

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 5-8-78		MAY 13 1978	
Company Maddox Energy Corporation						Connection None		Unit O.C.C.	
Pool Undesignated						Formation Morrow		ARTESIA, OFFICE	
Completion Date 5-8-78		Total Depth 8565'		Plug Back TD 8530		Elevation 3758		Farm or Lease Name State 32	
Csg. Size 4 1/2"	Wt. 10.50	d 4.090	Set At 8565'	Perforations: From 8392' To 8510'		Well No. 1			
Thq. Size 2 3/8"	Wt. 4.7	d 1.995	Set At 8319'	Perforations: Open Ended From To		Unit I		Sec. 32	Twp. 18s
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 8313'		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 172 @ 8451'		Mean Annual Temp. °F 60° F		Baro. Press. - P _a 13.2		State New Mexico	
L 8451'	H -	G _g 0.6591	% CO ₂ 0.635	% N ₂ 0.645	% H ₂ S 0.00	Prover X	Meter Run	Taps	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g. PWT	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							3015		PACKER		50.0
1.	2 8/64	0.250	160	-	50	2940	74				1.0
2.	2 11/64	0.250	440	-	34	2775	72				1.0
3.	2 15/64	0.250	760	-	46	2510	74				1.0
4.	2 18/64	0.250	1170	-	48	1880	72				4.0
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	1.087	-	173.2	1.010	1.232	1.019	238.71
2	1.087	-	453.2	1.026	1.232	1.057	658.20
3	1.087	-	773.2	1.014	1.232	1.091	1145.50
4	1.087	-	1183.2	1.012	1.232	1.138	1824.82
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1	0.26	510	1.37	0.964	Dry Gas	-
2	0.67	494	1.33	0.895	A.P.I. Gravity of Liquid Hydrocarbons	-
3	1.15	506	1.36	0.840	Specific Gravity Separator Gas	0.6591
4	1.76	508	1.37	0.772	Specific Gravity Flowing Fluid	X X X X X X X X
5					Critical Pressure	673
					Critical Temperature	371

NO.	P _r ²	P _w ²	P _w ²	P _r ² - P _w ²
1	3749.2	14056.5	744.4	
2	3500.2	12251.4	2549.5	
3	3116.2	9710.7	5090.2	
4	2339.2	5471.9	9329.0	
5				

(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 1.587$

AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 2628$

(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.440$

Absolute Open Flow	2628	Mcf @ 15.025	Angle of Slope θ	51°46'	Slope, n	0.788
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Remarks: * Bottom Hole Pressure @ (-4706) 8451' Used For Pressure Calculations.

Approved By Commission:	Conducted By: Jarrel Services, Inc.	Calculated By: Joe A. Coleman	Checked By: Joe A. Coleman
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