

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 Blanco Formation Mesa Verde County Rio Arriba
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed _____
Operator El Paso Natural Gas Lease San Juan 27-5 Unit Well No. 3
Unit M Sec. 17 Twp. 27 Rge. 5 Pay Zone: From 4844 To 5474
Casing: OD 7 WT. 20.00 Set At 4752 Tubing: OD 2 WT. 4.7 T. Perf. 5344
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .705 Estimated _____
Date of Flow Test: From 1/31/57 To 2/8/57 * Date S.I.P. Measured 9/18/53
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 (7.65) ² x sp. const. 10 = 585 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 585 psia (h)
P_t = (h) + (f) = 585 psia (i)
Wellhead casing shut-in pressure (Dwt) 1027 psig + 12 = 1039 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1028 psig + 12 = 1040 psia (k)
P_c = (j) or (k) whichever well flowed through = 1040 psia (l)
Flowing Temp. (Meter Run) 50 °F + 460 = 510 ° Abs (m)
P_d = ½ P_c = ½ (l) = 520 psia (n)

FLOW RATE CALCULATION

$$Q = \text{(integrated)} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} \right) = \frac{56}{1} \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{56}{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n} = \frac{56}{\left[\frac{811,200}{739,375} \right]^n} = \frac{1.0971}{1.0720} = 60 \text{ MCF/da.}$$

SUMMARY

P_c = 1040 psia
Q = 56 Mcf/day
P_w = 585 psia
P_d = 520 psia
D = 60 Mcf/day

Company El Paso Natural Gas Company
By _____
Title Original Signed
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 _t ² + R ²	P _w
			FRICTION NEGLIGIBLE			

D @ 500 = 60

OK

