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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 SANTA FE ENERGY						Lease or Unit Name STERLING SILVER 3					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 5-13-96		Well No. 1			
Completion Date 5-4-96		Total Depth 15244		Plug Back TD 14335		Unit Ltr. - Sec. - TWP - Rge.					
Csg. Size 5 1/2		Wt. 17		d 4.892		Set At 15244		Perforations: From: 13517 To: 13909		County EDDY	
Tbg. Size 2-3/8		Wt. 4.7		d 1.995		Set At 13425		Perforations: From: 13376 To: 13909		Pool	
Type Well - Single - Bradenhead - G.G. or P.O. Multiple single						Packer Set At 13376		Formation ATOKA			
Producing Thru Tbg. 13425		Reservoir Temp. °F 208.2		Mean Annual Temp. °F 60		Baro. Press - P _a 13.2		DIST. 2		Connection SALES	
L 13425		II 13425		Gg .720		% CO ₂ 1.43		% N ₂ .19		% 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	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	
1.	4.026 X 2.000	600	5"	60°	7200	5365	97°	PKR		72 hr.
2.	4.026 X 2.000	600	3"	78°	3200	95°	"			1 hr.
3.	4.026 X 2.000	600	10"	74°	2350	90°	"			1 hr.
4.	4.026 X 2.000	600	15"	62°	1600	84°	"			1 hr.
5.										

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)	$\frac{h_w P_m}{P_a}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	19.81	55.37	613.2	1.000	1.179	1.085	1403
2.	19.81	42.89	613.2	.9831	1.179	1.062	1045
3.	19.81	78.30	613.2	.9868	1.179	1.064	1920
4.	19.81	95.90	613.2	.9981	1.179	1.067	2385
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	N/A	Mcf/bbl
1.	.913	520	1.319	.851	A.P. L. Gravity of Liquid Hydrocarbons	N/A	Deg.
2.	.801	538	1.365	.886	Specific Gravity Separator Gas	.720	XXXXXXXXXX
3.	.795	534	1.355	.884	Specific Gravity Flowing Fluid	N/A XXXXX	
4.	.777	522	1.324	.879	Critical Pressure	671	P.S.I.A.
5.					Critical Temperature	394	R

P _c 7213.2		P _c ² 52030.3	
NO.	P _i ²	P _w	P _w ²
1.	28817.6	5389.0	29041.1
2.	10324.6	3220.6	10372.3
3.	5584.7	2393.7	5730.0
4.	2602.4	1680.1	2822.7
5.			

$$1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.057$$

$$2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.057$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.522$$

Absolute Open Flow 2.522 Mcfd @ 15.025		Angle of Slope θ 45°	Slope, n 1.000
Remarks: NO FLUID MADE DURING TEST.			

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