

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 SAN JUAN
Purchasing Pipeline PACIFIC NORTHWEST PIPELINE CORPORATION Date Test Filed JANUARY 24, 1957
Operator Pacific Northwest Pipeline Lease Artes "A" Well No. 1-17
Unit A Sec. 17 Twp. 32 Rge. 10 Pay Zone: From 5394 To 6118
Casing: OD 7" WT. 20 & 23 # Set At 5320 Tubing: OD 1" WT. 1.8 T. Perf. 5474
Produced Through: Casing X Tubing - Gas Gravity: Measured - Estimated .65
Date of Flow Test: From 11-19-56 To 11-27-56 * Date S.I.P. Measured 4-30-56
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. - = - psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) - = 547 psia (h)
P_t = (h) + (f) - = 1002 psia (i)
Wellhead casing shut-in pressure (Dwt) 990 psig + 12 = 1002 psia (j)
Wellhead tubing shut-in pressure (Dwt) 990 psig + 12 = 1002 psia (k)
P_c = (j) or (k) whichever well flowed through 42 = 502 psia (l)
Flowing Temp. (Meter Run) - °F + 460 - = 501 °Abs (m)
P_d = ½ P_c = ½ (l) - = 501 psia (n)

Q = 40.6 (integrated) X $\left(\frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)}} = \frac{\sqrt{(d)}}{\sqrt{(d)}} \right) = \text{MCF/da}$

DELIVERABILITY CALCULATION

D = Q 40.6 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n \frac{(1.0684) \cdot 75}{1.0509} = \text{43 MCF/da.}$

SUMMARY

P_c = 1002 psia
Q = 40.6 Mcf/day
P_w = 547 psia
P_d = 501 psia
D = 43 Mcf/day

Company Pacific Northwest Pipeline Corp.
By Donald C. 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 i)	P _t ² + R ²	P _w

FRICTION NEGLIGIBLE P_r = P_t

3-N.M.O.C.C.-Artes
2-Phillips Petroleum-Wayne Smith
1-L. G. Truby
1-File



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