

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 South Blanco Pictured Cliff Formation Pictured Cliffs County Rio Arriba
Purchasing Pipeline El Paso Natural Gas Date Test Filed _____
Operator El Paso Natural Gas Lease Rincon Unit Well No. 73
Unit H Sec. 33 Twp. 27 Rge. 7 Pay Zone: From 3150 To 3200
Casing: OD 5-1/2 WT. 15.50 Set At 3100 Tubing: OD 1-1/4 WT. 2.3 T. Perf. 3017
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .680 Estimated _____
Date of Flow Test: From 12-16-57 To 12-23-57 * Date S.L.P. Measured 1-24-57
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 (7.09 ² x sp. const. 5) _____ = 249 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 249 psia (h)
P_t = (h) + (f) _____ = 249 psia (i)
Wellhead casing shut-in pressure (Dwt) 817 psig + 12 = 829 psia (j)
Wellhead tubing shut-in pressure (Dwt) 817 psig + 12 = 829 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 829 psia (l)
Flowing Temp. (Meter Run) 51 °F + 460 _____ = 511 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 415 psia (n)

FLOW RATE CALCULATION

$$Q = \text{(integrated)} \times \left(\frac{\sqrt{P_c} - \sqrt{P_d}}{\sqrt{P_c} - \sqrt{P_w}} \right) = \underline{1434} \text{ MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q \times \left[\frac{(P_c^2 - P_d^2) - (P_c^2 - P_w^2)}{(P_c^2 - P_w^2)} \right]^n = \underline{1434} \times \left[\frac{515,016 - 451,984}{515,016} \right]^n = \underline{1602} \text{ MCF/day}$$

SUMMARY

P_c = 829 psia Company El Paso Natural Gas
Q = 1434 Mcf/day By _____
P_w = 485 psia Title _____
P_d = 415 psia Witnessed by _____
D = 1602 Mcf/day 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
2052	.139	1246.443	173,256	62,001	235,257	485

D at 250 = 1421

