

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 South Klance Formation Pictured Cliffs County Mio Arriba
Purchasing Pipeline Pacific Northwest Pipeline Co. Date Test Filed _____

Operator Magnolia Petroleum Co. Lease W. O. Hughes Well No. 2
Unit A Sec. 8 Twp. 24N Rge. 3W Pay Zone: From 3153' To 3214'
Casing: OD 5 1/2" WT. 14# Set At 3260' Tubing: OD 2 3/8" WT. 4.7# T. Perf. 3200
Produced Through: Casing _____ Tubing X Gas Gravity: Measured 0.780 Estimated _____
Date of Flow Test: From 5/22/58 To 5/30/58 * Date S.I.P. Measured 8/26/57
Meter Run Size 4.026 Orifice Size 1.250 Type Chart L-10-8 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 (_____)² x spring constant _____ = _____ psia (d)
Meter error (c) - (d) or (d) - (c) _____ ± _____ psi (e)
Friction loss, Flowing column to meter: _____ = _____ psi (f)
(b) - (c) Flow through tubing: (a) - (c) Flow through casing
Seven day average static meter pressure (from meter chart):
Normal chart average reading _____ psig + 12 = _____ psia (g)
Square root chart average reading (7.2)² x sp. const. 5 = 259 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 259 psia (h)
P_t = (h) + (f) = 259 psia (i)
Wellhead casing shut-in pressure (Dwt) 973 psig + 12 = 985 psia (j)
Wellhead tubing shut-in pressure (Dwt) 974 psig + 12 = 986 psia (k)
P_c = (j) or (k) whichever well flowed through = 986 psia (l)
Flowing Temp. (Meter Run) 63 °F + 460 = 523 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 493 psia (n)

Q = 760 MCF/D X $\left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{1}{1} = 1 \right) = \underline{760}$ MCF/da
(integrated)

DELIVERABILITY CALCULATION

D = Q 760 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n$ 0.85 .8383 = 637 MCF/da.
729,147
897,316

SUMMARY

P_c = 986 psia
Q = 760 Mcf/day
P_w = 274 psia
P_d = 493 psia
D = 637 Mcf/day

Company MAGNOLIA PETROLEUM COMPANY
By James A. Fagan, Jr.
Title Gas Engineer
Witnessed by _____
Company _____

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

REMARKS OR FRICTION CALCULATIONS

GL	(1-e ^{-S})	(F _c Q) ²	(F _c Q) ² (1-e ^{-S}) R ²	P _t ² (Column i)	P _t ² + R ²	P _w
<u>2304</u>	<u>0.154</u>	<u>51</u>	<u>7.8</u>	<u>67.08</u>	<u>74.88</u>	<u>274</u>



