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MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator Bass Enterprises Production Co.				Lease or Unit Name James Ranch Unit			
Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 3-10-95		Well No. 70	
Completion Date 1-20-95		Total Depth 14139		Plug Back TD 14026		Elevation 3331.1' GR	
Csg. Size 5 1/2		Wt. 20#		Set At 14139		County Eddy	
Tbg. Size 2-3/8		Wt. 4.7#		Set At 12695		Pool Livingston Ridge NE	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 12695		Formation Atoka	
Producing Thru Csg 12748		Reservoir Temp. °F 201 @ 12748		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
L 12748		H 12748		G _g .614		% CO ₂ .48	
				% N ₂ .74		% H ₂ S	
				Prover		Meter Run 4.026	
						Taps flg	

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.	
SI							2260		2260	24 hr.
1.	4	x	2.750	421	30.00	67	980		915	2 hr.
2.	4	x	2.750	426	39.00	67	902		842	2 hr.
3.	4	x	2.750	448	49.00	68	818		760	2 hr.
4.	4	x	2.750	522	60.63	78	607		548	2 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 _{sp}	Rate of Flow Q, Mcfd
1.	41.10	114.13	434.2	.9933	1.276	1.039	6,177
2.	41.10	130.88	439.2	.9933	1.276	1.039	7,084
3.	41.10	150.33	461.2	.9924	1.276	1.041	8,145
4.	41.10	180.13	535.2	.9831	1.276	1.043	9,686
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Super Compress. Factor, F _{sp}	Rate of Flow Q, Mcfd
1.	.64	527	1.45	.927	508.2	1.039	6,177
2.	.65	527	1.45	.926	59.6 @ 60°	1.039	7,084
3.	.68	528	1.45	.923	.614	1.041	8,145
4.	.80	538	1.49	.920	.7405	1.043	9,686
5.							

P _c 2273.2 P _c ² 5167.4				1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.080$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.080$	
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²			
1.	993.2	986.4	4181.0				
2.	915.2	837.6	4329.8				
3.	831.2	690.9	4476.5				
4.	620.2	384.6	4782.8				
5.							

Absolute Open Flow 10.464	Mcfd @ 15.025	Angle of Slope θ 45	Slope, n 1.000
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Remarks: **Well made 3.51 BBLS 59.6 API Condensate**

Approved By Division	Conducted By: Pro Well Tester	Calculated By:	Checked By:
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