

MULTIPOINT 1000 POINT BACK PRESSURE TEST 1 GAS WELL

72 E 33 N 17 W 21

Type Test		☒ Initial ☐ Annual ☐ Special		Test Date 6/29/67	
Company Gulf Oil Corporation		Connection None			
Pool Undesignated		Formation Upper Penn		Unit ARTISIAN, UPPER	
Completion Date 6/25/67		Total Depth 8140		Elevation 3286 KB	
Casing Size 5 1/2		Set At 8140		Perforations From 8019 To 8112	
Tubing Size 2 3/8		Set At 8020		Perforations From Open Ended To	
Type Well - Single - Branchhead - G.G. or G.O. Multiple Single		Packer Set At 8020		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 600		State New Mexico	
L *8059		H Gg .657		Prover Meter Run X	
		% CO ₂ 0.35		% N ₂ 0.33	
		% H ₂ S 0.29		Taps Flange	

FLOW DATA						TUBING DATA		CASING 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. Header	of Flow
51							2500		Packer	Choke	21.5
1.	4		2.25	600	4.5	113	2305			12/64	1
2.	4		2.25	690	12.5	90	2242			17/64	1
3.	4		2.25	720	25.0	90	2200			21/64	1
4.	4		2.25	750	64.0	80	2085			30/64	1
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor P _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mscf
1	27.00	52.53	612.2	.9526	1.234	1.044	1741
2	27.00	93.75	702.2	.9026	1.234	1.059	3216
3	27.00	135.4	732.2	.8723	1.234	1.061	4654
4	27.00	221.0	763.2	.8413	1.234	1.069	7724
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	MoL/bbl.
1	.915	573	1.54	.917	30.10 Average	
2	1.05	550	2.48	.902	60.1	
3	1.09	550	2.48	.888		
4	1.14	540	1.45	.875		
5						

NO.	P _r ²	P _w ²	R _w ²	P _r ² - R _w ²	(1) $\frac{P_r^2}{P_r^2 - R_w^2} =$	(2) $\left[\frac{P_r^2}{P_r^2 - R_w^2} \right]^n =$
1	3378.2	11412	109		62.956	37.526
2	3376.2	11399	122			
3	3367.2	11338	123			
4	3346.2	11197	324			
5						

Absolute Open Flow		174,465	Mscf @ 15.025	Angle of Slope @	Slope, n = .875
Remarks: *BHP datum point					
Approved By Commission: <i>[Signature]</i> Conducted By: <i>[Signature]</i> Calculated By: <i>[Signature]</i> Checked By: <i>[Signature]</i>					