

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 Undesignated Formation Pictured Cliffs County El Arriba
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed _____

Operator El Paso Natural Gas Co. Lease Harvey State Well No. 3
Unit 1 Sec. 16 Twp. 25N Rge. 6W Pay Zone: From 2310 To 2370
Casing: OD 7 WT. 20 Set At 2310 Tubing: OD 1 1/2 WT. 2.3 T. Perf. 2322
Produced Through: Casing _____ Tubing I Gas Gravity: Measured .675 Estimated _____
Date of Flow Test: From 2/8 To 2/16/56 Date S.I.P. Measured 12/21/55
Meter Run Size 4 Orifice Size _____ Type Chart 29. Kt. Type Taps Flange

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: _____ = _____ psi (f)
(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. 3 = 276 psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) = 276 psia (h)
P_t = (h) + (f) = 276 psia (i)
Wellhead casing shut-in pressure (Dwt) 836 psig + 12 = 848 psia (j)
Wellhead tubing shut-in pressure (Dwt) 836 psig + 12 = 848 psia (k)
P_c = (j) or (k) whichever well flowed through = 848 psia (l)
Flowing Temp. (Meter Run) 51 °F + 460 = 511 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) = 424 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \times \left(\frac{V(c)}{V(d)} \right) = \frac{848^2 - 424^2}{848^2 - 288^2} \times \left(\frac{355}{308} \right) = 355 \text{ MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q \times \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = 355 \times \left[\frac{848^2 - 424^2}{848^2 - 288^2} \right]^{.8475 / .8689} = 308 \text{ MCF/day}$$

SUMMARY

P_c = 848 psia
Q = 355 Mcf/day
P_w = 288 psia
P_d = 424 psia
D = 308 Mcf/day

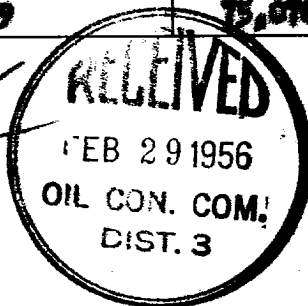
Company El Paso Natural Gas Company
By Original Signed
Title Lewis D. Galloway
Witnessed by _____
Company _____

* 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})	P _t ²	P _t ² + R ²	P _w
			R ²	(Column i)		
<u>1451</u>	<u>.100</u>	<u>76.388</u>	<u>7.639</u>	<u>75,076</u>	<u>82,715</u>	<u>288</u>



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