



October 16, 2001

DEVIATION REPORT

Well Name: ROSA UNIT #44B
Location: C SEC 35 T32N R6W
County, State: RIO ARriba COUNTY, NEW MEXICO
Formation: BLANCO MV



DEVIATION	DEPTH
1/2°	530'
3/4°	1030'
1/4°	1530'
1/2°	2028'
1 1/4°	2500'
1 1/4°	2906'
1°	3501'
1 3/4°	3938'
1°	5104'
1°	6385'

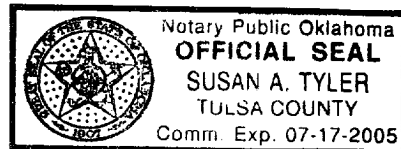
Tracy Ross
Tracy Ross
Production Analyst

State of Oklahoma)
) ss:
County of Tulsa)

The foregoing instrument was acknowledged before me this 16th day of October, 2001, by Tracy Ross.

My Commission Expires: 7-17-2005

Susan A. Tyler
Susan A. Tyler





LTR



Job separation sheet

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

Operator Williams Production Company										Lease or Unit Name Rosa Unit									
Test Type X Initial Annual Special					Test Date 9/24/2001					Well Number #44B									
Completion Date 9/14/2001			Total Depth 6387'			Plug Back TD 6265'			Elevation 6658'			Unit C		Sec 35		Twp 32N		Rng 6W	
Casing Size 4 1/2"			Weight 10.5#		d		Set At 6385'		Perforations: 5007' - 5771'			County Rio Arriba							
Tubing Size 2-3/8"			Weight 4.7#		d		Set At 6206'		Perforations: 5866' - 6198'			Pool Blanco MV							
Type Well - Single-Bradenhead-GG or GO Multiple									Packer Set At			Formation MV							
Producing Thru Tubing			Reservoir Temp. oF			Mean Annual Temp. oF			Barometer Pressure - Pa			Connection							
L		H		Gq 0.6		%CO2		%N2		%H2S		Prover 3/4"		Meter Run		Taps			

FLOW DATA					TUBING DATA		CASING DATA		
NO	Prover Line Size	X Orifice Size	Pressure p.s.i.q	Temperature oF	Pressure p.s.i.q	Temperature oF	Pressure p.s.i.q	Temperature oF	Duration of Flow
S1		2" X 3/4"			735	84	985		0
1					290	60	950		0.5 hr
2					290	61	935		1.0 hr
3					290	62	925		1.5 hrs
4					290	64	915		2.0 hrs
5					285	65	895		3.0 hrs

RATE OF FLOW CALCULATION									
NO	Coefficient (24 Hours)			hwPm	Pressure Pm	Flow Temp. Factor Fl	Gravity Factor Fg	Super Compress. Factor. Fpv	Rate of Flow Q, Mcfd
1	9.604				297	0.9952	1.29	1.035	3790
2									
3									
4									

NO	Pr	Temp. oR	Tr	Z	Gas Liquid Hydrocarbon Ration	Mcf/bbl.
1					A.P.I Gravity of Liquid Hydrocabrons _____	Deq.
2					Specific Gravity Separator _____	XXXXXX
3					Specific Gravity Flowing Fluid xxxxxxxxxx	
4					Critical Pressure _____ p.s.i.a.	____ p.s.i.a.
5					Critical Temperature _____ R	____ R

Pc 997		Pc2 994009		
NO	Pt1	Pw	Pw2	Pc2-Pw2
1		907	822649	171360
2				
3				
4				

(1) $\frac{Pc2}{Pc2 - Pw2} = \underline{5.8007061}$		(2) $\frac{Pc2^n}{Pc2 - Pw2} = \underline{3.7377534}$	
AOF = Q $\frac{Pc2^n}{Pc2 - Pw2} = \underline{14166}$			

Absolute Open Flow 14166		Mcf/d @ 15.025		Angle of Slope _____		Slope, n 0.75	
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Remarks:

Approved By Commission:		Conducted By: Larry Higgins		Calculated By: Tracy Ross		Checked By:	
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