

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 Kinross Formation Mesa Verde County San Juan
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed _____
Operator El Paso Natural Gas Lease Thornton Well No. 1
Unit 1 Sec. 31 Twp. 30N Rge. 13W Pay Zone: From 4448 To 4731
Casing: OD 5 1/2 WT. 15.5 Set At 4607 Tubing: OD 2 WT. 4.7 T. Perf. 4691
Produced Through: Casing _____ Tubing 1 Gas Gravity: Measured .700 Estimated _____
Date of Flow Test: From 3/8/57 To 3/17/57 * Date S.I.P. Measured _____
Meter Run Size _____ Orifice Size 1.250 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: _____ = _____ 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 (7.25) ² x sp. const. 1000 = 526 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 526 psia (h)
P_t = (h) + (f) _____ = 526 psia (i)
Wellhead casing shut-in pressure (Dwt) 1849 psig + 12 = 1861 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1676 psig + 12 = 1688 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1688 psia (l)
Flowing Temp. (Meter Run) 66 °F + 460 _____ = 526 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 844 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{Q}{(\text{integrated})} \times \left(\frac{\frac{V(c)}{V(d)}}{\frac{V(c)}{V(d)}} \right)^* = \underline{807} \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{807}{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n} = \underline{802} \text{ MCF/da.}$$

SUMMARY

P_c = 1688 psia
Q = 807 Mcf/day
P_w = 526 psia
P_d = 844 psia
D = 802 Mcf/day

Company El Paso Natural Gas Company
By _____
Title _____
Witnessed by _____
Company _____

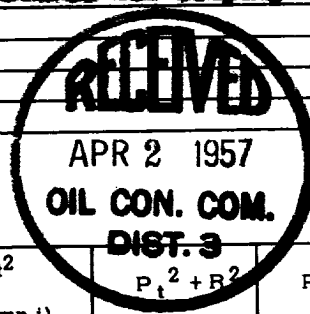
- * This is date of completion test.
- * Meter error correction factor

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>3004</u>	<u>.212</u>	<u>57.563</u>	<u>12.203</u>	<u>276,676</u>	<u>288,879</u>	<u>527</u>

D = 802 = 817

OK





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