

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 4-4-82	
Company Southland Royalty Company				Connection Southern Union Gathering			
Pool Basin				Formation Dakota		Unit	
Completion Date 2-27-82		Total Depth 6678'		Plug Back TD 6635'		Elevation 5865' GL	
Farm or Lease Name Reid							
Csq. Size 5.500	Wt. 15.5#	d 4.950	Set At 6678'	Perforations: From To		Well No. 21-E	
Tsq. Size 1.900	Wt. 2.76#	d 1.900	Set At 6574'	Perforations: From 6442' To 6610'		Unit Sec. Twp. Rge. I 19 28W 9W	
Type Well - Single - Brdenhead - G.G. or G.O. Multiple G.G. Multiple				Packer Set At 3295'		County San Juan	
Producing Thru Tubing		Reservoir Temp. °F 8		Mean Annual Temp. °F		Baro. Press. - P _a 12.2	
State New Mexico							
L	H	Gg .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.	Temp. °F	
SI							1190				
1.	2"	X	3/4"				75				1 hr
2.							60				2 hrs
3.							45				3 hrs
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super. Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	12.365		57.2	1.0000	.9258	1.0000	655
2.							
3.							
4.							
5.							

NO.	P _t	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

$P_c = 1202.2$ $P_c^2 = 1445284.8$					$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.0023$ $(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0017$	
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²		
1		57.2	3271.8	1442013		
2						
3						
4						
5						

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 656$			
--	--	--	--

Absolute Open Flow <u>656</u> Mcfd @ 15.025		Angle of Slope θ _____	Slope, n <u>.75</u>
---	--	-------------------------------	---------------------

Remarks: _____			
----------------	--	--	--

Approved By Division	Conducted By: Leroy Castleman	Calculated By: James Smith	Checked By: R. E. Fielder
----------------------	----------------------------------	-------------------------------	------------------------------