

OIL CONSERVATION DIVISION

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

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 3-25-84							
Company Southland Royalty Company				Connection Southern Union Gathering							
Pool Blanco				Formation Mesaverde							
Completion Date 2-22-84		Total Depth 7200'		Plug Back TD 7150'							
Elevation 6049' GL		Farm or Lease Name Grenier "A"									
Csg. Size 5.500	Wt. 15.5# 17#	d 4.950 4.892	Set At 7193'	Perforations: (Cliff House) From 4226' To 4633'							
Thq. Size 1.900	Wt. 2.76#	d 1.610	Set At 4881'	Perforations: (Point Lookout) From 4683' To 4902'							
Type Well - Single - Bradenhead - G.G. or G.O. Multiple G. G. - Multiple				Packer Set At 5259'							
Producing Thru Tubing		Reservoir Temp. °F 8		Baro. Press. - P _a 12.2							
L		H		Cg .700							
% CO ₂		% N ₂		% H ₂ S							
Prover		Meter Run		Taps							
FLOW DATA TUBING DATA CASING DATA											
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	Duration of Flow
1.	2"	X	3/4"				687		1007		1 hour
2.							155		896		2 hours
3.							147		862		3 hours
4.							142		847		
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 _{sp}	Rate of Flow Q, Mcfd				
1.	12.365		154.2	1.0000	.9258	1.0000	1765				
2.											
3.											
4.											
5.											
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl. A.P.I. Gravity of Liquid Hydrocarbons _____ Deg. Specific Gravity Separator Gas _____ X X X X X X X X Specific Gravity Flowing Fluid _____ X X X X X Critical Pressure _____ P.S.I.A. _____ P.S.I.A. Critical Temperature _____ R _____ R						
1.											
2.											
3.											
4.											
5.											
P _c 1019.2 P _c ² 1038768.6					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.456$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.535$						
NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²							
1.		859.2	738224.6	300544							
2.											
3.											
4.											
5.											
Absolute Open Flow 4474 Mcfd @ 15.025					Angle of Slope θ _____			Slope, n .75			
Remarks: Heavy mist throughout test											
Approved By Division				Conducted By: Steve Kellenaers				Calculated By: James W. Smith			
								Checked By: R. E. Fielder			