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appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-122
Revised 4-1-91

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator Nearburg Producing Company				Lease or Unit Name Rifleman 7 Federal			
Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 9/13/00		Well No. 1	
Completion Date 6/28/00		Total Depth 11700		Plug Back TD 11612		Elevation 3676' GL	
Unit Ltr. - Sec. - TWP - Rgc G 7 22s 26e		County Eddy					
Csg. Size 5 1/2	Wt. 17#	d 4.892	Set At 11700	Perforations: From: 11214 To: 11306		Pool Happy Valley	
Tbg. Size 2 3/8	Wt. 4.7#	d 1.995	Set At 11123	Perforations: From: Open To: Ended		Formation Morrow	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 11123		Connection El Paso	
Producing Thru Tbg		Reservoir Temp. °F 166.7@11123'		Mean Annual Temp. °F 60		Baro. Press - P. 13.2	
L 11123	H 11123	Gg 0.604	% CO ₂ 1.259	% N ₂ 0.347	% H ₂ S	Prover	Meter Run 3.068
						Taps FLG	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							1272		PACKER		48 Hrs
1.	3.068	x	1.125	463	2.25	75	1227		"		1 Hr
2.	3.068	x	1.125	477	5.76	75	1153		"		1 Hr
3.	3.068	x	1.125	491	12.25	74	1041		"		1 Hr
4.	3.068	x	1.125	505	21.16	76	921		"		1 Hr
5.											

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft	Gravity Factor Fg	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	6.095	32.73	476.2	.9859	1.287	1.038	263
2.	6.095	53.14	490.2	.9859	1.287	1.039	427
3.	6.095	78.59	504.2	.9868	1.287	1.040	633
4.	6.095	104.71	518.2	.9850	1.287	1.041	842
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio Dry Gas Mcf/bbl		
1.	.71	535	1.49	.928	A.P. I. Gravity of Liquid Hydrocarbons Dry Deg		
2.	.73	535	1.49	.926	Specific Gravity Separator Gas .604 XXXXXXXXXX		
3.	.75	534	1.49	.924	Specific Gravity Flowing Fluid XXXXXX		
4.	.77	536	1.50	.923	Critical Pressure * 668 P.S.I.A. P.S.I.A.		
5.					Critical Temperature * 357 R R		

P _c	1285.2	P _c ²	1651.7				
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.186$		
1.	1241.1	1540.3	111.4		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.735$		
2.	1168.7	1365.9	285.8				
3.	1060.4	1124.4	527.3		AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.461$		
4.	946.7	896.3	755.4				
5.							
Absolute Open Flow 1,461 Mcfd @ 15.025				Angle of Slope θ 54.8		Slope, n .7047	

Remarks: **Well produced 1.3 bbls of H2O**
* = corrected to 1.259% CO₂

Approved By Division

Conducted By:
Jarrel Services, Inc.

Calculated By:
Bob Murray

Checked By:
Bob Murray