



In Pipe NTS Liquid Monitoring Systems

Value Tracking Case Study



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Background

Significant liquid contamination can result from a gradual build-up of liquid deposits on pipe surfaces, from components that may even be present normally in the gas phase. Depending on the specific components involved, dew temperature measurements may not predict the potential liquid deposition. Gas composition may give an indication of increased concentrations of critical components in the gas phase, but these are not routinely monitored at the GNCC. The aim of this project is to address the problem of detecting liquid ingress at National Transmission System (NTS) entry points through the development and testing of a video identification system.

What's new?

Working with Operations the project was able to identify test areas to demonstrate the Line Vu camera and outputs identifying liquid present. Project closed well with good demonstrations at both Bacton and Longtown with very interesting results. The Line Vu camera is good at identifying issues for large volumes of liquid with development identified for smaller volumes. Three installations completed with video evidence logged of equipment in use.

The benefits

The ability to monitor contamination will allow the control of incidents of liquid contamination to be pro-active, rather than re-active. With damaged filters costing approx. £20k each and Containment incident costing approx. £50k there can be high cost saving through improved monitoring.

The equipment will also allow us to monitor and prevent damage to equipment during a contamination event to reduce cost/ issues further.

Financial savings

£43,000 per incident based on avoidance of repairing damaged filters or prevention of containment incidents. Due to minimal levels of liquid highlighted in usage so far replacement work would not be required for these levels. Demonstration of benefit to follow from team recording incident avoidance.

Implementation

The equipment has been introduced across National Gas Transmission but we have not recognised, to date, any liquid levels that would require action to be taken. Activities to be tracked with Operations teams for further examples or savings to be recognised.

