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appropriate district office.
See Rule 401 & Rule 1122

State of New Mexico
Energy Minerals and Natural Resources

Form C-122
Revised October, 1999

Oil Conservation Division

2020 South Pacheco

Santa Fe, NM 87505

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator ELK OIL COMPANY				Lease or Unit Name SE STATE							
Type Test ☐ XX Initial ☐ Annual ☐ Special				Test Date 05/21/01		Well No 4					
Completion Date 5/10/01		Total Depth 5987		Plug Back TD		Elevation					
Csg. Size 5.5	Wt. 17	ID 4.89	Set At 5987	Perforations: From: 5787 To: 5797		County CHAVES					
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 5978		Formation CISCO					
Producing Thru CASING		Reservoir Temp. °F		Mean Annual Temp. °F		Baro. Press - P _a 13.2					
L		H		Gg 0.65		Prover					
				%CO ₂ 0.2721		%N ₂ 3.4366					
				%H ₂ S 0.0		Meter Run 4 inch					
						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	4"								1450		
1.	4"		2.125	219	10	79			1150		1 Hour
2.	4"		2.125	232	28	74			950		1 Hour
3.	4"		2.152	252	51	73			720		1 Hour
4.	4"		2.125	276	69	74			560		1 Hour
5.											
RATE OF FLOW CALCULATIONS											
No.	COEFFICIENT (24 HOUR)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress Factor F _{pv}	Rate of Flow Q, Mcfd				
1.	27.02	48.2	232.2	0.9822	1.2403	1.0200	16.8				
2.	27.02	82.9	245.2	0.9868	1.2403	1.0219	2800				
3.	27.02	116.3	265.2	0.9877	1.2403	1.0239	3942				
4.	27.02	141.3	289.2	0.9868	1.2403	1.0260	4793				
5.											
No.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.						
1.					A. P. I. Gravity of Liquid Hydrocarbons _____ Deg						
2.					Specific Gravity Separator Gas 0.65 XXXXXXXXXX						
3.					Specific Gravity Flowing Fluid XXXXXX						
4.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.						
5.					Critical Temperature _____ R _____ R						
P _c 1484.1		P _c ² 2203									
No.	P _r ²	P _w ²	P _w ²	P _c ² - P _w ²							
1.	1181.7		1396.4	806.2	(1) P _r ² = 1484.1 (2) P _c ² = 2203						
2.	989.6		979.3	1223.2	$\frac{P_c^2 - P_w^2}{P_r^2 - P_w^2}$						
3.	780.7		609.6	1593.0	AOF = Q $\left[\frac{P_c^2}{P_r^2 - P_w^2} \right]^n = \underline{\underline{6412}}$						
4.	652.5		425.7	1776.9							
5.											
Absolute Open Flow 6412				Mcf/d @ 15.025				Angle of Slope 36.4		Slope, n 1.35	
Remarks: Choke Sizes: Q₁ = 12/64 Q₂ = 18/64 Q₃ = 25/64 Q₄ = 33/64											
Approved By Division				Conducted By: KELTIC SERVICES				Calculated By: LARRY MOSSBARGER			
								Checked By: MIKE KELLY			

CAOF PLOT

