

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 Dakota Formation Dakota County San Juan
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed 5-8-64
Operator PAN AMERICAN PETROLEUM CORP. Lease Gallegos Canyon Unit Well No. 124
Unit D Sec. 35 Twp. 28N Rge. 12W Pay Zone: From 6213 To 6234
Casing: OD 4-1/2 WT. 10.5 Set At 6385 Tubing: OD 2-3/8 WT. 4.7 T. Perf. 6238
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .677 Estimated _____
Date of Flow Test: From 4-9-64 To 4-17-64 * Date S.I.P. Measured 3-6-62
Meter Run Size 4" Orifice Size 1.750 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: _____ = _____ psi (f)
(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 (6.85) ² x sp. const. 10 = 469 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 465 psia (h)
P_t = (h) + (f) _____ = 2093 psia (i)
Wellhead casing shut-in pressure (Dwt) 2081 psig + 12 = 2093 psia (j)
Wellhead tubing shut-in pressure (Dwt) 2071 psig + 12 = 2083 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 2093 psia (l)
Flowing Temp. (Meter Run) _____ °F + 460 _____ = _____ °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 1047 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{\left(\frac{V(c)}{V(d)} \right)^{1/2}}{\left(\frac{F_c^2 - P_d^2}{F_c^2 - P_w^2} \right)^{1/2}} \times \text{_____} = \text{_____ MCF/day}$$

(Integrated)

DELIVERABILITY CALCULATION

$$D = Q \times \left[\frac{F_c^2 - P_d^2}{F_c^2 - P_w^2} \right]^{1/2} = \frac{3108 \times \left[\frac{3,234,440}{3,935,261} \right]^{1/2}}{0.8732} = 2714 \text{ MCF/day}$$

SUMMARY

P_c = 2093 psia
Q = 3108 Mcf/day
P_w = 667 psia
P_d = 1047 psia
D = 2714 Mcf/day

Company PAN AMERICAN PETROLEUM CORPORATION
By F. L. Nabors
Title District Engineer
Witnessed by By: F. W. Foell
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
4223	.264	853.891	225.427	219.961	445.388	667