

C/SF

C-122

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 3-12-82		039143-61 W.O.	
Company GULF OIL EXPLORATION & PROD.		Connection TO AIR		MAR 17 1982	
Pool WHITE CITY PEN		Formation MORROW		O. C. D. ARTESIA, OFFICE	
Completion Date 3-4-82		Total Depth 11824		Plug Back TD 11651	
Elevation 3315 GL		Form or Lease Name Marquardt "Fed"		Well No. 4	
Csg. Size 7 5/8"		Set At 11824		Perforations: From 11052 To 11359	
Tq. Size 2 3/8"		Set At 10988		Perforations: From To	
Type Well - Single - Broadhead - G.C. or G.O. Multiple SINGLE		Packer Set At 10988		County EDDY	
Producing Thru TBG.		Reservoir Temp. °F 184 @ 10988		Mean Annual Temp. °F 60°	
Baro. Press. - P _a 13.2		State NEW MEXICO		Prover 4"	
L 10988		H 10988		G _g .573	
% CO ₂ 1.19%		% N ₂ .28%		% H ₂ S .	
FLOW DATA		TUBING DATA		CASING DATA	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w
1.	4.0	x	1.750	300	5"
2.	4.0	x	1.750	500	7"
3.	4.0	x	1.750	510	8"
4.	4.0	x	1.750	510	10"
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
1.	14.93	50.66	513.2	.9715	1.321
2.	14.93	59.94	513.2	.9715	1.031
3.	14.93	64.70	523.2	.9750	1.033
4.	14.93	72.33	523.2	.9813	1.034
5.					
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio
1.	.76	551	1.60	.941	A.P.I. Gravity of Liquid Hydrocarbons
2.	.76	551	1.60	.941	Specific Gravity Separator Gas
3.	.77	547	1.59	.938	Specific Gravity Flowing Fluid
4.	.77	540	1.57	.935	Critical Pressure
5.					Critical Temperature
$P_r 3185.2$ $P_w^2 10145.5$					
NO.	P _w	P _w ²	P _r ² - P _w ²	$(1) \frac{P_r^2}{P_r^2 - P_w^2} = 1.112$	
1.	2090.8	4371.5	5774.0	$(2) \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.100$	
2.	1647.0	2712.5	7433.0	$AOI = 0 \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.592$	
3.	1384.9	1917.9	8227.6		
4.	1010.0	1020.1	9125.1		
5.					
Absolute Open Flow 1592 Mcld @ 15.025 Angle of Slope 48° Slope, n 900 Remarks: Made no liquids during test					
Approved by Division		Conducted by:		Checked by:	

Posted ID-2
+ Comp. Book
SI
4-23-82