

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL RECEIVED BY

Type Test 4 POINT ☒ Initial ☐ Annual ☐ Special				Test Date 4-20-87		MAY 18 1987	
Company SANTA FE ENERGY Corp.				Connection TO AIR		O. C. D.	
Pool 1) Sand Lanes (1000)				Formation MORROW		Unit ARTESIA	
Completion Date 4-17-87		Total Depth 15132		Plug Back TD 15052		Elevation	
Farm or Lease Name STERLING SILVER 33		Well No. FED. 2		Unit G		Sec. 33	
Csg. Size 4.5		Wt. 13.5		Set At 3.920		15132	
Trq. Size 2.375		Wt. 4.7		Set At 1.995		14736	
Perforations: From 14808		To 14818		Perforations: From OPEN		To ENDED	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At 14736		County EDDY	
Producing Thru TUBING		Reservoir Temp. °F 190 @ 14813		Mean Annual Temp. °F 60		State NEW MEXICO	
L 14813		H 14813		Cg .577		% CO ₂ 1.58	
				% N ₂ 0.29		% H ₂ S 0	
Prover 0		Meter Run 4.026		Taps FLG			
FLOW DATA				TUBING DATA		BHP DATA	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.
SI							
1.	4.026	1.000	563	8.0	110	5210	70
2.	4.026	1.000	580	13.0	94	5060	70
3.	4.026	1.000	605	22.0	79	4637	71
4.	4.026	1.000	610	37.0	75	4100	71
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, Fpv	Rate of Flow Q, Mcfd
1	4.75	67.89	576.2	0.9551	1.3168	1.0310	418
2	4.75	87.82	593.2	0.9688	1.3168	1.0359	552
3	4.75	116.62	618.2	0.9822	1.3168	1.0423	747
4	4.75	151.85	623.2	0.9859	1.3168	1.0439	978
5							
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 0 Mcf/bbl.		
1	0.85	570	1.64	0.941	A.P.I. Gravity of Liquid Hydrocarbons 0 Deg.		
2	0.87	554	1.59	0.932	Specific Gravity Separator Gas .577 XXXXXXXXXX		
3	0.91	539	1.55	0.921	Specific Gravity Flowing Fluid XXXXX .577		
4	0.92	535	1.54	0.918	Critical Pressure 680 P.S.I.A. 680 P.S.I.A.		
5					Critical Temperature 348 R 348 R		
P _r 5857.6 P _r ² 34311							
NO.	P _i ²	P _w	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 1.9634$		
1		5212	27167	7144	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.7980$		
2		5057	25570	8741	Best FO-2		
3		4638	21508	12803	5-22-87		
4		4103	16836	17476	comp & BK		
5					AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1758$		
Absolute Open Flow 1758 Mcfd @ 15.025				Angle of Slope 49°		Slope, n 0.870	
Remarks: BHP TAKEN WITH AMERADA BOMBS							
Approved By Division		Conducted By:		Calculated By:		Checked By:	