

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 MESADO MESAVERDE Formation MESAVERDE County RIO ARriba
Purchasing Pipeline PACIFIC NORTHWEST PIPELINE CORPORATION Date Test Filed JANUARY 26, 1957

Operator Pacific Northwest Pipeline Lease San Juan Unit 31-6 Well No. 31-6
Unit N Sec. 28 Twp. 31 Rge. 6 Pay Zone: From 5100 To 5200
Casing: OD 7" WT. 20 & 23 Set At 5300 Tubing: OD 1" WT. 1.76 T. Per. 200
Produced Through: Casing I Tubing _____ Gas Gravity: Measured _____ Estimated .650
Date of Flow Test: From 12-25-56 To 1-1-57 * Date S.I.P. Measured 8-1-54
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. 477 _____ = 109 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = _____ psia (h)
P_t = (h) + (f) _____ = 109 psia (i)
Wellhead casing shut-in pressure (Dwt) 809 psig + 12 = 821 psia (j)
Wellhead tubing shut-in pressure (Dwt) 808 psig + 12 = 820 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 821 psia (l)
Flowing Temp. (Meter Run) 91 °F + 460 _____ = _____ °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 410.5 psia (n)

FLOW RATE CALCULATION

Q = 20 (integrated) X $\left(\frac{\sqrt{(c)}}{\sqrt{(d)}} \right) =$ _____ MCF/da

DELIVERABILITY CALCULATION

D = Q 20 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n \frac{(1.1614)^{.75}}{1.1186} =$ 22 MCF/da.

SUMMARY

P_c = 821 psia
Q = 20 Mcf/day
P_w = 109 psia
P_d = 411 psia
D = 22 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

FRICTION NEGLIGIBLE P_w = P_d

3-M.N.C.C.C. - Adams -
3-Phillips Petroleum-Wayne Smith
1-L.L.G./Adams
1-File



1. The first part of the document is a list of the names of the persons who have been appointed to the various offices of the city.

2. The second part of the document is a list of the names of the persons who have been appointed to the various offices of the city.

3. The third part of the document is a list of the names of the persons who have been appointed to the various offices of the city.

4. The fourth part of the document is a list of the names of the persons who have been appointed to the various offices of the city.

5. The fifth part of the document is a list of the names of the persons who have been appointed to the various offices of the city.

6. The sixth part of the document is a list of the names of the persons who have been appointed to the various offices of the city.

7. The seventh part of the document is a list of the names of the persons who have been appointed to the various offices of the city.

8. The eighth part of the document is a list of the names of the persons who have been appointed to the various offices of the city.

9. The ninth part of the document is a list of the names of the persons who have been appointed to the various offices of the city.