

3-H. N. O. C.C.  
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 Mesa Verde Formation Mesa Verde County San Juan  
Purchasing Pipeline PACIFIC NORTHWEST PIPELINE Date Test Filed 11-26-57  
Operator PACIFIC NORTHWEST PIPELINE Lease San Juan 32-8 Well No. 2-89  
Unit 1 Sec. 29 Twp. 32N Rge. 8W Pay Zone: From 3030' To 5090'  
Casing: OD 7" WT. 19.75 Set At 4992' Tubing: OD 1" WT. 10.75 T. Perf. 5090'  
Produced Through: Casing 1" Tubing 1" Gas Gravity: Measured 0.650 Estimated 0.650  
Date of Flow Test: From 10-17-57 To 11-27-57 \* Date S.I.P. Measured 1-2-58  
Meter Run Size 1" Orifice Size 1/8" Type Chart 30" Type Taps 1/2"

OBSERVED DATA

Flowing casing pressure (Dwt) 947 psig + 12 = 959 psia (a)  
Flowing tubing pressure (Dwt) 935 psig + 12 = 947 psia (b)  
Flowing meter pressure (Dwt) 927 psig + 12 = 939 psia (c)  
Flowing meter pressure (meter reading when Dwt. measurement taken):  
Normal chart reading 508 psig + 12 = 520 psia (d)  
Square root chart reading ( 508 )<sup>2</sup> x spring constant 1.028 = 520 psia (d)  
Meter error (c) - (d) or (d) - (c) ± = 0 psi (e)  
Friction loss, Flowing column to meter:  
(b) - (c) Flow through tubing: (a) - (c) Flow through casing = 20 psi (f)  
Seven day average static meter pressure (from meter chart):  
Normal chart average reading 508 psig + 12 = 520 psia (g)  
Square root chart average reading ( 508 )<sup>2</sup> x sp. const. 1.028 = 520 psia (g)  
Corrected seven day avge. meter press. (p<sub>f</sub>) (g) + (e) = 520 psia (h)  
P<sub>t</sub> = (h) + (f) = 540 psia (i)  
Wellhead casing shut-in pressure (Dwt) 947 psig + 12 = 959 psia (j)  
Wellhead tubing shut-in pressure (Dwt) 935 psig + 12 = 947 psia (k)  
P<sub>c</sub> = (j) or (k) whichever well flowed through = 947 psia (l)  
Flowing Temp. (Meter Run) 44 °F + 460 = 504 °Abs (m)  
P<sub>d</sub> = 1/2 P<sub>c</sub> = 1/2 (l) = 473.5 psia (n)

FLOW RATE CALCULATION

Q = 45 X  $\left( \frac{\sqrt{P_c} - \sqrt{P_d}}{\sqrt{P_c} - \sqrt{P_w}} \right)^2 = \underline{45} MCF/day  
(integrated)$

DELIVERABILITY CALCULATION

D = Q 45  $\left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \underline{46} MCF/day  
 $\left[ \frac{702,317}{682,080} \right]^{0.75}$$

SUMMARY

P<sub>c</sub> = 947 psia  
Q = 45 Mcf/day  
P<sub>w</sub> = 504 psia  
P<sub>d</sub> = 473.5 psia  
D = 46 Mcf/day

Company PACIFIC NORTHWEST PIPELINE CORP.  
By Original signed by G. H. Peppin  
Title Assistant Exploration 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> )<br>R <sup>2</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> |
|----|----------------------|---------------------------------|------------------------------------------------------------------------|-------------------------------------------|----------------------------------------------|----------------|
|    |                      |                                 |                                                                        |                                           |                                              |                |

OK



1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000