

Radial Bond Tool

Detection of poor cement conditions



The Radial Bond Tool (RBT) facilitates a detailed, qualitative analysis of the zonal isolation achieved by cementing services. Effective hydraulic isolation from water-bearing formations is crucial to maximise the productivity of hydrocarbon-bearing reservoirs. Poor cementing allows unwanted fluid transfers between zones, resulting in the potential for lost or unwanted production

Benefits

- Small size, rigid isolator, and powerful transmitter allowing through tubing operations after the completion string is in place.
- In addition to the traditional 3 ft amplitude and 5 ft VDL, the RBT has a radially segmented, calibrated amplitude measurement. This focuses the transmitted sonic pulse circumferentially, allowing the differentiation of small axial channels as opposed to poor or contaminated cement.

Typical Applications

- Identify the top of lead and tail cement
- Evaluate the cement bond quality to the casing
- Evaluate cement bond quality to the formation (VDL)
- Identify channels in cement
- Identify micro-annulus with subsequent pressure pass
- Identify the cement squeeze interval in case of a bad cement job
- Determine the depth to cut and pull casing

Features

- Single transmitter, 3 ft (near) and 5 ft (far) receivers, segmented radial receiver array for radial cement imaging
- Variable sampling rates to maximize data acquisition
- Interchangeable telemetry cartridge
- Slotted sleeve design for improved rigidity, strength, and acoustic isolation
- Can be deployed through small completions and tubing restrictions to log the liner below (minimum clearance +0.25 inches above tool diameter)
- Fully combinable with other UltraWire and UltraMemory™ tools