Form C-122-A

Revised April 20, 1955

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 Undesignated Formation Pictured Cliffs County

Purchasing Pipeline Pacific Northwest Pipe Line Corporation Date Test Filed March 23, 1959

Operator Magnolia Petroleum Company Lease Jicarilla "D" Well No. 8 UT-PC

Unit A Sec. 23 Twp. 26N Rge. 3W Pay Zone: From 3764' To 3841'

Casing: OD 7 5/8" WT. 26.40# Set At 6969' Tubing: OD 2 3/8" WT 4.7# T. Perf. 3839'

Produced Through: Casing - Tubing X Gas Gravity: Measured 0.647 Estimated -

Date of Flow Test: From 1-15-59 To 1-22-59 * Date S.I.P. Measured 10-17-58

Meter Run Size 4.026" Orifice Size 1.000" Type Chart Sqr. Rt. Type Taps Flange

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 493 psig + 12 = 505 psia (g)

Square root chart average reading (7.1) ^{2} x sp. const. 10 = 505 psia (g)

Corrected seven day avge. meter press. (p_f) (g) + (e) = 505 psia (h)

P_t = (h) + (f) = 505 psia (i)

Wellhead casing shut-in pressure (Dwt) 977 psig + 12 = 989 psia (j)

Wellhead tubing shut-in pressure (Dwt) 944 psig + 12 = 956 psia (k)

P_c = (j) or (k) whichever well flowed through = 956 psia (l)

Flowing Temp. (Meter Run) 68 °F + 460 = 528 °Abs (m)

$P_d = \frac{1}{2} P_c = \frac{1}{2}$ (l) = 478 psia (n)

FLOW RATE CALCULATION

$$Q = \underset{\text{(integrated)}}{669} \times \left(\frac{\sqrt{(c)}\ 1}{\sqrt{(d)}\ 1} = \frac{1}{1} = 1 \right) = 669 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q\ 669 \left[\frac{P_c^2 - P_d^2 = 685{,}452}{P_c^2 - P_w^2 = 652{,}815} \right]^{n\ 0.85} 1.0423 = 697 \text{ MCF/da.}$$

SUMMARY

P_c = 956 psia

Q = 669 Mcf/day

P_w = 811 psia

P_d = 478 psia

D = 697 Mcf/day

Company Magnolia Petroleum Company

By William A Zangen

Title Jr. Gas Engineer

Witnessed by -

Company -

* This is date of completion test.

* Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

GL	$(1-e^{-s})$	$(F_cQ)^2$	$\frac{(F_cQ)^2 (1-e^{-s})}{R^2}$	Pt^2 (Column i)	$P_t^2 + R^2$	P_w
2484	0.165	39.6	6.53	255.0	261.5	811

ok