CASE HISTORY

Unconventional Resources | Drilling & Completions | Reservoir Optimization | Well Intervention

Unconventional Resources

Location: Manitoba (Onshore)

Challenge:
To selectively perform sand fracturing in open hole lateral with jointed pipe, test & produce upon completion.

Solution:
Run PosiFrac Straddle System with dual inflatable/resettable packers. Set packers across 32 selected intervals and fracture in one run.

Well Description:
Land Well, 7” casing from surface to 800m (2,624ft), 6-1/4” open hole, 600m (1,968ft) true vertical depth, 2,100mKB (6,890ft)

Tools Used:
425-PW-02 4-1/4” x 5-1/16” (107x128.6mm) TAM "J" straight J with collet choke setting head, 2-7/8”(73mm) EUE workstring, 3/8” inflation line, 2-7/8” (73mm) Shut in valve & Drag Block (run in cased hole section), 4-1/4” x 5-1/16” (107x128.6mm) External Inflate packer, 2-7/8” (73mm)EUE x 17.5ft.(5.4m) Perforated Pup Joint

Procedure:
- Rig up BHA.
- Run in hole to desired depth in horizontal section.
- Drop setting ball and circulate to seat.
- Increase pressure in stages to set the packers.
- Over pull to confirm packers are set.
- Set down weight to lock in inflation pressure and expel the ball.
- Fracture each interval with 138-157 bbls (22-25m³) of gel fluid & 3-5 Tons of sand with average pumping pressure of 1,235Psi.(8.5MPa) maximum pumping pressure of 4,140Psi.(28.5MPa) and maximum rate of 5bbl/min (0.8m³/min).
- When finished, overpull to deflate the packers.
- Move to the next interval.

Results:
- Job was successful.

Value Created:
- By using PosiFrac Straddle technology, operator saved significant amount on capital-investment (~$CAD190,000) as opposed to running open hole completion system. In addition, client was able to bring the well on production immediately after clean up.