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 MESA VERDE Formation MESA VERDE County RIO ARRIBA

Purchasing Pipeline PACIFIC NORTHWEST PIPELINE CORPORATION Date Test Filed JANUARY 16, 1957

Operator Pacific Northwest Pipeline Lease San Juan Unit 29-6 Well No. 85-32

Unit B Sec. 32 Twp. 29 Rge. 6 Pay Zone: From 5004 To 5507

Casing: OD 5 1/2 WT. 15.5 Set At 5460 Tubing: OD 2 3/8 WT. 4.7 T. Perf. 5476

Produced Through: Casing - - Tubing - - Gas Gravity: Measured .659 Estimated ____

Date of Flow Test: From 11-9-56 To 11-17-56 * Date S.I.P. Measured 8-18-55

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 | psig + 12 = | psia | (g) |
| Square root chart average reading ( ) $^2$ x sp. const. | = 534 | psia | (g) |
| Corrected seven day avge. meter press. ($p_f$) (g) + (e) | = | psia | (h) |
| $P_t$ = (h) + (f) | = 534 | psia | (i) |
| Wellhead casing shut-in pressure (Dwt) 1083 | psig + 12 = 1095 | psia | (j) |
| Wellhead tubing shut-in pressure (Dwt) 1087 | psig + 12 = 1099 | psia | (k) |
| $P_c$ = (j) or (k) whichever well flowed through | = 1099 | psia | (l) |
| Flowing Temp. (Meter Run) 77 °F + 460 | = 537 | °Abs | (m) |
| $P_d$ = ½ $P_c$ = ½ (l) | = 550 | psia | (n) |

## FLOW RATE CALCULATION

$$Q = \underset{\text{(integrated)}}{1678} \times \left( \frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{\quad}{\quad} = \quad \right)^{*} = \quad \text{MCF/da}$$

## DELIVERABILITY CALCULATION

$$D = Q \left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} = \frac{809,881}{739,568} \right]^{n} = (1.0944)^{.75} = 1.070$$

D = 1678 × 1.070 = 1768 MCF/da.

## SUMMARY

| | | |
|---|---|---|
| $P_c$ = | 1099 | psia |
| Q = | 1678 | Mcf/day |
| $P_w$ = | 583 | psia |
| $P_d$ = | 550 | psia |
| D = | 1768 | Mcf/day |

Company Pacific Northwest Pipeline Corporation
By Ronald C. Adams
Title Well Test Engineer
Witnessed by ____
Company ____

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

## REMARKS OR FRICTION CALCULATIONS

| GL | $(1-e^{-S})$ | $(F_cQ)^2$ | $\frac{(F_cQ)^2 (1-e^{-S})}{R^2}$ | $P_t^2$ (Column i) | $P_t^2 + R^2$ | $P_w$ |
|---|---|---|---|---|---|---|
| 3579 | .028 | 841,843 | 55003 | [illegible] | 340,139 | 583 |

cc: N.M.O.C.C.-Aztec
Phillips Petroleum (Wayne Smith)
File

OK

RECEIVED
JAN 18 '57
OIL CON. COM.
DIST. 3