

6/5F

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL **RECEIVED**

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 7/23/82		JUL 29 1982 O. C. D. ARTESIA, OFFICE	
Company Gulf Oil Exploration & Production Co.				Connection None			
Field White City				Formation Penn		Unit ARTESIA, OFFICE	
Completion Date 7/21/82		Total Depth 11454' / 11500		Plug Back TD 11424'		Elevation 3389' GL	
Casing Size 5"		ID 15.0		Set At 11454'		Perforations From 10366 To 11376	
Tubing Size 2 3/8"		ID 4.70		Set At 10319		Perforations Open Ended	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 10319		Country Eddy	
Producing Thru Tbg		Reservoir Temp. °F 177 @ 10319'		Mean Annual Temp. °F 60		Base. Press. - P _a 13.2	
L 10319'		H 10319'		G _g 0.584		% CO ₂ 1.785	
				% N ₂ 0.518		% H ₂ S -	
				Prover -		Meter Run 2.900	
						F F	

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. DWT	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							1464		PACKER		60.0 hrs.
1.	3.0	X	.875	515	4.2	84	1404				1.0 hr
2.	3.0	X	.875	515	9.0	87	1366				1.0 hr
3.	3.0	X	.875	515	20.0	90	1319				1.0 hr
4.	3.0	X	.875	515	41.0	85	1165				1.0 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 _{sv}	Rate of Flow Q, Mscf/d
1	3.657	47.10	528.2	.9777	1.309	1.037	229
2	3.657	68.95	528.2	.9750	1.309	1.036	333
3	3.657	102.78	528.2	.9723	1.309	1.035	495
4	3.657	147.16	528.2	.9768	1.309	1.036	713
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry	Mcf/bbl.
1	0.79	544	1.55	0.930	A.P.L. Gravity of Liquid Hydrocarbons	-	Deg.
2	0.79	547	1.56	0.932	Specific Gravity Separator Gas	.584	X X X X X X X X
3	0.79	550	1.57	0.934	Specific Gravity Flowing Fluid	X X X X X	
4	0.79	545	1.56	0.932	Critical Pressure	672 P.S.I.A.	- P.S.I.A.
5					Critical Temperature	350 °R	- °R

NO.	P _r	P _w	P _w ²	P _r ² - P _w ²
1	1477.2	1417.8	2010.1	172.0
2	1477.2	1380.5	1905.7	276.4
3	1477.2	1335.1	1782.5	399.6
4	1477.2	1185.1	1404.4	777.7
5				

(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 2.806$

(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 2.206$

AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.573$

Post ID-2
10-8-82
Camp + BK

Absolute Open Flow	1573	Mcf/d @ 15.025	Angle of Slope θ	52.5	Slope, n	0.767
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Remarks: NO FLUID MADE DURING TEST

Approved By Division	Conducted By: JARREL WELL TESTING, INC.	Calculated By: R. Reston	Checked By: Joe A Coleman PE #2208
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