

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 Elanco Formation Mesaverde County Rio Arriba
Purchasing Pipeline Pacific Northwest Pipeline Date Test Filed 4-18-59
Operator Magnolia Petroleum Co. Lease Jicarilla "F" Well No. 4 M.V. L.T.
Unit A Sec. 23 Twp. 27N Rge. 3W Pay Zone: From 5633' To 6104'
Casing: OD 5" WT. 154 Set At 6160' Tubing: OD 2-3/8" WT. 4.74 T. Perf. 6161'
Produced Through: Casing - Tubing X Gas Gravity: Measured 0.714 Estimated -
Date of Flow Test: From 2/27/59 To 3/7/59 * Date S.I.P. Measured 9/22/58
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):
Normal chart average reading 508 psig + 12 = 520 psia (g)
Square root chart average reading (7.21) ² x sp. const. 10 = 520 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 520 psia (h)
P_t = (h) + (f) _____ = 520 psia (i)
Wellhead casing shut-in pressure (Dwt) 1375 psig + 12 = 1387 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1375 psig + 12 = 1387 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1387 psia (l)
Flowing Temp. (Meter Run) 65 °F + 460 _____ = 525 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 693 psia (n)

Q = 331 X $\left(\frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)} \frac{1}{1} = \frac{1}{1} = \frac{1}{1}} \right) = \underline{\underline{331}}$ MCF/da
(Integrated)

DELIVERABILITY CALCULATION
D = Q 331 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n \frac{0.75}{0.9039} = \underline{\underline{299}}$ MCF/da.
 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right] = \frac{1,443,520}{1,650,746}$

SUMMARY

P_c = 1387 psia
Q = 331 Mcf/day
P_w = 523 psia
P_d = 693 psia
D = 299 Mcf/day

Company Magnolia Petroleum Co.
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>4356</u>	<u>0.271</u>	<u>9.68</u>	<u>2.623</u>	<u>270.400</u>	<u>273.023</u>	<u>523</u>

