

# RAYCO DRILLING COMPANY

P. O. Box 1741  
FARMINGTON, NEW MEXICO  
TELEPHONE 325-1461

June 1, 1966

Shar Alan Oil Company  
1402 Denver U.S. National Center  
Denver, Colorado

## ENGINEERING REPORT

Re: Carson #1  
NW/4 Sec 10-31N-5W,  
Rio Arriba Co., N.M.  
Elevation 6330 K.B.

- 10-23-65 Spud @ 2:00 P.M. Cemented 10-3/4" casing at 204' w/150 sacks.
- 10-24 to 11-6-65 Drilled 9-7/8" hole to 3772'. Ran electric log
- 11-7-65 Cemented 7-5/8" 26.40# J-55 casing at 3772' w/150 sacks
- 11-8-65 Trying to dry hole to drill with gas. Unable to drill to 11-18 with gas
- 11-18-65 Mudded up. Drilling 6-3/4" hole.
- 11-19 to 11-26-65 Drilled to 5910 and lost circulation.
- 11-29-65 Stuck pipe in lost circulation zone.
- 11-30 to 12-5-65 Fishing. Washed over and recovered all drill pipe, collars and bit.
- 12-6 to 12-18-65 Drilled 6-3/4" hole to 8138'.
- 12-19-65 Ran IES log. Ran drill pipe and 6-3/4" bit.
- 12-20-65 Drilled to 8195'. Ran IES, Caliper and Density Log.
- 12-21-65 Cemented 5-1/2" casing at 8195' w/260 sacks.
- 12-22-65 Nippled up. Picked up 4-3/4" bit, drill collar and tubing and started in hole to blow down and drill out below 5-1/2" casing.

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- 12-23-65 Blew hole dry w/gas. Gas drilled from 8195' to 8204' w/4-3/4" bit. Gauge TSTM
- 12-24-65 Drilled 4-3/4" hole to 8330'. Shut down for Christmas
- 12-27-65 Pulled bit & tubing. Ran Gamma Ray - Induction Log.
- 12-28-65 Frac treated down casing open hole 8195' - 8330' w/ 10,000# of 40-60 sand and 30,000# of 20-40 sand and 73,500 gallons of water. Break down pressure 2700 psi. Treating pressure 3000 - 3400 psi. Instant shut-in 2600 psi. 15 min shut-in 2100 psi. Injection rate 50 BPM
- 12-29-65 Ran 2" tubing and 4-3/4" bit. On bottom at 9:30 P.M. Gauged 1200 MCFPD w/1/4" stream of water.
- 12-30-65 Blew well 24 hours. Gauged 1400 MCFPD. Shut down because of weather
- 1-5-66 Started up. Pulled tubing. Ran correlation log. Set CIBP @ 8190'.
- 1-6-66 Perforated 8166 - 8178 w/4 holes/foot, w/hole dry. After 30 minutes gas broke in and started flowing at rate of 2500 MCFPD. Decreased to 1500 MCFPD in 3 hours. Acid treated perforation w/500 gals of mud acid.
- 1-7-66 Blew hole dry. Then gauged 1500 MCFPD. Drilled out BP and cleaned out to 8330'. Gauged 1500 MCFPD. Pulled tubing.
- 1-8-66 Ran CIBP and stuck in casing at 7250'. Pulled out of setting tool. Fished out setting tool.
- 1-9-66 Drilled out BP @ 7250 and cleaned out to bottom. Pulled tubing. Ran CIBP and set at 8189.
- 1-10-66 Ran tubing in hole. Gauged 1500 MCFPD. Shut down.

Very truly yours,  
RAYCO DRILLING COMPANY

  
F.J. Ray, President