

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 ELANCO MESAVERDE Formation MESAVERDE County SAN JUAN
Purchasing Pipeline PACIFIC NORTHWEST PIPELINE CORPORATION Date Test Filed January 16, 1957
Operator Pacific Northwest Pipeline Lease San Juan Unit 38-7 Well No. 14-28
Unit E Sec. 25 Twp. 38N Rge. 7W Pay Zone: From 3600 To 6000
Casing: OD 5 1/2 WT. 25.5 Set At 6000 Tubing: OD 2 3/8 WT. 4.7 T. Perf. 6015
Produced Through: Casing --- Tubing E Gas Gravity: Measured --- Estimated .650
Date of Flow Test: From 12-23-56 To 1-1-57 * Date S.I.P. Measured 12-3-56
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 (---)² 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 --- psig + 12 = --- psia (g)
Square root chart average reading (---)² x sp. const. 530 = 747 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) --- = 747 psia (h)
P_t = (h) + (f) --- = 747 psia (i)
Wellhead casing shut-in pressure (Dwt) 1197 psig + 12 = 1209 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1190 psig + 12 = 1202 psia (k)
P_c = (j) or (k) whichever well flowed through --- = 1202 psia (l)
Flowing Temp. (Meter Run) 58 °F + 460 --- = 518 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) --- = 601 psia (n)

Q = 913 (integrated) X $\left(\frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} \right)^* = \text{--- MCF/da}$

DELIVERABILITY CALCULATION

D = Q 913 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{1/n} = \text{--- MCF/da.}$

SUMMARY

P_c = 1202 psia
Q = 913 Mcf/day
P_w = 572 psia
P_d = 601 psia
D = 494 Mcf/day

Company Pacific Northwest Pipeline Corporation
By W. H. G. Jones
Title Oil Well Engineer
Witnessed by ---
Company ---

- * This is date of completion test.
- * Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

GL	(1-e ^{-S})	(F _c Q) ²	(F _c Q) ² (1-e ^{-S}) R ²	P _t ² (Column i)	P _t ² + R ²	P _w
<u>3910</u>	<u>.847</u>	<u>83,881</u>	<u>709</u>	<u>499,209</u>	<u>500,918</u>	<u>572</u>

3-W.H.G.C.C.-Jones
1-L. G. Truby
2-Wayne Smith (Phillips)
1-File

Oil



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