

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

Form C-122
Revised 9-1-63

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 04-13-80									
Company SOUTHERN UNION EXPLORATION		Collection AIR									
Pool MISSISSIPPI		Unit F									
Completion Date 04-11-80	Total Depth 13831	Flow Test To 13790	Elevation 3962 GL								
County STATE 17		Well No. # 1									
Csg. Size 5 1/2	Wt. n/20	Set At 13831	Perforations: From 13228 To 13258								
Trq. Size 2 3/8	Wt. n/80	Set At 13125	Perforations: From To								
Type Well - Single - Provenhead - G.G. or G.O. Multiple SINGLE GAS WELL		Packer Set At 13125	County LEA								
Producing Thru TBG.	Reservoir Temp. °F 205 @ 13125	Mean Annual Temp. °F 60	Boro. Press. - P _a 13.2								
L 13125	H 13125	Gg .700	% CO ₂ 3.543								
			% N ₂ 3.285								
			% H ₂ S								
		Prover	Meter Run 4 "								
			Tag FLG.								
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	Duration of Flow
SI							2735				41 HRS.
1.	4 X 1.500			600	8.0	110	2590				1 HR.
2.	4 X 1.500			600	15.0	104	2460				1 HR.
3.	4 X 1.500			600	34.0	102	2350				1 HR.
4.	4 X 1.500			600	72.0	105	2170				1 HR.
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, Mfd				
1	10.84	70.04	613.2	.9551	1.195	1.047	907				
2	10.84	95.91	613.2	.9602	1.195	1.049	1251				
3	10.84	144.39	613.2	.9619	1.195	1.049	1887				
4	10.84	210.12	613.2	.9594	1.195	1.049	2739				
5											
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 94.222 Mcf/bbl.						
1.	.91	570	1.51	.912	A.P.I. Gravity of Liquid Hydrocarbons 56 @ 60 Deg.						
2.	.91	564	1.49	.908	Specific Gravity Separator Gas .700 X X X X X X X X						
3.	.91	562	1.49	.908	Specific Gravity Flowing Fluid X X X X X .731						
4.	.91	565	1.49	.908	Critical Pressure 675 P.S.I.A. 675 P.S.I.A.						
5.					Critical Temperature 378 R 387 R						
P _r 2748.2 P _w 27552.6					$(1) \frac{P_r^2}{P_r^2 - P_w^2} = 3.045$ $(2) \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 3.045$						
NO.	P _r	P _w	P _r ²	P _w ²	$ADP = 0 \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 8.339$						
1		2607.4	6798.5	754.1							
2		2482.9	6164.8	1387.8							
3		2392.7	5725.0	1827.6							
4		2252.1	5072.0	2480.6							
5											
Absolute Open Flow 8,339. Mcf @ 15.025					Angle of Slope 45		Slope, n 1.000				
Remarks: The well produced 3 BBLS. of distillate during the test.											
Approved By County Agent John A. Nguyen		Conducted By: JOHN DAVIS		Calculated By: RICK PAGAN		Checked By:					