

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 Astec FORMATION Pictured Cliff COUNTY San Juan
PURCHASING PIPELINE El Paso Natural Gas Co. DATE TEST FILED 12-14-55
OPERATOR Pubco Development, Inc. LEASE State WELL NO. 21
UNIT N SEC. 36 TWP. 29N RGE. 10W FAI. ZONE: From 1907 To 1940
CASING: OD 5 1/2 WT. 14 SET AT 1898 TUBING: OD 1" WT. 1.7 T.Perf. 1899
PRODUCED THROUGH: CASING X TUBING GAS GRAVITY: MEASURED .680 ESTIMATED
DATE OF FLOW TEST: From 11-23-55 To 11-30-55 *Date S.I.P. MEASURED 9-23-55
METER RUN SIZE 3/4" 4" ORIFICE SIZE 1" TYPE CHART Sq.Rt. 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 (_____) ²x 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 (6.25) ²x sp. const. _____ = 195 psia (g)
Corrected seven day avge. meter press. (Pf) (g) + (e) _____ = _____ psia (h)
P_t = (h) + (f) _____ = 195 psia (i)
Wellhead casing shut-in pressure (Dwt) 696 psig + 12 = 708 psia (j)
Wellhead tubing shut-in pressure (Dwt) 697 psig + 12 = 709 psia (k)
P_c = (j) or (k) whichever well flowed through. _____ = 708 psia (l)
Flowing Temp. (Meter Run) 53 °F + 460 _____ = 513 °Abs (m)
P_d = 1/2 P_c = 1/2 (l) _____ = 354 psia (n)

FLOW RATE CALCULATION

$$Q = \frac{401}{(\text{integrated})} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} \right) = \frac{401}{1} = 401 \text{ MCF/da.}$$

DELIVERABILITY CALCULATION

$$D = Q \frac{401}{\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^{.85} \cdot .8521} = \frac{401}{\left[\frac{708^2 - 354^2}{708^2 - 195^2} \right]^{.85} \cdot .8521} = 336 \text{ MCF/da.}$$

SUMMARY

P_c = 708 psia Company Pubco Development, Inc.
Q = 401 Mcf/day By N. E. Maxwell, Jr.
P_w = 195 psia Title Supt. Prod. Dept.
P_d = 354 psia Witnessed by _____
D = 336 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 R ²	(1-e ^{-S})	P _t ² (Column i)	P _t ² + R ²	P _w
1234	Friction too small to measure				36,025	38,025	195

Initial production deliverability. First production to El Paso 11-7-55.

OIL CONSERVATION COMMISSION	
FIELD REPORT	
DATE	TIME
3...	
1	
1	
1	✓