

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 4-27-82				
Company MESA PETROLEUM CO.				Connection EPNG					
Pool BASIN DAKOTA				Formation DAKOTA				Unit I	
Completion Date 4-9-82		Total Depth 7615.		Plug Back TD 7516.		Elevation 6710.		Form or Lease Name FEDERAL	
Csg. Size 5.500	Wt. 15.5	d 4.950	Set At 7557.	Perforations: From 7498. To 7524.		Well No. 13E			
Thq. Size 2.063	Wt. 3.2	d 1.750	Set At 7235.	Perforations: From 7543. To 7550.		Unit Sec. Twp. Rge. 21-26N-6W			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple FLOWING					Packer Set At 7210.		County SAN JUAN		
Producing Thru TUBING		Reservoir Temp. °F 172.° 7498.		Mean Annual Temp. °F 60.0		Baro. Press. - P _a 13.2		State NM	
L 7498.	H 7498.	Cg 0.650	% CO ₂ 0.	% N ₂ 0.	% H ₂ S 0.	Prover 0.	Meter Run 0.	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							1815.	65.			168.0
1.	2.00 X 0.750			340.	0.	71.	340.	71.	0.	0.	3.0
2.											
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor FL	Gravity Factor F _g	Super Compress. Factor, F _{spv}	Rate of Flow Q, Mcfd
1	10.94	0.	353.2	0.9896	1.2403	1.0343	4907.
2.							
3.							
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1	0.53	531.	1.42	0.935	0.	0.
2.					A.P.I. Gravity of Liquid Hydrocarbons	0.650
3.					Specific Gravity Separator Gas	0.650
4.					Specific Gravity Flowing Fluid	0.650
5.					Critical Pressure	670.
					Critical Temperature	374.

NO.	P _c	P _w	P _c ²	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$
1	1825.5	3332.				1.5681	1.4013
2.							
3.							
4.							
5.							

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 6876.$			
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Absolute Open Flow	6876.	Mcf/d @ 15.025	Angle of Slope θ	53.1	Slope, n	0.750
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Remarks:			
Approved By Commission:	Conducted By: <i>Charlie Jones</i>	Calculated By: <i>T. K. Brock</i>	Checked By: <i>George Dejan</i>