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appropriate district office.
See Rule 401 & Rule 1122

State of New Mexico
Energy Minerals and Natural Resources

Form C-122
Revised October, 1999

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

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MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator Reliance Energy, Inc. /						Lease or Unit Name Willow Spring "22" State					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 7-31-01			Well No. 2		
Completion Date 2-8-01		Total Depth 4027		Plug Back TD 3986		Elevation 3826 GR			Unit Ltr. - Sec. - TWP - Rge. D 22 4S 25E		
Csg. Size 5-1/2	Wt. 15.5	d 	Set At 4027	Perforations: From: 3686 To: 3787			County Chaves				
Thg. Size 2-3/8	Wt. 4.7	d 	Set At 3632	Perforations: From: To: 			Pool Pecos Slope Abo				
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 3635			Formation Abo Sd		
Producing Thru Tbg		Reservoir Temp. °F 100°		Mean Annual Temp. °F 60°		Baro. Press - P _a -			Connection Sales		
L 3736	H 3736	Gg .699	%CO ₂ 0	%N ₂ 15.94	%H ₂ S 0	Prover 0	Meter Run 2.1	Taps Pipe			

FLOW DATA					TUBING DATA		CASING DATA		Duration Of Flow	
No.	Prover Line Size	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						820	89			72 hrs
1.	2.07 x .500		90	2.0	90	95	89			72 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.	1.23	14.37	103.2	.9723	1.1963	1.0068	21
2.							
3.							
4.							
5.							

No.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl
1.	.16	550.	1.59	.987	A. P. I. Gravity of Liquid Hydrocarbons	Deg.
2.					Specific Gravity Separator Gas	.699
3.					Specific Gravity Flowing Fluid	XXXXXX
4.					Critical Pressure	640 P.S.I.A.
5.					Critical Temperature	346 R

P _c 833.2		P _c ² 694.	
No.	P _i ²	P _w	P _w ²
1.		108	12.
2.			
3.			
4.			
5.			

(1) $P_c^2 = 1.0171$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0145$

Absolute Open Flow 21	Mcf/d @ 15.025	Angle of Slope θ: 45	Slope, n: 1
Remarks:			

Approved By Division	Conducted By: D. Shirley	Calculated By: Red Dog Testing	Checked By: G. Morgan
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