

Greater Efficiency and Peace of Mind with the KETOS SHIELD

Municipality Automates its Water Quality Testing to Ensure Compliance in Real-time

KETOS Customer Background

Rio Rancho is the 3rd largest city in New Mexico. The water utility serves over 100,000 residents. It's the fastest-growing community in the state and one of the fastest-growing in the southwest.



Rio Rancho Utilities Director, Jim Chiasson, has shared that “the KETOS SHIELD gives us access to real-time information. We can make proactive changes to our removal capacity when the water isn’t meeting our standards. Instead of a color on a strip, we have an actual number that we can reference and trend over time.” In addition, “KETOS enables us to be more efficient and have greater peace of mind. With the SHIELD, we are over 99% sure we are safe.”

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- Jim Chiasson, Rio Rancho Utilities Director

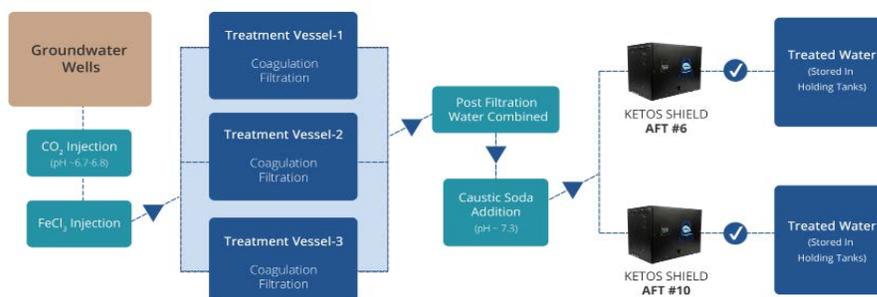
Challenge

Before installing the KETOS SHIELD and the KETOS Smart Water Intelligence Platform, the treated water monitoring process was manual and time-intensive and included three tests per day. The team used grab samples and test strips - which were not lab accurate, and results could vary somewhat from one technician to the next. Inconsistent results meant that water could be out of compliance without the team knowing in real-time. In addition, it was challenging to identify and track daily Arsenic fluctuations and trend accurate, reliable data over time.

Solution

The team implemented KETOS SHIELD remote monitoring devices to monitor water quality before treated water entered the holding tanks (see process diagram below).

In addition, the integrated KETOS hardware/software solution was configured to automatically sample and test the following parameters at varying intervals and provide real-time insight for each of the below parameters 24/7. Of particular importance were heavy metals like Arsenic and Iron.



In addition, KETOS Smart Water Intelligence Platform was configured so that both operations technicians and utility leaders receive alerts (via email or SMS) if specific detection parameters meet or exceed levels that don't comply with safety and compliance standards.

Tier	Parameter	Frequency
Environmental	Total Dissolved Solids	Continuous (Every Minute)
Environmental	Temperature	Continuous (Every Minute)
Environmental	Conductivity (EC)	Continuous (Every Minute)
Environmental	Salinity	Continuous (Every Minute)
Environmental	pH	Continuous (Every Minute)
Environmental	Dissolved Oxygen	Continuous (Every Minute)
Heavy Metal	Arsenic (III)	Three Times / Day
Heavy Metal	Iron (II)	Three Times / Day
Inorganics	Free Chlorine	Three Times / Day
Inorganics	Residual Chlorine	Three Times / Day
Inorganics	Total Hardness	Three Times / Day
Nutrient	Nitrates-N	Three Times / Day

Benefit/Outcome

After installing the KETOS SHIELD and configuring the KETOS Smart Water Intelligence Platform, operators benefit from 24/7 insight into critical water quality parameters. Rather than relying on inconsistent, labor-intensive processes like manual sampling and test strips, the team can monitor water quality remotely and make proactive adjustments to treatment processes.



About KETOS

KETOS is a fully integrated platform that combines hardware, software, connectivity, automated reporting, predictive analytics, and maintenance to automate water monitoring and testing. KETOS enables water operators to identify and solve mission-critical water efficiency and quality challenges in real-time, or before they happen through predictive algorithms, to ensure that water meets specific quality and safety standards.

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Proactively Solving Problems with KETOS Analytics

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