

N I I CO OIL CONSERVATION COMM C
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 9-24-98	
Company Santa Fe Energy				Connection		
Pool				Formation Morrow		Unit
Completion Date		Total Depth		Plug Back TD 13358'		Elevation
Casing Size 5.5		Wt. 20		Set At 4.778		Performances: From 13078 To 13146
Thg. Size 2.375		Wt. 4.7		Set At 1.995		12927
Type Well - Single - Bradenhead - G.C. or G.O. Multiple				Packer Set At 12927		County Lea
Producing Thru Tubing		Reservoir Temp. °F 173° 13112'		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2
L 13112		H 13112		G _g 0.602		% CO ₂ 0.42
				% N ₂ 0.27		% H ₂ S 0.0
				Prover		Meter Run 3.068
						Taps Flange

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	3.068	x	1.25	625			5088	86	-	-	193
1.	3.068	x	1.25	625	3.7	101	3691	86	-	-	1
2.	3.068	x	1.25	625	5.3	96	3334	86	-	-	1
3.	3.068	x	1.25	625	8.4	93	2926	86	-	-	1
4.	3.068	x	1.25	625	10.1	90	2592	86	-	-	1
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	7.58	48.59	638.2	0.9628	1.2888	1.042	476
2	7.58	58.16	638.2	0.9671	1.2888	1.0435	573
3	7.58	73.22	638.2	0.9697	1.2888	1.0445	724
4	7.58	80.29	638.2	0.9723	1.2888	1.0455	797
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	0.95	561	1.57	0.921	25.539	48.5	0.602	XXXXXXX	674	358
2	0.95	556	1.55	0.918				0.712		
3	0.95	553	1.55	0.917						
4	0.95	550	1.54	0.915						
5										

NO.	P _i ²	P _w	R _w ²	P _c ² - R _w ²	(1) $\frac{P_c^2}{P_c^2 - R_w^2} =$	(2) $\left[\frac{P_c^2}{P_c^2 - R_w^2} \right]^n =$
1	26179	3614	13062	12167	1.3204	1.3204
2	21725	3237	10477	14752		
3	17075	2816	7930	17299		
4	13562	2474	6121	19107		
5						

Absolute Open Flow		1052		Mcfd @ 15.025		Angle of Slope θ		45.0		Slope, n		1.00	
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Remarks: Bottomhole pressure measured w/bhp gauge T-64															
Approved By Commission:				Conducted By:				Calculated By:				Checked By:			
				ARC Pressure Data				Chad R. Mayo							