

Initial Deliverability
Test

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 Pacific Northwest Date Test Filed _____

Operator El Paso Natural Gas Lease San Juan 28-5 Unit Well No. 21
Unit L Sec. 35 Twp. 28 Rge. 5 Pay Zone: From 5216 To 5752
Casing: OD 5-1/2 WT. 15.5 Set At 5828 Tubing: OD 2 WT. 4.7 T. Perf. 5669
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .676 Estimated _____
Date of Flow Test: From 9/22/57 To 9/30/57 * Date S.I.P. Measured 4/29/57 (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 _____ psig + 12 = _____ psia (g)
Square root chart average reading (6.85) ² x sp. const. 10 _____ = 469 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 469 psia (h)
P_t = (h) + (f) _____ = 469 psia (i)
Wellhead casing shut-in pressure (Dwt) 1140 psig + 12 = 1152 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1140 psig + 12 = 1152 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1152 psia (l)
Flowing Temp. (Meter Run) 63 °F + 460 _____ = 523 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 576 psia (n)

Q = _____ X $\left(\frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)}} = \frac{\text{_____}}{\sqrt{(d)}} = \text{_____}} \right)^* = \underline{591} \text{ MCF/da}$
(integrated)

DELIVERABILITY CALCULATION

D = Q 591 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n = \underline{548} \text{ MCF/da.}$
 $\frac{995,328}{1,099,639} \cdot \frac{.9051}{.9280}$

SUMMARY

P_c = 1152 psia
Q = 591 Mcf/day
P_w = 477 psia
P_d = 576 psia
D = 548 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 + R ²	P _w
3832	.243	30,880	7,504	219,961	227,465	477

D at 500 = 574