

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 West Knts Dakota Formation Dakota County San Juan  
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed June 24, 1960  
Operator Tennessee Gas Transmission Company Lease (USA) Glenn H. Callow Well No. 11  
Unit F Sec. 28 Twp. 27N Rge. 13W Pay Zone: From 6140' To 6262'  
Casing: OD 7" WT. 23 1/2 Set At 6359' Tubing: OD 2 3/8" WT. 4.7 T. Perf. 6140'  
Produced Through: Casing \_\_\_\_\_ Tubing X Gas Gravity: Measured .692 Estimated \_\_\_\_\_  
Date of Flow Test: From 5/18/60 To 5/24/60 \* Date S.I.P. Measured 12/31/59  
Meter Run Size 4" Orifice Size 1.5" Type Chart SR Type Taps Flange

OBSERVED DATA

Flowing casing pressure (Dwt) \_\_\_\_\_ psig + 12 = Packer psia (a)  
Flowing tubing pressure (Dwt) \_\_\_\_\_ psig + 12 = 494 psia (b)  
Flowing meter pressure (Dwt) \_\_\_\_\_ psig + 12 = 489 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: \_\_\_\_\_ = 5 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 (7.05) <sup>2</sup> x sp. const. 1000 = 497 psia (g)  
Corrected seven day avge. meter press. (p<sub>f</sub>) (g) + (e) \_\_\_\_\_ = 497 psia (h)  
P<sub>t</sub> = (h) + (f) \_\_\_\_\_ = 502 psia (i)  
Wellhead casing shut-in pressure (Dwt) \_\_\_\_\_ psig + 12 = Packer psia (j)  
Wellhead tubing shut-in pressure (Dwt) \_\_\_\_\_ psig + 12 = 2030 psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through \_\_\_\_\_ = 2030 psia (l)  
Flowing Temp. (Meter Run) 77 °F + 460 \_\_\_\_\_ = 537 °Abs (m)  
P<sub>d</sub> = 1/2 P<sub>c</sub> = 1/2 (l) \_\_\_\_\_ = 1015 psia (n)

Q = \_\_\_\_\_ X  $\left( \frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)} = \frac{\sqrt{(d)}}{\sqrt{(d)}}} \right) = \underline{342} \text{ MCF/day}$   
(integrated)

DELIVERABILITY CALCULATION

D = Q 342  $\left[ \frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n \frac{(10980000)^{.75}}{(359465)} = \underline{289} \text{ MCF/day}$

SUMMARY

P<sub>c</sub> = 2030 psia  
Q = 342 Mcf/day  
P<sub>w</sub> = 504 psia  
P<sub>d</sub> = 1015 psia  
D = 289 Mcf/day

Company Tennessee Gas Transmission Company  
By J. J. Lacey  
Title District Petroleum 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> + R <sup>2</sup>	P <sub>w</sub>
<u>4250</u>	<u>.266</u>	<u>10330</u>	<u>2160</u>	<u>24764</u>	<u>504</u>



