

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 7-21-82	
Company Southland Royalty Company				Connection El Paso Natural Gas Company		
Pool Basin				Formation Dakota		Unit
Completion Date 7-12-82		Total Depth 6939'		Plug Back TD 6893		Elevation 5826' GL
Csg. Size 5.500		Wt. 15.5#	d 4.950	Set At 6939'	Perforations: From To	
Tbg. Size 1.900		Wt. 2.90#	d 1.610	Set At 6850'	Perforations: From 6700' To 6904'	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple G. G. - Multiple					Packer Set At 6106'	
Producing Thru Tubing		Reservoir Temp. °F 8		Mean Annual Temp. °F		Baro. Press. - P _a 12.2
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. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							1700				
1.	2"	X	3/4"				251				1 hr
2.							181				2 hrs
3.							136				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		148.2	1.0000	.9258	1.0000	1697
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

$P_c = 1712.2$ $P_c^2 = 2931628.8$					$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.0075$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0057$	
NO.	P _t	P _w	P _w ²	P _c ² - P _w ²				
1		148.2	21963.2	2909665.6				
2								
3								
4								
5								

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1707$				
---	--	--	--	--

Absolute Open Flow _____ 1707 _____ Mcfd @ 15.025		Angle of Slope θ _____		Slope, n .75	
---	--	-------------------------------	--	--------------	--

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

Approved by Division	Conducted By: Richard Lopez	Calculated By: James Smith	Checked By: R. E. Fielder
----------------------	--------------------------------	-------------------------------	------------------------------