

LeakPoint®

Protect your investment

Locate barrier leaks downhole

Fast and Accurate Diagnosis with LeakPoint®

Provides a clear picture of the integrity status of your well, with accurate location of any leaks in the primary barrier

Better data, better decisions

Leaks can reduce a well's performance throughout its life and cause serious safety, environmental and reputational issues. The reliability of traditional methods of leak detection can be extremely variable since they can be affected by both the rate and location of the leak. Low-rate or multiple leaks and leaks beyond the primary tubular are particularly challenging.

LeakPoint® is able to expose leaks in the primary tubular and surrounding casing strings or completion equipment clearly, reliably and consistently. Results are clear and unambiguous, with leaks in the production casing or beyond able to be diagnosed, even with the well flowing.

How it works

When fluid moves through a leak as a result of a differential pressure, acoustic energy is generated, part of which is ultrasound. Archer has developed a range of Point® sensors which use proprietary ultrasound sensing technology to detect and locate these characteristic signatures. Concentrating on ultrasound confers the sensors with immunity to background "noise" from the rest of the well, and even allows the surveys to be run while the well is flowing.

While the core of the Point® system is the sensor (S100 and/or S300 depending on the application), additional measurement sensors can be run in combination to allow full evaluation of the integrity status of the well. Correlation tools ensure exact depth determination.

A LeakPoint® survey is deployed when a barrier leak is known or suspected, and two types of survey are available to locate primary barrier leaks or more complex secondary barrier failures.

Benefits

- Rapid, through-tubing deployment minimizes disruption and cost
- Locates leaks rapidly, accurately, clearly and completely
- Enables confident decision making and better-targeted remediation
- Tiered service structure linked to the complexity of the problem minimizes the cost of diagnosis

Service specifications

Physical

Outer diameter	1 11/16 in [42.9 mm]
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Environmental

Maximum temperature	350°F [177°C]
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Maximum pressure	15000 psi [1000 bar]
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Operational

Recommended logging speed	30 ft/min [9.1 m/min] 15s per station
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Logging mode	Memory / SRO
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Well conditions

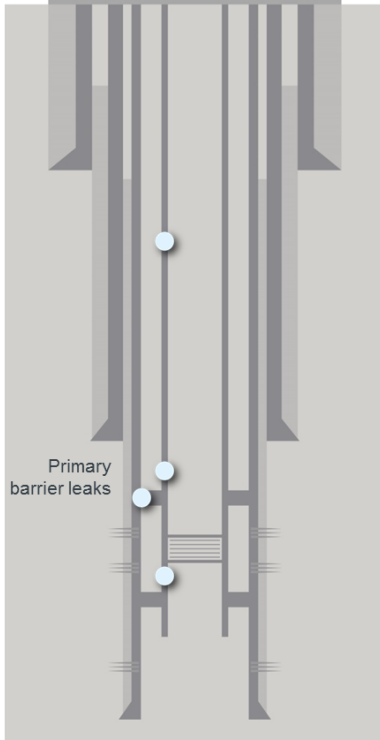
Fluid	Water, brine, production fluid, gas
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Minimum casing size	2 in [51 mm]
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Maximum casing size	N/A
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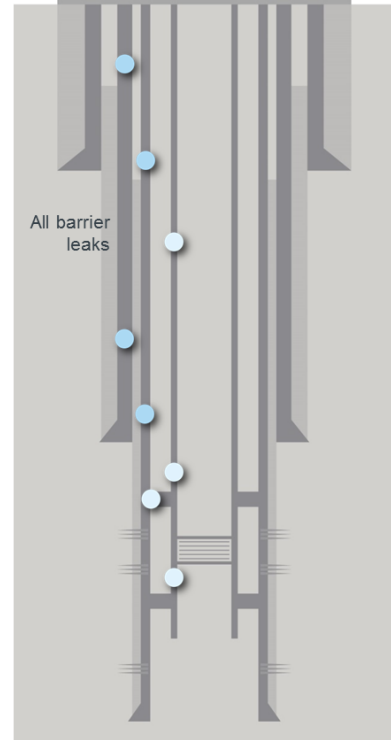
Leak**Point**®/A10

A standard survey to diagnose straightforward integrity failures, targeting the primary barrier and A-annulus. Using a logging platform built around Archer's S100 ultrasound sensor, the engineer evaluates the data to define the failures and their location. Leak locations are normally clearly visible on field logs.



Leak**Point**®/A30

A standard survey to diagnose moderately complex integrity failures which may extend beyond the primary barrier. Using a logging platform built around the Archer S100 and S300 ultrasound sensors, the engineer targets each suspected barrier and annulus. Leak locations may be visible in field logs or data may require further analysis.



Check Point ®/A10	●
Check Point ®/A50	● ● ●
Check Point ®/A70	● ● ● ●
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SURFACE	INVESTIGATE
DOWNHOLE	LOCATE
Leak Point ®/A10	●
Leak Point ®/A30	● ●
Flow Point ®/A50	● ● ●
Flow Point ®/A70	● ● ● ●

