

SUMMARY OF DRILLING OPERATIONS

ROSA UNIT #49
SW/4 Section 27 - T31N - R4W
Rio Arriba County, New Mexico

10-9-63

Subject well spudded. Set 9 5/8" surface casing at 201' and cemented same with 100 sacks, plus 2% cc.

10-10-63

Waiting on cement.

10-11-63

Drilling at 523'

10-12-63

Drilling at 555'

10-13-63

Drilling at 980'

10-14-63

Drilling at 1510'

10-15-63

Fishing at 1608'

10-16-63

Fishing at 1608'

10-17-63

Fishing at 1608'

10-18-63

Drilling at 2239'

10-19-63

Drilling at 2513'

10-20-63

Drilling at 2873'

10-21-63

Drilling at 3057'

10-22-63

Drilling at 3224'

10-23-63

Drilling at 3460'

10-24-63

Drilling at 3685'

10-25-63

Drilling at 388'. Will run log at 3900', prior to setting 7" intermediate casing

10-26-63

Ran log. Set 7" intermediate string of casing at 3940' and cemented same with 150 sacks. Total depth 3940'. Well presently shut down by U. S. Forestry Service until November 11, 1963 for hunting season.

10-27-63

Shut-down

10-28-63

Shut-down

10-29-63

Shut-down

10-30-63

Shut-down

10-31-63

Shut-down

11- 1-63

Shut-down

11- 2-63

Shut-down

11- 3-63

Shut-down

11- 4-63

Shut-down

11- 5-63

Shut-down

11- 6-63

Shut-down

11- 7-63

Shut-down

11- 8-63

Shut-down

11- 9-63

Shut-down

11-10-63

Shut-down

11-11-63

Shut-down

11-12-63

Shut-down

11-13-63

Shut-down

11-14-63

Shut-down

Resumed drilling operations

Drilling at 4518'

Drilling at 5650'. Straight hole survey at 5538' - 3°.



11-15-63	Drilling at 6220'. Straight hole survey run at 6050' - 2 1/4°
11-16-63	Drilling at 7115'
11-17-63	Drilling at 8025'
11-18-63	Drilling at 8400'
11-19-63	Total Depth 8502'. Preparing to run pipe.
11-20-63	Preparing to run pipe.

While attempting to run 4 1/2" casing to total depth, we encountered hole caving in at approximately 6400'. Pulled casing. Went back in and re-conditioned hole. While attempting to re-run 4 1/2" casing, casing was stuck at 6410'. Mudded up, went in and redrilled hole with mud to total depth. of 7155'. Cemented 4 1/2" casing at 6410'. Perforated with 4 squeeze shots at 6030'. Squeezed with 55 sacks. Perforated 6190' with 4 squeeze shots. Squeezed with 55 sacks. Ran 2 1/2" EUE tubing to 7135'. Cemented with 35 sacks. Top of 2 1/2" tubing at 6310'. Cemented with 40 sacks. Squeezed tubing with 40 sacks. Well presently W.O.C.

On December 1, 1963 perforated Gallup and Mesaverde Formations as follows:

GALLUP - 6895 - 6900; 6948-6953; 6917-6922; 6995-7000; 7020-7025; with 2 holes per foot. Fraced with 11,800# sand and 30,000 gallons water. Breakdown pressure-3500#. Treating pressure 3500-3600. Injection rate 12 BPM. Instant shut-in pressure 2200 psi.

MESAVERDE - 6115-6127; 6269-6275; with 2 holes per foot. Fraced with 48,200# sand and 55,000 gallons water. Breakdown pressure 2700#. Treating pressure 3300-3500 psi. Instant shut-in pressure 1200 psi. Injection rate 33 BPM.

12-2-63

Blowing well down. Ran 22 stands tubing in hole. Frac water coming out of formation.

