

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 Formation Pictured Cliff County San Juan
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed _____
Operator El Paso Natural Gas Co. Lease G. Hughes Well No. 4-3
Unit A Sec. 3 Twp. 27 Rge. 9 Pay Zone: From 2289 To 2365
Casing: OD 5 1/2 WT. 15.5 Set At 2294 Tubing: OD 1 WT. 1.68 T. Perf. 2323
Produced Through: Casing I Tubing _____ Gas Gravity: Measured .645 Estimated _____
Date of Flow Test: From 4/30 To 5/8 * Date S.I.P. Measured 12/9/55
Meter Run Size 4 Orifice Size _____ Type Chart Sq. Rt. Type Taps Flange

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 (7.75) 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) 747 psig + 12 = 759 psia (j)
Wellhead tubing shut-in pressure (Dwt) 747 psig + 12 = 759 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 759 psia (l)
Flowing Temp. (Meter Run) 58 °F + 460 _____ = 518 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 300 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} \right) = \frac{759^2 - 300^2}{759^2 - 300^2} \times \left(\frac{\sqrt{518}}{\sqrt{300}} \right) = 509 \text{ MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q \times \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = 509 \times \left[\frac{759^2 - 300^2}{759^2 - 300^2} \right]^n = 460 \text{ MCF/day}$$

SUMMARY

P_c = 759 psia
Q = 509 Mcf/day
P_w = 300 psia
P_d = 300 psia
D = 460 Mcf/day
Company El Paso Natural Gas Company
By Original Signed
Title Lewis D. Galloway
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 R ²	(1-e ^{-S})	P _t ² (Column i)	P _t ² + R ²	P _w

D = 250 = 528



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