

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 Tpacite Formation Pictured Cliffs County Rio Arriba
Purchasing Pipeline Pacific Northwest Pipeline Corp. Date Test Filed 8-18-57

Operator Northwest Production Corp. Lease "X" Well No. 3-8
Unit L Sec. 5 Twp. 26N Rge. 4W Pay Zone: From 4030 To 4038
Casing: OD 8 WT. 11.5 Set At 4108 Tubing: OD 1 1/2 WT. 2.3 T. Perf. 4030
Produced Through: Casing X Tubing _____ Gas Gravity: Measured .680 Estimated _____
Date of Flow Test: From 7-24-57 To 8-1-57 * Date S.I.P. Measured 8-21-57
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 621 psig + 12 = 633 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) _____ = 633 psia (i)
Wellhead casing shut-in pressure (Dwt) _____ 1000 psig + 12 = 1012 psia (j)
Wellhead tubing shut-in pressure (Dwt) _____ 1000 psig + 12 = 1012 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1012 psia (l)
Flowing Temp. (Meter Run) _____ °F + 460 _____ = _____ °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 506 psia (n)

Q = 1,162 (integrated) X $\left(\frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} = \frac{\text{_____}}{\text{_____}} = \text{_____} \right)^* = \text{_____ MCF/da}$

DELIVERABILITY CALCULATION
D = Q 1,162 $\left[\frac{(P_c^2 - P_d^2) = \text{768,108}}{(P_c^2 - P_w^2) = \text{622,789}} \right]^n \frac{1,1950}{\text{_____}} = \text{1,389 MCF/da.}$

SUMMARY
P_c = 1012 psia Company Northwest Production Corp.
Q = 1162 Mcf/day By Ray Phillips RAY PHILLIPS
P_w = 633.5 psia Title Asst Mgr, Prod Opr
P_d = 506 psia Witnessed by _____
D = 1389 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
<u>2740</u>	<u>0.181</u>	<u>3.679</u>	<u>666</u>	<u>400,689</u>	<u>401,355</u>	<u>633.5</u>

[Handwritten Signature]
RECEIVED
AUG 21 1957
OIL CON. COM.
DIST. 3