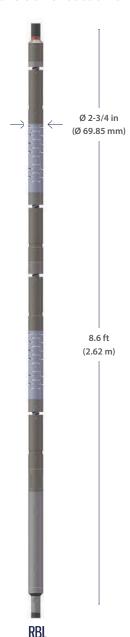


# RADIAL BOND TOOL (RBL70C-A)

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 covers a 45° section of the pipe which gives a complete 360° evaluation of bond integrity.



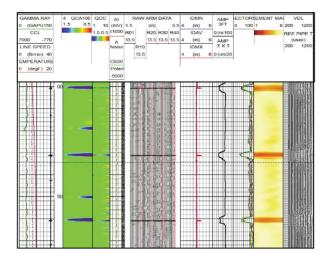
### **FEATURES**

- 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
- SRO and memory capable
- 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 4 in. (101 mm) to 13 3/8 in. (340 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





## **SPECIFICATIONS**

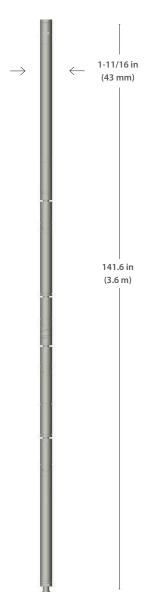
	RBL70C -A
	P/N 100508044
GENERAL SPECS	
Maximum Pressure	15,000PSI (102 MP)
Maximum Temperature	350°F (175°C)
Maximum Casing ID	13.375 in. (340 mm)
Minimum Casing ID	4 in. (101 mm)
Diameter	2-3/4 in (70 mm)
Length	8.6 ft (2.62 m)
Weight	95 lbs (43 kg)
Max. Logging Speed	32.8 ft/min (10 m/min)
Combinability	Combinable with Pegasus Series Tools
BOREHOLE CONDITIONS	
Borehole Fluids	Oil, Fresh Water, Brine
Tool Position	Centralized
MEASUREMENT	
Transmitters	Single Transmitter
Receivers	Radial = 8 Segments
Measurements	Near @ 3ft., Far @ 5ft., Radial @ 2ft.
Wave Sample Rate	2us for All Waves
	2ft Segments, 100-400us
Wave Start/Stop	3ft Segments, 100-800us
	5ft Segments, 100-1200us
HARDWARE FEATURES	
Voltage	18V to 36V
Current	≤ 120 mA @ 18v
Tool Time Cycle	380 ms
Transducer Type	20 KHz Piezoelectric
Output Data	Waves: 3ft, 5ft, 2ft (8 Segments)
	Calibration Waveforms
	Acceleromete Data
	Housing Temperature



# RADIAL BOND TOOL (RBL43C)

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 six receivers (Radial @2Ft). Each segment covers a 60° section of the pipe which gives a complete 360° evaluation of bond integrity.



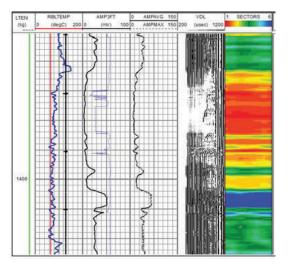
### **FEATURES**

- Combinable with GOWell's Pegasus Series Tools for flexible acquisition and rig time saving
- Fully digital acquisition and data transmission.
- Robust design suitable for horizontal logging
- SRO and memory capable
- 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 2 in. (50.8 mm) to 7 in. (177.8 mm)
- Indicates channels and intervals using radial receivers
- Measures the attenuation of the acoustic energy in the casing to cement interface

#### RADIAL CBL LOG EXAMPLE



**RBL** 

## **SPECIFICATIONS**

	RBL43C
	P/N 100517188
GENERAL SPECS	
Maximum Pressure	15,000 PSI (100 Mpa)
Maximum Temperature	350°F (175°C)
Maximum Casing ID	7 in (177.8mm)
Minimum Casing ID	2 in. (50.8 mm)
Diameter	1-11/16 in (43 mm)
Length	11.8 ft (3.6 m)
Weight	55.1lbs ( 25kg)
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 Single	Transmitter
Receivers	Radial = 6 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
Current	120 ~160 mA @ 18v
Tool Time Cycle	480 ms
Transducer Type	30±2 KHz Piezoelectric
Output Data	Waves: 3ft, 5ft, 2ft (6 Segments)
	Calibration Waveforms
	Accelerometer Data