

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 Klance Mesa Verde Formation Mesa Verde County San Juan  
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed \_\_\_\_\_  
Operator El Paso Natural Gas Lease Stewart Well No. 5  
Unit L Sec. 20 Twp. 30N Rge. 10W Pay Zone: From 4686 To 5074  
Casing: OD 7 WT. 20 Set At 2845 Tubing: OD 2 WT. 4.7 T. Perf. 5008  
Produced Through: Casing \_\_\_\_\_ Tubing X Gas Gravity: Measured .75 Estimated \_\_\_\_\_  
Date of Flow Test: From 7/8 To 7/16 \* Date S.I.P. Measured 5/3/56  
Meter Run Size 4 Orifice Size \_\_\_\_\_ Type Chart Sq. Rt. 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 ( \_\_\_\_\_ )<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 ( 7.00 )<sup>2</sup> x sp. const. 10 = 490 psia (g)  
Corrected seven day avge. meter press. (p<sub>f</sub>) (g) + (e) = 490 psia (h)  
P<sub>t</sub> = (h) + (f) = 490 psia (i)  
Wellhead casing shut-in pressure (Dwt) 1168 psig + 12 = 1180 psia (j)  
Wellhead tubing shut-in pressure (Dwt) 1170 psig + 12 = 1182 psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through = 1182 psia (l)  
Flowing Temp. (Meter Run) 71 °F + 460 = 531 °Abs (m)  
P<sub>d</sub> = ½ P<sub>c</sub> = ½ (l) = 591 psia (n)

FLOW RATE CALCULATION

$$Q = \text{(integrated)} \times \left( \frac{\sqrt{(c)}}{\sqrt{(d)}} \right) = \text{519 MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q \times \left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{.9099} = \text{484 MCF/day}$$

SUMMARY

P<sub>c</sub> = 1182 psia  
Q = 519 Mcf/day  
P<sub>w</sub> = 496 psia  
P<sub>d</sub> = 591 psia  
D = 484 Mcf/day  
Company El Paso Natural Gas Company  
By Lewis D. Galloway  
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>
<u>3581</u>	<u>.229</u>	<u>23.614</u>	<u>5.453</u>	<u>240,100</u>		<u>496</u>

D @ 500 = 512



