

OIL CONSERVATION DIVISION

P. O. BOX 2088

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

SANTA FE, NEW MEXICO 87501

Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 12-13-82	
Company Southland Royalty Company				Connection Southern Union Gathering	
Pool Basin				Formation Dakota	
Completion Date 12-08-82		Total Depth 7170'		Plug Back TD 7118'	
				Elevation 5865' GR	
Farm or Lease Name Calloway				Well No. 3	
Gauge Size 4.500		Wt. 23# 4.052		Set At 4638'	
				Perforations: From To	
Thg. Size 2.375		Wt. 4.7# 1.995		Set At 7042'	
				Perforations: From 6867' To 7061'	
Type Well - Single - Brdenhead - G.G. or G.O. Multiple G. G. - Multiple				Packer Set At 4755'	
Producing Thru Tubing		Reservoir 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							1757				
1.	2"	X	3/4"				106				1 hr
2.							90				2 hrs
3.							59				3 hrs
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		71.2	1.0000	.9258	1.0000	815
2.							
3.							
4.							
5.							

NO.	P _r	Temp. °R	T _r	Gas Liquid Hydrocarbon Ratio _____ Mcf/lbl.
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

$P_c = 1769.2$ $P_w = 3130068.6$				$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.0016$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0012$	
NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²			
1		71.2	5069.4	3124999			
2							
3							
4							
5							

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 816$			
Absolute Open Flow _____ 816 _____ Mcfd @ 15.025		Angle of Slope _____ Slope, n .75	
Remarks: _____			

Approved By Division	Conducted By: Don Thompson	Calculated By: James Smith	Checked By: C.C. Parsons
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