

An Overall Water Loss Management Strategy

Water distribution infrastructure can experience degradation over time causing inefficiencies in producing and supplying potable water. This can be due to various factors such as corrosion of pipes, weakening of joints, and external threats. Leaks in the system left undetected are losses in revenue and resource, that can potentially lead to main breaks, and emergency repairs thus resulting in higher costs for the water utility and the end user. Acoustic watermain testing is a proactive approach that can assess a distribution network to help identify any critical components that require repair.

Hetek undertook a project of an acoustic watermain testing survey at an airport in northern British Columbia. This included testing of the entire infrastructure including adjacent to commercial airplanes. This testing was part of an overall strategy for upgrading existing infrastructure. The acoustic methodology involved testing the mainline and service lines using correlation and ground listening as well as hydrant sounding for detecting potential leak noises. The findings from the testing, gave an indication to the end user on the condition of their water lines and its components.

In addition to serving water utilities, Hetek’s unique project field experience includes acoustic watermain testing at first nations, housing societies, educational institutions, residential services, and service locates using acoustic methods.



Figure 1. Hydrant sounding at an airport