

Workover Procedure

McCallister State #7

API#: 30-025-20115-0000

660' fsl & 1780' fwl

Section 25, T17S & R34E

Vacuum Field

Lea County, New Mexico

AFE No.: 307999

Date: May 10, 1999

AFE Cost:

WI: 100%. NRI: 87.5%

AFE Days: 20

Purpose: Add Blinebry and Abandon Abo, Wolfcamp, and Penn

Well Status:	Pumping Oil Well:	Abo	(8,385' to 9,252')
		Wolfcamp	(9,452' to 9,905')
		Penn	(10,000' to 10,158')

Elevation: TD: 12,125' PBD: 10,178' KB: 4017' GL: 4005'

Squeeze Holes: 5190 to 5122'; 5346' to 5377'; 7478' to 7486'; 8888'; 9400'; 10000

Surface Casing: 16" 65# H-40 Set at 371'. Cemented with 475 sx Trinity Reg. Circulated to surface.

Intermediate: 10 3/4" 40.5# J-55 (Surface to 2527'), 45.5# J-55 (2527' to 3742'), 51# J-55 (3742' to 5006'). Cemented w/2750 sx. Trinity Lite & 330 sx Trinity Reg. (Circulated)

Production: 7" 23# N-80 (Surface to 5816'), 26# N-80 (5816' to 8090'), 29# N-80 (8090' to 10606), 32# N-80 (10606' to 12118'). Cemented in three stages with DV-tools at 10,441' and 7,486'. 1st stage cemented with 495 sx of Trinity Inferno, Contaminated cement circ. off tool. 2nd stage cemented with 625 sx of Trinity Inferno, Good cement circ. off tool. 3rd Stage cemented with 400 sx of Trinity Inferno, TOC at 4,405' from temp survey.

***** Well history indicates that there is very little primary cement behind the pipe from \pm 6,000' to \pm 8,700'

Casing:	<u>Grade & Wt.</u>	<u>I.D.</u>	<u>Drift I.D.</u>	<u>Burst</u>	<u>Collapse</u>
	N-80 23#	6.366"	6.241"	6,340 psi	3,830 psi
	N-80 26#	6.276"	6.151"	7,240 psi	5,410 psi
	N-80 29#	6.184"	6.059"	8,160 psi	7,020 psi
	N-80 32#	6.094"	5.969"	9,060 psi	8,600 psi

Tubing:	<u>Size & Wt.</u>	<u>I.D.</u>	<u>Drift I.D.</u>	<u>Burst</u>	<u>Collapse</u>
	2 7/8" 6.5#	2.441"	2.347"	10,570 psi	11,160 psi
	3 1/2" 9.3#	2.992"	2.867"	10,160 psi	10,530 psi

Rods:	<u>Size</u>	<u>Type</u>	<u>Number</u>	<u>Length</u>
	1"	FG	66	2475'
	3/4"	Steel	306	7650'

Wellhead: Unknown

Pressure Info: Estimated. Blinebry Pressure ± 500 psi (2.2 ppq)

Safety: Run killstring when needed, Install H2S monitoring alarm and rescue equipment.