Initial Deliverability Test

Form C-122-A
Revised April 20, 1955

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 Otero Chacra Formation Chacra County Rio Arriba

Purchasing Pipeline El Paso Natural Gas Company Date Test Filed July 8, 1963

Operator Pan American Petroleum Corp. Lease Jicarilla Contract 146 Well No. 15

Unit M Sec. 10 Twp. 25-N Rge. 5-W Pay Zone: From 3781' To 3794'

Casing: OD 4-1/2" WT. 9.5# Set At 3897' Tubing: OD 2-3/8" WT. 4.7# T. Perf. 3747'

Produced Through: Casing ____ Tubing X Gas Gravity: Measured .668 Estimated ____

Date of Flow Test: From 5-28-63 To 6-5-63 * Date S.I.P. Measured 12-1-62

Meter Run Size 4" Orifice Size 1250 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 (7.05)$^2$ x sp. const. 5 | = | 249 | psia | (g) |
| Corrected seven day avge. meter press. ($p_f$) (g) + (e) | = | 249 | psia | (h) |
| $P_t$ = (h) + (f) | = | 249 | psia | (i) |
| Wellhead casing shut-in pressure (Dwt) 832 | psig + 12 = | 844 | psia | (j) |
| Wellhead tubing shut-in pressure (Dwt) 831 | psig + 12 = | 843 | psia | (k) |
| $P_c$ = (j) or (k) whichever well flowed through | = | 844 | psia | (l) |
| Flowing Temp. (Meter Run) ____ °F + 460 | = | ____ | °Abs | (m) |
| $P_d$ = ½ $P_c$ = ½ (l) | = | 422 | psia | (n) |

## FLOW RATE CALCULATION

Q = 232 (integrated) x $\left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{\quad}{\quad} = 1.000\right)^*$ = 232 MCF/da

## DELIVERABILITY CALCULATION

$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} = \frac{534252}{649545}\right]^n$ .8637 = 200 MCF/da.

## SUMMARY

$P_c$ = 844 psia
Q = 232 Mcf/day
$P_w$ = 251 psia
$P_d$ = 422 psia
D = 200 Mcf/day

Company Pan American Petroleum Corporation
By G. W. Eaton, Jr. ORIGINAL SIGNED BY G. W. Eaton, Jr.
Title Senior Engineer
Witnessed by ____
Company ____

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JUL 9 1963
OIL CON. COM.
DIST. 3

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

REMARKS OR FRICTION CALCULATIONS

| GL | $(1-e^{-s})$ | $(F_cQ)^2$ | $\frac{(FcQ)^2}{R^2}$ $(1-e^{-s})$ | $P_t^2$ (Column i) | $P_t^2 + R^2$ | $P_w$ |
|---|---|---|---|---|---|---|
| 2503 | .166 | 4.758 | .790 | 62.001 | 62.791 | 251 |

Corrected