

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 10-15-81	
Company Southland Royalty Company				Connection Gas Company of New Mexico	
Pool West Kutz				Formation Pictured Cliffs Extension	
Completion Date 10-01-81		Total Depth 1300'		Plug Back TD 1254'	
Elevation 5357' GR		Farm or Lease Name Texaco State			
Csq. Size 2.875	Wt. 6.5#	d 2.441	Set At 1262'	Perforations: From 1060' To 1121'	
Thq. Size ---	Wt. ---	d ---	Set At ---	Perforations: From --- To ---	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At -----	
Producing Thru Casing		Reservoir Temp. °F 8		Mean Annual Temp. °F 12.2	
Baro. Press. - P _a 12.2		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									186		
1.	2"	X	3/4"						11		1 hr
2.									10		2 hrs
3.									9		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 F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	8.5417		21.2	1.0000	.9258	1.0000	168
2.							
3.							
4.							
5.							

NO.	P _t	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 X
3.					Specific Gravity Flowing Fluid	X X X X X
4.					Critical Pressure	P.S.I.A.
5.					Critical Temperature	R

P _c 198.2 P _c ² 39,283.2				
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1	21.2	449.4	38833.8	
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0116$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 170$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0010$

Absolute Open Flow	170	Mcf/d @ 15.025	Angle of Slope θ	Slope, n .85
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Remarks:			

Approved By Division	Conducted By: Tom Wagner	Calculated By: James Smith	Checked By: L. O. Van Ryan
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