

Initial Deliverability
Test

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)

72-134

Pool Blanco Formation Mesa Verde County Rio Arriba
Purchasing Pipeline El Paso Natural Gas Date Test Filed _____
Operator El Paso Natural Gas Lease San Juan 28-6 Well No. 87
Unit M Sec. 20 Twp. 28 Rge. 6 Pay Zone: From 4962 To 5622
Casing: OD 5-1/2 WT. 15.5 Set At 5677 Tubing: OD 1-1/4 WT. 2.4 T. Perf. 5582
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .708 Estimated _____
Date of Flow Test: From 3/22/60 To 3/30/60 * Date S.I.P. Measured 8/22/59
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 (_____) ² x sp. const. _____ = 533 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 533 psia (h)
P_t = (h) + (f) _____ = 533 psia (i)
Wellhead casing shut-in pressure (Dwt) _____ 703 psig + 12 = 715 psia (j)
Wellhead tubing shut-in pressure (Dwt) _____ 714 psig + 12 = 726 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 715 + _____ psia (l)
Flowing Temp. (Meter Run) _____ 72 °F + 460 _____ = 532 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 358 psia (n)

FLOW RATE CALCULATION

$$Q = \text{(integrated)} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{\text{_____}}{\text{_____}} = \text{_____} \right) = \text{654 MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \text{ 654 } \left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n = \frac{2.3598}{1.9030} = \text{1245 MCF/da.}$$

SUMMARY

P_c = 715 psia Company El Paso Natural Gas
Q = 654 Mcf/day By _____
P_w = 591 psia Title Original Signed
P_d = 358 psia Witnessed by Harold L. Kendrick
D = 1245 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
3952	.250	259.242	64,811	284089	318900	591

D at 500 = 701 + Use SIRC for P_c. SIFT too Low.

Installed Intermittent.



