Learning Brief

GAS LEAK FROM NON-STANDARD REPAIR

What happened?

- A pipeline operator identified a leak from a 24 barg gas main
- Following excavation, a non-standard repair was uncovered
- Due to the proximity of a water main concrete valve chamber, diversion of the gas main was the only viable solution

Findings and key learning points

- The operator carried out continued fitness-for-purpose reviews of their oldest gas pipelines following a leak in 2021 from a pipeline dating from 1965
- This resulted in annual leakage surveys of similar age pipelines being implemented
- As a result of a leakage survey a leak was detected in another 1967 pipeline
- On excavation, an unusual repair (see photos) was discovered. The domed cap is assumed to encapsulate a fitting. The operator had no records of the repair which is assumed to be of similar age to the pipeline
- A parallel water main runs within 3 metres of the gas main and the concrete walls of a valve chamber encase the gas main
- The water company would not give permission for the concrete to be removed to fit a repair clamp, so a diversion of the gas main was the only solution

Recommendation

- It is recommended that operators consider what steps may be appropriate to ensure the continued fitness-for-purpose of pipelines of similar vintage, include these in their management plan, and keep them under review
- Operators should be made aware that unrecorded non-standard repairs may have previously been carried out