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U.S. GEOLOGICAL SURVEY
HOBBS, NEW MEXICO
MAY 20 1980

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
 Revised 9-1-65

POINT A AND ONE POINT BACK PRESSURE TEST OR GAS WELL

Type of Well ☒ Initial ☐ Annual ☐ Special		Test Date	05-14-80	
Company GULF OIL CORP.		Direction AIR		
Pool NORTH LUSK		Formation MORROW		Drift K
Completion Date 05-09-80	Total Depth 13030	Plug Back To 12981	Elevation 3660 GL	Form or Lease Name FEDERAL COM. 4 Com
Csg. Size 5 1/2	Wt. 17	Set At 13020	Perforations: From 12572 To 12699	Well No. # 1
Tub. Size 2 3/8	Wt. n/80	Set At 12521	Perforations: From To	Unit K
Type Well - Single - Broadhead - 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	Bore. Press. - P _a 13.2	State NEW MEXICO
L 12521	H 12521	G _g .6427	% CO ₂ .442	% N ₂ .524
			% H ₂ S	Prover 4"
				Turns 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
5!							4115				72 HRS.
1.	4 X 1.500			460	12.0	83	3995				1 HR.
2.	4 X 1.500			480	50.0	75	3750				1 HR.
3.	4 X 1.500			480	27.0	82	3500				1 HR.
4.	4 X 1.500			480	43.5	75	3120				1 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 _{py}	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 _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio 41.104 Mcf/bbl.
1.	.71	543	1.46	.922	A.P.I. Gravity of Liquid Hydrocarbons 53 @ 60 Deg.
2.	.74	535	1.44	.915	Specific Gravity Separator Gas .6427 X X X X X X X X
3.	.74	542	1.46	.919	Specific Gravity Flowing Fluid X X X X X .715
4.	.74	535	1.44	.915	Critical Pressure 670 P.S.I.A. 668 P.S.I.A.
5.					Critical Temperature 372 R 398 R

NO.	P _t ²	P _w ²	P _t ² - P _w ²	(1) $\frac{P_t^2}{P_t^2 - P_w^2} = 2.569$	(2) $\left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n = 1.725$
1	4015.3	16122.6	919.4		
2	3794.3	14396.7	2645.3		
3	3567.2	12724.9	4317.1		
4	3226.1	10407.7	6634.3		
5					

Absolute Open Flow 6,431 Mcfd @ 15.025		Angle of Slope @ 60	Slope, n .578
Remarks: THE WELL PRODUCED 10 BBL OF DISTILLATE DURING THE TEST.			
Approved By Commission:	Conducted By: DAVIS SERVICES INC.	Calculated By: RICK PAGAN	Checked By: