

N MEXICO OIL CONSERVATION COM. ON
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 12-7-81	
Company Gulf Exploration & Prod.				Connection Air	
Pool Undesignated				Formation Morrow	
Completion Date 11-15-81		Total Depth 13327		Plug back TD 13327	
Elevation				Name of Lease Name North Rock Lake	
Csg. Size 7"-5" liner		Set At 13327		Perforations: From 13015 To 13036	
Tbg. Size 2 3/8		Set At 12926		Perforations: From To	
Type Well - Single - Production - G.G. or G.O. Multiple Single Gas				Packer Set At 12926	
Producing Thru Tbg.		Reservoir Temp. °F 203 @ 12926		Mean Annual Temp. °F 60°	
Baro. Press. - P _a 13.2		County Lea			
State N.M.					
L 12926	H 12926	Gg .6573	% CO ₂ .466	% N ₂ .599	% H ₂ S
Prover		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							5830				72 hrs.
1.	4 X 1.500			500	1.0	91	5290				1 hr.
2.	4 X 1.500			505	6.0	104	4480				1 hr.
3.	4 X 1.500			460	10.0	102	3800				1 hr.
4.	4 X 1.500			495	13.0	111	3380				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	10.84	22.65	513.2	.9715	1.237	1.045	308
2	10.84	55.76	518.2	.9602	1.237	1.042	748
3	10.84	68.79	473.2	.9619	1.237	1.039	922
4	10.84	81.28	508.2	.9543	1.237	1.039	1081
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	.77	551	1.46	.916	31.865	51.6 @ 60°	.6573	.751	670	378
2	.77	564	1.49	.921						
3	.71	562	1.49	.927						
4	.76	571	1.51	.926						
5.										

P _c 5843.2 P _w 34143.0		(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.512$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.512$	
NO.	P _c ²	P _w ²	P _c ² - P _w ²		
1	5303.7	28129.7	6013.3		
2	4496.5	20218.9	13924.1		
3	3818.6	14581.4	19561.6		
4	3400.9	11566.2	22576.8		
5					

Absolute Open Flow		1,635 Mcf @ 15.025		Angle of Slope α		45°		Slope, n		1.000	
Remarks: 4 bbls. distillate produced during test.											

Orig. Signed by Jerry S. Pagan				Conducted By: Davis Services, Inc.				Checked By: Rick Pagan			
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