Onsite diagnostics helps net \$1.7 million savings — Eagle Ford

Reinforces value of step-down tests, analytical expertise in identifying and eliminating complications.

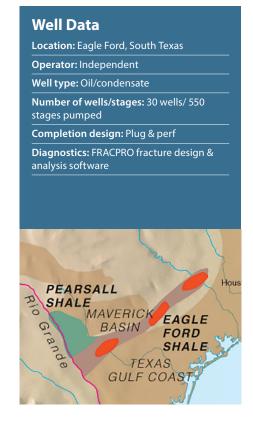
Eagle Ford, South Texas

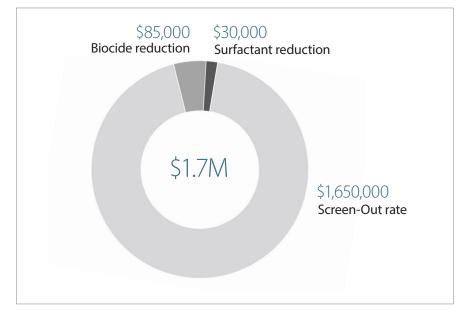
The challenge

The client's Eagle Ford holdings comprised a mixture of shallow, low-pressure and heavily faulted pay zones. Optimal stimulation and completion designs were critical to meeting the operator's aggressive production objectives.

The solution

To help the client meet its production goals and reduce costs, STRATAGEN® consultants provided ongoing diagnostic analysis on-site, complemented with office support aimed at optimizing completion programs. Wellsite diagnostics featured routine step-down tests performed on every stage, strengthened by the analytical expertise of STRATAGEN advisors. The ability to precisely interpret the ensuing data served as a precursor for looming placement complications, allowing for modifications of the treatment schedule, as well as opportunities to reduce chemical loading and associated costs. For example, the step down analysis on one well showed an average of 17 effective perforations open with 1,440 psi perforation friction and 370 near wellbore entry friction pressure. Thus, the STRATAGEN advisor modified the treatment schedule and flushed the well to avoid screen out.



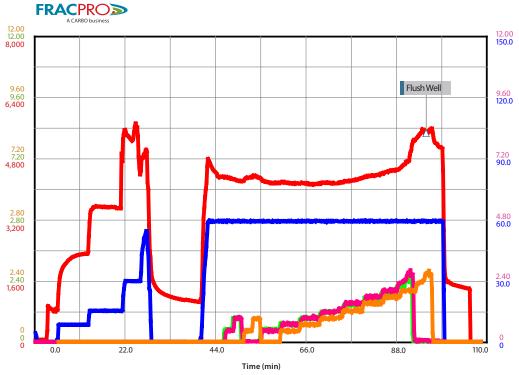


On-site diagnostics aimed at optimizing completion programs generated a \$1.7M savings for the client



The results

The value delivered by the STRATAGEN analysis was reflected in an aggregate 550 stages pumped with zero screen-outs, which when combined with a dramatic reduction in chemical loading, generated a \$1.7-million savings for the client. Avoiding the industry-average of a 2% screen-out rate saved an estimated \$1.65 million alone. In addition, the STRATAGEN advisor recommended a reduction in chemical usage.



Blender proppant concentration (ppg)
Pressure 1 (psi)

Average inline concentration (ppg)

Btm proppant concentration (ppg)

Slurry rate (bpm)

The step down analysis shown here disclosed to the STRATAGEN advisor that there was a pressure building trend and a number of perforations accepting fluid would create problems going forward. This resulted in a prompt decision by STRATAGEN advisors to change the treatment schedule and flush the well.

For more information on this case history contact:

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