

Initial Deliverability
Test

NEW MEXICO OIL CONSERVATION COMMISSION
GAS WELL TEST DATA SHEET - SAN JUAN BASIN

(TO BE USED FOR FRUITLAND, PICTURED CLIFFS, MESA VERDE, & ALL DAKOTA
EXCEPT E-PRER DOME STORAGE AREA)

Pool **TAPACITO** Formation **PICTURED CLIFFS** County **RIO ARriba**
Purchasing Pipeline **PACIFIC NORTHWEST PIPELINE CORP.** Date Test Filed **SEPT. 2, 1959**
Operator **OCCIDENTAL PETROLEUM CORP.** Lease **"E"** Well No. **2-27**
Unit **K** Sec. **27** Twp. **26N** Rgn. **3W** Pay Zone: From **3994** To **4056**
Casing: OD **7-5/8** WT. **26.40** Set At **4206** Tubing: OD **2-3/8** WT. **4.7** T. Perf. **3957**
Produced Through: Casing _____ Tubing **X** Gas Gravity: Measured **.672** Estimated _____
Date of Flow Test: From **3-30-59** To **4-7-59** * Date S.I.P. Measured **12-30-58**
Meter Run Size **4.067** Orifice Size **0.500** Type Chart **L-10** Type Taps **P1**

OBSERVED DATA

Flowing casing pressure (Dwt) _____ psig + 12 = _____ psia (a)
Flowing tubing pressure (Dwt) _____ psig + 12 = _____ 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 (_____) ² x spring constant _____ = _____ psia (d)
Meter error (c) - (d) or (d) - (c) _____ = _____ psi (e)
Friction loss, Flowing column to meter:
(b) - (c) Flow through tubing: (a) - (c) Flow through casing _____ = _____ psi (f)
Seven day average static meter pressure (from meter chart):
Normal chart average reading **479** psig + 12 = **491** psia (g)
Square root chart average reading (_____) ² x sp. const. _____ = _____ psia (g)
Corrected seven day avg. meter press. (pf) (g) + (f) _____ = _____ psia (h)
P_t = (h) + (f) _____ = _____ psia (i)
Wellhead casing shut-in pressure (Dwt) **1000** psig + 12 = **1012** psia (j)
Wellhead tubing shut-in pressure (Dwt) **1000** psig + 12 = **1012** psia (k)
P_c = (j) or (k) whichever well flowed through _____ = **1012** psia (l)
Flowing Temp. (Meter Run) **51** F + 460 _____ = **511** ° Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = **506** psia (n)

FLOW RATE CALCULATION

Q = _____ X $\left(\frac{P_c^2 - P_d^2}{P_c^2 - P_b^2} \right)^{1/2} =$ _____ MCF/day
(integrated)

DELIVERABILITY CALCULATION

D = Q **170** $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_b^2} \right]^{1/2} =$ **167** MCF/day
 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_b^2} \right]^{1/2} = \frac{768,108}{782,613} = 0.9842$
 $(0.9815)^n$

SUMMARY

P_c = **1012** psia
Q = **170** MCF/day
P_w = **492** psia
P_d = **506** psia
D = **167** MCF/day
Company **OCCIDENTAL PETROLEUM CORP.**
By **M.B. JONES, NORTHWEST PRODUCTION**
Title **AGENT**
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}) F ²	P _t ² (Column i)	P _t ² + R ²	P _w
2659	0.176	2.554	450	241,081	241,531	491.5

F_c = **9.402**

