

CONFIDENTIAL

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 6-3-80		FEB 10 1981					
Company McCLELLAN OIL CORPORATION				Connection TO AIR		O. C. D. ARTESIA, OFFICE					
Well Wilcox Area				Formation ABO		Unit ARTESIA, OFFICE					
Completion Date 6-3-80		Total Length 4700		Plug Back TD 4685		Elevation		Farm or Lease Name P. J. FEDERAL			
Seq. Size 4 1/2	Wt. 11.60	d 4.000	Set At 4700	Perforations: From 4334 To 4514		Well No. 1					
Tbg. Size 2 3/8	Wt. 4.60	d 2.375	Set At 4306	Perforations: From OPEN To END		Unit Sec. Twp. Rge. J 6 9S 26E					
Type Well - Single - Brokenhead - G.G. or G.O. Multiple SINGLE				Packer Set At 4306		County CHAVES					
Producing Thru TUBING		Reservoir Temp. °F 118 @ 4400		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State NEW MEXICO			
L 4400	H 4400	G _g .645	% CO ₂ NIL	% N ₂ 5.378	% H ₂ S	Prover 2"	Meter Run	Taps			
FLOW DATA											
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
SI							986				
1.	2 X 1/4			721		78	721	84			1 HR.
2.	2 X 5/16			548		78	548				30 MIN.
3.	2 X 3/8			427		75	427				30 MIN.
4.	2 X 7/16			330		75	330				30 MIN.
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. Compress. Factor, Fpv	Rate of Flow Q, Mcfd				
1	1.087		734.2	.9831	1.245	1.059	1034				
2	1.672		561.2	.9831	1.245	1.045	1200				
3	2.378		440.2	.9859	1.245	1.036	1331				
4	3.408		343.2	.9859	1.245	1.028	1476				
5											
NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/cbl.						
1	1.11	538	1.50	.892	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.						
2	.85	538	1.50	.916	Specific Gravity Separator Gas _____ XXXXXXXXXX						
3	.67	535	1.49	.931	Specific Gravity Flowing Fluid _____ XXXXXX						
4	.52	535	1.49	.946	Critical Pressure _____ 661 P.S.I.A. _____ P.S.I.A.						
5					Critical Temperature _____ 358 R _____ R						
P _c 999.2 P _c ² 998.4											
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 4.027$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.007$						
1		866.3	750.5	247.9							
2		784.1	614.8	383.6							
3		675.9	456.8	541.6							
4		508.4	258.5	739.9	Addition $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.075$						
5											
Absolute Open Flow _____ 2,075 Mcfd @ 15.025 Angle of Slope θ _____ 63.5 Slope, n _____ 500											
Remarks:											
Approved By Commission: _____ Conducted By: M.B. Calculated By: R.R. Checked By: J.W.W.											