



Annex F1/A14 to the Certificate No 139-6

SCOPE of ACCREDITATION of the **Analytical Laboratory** of **BIOLAB Single Member Private Company** in Arta

Tested materials/products	Types of test/Properties	Applied Methods/Techniques
	<u>Chemical Testing</u>	
1. Water	Electrometric determination of acidity (pH)	APHA* 4500-H ⁺ : 20 th edition, 1998 XN 01**
	Determination of conductivity	APHA* 2510: 20 th edition, 1998 XN 02**
	Determination of nitrate (in waters with low organic matter)	In house method based on APHA* 4500-NO ₃ : 20 th edition, 1998 (Ultraviolet spectrophotometric) XN 08**
	Determination of nitrite	In house method based on APHA* 4500-NO ₂ : 20 th edition, 1998 (colorimetric – azo dye) XN 06**
	Determination of ammonia	In house method based on APHA* 417 B: 17 th edition, 1989 (Nesslerization method) XN 07**
	Determination of calcium (ions)	3111B, 3500Ca, A (APHA, Standard Methods 20 th Ed. 2000) XN 03**

Tested materials/products	Types of test/Properties	Applied Methods/Techniques
1. Water (continued) water	Determination of magnesium (ions)	In house calculation method, based on 3500-Mg B calculation method (APHA ,Standard Method 21th Ed. 2005) XN 04 **
	Determination of phosphates	4500 P, E (APHA, Standard Methods 21th Ed. 2005) XN 10 **
	<u>Determination of hardness</u>	<u>2340 C</u> (APHA, Standard Methods 21th Ed. 2005) <u>XN 04 **</u>
	Determination of free cyanide	In house method DIN EN ISO14403 XN 32**
	Determination of surfactants	In house method EPA425.1, XN 34**
	Determination in turbidity	In house method HANNA kit test XN 31**
	Determination of residual chlorine	In house method EPA DPD METHOD 330.5 XN 30**
	Determination in Color	In house method ISO ΕΛΟΤ 657/1983 with photometer XN 36**
	Determination of chlorophyll	In house method UV/VIS XN 38
	Determination in oxidisability (KMnO4 consumption)	ISO ΕΛΟΤ 827/1986 XN 37**
	Determination of alkalinity	APHA *2320, 21η ΕΚΔΟΣΗ, 2005 XN 33**
	Determination in bicarbonate	APHA *2320, 21η ΕΚΔΟΣΗ, 2005 XN 33**
	Determination in B (boron)	ISO ΕΛΟΤ 9390/1990 XN 35*
	Determination of sulphate-SO4	APHA 4500E ,21η ΕΚΔΟΣΗ, 2005 XN 28**
	Determination of chloride ion-Cl	In house βασισμένη APHA 4500-Cl B XN 09**
	Determination of Fe (Iron)	In house based Merck kit test XN 39**
	Determination of BOD ₅	In house method X/N11 using manometer, based on 5280D (APHA, Standard Methods 21th Ed. 2005) XN 11
Determination of COD	ISO 15705: 2002 XN 12	
Determination of (SS) suspended solids	In house method X/N 28 based in APHA: 2005, 2540D, 2-58 XN 28	

Tested materials/products	Types of test/Properties	Applied Methods/Techniques
	Determination of Pb, Cd, Ni, As, Co, Sb, Cr, Ag, V, Ba	In house method based on Standard Methods of examination 3113 A- B AAS Method XN 15**
	Determination of Na, K, Zn, Cu	In house method based on Standard Methods of examination 3111 A&B Metals By F AAS XN 14**
	Determination of Hg	In house method based on Standard Methods of examination 3112 B Cold-Vapor AAS Method XN 16**
3. Potable, surface and ground water	Determination of Se, Mn, Al	In house method based in Standard Methods of examination 3111 A&B Metals By F AAS XN 25**
4. Potable water, groundwater Superficially, waste water	Determination of F	In house method based in Standard Methods of examination with kit MERCK, based in EPA340.3 και APHA, Standard Methods 4500 -F E XN 26**
	Determination of Cr (IV)	APHA: Standards methods for examination of Water and Wastewater, 21 th edition 2005. XN 13 **
5. Fish and fishery products, cereals and feed	Determination of Hg	In house method by cold vapor AAS XY 29
6. Foods, cereals and feed	Determination of Pb	In house method based in AOAC official method 999.10 XY 22
7. Foods and feed (except dairy)	Determination of Cd	
8. Cereals and nuts	Determination of As	
9. Cereals, vegetables and feeds	Determination of K	In house method by F AAS spectroscopy XT 28
10. Cereals and feeds	Determination of Fe Mn Zn Na Ca	In house method by F AAS spectroscopy XT 28
11. Cereals and feeds	1. Determination of Moisture	Directive 71/ 393 EEC XT 02
	2. Determination of Ash	Directive 71/ 393 EEC XT 01
	3. Determination of Fat Content	Directive 71/ 393 EEC XT 03
	4. Determination of Protein	In house method X/T/04, modified based on AOAC 991.20:2000
12. Oils	1. Determination of peroxide value	Regulation EEC 2568/91 (Annex II) XT 13
	2. Determination of Moisture	Food Code, Volume II, Part B, 03.I and Γ1 XT 10
	3. Determination of K ₂₃₂ -K ₂₇₀	Regulation EEC 2568/91 (Annex II) XT 15

Tested materials/products	Types of test/Properties	Applied Methods/Techniques
	4. Determination of acidity (acid value)	Regulation EEC 2568/91 (Annex II) XT 14
13. Cheese	1. Determination of Moisture	Food Code, Volume II, Part B ,Ø3.I and Γ1 XT 10
	2. Determination of Fat Content	In house method X/T 11 , Gerber method
14. Milk	1. Determination of Protein	In house method X/T/04, modified based on AOAC 991.20:2000
	2 Determination of fat free dry total matter	Food Code, Volume II, Part B, Ø5 XT 08
	3 Determination of Fat Content	In house method X/T09 (Gerber method) XT 09
15. Meat and meat products	1. Humidity	ISO 1442:1997 XT 06
	2. Ash	ISO 936 :1998 XT 05
	3.Total fat	Food Code, Volume II, Part B ,I3 and Γ4 XT 07
	4. Protein	In house method X/T/04, modified based on AOAC 991.20:2000
16. Fruits and vegetables	Protein	In house method X/T/04, modified based on AOAC 991.20:2000
17. Legumes	Protein	In house method X/T/04, modified based on AOAC 991.20:2000
18. Honey	Determination of HMF (HydroxyMethylFurfuraldehyde)	AOAC Official Method 980.23 XT 21
19. Food and non standard	Determination of total sulfur (SO ₂)	Volumetric method based K.T.P. To the Section D paragraph D2 XT 30
20. Fruit juices, soft drinks, tea and similar beverages	Determination of citric acid (E 330)	Spectrophotometric method, based on Directive BOEHRINGER MANNHEIM / R-BIOPHARM XT31
21. Soil	Engineering / Sieve analysis Sand % Sludge% Clay%	In house method X/T 36 , based in Plant, Soil and Water Reference, Methods for the Western Region.1994, WCC S14-10 , WCC-103 Publication WREP-125, 2 ndEdition
	pH	In house method X/T 18 (Electrometry paste saturation) (based in WCC-103 Publication WREP-125, 2nd Edition

Tested materials/products	Types of test/Properties	Applied Methods/Techniques
	Conductivity	In house method X/T 19 (Electrometry paste saturation) based in WCC-103 Publication WREP-125, 2nd Edition
	Organic substance	In house method X/T 20 (Walkley – Black, titrimetric) based in WCC-103 Publication WREP-125, 2nd Edition
	Determination of exchangeable ions K, Mg, Ca	In house method X/T 33 based in WCC-103 Publication WREP-125, 2nd Edition and AAS Flame
	Determination of Total Phosphorus P	In house method X/T 28, (OLSEN) based in WCC-103 Publication WREP-125, 2nd Edition
	Determination of nitrate nitrogen (NO ₃ ⁻) ¹⁾	In house method X/T 35 based in WCC-103 Publication WREP-125, 2nd Edition
<u>Microbiological Tests</u>		
Potable water, sea water, swimming pool water	Detection and enumeration of <i>Enterococci</i>	ELOT EN ISO 7899-2:2000 M 03
	Detection and enumeration of coliform organisms and <i>E. Coli</i>	ELOT EN ISO 9308-1:2000 M 01
<u>Sampling</u>		
Potable water from water supply and water drills	Sampling of water	ISO 5667-1:2006 ISO 5667-3:2006 ISO 19458:2006
Sea water and environmental samples		ISO 5667-1:2006 ISO 5667-3:2006 ISO 19458: 2006

* American Public Health Association, American Water Works Association, Water Environment Federation, "Standard Methods for the Examination of Water and Wastewater", 20th Edition, 1998 and 21st Edition 2005
 (*) Methods highlighted with (*) have been assessed and conform to the performance criteria described in KYA Y2/2600/2001, ΦΕΚ 892/Β/11.07.2001, its modification KYA Αριθμ. ΔΥΓ2 / Γ.Π οικ.38295 regarding the quality of drinking water.

Site of assesement : **Permanent Laboratory premises, Arta's Bridge 68, Arta, Greece**

Approved signatory : **Sotiris Tzimas, Bazaka Eva**

This scope of Accreditation replaces the previous one dated 28.2.2013

The Accreditation Certificate No.139-6, to ELOT EN ISO/IEC 17025:2005, is valid until 15.9.2015.

Athens 26.7.2013

