

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 Hilmar Formation Mano Verde County Rio Arriba
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed _____
Operator EPNG Lease San Juan 27-5 Well No. 42 (1)
Unit M Sec. 22 Twp. 27 Rge. 5 Pay Zone: From 5426 To 5946
Casing: OD 5-1/2 WT. 15.54 Set At 9622 Tubing: OD 2 WT. 4.7 T. Perf. 5440
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .700 Estimated _____
Date of Flow Test: From 9-22-59 To 9-29-59 * Date S.I.P. Measured 7-2-59 (13 days)
Meter Run Size _____ Orifice Size _____ 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 988 psig + 12 = 940 psia (g)
Square root chart average reading (_____) ² x sp. const. _____ = 940 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 940 psia (h)
P_t = (h) + (f) _____ = 940 psia (i)
Wellhead casing shut-in pressure (Dwt) _____ psig + 12 = _____ psia (j)
Wellhead tubing shut-in pressure (Dwt) 1103 psig + 12 = 1115 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1115 psia (l)
Flowing Temp. (Meter Run) 79 °F + 460 _____ = 539 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 558 psia (n)

Q = $\frac{2867}{185 \times 24}$ (integrated) × $\left(\frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)} = \frac{\text{_____}}{\sqrt{(d)} = \text{_____}}} \right)^* = 268 \text{ MCF/da}$

DELIVERABILITY CALCULATION

D = Q 268 $\left[\frac{(P_c^2 - P_d^2) = \frac{991861}{950088}}{(P_c^2 - P_w^2) = \frac{991861}{950088}} \right]^n \frac{.9898}{.9876} = 264 \text{ MCF/da.}$

SUMMARY

P_c = 1115 psia
Q = 268 Mcf/day
P_w = 941 psia
P_d = 558 psia
D = 264 Mcf/day

EL PASO NATURAL GAS COMPANY

By _____
Title Original Signed
Witnessed by Harold L. Hendrick
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
3808	.242	6.350	1537	891600	893137	941

D500 = 274

