



## Sample Master® LIMS Meets Data Management Needs at The Water Authority of the Cayman Islands

Increased versatility in data handling is just one major LIMS benefit.

### Organization Profile

The Water Authority of the Cayman Islands has been providing water and sewerage services since 1983 to more than 17,000 customers in the Grand Cayman districts of George Town, Bodden Town, East End, North Side and the Sister Island of Cayman Brac.

Their Mission:

- To ensure that the entire population of the Cayman Islands has access to a pure, wholesome and affordable supply of potable water.
- To protect and develop groundwater resources for the benefit of present and future populations of these islands.
- To provide for the collection, treatment and disposal of sewage within these islands in a manner that is safe, efficient and affordable.
- To operate in such a manner as to be financially self-sufficient, while contributing to the economy of the islands and achieving a reasonable and acceptable return on capital investments.

As a part of the Water Resources & Quality Control Department, the Water Authority Laboratory is responsible for ensuring through quality control that all potable water sold meets internationally-recognized standards and that all effluents disposed of meet the established standards of the Government and Water Authority regulations.

The laboratory, that performs more than 40,000 analyses on an annual basis across 32 different parameters, has achieved A2LA Certification, demonstrating their commitment to quality. In addition, they support other sections of the Authority responsible for the protection, management, and development of groundwater resources. The laboratory also provides analytical services to the private and public sectors.

### Their Challenge

The Water Authority researched the purchase of a Laboratory Information Management System (LIMS) with three major objectives in mind:

- To facilitate and improve the processing of samples
- To automate recordkeeping and thereby increase the laboratory's efficiency of data handling and reporting
- To reduce the time required by staff to record and report results

Proposals were requested from 10 LIMS vendors. After a stringent review and on-site demonstration process, ATL was selected because of the flexibility and ease of use of their product, along with the company's commitment to quality (ISO 9001:2015) and their expertise in the water/wastewater industry.



Grand Cayman, Cayman Islands  
<https://www.waterauthority.ky/>

“ Sample Master® has provided greater versatility for our data handling while simultaneously decreasing the time it takes to report data. Since implementing Sample Master®, the Lab has experienced a decrease in the errors relating to data entry and reporting; it has also experienced an increase in the efficiency of data reporting. The Lab staff is happy with the system as it has decreased the time they spend on administrative issues and data entry.

Also, I am very impressed with the superb customer service that we have received from ATL. ”

**Marcela Martinez-Ebanks,**  
Laboratory Manager Water  
Authority-Cayman Islands







## Our Solution

Sample Master has provided the laboratory with the ability to centralize its data while at the same time allow more versatility in how data is analyzed and reported. At login, Chain of Custody reports and barcoded labels are automatically generated and sample conditions automatically recorded. The Sample Scheduling module manages routine sample collection, the integrated QA/QC module allows users to create QC charts and view trends, and the Electronic Data Transfer module allows users to seamlessly import instrument data from two interfaced instruments: a Mettler Toledo XS 204 Analytical Balance and a Hach DR 4000 Spectrophotometer. Additionally, the Chemical Inventory, Resource Management and Customer Relationship Management (CRM) modules were implemented to not only help in managing/tracking data and sending alerts, but also assist in facilitating regulatory compliance.

The Chemical Inventory module helps track chemicals and reagents that are used in the laboratory, as well as related information such as lot numbers, expiration dates and quantities on hand. The Resource Management module allows users to track employee training records, link certificates and alerts users that re-training is required. This module also tracks instrument maintenance, repairs, calibration and alerts users when maintenance or re-calibration are required. The CRM module allows the laboratory to effectively manage customer complaints, which ensures that all open complaints are logged, characterized by severity, managed and tracked through closure; all of which helps ensure that no complaints or inquiries are left unanswered.

ATL engineers installed Result Point® —a secure, Web portal using SSL (Secure Socket Layer) that allows consumers (internal and external) to access reports generated by Sample Master. It also provides instantaneous access to real-time analytical results from virtually anywhere, at any time of the day. Laboratory clients have read-only privileges down to the project level where clients can download PDF reports or Excel files (Electronic Data Deliverables). The Authority also participated in the development of the Calculator – automating the calculations with integrated alerts for results that exceed limits, which further enhances accuracy and efficiency.

In summary, a few of the benefits that were realized following the implementation of the LIMS include the following:

- Reduced turnaround times
- Automated reporting for state agencies (EDDs)
- Reduction in paperwork
- Improved data quality (reduction in errors)
- Improved operational efficiency
- Increased productivity (reduction of duplicate and mundane tasks)
- Productivity gains (auto-reporting along with the web portal for remote access)
- Integration with other departments/business systems

*Accelerated Technology Laboratories (ATL), headquartered in West End, NC, provides laboratory automation solutions to a variety of industries from analytical, environmental, food & beverage, water and wastewater, agriculture, cannabis, chemical, government, public health, biotechnology, clinical testing and manufacturing. ATL's LIMS products are installed in over 600 laboratories around the world and supported by a steadfast commitment to excellence in product quality, support and training. ATL is one of the few LIMS providers that is ISO 9001:2015 certified. For additional information, visit: [www.atlab.com](http://www.atlab.com).*

