

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 Mesa Verde County Rio Arriba
Purchasing Pipeline El Paso Natural Gas Date Test Filed _____
Operator El Paso Natural Gas Lease San Juan 28-6 Unit Well No. 71
Unit B Sec. 13 Twp. 28 Rge. 6 Pay Zone: From 5220 To 5726
Casing: OD 5-1/2 WT. 15.5 Set At 5824 Tubing: OD 2 WT. 4.7 T. Perf. 5685
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .696 Estimated _____
Date of Flow Test: From 5/1/58 To 5/9/58 * Date S.I.P. Measured 1/17/58
Meter Run Size _____ Orifice Size _____ Type Chart _____ 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: _____ psi (f)
(b) - (c) Flow through tubing: (a) - (c) Flow through casing _____
Seven day average static meter pressure (from meter chart):
Normal chart average reading _____ psig + 12 = _____ psia (g)
Square root chart average reading (7.55)² x sp. const. 10 = 570 ✓ psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 570 ✓ psia (h)
= 570 ✓ psia (i)
P_t = (h) + (f) = 1115 ✓ psia (j)
Wellhead casing shut-in pressure (Dwt) 1103 psig + 12 = 1115 ✓ psia (j)
Wellhead tubing shut-in pressure (Dwt) 1103 psig + 12 = 1115 ✓ psia (k)
P_c = (j) or (k) whichever well flowed through = 1115 ✓ psia (l)
Flowing Temp. (Meter Run) 71 °F + 460 = 531 ✓ ° Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 558 ✓ psia (n)

FLOW RATE CALCULATION

$$Q = \text{(Integrated)} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} \right) = \frac{1187}{1} \text{ MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q \times \left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n = \frac{1187 \times \left[\frac{931,861}{887,188} \right]^{0.75}}{1.0375} = 1232 \text{ MCF/day}$$

SUMMARY

P_c = 1115 ✓ psia
Q = 1187 ✓ Mcf/day
P_w = 597 ✓ psia
P_d = 558 ✓ psia
D = 1231 ✓ Mcf/day

Company El Paso Natural Gas
By Ronald E. Hendrich
Title _____
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
3957	.250	124.546	31,137	324,900	356,037	597

D at 500 = 1247

