

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

Form C-122
Revised 9-1-65

Type Test 4 POINT ☒ Initial ☐ Annual ☐ Special		Test Date 12-26-84		1980 FSL		
Company SOUTHLAND ROYALTY			Connection TO AIR			
Pool PITCHFORK RANCH			Formation MORROW			
Completion Date 12-22-84		Total Depth 15505.		Plug Back 15467.		
Elevation 3536.		Farm or Lease Name VACA RIDGE "30" FED.				
Flow Rate 5.500		Well No. COM #1		Well No. NM-28881		
Pressure 23.0		Depth 4.670		Perforations: From 14854. To 15166.		
Pressure 2.875		Depth 6.5		Perforations: From 0. To 0.		
Type Well - Single - Washhead - G.G. or G.O. Multiple SINGLE			Packer Set At 12750.		County LEA	
Producing Time TUBING		Reservoir Temp. °F 210. 15010.		Mean Annual Temp. °F 60.0		
L 15010.		H 15010.		Cg 0.580		
CO ₂ 0.50		N ₂ 0.34		H ₂ O 0.		
Prover 0.		Motor Run 4.0		Top FLANGE		
FLOW DATA			TUBING DATA		B.H.P. DATA	
NO	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F
1	4.03 X 2.500		205.	17.0	65.	7150.
2	4.03 X 2.500		280.	35.0	44.	6970.
3	4.03 X 2.500		400.	45.5	29.	6740.
4	4.03 X 2.500		450.	56.0	24.	6490.
5						6235.
RATE OF FLOW CALCULATIONS			Duration of Flow			
NO	Coefficient (24 Hour)	$\sqrt{h P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, F _{cv}
1	32.64	60.90	218.2	0.9952	1.3131	1.0170
2	32.64	101.30	293.2	1.0157	1.3131	1.0272
3	32.64	137.12	413.2	1.0312	1.3131	1.0419
4	32.64	161.06	463.2	1.0365	1.3131	1.0493
5						
NO	P ₁	Temp. °R	T ₁	Z	Gas Liquid Hydrocarbon Ratio 437.4	
1	0.32	525.	1.50	0.967	A.P.I. Gravity of Liquid Hydrocarbons 60.0	
2	0.43	504.	1.44	0.948	Specific Gravity Separator Gas 0.580	
3	0.61	489.	1.40	0.921	Specific Gravity Flowing Fluid XXXXX	
4	0.69	484.	1.38	0.908	Critical Pressure 675. P.G.I.A. 675. P.B.I.A. 352. °R	
5					Critical Temperature 350. °R	
1. 7197.0		P ₁ ² 51796.				
NO	P ₁	P ₂	P ₁ ²	P ₂ ² - P ₁ ²	(1) $\frac{P_2^2}{P_2^2 - P_1^2} = 4.4801$	
1	48765.	6999.	48981.	2815.	(2) $\left[\frac{P_2^2}{P_2^2 - P_1^2} \right]^n = 3.1922$	
2	45606.	6790.	46104.	5692.		
3	42292.	6571.	43178.	8618.		
4	39040.	6343.	40235.	11561.		
5						
Absolute Open Flow 23963.8		Mold @ 15.025		Angle of Slope @ 52.25		Glope, n. 774
Remarks						