

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 Tapacito Formation Pictured Cliffs County Rio Arriba
Purchasing Pipeline Pacific Northwest Pipeline Corporation Date Test Filed 1-2-59

Operator Northwest Production Corp. Lease Johnston-Shear 26-4 Well No. 1-5
Unit 0 Sec. 5 Twp. 26N Rge. 4W Pay Zone: From 3920 To 3974
Casing: OD 5 WT. 11.5 Set At 4029 Tubing: OD 1 1/4 WT. 2.3 T. Perf. 3939
Produced Through: Casing X Tubing _____ Gas Gravity: Measured _____ Estimated 0.650
Date of Flow Test: From 12-7-58 To 12-15-58 * Date S.I.P. Measured 10-2-58
Meter Run Size 4 Orifice Size 1.250 Type Chart L-10 Type Taps F1.

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 505 psig + 12 = 517 psia (g)
Square root chart average reading (_____) ² x sp. const. _____ = _____ psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 517 psia (h)
P_t = (h) + (f) _____ = 517 psia (i)
Wellhead casing shut-in pressure (Dwt) 1006 psig + 12 = 1018 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1005 psig + 12 = 1017 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1018 psia (l)
Flowing Temp. (Meter Run) 58 °F + 460 _____ = 518 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 509 psia (n)

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

DELIVERABILITY CALCULATION

$$D = Q \text{ } \underline{886} \left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n \frac{1.0093}{(1.0111)^N} = \underline{894} \text{ MCF/day}$$

SUMMARY

P _c = <u>1018</u> psia	Company <u>Northwest Production Corp.</u>
Q = <u>886</u> Mcf/day	By <u>RAY PHILLIPS</u> <u>Ray Phillips</u>
P _w = <u>517</u> psia	Title <u>Manager, Prod Operations</u>
P _d = <u>509</u> psia	Witnessed by _____
D = <u>894</u> 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
2548	0.169	2.137	361	267,289	267,650	517.3

F_c = 1.650



✓ OK