

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 El Paso Natural Gas Company Date Test Filed _____

Operator El Paso Natural Gas Lease San Juan 28-7 Unit Well No. 52

Unit H Sec. 27 Twp. 28 Rge. 7 Pay Zone: From 4442 To 5155

Casing: OD 5 1/2 WT. 15.5 Set At 5220 Tubing: OD 2 WT. 4.7 T. Perf. 5084

Produced Through: Casing _____ Tubing X Gas Gravity: Measured .700 Estimated _____

Date of Flow Test: From 3/16/57 To 3/23/57 * Date S.I.P. Measured 10/31/56 (11 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 (7.40) ² x sp. const. 10 = 548 psia (g)

Corrected seven day avge. meter press. (p_f) (g) + (e) = 548 psia (h)

P_t = (h) + (f) = 548 psia (i)

Wellhead casing shut-in pressure (Dwt) 1083 psig + 12 = 1095 psia (j)

Wellhead tubing shut-in pressure (Dwt) 1071 psig + 12 = 1083 psia (k)

P_c = (j) or (k) whichever well flowed through = 1083 psia (l)

Flowing Temp. (Meter Run) 80 °F + 460 = 540 °Abs (m)

P_d = 1/2 P_c = 1/2 (l) = 542 psia (n)

FLOW RATE CALCULATION

$$Q = \text{(Integrated)} \times \left(\frac{\frac{V(c)}{V(d)}}{\frac{V(c)}{V(d)}} \right)^* = \underline{1356} \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \underline{1356} \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \underline{1409} \text{ MCF/da.}$$

$\frac{879,125}{835,527}$ $\frac{1.0521}{1.0388}$

SUMMARY

P_c = 1083 psia
Q = 1356 Mcf/day
P_w = 581 psia
P_d = 542 psia
D = 1409 Mcf/day

Company El Paso Natural Gas
By Original Signed
Title _____
Witnessed by Lewis D. Galloway
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
3559	.228	162.537	37,058	300,304	337,362	581

D @ 500 = 1400

OK



