

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

RECEIVED
Form C-122
Revised 9-1-65

AUG 27 1970

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 8/22/70		O. C. C. ARTICIA, OFFICE	
Company Gulf Oil Corporation				Connection Transwestern Pipeline Co.				
Pool Rock Tank				Formation Upper Morrow				Unit
Completion Date 3/3/70		Total Depth 10,350		Plug Back TD 10,312		Elevation 4008 GL		Farm or Lease Name Boothe "BO" Federal
Csg. Size 5 1/2	Wt. 17#	d 4.892	Set At 10,314	Perforations: From 9926 To 10,072		Well No. 1		
Thq. Size 2 7/8	Wt. 6.5	d 2.441	Set At 10,180	Perforations: From To		Unit Sec. Twp. Rge. K 12 23S 24E		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Dual Gas - Gas					Packer Set At 10,180		County Eddy	
Producing Thru Annulus		Reservoir Temp. °F 150° 10,000		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2		State New Mexico
L 9926	H 9926	Gg .581	% CO ₂ 0.58%	% N ₂ 0.30%	% H ₂ S -	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									2696		69.25
1.	2.066	X	0.875	902	6.5	80			2361	65	3.00
2.	2.066	X	0.875	902	11.0	82			2160	65	2.50
3.	2.066	X	0.875	905	20.0	84			1884	65	2.50
4.	2.066	X	0.875	910	32.0	84			1502	65	3.50
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, Mcfd
1	3.729	77.13	915.2	.9813	1.312	1.064	394
2	3.729	100.3	915.2	.9795	1.312	1.064	511
3	3.729	135.6	918.2	.9777	1.312	1.062	689
4	3.729	171.9	923.2	.9777	1.312	1.062	873
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Dry Gas _____ Mcf/bbl.	
1	1.36	540	1.55	.884	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.	
2	1.36	542	1.55	.884	Specific Gravity Separator Gas .581	XXXXXXXXXX
3	1.36	544	1.56	.887	Specific Gravity Flowing Fluid XXXXX	
4	1.37	544	1.56	.886	Critical Pressure 674 P.S.I.A.	P.S.I.A.
5					Critical Temperature 349 R	R

P _c 2709.2 P _c ² 7339.8				
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1	2374.8	5639.7	1700.1	
2	2173.9	4725.8	2614.0	
3	1897.7	3601.3	3738.5	
4	1515.8	2297.6	5042.2	
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.4557$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.182$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.3545$$

Absolute Open Flow	1.182	Mcf/d @ 15.025	Angle of Slope @	.808
Remarks:				

Approved By Commission:	Conducted By: <i>H. L. Smith</i>	Calculated By: <i>Wanda Holmes</i>	Checked By: <i>H. L. Smith</i>
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