

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 Tapesito-Pictured Cliffs Formation Pictured Cliffs County Rio Arriba
Purchasing Pipeline Pacific Northwest Pipe Line Corp. Date Test Filed May 1, 1957
Operator Magnolia Petroleum Co. Lease Clearilla "B" Well No. 1
Unit N Sec. 19 Twp. 26N Rge. 3W Pay Zone: From 3090' To 3230'
Casing: OD 5 1/2" WT. 24# Set At 3090' Tubing: OD 2-3/8" WT. 4.7# Tubing Set 3000'
Produced Through: Casing Tubing X Gas Gravity: Measured Estimated 0.68
Date of Flow Test: From 4-9-57 To 4-16-57 * Date S.I.P. Measured Sept. 30, 1955
Meter Run Size 3.069 Orifice Size 1.250" Type Chart Sq. Rt. Type Taps Flange

OBSERVED DATA

Flowing casing pressure (Dwt) 510 psig + 12 = 522 psia (a)
Flowing tubing pressure (Dwt) 507 psig + 12 = 519 psia (b)
Flowing meter pressure (Dwt) 507 psig + 12 = 519 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken:
Normal chart reading 7.20 psig + 12 = 518 psia (d)
Square root chart reading (7.20)² x spring constant 10 = 518 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 7.3 psig + 12 = 533 psia (g)
Square root chart average reading (7.3)² x sp. const. 10 = 533 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 534 psia (h)
P_t = (h) + (f) = 537 psia (i)
Wellhead casing shut-in pressure (Dwt) 1028 psig + 12 = 1040 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1028 psig + 12 = 1040 psia (k)
P_c = (j) or (k) whichever well flowed through = 1040 psia (l)
Flowing Temp. (Meter Run) 79 °F + 460 = 539 ° Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 520 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{784}{(\text{integrated})} \times \left(\frac{\sqrt{(c) \ 519} = \sqrt{1.0019} = 1.001}{\sqrt{(d) \ 518}} \right)^* = 785 \text{ MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{785}{\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^{0.85}} = 808 \text{ MCF/day}$$

SUMMARY

P_c = 1040 psia
Q = 785 Mcf/day
P_w = 520 psia
P_d = 520 psia
D = 808 Mcf/day

Company Magnolia Petroleum Company
By Walter H. King
Title 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
2672	0.177	54.46	9.61	288.4	298.0	545.9



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