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2-File

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 Chaco Mesa Formation Pictured Cliffs County Rio Arriba
Purchasing Pipeline EL PASO NATURAL GAS COMPANY Date Test Filed 2-12-58
~~PACIFIC NORTHWEST PIPELINE~~
Operator PICTURED CLIFFS Lease Indian "A" Well No. 2
Unit M Sec. 30 Twp. 29N Rge. 3W Pay Zone: From 3650' To 3860'
Casing: OD 5-1/2" WT. Set At 3987' Tubing: OD 2" WT. 4.7 T. Perf. 3925'
Produced Through: Casing Tubing x x Gas Gravity: Measured .649 Estimated
Date of Flow Test: From 1-16-58 To 1-23-58 * Date S.I.P. Measured 12-17-56
Meter Run Size Orifice Size 1.500 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 (7.75) ² x sp. const. 10 = 601 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 601 psia (h)
P_t = (h) + (f) = 601 psia (i)
Wellhead casing shut-in pressure (Dwt) 1109 psig + 12 = 1121 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1107 psig + 12 = 1119 psia (k)
P_c = (j) or (k) whichever well flowed through = 1121 psia (l)
Flowing Temp. (Meter Run) 72 °F + 460 = 532 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 560.5 psia (n)

Q = 845 X $\left(\frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} = \frac{\text{ }}{\text{ }} = \text{ } \right)^* = \text{845}$ MCF/da
(Integrated)

DELIVERABILITY CALCULATION
D = Q 845 $\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} = \frac{1121^2 - 560.5^2}{1121^2 - 610^2} = \frac{942491}{884772} \right]^n \frac{(1.065)^{.85}}{1.055} = \text{891}$ MCF/da.

SUMMARY
P_c = 1121 psia
Q = 845 Mcf/day
P_w = 610 psia
P_d = 560.5 psia
D = 891 Mcf/day

PACIFIC NORTHWEST PIPELINE
Company
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
2547	0.169	63.123	10.668	361.201	371.869	610



Figure 1 consists of seven bar charts, labeled (a) through (g), each representing a different demographic variable. The y-axis for all charts is 'Percentage of total sample' ranging from 0 to 100. The x-axis for each chart has two categories: 'Control' and 'Intervention'. The bars are color-coded: white for the Control group and black for the Intervention group. Significance levels are indicated by asterisks (*, **, ***) above the bars.

- (a) Age: The Control group is approximately 65%, and the Intervention group is approximately 35%. Significance: ***.
- (b) Sex: The Control group is approximately 50%, and the Intervention group is approximately 50%. Significance: *.
- (c) Education: The Control group is approximately 60%, and the Intervention group is approximately 40%. Significance: **.
- (d) Income: The Control group is approximately 60%, and the Intervention group is approximately 40%. Significance: **.
- (e) Employment: The Control group is approximately 60%, and the Intervention group is approximately 40%. Significance: **.
- (f) Religion: The Control group is approximately 60%, and the Intervention group is approximately 40%. Significance: **.
- (g) Marital status: The Control group is approximately 60%, and the Intervention group is approximately 40%. Significance: **.