

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 Undesignated Formation Pictured Cliffs County Rio Arriba
Purchasing Pipeline Pacific Northwest Pipe Line Corp. Date Test Filed Jan 15, 1959

Operator Magnolia Petroleum Company Lease Jicarilla "D" Well No. 7 UT-PC
Unit M Sec. 13 Twp. 26N Rge. 3W Pay Zone: From 3817' To 3873'
Casing: OD 7 5/8" WT. 25.4# Set At 4095 Tubing: OD 2 3/8" WT. 4.7# T. Perf. 3875'
Produced Through: Casing - Tubing X Gas Gravity: Measured 0.671 Estimated -
Date of Flow Test: From 11-29-58 To 12-7-58 * Date S.I.P. Measured 12-14-58
Meter Run Size 4.026 Orifice Size 1.250" Type Chart L-10-8 Type Taps Flange

OBSERVED DATA

Flowing casing pressure (Dwt) 503 psig + 12 = 515 psia (a)
Flowing tubing pressure (Dwt) 500 psig + 12 = 512 psia (b)
Flowing meter pressure (Dwt) 500 psig + 12 = 512 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken:
Normal chart reading 7.15 psig + 12 = 511 psia (d)
Square root chart reading (7.15)² x spring constant 10 = 511 psia (d)
Meter error (c) - (d) or (d) - (c) ± = 1 psi (e)
Friction loss, Flowing column to meter:
(b) - (c) Flow through tubing: (a) - (c) Flow through casing = 3 psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading - psig + 12 = - psia (g)
Square root chart average reading (-)² x sp. const. 10 = 505 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 506 psia (h)
P_t = (h) + (f) = 509 psia (i)
Wellhead casing shut-in pressure (Dwt) 828 psig + 12 = 840 psia (j)
Wellhead tubing shut-in pressure (Dwt) 828 psig + 12 = 840 psia (k)
P_c = (j) or (k) whichever well flowed through = 840 psia (l)
Flowing Temp. (Meter Run) 65 °F + 460 = 525 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 420 psia (n)

Q = 685 X $\left(\frac{\sqrt{(c)} = \sqrt{512} = 1.001}{\sqrt{(d)} = \sqrt{511}} \right)^2 = \underline{686}$ MCF/da
(integrated)

DELIVERABILITY CALCULATION

D = Q 686 $\left[\frac{(P_c^2 - P_d^2) = 529,200}{(P_c^2 - P_w^2) = 439,363} \right]^n \frac{0.85}{1.1709} = \underline{803}$ MCF/da.

SUMMARY

P_c = 840 psia
Q = 686 Mcf/day
P_w = 516 psia
P_d = 420 psia
D = 803 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
2600	0.172	41.603	7.156	259.081	266.237	516

This test was accomplished in accordance with Sec 3, Sub paragraph 1, Paragraph A, sub paragraph 1, Order R-333-C & D, and shall be considered an annual test.

