

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 Mesa Verde County San Juan
Purchasing Pipeline Pacific Northwest Pipeline Company Date Test Filed
Operator Magnolia Petroleum Company Lease Jicarilla "D" Well No. 6 N.V.
Unit S B Sec. 24 Twp. 20N Rge. 3W Pay Zone: From 5724' To 6229'
Casing: OD 5 1/2" WT. 14# Set At 5380' Tubing: OD 2 3/8" WT. 4.7# T. Perf. 5690'
Produced Through: Casing Tubing x Gas Gravity: Measured 0.697 Estimated
Date of Flow Test: From 4/21/58 4/29/58 * Date S.I.P. Measured 12/12/57
Meter Run Size 4.026" Orifice Size 0.500" Type Chart exp. 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) psig + 12 = psia (j)
Wellhead tubing shut-in pressure (Dwt) 1466 psig + 12 = 1478 psia (k)
P_c = (j) or (k) whichever well flowed through = 1478 psia (l)
Flowing Temp. (Meter Run) 60 °F + 460 = 520 ° Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 739 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{67}{(\text{integrated})} \times \left(\frac{\sqrt{(c)} \frac{1}{1} = \frac{1}{1} = \frac{1}{1}}{\sqrt{(d)} \frac{1}{1} = \frac{1}{1}} \right)^{0.75} = 67 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{67}{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} = \frac{1,638,363}{1,811,136} \right]^{0.75} \frac{0.9271}{1}} = 62 \text{ MCF/da.}$$

SUMMARY

P_c = 1478 psia
Q = 67 Mcf/day
P_w = 611 psia
P_d = 739 psia
D = 62 Mcf/day

Company MAGNOLIA PETROLEUM COMPANY
By C. E. K. [Signature]
Title Dist. Superintendent - N.M.
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
3971	0.251	0.106	0.0266	373.321	373.348	611



