

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

Form C-122
Revised 9-1-65

C/SF
C-122

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 1-22-82		FEB 2 1982	
Company MESA PETROLEUM CO.				Connection Unconnected					
Pool <u>Pecos Slope Abo Gas</u> Undesignated ABO				Formation ABO		Unit O. C. D. ARTESIA, OFFICE			
Completion Date 1-22-82		Total Depth 4380		Plug Back TO 4318'		Elevation 3744'		Name of Lease Name Burtis Com	
Csg. Size 4 1/2"	Wt. 10.5#	d 	Set At 4373'	Perforations: From 3707 To 3951		Well No. 2			
Tub. Size 2 3/8"	Wt. 4.7#	d 	Set At 3610'	Perforations: From open ended To		Unit Sec. Twp. Rge. A 11 7 25			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple single						Packer Set At none		County Chaves	
Producing Thru tubing		Reservoir Temp. °F 102° @ 4380		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico	
L	H	G _g .65	% CO ₂ 1	% N ₂ 1	% H ₂ S	Prover 2" ORIFICE Well TESTER		Meter Run	

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.	
1.	2" ORIFICE	1 1/4	10	34	210	52	945	220	925	72 hr SI
2.	Well									1 hr.
3.	Tester									
4.										
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, Mhd
1	758	2" ORIFICE WELL		1.0260	.9608		747
2		TESTER					
3							
4							
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/Std.	A.P.L. Gravity of Liquid Hydrocarbons _____ Deg.
1.					Specific Gravity Separator Gas _____	X X X X X X X X
2.					Specific Gravity Flowing Fluid _____	X X X X X
3.					Critical Pressure _____ P.S.I.A.	_____ P.S.I.A.
4.					Critical Temperature _____ R	_____ R
5.						

NO.	P _r	P _w	P _w ²	P _r ² - P _w ²
1	938	880	233	54
2				
3				
4				
5				

$$(1) \frac{P_r^2}{P_r^2 - P_w^2} = 1.0653$$

$$ACF = Q \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 800$$

$$(2) \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.0653$$

Absolute Open Flow	800	Mcf @ 15.025	Angle of Slope	45°	Slope, n	1
--------------------	-----	--------------	----------------	-----	----------	---

Remarks: Unable to run four flow rates due to low delivery of wells. Assumed N=1 and based calculations on one point test.

Approved By Commission:	Conducted By: James Craig	Calculated By: E.L. Buttross, Jr.	Checked By:
-------------------------	------------------------------	--------------------------------------	-------------