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2-File

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 Blanco Mesa Verde Formation Mesa Verde County Rio Arriba

Purchasing Pipeline PACIFIC NORTHWEST PIPELINE CORPORATION Date Test Filed 11-23-57

Operator PACIFIC NORTHWEST PIPELINE Lease San Juan 28-4 Well No. 12-33

Unit K Sec. 33 Twp. 28N Rge. 4W Pay Zone: From 6034' To 6554'

Casing: OD 5 1/2" WT. Set At 6629' Tubing: OD 2-3/8" WT. 4.7 T. Perf. 6511'

Produced Through: Casing Tubing XX Gas Gravity: Measured 0.84 Estimated

Date of Flow Test: From 10-8-57 To 10-16-57 * Date S.I.P. Measured 7-25-57

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 509 psig + 12 = 521 psia (g)

Square root chart average reading () ² x sp. const. = psia (g)

Corrected seven day avge. meter press. (p_f) (g) + (e) = psia (h)

P_t = (h) + (f) = 521 psia (i)

Wellhead casing shut-in pressure (Dwt) 1157 psig + 12 = 1169 psia (j)

Wellhead tubing shut-in pressure (Dwt) 1025 psig + 12 = 1037 psia (k)

P_c = (j) or (k) whichever well flowed through = 1169 psia (l)

Flowing Temp. (Meter Run) 96 °F + 460 = 556 °Abs (m)

P_d = 1/2 P_c = 1/2 (l) = 584.5 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{513}{(\text{integrated})} \times \left(\frac{\frac{V(c)}{V(d)}}{\frac{V(c)}{V(d)}} \right)^* = \text{MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{513}{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n} \frac{(0.9414)^{.75}}{(0.9557)} = 490 \text{ MCF/da.}$$

SUMMARY

P_c = 1169 psia
Q = 513 Mcf/day
P_w = 527 psia
P_d = 584.5 psia
D = 490 Mcf/day

Company PACIFIC NORTHWEST PIPELINE CORP.
By Original signed by G. H. Peppin
Title District Production Engineer
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
4454	0.277	23.261	6.443	271.112	277.884	527

OK



