

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 Blanco Mesa Verde Formation Mesa Verde County Rio Arriba
Purchasing Pipeline Pacific Northwest Pipeline Corp. Date Test Filed 1-16-57
Operator Pacific Northwest Lease San Juan Unit 29-6 Well No. 9-36
Unit N Sec. 36 Twp. 29 Rge. 6 Pay Zone: From 5123 To 5690
Casing: OD 7" WT. 20# Set At 5075 Tubing: OD 2 3/8 WT. 4.7 T. Perf. 5648
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .600 Estimated _____
Date of Flow Test: From 11-17-56 To 11-25-56 Date S.I.P. Measured 7-26-54
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: _____ = _____ psi (f)
(b) - (c) Flow through tubing; (a) - (c) Flow through casing
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. _____ = 461 psia (g)
Corrected seven day avge. meter press. (P_f) (g) + (e) _____ = _____ psia (h)
P_t = (h) + (f) _____ = 461 psia (i)
Wellhead casing shut-in pressure (Dwt) 1037 psig + 12 = 1049 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1033 psig + 12 = 1045 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1045 psia (l)
Flowing Temp. (Meter Run) 67 °F + 460 _____ = 527 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 523 psia (n)

FLOW RATE CALCULATION

Q = 453 X $\left(\frac{\sqrt{(c)}}{\sqrt{(d)}} \right) =$ _____ MCF/day
(integrated)

DELIVERABILITY CALCULATION

D = Q 453 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = (1.9353) \cdot 75 = 1.4518 \cdot 431 =$ _____ MCF/day

SUMMARY

P_c = 1045 psia
Q = 453 Mcf/day
P_w = 446 psia
P_d = 523 psia
D = 431 Mcf/day

Company Pacific Northwest Pipeline Corp.
By Donald G. Adams
Title Well Test 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 1)	P _t ² + R ²	P _w
<u>3041</u>	<u>.244</u>	<u>18,139</u>	<u>4426</u>		<u>216947</u>	<u>466</u>

3- NMOCC
2- Phillips Petro (Wayne Smith)
1- File

Oil



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