

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 Manos Formation Mesa Verde County San Juan
Purchasing Pipeline Southern Union Gathering Co. Date Test Filed 2/4/58
Operator Southern Union Gas Co. Lease Jungus Well No. 1
Unit II Sec. 6 Twp. 31N Rge. 6W Pay Zone: From 4635 To 5598
Casing: OD 3 1/2" WT. 15.94 Set At 5675 Tubing: OD 2 3/8" WT. 4.74 T. Perf. 5570
Produced Through: Casing X Tubing _____ Gas Gravity: Measured .663 Estimated _____
Date of Flow Test: From 12-23-57 To 12-23-57 * Date S.I.P. Measured 9-30-57
Meter Run Size 4" Orifice Size 1 1/4" Type Chart Normal Type Taps Range

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 630 psig + 12 = 642 psia (g)
Square root chart average reading (_____)² x sp. const. _____ = _____ psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 642 psia (h)
P_t = (h) + (f) _____ = 642 psia (i)
Wellhead casing shut-in pressure (Dwt) 1118 psig + 12 = 1130 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1099 psig + 12 = 1111 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1111 psia (l)
Flowing Temp. (Meter Run) 60 °F + 460 _____ = 500 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 556 psia (n)

FLOW RATE CALCULATION

Q = 857 X $\left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{1.0000}{1.0000} \right) = \underline{857}$ MCF/day
(Integrated)

DELIVERABILITY CALCULATION

D = Q 857 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^{0.75} = \underline{949}$ MCF/day
 $\frac{985,185}{806,605}$ $\frac{1.1021}{1.0000}$

SUMMARY

P_c = 1111 psia
Q = 857 Mcf/day
P_w = 654 psia
P_d = 556 psia
D = 949 Mcf/day

Company Southern Union Gas Company
By Bill McEwen
Title Exploration Department
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>3692</u>	<u>0.235</u>	<u>64,906</u>	<u>15.257</u>	<u>412.164</u>	<u>427.692</u>	<u>654</u>

DELIVERABILITY TEST



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