Kim Radway DVM, DABVP (Canine/ Feline)

Date of Study: 3/13/24 **Patient**: Marlin **Client**: Chatmas

Breed: Feline Maine Coon **Sex**: Intact male **Age**: 1 years **Weight**: 13.5 lbs

Clinic: Glenwood VC **Doctor**: Dr. Zduoba

Echo indication: This is a pre-breeding screening echocardiogram.

1. **Left ventricular dimensions**: **(M-mode)**

Diastole	IVSd	4.7 mm	[3-6]
	LVIDd	17.1 mm	[10.8-21.4]
	LVFWd	6.8 mm	[2.5-6]
Systole	IVSs	9.3 mm	[4-9]
	LVIDs	6.3 mm	[4-11.2]
	LVFWs	11 mm	[4.3-9.8]
	FS%	63.37 %	[30-46]

2. **Left atrial dimensions**: (**2D)**

LA	13.6 mm	[7-17]
AO	11.6 mm	[6-12.1]
LA:Ao ratio	1.17	[<1.3]

3. **Mitral Valve:** EPSS 1.5 mm [< 8 mm]

Mitral Valve Prolapse (canine) none X present ___.

4. Ratios

IVSd:LVIDd ratio	0.27	(.22 - .34) (< .22 suggests inadequate wall thickness)
LVIDd:LVPWd ratio	2.5	(3 - 5) < 3 suggests LVH, > 5 suggests LV dilation)
LV:RV ratio	1.5	(> 2) (< 2 suggests RV dilation)
LVW:RVW ratio	1.0	(> 1.5) (< 1.5 suggests RVH)

5. Color Doppler Insufficiencies

Mitral Valve: None.

Tricuspid Valve: None.

Aortic Valve: None.

Pulmonic Valve: None.

6. Doppler flows

Aorta (systolic): Peak velocity	1.25	m/sec (N <2.5) PG	6.21	mm Hg	
Pulmonary Artery (systolic): Peak velocity	0.79	m/sec (N <2.0) PG	2.47	mm Hg	
Pulmonic Insufficiency:	X NA	End diastolic velocity	m/sec PG		mmHg
Tricuspid Insufficiency:	X NA	Peak velocity	m/sec PG		mmHg
Aortic Insufficiency:	X NA	Peak velocity	m/sec PG		mmHg

Echocardiographic Assessment:

The **left atrium** was not enlarged in size and ratio to the Aorta. There was no evidence of thrombi or smoke present within the left atrial chamber. The **mitral valve** appeared normal with both the anterior and posterior valve leaflets showing no thickness or significant myxomatous changes and both had normal motion and coaptation. The **left ventricle** had normal chamber size and wall thickness. The left ventricle demonstrated normal systolic function with a fractional shortening of 63.37 %. The left ventricular outflow tract showed no evidence of stenosis or obstruction and had laminar flow. The **right atrium** and auricle were of normal size and contained no mass or growth. The size of the pulmonic outflow tract was normal and approximately equal to the Aorta. No dilation or stenosis was evident. The **right ventricular** chamber and wall thickness were of normal size, with it being 1/3 of

the size of the left ventricular chamber. The **pulmonic flow velocity** and the **Aortic flow velocity** were normal. Color flow doppler showed no evidence of regurgitation at the Aortic or Pulmonic valves. There was no **mitral regurgitation** or clinically significant **tricuspid regurgitation** present on color flow doppler. The myocardium appeared normal without evidence of fibrosis, infiltrative disease or ischemia. There was no pericardial effusion present.

This is a normal cardiac study with no evidence of underlying structural disease. It is felt that this patient can safely be part of a breeding program. No cardiac medications are required.