and the ESYD Criteria.

Athens, February 22nd, 2016



Sitaras
Laboratories Accreditation Division Manager

ESYD is a signatory of the European co-operation for Accreditation (EA) Multilateral Agreement for the activities covered by this certificate

Hellenic Accreditation System



Annex F1/1 to the Certificate No.1021

SCOPE of ACCREDITATION

of the

Analytical Chemistry Department

of the

Hellenic Research Center for Metals (ELKEME) S.A.

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
Chemical Tests		
1. Wastewater	1. Determination of pH	APHA* 4500-H ⁺ B
	2. Determination of Conductivity	APHA* 2510 B
	3. Determination of Total Suspended Solids (TSS)	APHA* 2540D
	4. Determination of Total Dissolved Solids (TDS)	APHA* 2540C
	5. Determination of Oil - Grease (HEM)	APHA* 5520B
	6. Determination of Hydrocarbons (SGT- HEM)	APHA* 5520F
	7. Determination of Aluminium (Al), Copper (Cu), Zinc (Zn), Arsenic (As), Barium (Ba), Iron (Fe), Manganese (Mn), Selenium (Se).	ELOT EN ISO 11885:2009 - Inductively coupled plasma optical emission spectrometry (ICP-OES) ELOT EN ISO 15587.01:2002 - Aqua regia digestion
	8. Determination of total Chromium (Cr)	EPA** 7191:1986 - Atomic absorption spectrometry, graphite furnace (GF-AAS)
	9. Determination of Fluoride (F ⁻)	APHA* 4500F ⁻ C
	10. Determination of Hexavalent Chromium (Cr ⁶⁺)	MERCK 1.14758

*American Public Health Association, American Water Works Association, Water Environment Federation, "Standard Methods for the Examination of Water and Wastewater", 22nd Edition, 2012.

** EPA United States Environmental Protection Agency

Site of assessment: **Permanent laboratory premises, 56th km Athens-Lamia Nat. Road, 32011 Oinofyta, Viotia, Greece**

Approved signatory: **Ch. Kouliantanos, K. Pantazis, G. Pantazopoulos, T. Pentovolou.**

The Accreditation Certificate No. 1021, to ELOT EN ISO/IEC 17025:2005, is valid until 21.02.2020.

Athens, February 22nd, 2016



A handwritten signature in blue ink, appearing to be 'I. Sitaras', written over the stamp and extending to the right.

I Sitaras
Laboratories Accreditation Division Manager