

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



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| 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 |