



Sample Master® LIMS Creates Efficiencies at The Gwinnett Department of Water Resources

Moving on from manual processes.

Organization Profile

The mission of the Gwinnett Department of Water Resources is to enhance quality of life by providing excellent water, wastewater, and stormwater services at the best possible value to customers while preserving natural water resources. It operates and maintains a central laboratory for analyzing water, wastewater, and environmental samples. On a daily basis, Gwinnett Water Resources Laboratory (WRL) conducts chemical analyses and biological testing to ensure regulatory compliance with standards such as the Clean Water Act (specifically, National Pollutant Discharge Elimination System - NPDES) and Safe Drinking Water Act - SDWA. The WRL staff includes analysts, field personnel (including the Industrial Pretreatment Program), management, and computer support for a total over 25 employees. The WRL processes approximately 20,000 samples and performs 57,000 analyses per year and is currently accredited by The American Association for Laboratory Accreditation (A2LA) to the requirements of ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Many of these requirements are the same as those required by National Environmental Laboratory Accreditation Conference (NELAC).

Their Challenge

Historically, WRL used a manual method of managing laboratory information. Raw data was maintained in paper logbooks or entered into Excel spreadsheets, and reports were often generated in Word. As the laboratory grew, managing information and trying to obtain trending data was proving to be increasingly time consuming, error prone and complex. Recording and extracting appropriate data for analysis and reporting was becoming difficult at best.

Our Solution

Given their experience with manual processes and inexperience mapping these processes into a LIMS, the WRL requested ATL to conduct a Needs Assessment and configure the LIMS to the characteristics of their laboratory. The recommendations provided by ATL streamlined the implementation of Sample Master® LIMS and ensured existing WRL processes were not only mapped into the LIMS, but also modified to ensure maximum efficiency gains. New processes were recommended and implemented for additional efficiency gains.

The WRL now enjoys increased control of their samples, data management, data access, analysis, and meeting regulatory requirements. This represents a significant improvement over the previous islands of information that were located in separate logbooks and Excel spreadsheets. With the ability to set permissions, automatically e-mail PDF reports, and integrate with other applications, the LIMS offers a centralized data repository from which final analysis reports can be generated and data exchanged with others in the organization. Significant savings in time and data quality have resulted from the installation and implementation of Sample Master LIMS.

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.



Gwinnett, GA www.gwinnettcounty.com

Prior to Sample Master®, sample login and tracking were laborious and time consuming. Now we are able to create projects and use the scheduler to pre-log samples which has been a great time saving element. The query screen, which impressed our staff during the demo, has proven to be a very powerful and useful tool.

Alan Serrero, Quality Systems Manager, Water Resources Laboratory

