

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

Form C-122e
Revised 9-1-69

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 11-11-81		DEC 11 1981	
Company Mesa Petroleum Co.				Connection Unconnected		O. C. D.	
Pool Undesignated ABO				Formation ABO		ARTESIA, OFFICE	
Completion Date 11-11-81		Total Depth 4014		Plug back To 3950		Elevation 3600	
Csg. Size 4 1/2		Wt. 10.5#		Set At 4009		Perforations: From 3698 To 3718	
Trg. Size 2 3/8		Wt. 4.7#		Set At 3588		Perforations: From open ended to	
Type Well - Single - Provenhead - G.G. or G.O. Multiple Single				Packer Set At None		County Chaves	
Producing Thru Tubing		Reservoir Temp. °F 60		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
L 3588		H 3588		G _g .65		% CO ₂ 1 % N ₂ 1 % H ₂ S	
						Prover 2" Orifice Well Tester	
FLOW DATA				TUBING DATA		CASING DATA	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Duration of Flow
5.							
1.	2" Orifice	1	1 1/4	8.5		36	48 hr. SI
2.	Well	1	1 1/4	15		40	1 hr.
3.	Tester	1	1 1/4	22		50	1 hr.
4.		1	1 1/4	23		51	3/4 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, Mcd
1	685	2" Orifice Well		1.0239	.9608		674
2.	964	Tester		1.0198	.9608		945
3.	1320			1.0098	.9608		1281
4.	1348			1.0098	.9608		1308
5.							
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcd/Sbl.		
1.					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.		
2.					Specific Gravity Separator Gas _____ X X X X X X X X		
3.					Specific Gravity Flowing Fluid _____ X X X X X		
4.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.		
5.					Critical Temperature _____ R _____ R		
$P_r = 873$ $P_w^2 = 762$							
NO.	P_r^2	P_w^2	$P_r^2 - P_w^2$	$(1) \frac{P_r^2}{P_r^2 - P_w^2} = 1.4405$			
1		768	590				
2		683	466				
3		548	300				
4		483	233				
5							
				$AOF = Q \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1700$			
				$(2) \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.2911$			
				3-11-81 ID-2-18-81			
Absolute Open Flow 1700				Mcd @ 15.025		Angle of Slope 550	
						Slope, n .7	
Remarks:							
Approved By Commission:		Conducted By: James Craig		Calculated By: E.L. Buttross, Jr.		Checked By:	