

NL MEXICO OIL CONSERVATION COMMS. N
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

copy to 2

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Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 3/31/69		APR 8 1969		
Company Gulf Oil Corporation				Connection None				Unit O. C. C.	
Pool Undesignated <i>Golden Lane Strawn Gas</i>				Formation Strawn				Unit ARTESIA, OFFICE	
Completion Date 3/26/69		Total Depth 11,075		Plug Back TD 11,035		Elevation 3358 GL		Farm or Lease Name Eddy "BD" State	
Csg. Size 5 1/2	Wt. 17 & 20	d -	Set At 11,074	Perforations: From 10,980 To 11,011			Well No. 1		
Tbg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 10,875	Perforations: From Open To End			Unit Sec. Twp. Rge. P 32 20S 30E		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At 10,870		County Eddy		
Producing Thru Tbg.		Reservoir Temp. °F 110.0		Mean Annual Temp. °F 60.0		Baro. Press. - P _a 13.2		State New Mexico	
L 10,875	H 10,875	G _g .679	% CO ₂ 0	% N ₂ -	% H ₂ S 0	Prover	Meter Run X	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
SI							3768		Choke		46 hrs
1.	4.026 X 1.50			220	1.0	78	3730		7/64		2 1/2 hrs
2.	4.026 X 1.50			595	21.0	88	2555		10/64		3
3.	4.026 X 1.50			630	34.0	72	1900		14/64		3
4.	4.026 X 1.50			670	52.0	72	1343		20/64		3
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	10.84	15.27	233.2	.9831	1.214	1.022	202 ^{1/2}
2	10.84	113.0	608.2	.9741	1.214	1.056	1530
3	10.84	147.9	643.2	.9887	1.214	1.068	2055
4	10.84	188.5	683.2	.9887	1.214	1.073	2632
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
					17.722	
					A.P.I. Gravity of Liquid Hydrocarbons	53.2 Deg.
1.	0.35	538	1.41	.957	Specific Gravity Separator Gas	.679 XXXXXXXX
2.	0.91	548	1.44	.896	Specific Gravity Flowing Fluid	.7661 XXXXX
3.	0.96	532	1.39	.876	Critical Pressure	669 P.S.I.A.
4.	1.02	532	1.39	.869	Critical Temperature	382 °R
5.						

P _c	5337.2	P _c ²	28486	BHP
NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²
1		5308.2	28177	309
2		3894.2	15165	13321
3		3082.2	9500	18986
4		2252.2	5072	23414
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.217$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.213$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3193$$

Absolute Open Flow	3193 Mcfd @ 15.025	Angle of Slope θ	Slope, n .984
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Remarks: **BHP readings corrected to 10995. *Well logging.**

Approved By Commission:	Conducted By: <i>H. F. Smith</i>	Calculated By: <i>Warner Holbe</i>	Checked By: <i>H. F. Smith</i>
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