



URTeC: 3859461 Summary

A RAPID & ROBUST APPROACH FOR OPTIMIZING PRODUCTION IN THE NORTHERN DELAWARE BASIN

OVERVIEW

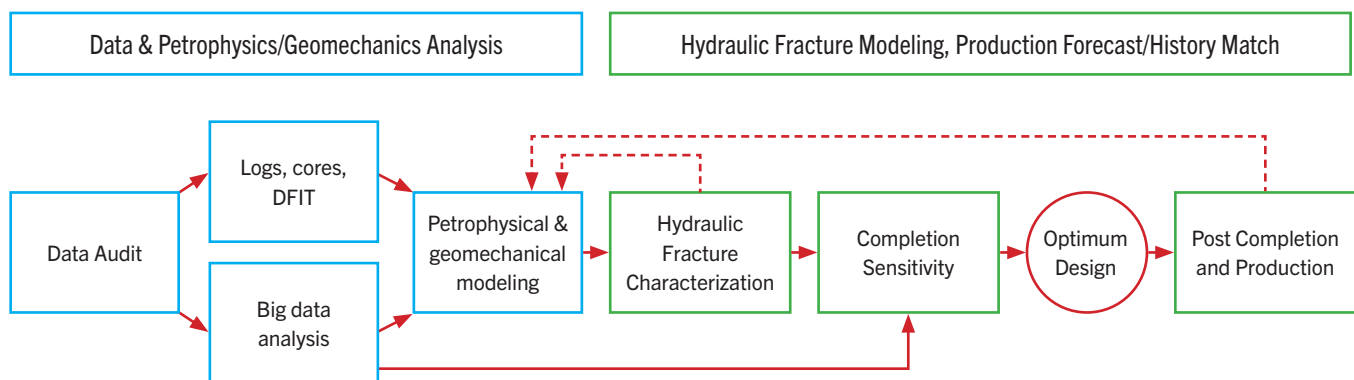
An operator drilling wells in the Delaware basin partnered with Liberty Energy to develop a small acreage position in Southeast New Mexico.

The operator had already drilled and completed two wells in the Bone Springs formation with disappointing results and was going to give the area one more chance with two additional laterals. They approached Liberty seeking ways to re-engineer their completions and improve production without drastically increasing their investment.



LIBERTY'S WORKFLOW SOLUTION

Liberty's technical team customized an open-ended, iterative workflow designed to provide hydraulic fracture models based on all available petrophysical, geomechanical, and well-site data. The workflow's key feature allowed the rapid integration of new information and the generation of optimal pumping schedules and completion geometry.

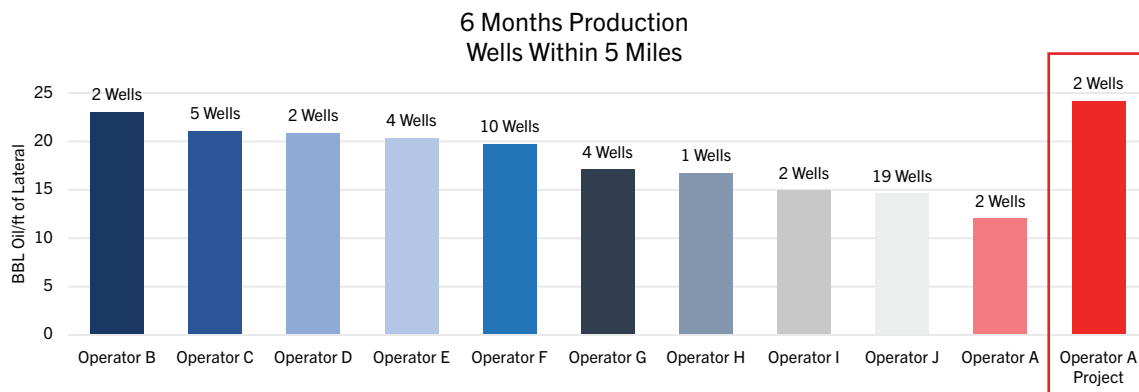


With continual feedback from operations, the client effectively determined the target horizons and completion variables for the highest likelihood of success. Two wells, landed in different formations, were then completed using the resulting designs and evaluated against peer wells in the field.



PRODUCTION RESULTS

The re-engineered completions in the new wells led to remarkable success. The six-month average production, adjusted for lateral length, was nearly twice that of their initial efforts and surpassed most neighboring competitor wells. Consequently, the operator decided to proceed with developing the acreage. The pumping data from these successful wells was incorporated into the optimization workflow, allowing for further refinement of reservoir characterization and completion procedures. Subsequently, four additional wells were subjected to new pump schedules, including a customized zipper sequence to ensure proper reservoir coverage for stacked laterals, resulting in outcomes that either met or exceeded the success of the previous two wells. With the improved economics of the acreage and a proven optimization process, the operator expanded their field development program.



Liberty's customizable data and modeling workflow is a proven solution for operators aiming to expand their development footprint and improve their well performance. Our workflow empowers operators, especially those with smaller acreage positions, to execute swiftly even with limited existing field data, optimizing costs and enabling continuous adaptation with newly collected information. This type of customized engineering solution is just one of the many ways Liberty helps add value to our client's assets.

READ THE COMPLETE PAPER

Please refer to paper
URTeC: 3859461
for more details.

