

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 West Kutz Formation Pictured Cliffs County San Juan
Purchasing Pipeline El Paso Natural Gas Co. Date Test Filed 10-21-60
Operator Tidal Oil Company Lease Tidal Well No. 1
Unit I Sec. 9 Twp. 27N Rge. 12W Pay Zone: From 1354 To 1362
Casing: OD 5 5/8 WT. 24 Set At 1453 Tubing: OD 1 1/2 WT. 2.3 T. Perf. 1366
Produced Through: Casing _____ Tubing X Gas Gravity: Measured 0.658 Estimated _____
Date of Flow Test: From 10-22-60 To 10-30-60 Date S.I.P. Measured 7-21-60
Meter Run Size 4.067 Orifice Size 0.625 Type Chart L-10 Type Taps F1

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 _____ psig + 12 = _____ psia (g)
Square root chart average reading (6.40) ² x sp. const. 5.0 _____ = 205 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 205 psia (h)
P_t = (h) + (f) _____ = 205 psia (i)
Wellhead casing shut-in pressure (Dwt) 371 psig + 12 = 383 psia (j)
Wellhead tubing shut-in pressure (Dwt) 366 psig + 12 = 378 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 378 psia (l)
Flowing Temp. (Meter Run) 65 °F + 460 _____ = 525 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 189 psia (n)

Q = _____ X $\left(\frac{\text{FLOW RATE CALCULATION}}{\sqrt{(d)}} \right) = \text{_____ MCF/da}$
(integrated)

DELIVERABILITY CALCULATION

D = Q 59 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n = \frac{1.0473}{(1.064)^n} = \text{_____ MCF/da.}$
107,163
100,727

SUMMARY

P_c = 378 psia Company TIDAL OIL COMPANY
Q = 59 Mcf/day By M. B. JONES Morris B. Jones
P_w = 205 psia Title Consulting Petroleum Engineer
P_d = 189 psia Witnessed by _____
D = 62 Mcf/day 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
899	0.063	2.10	132	42,025	42,157	205.3

F_c = 24.62

