

CHALLENGE

The operator's disposal wells are completed in a very unconsolidated sand and have an ongoing problem with the sand generating large amounts of fill in the wellbore, often covering portions of the completed zone. Due to liner size restrictions, re-perforating and installing a screen is not an option. They will sometimes bail out the sand, but decided to try WASP®, which is more cost effective, and could clear blockages in the open portion of the completion.

HIGHLIGHTS

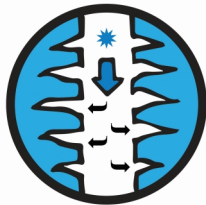
- SAGD steam blowdown disposal wells
- High pH water
- Vertically drilled
- Multiple perforated intervals
- Slotted pre-packed wire-wrapped screens

LOCATION

NE Alberta

CONDITIONS

Depth: 300 m (1,000 ft)
McMurray sandstone

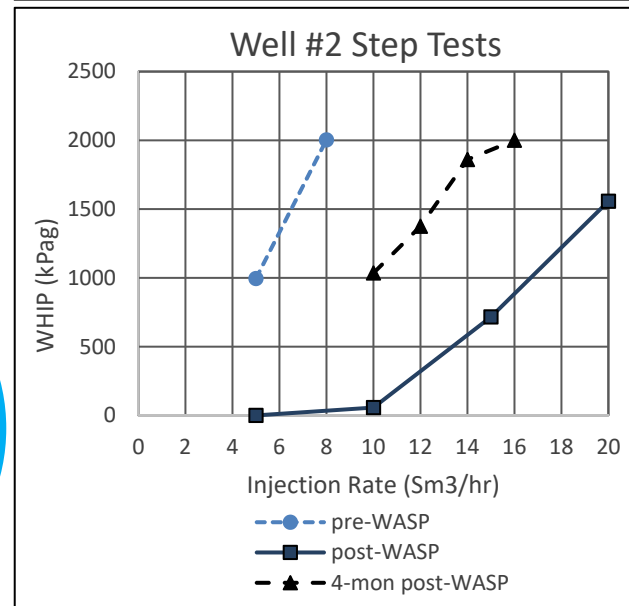
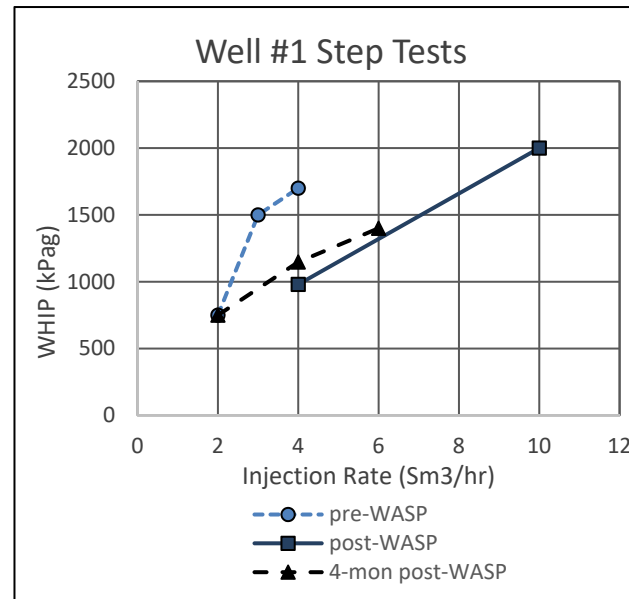


Injection Well

OUTCOME

- Both wells saw an immediate drop in injection pressure resulting in an increase in injection rate
- Step rate tests done immediately after the treatment and after several months confirmed lower pressures and higher injection rates than before the treatment were being maintained
- The comparison of total volume injected for 6 months pre and post treatment showed a 23% increase for Well #1 and a 179% increase for Well #2

Higher injection rates at lower WHIP



SOLUTION

Improve connectivity to the reservoir by clearing sand screen blockages using electro-hydraulic stimulation technology

- The operator chose two wells with poor injectivity to treat with WASP®
- Both wells were treated through tubing with the Blue Spark WASP® 212 (Wireline Applied Stimulation Pulsing) slim-hole tool on third-party E-Line
- The treated intervals were 15 m and 26 m, taking just 5 hours and 8 hours respectively of treatment time
- The wells were put back on injection and monitored. Several step rate tests were done to confirm injectivity rates

