

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)

74-678-01
Pool South Blanco Formation Pictured Cliffs County San Juan
Purchasing Pipeline El Paso Natural Gas Date Test Filed _____
Operator El Paso Natural Gas Lease Schwerdtfeger Well No. 9-A (P)
Unit A Sec. 31 Twp. 28 Rge. 8 Pay Zone: From 2957 To 3010
Casing: OD 7-5/8 WT. 26.4 Set At 5118 Tubing: OD 1-1/4 WT. 2.3 T. Perf. 2964
Produced Through: Casing _____ Tubing X Gas Gravity: Measured 644 Estimated _____
Date of Flow Test: From 7/22/58 To 7/30/58 * Date S.I.P. Measured 10/16/57
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 (6.75) ² x sp. const. 5 _____ = 228 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 228 psia (h)
P_t = (h) + (f) _____ = 228 psia (i)
Wellhead casing shut-in pressure (Dwt) 768 psig + 12 = 780 psia (j)
Wellhead tubing shut-in pressure (Dwt) 768 psig + 12 = 780 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 780 psia (l)
Flowing Temp. (Meter Run) 70 °F + 460 _____ = 530 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 390 psia (n)

FLOW RATE CALCULATION

$$Q = \text{(integrated)} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} \right) = \frac{1577}{1} = 1577 \text{ MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{1577}{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n} = \frac{1577}{\left[\frac{456300}{360446} \right]^{1.2659/1.2220}} = 1927 \text{ MCF/day}$$

SUMMARY

P_c = 780 psia
Q = 1577 Mcf/day
P_w = 498 psia
P_d = 390 psia
D = 1927 Mcf/day

Company El Paso Natural Gas
By Harold L. Kewin
Title _____
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 (1-e ^{-s})	P _t ²	P _t ² + R ²	P _w
			R ²	(Column i)		
1909	.130	1.507.458	195,970	51,984	247,954	498

D at 250 = 1537

