

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 Elanco 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. 3  
Unit A Sec. 28 Twp. 30 Rge. 10 Pay Zone: From 4580 To 5314  
Casing: OD 5 1/2 WT. 15.5 Set At 5330 Tubing: OD 2 WT. 4.7 T. Perf. 5202  
Produced Through: Casing \_\_\_\_\_ Tubing I Gas Gravity: Measured .710 Estimated \_\_\_\_\_  
Date of Flow Test: From 5/16 To 5/23 \* Date S.I.P. Measured 3/1/56  
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:  
(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 (7.15) <sup>2</sup> x sp. const. 10 \_\_\_\_\_ = 511 psia (g)  
Corrected seven day avge. meter press. (p<sub>f</sub>) (g) + (e) \_\_\_\_\_ = 511 psia (h)  
P<sub>t</sub> = (h) + (f) \_\_\_\_\_ = 511 psia (i)  
Wellhead casing shut-in pressure (Dwt) 1039 psig + 12 = 1051 psia (j)  
Wellhead tubing shut-in pressure (Dwt) 1002 psig + 12 = 1014 psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through \_\_\_\_\_ = 1014 psia (l)  
Flowing Temp. (Meter Run) 66 °F + 460 \_\_\_\_\_ = 526 °Abs (m)  
P<sub>d</sub> = 1/2 P<sub>c</sub> = 1/2 (l) \_\_\_\_\_ = 507 psia (n)

FLOW RATE CALCULATION

Q = \_\_\_\_\_ X  $\left( \frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{\text{_____}}{\text{_____}} = \text{_____} \right)^* = \text{578} \text{ MCF/da}$   
(integrated)

DELIVERABILITY CALCULATION

D = Q 578  $\left[ \frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} = \frac{773,147}{760,106} \right]^n \frac{1.0145}{1.0109} = \text{584} \text{ MCF/da.}$

SUMMARY

P<sub>c</sub> = 1014 psia  
Q = 578 Mcf/day  
P<sub>w</sub> = 518 psia  
P<sub>d</sub> = 507 psia  
D = 584 Mcf/day

Company El Paso Natural Gas  
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 <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>
3693	.236	29,528	6,969	261,121	268,090	518

D • 500 = 577



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