

Submit in duplicate to
appropriate district office.
See Rule 401 & Rule 1122

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-122
Revised October, 1999

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator TIMBER SHARP					Lease or Unit Name IRON HOUSE STATE					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 1/31/01		Well No. 1		
Completion Date 1/26/01		Total Depth		Plug Back TD 5369		Elevation 3840		Unit Ltr - Sec - TWP - Rge 1 19S 35E		
Csg. Size 5 1/2	Wt. 15 1/2	d 4.95	Set At 4308	Perforations: From: 4424 To: 4430				County IEA		
Tbg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 4308	Perforations: From: To:				Pool		
Type Well-Single-Bradenhead-G.G. or G.O. Multiple SINGLE				Packer Set At 4308				Formation QUEEN		
Producing Thru TUBING		Reservoir Temp. °F 97.39		Mean Annual Temp. °F 60		Baro. Press.-P _a 13.2		Connection AIR		
I. 4308	II 4308	Gg 0.726	%CO ₂ 0.025	%N ₂ 17.952	%H ₂ S N/A	Prover N/A	Meter Run 4.026	Taps FLG		
FLOW DATA					TUBING DATA				CASING DATA	
No.	Prover Line Size	Orifice x 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	Duration of Flow
SI						1385	N/A	PKR	N/A	
1	4.026 X 1.500		522	6.25	61	1305				1 HR.
2	4.026 X 1.500		522	15.6	79	1220				1 HR.
3	4.026 X 1.500		531	25.5	79	1150				1 HR.
4	4.026 X 1.500		567	42.2	75	985				1 HR.
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	10.84		57.8	535.2	0.999	1.174	1.048	770		
2	10.84		91.4	535.2	0.9822	1.174	1.045	1193		
3	10.84		1117.8	544.2	0.9822	1.174	1.045	1460		
4	10.84		156.5	580.2	0.9359	1.174	1.044	1945		
5										
No.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio			N/A Mcf bbl.		
1	0.81	521	1.46	0.911	A.P. I. Gravity of Liquid Hydrocarbons			N/A Deg.		
2	0.83	539	1.51	0.915	Specific Gravity Separator Gas			0.726 XXXXXXXX		
3	0.83	539	1.51	0.915	Specific Gravity Flowing Fluid			N/A XXXXXX		
4	0.83	535	1.5	0.918	Critical Pressure			643 P.S.I.A. P.S.I.A.		
5					Critical Temperature			356 R. R.		
P _c 1391.8 P _{c2} 1937.1										
No.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $P_c^2 = 2.24$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.11$					
1		1267	1606	331.1	$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4103.9$					
2		1229.6	1511.9	425.2						
3		1154.1	1331.9	605.2						
4		1036.4	1074.1	863						
5										
Absolute Open Flow 4103.9 Mcfd @ 15.025					Angle of Slope (°): 47.16		Slope n: 1			
Remarks: * CALCULATED FROM KNOWN BOTTOM HOLE PRESSURES. NO LIQUID MADE DURING TEST.										
Approved By Division:			Conducted By: Signal Wireline			Calculated By: BM			Checked By: <i>[Signature]</i> BM	

TIMBER SHARP
IRON HOUSE STATE #1

