

West Texas Infill Wells Achieve Oil Production Comparable to Offset Parent Well

BroadBand Shield service limits communication among infill and parent wells and helps defeat the trend for infill wells to underperform parent wells in the Wolfcamp Shale

To maximize the production potential of two infill wells, a West Texas operator used BroadBand Shield* fracture geometry control service, which constrained new fractures from extending into reservoir rock that a parent well had already depleted.

Avoid fracture-driven interference

An operator in West Texas planned to zipper frac two infill wells in the same section. The wells were adjacent to another operator's well, which was 1,000 ft away and had been producing for 6 months. The main objective was to minimize any unwanted fracture-driven interference and improve the production performance of the planned infill wells. Infill wells in the area tend to produce ~40% less than nearby parent wells because of fracture-driven interaction.

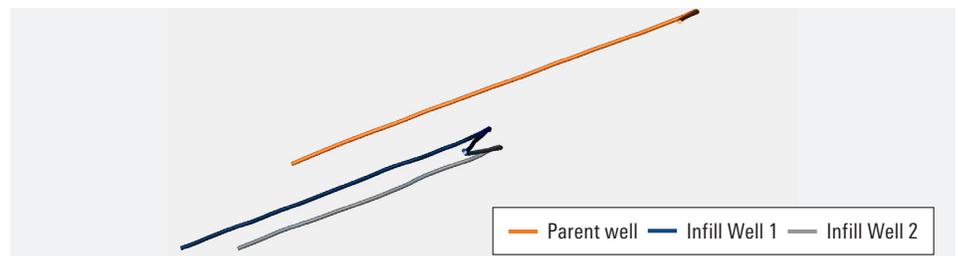
Optimize stimulation with technology

BroadBand Shield service constrains fracture growth with far-field diversion, minimizing the risk of communicating with neighboring wells or fracturing into undesirable or depleted zones. It is deployed with WellWatcher Stim* stimulation monitoring service to improve fracturing with nearly real-time confirmation of downhole events. Proprietary algorithms decode return pressure pulses during stimulation treatments to detect and verify critical events such as interstage diversion, interstage isolation, and fracture-driven interactions in offset wells.

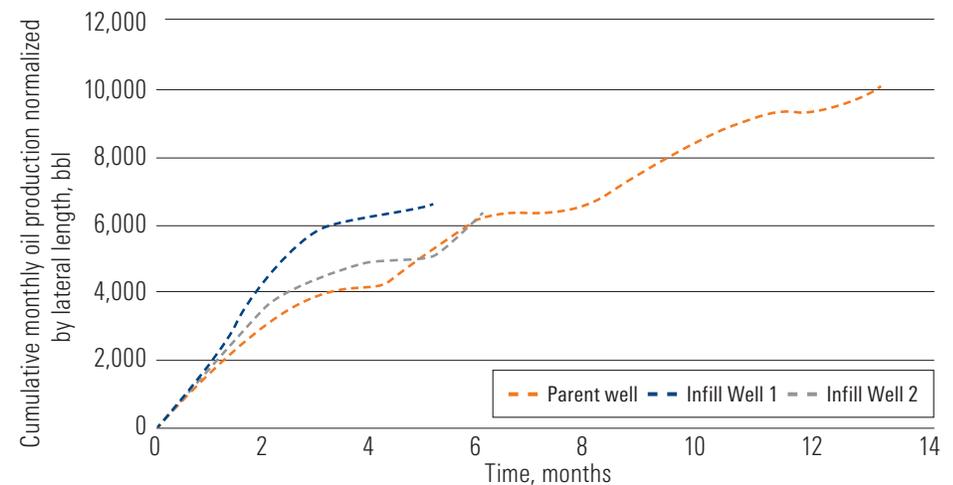
Outperform the parent wells

BroadBand Shield service was pumped on the last 20 stages of infill Well 1, where the lateral was directly parallel to the parent well. WellWatcher Stim service was used on infill Well 2 to monitor for fracture-driven interaction and provide real-time alerts of any communication.

After the stimulation, analysis of the production data indicated that normalized oil production from both infill wells outperformed that of the parent well. Infill Well 1, treated with the BroadBand Shield service, achieved ~10% higher production performance as compared with that of infill Well 2, farther away from the parent well. No detrimental production impact was observed in the parent well after the infill well stimulation treatments, indicating no negative fracture-driven interactions occurred.



A West Texas operator performed zipper fracs on two infill wells that were ~500 ft apart. The parent well was ~1,000 ft away and had been producing for 6 months.



Two West Texas infill wells stimulated using BroadBand Shield service outperformed a nearby parent well, defeating the Wolfcamp Shale trend for infill wells to underperform parent wells.

“We were very pleased to successfully mitigate negative fracture hits and improve infill well performance for spacing under 1,000 ft.”

VP Engineering

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