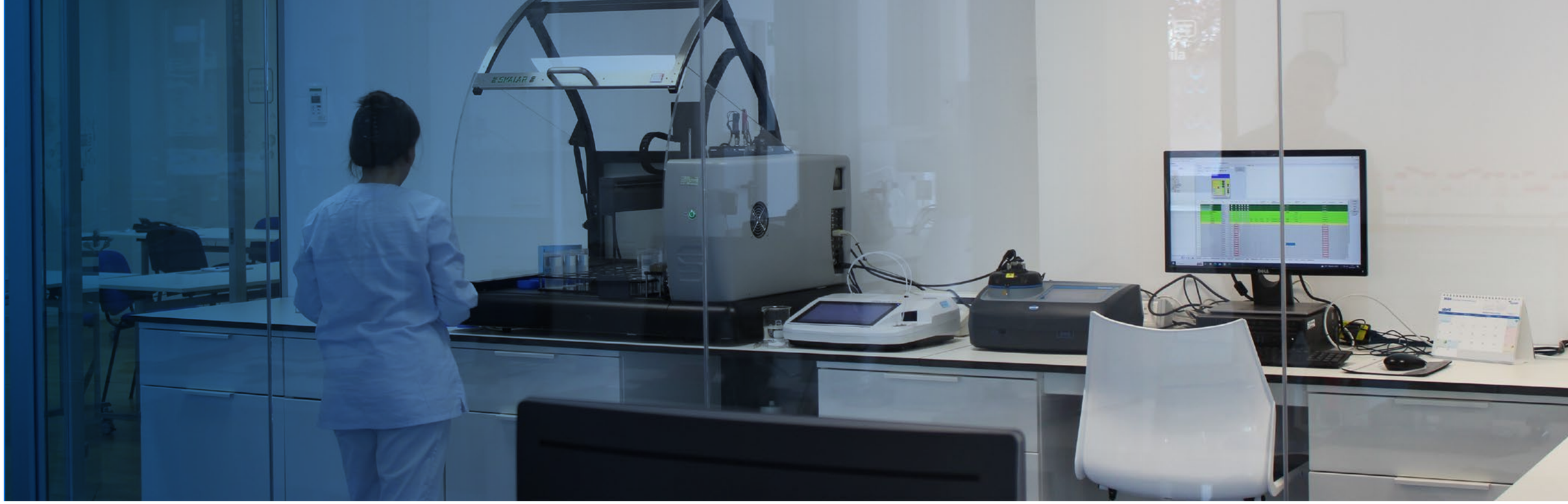
2025 Annual Activity Report

Aqualia-LAB



1. Trust, safety and quality: the DNA of Aqualia-LAB

In 2025, Aqualia's accredited laboratories played a key role in the sustainable management of the end-to-end water cycle, helping us to accurately understand water quality so as to ensure its responsible and safe use. Their primary mission is to verify that water complies with the limits established by current regulations and with the quality standards required to protect public health and preserve the environment. To this end, they apply validated and accredited methodologies that enable the accurate and traceable assessment of physical, chemical and microbiological contaminants, thereby ensuring the reliability of the results.

Drinking water quality control is underpinned by a highly specialised structure that encompasses representative sampling, the transport and preservation of the samples obtained under optimal conditions, their analysis in accredited laboratories, and the reporting of the results with the utmost technical rigour. The processes carried out in the laboratories are supported by high-tech equipment, qualified personnel and robust quality systems. Furthermore, they incorporate sustainability-oriented practices, such as the optimisation of energy consumption, the reduction of waste and the promotion of the circular economy.

Beyond their analytical function, **accredited laboratories are a strategic element of sustainable water management.** In 2025, they made a decisive contribution towards the continuous improvement of municipal services: they optimised incident response times, strengthened incident monitoring and collaborated in determining effective solutions. They also drove the implementation of innovations aimed at operational efficiency and the sustainability of water resources.

These actions are complemented by the prevention of health risks, the enforcement of regulatory compliance and the incorporation of technologies that reduce environmental impact. In this way, we consolidate our commitment to the protection of water as an essential resource for present and future generations.

Key achievements in 2025

Substantial expansion of the scope of accreditation, with a

67%

increase in the number of accredited parameters.

New analytical methodologies

have been developed, implemented and optimised, to ensure an effective response to the increasing workload and the parameters analysed.

Advanced technology has been incorporated

which, thanks to its high sensitivity and specificity, allows us to detect and quantify a wide range of compounds at extremely low concentrations.

Training and upskilling of laboratory technicians,

a key element in achieving the ambitious objectives for the development of new methodologies.

2. Organisation and structure of the laboratories

Aqualia-LAB's laboratories are a space where research, technology and sustainability come together to transform the end-to-end water cycle.

We have a **solid network of 22 accredited laboratories** and 2 that are in the process of accreditation. These are distributed across five countries, which strengthens our capacity to guarantee water quality and to make progress in terms of the sustainability of water resources. This infrastructure enables us to perform comprehensive and reliable analyses, and to enforce regulatory compliance and the protection of public health and the environment.

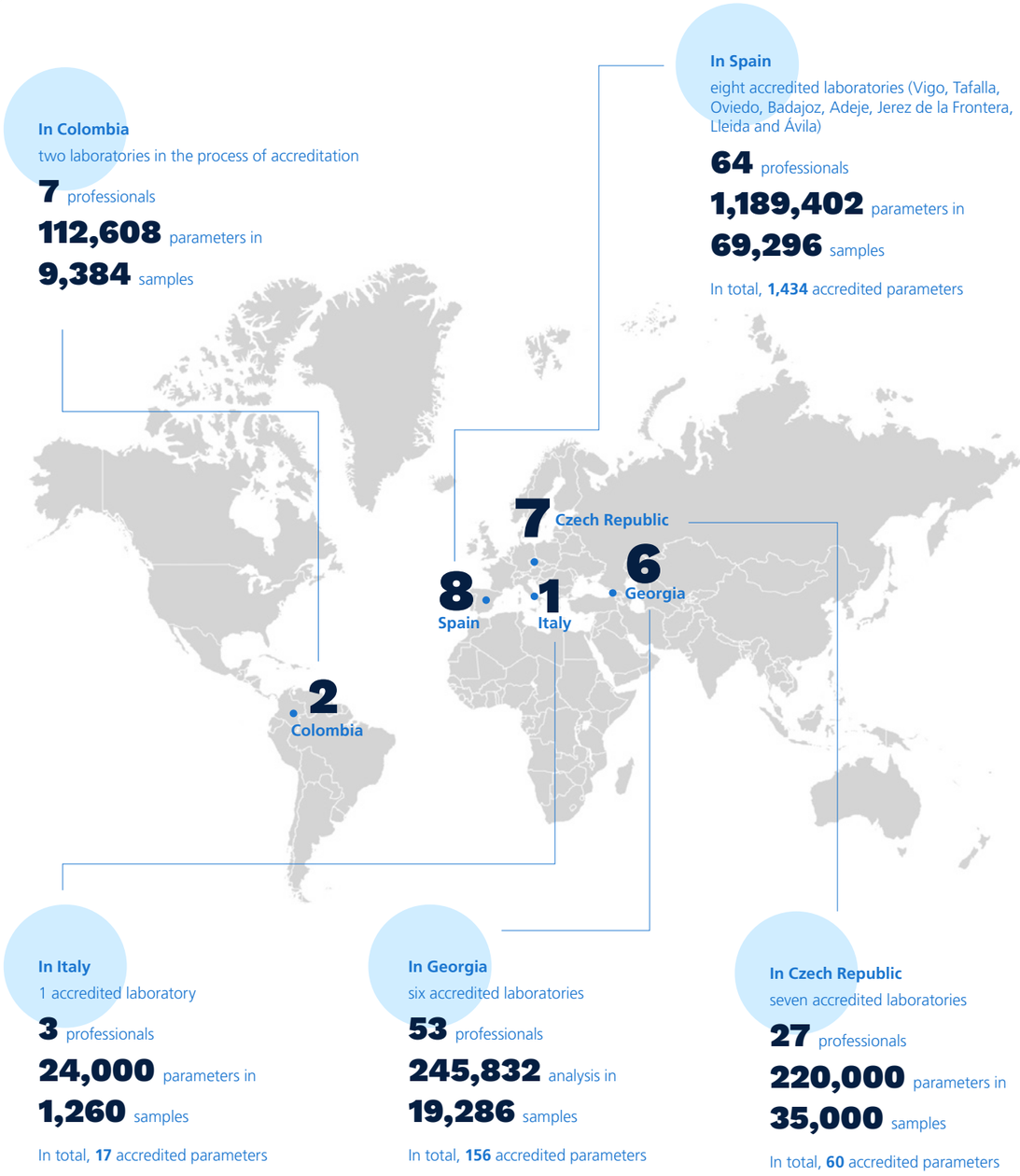
22
accredited laboratories and 2 in the process of accreditation

154
employees

1,667
accredited parameters

134,226
samples analysed

1,791,842
total parameters analysed



The primary function of this laboratory network is to carry out analyses for the quality control of drinking water, as well as continental and marine waters, swimming pool water and wastewater. All accredited laboratories comply with **ISO 17025**, as a benchmark for technical competence and the utmost reliability of analytical results, in line with our commitment to excellence and sustainability.

2.1 Organisational structure

In total, the accredited laboratory network has a workforce of 154 employees. All the laboratories have a similar organisational structure, following the organisational chart below:

LABORATORY MANAGER

Laboratory Quality Manager

Laboratory Technical Manager

Area Lead Technician

Laboratory Technician

Laboratory Assistant

Administrative Officer

Commitment to training and talent development

As part of our commitment to training and promoting talent, the laboratories collaborated with various institutions and universities in 2025. These partnerships resulted in the hosting of a significant number of students in work placements, who joined real teams and participated in analytical activities under specialist supervision. This training work not only contributes towards developing talent in the sector, but also fosters innovation and social responsibility, and helps attract highly qualified future professionals, aligned with the principles of innovation and sustainability that guide the Company's activities.

Qualifications and technical excellence

Our laboratory team is distinguished by a high level of technical qualification across all areas of analysis, underpinned by experience and continuous training. The majority of staff hold higher education qualifications, which strengthens the technical competence of the network and reinforces the reliability and rigour of the analytical results. This approach ensures that every process is carried out to the highest quality standards.

Diversity and inclusion in the workplace

The integration of people with disabilities is a priority area of action for the laboratories, consistent with our commitment to diversity and inclusion. To this end, we work with specialist organisations that facilitate both labour insertion and the individual monitoring of each case. In our laboratories, we adapt work stations and procedures to ensure that these individuals can perform real duties that are fully integrated into operational workflows. This joint effort between partner organisations and the laboratory technical team results in more diverse, inclusive and enriching work environments that strengthen the corporate culture and add value to the entire organisation.

2.2 Training programmes

Training is a strategic pillar for Aqualia, reinforcing key competences across all work areas and helping to ensure the correct application of accredited procedures. The programmes are designed to facilitate adaptation to the regulatory and technological changes that impact water management, thus ensuring the preparedness of laboratory staff for the new challenges facing the sector.

In the laboratories, we run continuous training programmes aimed at all technical staff, with the objective of keeping them constantly updated on analytical procedures and ensuring their compliance with the highest quality standards.

The training initiatives include specialised content on test methods, quality control and laboratory safety, as well as the use of advanced equipment. Furthermore, we promote the adoption of good practices that contribute to operational efficiency and sustainability, fostering the optimisation of resources and the reduction of environmental impact in daily activities.

2.3 Work areas and equipment used

Aqualia's laboratories organise their activities into specialised areas to ensure a coordinated, efficient and safe chain of analysis and to optimise processes while guaranteeing results of the highest quality. The most important areas are: chromatography, physicochemical analysis, microbiology and radioactivity. Each area is equipped with advanced technology and adapted to the most demanding technical and regulatory standards.

The laboratories' technological capabilities are complemented by systems that promote energy efficiency and sustainability, incorporating modern equipment to optimise resource consumption and reduce environmental impact. A commitment to innovation and continuous improvement that reinforces our dedication to technical excellence and environmental protection.

Chromatography area

Dedicated to the separation and detection of organic and inorganic compounds across different matrices, this area is equipped with high-precision instruments capable of achieving the limits of quantification essential for compliance with current regulations. The most representative equipment includes gas chromatography instruments with mass spectrometry detection and thermal desorption systems, UPLC liquid chromatography instruments with mass detection, and ion chromatography systems with ultrafiltration and conductimetric detection.

Physicochemical analysis area

This area determines key parameters for assessing water quality in different contexts. It is equipped with inductively coupled plasma mass spectrometry instruments, instruments for determining Total Organic Carbon by catalytic combustion, and atomic fluorescence spectrophotometers for mercury determination, among others.

Microbiology area

Specialising in the detection and quantification of microorganisms that indicate contamination, it combines traditional methods with rapid detection methods. The most notable instruments include high thermal stability incubators, automated culture media preparators and microscopes with epifluorescence modules, ensuring the reliability of microbiological analyses.

Radioactivity area

This area is dedicated to the determination of natural or artificial radioactivity present in samples. To this end, it uses proportional counters for the measurement of alpha and beta activity, as well as scintillation counters for the determination of radon and tritium.

2.4 Audits and new accreditations obtained

External and internal audits

The accreditation of water analysis laboratories (for drinking, continental, marine and swimming pool water and wastewater) under the **UNE-EN ISO/IEC 17025** standard is a formal recognition of their technical competence granted by an official body (ENAC in Spain). This ensures that the results generated are valid and reliable. A seal of public and business confidence, it guarantees the competence to analyse physicochemical and microbiological parameters, and is essential for compliance with health and environmental regulations.

Compliance with the requirements established by the aforementioned standard is ensured through rigorous periodic audits carried out by **national accreditation bodies**, the highest level in the conformity assessment chain, which evaluate and recognise the technical competence of laboratories. The audits are carried out by independent technical experts who assess the competence of the analytical methods, equipment and personnel, as well as the management system that is in place.

Accreditation body audits comprise surveillance audits and reassessment audits, the latter being conducted after two surveillance audits. Reassessment audits involve an even more thorough review of all accredited analytical techniques, with in situ observation of their performance.

In 2025, five reassessment audits were carried out, two of which included scope expansion audits, together with two surveillance audits, both including scope expansion audits.

Additionally, each laboratory undergoes prior internal audits conducted by personnel with specific qualifications in internal auditing. The objective is to ensure adequate preparation for the official reviews and to continuously verify compliance with regulatory requirements, in line with our culture of continuous improvement.

New accreditations obtained

In 2025, we made significant efforts to add 578 new parameters to the scopes of accreditation. In Spain, we went from 856 accredited parameters in 2024 to 1,434, representing an increase of 67.5%. If we analyse this increase by laboratory, the Adeje laboratory saw a 105.3% increase and the Oviedo laboratory a 99.4% increase.

These expansions of the scopes of accreditation reflect the commitment of our laboratories to continuous improvement, technical excellence, innovation in water quality analysis, responsiveness to new regulatory requirements, and the integration of sustainability criteria by ensuring more robust methods.

3. Projects and activities

3.1 Participation in interlaboratory exercises

Aqualia's laboratories actively participate in intercomparison exercises organised by external benchmark bodies, with the aim of guaranteeing technical competence and enhancing the reliability of the analytical results. In these tests, blind samples distributed by national and international organisations are analysed, which enables performance to be assessed under controlled and comparable conditions, thereby ensuring the traceability and quality of the processes.

In 2025, we continued to participate in intercomparison rounds for physicochemical and microbiological parameters, covering different water matrices, such as drinking water, continental water, waste water, marine water and swimming pool water. This diversity ensures that the methods applied are robust and adaptable to different operational contexts.

Furthermore, the results obtained in these exercises are integrated into comparative studies with historical data from previous years. This enables us to assess the consistency of performance and apply continuous improvements to analytical procedures. As well as ensuring regulatory compliance and accreditation, this approach contributes to the sustainability of the quality control system by reducing risks associated with analytical variability.

By participating in these initiatives, we reinforce the transparency of and confidence in the analyses carried out, as well as our commitment to technical excellence and innovation.

3.2 Collaborations

Aqualia's laboratories maintain strategic agreements with educational institutions at various levels (vocational training, universities and specialist centres) for hosting students on work placement. Through these collaborations, students join real teams and gain practical experience in highly specialised technical environments.

We also promote social initiatives aimed at the labour insertion of people with disabilities. To date, this area of action is carried out in the Jerez, Badajoz and Lleida (Spain) laboratories, where tasks, spaces and procedures are adapted to ensure the full professional development of these individuals. These actions are supported by partner organisations and result in more accessible, inclusive and enriching work environments that strengthen the corporate culture and add value to the entire organisation.

These collaborations not only strengthen training and inclusion, but also contribute directly to Aqualia's sustainability objectives. By promoting equal opportunities, inclusive employment and the development of young talent, we drive a responsible management model that integrates social commitment with technical excellence, creating a positive impact on both the community and in the water sector.

3.3 Scientific networks

Institutional participation

Aqualia's laboratories are active members of various technical, scientific and sectoral networks, both nationally and internationally. This collaboration enables the exchange of knowledge, the harmonisation of criteria and adaptation to new regulatory requirements, ensuring that processes remain aligned with the most advanced standards in the sector. It also positions the laboratories as strategic players in the development of innovative solutions for water analysis, fostering collaboration and technology transfer.

The commitment to these networks reinforces our dedication to technical excellence by promoting practices that optimise resources and reduce risks. It also consolidates our presence in specialist forums and strengthens our capacity to respond to the global challenges related to water quality.

Collaboration with R&D&I projects and technology platforms

Innovation is a strategic pillar for Aqualia's laboratories, which participate in applied research projects and technology platforms focused on the detection, control and monitoring of emerging contaminants and pathogens. These collaborations drive the development of advanced solutions that improve water safety and contribute to the sustainability of water resources.

Among the most significant initiatives is the **European NINFA project**, which aims to prevent contamination in groundwater and design innovative analytical methods for monitoring substances of concern. This project, developed in collaboration with international companies and research centres, promotes technology transfer and the harmonisation of criteria at the European level.

The laboratories also participate in the **SENTIATECH technology platform**, which focuses on the early detection and control of chemical and biological risks, including microplastics, nanoparticles and other emerging contaminants. This collaboration makes it possible to advance with technologies that strengthen the capacity to respond to new environmental challenges, integrating innovation, digitalisation and sustainability.

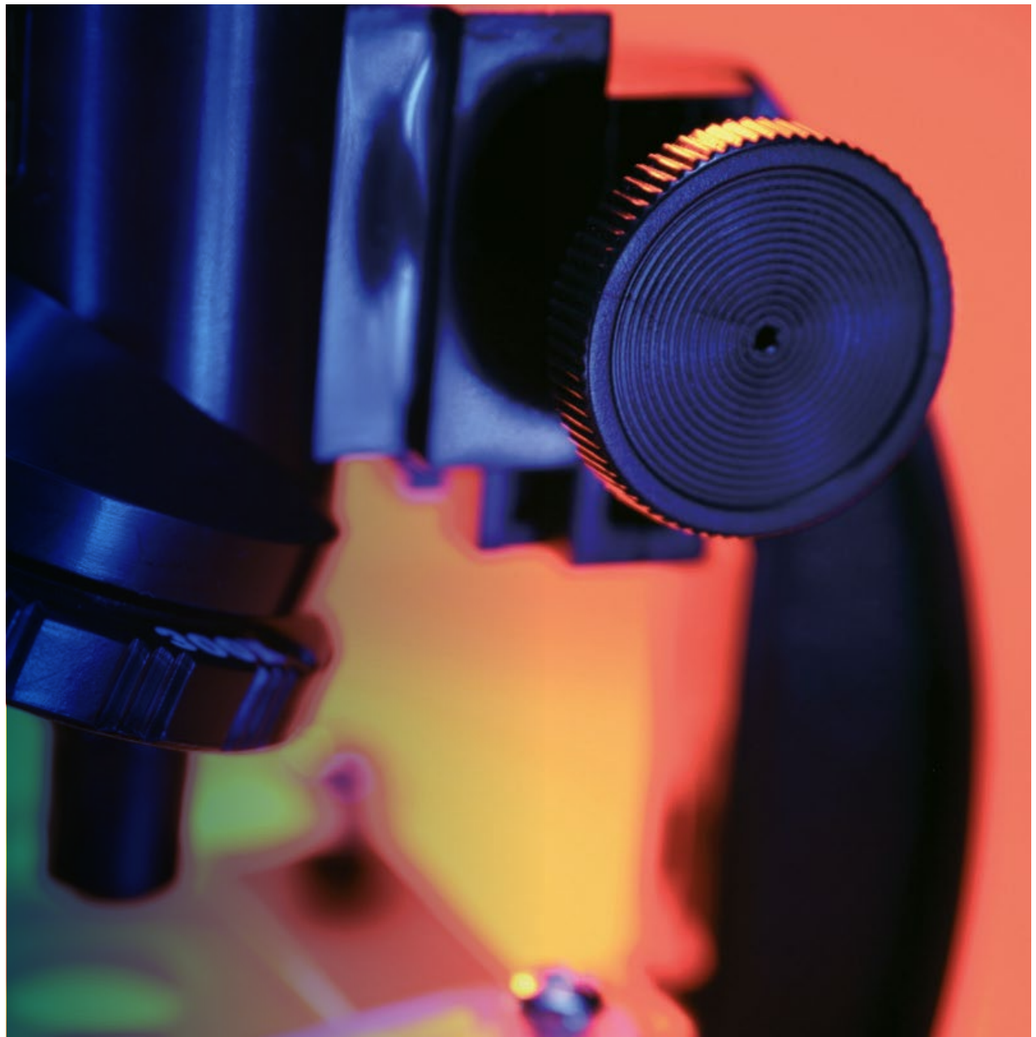
These actions consolidate the role of the laboratories as active agents in the transformation of the sector and in knowledge generation. They also drive the development of advanced methods, optimise the identification of contaminants and improve the capacity to respond to new analytical challenges.

4. Innovations and technological improvements

4.1 Implementation of new technologies

In 2025, we maintained our commitment to new technologies and the development of new high-precision analytical methods to respond to emerging regulatory requirements. As a result of this effort, we achieved a significant expansion in the number of accredited parameters.

At the same time, we continued to make progress in the implementation and validation of the method for detecting somatic coliphages across several laboratories.



Specific methodologies

We also developed specific methodologies for determining new parameters, supported by state-of-the-art equipment. Among these, chromatography equipment deserves special mention. Some of the latest acquisitions include:

- **Two gas chromatographs with a thermal desorption module and triple quadrupole mass analyser.** Thermal desorption (TD) is a powerful sample introduction technique for gas chromatography (GC) and GC-MS. Rather than dissolving compounds in a solvent, TD heats samples to release volatile and semi-volatile organic compounds (VOCs and SVOCs), which are transported directly to the analytical system.
- **One gas chromatograph with purge and trap and single quadrupole mass analyser.**
- **Two liquid chromatography-mass spectrometry (LC-MS) triple quadrupole instruments,** combining the separation capability of liquid chromatography (LC) with the precise identification and quantification of mass spectrometry (MS) to analyse and detect compounds at trace levels.
- **Two QTRAP LC-MS systems, a hybrid analytical system combining liquid chromatography (LC) and mass spectrometry (MS),** that integrates a triple quadrupole (triple Quad) with a linear ion trap to achieve an extremely sensitive identification and quantification of compounds in complex matrices.
- **Four nitrogen generators (one for each LC-MS).**
- **Other equipment acquired:** safety cabinet, various incubators for microbiological analysis, culture media preparators, probes for isothermal media control, and extraction equipment for the analysis of oils and fats in waste water, among others.

5. Challenges and opportunities

5.1 Challenges in 2025

In response to new regulatory requirements and technological developments in the sector, the laboratories faced significant operational and technical challenges in 2025, undertaking relevant actions such as:

Development and implementation of the LAB tool, designed to optimise internal management and improve the traceability of analytical processes, and to facilitate data integration and coordination between areas.

Definition and application of the urgent samples protocol, which enables the prioritisation of critical analyses and guarantees faster response times in situations requiring immediate action.

Advances in digitalisation, with automated data processing systems that strengthen IT security and enable remote access for resolving equipment incidents. These advances have increased efficiency and operational resilience.

Preparation of the Practical Application Guide on Occupational Risk Prevention (ORP), aimed at coordinating safety actions in laboratory prevention activities.

Development and validation of new analytical methods, adapted to the requirements of Spanish Royal Decree 3/2023 and the detection of emerging contaminants, which has involved a significant effort in applied research and accreditation.

5.2 Opportunities for the future

With a consolidated and expanding laboratory network, significant opportunities are opening up to evolve towards a more global, digital, innovative and sustainable model, aligned with the company's strategic objectives.

International collaboration

The creation of an integrated global laboratory network will enable us to advance forward in the harmonisation of technical criteria, the joint development of innovative methodologies and the optimisation of resources. This approach will foster knowledge transfer, participation in European and international projects, and the generation of synergies between technical teams from different countries.

Digital transformation and smart automation

The laboratories will pursue advanced digitalisation, boosting the automation of workflows from sample reception through to the issuance of reports, thus reducing turnaround times and errors. In addition, integrated platforms will be developed to connect with clients and health authorities.

Technical innovation and new analytical parameters

The incorporation of methods for emerging contaminants (microplastics, nanomaterials, PFAS, pharmaceuticals) and rapid, sustainable techniques, such as biosensors and reagent-free analysis, will enable us to anticipate future European regulations. This commitment to innovation will consolidate the network as a benchmark in quality, safety and sustainability.

Social inclusion and talent development

Social integration will continue to be a strategic pillar: we will strengthen the recruitment of people with disabilities and adapt work environments and processes to ensure their full inclusion.

6. Spain laboratory annex

6.1 Samples and parameters

	2025					
	Laboratories	Professionals	Total parameters analysed	Analysed samples	Accredited parameters analysed	No. of accredited parameters
Spain	Ávila	7	63,118	6,629	50,407	73
	Badajoz	4	28,817	3,692	25,343	35
	Adeje	8	111,903	5,059	31,557	78
	Jerez de la Frontera	5	66,644	7,731	53,903	77
	Lleida	8	84,102	15,120	26,049	90
	Oviedo	24	679,418	21,253	493,102	1,057
	Vigo	6	153,016	9,343	65,660	9
	Tafalla	2	2,384	469	2,190	15
	Total	**64**	**1,189,402**	**69,296**	**748,211**	**1,434**

6.2 Accredited parameters and expansions

	NUMBER OF ACCREDITED PARAMETERS											2025 EXPANSIONS			
Zones	Drinking water		Inland water		Swimming pool water		Wastewater		Seawater		TOTAL Accredited parameters	No. Parameters scope expansion		% expansion	Accredited parameters Total
	FQ	MICROB	FQ	MICROB	FQ	MICROB	FQ	MICROB	FQ	MICROB		FQ	MICROB		
Ávila	29	4	28	-	3	-	-	-	-	-	64	6	3	0	73
Badajoz	8	5	7	4	7	2	-	-	-	-	33	-	2	0	35
Adeje	13	4	13	-	3	-	-	-	5	-	38	40	-	1	78
Jerez de la Frontera	37	4	36	-	-	-	-	-	-	-	77	-	-	-	77
Lleida	37	5	35	5	-	4	4	-	-	-	90	-	-	-	90
Oviedo	249	4	249	-	-	-	28	-	-	-	530	526	1	1	1,057
Vigo	8	1	-	-	-	-	-	-	-	-	9	-	-	-	9
Tafalla	7	2	6	-	-	-	-	-	-	-	15	-	-	-	15
											856	**572**	**6**	**67.52%**	**1,434**
												578			
											1,434				

6.3 Scope expansions

		Drinking water		Inland water		Swimming pool water		Wastewater		Total Expanded parameters 2022-2025
Scope expansions		FQ Parameters	MICROB Parameters	FQ Parameters	MICROB Parameters	FQ Parameters	MICROB Parameters	FQ Parameters	MICROB Parameters	
2022	Badajoz	2	3	2	4	11	2	-	-	24
	Jerez de la Frontera	6	-	6	-	-	-	-	-	12
	Lleida	10	-	10	4	-	-	1	-	25
	Vigo	2	-	-	-	-	-	-	-	2
2023	Ávila	6	-	6	-	-	-	-	-	12
2024	Adeje	2	-	2	-	-	-	-	-	4
	Lleida	1	1	1	1	-	1	-	-	5
2025	Ávila	3	2	3	1	-	-	-	-	9
	Badajoz		1		1	-	-	-	-	2
	Adeje	20	-	20	-	-	-	-	-	40
	Jerez de la Frontera	-	-	-	-	-	-	-	-	-
	Lleida	-	-	-	-	-	-	-	-	-
	Oviedo	263	1	263	-	-	-	-	-	527
	Vigo	-	-	-	-	-	-	-	-	-
	Tafalla	-	-	-	-	-	-	-	-	-

6.4 Samples and parameters 2024-2025

	No. Analysed samples		No. Analysed parameters	
Laboratory	2024*	2025	2025 (Total)	2025 (Accredited)
Ávila	7,404	6,629	63,118	50,407
Badajoz	5,583	3,692	28,817	25,343
Adeje	6,771	5,059	111,903	31,557
Jerez de la Frontera	7,539	7,731	66,644	53,903
Lleida	11,000	15,120	84,102	26,049
Oviedo	17,919	21,253	679,418	493,102
Vigo	9,939	9,343	153,016	65,660
Tafalla	304	469	2,384	2,190
Total	**66,459**	**69,296**	**1,189,402**	**748,211**

* From October 1, 2023, to September 30, 2024.

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