

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

C/SF + C-122

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 9/21/81				
Company Pogo Production Co.				Connection None					
Pool Undesignated				Formation Atoka				Unit	
Completion Date 9/21/81		Total Depth 12875'		Plug Back TD 11310'		Elevation 3187'KB		Farm or Lease Name MAW State	
Coq. Size 5"	Wt. 18.0	d 4.276	Set At 12875'	Perforations: From 11220 To 11243			Well No. 1		
Tbg. Size 2 3/8"	Wt. 4.7	d 1.995	Set At 11103	Perforations: Open Ended From To			Unit E	Soc. 14	
Type Well - Single - Brodenhead - G.G. or G.O. Multiple Single				Packer Set At 11103'		County Eddy			
Producing Thru Tubing		Reservoir Temp. °F 210 @ 13100'		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico	
L 11232	H -	G _g 0.5811	% CO ₂ 0.546	% N ₂ 0.947	% H ₂ S -	Prover	Meter Run 2.900	Taps F	

FLOW DATA							TUBING DATA		CASING DATA		Location of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g. DWT	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI							6000		PACKER		
1.	2.900	4/64	1.00	530	11	102	5587	102			1.0 hr
2.	2.900	4.5/64	1.00	540	16	102	5350	102			1.0 hr
3.	2.900	5.5/64	1.00	545	38	95	4860	95			1.0 hr
4.	2.900	7/64	1.00	560	70	92	4258	92			1.0 hr
5.											

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 _{sp}	Rate of Flow Q, Mcf/d
1	4.801	77.30	543.2	0.9619	1.312	1.031	482.87
2	4.801	94.08	553.2	0.9619	1.312	1.031	587.69
3	4.801	145.64	558.2	0.9680	1.312	1.034	918.21
4	4.801	200.31	573.2	0.9706	1.312	1.034	1266.28
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NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry Gas	Mcf/bbl.
1	0.80	562	1.62	0.940	A.P.I. Gravity of Liquid Hydrocarbons	-	Req.
2	0.82	562	1.62	0.940	Specific Gravity Separator Gas	0.5811	XXXXXX
3	0.83	555	1.60	0.936	Specific Gravity Flowing Fluid	XXXXX	
4	0.85	552	1.60	0.935	Critical Pressure	675	P.S.I.A.
5					Critical Temperature	346	R

NO.	P _r ²	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} =$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n =$
1	5593.6	31288.4	4870.2	2.031	1.832
2	5383.0	28976.7	7181.9		
3	4880.3	23817.3	12341.3		
4	4284.5	18356.9	17801.7		
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Absolute Open Flow 2319		Mcf/d @ 15.025		Angle of Slope @ 49°30'		Slope, n 0.854	
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Remarks: Top 5" Liner 9764'			
Approved By Division	Conducted By: JARREL WELL TESTING	Calculated By: R. Reston	Checked By: PE #2208 JOE A. COLEMAN