

Initial Deliverability
TestForm C-132-A
Revised April 26, 1959NEW 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 San Arriba
Purchasing Pipeline Pacific Northwest Pipe Line Corporation Date Test Filed March 23, 1959
Operator Magnolia Petroleum Company Lease Jicarilla #6 Well No. 412-28
Unit A Sec. 26 Twp. 27N Rge. 3E Pay Zone: From 3670' To 3694'
Casing: OD 7 5/8" WT. 25.400 Set At 4170' Tubing: OD 2 3/8" WT. 4.75 T. Perf. 3693'
Produced Through: Casing - Tubing X Gas Gravity: Measured 0.600 Estimated -
Date of Flow Test: From 2-7-59 To 2-15-59 * Date S.I.P. Measured 10-15-58
Meter Run Size 4.026" Orifice Size 0.750 Type Chart Box 21 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 _____ psig + 12 = _____ psia (g)
Square root chart average reading (7.31) ² x sp. const. 10 _____ = _____ psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = _____ psia (h)
P_t = (h) + (f) _____ = _____ psia (i)
Wellhead casing shut-in pressure (Dwt) 912 psig + 12 = 924 psia (j)
Wellhead tubing shut-in pressure (Dwt) 625 psig + 12 = 637 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 637 psia (l)
Flowing Temp. (Meter Run) 47 °F + 460 _____ = 507 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 318 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{122}{(\text{Integrated})} \times \left(\frac{\sqrt{(c)} - 1}{\sqrt{(d)} - 1} \right) = \frac{1}{1} = 1 = 122 \text{ MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{122}{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{0.85}} = \frac{122}{\left[\frac{304,645}{119,313} \right]^{0.85}} = \frac{122}{2.2158} = 270 \text{ MCF/day}$$

SUMMARY

P_c = 637 psia
Q = 122 Mcf/day
P_w = 598 psia
P_d = 318 psia
D = 270 Mcf/day

Company Magnolia Petroleum Company
By William A. Morgan
Title Gas Engineer
Witnessed by _____
Company _____

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

REMARKS OR FRICTION CALCULATIONS

GL	(1-e ⁻⁸)	(F _c Q) ²	(F _c Q) ² (1-e ⁻⁸) R ²	P _t ² (Column i)	P ₁ ² P ₂ ²
<u>2647</u>	<u>0.175</u>	<u>1.32</u>	<u>0.231</u>	<u>286,225</u>	<u>304,645</u>

