

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 Blanco Formation Mesa Verde County Rio Arriba
Purchasing Pipeline Pacific Northwest Date Test Filed _____
Operator Magnolia Petroleum Co. Lease Jicarilla "D" Well No. 5
Unit M Sec. 14 Twp. 26N Rge. 3W Pay Zone: From 5514' To 6062'
Casing: OD 5-1/2" WT. 14# Set At 6080' Tubing: OD 2-3/8" WT. 4.7# T. Perf. 5484'
Produced Through: Casing _____ Tubing I Gas Gravity: Measured .705 Estimated _____
Date of Flow Test: From 5/7/58 To 5/15/58 * Date S.I.P. Measured 9/23/57
Meter Run Size 2" Orifice Size 0.375 Type Chart L-10-8 Type Taps Flg.

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 (6.4) ² x sp. const. 15 = 613 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 613 psia (h)
P_t = (h) + (f) = 613 psia (i)
Wellhead casing shut-in pressure (Dwt) _____ psig + 12 = _____ psia (j)
Wellhead tubing shut-in pressure (Dwt) 1519 psig + 12 = 1531 psia (k)
P_c = (j) or (k) whichever well flowed through = 1531 psia (l)
Flowing Temp. (Meter Run) 46 °F + 460 = 506 ° Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 766 psia (n)

Q = 55 MCF/day (integrated) X $\left(\frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{P_c}}{\sqrt{P_d}}} = \frac{1}{1} \right) = \underline{55} \text{ MCF/day}$

DELIVERABILITY CALCULATION

D = Q 55 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{.75} = \underline{55 \times .9186} = \underline{50.5} \text{ MCF/day.}$

SUMMARY

P_c = 1531 psia
Q = 55 Mcf/day
P_w = 613 psia
P_d = 766 psia
D = 50.5 Mcf/day

Company Magnolia Petroleum Co.
By James A. Logan, Jr.
Title Gas Engineer
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
3866	0.245	517.1	126.7	375.8	375.9	613

