

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 HOLLAND Formation PICTURED CLIFFS County SAN JUAN
Purchasing Pipeline EL PASO NATURAL GAS COMPANY Date Test Filed 2-2-56
Operator J. CLAY YOUNG Lease WINDFALL UNIT Well No. 12-2
Unit 8 Sec. 2 Twp. 34N Rge. 9E Pay Zone: From 1947 To 2015
Casing: OD 5-1/2" WT. 145 Set At 1952 Tubing: OD 1" WT. 1.75 T. Perf. 1952-54
Produced Through: Casing X Tubing _____ Gas Gravity: Measured 0.650 Estimated _____
Date of Flow Test: From 12-17-55 To 12-24-55 * Date S.I.P. Measured 7-15-55
Meter Run Size 4.827 Orifice Size 0.750 Type Chart Sq. Rt. 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 (a) - (d) or (d) - (a) _____ ± _____ psi (e)
Friction loss, Flowing column to meter: _____ = _____ psi (f)
(b) - (c) Flow through tubing; (a) - (c) Flow through casing
Seven day average static meter pressure (from meter chart):
Normal chart average reading 237 psig + 12 = 249 psia (g)
Square root chart average reading (_____) ² x sp. const. _____ = _____ psia (g)
Corrected seven day avg. meter press. (p_f) (g) + (e) _____ = _____ psia (h)
P_i = (h) + (f) _____ = _____ psia (i)
Wellhead casing shut-in pressure (Dwt) 640 psig + 12 = 652 psia (j)
Wellhead tubing shut-in pressure (Dwt) 640 psig + 12 = 652 psia (k)
P₀ = (j) or (k) whichever well flowed through _____ = _____ psia (l)
Flowing Temp. (Meter Run) 50 °F + 460 _____ = 518 °Abs (m)
P_d = 1/2 P₀ = 1/2 (l) _____ = 326 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{\text{(Integrated)}}{\left(\frac{\sqrt{(a)}}{\sqrt{(d)}} \right)} \times \left(\frac{\sqrt{(a)}}{\sqrt{(d)}} \right) = \text{_____ MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{101}{\left[\frac{(P_0^2 - P_d^2)}{(P_0^2 - P_w^2)} \right]^n} = \frac{101}{\left[\frac{326.700}{373.577} \right]^n} = \frac{101}{0.893} = 93 \text{ MCF/day}$$

SUMMARY

P₀ = 640 psia
Q = 101 Mcf/day
P_w = 249 psia
P_d = 326 psia
D = 93 Mcf/day

Company J. CLAY YOUNG
By Walter L. Stork
Title Engineer
Witnessed by _____
Company _____

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

REMARKS OR FRICTION CALCULATIONS

GL	(1-e ^{-s})	(F ₀ Q) ²	(F ₀ Q) ² (1-e ^{-s}) R ²	P _i ² (Column i)	P _i ² + R ²	P _w
			Friction negligible			

From EPMS Chart 971-972-01 Q = (720) 24
(166)



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