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 **Ballard** Formation **Pictured Cliffs** County **Rio Arriba**

Purchasing Pipeline **El Paso Natural Gas Company** Date Test Filed **February 17, 1958**

Operator **Wofford Cain** Lease **Hughes** Well No. **5-30**

Unit **F** Sec. **30** Twp. **26N** Rge. **7W** Pay Zone: From **2165** To **2192**

Casing: OD **5½"** WT. **14#** Set At **2290** Tubing: OD **1"** WT. **1.7#** T. Perf. **2194**

Produced Through: Casing **x** Tubing ____ Gas Gravity: Measured **0.666** Estimated ____

Date of Flow Test: From **1-24-58** To **1-31-58** * Date S.I.P. Measured **9-14-57**

Meter Run Size **4"** Orifice Size **1.250"** Type Chart **Sq. Rt.** Type Taps **Flange**

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 (6.60)^2 x sp. const. 5	=	218	psia	(g)
Corrected seven day avge. meter press. (p_f) (g) + (e)	=	218	psia	(h)
P_t = (h) + (f)	=	218	psia	(i)
Wellhead casing shut-in pressure (Dwt) 761	psig + 12 =	773	psia	(j)
Wellhead tubing shut-in pressure (Dwt) 761	psig + 12 =	773	psia	(k)
P_c = (j) or (k) whichever well flowed through	=	773	psia	(l)
Flowing Temp. (Meter Run) 51 °F + 460	=	511	°Abs	(m)
P_d = ½ P_c = ½ (l)	=	387	psia	(n)

FLOW RATE CALCULATION

$$Q = 336 \text{ (integrated)} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{\quad}{\quad} = 1.000 \right)^{*} = 336 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} = \frac{447{,}760}{550{,}005} \right]^{n} = 336 \left[0.8139 \right]^{0.85} = 336 \times 0.8396 = 282 \text{ MCF/da.}$$

SUMMARY

P_c =	773	psia
Q =	336	Mcf/day
P_w =	218	psia
P_d =	387	psia
D =	282	Mcf/day

WOFFORD CAIN

Company [redacted]

By L. M. Stivers Jr.

Title [redacted] Representative

Witnessed by ____

Company ____

* This is date of completion test.

* Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

GL	$(1-e^{-S})$	$(F_cQ)2$	$\frac{(FcQ)^2 \quad (1-e^{-S})}{R^2}$	Pt^2 (Column i)	$P_t^2 + R^2$	P_w

Friction loss negligible

RECEIVED
FEB 17 1958
OIL CON. COM.
DIST. 3