

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

Operator El Paso Natural Gas Lease Flood Well No. 1
Unit C Sec. 34 Twp. 31 Rge. 11 Pay Zone: From 2302 To 2346
Casing: OD 5-1/2 WT. 15.5 Set At 2474 Tubing: OD 1-1/4 WT. 2.3 T. Perf. 2305
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .685 Estimated _____
Date of Flow Test: From 8/8/57 To 8/16/57 * Date S.I.P. Measured 5/17/57 (8 days)
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 _____ = _____ psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading _____ psig + 12 = _____ psia (g)
Square root chart average reading (6.30) ² x sp. const. 5 = 198 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 198 psia (h)
P_t = (h) + (f) = 198 psia (i)
Wellhead casing shut-in pressure (Dwt) 665 psig + 12 = 677 psia (j)
Wellhead tubing shut-in pressure (Dwt) 665 psig + 12 = 677 psia (k)
P_c = (j) or (k) whichever well flowed through = 677 psia (l)
Flowing Temp. (Meter Run) 68 °F + 460 = 528 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 339 psia (n)

FLOW RATE CALCULATION

$$Q = \text{(Integrated)} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} \right) = \text{_____} = \text{_____} = \text{_____} = \text{197 MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q \text{ 197 } \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \frac{343,408}{416,585} \cdot \frac{.8243}{.8487} = \text{167 MCF/day}$$

SUMMARY

P_c = 677 psia
Q = 197 Mcf/day
P_w = 204 psia
P_d = 339 psia
D = 167 Mcf/day

Company El Paso Natural Gas
By Original Signed
Title _____
Witnessed by Lewis D. Galloway
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 _c ² - P _d ²	P _c ² - P _w ²
1579	.108	23.523	2540	39,204	41,744	204

D at 250 = 185