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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 HARVEY E. YATES CO.					Lease or Unit Name CEDAR "32" STATE				
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 11/30/01		Well No. 2		
Completion Date		Total Depth 11950		Plug Back TD 11894		Elevation		Unit Ltr - Sec - TWP - Rge 32 17S 31E	
Csg. Size	Wt.	d	Set At	Perforations: From: 11814 To: 11825			County EDDY		
Tbg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 11734	Perforations: From: To:			Pool E Cedar Lake Morrow		
Type Well-Single-Bradenhead-G.G. or G.O. Multiple SINGLE				Packer Set At 11734			Formation MORROW		
Producing Thru Tubing		Reservoir Temp. °F 191	Mean Annual Temp. °F 60	Baro. Press. -P _a 13.2			Connection SALES		
L 11734	H 11734	Gg 0.656	%CO ₂ 0.246	%N ₂ 0.694	%H ₂ S N/A	Prover N/A	Meter Run 4.026	Taps FLG	

FLOW DATA				TUBING DATA			CASING DATA			Duration of Flow
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						3465	N/A	PKR	N/A	
1	4.026 X 1.750		664	3.8	90	3294				1 HR
2	4.026 X 1.750		672	13.2	91	3069				1 HR
3	4.026 X 1.750		680	29.5	77	2765				1 HR
4	4.026 X 1.750		690	51.2	71	2390				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 F _g	Super Compress Factor F _{pv}	Rate of Flow Q. Mcfd
1							1143
2							1903
3	TOTAL	FLOW	METER				2875
4							3761
5							

No.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	80.683	Mcf bbl.
1					A.P. I. Gravity of Liquid Hydrocarbons	53.2	Deg.
2					Specific Gravity Separator Gas	0.656	XXXXXXX
3	TOTAL	FLOW	METER		Specific Gravity Flowing Fluid	XXXXXX	G. MIX = .693
4					Critical Pressure	673	P.S.I.A. 672 P.S.I.A.
5					Critical Temperature	371	R. 384 R

P _c 3478.2		P _{c2} 12097.9	
No.	P _t ²	P _w	P _w ²
1		3314.7	10987.4
2		3103.9	9634.4
3		2831.1	8015.4
4		2503.5	6269.6
5			

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{2.075}{\quad}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{1.7}{\quad}$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{6393.7}{\quad}$

Absolute Open Flow	6393.7	Mcf @ 15.025	Angle of Slope (°):	53.94	Slope n:	0.7279
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Remarks: * WELL MADE 5 BBLS OF 53.2 API GRAVITY CONDENSATE DURING TEST.

Approved By Division:	Conducted By: PRO WELL TESTING	Calculated By: MERV BUECKER	Checked By: BM
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