

SP
 File
 122

DEC 18 1979

Type Test ☒ Initial ☐ Annual ☐ O. C. D. ☐ Special		Test Date 12-10-79	
Company MCCLELLAN OIL CORPORATION		ARTESIA OFFICE	
Pool Penjack		Formation ABO	
Completion Date 9-10-79		Total Depth 4730	Plug Back TD 4687
Elevation 3690 GL		Farm or Lease Name M. M. FEDERAL	
Csg. Size 4 1/2	Wt. 9.50	Set At 4729	Perforations: From 4174 To 4202
Tbg. Size 2 3/8	Wt. 4.60	Set At 4138	Perforations: From OPEN To END
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE		Packer Set At NONE	County CHAVES
Producing Thru TBG	Reservoir Temp. °F 118° @ 4436	Mean Annual Temp. °F 60°	Baro. Press. - P _a 13.2
State NEW MEXICO			
L	H	G _g .674	% CO ₂ 3.55
		% N ₂ 5.291	% H ₂ S
Prover 2"		Meter Run 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							967		967		
1.	2 x 1/16			960		71	960		960		1 HR.
2.	2 x 1/8			937		68	937		940		1 HR.
3.	2 x 3/16			915		66	915		920		1 HR.
4.	2 x 7/32			696		65	696		700		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 F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	.06405		973.2	.9896	1.218	1.076	81
2.	.2648		950.2	.9924	1.218	1.074	327
3.	.6082		928.2	.9943	1.218	1.075	735
4.	.8393		709.2	.9952	1.218	1.057	763
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.	1.45	531	1.50	.864	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.	1.41	528	1.50	.867	Specific Gravity Separator Gas .674 XXXXXXXXXX
3.	1.38	526	1.49	.866	Specific Gravity Flowing Fluid XXXXX
4.	1.05	525	1.49	.895	Critical Pressure 673 P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature 353 R _____ R

P _c 980.2	P _c ² 960.8	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.125$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.125$	
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1		973.2	947.1	13.7
2		953.2	908.6	52.2
3		933.2	870.9	89.9
4		713.2	508.7	452.1
5				

Absolute Open Flow 1.622 Mcfd @ 15.025 Angle of Slope θ 45 Slope, n 1.00

Remarks: POINT ALIGNMENT TOO FLAT A SLOPE OF 45° WAS DRAWN THROUGH HIGH RATE OF FLOW.

Approved By Commission:	Conducted By: LCH	Calculated By: RR	Checked By: JWW
-------------------------	----------------------	----------------------	--------------------