

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 MESAVERDE County BLANCO
Purchasing Pipeline PACIFIC NORTHWEST PIPELINE CORPORATION Date Test Filed JANUARY 16, 1977
Operator Pacific Northwest Pipeline Lease San Juan Unit 29-4 Well No. 8-1
Unit N Sec. 1 Twp. 29 Rge. 6 Pay Zone: From 5000 To 5000
Casing: OD 7" WT. 20 & 23 Set At 5178 Tubing: OD 2 3/8 WT. 4.7 T. Perf. 4948
Produced Through: Casing --- Tubing --- Gas Gravity: Measured .660 Estimated ---
Date of Flow Test: From 11-27-76 To 11-27-76 Date S.I.P. Measured 3-30-74
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. --- = 409 psia (g)
Corrected seven day ave. meter press. (p_f) (g) + (e) --- = 409 psia (h)
P_t = (h) + (f) --- = 1114 psia (i)
Wellhead casing shut-in pressure (Dwt) 1102 psig + 12 = 1114 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1102 psig + 12 = 1114 psia (k)
P_c = (j) or (k) whichever well flowed through --- = 1114 psia (l)
Flowing Temp. (Meter Run) 66 °F + 460 --- = 506 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) --- = 557 psia (n)

Q = 1012 X $\left(\frac{\sqrt{(c)}}{\sqrt{(d)}} \right) = \text{---} \text{ MCF/da}$
(integrated)

DELIVERABILITY CALCULATION =
D = Q 1012 $\left[\frac{(P_c^2 - P_d^2) = 930797}{(P_c^2 - P_w^2) = 90772} \right]^n \cdot (.9471)^{75} = .9000 = 972 \text{ MCF/da.}$

SUMMARY
P_c = 1114 psia
Q = 1012 Mcf/day
P_w = 908 psia
P_d = 557 psia
D = 972 Mcf/day

Company Pacific Northwest Pipeline Corp.
By Donald C. Adams
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>3066</u>	<u>.211</u>	<u>90,535</u>	<u>19,103</u>	<u>1114</u>	<u>25004</u>	<u>908</u>

3-H.M.C.C.-Adams
B-Phillips Petro. (Wayne Smith)
1-File

OK



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Trial	Control	MCI	AD
1	95	85	75
2	95	85	75
3	95	80	70
4	95	78	68
5	95	75	65

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• 2007年12月11日，中国商务部宣布，中国将自2008年1月1日起，对原产于美国的部分农产品、水产品、矿产品、机电产品、轻工产品、农产品等，按照《中美贸易关系正常化25周年纪念公告》的有关规定，给予最惠国待遇。

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