

NEW 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 05-14-80	
Company GULF OIL CORP.				Location AIR			
Field NORTH LUSK				Formation MORROW		Unit K	
Completion Date 05-09-80		Total Depth 13030		Plug Back To 12981		Elevation 3650 GL	
Csg. Size 5 1/2		ID 17		Set At 13020		Perforations From 12572 To 12609	
Trq. Size 2 3/8		ID n/80		Set At 12521		Perforations From To	
Type Well - Single - Provenhead - G.G. or G.O. Multiple SINGLE GAS				Packer Set At 12511		County LEA	
Producing Thru TBG.		Reservoir Temp. °F 199 @ 12521		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
L 12521		H 12521		G _g .6427		% CO ₂ .442	
				% N ₂ .524		% 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. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
1.	4 X 1.500			460	12.0	83	4115				72 HRS.
2.	4 X 1.500			480	50.0	75	3295				1 HR.
3.	4 X 1.500			480	27.0	82	3750				1 HR.
4.	4 X 1.500			480	43.5	75	3500				1 HR.
5.							3120				1 HR.

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 _{pv}	Rate of Flow Q, Mcfd
1	10.84	75.36	473.2	.9786	1.247	1.041	1038
2	10.84	157.04	493.2	.9859	1.247	1.045	2187
3	19.81	115.40	493.2	.9795	1.247	1.043	2912
4	19.81	146.47	493.2	.9859	1.247	1.045	3728
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	.71	543	1.46	.922	41.104	
2.	.74	535	1.44	.915	53 @ 60	
3.	.74	542	1.46	.919	Specific Gravity Separator Gas	.6427
4.	.74	535	1.44	.915	Specific Gravity Flowing Fluid	.715
5.					Critical Pressure	670 P.S.I.A.
					Critical Temperature	372 R

NO.	P _r ²	P _w ²	P _w ² - P _r ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 6.431$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.725$
1	4015.3	16122.6	919.4			
2	3794.3	14326.7	2645.3			
3	3567.2	12724.9	4317.1			
4	3226.1	10407.7	6634.3			
5						

Absolute Open Flow				Angle of Slope		Slope, n	
6,431 Mcfd @ 15.025				60		.578	

Remarks: THE WELL PRODUCED 10 BBLs OF DISTILLATE DURING THE TEST.

Approved By 	Conducted By DAVIS SERVICES INC.	Calculated By RICK PAGAN	Checked By
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