

c/SF
F.12

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O. C. D.
ARTESIA, OFFICE

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

Form C-122
Revised 9-1-6

Type Test 4-POINT ☒ Initial ☐ Annual ☐ Special		Test Date 2/14/85										
Company SOUTHLAND ROYALTY Co.		Connection TO AIR										
Pool S. Central Morrow		Formation MORROW										
Completion Date 2/10/85		Total Depth 11,350	Plug Back 11289									
Elevation 0		Barn or Lease Name EMPIRE ST 16 St. Louis										
Well No. 1	Unit E	Sec. 16	Twp. 18S									
Hwy. 29E		County EDDY										
State NEW MEXICO		Mater Hun 4.0										
Tape FLANGE		Prover 0										
L 11009		H 11009										
Cg 0.745		% CO ₂ 0.13										
% N ₂ 23.38		% H ₂ S 0										
Flow Data		TUBING DATA										
B.H.P. DATA		Duration of Flow										
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Prova. p.s.i.g.	Temp. °F	Prova. p.s.i.g.	CHOKE	Duration of Flow	
1	4.03	X	1.625	460	6.0	100	2999	0	4247	10/64	1.0	
2	4.03	X	1.625	500	14.0	83	2765	0	3957	12/64	1.0	
3	4.03	X	1.625	505	26.0	83	2540	0	3674	14/64	1.0	
4	4.03	X	1.625	520	46.0	84	2232	0	3285	14/64	1.0	
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 Fpv	Rate of Flow Q, Mcld					
1	12.79	53.28	473.2	0.9636	1.1586	1.0272	782					
2	12.79	84.76	513.2	0.9786	1.1586	1.0334	1270					
3	12.79	116.07	518.2	0.9786	1.1586	1.0337	1740					
4	12.79	156.61	533.2	0.9777	1.1586	1.0344	2347					
5												
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 30.4							
1	0.76	560	1.65	0.948	A.P.I. Gravity of Liquid Hydrocarbon 61.0							
2	0.82	543	1.60	0.936	Specific Gravity Separator Gas 0.745							
3	0.83	543	1.60	0.936	Specific Gravity Flowing Fluid XXXXX							
4	0.85	544	1.60	0.935	Critical Pressure 625							
5					Critical Temperature 340							
P _r 3216.6 P _w 10347					(1) $\frac{P_c^2}{P_w^2 - P_c^2} = 2.0698$							
					(2) $\left[\frac{P_c^2}{P_w^2 - P_c^2} \right]^n = 1.8317$							
					AOR = Q $\left[\frac{P_c^2}{P_w^2 - P_c^2} \right]^n = 4299$							
NO.	P _r ²	P _w ²	P _w ²	P _r ² - P _w ²								
1	18149	3053	9322	1024								
2	15762	2824	7973	2373								
3	13595	2605	6786	3561								
4	10878	2312	5347	4999								
5												
Absolute Open Flow 4299					Mcld @ 15.025					Angle of Slope 50.25		Glope, n 832
Remarks												
Approved by Commission												
Conducted by			Calculated by			Checked by						

Post ID-2
3-8-85
Comp & BK