

Washington Aqueduct Army Corp of Engineers

Company:

Washington Aqueduct
Army Corps of Engineers
Washington, D.C.

<http://washingtonaqueduct.nab.usace.army.mil/>



Business Strategy:

To provide safe drinking water to approximately one million citizens living, working or visiting in the District of Columbia, Arlington County, Virginia, and the City of Falls Church and its service area.

Company Profile:

In 1859, the Corps of Engineers designed, built and began operating the Washington Aqueduct. Since then, the Corps has significantly expanded and enhanced the capacity and function of the Aqueduct from its original mission of supplying raw river water to a sparsely populated District of Columbia to today's mission of providing safe drinking water to a much larger and more populous service area. A division of the Baltimore District, U.S. Army Corps of Engineers, the Washington Aqueduct is a federally owned and operated public water supply agency. The two water treatment plants and water quality laboratory located in Washington, DC produce an average of 180 million gallons of water a day for one million residents in Washington, DC, Arlington, VA and Falls Church, VA. The Washington Aqueduct is managed, operated, and maintained twenty-four hours a day, every day, by 165 civilian employees of the U.S. Army Corps of Engineers. The work force consists of engineers, chemists, certified plant operators, skilled tradesmen, laborers and administrative staff.

Sample Master[®] Pro at Washington Aqueduct:

As a high throughput environmental laboratory, the Washington Aqueduct faced numerous challenges including enhanced regulatory oversight, decreasing costs per test and numerous and required laboratory accreditations. The Washington Aqueduct Laboratory established a LIMS implementation committee composed of representatives from management, information services and laboratory staff. The committee developed a detailed LIMS RFP, which was presented to Accelerated Technology Laboratories, Inc. (ATL) as well as several other LIMS vendors. Each vendor was asked to answer a series of questions relating to the Washington Aqueduct LIMS specifications, the company, support options, company qualifications, LIMS experience and industry-specific references. The specifics of the RFP included a detailed description of the functionality of the various features or modules of the LIMS. The LIMS vendors with the highest scores on the LIMS questionnaires were invited to visit the laboratory and provide an onsite demonstration based on a script prepared by the laboratory. The demonstrations were viewed by the LIMS implementation committee, laboratory management and staff to gain a thorough understanding of how the LIMS operates and to determine if there was a match. Once the feedback from the committee and the laboratory was gathered, the scores were tallied and the cost proposals were reviewed.

The Washington Aqueduct sought a vendor with LIMS expertise that could provide a turnkey solution to help meet their data management challenges. They chose ATL and Sample Master[®] Pro LIMS due to ATL's technical expertise and product quality.

The selection and installation of Sample Master[®] Pro has resulted in many data management and automation improvements in the Washington Aqueduct laboratory. There is now a full chain of custody, audit trail and many quality control enhancements that assist the laboratory in its day-to-day data management challenges. By limiting users to tests and methods on pull-down lists, instrument integration, and requesting that users log onto the system with user name and password, there is a higher degree of data integrity. Instrument integration has significantly reduced the amount of time analysts devote to data entry. Prior to implementation of the LIMS, reports were generated on a weekly to semi-monthly basis. Sample Master[®] Pro LIMS has been setup for automatic report generation so that reports are automatically printed once the laboratory manager has approved sample results. The turnaround time of reports has been greatly decreased from 10 hours per week to approximately 4-5 hours per week. Data loggers have reduced the amount of time required to log in remote samples to the laboratory. Quality control records are readily available for laboratory and auditor review. And finally, the generation of control charts, once a laborious process, can now be completed in seconds.

In summary, the implementation of the Sample Master[®] Pro Laboratory Information Management System has provided the Washington Aqueduct Laboratory with a data management solution that promotes data accessibility, increased efficiency and time savings.