

NEW MEXICO OIL CONSERVATION COMMISSION MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 5-11-79	
Company Southland Royalty Company				Connection Southern Union Gathering Company		
Pool Blanco				Formation Mesaverde		Unit
Completion Date 5-4-79		Total Depth 5016'		Plug Back TD 4980'		Elevation 5964' GR
Farm or Lease Name Thompson		Well No. #3A				
Csg. Size 7.000 4.500	Wt. 20# 10.5#	d 6.456 4.052	Set At 2576 2438-5014	Perforations: From 4681' To 4930'		Unit Sec. Twp. Rge. (J) Sec. 34-31N-12W
Thg. Size 2.375	Wt. 4.7#	d 1.995	Set At 4922	Perforations: From To		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At --		County San Juan
Producing Thru Csg.		Reservoir Temp. °F @		Mean Annual Temp. °F		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							994		1036		
1.	2"	X	3/4"				343		731		1 hr
2.							302		649		2 hrs
3.							279		601		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	12.365		291.2	1.0000	.9258	1.0000	3.334
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
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

$P_c = 1048.2$ $P_c^2 = 1,098,723$				
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1		613.2	376,014	722,709
2				
3				
4				
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.5203$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4,565$$

$$(2) \left[\frac{P_c^2 - P_w^2}{P_c^2} \right] = 1.3691$$

Absolute Open Flow _____ Mcfd @ 15.025		Angle of Slope @ _____	
Remarks: _____			

Approved By Commission:	Conducted By: Jim Bacon	Calculated By: James Smith	Checked By:
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