

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

Form C-122
 Revised 9-1-65

*clsf
 file*

Type Test ☒ Initial 4-POINT ☐ Annual ☐ Special						Test Date 8-2-83		1980 ENL			
Company CLEMENTS ENERGY				Connection AIR NEW WELL				1980 FEL			
Pool W. Buffalo Valley - Permian				Formation MORROW				Unit AUG 10 1983			
Completion Date 7-31-83		Total Depth 6824 6900		Plug Back To 6824 6857		Elevation 3383		Farm or Lease Name DRUM #1 Com			
Top Size 8.500	Wt. 17.0	d 4.892	Set At 6824	Perforations: From 6789 To 6795		Unit Sec. Twp. Hgt. 4-1 G 33 14S 26E					
Fin. Size 2.375	Wt. 4.7	d 1.995	Set At 6720	Perforations: From 0 To 0							
Type Well - Single - Rodenthead - G.G. or G.O. Multiple SINGLE						Packer Set At 6726		County CHAVES			
Producing thru TUBING		Reservoir Temp. °F 148 6791		Mean Annual Temp. °F 60.0		Baro. Press. - P _a 13.2		State NEW MEXICO			
L 6791	H 6791	Cg 0.664	% CO ₂ 1.25	% N ₂ 2.10	% H ₂ S 0	Provor 0	Motor Run 4.0	Tcpu FLANGE			
FLOW DATA						TUBING DATA		B.H.P. DATA			
NO.	Provor Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. in. H ₂ O	Temp. °F	Press. p.s.i.g.	Temp. °F	Provo. p.s.i.g.	CHOKE	Duration of Flow
51							1392		1937		1370.0
1.	4.03 X 0.500			350	5.5	108	1222	90	1746	3/64	1.0
2.	4.03 X 0.500			350	9.5	106	1097	92	1614	4/64	1.0
3.	4.03 X 0.500			360	17.0	105	920	88	1424	5/64	1.0
4.	4.03 X 0.500			360	22.0	104	595	88	1111	6.5/65	1.0
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. Compres. Factor, F _{sp}	Rate of Flow Q, Mgd				
1	1.18	44.69	363.2	0.9568	1.2272	1.0265	64				
2	1.18	58.74	363.2	0.9585	1.2272	1.0269	84				
3	1.18	79.65	373.2	0.9594	1.2272	1.0278	114				
4	1.18	90.61	373.2	0.9602	1.2272	1.0279	130				
5											
NO.	R _g	Temp. °R	T _g	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.						
1	0.54	568	1.53	0.949	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.						
2	0.54	566	1.53	0.948	Specific Gravity Separator Gas _____		XXXXXXXXXX				
3	0.56	565	1.52	0.947	Specific Gravity Flowing Fluid _____		0.664				
4	0.56	564	1.52	0.946	Critical Pressure _____ P.S.I.A.		671				
5					Critical Temperature _____ °R		371				
$P_c = 1624.6$ $P_w = 2639$											
NO.	P ₁ ²	P _w ²	P ₂ ²	P ₂ ² - P _w ²	(1) $\frac{P_c^2}{P_2^2 - P_w^2} = 1.5105$ (2) $\left[\frac{P_c^2}{P_2^2 - P_w^2} \right]^n = 1.2675$						
1	3095	1460	2133	507	AOF = 0 $\left[\frac{P_c^2}{P_2^2 - P_w^2} \right]^n = 164$						
2	2648	1354	1832	807							
3	2066	1200	1439	1200							
4	1264	944	892	1747							
5											
Absolute Open Flow _____ 164 _____ Mgd @ 15.025					Angle of Slope _____ 60.1 _____			Slope, n _____ 0.575 _____			
Remarks: BOTTOM HOLE PRESSURES MEASURED WITH AMERADA PRESSURE ELEMENTS.											
Approved By Commission			Conducted By RICHARD TOWNLEY			Calculated By BENNETT & CATHEY			Checked By		

*Post ID-2
 12-9-83
 Kemp & BK*