

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 BLANCO MESAVERDE Formation MESA VERDE County MCO AJUSA
Purchasing Pipeline PACIFIC NORTHWEST PIPELINE CORPORATION Date Test Filed JANUARY 16, 1957

Operator Pacific Northwest Pipeline Lease San Juan Unit 89-6 Well No. 16-32
Unit N Sec. 32 Twp. 29N Rge. 6W Pay Zone: From 5353 To 5930
Casing: OD 7" WT. 20 & 23 Set At 5353 Tubing: OD 2 3/8 WT. 4.7 T. Perf. 5090
Produced Through: Casing Tubing Gas Gravity: Measured Estimated .65
Date of Flow Test: From 12-17-56 To 12-23-56 * Date S.I.P. Measured 10-12-56
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 psig + 12 = psia (g)
Square root chart average reading ()² x sp. const. 535 = 547 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = psia (h)
P_t = (h) + (f) = 547 psia (i)
Wellhead casing shut-in pressure (Dwt) 1091 psig + 12 = 1103 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1091 psig + 12 = 1091 psia (k)
P_c = (j) or (k) whichever well flowed through = 1091 psia (l)
Flowing Temp. (Meter Run) 63 °F + 460 = 503 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 547 psia (n)

Q = 800 X $\left(\frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)} = \text{ } = \text{ }} \right) = \text{ }$ MCF/day
(Integrated) $\sqrt{(d)} = \text{ }$

DELIVERABILITY CALCULATION

D = Q 800 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \frac{(1.0164)}{1.0183} = \text{830}$ MCF/day

SUMMARY

P_c = 1091 psia
Q = 800 Mcf/day
P_w = 560 psia
P_d = 547 psia
D = 830 Mcf/day

Company Pacific Northwest Pipeline Corp.
By Donald C. Jones
Title Well Test 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
<u>3029</u>	<u>.843</u>	<u>59444</u>	<u>14,445</u>	<u>299,209</u>	<u>313,654</u>	<u>560</u>

3-M.M.O.C.C. - Astec
1-L. C. Tudy
2-McGraw Hill (Phillips)
1-File

OK



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