

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 11-25-80	
Company Southland Royalty Company				Connection Southern Union Gathering	
Pool Aztec				Formation Pictured Cliffs	
Completion Date 10-30-80		Total Depth 7640'		Plug Back TD 7596'	
Elevation 6342' GR		Farm or Lease Name Davis			
Csg. Size 7.000		Wt. 23#		d 6.366	
4.500		10.5 & 11.6		d 4.052	
Tub. Size 1.900		Wt. 2.76#		d 1.610	
3009'		Set At 5113		7625'	
Perforations: From		To		Well No. #9E	
2933'		3008'		Unit A	
Sec. 12		Twp. 31N		Rge. 12W	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple G-Single				Packer Set At 5038'	
Producing Thru Tubing		Reservoir Temp. °F #		Mean Annual Temp. °F	
Baro. Press. - P _g 12.2		State New Mexico			
L		H		Cg	
.700		% CO ₂		% N ₂	
% H ₂ S		Prover		Meter Run	
Taps					
FLOW DATA					
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w
1.	2" X 3/4"				
2.					
3.					
4.					
5.					
TUBING DATA					
	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
	862		865		
	122		350		1 Hour
	84		245		2 Hours
	70		220		3 Hours
CASING DATA					
	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
RATE OF FLOW CALCULATIONS					
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg
1.	12.365		82.2	1.0000	.9258
2.					
3.					
4.					
5.					
NO.	P _r	Temp. °R	T _i	Z	Gas Liquid Hydrocarbon Ratio
1.					A.P.I. Gravity of Liquid Hydrocarbons
2.					Specific Gravity Separator Gas
3.					Specific Gravity Flowing Fluid
4.					Critical Pressure
5.					Critical Temperature
P_r 877.2 P_c 769479.8 (1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0753$ (2) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0637$ AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1001$					
NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²	
1.	232.2	53916.8	715563.0		
2.					
3.					
4.					
5.					
Absolute Open Flow				Mcf/d @ 15.025	
Angle of Slope				Slope, n .85	
Remarks:					
Approved By Division		Conducted By:		Calculated By:	
Steve McCarnet		James Smith		L. O. Van Ryan	