



CASE STUDY

ACTIVE FRAC MANAGEMENT SAVINGS

By focusing on time, chemical usage, and effective proppant placement, IPT Well Solutions ("IPT") delivered \$230,000 in total savings for a small West Texas Independent for their operations. On these two Wolfcamp zipper fracs with 53 stages, IPT was able to achieve maximum performance without sacrificing safety, efficiency, or profitability.

THE CHALLENGE

When frac fleets are in high demand, operational efficiency is critical between all parties on the wellsite requiring a concerted focus on working together as one team, with the same goal.

Current stimulation company pricing models are configured to maximize the return on investment for their equipment through operational efficiency and minimizing NPT (non-productive time).

The operator also wants to minimize time on location while still stimulating the formation effectively to optimize production. Working together as a team the service companies and the company representatives must optimize the treatments through active management of fluid, proppant, and chemical usage without jeopardizing overall stimulation effectiveness.

**\$230,000
SAVINGS**

THE APPROACH

IPT's approach is to treat each well like it was their personal asset and financial responsibility and use that mentality as the driver for recommendations based on what is best for the client. IPT works to optimize each additive to maximize the benefit relative to the volume utilized in the stage that is being pumped down hole.

As an example, it is common to utilize a 2,000-gallon acid stage as a lead-in fluid to help clean up near-wellbore restrictions early in the treatment. If there is no change in the pressure response when the acid enters the formation that may be an indicator that the acid stage needs to be reevaluated and possibly eliminated. This can save the operator financially due to the lower chemical consumption.

The service company on location also needs to stress to their employees the need to maximize efficiency and communication while effectively placing the treatments. Good communication and a common goal allows each group to do their job and make the necessary real time adjustments to the treatment while still effectively placing the proppant.

THE SOLUTION

This pad was this operator's first attempt at using all 100 mesh in their completion program. The designed treatment schedule was configured to ensure at least one full wellbore volume of each proppant concentration was pumped before staging up to the next concentration.



This allows the company representatives (IPT) to evaluate the real time pressure response of the proppant hitting formation before committing to a higher concentration. Based on the treating character of the early stages it was apparent that proppant placement with the 100 mesh would not be problematic.

IPT identified an opportunity to modify the treatment schedule to reduce overall pump time along with fluid and chemical usage while still effectively placing the treatments. The new treatment schedule was effectively implemented and used for the remainder of the pad. In addition, active management of the HVFR (friction reducer) loading allowed additional savings to be realized.

These adjustments resulted in a substantial savings for the operator compared to the original service company quote due to the reduction in chemical usage and time savings. Through effective communication with the service companies and real time monitoring of treatment pressure response, time and cost saving adjustments to the pump schedule can quickly be made.

THE RESULTS

The service company was able to place all the treatments while minimizing downtime and placing the design proppant volume two days ahead of schedule. Overall chemical usage was also reduced due to the adjustment and pump schedule and IPT's active management of the chemical additives during the treatments. Based on the initial production response and the \$230,000 savings, the operator is satisfied with the current design and will continue to evaluate the production response to ensure optimizations are realized within their company.