

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 8-8-80			
Company Southland Royalty Company				Connection Southern Union Gathering					
Pool Basin				Formation Dakota				Unit	
Completion Date 8-1-80		Total Depth 7541'		Plug Back TD 7508'		Elevation 6283' GL		Farm or Lease Name Davis	
Csg. Size 7.000 4.500		Wt. 20# 10.5 & 11.6		d 6.456 4.052		Set At 5046 4890'-7541'		Perforations: From To	
Tbg. Size 2.375		Wt. 4.7#		d 1.995		Set At 7309'		Perforations: From 7333' To 7496'	
Type Well - Single - Brdenhead - G.G. or G.O. Multiple GG-Multiple						Packer Set At 4947'		County San Juan	
Producing Thru Tubing		Reservoir Temp. °F @		Mean Annual Temp. °F		Baro. Press. - P _g 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.	
SI							1080			
1.	2" X 3/4"						2#			1 Hour
2.							1#			2 Hours
3.							1#			3 Hours
4.										
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		13.2	1.0000	.9258	1.0000	151
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	XXXXXX
3.					Specific Gravity Flowing Fluid	XXXXX
4.					Critical Pressure	P.S.I.A. _____ P.S.I.A. _____
5.					Critical Temperature	R _____ R _____

NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1		13.2	174.2	1192726.6
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0001$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0001$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 151$

REVIEWED

8-8-80

REC'D

Absolute Open Flow <u>151</u> Mcfd @ 15.025		Angle of Slope @ _____		Slope, n <u>.75</u>	
---	--	------------------------	--	---------------------	--

Remarks: _____			
----------------	--	--	--

Approved by Division	Conducted By: Steve Kellanaers	Calculated By: James Smith	Checked By: L. O. Van Ryan
----------------------	-----------------------------------	-------------------------------	-------------------------------