

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)

71-511

Pool Blanco Formation Mesa Verde County San Juan  
Purchasing Pipeline El Paso Natural Gas Date Test Filed \_\_\_\_\_

Operator El Paso Natural Gas Lease Thurston Well No. 1  
Unit H Sec. 31 Twp. 31 Rge. 11 Pay Zone: From 4448 To 4731  
Casing: OD 5-1/2 WT. 15-1/2 Set At 4807 Tubing: OD 2 WT. 4.7 T. Perf. 4691  
Produced Through: Casing \_\_\_\_\_ Tubing X Gas Gravity: Measured 689 Estimated \_\_\_\_\_  
Date of Flow Test: From 6/21/58 To 6/29/58 \* Date S.I.P. Measured 5/8/57  
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 (\_\_\_\_\_) <sup>2</sup> 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 (7.10) <sup>2</sup> x sp. const. 10 = 504 psia (g)  
Corrected seven day avge. meter press. (p<sub>f</sub>) (g) + (e) = 504 psia (h)  
P<sub>t</sub> = (h) + (f) = 834 psia (i)  
Wellhead casing shut-in pressure (Dwt) 822 psig + 12 = 834 psia (j)  
Wellhead tubing shut-in pressure (Dwt) 819 psig + 12 = 831 psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through = 831 psia (l)  
Flowing Temp. (Meter Run) 85 °F + 460 = 545 °Abs (m)  
P<sub>d</sub> = 1/2 P<sub>c</sub> = 1/2 (l) = 416 psia (n)

FLOW RATE CALCULATION

$$Q = \text{(Integrated)} \times \left( \frac{\sqrt{(c)}}{\sqrt{(d)}} \right) = \text{_____} \times \left( \frac{\text{_____}}{\text{_____}} \right) = \text{_____} \times \text{_____} = \text{359 MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \times \left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \text{359} \times \left[ \frac{517505}{434164} \right]^n = \text{1.1919} \times \text{1.1406} = \text{409 MCF/da.}$$

SUMMARY

P<sub>c</sub> = 831 psia  
Q = 359 Mcf/day  
P<sub>w</sub> = 504 psia  
P<sub>d</sub> = 416 psia  
D = 409 Mcf/day

El Paso Natural Gas

Company \_\_\_\_\_  
By \_\_\_\_\_  
Title \_\_\_\_\_  
Witnessed by \_\_\_\_\_  
Company \_\_\_\_\_

- \* This is date of completion test.
- \* Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

GL	(1-e <sup>-S</sup> )	(F <sub>c</sub> Q) <sup>2</sup>	(F <sub>c</sub> Q) <sup>2</sup> (1-e <sup>-S</sup> ) R <sup>2</sup>	P <sub>t</sub> <sup>2</sup> (Column i)	P <sub>t</sub> <sup>2</sup> + R <sup>2</sup>	P <sub>w</sub>
3232	.209	11.391	2.381	254.016	256.397	506

D at 500 = 354

