

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 8-28-84			
Company Southland Royalty Company				Connection El Paso Natural Gas Company					
Pool Basin				Formation Dakota				Unit	
Completion Date 8-16-84		Total Depth 5720'		Plug Back TD 6676'		Elevation 6211'		Farm or Lease Name Hillside	
Csq. Size 4.500	Wt. 10.5#	d 4.052	Set At 6720'	Perforations: From To		Well No. 1E			
Tbg. Size 2.375	Wt. 4.7#	d 1.995	Set At 6548'	Perforations: From 6544' To 6576'		Unit Sec. Twp. Rge. H 9 27N 11W			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At -----		County San Juan	
Producing Thru Tubing		Reservoir Temp. °F #		Mean Annual Temp. °F		Baro. Press. - P _g 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.	
SI							882		882	
1.	2"	X	3/4"				228		630	1 hr
2.							210		562	2 hrs
3.							193		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, Fpv	Rate of Flow Q, Mcfd
1	12.365		205.2	1.0000	.9258	1.0000	2349
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 X X X
4.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature _____ R _____ R

P _c 894.2 P _c ² 799593.6				
NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²
1		558.2	311587.2	488006.4
2				
3				
4				
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.6385$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3402$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.4482$$

Absolute Open Flow	3402	Mcfd @ 15.025	Angle of Slope @	Slope, n .75
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Remarks: Fine mist with trace of oil

Approved By Division	Conducted By: Larry Bannowsky	Calculated By: James W. Smith	Checked By: C. Terry Hobbs
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