

## Choose your fecal exams wisely...





Please call the Diagnostic Parasitology Laboratory for additional assistance (865) 974-5645



Test Name	Test Components	Pros	Cons
Fecal Panel (Sugar and Zinc) Routine	• Centrifugal* Sucrose	<ul style="list-style-type: none"> <li>• Increased sensitivity for <i>Cryptosporidium</i> oocysts</li> <li>• Nematode &amp; Cestode eggs, Coccidian oocysts</li> </ul>	<ul style="list-style-type: none"> <li>• Specific gravity of solution (sp.g 1.275) distorts <i>Giardia</i> cysts and fluke eggs</li> </ul>
	• Centrifugal* Zinc	<ul style="list-style-type: none"> <li>• Increased sensitivity for <i>Giardia</i> cysts</li> <li>• Nematode &amp; Cestode &amp; Trematode eggs, lungworm larvae</li> </ul>	<ul style="list-style-type: none"> <li>• Poor sensitivity for <i>Trichuris</i> eggs and <i>Cryptosporidium</i> oocysts</li> </ul>
Giardia Panel & Sugar Float	• <i>Giardia</i> ELISA	<ul style="list-style-type: none"> <li>• <i>Giardia</i> ANTIGEN in symptomatic cats and dogs</li> <li>• Increased sensitivity, when performed in conjunction with zinc fecal float</li> </ul>	<ul style="list-style-type: none"> <li>• Increased false positives in asymptomatic dogs</li> </ul>
	• Direct Saline Smear	<ul style="list-style-type: none"> <li>• <i>Giardia</i> trophozoites only detected in 10% of <i>known</i> positive infections</li> </ul>	<ul style="list-style-type: none"> <li>• Poor sensitivity for most helminth eggs, protozoa and coccidian oocysts</li> <li>• Requires fresh unrefrigerated sample</li> </ul>
	• Centrifugal* Zinc	<ul style="list-style-type: none"> <li>• <i>Giardia</i> cysts</li> <li>• Specific gravity of solution (sp.g 1.19) increases sensitivity for <i>Giardia</i> cysts</li> </ul>	<ul style="list-style-type: none"> <li>• Poor sensitivity for <i>Trichuris</i> eggs and <i>Cryptosporidium</i> oocysts</li> </ul>
	• Centrifugal* Sucrose	<ul style="list-style-type: none"> <li>• Detect parasites other than <i>Giardia</i> as cause of diarrhea</li> <li>• Nematode &amp; Cestode eggs, <i>Cryptosporidium</i> &amp; Coccidian oocysts</li> </ul>	<ul style="list-style-type: none"> <li>• Specific gravity of solution (sp.g 1.275) distorts <i>Giardia</i> cysts and fluke eggs</li> </ul>

\*Parasite detection significantly increases with centrifugation

Comprehensive review by Companion Animal Parasite Council [capcvet.org](http://capcvet.org)

## Choose your heartworm tests wisely...

Routine Test Components	Pros	Cons
 <ul style="list-style-type: none"> <li>•Dirochek™ ANTIGEN</li> <li>•Knott's Exam</li> </ul>	<ul style="list-style-type: none"> <li>•Highest sensitivity for <b>as few as</b> 1-2 adult females</li> </ul>	<ul style="list-style-type: none"> <li>• Poor sensitivity for male only infection or immature female worms</li> </ul>
 <ul style="list-style-type: none"> <li>•Idexx SNAP™ ANTIGEN</li> <li>•Knott's Exam</li> </ul>	<ul style="list-style-type: none"> <li>•High sensitivity for <b>at least 2</b> adult females</li> </ul>	<ul style="list-style-type: none"> <li>• Poor sensitivity &lt;2 female worms, male only infection, or immature female worms</li> </ul>
 <ul style="list-style-type: none"> <li>•Idexx 4DxPlus™ Heartworm ANTIGEN &amp; <i>Borrelia burgdorferi</i>, <i>Anaplasma species</i> &amp; <i>Ehrlichia species</i> ANTIBODIES</li> <li>•Knott's Exam</li> </ul>	<ul style="list-style-type: none"> <li>•High sensitivity for <b>at least 2</b> adult females</li> <li>• Detects <i>Borrelia</i> antibodies from natural infection; not detected from specific vaccines</li> </ul>	<ul style="list-style-type: none"> <li>• Poor sensitivity &lt;2 female worms, male only infection, or immature female worms</li> <li>• Tick-borne pathogen antibodies presence/absence only (NO numerical titer)</li> <li>• No differentiation between <i>Anaplasma species</i> or <i>Ehrlichia species</i> antibodies</li> </ul>
 <ul style="list-style-type: none"> <li>•Dirochek™ ANTIGEN</li> <li>•Feline heartworm ANTIBODIES</li> </ul>	<ul style="list-style-type: none"> <li>• Antibody detection for both male and female larvae and adults</li> <li>• Highest antigen sensitivity for <b>as few as</b> 1-2 adult females</li> </ul>	<ul style="list-style-type: none"> <li>•No indication of continued infection; only that infection occurred</li> <li>•Large volume of serum necessary for repeat testing</li> </ul>

Specialty Tests & Components	Pros	Cons
 <p><b>Verification Panel</b></p> <ul style="list-style-type: none"> <li>•Dirochek™ ANTIGEN</li> <li>•Idexx SNAP™ or SNAP 4DxPlus™</li> <li>•Knott's Exam</li> </ul>	<ul style="list-style-type: none"> <li>• Confirmation of POSITIVE result using multiple tests</li> <li>• Aid in diagnosis for complex cases</li> </ul>	
 <p><b>Knott's Exam (Post-treatment)</b></p>	<ul style="list-style-type: none"> <li>• Evaluate 3 months after treatment initiated</li> <li>• Kills and stains microfilariae</li> <li>• Differentiate <i>D. immitis</i> from <i>Acanthocheilonema reconditum</i></li> </ul>	<ul style="list-style-type: none"> <li>• No microfilariae present in male only infections, or immature female worms</li> <li>• Microfilariae can survive for up to 2 years</li> </ul>