Pipe Inspection Case Studies

Case #1
AET personnel did video pipe inspection with digital imaging technology for Tugaloo Pipeline, Inc in Barrow County, GA. We were able to show the internal structure of all newly installed pipes for the Water & Sewer Authority. The digital imaging equipment and software allow viewing of each section of pipe from manhole to manhole while continuing to inspect other sections. This pipe installation was found to be clean and properly installed.

Case #2
AET personnel did video pipe inspection for Tugaloo Pipeline, Inc. in Pickens County, SC. We initially simply videoed this pipeline project finding that a joint that was beneath a creek bed had become misaligned and needed attention. We also found debris in a section of pipe that had occluded the flow and had to be removed. We laser profiled this pipe installation to show that the ovality was within specified parameters and the capacity would be at < 98.5%. The engineering firm had trouble viewing the imaging because it was a new imaging file type and our IT staff converted the files so that they could be viewed even by older computer equipment.

Case #3
AET personnel worked with Greenville Water System to identify and locate pipeline meeting and crossing a water main project. With this equipment we can send a video camera or robot into piping as small as 1” in diameter and as large has 60”. The sonar equipment can profile piping many feet in diameter without having to empty the pipe of liquid.

Case #4
AET personnel worked with The Underwriter’s Group, a bonding company, in Florida. The Florida DOT requires that all piping that is within the DOT right-of-way be video inspected and laser profiled. The problem here was that the piping contractor had allowed delivery of heavy equipment and it had been unloaded directly above just laid piping. The contractor never assumed that the weight of the vehicles had caused severe collapse of the newly laid piping. This was found with our video inspection and through the laser profiling we could tell the extent of the damage. This section of the project had to be removed and replaced. It was a costly error for the contractor.