



Truckee Meadows Water Reclamation Facility Chooses Sample Master® LIMS

Turnkey solution provides sample control, data integrity.

Organization Profile

In 1964, the cities of Reno and Sparks, via an inter-local agreement, commissioned the construction of the Truckee Meadows Water Reclamation Facility (TMWRF). Since that time, the cities have jointly owned and operated the 40 MGD facility.

TMWRF is a biological nutrient removal plant that uses separate nitrification and denitrification processes for nitrogen removal and biological and chemical processes for phosphorus removal. Reclaimed water is discharged to the Truckee River or is pumped to effluent reuse sites in the cities of Reno and Sparks. Solids are thickened, anaerobically digested, dewatered and hauled to the local landfill for disposal. The methane gas produced by solids digestion is used to generate the hot water which is used to heat many TMWRF's buildings.

Under the direction of the Plant Manager, TMWRF has a staffing complement of 45 full time employees. The management team is comprised of the Plant Manager, Operations & Maintenance Manager, and Laboratory Supervisor.

The TMWRF Laboratory is certified by the State of Nevada as the first step in ensuring high quality data. The TMWRF Laboratory tests surface water, ground water, wastewater, wastewater sludge and gas matrices. Pursuant to the Clean Water Act, the Laboratory holds a Nevada Environmental Laboratory Certification for non-potable water and is certified for 66 parameters.

The TMWRF Laboratory provides analytical and biological testing for final effluent and reuse permit requirements along with treatment plant in process support testing. Analytical testing for both the cities of Reno and Sparks Environmental Control programs and support to the Washoe County Watershed Program are also provided by the Laboratory.

Additionally, the Laboratory provides permit and laboratory support to the City of Sparks, Sparks Marina Lake Park. This is a 77-acre man made, recreational center that supports boating, scuba diving, wind surfing, sailing, fishing, swimming and facilities such as a dog park, volleyball courts and playgrounds.



Sparks, NV

<https://cityofsparks.us/resources/resource/tmwrf/>

“It is refreshing to work with a company where customer service actually means something and is actively practiced by the organization.”

David Bruketta,
Laboratory Supervisor,
Truckee Meadows Water
Reclamation Facility





Their Challenge

The TMWRF Laboratory's goals for acquiring a Laboratory Information Management System (LIMS) centered on sample control, data integrity, improved automated reporting and increasing laboratory efficiencies. They chose ATL's Sample Master® LIMS because it would allow them to achieve their data management and laboratory automation goals.

Our Solution

After implementing Sample Master LIMS, the TMWRF Laboratory now has much better control and coordination of their samples from sample log in to results entry and reporting. They have better data integrity through the use of results entry, validation and approval steps. Their reporting is now being standardized through the use of the LIMS' powerful custom reporting capabilities.

The TMWRF Laboratory performs approximately 50,000 analyses annually. Using Sample Master, they can now easily look at trends in their data. Sample Master is a state-of-the-art laboratory database management system that securely stores all data in a robust centralized database, Microsoft SQL Server. The TMWRF Laboratory has been more efficient by not having to work with multiple systems.

The following Sample Master modules ensure high data quality and provide the tools to enable the laboratory analysts to be successful in their daily tasks: Sample Tracking, Data Entry, Sample Scheduling, QA/QC, Chemical Inventory, Resource Management and Maintenance.

The TMWRF Laboratory also purchased ATL's National Pollutant Discharge Elimination System (NPDES) Discharge Monitoring Reporting (DMR) Package. The reporting package allows users to rapidly generate the NPDES DMR form from data that is already stored in the LIMS and exported from Sample Master LIMS. It includes functions to collect and collate all data associated with the NPDES permit number into a final report format that is ready to send via hardcopy, fax or e-mail. These reports can also be converted to Adobe® pdf and can also be sent out electronically. The DMR Reporting Package has saved a significant amount of TMWRF Laboratory resources.

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.