

OIL CONSERVATION DIVISION

Form C-122
Revised 10-1-78STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 11-17-82			
Company Southland Royalty Company				Connection Northwest Pipeline Corporation					
Pool Basin				Formation Dakota				Unit OIL	
Completion Date 11-03-82		Total Depth 8035'		Plug Back TD 7983'		Elevation 6453' GL		Farm or Lease Name Cat Draw	
Csg. Size 5.500	Wt. 17#	d 4.892	Set At 8033'	Perforations: From To		Well No. 1E			
Tbg. Size 1.900	Wt. 2.9#	d 1.610	Set At 7952'	Perforations: From 7880' To 7974'		Unit C		Sec. 4	Twp. 30N
Type Well - Single - Bradenhead - G.G. or G.O. Multiple G. G. - Multiple						Packer Set At 5935'		County Rio Arriba	
Producing Thru Tubing		Reservoir Temp. °F P		Mean Annual Temp. °F		Baro. Press. - P _a 12.0		State New Mexico	
L	H	Gg .700	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run	Taps	

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							2469				
1.	2"	X	3/4"				137				1 hr
2.							100				2 hrs
3.							98				3 hrs
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	12.365		110.2	1.000	.9258	1.0000	1262
2.							
3.							
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.					Specific Gravity Separator Gas _____ X X X X X X X X
3.					Specific Gravity Flowing Fluid _____ X X X X X
4.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature _____ R _____ R

$P_c = 2481.2$ $P_c^2 = 6156353.4$					$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.0020$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0015$	
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²				
1		110.2	12144.0	6144209				
2								
3								
4								
5								

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1264$				
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Absolute Open Flow _____ 1264 _____ Mcfd @ 15.025		Angle of Slope @ _____		Slope, n _____ .75	
Remarks: _____					

Approved By Division	Conducted By: Steve McCament	Calculated By: James Smith	Checked By: R.E. Fielder
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