

## Pueblo Water Reclamation Laboratory



The primary function of the Water Reclamation Laboratory is to ensure that any plant discharge meets all applicable Federal and State standards. Laboratory tests are critical for the efficient control of the wastewater treatment plant as well as for the effluent monitoring required by discharge permits. Through daily analysis of samples, the operations staff is able to maintain proper operational control at the wastewater plant. Good operators often turn to the laboratory for much of the information they need to

troubleshoot problems in the treatment process. In fact, laboratory data can often be used to prevent problems from developing in the first place.

Another major function of the Water Reclamation Laboratory is analyzing samples from significant industrial users to ascertain that the wastewater discharged by these industries meet the local discharge pretreatment limits. These limits and their enforcement protect the treatment process, increase worker safety and protect the Arkansas River.

A significant instream sampling program allows evaluation of the quality of the water in the Arkansas River and in Fountain Creek to determine if it meets the Colorado Department of Public Health and Environment stream standards. If not, testing can help to determine the sources of contaminants.

The Pueblo Water Reclamation Laboratory is certified by USGS and maintains compliance through the Discharge Monitoring Report–Quality Assurance (DMR-QA) program. EPA requires laboratories to participate in the DMR-QA program to evaluate the analytical ability of the laboratory. The lab technicians strive to surpass the governmental standards by using modern instrumentation and an extensive quality control program to ensure the accuracy of all data generated.

The Water Reclamation Laboratory uses state of the art analytical equipment to analyze samples using EPA 40CFR Part 136 approved methods.



ICP-MS for metal analysis

Microbiological tests and traditional wet-chemistry procedures to analyze other parameters such as biological oxygen demand, solids and cyanide are performed.



Analytical Balance



Microscopic  
filamentous bacteria

Standard quality assurance/quality control procedures were used for the collection, analysis, and data management. The use of stringent Quality Control/Quality Assurance, allows the City of Pueblo Water Reclamation Laboratory to meet the goal to produce the most accurate and reliable data possible to protect our water and environment.