

Target Detection System (TDS)

ACCURATELY LOCATES EXTERNAL CASING EQUIPMENT

Halliburton offers a solution for detecting equipment located on the outside of casing and to power orient perforating guns away from that equipment. This Target Detection System (TDS) service is comprised of innovative tools that enable single-run detection and perforating in wells with $>5^\circ$ deviation.

Unique to the TDS service is the Metal Anomaly Tool (MAT) that has an arm-mounted pad sensor that contacts the inner wall of the casing. The tool uses pulsed-eddy current technology to accurately locate the position of equipment contacting the outside of casing and provides a visually clear, high-confidence output.

The TDS system offers operational efficiency as detection and perforation runs can be made simultaneously. Customers also have the advantage of being able to power orient individual guns to any desired angle with precision over traditional, gravity-based methods.

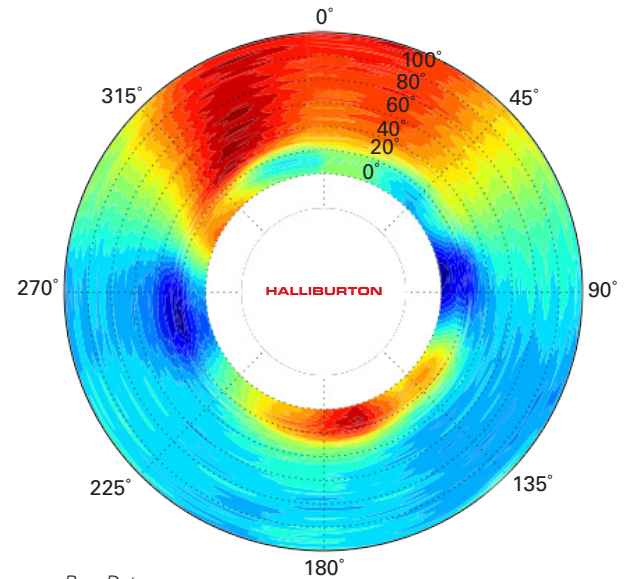
BENEFITS

The TDS system offers several advantages over existing technology available today, including:

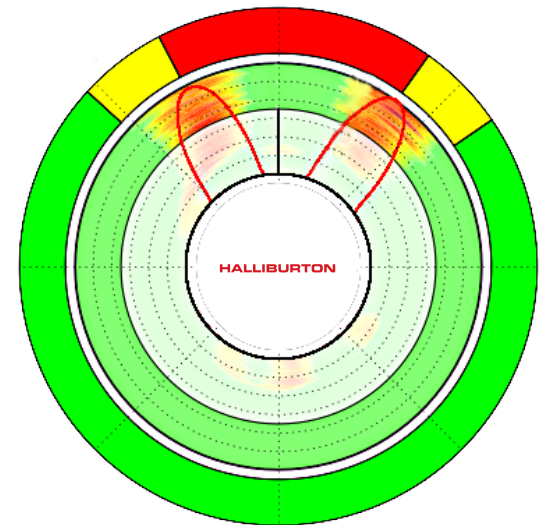
- » Clear visual output provides confidence for perforating without fear of damaging fiber optics or control lines
- » Single-trip detection, orientation, and perforating
- » Guns can be oriented in real time to any desired angle
- » Greater orientation accuracy than traditional methods
- » System does not rely on mechanical orientation on surface
- » Multiphase guns can be perforated with confidence

FEATURES

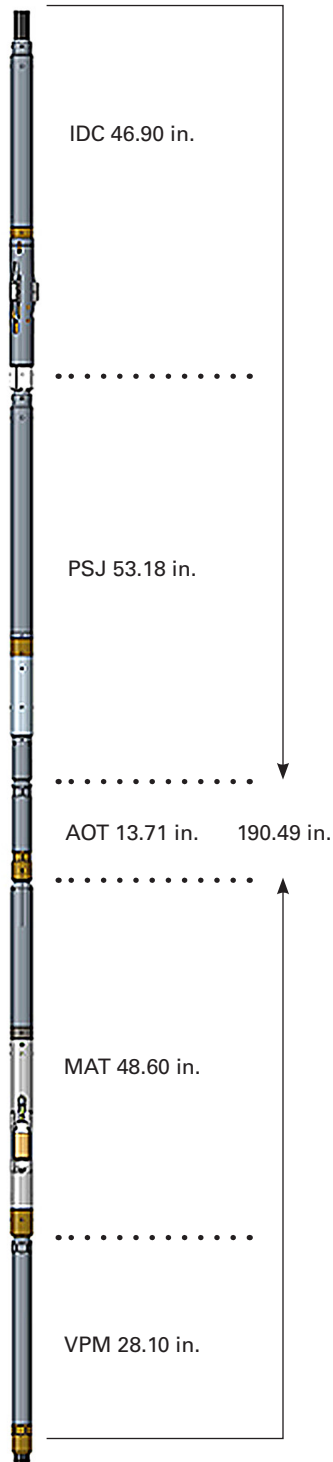
- » Detection accuracy $\pm 7.5^\circ$
- » Robust design ideally suited to plug and perf operations
- » Relative bearing measurement accurate to $\pm 3^\circ$
- » High-torque swivel for orientation in horizontal wells
- » Gun orientation accuracy within $\pm 6^\circ$
- » Compatible with resistorized and RF-safe detonators
- » Rated to 15,000 psi and 350°F



Raw Data



Target Identified



Target Detection System Specifications

Length	190.49 in. (483.84 cm)
Outside Diameter	3.375 in. (85.8 mm)
Weight	240.30 lb (109.23 kg)
Maximum Temperature	350°F (177°C)
Maximum Pressure	15,000 psi (103.42 MPa)
Logging Speed	Stationary
Casing	5.5 in., 17 to 23 lb
Grade	L-80, P110, 13 Chrome
Fluid Type	Oil, Air, Fresh

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