

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 South Blanco Formation Pictured Cliffs County San Juan
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed 1-15-58

Operator Northwest Production Corp. Lease San Juan 27-8 Well No. 1-14
Unit I Sec. 14 Twp. 27N Rge. 8W Pay Zone: From 2913 To 2974
Casing: OD 5 WT. 11.5 Set At 3053 Tubing: OD 1 1/4 WT. 2.3 T. Perf. 2933
Produced Through: Casing X Tubing _____ Gas Gravity: Measured .640 Estimated _____
Date of Flow Test: From 12-20-57 To 12-28-57 * Date S.I.P. Measured 7-24-57
Meter Run Size 2 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 (7.75) ² x sp. const. 5.0 = 300 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 300 psia (h)
P_t = (h) + (f) _____ = 300 psia (i)
Wellhead casing shut-in pressure (Dwt) 886 psig + 12 = 898 psia (j)
Wellhead tubing shut-in pressure (Dwt) 886 psig + 12 = 898 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 898 psia (l)
Flowing Temp. (Meter Run) 59 °F + 460 _____ = 519 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 449 psia (n)

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

DELIVERABILITY CALCULATION

D = Q 1,459 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} = \frac{604,803}{715,668} \right]^n \frac{0.8667}{(0.8451)} = \text{1,265 MCF/da.}$

SUMMARY

P_c = 898 psia
Q = 1459 Mcf/day
P_w = 301 psia
P_d = 449 psia
D = 1265 Mcf/day

Company Northwest Production Corp.
By Ray Phillips RAY PHILLIPS
Title Asst Mgr, Prod Opr
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
1864	0.127	5.794	736	90,000	90,736	301.2

P_c = 1.650

