

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 2-3-82	
Company Southland Royalty Company			Connection Southern Union Gathering		
Pool Crouch Mesa			Formation Mesa Verde		Unit
Completion Date 1-16-82		Total Depth 6705'	Plug back TD 6642'		Elevation 5777' GL
Farm or Lease Name Cooper					
Csq. Size 5.500	Wt. 15.5#	d 4.950	Set At 6681'	Perforations: From To	
Well No. 3-E					
Thq. Size 1.900	Wt. 2.76#	d 1.610	Set At 3677'	Perforations: From 3650' To 3696'	
Unit I			Sec. 6	Twp. 29N	R1/4 11W
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Multiple - G.G.				Packer Set At 3752'	
Producing Thru Tubing		Reservoir Temp. °F 8	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
1.	2"	X	3/4"				898		902		1 hr
2.							231		841		2 hrs
3.							211		838		3 hrs
4.							226		833		
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		238.2	1.0000	.9258	1.0000	2727
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons	Deg.
2.					Specific Gravity Separator Gas	
3.					Specific Gravity Flowing Fluid	
4.					Critical Pressure	P.S.I.A.
5.					Critical Temperature	R

F _c 914.2 P _c ² 835761.6				
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1		845.2	7143630	121398.6
2				
3				
4				
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \frac{6.8844}{1} = 6.8844$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{4.2501}{1} = 4.2501$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 11590$$

Absolute Open Flow	11590	Mcf/d @ 15.025	Angle of Slope @	Slope, n	.75
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Remarks:

Approved by Division	Conducted By: Kelly Maxwell	Calculated By: James Smith	Checked By: R. E. Fielder
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