

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 Basin Formation Dakota County San Juan
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed 1-14-66
Operator Pan American Petroleum Corp. Lease Brannon Federal Well No. 2
Unit D Sec. 29 Twp. 25N Rge. 9W Pay Zone: From 6372 To 6410
Casing: OD 4 1/2 WT. 10.5 Set At 6495 Tubing: OD 2 3/8 WT. 4.7 T. Perf. 6391
Produced Through: Casing _____ Tubing xx Gas Gravity: Measured .701 Estimated _____
Date of Flow Test: From 12-31-65 To 1-8-66 * Date S.I.P. Measured 9-28-65
Meter Run Size 4" Orifice Size - Type Chart Sq. 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 _____ psig + 12 = _____ psia (g)
Square root chart average reading (6.95) ² x sp. const. _____ = 1799 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 1799 psia (h)
P_f = (h) + (f) _____ = 1799 psia (i)
Wellhead casing shut-in pressure (Dwt) 1785 psig + 12 = 1797 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1787 psig + 12 = 1799 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1799 psia (l)
Flowing Temp. (Meter Run) _____ °F + 460 _____ = _____ °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 900 psia (n)

FLOW RATE CALCULATION

$$Q = \text{(Integrated)} \times \left(\frac{V(c)}{V(d)} \right) = \text{_____ MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q \times \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \text{_____ MCF/day}$$

SUMMARY

P_c = 1799 psia
Q = 436 Mcf/day
P_w = 1799 psia
P_d = 900 psia
D = 372 Mcf/day
Company Pan American Petroleum Corporation
By G. W. Eaton, Jr. Original Signed By
Title Area Engineer G. W. EATON, JR.
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>4480</u>	<u>.378</u>	<u>16.804</u>	<u>4.672</u>	<u>233,289</u>	<u>237,961</u>	<u>488</u>

OK

RECEIVED
JAN 17 1966
OIL CON. CO.