

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 Pictured Cliffs County Rio Arriba  
Purchasing Pipeline El Paso Natural Gas Date Test Filed \_\_\_\_\_

Operator El Paso Natural Gas Lease Rincon Unit Well No. 91  
Unit D Sec. 11 Twp. 26 Rge. 7 Pay Zone: From 2930 To 2978  
Casing: OD 5-1/2 WT. 15.5 Set At 3025 Tubing: OD 1-1/4 WT. 2.3 T. Perf. 2911  
Produced Through: Casing \_\_\_\_\_ Tubing x Gas Gravity: Measured .655 Estimated \_\_\_\_\_  
Date of Flow Test: From 8/31 To 9/8/57 \* Date S.I.P. Measured 2/5/57  
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:  
(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 ( 7.65 ) <sup>2</sup> x sp. const. 5 \_\_\_\_\_ = 293 psia (g)  
Corrected seven day avge. meter press. (p<sub>f</sub>) (g) + (e) \_\_\_\_\_ = 293 psia (h)  
P<sub>t</sub> = (h) + (f) \_\_\_\_\_ = 293 psia (i)  
Wellhead casing shut-in pressure (Dwt) 783 psig + 12 = 795 psia (j)  
Wellhead tubing shut-in pressure (Dwt) \_\_\_\_\_ psig + 12 = \_\_\_\_\_ psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through \_\_\_\_\_ = 795 psia (l)  
Flowing Temp. (Meter Run) 59 °F + 460 \_\_\_\_\_ = 519 °Abs (m)  
P<sub>d</sub> = 1/2 P<sub>c</sub> = 1/2 (l) \_\_\_\_\_ = 398 psia (n)

Q = \_\_\_\_\_ X  $\left( \frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} \right)^* = \underline{1721} \text{ MCF/da}$   
(integrated)

DELIVERABILITY CALCULATION

D = Q 1721  $\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \frac{1.5055}{1.4160} = \underline{2437} \text{ MCF/da.}$   
 $\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right] = \frac{473,621}{314,582}$

SUMMARY

P<sub>c</sub> = 795 psia  
Q = 1721 Mcf/day  
P<sub>w</sub> = 563 psia  
P<sub>d</sub> = 398 psia  
D = 2437 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>
1907	.129	1795.302	231,594	85,849	317,443	<u>564</u>

D at 250 = 1767

