

NEW MEXICO OIL CONSERVATION COMMISSION
GAS WELL TEST DATA SHEET - - SAN JUAN BASIN

(TO BE USED FOR FRUITLAND, PICTURE CLIFFS, MESAVERDE, & ALL DAKOTA
EXCEPT BARKER DOME STORAGE AREA)

Pool Ballard Pictured Cliff Formation Pictured Cliff County San Juan
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed _____
Operator El Paso Natural Gas Company Lease Barfano Well No. 48
Unit X Sec. 9 Twp. 26N Rge. 9E Pay Zone: From 2194 To 2225
Casing: OD 7" WT. 20" Set At 2194 Tubing: OD 1 1/2 WT. 33 1/2 T. Perf. 2245
Produced Through: Casing X Tubing _____ Gas Gravity: Measured _____ Estimated .670
Date of Flow Test: From 4-30-56 To 5-8-56 * Date S.I.P. Measured 2-16-56
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: _____ 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 (7.75) ² x sp. const. 5 = 300 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 300 psia (h)
P_t = (h) + (f) = 300 psia (i)
Wellhead casing shut-in pressure (Dwt) 634 psig + 12 = 646 psia (j)
Wellhead tubing shut-in pressure (Dwt) 634 psig + 12 = 646 psia (k)
P_c = (j) or (k) whichever well flowed through = 646 psia (l)
Flowing Temp. (Meter Run) 62 F + 60 = _____ °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 323 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{\int \frac{P_c^2 - P_d^2}{P_c^2} dV}{\int \frac{P_c^2 - P_d^2}{P_c^2} dV} = \frac{73}{73} \text{ MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2} \right]^{1/n} = 73 \left[\frac{312,987}{327,316} \right]^{1/.9562} = 70 \text{ MCF/day}$$

SUMMARY

P_c = 646 psia
Q = 73 Mcf/day
P_w = 300 psia
P_d = 323 psia
D = 70 Mcf/day

Company El Paso Natural Gas Company
By Lewis D. Galloway
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})	P _t ²	P _t ² + R ²	P _w
				(Column i)		
			Friction negligible			

D 250 = 77





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