

## Global Clients

Regions served: North America, Europe, Asia, Middle East, Northern Africa

Industries: Municipal, industrial, food & beverage, defense, government, NGO, mining, petrochemical

Sample Customers: Singapore PUB, LADWP, Severn Trent Water, Las Vegas Valley Water, Health Canada

Applications: The entire water cycle from raw to drinking to waste; environmental monitoring; raw material & finished goods confirmation, process monitoring


Parameters: *E. coli*, Total Coliforms, Fecal Coliforms, Enterococcus

## Our compelling value proposition

Current microbiological monitoring is inadequate due to slow, manual methods that provide results days after samples are taken. The rapid, automated TECTA system solves this issue by not only bringing efficiencies to a lab operation, but also providing an easy-to-use, lab-in-a-box system that can be used by anyone, anywhere, anytime,

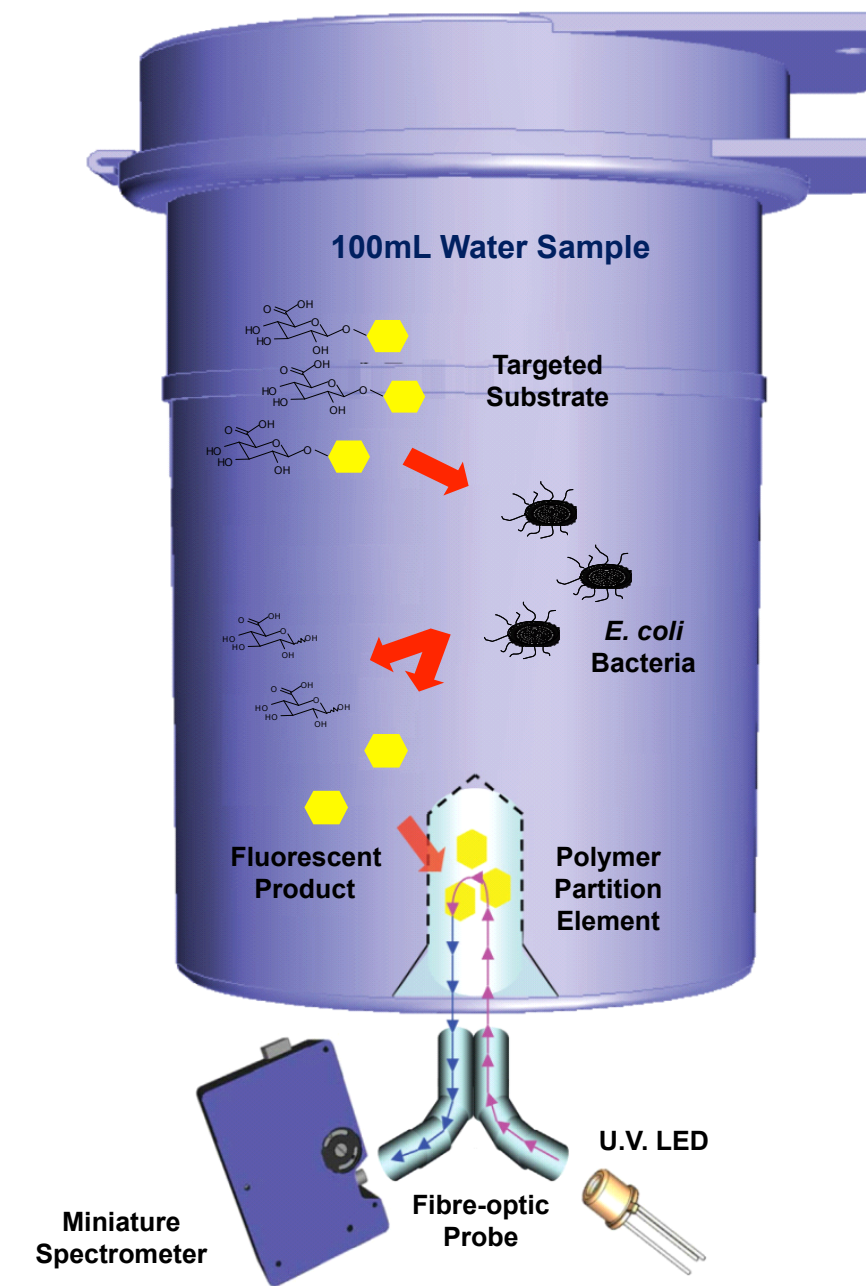
- ✓ Fully automated interpretation and reporting eliminates the typical errors of standard methods
- ✓ Provides much faster results
- ✓ Lowers operational costs
- ✓ Improves water quality & human health protection
- ✓ Provides an insurance policy and brand protection

## Details of the demo / pilot

Name of client: Singapore PUB   
Application Type: Municipal

Singapore PUB is renowned for their ongoing pursuit of advanced technologies in order to continuously improve their operation. They recognized that the TECTA system was a significant improvement upon their current standard microbiological test method.

PUB compared the TECTA system to their standard method in a comprehensive trial. They were interested in more rapid results, the ability to run test samples at any time and ideally, the ability to run tests at a variety of locations including the site of water main failures.



TECTA B16 instrument and TECTAlert cartridge schematic

## What problems are we solving?

Shockingly, the microbiological parameters that are required for regulatory compliance and are most indicative of human health protection are often ignored for operational purposes due to the inadequacies of the slow and manual methods that are available. As users pursue automated monitoring and advanced analytics, microbiology is simply not included. No longer. The TECTA solution brings automation to microbiology

- ✓ Operationalizes regulatory compliance microbiological parameters
- ✓ Provides rapid, actionable data that can be utilized by operators in order to improve system performance
- ✓ Provides a lab-equivalent solution for remote locations
- ✓ Provides advanced, operational knowledge of the regulatory mandated parameters required for system compliance
- ✓ Provides a new, higher level of water and human health protection

## The Experience

The TECTA system exceeded Singapore PUB 's expectations. With identical results, faster performance and more flexibility, the TECTA system out performed PUB' s current method.

- ✓ Multiple TECTA systems purchased for central lab
- ✓ Accredited for all water samples including drinking water and environmental monitoring
- ✓ TECTA utilized for reservoir rehabilitation program
- ✓ Became a validation partner for new enterococcus test
- ✓ A mobile lab with a "Traveling TECTA" was developed



TECTA B16 installed in Singapore PUB's mobile lab

## What this means for the future?

With over 300 systems installed in 30 countries, the automated TECTA solution is rapidly becoming the new global standard for microbiological monitoring.

- ✓ Microbiology will no longer be an "after-the-fact" "check-the-box" parameter
- ✓ Microbiology will be fully integrated with other advanced monitoring parameters for effective management and optimization of water operations
- ✓ Remote locations will have unprecedented and improved protection equivalent to urban centres

*"With its fast detection time, fully automated reports, and the accuracy of the test results, the TECTA™ B16 is a tool that helps improve the efficiency of our water quality monitoring work."*

Mr. Yu Lei, Senior Microbiologist, PUB, Singapore

*"We can strategically place TECTA™ B16 units closer to the points of sampling to initiate quicker testing and deliver results to contractors substantially faster."*

Willie Frehner, Sr. Microbiologist Las Vegas Valley Water District

*"The biggest benefit for us is the shorter timespan for bacteria results. It is also an advantage to be able to receive emails confirming results from the TECTA™ B16, which helps eliminate any human error," says Jacobs. "In addition to using the machine for testing our distribution network, we hope to eventually use the TECTA™ B16 for all our water samples, including well water and recreational water."*

Larry Jacobs, Environmental Health Technician, Kahnawake Shaktola'takenhas Community Services