

way

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 1/27/78		FEB 2 1978	
Company Gulf Oil Corp.				Connection Air				O.C.C.	
Pool <i>Benton 7 1/2" narrow</i> Undesignated				Formation Morrow				Unit ARTESIA, OFFICE	
Completion Date 1/18/78		Total Depth 11407		Plug Back TD 11366		Elevation 3333		Farm or Lease Name Potts Federal	
Csg. Size 5 1/2	Wt. 17	d 11407	Set At 11407	Perforations: From 10914 To 11129		Well No. # 1			
Tbg. Size 2 3/8	Wt. 4.7	d 10852	Set At 10852	Perforations: From To		Unit Soc. Twp. Rge. 0 13 20 27			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 10852		County Eddy	
Producing Thru Tbg.		Reservoir Temp. °F 183° 10852		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2		State New Mexico	
L 10852	H 10852	Gg .627	% CO ₂ 3.24	% N ₂ .37	% 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
SI							2930				48 Hr
1.	4 X 1.000			500	10.0	63	2730				1 Hr
2.	4 X 1.000			500	19.0	90	2620				1 Hr
3.	4 X 1.000			500	40.0	93	2390				1 Hr
4.	4 X 1.000			500	80.0	93	2085				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, Fpv	Rate of Flow Q, Mcfd
1	4.753	71.64	513.2	.9971	1.263	1.050	450
2	4.753	98.75	513.2	.9723	1.263	1.042	601
3	4.753	143.28	513.2	.9697	1.263	1.041	868
4	4.753	202.62	513.2	.9697	1.263	1.041	1228
5							

NO.	P _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio	Dry	Mcf/bbl.
1	.77	523	1.42	.907	A.P.I. Gravity of Liquid Hydrocarbons		Deq.
2	.77	550	1.49	.921	Specific Gravity Separator Gas	.627	X X X X X X X X
3	.77	553	1.50	.923	Specific Gravity Flowing Fluid	X X X X X	
4	.77	553	1.50	.923	Critical Pressure	670	P.S.I.A.
5					Critical Temperature	368	R

P _c 2943.2 P _c ² 8662.4				
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1		2745.1	7535.6	1126.9
2		2635.7	6946.9	1715.5
3		2408.7	5801.8	2860.6
4		2109.7	4450.8	4211.6
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.057$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.744$

NOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.141$

Tested 10-24-78 2/3/78

Absolute Open Flow 2,141 Mcfd @ 15.025		Angle of Slope 52.25°		Slope, n .771	
Remarks:					
Approved By Commission:		Conducted By: Larry Davis		Checked By:	
		Calculated By: Larry Davis			