

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 Tapecito Formation Pictured Cliffs County Rio Arriba
Purchasing Pipeline Pacific Northwest Pipeline Corp. Date Test Filed 6-21-57

Operator Northwest Production Corp. Lease "X" Well No. 1-33
Unit H Sec. 33 Twp. 26N Rge. 3W Pay Zone: From 3930 To 3990
Casing: OD 4 1/2 WT. 9.5 Set At 4107 Tubing: OD 1 1/2 WT. 2.3 T. Perf. _____
Produced Through: Casing _____ Tubing K Gas Gravity: Measured .630 Estimated _____
Date of Flow Test: From 5-17-57 To 5-25-57 Date S.I.P. Measured 8-22-56
Meter Run Size 2" 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 962 psig + 12 = 575 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) _____ = 575 psia (i)
Wellhead casing shut-in pressure (Dwt) 1047 psig + 12 = 1059 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1047 psig + 12 = 1059 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1059 psia (l)
Flowing Temp. (Meter Run) _____ °F + 460 _____ = _____ °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 530 psia (n)

Q = 962 X $\left(\frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} \right)^* = \text{_____ MCF/da}$
(integrated)

DELIVERABILITY CALCULATION

D = Q 962 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n \frac{1.174}{1.174} = \text{_____ MCF/da.}$
 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right] = \frac{840.301}{695.594}$

SUMMARY

P_c = 1059 psia Company Northwest Production Corp.
Q = 962 Mcf/day By Ray Phillips RAY PHILLIPS
P_w = 652.6 psia Title Asst Mgr. Production Operations
P_d = 530 psia Witnessed by _____
D = 1129 Mcf/day 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
2362	0.170	360.932	95.358	330.625	425.983	652.6

