

CHALLENGE

Client's conventional oil well production rates had decreased by more than 60% in only 8 months. Root cause analysis, and previous data collected through solids analysis and visual characterization, concluded that a carbonate type scale was forming. Since this was a low producer, a cost effective solution, in conjunction with a workover, was required to remediate the well. Identifying and utilizing an alternative cost effective technology that deals directly with suspected blocking mechanism (scale) in the wellbore and near-well reservoir.

HIGHLIGHTS

Onshore
Conventional oil
Vertically drilled
Perforated completion

LOCATION

Western Canada

CONDITIONS

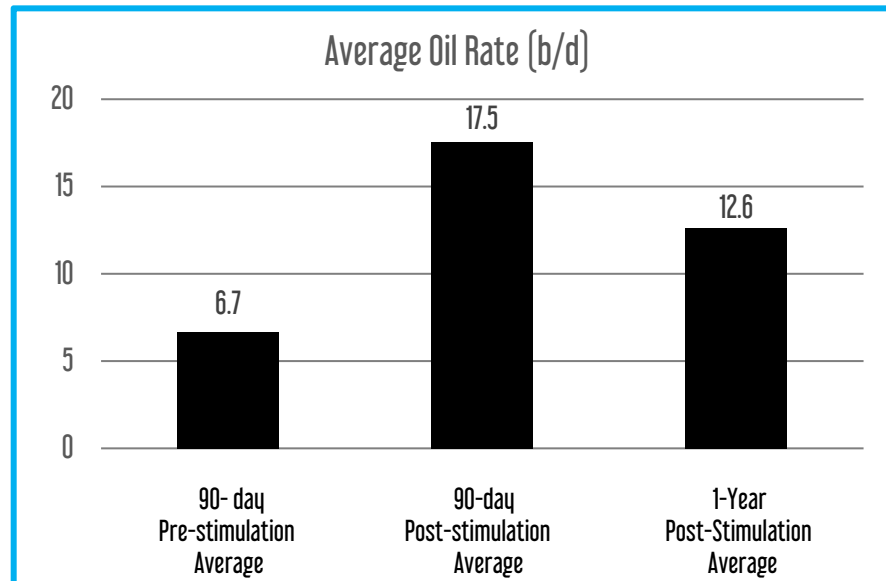
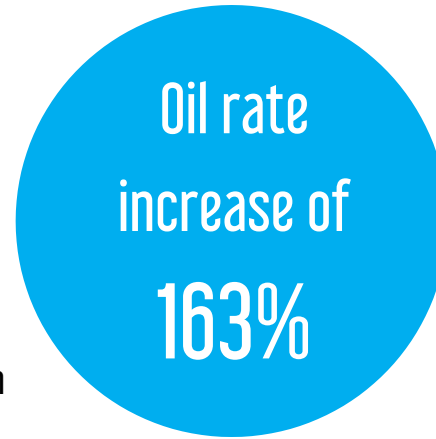
Gething Sandstone
Depth: 1500 m (4900 ft.)
Temperature: 35°C (95°F)



Scale Removal

OUTCOME

- Oil production more than doubled after the remediation
- Client data shows an average increase in oil production of more than 10 b/d over a 3-month period (163% increase)
- The data for the 1-year period post-stimulation showed a 90% increase in average production to 12.6 b/d



SOLUTION

Electro-hydraulic stimulation in cased hole to improve well inflow.

- In conjunction with a workover on the well to pull tubing and bottom hole pump assembly, WASP® was deployed.
- Completed Blue Spark WASP® (Wireline Applied Stimulation Pulsing) Treatment over the 3 m (10 ft.) perforated zone of interest – Gething Formation (sandstone).
- Ran production tubing and pump assembly in wellbore and began monitoring production rates, pressure and fluid levels.
- Immediate increase in production was observed.