



INTERNATIONAL
ACCREDITATION
SERVICE®

CERTIFICATE OF ACCREDITATION

This is to attest that

AGQ COSTA RICA S.A.

50 MTS NORTE Y 75 MTS OESTE DE LA ESCUELA REPÚBLICA DOMINICANA
SAN FRANCISCO DE DOS RÍOS, SAN JOSÉ, 10106, REPUBLIC OF COSTA RICA

Testing Laboratory TL-1036

has met the requirements of AC89, *IAS Accreditation Criteria for Testing Laboratories*, and has demonstrated compliance with ISO/IEC Standard 17025:2017, *General requirements for the competence of testing and calibration laboratories*. This organization is accredited to provide the services specified in the scope of accreditation.

Effective Date May 22, 2024



International Accreditation Service
Issued under the authority of IAS management

Visit www.iasonline.org for current accreditation information.

SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

AGQ COSTA RICA S.A.

www.agqlabs.cr

Contact Name Jeisson Cardenas Miranda

Contact Phone +506-22861168

Accredited to ISO/IEC 17025:2017

Effective Date May 22, 2024

FIELDS OF TESTING	MATERIAL/MATRIX	DETERMINANT(S)/ANALYTE(S)	METHOD REFERENCE	
FOOD-MICROBIOLOGY	Food, feed and surfaces	Escherichia coli	AOAC 991.14, AOAC 998.08, AOAC 986.33, AOAC 989.10 (IT-345)	
		Total coliforms	AOAC 991.14, AOAC 998.08, AOAC 986.33, AOAC 989.10 (IT-345)	
		Fecal coliforms	AFNOR 3M01/2-09/89C (IT-345)	
		Staphylococcus aureus	AOAC 2003.07, AOAC 2003.08, AOAC 2003.11 (IT-343)	
		Aerobic plate count	AOAC 990.12 (IT-344)	
		Yeast and molds	AOAC 997.02 (IT-342)	
		Salmonella spp.	Vidas ® UP Salmonella SPT (IT-392)	
		Listeria spp. Listeria monocytogenes	Vidas ® UP Listeria LPT (IT-393)	
	Granular and liquid sugar. -OR- Granular and liquid sucrose and treated simple syrup.	Mesophilic Total Count	ICUMSA GS2/3-41 (IT-416)	
		Yeast and Mold	ICUMSA GS 2/3-47(IT-415)	
		Thermophilic Acidophilic Bacteria (TAB) & Guaiacol Producing TAB	SM-PR-687 (IT-417)	
	FOOD-INORGANIC	Food, feed	Ash	IT-328 Based on ISO 936, AOAC 942.05
			Moisture	IT-333 Based on AOAC 925.45
Crude Protein			IT-335 Based on AOAC 990.3, AOAC 992.15	
Total Fat			IT-332 Based on ISO 1443	
Total dietary fiber			IT-330 Based on AOAC 993.21	
Total sugar			IT-327 Based on BOE- A - 1979-21118	

TL-1036

AGQ COSTA RICA S.A.

Effective Date May 22, 2024

Page 2 of 9

IAS/TL-Food/100-1



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

FIELDS OF TESTING	MATERIAL/MATRIX	DETERMINANT(S)/ANALYTE(S)	METHOD REFERENCE
FOOD-INORGANIC (cont'd.)	Food, feed (cont'd.)	Carbohydrates (US & EU) – by calculation	IT-414 (EU) No1169/2011 UE, Food labeling guide FDA - Carbohydrates (US) and (EU)
		Energy (Calories and kilojoules) (US, EU and MX) - by calculation	IT-414 Based on (EU) No1169/2011 EU, Food labeling guide FDA
		Nutritional and heavy metals: Li, Be, B, Na, Mg, Al, Si, P, S, K, Ca, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Se, Sr, Mo, Ag, Sn, Sb, Ba, Tl, As, Cd, Hg, Pb	IT-334 Metals by ICP-MS Based on AOAC Official Method 2015.01 Heavy Metals in Food, Codex Alimentarius CAC/GL 41, Codex Alimentarius Stan 193-1995
	Food & Feed, Cosmetics, Dietary Supplements, Hygienic Products	CBD, CBDA, delta-8 THC, delta-9 THC, THCA-A, CBD TOTAL, THC TOTAL	IT-444 Based on: AOAC 2018.10 / HPLC-DAD
	Granular and liquid sugar. -OR- Granular and liquid sucrose and treated simple syrup.	Chloride	IT-418 by ion chromatography
		Sensory analysis (Appearance, Odor, Odor after acidification, taste	IT-419 SM-PR-420
		Assay (Purity)	IT-420
		Quaternary Ammonium Compounds (QAC)	IT-427 SM-PR-470 by spectrophotometry
		Moisture by Loss on Drying	IT-426 ICUMSA GS 2-15 (2007)
		Day Acid Beverage Floc Test	IT-424 ICUMSA GS40 (2011)
		Insoluble Matter	IT-428 ICUMSA GS2-19 (2007)
		Reducing Sugars	IT-425 ICUMSA GS2-5(2011) by the Knight and Allen EDTA Method
		Colour	IT-423 ICUMSA GS 2-10 (2011)
		Turbidity	IT-430 ICUMSA GS 2-18 (2013)
		Conductivity Ash	IT-421 ICUMSA GS2-17 (2011)
Refractometric Dry Substance (RDS %)		IT-422 ICUMSA GS 4-13 (2009)	
Sulphite	IT-429 ICUMSA GS 2-33 (2011) by the Rosaniline Colorimetric Method		

SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

FIELDS OF TESTING	MATERIAL/MATRIX	DETERMINANT(S)/ANALYTE(S)	METHOD REFERENCE
FOOD-INORGANIC (cont'd.)	Food	Gluten (as gliadin R5)	IT-462 Based on: AOAC 2012.01 / ELISA
ENVIRONMENTAL-INORGANIC	Ground waters, surface waters, drinking waters, wastewaters, seawaters	Metals: Al, Sb, As, Ba, B, Ca, Cd, Cr, Cu, Pb, Fe, Mg, Mn, Hg, Sn, Ni, Se, Ag, K, Na, V, Zn By calculation: Calcium Hardness, Magnesium Hardness Total Hardness	IT-399 SMEWW-APHA-AWWA-WEF (24 th Ed. 2023) 3125 B.; U.S. EPA Method 6020B (SW-846) and 200.8. / ICP-MS
		Soils, sediments, sludges and residues	Metals: Al, Sb, As, Ba, B, Ca, Cd, Cr, Cu, Pb, Fe, Mg, Mn, Hg, Sn, Ni, Se, Ag, K, Na, V, Zn.
	Ground waters, surface waters, drinking waters, wastewaters, seawater	Total Suspended Solids	IT-371: SMEWW-APHA-AWWA-WEF (24 th Ed. 2023) 2540 D: Gravimetry
		Total Solids	IT-368: SMEWW-APHA-AWWA-WEF (24 th Ed. 2023) 2540 B: Gravimetry
		Total Dissolved Solids	IT-369: SMEWW-APHA-AWWA-WEF (24 th Ed. 2023) 2540 C Gravimetry
		Settleable Solids by	IT-370: SMEWW-APHA-AWWA-WEF (24 th Ed. 2023) 2540 F: Volumetry
		Turbidity	IT-376: SMEWW-APHA-AWWA-WEF (24 th Ed. 2023) 2130 B: Nephelometry
		Anionic surfactants as MBAS	IT-375: SMEWW-APHA-AWWA-WEF (24 th Ed. 2023) 5540 C: Spectrophotometry
		Sulfide	IT-440 SMEWW-APHA-AWWA-WEF (24 th Ed. 2023) 4500 Sulfide. / US EPA Methylene Blue Method. / Method 8131.HACH.
		Apparent and true Color	IT-373-SMEWW-APHA-AWWA-WEF (24 th Ed. 2023) 2120 B. Color. / Visual comparison
Electric conductivity	IT-372 SMEWW-APHA-AWWA-WEF (24 th Ed. 2023) 2510 B. Conductivity.		



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

FIELDS OF TESTING	MATERIAL/MATRIX	DETERMINANT(S)/ANALYTE(S)	METHOD REFERENCE
ENVIRONMENTAL-INORGANIC (cont'd.)	Ground waters, surface waters, drinking waters, wastewaters, seawater (cont'd.)	Biochemical oxygen demand (BOD)	IT-366 SMEWW-APHA-AWWA-WEF (24 th Ed. 2023) 5210 B 5-day BOD Test.
		Ammonia, Ammoniacal Nitrogen and Ammonium	IT-396 Based on SMEWW-APHA-AWWA-WEF (15 th Ed. 1980) 4500 NH3 A. Nitrogen (Ammonia). / U.S. EPA / U.S. EPA Method 350.2: Nitrogen, Ammonia / HACH-Method 8038: Spectrophotometry
		Sulfates, Chlorides, Bromide, Fluoride, Phosphate, Nitrate, Nitrite	IT-380 SMEWW-APHA-AWWA-WEF (24 th Ed. 2023) 4110 B / EPA Method 300.0. Ion Chromatography with Chemical Suppression of Eluent Conductivity
		Chromium(VI), Cr(VI)	IT-441 SMEWW-APHA-AWWA-WEF (24 th Ed. 2023) 3500-Cr B. Chromium. Colorimetric Method / 8023: US EPA 1,5-diphenylcarbohydrazide – Spectrophotometry
		Total and partial Alkalinity, hydroxide alkalinity. Carbonates and Bicarbonates	IT-413 SMEWW-APHA-AWWA-WEF (24 th Ed. 2023) 2320 B. Alkalinity. Titration Method.
		Phenols	IT-431 SMEWW-APHA-AWWA-WEF (24 th Ed. 2023) 5530 A, B and D. / US EPA Method 420.1: Phenolics / Spectrophotometry
		Salinity	IT-438 SMEWW-APHA-AWWA-WEF (24 th Ed. 2023) 2520 B. Salinity. Electrical Conductivity
		Transmittance 254	IT-439 SMEWW-APHA-AWWA-WEF (24 th Ed. 2023) 5910 B. UV-Absorbing Organic Constituents. Ultraviolet Absorption
		UV 254	IT-439 SMEWW-APHA-AWWA-WEF (24 th Ed. 2023) 5910 B. UV-Absorbing Organic Constituents. Ultraviolet Absorption



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

FIELDS OF TESTING	MATERIAL/MATRIX	DETERMINANT(S)/ANALYTE(S)	METHOD REFERENCE
ENVIRONMENTAL-INORGANIC (cont'd.)	Ground waters, surface waters, drinking waters, wastewaters, seawater (cont'd.)	TOC (USP)	USP method 643 (IT-432)
		TOC	IT-432 Based on: HACH method 10129
	Ground waters, surface waters, wastewaters, seawater	Total COD & Dissolved COD	IT-367: SMEWW-APHA-AWWA-WEF (24 th Ed. 2023) 5220 D: Closed reflux, colorimetry
		Oils & Grease	IT-374: SMEWW-APHA-AWWA-WEF (24 th Ed. 2023) 5520 B: Liquid-Liquid partition-Gravimetry
	Wastewaters	Spectrophotometric color (Purity)	IT-373 SMEWW-APHA-AWWA-WEF (24 th Ed. 2023) 2120 D. Spectrophotometry
Ground waters, surface waters, drinking waters, wastewaters, seawater, soils, sediments, sludges	Total Petroleum Hydrocarbons (TPH): <ul style="list-style-type: none"> - Gasoline Range Organics (GRO) >C5-C10 - Diesel Range Organics (DRO) >C10-C28 - Oil Range Organics (ORO) >C28-C40 - Sum of fractions Gasoline Range Organics (GRO) >C5-C10, Diesel Range Organics (DRO) >C10-C28 and Oil Range Organics (ORO) >C28-C40; and any possible subfractions between >C5-C40 including kerosene organic range, jet fuel organic range and bunker organic range Emulfiable Hydrocarbons Non-emulfiable Hydrocarbons Emulfiable and Non-emulfiable Total Petroleum Hydrocarbons	IT-381 U.S. EPA Method 8015C Gravimetric / GC-FID / GC-MS	



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

FIELDS OF TESTING	MATERIAL/MATRIX	DETERMINANT(S)/ANALYTE(S)	METHOD REFERENCE
ENVIRONMENTAL-INORGANIC Field sampling and Monitoring	Ground waters, surface waters, drinking waters, wastewaters, seawater	Sampling (Grab and composite):	PICR-211: SMEWW-APHA-AWWA-WEF (24 th Ed. 2023) 1060 A, B y C: Collection and Preservation of Samples
		pH	IT-378: SMEWW-APHA-AWWA-WEF (24 th Ed. 2023) 4500 H+ B: Electrometry
		Temperature	IT-377: SMEWW-APHA-AWWA-WEF (24 th Ed. 2023) 2550
ENVIRONMENTAL-MICROBIOLOGY	Recreational waters, ground waters, surface waters, drinking waters	Fecal Coliforms, Total Coliforms, Escherichia coli	IT-340 Based on SMEWW-APHA-AWWA-WEF (24 th Ed. 2023) 9222 Membrane Filter Technique; ISO 9308-1:2014 Water quality — Enumeration of Escherichia coli and coliform bacteria
	Ground waters, surface waters, drinking waters, wastewaters, seawater	Total heterotroph count	IT-338 SMEWW-APHA-AWWA-WEF (24 th Ed. 2023) 9215 B. Heterotrophic Plate Count
	Ground waters, surface waters, drinking waters, recreational waters	Pseudomonas	IT-339 SMEWW-APHA-AWWA-WEF (24 th Ed. 2023) 9213 E by Membrane Filtration.
ENVIRONMENTAL-SAMPLING	Soil, Sediment, Sludge (Biosolids)	Chemistry and Microbiology parameters	PICR-211. Based on: U.S. EPA. Soil Sampling. Laboratory Services and Applied Science Division. Athens, Georgia, 2020 U.S. EPA. Sediment Sampling. Laboratory Services and Applied Science Division. Athens, Georgia, 2020. U.S. Environmental Protection Agency. POTW Sludge Sampling and Analysis Guidance Document EPA 833-B-89-100, 1989
FOOD-SAMPLING	Food, Feed, Surfaces	Microbiology parameters	PICR-212: ISO 18593:2018, BAM Cap1, CODEX-ALIMENTARIUS



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

<p>ENVIRONMENTAL-ORGANIC</p>	<p>Ground waters, surface waters, drinking waters, wastewaters, seawater, Soils, sediments, sludges</p>	<p>Volatile organic compounds (VOCs) 1,1-dichloropropylene 1,2,3-trichlorobenzene 1,2,3-trichloropropane 1,2,4-trichlorobenzene 1,2,4-trimethylbenzene 1,2-dibromo-3-chloropropane 1,2-dibromoethane 1,2-dichlorobenzene 1,2-dichloroethane 1,2-dichloropropane 1,3,5-trimethylbenzene 1,3-dichlorobenzene 1,3-dichloropropane 1,4-dichlorobenzene 2,2-dichloropropane 2-chlorotoluene 4-chlorotoluene 4-isopropyltoluene Benzene Bromobenzene Bromochloromethane Bromodichloromethane Bromoform Carbon Tetrachloride Chlorobenzene Chloroform Cis-1,2-dichloroethylene Dibromochloromethane Dibromomethane Ethylbenzene Hexachlorobutadiene Isopropylbenzene Methyl T-butyl Ether M-xylene Naphthalene N-butylbenzene N-propylbenzene O-xylene P-xylene Sec-butylbenzene Styrene Tert-butylbenzene Tetrachloroethylene Toluene Trans-1,2-dichloroethylene Trichloroethylene Ethanol</p>	<p>IT-383. Based on US EPA Method 8260D (GC/MS)</p> <p>IT-383. Based on US EPA Method 8260D (GC/MS) (cont'd.)</p>
-------------------------------------	---	---	---



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

FIELDS OF TESTING	MATERIAL/ MATRIX	DETERMINANT(S)/ ANALYTE(S)	METHOD REFERENCE
ENVIRONMENTAL-ORGANIC (cont'd.)	Ground waters, surface waters, drinking waters, wastewaters, seawater, Soils, sediments, sludges (cont'd.)	Polycyclic aromatic hydrocarbons (PAHs) Acenaphthene Acenaphthylene Anthracene Benz(a)anthracene Benz[a]pyrene Benzo(b)fluoranthene Benzo(g,h,i)perylene Benzo(k)fluoranthene Chrysene Dibenz(a,h)anthracene Fluoranthene Fluorene Indeno(1,2,3-cd) pyrene Naphthalene Phenanthrene Pyrene	IT-382 Based on: SMEWW-APHA-AWWA-WEF (24 th Ed. 2023) 6440 Polynuclear Aromatic Hydrocarbons / US EPA Method 8270E (SW-846 GC/MS-MS) IT-382 Based on: SMEWW-APHA-AWWA-WEF (24 th Ed. 2023) 6440 Polynuclear Aromatic Hydrocarbons / US EPA Method 8270E (SW-846 GC/MS-MS) (cont'd.)
		Pesticides residues (PRs)	IT-447 Based on US EPA Method 8270E (SW-846 GC/MS-MS)
	Ground waters, surface waters, drinking waters, wastewaters, seawater, Soils, sediments, sludges and residues	Polychlorinated biphenyls (PCBs) (PCB-180) 2,2',3,4,4',5,5'-Heptachlorobiphenyl (PCB-138) 2,2',3,4,4',5'-Hexachlorobiphenyl (PCB-153) 2,2',4,4',5,5'-Hexachlorobiphenyl (PCB-101) 2,2',4,5,5'-Pentachlorobiphenyl (PCB-52) 2,2',5,5'-Tetrachlorobiphenyl (PCB-118) 2,3',4,4',5-Pentachlorobiphenyl (PCB-28) 2,4,4'-Trichlorobiphenyl	IT-446. Based on: US EPA Method 8082A (GC/MS-MS)

