

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 9-12-84		SEP 17 1984	
Company Southland Royalty Company		Connection Southern Union Gathering		OIL CON. DIV.	
Pool Basin		Formation Dakota		Unit DIST. 3	
Completion Date 9-2-84		Total Depth 7438'		Plug Back TD 7375'	
Elevation 6063' GL		Farm or Lease Name Childers		Well No. 3	
Casing Size 7.000		Wt. 23#		Set At 5020'	
4.500		10.5#		4860'-7428'	
Tub. Size 2.375		Wt. 4.7#		Set At 7184'	
1.995		7184'		Perforations: From 7184 To 7316'	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single		Packer Set At -----		County San Juan	
Producing Thru Tubing		Reservoir Temp. °F 8		Mean Annual Temp. °F 12.2	
Baro. Press. - P _a 12.2		State New Mexico			
L		H		G _a	
				.700	
% CO ₂		% N ₂		% H ₂ S	
Prover		Meter Run		Taps	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	
SI							1962		1955	
1.	2" X 3/4"						172		816	1 hr
2.							104		575	2 hrs
3.							82		497	3 hrs
4.										
5.										

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{sp}	Rate of Flow Q, Mcfd
1	12.365		94.2	1.0000	.9258	1.0000	1078
2.							
3.							
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.					Specific Gravity Separator Gas _____ X X X X X X X X
3.					Specific Gravity Flowing Fluid _____ X X X X X
4.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature _____ R _____ R

NO.	P _c	P _w	P _r	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$
1	1974.2	509.2	259284.6	36381	1.0713	1.053
2.						
3.						
4.						
5.						

Absolute Open Flow _____ 1135 Mcfd @ 15.025				Angle of Slope @ _____ Slope, n _____ .75	
Remarks: Heavy slugs water for first 15 minutes. Heavy mist throughout test.					
Approved By Division		Conducted By: Jim Choquette		Calculated By: James W. Smith	
				Checked By: R. E. Fielder	