

COMPLETE PRODUCTION LOGGING TOOL

A Complete Production Logging Tool in memory mode as well as SRO consists of all necessary modules and sensors to perform a comprehensive evaluation of oil producers and water injectors performance. The sensors of the tool are independently programmable through one common telemetry as per job objectives or could be added as a separate module if necessary. The tool could be combined with the North Side FIND as well as HRT to evaluate reservoir-related production profile, channeling behind casing, and determine thief production zones. The tool consists of GR, CCL, Temperature and Pressure Sensors along with Full-Bore Spinner (FBS), In-line Spinner (ILS), and Fluid Phases Evaluation modules.

Applications

- Complete PLT in oil producers and water injectors
- Production-injection profiles evaluation
- Performance evaluation of complex well completions with SSDs

Advantages

- All-In-One tool allows quick deployment and versatile application
- FBS is capable of extra low flowrates (from 5 bpd)
- A combination of FBS and ILS allows for continuous production profiling in pipes of different diameters within one logging run
- Higher data acquisition assurance by the combination of two different types of flowmeters
- Cost-effective compact solution for small service companies



COMPLETE PRODUCTION LOGGING TOOL



GR sensor	
Measurement range	0-250 μ R/hr
Resolution	2.5 CPS
CCL sensor	
Signal-to-noise ratio	>5kHz
Dynamic range	0-3,000 mV
Temperature sensor	
Accuracy	0.1°C
Resolution	0.001°C
Response time	0.25 sec
Sensor type	Platinum/Exposed
Pressure sensor	
Resolution	0.14 PSI (0.97 kPa)
Accuracy	0.1%
Sensor type	Sapphire
Fluid Phases Evaluation module	
Capacitance measurements	0-100%
Capacitance accuracy	\pm 0.1%
Resistivity measurement error	Less than 1 ohm-m
Full-Bore Spinner module	
Threshold	0.03 ft/min (0.6 m/hr)
Detectable flowrate range	5-7,550 bpd (1-1,200 m ³ /d)
In-Line Spinner module	
Threshold	0.1 ft/min (2 m/hr)
Detectable flowrate range	19-15,860 bpd (3-2,521 m ³ /d)
General Specifications	
Maximum operating pressure	14,500 PSI (100 MPa)
Maximum operating temperature	150°C (302°F)
Tool OD	1.50/1.65 in (38/42 mm)
Tool length	11.5 ft (3.5 m)
Tool weight	43.0 lbs (19.5 kg)
Connections	15/16 SR
Operational time in memory mode	Over 100 hours
H ₂ S resistance	6% standard (25% optional)
Surface read-out / Memory	Both