

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

Form O-127
Revised 5-61
RECEIVED

SEP 17 1980

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 9-9-80		O. C. D. ARTESIA, OFFICE	
Company Gulf Oil Corp.		Connection To Air		Well	
Well <i>Burton Plate Morrow</i>		Formation Morrow		Test	
Completion Date 9-4-80		Total Length 11,275		Plug back To 11,229	
Elevation 3,309 GL		Form or Lease Name Potts Fed. Com.		Well No. 2	
Gas Size 5 1/2	Wt. 17#	Set At 11,275	Perforations: From 10,852 To 10,974		Well No. 2
Prod. Size 27/8	Wt. 6.5	Set At 10,806	Perforations: From Open To End		Unit <i>F</i> Sec. 13 Twp. 20S R. 27E
Type Well - Single - Brokenhead - G.G. or G.O. Multiple Single			Packer Set At 10,806		County Eddy
Producing Thru Tbg.		Reservoir Temp. °F 182 @ 10,806		Mean Annual Temp. °F 60	
Surf. Press. - P _s 13.2		State New Mexico		Meter Run 4"	
L 10,806	H 10,806	G _g .618	% CO ₂ .013	% N ₂ .013	% H ₂ S Prover

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
51							3100				24 hr
1.	4	X 1.750		605	3.0	104	2890				1 hr
2.	4	X 1.750		600	6.0	99	2590				1 hr
3.	4	X 1.750		605	13.0	92	2240				1 hr
4.	4	X 1.750		605	24.0	90	1680				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 F _g	Super Compress. Factor, F _{sp}	Rate of Flow Q, Mgd
1	14.93	43.07	618.2	.9602	1.272	1.042	818
2	14.93	60.66	613.2	.9645	1.272	1.044	1160
3	14.93	89.65	618.2	.9706	1.272	1.047	1730
4	14.93	121.81	618.2	.9723	1.272	1.047	2355
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	DRY	Metric
1	.92	564	1.56	.921	A.P.L. Gravity of Liquid Hydrocarbons		
2	.91	559	1.54	.918	Specific Gravity Separator Gas .618		
3	.92	552	1.52	.913	Specific Gravity Flowing Fluid		
4	.92	550	1.52	.913	Critical Pressure 671 P.S.I.A.		
5					Critical Temperature 362 °R		

NO.	P _r	P _w	P _r ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 1.380$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.295$
1		2904.7	8437.3	1254.7		
2		2606.0	6791.2	2900.8		
3		2260.3	5109.0	4583.0		
4		1634.3	2670.9	7021.1		
5						

Rate of Flow 3,051	Refr. 15.025	Angle of Slope 51.250	Slope, n .803
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Remarks: NO FLUID DURING TEST

Approved By Commission	Conducted By: DAVIS SERVICES INC.	Calculated By: LARRY DAVIS	Checked By:
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