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 Aztec Formation Pictured Cliffs County San Juan

Purchasing Pipeline Southern Union Gas Company Date Test Filed March 7, 1958

Operator Aztec Oil & Gas Company Lease Mare Well No. 7

Unit J Sec. 15 Twp. 29N Rge. 10W Pay Zone: From 2068 To 2120

Casing: OD 5½" WT. 14# Set At 2176 Tubing: OD 1" WT. 1.7# T. Perf. 2099

Produced Through: Casing X Tubing ____ Gas Gravity: Measured 0.667 Estimated ____

Date of Flow Test: From 2-7-58 To 2-14-58 * Date S.I.P. Measured 10-28-57

Meter Run Size 4" Orifice Size 1" Type Chart Normal 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 | 192 psig + 12 = | 204 | psia | (g) |
| Square root chart average reading (____)$^2$ x sp. const. | = | ____ | psia | (g) |
| Corrected seven day avge. meter press. ($p_f$) (g) + (e) | = | 204 | psia | (h) |
| $P_t$ = (h) + (f) | = | 204 | psia | (i) |
| Wellhead casing shut-in pressure (Dwt) | 684 psig + 12 = | 696 | psia | (j) |
| Wellhead tubing shut-in pressure (Dwt) | 684 psig + 12 = | 696 | psia | (k) |
| $P_c$ = (j) or (k) whichever well flowed through | = | 696 | psia | (l) |
| Flowing Temp. (Meter Run) | 52 °F + 460 = | 512 | °Abs | (m) |
| $P_d$ = ½ $P_c$ = ½ (l) | = | 348 | psia | (n) |

## FLOW RATE CALCULATION

Q = 439 (integrated) X $\left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{\quad}{\quad} = 1.0000\right)^*$ = 439 MCF/da

## DELIVERABILITY CALCULATION

$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} = \frac{363,312}{442,800}\right]^n$ 0.85 / 0.8453 = 371 MCF/da.

SUMMARY

| | | | |
|---|---|---|---|
| $P_c$ = | 696 | psia | |
| Q = | 439 | Mcf/day | |
| $P_w$ = | 204 | psia | |
| $P_d$ = | 348 | psia | |
| D = | 371 | Mcf/day | |

Company AZTEC OIL & GAS COMPANY
By ORIGINAL SIGNED BY L. M. STEVENS
Title District Engineer
Witnessed by ____
Company ____

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

REMARKS OR FRICTION CALCULATIONS

| GL | $(1-e^{-s})$ | $(F_cQ)2$ | $\frac{(FcQ)^2 (1-e^{-s})}{R^2}$ | $Pt^2$ (Column i) | $P_t^2 + R^2$ | $P_w$ |
|---|---|---|---|---|---|---|
| | | | | | | |

Friction loss negligible

RECEIVED
MAR 7 1958
OIL CON. COM.
DIST. 3