

# CASE STUDY JERICHO WATER DISTRICT

Encore® 700 Chemical Feed Pump Provides Reliable Metering with Minimal Maintenance for Over a Decade at One of New York's Largest Water Districts

#### **OVERVIEW**

Jericho Water District (JWD) is one of the largest water districts in New York covering nearly 37 square miles. Founded in 1923, JWD serves nearly 58,000 people through 18,604 residential and commercial service connections on Long Island.

The district pumps most of its water from wells, some of which are almost 700 ft. deep into the ground. The source of the water come from the Magothy Aquifer and the Lloyd Aquifer.

The Jericho Water District produces around 4.7 billion gallons of water each year from 25 wells. These wells have a daily average of nearly 13 million gallons per day of treated water that is pumped into the distribution system.



The district is home to 6 storage tanks with a combined storage capacity of over 12 million gallons of water. The district pumps sodium hydroxide into the raw water to increase the pH and control corrosion in the pipes.

#### SITUATION

JWD struggled with controlling corrosion in their pipes. This had an impact on achieving accurate pressure and water speed. They also had issues with operations that negatively affected operation time and drove up costs. They needed a solution that would address corrosion, operations, maintenance, repairs and costs.

> The Jericho Water District maintains over 350 miles of water mains throughout the district, also covering more than 3,600 fire hydrants.



## APPROACH

The JWD decided to install an Encore<sup>®</sup> 700 pump at their new pump house in Muttontown, New York. The new simplex pump with a 2-inch diaphragm and motordriven pulley drive, professed to be more robust, have fewer parts and have less maintenance.

Needless to say, after successfully passing many tests to judge the pump's performance, JWD operators added more Encore® 700 pumps to their distribution system. The believed these yielded higher quality output and decreased operation costs.

"The Encore® 700 pumps have been working great for us. They're a lot less maintenance - virtually maintenance-free – and the problems we had with the previous pump just aren't there with the Encore® 700. We plan to continue converting every pump at all of our wells."

> Peter Ranaldo, Assistant Superintendent Jericho Water District



Encore<sup>®</sup> 700 Pump

#### RESULTS

- The Encore<sup>®</sup> 700 required far less maintenance compared to JWD's previous systems, saving the operating team time and reducing operating costs.
- The Encore<sup>®</sup> 700 provided reliable and efficient operation with minimal system vibration.
- The Encore<sup>®</sup> 700 allow the operating team to manually, and smoothly adjust eccentricity during operation.

## CONCLUSION

The Encore<sup>®</sup> 700 Pump was a perfect solution for the problems the JWD operating team wanted to address. The Encore<sup>®</sup> 700 Pump provided efficient operation and saved the team time and money.

In addition to adding an Encore® 700 Pump to the Muttontown, New York location, the team upgraded pumps throughout their district.

At last check, JWD had purchased and installed 11 Encore® 700 diaphragm metering pumps and plan to convert the remainder as new pumps are needed.

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Encore® 700 Installation at Muttontown, NY

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Info@cleanwater1.com