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2-File

Initial Deliverability  
Test

Form C-122-A  
Revised April 20, 1955

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 Rio Arriba  
Purchasing Pipeline PACIFIC NORTHWEST PIPELINE CORPORATION Date Test Filed 11-26-57  
Operator PACIFIC NORTHWEST PIPELINE Lease San Juan 29-6 Well No. 54-4  
Unit K Sec. 4 Twp. 29N Rge. 6W Pay Zone: From 5134' To 5640'  
Casing: OD 5 1/2" WT. 14.0# Set At 5697' Tubing: OD 2-3/8" WT. 4.7 T. Perf. 5629'  
Produced Through: Casing \_\_\_\_\_ Tubing XX Gas Gravity: Measured .698 Estimated \_\_\_\_\_  
Date of Flow Test: From 9-30-57 To 10-8-57 \* Date S.I.P. Measured 4-23-57  
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 chart):  
Normal chart average reading 565 psig + 12 = 577 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) \_\_\_\_\_ = 577 psia (i)  
Wellhead casing shut-in pressure (Dwt) 1112 psig + 12 = 1124 psia (j)  
Wellhead tubing shut-in pressure (Dwt) 1100 psig + 12 = 1112 psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through \_\_\_\_\_ = 1124 psia (l)  
Flowing Temp. (Meter Run) 78 °F + 460 \_\_\_\_\_ = 537 °Abs (m)  
P<sub>d</sub> = 1/2 P<sub>c</sub> = 1/2 (l) \_\_\_\_\_ = 562 psia (n)

Q = 2,054 X  $\left( \frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)}} = \frac{\text{ } }{\sqrt{(d)}} = \text{ } \right)^* = \underline{2,054} MCF/da  
(integrated)$

DELIVERABILITY CALCULATION

D = Q 2,054  $\left[ \frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n \frac{(1.131)^{.75}}{(1.0965)} = \underline{2,252} MCF/da.  
 $\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} = \frac{947,532}{837,582}$$

SUMMARY  
P<sub>c</sub> = 1124 psia  
Q = 2,054 Mcf/day  
P<sub>w</sub> = 652 psia  
P<sub>d</sub> = 562 psia  
D = 2,252 Mcf/day  
Company PACIFIC NORTHWEST PIPELINE CORP.  
By Original signed by G. H. Peppin  
Title District Production 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><br>R <sup>2</sup> | (1-e <sup>-S</sup> ) | P <sub>t</sub> <sup>2</sup><br>(Column i) | P <sub>t</sub> <sup>2</sup> + R <sup>2</sup> | P <sub>w</sub> |
|------|----------------------|---------------------------------|---------------------------------------------------|----------------------|-------------------------------------------|----------------------------------------------|----------------|
| 3929 | 0.249                | 372.953                         | 92.865                                            |                      | 332.929                                   | 425.794                                      | 652            |

