

UNITED STATES OF MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122

CSI File

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 01/02/1992	
Company Yates Petroleum Corp				Connection Yates Petroleum Corp			
Pool Atoka-Morrow				Formation Springer Basin			
Completion Date 05/27/1983		Total Depth 8060		Plug Back TD 7977		Elevation 3463	
Csg Size 4.500		Wt 10.500		Set At 8060		Perforations: From 7489 To 7659	
Tbg Size 2.375		Wt 4.700		Set At 7451		Perforations: From 7489 To 7659	
Type Well Single				Packer Set At 7455		County Chaves	
Producing Formation Tubing				Reservoir Temp °F 135		Mean Temp °F 62	
				Baro Press - Pa 13.2		State New Mexico	
L 7451		H 7451		Gg 0.639		%CO ₂ 0.328	
				%N ₂ 0.433		%H ₂ S 0.000	
				Prover 0.000		Meter Run 2.000	
						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	of Flow
Sl.	0.000	x	0.000	0	0.0	0	700	0			0
1	2.067	x	0.500	520	2.0	45	650	62			24
2	2.067	x	0.500	481	4.6	48	607	62			24
3	2.067	x	0.500	520	9.0	42	563	62			24
4	2.067	x	0.500	520	13.0	41	520	62			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	1.189	32.7	533.2	1.0148	1.251	1.059	52
2	1.189	47.9	494.7	1.0117	1.251	1.053	76
3	1.189	69.3	533.2	1.0178	1.251	1.060	111
4	1.189	83.3	533.2	1.0188	1.251	1.061	134
5							

NO	Pr	Temp °R	Tr	Z	Gas Liquid Hydrocarbon Ratio	0	Mcf/bbl
					A.P.I. Gravity of Liquid Hydrocarbons	0.000	Deg.
1	0.79	505	1.37	0.892	Specific Gravity Separator Gas	0.639	XXXXXXXXXX
2	0.74	508	1.38	0.902	Specific Gravity Flowing Fluid	XXXXXXXXXX	0.639
3	0.79	502	1.37	0.890	Critical Pressure	671	P.S.I.A
4	0.79	501	1.36	0.889	Critical Temperature	367	°R
5							

Pc	713.2	Pc'	508.7
NO	P _t	P _w	P _w '
1	439.8	663.2	439.9
2	384.6	620.3	384.8
3	332.0	576.5	332.3
4	284.3	533.6	284.7
5			

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.884$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.331$	
AOF = Q		$\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 259$	

Absolute Open Flow	259	Mcf/d @ 15.025	Angle of Slope	0	39	Slope, n	0.799
Remarks							

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Joe Braswell	Andrea Carpenter	