

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

RECEIVED
 NOV - 8 1999
 OIL FIELD DIV

Operator Williams Production Company					Lease or Unit Name Reso Unit #137A				
Test Type X Initial Annual Special			Test Date 10/21/99		Well Number #137A				
Completion Date 10/2/99		Total Depth 6214'		Plug Back TD 6154'		Elevation 6370'		Unit Sec Twp Rng I 31 31N 5W	
Casing Size 4 1/2"		Weight 10.5#		Set At 6214'		Perforations: From 4556' To 5696'		County Rio Arriba	
Tubing Size 2 3/8"		Weight 4.7#		Set At 5990'		Perforations: From 5726' To 6040'		Pool Blanco MV	
Type Well - Single-Bradenhead-GG or GO Multiple					Packer Set At 3600'		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
SI		2" X 3/4"			938				0
1					344	58			0.5 hr
2					326	62			1.0 hr
3					315	63			1.5 hrs
4					311	64			2.0 hrs
5					299	66			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					311	0.9943	1.29	1.036	3969
2										
3										
4										

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

Pc	950	Pc2	902500			
NO	Pt1	Pw	Pw2	Pc2-Pw2	(1) $\frac{Pc2}{Pc2-Pw2} =$	(2) $\frac{Pc2^n}{Pc2-Pw2} =$
1		311	96721	805779	1.1200342	1.0887382
2						
3						
4						

Absolute Open Flow 4321		Mcf @ 15.025	Angle of Slope _____	Slope, n 0.75
--------------------------------	--	--------------	----------------------	----------------------

Remarks:	
Approved By Commission:	Conducted By: Chic Charley
Calculated By: Tracy Ross	Checked By: David Spitz