

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 8-3-80		AUG 20 1980 O. C. D. ARTESIA, OFFICE	
Company Southland Royalty Company ✓				Connection			
Pool <u>Undesignated</u>				Formation Atoka		Unit ARTESIA, OFFICE	
Completion Date 7-27-80		Total Depth 11,566'		Plug Back TD 11,355'		Elevation 3319.291	
Csg. Size 4 1/2"		Wt. 11.6#		Set At 11,554'		Perforations: From 10,760' To 10,768'	
Thg. Size 0		Wt. 0		Set At 0		Perforations: From 0 To 0	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Dual				Packer Set At 11,002'		Farm or Lease Name State "14" Corn.	
Producing Thru Csg. Annulus		Reservoir Temp. °F 180 @ 10,764'		Mean Annual Temp. °F 60.0		Baro. Press. - P _a 13.2	
L 10,764		H 10,764		Gg 0.640		% CO ₂ 0.01	
				% N ₂ 0		% H ₂ S 0	
				Prover 0		Meter Run 3.0	
						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							3500	77			24.0
1.	3.00 x 1.250			595	5.0	94	3040	77	0	0	1.0
2.	3.00 x 1.250			600	16.0	94	2700	75	0	0	1.0
3.	3.00 x 1.250			600	25.0	93	2200	72	0	0	1.0
4.	3.00 x 1.250			605	36.0	94	1700	65	0	0	1.0
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 _{pv}	Rate of Flow Q, Mcfd
1	7.59	55.15	608.2	0.9688	1.2500	1.0488	532
2	7.59	99.05	613.2	0.9688	1.2500	1.0492	955
3	7.59	123.81	613.2	0.9697	1.2500	1.0496	1196
4	7.59	149.18	618.2	0.9688	1.2500	1.0496	1439
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ 0 _____ Mcf/bbl.
1.	0.91	554	1.49	0.909	A.P.I. Gravity of Liquid Hydrocarbons _____ 60.0 _____ Deg.
2.	0.91	554	1.49	0.908	Specific Gravity Separator Gas _____ 0.640 _____ XXXXXXXXX
3.	0.91	553	1.49	0.908	Specific Gravity Flowing Fluid _____ XXXXX _____ 0.640
4.	0.92	554	1.49	0.908	Critical Pressure _____ 671 _____ P.S.I.A. _____ 671 _____ P.S.I.A.
5.					Critical Temperature _____ 371 _____ R _____ 371 _____ R

P _c 3491.5 P _c ² 12191					
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.3237$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.2816$ AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1845$
1	9322	3033	9199	2992	
2	7361	2700	7288	4902	
3	4898	2210	4883	7308	
4	2935	1727	2981	9210	
5					

Absolute Open Flow _____ 1845 _____ Mcfd @ 15.025	Angle of Slope @ _____ 48.5 _____	Slope, n _____ 0.885 _____
Remarks: _____		
Approved By Commission:	Conducted By: B. J. Well Testers	Calculated By: Ray F. Nokes
		Checked By: Don R. Craig