

SPINNERLESS PRODUCTION PROFILING

HIGH PRECISION TEMPERATURE TECHNOLOGY

High Precision Temperature technology is based on High Accuracy Temperature Tool with resolution of exposed to the environment Temperature Probe of not less than 0.001 C and response time not less than 0.25 sec.

HPT tool is designed to acquire wellbore/reservoir temperature with high resolution and accuracy at different well conditions (static, flowing, transient captured in the certain sequence) with subsequent interpretation of recorded HPT curves to decode related to the reservoir and wellbore production / injection processes/profiles, channelling behind casing/liner/tubing, thief zone production and well integrity issues.

Technology application:

- Production/injection profiling based on HPT readings - **spinnerless** well-reservoir performance evaluation technology.
- Leaks, channelings, thief production/injection quantification behind tubing/casing.

Technology advantages:

- No rate limitation due to threshold for production / injection measurement.
- Through tubing technology for complex completions where spinner can't work.
- True reservoir related production / injection profiling.

TOOL SPECIFICATIONS

Temp probe type	Platinum, Exposed
Precision	0.001C
Response time	0.25 sec
SC-SNL in toolstring	Yes
GR	Yes
CCL	Yes
Pressure	Yes
Phases evaluation module	Yes
Tool OD	1.65 in (42mm)
Tool length	2.6 m
Maximum Operating Temperature	150 C
Maximum Operating Pressure	14,500 PSI (100 MPa)
Connections	15/16 SR
Fully autonomous tool	Yes

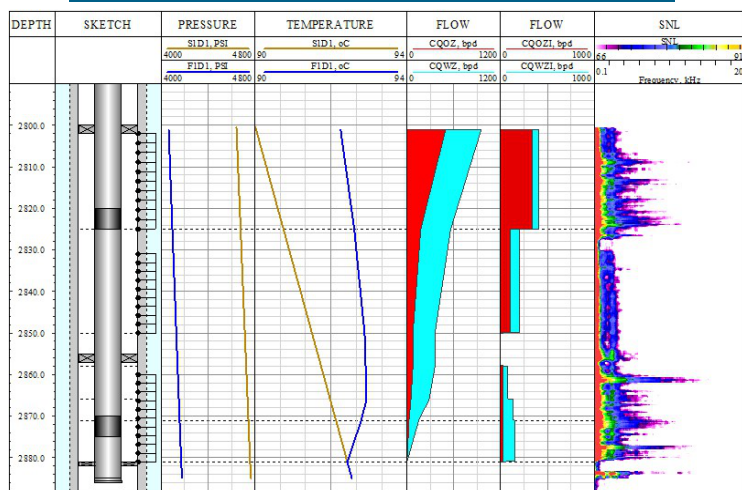


SNL

GR, CCL, P, CAP, RESIST

HPT

BEHIND TUBING RESERVOIR PERFORMANCE EVALUATION



RESERVOIR PERFORMANCE EVALUATION

