

03-28-91 Finished running into hole with tubing equipped with a squeeze stringer. Spotted 250 gal of 15% MCA acid inside of tubing from 1962 feet to 3500 feet. Broke down squeeze perforations with acid. Performed a precautionary squeeze of upper Grayburg interval behind 7" OD casing with a net 102 sx of API Class-C cement into formation and 5 sx of cement inside of 5-1/2" OD casing below squeeze retainer. Pulled stringer out of retainer and circulated 20 sx of excess cement out of tubing. Pulled out of hole with tubing. Rigged up Capitan and perforated well with a 4" OD select fire casing gun with a total of 26 shots (0.43" hole - 23 grams/shot) with one shot each at:

3233	3306	3340	3363	3424	3465
3254	3314	3343	3365	3436	
3275	3321	3351	3382	3439	
3281	3330	3353	3397	3455	
3300	3338	3360	3405	3462	

Rigged down Capitan and ran into hole with 2-3/8" OD, 4.7 lb/ft, J-55 EUE tubing and landed tubing at 3112 feet (94 jts + 1.1' SN + 18' MA). Loaded hole with 230 gals of 2% KCl water and then acidized well with an additional 6500 gals of 15% MCA acid at an average rate of 5.7 BPM and average pressure of 2800 psi. Maximum treating rate was 6.5 BPM and minimum treating rate was 3.5 BPM. Maximum treating pressure was 3300 psi. Well balled off after 29 balls had been pumped. Began swabbing well. Shutdown for night.

03-29-91 Resumed swabbing well to pit.

03-30-91 Unbutton wellhead and lowered bottom of 2-3/8" OD, 4.7 lb/ft, J-55 EUE tubing to 3550 feet G.L.

Ran 1-1/4" insert pump on a 3/4" API Class-K rod string

16' X 1-1/4" polish rod	-	16.0'
1 - 6' X 3/4" rod sub	-	6.0'
3 - 4' X 3/4" rod subs	-	12.0'
139 - 3/4" API Class-K rods	-	3475.0'
1 - 2-3/8" X 1-1/4" X 12' RHAC Pump	-	12.0'
TOTAL	-	3521.0'

Placed well to pumping at 9-1/2 X 64 X 1-1/4.

04-10-91 Rigged up Halliburton and fraced well as follows down casing-tubing annulus with 228,738 gal. of gelled water and CO2 and 561, 449# of 20/40, 12/20 and 8/16 frac sand. Max. treating pressure 2942# and avg. treating pressure 2468#. Avg. rate 35.9 BPM. ISIP 1625# and 5 min. SIP 1568#. Finished pumping frac at 12:40 PM MDT. Flow well up to pit.

04-11-91 Rigged up Pool foam circulating unit and NOWSCO nitrogen truck. Lowered tubing and tagged top of sand fill at 3381 feet (103 rd jt). Cleaned out well to a PBD of 3602 feet G.L. Landed 2-3/8" OD, 4.7 lb/ft, J-66, EUE tubing at 3540 feet and buttoned up wellhead. Ran 2-3/8" X 1-1/4 X 12' RHAC insert pump on a 3/4 inch rod API Class K rod string. Made up pumping-flowing wellhead assembly. Placed well to pumping at 9-1/2 X 64 X 1-1/4.

04-16-91 Pulled rods and pump. Killed tubing and installed check valve. Lowered tubing and found an additional 31 feet of sand fill (total sand fill between 4-11-91 and 4-15-91 was 83 feet). Using a foam drilling unit and compressed nitrogen. Cleaned well out to a PBD of 3602 feet. Lowered tubing to 3540 feet (107 jts @ 32.9 ft/jt + 1.1' SN + 18' MA) and buttoned up wellhead. After hanging well on, placed well to pumping at 9-1/2 X 64 X 1-1/4. Commenced performing potential test. Well tested at the rate of 320 MCFPD on a 16/64 choke with a FCP - 263 psi.