

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 Undesignated Formation Pictured Cliffs County Mc Arriba
Purchasing Pipeline Pacific Northwest Pipeline Co. Date Test Filed -
Operator Magnolia Petroleum Co. Lease Jicarilla "D" Well No. 6 P.C.-UT
Unit 8 S Sec. 24 Twp. 26N Rge. 3W Pay Zone: From 3960' To 4038'
Casing: OD 7 5/8" WT. 24# Set At 4220' Tubing: OD 2 3/8" 4.7# T. Perf. 3938'
Produced Through: Casing - Tubing x Gas Gravity: Measured 0.682 Estimated -
Date of Flow Test: From 4/21/58 To 4/29/58 * Date S.I.P. Measured 12/12/57
Meter Run Size 4.025 Orifice Size 1.000" Type Chart sq. 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 (_____) ² 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 _____ psig + 12 = _____ psia (g)
Square root chart average reading (7.82) ² x sp. const. 10 _____ = 611 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 611 psia (h)
P_t = (h) + (f) _____ = 611 psia (i)
Wellhead casing shut-in pressure (Dwt) 962 psig + 12 = 974 psia (j)
Wellhead tubing shut-in pressure (Dwt) 962 psig + 12 = 974 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 974 psia (l)
Flowing Temp. (Meter Run) 65 °F + 460 _____ = 525 °Abs (m)
P_d = ½ P_c = ½ (l) _____ = 487 psia (n)

Q = 665 X $\left(\frac{\sqrt{(c)} - 1}{\sqrt{(d)} - 1} \right) = \frac{665}{1} = 665$ MCF/da
(Integrated)

DELIVERABILITY CALCULATION

D = Q 665 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{0.85} = \frac{711,507}{568,135}^{0.85} = 1.209 = 804$ MCF/da.

SUMMARY

P_c = 974 psia Company MAGNOLIA PETROLEUM COMPANY
Q = 665 Mcf/day By Lee E. Robinson
P_w = 616 psia Title District Superintendent - N.G.
P_d = 487 psia Witnessed by _____
D = 804 Mcf/day 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>2686</u>	<u>0.177</u>	<u>39.09</u>	<u>6.92</u>	<u>275.32</u>	<u>180.261</u>	<u>616</u>

