

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 WELLS

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 3-28-82	
Company Southland Royalty Company				Connection Southern Union Gathering	
Pool Undesignated				Formation Chacara	
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	
Tub. Size 1.900	Wt. 2.90#	d 1.610	Set At 3188'	Perforations: From 3040' To 3146'	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple G.G. Multiple				Packer Set At 3295'	
Producing Thru Tubing		Reservoir Temp. °F 8		Mean Annual Temp. °F 12.2	
Baro. Press. - P _a 12.2		County San Juan			
State New Mexico					
L	H	G _g .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							1040		1040		
1.	2"	X	3/4"				235		645		1 hr
2.							206		600		2 hrs
3.							200		550		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		212.2	1.0000	.9258	1.0000	2429
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _t	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 1052.2 P _c ² 1107124.8			
NO.	P _t ²	P _w	P _w ²
1	562.2	316068.8	791056
2			
3			
4			
5			

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.3996$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3126$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.2868$$

Absolute Open Flow 3126	Mcf @ 15.025	Angle of Slope @	Slope, n .75
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Remarks:			

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