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State of New Mexico
Energy, Minerals and Natural Resources Department

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Form C-122
Revised 4-1-91

OIL CONSERVATION DIVISION

DEC 27 1991

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

O. C. D.
ARTESIA OFFICE

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator Bird Creek Resources, Inc.					Lease or Unit Name Jarvis Mead				
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 12-2-91		Well No. 1		
Completion Date 11-2-91		Total Depth 12,478'		Plug Back TD 10,915'		Elevation 3141' GL		Unit Ltr. - Sec. - TWP - Rge. N 5-22S-27E	
Csg. Size 7"	Wt. 32	d 6.094"	Set At 0- 11,784'	Perforations: From: 10,423' To: 10,438'			County Eddy		
Tbg. Size 2 7/8"	Wt. 6.5	d 2.441"	Set At 0- 10,340'	Perforations: From: -- To: --			Pool Wildcat		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At 10,308'		Formation Atoka		
Producing Thru 2 7/8"		Reservoir Temp. °F 165		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		Connection Llano Gas Co.	
L 10,431	H 10,431	G _g 0.652	% CO ₂ 0.48	% N ₂ 0.73	% H ₂ S 0	Prover --	Meter Run 3	Taps Flange	

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	3.068		1.75	705	--	58	4610	90	--	--	24 hrs.
1.	3.068		1.75	705	14.1	58	3520	84	--	--	1
2.	3.068		1.75	710	17.6	56	3125	84	--	--	1
3.	3.068		1.75	710	24.8	56	2565	82	--	--	1
4.	3.068		1.75	710	31.3	56	2225	80	--	--	1
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.	15.61	100.63	718.2	1.0019	1.2384	1.0783	2102
2.	15.61	112.43	718.2	1.0039	1.2384	1.0783	2353
3.	15.61	133.92	723.2	1.0039	1.2384	1.0783	2803
4.	15.61	150.45	723.2	1.0039	1.2384	1.0783	3148
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	1.080	518	1.395	0.86	85.2	1.0783	2102
2.	1.080	516	1.389	0.86	59.0	1.0783	2353
3.	1.087	516	1.389	0.86	0.652	1.0783	2803
4.	1.087	516	1.389	0.86	XXXXXX	1.0783	3148
5.							

P _c = 5786 P _c ² = 33,480 (x1000)					1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.668$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.423$	
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²				
1.		4737.2	22,441	11,039				
2.		4417.5	19,515	13,965				
3.		3930.6	15,450	18,030				
4.		3661.2	13,404	20,076				
5.								

Absolute Open Flow	4480	Mcfd @ 15.025	Angle of Slope θ	56	Slope, n	0.69
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Remarks:

Approved By Division	Conducted By: Keith Norvell	Calculated By: Brad D. Burks	Checked By: Brad D. Burks
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