

74866
Initial Deliverability
Test

Form C-122-A
Revised April 20, 1955

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 Artec Formation Picture Cliff County San Juan
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed _____

Operator El Paso Natural Gas Co. Lease Hancock Well No. 3 (P)
Unit M Sec. 22 Twp. 28 Rge. 9 Pay Zone: From 3258 To 3290
Casing: OD 7 5/8 WT. 26.44 Set At 3453 Tubing: OD 1 1/2 WT. 2.4 T. Perf. 3278
Produced Through: Casing X Tubing _____ Gas Gravity: Measured .644 Estimated _____
Date of Flow Test: From 9-21-59 To 9-29-59 * Date S.I.P. Measured 5-27-59
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: _____ = _____ psi (f)
(b) - (c) Flow through tubing; (a) - (c) Flow through casing
Seven day average static meter pressure (from meter chart):
Normal chart average reading 230 psig + 12 = 242 psia (g)
Square root chart average reading (_____) ² x sp. const. _____ = _____ psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = _____ psia (h)
P_t = (h) + (f) _____ = _____ psia (i)
Wellhead casing shut-in pressure (Dwt) 724 psig + 12 = 726 psia (j)
Wellhead tubing shut-in pressure (Dwt) 724 psig + 12 = 726 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 726 psia (l)
Flowing Temp. (Meter Run) 61 °F + 460 _____ = 521 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 363 psia (n)

$$Q = \frac{4778}{8} \times \left(\frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} \right) = 597 \text{ MCF/day}$$

(Integrated)

DELIVERABILITY CALCULATION

$$D = Q \frac{597}{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n} = 517 \text{ MCF/day}$$

n = .8437 / .8694

SUMMARY

P_c = 726 psia
Q = 597 Mcf/day
P_w = 242 psia
P_d = 363 psia
D = 517 Mcf/day

EL PASO NATURAL GAS COMPANY

Company _____
By _____
Title _____
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 f)	P _t ² + R ²	P _w

Friction Negligible

D250 = 586

OK



YOUNG JAMES J. JAMES
JAMES J. JAMES
JAMES J. JAMES