

WELL HISTORY CONTINUED

Set retrievable bridge plug at 5005'.

Perforated Mesa Verde section as follows:

4925 to 4940' with 2 holes per foot

4950 to 4965' with 2 holes per foot

4990 to 5005' with 2 holes per foot

Fractured above section with 57,000 gallons water and 60,000# sand.

Flushed with 9200 gallons water

Breakdown pressure 1600 to 1500#

Treating pressure 1800 to 2100#

Pressure increased from 1800 to 2000# when rubber balls hit. 45 rubber balls were used after 30,000# sand.

Average injection rate 54.2 BPM

Set retrievable bridge plug at 3370'.

Perforated Pictured Cliffs section as follows:

3214 to 3254 with 2 holes per foot.

Fractured above section with 49,980 gallons water and 40,000# 10-20 sand.

Flushed with 7300 gallons water.

Breakdown pressure 2300# to 1200#.

Treating pressure 1400 to 1200#

Final pressure 1000#.

Average injection rate 62.6 BPM

Used 40 rubber balls in above treatment.

Well unloaded on its own power after fracturing Pictured Cliffs section. Flowed well 6 hours. Gauge 3,000 MCF at end of flow.

Cleaned sand out to 3370'. Picked up retrievable bridge plug at 3370'. Found well to be on vacuum. Cleaned out to 5005' with gas. Picked up retrievable bridge plug at 5005'. Cleaned out to TD with gas.

Gas volume measured 1,822 Mcf for first 24 hours with both Mesa Verde and Pictured Cliffs open.

Run 2" tubing to 5488' with Packer set at 3349'.

Run 1 1/4" tubing to 3246'.

Gas gauged 1480 Mcf thru 2" tubing from Mesa Verde.

Gas gauged 982 Mcf thru 1 1/4" tubing from Pictured Cliffs.

Pictured Cliffs section shut in and Mesa Verde section left open. After flowing Mesa Verde alone for four hours gas volume suddenly increased to 2,200 Mcf. Pictured Cliffs was opened again and gas volume on Mesa Verde decreased to 1,514 Mcf.

Pulled 1 1/4" tubing and 2" tubing with packer.

Rerun 2" tubing to 5488' with new packer set at 3379'.

Rerun 1 1/4" tubing to 3246'.

Pictured Cliff Shut in for test July 7, 1958.

Mesa Verde Shut in for test July 12, 1958.

Attempted to take 3 hour Open flow test on Pictured Cliffs July 15, 1958.

Pressure on Mesa Verde fell off 225# in 30 minutes with Pictured Cliffs open.

Ran B & R Service Company plug to 4000' to check 2" tubing for leak. 2" tubing did not leak.

Now plan to run 7 5/8" Baker Model D Packer to 3300' in an attempt to get Positive Separation.