IN THE FIELD: ADVANCING SUSTAINABLY FARmed FOODS WITH A WORLD-CLASS LAB

HOW BUREAU VERITAS HELPED AVENA FOODS OPTIMIZE THEIR LABORATORY, MAXIMIZING SAFETY WHILE MINIMIZING COSTS

Sustainably farmed foods are big business. According to the International Food Information Council, 73% of global consumers now say that they would change their consumption habits to reduce their impact on the environment, creating an unprecedented demand for environmentally conscious foods.

Recognizing this growing trend, Bureau Veritas has been thrilled to partner with Avena Foods, a Canadian specialty miller, to provide onsite laboratory testing services.

Avena builds partnerships with farmers and manufacturers to provide food, beverage, and pet food manufacturers with products that contain sustainably grown, specialty milled, high quality, safe, and nutritious pulse and oat ingredients. Established in 2008 by a group of pedigreed seed growers, it operates under the Avena Purity Protocol, which has become the gold standard for producing pure, gluten-free oats that are safe to consume by people who have celiac disease, gluten-intolerance, or wheat allergies. Therefore, maintaining exemplary FSQM (food safety, quality management) systems has always been of utmost importance to Avena.

This calls for strict laboratory practices, and for help, Avena turned to Bureau Veritas.

Laboratory services are one of Bureau Veritas’ core capabilities, and the end-to-end solutions we provide can help companies realize a range of significant advantages when it comes to operating their own laboratory functions. Whether a company must design a laboratory from the ground up or find the right resources to staff and run it, our solutions deliver agility, flexibility, and, perhaps most significantly, the expertise companies need to streamline operations and save money. In partnering with Bureau Veritas, companies like Avena are able to quickly and cost effectively scale up their laboratory operations, capitalizing on our 50-year history operating labs across North America.

In the following case study, we provide details of our partnership with Avena—and how we ultimately arrived at a laboratory solution that is optimizing performance and minimizing costs, allowing Avena to further its commitment to providing safe, quality ingredients to its partners around the world.
THE CHALLENGE

Though pulses and oats are naturally gluten-free, they can be contaminated with gluten-containing grains, such as wheat, rye, barley, and triticale, as well as grain dust. The shape and color of many types of pulses and oats makes it especially difficult to clean out these impurities as well as other contaminants.

As a locally-rooted specialty miller, Avena has developed an integrated approach to preventing contamination throughout the entire supply chain grounded in the knowledge that no single control step is adequate to control contamination. Rather, success lies in multiple controls. The Avena Purity Protocol includes a combination of visual inspection and laboratory testing, treating the potential for gluten contamination as both a physical and chemical hazard. If it is only approached as a physical risk, by removing the visible gluten-containing grains, the risk associated with grain dust, the non-visual component of gluten-contamination, remains.

Avena’s laboratory serves as an in-house testing location for all three Avena facilities. Even before partnering with Bureau Veritas, in a typical week, the team would conduct more than 600 gluten tests on raw grain and finished products using the R5 ELISA method, the industry standard for gluten testing. Additional samples were also sent to a third-party laboratory to be tested for gluten and microbial tests and screened for the entire spectrum of mycotoxins. This hybrid process—and in particular, the need to ship samples on a daily basis to an outside testing facility—created unnecessary bottlenecks, posing the risk of delays that could hinder the ability for farmers to quickly transport their harvested product or for Avena to ship finished products to customers.

Like many companies in the era of COVID-19 economic upheaval, Avena was also faced with the all-too-familiar challenge of learning how to do more with less out of its 1,500 square-foot laboratory. Lab employees split functions between food testing and innovation, stretching resources thin and further complicating matters when its limited staff had unexpected absences or moved on from their positions.

Faced with these challenges, Avena asked Bureau Veritas to deliver a solution that would enable it to double down on its promise of delivering safe foods while focusing on doing what it does best: selling its high-quality ingredients around the world.

THE SOLUTION

In January 2022, Bureau Veritas announced a partnership with Avena to upgrade their onsite laboratory, combining the latest technology, people, and solutions to expand Avena’s testing capabilities and elevate their operations to an ISO 17025 standard.

As a first step in any laboratory upgrade, we began by providing a tailored set of cutting-edge solutions to modernize Avena’s testing capacity. This included recommendations for improving workflow processes and ensuring that the placement of laboratory elements like safety stations and entries and exits contributed to the overall efficiency of the space. All Bureau Veritas laboratories are outfitted with our industry standard laboratory protocols, ensuring worker safety. In order to mitigate the costs associated with acquiring the latest technology and infrastructure, Bureau Veritas worked with Avena to lease the upgraded equipment instead of buying it outright, giving Avena more financial flexibility to focus on its core business model.

“...We are pleased to partner with Bureau Veritas to operate our onsite laboratory. This allows us to focus on producing and selling high-quality food ingredients, knowing that the laboratory tests are conducted by a world-class third-party expert.”

— Gord Flaten, CEO of Avena
Additionally, Bureau Veritas provided full-time laboratory personnel to deliver the onsite laboratory operations and critical testing required for production support and food safety and quality management. Employing 2,000 highly trained scientists, project managers, engineers, and lab technicians across North America, Bureau Veritas has the ability to flexibly rotate its staff in and out of project sites, ensuring that no laboratory sits understaffed. Avena also tasked Bureau Veritas with supplementing its in-house capabilities with non-critical off-site sample analysis, leveraging its network of strategically located state-of-the-art laboratories that service the food and agriculture industry.

THE RESULTS

Although we are only a few months into our partnership with Avena, Bureau Veritas is already delivering accurate and reliable testing that will enable this socially-conscious food processor to safely and efficiently run its laboratory operations. This is a win-win-win, benefiting Avena, Bureau Veritas, and the global food supply.

Putting to work our 50-year history of conducting laboratory operations in North America, Bureau Veritas is helping Avena mitigate the risks associated with staffing inconsistencies while curbing rising laboratory costs by converting capital expenditures into basic operating expenses. Our laboratory technicians have significantly expanded the lab’s testing capacity, introducing 13 additional tests that will maximize Avena’s ability to ensure safety remains at the heart of its mission. Leveraging state-of-the-art technology, we were able to top-grade this laboratory’s operations, increasing the lab’s capacity to test up to 150,000 samples per year, translating to 750,000 annual test results. To help with analysis and organization of these results, Bureau Veritas implemented its Laboratory Information Management System (LIMS), a customer data interface that improves efficiency, eliminates transcription errors, and maintains data security and integrity.

Additionally, this partnership has allowed Bureau Veritas to bring accredited third-party food and agriculture testing to a region that is currently underserved, expanding our capacity to provide innovative solutions that advance the food and agriculture industry as a whole. Prior to modernizing their onsite laboratory with Bureau Veritas, Avena was shipping samples up to three times per day to Bureau Veritas labs hundreds of miles away, creating a heavy burden on shipping and logistics partners who were required to manage transport to remote areas and service centers. Not only does the addition of Avena’s upgraded laboratory help alleviate the potential for delays caused by the shipping process, it also greatly reduces the company’s carbon footprint by relying less on freight companies to move test samples.

Bureau Veritas looks forward to building on our partnership with Avena, pairing its commitment to bringing safe, quality ingredients to market with our mission to shape a world of trust.
Bureau Veritas provides innovative laboratory testing, inspection, and certification solutions, which serve the businesses that are shaping our changing world. We help ensure assets, products, infrastructure, and processes comply with client specifications or standards and regulations, while improving performance in quality, health and safety, environmental protection (QHSE), and social responsibility.

A LEGACY OF EXCELLENCE
For nearly 200 years, Bureau Veritas has had an unparalleled history in testing, inspections, and certification, with a global network of more than 80,000 experts helping clients meet their quality, health, safety, and environmental needs. We are a recognized global partner in laboratory services, working across numerous industries as diverse as pharmaceutical, automotive, oil and gas, and agriculture. Leveraging people, tools, technology, and innovation, we are a Business to Business to Society company working to shape a world of trust in your industry with the solutions we provide. Our experts are equipped with the knowledge and resources to help your laboratories succeed in meeting the challenges of the current health pandemic, remain accountable to evolving regulations, and optimize operational effectiveness.

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