

INITIAL 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)

Pool Tapacito Formation Pictured Cliffs County Rio Arriba
Purchasing Pipeline Southern Union Gas Company Date Test Filed 3/21/57
Operator Southern Union Gas Company Lease Jicarilla Well No. 5-D
Unit K Sec. 30 Twp. 26N Rge. 3W Pay Zone: From 3860 To 3916
Casing: OD 4 1/2" WT. 9.5 Set At 3934 Tubing: OD 2 3/8 WT. 4.74 T. Perf. 3867
Produced Through: Casing _____ Tubing XX Gas Gravity: Measured .672 Estimated _____
Date of Flow Test: From 2/7/57 To 2/14/57 * Date S.I.P. Measured 8/6/56
Meter Run Size 4 inch Orifice Size 1 3/4" Type Chart Normal 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 570 psig + 12 = 582 psia (g)
Square root chart average reading (_____) ² x sp. const. _____ = _____ psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 582 psia (h)
P_t = (h) + (f) _____ = 582 psia (i)
Wellhead casing shut-in pressure (Dwt) 1087 psig + 12 = 1099 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1087 psig + 12 = 1099 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1099 psia (l)
Flowing Temp. (Meter Run) 83 °F + 460 _____ = 543 ° Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 549 psia (n)

Q = 1730 X $\left(\frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)}} = \text{None} \right) = \text{None}$ MCF/da
(integrated)

DELIVERABILITY CALCULATION

D = Q 1730 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{0.85} = \frac{906,400}{823,401}^{0.85} = 1.0830 = \text{1877}$ MCF/da.

SUMMARY

P_c = 1099 psia
Q = 1730 Mcf/day
P_w = 620 psia
P_d = 549 psia
D = 1877 Mcf/day

Company Southern Union Gas Company
By L. S. Muennink
Title Exploration Engineer
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>2599</u>	<u>0.172</u>	<u>264.38</u>	<u>45.47</u>	<u>338.72</u>	<u>384.19</u>	<u>620</u>

OIL CON. COM
DIST.