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 Mesa Verde County San Juan

Purchasing Pipeline El Paso Natural Gas Company Date Test Filed

Operator El Paso Natural Gas Lease Ludwick Well No. 8

Unit H Sec. 31 Twp. 30N Rge. 10W Pay Zone: From 4717 To 4942

Casing: OD 5½ WT. 15.5 Set At 5007 Tubing: OD 2 WT. 4.7 T. Perf. 4921

Produced Through: Casing Tubing X Gas Gravity: Measured .700 Estimated

Date of Flow Test: From 3/8/57 To 3/17/57 * Date S.I.P. Measured 7/6/56

Meter Run Size Orifice Size 1.750 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 (6.80) ^{2} x sp. const. 1000	=	462	psia	(g)
Corrected seven day avge. meter press. (p_f) (g) + (e)	=	462	psia	(h)
P_t = (h) + (f)	=	462	psia	(i)
Wellhead casing shut-in pressure (Dwt) 973	psig + 12 =	985	psia	(j)
Wellhead tubing shut-in pressure (Dwt) 973	psig + 12 =	985	psia	(k)
P_c = (j) or (k) whichever well flowed through	=	985	psia	(l)
Flowing Temp. (Meter Run) 65 °F + 460	=	525	°Abs	(m)
P_d = ½ P_c = ½ (l)	=	493	psia	(n)

FLOW RATE CALCULATION

$$Q = \underset{\text{(integrated)}}{\quad} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \quad = \quad \right)^{*} = 928 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q\,928 \left[\left(\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right) = \frac{727,176}{739,881} \right]^{n} \quad \begin{matrix} .9828 \\ .9871 \end{matrix} = 916 \text{ MCF/da.}$$

SUMMARY

P_c =	985	psia	
Q =	928	Mcf/day	
P_w =	480	psia	
P_d =	493	psia	
D =	916	Mcf/day	

Company El Paso Natural Gas Company
By
Title
Witnessed by
Company

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OIL CON. COM.
DIST. 3

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

REMARKS OR FRICTION CALCULATIONS

GL	$(1-e^{-S})$	$(F_cQ)2$	$\frac{(FcQ)^2}{R^2}$ $(1-e^{-S})$	Pt^2 (Column i)	$P_t^2 + R^2$	P_w
345	.222	76,126	16,900	213,444	230,344	480

D @ 500 = 883

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