

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088

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 9-08-81		OCT 13 1981 OIL CON. COM. DIST. 3	
Company Southland Royalty Company			Connection Southern Union Gathering			
Pool Blanco			Formation Mesa Verde			
Completion Date 8-20-81		Total Depth 7105'	Plug Back TD 7060'		Elevation 6466' GL	Farm or Lease Name Hanks
Coq. Size 5.500	Wt. 17#	d 4.892	Set At 7105'	Perforations: From To		Well No. 18-M
Thq. Size 1.900	Wt. 2.76#	d 1.610	Set At 5060'	Perforations: From 4810' To 5077'		Unit Sec. Twp. Rye. I 5 27N 9W
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Multiple - G.G.				Packer Set At 5182'		County San Juan
Producing Thru Tubing		Reservoir Temp. °F #	Mean Annual Temp. °F		Baro. Press. - P _a	State New Mexico
L	H	Cq	% 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							527		880		
1.	2"	x	3/4"				12		640		1 hr
2.							40		600		2 hrs
3.							2		560		3 hrs
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, F _{sp}	Rate of Flow Q, Mcfd
1	12.365		14.2	1.0000	.9258	1.0000	163
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/lb.
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 _____ F

P _c 892.2 P _c ² 796020.8			
NO	P _t ²	P _w	P _w ²
1		572.2	327412.8
2			
3			
4			
5			

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \frac{1.6987}{1.6987 - 0.468608} = 1.6987$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{1.4879}{1.4879 - 0.468608} = 1.4879$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 242$$

Absolute Open Flow _____ 242 _____ Mcfd @ 15.025	Angle of Slope θ _____	Slope, n = .75
Remarks: _____		

Approved By Division	Conducted By: Richard Ramos	Calculated By: James Smith	Checked By: L.O. Van Ryan
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