

Case Study – Vertechs TempLog

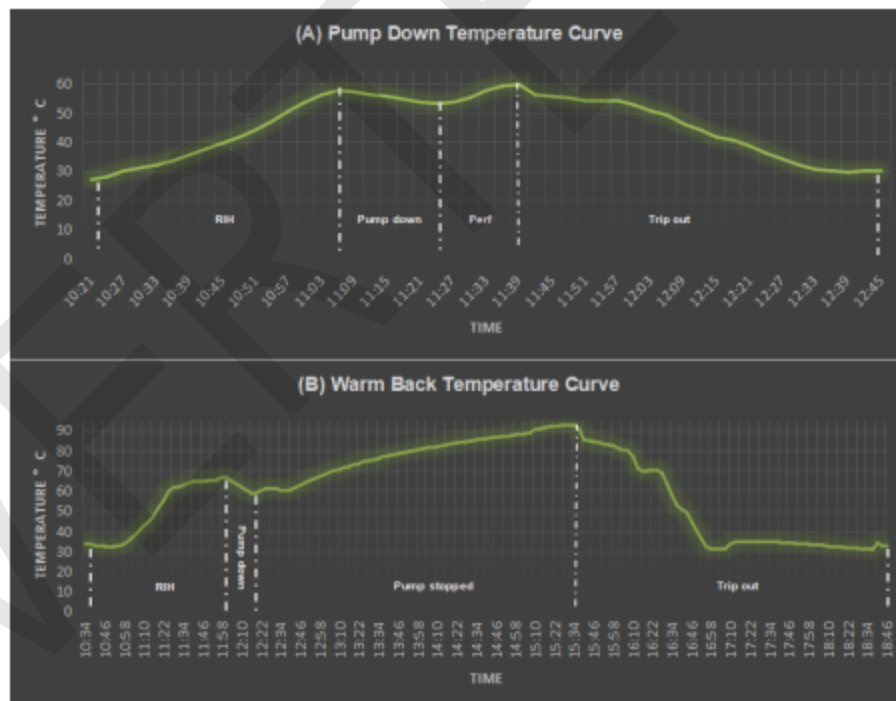


Understanding downhole dynamic temperature footprint during P&P runs

TempLog is a Vertechs proprietary technology which enable dynamic downhole temperature logging during P&P runs. The downhole temperature dynamics acquired on-site can be useful in many ways, such as dissolvable plugs optimization, temperature correlation and warm back analysis.

Chart (A) shows a typical pump down temperature dynamics, where the downhole temperature before pump down is been cooled by last stage frac (1st peak), and cooled further during pump down (1st decline). After the plug is set, perforation guns released heat during detonation (2nd peak), then tool string is lifted to the surface.

Chart (B) shows the warm back trend, after a P&P run was interrupted during pump down. Without further pumping, the formation gradually starts to warm back during the next 3 hours, before the tool string is retrieved to the surface.



Note: both charts (A & B) are field data collected from the same well with a static BHT 120°C (248°F).

Benefits & Results

- Pinpoint the most suitable dissolvable materials for your temperature application regions.
- Optimize dissolvability for dissolvable frac plugs.
- Save completion time and cost in the long run.