

CASE STUDY

Badger[®] ORION[®]

Radio Frequency System



Badger Meter's ORION[®] Radio Frequency System

Sunny City in Oklahoma Modernizes with Badger[®] ORION[®] Technology

By: Ted Schaar

Ardmore, Oklahoma, is located midway between Oklahoma City to the north and Dallas, Texas, to the south. This is oil country, with wells still producing crude near Healdton, about 25 miles to the west.

The Arbuckle Mountains, one of the oldest ranges in the world, are just north of Ardmore, and the city is often referred to as on “the sunny side of the Arbuckles.”

All-American City

“Winters here are generally mild and we’re surrounded by lakes and recreational opportunities,” said Public Utilities Director Shawn Geurin. Ardmore has received accolades from organizations that rate communities, including being named an All-American City by the National Municipal League.

Water for the Ardmore’s population of just under 24,000 is drawn from the 62,000-acre Lake of the Arbuckles, which was created in the sixties when Arbuckle Dam was built at the “confluence of the Buckhorn, Guy Sand, and Rock Creeks,” according to a Web page about the project.

Modernization project launched

In 2002, Ardmore’s Public Utilities Department began exploring options—including Wi-Fi—to modernize the city’s meter-reading capability.

“A consultant helped us,” Geurin said. “As a first step, we pulled about 300 meters and had a lab check them for accuracy. At the time we were using five different brands and most had been in service for years.”

Ardmore’s meters are housed in plastic boxes set 18 to 24 inches below the surface. “We only have about four weeks of freezing weather each year,” Geurin continued. “Our frost line is at about 18 inches, and we really don’t have problems related to cold.”

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About the Author:

Ted Schaar is a freelance writer based in Brookfield, Wisconsin.

ARDMORE CASE



BadgerMeter, Inc.

P.O. Box 245036 • Milwaukee, WI 53224-9536

(800) 876-3837 • Fax: (888) 371-5982

www.badgermeter.com

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Savings projected

The lab reported that the accuracy of the test meters was at best average. “The consultant showed us that if we went with ORION® and new Badger® meters, we could transfer nearly all of our meter readers to different jobs, save a great deal of money on labor, and reduce our workers’ compensation exposure,” Geurin said. “This and the much greater accuracy of the new meters—and consequent increases in revenue—would pay for the improvements in about seven years.”

Also factored in was the approximately six hours spent doing rereads each month. “Our readers were excellent but human errors occur whenever you’re doing something repetitive like punching numbers into a handheld data recorder,” Geurin pointed out.

Test drive

Before committing to the Badger ORION system, officials asked Account Manager Ed Larson of Atlas Utility Supply, a Badger Meter distributor, to participate in a test of the system. “Ed arranged for several ORION-equipped meters to be dropped into our pits,” Geurin said.

Then a dozen city officials, including the mayor and city

manager, took turns driving around town with a laptop to see how well the system could receive data from the meters. “ORION did great,” Geurin recalled, “even reading meters in some older pits we have that are concrete-lined and covered by thick, steel plates.”

Technicians like Badger Meter

Geurin added, “Another factor in our decision to purchase ORION revolved around the people who work for me. They have a lot of experience with various meters and like Badger products.”

After the City of Ardmore approved the project, which called for changing out 10,300 services, local media helped inform the public and a contractor was hired to do the conversion work. The modernization was started in October 2007 and will be completed by July 2008.

With the Badger ORION system, all meters are currently read by one individual in a vehicle, in one week, which is far faster than was possible when personnel needed to visit every meter. “ORION has helped in many ways,” Geurin emphasized. “For example, the system is so fast, it’s easy for our readers to schedule vacation around normal read

times. In the old days when we had multiple individuals doing reads at the same time, vacations could be a problem. All that’s in the past now.”

Quality and professionalism

Geurin stressed that he and other City of Ardmore personnel are pleased with the quality and professionalism of Badger Meter and distributor Atlas Utility Supply. “The equipment is excellent and everyone goes above and beyond expectations to make sure it’s working properly. Our sales rep is in constant contact and we appreciate the attention.”

The much greater accuracy of the new system has led some citizens to question their bills. “When this happens, most of the time it’s just that the new meter is recording all the water a customer is using rather than most of it, like the old meters,” Geurin laughed.

“Every once in a while, though, ORION’s ‘tattletale’ feature tells us there’s a leak somewhere in the residence. Usually, it’s a toilet and we find it by putting food coloring in the tank and waiting for it to appear in the bowl. It’s a common problem but one that’s fairly easy to solve.” ■