

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

SF
File
122
Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 7/20/79		JUL 27 1979	
Company Maddox Energy Corporation				Connection None			
Pool Undersaturated Malaga Atoka				Formation Atoka		Unit ARTESIA, OFFICE	
Completion Date 7/16/79		Total Depth 13100'		Plug Back TD 11800'		Elevation 3041'DB	
Farm or Lease Name Malaga Com.		Well No. 1		Unit G		Sec. 3 Twp. 24s Rge. 28e	
Casing Size * 4 1/2"		Wt. 26.0		d 6.276		Set At 12070'	
Perforations: From 11672' To 11686'		Perforations: From Open Ended To					
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single		Packer Set At 11517'		County Eddy		State New Mexico	
Producing Thru Tubing		Reservoir Temp. °F 180° 11508'		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
L 11 679'		H -		G _g 0.5724		% CO ₂ 0.460	
				% N ₂ 0.702		% H ₂ S 0.000	
				Prover -		Meter Run 4 X 2.500	
						Taps Flange	

FLOW DATA									
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g. DWT	Temp. °F	Duration of Flow
1.	4	5/64	2.500	600	3	76	6350	67	1.0
2.	4	12/64	2.500	610	14	76	6180	67	1.0
3.	4	18/64	2.500	600	30	79	5695	67	1.0
4.	4	24/64	2.500	600	56	71	5215	68	1.0
5.							4510	70	1.0

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	32.64	42.83	613.2	0.9850	1.322	1.040	1893.21
2	32.64	93.35	623.2	0.9850	1.322	1.041	4130.31
3	32.64	135.68	613.2	0.9822	1.322	1.039	5974.67
4	32.64	185.20	613.2	0.9896	1.322	1.043	8248.34
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry Gas	Mcf/Ubl.
1	0.91	536	1.57	0.924	A.P.I. Gravity of Liquid Hydrocarbons	-	Deq.
2	0.92	536	1.57	0.923	Specific Gravity Separator Gas	0.5724	XXXXXXX
3	0.91	539	1.58	0.926	Specific Gravity Flowing Fluid	XXXXX	
4	0.91	531	1.55	0.920	Critical Pressure	675	P.S.I.A.
5					Critical Temperature	342	R

P _c 7792.2 P _c ² 60718.4			
NO.	P _r	P _w **	P _r ² - P _w ²
1		7544.2	56915.0
2		7072.2	50016.0
3		6577.2	43259.6
4		5844.2	34154.2
5			

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.286$

ADP = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 16587$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.011$

Absolute Open Flow	16587	Mcf @ 15.025	Angle of Slope	49° 48'	Slope, n	0.845
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Remarks: * TOP 4 1/2" LINER @ 11849'

TOP OF 7" LINER @ 9990'

** BHP @ (-8638) 11679' USED FOR PRESSURE CALCULATION

Approved By Commission:	Conducted By: JARREL SERVICES, INC.	Calculated By: Joe A. Coleman	Checked By: Joe A. Coleman
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