

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 Mesaverde County Rio Arriba
Purchasing Pipeline Pacific Northwest Pipeline Corporation Date Test Filed 8-21-57
Operator Northwest Production Corp. Lease "N" Well No. 5-6
Unit L Sec. 6 Twp. 26N Rge. 4W Pay Zone: From 5506 To 6120
Casing: OD 5 1/2 WT. 14 & 15.5 Set At 6153 Tubing: OD 2-2/8 WT. 4.7 T. Perf. 6043
Produced Through: Casing Tubing X Gas Gravity: Measured .700 Estimated
Date of Flow Test: From 7-24-57 To 8-1-57 * Date S.I.P. Measured 8-4-57
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 638 psig + 12 = 640 psia (g)
Square root chart average reading ()² x sp. const. = psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = psia (h)
P_t = (h) + (f) = 640 psia (i)
Wellhead casing shut-in pressure (Dwt) psig + 12 = psia (j)
Wellhead tubing shut-in pressure (Dwt) 1132 psig + 12 = 1132 psia (k)
P_c = (j) or (k) whichever well flowed through = 1132 psia (l)
Flowing Temp. (Meter Run) °F + 460 = °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 566 psia (n)

FLOW RATE CALCULATION

Q = 261 X $\left(\frac{\sqrt{P_c}}{\sqrt{P_d}} \right)^2 = \text{MCF/da}$
(Integrated)

DELIVERABILITY CALCULATION

D = Q 261 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \text{Mcf/da}$
1.0773

SUMMARY

P_c = 1132 psia
Q = 261 Mcf/day
P_w = 641.2 psia
P_d = 566 psia
D = 261 Mcf/day

Company Northwest Production Corp.
By Ray Phillips
Title Asst Mgr. Prod Operations
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
4230	0.265	6.022	1.596	409,000	411,196	641.2