

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 Date Test Filed _____
Operator El Paso Natural Gas Lease Abraham Well No. 2-X
Unit M Sec. 12 Twp. 30N Rge. 6W Pay Zone: From 5090 To 5504
Casing: OD 5-1/2 WT. 15.5 Set At 5573 Tubing: OD 2" WT. 4.7 T. Perf. 5472
Produced Through: Casing _____ Tubing X Gas Gravity: Measured .590 Estimated _____
Date of Flow Test: From 12-8-57 To 12-16-57* Date S.I.P. Measured 8-20-57 (56 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 (7.65)² x sp. const. 10 _____ = 585 psia (g)
Corrected seven day avg. meter press. (p_f) (g) + (e) _____ = 585 psia (h)
P_t = (h) + (f) _____ = 585 psia (i)
Wellhead casing shut-in pressure (Dwt) 1171 psig + 12 = 1183 psia (j)
Wellhead tubing shut-in pressure (Dwt) 1164 psig + 12 = 1176 psia (k)
P_c = (j) or (k) whichever well flowed through _____ = 1176 psia (l)
Flowing Temp. (Meter Run) 49 °F + 460 _____ = 509 °Abs (m)
P_d = ½ P_c = ½ (l) _____ = 588 psia (n)

Q = _____ X $\left(\frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} = \frac{\text{_____}}{\text{_____}} = \text{_____} \right)^* = \text{486} \text{ MCF/da}$
(integrated)

DELIVERABILITY CALCULATION

D = Q 486 $\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} = \frac{1,037,232}{1,036,388} \right]^n \frac{1.0008}{1.0006} = \text{486} \text{ MCF/da.}$

SUMMARY

P_c = 1176 psia
Q = 486 Mcf/day
P_w = 589 psia
P_d = 588 psia
D = 486 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
<u>3228</u>	<u>.209</u>	<u>20.876</u>	<u>4.363</u>	<u>342,225</u>	<u>346,588</u>	<u>589</u>

D at 500 = 514

EXPERT BARKER DOME STORAGE AREA

030000Z FEB 60

(a)	Flowing Temp. (water)	57 + 100	
(m)	Flowing Temp. (water)		
(n)	Flowing Temp. (water)		
(o)	Flowing Temp. (water)		
(p)	Flowing Temp. (water)		
(q)	Flowing Temp. (water)		
(r)	Flowing Temp. (water)		
(s)	Flowing Temp. (water)		
(t)	Flowing Temp. (water)		
(u)	Flowing Temp. (water)		
(v)	Flowing Temp. (water)		
(w)	Flowing Temp. (water)		
(x)	Flowing Temp. (water)		
(y)	Flowing Temp. (water)		
(z)	Flowing Temp. (water)		

[illegible]

SECRET

YFZ, 2011

DISC _____ C
VOLUME _____ C
DISC _____ C
DISC _____ C
VOLUME _____ C

* Total population above water *

* Total population below water *

[illegible][illegible]