

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

Form C-122
Revised 9-1-65

RECEIVED

C-5F

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 7-30-80		AUG 5 1980	
Company MESA PETROLEUM Co.				Connection AIR				O. C. D. ARTESIA, OFFICE	
Pool WEST MESA				Formation QUEEN				Unit	
Completion Date 6-27-80		Total Depth 4085		Plug Back TD 3381		Elevation 4394 GL		Farm or Lease Name CAPROCK STATE COM.	
Csg. Size 4 1/2"	Wt. 10.5	d 	Set At 3423'	Perforations: From 3295' To 3309'		Well No. 1			
Tub. Size 2 3/8"	Wt. 4.7	d 	Set At 3335'	Perforations: From ----- To -----		Unit N		Sec. 1	Twp. 16S
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At -----		County EDDY		State NEW MEXICO	
Producing Thru CSG		Reservoir Temp. °F 92° @ 3209'		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2			
L 3302	H 3302	G _g 0.81	% CO ₂ 	% N ₂ 49	% H ₂ S NIL	Prover 	Meter Run 2" OT	Taps 	

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									65	95	72 HRS
1.	2" x 0.250			0	7.5	95	-	-	8.0	95	2 HRS
2.											
3.											
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, Mcfd
1	ORIFICE	FLOW	TESTER	0.9680	0.8607	1.0	20.4
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.	0.06	552	1.29	1.0	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.					Specific Gravity Separator Gas _____ .81
3.					Specific Gravity Flowing Fluid _____ X X X X X
4.					Critical Pressure _____ 665 _____ P.S.I.A.
5.					Critical Temperature _____ 428 _____ R

P _c 78.2 P _c ² 6.115					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.079$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.079$	
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 22$	
1		21.2	0.4494	5.666		
2						
3						
4						
5						

Absolute Open Flow 22 Mcfd @ 15.025		Angle of Slope θ = 45°		Slope, n = 1	
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Remarks: DUE TO LOW PRESSURES AND FLOW RATES, A 2" ORIFICE WELL TESTER WAS USED TO DETERMINE GAS RATE			
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Approved By Commission:	Conducted By: W. R. MIERTSCHIN	Calculated By: W. R. MIERTSCHIN	Checked By: C. C. WHEELER
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