

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 Rio Arriba
Purchasing Pipeline Pacific Northwest Date Test Filed 3-7-58
Operator Magnolia Petroleum Company Lease Jicarilla #1 Well No. 5 PC-UT
Unit M Sec. 11 Twp. 26N Rge. 3W Pay Zone: From 3,696 To 3,754
Casing: OD 7 5/8" WT. 24# Set At 4000' Tubing: OD 2 3/8" WT. 4.7# T. Perf. 3686
Produced Through: Casing Tubing x Gas Gravity: Measured 0.679 Estimated
Date of Flow Test: From 1-16-58 To 1-23-58 * Date S.I.P. Measured 8-28-57
Meter Run Size 2.067" Orifice Size 1.250" 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 (7.71) ² x sp. const. 10 = 595 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 595 psia (h)
P_t = (h) + (f) = 595 psia (i)
Wellhead casing shut-in pressure (Dwt) 1002 psig + 12 = 1014 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1002 psig + 12 = 1014 psia (k)
P_c = (j) or (k) whichever well flowed through = 1014 psia (l)
Flowing Temp. (Meter Run) 60 °F + 460 = 5200 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 507 psia (n)

Q = 495 X $\left(\frac{\sqrt{(c)} - \sqrt{(d)}}{\sqrt{(d)}} \right)^2 = \underline{495}$ MCF/day
(integrated)

DELIVERABILITY CALCULATION

D = Q 495 $\left[\frac{(P_c^2 - P_d^2) - (P_c^2 - P_w^2)}{(P_c^2 - P_w^2)} \right]^{0.85} = \underline{557}$ MCF/day.
771,347 670,575 1.126

SUMMARY

P_c = 1014 psia Company Magnolia Petroleum Company
Q = 495 Mcf/day By William A. Morgan
P_w = 596 psia Title Gas Engineer
P_d = 507 psia Witnessed by
D = 507 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>2503</u>	<u>0.166</u>	<u>21.66</u>	<u>3.596</u>	<u>354,025</u>	<u>357,621</u>	<u>596</u>



