

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT A ONE POINT BACK PRESSURE TEST R GAS WELL

SF
 File ✓
 Form C-122
 Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 9-19-79		007 2 273	
Company Southland Royalty Company				Connection Undesignated					
Pool Undesignated (Morrow)				Formation Morrow				Unit ARTERIA, OFFICE	
Completion Date 8-30-79		Total Depth 11127		Plug Back TD 11060		Elevation 3343		Farm or Lease Name State "2" Comm.	
Csg. Size 4.500	Wt. 24.0	d 4.000	Set At 11127	Perforations: From 10708 To 10794		Well No. 1			
Tq. Size 2.375	Wt. 4.7	d 1.995	Set At 10500	Perforations: From 0 To 0		Unit Sec. Twp. Rye. G 2 20 27			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 10500		County Eddy			
Producing Thru Tbq		Reservoir Temp. °F 151 10751		Mean Annual Temp. °F 60.0		Baro. Press. - P _a 13.2		State New Mexico	
L 10751	H 10751	G _g 0.611	% CO ₂ 0.65	% N ₂ 0.85	% H ₂ S 0	Prover 0	Meter Run 2.1	Taps Flange	

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							2710	57			72.0
1.	2.07 x 1.000			120	88.0	61	2140	68	0	0	1.0
2.	2.07 x 1.000			360	42.0	68	1230	68	0	0	1.0
3.	2.07 x 1.000			380	37.0	78	1330	70	0	0	1.0
4.	2.07 x 1.000			380	30.0	84	1430	68	0	0	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 F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	4.95	108.27	133.2	0.9990	1.2793	1.0118	692
2	4.95	125.20	373.2	0.9924	1.2793	1.0318	811
3	4.95	120.62	393.2	0.9831	1.2793	1.0308	773
4	4.95	108.61	393.2	0.9777	1.2793	1.0296	692
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	0.20	521	1.45	0.977	0	0	0.611	XXXXXXX	673	359
2	0.55	528	1.47	0.939				XXXXX		
3	0.58	538	1.50	0.941						
4	0.58	544	1.52	0.943						
5										

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$
1	4636	2149	4617	2836	1.2627	1.2267
2	1546	1245	1551	5902		
3	1804	1342	1802	5650		
4	2083	1442	2078	5374		
5						

Absolute Open Flow 994 Mcfd @ 15.025				Angle of Slope θ		Slope, n .876	
Remarks:							
Approved By Commission:							
Conducted By: B. J. TESTING		Calculated By: D. R. CRAIG		Checked By: D. R. CRAIG			