McClellan Oil Corporation Leeman Fed. #4 Sec. 12-T9S-R25E 660' FSL & 2310' FWL Chaves County



- 3/02/87: Moving in WEK Rig #1.
- 3/04/87: Drilling at 743'. Spudded 3/3/87 at 2:30 pm with 12½" bit.
- 3/05/87: Waiting on cement. Drilled to 958'. Set 958' of 8-5/8" 24 lb. casing. Cemented with 250 sx Pace Setter Lite with additives and 250 sx Class "C" with 2% CACL2. Circulated 95 sx. Plug down at 11:30 pm.
- 3/06/87: Drilling at 1586' in shale and lime. MW 10.
- 3/07/87: Drilling at 2080'. MW 9.6
- 3/08/87: Drilling at 2740' in shale and lime.
- 3/09/87: Drilling at 3810'. Mudding up.
- 3/10/87: Drilling at 4152'. MW 9.9, Vis 35, WL 19, 0il 4%.
- 3/11/87: TD at 4475'. Present operation circulating hole. MW 9.9, Vis 45, WL 11. Making short trip and pulling out of hole for log. Rig up Schlumberger. Log well with CDL-FDC-DLL. Go in hole with drill pipe & collars. Circulate hole 1½ hours. Pull out of hole & prep to run casing.
- 3/12/87: Ran 4491' of 4½" 9.5 lb. casing. Cemented using Halliburton, 220 sx 65/35 Poz, 6 lb. salt, .3% Hallad 4, .3% CFR-3. Displaced with 2% KCL. Pumped 500 gals. Flocheck 21, 500 gals. mud flush ahead of cement. Plug down at 4:30 am. 1" between 4½" & 8-5/8" casing with 150 sx Halliburton Lite 2% CACL. Set slips. Released rig.

No further reports until completion is attempted.

- 3/15/87: Rigged up pulling unit.
- 3/16/87: Rigged up Schlumberger and ran Bond Log. Log showed 98% bond. Perf well at $4370,71,71\frac{1}{2},72,73,74,74\frac{1}{2},75,76$; .35/9 holes. Trip in hole to 4351' with 2-3/8" tubing & packer. SION
- 3/17/87: Ran 1 joint to 4383'. Spotted 1 bbl. 10% NE acid. Pulled packer to 4321'. Broke down perfs at 1500 psi. Pumped 1 bbl. & shut down. ISDIP 50, 1 min 0. Opened bypass, spotted acid & balls to end of tubing. Closed bypass. Acidized well at 1400 psi at 3 BPM. Balled off with 11 balls on to 3000 psi. Released balls & finished acid job. ISIP 520, 4 min 0. Rig up swab & swab acid load back. Good show of gas. Pulled packer loose, ran through perfs. Pull tubing and packer to 4320' & swabbed casing fluid off. Prep to frac in the morning. SION
- 3/18/87: Tubing 220 psi, casing 220-psi. All of psi would burn. Fluid level was 200' from seat nipple. Pulled tubing & packer out of hole. Frac down 4½" casing using 2000 gals. PrePad, 18900 gals. Purgel 30, 5000 gals. CO₂, 250 sx 20/40 sand. Average rate 16-BPM, 13 BPM fluid, 3 BPM CO₂. Average psi - 1920. ISIP - 1370 psi, 15 min. -1070 psi. Shut well in for 4 hours. Flow well at 2:30 pm. After 4 hours - SITP-600 psi. Opened to pit on 3/8" choke. Left open overnight.
- 3/19/87: FTP 10 psi at 8:00 am. Pulled frac head off well. Ran tubing & R-4 packer in hole. Tag frac sand at 3650'. Washed approximately 120' of frac sand. Pulled tubing to 4352' & set packer. Flanged up well head. Swab the rest of day - good show of gas at end of day. SION
- 3/20/87: TP 250 psi. Well kicked off after 1 swab. Flowed 10 psi with good gas and flowing back frac fluid.

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- 3/21/87: Tubing psi 810. Flowed gas & large amount of frac water till noon. Swabbing 2000' of gas cut fluid. SION
- 3/22/87: Tubing psi 830. Flowed gas & small amount of frac water. Made 2 swab runs, well kicked off flowing 20 lbs. on 3/4" choke. Left open overnight on a 32/64 choke.
- 3/23/87: Tubing psi 43. Very slight show of water. Shut well in for build up test. Will run four point in 3 or 4 days.
- 3/24/87: SITP 900 psi after 24 hours.
- 3/25/87: SITP 925.
- 3/26/87: SITP 940.
- 3/27/87: SITP 945. Opened up on $\frac{1}{2}$ " choke to run 24 hour production test.
- 3/28/87: Flowing 40 psi on $\frac{1}{2}$ " choke with heavy mist and $\frac{1}{2}$ " stream of water.
- 3/29/87: Flowing 25 psi on $\frac{1}{2}$ " choke with heavy mist.
- 3/30/87: Flowing 25 psi on $\frac{1}{2}$ " choke with heavy mist. Shut in.
- 4/5/87: SITP 900 psi. Casing open. Blew down to pit on $\frac{1}{2}$ " choke. Rigged up pulling unit.
- 4/6/87: Flowing 40 psi on ½" choke. Killed well and pull tubing & R-4 packer. Went in hole with overshot and junk basket. Washed sand to 4422'. Ran Schlumberger and perfed 4374' to 4380 with 4 JSPF; 28 holes. Rigged up Howco and fraced with 45,000 gals. gelled 2% KCL water with 40,000 lbs 20-40 and 25,000 lbs 12-20 sand at average rate of 50 BPM and average WHTP of 3200 psi. ISIP - 2500 psi, 15 minutes - 1670. Shut in overnight.
- 4/7/87: SIP less than 100 psi. Bled off, ran in hole with tubing. Washed 85' of sand to 4400'. Pulled tubing to 4360'. Swab tubing. Swabbed a total of 125 bbls. No gas.
- 4/8/87: TP 10, CP 10. Swabbing back frac load. Swabbed 135 bbls load water. Fluid level dropped to within 500' from S.N. SI
- 4/9/87: SITP & SICP 15. First swab fluid level at 2500' from surface with slight gas show. Swabbing 110 bbls frac fluid. Tubing psi - 15, fluid level. Casing psi - 15. Slight show of gas.
- 4/10/87: Swabbing 98 bbls frac load. Checked perfs for sand fill and perfs were clear.
- 4/11/87: TP 0, CP 180. Swabbed 35 bbls fluid. Left open to pit.
- 4/12/87: TP 0, CP 500. Swabbed & flowed 40 bbls fluid. Left open to pit.
- 4/13/87: CP 600. Flowing after 2 swab runs. Swabbed dry after 3 hours swabbing. Left open to pit. Flowing small 2' flare.
- 4/14/87: Flowing very samll flare; 200 psi on casing. Ran 1 swab, pulled 1300' scattered fluid. Left open unloading slight mist with very little gas. Rigged down swab unit. Will shut in & flow water off daily.
- 4/15/87: SITP 640, SICP 710. Flowed well to pit on 28/64" choke. Unloaded large amounts of water. SI
- 4/24/87: TP 830, CP 830. Open up well on ½" choke. Flowed 5-7 bbls of water in 3 minutes. After flowing well for 11 hours it had 10 psi on tubing & 105 psi on casing with a fine mist. Well making 1 gal. every 2 minutes.
- 4/27/87: TP 540, CP 860. SI since Friday afternoon. Opened up on ½" choke. TP dropped to 50 real quick. Lots of fluid. Went back up to 400 lbs. Still unloading fluid. In 15 minutes blew down to 120 TP, 500 CP.

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- 4/30/87: 700 psi tubing, 800 casing. Blew down, unloaded 10-15 bbls load water. Left open 24 hours. Well was flowing small flare with 160 psi on casing. Shut-in.
- 5/1/87: SITP 580, SICP 800 after 12 hours.
- 5/3/87: SITP 840, SICP 840. Blew down, unloaded 5 bbls fluid. SI
- 5/8/87: TP 800, CP 840. Blew down 45 minutes on $\frac{1}{2}$ " choke. Final pressure 30-TP, 180-CP. Unload 3 bbls water. Drop 2 soap sticks & SI.
- 5/26/87: Rigged up pulling unit. Blew well down. Pulled tubing and ran RTTS in hole to 4280'. Acidized with 3000 gals. 15% gelled acid at 6 BPM at 3500 psi. Good break with 500 gals. acid in hole. Tagged acid with R-A material. ISIP - 1140. Ran tracer survey which showed treatment to be in zone. Started swabbing back load.
- 5/27/87: SITP 540. FL 500' from surface scattered. Making est. 1 bbl fluid each swab run. Making 1 swab run/hour. Well flows 6' flare after each swab run & decreases to 3' flare in 15-20 minutes. 55 BFR - 30 BPTR. Left open to pit overnight.
- 5/28/87: Flowing to pit this morning with a 1" stream of water approximately 20 psi on 3/4" choke (estimated pressure guage not accurate). Ran 1 swab with fluid level approximately 100' from S.N. Lowered packer 1 joint to 4310'. Rigged down pulling unit. Left well flowing to pit on 3/4" choke.
- 5/30/87: FTP 5 psi, CP 0, packer in hole. Shut in. Flowing very small stream of water.
- 6/1/87: SITP 800, CP 120. Must have slight packer leak.
- 6/23/87: SITP 900. Blew down for 1 hour with 40 psi on ½" choke. Acidized well with 8000 gals. 15% gelled acid and 6000 gals. liquid CO₂. Average rate 12 BPM, average psi 4400. ISIP 2100, 5 minutes 1400, 10 minutes 1100. Blew back for 5 hours on ½" choke. Well died, swabbing back acid load. Note: Two definite pressure breaks during acid job.
- 6/24/87: Well died, swabbed 60 bbls, left open overnight. This am, fluid level 1500' from surface. Good gas show after 2nd run, but would not flow. Present operation swabbing.
- 6/25/87: SITP 900 (all gas). Swabbing 8 bbls fluid/hour with strong flare. Swabbed back 40 bbsl this morning. Well flows continuously between swab runs.
- 6/26/87: SITP 900. Opened well up flowing 35 lbs on 3/4" choke with a heavy mist. Small amount of fluid. Estimated fluid recovery since last acid job 200 bbls.
- 6/27/87: FTP 10 psi on 3/4" choke. Unloading small amount of fluid. Cut choke back to 36/64".
- 6/28/87: FTP 10 psi on 36/64".
- 6/29/87: FTP 10 psi on 36/64". Ran swab, unloading $\frac{1}{2}$ bbl fluid. Rigged down pulling unit. Shut in.
- 7/27/87: Rigged up pulling unit. Ran tubing open-ended to 4400'. Loaded hole with 60 bbls of mud. Set 25 sx Class C with 2% CaCl2 plug. WOC 2 hours. Tagged plug at 4219'. Set 25 sx Class C with 2% CaCl2 plug at 1600'. Set 25 sx Class C with 2% CaCl2 plug at 1000'. Set 10 sx cement plug at surface. Pulled all tubing and wellhead. 8-5/8" & 4½ left in the hole. Will clean and level location and install dry hole marker.