

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 Kuts Formation Pictured Cliff County San Juan

Purchasing Pipeline El Paso Natural Gas Company Date Test Filed _____

Operator El Paso Natural Gas Lease Huerfano Well No. 70

Unit C Sec. 8 Twp. 26N Rge. 10W Pay Zone: From 2109 To 2134

Casing: OD 5 1/2 WT. 15.5 Set At 2215 Tubing: OD 1 1/2 WT. 2.3 T. Perf. 2114

Produced Through: Casing I Tubing _____ Gas Gravity: Measured _____ Estimated _____

Date of Flow Test: From 2/28 To 3/9 * Date S.I.P. Measured 12/4/56

Meter Run Size _____ Orifice Size _____ 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:

(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 (6.55) ² x sp. const. 5 _____ = 215 psia (g)

Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 215 psia (h)

P_t = (h) + (f) _____ = 215 psia (i)

Wellhead casing shut-in pressure (Dwt) 396 _____ psig + 12 = 408 psia (j)

Wellhead tubing shut-in pressure (Dwt) 395 _____ psig + 12 = 407 psia (k)

P_c = (j) or (k) whichever well flowed through _____ = 408 psia (l)

Flowing Temp. (Meter Run) 53 °F + 460 _____ = 513 °Abs (m)

P_d = 1/2 P_c = 1/2 (l) _____ = 204 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{\left(\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right)^{1/n}}{\left(\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right)^{1/n}} \times \left(\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right)^{1/n} = 529 \text{ MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q \left(\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right)^{1/n} = 529 \left(\frac{124,848}{120,239} \right)^{1/1.0383} = 546 \text{ MCF/day}$$

SUMMARY

P_c = 408 psia
Q = 529 Mcf/day
P_w = 215 psia
P_d = 204 psia
D = 546 Mcf/day

Company El Paso Natural Gas Co.
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
			FRICITION NEGLIGIBLE			

D @ 250 = 444

