

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPORT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
 Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 1-10-86							
Company SOUTHLAND ROYALTY			Connection TO AIR								
Pool JOHNSON RANCH			Formation WOLFCAMP								
Completion Date 12-22-85		Total Depth 13,710'		Plug Here 13664							
Elevation 3555		Form or Lease Name MADERA RIDGE "22"									
Perforations: From 13282 To 13546	Well No. 1										
Perforations: From 0 To 0	Unit Sec. Twp. Rge. 22 24S 33E										
Type Well - Single - Packerhead - G.O. or G.O. Multiple SINGLE				Packer Set At 12645							
Producing thru TUBING		Reservoir Temp. °F 284.0 13414		Mean Annual Temp. °F 60.0							
L 13414		H 13414		Gg 0.710							
CO ₂ 1.95		N ₂ 0.62		H ₂ S 0							
Proves 0		Motor Run 4.0		Tape FLANGE							
FLOW DATA											
NO.	Prove Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. in. Hg	Temp. °F	TUBING DATA		B.H.P. DATA		Duration of Flow
							Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	CHOKE	
1	4.03	X	1.250	540	3.0	94	7660	284	9970		28.0
2	4.03	X	1.250	640	14.0	82	7560	284	9821	4/16	1.0
3	4.03	X	1.250	680	43.0	68	7210	284	9408	5/16	1.0
4	4.03	X	1.250	680	80.0	60	6660	284	8777	6/16	1.0
5							5780	284	7949	7/16	1.0
RATE OF FLOW CALCULATIONS											
NO.	Coefficient (24 Hour)	$\sqrt{P_1 - P_2}$	Pressure P ₁	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{sc}	Rate of Flow O. Mhd				
1	7.47	40.74	553.2	0.9688	1.1864	1.0524	368				
2	7.47	95.63	653.2	0.9795	1.1864	1.0674	886				
3	7.47	172.65	693.2	0.9924	1.1864	1.0805	1641				
4	7.47	235.49	693.2	1.0000	1.1864	1.0856	2266				
Gas Liquid Hydrocarbon Ratio <u>198.6</u> Met/bbl. A.P.I. Gravity of Liquid Hydrocarbons <u>56.000</u> Deg. Specific Gravity Separator Gas <u>0.710</u> Specific Gravity Flowing Fluid <u>XXXXXX</u> Critical Pressure <u>674</u> P.S.I.A. Critical Temperature <u>388</u> °F											
1. 8057.3 P ₁ ² 64920											
NO.	P ₁ ²	P ₂ ²	R ₁ ²	R ₂ ² - R ₁ ²							
1	7919	62705	2215								
2	7536	56784	8135								
3	6954	48354	16566								
4	6198	38409	26511								
Absolute Open Flow <u>4377</u> Mhd @ 15.025				Angle of Slope <u>53.7</u>		Slope, n <u>0.735</u>					
Remarks:											
Approved By Commission:		Conducted By:		Calculated By:		Checked By:					
		BENNETT & CATHEY		RICHARD TOWNLEY		Dorell Roberts					

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JAN 29 1986

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