

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)

74-755
Pool South Blanco Formation Pictured Cliffs County San Juan
Purchasing Pipeline El Paso Natural Gas Date Test Filed _____
Operator El Paso Natural Gas Lease Turner State Well No. 13-2
Unit N Sec. 2 Twp. 26 Rge. 8 Pay Zone: From 2210 To 2269
Casing: OD 5.9 WT. 15.5 Set At 2311 Tubing: OD 1 WT. 1.68 T. Perf. 2244
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .689 Estimated _____
Date of Flow Test: From 8/15/59 To 8/22/59 * Date S.I.P. Measured 8/29/59
Meter Run Size _____ Orifice Size _____ Type Chart _____ Type Taps _____

OBSERVED DATA

Flowing casing pressure (Dwt) 210 psig + 12 = 222 psia (a)
Flowing tubing pressure (Dwt) 201 psig + 12 = 213 psia (b)
Flowing meter pressure (Dwt) 201 psig + 12 = 213 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken):
Normal chart reading _____ psig + 12 = _____ psia (d)
Square root chart reading (6.50)² x spring constant _____ = 211 psia (d)
Meter error (c) - (d) or (d) - (c) _____ ± _____ = 42 psi (e)
Friction loss, Flowing column to meter:
(b) - (c) Flow through tubing; (a) - (c) Flow through casing _____ = 0 psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading _____ psig + 12 = _____ psia (g)
Square root chart average reading (6.65)² x sp. const. _____ = 221 psia (g)
Corrected seven day avg. meter press. (P_f) (g) + (e) _____ = 227 psia (h)
P_t = (h) + (f) _____ = 227 psia (i)
Wellhead casing shut-in pressure (Dwt) 406 psig + 12 = 418 psia (j)
Wellhead tubing shut-in pressure (Dwt) 406 psig + 12 = 418 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 418 psia (l)
Flowing Temp. (Meter Run) 73 °F + 460 _____ = 533 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 209 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{77}{(\text{integrated})} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{1.0094}{1.0047} = 1.0047 \right) = 77 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{77}{\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} = \frac{131043}{123398} \right]^n \frac{1.0619}{1.0523}} = 81 \text{ MCF/da.}$$

SUMMARY

P_c = 418 psia
Q = 77 Mcf/day
P_w = 227 psia
P_d = 209 psia
D = 81 Mcf/day

Company El Paso Natural Gas
By _____
Title Original Signed
Witnessed by Harold L. Kendrick
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
1546	.106	15,062	1597	49789	51386	227

D at 250 = 67

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