

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)

72-111-01

Pool South Kansas Formation Pictured Cliffs County El Arroyo  
Purchasing Pipeline El Paso Natural Gas Date Test Filed \_\_\_\_\_

Operator El Paso Natural Gas Lease San Juan 22-7 Unit Well No. 93 (2)  
Unit N Sec. 9 Twp. 27N Rge. 7E Pay Zone: From 3130 To 3180  
Casing: OD 7-5/8 WT. 26.4 Set At 3304 Tubing: OD 1-1/4 WT. 2.4 T. Perf. 3140  
Produced Through: Casing \_\_\_\_\_ Tubing X Gas Gravity: Measured .651 Estimated \_\_\_\_\_  
Date of Flow Test: From 10/22/58 To 10/30/58 Date S.I.P. Measured 1/13/58 (23 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:  
(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 (7.93) <sup>2</sup> x sp. const. 5 \_\_\_\_\_ = 270 psia (g)  
Corrected seven day avge. meter press. (P<sub>f</sub>) (g) + (e) \_\_\_\_\_ = 270 psia (h)  
P<sub>t</sub> = (h) + (f) \_\_\_\_\_ = 270 psia (i)  
Wellhead casing shut-in pressure (Dwt) 954 psig + 12 = 1003 psia (j)  
Wellhead tubing shut-in pressure (Dwt) 954 psig + 12 = 1003 psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through \_\_\_\_\_ = 1003 psia (l)  
Flowing Temp. (Meter Run) 98 °F + 460 \_\_\_\_\_ = 518 °Abs (m)  
P<sub>d</sub> = ½ P<sub>c</sub> = ½ (l) \_\_\_\_\_ = 502 psia (n)

Q = \_\_\_\_\_ X  $\left( \frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} = \frac{\text{_____}}{\text{_____}} = \text{_____} \right)^* = \text{2045} \text{ MCF/da}$

(integrated)

DELIVERABILITY CALCULATION

D = Q 2045  $\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \frac{1.2705}{1.2860} = \text{2307} \text{ MCF/da.}$

$\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right] = \frac{794003}{999430}$

SUMMARY

P<sub>c</sub> = 1003 psia  
Q = 2045 Mcf/day  
P<sub>w</sub> = 642 psia  
P<sub>d</sub> = 502 psia  
D = 2307 Mcf/day

Company El Paso Natural Gas  
By Original Signed  
Title Harold L. Kendrick  
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>
1986	.134	2534.921	339.679	72,900	42,579	642

D at 230 = 2053

