

Memory Cement Bond Logging Tool (MCBL)

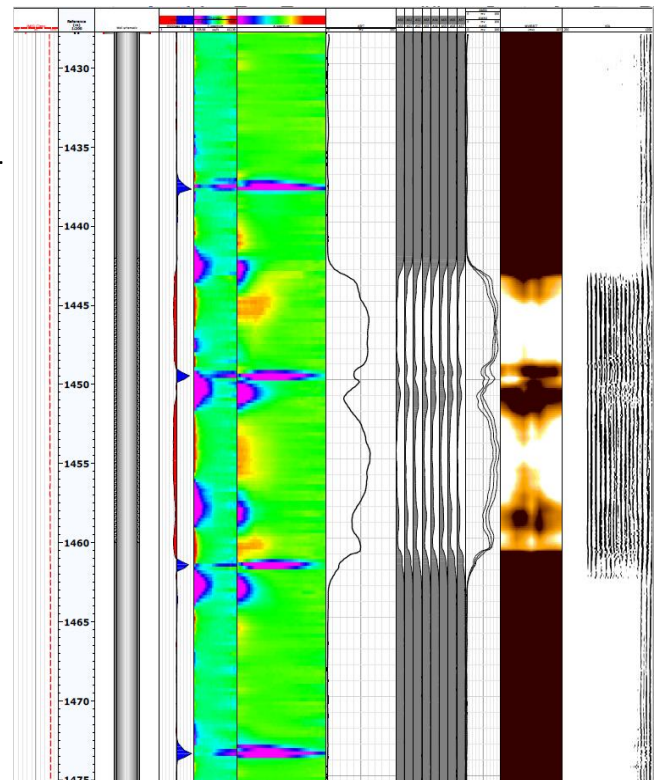
Memory Cement Bond Logging Tool (MCBL) is primarily used to evaluate the cement bond between the casing and the formation, providing key indicators for assessing the sealing integrity of oil, gas, and water wells. The Tool includes a 3-foot sector receiving probe, and a 5-foot VDL (Variable Density Log) probe. Each sector covers a 45-degree cross-section, allowing for a 360-degree assessment of the cement bond integrity.

Features

- The Tool features a 13-core quick connector design, which facilitates easy connection with multi-arm, electromagnetic flaw detection, downhole television, and other instruments, enhancing the efficiency of correlative well logging data acquisition.
- All ultrasonic probe heads are structured in an independent design, offering strong reliability and convenient maintenance.
- The main body of the instrument is designed with four-arm rollers for centralization, complemented by upper and lower roller centralizers, making it particularly suitable for well logging in high-angle and horizontal wells where oil pipes or drill pipes are used as the conveyance method.
- The Tool is equipped with a large-capacity storage system, high-speed data acquisition frequency, and ultra-fast data reading speed, enabling refined and rapid well logging.

Applications

- Perform well logging in operations where cable provision is not possible.
- Provide a 360-degree cement bond log (CBL) image.
- Measure the quality of cement bonding in both horizontal and conventional wells.
- Meet the requirements for well logging in casings ranging from 4.5 inches (114 millimeters) to 10 inches (254 millimeters).
- Quantitatively evaluate the bond index of the first interface, and qualitatively assess the bond index of the second interface.



Specifications

	MCBL70C	MCBL90C
General Specs		
Pressure Rating	14,500psi (100Mpa)	14,500psi (100Mpa)
Temperature Rating	350°F (175°C)	350°F (175°C)
Minimum Casing Diameter	114mm (4.5in)	114mm (4.5in)
Maximum Casing Diameter	254mm (10in)	339.7mm (13-3/8in)
Diameter	70mm (2-3/4in)	90mm (3-11/20in)
Length	2680mm(105.5in)	2750mm (108.3in)
Weight	44.6kg	67kg
Logging Speed	32ft/min(10m/min)	32ft/min(10m/min)
Joint Connection	13-core	13-core
Logging Conditions		
Well Fluid	Oil, Fresh Water, Salty Water	Oil, Fresh Water, Salty Water
Position	Center of Casing	Center of Casing
Sensors Parameters		
Transmitter	1	1
Receiver	2	2
AD Resolution Ratio	12 bit	12 bit
AD Acquisition Ratio	10Mps	10Mps
Source Distance	8-sector probe	12-sector probe
	CBL Probe	CBL Probe
	VDL Probe	VDL Probe
Electrical Characteristics		
Voltage	15 to 30 VDC	15 to 30 VDC
Current	80mA@20VDC	80mA@20VDC
Sampling Period	320ms	320ms
Transducer Parameters	20KHZ	20KHZ
Memory Capacity	10Gb	10Gb