

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 Blanco-Mesa Verde Formation Mesa Verde County Nio Arriba
Purchasing Pipeline Pacific Northwest Pipeline Date Test Filed -
Operator Magnolia Petroleum Company Lease Hearilla "E" Well No. 4 M.V.-17
Unit N Sec. 11 Twp. 27N Rge. 3W Pay Zone: From 5577' To 6034'
Casing: OD 5 1/2" WT. 11# Set At 6110 Tubing: OD 2 3/8" WT. 4.7# T. Perf. 5577'
Produced Through: Casing - Tubing x Gas Gravity: Measured 0.711 Estimated -
Date of Flow Test: From 4/21/58 To 4/29/58 * Date S.I.P. Measured 11/7/57
Meter Run Size 4.029" 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 (8.02) ² x sp. const. 10 _____ = 643 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 643 psia (h)
P_t = (h) + (f) _____ = 643 psia (i)
Wellhead casing shut-in pressure (Dwt) _____ psig + 12 = _____ psia (j)
Wellhead tubing shut-in pressure (Dwt) 1638 psig + 12 = 1650 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1650 psia (l)
Flowing Temp. (Meter Run) 60 °F + 460 _____ = 520 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 825 psia (n)

Q = 1045 X $\left(\frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)} \frac{1}{1} = \frac{1}{1} = \frac{1}{1}} \right) = \underline{1045}$ MCF/da
(integrated)

DELIVERABILITY CALCULATION
D = Q 1045 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^{0.75} = \underline{961}$ MCF/da.
2,041,875 2,285,221

SUMMARY

P_c = 1650 psia
Q = 1045 Mcf/day
P_w = 661 psia
P_d = 825 psia
D = 961 Mcf/day

Company MAGNOLIA PETROLEUM COMPANY
By L. E. Robinson
Title Dist. Superintendent, N.G.
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>3904</u>	<u>0.247</u>	<u>96.5</u>	<u>23.83</u>	<u>413.449</u>	<u>437.279</u>	<u>661</u>

