

Initial Deliverability
Test

Form G-129-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, MESAVENGE, & ALL SAKOTA
EXCEPT BARKER DOME STORAGE AREA)

Pool Delaney Mesa Formation Picture cliff County San Juan
Purchasing Pipeline El Paso Natural Gas Co. Date Test Filed 8-23-57
Operator McKay, Wayne & Zinkney Lease Sullivan Well No. 3
Unit N Sec. 22 Twp. 20N Rge. 10W Pay Zone: From 1757 To 1797
Casing: OD 4 1/2 WT. 9.5 Set At 1797 Tubing: OD 1.315 WT. 1.66 T. Perf. 1797
Produced Through: Casing X Tubing _____ Gas Gravity: Measured .649 Estimated _____
Date of Flow Test: From 8-1-57 To 8-2-57 * Date S.I.P. Measured 8-2-57
Meter Run Size 4" Orifice Size .750 Type Chart SL-RT Type Taps _____

OBSERVED DATA

Flowing casing pressure (Bwt) 249 psig + 12 = 261 psia (a)
Flowing tubing pressure (Bwt) 249 psig + 12 = 261 psia (b)
Flowing meter pressure (Bwt) 249 psig + 12 = 261 psia (c)
Flowing meter pressure (meter reading when Bwt measurement taken):
Normal chart reading _____ psig + 12 = _____ psia (d)
Square root chart reading (6.0) ² x spring constant .500 = 255 psia (d)
Meter error (e) = (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 (6.00) ² x sp. const. .500 = 255 psia (g)
Corrected seven day avg. meter press. (P₁) (g) + (e) _____ psia (h)
P₁ = (h) + (f) _____ psia (i)
Wellhead casing shut-in pressure (Bwt) 450 psig + 12 = 462 psia (j)
Wellhead tubing shut-in pressure (Bwt) 450 psig + 12 = 462 psia (k)
P₂ = (j) or (k) whichever well flowed through _____ psia (l)
Flowing Temp. (Meter Run) 69 °F + 460 _____ °Abs (m)
P₂ = 1/2 P₁ = 1/2 (i) _____ psia (n)

FLOW RATE CALCULATION

Q = 223 (Integrated) x $\left(\frac{\sqrt{P_1} - \sqrt{P_2}}{\sqrt{P_2} - \sqrt{P_3}} \right) = \frac{14.16 - 1.047}{15.45} = \frac{223}{15.45} = 14.46$ MCF/day

DELIVERABILITY CALCULATION

B = Q 223 $\left[\frac{(P_1^2 - P_2^2)}{(P_2^2 - P_3^2)} \right]^{.65} = \frac{140055}{140050}^{.65} = 1.076$ 251 MCF/day

SUMMARY

P₁ 462 psia
Q 223 MCF/day
P₂ 462 psia
P₃ 261 psia
B 251 MCF/day

Company Well Production Co.
By H. A. McKay
Title Owner
Witnessed by _____
Company _____

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

REMARKS OR FRICITION CALCULATIONS

Q ₁	(P ₁ ² - P ₂ ²)	(P ₂ ² - P ₃ ²)	(P ₂ ² - P ₃ ²) ²	(1 - 0.0001 P ₂) ²	P ₂ ²	P ₃ ²



