Hellenic Accreditation System

Annex F1/12 to the Certificate No. **985**-3

SCOPE of ACCREDITATION

of the

Testing laboratory

of

"DIALYNAS S.A."

Tested materials / products	Types of test / Properties to be measured	Applied Standards / Techniques to be used
Chemical testing		
1. Surface water, groundwater and drinking water	1. Determination of Conductivity	APHA 2510-Conductivity, 24th Ed., 2023
	2. Determination of pH	APHA 4500-H^+ pH value, 24th Ed., 2023
	3. Determination of Nitrates (mg/L NO_3^- or N-NO_3)	HACH LCK 339, 340
	4. Determination of Total Phosphorus (mg/L TP or PO_4^{3-})	HACH LCK 348, 349, 350
	5. Determination of Total and Composite Alkalinity	ISO 9963-1:1995
	6. Determination of Nitrites (mg/L NO_2^- or N-NO_2)	HACH LCK 341, 342
	7. Determination of Ammonium Ions (mg/L NH_4^+ or N-NH_4)	HACH LCK 304, 303, 302
	8. Nephelometric determination of Turbidity	APHA 2130-B, 24th Ed., 2023
	9. Determination of Residual Chlorine (mg/L Cl_2)	Method 8021 HACH (USEPA DPD method)
	10. Determination of Total Nitrogen (mg/L T.N.)	HACH LCK 138, 238, 338
	11. Determination of Chlorides (mg/L Cl^-)	ΕΛΟΤ 666:1983
	12. Determination of Sulfates (mg/L SO_4^{2-})	Method 8051 HACH (USEPA SulfaVer 4 method)
	13. Determination of Total Suspended Solids	In house Method based on ELOT

Tested materials / products	Types of test / Properties to be measured	Applied Standards / Techniques to be used
1. Surface water, groundwater and drinking water (continued)	(mg/L T.S.S.)	EN 872 E2
	14. Determination of Total Iron (Fe)	Method 8008 HACH
	15. Determination of Manganese (Mn)	Method 8149 HACH
	16. Determination of Total Hardness	Method 8213 HACH, Digital Titrator
	17. Determination of Copper (Cu)	Method 8506 HACH
	18. Determination of Hexavalent Chromium (Cr^{6+})	Method 8023 HACH
	19. Determination of Aluminium (Al)	HACH LCK 301
	20. Determination of Potassium (K)	Method 8049 HACH
	21. Determination of Silica (SiO_2)	Method 8185 HACH
	22. Determination of Color (True and Apparent)	Method 8025 HACH
	23. Determination of Total Chlorine (mg/L Cl_2)	Method 8167 και 10070 HACH (USEPA DPD method)
	24. Determination of Chemical Oxygen Demand (mg/L C.O.D.)	HACH LCK 1414, 314, 514
	25. Determination of Biological Oxygen Demand (mg/L $B.O.D._5$)	In house Method based on APHA 5210-D, 24th Ed., 2023
	26. Determination of Cyanuric Acid	Method 8139 HACH
	27. Determination of Cationic Surfactants	HACH LCK 331
	28. Determination of Phenols	HACH LCK 345 (4-nitroaniline method)
	29. Determination of Total Solids (T.S., mg/L)	APHA 2540 B, 24th Ed., 2023
	30. Determination of Total Dissolved Solids (T.D.S., mg/L)	APHA 2540 C, 24th Ed., 2023
	31. Determination of Anions: fluorides (F^-), chlorides (Cl^-), nitrites (NO_2^-), bromides (Br^-), nitrates (NO_3^-), phosphates (PO_4^{3-}) and sulfates (SO_4^{2-})	In house Method based on APHA 4110 B, 24th Ed., 2023
	32. Determination of Total Carbon (TC) and Total Organic Carbon (TOC)	In house Method based on APHA 5310 B, 24th Ed., 2023
	33. Determination of elements: Calcium (Ca), Magnesium (Mg), Sodium (Na), Potassium (K) and Copper (Cu)	In house Method based on APHA 3111, 24th Ed., 2023
	34. Determination of elements:	In house Method based on APHA

Tested materials / products	Types of test / Properties to be measured	Applied Standards / Techniques to be used
1. Surface water, groundwater and drinking water (continued)	Antimony (Sb), Cadmium (Cd), Lead (Pb), Nickel (Ni) and Chromium (Cr)	3113, 24th Ed., 2023
	35. Determination of Cyanides (CN^-)	HACH LCK 315
	36. Determination of Boron (B)	HACH LCK 307
	37. Determination of bound chlorine (mg/L Cl_2)	Calculated from the determination of total and free residual chlorine
	38. Determination of permanganate index (oxidizability) (mg/L O_2)	HACH LCK 394
2. Swimming pool water	1. Determination of Total and Composite Alkalinity	ISO 9963-1:1995
	2. Determination of pH	APHA 4500-H^+ pH value, 24th Ed., 2022
	3. Determination of Conductivity	APHA 2510-Conductivity, 24th Ed., 2022
	4. Determination of Residual Chlorine (mg/L Cl_2)	Method 8021 HACH (USEPA DPD method)
	5. Determination of Total Chlorine (mg/L Cl_2)	Method 8167 και 10070 HACH (USEPA DPD method)
	6. Determination of Cyanuric Acid	Method 8139 HACH
	7. Determination of bound chlorine (mg/L Cl_2)	Calculated from the determination of total and free residual chlorine
3. Wastewater	1. Determination of pH	APHA 4500-H^+ pH value, 24th Ed., 2023
	2. Determination of Chemical Oxygen Demand (mg/L C.O.D.)	HACH LCK 314, 514
	3. Nephelometric determination of Turbidity	APHA 2130-B, 24th Ed., 2023
	4. Determination of Residual Chlorine (mg/L Cl_2)	Method 8021 HACH (USEPA DPD method)
	5. Determination of Conductivity	APHA* 2510-Conductivity, 24th Ed., 2023
	6. Determination of Nitrates (mg/L NO_3^- or N-NO_3)	HACH LCK 339, 340
	7. Determination of Nitrites (mg/L NO_2^- or N-NO_2)	HACH LCK 341, 342
	8. Determination of Ammonium Ions (mg/L NH_4^+ or N-NH_4)	HACH LCK 304, 303, 302
	9. Determination of Total Nitrogen (mg/L.N.)	HACH LCK 138, 238, 338

Tested materials / products	Types of test / Properties to be measured	Applied Standards / Techniques to be used
3. Wastewater (continued)		
	10. Determination of Total Phosphorus (mg/L TP or PO_4^{3-})	HACH LCK 348, 349, 350
	11. Determination of Chlorides (mg/L Cl^-)	ELOT 666:1983
	12. Determination of Total Suspended Solids (mg/L T.S.S.)	In house Method based on ELOT EN 872 E2
	13. Determination of Total Iron (Fe)	Method 8008 HACH
	14. Determination of Manganese (Mn)	Method 8149 HACH
	15. Determination of Total Hardness	Method 8213 HACH, Digital Titrator
	16. Determination of Copper (Cu)	Method 8506 HACH
	17. Determination of Hexavalent Chromium (Cr^{6+})	Method 8023 HACH
	18. Determination of Biological Oxygen Demand (mg/L $B.O.D._5$)	In house Method based on APHA 5210-D, 24th Ed., 2023
	19. Determination of Cationic Surfactants	HACH LCK 331
	20. Determination of Color (True and Apparent)	Method 8025 HACH
	21. Determination of Total Chlorine (mg/L Cl_2)	Method 8167 και 10070 HACH (USEPA DPD method)
	22. Determination of Phenols	HACH LCK 345 (4-nitroaniline method)
	23. Determination of Total Solids (T.S., mg/L)	APHA 2540 B, 24th Ed., 2023
	24. Determination of Total Dissolved Solids (T.D.S., mg/L)	APHA 2540 C, 24th Ed., 2023
	25. Determination of Anions: fluorides (F^-), chlorides (Cl^-), nitrites (NO_2^-), bromides (Br^-), nitrates (NO_3^-), phosphates (PO_4^{3-}) and sulfates (SO_4^{2-})	In house Method based on APHA 4110 B, 24th Ed., 2023
	26. Determination of Total Carbon (TC) and Total Organic Carbon (TOC)	In house Method based on APHA 5310 B, 24th Ed., 2023
	27. Determination of elements: Calcium (Ca), Magnesium (Mg), Sodium (Na), Potassium (K) and Copper (Cu)	In house Method based on APHA 3111, 24th Ed., 2023
	28. Determination of Cyanides (CN^-)	HACH LCK 315
	29. Determination of Total and Composite Alkalinity	ISO 9963-1:1995

Tested materials / products	Types of test / Properties to be measured	Applied Standards / Techniques to be used
3. Wastewater (continued)	30. Determination of bound chlorine (mg/L Cl_2)	Calculated from the determination of total and free residual chlorine
	31. Determination of permanganate index (oxidizability) (mg/L O_2)	HACH LCK 394
	32. Determination of volatile solids (V.S.)	APHA 2540 E, 24th Ed., 2023
	33. Determination of volatile suspended solids (V.S.S.)	APHA 2540 E, 24th Ed., 2023
	34. Determination of mixed liquor suspended solids in aeration tanks (M.L.S.S.)	In house Method based on ELOT EN 872 E2
	35. Determination of mixed liquor volatile suspended solids in aeration tanks (M.L.V.S.S.)	APHA 2540 E, 24th Ed., 2023
	36. Determination of settleable solids (Imhoff)	APHA 2540 F, 24th Ed., 2023
	37. Determination of Sludge Volume Index (S.V.I.)	APHA 2710 D, 24th Ed., 2023
4. Seawater	1. Determination of pH	APHA 4500-H^+ pH value, 24th Ed., 2023
	2. Determination of Conductivity	APHA 2510-Conductivity, 24th Ed., 2023
5. Oils, Olive-oils	1. Determination of Free Fatty Acids, cold method	Method COI/T.20/Doc. Number 34, Annex I of Implementing Regulation (EU) 2022/2105
	2. Spectrophotometric Investigation in the Ultraviolet (UV)	Method COI/T.20/Doc. Number 19, Annex I of Implementing Regulation (EU) 2022/2105
	3. Determination of Peroxide Value (PV)	Method COI/T.20/Doc. Number 35, Annex I of Implementing Regulation (EU) 2022/2105
Sensory testing		
1. Drinking water	1. Odor - Determination of Threshold Odor Number (TON)	ΕΛΟΤ EN 1662:2006
	2. Taste - Determination of Threshold Flavor Number (TFN)	ΕΛΟΤ EN 1662:2006
Biological testing		
1. Water intended for hemodialysis and related treatments	1. Determination of Bacterial Endotoxins	Charles River Endosafe® Limulus Amebocyte Lysate (LAL) Multi-Test Vial

Tested materials / products	Types of test / Properties to be measured	Applied Standards / Techniques to be used
Microbiological testing		
1. Surface, underground and drinking water, swimming pool water	1. Detection and quantification of Total Coliforms	ISO 9308-1:2014/ Amd 1:2016
	2. Detection and qualification of *Escherichia coli*	ISO 9308-1:2014/ Amd 1:2016
	3. Detection and qualification of *Enterococci*	ISO 7899-2:2000
	4. Detection and enumeration of *Pseudomonas aeruginosa*	ISO 16266:2006
	5. Enumeration of culturable micro-organisms at 22°C and 36°C	ISO 6222:1999
	6. Detection and enumeration of *Clostridium perfringens* (including spores)	ISO 14189:2013
	7. Enumeration of Somatic Coliphages	ISO 10705-2:2000
	8. Detection and enumeration of *Legionella spp*	ISO 11731:2017
2. Sea water	1. Detection and quantification of Total Coliforms	ISO 9308-1:2014/ Amd 1:2016
	2. Detection and qualification of *Escherichia coli*	ISO 9308-1:2014/ Amd 1:2016
	3. Detection and qualification of *Enterococci*	ISO 7899-2:2000
	4. Enumeration of Somatic Coliphages	ISO 10705-2:2000
3. Treated wastewater	1. Detection and quantification of Total Coliforms	ISO 9308-1:2014/ Amd 1:2016
	2. Detection and qualification of *Escherichia coli*	ISO 9308-1:2014/ Amd 1:2016
	3. Detection and quantification of Fecal Coliforms	APHA 9222 D, 24th Ed., 2023
	4. Enumeration of Somatic Coliphages	ISO 10705-2:2000
	5. Detection and enumeration of *Legionella spp*	ISO 11731:2017
4. Wastewater	1. Detection and quantification of Total Coliforms	APHA 9222 B, 24th Ed., 2023
	2. Detection and quantification of Fecal Coliforms	APHA 9222 D, 24th Ed., 2023

Tested materials / products	Types of test / Properties to be measured	Applied Standards / Techniques to be used
4. Wastewater (continued)	3. Detection and quantification of *Escherichia coli*	APHA 9222 H, 24th Ed., 2023
	4. Enumeration of Somatic Coliphages	ISO 10705-2:2000
	5. Detection and enumeration of *Legionella spp*	ISO 11731:2017
5. Environmental samples (sludge, sediments, biofilm, etc)	1. Detection and enumeration of *Legionella spp*	ISO 11731:2017
6. *Legionella* strains isolated from water, wastewater, and environmental samples (sludge, sediments, etc.)	1. Serological identification of the following *Legionella spp.* types: - *Legionella pneumophila Serogroup 1* - *Legionella pneumophila Serogroups 2-15* - *Legionella pneumophila Other Species*	Latex agglutination using Microgen® *Legionella* (M45)
7. Food	1. Detection and determination of the total colony count at 30ºC	ISO 4833-1:2013/Amd 1:2022
	2. Detection and determination of beta-glucuronidase-positive Escherichia Coli	ISO 16649-2:2001
	3. Detection and determination of coagulase-positive Staphylococci (Staphylococcus aureus and other species)	ISO 6888-2:2021/ Amd 1:2023
	4. Detection and determination of Salmonella spp. (except S. Typhi and S. Paratyphi)	ISO 6579-1:2017/Amd 1:2020
	5. Detection and determination of Listeria spp. and Listeria monocytogenes	ISO 11290-1:2017
	6. Detection and enumeration of Enterobacteriaceae	ISO 21528-2:2017
	7. Detection and enumeration of Total Coliforms	ISO 4832:2006
7.a. Foods with a_w>0.95	1. Detection and enumeration of yeasts and molds	ISO 21527-1:2008
7.b. Foods with a_w≤0.95	1. Detection and enumeration of yeasts and molds	ISO 21527-2:2008
Sampling		
1. Surface, underground and drinking water, swimming pool water, sea water, wastes, and wastewaters, treated wastewaters	1. Sampling of water- wastewater for the determination of physical-chemical parameters	ISO 5667-01:2023 ISO 5667-03:2024 ISO 5667-04:2018 ISO 5667-05:2006 ISO 5667-06:2017 ISO 5667-06/A11:2020

Tested materials / products	Types of test / Properties to be measured	Applied Standards / Techniques to be used
1. Surface, underground and drinking water, swimming pool water, sea water, wastes, and wastewaters, treated wastewaters (continued)		ISO 5667-09:2017 ISO 5667-10(E2):2021 ISO 5667-11:2010 ISO 5667-14:2016 ISO 5667-23:2012
	2. Sampling of water- wastewater for the determination of microbiological parameters	ISO 19458:2006 ISO 5667-01:2023 ISO 5667-03:2024 ISO 5667-04:2018 ISO 5667-05:2006 ISO 5667-06:2017 ISO 5667-06/A11:2020 ISO 5667-09:2017 ISO 5667-10(E2):2021 ISO 5667-11:2010 ISO 5667-14:2016 ISO 5667-23:2012 Οδηγία 2006/7/ΕΚ
2. Sludges - Sediment	1. Sampling of sludges- sediment for the determination of physical-chemical parameters	ISO 5667-15:2011 ISO 5667-13(E2):2011
3. Surface samples	1. Horizontal methods for surface sampling for microbiological testing	ISO 18593:2018

*APHA = American Public Health Association, American Water Works Association, Water Environment Federation, "Standard Methods for the Examination of Water and Wastewater", 24th Edition, 2023

Site of assessment: **Laboratory permanent premises: Thesi Troulos Kallitheas, 71601, Heraklion, Crete, Greece.**

Approved signatories: **M. Kavvalakis, V. Amargianitakis, M. Panagiotopoulou.**

This scope of Accreditation replaces the previous one dated 23.02.2024.
The Accreditation Certificate No. **985**-3**,** to ELOT EN ISO/IEC 17025:2017, is valid until 22.06.2028.

Athens, 16th of January 2026

Konstantino

u Evangelos Apostolos
CEO of ESYD