

Initial Deliverability
Test

Form C-122-A
Revised April 20, 1955

NEW MEXICO OIL CONSERVATION COMMISSION
GAS WELL TEST DATA SHEET - - SAN JUAN BASIN

(TO BE USED FOR FRUITLAND, PICTURED CLIFFS, MESAVERDE, & ALL DAKOTA
EXCEPT BARKER DOME STORAGE AREA)

Pool Mano-Mano Verde Formation Mano Verde County Rio Arriba
Purchasing Pipeline Pacific Northwest Pipe Line Corp. Date Test Filed 5-22-57
Operator Magnolia Petroleum Co. Lease Jicarilla "F" Well No. 2 MV
Unit L Sec. 14 Twp. 27N Rge. 3W Pay Zone: From 5423' To 6126'
Casing: OD 9 1/4" WT. 14.4 Set At 6211' Tubing: OD 2 3/8" WT. 4.78 T. Perf. 5406'
Produced Through: Casing X Tubing X Gas Gravity: Measured 0.65 Estimated
Date of Flow Test: From 4-17-57 To 4-25-57 Date S.I.P. Measured 10-2-56
Meter Run Size 2.068 Orifice Size 1.250" Type Chart Sq. Rt. Type Taps Flange

OBSERVED DATA

Flowing casing pressure (Dwt) 508 psig + 12 = 520 psia (a)
Flowing tubing pressure (Dwt) 508 psig + 12 = 520 psia (b)
Flowing meter pressure (Dwt) 508 psig + 12 = 520 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken:
Normal chart reading 7.72 psig + 12 = 594 psia (d)
Square root chart reading (7.72)² x spring constant 10 = 596 psia (d)
Meter error (c) - (d) or (d) - (c) ± = 2 psi (e)
Friction loss, Flowing column to meter:
(b) - (c) Flow through tubing: (a) - (c) Flow through casing = 2 psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading 7.7 psig + 12 = 593 psia (g)
Square root chart average reading (7.7)² x sp. const. 10 = 595 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 597 psia (h)
P_t = (h) + (f) = 599 psia (i)
Wellhead casing shut-in pressure (Dwt) 1723 psig + 12 = 1735 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1723 psig + 12 = 1735 psia (k)
P_c = (j) or (k) whichever well flowed through 65 °F + 460 = 525 °Abs (l)
Flowing Temp. (Meter Run) 65 °F + 460 = 525 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 262 psia (n)

Q = 542 X $\left(\frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)} \frac{598}{\sqrt{1.0034}} = 1.0017} \right) = \underline{543} \text{ MCF/da}$
(Integrated) $\sqrt{(d)} \frac{596}{\sqrt{1.0034}}$

D = Q 543 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{0.75} = \underline{482} \text{ MCF/da.}$
 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{0.75} = \underline{0.8873}$

SUMMARY
P_c = 1735 psia
Q = 543 Mcf/day
P_w = 65 psia
P_d = 262 psia
D = 482 Mcf/day

Company Magnolia Petroleum Co.
By Walter H. Ray
Title Gas Engineer
Witnessed by
Company

- This is date of completion test.
- Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

GL	(1-e ⁻⁸)	(F _c Q) ²	(F _c Q) ² (1-e ⁻⁸) R ²	P _t ² (Column i)	P _t ² + R ²	P _w
<u>3657</u>	<u>0.234</u>	<u>26.06</u>	<u>6.1</u>	<u>366.1</u>	<u>362.5</u>	<u>602.1</u>



