Form C-122-A
Revised April 20, 1955

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 Blanco Formation Mesa Verde County Rio Arriba

Purchasing Pipeline Pacific Northwest Pipeline Date Test Filed 7-16-58

Operator Pacific Northwest Lease San Juan 29-6 Well No. 43-05

Unit G Sec. 05 Twp. 29N Rge. 6W Pay Zone: From 5694' To 5668'

Casing: OD 5½" WT. 14.0 Set At 5709' Tubing: OD 1-1/2" WT. 2.36 T. Perf. 5668'

Produced Through: Casing ^ Tubing Flow Gas Gravity: Measured .719 Estimated

Date of Flow Test: From 6-21-58 To 6-29-58 * Date S.I.P. Measured 3-21-58

Meter Run Size Orifice Size Type Chart Type Taps

## 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 | 463 psig + 12 = | 475 | psia | (g) |
| Square root chart average reading ( ) $^2$ x sp. const. | = | | psia | (g) |
| Corrected seven day avge. meter press. ($p_f$) (g) + (e) | = | 475 | psia | (h) |
| $P_t$ = (h) + (f) | = | 475 | psia | (i) |
| Wellhead casing shut-in pressure (Dwt) | 1107 psig + 12 = | 1119 | psia | (j) |
| Wellhead tubing shut-in pressure (Dwt) | 975 psig + 12 = | 987 | psia | (k) |
| $P_c$ = (j) or (k) whichever well flowed through | = | 987 | psia | (l) |
| Flowing Temp. (Meter Run) | 76 °F + 460 = | 536 | °Abs | (m) |
| $P_d$ = ½ $P_c$ = ½ (l) | = | 493.5 | psia | (n) |

## FLOW RATE CALCULATION

$$Q = \underset{\text{(integrated)}}{719} \times \left( \frac{\sqrt{(c)}}{\sqrt{(d)}} = \quad = \quad \right)^{*} = \quad \text{MCF/da}$$

## DELIVERABILITY CALCULATION

$$D = Q \left[ \left( \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right) = \frac{730,687}{668,637} \right]^{n} = \frac{1.093}{1.069} = 769 \text{ MCF/da.}$$

## SUMMARY

| | | | |
|---|---|---|---|
| $P_c$ = | 987 psia | Company | Pacific Northwest Pipeline |
| Q = | 719 Mcf/day | By | Original signed by G. H. Reppin |
| $P_w$ = | 953 psia | Title | District Production Engineer |
| $P_d$ = | 493.5 psia | Witnessed by | |
| D = | 769 Mcf/day | Company | |

* This is date of completion test.

* Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

| GL | $(1-e^{-S})$ | $(F_cQ)2$ | $\frac{(FcQ)^2}{R^2}$ $(1-e^{-S})$ | $Pt^2$ (Column i) | $P_t^2 + R^2$ | $P_w$ |
|---|---|---|---|---|---|---|
| 4042 | 0.055 | 313.36 | 79.997 | 975.625 | 305.532 | 953 |

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