TRITON Intelligent Water Surveillance®



Pilot Demonstration of TRITON in London, Ontario

The City of London, Ontario—a regional leader in water quality research—has identified a clear need for a large scale online drinking water monitoring infrastructure in order to realize flow prediction and contaminant detection throughout City's water distribution network. Between October, 2013 and March, 2015, AUG Signals partnered with London for a pilot scale demonstration of the TRITON online water surveillance system at seven different drinking water pumping stations.



A TRITON unit in operation at London's Pond Mills Pumping Station.



AUG personnel performing initial setup of TRITON at Pond Mills Pumping Station.

Following initial installation by AUG personnel, routine maintenance on the seven units was performed by local water operators with minimal additional training required. Once per month, the operators extracted a water sample to be sent to a certified laboratory for verification analysis. This process confirmed the efficacy of the TRITON system: in 18 months of full-scale monitoring, TRITON results showed 99.5% agreement with those of the certified laboratory, with zero false alarms.

The Safe Drinking Water Branch of the Ministry of Environment, Ontario (MOE) aided in finalizing London's drinking water testing notification process. This first-of-its-kind system is an enhancement to conventional water monitoring processes: when TRITON detects an anomaly, a water sample is automatically taken and immediately analyzed to follow up and verify the potential contamination.



AUG President George Lampropoulos speaking with attendees of an on-site TRITON demonstration in London on May 20, 2014. In a survey, 75% of attendees indicated they would consider applying TRITON in their own applications.

By partnering with AUG for the TRITON pilot demonstration, London has helped to make Ontario a safe drinking water technology hub for Canada and the world, affirming its reputation as a leader in technological innovation and development. TRITON has been the first step to satisfy this need, but AUG Signals and the City of London are looking to utilize this technology in new ways to realize comprehensive source-to-tap monitoring.