

Initial
Deliverability

NEW MEXICO OIL CONSERVATION COMMISSION

WELL DELIVERABILITY TEST REPORT FOR 19 71

Form C122-A
Revised 1-1-68

POOL NAME Fulcher Kutz	POOL SLOPE $n = 0.85$	FORMATION Pictured Cliffs	COUNTY San Juan
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COMPANY Petroleum Corporation of Texas			WELL NAME AND NUMBER Feasel No. 1-Y		
UNIT LETTER L	SECTION 33	TOWNSHIP 28	RANGE 10	PURCHASING PIPELINE Southern Union	
CASING O.D. - INCHES 4.500	CASING I.D. - INCHES 4.090	SET AT DEPTH - FEET 2173	TUBING O.D. - INCHES 2.375	TUBING I.D. - INCHES 1.995	TOP - TUBING PERF. - FEET 2087
GAS PAY ZONE FROM 2031 TO 2083		WELL PRODUCING THRU CASING X TUBING		GAS GRAVITY 0.660	GRAVITY X LENGTH 1340 ✓
DATE OF FLOW TEST FROM 1-26-71 TO 2-2-71			DATE SHUT-IN PRESSURE MEASURED 1-3-71		

PRESSURE DATA - ALL PRESSURES IN PSIA

(a) Flowing Casing Pressure (DWt) 173	(b) Flowing Tubing Pressure (DWt) 173	(c) Flowing Meter Pressure (DWt) 173 XXXX	(d) Flow Chart Static Reading 170	(e) Meter Error (Item c - Item d) +3	(f) Friction Loss (a-c) or (b-c) 0	(g) Average Meter Pressure (Integr.) 185
(h) Corrected Meter Pressure (g+e) 188	(i) Avg. Wellhead Press. $P_t = (h+f)$ 188	(j) Shut-in Casing Pressure (DWt) 284	(k) Shut-in Tubing Pressure (DWt) 284	(l) P_c = higher value of (i) or (k) 284 ✓	(m) Del. Pressure $P_d = \frac{50}{142} \% P_c$ 142 ✓	(n) Separator or Dehydrator Pr. (DWt) for critical flow only

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 993	Quotient of $\frac{\text{Item c}}{\text{Item d}}$ 1.0176	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$ 1.0087	Corrected Volume $Q = \frac{993}{1.0087} = \mathbf{1,002}$ MCF/D
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WORKING PRESSURE CALCULATION

$(1-e^{-s})$ 0.093	$(F_c Q_m)^2 (1000)$ 13,760	$R^2 = (1-e^{-s}) (F_c Q_m)^2 (1000)$ 1,280	P_t^2 ✓ 35,344	$P_w^2 = P_t^2 + R^2$ 36,624	$P_w = \sqrt{P_w^2}$ 191
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DELIVERABILITY CALCULATION

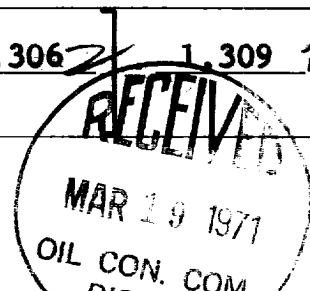
$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \mathbf{1,002}$ ✓	$\left(\frac{60,492}{44,175} \right)^n = \left(1.3693 \right)^n = \mathbf{1.306}$ ✓	$\mathbf{1.309}$ MCF/D
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REMARKS:

SUMMARY

Item h **188** ✓ Psia
 P_c **284** ✓ Psia
 Q **1,002** ✓ MCF/D
 P_w **191** ✓ Psia
 P_d **142** ✓ Psia
 D **1,309** ✓ MCF/D

Company **Petroleum Corporation of Texas**
 By *[Signature]*
 Title **President**
 xxxxxx **Walsh Engineering & Production Corp.**



<i>OK</i>				

FROM	TO	DATE	TIME	FARE	TAXES	TOTAL	CARRIER	CLASS	STATUS
1-26-71	2031	2083	X						
1-26-71	2031	2083	X	4.500	4.090	2173			
1-26-71	2031	2083	X	2.375	1.995	2087			
1-3-71	2031	2083	X	10	10	2087			
1-3-71	2031	2083	X	10	10	2087			

(d) Flowing Gaining Pressure (DWT)	(c) Flowing Gaining Pressure (DWT)	(b) Flowing Gaining Pressure (DWT)	(a) Flowing Gaining Pressure (DWT)
173	173	173	170
188	188	284	284
142	50		

1.0087 1.0087	1.0178 1.0178	1.0087 1.0087	1.0087 1.0087
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0.083	$\sigma^2 = 0.0001$	$R^2 = 0.9999$	32.344	$\sigma^2 = 0.0001$	32.344	0.083
13.780	$\sigma^2 = 0.0001$	$R^2 = 0.9999$	32.344	$\sigma^2 = 0.0001$	32.344	13.780
1.580	$\sigma^2 = 0.0001$	$R^2 = 0.9999$	32.344	$\sigma^2 = 0.0001$	32.344	1.580
0.083	$\sigma^2 = 0.0001$	$R^2 = 0.9999$	32.344	$\sigma^2 = 0.0001$	32.344	0.083

$$\left[\begin{array}{c} 1.005 \\ 44.175 \\ 60.495 \end{array} \right] \left(\begin{array}{c} 1.3663 \\ 1.308 \end{array} \right) \left(\begin{array}{c} 1.308 \\ 1.308 \end{array} \right)$$

REMARKS:

[illegible]