



The challenge of annular flow

Detecting liquid or gas flow behind casing with a throughtubing survey has been a challenge for well integrity engineers over many decades.

Symptomatic of a zonal isolation or barrier failure in the annulus, this unwanted flow can have a variety of outcomes, including poor well performance, ground water or reservoir contamination and/or more catastrophic, uncontrolled fluid escape at surface.

FlowPoint is sensitive to the ultrasound energy created by turbulent liquid or gas flow through small restrictions in annuli. From within the tubing, it can detect and locate undesirable flow behind pipe with great accuracy - even through multiple casing strings.

FlowPoint - locates annular failures

The accurate data delivered by FlowPoint, difficult to obtain through any conventional methods, can prove invaluable in resolving simple or complex well integrity issues. Confidence in data enables faster, more effective remediation decisions and potentially, can save wells from premature re-completion or abandonment.

Key benefits

- Detects and maps fluid migration behind pipe without pulling the tubing
- Evaluates sealing performance of cement, annular barriers and zonal isolation quality
- Enables pinpointing and remediation of zonal isolation failures
- Enables confident, faster decision-making; more effective remedial action
- Potentially saves wells from premature. re-completion or abandonment

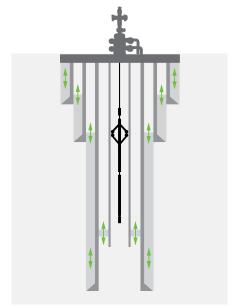
Typical applications

- Investigating sustained annular pressure
- Evaluating zonal isolation and annular barriers
- Appraising sealing performance of cement
- Investigating cross-flow
- Diagnosing subsurface gas seepage
- Post-remediation validation
- Pre-abandonment survey



Flow**Point**

Specifications	
-	Flow Point
Max. Pressure, psi [MPa]	15,000 [103]
Max. Temp, degF [degC]	257 [125]
OD, in [mm]	1 11/16 [42.9]
Min. restriction, in [mm]	2.0 [51.0]
Tool length ² , ft [cm]	1.97 [60]
Tool weight, lbm [kg]	9.1 [4.1]
Typical logging speed, ft/min [m/min]	15 [5]
Logging mode	Memory



FlowPoint locates annular flow behind casing where conventional technologies are ineffective.

We are a global oilfield service company that specialises in drilling services and well services because we believe that specialists do the job best. Our experience drives our difference in our constant search for new ways to deliver better wells. We listen to our customers to provide straightforward solutions to help them produce more oil and gas. We are craftsmen, who take pride in our work and do what we promise.

We are Archer, the well company.

