

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 8-10-78	
Company Gulf Oil Corporation			Connection Air		
Pool Quail Ridge			Formation Morrow		Unit K
Completion Date 8/5/78		Total Depth 13527	Plug Back TD 13478		Elevation 3770
Farm or Lease Name Lea "ED" State					
Csg. Size 5"	Wt. 13	d	Set At 13527	Perforations: From 13236 To 13330	Well No. # 2
Tub. Size 2 3/8"	Wt. 4.7	d	Set At 13527	Perforations: From To	Unit K
Type Well - Single - Horizontal - G.G. or G.O. Multiple Single					Packer Set At 13178
Producing Thru Tubing					County Lea
Reservoir Temp. °F 206°		Mean Annual Temp. °F 60°		State New Mexico	
L 7602	H 7602	Gg .666	% CO ₂ .62	% N ₂ 1.38	% H ₂ S
Prover				Meter Run 4	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. °F	
51							3940				72 hr
1.	4	X	2.250	550	1.3	83	3432				1 hr
2.	4	X	2.250	575	5.0	95	2870				1 hr
3.	4	X	2.250	585	9.0	93	2357				1 hr
4.	4	X	2.250	615	13.0	80	1630				1 hr
5.											

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 _{pv}	Rate of Flow Q, Mhd
1	25.64	31.34	563.2	.9786	1.225	1.055	1032
2	25.64	54.23	588.2	.9630	1.225	1.054	1733
3	25.64	73.37	598.2	.9697	1.225	1.054	2355
4	25.64	106.34	628.2	.9313	1.225	1.063	3484
5.							

NO.	P _r	Temp. °R	T _r	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	.34	543	1.42	.899	18.395	51 @ 60°	.666	XXXXXX	669	382
2	.83	555	1.45	.901				XXXXX	665	434
3	.89	553	1.45	.900						
4	.94	540	1.41	.885						
5.										

P _r 3953.2 P _w 15627.3				(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 1.237$		(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.237$	
NO.	P _r	P _w	P _r ²	P _w ²	P _r ² - P _w ²		
1		3450.8	11903.0	3719.3			
2		2898.8	8403.0	7224.7			
3		2401.2	5765.8	9862.0			
4		1731.1	2996.7	1263.1			
5							

Absolute Open Flow 4.311 Mhd @ 15625 Angle of Slope 45° Slope, n 1.000

Remarks: Equivalent Length Calculated for 2 3/8" flow string.
Produced 19.5 Bbls of distillate during the test

Approved By: <u>[Signature]</u>	Conducted By: <u>Lanny Davis</u>	Calculated By: <u>Lanny Davis</u>	Checked By: _____
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