Accelerated Technology LABORATORIES INC.

Customer Spotlight:
Water/Wastewater

# Sample Master® LIMS Meets Data Management Needs at Parker Water & Sanitation District

Automation improves sample tracking, data entry.

## Organization Profile

Parker Water & Sanitation District (PWSD) was formed in 1962, for the purpose of providing water and wastewater utilities to the customers of the District. The District serves more than 55,600 residents today. The District owns and maintains its water distribution system and wastewater collection system. PWSD provides an annual average of 7.8 million gallons of water a day (MGD) with demands ranging from as low as 3 MGD in the winter to over 20 MGD in the summer. It maintains approximately 325 miles of water pipelines and 240 miles of wastewater pipelines.

The water supplied to PWSD customers is a combination of groundwater and surface water. The groundwater is pumped from Denver basin aquifers and the surface water is stored in the Rueter-Hess Reservoir and treated through the Rueter-Hess Purification Facility. Thirty wells, the water treatment plant, and four booster stations supply water to five storage tanks with a combined storage capacity of 20 million gallons.

PWSD currently operates two wastewater treatment plants - the North Water Reclamation Facility and the South Water Reclamation Facility. Both facilities use the highest standards of advanced wastewater treatment to filter, treat, and clean water to meet and exceed federal clean water standards. They are designed to remove not only conventional pollutants, but also algae promoting nutrients such as nitrogen and phosphorus. The removal is accomplished by the biological process (activated sludge) and the use of Advanced Water Treatment Filters. Wastewater is treated to permit specifications determined by the Colorado Department of Public Health and Environment (CDPH&E) and the U.S. Environmental Protection Agency (EPA).

The Parker Water & Sanitation Laboratory (PWSL), located at the North Water Reclamation Facility, is staffed with a microbiologist, industrial pretreatment compliance inspector, sample technician, laboratory supervisor, and chemists. The Laboratory is responsible for providing quality and accurate data for process control and regulatory compliance, and compliance of the drinking water system. The Laboratory is certified by the State of Colorado for bacteriological, nitrate and nitrite testing on drinking water. PWDS tests its water for more than 130 substances, including bacteria, minerals, pesticides, and microorganisms. 60 bacteria drinking water samples are collected and analyzed each month. Samples are taken from each water supply source and analyzed for organic, inorganic, and radiological constituents based on a monitoring schedule from CDPH&E.

Parker Water & SANITATION DISTRICT

**Parker, CO**
**pwsd.org**

> Sample Master® is an extremely user- friendly and flexible LIMS system that was configured to fit our specific needs. This, coupled with excellent customer service from the sales process on through implementation and support, made our experience with ATL a pleasure.

**Tony Petrucci**
**Systems Administrator,**
**Parker Water & Sanitation District**

## Their Challenge

PWSL had an older computerized LIMS system which was only partially used. Primarily, a manual system was used to login all samples into the laboratory, as well as other numerous logs across the laboratory. It became evident that the existing LIMS was never able to "fit" the way the laboratory worked, and vendor support was poor in terms of obtaining bug fixes and updates. PWSL was struggling to become automated and more efficient; the current system was holding back personnel from reaching their potential. The PWSL team decided it would be judicious to have a laboratory automation needs assessment performed prior to evaluating the purchase of a new LIMS.

## Our Solution

The deployment of Sample Master® was straightforward, due to the needs assessment conducted to identify potential risks and gain a better understanding of challenges. The ATL Implementation team worked with PWSD staff to complete a pre-installation checklist and template that allowed the Laboratory to assist ATL engineers in populating static table data with information from their log books and historical LIMS. Once this was accomplished, ATL engineers installed the software on the new LIMS VM server and began LIMS Administrator and End-user training sessions. In addition to migrating multiple years of historical data, ATL engineers also implemented the ATL NPDES Reporting Package for automatic generation of state required NPDES DMR (Discharge Monitoring Report).

Sample Master provided automation advantages such as the ability to leverage bar-coding, rapid sample login, quick sample tracking, data entry and sample scheduling, integrated QA/QC functionality, and automated reporting. Once the system was configured to meet the data management and reporting requirements of the Laboratory, the LIMS team ran parallel testing for a few weeks and then quickly moved to Sample Master.

ATL also offers additional training, LIMS Boot Camp in Pinehurst, NC for LIMS Administrators and Super-users, which members of the PWSL team attended.

*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.*

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