



# The Herriman City Water Department

## Consumption Activity History through the Neptune® R900® System Helps Take Pressure off PRV Monitoring and Customer Service

### GETTING OUT OF VAULTS AND GOING ONLINE – PRV MONITORING WITH THE CELLO XO

What helps Justun Edwards handle pressure? THE CELLO. No, not the musical instrument, but the latest enhancement to his Neptune® System. Edwards, Director of Water Services for Herriman City, Utah's Municipal Water Department, added the Cello XO cellular data logger as part of the City's ARB® Utility Management System™. Since installing three of the Cello loggers across the distribution network in June 2014, Edwards and his team can collect data from pressure reducing valves (PRVs) in critical areas without having to send personnel into hazardous, confined vaults. Not only has this increased safety but it's also much more efficient for the Department to log in online to check or monitor water pressure, rather than send two or three employees out in trucks.

"This data collection has been very helpful," Edwards said. "We see not only how a PRV is functioning but also how the system is functioning during higher demand as well. The Cello XO is telling us what system pressures are doing at peak demand times, and not just about downstream pressures that cause system or home damage. We're now able to see fluctuations across the entire system, so the Cello XO is helpful in ways we hadn't even thought about initially."

### GOING BEYOND ACCURATE READS TO LEVERAGE ACCURATE DATA

Before the Department began implementing R900® radio frequency (RF) technology in 2003, it read meters from a variety of different manufacturers, sending out two or three readers for three to four days each billing cycle. These personnel would manually write down or type into a handheld the readings for roughly 1,500-2,000 total accounts. Today, a single employee can read the City's now-6,700 meters in about half the time – without having to get out of the utility vehicle. "It's also sped up our transfer of data on the billing side," added Edwards, "because we don't have to manually input all the readings."



#### CUSTOMER

The Herriman City, Utah  
Water Department

#### SERVICE TERRITORY

Herriman is a city in Salt Lake County, Utah. As of the 2010 census, the population was 21,785.

#### SOLUTION BENEFITS

- Drive-by system with R900 Gateway units
- One employee reads 6,700 accounts in 1-2 days
- 96 Days of data logging information
- Collect PRV data from utility office with Cello XO
- Compare year-to-year production as well as usage

Since achieving a completely RF, mobile AMR system in 2005, Herriman City hasn't had to estimate reads, previously common during the harsh Utah winters. And in recent years, Edwards and his team have found a tool every bit as useful as mobile reading – data logging. The E-CODER®)R900i™ combination absolute encoder/RF meter interface unit (MIU) provides 96 days' worth of an account's historical data, and has proven useful in answering customers' high bill complaints.

"It has helped on several occasions, such as with finding intermittent or continuous leaks," said Edwards. It's provided proof of meter accuracy as well as proof of when issues were addressed, resolving disputes. "We can show them, 'You had this issue on this day, and it was repaired on this day' – and point to when the usage became normal again."

Luke Sieverts, Manager of Water Services, said, "Data logging allows us to pinpoint water leaks when and where they're taking place. We're able to save and be more efficient." Edwards added, "[With all this detailed data] we can compare year-to-year production as well as usage."

The R900 System first implemented in 2003 is still performing well for Herriman City, and the Department still uses the MRX920™ mobile data collector to read its meters. However, knowing that the system allows seamless migration to fixed network reading of the same endpoints, Edwards has spoken with Neptune District Manager Tony Glassier about implementing R900® Gateway fixed network data collectors for full-fixed AMI in the next few years. "We won't have to send out meter

readers to drive by for reads," Edwards said. "Plus, when a homeowner moves out, we'll be able to go online to pick up that read. Not having to roll a truck will speed up our efficiency." He also looks forward to working with Glassier to implement a customer web portal; "It will allow the individual at their residence to check their own data and help conserve water."

#### IT PAYS TO KNOW PEOPLE WITH ANSWERS

"Tony has a great attitude – he loves to help," Edwards said. "For example, we have a secondary, pressurized irrigation system we want to install meters on, to get away from having to charge a flat monthly rate. However, our irrigation water has a lot of particulates that can clog meters. Tony was able to show us a meter that has no moving parts, so the particulates won't be a problem."

Edwards is also enthusiastic about the service the Department receives from Ken Sheffield at Neptune Level 1 distributor MeterWorks. "Ken's group has been great to deal with too, providing a well-stocked inventory with next-day delivery and answering technical questions on equipment and software."

Edwards added, "It's very important for us to be able to work with one company that can provide everything we need. The service we get from Neptune has always been top-notch, number-one. When we have a question, we always get an answer."

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