

# ACIDIZE AND SQUEEZE RECORD

New Mex "X" #1

<u>Depth Interval</u>	<u>Amount and Kind Material Used</u>
4095-4449	Acidized w/2000 gals. 15% Unisol + 35 RCN Ball Sealers.
4095-4142	Squeezed w/600 sx. Incor Neat 1/4# Floseal, Rev. out 15 sx.
4277-4449	Acidized w/2000 gals. 15% Unisol + 25 RCN Ball Sealers
4277-4449	Attempt to Squeeze w/250 sx. Incor Neat.
4277-4449	Squeezed w/300 sx. Incor Neat 1/4# Floseal, Rev. out 60 sx.
4095-4449	Attempt to Squeeze w/200 sx. Incor Neat.
4095-4449	Squeezed w/140 sx. Incor Neat 1/4# floseal 8# salt.
4128-4138	Acidized w/500 gals. 15% Unisol + 4 RCN Ball Sealers
4288-4393	Acidized w/1500 gals. 15% Unisol + 20 RCN ball sealers.
4288-4393	Acidized w/3000 gals. 15% Unisol + 20 RCN ball sealers
4128-4393	Attempt to squeeze w/250 sax. Incor neat, .06 of 1% Halad-9
4128-4393	Attempt to squeeze w/50 sax Incor neat.
4128-4393	Squeezed w/100 sax Incor neat w/.06 of 1% Halad-9.
4128-4393	Squeezed w/100 sax Trinity Inf. neat.
4109-4192	Acidized w/5000 gals. 15% Unisol Acid + 7 RCN ball sealers

<u>Date</u>	<u>Operations</u>
1-10-66	Verna Drlg. Co. Spudded 6:00 P.M. 1-9-66
1-12	Ran 1566' of 8-5/8" casing cemented @ 1566' with 500 sx Incor 4% gel, 100 sx Incor - all cement 2% CaCl. Plug down 11:00 A.M. 1-11-66. Cement circ. WOC 12 hours. Test casing 1000# 30 min. OK.
1-19	Set 4-1/2" casing (J-55) 9.5# @ 4490 cemented w/300 sx incor neat w/8# of salt/sx. Plug down @ 4:30 A.M. 1-19-66. PGAC ran GR-Acoustic, Neutron & Caliper Log. ran drill pipe & bit to bottom - circ. 2 hours.
1-20	Released rig @ 9:30 A.M. 1-19-66.
1-21	WOC 49-1/2 hours on 4-1/2" casing. X-Pert rigged up & install BOP. Ran 3-7/8" & casing scraper on 2-3/8" to 4457.
1-22	Card. Chem. circ. hole with crude, test 4-1/2" casing 2000# 30 min. OK.
1-24	Pulled 2-3/8". PGAC ran Gamma Correl. 3800 to 4454. Perf. 4-1/2" @ 4095, 99, 4109, 16, 23, 26, 28, 33, 38, 40, 42, 4277, 79, 87, 93, 4310, 17, 24, 44, 46, 60, 62, 64, 74, 86, 88, 90, 92, 4437, 46, 49 - 1 Jet/SPF. 31 holes. Ran 2-3/8 open ended to 4452. Card. wash perf. w/15% unisol (500 gals.). pull to 4089. Acidized w/2000 gals. 15% Unisol 35 RCN Ball sealers, treating tubing Pressure 2800-2400 to 4000# @ 3.4 B/min. S-I 2800 psi 5 min. SI 1800 psi comp. @ 9:00 P.M. 1-22-66. Pulled 2-3/8, reran w/mud anchor to 4450, T. Perf. 4416 to 20. SN 4413, Swab 17 BLO + 52 BAW, 6 hrs.
1-26	Pulled tubing. ran HWC packer & RBP. Set pkr @ 4405, swab perf. 4095 - 4392 (OA) Set packer @ 4235. Perf. 4277-4392 Swab 4 BNO + 8 BSW/ 2 hrs. 350' fluid in hole. Unseated packer. Reset RBP @ 4235', packer 4049. From perf. 4095-4147, swab 30 BSW/3 hours. fluid lever @ 2800'.
1-27	Rel. RTTS pkr. spot 2 sx of 10-20 sd on BP @ 4235. Pull tub & pkr. to 3985' HOWCo sq. perf. 4095-4142 OA w/600 sx of incor neat 1/4# floseal. Max Press 3500 psi Rev. out 15 sx. Job comp. @ 6:30 P.M. 1-26-66. Pulled 2-3/8 @ RTTS Packer.
1-28	Drilled cement 3985-4230. Tested perf. 4095-4142 OA w/1250# 30 min. OK. Circ. water to oil. Pulled 60 std tubing.
1-29	Pull tubing & bit. Ran RTTS, reset BP @ 4455, set packer 4235. Swab from perf 4277-4449 OA, 16 BLO + 5 BNO + 20 BSW in 9 hrs. good show of gas, 300' fluid in hole swab 4 bbls. last hour - 20% oil
1-31	Card. Chem acidized perf. 4277-4449 OA w/2000 gals. 15% Unisol acid, using 25 RCN ball sealers. Max. Pr. 2800, TR TP 2400, Rate 3.1 BPM, ISIP 1150, 5 min. SIP 200, 20 min. on vac. Job comp. 5:40 PM, 1-30-66. Swb 15 BLO + 48 BAW + 37 BFW in 12 hr. 1600 FIH, last hour swab 6 bbls. S/O 100% wtr.
2-2	Ret. BP @ 4455', pulled 2-3/8 tubing, RTTS Pkr & BP out of hole. Ran RTTS pkr. on 2-3/8" tubing to 3995. HOWCo attempt to sq. SA Perf. 4277-4449 OA w/250 sx. incor neat, TP 2200 to 3600 @ 3 BPM. Pr. would not hold. Cleared perf. Job comp 6:00 PM 2-1-66. WOC 12 hours.
2-3	HOWCo sq. SA perf. 300 sx incor neat w/1/4# floseal per sx. Sq. TP 2300-6200#, Rev. out 60 sx, job comp. 11:30 AM, 2-2-66.
2-4-	Drilled cement 4-1/2" casing 4000' to 4410' in 7 hours. Tested perf. w/2000# leaked off 100# per min. back to 1000#.
2-5	Ran RTTS to 3995, attempt to sq. perf. 4095-4449 w/200 sx incor neat, TP 2200-3600 would not hole, leak to 0# Comp. 10:00 AM, 2-4-66 WOC 6 hr. Sq. perf. 140 sx. incor neat + 1/4# floseal per sx. + 8# salt/sx. Max press. 6000# comp. 5:00 PM 2-4-66 WOC 13 hrs
2-7	Drilled cement 3995-4410, 4-1/2" casing, Tested perf. w/2000# 30 min. OK. Disp. hole w/load oil. Pulled tubing, DC's + bit. PGAC ran GR-Cement band log 3941-4441. PGAC said had good band. Then perf. 4-1/2" casing in SA @ 4128, 33, & 38, 3 holes, Ran 2-3/8" tubing 4138'. Card Chem. washed perf. w/unisol acid. then acid perf. w/500 gals. 15% unisol, 4 RCN ball sealers, TR TP 2800-2200# @ rate 2.5 BPM ISIP 1500#, 5 min. 900#, Job comp. 4:00 PM 2-6-66, Then swab 60 BLO + 12 BAW + 7 BNO + 3 BFW total 11 hrs. 300' FIH, last hour swab 3 bbls. S/O 98% oil.
2-10	Pulled 2-3/8" tubing, reran 2-3/8 tubing to 4455', Tubing perf. 4444-47, SN 4443, Install well head, ran rods & Pump to 4443. Released X-Pert.

Date      Operations

1966

- 2-20 Rigged up well unit, pulled rods & pump, pulled 2-3/8" tubing. Install BOP PGAC perf. San Andres @ 4288, 93, 4310, 17, 24, 60, 62, 87 & 93 (9 holes) Ran RTTS Packer to 4395. Cardinal Chemical washed perf. w/unisol acid. Then set packer @ 4200, acidized perf 4288-4393 w/1500 gals. 15% unisol acid + 20 RCN ball sealers BIP 4500# T.TP 3200# Avg. Inj. Rate 2.3 B/M ISIP 2400# 5 min. SIP 2300# complete @ 1:40 P.M. 2-20-66.
- 2-22 Cardinal Chemical Acidized w/3000 gals. 15% unisol acid + 20 RCN ball sealers BD TD 3200#, Tr. TP 3200-5600#, Avg. Rate 6 BPM, SITP 1800# 5 min. SI TP 1200# Job complete 10:00 A.M. 2-22-66.
- 2-23 Pulled tubing & packer. Ran 2-3/8" tubing to 4455. Tubing perf. 4444-47, SN @ 4443, Ran rods & pump.
- 3-8 Pulled rods & pump, install BOP. Pulled 2-3/8" tubing.
- 3-9 Ran HOWCo RTTS packer on 2-3/8" tubing, set @ 4008', HOWCo attempt to squeeze San Andres perfs. w/250 sax. Incor neat, .06 of 1% Halad-9, washed by perfs w/5 BW Job complete 5:30 P.M. 3-8-66.
- 3-10 HOWCo attempted to squeeze San Andres perf. w/50 sax Incor neat Press. 2300-1700 leaked off. washed by perfs w/5 BW. Job complete 10:00 A.M. 3-9-66 WOC 5 hours. Reset packer @ 3888, Re-squeezed perfs. w/100 sax Incor neat w/.06 of 1% Halad-9 Sq. press. 4400#. rev. out 30 sax. Squeeze job would not hold. washed by perfs WOC, Job complete 5:00 PM 3-9-66
- 3-11 Reset RTTS packer @ 3858, HOWCo sq. perfs w/100 sx Trinity Inf. neat, max pressure 4000#, Job complete 1:00 P.M. 3-10-66,
- 3-12 Pulled RTTS packer & tubing, Ran 3-7/8" bit casing scraper + 3 - 3 1/2" DC's on 2-3/8" tubing, drilled cement 3942-4187. Threads on bell nipple on top of 4-1/2" casing broke.
- 3-14 Repaired bell nipple on 4-1/2" casing. Finished drilling cement to 4200. Tested casing w/1800# 30 min. OK. disp. hole to LO, pulled tubing, DC's & bit. Schumberger perf. 4-1/2" casing in San Andres @ 4109, 16, 23, 75, 78, 85 & 92 w/1 Jet SPF, total 7 holes. Ran 2-3/8" tubing w/RTTS packer, tubing to 4198' Cardinal Chemical washed perfs. w/unisol acid. Set packer @ 4066' End of tubing @ 4106. Acidized perfs. w/5000 gals. 15% unisol acid + 7 RCN ball sealers. BD Pr 3400-2400#, Tr. TP 2400#, rate 4 BPM ISIP 800# 6 min. SI Vac. Job complete 10:20 A.M. 3-13-66.
- 3-16 Pulled RTTS Packer & tubing. Ran 2-3/8" tubing to 4196, Tubing perfs. 4163-66, SN @ 4162. Ran rods & pump. Spaced out, put well to pumping. Released X-Part Well Service @ 3:00 P.M. 3-15-66. Rel. to prod. Completion date 10:20 A.M. 3-13-66.
- 3-17 4490 TD, 4200 PBDT, San Andres Perfs. 4109-92, NMOCC Pumped 144 BNO + 48 BSW in 24 hours, GOR 280/1, Gravity 16° @ 60°, 2" x 1-1/2 x 12' bottom hole pump, 14-54" SPM, Allow 44 BOPD, TFA 44 BOPD.