

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

Form C-122
Revised 9-1-65
RECEIVED

JUN 24 1980

Type Test: ☒ Initial ☐ Annual ☐ Special				Test Date: 06-11-80		JUN 24 1980	
Company: MESA PETROLEUM Co.				Connection: AIR		O.C.D.	
Well: UNDESIGNATED				Formation: ATOKA - MORROW		ARTESIA, OFFICE	
Completion Date: 05-28-80		Total Depth: 9131		Plug Point To: 9034'		Elevation: 3580 GL	
Csg. Size: 4 1/2		ID: 10.5-11.6		Set At: 9131		Perforations: From 8909 To 8988	
Tub. Size: 2 3/8		ID: 4.7		Set At: 8857		Perforations: From To	
Type Well - Single - Broadhead - G.G. or G.O. Multiple				Packer Set At: 8857		County: CHAVES	
Producing Thru: TBG.		Reservoir Temp. °F: 163° 8857		Mean Annual Temp. °F: 60		State: NEW MEXICO	
L: 8857		R: 8857		Gg: .6655		Prover: 4"	
				% CO ₂ : 2.078		% H ₂ S: 9.237	
						Meter Run: 4"	
						Type: FLG.	

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	Duration of Flow
51							2505				72 HRS.
1.	4 X 1.000			430	2.5	86	1920				1 HR.
2.	4 X 1.000			270	5.0	90	1500				1 HR.
3.	4 X 1.000			270	6.0	92	1080				1 HR.
4.	4 X 1.000			270	7.0	93	645				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 Fg	Super. Compens. Factor, Fpv	Rate of Flow Q, M/d
1	4.753	33.29	443.2	.9759	1.225	1.031	195
2	4.753	37.63	283.2	.9723	1.225	1.019	217
3	4.753	41.22	283.2	.9706	1.225	1.019	237
4	4.753	44.52	283.2	.9697	1.225	1.019	256
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ dry _____ Mcf/Sol.
1	.62	546	1.52	.940	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2	.39	550	1.53	.963	Specific Gravity Separator Gas .6655
3	.39	552	1.54	.964	Specific Gravity Flowing Fluid _____ X X X X X
4	.39	553	1.54	.964	Critical Pressure 717 P.S.I.A.
5					Critical Temperature 359 R

NO.	P _r ²	P _w ²	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 1.566$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.251$
1		1933.5	3738.3	2603.0	ACT = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = .272$	Potted ID 100- 55
2		1513.6	2291.1	4050.2		
3		1094.0	1196.8	5144.5		
4		659.8	435.3	5906.0		
5						

Absolute Open Flow: 272	Md/D 15.025	Angle of Slope: 63.5	Slope: .500
Remarks:			
Approved By: _____	Conducted By: _____	Calculated By: _____	Checked By: _____
DAVIS SERVICES INC. RICK PAGAN			