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State of New Mexico
Geology, Minerals and Natural Resources Department

Form C-122
Revised 4-1-91

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator ENRON OIL & GAS Company				Lease or Unit Name RANGER 17, FED. COM			
Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 4-27-96		Well No. 7	
Completion Date 1-15-96		Total Depth 11,780		Plug Back TD 11,714		Elevation 3520	
Csg. Size 5 1/2		Wt. 17		d 4.892		Set At 11,780	
Tbg. Size 2-7/8		Wt. 6.5		d 2.441		Set At 11,334	
Perforations: From: 11,234 To: 11,334				County EDDY			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple single				Packer Set At 11,117.5			
Producing Thru tbg		Reservoir Temp. °F 185		Mean Annual Temp. °F 60		Baro. Press - P 13.2	
L 11,117		H 11,117		Gg .684		% CO ₂ .52	
				% N ₂ .57		% H ₂ S -0-	
				Prover -0-		Meter Run 4.026	
						Taps 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
SI							1840				
1.	4.026	X	2.250	436	1.0	104°	1704	82°	PKR		45 min
2.	4.026	X	2.250	436	2.3	102°	1630	86°	"		45 min
3.	4.026	X	2.250	449	4.0	94°	1519	88°	"		45 min
4.	4.026	X	2.250	449	9.0	94°	1390	88°	"		45 min
5.											

RATE OF FLOW CALCULATIONS

NO.	COEFFICIENT (24 HOUR)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _L	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	25.64	21.194	449.2	.9602	1.209	1.031	650
2.	25.64	32.140	449.2	.9619	1.209	1.034	991
3.	25.64	43.000	462.2	.9688	1.209	1.032	1333
4.	25.64	64.500	462.2	.9688	1.209	1.032	1999
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P. I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	.661	564	1.571	.940	21,387	52.0	.684	N/A	679	359
2.	.661	562	1.565	.936						
3.	.680	554	1.543	.939						
4.	.680	554	1.543	.939						
5.										

P _c 1853.2		P _c ² 3434.4		1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.426$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.426$	
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²			
1.	2948.8	1718.7	2953.9	480.4			
2.	2700.1	1646.8	2712.1	722.3			
3.	2347.6	1539.3	2369.5	1064.9			
4.	1969.0	1420.7	2018.5	1415.9			
5.							

Absolute Open Flow	4.849	Mcfd @ 15.025	Angle of Slope θ	45	Slope, n	1.000
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Remarks:

Approved By Division	Conducted By: PRO WELL TESTER	Calculated By: MB	Checked By: BM
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Betty Lillard
Enron Oil & Gas Company
Regulatory Analyst

5/10/96