

Initial Deliverability  
Test

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 Blanco Formation Mesaverde County Rio Arriba  
Purchasing Pipeline Pacific Northwest Pipe Line Corporation Date Test Filed March 23, 1959  
Operator Magnolia Petroleum Company Lease Jicarilla "F" Well No. 7 LT-MV  
Unit M Sec. 24 Twp. 27N Rge. 3W Pay Zone: From 5645' To 6012'  
Casing: OD 5" WT. 15# Set At 6230' Tubing: OD 2 3/8" WT. 4.7# T. Perf. 6011'  
Produced Through: Casing - Tubing I Gas Gravity: Measured 0.676 Estimated -  
Date of Flow Test: From 1-15-59 To 1-22-59 \* Date S.I.P. Measured 10-30-58  
Meter Run Size 4.026" Orifice Size 1.250" Type Chart Sqr.Rt. Type Taps Flange

OBSERVED DATA

Flowing casing pressure (Dwt) \_\_\_\_\_ psig + 12 = \_\_\_\_\_ psia (a)  
Flowing tubing pressure (Dwt) \_\_\_\_\_ psig + 12 = \_\_\_\_\_ psia (b)  
Flowing meter pressure (Dwt) \_\_\_\_\_ psig + 12 = \_\_\_\_\_ psia (c)  
Flowing meter pressure (meter reading when Dwt. measurement taken:  
Normal chart reading \_\_\_\_\_ psig + 12 = \_\_\_\_\_ psia (d)  
Square root chart reading (\_\_\_\_\_) <sup>2</sup> x spring constant \_\_\_\_\_ = \_\_\_\_\_ psia (d)  
Meter error (c) - (d) or (d) - (c) \_\_\_\_\_ ± \_\_\_\_\_ = \_\_\_\_\_ psi (e)  
Friction loss, Flowing column to meter:  
(b) - (c) Flow through tubing: (a) - (c) Flow through casing \_\_\_\_\_ = \_\_\_\_\_ psi (f)  
Seven day average static meter pressure (from meter chart):  
Normal chart average reading 4.79 psig + 12 = 1491 psia (g)  
Square root chart average reading (7.0) <sup>2</sup> x sp. const. 10 = 1491 psia (g)  
Corrected seven day avge. meter press. (p<sub>f</sub>) (g) + (e) \_\_\_\_\_ = 1491 psia (h)  
P<sub>t</sub> = (h) + (f) \_\_\_\_\_ = 1491 psia (i)  
Wellhead casing shut-in pressure (Dwt) \_\_\_\_\_ psig + 12 = \_\_\_\_\_ psia (j)  
Wellhead tubing shut-in pressure (Dwt) 1584 psig + 12 = 1596 psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through \_\_\_\_\_ = 1596 psia (l)  
Flowing Temp. (Meter Run) 66 °F + 460 \_\_\_\_\_ = 526 °Abs (m)  
P<sub>d</sub> = 1/2 P<sub>c</sub> = 1/2 (l) \_\_\_\_\_ = 798 psia (n)

Q = 579 X  $\left( \frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{1}{1} = 1} \right) = \underline{579}$  MCF/day  
(integrated)

DELIVERABILITY CALCULATION

D = Q 579  $\left[ \frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^{0.75} \frac{0.8703}{1} = \underline{504}$  MCF/day

SUMMARY

P<sub>c</sub> = 1596 psia Company Magnolia Petroleum Company  
Q = 579 Mcf/day By William A. Morgan  
P<sub>w</sub> = 499 psia Title Jr. Gas Engineer  
P<sub>d</sub> = 798 psia Witnessed by \_\_\_\_\_  
D = 504 Mcf/day Company \_\_\_\_\_

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

REMARKS OR FRICTION CALCULATIONS

GL	(1-e <sup>-S</sup> )	(F <sub>c</sub> Q) <sup>2</sup>	(F <sub>c</sub> Q) <sup>2</sup> (1-e <sup>-S</sup> ) R <sup>2</sup>	P <sub>t</sub> <sup>2</sup> (Column i)	P <sub>t</sub> <sup>2</sup> + R <sup>2</sup>	P <sub>w</sub>
4063	0.256	29.64	7.59	241.081	248.672	499

