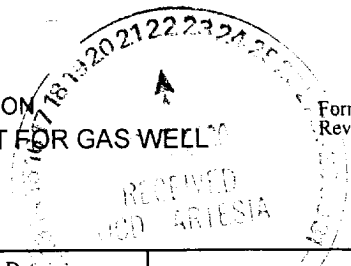


NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
 Revised 9-1-65



Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 11/10/00	
Company Gruy Petroleum Management Co.				Connection Conoco			
Pool N Shugart Morrow				Formation Morrow		Unit G	
Completion Date 11/7/00		Total Depth 11996		Plug Back TD 11954		Elevation 3702'	
Csg. Size 5.5		Wt. 17.0		d 4.892		Set At 11996	
Tbg Size 2.375		Wt. 4.7		d 1.995		Set At 11733	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 11713		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 167 @ 11784		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
L 11784		H 11784		G _g 0.679		% CO ₂ 0.374	
				% N ₂ 0.629		% H ₂ S	
				Prover		Meter Run 4.026	
						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							3612	58			72
1.	4.026	2.000		560	19.8	67	2472	61			1.0
2.	4.026	2.000		530	13.6	83	2574	54			1.0
3.	4.026	2.000		512	6.5	68	2654	50			1.0
4.	4.026	2.000		494	1.9	61	2684	50			1.0
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	19.81	106.50	572.8	0.9938	1.2136	1.0632	2705.3
2	19.81	85.93	543.0	0.9786	1.2136	1.0525	2127.9
3	19.81	58.42	525.0	0.9924	1.2136	1.0574	1473.8
4	19.81	31.04	507.0	0.9988	1.2136	1.0580	788.5
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	0.86	527	1.38	0.886	47.000	59.3	0.679	XXXX	669	381
2.	0.81	543	1.43	0.903						
3.	0.78	528	1.39	0.896						
4.	0.76	521	1.37	0.895						
5.										

NO.	P _r ²	P _w ²	P _c ²	P _c ² - P _w ²
1.		3573	12764	419
2.		3587	12865	318
3.		3601	12965	218
4.		3613	13053	130
5.				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 60.4711$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 66671$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 45.2287$

Absolute Open Flow 66671 Mcfd @ 15.025	Angle of Slope 0 47.1	Slope, n 0.9292
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Remarks: Bottomhole pressures were recorded using electronic gauge #Z-3.

Approved By Commission:	Conducted By: ARC Pressure Data, Inc.	Calculated By: Rod Dodson	Checked By:
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