

## **Inspicio company complete Ground Penetration Radar work**

Inspicio company SM Pelorus have completed Ground Penetration Radar (GPR) work valued at £10,000 to analyse the buried structure of Thirlmere Aqueduct, Cumbria, the 84 mile-long Victorian water pipe connecting the Lake District to Manchester.

The radar work, which took place hundreds of feet below the Dunmail Raise pass, was designed to help United Utilities understand how the tunnel was constructed. United Utilities is the regional water company for the north west of England and invests millions of pounds every year to ensure the reliability of water supplies to its seven million water customers.

By looking at the thickness and quality of the concrete lining Inspicio's SM Pelorus were able to gather enough data to interpret if there were any voids or potential weaknesses from within the pipe over a few of its sections.

Associate Director for Inspicio's SM Pelorus, Mike Wilson said, "To meet some challenging operational conditions our engineers were required to complete 'confined spaces training' to help them fully understand the safety issues associated with working underground and in wet conditions as the water ingress in the aqueduct was very high.

John Butcher, United Utilities' operations manager, said that although they were unable to substantiate the legend that a 10th century king was buried under the cairn at Dunmail Raise, the radar had shed light on another local mystery.

He said: "Legend has it that two tunnelling teams met spot on in the centre of the mountain. Actually, it looks like they were probably about 8ins out. It's still impressive given the technology they had available at the time."

The radar analysis is the latest stage in a six-year, £12m overhaul of the pipeline which requires the aqueduct to be drained. It is the fourth time United Utilities has closed part of the aqueduct, and after two years of inspection engineers have begun to make repairs.

This section of pipeline was fully operational again by mid-December.

**—Ends—**