

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 Formation Mesaverde County Rio Arriba
Purchasing Pipeline Pacific Northwest Pipeline Date Test Filed 4-10-59
Operator Magnolia Petroleum Co. Lease Cheney Federal Well No. 2 M.V. L.T.
Unit M Sec. 17 Twp. 26N Rge. 2W Pay Zone: From 5572' To 6026'
Casing: OD 5" WT. 15# Set At 6085 Tubing: OD 2-3/8" WT. 4.7# T. Perf. 5988'
Produced Through: Casing - Tubing x Gas Gravity: Measured 0.667 Estimated -
Date of Flow Test: From 2/19/59 To 2/27/59 * Date S.I.P. Measured 9/14/58
Meter Run Size 4.026" Orifice Size 1.250" 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:
(b) - (c) Flow through tubing; (a) - (c) Flow through casing _____ = _____ psi (f)
Seven day average static meter pressure (from meter chart): 583
Normal chart average reading _____ psig + 12 = 595 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) _____ psig + 12 = _____ psia (j)
Wellhead tubing shut-in pressure (Dwt) 1497 psig + 12 = 1509 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1509 psia (l)
Flowing Temp. (Meter Run) 53 °F + 460 _____ = 513 °Abs (m)
P_d = ½ P_c = ½ (l) _____ = 754 psia (n)

Q = 745 X $\left(\frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)} \ 1}{\sqrt{(d)} \ 1} = \frac{1}{1} = 1} \right)^* = \underline{745} \text{ MCF/da}$
(Integrated)

DELIVERABILITY CALCULATION

D = Q 745 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n \frac{0.75}{0.9194} = \underline{685} \text{ MCF/da.}$
 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right] = \frac{1,708,565}{1,910,683}$

SUMMARY

P_c = 1509 psia
Q = 745 Mcf/day
P_w = 605 psia
P_d = 754 psia
D = 685 Mcf/day

Company Magnolia Petroleum Co.
By W. S. Thacker
Title District 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
3994	0.252	49.1	12.373	354.025	366.398	605

