

# LEAK DETECTION AND LEAK LOCATING; WHAT'S THE DIFFERENCE?

By Mike Stanzel, Deputy Circuit Rider

This month we have been extremely busy with requests for leak detection and leak locating. So it only seems appropriate to write about the difference and the importance of the two.

First of all, let's see if I can explain the difference. Generally what we describe as "Leak Locating" is when we get called to help pinpoint a leak that has found its way to the surface and is either coming up in an area that is not coinciding with the water main or the crew has dug up the area where water was bubbling up and found that the water is coming from elsewhere. In situations like these we usually can use our correlator to pinpoint the leak. Although our equipment is new and modern our success rate of pinpointing the exact location is about 90%. Nothing is foolproof but we can generally get you within a couple feet of the leak and there have been several times we have located within a couple of inches. The main benefit of this is you can save a lot of time and money not having to rip out excess concrete, driveways, sidewalks, etc. The exception to this rule is if you have plastic mains, chances are we won't be able to locate the leak as plastic water mains will not carry sound.

Leak detection is performed when an operator calls us when there is unexplained water loss. For systems with water meters the monthly billing should be compared to the amount the wells pumped and if it is more than a 15% loss chances are good you have a waterline leaking somewhere. Same scenario if you don't have meters. If the well is pumping more and more compared to weeks, and months and even years past, chances are good there is a leak.

I have heard countless times from operators, "We don't have a leak; it would be bubbling up if we did." This is the BIGGEST misconception we face. We have

found at least a dozen leaks in the past month that have not surfaced even a drop of water. You should see the look on the operator's face when we tell them there is a leak.

"So where's the water going?" This is always their next question. On several leaks we found there were vacant lots where the house had been torn down for years. At the time the house was demolished the water had been disconnected at the curb stop and the old galvanized line to the main is still live. In the old days water and sewer were generally laid in the same trench so the old clay or Orangeburg sewer pipe had deteriorated enough to let the seeping water in and flow right down the drain. In other cases we have found several fire hydrants that were spraying water out the weep holes due to a faulty valve seat. This can occur in very old hydrants, as well as, new hydrants. One hydrant was dated 2007 and was spraying approximately 25 GPM.

In closing, if you think you might have a leak or you would like your Town or Village surveyed, please give us a call. You might be surprised what we might find.