Case Study: PinPoint Re-Stimulation of an Open Hole Horizontal using Surgifrac



Location: UAE | Challenge: PinPoint Stimulation

Challenge

- A gas producer well in the UAE was completed with a 7,000 ft horizontal section, that required a stimulation treatment to restore production.
- Previously stimulated intervals have depleted over time, however bypassed pay remains accessible.
- The lateral is an open hole, making selective placement of stimulation intervals, as well as limited treatment volumes, critical to bypass the depleted zones.
- Upper completion casing has a maximum pressure limit of 4,700 psi.

Solution

- The target stimulation depths were selected based on petrophysical analysis of the logs performed on the open hole as well as consideration of image log to avoid intervals with considerable natural fractures.
- SurgiFrac would be selected as the stimulation method to enable targeted placement of treatments, utilizing dynamic diversion to provide pressure isolation.
- Primary treatment being pumped down the CT string would allow optimal stimulation without exceeding the surface casing pressure limits.

Results

- Operation was completed in less time than anticipated by the customer, completing 20 stages in 24 hours.
- Dynamic diversion enabled the placement of separate targeted stimulation intervals in an open hole completion, bypassing depleted zones.

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