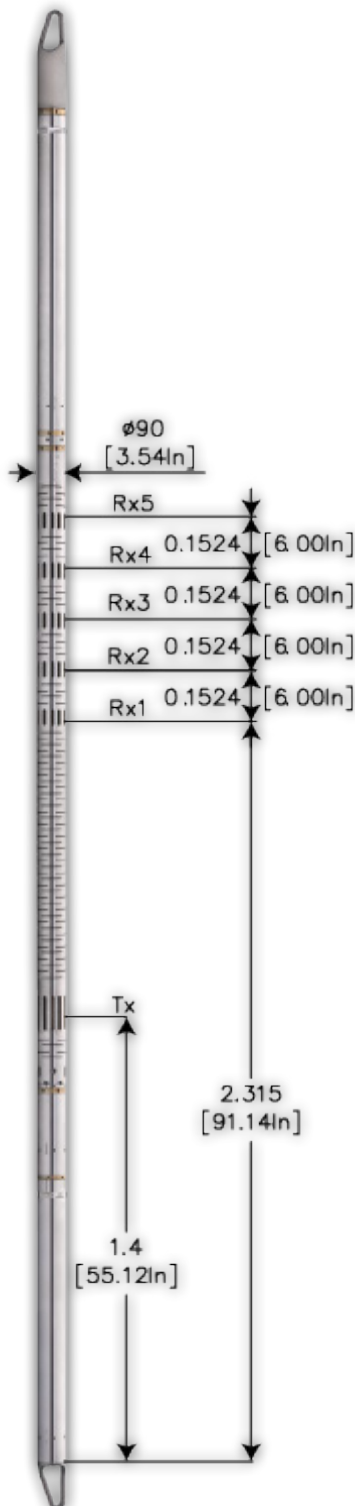


High Definition Sonic Logging Tool (HDSL)

GOWell's High Definition Sonic Logging Tool (HDSL) is part of the Gallop Suite and it is comprised of a single transmitter and five receivers. The instrument provides a borehole compensated acoustic compressional travel time (Dt). Applications include porosity calculations, and calibration of seismic data. It can also be used for cement bond evaluation.



HDSL

DESCRIPTION

The sonic logging tool can also be used to improve the correlation between time and depth, as well as be used for rock mechanics. This tool combines transmitters and receivers, which allow the recording of travel time, of an acoustic wave (sound energy) through the formation, to be measured.

APPLICATIONS

- Formation Porosity
- Seismic Correlation
- Basic Cement Bond evaluation in cased hole
- Fracture Identification

FEATURES

- Combinable with other Gallop tools
- Acquires full digital Compressional waveforms in both OH (5 Rx) and CH (2 Rx CBL) modes configurable from software
- Real-time semblance available
- Travel time DTC processing real time, including borehole compensation



SPECIFICATIONS

HDSL - High Definition Sonic Logging Tool

General Specs

Maximum Pressure	20,305 PSI (140 Mpa)
Maximum Temperature	350 °F (175°C)
Maximum Hole Size	16 in. (406.4 mm)
Minimum Hole Size	4.5 in. (114.3 mm)
Diameter	3.5 in. (88.9 mm)
Length	13.8 ft. (4.2 m)
Weight	278 lbs (126 kg)
Max. Logging Speed	38 ft/min (11.6 m/min)

Borehole Conditions

Borehole Fluids	Any liquid
Tool Position	Centralized

Hardware Features

Voltage	220 Vac, 50 Hz
Current	60 mA
Transmitter Type	25 KHz Piezoelectric Ceramic Transducer
Sampling Rate	10, 20, 40 samples/m selectable

Measurement

Principle	Sonic Slowness and Amplitude
Minimum	130 us/m
Maximum	630 us/m
Vertical Resolution	5.9 in. (15 cm) (DTC Curve)
Depth of Investigation	2 in. (5 cm)
Accuracy	±2 us/m
Primary Curves	DTC, DTH, CBL, VDL

*Specifications are subject to change as tools are constantly being improved