

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 Otero Formation Picture Cliff County Rio Arriba
Purchasing Pipeline El Paso Natural Gas Co. Date Test Filed 1-10-57

Operator Gulf Oil Corporation Lease Apache Federal Well No. 5
Unit H Sec. 18 Twp. 24N Rge. 5W Pay Zone: From 2205 To 2250
Casing: OD 4" WT. 9.5 Set At 2318 Tubing: OD 2 3/8" WT. 4.7 T. Perf. 2226
Produced Through: Casing X Tubing _____ Gas Gravity: Measured .690 Estimated _____
Date of Flow Test: From 12-16-56 To 12-24-56 * Date S.I.P. Measured 12-30-56
Meter Run Size 4" Orifice Size .750 Type Chart Sq. Rt. Type Taps _____

OBSERVED DATA

Flowing casing pressure (Dwt) 269 psig + 12 = 281 psia (a)
Flowing tubing pressure (Dwt) 269 psig + 12 = 281 psia (b)
Flowing meter pressure (Dwt) 269 psig + 12 = 281 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken:
Normal chart reading 7.5 .500 psig + 12 = 281 psia (d)
Square root chart reading (7.5) ² x spring constant = 0 psia (d)
Meter error (c) - (d) or (d) - (c) ± = 0 psi (e)
Friction loss, Flowing column to meter: = 0 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 7.30 500 psig + 12 = 266 psia (g)
Square root chart average reading (7.30) ² x sp. const. = 266 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 266 psia (h)
P_t = (h) + (f) = 266 psia (i)
Wellhead casing shut-in pressure (Dwt) 476 psig + 12 = 488 psia (j)
Wellhead tubing shut-in pressure (Dwt) 476 psig + 12 = 488 psia (k)
P_c = (j) or (k) whichever well flowed through = 488 psia (l)
Flowing Temp. (Meter Run) 38 °F + 460 = 244 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 244 psia (n)

FLOW RATE CALCULATION

Q = 201 X $\left(\frac{\sqrt{(c)}}{\sqrt{(d)}} \right)^{16.78} = \frac{16.78}{16.78} = 201$ MCF/day
(integrated)

DELIVERABILITY CALCULATION

D = Q 201 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{.85} = \frac{178,608}{167,588}^{.85} = 212$ MCF/day

SUMMARY

P_c = 488 psia
Q = 201 Mcf/day
P_w = 266 psia
P_d = 244 psia
D = 212 Mcf/day

Company Well Production Co.
By R. A. Neely
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	(F _c Q) ² (1-e ^{-S}) R ²	P _t ² (Column #)	P _t ² + R ²	P _w



OK Initial