APPLICATION OF ROBERT L. BAYLESS
Simms Com #1
Downhole Commingle
NMOCD Docket #28-93; Case #10831

EXHIBIT NO. 4

ATTACHMENT

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-122
Revised 4-1-91

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator: Robert L. Bayless				Lease or Unit Name: Simms		
Type Test: X Initial / Annual / Special				Test Date: 7/20/93	Well No.: 1	
Completion Date: 10/23/83	Total Depth: 8731		Plug Back TD: 4150 (B.P.)	Elevation: 7023' GL	Unit Ltr. - Sec. - TWP - Rge.: J 13 30N 4W	
Csg. Size: 5 1/2"	Wt.: 15.5#	d: 4.950"	Set At: 8731	Perforations: From: 3709 To: 3715	County: Rio Arriba	
Tbg. Size: 2 3/8"	Wt.: 4.7#	d: 1.995"	Set At: 3681	Perforations: From: To:	Pool: East Blanco P.C.	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: Single			Packer Set At: None		Formation: Pictured Cliffs	
Producing Thru: Tubing	Reservoir Temp. °F: 110	Mean Annual Temp. °F:	Baro. Press - P_a: 12.0 (est.)		Connection: None	
L	H	Gg: est .65	% CO_2	% N_2	% H_2S	Prover / Meter Run / Taps

	FLOW DATA				TUBING DATA		CASING DATA		
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	Duration of Flow
SI	over 9 years!				1060		1065		
1.	2" x .750				20	60°	130		3 hrs.
2.									
3.									
4.									
5.									

calculated BHP = 1176

RATE OF FLOW CALCULATIONS

NO.	COEFFICIENT (24 HOUR) $\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg.	Super Compress. Factor, Fpv.	Rate of Flow Q, Mcfd
1.	12.365	32	1.0000	1.240	1.020	500
2.						
3.						
4.						
5.						

NO.	P_r	Temp. °R	T_r	Z
1.	0.05		1.23	0.962
2.				
3.				
4.				
5.				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg
Specific Gravity Separator Gas XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure _____ P.S.I.A. _____ P.S.I.A
Critical Temperature _____ R _____

P_c 1077 P_c^2 1,159,929

NO.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1.		142	20,164	1,139,765
2.				
3.				
4.				
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2}$ = 1.0177 (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 1.0150

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 508

Absolute Open Flow 508 Mcfd @ 15.025 | Angle of Slope θ _____ | Slope, n .85

Remarks: _____

Approved By Division	Conducted By:	Calculated By:	Checked By:
	Cecil Bell	Kevin McCord	