

Initial Deliverability
TestForm C-122-A
Revised April 20, 1955NEW 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 Blanco Formation Mesaverde County Rio Arriba
Purchasing Pipeline EPNG Date Test Filed 1-19-65
Operator Socony Mobil Oil Co., Inc. Lease Cheney Fed. Well No. 3
Unit B Sec. 17 Twp. 26N Rge. 2W Pay Zone: From 5461 To 5943
Casing: OD 4-1/2 WT. 10.5 Set At 6072 Tubing: OD 2-3/8 WT. 4.7 T. Perf. 5461
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .706 Estimated _____
Date of Flow Test: From 12-14-64 To 12-23-64 * Date S.I.P. Measured 9-6-64
Meter Run Size 4 Orifice Size _____ Type Chart Sq. Rt. Type Taps Flg.

OBSERVED DATA

Flowing casing pressure (Dwt) _____ psig + 12 = _____ psia (a)
Flowing tubing pressure (Dwt) 545 psig + 12 = 557 psia (b)
Flowing meter pressure (Dwt) 545 psig + 12 = 557 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken):
Normal chart reading _____ psig + 12 = _____ psia (d)
Square root chart reading (7.5)² x spring constant 10 = 563 psia (d)
Meter error (c) - (d) or (d) - (c) ± = -6 psi (e)
Friction loss, Flowing column to meter:
(b) - (c) Flow through tubing: (a) - (c) Flow through casing = 0 psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading 551 psig + 12 = 563 psia (g)
Square root chart average reading (_____)² x sp. const. = _____ psia (g)
Corrected seven day avge. meter press. (pf) (g) + (e) = 557 psia (h)
P_t = (h) + (f) = 557 psia (i)
Wellhead casing shut-in pressure (Dwt) _____ psig + 12 = _____ psia (j)
Wellhead tubing shut-in pressure (Dwt) 1510 psig + 12 = 1522 psia (k)
P_c = (j) or (k) whichever well flowed through = 1522 psia (l)
Flowing Temp. (Meter Run) _____ °F + 460 = _____ °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 1218 psia (n)

$$Q = \frac{184}{(\text{Integrated})} \times \left(\frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c) 557} = .9893}{\sqrt{(d) 563}} = .9947} \right) = 183 \text{ MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{183}{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} = \frac{832.960}{2.005.512} \right]^n .4153^{.75} = .5173} = 95 \text{ MCF/day}$$

SUMMARY

P_c = 1522 psia
Q = 183 Mcf/day
P_w = 558 psia
P_d = 1218 psia
D = 95 Mcf/day

Company Socony Mobil Oil Co., Inc.
By R. W. Hensley
Title Production Foreman
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
3855	0.244	2.962	0.723	310.249	310.972	558

NMOCC Aztec 3
EPNG Farmington 2
R. W. Hensley 1

File 1

