Kim Radway DVM, DABVP (Canine/ Feline)

Date of Study: 3/12/25 **Patient**: Ranch Cat **Client**: Chatmas

Breed: Feline Maine Coon **Sex**: Intact male **Age**: 1 year **Weight**: 16.9 lbs

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

Echo indication: This is a screening echocardiogram for breeding.

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

Diastole	IVSd	4.6 mm	[3-6]
	LVIDd	19.8 mm	[10.8-21.4]
	LVFWd	5.9 mm	[2.5-6]
Systole	IVSs	8.3 mm	[4-9]
	LVIDs	8.6 mm	[4-11.2]
	LVFWs	10.1 mm	[4.3-9.8]
	FS%	56.41 %	[30-46]

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

LA	9.9 mm	[7-17]
AO	9.9 mm	[6-12.1]
LA:Ao ratio	1.0	[<1.3]

3. **Mitral Valve:** EPSS 2.0 mm [< 8 mm]

Mitral Valve Prolapse (canine) none X present ___.

4. **Ratios**

IVSd:LVIDd ratio 0.23 (.22 - .34) (< .22 suggests inadequate wall thickness)

LVIDd:LVPWd ratio	3.35	(3 - 5) < 3 suggests LVH, > 5 suggests LV dilation)
LV:RV ratio	2.0	(> 2) (< 2 suggests RV dilation)
LVW:RVW ratio	1.5	(> 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	1.5	m/sec (N <2.5) PG	9.02	mm Hg	
Pulmonary Artery (systolic): Peak velocity	1.2	m/sec (N <2.0) PG	5.76	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 56.41 %. 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 was a normal study with no evidence of primary congenital heart disease which would be a reason for avoiding breeding in this patient. Future echocardiogram rechecks should be considered, in order to ensure that this patient does not have evidence of acquired cardiac disease later in life.