

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 Pipeline Date Test Filed 4-10-59  
Operator Magnolia Petroleum Co. Lease Jicarilla "H" Well No. 8 M.V. L.T.  
Unit M Sec. 12 Twp. 26N Rge. 3W Pay Zone: From 5476' To 5977'  
Casing: OD 5" WT. 15# Set At 6050' Tubing: OD 2-3/8" WT. 4.7# T. Perf. 5964'  
Produced Through: Casing - Tubing x Gas Gravity: Measured 0.700 Estimated -  
Date of Flow Test: From 2/19/59 To 2/27/59 Date S.I.P. Measured 10/13/58  
Meter Run Size 4.028" Orifice Size 1.500" 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 553 psig + 12 = 565 psia (g)  
Square root chart average reading (7.52)<sup>2</sup> x sp. const. 10 = 565 psia (g)  
Corrected seven day avge. meter press. (p<sub>f</sub>) (g) + (e) \_\_\_\_\_ = 565 psia (h)  
P<sub>t</sub> = (h) + (f) \_\_\_\_\_ = 565 psia (i)  
Wellhead casing shut-in pressure (Dwt) \_\_\_\_\_ psig + 12 = \_\_\_\_\_ psia (j)  
Wellhead tubing shut-in pressure (Dwt) 1528 psig + 12 = 1540 psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through \_\_\_\_\_ = 1540 psia (l)  
Flowing Temp. (Meter Run) 71 °F + 460 \_\_\_\_\_ = 531 °Abs (m)  
P<sub>d</sub> = 1/2 P<sub>c</sub> = 1/2 (l) \_\_\_\_\_ = 770 psia (n)

Q = 1486 (Integrated) x  $\left( \frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)} \frac{1}{1} = \frac{1}{1} = \frac{1}{1}} \right)^2 = \underline{1486}$  MCF/da

DELIVERABILITY CALCULATION

D = Q 1486  $\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \frac{1,778,700}{2,001,233}^{0.75} = 0.9155 = \underline{1360}$  MCF/da.

SUMMARY

P<sub>c</sub> = 1540 psia  
Q = 1486 Mcf/day  
P<sub>w</sub> = 609 psia  
P<sub>d</sub> = 770 psia  
D = 1360 Mcf/day

Company Magnolia Petroleum Co.  
By [Signature]  
Title District Gas Engineer  
Witnessed by \_\_\_\_\_  
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> R <sup>2</sup>	(1-e <sup>-S</sup> )	P <sub>t</sub> <sup>2</sup> (Column 1)	P <sub>t</sub> <sup>2</sup> + R <sup>2</sup>	P <sub>w</sub>
<u>4175</u>	<u>0.262</u>	<u>195.2</u>	<u>51.142</u>		<u>319.225</u>	<u>370.367</u>	<u>609</u>

