

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 Ashee Formation Pictured Cliffs County San Juan  
Purchasing Pipeline Southern Union Gas Company Date Test Filed February 19, 1960  
Operator Ashee Oil & Gas Company Lease 244 Well No. 13  
Unit 1 Sec. 11 Twp. 24 Rge. 9 Pay Zone: From 1070 To 2000  
Casing: OD 4 1/2 WT. 9.7 Set At 1030 Tubing: OD 1 1/2 WT. 2.7 T. Perf. 1000  
Produced Through: Casing 12 Tubing 12 Gas Gravity: Measured 0.64 Estimated 0.64  
Date of Flow Test: From 1/2 To 2/7 \* Date S.I.P. Measured 2/2/60  
Meter Run Size 4" 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. 5.70 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) 927 psig + 12 = \_\_\_\_\_ psia (j)  
Wellhead tubing shut-in pressure (Dwt) 891 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)

FLOW RATE CALCULATION

$$Q = \frac{109}{(\text{integrated})} \times \left( \frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{1.000}{1.000} \right) = 109 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{0.85}}{\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{0.85}} = 177 \text{ MCF/da.}$$

SUMMARY

P<sub>c</sub> = 927 psia  
Q = 109 Mcf/day  
P<sub>w</sub> = 905 psia  
P<sub>d</sub> = 891 psia  
D = 177 Mcf/day  
Company Ashee Oil & Gas Company  
By ORIGINAL SIGNED BY L. M. STEVENS  
Title L. M. Stevens, Dist. 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> (Column i)	P <sub>t</sub> <sup>2</sup> + R <sup>2</sup>	P <sub>w</sub>
<u>Friction Loss Is Negligible</u>						

OK

