

Initial Deliverability
Test

Form C-122-A
Revised April 20, 1955

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 Alamosa Formation Mesa Verde County Rio Arriba
Purchasing Pipeline Pacific Northwest Pipe Line Corporation Date Test Filed March 23, 1959
Operator Magnolia Petroleum Company Lease Jicarilla #6 Well No. 8 12-10
Unit A Sec. 26 Twp. 27N Rge. 3W Pay Zone: From 7667' To 6185'
Casing: OD 5" WT. 15# Set At 6260' Tubing: OD 2 1/8" WT. 4.7# T. Perf. 6184'
Produced Through: Casing - Tubing X Gas Gravity: Measured 0.690 Estimated -
Date of Flow Test: From 1-15-59 To 1-22-59 * Date S.I.P. Measured 10-15-58
Meter Run Size 4.026" 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 (_____) 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 (7.11) ² x sp. const. 10 = _____ psia (g)
Corrected seven day avg. meter press. (P_f) (g) + (e) = _____ psia (h)
P_t = (h) + (f) = _____ psia (i)
Wellhead casing shut-in pressure (Dwt) _____ psig + 12 = _____ psia (j)
Wellhead tubing shut-in pressure (Dwt) 1432 psig + 12 = _____ psia (k)
P_c = (j) or (k) whichever well flowed through = _____ psia (l)
P_c = (j) or (k) whichever well flowed through _____ °F + 460 = _____ °Abs (m)
Flowing Temp. (Meter Run) 35 °F + 460 = _____ °Abs (n)
P_d = 1/2 P_c = 1/2 (l) = _____ psia

FLOW RATE CALCULATION

$$Q = \frac{632}{(\text{integrated})} \times \left(\frac{\sqrt{(c)} - \sqrt{(d)}}{\sqrt{(a)} - \sqrt{(b)}} \right) = \frac{632}{1} = 632 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{632}{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{0.75}} = \frac{632}{\left[\frac{1,563,852}{1,820,681} \right]^{0.75}} = 964 \text{ MCF/da.}$$

SUMMARY

P_c = 1444 psia
Q = 632 Mcf/day
P_w = 314 psia
P_d = 722 psia
D = 964 Mcf/day

Company Magnolia Petroleum Company
By William A. Morgan
Title Jr. 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>4267</u>	<u>0.267</u>	<u>35.31</u>	<u>9.43</u>	<u>255.025</u>	<u>264.455</u>	<u>314</u>

