

Initial Deliverability
Test

Form C-122-A
Revised April 20, 1955

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 South Hanco Formation PC County San Juan
Purchasing Pipeline El Paso Natural Gas Co. Date Test Filed 4/16/58
Operator Northwest Production Corp. Lease San Juan 27-0 Well No. 8-11
Unit N Sec. 11 Twp. 27N Rge. 3W Pay Zone: From 2818 To 2828
Casing: OD 8 WT. 11.8 Set At 2350 Tubing: OD 1-1/4 WT. 3.3 T. Perf. 2327
Produced Through: Casing Tubing I Gas Gravity: Measured .634 Estimated
Date of Flow Test: From 4/21/58 To 4/30/58 * Date S.I.P. Measured 10/17/57
Meter Run Size 4.0 Orifice Size 1.500 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 = psia (g)
Square root chart average reading (7.65)² x sp. const. 2.00 = 285 psia (g)
Corrected seven day avg. meter press. (p_f) (g) + (e) = 285 psia (h)
P_t = (h) + (f) = 285 psia (i)
Wellhead casing shut-in pressure (Dwt) 577 psig + 12 = 589 psia (j)
Wellhead tubing shut-in pressure (Dwt) 575 psig + 12 = 587 psia (k)
P_c = (j) or (k) whichever well flowed through = 587 psia (l)
Flowing Temp. (Meter Run) 63 °F + 460 = 500 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 444 psia (n)

FLOW RATE CALCULATION

$$Q = \text{(integrated)} \times \left(\frac{\sqrt{(c)} = \text{ } = \text{ }}{\sqrt{(d)} = \text{ } = \text{ }} \right) = \text{ } \text{ MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q \text{ } 634 \left[\frac{(P_c^2 - P_d^2) = 589,633}{(P_c^2 - P_w^2) = 602,338} \right]^n \frac{0.0033}{(0.0041)^2} = 502 \text{ MCF/day.}$$

SUMMARY

P_c = 587 psia
Q = 502 Mcf/day
P_w = 587 psia
P_d = 444 psia
D = 502 Mcf/day

Company Northwest Production Corp.
By Ray Phillips RAY PHILLIPS
Title Mgr., Production 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
1418	0.693	236.791	22,296	61,226	104,431	323.2

P_o = 24.08

