Form C-122-A

Revised April 20, 1955

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 S. Blanco P.C. Formation P.C. County S.J

Purchasing Pipeline E.P.N.G. Date Test Filed

Operator John A. Egan Lease Marron Well No. 4

Unit I Sec. 27 Twp. 27N Rge. 8W Pay Zone: From 2400 To 2446

Casing: OD 5½ WT. 15.5 Set At 2467 Tubing: OD 1 WT. T. Perf. 2433

Produced Through: Casing Tubing xxx Gas Gravity: Measured .652 Estimated

Date of Flow Test: From 7-22-60 To 7-30-60 * Date S.I.P. Measured 8-7-60

Meter Run Size 4 Orifice Size 1.50 Type Chart Sq.Rt. Type Taps Flg.

OBSERVED DATA

Flowing casing pressure (Dwt)		psig + 12 =	psia	(a)
Flowing tubing pressure (Dwt)	298	psig + 12 = 310	psia	(b)
Flowing meter pressure (Dwt)	242	psig + 12 = 254	psia	(c)
Flowing meter pressure (meter reading when Dwt. measurement taken):				
Normal chart reading		psig + 12 =	psia	(d)
Square root chart reading (7.11) ^{2} x spring constant	5	= 253	psia	(d)
Meter error (c) - (d) or (d) - (c)	±	= 1	psi	(e)
Friction loss, Flowing column to meter:				
(b) - (c) Flow through tubing: (a) - (c) Flow through casing		= 56	psi	(f)
Seven day average static meter pressure (from meter chart):				
Normal chart average reading	237	psig + 12 = 249	psia	(g)
Square root chart average reading (_____) ^{2} x sp. const.		=	psia	(g)
Corrected seven day avge. meter press. (p_f) (g) + (e)		= 250	psia	(h)
P_t = (h) + (f)		= 306	psia	(i)
Wellhead casing shut-in pressure (Dwt)	553	psig + 12 = 565	psia	(j)
Wellhead tubing shut-in pressure (Dwt)	553	psig + 12 = 565	psia	(k)
P_c = (j) or (k) whichever well flowed through		= 565	psia	(l)
Flowing Temp. (Meter Run)	71 °F + 460	= 531	°Abs	(m)
P_d = ½ P_c = ½ (l)		= 282	psia	(n)

FLOW RATE CALCULATION

$$Q = 748 \text{ (integrated)} \times \left(\frac{\sqrt{h_w}}{\sqrt{(d)}} = \frac{1.0040}{\quad} = 1.0020 \right)^{*} = 749 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q\,749 \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} = \frac{239.701}{70.257} \right]^{n} (3.4118)\ 2.8380 = 2126 \text{ MCF/da.}$$

SUMMARY

P_c =	565	psia	
Q =	749	Mcf/day	
P_w =	499	psia	
P_d =	282	psia	
D =	2126	Mcf/day	

Company John A. Egan

By W. B. Smith

Title

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)	$P_c^2 - R^2$	P_w
1586	.109	1425.063	155.332	93.636	248.968	499