

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 MESAVERDE Formation MESAVERDE County ELD ARANDA
Purchasing Pipeline PACIFIC NORTHWEST PIPELINE CORPORATION Date Test Filed JAN 17 1957
Operator Pacific Northwest Pipeline Lease 25-6 Well No. 21-21
Unit 1 Sec. 31 Twp. 35N Rge. 6W Pay Zone: From 5072 To 5992
Casing: OD 5" WT. 11.5 Set At 6012 Tubing: OD 2 1/8 WT. 4.7 T. Perf. 5979
Produced Through: Casing --- Tubing --- Gas Gravity: Measured --- Estimated .650
Date of Flow Test: From 12-9-56 To 12-7-56 * Date S.I.P. Measured 8-6-56
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 = 547 psia (g)
Square root chart average reading (---)² x sp. const. 535 = --- psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) --- = 547 psia (h)
P_t = (h) + (f) --- = 1493 psia (i)
Wellhead casing shut-in pressure (Dwt) 1077 psig + 12 = 1089 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1055 psig + 12 = 1067 psia (k)
P_c = (j) or (k) whichever well flowed through 66 = 95 psia (l)
Flowing Temp. (Meter Run) --- °F + 460 --- = 740 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) --- = --- psia (n)

Q = 1493 (integrated) X $\left(\frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} \right) = \text{--- MCF/da}$

D = Q 1493 $\left[\frac{(P_c^2 - P_d^2) = 874,800}{(P_c^2 - P_w^2) = 818,700} \right]^n \frac{(1.0505)^{-75}}{1.0505} = \text{1569 MCF/da.}$

SUMMARY
P_c = 1089 psia
Q = 1493 Mcf/day
P_w = 95 psia
P_d = 95 psia
D = 1569 Mcf/day
Pacific Northwest Pipeline Corp.
Company ---
By ---
Title ---
Witnessed by ---
Company ---

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

REMARKS OR FRICTION CALCULATIONS

GL	(1-e ⁻⁸)	(FcQ) ²	(FcQ) ² (1-e ⁻⁸)	P _t ²	P _t ² + R ²	P _w
			R ²	(Column i)		
3886	.246	197037	48,471	259,209	347,680	590

3-H.M.O.C.C. - Antec
1-L. G. Kelly
2-Wayne Smith (Phillips)
1-File

OK



Figure 1

