

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 Blanco Formation Mesa Verde County Rio Arriba
Purchasing Pipeline El Paso Natural Gas Date Test Filed _____
Operator El Paso Natural Gas Lease San Juan 27-5 Unit Well No. 19
Unit N Sec. 20 Twp. 27 Rge. 5 Pay Zone: From 5060 To 5628
Casing: OD 5-1/2 WT. 15.5 Set At 5689 Tubing: OD 2 WT. 4.7 T. Perf. 5594
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .680 Estimated _____
Date of Flow Test: From 9/22 To 9/30 * Date S.I.P. Measured 3/19/57
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 _____ psig + 12 = _____ psia (g)
Square root chart average reading (7.85)² x sp. const. 10 _____ = 616 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 616 psia (h)
P_t = (h) + (f) _____ = 616 psia (i)
Wellhead casing shut-in pressure (Dwt) 1048 psig + 12 = 1060 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1042 psig + 12 = 1054 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1054 psia (l)
Flowing Temp. (Meter Run) 60 °F + 460 _____ = 520 °Abs (m)
P_d = ½ P_c = ½ (l) _____ = 527 psia (n)

Q = _____ X $\left(\frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} = \frac{\text{_____}}{\text{_____}} = \text{_____} \right)^* = \text{173} \text{ MCF/da}$
(integrated)

DELIVERABILITY CALCULATION

D = Q 173 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} = \frac{833,187}{730,819} \right]^n \frac{1.1400}{1.1031} = \text{191} \text{ MCF/da.}$

SUMMARY

P_c = 1054 psia
Q = 173 Mcf/day
P_w = 617 psia
P_d = 527 psia
D = 191 Mcf/day

Company El Paso Natural Gas
By Original Signed
Title Lewis D. Galloway
Witnessed by _____
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 - P _w ²	P _w
3804	.242	2.647	.641	379,456	380,097	617

D at 500 = 193

OK

X

