Form C-122-A
Revised April 20, 1955

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 Formation Mesaverde County Rio Arriba

Purchasing Pipeline Pacific Northwest Pipeline Corporation Date Test Filed January 8, 1957

Operator Pacific Northwest Pipeline Lease San Juan Unit 30-5 Well No. 12-31

Unit M N Sec. 31 Twp. 30 Rge. 5 Pay Zone: From 5376 To 5916

Casing: OD 5 1/2 WT. 15.5 Set At 5922 Tubing: OD 2 3/8 WT. 4.7 T. Perf. 5897

Produced Through: Casing ____ Tubing x Gas Gravity: Measured .681 Estimated ____

Date of Flow Test: From 11-11-56 To 11-19-56 * Date S.I.P. Measured 2-14-56

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.	=	532	psia	(g)
Corrected seven day avge. meter press. (p_f) (g) + (e)	=	____	psia	(h)
P_t = (h) + (f)	=	532	psia	(i)
Wellhead casing shut-in pressure (Dwt) 1107	psig + 12 =	1019	psia	(j)
Wellhead tubing shut-in pressure (Dwt) 1101	psig + 12 =	1013	psia	(k)
P_c = (j) or (k) whichever well flowed through	=	1013	psia	(l)
Flowing Temp. (Meter Run) 72 °F + 460	=	532	°Abs	(m)
P_d = ½ P_c = ½ (l)	=	506	psia	(n)

FLOW RATE CALCULATION

$$Q = 1562 \text{ (integrated)} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{\quad}{\quad} = \quad \right)^{\cdot} = \quad \text{MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} = \frac{770133}{688578} \right]^{n} (1.1184)^{.75} = 1.0875 = 1699 \text{ MCF/da.}$$

SUMMARY

P_c = 1013 psia
Q = 1562 Mcf/day
P_w = 581 psia
P_d = 506 psia
D = 1699 Mcf/day

Company Pacific Northwest Pipeline Corporation
By Donald C. Adams
Title Well Test Engineer
Witnessed by ____
Company ____

RECEIVED
JAN 1 1957
OIL CON. COM.
DIST. 3

* This is date of completion test.
* Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

GL	$(1-e^{-S})$	$(F_cQ)^2$	$\frac{(FcQ)^2 \quad (1-e^{-S})}{R^2}$	P_t^2 (Column i)	$P_t^2 + R$	P_w
4016	.253	215679	54567	283024	337591	581

3-N.M.O.C.C.-Aztec
2-Phillips Petroleum-Wayne Smith
1-L.G. Truby
1-File

EAC