

Read & Stevens, Inc.

#1 HISSOM STATE COM
660' FSL & 660' FWL Sec. 23, T-21-S, R-27-E
Eddy County, New Mexico

Drill Stem Tests

DST#1 (Morrow sand) 11,372' - 11,697', open total of 90 min. On 30 min. pre-flow, op. w/weak blow inc. to good blow w/max. SFP of 2#. On 60 min. final flow, op. w/good blow decr. to fair blow w/SFP 1#. No gas to surface. Rec. 219' drlg. mud. Spl. ch. rec. no gas, 500 cc drlg. mud @ 25#. IHP 6275#, 30 min. IFP 277# - 231#, 90 min. ISIP 1106#, 60 min. FFP 231# - 231#, 180 min. FSIP 2161#, FHP 6275#, BHT 180°.

DST #2 (Morrow sand) 11,680' - 11,890', op. total of 90 min. On 30 min. pre-flow, op. w/fair blow inc. to strong blow. Gas to surface in 18 min. On $\frac{1}{4}$ " ch. SFP inc. to max. 205# @ rate of 323.4 MCF. On 60 min. final flow, op. w/GTS on $\frac{1}{4}$ " ch. inc. to max. SFP 90# in 14 min. Mud to surface in 14 min. & salt water to surface in 20 min. Open ch. to 1" w/base SFP 150# for 30 min. Reduce ch. to $\frac{1}{2}$ " for 5 min. w/base SFP 250#. Open ch. to 1" for remainder of test w/base SFP 150# flowing gas and salt water. Reversed out 10,700' gas cut salt water (approx. 92.5 bbls) Spl. ch. rec. 2.823 cu. ft. gas, 1900 cc salt water @ 2300#. IHP 6388#, 30 min. IFP 2365# - 3914#, 60 min. ISIP 4800#, 60 min. FFP 3663# - 4300#, 135 min. FSIP 4800#, FHP 6160#, BHT 190°.

SP DST #3 (Morrow sand) 11,671' - 11,723', top pkr. failed, misrun.

SP DST #4 (Morrow sand) 11,665' - 11,723', tool plugged, misrun.

SP DST #5 (Wolfcamp lime) 9450' - 9730', open total of 210 min. On 30 min. 1st flow, op. w/fair blow inc. to good blow w/max. SFP 8# at end of period. On 60 min. 2nd flow, op. w/strong blow on $\frac{1}{4}$ " ch. w/SFP 8#. Gas to surface in 14 min. w/SFP decr. to 6.5# at end of period. On 120 min. 3rd flow, op. w/gas flow on $\frac{1}{4}$ " ch. w/SFP 20#. Open ch. to $1\frac{1}{2}$ ", in 20 min. SFP decr. to 7#, next 10 min. SFP decr. to 3#, next 8 min. SFP decr. to 1#, next 22 min. SFP decr. to 0.5#, next 20 min. SFP decr. to 0#. Gas flow rate gauged 27 MCF on $\frac{1}{4}$ " @ SFP 8#. Rec. 400' gas cut mud. Spl. ch. rec. .302 cu. ft. gas, 1000 cc GCM @ 200#. IHP 5027#, 1st 30 min. FP 162# - 139#, 1st 60 min. SIP 929#, 2nd 60 min. FP 162# - 162#, 2nd 120 min. SIP 2273#, 3rd 120 min. FP 162# - 162#, 3rd 240 min. SIP 3546#, FHP 5026#.

Deviation Survey

The following are the deviation surveys run on the above well during deepening operations: 10,667' - $1\frac{1}{2}$ °, 11,257' - $1\frac{3}{4}$ °.

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John L. Anderson, Jr.