

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 Pine Lake Formation Pictured Cliffs County Rio Arriba
Purchasing Pipeline El Paso Natural Gas Co. Date Test Filed 6/10/60

Operator Mobil Oil Company Lease Jicarilla D Well No. 2 UT-PC
Unit A Sec. 14 Twp. 26N Rge. 3W Pay Zone: From 3672' To 3736'
Casing: OD 7-5/8" WT. 24# Set At 4010' Tubing: OD 2-3/8" WT. 4.7# T. Perf. 3673
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .672" Estimated -
Date of Flow Test: From 5/15/60 To 5/22/60 * Date S.I.P. Measured 5/29/60
Meter Run Size 2.067" Orifice Size 1.000" Type Chart Sq. Rt. Type Taps Flg.

OBSERVED DATA

Flowing casing pressure (Dwt) _____ psig + 12 = _____ psia (a)
Flowing tubing pressure (Dwt) 487 psig + 12 = 499 psia (b)
Flowing meter pressure (Dwt) 487 psig + 12 = 499 psia (c)
Flowing meter pressure (meter reading when Dwt. measurement taken:
Normal chart reading _____ psig + 12 = _____ psia (d)
Square root chart reading (7.04)² x spring constant 10 = 496 psia (d)
Meter error (c) - (d) or (d) - (c) ± = 3 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 _____ psig + 12 = _____ psia (g)
Square root chart average reading (7.00)² x sp. const. 10 = 490 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 493 psia (h)
P_t = (h) + (f) = 493 psia (i)
Wellhead casing shut-in pressure (Dwt) _____ psig + 12 = _____ psia (j)
Wellhead tubing shut-in pressure (Dwt) 655 psig + 12 = 667 psia (k)
P_c = (j) or (k) whichever well flowed through = 667 psia (l)
Flowing Temp. (Meter Run) 64 °F + 460 = 524 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 334 psia (n)

Q = 450 (integrated) X $\left(\frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)} = \frac{22.34}{\sqrt{(d)} = \frac{22.27}}{1.003}} \right)^* = \underline{451} \text{ MCF/da}$

DELIVERABILITY CALCULATION
D = Q 451 $\left[\frac{(P_c^2 - P_d^2) = 333.3}{(P_c^2 - P_w^2) = 198.9} \right]^{.85} \frac{1.551}{1.551} = \underline{698} \text{ MCF/da.}$

SUMMARY
P_c = 667 psia
Q = 451 Mcf/day
P_w = 496 psia
P_d = 334 psia
D = 698 Mcf/day
Company Mobil Oil Company
By Max Beazley B.J. M.C. McE...
Title Prod. Engr.
Witnessed by _____
Company _____

* This is date of completion test.
* Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

GL	(1-e ⁻⁵)	(F _c Q) ²	(F _c Q) ² (1-e ⁻⁵) R ²	P _t ² (Column i)	P _t ² + R ²	P _w
2468	.164	17.98	2.949	243.049	245.998	496

