

Final 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 Formation Mesa Verde County Rio Arriba
Purchasing Pipeline PACIFIC NORTHWEST PIPELINE CORPORATION Date Test Filed (9-9-58)
Operator PACIFIC NORTHWEST PIPELINE Lease San Juan 29-6 Well No. 29-3
Unit H Sec. 3 Twp. 29N Rge. 24W Pay Zone: From 5770' To 5864'
Casing: OD 5 1/2" WT. 14.04 Set At 5790' Tubing: OD 1 1/2" WT. 2.44 T. Perf. 5761'
Produced Through: Casing _____ Tubing xxx Gas Gravity: Measured .679 Estimated _____
Date of Flow Test: From 7-15-58 To 7-22-58 * Date S.I.P. Measured 5-28-58
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 449 psig + 12 = 461 psia (g)
Square root chart average reading (_____) ² x sp. const. _____ = _____ psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 461 psia (h)
P_t = (h) + (f) _____ = 461 psia (i)
Wellhead casing shut-in pressure (Dwt) 1043 psig + 12 = 1055 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1043 psig + 12 = 1055 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1055 psia (l)
Flowing Temp. (Meter Run) 80 °F + 460 _____ = 540 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 527.5 psia (n)

Q = 1,407 (integrated) X $\left(\frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} \right) = \underline{1,407}$ MCF/day

DELIVERABILITY CALCULATION

D = Q 1,407 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \underline{1,797}$ MCF/day
834,769
602,921
1.385
1.277

SUMMARY

P_c = 1,055 psia
Q = 1,407 Mcf/day
P_w = 714 psia
P_d = 527.5 psia
D = 1,797 Mcf/day

Company PACIFIC NORTHWEST PIPELINE CORP.
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 + R ²	P _w
<u>3912</u>	<u>0.248</u>	<u>1,199.930</u>	<u>297.583</u>	<u>212.521</u>	<u>510.104</u>	<u>714</u>

