

Initial Deliverability
TestNEW 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 _____ Basin _____ Formation Dakota County San Juan
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed 1-4-66
Operator Pan American Petroleum Corp., Lease W. D. Heath "B" Well No. 3
Unit 0 Sec. 31 Twp. 30 Rge. 9 Pay Zone: From 6648 To 6764
Casing: OD 4 $\frac{1}{2}$ WT. 10.5 Set At 6808 Tubing: OD 2-3/8 WT. 4.7 T. Perf. 6636
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .630 Estimated _____
Date of Flow Test: From 11-28-65 To 12-6-65 * Date S.I.P. Measured 8-26-65
Meter Run Size 4" Orifice Size _____ Type Chart Sa. 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) _____ $\pm$ _____ 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 (7.1)² x sp. const. _____ = 504 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 504 psia (h)
P_t = (h) + (f) _____ = 504 psia (i)
Wellhead casing shut-in pressure (Dwt) 1483 psig + 12 = 1495 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1546 psig + 12 = 1558 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1558 psia (l)
Flowing Temp. (Meter Run) _____ °F + 460 _____ = _____ °Abs (m)
P_d = $\frac{1}{2}$ P_c = $\frac{1}{2}$ (l) _____ = 779 psia (n)

$$Q = \text{(integrated)} \times \left(\frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} \right)^* = \text{_____ MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q \text{ } \underline{674} \left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^{.8788} = \underline{592} \text{ MCF/day}$$

SUMMARY

P_c = 1558 psia
Q = 674 Mcf/day
P_w = 514 psia
P_d = 779 psia
D = 592 Mcf/day

Company Pan American Petroleum Corporation
By G. W. Eaton, Jr.
Title Area 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
<u>4181</u>	<u>0.262</u>	<u>40.157</u>	<u>10.521</u>	<u>254.016</u>	<u>264,537</u>	<u>514</u>



