

(TO BE USED FOR FRUITLAND, PICTURED CLIFFS, MESAVERDE, & ALL DAKOTA  
EXCEPT BARKER DOME STORAGE AREA)

Pool Basin Formation Dakota County San Juan  
Purchasing Pipeline El Paso Natural Gas Company Date Test Filed June 18, 1963

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Operator J. L. Mills Lease Mills Well No. 1  
Unit I Sec. 31 Twp. 31 Rge. 13 Pay Zone: From 6215 To 6300  
Casing: OD 4 1/2" WT. 10.5# Set At 6402 Tubing: OD 2 3/8" WT.  T. Perf. 6300  
Produced Through: Casing  Tubing X Gas Gravity: Measured 0.705 Estimated   
Date of Flow Test: From 4-3-63 To 4-11-63 \* Date S.I.P. Measured 4-18-63  
Meter Run Size 4" Orifice Size 1.750 Type Chart SR Type Taps Flange

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 ( _____ ) <sup>2</sup> 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 ( <u>7.15</u> ) <sup>2</sup> x sp. const. <u>10</u> _____	= <u>511</u> _____	psia	(g)
Corrected seven day avge. meter press. (p <sub>f</sub> ) (g) + (e) _____	= <u>511</u> _____	psia	(h)
P <sub>t</sub> = (h) + (f) _____	= <u>511</u> _____	psia	(i)
Wellhead casing shut-in pressure (Dwt) <u>1812</u> _____	psig + 12 = <u>1824</u> _____	psia	(j)
Wellhead tubing shut-in pressure (Dwt) <u>1810</u> _____	psig + 12 = <u>1822</u> _____	psia	(k)
P <sub>C</sub> = (j) or (k) whichever well flowed through _____	= <u>1824</u> _____	psia	(l)
Flowing Temp. (Meter Run) _____ °F + 460 _____	= _____	° Abs	(m)
P <sub>d</sub> = ½ P <sub>C</sub> = ½ (l) _____	= <u>912</u> _____	psia	(n)

Q = 739 x  $\left( \frac{\text{FLOW RATE CALCULATION}}{\frac{\sqrt{(c)}}{\sqrt{(d)}}} = \frac{\quad}{\quad} = \frac{\quad}{\quad}} \right) = \underline{739} \text{ MCF/day}$

$$D = Q \frac{739}{\left[ \begin{array}{l} (P_c^2 - P_d^2) = 2,495,232 \\ (P_c^2 - P_w^2) = 3,052,531 \end{array} \right]^n} \frac{0.8174}{(0.8596)^{.75}} = \frac{635}{\text{MCF/da.}}$$

Company J. L. Mills  
By Original signed by T. J. Mills  
Title Consulting Engineer  
Witnessed by \_\_\_\_\_  
Company \_\_\_\_\_

RECEIVED  
JUN 9 1963  
COMM

RECEIVED  
JUN 19 1963  
OIL CON. COM.  
DIST. 3

GL	$(1-e^{-S})$	$(F_c Q)^2$	$(F_c Q)^2 (1-e^{-S})$ R <sup>2</sup>	$P_t^2$ (Column i)	$P_t^2 + R^2$	$P_w$
4441	0.276	48.275	13.324	261.121	274.445	524