

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 BLANCO Formation MESAVERDE County RIO ARriba
Purchasing Pipeline EL PASO NATURAL GAS CO. Date Test Filed JULY 25, 1960
Operator OCCIDENTAL PETROLEUM CORP. Lease "F" Well No. 1-21
Unit M Sec. 21 Twp. 26N Rge. 3W Pay Zone: From 6074 To 6146
Casing: OD 5-1/2 WT. 15.5 Set At 6162 Tubing: OD 2-3/8 WT. 4.7 T. Perf. 6056
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .680 Estimated _____
Date of Flow Test: From 6-29-60 To 7-7-60 * Date S.I.P. Measured 7-14-60
Meter Run Size 4 Orifice Size 1.00 Type Chart L-10 Type Taps F1

OBSERVED DATA

Flowing casing pressure (Dwt) _____ psig + 12 = _____ psia (a)
Flowing tubing pressure (Dwt) 515 psig + 12 = 527 psia (b)
Flowing meter pressure (Dwt) 514 psig + 12 = 526 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken):
Normal chart reading _____ psig + 12 = _____ psia (d)
Square root chart reading (7.23)² x spring constant 10.00 = 521 psia (d)
Meter error (c) - (d) or (d) - (c) _____ ± _____ = 5 psi (e)
Friction loss, Flowing column to meter:
(b) - (c) Flow through tubing: (a) - (c) Flow through casing _____ = 1 psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading _____ psig + 12 = _____ psia (g)
Square root chart average reading (7.2)² x sp. const. 10.00 = 518 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 523 psia (h)
P_t = (h) + (f) _____ = 524 psia (i)
Wellhead casing shut-in pressure (Dwt) _____ psig + 12 = _____ psia (j)
Wellhead tubing shut-in pressure (Dwt) 860 psig + 12 = 872 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 872 psia (l)
Flowing Temp. (Meter Run) 77 °F + 460 _____ = 527 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 436 psia (n)

Q = 386 X $\left(\frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)}} = \frac{22.935}{22.935} = 1.005 \right)^* = \underline{388} \text{ MCF/day}$
(integrated)

DELIVERABILITY CALCULATION

D = Q 388 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n = \frac{570,288}{482,361}^{1.1333} = \underline{440}$
(1.1823)ⁿ

SUMMARY

P_c = 872 psia
Q = 388 Mcf/day
P_w = 527 psia
P_d = 436 psia
D = 440 Mcf/day

Company OCCIDENTAL PETROLEUM CORP. DIST. 3
By _____
Title RAY PHILLIPS, REPRESENTATIVE
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>4118</u>	<u>0.259</u>	<u>13,308</u>	<u>3,447</u>	<u>274,576</u>	<u>278,023</u>	<u>527.3</u>

F_c = 9.402

