

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

Form C-122

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 12/30/1999	
Company Yates Petroleum Corp		Connection Agave Energy Company	
Pool Shoe Bar North		Formation Morrow	
Completion Date 12/14/1999		Total Depth 12940	
Plug Back TD 12644		Elevation 3991	
Farm or Lease Name GALLAGHER ATJ STATE			
Csg. Size 5.500	Wt. 17.000	d 4.892	Set At 12942
Perforations: From 12542 To 12736		Well No. 1	
Tbg. Size 2.875	Wt. 6.400	d 2.441	Set At 12487
Perforations: From 12542 To 12736		Unit Sec. Twp. Rge. G 2 16S 35E	
Type Well Single		Packer Set At 12496	
Producing Thru Tubing		Baro. Press. - Pa 13.2	
Resv. Temp. °F 179 @ 12450		Mean Temp. °F 62	
State New Mexico			
L 12942	H 12942	Gg 0.702	%CO ₂ 1.943
%N ₂ 1.569	%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	2840	0			0
1.	4.026	x	2.000	1950	6.0	60	2650	60			24
2.	4.026	x	2.000	1950	16.0	60	2417	60			24
3.	4.026	x	2.000	1950	27.0	60	2183	60			24
4.	4.026	x	2.000	1950	37.0	60	1950	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.	19.810	108.5	1963.2	1.0000	1.194	1.214	3114
2.	19.810	177.2	1963.2	1.0000	1.194	1.214	5085
3.	19.810	230.2	1963.2	1.0000	1.194	1.214	6606
4.	19.810	269.5	1963.2	1.0000	1.194	1.214	7733
5.							

NO.	Pr	Temp °R	Tr	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	2.91	520	1.36	0.679	0	
2.	2.91	520	1.36	0.679	0.000	
3.	2.91	520	1.36	0.679	0.702	XXXXXXXXXX
4.	2.91	520	1.36	0.679	XXXXXXXXXX	0.702
5.						

Pc	2853.2	Pc ²	8140.8
NO.	Pt ²	Pw	Pw ²
1.	7092.6	2685.8	7213.4
2.	5905.9	2494.2	6220.9
3.	4823.3	2312.2	5346.5
4.	3854.2	2136.5	4564.6
5.			

$(1) \frac{Pc^2}{Pc^2 - Pw^2} = 4.240$		$(2) \left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n = 2.648$	
$AOF = Q \left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n = 13464$			

Absolute Open Flow	13464	Mcf/d @ 15.025	Angle of Slope θ	34	Slope, n	0.674
Remarks:						

Approved By Commission:	Conducted By: Rocky Harper	Calculated By: Katie Brunson	Checked By: Pinson McWhorter
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