

Initial Deliverability
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 Fulcher Kutz Formation Dakota County San Juan
Purchasing Pipeline Southern Union Gas Co. Date Test Filed 1-6-59
Operator Kingwood Oil Company Lease Kutz Well No. 1
Unit M Sec. 22 Twp. 28N Rge. 10W Pay Zone: From 6504 To 6653
Casing: OD 5 1/2 WT. 15.3 Set At 6743 Tubing: OD 2 3/8 WT. 4.67 T. Perf. 6480
Produced Through: Casing _____ Tubing I Gas Gravity: Measured .667 Estimated _____
Date of Flow Test: From 12-8-58 To 12-16-58 Date S.I.P. Measured 12-31-58
Meter Run Size 4" Orifice Size 1.875 Type Chart Normal Type Taps _____

OBSERVED DATA

Flowing casing pressure (Dwt) None psig + 12 = None psia (a)
Flowing tubing pressure (Dwt) 534 psig + 12 = 546 psia (b)
Flowing meter pressure (Dwt) 216 psig + 12 = 228 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken: 212 psig + 12 = 224 psia (d)
Normal chart reading _____ 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 _____ = _____ psi (f)
Seven day average static meter pressure (from meter chart): 210 psig + 12 = 222 psia (g)
Normal chart average reading _____ Square root chart average reading (_____) ² x sp. const. _____ = _____ psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = _____ psia (h)
P_t = (h) + (f) _____ = _____ psia (i)
Wellhead casing shut-in pressure (Dwt) None psig + 12 = None psia (j)
Wellhead tubing shut-in pressure (Dwt) 1570 psig + 12 = 1582 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1582 psia (l)
Flowing Temp. (Meter Run) 62 °F + 460 _____ = 522 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 791 psia (n)

FLOW RATE CALCULATION

Q = 1649 X $\left(\frac{\sqrt{(c)} - \sqrt{(d)}}{\sqrt{(c)}} \right) = \frac{15.10 - 14.97}{15.10} = 1.0086$ = 1663 MCF/day
(Integrated)

DELIVERABILITY CALCULATION

D = Q 1663 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n = \frac{1877043 - 617649}{2140777} = .8768$ ^{.75} $\frac{.8768}{.9061} = 1.507$ MCF/day

SUMMARY

P_c = 1582 psia
Q = 1663 Mcf/day
P_w = 601 psia
P_d = 791 psia
D = 1507 Mcf/day

Company Well Production Co.
By N.A. Sealy
Title Owner
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	(FcQ) ² (1-e ^{-S}) R ²	P _t ² (Column i)	P _t ² + R ²	P _w
<u>4322</u>	<u>.270</u>	<u>244.484</u>	<u>66.011</u>	<u>295.936</u>	<u>361.947</u>	<u>601</u>



