

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)

Blanco

Mesa Verde

Rio Arriba

Pool El Paso Natural Gas Company Formation El Paso Natural Gas Company County El Paso

Purchasing Pipeline El Paso Natural Gas Co. Date Test Filed 33

Operator El Paso Natural Gas Co. Lease Rincon Well No. 33

Unit M 22 Sec. 27 Rge. 6 Pay Zone: From 4793 To 5485

Casing: OD 7 WT. 20 & 23 Set At 4745 Tubing: OD 2 WT. 4.7 T. Perf. 5435

Produced Through: Casing 11/30 Tubing 12/8 Gcs Gravity: Measured 9/13/55 Estimated .670

Date of Flow Test: From 4 To 4 * Date S.I.P. Measured Sq. Rt.

Meter Run Size Flange Orifice Size Flange Type Chart Flange 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 7.40 10 psig + 12 = 548 psia (g)

Square root chart average reading () ² x sp. const. = 548 psia (g)

Corrected seven day avge. meter press. (p_f) (g) + (e) = 548 psia (h)

P_i = (h) + (f) 1104 = 1116 psia (i)

Wellhead casing shut-in pressure (Dwt) 1100 psig + 12 = 1112 psia (j)

Wellhead tubing shut-in pressure (Dwt) psig + 12 = 1112 psia (k)

P_c = (j) or (k) whichever well flowed through 53 = 513 psia (l)

Flowing Temp. (Meter Run) °F + 460 = 556 °Abs (m)

P_d = 1/2 P_c = 1/2 (l) = psia (n)

FLOW RATE CALCULATION

$$Q = \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} \right) = 775 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = 777 \text{ MCF/da}$$

SUMMARY

P_c = 1112 psia
Q = 775 Mcf/day
P_w = 559 psia
P_d = 556 psia
D = 777 Mcf/day

El Paso Natural Gas Company

Company. El Paso Natural Gas Company
By Original Signed
Title Lewis D. Galloway
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})	P _t ²	P _t ² + R ²	P _w
364.1	.233	53.100	12,372	300,304	312,676	559

D @ 500 = 799

