

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 5-27-82		***RE-TEST***	
Company Southland Royalty Company				Connection Southern Union Gathering				
Pool Aztec				Formation Pictured Cliffs				Unit
Completion Date 6-15-81		Total Depth 2550'		Plug Back TD 2531'		Elevation 5955' GR		Farm or Lease Name Culpepper Martin
Csq. Size 2.875	Wt. 6.5#	d 2.441	Set At 2539'	Perforations: From 2330' To 2348'			Well No. 19	
Thq. Size -----	Wt. ---	d -----	Set At -----	Perforations: From ----- To -----			Unit Sec. Twp. Rge. A 29 32N 12W	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At ---		County San Juan	
Producing Thru Casing		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											
1.	2"	X	3/4"							879	
2.										61	1 hr
3.										51	2 hrs
4.										46	3 hrs
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	12.365		58.2	1.0000	.9258	1.0000	666
2.							
3.							
4.							
5.							

NO.	P _f	Temp. °R	T _f	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

$P_c = 891.2$ $P_c^2 = 794237.4$					$(1) \frac{P_c^2}{P_e^2 - P_w^2} = 1.0043$		$(2) \left[\frac{P_c^2}{P_e^2 - P_w^2} \right]^n = 1.0036$	
NO.	P _e ²	P _w	P _w ²	P _e ² - P _w ²				
1		58.2	3387.2	790850.2				
2								
3								
4								
5								

AOF = Q $\left[\frac{P_c^2}{P_e^2 - P_w^2} \right]^n = 668$

Absolute Open Flow <u>668</u> Mcfd @ 15.025		Angle of Slope θ _____		Slope, n <u>.85</u>	
Remarks: _____					

Approved by Division	Conducted By: Jim Choquette	Calculated By: James Smith	Checked By: C. C. Parsons
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