

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 Formation Mesa Verde County Rio Arriba
Purchasing Pipeline PACIFIC NORTHWEST PIPELINE Date Test Filed 1-27-59
Operator PACIFIC NORTHWEST PIPELINE Lease San Juan 29-5 Well No. 18-5
Unit K Sec. 5 Twp. 29N Rge. 5W Pay Zone: From 5472' To 5942'
Casing: OD 5 1/2" WT. 15.5# Set At 5985' Tubing: OD 1 1/2" WT. 2.44 T. Perf. 5919'
Produced Through: Casing _____ Tubing xxx Gas Gravity: Measured .628 Estimated _____
Date of Flow Test: From 12-15-58 To 12-22-58 Date S.I.P. Measured 9-17-58
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 505 psig + 12 = 517 psia (g)
Square root chart average reading (_____) ² x sp. const. _____ = _____ psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 517 psia (h)
P_f = (h) + (f) _____ = 517 psia (i)
Wellhead casing shut-in pressure (Dwt) 1103 psig + 12 = 1115 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1031 psig + 12 = 1043 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1115 psia (l)
Flowing Temp. (Meter Run) _____ 69 °F + 460 _____ = 529 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 557.5 psia (n)

Q = 1,411 X $\left(\frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)}} = \frac{\text{_____}}{\sqrt{(d)}} = \text{_____}} \right)^{.75}$ = 1,411 MCF/da
(Integrated)

DELIVERABILITY CALCULATION

D = Q 1,411 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^{.75} = \frac{932,419}{689,925}^{.75} \frac{(1.351)}{1.253} = 1,768$ MCF/da.

SUMMARY

P_c = 1115 psia
Q = 1411 Mcf/day
P_w = 744 psia
P_d = 557.5 psia
D = 1,768 Mcf/day

Company PACIFIC NORTHWEST PIPELINE
By Original signed by G. H. Peppin
Title District Production 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 OCN. OQM. DISC 3	
3717	0.237	1,206.798	286.011	267.289	553.300	744

