

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

Form C-122
 Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 11-6-78	
Company Southland Royalty Company				Connection Southern Union Gathering		
Pool Basin				Formation Dakota		Unit
Completion Date 10-30-78		Total Depth 7225'		Plug Back TD 7176'		Elevation 6122' GR
Csg. Size 4.500		Wt. 23#	d 6.366	Set At 5346'	Perforations: From 7015' To 7127'	
Tbg. Size 2.375		Wt. 4.7#	d 1.995	Set At 7074'	Perforations: From To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple G.G. Multiple				Packer Set At 5263'		Farm or Lease Name Grenier "A"
Producing Thru Tbg.		Reservoir Temp. °F p		Mean Annual Temp. °F		Baro. Press. - P _a 12.2
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	
1.	2"	X	3/4"				1811				1 hr
2.							243				2 hrs
3.							154				3 hrs
4.							155				
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		167.2	1.0000	.9258	1.0000	1,914
2.							
3.							
4.							
5.							

NO.	P _t	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

$P_c = 1825.2$ $P_c^2 = 3,324,058$				
NO.	F _t	P _w	P _w ²	P _c ² - P _w ²
1.		167.2	27,956	3,296,102
2.				
3.				
4.				
5.				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.0085$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0064$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1,926$$

$$1,926$$

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

Remarks: H₂O and small amount of oil

Approved By Commission:	Conducted By: Abe Saiz	Calculated By: James Smith	Checked By:
-------------------------	---------------------------	-------------------------------	-----------------