RAYCO DRILLING COMPANY

P. O. Box 1741
FARMINGTON, NEW MEXICO

TELEPHONE 325-1461 October 29, 1965

ENGINEERS REPORT

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DENVER, COLO.

Shar Alan Oil Company 1402 Denver US National Center Denver 2, Colorado

> Re: Jicarilla N-l Sec 23-23N-2W Rio Arriba Co., New Mexico

Cemented 8 5/8" casing @ 101; w/60 sks. 6-28-64 Reached TD of 3112. Ran electric log. Cemented 5 1/2 casing @ 3097 w/100 sks. 7-14-64 While cleaning out 5 1/2" casing the tubing twisted off and left one drill collar, a 4 3/4" bit and a broken joint of the tubing in the hole. 12-1-64 Moving in and rigging up. 12-2-64 Finished rigging up in mud and snow to fish out drill collar, bit and broken joint of 1 1/4" tubing. Moved 2" tubing to N#1. Cleaned and 12-3-64 thawed out tubing Started picking up tubing to run impression block. 12-4-64 Finished picking up tubing. Ran impression block. Pulled impression block. Ran overshot. Fishing with overshot changed shirt 12-5-64 and grapple. Recovered fish. 12-6-64 Ran 4 3/4" magnet to fish junk out of hole. Milled and fished for junk. Finished cleaning out junk Ran 4 3/4" 12-7-64 bit Cleaned out cement to 3060 Laid down drill collars Shut down.

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- 12-12-64 Hauled tubing from R#3 Picked up tubing and 4" flush joint liner.
 Ran liner in hole. Liner plugged.
- Pulled liner. Found float plugged Ran tubing and bit, cleaned out 3060's Pulled bit. Picked up liner. Started 12-13-64 in hole with 4" liner.
- 12-14-64 Cemented 4" flush joint liner @ 3080' Top of liner @ 2927'. Cemented w/40 sacks. Pulled tubing Ran tubing with 3 1/8" bit to clean out liner. Cleaned out. Pulled and laid down tubing. Shut down.
 - 9-29-65 Moved in and rigged up. Picked up 2" tubing and 4 3/4" bit.
 - Drilled out cement inside 5 1/2" casing to top of liner at 2947.
 Pulled tubing. Pulled tubing, pressure 9-30-65 tested casing and pumped in at 1800psi Pumped 50 casks of cement down casing and squeezed top of liner w/50 sacks + 2% Ca Clo WOC 6 hrs.
- Ran 2" tubing and 4 3/4" bit. Drilled out cement inside 5 1/2" casing to top of liner at 2947. Pulled tubing, Ran 10-1-65 tubing w/3 3/8" bit and cleaned out inside liner to 30751. Pulled tubing and bit. Pressure tested casing to 2500psi. Held 0.K.
 - 6-26-65 Ran correlation log and perforated the Pictured Cliffs from 3034; to 3043; w/4 holes per foot.
- 10-23-65 Frac treated down the casing w/40,000 of 20/40 sand and 47000 gal. water. Breakdown pressure 2700psi, treating pressure 350psi & 15 minutes shut in pressure 350psi injection rate 84 barrels per minute.
- 10-24-65 The well started flowing. Shut in waiting on tubing.

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