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appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-122
Revised 4-1-91

OIL CONSERVATION DIVISION

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

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator Producing Royalties, Inc.						Lease or Unit Name Payne					
Type Test ☐ Initial ☐ Annual ☐ Special						Test Date 12/30/99		Well No. 4			
Completion Date		Total Depth		Plug Back TD		Elevation		Unit Ltr. - Sec. - TWP - Rge. H 11 29N 12W			
Csg. Size	Wt.	d	Set At	Perforations:				County			
4.5	10.5			From: 1874 To: 1942				San Juan			
Tbg. Size	Wt.	d	Set At	Perforations:				Pool			
1 1/4	2.4		1880	From: To:				Fulcher Kutz			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple						Packer Set At N/A		Formation Pictured Cliffs			
Producing Thru		Reservoir Temp. °F		Mean Annual Temp. °F		Baro. Press. - P _a 12		Connection			
L	H	Gg	% CO ₂	% N ₂	% H ₂ S	Prover		Meter Run		Taps	
		563									

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.	
1.	1/2 x 6 x 2						110		110	
2.							10		96	60° F
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 Fg	Super Compress. Factor, F _{sp}	Rate of Flow Q, Mcfd
1.	4.722		22	1	1.33		138
2.							
3.							
4.							
5.							

NO.	P _i	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.					A.P.L. Gravity of Liquid Hydrocarbons	Deg.
2.					Specific Gravity Separator Gas	XXXXXXXXXX
3.					Specific Gravity Flowing Fluid	XXXXXX
4.					Critical Pressure	PSIA PSIA
5.					Critical Temperature	R R

P _c 122		P _c ² 14,884	
NO.	P _i ²	P _w	P _w ²
1.		108	11,664
2.			
3.			
4.			
5.			

1) $\frac{P_c^2}{P_i^2 - P_w^2} = \frac{14,884}{3220}$

AOF = Q $\left[\frac{P_c^2}{P_i^2 - P_w^2} \right]^n = 508$

(2) $\left[\frac{P_c^2}{P_i^2 - P_w^2} \right]^n = 3.67$

Absolute Open Flow	508	Mcf/d @ 15.02°	Angle of Slope θ	Slope, n .85
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Remarks: Medium spray of water started 15 minutes after test began. Gas gravity taken from offset wells.

Approved By Division	Conducted By: Mark Brown	Calculated By: J. Alexander	Checked By:
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