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appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Energy, 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 POGO PRODUCING						Lease or Unit Name FEDERAL 8					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 8-28-95			Well No. 1		
Completion Date		Total Depth 15100		Plug Back TD 14585		Elevation			Unit Ltr. - Sec. - TWP - Rge.		
Csg. Size 5"	Wt. 18#	d	Set At	Perforations: From: 14511 To: 14524				County LEA			
Tbg. Size 2-7/8 2-3/8	Wt. 6.5 4.7	d 2.316 1.995	Set At 14420	Perforations: From: To:				Pool Red Tank			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple single						Packer Set At 14420			Formation AFOKA - Morton		
Producing Thru cbg		Reservoir Temp. °F		Mean Annual Temp. °F 60°		Baro. Press - P _a 13.2			Connection AIR		
L 14420	H 14420	G _s .598	% CO ₂ 1.01	% N ₂ .38	% H ₂ S	Prover -0-		Meter Run 3.067	Taps 8lg.		

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	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						3220				72 hr.
1.	3.068 X	1.250	100	2.00	82	3000	94	PKR		45 min
2.	3.068 X	1.250	100	6.00	60	2350	94			1 hr.
3.	3.068 X	1.250	100	12.00	55	1705	90			45 min
4.	3.068 X	1.250	100	24.00	55	830	90			1 hr.
5.										

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor FL	Gravity Factor Fg	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	7.577	15.05	113.2	.9775	1.293	1.006	145
2.	7.577	26.06	113.2	1.000	1.293	1.006	257
3.	7.577	36.86	113.2	1.005	1.293	1.006	365
4.	7.577	52.12	113.2	1.005	1.293	1.006	516
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.	.16	542	1.53	.988	4.012	55.9	.598	XXXXXX	*676	*353
2.	.16	520	1.47	.988				XXXXXX		
3.	.16	515	1.44	.988						
4.	.16	515	1.44	.988						
5.										

P _c 3233.2		P _w 10453.6	
NO.	P _i ²	P _w ²	P _c ² - P _w ²
1.	3013.3	9080.1	1373.5
2.	2363.6	5586.7	4866.9
3.	1719.3	2556.1	7497.5
4.	848.1	719.2	9734.4
5.			

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.074$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 554$

2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.074$

Absolute Open Flow 554	Mcfd @ 15.025	Angle of Slope θ 45	Slope, n 1.000
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Remarks: ***=CORRECTED TO 1.01% Co₂**

12 bbls CONDENSATE DURING TEST 55.9 @60°

Approved By Division	Conducted By: PRO WELL TESTER	Calculated By: BM	Checked By: BM
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