

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 Mesa Verde Formation Mesa Verde County SJ
Purchasing Pipeline El Paso Natural Gas Co. Date Test Filed May 22, 1958
Operator Tennessee Gas Trans. Co. Lease Blanco State Unit 1 Well No. 1
Unit 6 Sec 2 Twp. 30N Rge. 11W Pay Zone: From 4706 To 4795
Casing: OD 5 1/2" WT. 11.5 Set At 4350 Tubing: OD 2" WT. 4.7 T. Perf. 4664-4670
Produced Through: Casing Tubing X Gas Gravity: Measured .685 Estimated
Date of Flow Test: From 4-18 To 4-26 * Date S.I.P. Measured 12-16-57
Meter Run Size 4" Orifice Size 1.250 Type Chart SR 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 (7.35) ² x sp. const. 1000 = 540 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 540 psia (h)
P_t = (h) + (f) = 540 psia (i)
Wellhead casing shut-in pressure (Dwt) 1031 psig + 12 = 1043 psia (j)
Wellhead tubing shut-in pressure (Dwt) psig + 12 = psia (k)
P_c = (j) or (k) whichever well flowed through = 1043 psia (l)
Flowing Temp. (Meter Run) 75 °F + 460 = 535 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 521 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{\int \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \times \left(\frac{\sqrt{P_c^2 - P_d^2}}{\sqrt{P_c^2 - P_w^2}} \right) = \text{MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = 631 \text{ MCF/day}$$

SUMMARY

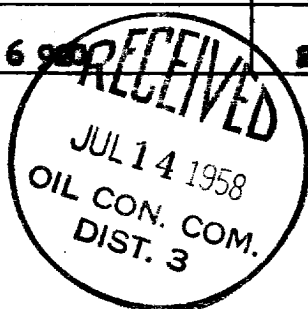
P_c = 1043 psia
Q = 615 Mcf/day
P_w = 546 psia
P_d = 521 psia
D = 631 Mcf/day

Company Tennessee Gas Transmission Company
By Patterson Lay Original signed
Title District Production Superintendent
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>3294</u>	<u>.207</u>	<u>33 434</u>	<u>6 982</u>	<u>291 600</u>	<u>298 580</u>	<u>546</u>



1875

1876

1877

1878

1879

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1881

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1883

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1886

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1889

1890