

NEW MEXICO OIL CONSERVATION COMMISSION
GAS WELL TEST DATA SHEET - SAN JUAN BASIN

(TO BE USED FOR FRUITLAND, PICTURED CLIFF, HERRING, & ALL SANDS
EXCEPT BAKER HOME STORAGE AREA)

For Basin Formation DAKOTA County San Juan
Purchasing Pipeline SECURITY UNION GAS SYSTEM Date Recd Filed 12-30-60

Operator AZTEC OIL & GAS Lease RICHARDSON Well No. 7
Unit 1 Sec. 15 Twp 31N Rge. 12W Pay Zone From 7238 To 7344
Casing: OD 4 1/2 WT 11.60 Set At 7457 Tubing: OD 2 3/8 WT 4.70 T. Perd 7238
Produced Through: Casing Tubing Gas Gravity: Measured 0.719 Estimated
Date of Flow Test: From 11/23 To 11/30 Date R.P.R. Measured 12/23/60
Meter Run Size 4 Orifice Size Type Chart SR Type Tops E

OBSERVED DATA

Flowing casing pressure (Dwt) PAKER psig + 12 = psia
Flowing tubing pressure (Dwt) 504 psig + 12 = 516 psia
Flowing meter pressure (Dwt) 480 psig + 12 = 492 psia
Flowing meter pressure (meter reading when Dwt. measurement taken:
Normal chart reading psig + 12 = psia
Square root chart reading 7.0 $\sqrt{1}^2 \times$ spring constant 1.0 = 490 psia
Meter error (a) - (d) or (d) - (a) psi
Friction loss, flowing column to meter:
(b) - (c) Flow through tubing, (c) - (d) Flow through casing 24 psi
Seven day average static meter pressure (from meter chart):
Normal chart average reading 492 psig + 12 = 504 psia
Square root chart average reading $\sqrt{1}^2 \times$ sp. const. = psia
Corrected seven day average meter press. (a₇) (g) + (e) 506 psia
P₁ = (b) + (f) 530 psia
Wellhead casing shut-in pressure (Dwt) PAKER psig + 12 = psia
Wellhead tubing shut-in pressure (Dwt) 1741 psig + 12 = 1753 psia
P₂ = (f) or (k) whichever well flows through 1753 psia
Flowing Temp. (Meter Run) 76 °F = 450° 536 psia
P₂ = K P₁ = K (f) 877 psia

FLOW RATE CALCULATION

Q = 1837 $\sqrt{\frac{(1.0041)^{0.5}}{1.0020}}$ = 1841 Mcf/day
(Integrated)

DELIVERABILITY CALCULATION

Q = 1841 $\left[\frac{2,303,880 - 2,620,150}{2,698,935} \right]^{0.75} \frac{.8880}{0.9007} = 1635$ Mcf/day
(8536)

SUMMARY

P₁ = 1753 psia
Q = 1841 Mcf/day
P_w = 612 psia
P_d = 877 psia
D = 1635 Mcf/day

Company Aztec Oil & Gas Company
By P. O. Drawer 570
Title Farmington, New Mexico
Witnessed by ORIGINAL SIGNED BY L. M. STEVENS
Company OIL CORP

JAN 10 1961

- * This is a late completion test.
- * Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

Q	(1-e ⁻²)	(P ₁ ² - P ₂ ²)	(P ₁ ² - P ₂ ²) ^{0.75}	u ₁ ²	P ₁ ² + P ₂ ²	P ₁
5129	0.311	299.601	93.176	280.900	374.076	612