

# Case Study - PIG Inspection Services

## Project

PIG gauging and PIG tracking of 150 mm Aviation fuel Pipeline.

## Location

Linkwood Petroleum storage Depot to Leuchars Bulk fuel Installation, Scotland.

## Main Contractor

Babcock Industrial Services.

## Pipeline Owner

MoD.

## Gauge PIG Equipment utilised

Roxby used 3 cup Polypropylene PIGS to suit the 150 mm NS with a 7.04mm wall thickness, complete with a gauging plate, 3mm thick aluminium 143.3mm diameter slotted.

## Purpose of Inspection

To distinguish the internal profile of the pipe to allow the owner to decide whether a full PIG inspection was possible with the use of a Ultrasonic inspection PIG.

## Result

A number of clear blockages were identified by the deformation of the gauge plate. These blockages were highlighted by the use of the PIG tracking system and any necessary remedial work was carried out.

## 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.



Gauge PIG with damaged gauge plate indicating that some blockages were apparent



Receiver



Antenna



Transmitter

“ Roxby have always responded to my service requests promptly and professionally. They have proved to be efficient and resourceful in dealing with the difficulties that have arisen during the execution of my projects. It is always a pleasure to work with people who have a “can do” approach. ”

Stephen Machin-Smith  
Technical Operations Manager  
Babcock Infrastructure Services

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