

Initial Deliverability
Test

Form O-12-A
Revised April 20, 1955

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 Pine Lake Formation Pictured Cliffs County Rio Arriba
Purchasing Pipeline El Paso Natural Gas Co. Date Test Filed 8/18/60
Operator Secony Mobil Oil Co., Inc. Lease Jicarilla "F" Well No. 1 UT- PG
Unit B Sec. 22 Twp. 27N Rge. 3W Pay Zone: From 3878 To 3989
Casing: OD 7-5/8" WT. 21# Set At 4250 Tubing: OD 2-3/8" WT. 4.7# T. Perf. 3984
Produced Through: Casing Tubing X Gas Gravity: Measured .655 Estimated
Date of Flow Test: From 7/22/60 To 7/30/60 * Date S.I.P. Measured 8/6/60
Meter Run Size 2.068" Orifice Size 0.375 Type Chart Sq Rt Type Taps Flange

OBSERVED DATA

Flowing casing pressure (Dwt) 541 psig + 12 = 553 psia (a)
Flowing tubing pressure (Dwt) 540 psig + 12 = 552 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 (6.05)² x spring constant 15 = 549 psia (d)
Meter error (c) - (d) or (d) - (c) = 3 psi (e)
Friction loss, Flowing column to meter: = 1 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 psig + 12 = 522 psia (g)
Square root chart average reading (5.90)² x sp. const. 15 = 525 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 526 psia (h)
P_t = (h) + (f) = 526 psia (i)
Wellhead casing shut-in pressure (Dwt) 945 psig + 12 = 957 psia (j)
Wellhead tubing shut-in pressure (Dwt) psig + 12 = 957 psia (k)
P_c = (j) or (k) whichever well flowed through 79 °F + 460 = 539 °Abs (m)
Flowing Temp. (Meter Run) = 479 psia (n)
P_d = 1/2 P_c = 1/2 (l)

Q = 76 (Integrated) X $\left(\frac{\frac{23.49}{V(c)}}{\frac{23.43}{V(d)}} = \frac{1.003}{1} \right)^* = \underline{76} \text{ MCF/day}$

DELIVERABILITY CALCULATION

D = Q 76 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n \frac{1.074^{.85}}{1.0633} = \underline{81} \text{ MCF/day}$

SUMMARY

P_c = 957 psia
Q = 76 Mcf/day
P_w = 526 psia
P_d = 479 psia
D = 81 Mcf/day

Company Secony Mobil Oil Company, Inc.
By M. B. Beasley
Title Prod. Engr.
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>2610</u>	<u>.173</u>	<u>0.511</u>	<u>.08</u>	<u>276.7</u>	<u>276.8</u>	<u>526</u>

