Unsurpassed in sensitivity, cornering ability and range, the new 8-inch See Snake represents the state-of-the-art in Remote Field Technology (RFT) inspection of metallic pipes. By combining some of the latest improvements in RFT technology with traditional pipeline pig designs, the 8-inch See Snake tool provides to municipal engineers the same type of information historically only available to oil and gas pipeline operators; with one major difference: “The See Snake tool determines the remaining wall of the pipe through internal scale and deposits.”

The 8-inch See Snake tool has been specifically designed to inspect the wall thickness of the pipe at variable lift-offs to accommodate wall thickness variations, pipe ovality, liners and internal scale. The ultimate goal of the tool is to provide accurate condition assessment information that will allow reliable planning for critical mains. Using the See Snake's results operators will be able to determine the weak links in the line and address potential failures before they happen as a result of an external trigger.
Project Snapshot

- Where: Virginia, USA
- What: Wastewater Force Main Inspection
- When: Summer 2011
- How: Tethered Inspection
- Why: Part of a larger condition assessment program to understand the quality of smaller force mains
- Distance: 2,500 feet inspected

Details

A common driver for force main inspection is the desire to protect the environment from contamination. When lines run near protected land, estuaries, and natural wildlife habitats a broken force main can endanger ecology and also lead to heavy fines. To prevent these situations, PICA’s SeeSnake can play a pivotal role. With a better understanding of the pipeline's condition, proactive repairs can be made before costly failures.

This job was conducted in two parts, using a tethered wireline to pull the tool through the dewatered force main. Pumper trucks allowed the line to be suspended for a few hours each day while the SeeSnake was running in the pipe. Both days the tool was loaded into the line and traveled through multiple bends. Data was downloaded in the evening and sent to the analyst. The thickness data was merged with odometer information to produce an accurate representation of the pipe condition.

The Final Report contained the following information:

- PICA analyzed 135 pipe joints
- We located and sized the three worst defects in each pipe joint
- Possible through-holes were seen in 17 different joints
- Average Wall Thickness was 95% (relative to its installation)
- Pitted regions were predominantly distributed in the crown of the pipe

For more information about this project or how PICA can make your life easier, give us a call!