

- 8-15-81 of zone (5224-30 interval perforated erroneously).
(Cont.) Perforate Gallup formation using 3-1/8" hollow carrier gun at
5008, 5009, 5010, 5011, 5012, 5013, 5014, 5015, 5016, 5026, 5027,
5028, 5029, 5030, 5031, 5032, 5033, 5034, 5035, 5036, 5037, 5038,
5039, 5040, 5041, 5042, 5100, 5101, 5102, 5103, 5104, 5105, 5106,
5107, 5181, 5182, 5183, 5184, 5185, 5186, 5187, 5212, 5213, 5214,
5215, 5216, 5217, 5218, 5230, 5231, 5232, 5233, 5234 for a total
of 52 holes. Rig up Western Co. and Slickwater Fracture the Gallup
Formation as follows:
5,000 gal pad
70,000 gal w/ 1 ppg 20-40 sand
3,486 gal flush
Total fluid: 78,486 gals slick water w/ 190# FR-2 and 79
gals Aquaflo.
Total sand: 70,000# 20-40 mesh
Treating Pressures: Max 2800 psi, Min 1200 psi, Ave 1600 psi
ISDP \pm 900 psi, 10 min. shut in pressure 700 psi
Ave Injection Rate \pm 48 BPM
Well shut in till Aug. 17, 1981.
- 8-17-81 Opened well up. Well dead. T.I.H. w/ tbg. and seat nipple.
Tag sand at 5980' RKB. Rig up pump and pit to clean out sand.
Pumped \pm 60 bbls of water till circulation was established.
Circulated large amounts of green oil. Wait on water truck.
Unable to get pump started. Shut down for repairs.
- 8-18-81 Repair pump. Circulate sand from well bore. Unable to gain full
circulation. Wait on water truck. Continue circulating sand
from 5980' to 6185' RKB. Pumped approx. 275 bbls of water into
Gallup formation while circulating sand from well bore.
Ran 186 jts. of 2-3/8", 4.7#, J-55, 8 Rd, EUE tubing. T.E.-6141.97'
set at 6151' RKB. Nipple down B.O.P. and flange up wellhead. Well was
dead but left open to pit over night.
- 8-19-81 Well dead. Casing pressure TSTM. Swabbed well for 9 hrs. Lowered
fluid level to 1500'. Shows of oil and gas with each run. Gas shows
getting stronger with each run. Shut well in over night.

DAILY REPORT

8-11-81 MI & RU MTK Rig #2. T.I.H. w/ 3-7/8" rock bit to reach stage tool at 4222' in csg. talley. Tagged cement above D.V. tool, 3' in on #128 - 4208' RKB.

Drilled out 12-15' cement and the D.V. tool. S.D.F.N.

✓ 8-12-81 T.I.H. w/ bit to tag bottom-fill at ±6180'. P.O.O.H. w/ bit. Rig up Jetronics. Ran GR & CCL from 6179 to 5850 and from 5350 to 4850. Perforated 6148 to 6158 w/ 10 shots .35 inch in diameter, 1 jsfp, 10 ft.

T.I.H. w/ Baker Model "R" 4½" packer.

✓ 8-13-81 MTK Rig #2
Set packer w/ 185 jts. tbgs. above it at 6122 ft. Swabbed down. Rig up Cementer's Inc. Pumped 300 gal 15% HCL ahead of 25.5 bbl water flush. This broke from ±2000 psi initially to ±1650 psi treating pressure at 2 BPM.

Well continued to flow back. Swabbed well down. Kicked off - making gas audibly. Shut in for night.

8-14-81 310 psi on tbgs. Opened well up and flowed to pit. Flowed for 50 mins. w/ heavy mist of oil and water. Made 1 swab run and brought 6 bbls of oil and water. Made 4 more swab runs w/ approx. 15-85 oil-water concentration. Rig down swab tools and unseat Baker hydrostatic head. P.O.O.H. w/ tbgs. and packer. Shut well in over night.

✓ 8-15-81 Rig up Western Co. and Fracture Dakota formation using Mini-Max III-30 gel w/ 2% hydrocarbon phase as follows:

5,000 gal fluid pad
3,000 gal fluid w/ 1 ppg 20-40 sand
3,000 gal fluid w/ 2 ppg 20-40 sand
5,000 gal fluid w/ 3 ppg 20-40 sand
4,116 gal slick water flush

Total fluid: 16,000 gals Mini-Max III-30 gel w/ 320 gals condensate, 16 gals Aquaflow, 16 gals x-cide, 25# B-5, 4116 gals slickwater w/ 10# FR-2

Total sand: 24,000# 20-40 mesh

Treating Pressures: Max 3700 psi, Min 3150 psi, Ave 3700 psi
ISDP ±2000 psi, 15 min shut-in pressure 1650 psi
Injection Rate 31 BPM

Shut well in and wait 4 hrs for gel to decompose. Rig up Jetronics Perforating gun was wired in reverse, causing gun to be fired out