

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 ☒ Initial ☐ Annual ☐ Special			Test Date 10/4/2005		Well Number (API #) #225A (API # 30-039-29576)		
Completion Date 10/4/2005		Total Depth 3660'		Plug Back TD		Elevation 6503'	
Casing Size 5 1/2"		Weight 17#		Set At 3660'		Perforations: 3387' - 3558'	
Tubing Size 2 7/8"		Weight 6.5#		Set At 3647'		Perforations:	
Type Well - Single-Bradenhead-GG or GO Multiple				Packer Set At		Formation Fruitland Coal	
Producing Thru Tubing		Reservoir Temp. oF		Mean Annual Temp. oF		Barometer Pressure - Pa	
Connection		L		H		Gq	
%		%		%		%	
Prover		Meter Run		Taps			

FLOW DATA				TUBING DATA		CASING DATA		
NO	Prover Line Size	X Orifice Size	Pressure p.s.i.g	Temperature oF	Pressure p.s.i.g	Temperature oF	Pressure p.s.i.g	Temperature oF
SI	2 3/4"	2 3/4"			200	67	1010	
1					200	67	1010	0.5 hr
2					190	60	990	1.0 hr
3					185	60	980	1.5 hrs
4					170	57	965	2.0 hrs
5					170	55	965	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,Mcf/d
1	9.604		182	1.0048	1.29	1.015	2300
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	1022	Pc2	1044484	
NO	Pt1	Pw	Pw2	Pc2-Pw2
1		977	954529	89955
2				
3				
4				

Absolute Open Flow 14465		Mcf @ 15.025		Angle of Slope _____		Slope, n 0.75	
Remarks:							
Approved By Commission:		Conducted By: Mark Lepich		Calculated By: Tracy Ross		Checked By:	

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Completion Date 10/4/2005		Total Depth 3660'		Plug Back TD		Elevation 6503'		Unit Sec Twp Rng J 12 31N 06W	
Casing Size 5 1/2"		Weight 17#		Set At 3660'		Perforations: 3387' - 3558'		County Rio Arriba	
Tubing Size 2 7/8"		Weight 6.5#		Set At 3647'		Perforations:		Pool Basin	
Type Well - Single-Bradenhead-GG or GO Multiple					Packer Set At		Formation Fruitland Coal		
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"				200	67	1010		0
1					200	67	1010		0.5 hr
2					190	60	990		1.0 hr
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4					Critical Pressure _____ p.s.i.a.				____ p.s.i.a.
5					Critical Temperature _____ R				____ R

Pc	1022	Pc2	1044484	
NO	Pt1	Pw	Pw2	Pc2-Pw2
1		977	954529	89955
2				
3				
4				

(1) $\frac{Pc2}{Pc2-Pw2} =$ 11.611183		(2) $\frac{Pc2^n}{Pc2-Pw2} =$ 6.2900973	
AOF = Q $\frac{Pc2^n}{Pc2 - Pw2} =$ 14465			

Absolute Open Flow 14465		Mcf @ 15.025	Angle of Slope _____	Slope, n 0.75
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Remarks:			
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Tubing Size 2 7/8"		Weight 6.5#		Set At 3647'		Perforations:		Pool Basin	
Type Well - Single-Bradenhead-GG or GO Multiple					Packer Set At		Formation Fruitland Coal		
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
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Absolute Open Flow	14465	Mcf/d @ 15.025	Angle of Slope _____	Slope, n	0.75
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