

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

Form C-1
Revised 9-

RECEIVED

Type Test ☒ Initial FOUR POINT ☐ Annual ☐ Special				Test Date 6-22-82		JUL 19 1982	
Company CLEMENTS ENERGY Inc.				Connection AIR NEW WELL		O. C. D. ARTESIA, OFFICE	
Field Willard Penn. UNDESIGNATED				Formation Lower MORROW		Unit	
Completion Date 6-18-82		Total Depth 7294'		Plug Back TD 7109		Elevation 3432 KB	
Prop. Size 4.500	Wt. 11.600	d 4.000	Set At 7294'	Perforations: From 6925 To 7010'		Farm or Lease Name KING 35 Cam	
Trq. Size 2.375	Wt. 4.700	d 1.995	Set At 4979	Perforations: From OPEN To ENDED		Well No. 1	
Type Well - Single - Dradenead - G.C. or G.O. Multiple SINGLE				Packer Set At 4978		Unit Sec. Twp. Rge 35 14S 26E	
Producing Thru TUBING		Reservoir Temp. °F 166° 6971		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2	
L 6925		H 7008		G _g .656		Prover 4.028	
% CO ₂ .26		% N ₂ 1.45		% H ₂ S		Meter Run FLANGE	

FLOW DATA						TUBING DATA		B.H.P. 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
1	4.028	X	1.00	425	16.5	99	1894	64	2528		66.80 HR
2	4.028	X	1.00	421	45.5	104	1860	65	2481		1
3	4.028	X	2.00	420	9.5	94	1706	66	2448		1
4	4.028	X	2.00	405	12.0	63	1692	67	2328		1

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	.48740	85.03	438.2	.9645	1.2347	1.0342	510
2	4.8740	140.56	434.2	.9602	1.2347	1.0325	839
3	20.3200	64.15	433.2	.9688	1.2347	1.0342	1613
4	20.3200	70.84	418.2	.9977	1.2347	1.0420	1847

NO.	P _r	Temp. °R	T _r °F	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	.66	559	1.51	.935			.6560		669	370
2	.65	564	1.52	.938						
3	.65	554	1.50	.935						
4	.63	523	1.41	.921						

$P_c^2 = 2588.2$ $P_w^2 = 6698.8$				$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 5.4998$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.8924$		
NO.	P _r	P _w	P _r ² - P _w ²	$AOG = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 7,189.3$				
1		2541.2	6457.7	241.0				
2		2494.2	6221.0	478.0				
3		2461.2	6057.5	641.0				
4		2341.2	5481.2	1218.0				

Absolute Open Flow 7,189.3 Mcfd @ 15.025		Angle of Slope 51.4		Slope, n .7972	
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Remarks: **BOTTOM HOLE PRESSURES MEASURED WITH AMERADA PRESSURE ELEMENTS.**

Approved By Commission:	Conducted By: RICHARD TOWNLEY	Calculated By: BENNETT-CATHEY	Checked By:
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