Objectives

- An operator wanted to perform a comprehensive well integrity review targeting a 10% across 700 onshore wells and 200 offshore wells.
- With a portfolio containing aging wells (field development was in 1935), a number of these had significant annulus pressures, pronounced surface and subsurface corrosion, and visible surface leakage.
- The well stock comprised of subsea wells, oil and gas producers, gas injector, water injector, and observation wells.

Requirements:
- Identify potential for integrity failures
- Review casing and cementing practices with a view to improving integrity
- Develop effective, practical and fit-for-purpose integrity management procedures
- Review of downhole safety management procedures
- Evaluate the barrier philosophy to maintain barrier integrity

Value to client

- A well by well review identifying potential subsurface leaks and failures – the results of the sample saw 5% of wells fall into the high risk category, 75% into the medium risk category, and 15% into the low risk category.
- Current practices were reviewed, and subsequently comprehensive wellhead maintenance, integrity management and annulus pressure monitoring plans were put in place.
- An analysis of current cementing practices and recommendations on possible improvements.
- A subsurface safety valve (SSSV) review based on proximity to populated areas.
- Implementation of the recommended integrity management procedures.
- Remedial action on high and medium risk wells were recorded in Expro’s SafeWells well integrity software to allow for future maintenance to be scheduled.

Contact

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