

RADIAL BOND TOOL (RBL)

The **Radial Bond Log** tool provides proven superior reliability and responsiveness even in thin cement sheath conditions. With circumferential cement bond evaluation, the **RBL** identifies channels, in addition to standard cement bond logging. The main application of the **Radial Bond Log** tool is to evaluate hydraulic isolation between producing and non-producing zones— a key factor needed to assess the integrity of the well.

In addition to standard cement bond amplitude (CBL) through near receiver (3-ft), and variable density log (VDL) through far receiver (5-ft), the **RBL** tool provides a cement map through eight receivers (Radial @2Ft), each segment covering 45° section of the pipe which gives a complete 360° evaluation of bond integrity.



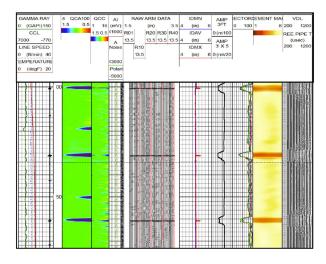
FEATURES

- Combinable with GOWell's Pegasus Series Tools for flexible acquisition and rig time saving
- All receivers are built in a slotted housing to provide rigidity, strength, and noise isolation
- Robust design suitable for horizontal logging
- · User friendly acquisition software
- Easily run on all standard wirelines
- Warrior compatible

APPLICATIONS

- Full circumferential resolution for better channel identification
- Provides a 360 degree cement map
- Cement bond quality measurement in slim and conventional wells
- Operates in casing from 3 1/2 in. (89 mm) to 10 3/4 in. (244 mm)
- Indicates channels and intervals using radial receivers
- Measures the attenuation of the acoustic energy in the casing to cement interface

MULTI-FINGER CALIPER + RADIAL CBL + EM PIPE INSPECTION COMBO LOG EXAMPLE



RBL



SPECIFICATIONS

| | RBL |
|---------------------|--|
| | P/N 100508044 |
| GENERAL SPECS | |
| Maximum Pressure | 15,000PSI (103MPa) |
| Maximum Temperature | 350°F (175°C) |
| Maximum Casing ID | 10.75 in. (264 mm) |
| Minimum Casing ID | 3.5 in. (89 mm) |
| Diameter | 2-3/4" (68.8 mm) |
| Length | 9.8 ft (2.997 m) |
| Weight | 132 lbs (60 kg) |
| Max. Logging Speed | 32.8 ft/min (10 m/min) |
| Combinability | Combinable with Pegasus Series Tools |
| BOREHOLE CONDITIONS | |
| Borehole Fluids | Oil, Fresh Water, Brine |
| Tool Position | Centralized |
| MEASUREMENT | |
| Transmitters | Near & Far = 2 5/8" |
| Receivers | Radial = 8 Segments |
| Measurements | Near @ 3ft., Far @ 5ft., Radial @ 2ft. |
| Wave Sample Rate | 2us for All Waves |
| Wave Start/Stop | 2ft Segments, 100-400us |
| | 3ft Segments, 100-800us |
| | 5ft Segments, 100-1200us |
| HARDWARE FEATURES | |
| Voltage | 18V to 36V |
| Current | ≤ 430 mA @ 18v |
| Tool Time Cycle | 3 x 50ms - 150ms |
| Transducer Type | 20 KHz Piezoelectric |
| Output Data | Waves: 3ft, 5ft, 2ft (8 Segments) |
| | Calibration Waves |
| | Accelerometor Data |
| | Housing Temperature |