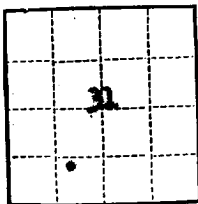


Form 9-381a
(Feb. 1951)



(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office Santa Fe
Lease No. NM 019411
Unit W/2 Sec. 31, T-30N
R-11W, N.M.P.M. San Juan
County, New Mexico

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF	SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL	SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE	SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING	SUPPLEMENTARY WELL HISTORY	X
NOTICE OF INTENTION TO ABANDON WELL		

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

May 8, 19 62

Federal
Well No. 1-31 is located 790 ft. from [M] line and 1850 ft. from [W] line of sec. 31
SE/4 SW/4 Sec. 31 T-30N R-11W N.M.P.M.
(3/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
Basin Dakota San Juan New Mexico
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 5857 ft.

DETAILS OF WORK

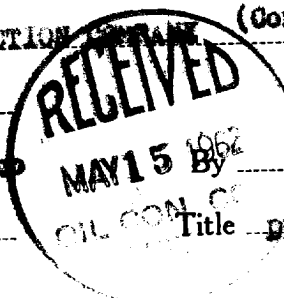
(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

1. Drill out stage collars at 2209' and 4006' - clean out to plug back T.D. of 6726'. Pressure test casing to 3000 psi for 30 minutes - pressure held on 4/17/62.
2. Spotted 250 gallons 15% acid on bottom. Ran cement bond log. First stage cement top at 5480'. Second stage cement top at 3000'.
3. Perf. 4 shots/ft. 6710-6698' and 6632-6624'.
4. Sand-water frac using 15,000 pounds 20-40 sand and 21,210 gallons water.
5. Set Mag. bridge plug at 6600' on 4/17/62.
6. Perf. 4 shots/ft 6560'-6588'.
7. Sand-water frac using 38,000 pounds 20-40 sand and 37,800 gallons water.
8. Set Mag. bridge plug at 6530' on 4/18/62.
9. Perf. 4 shots/ft. 6484-6502'.
10. Sand-water frac using 15,000 pounds 20-40 sand and 18,170 gallons water.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

(Continued on reverse side)

Company SOUTHERN UNION PRODUCTION COMPANY
Address P. O. Box 808
Farmington, New Mexico
Title Drilling Superintendent
G. D. Roland, Jr.



11. Drilled out bridge plugs and cleaned out to plug back T.D. of 6726'.
12. Set Baker Model "B" production packer at 6355' on 4/19/62.
13. Set Baker full bore packer at 3538' and perf. thru tubing 4 shots/ft. 3744-43.
14. Swab well in and test for 3 hours - well making gas and salt water.
15. Squeeze through packer with 75 sacks cement with 1% flac. Max squeeze pressure 3000 psi. Squeeze complete at 7:00 a.m. 4/20/62.
16. Pressure up on perfs to 2500 psi for 30 minutes on 4/21/62. Pressure held.
17. Perf 2 shots/ft 3744-3724'. Pumped 500 gallons 15% H.A. Pressure broke from 2700-2000 psi.
18. Blew hole down with gas - well making estimated 1 mcf with 1" stream water.
19. Set Baker full bore packer at 3587' and squeeze perfs with 60 sacks cement with 1% flac on 4/23/62. Standing squeeze pressure 1400 psi.
20. Re-squeeze perfs with 75 sacks regular with 1% flac on 4/23/62. Standing squeeze pressure 900 psi.
21. Re-squeeze perfs with packer at 3587' on 4/24/62 with 75 sacks regular with 1% flac. Standing squeeze pressure 700 psi. Let cement set six hours and re-squeeze with 75 sacks cement with 1% flac and 2% salt.
22. Pressure test cement job on 4/25/62. Pump in fm. at 1500 psi.
23. Squeeze with packer at 3587' using 100 sacks regular with 2% calcium chloride on 4/25/62. Drill out cement and pump in fm. at 2200 psi.
24. Set packer at 3587' and squeeze with 50 sacks regular with 1% flac maximum squeeze pressure 3000 psi. Squeeze complete at 11:00 a.m. 4/26/62.
25. Drilled out cement and pressure test perfs. to 2000 psi for 30 minutes on 4/27/62. Pressure held.