

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special										Test Date 10-1-88	
Company SUN Expl. & Prod. Co.					Connection AIR NEW WELL						
Pool Quail Ridge Morrow					Formation MORROW					Unit	
Completion Date			Total Depth 13690		Plug Back TD 13580		Elevation 0		Farm or Lease Name LEA CHAPPARAL FED Com		
Coq. Size 5.500	Wt. 20.0	d 4.778	Set At 13600	Perforations: From 13213 To 13352				Well No. #1			
Thg. Size 2.875	Wt. 6.5	d 2.441	Set At 13184	Perforations: From 0 To 0				Unit K	Sec. 33	Twp. 19S	Rge. 34E
Type Well - Single - Drdhead - G.G. or G.O. Multiple SINGLE							Packer Set At 13132		County LEA		
Producing Thru TUBING		Reservoir Temp. °F 188 @ 13282		Mean Annual Temp. °F 60.0		Baro. Press. - P _a 13.2		State NEW MEXICO			
L 13282	H 13282	G _g .708	% CO ₂ .65	% N ₂ .48	% H ₂ S 0	Prover 0	Meter Run 6.1	Taps FLANGE			

FLOW DATA						TUBING DATA		BHP DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI											
1.	6.06 X	2.250		370	12.0	104	3083	78	4986	188	72.
2.	6.06 X	2.250		375	25.0	102	2850	78	4865	188	2.
3.	6.06 X	2.250		375	48.0	101	2830	82	4735	188	1.
4.	6.06 X	2.250		440	85.0	100	2650	81	4577	188	1.
5.							2320	80	4293	188	1.

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	24.38	67.81	383.2	0.9602	1.1885	1.0353	1953.
2	24.38	98.51	388.2	0.9619	1.1885	1.0361	2845.
3	24.28	136.50	388.2	0.9628	1.1885	1.0363	3946.
4	24.38	196.27	453.2	0.9636	1.1885	1.0424	5713.
5.							

NO.	R _g	Temp. °R	T _g	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1	0.57	564	1.45	.933	13.1	
2	0.58	562	1.44	.932	55.000	
3	0.58	561	1.44	.931	.708	
4	0.58	560	1.44	.920		
5						

P _c 3095.5 P _c ² 9582					$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 3.0037$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.0618$	
NO.	P _w	P _w ²	P _c ² - P _w ²		$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 11779.$			
1	2994.	8963.	620.					
2	2885.	8325.	1257.					
3	2756.	7595.	1987.					
4	2528.	6392.	3190.					
5								

Absolute Open Flow 11779.		Mcf/d @ 15.025		Angle of Slope @ 56.7		Slope, n 658	
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Remarks:
NOV 16 1988

Approved By Division ORIGINAL SIGNED BY JERRY SEXTON DISTRICT 1 SUPERVISOR	Conducted By: BENNETT & CATHEY	Calculated By: MATT LEE	Checked By:
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