

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 San Juan
Purchasing Pipeline El Paso Natural Date Test Filed _____
Operator Blackwood Nichols Lease NEBU Well No. 37-6
Unit B Sec. 6 Twp. 30N Rge. 7W Pay Zone: From 5490 To 5520
Casing: OD 5 1/2 WT. _____ Set At 5507 Tubing: OD 2 WT. 4.70 T. Perf. 5377
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .648 Estimated _____
Date of Flow Test: From 4/29 To 5/7 * Date S.I.P. Measured 5/14/60
Meter Run Size _____ Orifice Size 2.00 Type Chart _____ Type Taps _____

OBSERVED DATA

Flowing casing pressure (Dwt) 600 psig + 12 = 612 psia (a)
Flowing tubing pressure (Dwt) 536 psig + 12 = 548 psia (b)
Flowing meter pressure (Dwt) 523 psig + 12 = 535 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken):
Normal chart reading _____ psig + 12 = _____ psia (d)
Square root chart reading (7.30)² x spring constant 1000 = 533 psia (d)
Meter error (c) - (d) or (d) - (c) ± _____ = 2 psi (e)
Friction loss, Flowing column to meter:
(b) - (c) Flow through tubing: (a) - (c) Flow through casing = 13 psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading _____ psig + 12 = _____ psia (g)
Square root chart average reading (7.15)² x sp. const. = 511 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 513 psia (h)
P_t = (h) + (f) = 526 psia (i)
Wellhead casing shut-in pressure (Dwt) 765 psig + 12 = 777 psia (j)
Wellhead tubing shut-in pressure (Dwt) 762 psig + 12 = 774 psia (k)
P_c = (j) or (k) whichever well flowed through = 774 psia (l)
Flowing Temp. (Meter Run) 82 °F + 460 = 542 °Abs (m)
P_c = 1/2 P_c = 1/2 (l) = 387 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{1,821}{(\text{integrated})} \times \left(\frac{\sqrt{c}}{\sqrt{d}} = \frac{1,0037}{1.0018} \right) = 1824 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{1824}{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} = \frac{449.307}{256.524} \right]^{1.7515}} = 1.5224 = 2777 \text{ MCF/da.}$$

SUMMARY

P_c = 774 psia Company Blackwood Nichols
Q = 1,824 Mcf/day By _____
P_w = 585 psia Title _____
P_d = 387 psia Witnessed by Thurmond McGlothlin
D = 2777 Mcf/day 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
3484	.224	294.092	65.876	276.676	342.552	585

3484

