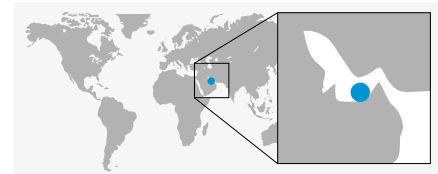


Case study: LeakPoint®/A10

Comprehensive diagnosis locates multiple unexpected leaks, enabling efficient remediation campaign

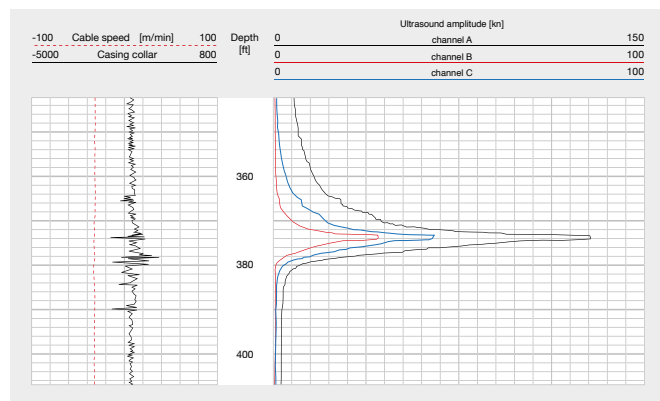


Region: Middle East, UAE
Customer: Dubai Petroleum
Field: Fateh
Well type: Gas lift oil producer
Reference: SPE-117182-PP

Challenge

A leaking gas lift valve [GLV] dummy in a mature oil producer had been damaged during a replacement operation. This had given rise to abnormally high annulus pressure due to communication between the tubing and the A-annulus. The well was scheduled to be converted to a gas injector.

Before remediation was attempted, the operator needed to undertake a comprehensive barrier performance survey to determine whether the problem mandrel was the only source of the raised pressure.



Clearly identified primary barrier leak at ball valve.

Case benefits

- Comprehensive identification of suspected leak and three further unexpected leaks
- Complete assessment first-time removed need for further interventions and avoided risk of incomplete remediation, saving time, cost and production
- Confidently specified, rapid remediation

Key capabilities

- Locates barrier leaks downhole rapidly, accurately, clearly and completely
- Two LeakPoint options, /A10 and /A30 according to complexity of failure
- Tiered pricing linked to complexity minimises cost of diagnosis
- Evaluates sealing performance of well barriers and complements other integrity management procedures
- Enables confident decisions and better-targeted remediation
- Independent validation of remediation treatment or P&A
- Mitigates integrity risk

Case study: LeakPoint®/A10

Solution

A LeakPoint/A10 survey was deployed in memory mode to confirm if the GLV was leaking and locate any additional primary barrier failures.

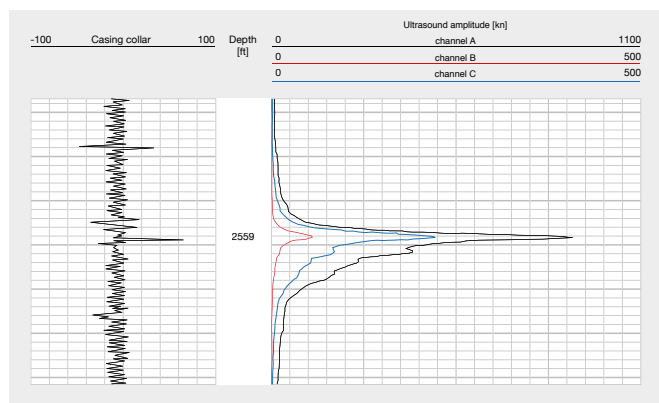
The operator mobilised a dual slickline/electric line unit in order to enable diagnosis and remediation in the same campaign. The unit included gas lift valve replacement capability and, as a contingency, settable straddles in case the leak was not related to the gas lift system.

Results

The damaged GLV dummy was confirmed leaking and, significantly, three further leaks were located: in a control line, a big-bore ball valve and a second GLV dummy.

The mandrels containing the failed GLV dummies were both sealed using straddle patches.

The LeakPoint/A10 programme accurately identified multiple sources of pressure build up in the A-annulus. In addition, knowledge of the existence and precise location of three previously unknown barrier failures enabled comprehensive, targeted remediation, rapidly restoring well integrity and minimising the risk of further interventions.



Leak at second dummy gas lift valve.

The **Point**® system
A proactive and systematic approach to integrity management.

- Check**Point**®/A10 ●
- Check**Point**®/A50 ●●●
- Check**Point**®/A70 ●●●●

SURFACE **INVESTIGATE**
DOWNHOLE **LOCATE**

- Leak**Point**®/A10 ●
- Leak**Point**®/A30 ●●
- Flow**Point**®/A50 ●●●
- Flow**Point**®/A70 ●●●●

For more information visit archerwell.com/point or contact point@archerwell.com

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