

OIL CONSERVATION DIVISION

P. O. BOX 2088

Form C-122
Revised 10-1-78STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

SANTA FE, NEW MEXICO 87501

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 4-9-82			
Company Southland Royalty Company				Connection Southern Union Gathering			
Pool Bloomfield				Formation Chacra		Unit	
Completion Date 3-27-82		Total Depth 6255'		Plug Back TD 6213'		Elevation 5398' GR	
Farm or Lease Name Mangum							
Csg. Size 5.500	Wt. 15.5#	d 4.950	Set At 6255'	Perforations: From To		Well No. 5-E	
Tub. Size 1.900	Wt. 2.76#	d 1.610	Set At 2540'	Perforations: From 2541' To 2645'		Unit Sec. Twp. Rge. A 29 29N 11W	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple G.G. - Multiple				Packer Set At 2714'		County San Juan	
Producing Thru Tubing		Reservoir Temp. °F θ		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							937		936		
1.	2"	X 5/8"					273		511		1 hr
2.							231		549		2 hrs
3.							203		546		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 Fg	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	8.5417		215.2	1.0000	.9258	1.0000	1702
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/lbl.
1					API 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 949.2 P _c ² 900980.6			
NO.	P _t	P _w	P _t ² P _w ² P _t ² - P _w ²
1		558.2	311587.2 589393.4
2.			
3.			
4.			
5.			

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.5287$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2340$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.3748$$

Absolute Open Flow	2340	Mcf @ 15.025	Angle of Slope θ	Slope, n .75
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Remarks:

Approved By Division	Conducted By: Kelly Maxwell	Calculated By: James Smith	Checked By: R. E. Fielder
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