

NEW MEXICO OIL CONSERVATION COMM. ON
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-80

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 11/21/80		DEC 3 1980	
Company GULF OIL CORP.				Production AIR		O. C. D.	
Well <i>Wildcat Wolfcamp</i> UNDESIGNATED				Formation WOLFCAMP		ARTESIA OFFICE	
Completion Date 10/18/80		Total Depth 10500		Plug Back To 9722		Elevation 3324 GL	
Casing Size 5 1/2		Set At 9753		Perforations From 7820 To 7896		Form or Lease Name LAKE McMILLIAN FEE	
Tubing Size 2 3/8		Set At 7810		Perforations From To		Well No. # 1	
Type Well - Single - Broadhead - G.G. or G.O. Multiple SINGLE GAS WELL				Packer Set At 7810		Unit Sec. Twp. Rge. I 30 19s 27e	
Producing thru TBG.		Reservoir Temp. °F 152 ^a 7858		Mean Annual Temp. °F 60 ^o		County EDDY	
Baro. Press. - P _a 13.2		State NEW MEXICO					
L 7858	H 7858	G _g .715	% CO ₂ 1.53	% N ₂ 1.79	% H ₂ S	Prover	Meter Run 4"
FLOW DATA				TUBING DATA		CASING DATA	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Duration of Flow
1.	4 X 1.000			475	8.0	81	72 hrs.
2.	4 X 1.000			480	33.0	98	1 hr.
3.	4 X 1.000			485	82.0	80	1 hr.
4.	4 X 1.000			720	94.0	102	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 _{pv}	Rate of Flow Q, Mscf/d
1	4.753	62.49	488.2	.9804	1.183	1.056	364
2	4.753	127.58	493.2	.9653	1.183	1.051	728
3	4.753	202.12	498.2	.9813	1.183	1.058	1180
4	4.753	262.53	733.2	.9619	1.183	1.075	1526
5							
NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio <u>dry</u> Mscf/bbl.		
1	.73	541	1.36	.896	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.		
2	.74	558	1.40	.906	Specific Gravity Separator Gas <u>.715</u> X X X X X X X X		
3	.75	540	1.36	.893	Specific Gravity Flowing Fluid X X X X X		
4	1.10	562	1.41	.865	Critical Pressure <u>668</u> P.S.I.A. P.S.I.A.		
5					Critical Temperature <u>398</u> °R °R		
P _t 1673.2 P _c ² 2799.6							
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 5.648$		
1	1649.2	2719.9	79.7		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.913$		
2	1607.4	2583.6	216.0				
3	1564.5	2447.7	351.9				
4	1517.9	2303.9	495.7		AOIF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 5.971$		
5							
Absolute Open Flow <u>5,971</u>				Mscf @ 15.025		Angle of Slope <u>51.75°</u>	
						Slope, n <u>.788</u>	
Remarks:							
Approved By: _____		Conducted By: _____		Calculated By: _____		Checked By: _____	
DAVIS SERVICES INC. RICK PAGAN							

12-19-80
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