NEW MEXICO OIL CONSERVATION COMMSSION

# MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELLS

Form C-122
Revised 9-1-65

RECEIVED
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OIL CON. COM.
DIST. 3

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Type Test: ☒ Initial ☐ Annual ☐ Special | | | | | Test Date: 6-15-82 | | |
| Company: MOBIL PRODUCING TEXAS AND NEW MEXICO, INC. | | | | | Connection: NORTHWEST PIPELINE | | |
| Pool: BLANCO MESA VERDE | | | | | Formation: MESAVERDE | | Unit: — |
| Completion Date: 6-4-82 | Total Depth: 6150 | | | Plug Back TD: 6113 | Elevation: 7081 7074 GL | | Farm or Lease Name: JICARILLA E |
| Csg. Size: 5 1/2 | Wt.: 15.5 | d: 4.950 | Set At: 6150 | Perforations: From 5540 | To 6070 | | Well No.: 7 |
| Tbg. Size: 2 3/8 | Wt.: 4.7 | d: 1.995 | Set At: 5601 | Perforations: From 5564 | To 5570 | | Unit: N Sec.: 13 Twp.: 27N Rge.: 3W |
| Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE | | | | Packer Set At: 5528 | | | County: RIO ARRIBA |
| Producing Thru: TUBING | Reservoir Temp. °F: 154 @ 6000 | | Mean Annual Temp. °F: 50°F | Baro. Press. – $P_a$: 12.2 | | | State: NEW MEXICO |
| L: 5805 | H: 5804 | Gg: 0.6943 | % $CO_2$: .494 | % $N_2$: .277 | % $H_2S$: — | Prover: 0.75 | Meter Run: 2" | Taps: — |

## FLOW DATA

| NO. | Prover Line Size X Orifice Size | Press. p.s.i.g. | Diff. $h_w$ | Temp. °F | TUBING DATA Press. p.s.i.g. | TUBING DATA Temp. °F | CASING DATA Press. p.s.i.g. | CASING DATA Temp. °F | Duration of Flow |
|---|---|---|---|---|---|---|---|---|---|
| SI | 2" X 0.75" | | | | 1672 | — | — | — | 172 HR |
| 1. | | 272 | | 72 | | — | — | — | 3 HR |
| 2. | | | | | | | | | |
| 3. | | | | | | | | | |
| 4. | | | | | | | | | |
| 5. | | | | | | | | | |

## RATE OF FLOW CALCULATIONS

| NO. | Coefficient (24 Hour) | $\sqrt{h_w P_m}$ | Pressure $P_m$ | Flow Temp. Factor Ft. | Gravity Factor Fg | Super Compress. Factor, Fpv | Rate of Flow Q, Mcfd |
|---|---|---|---|---|---|---|---|
| 1 | 12.3650 | | 284.2 | .9887 | .9296 | 1.032 | 3333 |
| 2. | | | | | | | |
| 3. | | | | | | | |
| 4. | | | | | | | |
| 5. | | | | | | | |

| NO. | $P_t$ | Temp. °R | $T_t$ | Z |
|---|---|---|---|---|
| 1. | .2985 | 570.5 | 1.4628 | 0.966 |
| 2. | | | | |
| 3. | | | | |
| 4. | | | | |
| 5. | | | | |

Gas Liquid Hydrocarbon Ratio 208.31 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 71.4 @ 60°F Deg.
Specific Gravity Separator Gas 0.6943 XXXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 671 P.S.I.A. ____ P.S.I.A.
Critical Temperature 390 R ____ R

$P_c$ 1684.2 $P_c^2$ 2836.53

| NO | $P_t^2$ | $P_w$ | $P_w^2$ | $P_c^2 - P_w^2$ |
|---|---|---|---|---|
| 1 | 142.28 | 644.89 | 415.89 | 2420.64 |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1718$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.1263$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3754$

Absolute Open Flow 3754 Mcfd @ 15.025 Angle of Slope θ 53.13 Slope, n 0.75

Remarks: PRODUCED 2 BBLS CONDENSATE + 2 BBLS WTR DURING 3 HR TEST

| Approved By Commission: | Conducted By: | Calculated By: | Checked By: |
|---|---|---|---|
| | D.R. WERLEY | M.L. MORRIS | N.J.N. |