ARRAY INDUCTION LOGGING TOOL (AILT)

GOWell's **Array Induction Logging Tool (AILT)** forms part of the Gallop suite. The **AILT** accurately measures open borehole formation conductivity at different borehole conditions. The tool uses an Array of induction coils operating at various frequencies, generating resistivity logs that have five (5) different depths of investigation.

The measurement is particularly suitable for high resistivity formations. Both deep and shallow readings allow for visual identification of permeable formations.

The Tool is made up of three sections:

- 1. The Power Supply section (Electronic section 1)
- 2. The Electronics Data Acquisition section (Electronic section 2)
- 3. The Sonde section (Electronic section 3)

FEATURES

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- · Can be combined with other Gallop formation porosity tools
- Rt determination accuracy is improved due to the tool's enhanced vertical resolution and radial profiling capabilities. This allows for precise reserve estimates
- Borehole corrections and deconvolution to achieve three (3) sets of curves (1, 2 and 4 ft. vertical resolution)

APPLICATIONS

- Determines water saturation
- Delineates reservoirs
- · Identifies hydrocarbon and moveable hydrocarbons
- Provides thin-bed analysis
- · Qualitatively evaluates invasion profile
- Provides correlation
- Identification of fluid contacts





SPECIFICATIONS

	AILT
GENERAL SPECS	
Maximum Pressure	20,000 PSI (140 MPa)
Maximum Temperature	350 °F (175°C)
Diameter	3-5/8 in (90 mm)
Length	24.52 ft (7.47 m)
Weight	394 lbs (178.7 kg)
Minimum measurement	0.1 Ohmm
Maximum measurement	2,000 Ohmm
Accuracy	±1.5mS/m or ≤±3%
Max. logging speed	66 ft/m (20.1 m/h)
Data transmission rate	1,152 KHz (CAN)
Minimum hole size	4.50 in (115 mm)
Maximum hole size	20 in (508 mm)
BOREHOLE CONDITIONS	
Borehole Fluids	Any, except high salinity
Tool Position	Centralized or stand off
MEASUREMENT	
Principle	Electromagnetic Induction
Vertical Resolution	1,2,4 ft
Depth of Investigation	10, 20, 30, 60, 90 in
Primary Curves	AT10, AT20, AT30, AT60, AT90
Secondary Curves	SP