Learning Brief

ILI TOOL DAMAGED DURING THE LAUNCH PROCEDURE

What happened?

- An In-line Inspection (ILI) tool was damaged during the launch procedure
- Differential pressure across the ILI tool built up causing the tool to move backwards

Findings and key learning points

- A Magnetic Flux Leakage (MFL) ILI tool was being used to inspect a 24” pipeline
- Three runs had already taken place (gauging and profiling)
- The ILI tool was loaded into the (temporarily fitted) pig trap but the pig trap door was not immediately closed (contrary to the Non-Routine Operation (NRO) instructions)
- Pressure built-up in front of the ILI tool due to an up-stream 2” balance line valve passing and a vent valve being closed (contrary to NRO instructions). Differential pressure across the tool caused the ILI tool to move backwards damaging the sensors
- The passing 2” valve had been greased and operated 36 times during the whole pigging operation. Pressure gauges were not fitted to check that the valve was holding
- Non-compliance with the NRO was found to be due to inexperience of the staff carrying out the operation and inappropriate hand-over of the NRO (e.g. no site visits)

Recommendation

- It is recommended that experienced staff are included in a pigging operation site team
- Non-Routine Operation instructions should be reviewed on-site, appropriately handed-over and adhered to
- Critical valves should be checked to ensure that they are holding pressure