

Submit in duplicate to
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 2083
Santa Fe, New Mexico 87504-2083

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator Chi Operating Inc. V					Lease or Unit Name Cannon Ball 19' st com				
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 5-25-99		Well No. 1		
Completion Date 5-6-99		Total Depth 10,150		Plug Back TD 10096		Elevation		Unit Lit. - Sec. - TWP. - Rge. 9 17-S 28-E	
Log. Size 5 1/2	Wt. 17#	d 4.892	Set At 10150'	Perforations: From: 9857 To: 9869		County Eddy			
Log. Size 2 3/8	Wt. 4.7#	d 1.995	Set At 9841	Perforations: From: To:		Pool WC CROW FLAT MORROW SE GA2			
Type Well - Single - Braidedhead - G.O. or G.Q. Multiple Single					Packer Set At 9841		Formation MORROW 96840		
Producing Thru Tbg L 9841		Reservoir Temp. °F 145°		Mean Annual Temp. °F 60°		Baro. Press. "H ₂ O" 13.2		Connection Sales	
II 9841		G _g .636	% CO ₂ .4674	% N ₂ .3725	% H ₂ S N/A	Prover N/A	Meter Run 4.026	Taps F/g	

FLOW DATA

NO.	Prover Line Size	X	Orifice Size	Press. psig.	Duff. h _w	Temp. °F	TUBING DATA		CASING DATA		Duration of Flow
							Press. psig.	Temp. °F	Press. psig.	Temp. °F	
St							3600	N/A	PKR	N/A	
1.	4.026 X	1.375		539	9.8	93°	3470				60 min
2.	4.026 X	1.375		542	17.4	99°	3350				60 min
3.	4.026 X	1.375		545	37.0	95°	3150				60 min
4.	4.026 X	1.375		552	65.0	91°	2800				60 min
5.											

RATE OF FLOW CALCULATIONS

NO.	COEFFICIENT (G/HOUR)	$h_w P_m$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{sp}	Rate of Flow Q, Mcfs
1.							
2.							870
3.							1145
4.							1698
5.							2065

VOLUME MEASURED BY TOTAL FLOW METER

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Method
1.					N/A	
2.					A.P. I. Gravity of Liquid Hydrocarbons	N/A
3.					Specific Gravity Separator Gas	.636
4.					Specific Gravity Flowing Fluid	XXXXX
5.					Critical Pressure	673
					Critical Temperature	364

P_r 3613.2 P_c 13055.2

NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²	1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.53$	2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^a = 1.62$
1.		3483.2	12132.7	922.5		
2.		3363.2	11311.1	1744.1		
3.		3163.2	10005.1	3049.4		
4.		2813.2	7914.1	5141.1		
5.						

AOF = Q

$$\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^a = 3.345$$

Absolute Open Flow 3.345

Mcfd @ 15.025

Angle of Slope θ 62.4

Slope, n .521

Remarks *No liquid made during test

Approved By Division

Conducted By:
Chi operating inc.

Calculated By:
Pro well testing M.B.

Checked By:
B.M.