

MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR WELL

Form C-122

45F

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 1/23/2000					
Company Yates Petroleum Corp					Connection Yates Petroleum Corp					
Pool Indian Basin					Formation Upper Penn Assoc.					
Completion Date 1/20/2000			Total Depth 8000		Plug Back TD 7825		Elevation 3963		Farm or Lease Name MALONE ASA FEDERAL	
Csg. Size 7.000	Wt. 26.000	d 6.276	Set At 8000	Perforations: From 7490 To 7640		Unit 2		Sec. Twp. Rge. 12 22S 23E		
Tbg. Size 2.875	Wt. 6.400	d 2.441	Set At 7616	Perforations: From 7490 To 7640		Unit A		Sec. Twp. Rge. 12 22S 23E		
Type Well Single					Packer Set At 7429		County Eddy			
Producing Thru Tubing		Resv. Temp. °F 125 @ 7600		Mean Temp. °F 62		Baro. Press. - Pa 13.2		State New Mexico		
L 8000	H 8000	Gg 0.651	%CO ₂ 0.672	%N ₂ 0.840	%H ₂ S 0.000	Prover 0.000	Meter Run 4.000	Taps Flange		

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
Sl.	0.000	x	0.000	0	0.0	0	1200	0			0
1.	4.026	x	2.500	340	64.0	60	600	60			24
2.	4.026	x	2.500	340	71.0	60	513	60			24
3.	4.026	x	2.500	340	78.0	60	427	60			24
4.	4.026	x	2.500	340	83.0	60	340	60			24
5.		x									

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{hwPm}$	Pressure Pm	Flow Temp. Factor Ft	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1.	32.640	150.3	353.2	1.0000	1.239	1.035	6294
2.	32.640	158.4	353.2	1.0000	1.239	1.035	6629
3.	32.640	166.0	353.2	1.0000	1.239	1.035	6948
4.	32.640	171.2	353.2	1.0000	1.239	1.035	7168
5.							

NO.	Pr	Temp °R	Tr	Z	Gas Liquid Hydrocarbon Ratio	0	Mcf/bbl
1.	0.53	520	1.41	0.934	A.P.I. Gravity of Liquid Hydrocarbons	0.000	Deg.
2.	0.53	520	1.41	0.934	Specific Gravity Separator Gas	0.651	XXXXXXXXXX
3.	0.53	520	1.41	0.934	Specific Gravity Flowing Fluid	XXXXXXXXXX	0.651
4.	0.53	520	1.41	0.934	Critical Pressure	672	P.S.I.A. 672 P.S.I.A.
5.					Critical Temperature	369	°R 369 °R

Pc	1213.2	Pc²	1471.9
NO.	Pi²	Pw	Pw²
1.	376.0	846.7	716.9
2.	276.9	812.1	659.5
3.	193.8	786.6	618.7
4.	124.8	762.8	581.8
5.			

(1) $\frac{Pc^2}{Pc^2 - Pw^2} = 1.725$

AOF = Q $\left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n = 10714$

(2) $\left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n = 1.542$

Absolute Open Flow	10714	Mcf/d @ 15.025	Angle of Slope θ	38	Slope, n	0.794
Remarks:						
Approved By Commission:						
Conducted By:		Calculated By:		Checked By:		
LeeRoy Richards		Katie Brunson		Pinson McWhorter		