

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 San Juan  
Purchasing Pipeline El Paso Natural Gas Date Test Filed \_\_\_\_\_

Operator El Paso Natural Gas Lease Howell Well No. 2-L  
Unit A Sec. 25 Twp. 30 Rge. 8 Pay Zone: From 4778 To 5398  
Casing: OD 7 WT. 20 Set At 4700 Tubing: OD 2 WT. 4.7 T. Perf. 4890  
Produced Through: Casing \_\_\_\_\_ Tubing X Gas Gravity: Measured .671 Estimated \_\_\_\_\_  
Date of Flow Test: From 10/30/58 To 11/7/58 \* Date S.I.P. Measured 5/22/58  
Meter Run Size \_\_\_\_\_ Orifice Size 1.250 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:  
(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 \_\_\_\_\_ psig + 12 = \_\_\_\_\_ psia (g)  
Square root chart average reading ( 5.55 ) <sup>2</sup> x sp. const. 15 = 462 psia (g)  
Corrected seven day avge. meter press. (p<sub>f</sub>) (g) + (e) \_\_\_\_\_ = 462 psia (h)  
P<sub>t</sub> = (h) + (f) \_\_\_\_\_ = 462 psia (i)  
Wellhead casing shut-in pressure (Dwt) 694 psig + 12 = 706 psia (j)  
Wellhead tubing shut-in pressure (Dwt) 580 psig + 12 = 592 psia (k)  
+ P<sub>c</sub> = (j) or (k) whichever well flowed through \_\_\_\_\_ = 706 psia (l)  
Flowing Temp. (Meter Run) 68 °F + 460 \_\_\_\_\_ = 528 °Abs (m)  
P<sub>d</sub> = ½ P<sub>c</sub> = ½ (l) \_\_\_\_\_ = 353 psia (n)

FLOW RATE CALCULATION

$$Q = \text{(integrated)} \times \left( \frac{\sqrt{(c)}}{\sqrt{(d)}} \right) = \frac{1129}{1} = 1129 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{1129}{\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n} = \frac{1129}{\left[ \frac{706^2 - 353^2}{706^2 - 487^2} \right]^n} = \frac{1129}{1.3090} = 1478 \text{ MCF/da.}$$

SUMMARY

P<sub>c</sub> = 706 psia  
Q = 1129 Mcf/day  
P<sub>w</sub> = 487 psia  
P<sub>d</sub> = 353 psia  
D = 1478 Mcf/day

Company El Paso Natural Gas  
By Original Signed  
Title Harold L. Kendrick  
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>
3281	.212	112.678	23,888	213,444	237,332	487

+ SIPC used for P<sub>c</sub> (Highest). Tubing Perf. on 9/30/58  
D at 500 = 981

OK



