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appropriate district office.
See Rule 401 & Rule 1122

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-122
Revised October, 1999

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator GRUY PETROLEUM					Lease or Unit Name MAG. FED. 5 COM.				
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 4/3/01		Well No. 2		
Completion Date 4/2/01		Total Depth 11965		Plug Back TD 11767		Elevation 3707 GL.		Unit Ltr - Sec - TWP - Rge 0 5 18 31	
Csg. Size 5 1/2	WL 17#	d 11945	Set At 11945	Perforations: From: 11694 To: 11706			County		
Tbg. Size 2 3/8	Wt 4.7	d 1.995	Set At 11592	Perforations: From: To:			Pool NORTH Shugart Morrow		
Type Well-Single-Bradenhead-G.G. or G.O. Multiple SINGLE				Packer Set At 11592		Formation MORROW			
Producing Thru tbg		Reservoir Temp. °F 189.9 @ 11592		Mean Annual Temp. °F 60		Baro. Press. -P _a 13.2		Connection	
L 11592	H 11592	Gg 0.64	%CO ₂ 0.462	%N ₂ 0	%H ₂ S	Prover	Meter Run 4 026	Taps flg	
FLOW DATA					TUBING DATA			CASING DATA	
No.	Prover Line Size	Orifice x 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						2650		PKR	
1	4 x	1.500	131	3.06	103	2490		"	
2	4 x	1.500	147	8.41	95	2290		"	
3	4 x	1.500	155	27.04	118	1895		"	
4	4 x	1.500	155	50.41	95	1485		"	
5									
RATE OF FLOW CALCULATIONS									
No.	COEFFICIENT (24 Hour)		$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress Factor F _{pv}	Rate of Flow Q, Mcfd	
1	10.84		21.01	144.2	0.961	1.25	1.011	277	
2	10.84		36.71	160.2	0.968	1.25	1.013	488	
3	10.84		67.43	168.2	0.9485	1.25	1.011	876	
4	10.84		92.05	168.2	0.968	1.25	1.014	1225	
5									
No.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 29.9 Mcf bbl				
1	0.21	563	1.51	0.979	A.P. I. Gravity of Liquid Hydrocarbons 54.6 @ 60 Deg.				
2	0.23	555	1.49	0.975	Specific Gravity Separator Gas 0.64 XXXXXXXX				
3	0.25	578	1.55	0.978	Specific Gravity Flowing Fluid XXXXXX GMIX = .738				
4	0.25	555	1.49	0.973	Critical Pressure 670 P.S.I.A. 668 P.S.I.A.				
5					Critical Temperature 372 R. 401 R				
P _c 2663.2 P ₂ 7092.6									
No.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.478$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.396$				
1		2503.7	6268.7	824					
2		2304.9	5312.8	1779.9					
3		1914.8	3666.6	3426					
4		1515	2295.2	4797.4					
5					79825 $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.71$				
Absolute Open Flow 1,710 Mcfd @ 15.025					Angle of Slope (°) 49.49		Slope n: 0.8543		
Remarks: WELL PRODUCED 4.00 bbls 54.6 API CONDENSATE									
Approved By Division			Conducted By: SIGNAL WIRE LINE		Calculated By: BM		Checked By: BM		