

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

Form C-122
Revised 9-1-65

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Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 12-31-75		JAN 8 1976	
Company Mesa Petroleum Company				Connection AIR			
Pool White City Penn				Formation MORROW		Unit F	
Completion Date 12-6-75		Total Depth 11654'		Plug Back TD 11611'		Elevation 3289'GL	
Csg. Size 5 1/2"		Wt. 20		Set At 4.778		Perforations: 11698' From 11256' To 11448'	
Tbg. Size 2 7/8"		Wt. 2.441		Set At 10.975'		Perforations: From 11098' To 11197'	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 10.975'		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 182°		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2	
L		H		G _g .595		% CO ₂ 1.221	
				% N ₂ .481		% H ₂ S	
				Prover		Meter Run 3"	
						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							3595				
1.	3	x	1	175	55	46	3300	61	Pkr		1 Hr
2.	3	x	1	190	86	41	2760	63	Pkr		1 Hr
3.	3	x	1	320	90	35	2320	63	Pkr		1 Hr
4.	3	x	1	520	74	73	2100	63	Pkr		1 Hr
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	4.789	102.	188.2	1.014	1.296	1.159	744
2	4.789	132.	203.2	1.019	1.296	1.178	983
3	4.789	173.	333.2	1.025	1.296	1.145	1260
4	4.789	199.	533.2	.9877	1.296	1.005	1226
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	.281	506	1.44	.744						
2	.304	501	1.43	.721						
3	.498	495	1.41	.763						
4	.797	533	1.52	.990						
5.										

P _c 4571.2 P _c ² 208916		(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.90$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.90$	
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	
1		3948	15586	5310	
2		3727	13896	7000	
3		3620	13104	7792	
4		3577	12796	8100	
5					

Absolute Open Flow 2924. Mcfd @ 15.025		Angle of Slope 45°		O. C. C. 1	
Remarks: Open flow calculated from BHP data using Amerada R.P.G. 3 36826					
Approved By Commission:		Conducted By: LARRY DAVIS		Calculated By: Larry Davis	
				Checked By:	

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JAN 19 1976

AC: 1-JLF, 1-MEC, 1-RHV, 1-LMC, 1-T.H. 3-NMOCC, 1-TW, 1-SU