

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 BLANCO MESA VERDE Formation MESA VERDE County SJ  
Purchasing Pipeline EL PASO NATURAL GAS CO. Date Test Filed MARCH 11, 1958  
Operator BLACKWOOD-NICHOLS Lease BL UNIT HOWELL B Well No. 1-X  
Unit B Sec. 10 Twp. 30N Rge. 7E Pay Zone: From 5356 To 5578  
Casing: OD 5 1/2 WT.        Set At 5774 Tubing: OD 2 3/8 WT.        T. Perf. 5560  
Produced Through: Casing        Tubing X Gas Gravity: Measured .645 Estimated         
Date of Flow Test: From        To        \* Date S.I.P. Measured 6-10-57  
Meter Run Size        Orifice Size 2.250 Type Chart SR 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 ( 6.00 )<sup>2</sup> x sp. const. 15 = 540 psia (g)  
Corrected seven day avge. meter press. (p<sub>f</sub>) (g) + (e)        =        psia (h)  
P<sub>t</sub> = (h) + (f)        = 540 psia (i)  
Wellhead casing shut-in pressure (Dwt) 1040 psig + 12 = 1052 psia (j)  
Wellhead tubing shut-in pressure (Dwt)        psig + 12 =        psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through        = 1052 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)        = 526 psia (n)

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

DELIVERABILITY CALCULATION  
D = Q 2791  $\left[ \frac{(P_c^2 - P_d^2) = 630,028}{(P_c^2 - P_w^2) = 656,463} \right]^n \frac{1.1923}{1.1923} = 3.328 \text{ MCF/da.}$

SUMMARY  
P<sub>c</sub> = 1052 psia  
Q = 2791 Mcf/day  
P<sub>w</sub> = 671 psia  
P<sub>d</sub> = 526 psia  
D = 3328 Mcf/day  
Company GELECTRIC? INC  
By B H KEVES  
Title AGENT  
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>
3598	.230	68 589	158 375	291 600	49 975	671

