

Memory Cement Bond Logging Tool (MCBL)

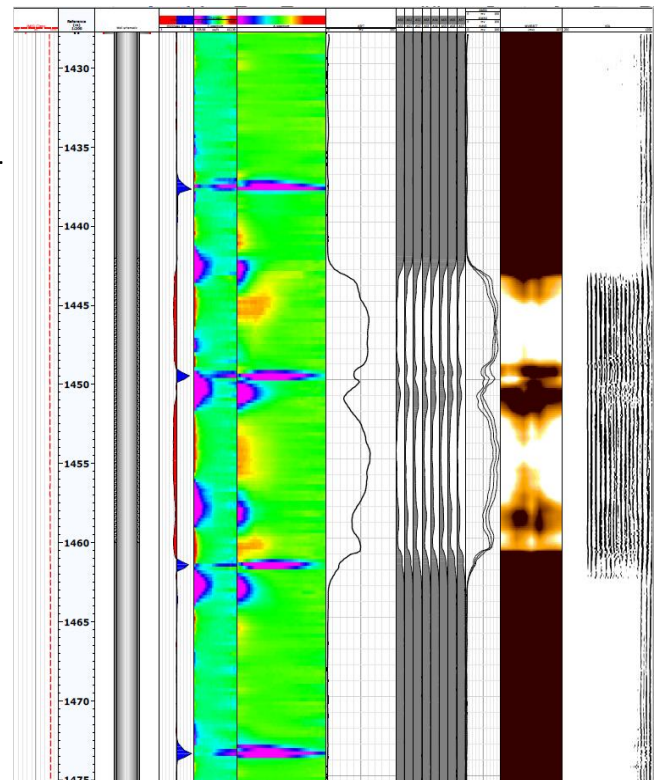
Memory Cement Bond Logging Tool (MCBL) is primarily used to evaluate the cement bond between the casing and the formation, providing key indicators for assessing the sealing integrity of oil, gas, and water wells. The Tool includes a 3-foot sector receiving probe, and a 5-foot VDL (Variable Density Log)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

		MCBL-1
General Specs		
Pressure Rating		14,500psi (100Mpa)
Temperature Rating		350°F (175°C)
Minimum Casing Diameter		4.5”(114mm)
Maximum Casing Diameter		10”(254mm)
Diameter		2-3/4”(70mm)
Length		2680mm(105.5in)
Weight		44.6kg
Logging Speed		32ft/min(10m/min)
Joint Connection		13-core
Logging Conditions		
Well Fluid		Oil, Fresh Water, Salty Water
Position		Center off Casing
Sensors Parameters		
Transmitter		1
Receiver		2
AD Resolution Ratio		12 bit
AD Acquisition Ratio		10Mps
Source Distance		8-sector probe 3ft
		CBL Probe 3ft
		VDL Probe 5ft
Electrical Characteristics		
Voltage		15 to 30 VDC
Current		80mA@20VDC
Sampling Period		320ms
Transducer Parameters		20KHZ
Memory Capacity		10Gb