

2-27-75 Testing: orifice-2" w/flange taps; Meter run 4". Differential range-100" water column; Static range 1500 PSIG.

| | choke | FTP | Duration | Diff | Static | Rate | Oil Prod |
|-----------|-------|------|----------|------|--------|------|----------|
| open flow | 32/64 | 1200 | 135" | 13 | 720 | 2474 | 104.4 BO |
| Point 1 | 16/64 | 1500 | 20" | 3.5 | 570 | 1080 | no gauge |
| Point 2 | 18/64 | 1540 | 20" | 6 | 750 | 1715 | " " |
| Point 3 | 20/64 | 1500 | 25" | 7 | 510 | 1528 | 15 08 |
| Point 4 | 24/64 | 1425 | 2-3" | 12.5 | 510 | 2042 | no gauge |

Ran out of tank room on last point. Produced 232 MCFG + 104.40 BO. Calculated GOR to be 2222:1.

1-30-75 Day 90. Flowed overnight on $\frac{1}{2}$ " choke thru separator. Flowed 9.86 BC + 1.16 BW in 17 hrs. FTP 550# @ 9 p.m. FARO 1902 MCFGPD. FTP 550# @ midnight. FARO 1748 MCFGPD. FTP 550# @ 8 a.m. FARO 1220 MCFGPD. Ran BHP bomb to 11,141' @ 8:30 & SI for 24 hr press. buildup.

1-31-75 Day 91. Depth 11,506. SITP @ 7:30 a.m. was 1750#. CP 275#. Retrieved 24 hr BHP bomb. Had 2130# @ 11,141'. Flowing BHP was 994# @ beginning of test w/500# corresponding surface pressure. Ran wireline tools and released tubing release. Dropped perf. gun to bottom. Perf. 11,452-11,458' w/1-11/16" ceramic jets, 2SPF. (12 holes). Surface pressure increased from 1750# to 1800# in 1 hr. Opened to pit on $\frac{3}{4}$ " choke. Press. decreased to 150# in 30 minutes. Had wtr to surf. in 20 minutes. Flow $2\frac{1}{2}$ hrs on $\frac{3}{4}$ " choke @ 150# FTP. Had intermittent slugs of water & mist. Vol 2350 MCFGPD. Treated w/1500 gal. 7 $\frac{1}{2}$ % MS acid + 65,750 SCFN w/22-7/8" balls. Flushed w/31 $\frac{1}{2}$ bbls 2% KCL water. Total load 67 $\frac{1}{2}$ bbls. Press. broke from 6000 to 5600 w/acid on lower perfs for 6 minutes. Upper perfs balled off. 3.7 BPM ave. injection rate. Max tr press 6000# & 5600# on flush. ISDP 4300'. 10 minute press 2250#. Opened to pits in 35 minutes. Had 1400# on tubing. Flowed water & nitrogen for 45 minutes. Well almost died. Left well flowing overnight.

2-1-75 Day 92. FTP @ 7:30 a.m. 90# on $\frac{3}{4}$ " ck. Flowing acid water. No gas. Switched thru stack pack @ 10:15 & F $2\frac{1}{2}$ hrs on $\frac{1}{2}$ " ck. FTP 110# making est. vol. of 1000 MCFGPD. SI for 15 min. Pressure incr. to 500# on $\frac{1}{2}$ " ck @ 1 p.m. Faro 687 MCFGPD. Left flowing overnight for test.

2-2-75 Day 93. Flowed well 15 hrs on $\frac{1}{2}$ " ck. Gas volume decreased from 679,644 CFPD to 485,460 CFPD. Killed well w/10# brine. Unseated packer. Pulled tbg & pkr. Started running Halliburton easy-drill cement retainer. Lacke 50 stds getting in hole w/same. SD for night.

2-3-75 Day 94. SD for Sunday.

2-4-75 Day 95. Finished running tbg. Set Howco cement retainer @ 11,080'. Cemented perfs 11,142-11,150' & 11,452-11,458' w/50 sax Class "H" cement. Squeezed @ 5000#. Pulled out of retainer & reversed tbg clean (less than 1 bbl). Pulled 126 jts tbg & SD for night.

2-5-75 Day 96. Finished POH w/tbg. Ran cement bond log. TOC on 3rd stage @ 4696' & bottom of cement @ 5400'. ECP @ 5400'. TOC on 2nd stage @ 8280' & bottom of cement @ 9835'. TOC on 1st stage @ 10,300' to TOC retainer. Had good bond through Wolfcamp interval. Will perforate Wolfcamp today.

- 2-6-75 Day 97. Filled hole w/10# brine. Perf 9056-9084' (28') opp. Wolfcamp lime w/4" csg gun 2 JSPF (56 holes). WIH w/Cuiberson 5½" Uni VI pkr, Cuiberson on & off tool & N-80 Tbg. Stripped off BOP & set pkr @ 9027', on & off tool @ 9015'. Landed tbg on bonnet & flanged up well head. Made 6 runs w/swab. Rec 20 bbls brine. Well started unloading brine wtr, then turned to gas & condensate. Put on 14/64" ck w/FTP 300#. Flowed for 15 min. & SI for high winds. Will turn to separator this A.M.
- 2-7-75 Day 98. PBTD 11,080'. 11 hr SITP 2050#. Opened well on ½" choke through separator for 2 hrs. Made 30 bbls condensate w/no water. FARGO 2431 MCFGPD w/FTP of 500#. Prep to take 4 point test & run BHP.
- 2-8-75 Day 99. SD. WO 4 point test.
- 2-9-75 Day 100. Running 4 point test.
- 2-10-75 Day 101. Running BHP buildup.
- 2-11-75 Day 102. Running BHP buildup.
- 2-12-75 Day 103. SI. WO results of 4 point test
- 2-13-75 Day 104. SI. WO results of 4 point test.
- 2-21-75 Prep to acidize w/1500 gallons mud acid w/ball sealers & nitrogen.
- 2-22-75 Treated W.C. perfs 9056-84' w/5⁰⁰⁰ CF nitrogen pad, 1500 gal 15% MA w/1000 CFN₂/ bbl. Flushed w/21 bbls KCL wtr w/1000 CFN₂/bbl and 100 ball sealers in 3 stages spaced 9 bbls apart. Total load 57 bbls SITP @ start of job 2050#. Pressure increased to 5400#. Broke to 4900# when acid got in perfs. Got 100# increase w/last ball sealer on perfs. Average IR 4.9 BPM ISDP 3300#. 7" SIP 2500#. Started open flowing to pit on ¾" choke. Had oil & gas to surface in 10". Flowed an additional 10". Reduced choke to 3/8". Stabilized @ 1140# in 10" Flowed @ 1140# for 10" ARO 3920 MCFGPD. Closed well in. SITP 1700# Prep to acidize w/10,000 gal 20% retarded acid.
- 2-23-75 SITP 2050#. Treated perfs 9056-84'. w/10,000 cubic feet of N₂ pad and 10,000 gal of 20% retarded acid + 1000 cu ft of N₂ per bbl. Total load 264 bbls. Pressure broke from 8300# to 8000# and then increased to 8200# then broke back to 6800# and then increased back to 8600#. Average IR 9.5 BPM. SITP 2200#. 15" SIP 2400#. 1 hr SIP 2250#. Opened to pit on ¾" choke. Had gas & condensate to surface in 10". Flowed 20" on ¾" choke. Reduced choke to ½". Pressure stabilized after 50" @ 1075#. Flowed additional 45" on ½" choke w/1075#. Indicated rate 6,812 MCFGPD
- 2-24-75 Well is SI.
- 2-25 & 26-75 Well is Shutin.