

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 Alamo Pictured Cliff Formation Pictured Cliff County San Juan
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed _____

Operator El Paso Natural Gas Company Lease Schwerdtfeger Well No. 2-4
Unit B Sec. 21 Twp. 27N Rge. 8W Pay Zone: From 2389 To 2478
Casing: OD 7 WT. 20 Set At 2389 Tubing: OD 1 WT. 1.63 T. Perf. 8414
Produced Through: Casing _____ Tubing X Gas Gravity: Measured _____ Estimated 640
Date of Flow Test: From 1/8/56 To 1/16/56 * Date S.I.P. Measured 11/21/55
Meter Run Size 4 Orifice Size _____ Type Char Sq. Root 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 (7.15) ² x sp. const. 5 = 256 psia (g)
Corrected seven day avge. meter press. (P_f) (g) + (e) = 256 psia (h)
P_t = (h) + (f) = 256 psia (i)
Wellhead casing shut-in pressure (Dwt) 811 psig + 12 = 823 psia (j)
Wellhead tubing shut-in pressure (Dwt) 811 psig + 12 = 823 psia (k)
P_c = (j) or (k) whichever well flowed through = 823 psia (l)
Flowing Temp. (Meter Run) 43 °F + 460 = 503 °Abs (m)
P_d = ½ P_c = ½ (l) = 412 psia (n)

Q = _____ X $\left(\frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)} = \text{_____} = \text{_____}} \right) = \text{1075} \text{ MCF/da}$
(integrated) $\sqrt{(d)} = \text{_____}$

DELIVERABILITY CALCULATION

D = Q 1075 $\left[\frac{(P_c^2 - P_d^2) = \text{507,585}}{(P_c^2 - P_w^2) = \text{300,633}} \right]^n \frac{1.6884}{1.5693} = \text{1677}^* \text{ MCF/da.}$

SUMMARY

P_c = 823 psia
Q = 1075 Mcf/day
P_w = 614 psia
P_d = 412 psia
D = 1677 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 (1-e ^{-S}) R ²	P _t ² (Column 4)	P _t ² + R ²	P _w
<u>1545</u>	<u>0.106</u>	<u>2935.472</u>	<u>311,160</u>	<u>65536</u>	<u>376,696</u>	<u>614</u>

* Corrected Copy - Well was producing through tubing instead of annulus.

D 250 = 1070

Ok

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