GUTERMANN

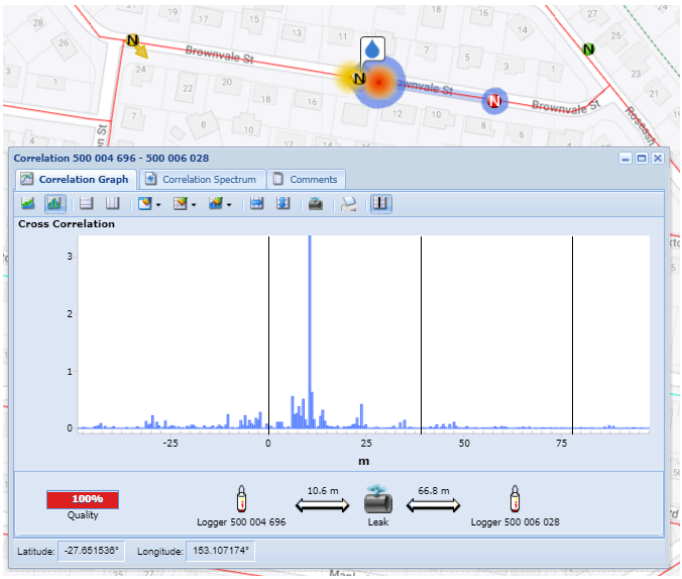
Product: ZONESCAN NB-IoT

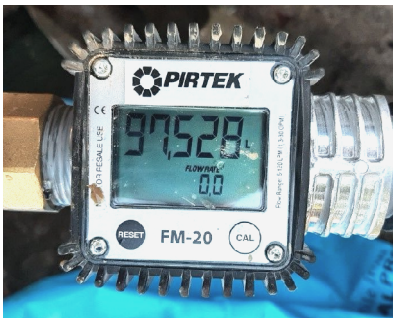
Type: Automatic Network Monitoring Loggers, utilizing the Narrowband Internet of Things

Utility/Company: City of Logan, Australia

Pipe Material/Diameter: 100mm (4") PVC main w/ 100mm (3/4") poly conduit

Summary: The City of Logan, after tremendous success with their ZONESCAN 820 lift & shift program, implemented a 300-point ZONESCAN NB-IoT system in May of 2021. In the first few months, the system found a total of 23 leaks (both mainline and customer-side), which saved an estimated $261k USD annually in non-revenue water. Pictured below is the most costly leak that was found by the system: a non-surfacing leak caused by a damaged road conduit. The city meticulously recorded every aspect of the found leaks, noting details such as identification-to-stoppage times, and gal/m losses.





Pipe Info: 100mm (4 in.) PVC main & 20mm (0.75 in.) poly road conduit
Correlation Score: 100%
Logger Spacing: 77.4m (254 ft)
Total Time from Identification to Stoppage: 29.45 hrs
Leakage Rate: 97.52 L/m (25.76 gal/m)
Actual Non-Revenue Water Loss: $538.00 USD or 172 KL
Total Estimated Non Revenue Water Loss Annually (in USD): $147,133.00

LOGAN CITY COUNCIL

Return on Investment: Though the NB-IoT system will continue to monitor the utility's water system for years to come, large and costly leaks caught early have provided a near full return on investment in the span of just two months. This startling success led the city to invest in creating purpose-built, ultra-secure chambers to better cover their mixed material system with NB-IoT Loggers where no valves are present.