

Form C-122
Revised October, 1999

Operator NADELL & GUSSMAN PERMAIN										Lease or Unit Name SHOEBAR "4"														
Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special										Test Date 9/10/01					Well No. 1									
Completion Date					Total Depth					Plug Back TD					Elevation					Unit Ltr - Sec - TWP - Rge				
Csg. Size		Wt.		d		Set At			Perforations: From: 12434 To: 12452										County LEA					
Tbg. Size 2 7/8		Wt. 6.5		d 2.441		Set At 12350			Perforations: From: To:										Pool					
Type Well-Single-Bradenhead-G.G. or G.O. Multiple SINGLE										Packer Set At 12350										Formation				
Producing Thru TUBING					Reservoir Temp. °F 200.5					Mean Annual Temp. °F 60					Baro. Press.-P _a 13.2					Connection SALES				
L 12350		H 12350		Gg 0.684		%CO ₂ 5.162		%N ₂ 1.321		%H ₂ S N/A		Prover N/A		Meter Run 2.067			Taps FLG							
FLOW DATA										TUBING DATA					CASING DATA					Duration of Flow				
No.	Prover Line Size	Orifice x 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		Duration of Flow						
SI										640		N/A		PKR		N/A								
1	2.067 X 1.250			110		25		66		400								24 HRS.						
2																								
3																								
4																								
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	8.12			55.5		123.2		0.9943		1.209		1.051			569									
2																								
3																								
4																								
5																								
No.	P _r		Temp. °R		T _r		Z		Gas Liquid Hydrocarbon Ratio N/A Mcf bbl.															
1	0.76		526		1.41		0.906		A.P. I. Gravity of Liquid Hydrocarbons N/A Deg.															
2									Specific Gravity Separator Gas 0.684 XXXXXXXX															
3									Specific Gravity Flowing Fluid XXXXXX															
4									Critical Pressure 689 P.S.I.A. P.S.I.A.															
5									Critical Temperature 373 R. R															
P _c		653.2		P _{c2}		426.7																		
No.	P _t ²		P _w		P _w ²		P _c ² -P _w ²		(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{1.7}{\quad}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{1.7}{\quad}$															
1	170.7		419.1		175.7		251		AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{0.967}{\quad}$															
2																								
3																								
4																								
5																								
Absolute Open Flow 0.967										Mcf @ 15.025					Angle of Slope (°): 45					Slope n: 1				
Remarks: * no condensate made during test.																								
Approved By Division:					Conducted By:					Calculated By: MERV BUECKER					Checked By: BM									