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: West Kutz Dakota Formation: Dakota County: San Juan

Purchasing Pipeline: El Paso Natural Gas Date Test Filed: June 8, 1960

Operator: Tennessee Gas Transmission Company Lease: (USA) Glenn E. Callow Well No.: 9

Unit: F Sec.: 28 Twp.: 29N Rge.: 13W Pay Zone: From: 6143' To: 6282'

Casing: OD: 7" WT.: 23 Set At: 6380' Tubing: OD: 2 3/8" WT.: 4.7 T. Perf.: 6143'

Produced Through: Casing: ___ Tubing: X Gas Gravity: Measured: .677 Estimated: ___

Date of Flow Test: From: 5/18/60 To: 5/24/60 * Date S.I.P. Measured: 10/6/59

Meter Run Size: 4" Orifice Size: 2.5" Type Chart: SR Type Taps: Flange

OBSERVED DATA

Flowing casing pressure (Dwt)	psig + 12 =	Packer	psia	(a)
Flowing tubing pressure (Dwt)	psig + 12 =	770	psia	(b)
Flowing meter pressure (Dwt)	psig + 12 =	515	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	=	255	psi	(f)
Seven day average static meter pressure (from meter chart):				
Normal chart average reading	psig + 12 =		psia	(g)
Square root chart average reading (7.15)^2 x sp. const. 1000	=	512	psia	(g)
Corrected seven day avge. meter press. (p_f) (g) + (e)	=	512	psia	(h)
P_t = (h) + (f)	=	767	psia	(i)
Wellhead casing shut-in pressure (Dwt)	psig + 12 =	2026	psia	(j)
Wellhead tubing shut-in pressure (Dwt)	psig + 12 =	2026	psia	(k)
P_c = (j) or (k) whichever well flowed through	=	2026	psia	(l)
Flowing Temp. (Meter Run) 67 °F + 460	=	527	°Abs	(m)
P_d = ½ P_c = ½ (l)	=	1013	psia	(n)

FLOW RATE CALCULATION

$$Q = \_\_\_\_ \text{ (integrated)} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \_\_\_\_ = \_\_\_\_ \right)^{*} = 2480 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q\ 2480 \left[\frac{(P_c^2 - P_d^2) = 3078907}{(P_c^2 - P_w^2) = 3373651} \right]^{n\ .75} (.9125) = 2315 \text{ MCF/da.}$$

SUMMARY

P_c =	2026	psia
Q =	2480	Mcf/day
P_w =	855	psia
P_d =	1013	psia
D =	2315	Mcf/day

Company: Tennessee Gas Transmission Company
By: J. J. Imsey
Title: District Petroleum Engineer
Witnessed by: ___
Company: ___

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

REMARKS OR FRICTION CALCULATIONS

GL	$(1-e^{-S})$	$(F_cQ)^2$	$\frac{(F_cQ)^2 (1-e^{-S})}{R^2}$	P_t^2 (Column i)	$P_t^2 + R^2$	P_w
4158	.861	543356	141815	588289	730104	855

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