

# case study

## LAKOS Pump Protection Separator (PPS) Prevents Damage In Municipal Water Well

City of Rochelle, IL Installs LAKOS and Extends Life of Submersible Pumps

<b>Application:</b>	Municipal Water Well
<b>Solids:</b>	Sandstone grains (Trempealeau & Ironton-Galesville)
<b>Liquid:</b>	Well Water



PPS during installation. The separator saved the City of Rochelle hundreds of thousands of dollars in well rehabilitation costs.

**Problem:** The City of Rochelle, Illinois is a bustling hub city located 50 miles west of Chicago. Home to some of the country's main rail lines and interstates, Rochelle counts on clean, potable drinking water for residents and travelers alike.

City well #11, an 893 foot deep sandstone well, was drilled in the Spring of 2004. A 300 horsepower submersible pump capable of producing 1,800 gallons per minute was installed.

However, the sand content in the water was taking its toll. The well had to be continually flushed, and system distribution problems were constant. The problem was so severe that the pumping equipment was sustaining damage. The well was shut down and put on standby mode, only to be used in emergencies. Well rehabilitation was considered but would be very expensive, and results could not be guaranteed. The City of Rochelle needed help; that's when they found LAKOS.

**Solution:** Municipal Well & Pump proposed a LAKOS PPS system to be installed on the intake of the submersible pump set at 430-feet below ground surface.

The LAKOS PPS sand separator was purchased and installed for less than \$15,000, which was a great deal less than the estimated \$150,000 needed to rehabilitate the well.



Interior pump house piping for well #11

**Results:** With sand problems eliminated, the well is now fully operational. To date, the system is operating effectively and efficiently for the City of Rochelle Water Utility. The City of Rochelle can now once again provide clean water for residents and visitors alike, thanks to the reliability of city well #11 and LAKOS.

“Results were outstanding!” said Dick Milaeger of Municipal Well & Pump, “I guess you could say that payback was 100%, taking

a well that was basically unusable and making it a productive well contributing 1,800 gallons per minute to the city’s needs.”



LAKOS PPS Pump Protection Separator during installation in Rochelle, IL

# LAKOS<sup>®</sup>

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