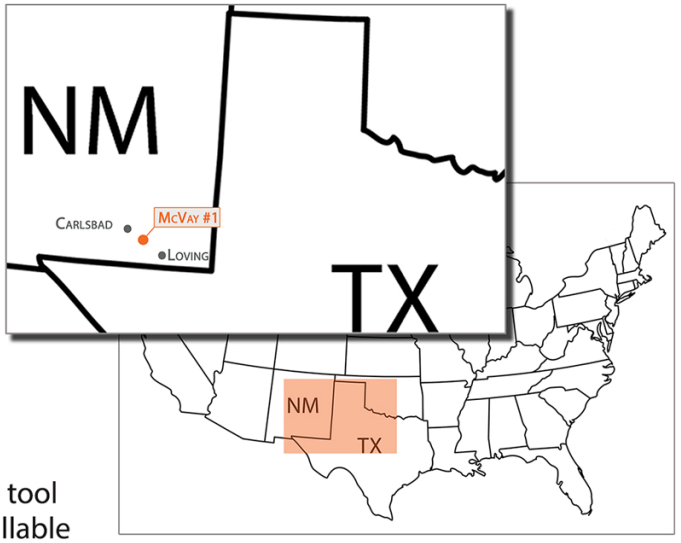
LONGHORN CASING TOOLS

AUTO SET External

Bopco LP

McVay #1
Bone Springs II Sand Field
Eddie Co, New Mexico



Longhorn was called for a short notice job in Texas. The client, Bopco LP had experienced issues running their 5.5" casing to bottom and pull casing after their first attempt. On the next run they wanted to use the 5.5" Auto-Set External with a 5.5" bronze Rhino on their next attempt. The Auto-Set External series of casing landing tools are designed as a drillable version of the Auto-Set. By moving the high tensile steel spring to the external of the lower assembly, and replacing the tool internals with industrial aluminum componenets, the tool is PDC drillable with the mechanical reset of the Auto-Set series. The tool was dispatched from the warehouse in Canada on January 30th and arrived on location in Texas on the morning of February 1st. The tool was made up and run inhole at 4:30AM on February 2nd.

The well had a TVD of 3047 m (9,998 ft), TMD of 5442 m (17,853 ft), and the production casing interval started at 3223.9 m (10,577 ft). Issues expected were mainly sand, bridges and washouts. Over the course of the run, the tool was worked through bridges and tight spots several times, at 3669.8m (12,040 ft), 4517 m (14,820 ft) and 4754.9m (15,600 ft). Each time, the tool worked through the obstruction simply by reciprocating the string. At 11:30 PM, the casing reached TD at 5,441 m (17,853 ft). The total run time was 19 hrs.

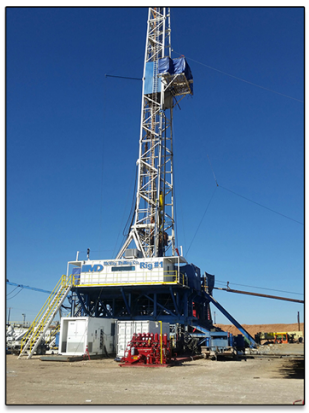
The tool run was considered by the client to be a huge success. The Bopco representitives were very pleased with the results, not only getting the casing to bottom, but achieving it in such an efficient and timely manner.

Run Summary

Client:	Bopco LP
Tool:	5.5" Auto-set External
Bit:	5.5" Bronze Rhino
Target:	5.5" Production Casing
Hole Size:	200mm / 7 7/8"
TVD:	3047 m / 9,998 ft
TMD:	5442 m/ 17,853 ft
Total Run Time:	19 Hours

Noteworthy

The tool worked through bridges and tight spots several times at 3669.8 m (12,040 ft), 4517m (14,820 ft) and 4754.9m (15,600 ft). Each time the obstructions were cleared by simply reciprocating the casing string.



Left: photo of McVay #1, **Center:** Flattened casing from previous run **Right:** photo of Bopco lease