

TRANSFORMING DAIRY LAB OPERATIONS WITH TEMPO® AND AUTOMATED QUALITY INDICATOR TESTING

In 1935, the Green County Cheesemakers formed the Foreign Type Cheesemaker's Association as a not-for-profit cooperative with the goal of establishing a laboratory to perform quality control testing on the milk and cheese they produced. The mission of the laboratory was to assist cheese producers in making quality, safe, and wholesome products. Today the organization provides support and services to members from all over the United States and is known as Precision Biolabs, which better reflects its state-of-the-art testing capabilities and emphasis on serving a broader customer base.

In 2017, the company expanded its lab infrastructure to double their square footage specifically for microbiological testing. **As part of this initiative, Precision Biolabs sought automated lab testing solutions to unlock operational efficiencies for high throughput of customer samples and simplicity for training personnel.**



BACKGROUND

Moving Away from Manual Methods

Prior to implementing TEMPO®, bioMérieux's fully automated quality indicator enumeration solution, Precision Biolabs utilized the traditional most probable number (MPN) technique and Neogen® Petrifilm® for estimating bacteria counts. Manual methods can present inherent challenges. With sample submission volumes rapidly increasing, it was critical to explore how automation could improve efficiencies while providing consistent results.



High Throughput & Training Bottlenecks

The greater the volume of samples to process, the greater the chances for human error. Automated results with TEMPO® helped avoid the risks of lab technician error. Automated data collection helped to reduce overhead costs associated with transcription of results and the potential for user errors in the process. Plus, training new personnel on previous methods was a bottleneck due to manual processes, especially when compounded with turnover across the industry.

Lab Transforming Speed-to-Results

Time to results is also a key metric for service labs supporting a growing client base. While traditional methods would take upwards of 48 hours for total counts, TEMPO® was able to provide Precision Biolabs and their customers **results in as little as 24 hours.**

"TEMPO® helped us transform how we operate in the lab."

Sarah Gempeler, Laboratory Manager

IMPACT

"The bioMérieux support from the beginning has been bullet proof – validations and their dedicated Scientific Affairs team were instrumental, and supply chain was never an issue. From a company standpoint, they've been excellent and very reliable."

- Zachari Tollakson, Director of Laboratory Operations



RESULTS

Thanks to TEMPO®, Precision Biolabs never had a delay delivering results – even when their customers were complaining that other labs were seven days behind due to staffing issues related to the COVID-19 pandemic. The TEMPO® *E. coli* assay transformed fresh product release by delivering results in just 24 hours, cutting the previous two-day wait time.

Training on TEMPO® was quick and simple. Precision Biolabs reduced training time from six months to just three, cutting the onboarding period for new hires by 50%.



Reduced Total Count Assays 48+ hours to 24 hours



Reduced E. coli Assays 2 days to 24 hours



Reduced Training Time 50%

CONCLUSION

The TEMPO® automated quality indicator method provided Precision Biolabs with key benefits, including faster results for customers, improved accuracy and consistency, enhanced productivity, and significant cost savings on training.

Precision Biolabs partnered with bioMérieux for validations, training, and customer support, showcasing the true value of collaboration with microbiology experts and dedicated support teams. This partnership reflects a shared purpose to provide accurate, timely, and high-integrity data while aligning with bioMérieux's mission to provide the dairy industry with innovative, precise technologies that help deliver safe, high-quality products to consumers.



For more information on TEMPO® and to get in touch with our experts, visit our website: biomerieux.com/us/tempo



To learn more about Precision Biolabs, explore their website: precisionbiolabs.com