

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

FILE
C-122 file
Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 12/22/77		DEC 29 1977	
Company Gulf Oil Corp.				Connection Air		O. C. C.	
Pool Undersimate				Formation Morrow		Unit E	
Completion Date 12/13/77		Total Depth 8400		Rim Mark FT 8354		Elevation 3602	
Form or Lease Name Gwynberg A Per.							
Csg. Size 5 1/2	Wt. 17.0	Set At 8400	Perforations From 8094 To 8166		Well No. 1		
Tbg. Size 2 3/8	Wt. 4.7	Set At 8026	Perforations From To		Unit Sec. Twp. Hgt. E 5 13 25		
Type Well - Single - Broadhead - G.G. or G.O. Multiple Single				Factor Set At 8026		County Eddy	
Producing Thru Tbg		Reservoir Temp. °F 154 8026		Mean Annual Temp. °F		State New Mexico	
L 8026	H 8026	Gg .651	% CO ₂ 4.47	% N ₂ .61	% H ₂ S	Prover	Meter Run 4"
				Taps Flg.			

FLOW DATA						TUBING DATA		CASING 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							2015				72 Hrs.
1.	4 X	1.500		550	13.0	70	2002				45 Min
2.	4 X	1.500		614	24.0	90	1990				30 Min
3.	4 X	2.500		625	6.0	90	1940				45 Min
4.	4 X	2.500		625	12.0	90	1805				1 Hr
5.	4 X	2.500		635	25.0	85	1605				1 Hr

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, F _{spv}	Rate of Flow Q, Mcf/d
1	10.84	85.57	563.2	.9905	1.239	1.056	1202
2	10.84	122.69	627.2	.9723	1.239	1.054	1689
3	32.64	61.28	633.2	.9723	1.239	1.055	2567
4	32.64	87.51	633.2	.9723	1.239	1.055	3630
5	32.64	127.30	643.2	.9768	1.239	1.058	5320

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	.84	530	1.41	.896	A.P.I. Gravity of Liquid Hydrocarbons	56.4 @ 60°
2.	.94	550	1.47	.900	Specific Gravity Separator Gas	.651
3.	.95	550	1.47	.899	Specific Gravity Flowing Fluid	.662
4.	.95	550	1.47	.897	Critical Pressure	670 P.S.I.A.
5.	.97	545	1.45	.893	Critical Temperature	375 R

NO.	P _r ²	P _w	P _r ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 228.533$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 15.117$
1	2023.3	4095.6	18.0		AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 18.171$	
2	2020.2	4081.2	32.4			
3	1993.2	3972.9	140.7			
4	1903.4	3623.1	490.5			
5	1818.0	3305.3	808.3			

Absolute Open Flow	18.171	Mcf/d @ 15.025	Angle of Slope	63.5°	Slope, n	.500
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Remarks: Made 2 Bbls of Distillate During Test			
Approved By Commission:	Conducted By: John Davis	Calculated By: Larry Davis	Checked By: