

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 Ashe Formation Pictured Cliffs County San Juan  
 Purchasing Pipeline Southern Union Gas Company Date Test Filed February 19, 1960  
 Operator Ashe Oil & Gas Company Lease 1001 Well No. 13  
 Unit 2 Sec. 11 Twp. 9 Rge. 9 Pay Zone: From 1070 To 1080  
 Casing: OD 4 1/2 WT. 9.7 Set At 1030 Tubing: OD 1 WT. 2.7 T. Perf. 1035  
 Produced Through: Casing 12 Tubing 12 Gas Gravity: Measured 0.64 Estimated 0.64  
 Date of Flow Test: From 1/21 To 1/27 \* Date S.I.P. Measured 1/22/60  
 Meter Run Size 1 1/2 Orifice Size 2.570 Type Chart SR Type Taps 7

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):  
 Normal chart average reading \_\_\_\_\_ psig + 12 = \_\_\_\_\_ psia (g)  
 Square root chart average reading (\_\_\_\_\_) <sup>2</sup> x sp. const. 1000 = \_\_\_\_\_ psia (g)  
 Corrected seven day avge. meter press. (p<sub>f</sub>) (g) + (e) \_\_\_\_\_ = \_\_\_\_\_ psia (h)  
 P<sub>t</sub> = (h) + (f) \_\_\_\_\_ = \_\_\_\_\_ psia (i)  
 Wellhead casing shut-in pressure (Dwt) 97 psig + 12 = \_\_\_\_\_ psia (j)  
 Wellhead tubing shut-in pressure (Dwt) 97 psig + 12 = \_\_\_\_\_ psia (k)  
 P<sub>c</sub> = (j) or (k) whichever well flowed through \_\_\_\_\_ = \_\_\_\_\_ psia (l)  
 Flowing Temp. (Meter Run) \_\_\_\_\_ °F + 460 \_\_\_\_\_ = \_\_\_\_\_ °Abs (m)  
 P<sub>d</sub> = 1/2 P<sub>c</sub> = 1/2 (l) \_\_\_\_\_ = \_\_\_\_\_ psia (n)

Q = 405 X  $\left( \frac{\sqrt{(c)} - \sqrt{(d)}}{\sqrt{(c)}} \right) = \underline{405}$  MCF/da

DELIVERABILITY CALCULATION  
 $D = Q \left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right] = \underline{477}$  MCF/da.

SUMMARY  
 P<sub>c</sub> = 97 psia  
 Q = 405 Mcf/day  
 P<sub>w</sub> = 97 psia  
 P<sub>d</sub> = 97 psia  
 D = 477 Mcf/day  
 Company Ashe Oil & Gas Company  
 By ORIGINAL SIGNED BY L. M. STEVENS  
 Title ORIGINAL SIGNED BY L. M. STEVENS  
 Witnessed by L. M. Stevens, Dist. Engineer  
 Company \_\_\_\_\_

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>
<u>Existing Loss Is Negligible</u>						

*OK*

