

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

Form C-122
Revised 9-1-65

C/SF
C-122
4565

Type Test ☒ Initial FOUR POINT ☐ Annual ☐ Special				Test Date 1-9-82		660 FSL RECEIVED	
Company FLAG REDFERN				Connection AIR NEW WELL		660 FEB 5 1982	
Well Wildcat San Andres UNDESIGNATED				Formation SAN ANDRES		Unit P O.C.D.	
Completion Date 1-9-82		Total Depth 4565		Plug Back TD 1115		Elevation 4023 KB	
Csg. Size 8.625		Wt. 24.0		Set At 1115		Perforations: From 826 To 872	
Temp. Size 2.375		Wt. 4.7		Set At 807		Perforations: From OPEN To ENDED	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At NONE		County DE BACA	
Producing Thru TUBING		Reservoir Temp. °F 74° 849		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2	
L 849		H 849		Gg .722		% CO ₂ .320	
				% N ₂ 25.043		% H ₂ S 2.00	
				Prover 2.00		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				344	0						24 HRS.
1	2.00	X	.0625	335	0	72	335	67			2
2	2.00	X	.09375	293	0	70	293	70			2
3	2.00	X	.125	247	0	70	247	70			2
4	2.00	X	.1875	270	0	70	270	70			2
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 _{spv}	Rate of Flow Q, Mcfd
1	.0657	.000	348.2	.9887	1.1720	1.0217	27
2	.1446	.000	306.2	.9905	1.1720	1.0190	57
3	.2716	.000	260.2	.9905	1.1720	1.0159	83
4	.6237	.000	283.2	.9905	1.1720	1.0174	209
5							

NO	P	Temp. °H	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	.56	532	1.62	.958			.722		627	328
2	.49	530	1.62	.963						
3	.41	530	1.62	.969						
4	.45	530	1.62	.966						
5										

$P_c = 357.2$ $P_w^2 = 127.6$					$P_c^2 = 127.6$	
NO	P _i ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2}$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n$
1			121.2	6.4		
2			93.8	33.8		
3			67.7	59.9		
4			80.4	47.2		
5						

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 565$

$\frac{P_c^2}{P_c^2 - P_w^2} = 2.7034$

$\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.7034$

Absolute Open Flow	565	Mcfd @ 15.025	Angle of Slope θ	45	Slope, n	1.000
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Remarks: **BOTTOM HOLE PRESSURES MEASURED WITH AMERADA PRESSURE GAUGES**

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	RICHARD TOWNLEY	BENNETT - CATHEY	