



ARRAY INDUCTION LOGGING TOOL

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:

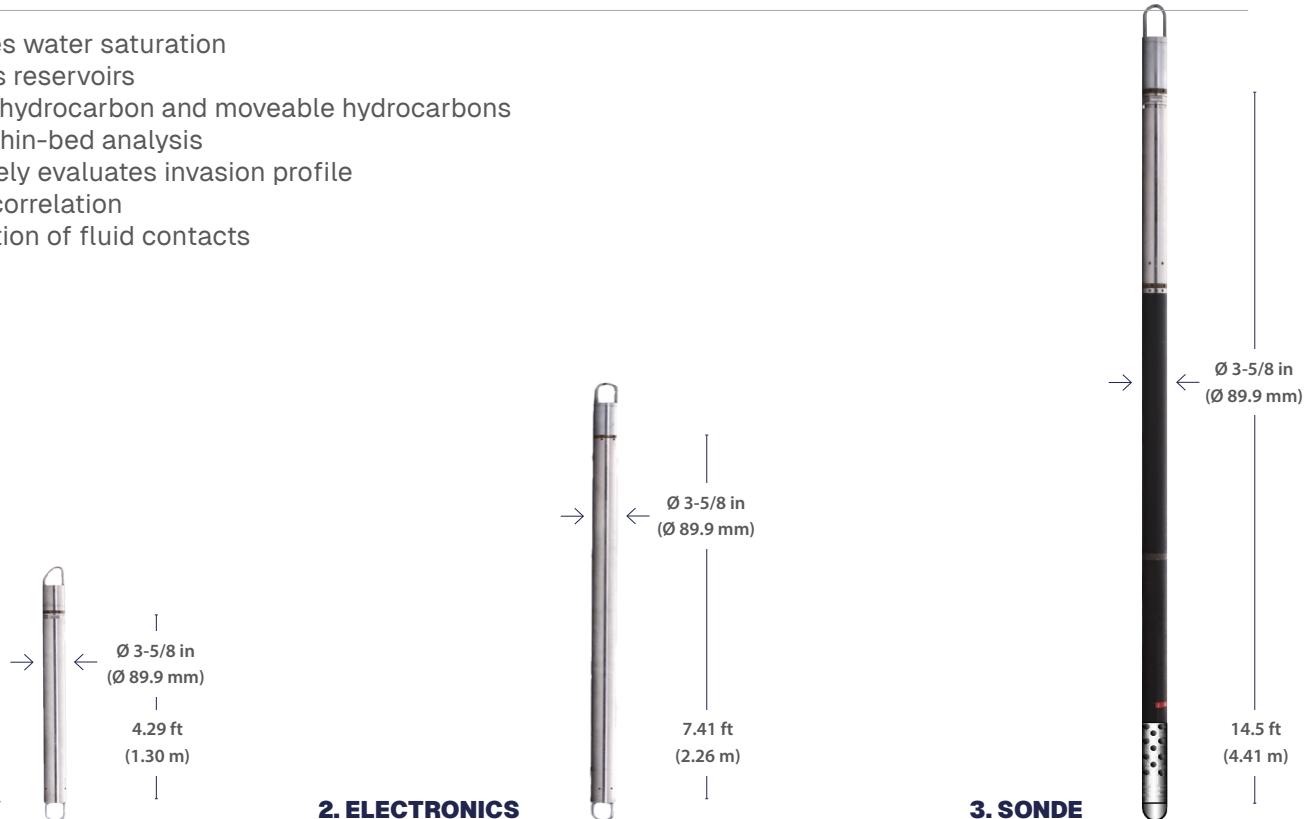
1. The Power Supply section (Electronic section 1)
2. The Electronics Data Acquisition section (Electronic section 2)
3. The Sonde section (Electronic section 3)

FEATURES

- 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





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SPECIFICATION

| 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 Fluids | Any, except high salinity |
| Tool Position | Centralized or stand off |
| | |
| 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 |