

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 Aztec Formation Pictured Cliff County San Juan
Purchasing Pipeline El Paso Natural Gas Date Test Filed _____

Operator El Paso Natural Gas Lease Heaton Well No. 13
Unit J Sec. 32 Twp. 31 Rge. 11 Pay Zone: From 2270 To 2310
Casing: OD 5-1/2 WT. 15.5 Set At 2380 Tubing: OD 1-1/4 WT. 2.3 T. Perf. 2285
Produced Through: Casing _____ Tubing x Gas Gravity: Measured .680 Estimated _____
Date of Flow Test: From 9/8/57 To 9/17/57 * Date S.I.P. Measured 5/28/57
Meter Run Size 4 Orifice Size 1.250 Type Chart Sq. Rt. 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: _____ = _____ 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 (6.90) ² x sp. const. 500 = 238 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 238 psia (h)
P_t = (h) + (f) = 238 psia (i)
Wellhead casing shut-in pressure (Dwt) 676 psig + 12 = 688 psia (j)
Wellhead tubing shut-in pressure (Dwt) 676 psig + 12 = 688 psia (k)
P_c = (j) or (k) whichever well flowed through = 688 psia (l)
Flowing Temp. (Meter Run) 70 °F + 460 = 530 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 344 psia (n)

Q = _____ X $\left(\frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} = \frac{\text{_____}}{\text{_____}} = \text{_____} \right)^* = \text{771} \text{ MCF/da}$
(Integrated)

DELIVERABILITY CALCULATION

D = Q 771 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n = \frac{.9388}{.9477} = \text{731}$

SUMMARY

P_c = 688 psia
Q = 771 Mcf/day
P_w = 309 psia
P_d = 344 psia
D = 731 Mcf/day

Company El Paso Natural Gas
By Original Signed
Title Lewis D. Galloway
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>1554</u>	<u>.107</u>	<u>360.316</u>	<u>38,554</u>	<u>56,644</u>	<u>95,198</u>	<u>309</u>

D at 250 = 752