

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)

72-126-01

Pool Aztec Formation Pictured Cliff Ext County San Juan
Purchasing Pipeline El Paso Natural Gas Date Test Filed _____

Operator El Paso Natural Gas Lease Sunray Well No. 3-D
Unit M Sec. 21 Twp. 30 Rge. 10 Pay Zone: From 2864 To 2910
Casing: OD 5-1/2 WT. 15.50 Set At 3009 Tubing: OD 1-1/4 WT. 2.4 T. Perf. 2863
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .651 Estimated _____
Date of Flow Test: From 6/7/58 To 6/17/58 * Date S.I.P. Measured 4/30/58 (14 days)
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: _____ = _____ psi (f)
(b) - (c) Flow through tubing: (a) - (c) Flow through casing
Seven day average static meter pressure (from meter chart):
Normal chart average reading _____ psig + 12 = _____ psia (g)
Square root chart average reading (6.90) ² x sp. const. 5.0 = 238 ✓ psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 238 ✓ psia (h)
P_t = (h) + (f) = 238 ✓ psia (i)
Wellhead casing shut-in pressure (Dwt) 666 psig + 12 = 678 ✓ psia (j)
Wellhead tubing shut-in pressure (Dwt) 666 psig + 12 = 678 ✓ psia (k)
P_c = (j) or (k) whichever well flowed through = 678 ✓ psia (l)
Flowing Temp. (Meter Run) 67 °F + 460 = 527 ✓ °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 339 ✓ psia (n)

FLOW RATE CALCULATION

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

(integrated)

DELIVERABILITY CALCULATION

$$D = Q \text{_____} \left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n \frac{(.8554) \cdot 85}{(.8758)} = \text{_____} \text{ MCF/da.}$$

SUMMARY

P_c = 678 ✓ psia
Q = 97 ✓ Mcf/day
P_w = 238 ✓ psia
P_d = 339 ✓ psia
D = 85 ✓ Mcf/day

Company El Paso Natural Gas
By David T. Feuchtwang
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}) R ²	P _t ² (Column i)	P _t ² + R ²	P _w
<u>1864</u>	<u>.127</u>	<u>5.703</u>	Friction Negligible			

D at 250 = 95



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