

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 Mesa Verde Formation Mesa Verde County San Juan
Purchasing Pipeline El Paso Natural Gas Date Test Filed _____

Operator El Paso Natural Gas Lease McGulley Well No. 3(M)
Unit K Sec. 24 Twp. 28 Rge. 9 Pay Zone: From 4538 To 4724
Casing: OD 5-1/2 WT. _____ Set At 4765 Tubing: OD 2 WT. 4.7 T. Perf. 4632
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .710 Estimated _____
Date of Flow Test: From 10/8/57 To 10/16/57 Date S.I.P. Measured 5/6/57 (9 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 (7.10) ² x sp. const. 10 _____ = 504 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 504 psia (h)
P_t = (h) + (f) _____ = 504 psia (i)
Wellhead casing shut-in pressure (Dwt) _____ psig + 12 = _____ psia (j)
Wellhead tubing shut-in pressure (Dwt) 989 psig + 12 = 1001 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1001 psia (l)
Flowing Temp. (Meter Run) 64 °F + 460 _____ = 524 °Abs (m)
P_d = ½ P_c = ½ (l) _____ = 501 psia (n)

Q = _____ X $\left(\frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)} = \text{_____} = \text{_____}} \right)^* = \text{446} \text{ MCF/day}$
(integrated) $\sqrt{(d)} = \text{_____}$

DELIVERABILITY CALCULATION

D = Q 446 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right]^n = \frac{751,000}{744,240}^n \frac{1.0090}{1.0067} = \text{449} \text{ MCF/day}$

SUMMARY

P_c = 1001 psia Company El Paso Natural Gas
Q = 446 Mcf/day By Original Signed
P_w = 508 psia Title _____
P_d = 501 psia Witnessed by Lewis D. Galloway
D = 449 Mcf/day 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
3289	.213	17.584	3.745	254,016	257,761	508

D at 500 = 442

