

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 Elmwood Formation San Juan County San Juan  
Purchasing Pipeline Pacific Northwest Pipeline Corporation Date Test Filed 7-3-77  
Operator Pacific Northwest Pipeline Corporation Lease San Juan 30-7 Well No. 7-17  
Unit 1 Sec. 17 Twp. 30N Rge. 7E Pay Zone: From \_\_\_\_\_ To \_\_\_\_\_  
Casing: OD 7" WT. \_\_\_\_\_ Set At 3056 Tubing: OD 1" WT. \_\_\_\_\_ T. Perf. 3010  
Produced Through: Casing \_\_\_\_\_ Tubing 1 Gas Gravity: Measured \_\_\_\_\_ Estimated .650  
Date of Flow Test: From 5-17-77 To 5-25-77 \* Date S.I.P. Measured 5-25-77  
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 ch 305)  
Normal chart average reading \_\_\_\_\_ psig + 12 = \_\_\_\_\_ psia (g)  
Square root chart average reading ( \_\_\_\_\_ )<sup>2</sup> x sp. const. \_\_\_\_\_ = \_\_\_\_\_ 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) 1095 psig + 12 = \_\_\_\_\_ psia (j)  
Wellhead tubing shut-in pressure (Dwt) 1100 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> = ½ P<sub>c</sub> = ½ (l) \_\_\_\_\_ = \_\_\_\_\_ psia (n)

Q = 37 X  $\left( \frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} \right)^* = \underline{37} \text{ MCF/da}$   
(integrated)

DELIVERABILITY CALCULATION

D = Q 37  $\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n \frac{(1.059)^{-D}}{(1.013)} = \underline{39} \text{ MCF/da.}$

SUMMARY

P<sub>c</sub> = 1110 psia  
Q = 37 Mcf/day  
P<sub>w</sub> = 600 psia  
P<sub>d</sub> = 305 psia  
D = 39 Mcf/day

Company Pacific Northwest Pipeline Corporation  
By Original signed by G. H. Peppin  
Title Reservoir Engineering  
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> R <sup>2</sup>	(1-e <sup>-S</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>357</u>	<u>0.833</u>	<u>3.470</u>	<u>0.810</u>	<u>0.810</u>	<u>302.10</u>	<u>309.39</u>	<u>600</u>

