

72472
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 Blanco Formation Mesa Verde County San Juan
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed _____
Operator El Paso Natural Gas Co. Lease Russell Well No. 5
Unit G Sec. 25 Twp. 28 Rge. 8 Pay Zone: From 4578 To 5192
Casing: OD 5-1/2 WT. 15.5 lbs Set At 5206 Tubing: OD 2 WT. 4.7 T. Perf. 5109
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .689 Estimated _____
Date of Flow Test: From 9/29/59 To 10/7/59 * Date S.I.P. Measured 8/6/59 (10 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 485 psig + 12 = 497 psia (g)
Square root chart average reading (_____) ² x sp. const. _____ = _____ psia (g)
Corrected seven day avge. meter press. (p_f) (g) + (e) _____ = 497 psia (h)
P_t = (h) + (f) _____ = 497 psia (i)
Wellhead casing shut-in pressure (Dwt) 1058 psig + 12 = 1070 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1058 psig + 12 = 1070 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1070 psia (l)
Flowing Temp. (Meter Run) 75 °F + 460 _____ = 535 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 535 psia (n)

$$Q = \frac{11033}{8} \times \left(\frac{\text{FLOW RATE CALCULATION}}{\sqrt{(c)}} = \frac{\text{FLOW RATE CALCULATION}}{\sqrt{(d)}} \right) = 1379 \text{ MCF/day}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{1379}{\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} = \frac{858675}{859902} \right]^n \cdot \frac{.9985}{.9989}} = 1377 \text{ MCF/day}$$

SUMMARY

P_c = 1070 psic
Q = 1379 Mcf/day
P_w = 534 psic
P_d = 535 psic
D = 1377 Mcf/day
Company El Paso Natural Gas Company
By _____
Title Original Signed
Witnessed by Harold L. Knecht
Company _____

- * This is date of completion test.
- * Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

GL	(1-e ^{-S})	(FcQ) ²	(FcQ) ² (1-e ^{-S}) R ²	P _t ² (Column i)	P _t ² + R ²	P _w
3520	.226	168.091	37.989	247009	284998	534

D 500 = 1361

