

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

Form C-122
 Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 4-22-86	
Company Manzano Oil Corp.				Connection Air			
Pool Wildcat				Formation		Unit	
Completion Date		Total Depth 13,103		Plug Back TD 13,060		Elevation	
Casing Size 4 1/2"		WI. 11.6		Set At 13,103		Perforations: From 13,014 To 13,024	
Tubg. Size 2 3/8"		WI. 4.7		Set At 12,935		Perforations: From Open-Ended	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 12,935	
Producing Thru Tubing		Reservoir Temp. °F 203° @ 12,935		Mean Annual Temp. °F 60°		Baro. Press. - P _g 13.2	
L 12,935		H 12,935		G _g .611		% CO ₂ .443	
				% N ₂ .372		% H ₂ S	
				Prover 2" Orifice Well Tester		Meter Run New Mexico	
						Tape	

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	
51							3714				72 Hrs.
1.	2	X	.750	10		75°	2972	70°			1 Hr.
2.	2	X	.750	17		79	2375	70			1 Hr.
3.	2	X	.750	35		70	1980	70			1 Hr.
4.	2	X	.750	55		71	1220	70			1 Hr.
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							243
2							337
3		Volumes taken from orifice well tester manual					566
4							794
5.							

NO.	P _t	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio 5.774 Mcf/bbl.		
1	N/A	N/A	N/A	NIL	A.P.I. Gravity of Liquid Hydrocarbons 44.5 @ 60° Deg.		
2.	N/A	N/A	N/A	NIL	Specific Gravity Separator Gas .661 XXXXXXXXXX		
3.	N/A	N/A	N/A	NIL	Specific Gravity Flowing Fluid XXXXX G.Mix 1.118		
4.	N/A	N/A	N/A	NIL	Critical Pressure 670 P.S.I.A. 651 P.S.I.A.		
5					Critical Temperature 378 R 530 R		

NO.	P _t ²	P _w ²	P _w ²	P _c ² - P _w ²	$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.127$ $(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.127$ $AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = .895$
1		2989.0	8934	4958	
2		2391.4	5719	8173	
3		2001.0	4004	9888	
4		1251.5	1566	12326	
5					

Absolute Open Flow 895 Mcfd @ 15.025		Angle of Slope 45°	Slope, n 1.00
Remarks: Made 14 Bbls. of condensate during test.			
Approved By Commission:		Conducted By: J.D.	Calculated By: R.R.
			Checked By: R.R.