

Initial Deliverability  
Test

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 Chozas Mesa Formation Pictured Cliffs County Rio Arriba  
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed \_\_\_\_\_  
Operator El Paso Natural Gas Co. Lease San Juan 28-4 Well No. 6-11  
Unit P Sec. 11 Twp. 28 Rge. 4 Pay Zone: From 4244 To \_\_\_\_\_  
Casing: OD 5-1/2 WT. 15.5 Set At 6571 Tubing: OD 1-1/4 WT. 2.4 T. Perf. 4244  
Produced Through: Casing X Tubing \_\_\_\_\_ Gas Gravity: Measured \_\_\_\_\_ Estimated \_\_\_\_\_  
Date of Flow Test: From 9-21-60 To 9-29-60 \* Date S.I.P. Measured 8-14-60  
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 (\_\_\_\_\_) <sup>2</sup> x sp. const. \_\_\_\_\_ = \_\_\_\_\_ psia (g)  
Corrected seven day avge. meter press. (p<sub>f</sub>) (g) + (e) \_\_\_\_\_ = \_\_\_\_\_ psia (h)  
P<sub>t</sub> = (h) + (f) \_\_\_\_\_ = \_\_\_\_\_ psia (i)  
Wellhead casing shut-in pressure (Dwt) 911 psig + 12 = 511 psia (j)  
Wellhead tubing shut-in pressure (Dwt) --- psig + 12 = 511 psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through \_\_\_\_\_ = \_\_\_\_\_ psia (l)  
Flowing Temp. (Meter Run) 65 °F + 460 \_\_\_\_\_ = 923 °Abs \* (m)  
P<sub>d</sub> = 1/2 P<sub>c</sub> = 1/2 (l) \_\_\_\_\_ = 523 psia (n)  
462

FLOW RATE CALCULATION

$$Q = \frac{\text{(Integrated)}}{\left( \frac{\sqrt{(c)}}{\sqrt{(d)}} \right)} \times \left( \frac{\sqrt{(c)}}{\sqrt{(d)}} \right) = \frac{56}{1} = 56 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \times \left[ \frac{\left( \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right)^n}{\frac{1.0806}{1.0681}} \right] = \frac{56 \times \left[ \frac{638,485}{590,808} \right]^n}{1.0681} = 60 \text{ MCF/da.}$$

SUMMARY

P<sub>c</sub> = 923 psia  
Q = 56 Mcf/day  
P<sub>w</sub> = 511 psia  
P<sub>d</sub> = 462 psia  
D = 60 Mcf/day  
Company El Paso Natural Gas Company  
By H. L. Kendrick Original Signed  
Title Field Gas Engineer  
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>

Friction Negligible

\* Use SIPC for P<sub>c</sub>. SIPT not obtainable.

Intermitter Installed # 8/22/60

D at 250 = 71



