VIVID® Seal

Validation of Cement Performance

Designed to set new standards in acoustic sensitivity, VIVID® Seal is optimised to detect the smallest of fluid movements downhole. High-speed sampling allows statistical parameter analysis over a broad frequency range, with greater resolution at low frequency.

Benefits

- Measure cement sealing quality
- Gauge flows, even in the presence of cement micro-annuli
- Describe minimum flow levels through a cement barrier
- Verify cement barrier integrity for P&A
- Reduce emissions by rig-time and scope reduction during P&A

Features

- Detailed analysis of downhole fluid movement
- High-speed sampling rate with 220 FFT/sec per sensor
- Shorter stations durations (15-20 sec)
- Memory and real-time acquisition
- Interactive sprectrum and curve data
- Integrated accelerometer sensor, effectively eliminating noise during stations

Typical Applications

- Locates small, flow paths and leaks behind multiple casing strings
- Validates cement integrity
- Gauges flow in the presence of micro-annuli

Specifications

Sensors	
Type	Passive acoustic
Number	1
Frequency range	<1 kHz - 223 kHz
Data structure	
Energy histogram bins per threshold	82
Statistical parameters (Per frequency channel)	Time-filtered noise Mean noise
Typical logging speed	30 ft/min [9.1 m/min]
Logging mode	Realtime and memory
Physical	
OD	1-11/16" (43mm)
Length	29.3" (745mm)
Weight	10.8lb (4.9kg)
Environmental	
Temperature	350°F [177°C]
Pressure	15,000 psi [1 034 bar]

Archer is a company providing drilling and well services to the global energy industry. Our heritage stretches back over 50 years and we are 5,000 employees globally. Archer operates in over 40 countries, providing sustainable high-quality services and innovative technology to optimize our customer's energy solutions. **We are Archer.**

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