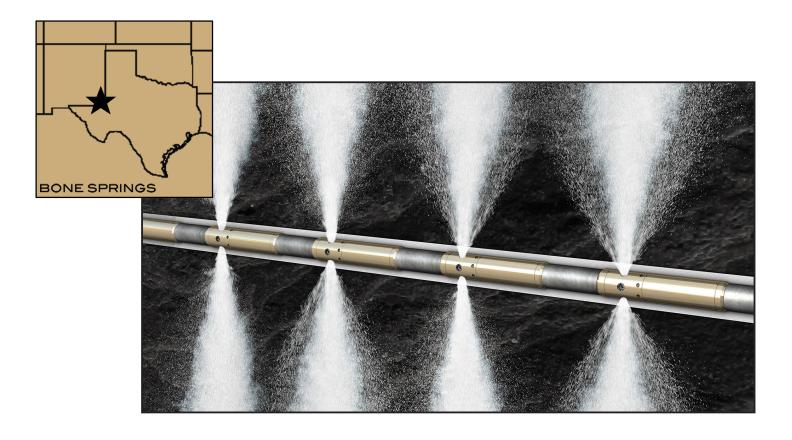
# CASE STUDY EXPANDABLE FRAC SYSTEM™

## CEMENTED SLEEVE FRAC SYSTEM SAVES OPERATOR **OVER 8 DAYS OF COMPLETION TIME**



### CHALLENGE

well in the Bone Springs play more efficiently and cost-effectively than the traditional plug-and-perf to achieve improved treatment method.

### SOLUTION

of the Peak Expandable Frac System™ in cemented wellbore coverage per stage in less time. Toe initiation planned with Trigger Toe Sub™.

### **RESULT**

Fracture-stimulate a cemented Custom design and deployment Fracturing operation completed as designed, under budget, and in 30 hours pump time. Operation performed was safer than the plug-and-perf method and reduced water and horsepower requirements.



## **CASE STUDY**

## EXPANDABLE FRAC SYSTEM™

#### REDUCE COMPLETION TIME

An operator in the Bone Springs play was using conventional plug-and-perf technique to fracture-stimulate wells with cemented liners. The operator was completing 10 stages per well in a 10 day period.

The goal was to reduce completion time and operational costs with a more efficient and cost-effective system.

RIGLESS ALTERNATIVE TO PLUG-AND-PERF

Peak Completions presented the operator with a rigless alternative to plug-and-perf – the Expandable Frac System™. This multistage system replicates perforation clusters in the frac design by utilizing multiple sleeves that are opened with a single ball. The frac job is performed quicker and with less equipment on-site as transition time between stages is eliminated.

The first stage is initiated hydraulically using the Trigger Toe Sub™ eliminating the time and cost associated with perforating guns. The Trigger Toe Sub™ is opened with an adjustable actuation pressure set per operator requirements. Next, a single ball for each stage is dropped from surface and travels through the wellbore to sequentially open several sleeves across each stage.

Each sleeve is designed with nozzles for limited-entry fracturing and can be matched to the operator's perf design. This feature provides the operator with the flexibility to design each stage for improved treatment coverage. Cemented applications allow up to 15 stages with 10 exit points per stage for a total of 150 exit points. In this case, the operator chose to deploy the Expandable Frac System™ configured with 10 stages and 3 sleeves per stage for a total of 30 exit points.

## 30 HOUR PUMP TIME RESULTS IN SUBSTANTIAL COST-SAVINGS

The Expandable Frac System™ fracturing system performed flawlessly and saved the operator 8 days of completion time. All of the stages were opened as designed and the well was fracture-stimulated in 30 hours pump time. No time was wasted during the transition between stages. Peak Completions effectively solved the operator's challenges with a highly reliable, efficient, and inexpensive solution. In addition, the operator was able to reduce equipment and manpower on location and improve the safety of their operations.

The operator has now switched to Peak's rigless alternative for the remainder of its completion projects.

