

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 Undesignated Dakota Formation Dakota County San Juan
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed 8/3/60
Operator Tennessee Gas Transmission Co. Lease USA Walter O. Berger Well No. 5
Unit 0 Sec. 14 Twp. 26N Rge. 11W Pay Zone: From 6270 To 6400'
Casing: OD 7" WT. 20# Set At 6450' Tubing: OD 2 3/8" WT. 4.7 T. Perf. 6270
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .713 Estimated _____
Date of Flow Test: From 7/10/60 To 7/16/60 * Date S.I.P. Measured 2/22/60
Meter Run Size 4" Orifice Size 2" Type Chart SR Type Taps F

OBSERVED DATA

Flowing casing pressure (Dwt) _____ psig + 12 = _____ psia (a)
Flowing tubing pressure (Dwt) _____ psig + 12 = 498 psia (b)
Flowing meter pressure (Dwt) _____ psig + 12 = 484 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken:
Normal chart reading _____ psig + 12 = _____ psia (d)
Square root chart reading (6.95)² x spring constant 1000 = 483 psia (d)
Meter error (c) - (d) or (d) - (c) _____ ± _____ = 1 psi (e)
Friction loss, Flowing column to meter: _____ = 14 psi (f)
(b) - (c) Flow through tubing; (a) - (c) Flow through casing
Seven day average static meter pressure (from meter chart):
Normal chart average reading _____ psig + 12 = _____ psia (g)
Square root chart average reading (6.95)² x sp. const. 1000 = 483 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 484 psia (h)
P_t = (h) + (f) = 498 psia (i)
Wellhead casing shut-in pressure (Dwt) 6451 psig + 12 = _____ psia (j)
Wellhead tubing shut-in pressure (Dwt) _____ psig + 12 = 1967 psia (k)
P_c = (j) or (k) whichever well flowed through = 1967 psia (l)
Flowing Temp. (Meter Run) 86 °F + 460 = 546 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 983 psia (n)

Q = 1327 X $\left(\frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)} = \underline{22.00} = \underline{1327} \text{ MCF/da}} \right) = \underline{1327} \text{ MCF/da}$
(Integrated) $\sqrt{(d)} = \underline{21.95}$

DELIVERABILITY CALCULATION

D = Q 1327 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n = \underline{1136} \text{ MCF/da.}$
 $\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} = \frac{2902800}{3587256}$.856

SUMMARY

P_c = 1967 psia
Q = 1327 Mcf/day
P_w = 529 psia
P_d = 983 psia
D = 1136 Mcf/day

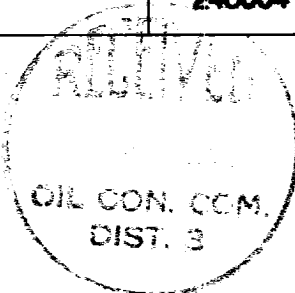
Company Tennessee Gas Transmission Company
By J. J. Lacey
Title District Petroleum Engineer
Witnessed by _____
Company _____

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

REMARKS OR FRICTION CALCULATIONS

GL	(1-e ^{-S})	(F _c Q) ²	(F _c Q) ² (1-e ^{-S}) R ²	P _t ² (Column i)	P _t ² + R ²	P _w
<u>4560</u>	<u>.282</u>	<u>119963</u>	<u>33829</u>	<u>248004</u>	<u>281833</u>	<u>529</u>

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