

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED
MAR 28 1984
OIL CON. DIV.
DIST. 3

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 3-18-84	
Company Southland Royalty Company			Connection Southern Union Gathering		
Pool Basin			Formation Dakota		Unit
Completion Date 2-22-84		Total Depth 7200'		Plug Back TD 7150'	
Elevation 6049' GL		Farm or Lease Name Grenier "A"			
Cas. Size 5.500	Wt. 15.5#	d 4.950	Set At 7193'	Perforations: From To	
Perf. Size 1.900	Wt. 2.9#	d 1.610	Set At 7027'	Perforations: From 6888' To 7040'	
Type Well - Single - Branchedhead - G.G. or G.O. Multiple G. G. - Multiple				Packer Set At 5259'	
Producing Thru Tubing		Reservoir Temp. °F #		Mean Annual Temp. °F	
Baro. Press. - P _a 12.2		State New Mexico			
L	H	G _a .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	
1.	2"	X	3/4"				1753				1 hour
2.							106				2 hours
3.							63				3 hours
4.							53				
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		65.2	1.0000	.9258	1.0000	746
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
4.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature _____ R _____ R

P _c 1765.2 P _c ² 3115931.				
NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²
1		65.2	4251	3111680.
2				
3				
4				
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.001$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 747$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.001$$

Absolute Open Flow	747	Mcf @ 15.025	Angle of Slope θ	Slope, n .75
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Remarks: Light mist

Approved By Division	Conducted By: Steve Kellenaers	Calculated By: James W. Smith	Checked By: R. E. Fielder
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