

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 South Blanco Formation Picture Cliff County Rio Arriba  
Purchasing Pipeline Pacific Northwest Date Test Filed \_\_\_\_\_

Operator El Paso Natural Gas Company Lease Jicarilla Well No. 12-E  
Unit M Sec. 17 Twp. 25 Rge. 4 Pay Zone: From 3672 To 3700  
Casing: OD 5 1/2 WT. 15.5# Set At 3742 Tubing: OD 1 1/2 WT. 2.4 T. Perf. 3641  
Produced Through: Casing X Tubing \_\_\_\_\_ Gas Gravity: Measured .653 Estimated \_\_\_\_\_  
Date of Flow Test: From 9-30-59 To 10-8-59 \* Date S.I.P. Measured 8-4-59 (17 Days)  
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 \_\_\_\_\_ = \_\_\_\_\_ psi (f)  
Seven day average static meter pressure (from meter chart): 478 psig + 12 = 490 psia (g)  
Normal chart average reading \_\_\_\_\_ = \_\_\_\_\_ psia (g)  
Square root chart average reading (\_\_\_\_\_) <sup>2</sup> x sp. const. \_\_\_\_\_ = 490 psia (h)  
Corrected seven day avge. meter press. (p<sub>f</sub>) (g) + (e) \_\_\_\_\_ = 490 psia (i)  
P<sub>t</sub> = (h) + (f) \_\_\_\_\_ = 944 psig + 12 = 956 psia (j)  
Wellhead casing shut-in pressure (Dwt) 944 psig + 12 = 956 psia (k)  
Wellhead tubing shut-in pressure (Dwt) \_\_\_\_\_ = 956 psia (l)  
P<sub>c</sub> = (j) or (k) whichever well flowed through \_\_\_\_\_ = 517 ° Abs (m)  
Flowing Temp. (Meter Run) 57 °F + 460 \_\_\_\_\_ = 478 psia (n)  
P<sub>d</sub> = 1/2 P<sub>c</sub> = 1/2 (l) \_\_\_\_\_

$$Q = \frac{3153}{8} \times \left( \frac{\sqrt{V(c)}}{\sqrt{V(d)}} \right) = 394$$
  
(Integrated)

DELIVERABILITY CALCULATION

$$D = Q \frac{394}{\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{1/2}} = 400$$

SUMMARY

P<sub>c</sub> = 956 psia  
Q = 394 Mcf/day  
P<sub>w</sub> = 490 psia  
P<sub>d</sub> = 478 psia  
D = 400 Mcf/day

EL PASO NATURAL GAS COMPANY

Company \_\_\_\_\_  
By Original Signed  
Title \_\_\_\_\_  
Witnessed by Harold L. Kendrick  
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

