

RADIAL CEMENT BOND TOOL

PURPOSE:

The Radial Cement Bond Tool provides an accurate evaluation of the cement bond quality and integrity to both pipe and formation by providing a 360° cement map with a dedicated 8 Sector Radial receiver, with each sector spaced 45° circumferentially around the tool located (2-ft) from the transmitter. The segmented receiver provides a good indication of cement channeling behind the casing while the tool also provides standard cement bond amplitude (CBL) through Near receiver (3-ft), and Variable Density Log (VDL) through Far receiver (5-ft).


ADVANTAGES:

- Ran in conjunction with a Gamma Ray (GR) and a Casing Collar Locator (CCL) placed on top of the radial cement bond tool string (SEE DIAGRAM ON PAGE 2)
- Located on the bottom of the tool string is an integrated temperature probe to provide an accurate measurement of wellbore temperature.
- Compatible with Compensated Neutron Tool (CNT) that can be ran below the bond tool receiver section.
- Lower operating time and cost with the ability to run the above tools in one run. GR/CCL/CBL/VDL/TEMP/CNT

APPLICATIONS:

- Cement bond quality & integrity to both pipe and formation
- Fast formation / Channeling / Microannulas
- Helps confirm isolation between zones
- Identify top of cement (TOC)

TOOL INFORMATION:

Sensor	Offset (m)	Schematic	Description	Length (m)	O.D. (mm)	Weight (lb)
CHD	6.25		CHD-Titan_2	0.31	36.51	2.00
THV	6.25		Hunting Titan 1.4375 Cone Type II			
CTL	5.93		CTL-CSS (CSS-B)	0.89	62.00	14.99
			Computer Sonics 3-1/8 Centrilizer			
GR_CCL	5.04					
CCL	4.83					
GR	4.28					
			GR_CCL-CSSM_GRCC (CSSM07)	2.11	79.46	30.86
			Computer Sonics Multiplex Gamma Ray / CCL			
SCBL	2.93					
WVFS1	2.51					
WVFS2	2.51					
WVFS3	2.51					
WVFS4	2.51					
WVFS5	2.51					
WVFS6	2.51					
WVFS7	2.51					
WVFS8	2.51					
WVFSUM	2.40					
WV3FT	2.34					
WV5FT	2.05					
TEMP	1.04					
CTL	0.97					
WVFSYNC	0.97					
WVFCAL	0.97					
Titan	0.08					
			CTL-CSS (CSS-T)	0.89	62.00	14.99
			Computer Sonics 3-1/8 Centrilizer			
			Titan-1.4375_Cap	0.08	36.51	1.00
			Titan 1 7/16" Cap			
			SCBL-CSSMRAD (CSSM07)	1.96	79.38	100.00
			Computer Sonics Multiplexed Sector Bond With Temperature			
Dataset:		CSSM RCBL				
Total length:		6.25 m				
Total weight:		163.85 lb				
O.D.:		79.46 mm				

Specifications	
Vertical Resolution	3ft CBL and 5ft VDL
Temperature Rating	350°F (177°C)
Pressure Rating	20,000 psi (138MPa)
Tool Weight	200 lbs (91kg)
Tool Length	20.5' (6.25m)
Tool OD	3.125" (79mm)
Minimum Casing Size	4 1/2" (114.3mm)
Maximum Casing Size	13 3/8" (339.7mm)
Well Deviation	No Limits
Borehole Environment	Cased, Fluid Filled Hole
Logging Speed	Approx. 30 ft/min (8-10m/min)

RADIAL CEMENT BOND LOG EXAMPLE:
