

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

Form C-122

CISF

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 11/11/2000			
Company Yates Petroleum Corp				Connection Agave Energy			
Pool Mission W Bush Morrow Wildcat Morrow				Formation Unit			
Completion Date 06/07/2000		Total Depth 12500		Plug Back TD 12403		Elevation 3483	
Csg. Size 5.500		Wt. 17.000		Set At 12500		Perforations: From 11884 To 12143	
Tbg. Size 2.875		Wt. 6.400		Set At 11805		Perforations: From 11884 To 12143	
Type Well Single				Packer Set At 11813		Farm or Lease Name RUDOLPH ATX STATE	
Producing Thru Tubing		Resv. Temp. °F 177 @ 11884		Mean Temp. °F 62		Baro. Press. - Pa 24.0	
L 12500		H 12500		Gg 0.667		%CO ₂ 0.672	
				%N ₂ 0.481		%H ₂ S 0.000	
				Prover 0.000		Meter Run 4.000	
						Taps Flange	

RECEIVED
OCD - ARTESIA

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	3325	0			0
1	4.026	x	1.250	1600	23.0	60	3150	62			24
2	4.026	x	1.250	1600	161.0	60	2633	62			24
3	4.026	x	1.250	1600	325.0	60	2117	62			24
4	4.026	x	1.250	1600	478.0	60	1600	62			24
5		x									

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{hwP_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	7.469	193.3	1624.0	1.0000	1.224	1.178	2082
2.	7.469	511.3	1624.0	1.0000	1.224	1.178	5508
3.	7.469	726.5	1624.0	1.0000	1.224	1.178	7826
4.	7.469	881.1	1624.0	1.0000	1.224	1.178	9491
5.							

NO.	Pr	Temp °R	Tr	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
					0	
					A.P.I. Gravity of Liquid Hydrocarbons	0.000 Deg.
1	2.42	520	1.38	0.721	Specific Gravity Separator Gas	0.667
2	2.42	520	1.38	0.721	Specific Gravity Flowing Fluid	0.667
3	2.42	520	1.38	0.721	Critical Pressure	672 P.S.I.A.
4	2.42	520	1.38	0.721	Critical Temperature	376 °R
5						

Pc 3349.0 Pc' 11215.8			
NO.	Pt'	Pw	Pw'
1	10074.3	3182.6	10128.8
2	7059.6	2724.1	7420.9
3	4583.9	2299.7	5288.6
4	2637.4	1916.3	3672.3
5			

(1) $\frac{Pc'}{Pc' - Pw'} = 1.892$ (2) $\left[\frac{Pc'}{Pc' - Pw'} \right]^n = 1.656$

AOF = Q $\left[\frac{Pc'}{Pc' - Pw'} \right]^n = 12961$

Absolute Open Flow	12961	Mcf/d @ 15.025	Angle of Slope θ	38	Slope, n	0.791
--------------------	-------	----------------	------------------	----	----------	-------

Remarks:

Approved By Commission:	Conducted By: Jerry Wyatt	Calculated By: Pinson McWhorter	Checked By: Katie Brunson
-------------------------	------------------------------	------------------------------------	------------------------------