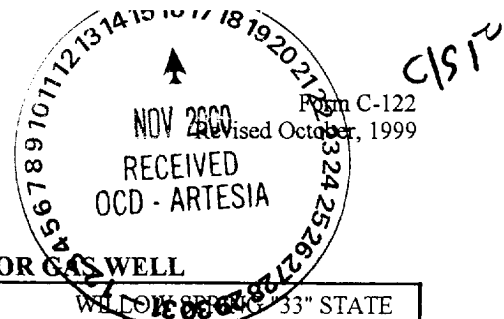


Submit in duplicate to
appropriate district office.
See Rule 401 & Rule 1122

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



MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator RELIANCE ENERGY INC.				Lease or Unit Name WILLIAMS BRADENHEAD 33" STATE							
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 10/31/00		Well No. 1			
Completion Date 8/25/00		Total Depth 4250		Plug Back TD 4224		Elevation		Unit Ltr - Sec - TWP - Rge L 33 4S 25E			
Csg. Size 5 1/2	Wt. 15.5	d 4.892	Set At 4247	Perforations: From: 3602 To: 4190		County CHAVES					
Tbg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 4172	Perforations: From: To:		Pool <i>Pecis Slope Abo</i>					
Type Well-Single-Bradenhead-G.G. or G.O. Multiple SINGLE				Packer Set At 3545		Formation ABO					
Producing Thru TUBING		Reservoir Temp. °F 109.5		Mean Annual Temp. °F 60		Baro. Press.-P _a 13.2		Connection SALES			
L 3545	H 3545	Gg 0.663	%CO ₂ 0.11	%N ₂ 9.06	%H ₂ S N/A	Prover N/A	Meter Run 2.067	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	Duration of Flow	
SI						980	N/A	PKR	N/A		
1	2.067 X 1.250		140	8	60	150				24 HRS	
2											
3											
4											
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	8.12		35	153.2	1	1.228	1.045	280			
2											
3											
4											
5											
No.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio N/A			Mcf bbl.			
1	0.77	520	1.46	0.916	A.P. I. Gravity of Liquid Hydrocarbons N/A			Deg.			
2					Specific Gravity Separator Gas 0.663			XXXXXX			
3					Specific Gravity Flowing Fluid N/A			XXXXXX N/A			
4					Critical Pressure 668			P.S.I.A. P.S.I.A.			
5					Critical Temperature 356			R. R.			
P _c 993.2 P _{c2} 986.4											
No.	P _t ²	P _w	P _w ²	P _c ² -P _w ²	(1) $P_c^2 = \frac{1.029}{P_c^2 - P_w^2}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$						
1	26.6	166.6	27.7	958.7							
2											
3											
4					AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 0.288$						
5											
Absolute Open Flow		288		Mcf/d @ 15.025		Angle of Slope (°):		45		Slope n:	1
Remarks: * NO LIQUID MADE DURING TEST.											
Approved By Division:			Conducted By: PRO WELL TESTING			Calculated By: MB			Checked By: BM		