

Initial Deliverability
Test

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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 Elanco Formation Mesa Verde County Rio Arriba
Purchasing Pipeline EL PASO NATURAL GAS COMPANY Date Test Filed 1-12-59
Operator PACIFIC NORTHWEST PIPELINE Lease San Juan 31-6 Well No. 13-4
Unit L Sec. 4 Twp. 30 N Rge. 6 W Pay Zone: From 5234' To 5688'
Casing: OD 5 1/2" WT. Set At 5783' Tubing: OD 2" WT. 4.75 T. Perf. 5784'
Produced Through: Casing Tubing XXX Gas Gravity: Measured .591 Estimated
Date of Flow Test: From 12-15-58 To 12-22-58 * Date S.I.P. Measured 10-2-58
Meter Run Size Orifice Size 1.250 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 (6.90)² x sp. const. 10.00 = 476 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 476 psia (h)
P_t = (h) + (f) = 476 psia (i)
Wellhead casing shut-in pressure (Dwt) 1053 psig + 12 = 1065 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1058 psig + 12 = 1070 psia (k)
P_c = (j) or (k) whichever well flowed through = 1070 psia (l)
Flowing Temp. (Meter Run) 67 °F + 460 = 527 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 535 psia (n)

Q = 274 (integrated) X $\left(\frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} = \frac{\text{ }{\text{ }}}{\text{ }} = \text{ } \right)^{.75}$ = 274 MCF/day

DELIVERABILITY CALCULATION

D = Q 274 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} = \frac{858,675}{918,324} \right]^n \frac{(0.9350)^{.75}}{0.9508}$ = 261 MCF/day.

SUMMARY

P_c = 1070 psia
Q = 274 Mcf/day
P_w = 476 psia
P_d = 535 psia
D = 261 Mcf/day

Company PACIFIC NORTHWEST PIPELINE
By
Title District Production Engineer
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



