

OCT 15 1982

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 10/11/82		O.C.D.	
Company GULF OIL EXPLORATION & PROD. CO.		Location AIR		ARTESIA, OFFICE	
Well WHITE CITY PENN		Formation -PENN MORROW		Unit	
Completion Date 9-25-82		Total Depth 11550		Elevation 11487	
Casing Size 5" liner		Set At 15		Perforations From 10924 To 11456	
Tubing Size 2 3/8		Set At 10850		Perforations From To	
Type Well - Single - Provenhead - G.G. or G.O. Multiple SINGLE GAS				Packer Set At 10850	
Producing thru TBG.		Reservoir Temp. °F 183 @ 10850		Mean Annual Temp. °F 60	
Baro. Press. - P _a 13.2		State NEW MEXICO		County EDDY	
L 10850		H 10850		G _g .576	
% CO ₂ 1.41		% N ₂ .30		% H ₂ S 0	
Prover 4"		Meter Run 4"		Type 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	
51							3165				72 hrs.
1.	4 x	1.500		600	5.0	84	2925				1 hr.
2.	4 x	1.500		600	10.5	77	2690				1 hr.
3.	4 x	1.500		600	20.0	80	2380				1 hr.
4.	4 x	1.500		600	33.0	95	1910				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, Mld
1	10.84	55.37	613.2	.9777	1.318	1.043	807
2	10.84	80.24	613.2	.9840	1.318	1.045	1179
3	10.84	111.64	623.2	.9813	1.318	1.045	1636
4	10.84	142.25	613.2	.9680	1.318	1.038	2042
5.							

NO.	P ₁	Temp. °R	T ₁	Z	Gas Liquid Hydrocarbon Ratio	DRY	Mcf/Std.
1.	.91	544	1.55	.920	A.P.L. Gravity of Liquid Hydrocarbons		Dep.
2.	.91	537	1.53	.916	Specific Gravity Separator Gas	.576	XXXXXXX
3.	.93	540	1.54	.916	Specific Gravity Flowing Fluid	XXXXXX	
4.	.91	555	1.59	.928	Critical Pressure	672	P.S.I.A.
5.					Critical Temperature	350	R

P _c 3178.2 P _w 10101.0				(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.610$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.345$	
NO.	P _c	P _w	P _w ²	P _c ² - P _w ²	ACF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.747$		
1		2942.5	8658.3	1442.7			
2		2712.1	7355.5	2745.5			
3		2410.8	5812.0	4289.0			
4		1956.3	3827.1	6273.8			
5							

Absolute Open Flow		2,747	Mcf @ 15.025	Angle of Slope @	58°	Slope, n	.623
Remarks:							
Approved by Commission:		Conducted By:		Calculated By:		Checked By:	
		DAVIS SERVICES, INC.		RICK PAGAN			