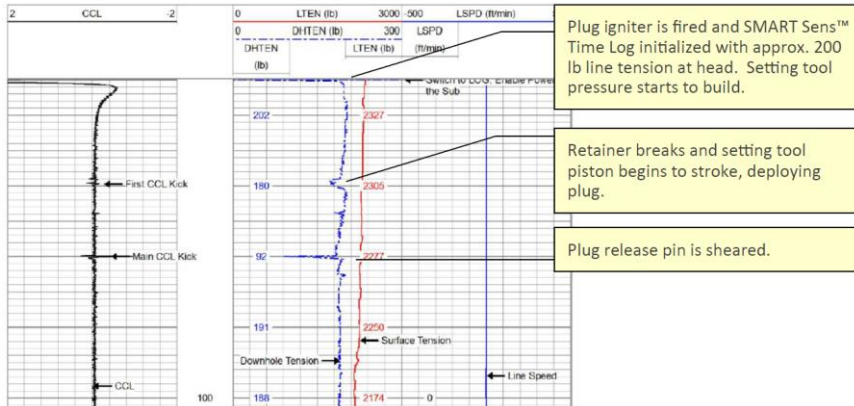


SMART Sens™ Delivers Plug Setting Assurance in Multi-Stage Completion Well

PRODUCTS/SERVICES

- SMART Sens real-time tension monitoring tool



SMART Sens plug setting log

Objectives

- Client planned a multi-stage “plug and perf” operation with more than 50 stages per well.
- There has been a history of plug setting problems in previous operations.
- Missing or faulty plugs have resulted in sub-optimal fracturing performance for the associated stage.
- Conventional surface and downhole measurements do not provide a reliable indicator of successful plug setting.

Our Approach

- Two SMART Sens real-time tension monitoring tools were deployed to the location.
- Experiments were conducted to verify that the system could deliver real time downhole tension log while the plug setting process is in operation.

Value to Customer

- 110 Plugs were set in two wells while being monitored in real time using the SMART Sens system.
- Downhole logs showed characteristic tension pulls when both the plug deployment pin and the plug release pin was sheared.
- Campaign successfully completed with zero tool maintenance, zero tool failures, and zero lost time.
- Service Company representative commented that SMART Sens was “as easy to operate as a CCL”.

