

Case Study - PIG Inspection Services

Project

PIG tracking of a QServ 48 inch Gauge PIG (5 km repetitive sections).

Location

Aberdeen Compressor station to Montrose Lockside AGI, Scotland.

Main Contractor

QServ.

Pipeline Owner

Transco.

Gauge PIG Equipment Utilised

A QServ PIG was used for the gauging of this pipeline. Roxby supplied the PIG tracking system which was attached by means of welding on to the side of the gauge PIG.

Purpose of Inspection

During a normal Gauge PIG operation it was noted that the PIG was not travelling as fast as it should at certain sections of the pipeline. Roxby were asked to assist in identifying the location of an anomaly that was restricting the flow of the Gauge PIG by using the Roxby PIG tracking system.

Result

During the Gauge / Tracking PIG operation it was noted that the PIG started to move very slowly at a certain section as monitored by the Roxby PIG tracking system. With the information gathered it was concluded that around 1.3km from the end of the pipeline that there was some form of blockage. A trolley inspection was then carried out and the inspector identified an indentation on the pipe. An excavation was then carried out and the damaged pipe replaced.



The Roxby transmitter was fitted inside 2 machined housings and these were welded to the side of the QServ Gauge PIG.



PIG tracking being carried out on an above ground pipeline

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PIG Tracking Equipment utilised

Roxby Services used Low Frequency transmitter PIG Tracking Equipment to confirm that the gauge PIG had been launched and received successfully.

The PIGS were also tracked at intermediate points along the length of the pipeline route to monitor progress and velocity. The receivers used by Roxby are very sensitive to weak signals. Analog and digital displays provide viewing signal strengths in all light conditions. The external antenna provides extended pickup range for use in locating lost or damaged tools and tracking at locations where pipelines are buried at greater depths (up to 5 metres).

The transmitters have a LED to indicate transmitters are operating correctly and can operate for over 100 hours on continuous use.

“ During the recent pre-commissioning of a Transco 48" Pipeline several marks were noted on one of the Gauging PIGS being run in the pipeline. At very short notice Roxby mobilised both men and PIG tracking equipment to allow the exact position of the slight dent to be established. The process was successful on the first run of the new gauging PIG fitted with the Roxby location system, allowing the defect to be located and repaired very quickly.

The service we received from Roxby was fast and effective doing exactly what was claimed, allowing work on the pipeline to re-commence with the minimum of delay. ”

Alan Porterfield
General Manager
QServ



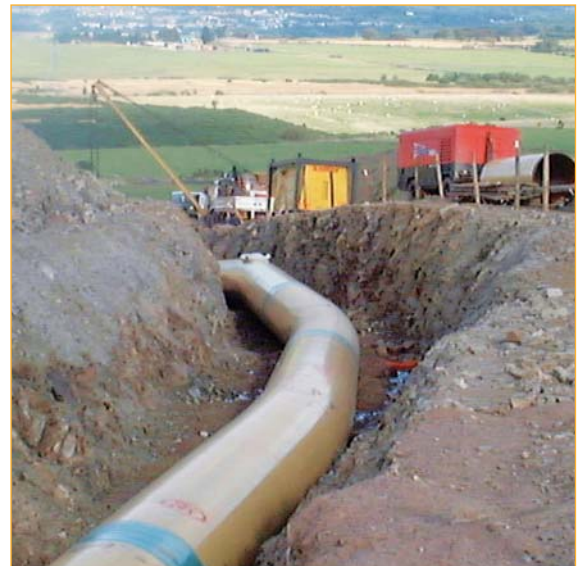
Receiver



Antenna



Transmitter



A section of the 48 inch Gas pipeline under construction. The PIG tracking took place after the pipeline had been backfilled.

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