

Initial Deliverability
Test

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 South Blanco Formation Picture Cliff County San Juan
Purchasing Pipeline Southern Union Gas Co. Date Test Filed 2-4-57
Operator J. Felix Hickman Lease Malco Well No. 1
Unit a Sec. 16 Twp. 26N Rge. 8W Pay Zone: From 2342 To 2372
Casing: OD 4 1/2 WT. 9# Set At 2408 Tubing: OD 1.315 WT. 1.68 T. Perf. 2345
Produced Through: Casing X Tubing _____ Gas Gravity: Measured .660 Estimated _____
Date of Flow Test: From 1-8-57 To 1-16-57 * Date S.I.P. Measured 8-28-56
Meter Run Size 4" Orifice Size 1.000 Type Chart Normal Type Taps _____

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 240 psig + 12 = 252 psia (g)
Square root chart average reading (_____) ² x sp. const. _____ = _____ psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 252 psia (h)
P_t = (h) + (f) _____ = 252 psia (i)
Wellhead casing shut-in pressure (Dwt) 655 psig + 12 = 667 psia (j)
Wellhead tubing shut-in pressure (Dwt) 655 psig + 12 = 667 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 667 psia (l)
Flowing Temp. (Meter Run) 64 °F + 460 _____ = 524 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 333 1/2 533.5 psia (n)

FLOW RATE CALCULATION

Q = 185 X $\left(\frac{\sqrt{(c)}}{\sqrt{(d)}} \right)^* = \underline{185}$ MCF/da
(integrated)

DELIVERABILITY CALCULATION

D = Q 185 $\left[\frac{(P_c^2 - P_d^2) = \underline{333,667}}{(P_c^2 - P_w^2) = \underline{381,385}} \right]^n \cdot \underline{.85} \cdot \underline{.9926} = \underline{165}$ MCF/da.

SUMMARY

P_c = 667 psia
Q = 185 Mcf/day
P_w = 252 psia
P_d = 333.5 psia
D = 165 Mcf/day

Company Well Production Co.
By N. A. Neely
Title Owner
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 _c ² - P _d ²	P _w



OK