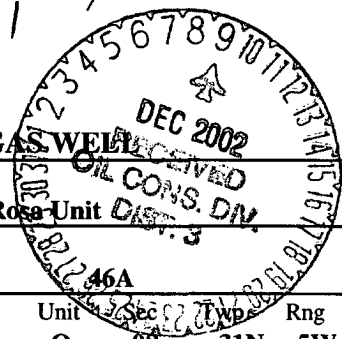


30-039-26391



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

Operator Williams Production Company					Lease or Unit Name Rosa Unit Dist. 3				
Test Type X Initial Annual Special			Test Date 11/19/2002		Well Number 46A				
Completion Date 11/6/2002		Total Depth 8123'		Plug Back TD 8079'		Elevation 6191'		Unit O 08 31N 5W	
Casing Size 5 1/2"		Weight 17#		Set At 8123'		Perforations: 7971' - 8081'		County Rio Arriba	
Tubing Size 2 1/16"		Weight 3.25#		Set At 8018'		Perforations:		Pool Basin DK	
Type Well - Single-Bradenhead-GG or GO Multiple					Packer Set At 6250'		Formation DK		
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
SI		2" X 3/4"			1450	51	1035		0
1					170	64	1040		0.5 hr
2					130	66	1040		1.0 hr
3					120	67	1040		1.5 hrs
4					115	67	1040		2.0 hrs
5					105	67	1040		3.0 hrs

RATE OF FLOW CALCULATION										
NO	Coefficient (24 Hours)				hwPm	Pressure Pm	Flow Temp. Factor Fl	Gravity Factor Fq	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	9.604					117	0.9933	1.29	1.014	1460
2										
3										
4										

NO	Pr	Temp. oR	Tr	Z	Gas Liquid Hydrocarbon Ration	Mcf/bbl.
1					A.P.I Gravity of Liquid Hydrocarbros	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	1047	Pc2	1096209	
NO	Pt1	Pw	Pw2	Pc2-Pw2
1		1052	1106704	-10495
2				
3				
4				

(1) $Pc2 = -104.4506$		(2) $Pc2^n = \#NUM!$	
$Pc2 - Pw2$		$Pc2 - Pw2$	
AOF = Q $Pc2^n = \#NUM!$		$Pc2 - Pw2$	

Absolute Open Flow	#NUM!	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: