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

Form C-122
Revised 9-1-65

Type Test: ☒ Initial ☐ Annual ☐ Special					Test Date: 6-12-72						
Company: Atlantic Richfield			Connection: Transwestern								
Pool: Rock Tank <i>Lower Morrow</i>			Formation: Lower Morrow		Unit: G						
Completion Date: 2-16-72		Total Depth: 10450	Plug Back TD: 10419		Elevation: 3846						
Cas. Size: 5 1/2"	Wt.: 20#	d: 4.778	Set At: 10450	Perforations: From 10350 To 10368							
Tbg. Size: 2"	Wt.: 4.7#	d: 1.995	Set At: 10240	Perforations: From To							
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: Single				Packer Set At: 10240							
Producing Thru: Tbg		Reservoir Temp. °F: 163	Mean Annual Temp. °F: 60	Baro. Press. - P _a : 13.2							
L: 10350	H: 10350	G _g : 0.583	% CO ₂ : 0.64	% N ₂ : 0.22	% H ₂ S: -----						
Prover: x			Meter Run: x	Taps: Flg							
FLOW DATA											
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	TUBING DATA		CASING DATA		Duration of Flow
							Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI	4	x	2"				2168	75	Pkr		73 hrs
1.	4	x	2"	780	6	49	1899	70			3.25 hrs
2.	4	x	2"	800	12	49	1803	72			3.25 hrs
3.	4	x	2"	815	16	56	1697	72			3.25 hrs
4.	4	x	2"	820	22	56	1580	71			3.25 hrs
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 _{pv}	Rate of Flow Q, Mcfd				
1	19.81	68.987	793.2	1.011	1.310	1.070	1937				
2	19.81	98.785	813.2	1.011	1.310	1.071	2776				
3	19.81	115.114	828.2	1.004	1.310	1.068	3203				
4	19.81	135.390	833.2	1.004	1.310	1.069	3771				
5											
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio: 2000 Mcf/bbl.						
1	1.18	509	1.46	0.874	A.P.I. Gravity of Liquid Hydrocarbons: 51.5 Deg.						
2	1.21	509	1.46	0.871	Specific Gravity Separator Gas: 0.583						
3	1.23	516	1.48	0.876	Specific Gravity Flowing Fluid: XXXXX 0.585						
4	1.24	516	1.48	0.875	Critical Pressure: 673.9 P.S.I.A. 673.9 P.S.I.A.						
5					Critical Temperature: 349.1 R 349.1 R						
P _c 2181.2 P _c ² 4757.6					$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 2.626$ $(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.585$						
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²							
1		1940.0	3763.6	994.0							
2		1875.7	3518.3	1239.3							
3		1793.6	3217.0	1540.6							
4		1716.3	2945.7	1811.9							
5											
$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 9,748$											
Absolute Open Flow: 9,748											
Slope, n: 0.984											
Remarks:											
Approved By Commission: Conducted By: Calculated By: Checked By:											