

CAMELID DIAGNOSTIC PLANS/PANELS



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The following diagnostic plans have been developed primarily as an **educational** tool to assist the veterinarian in designing a complete, although not exhaustive, diagnostic strategy. To encourage veterinarians to select only the tests that are deemed clinically appropriate in each situation, the price of the diagnostic plan is not discounted from the sum of the individual test costs. **Superscript numbers match the individual tests to the sample needed.** For the test groupings labeled as panels, there may be a discounted price versus the costs of the individual tests. Diagnostic plans and panels can be requested by writing the complete name as the test request. If appropriate samples are included all tests will be performed.

DIAGNOSTIC PLAN/PANEL	TESTS PERFORMED	PRICES	SAMPLES NEEDED
<i>Camelid Abortion Fetal Tissue Diagnostic Plan</i>	<p>(3) Aerobic bacterial cultures¹ Listeria included (1 sensitivity included); Bovine Virus Diarrhea Virus (BVDV) FA²; Bovine Virus Diarrhea Virus (BVDV) SN, Type 1³ and Type 2⁴; Campylobacter fetus (Vibrio) culture⁵;</p> <p>(2) Campylobacter fetus (Vibrio) FAs⁶; Chlamydomphila FA⁷; Chlamydomphila PCR⁸; Equine Herpes Virus -1 (Rhinopneumonitis) FA⁹;</p> <p>Histopathology¹⁰; (2) Leptospira FAs¹¹; Toxoplasma FA¹²; Toxoplasma gondii modified agglutination test (MAT)¹³;</p> <p>Virus isolation¹⁴</p> <p>May also want to consider adding Selenium (\$55) to fetal liver especially if stillbirths and/or neonatal deaths are involved.</p>	<p>\$511.25 per fetus</p> <p>NYS subsidized</p> <p>contract fee: \$101.75</p>	<p>Fresh tissue^{1,2,5,6,7,8,9,11,12,14}: lung, placenta including cotyledons, abomasal contents, kidney, liver, heart, adrenal, skin, heart blood^{3,4,13} in sterile red top tube AND</p> <p>Formalin fixed tissue¹⁰: placenta, liver, lung, brain, adrenal, heart, thymus, small intestine, kidney, fetal skin. SHIP FRESH TISSUE CHILLED AND PROTECT FIXED TISSUE FROM FREEZING. Kit is available. See Ruminant Abortion Kit for more information.</p>
<i>Camelid Abortion Serology Panel + Selenium</i>	<p>Bovine Virus Diarrhea Virus (BVDV) SN, Type 1¹ and Type 2²; Brucella card agglutination³; Equine Herpes Virus-1 (Rhinopneumonitis) SN⁴; Equine Rhinitis Virus-1 SN⁵; Leptospira MAT, 5 standard serovars⁶; Selenium, whole blood⁷; Toxoplasma gondii modified agglutination test (MAT)⁸</p>	<p>\$122 single</p> <p>\$217 paired (1 selenium)</p> <p>NYS subsidized</p> <p>contract fee: \$71.00 single</p>	<p>Maternal serum^{1,2,3,4,5,6,8} (separated) and maternal EDTA whole blood⁷ (LTT). SHIP CHILLED. When acute and convalescent samples are/will be collected, for most serology assays they should always be tested in parallel, and paired results interpreted. If acute samples are submitted alone please indicated if all tests should be performed. If second, convalescent samples are later submitted, tests on both samples will be run in parallel and fees for both samples will be charged. To avoid testing acute samples twice, hold and submit with convalescent samples. If convalescent samples will not be collected, or when infectious abortion is strongly suspected due to history, immediate testing of acute sample may be warranted.</p>

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Camelid Liver Panel (Large Animal Liver Panel + NEFA)	AST ; SDH ; GGT ; GLDH ; Non-esterified Fatty Acid (NEFA) ; Total/Direct/ Indirect Bilirubin ; Total Protein ; Albumin ; Globulin ; A/G Ratio ; CK ; Triglycerides	\$33.00	Serum (separated) or heparinized plasma (separated from a green top tube). SHIP CHILLED
Camelid Respiratory (Acute) Diagnostic Plan	Aerobic bacterial culture ¹ (1 sensitivity included); Bovine Respiratory Syncytial Virus (BRSV) FA ² ; Chlamydomphila PCR ³ ; Coronavirus FA ⁴ ; Cytology ⁵ ; Fibrinogen (heat-precipitated) ⁶ ; Hemogram routine (CBC) ⁷ ; Histopathology ⁸ ; Mycoplasma Culture ⁹ ; Virus Isolation ¹⁰	\$295.50 (ante mortem samples) \$301.00 (full set of necropsy samples)	Ante mortem samples: transtracheal wash (TTW)(preferred sample) or bronchial alveolar lavage (BAL) fluid in RTT ^{1,2,3,4,9,10} (alternatively can use viral transport media), and in EDTA tube ⁵ (LTT), (2) air dried slides ⁵ of fluid, (1) swab inoculated with sample ^{1,9} placed in aerobic transport media (Amies w/o charcoal), EDTA whole blood ^{6,7} (LTT), and (2) air dried blood smears ⁷ . SHIP CHILLED EXCEPT FOR SLIDES WHICH SHOULD BE KEPT AT ROOM TEMPERATURE.
	Testing for evidence of lungworms, quantitative fecal (\$25) may be warranted depending on season. Also selenium on an EDTA whole blood (\$21.00) sample or liver (\$55) and vitamin E (\$22) on a serum sample (separated) may be appropriate in some situations. Limited serology testing is available but paired acute and convalescent serum samples for BRSV SN (\$29 paired) may be warranted in acute disease episodes.	NYS subsidized contract fee: \$191.25 (ante mortem samples) \$101.75 (full set of necropsy samples)	See Transtracheal Wash Procedure for more information. It may be helpful to collect and bank a serum sample for possible acute and convalescent serology. [Nasal or pharyngeal swabs ^{3,10} are only appropriate for virus isolation and PCR. Submit in viral transport media or RTT with 0.5ml saline for virus isolation and PCR. SHIP CHILLED]
Coagulation Panel, Large Animal	aPTT ; PT ; Fibrinogen (Claus method)	\$38.50	2 ml separated citrate plasma in plastic or siliconized glass tube (blue top and then separated and transferred). SHIP CHILLED.

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Dermatology Diagnostic Plans	Aerobic bacterial culture ¹ (1 sensitivity included); Biopsy for parasite exam ² ;	Deep lesion: \$177.00	<u>Deep lesion:</u> (2) fresh skin biopsies ^{1,2,3,4} in plain RTT with 0.5 ml sterile saline to keep moist (not wet) +/- swab ^{1,3} from deep in tissue placed in aerobic transport media (Amies with charcoal), multiple formalin fixed skin biopsies ⁵ . SHIP CHILLED AND PROTECT FIXED TISSUE FROM FREEZING.
Deep lesion	Fungal culture ³ ; Gram stain ⁴ ; Histopathology (biopsy) ⁵	NYS subsidized contract fee: \$50.00	
Superficial lesion	Fungal culture ³ ; Gram stain ⁴ ; Histopathology (biopsy) ⁵ ; Skin scraping for ectoparasite identification ⁶ ; Cytology ⁷	Superficial lesion: \$156.75	<u>Superficial lesion:</u> (1) hair and skin scraping ^{3,4} for fungal culture and gram stain sent in a sealable paper envelope, (1) skin scraping ⁶ for ectoparasite identification in an escape proof, non-porous container, (2) impression smears/skin scrapings/fluid aspirates ⁷ for cytology placed on glass slides and air dried, and multiple formalin fixed skin biopsies ⁵ . No aerobic culture is included in the superficial plan. SHIP AT ROOM TEMPERATURE AND PROTECT FROM TEMPERATURE EXTREMES.
Fever of Unknown Origin Diagnostic Plan	(3) Blood cultures, aerobic/fungal ¹ (1 sensitivity included); (3) Blood cultures, anaerobic ² ; Fibrinogen (heat-precipitated) ³ ; Hemogram, routine (CBC) ⁴ (examination for blood parasites included); (2) Virus isolations ⁵ (nasal, whole blood)	\$275.50	(3) Inoculated aerobic/fungal blood culture bottles ¹ , (3) inoculated anaerobic blood culture bottles ² , nasal swab ⁵ in 0.5 ml saline to keep moist (not wet), (2) tubes EDTA whole blood ^{3,4,5} (LTT), and (2) air dried blood smears ⁴ . SHIP CHILLED EXCEPT FOR SLIDES AND BLOOD CULTURE BOTTLES, WHICH ARE SHIPPED AT ROOM TEMPERATURE. See Blood Culture Technique for more information. It may be helpful to collect and bank a serum sample for possible acute and convalescent serology.
	If case is chronic, virus isolation can be omitted if desired, see comment to right. If not previously tested a Bovine Virus Diarrhea Virus PCR (\$36.75) on serum (>60 days of age) or EDTA whole blood and a Large animal chemistry panel (\$41.75) on serum (separated) or heparinized plasma (separated from a green top tube) may be warranted.	Chronic case with no virus isolation: \$220.25	This diagnostic plan is designed to detect a broad spectrum of systemic bacterial, viral, and some blood parasite causes of acute fever of unknown origin, as well as certain inflammatory changes which may assist in determining the underlying problems. Viral causes of illness are best detected acutely and most are unlikely to be detected in a patient with a chronic fever of unknown origin. This plan is intended to be used as an adjunct to targeted, disease-specific testing appropriate to the species, clinical history and geographic location or conditions. See url for other ideas of testing.
		NYS subsidized contract fee: \$114.50 (full plan)	
		\$99.50 (Chronic case with no virus isolation)	

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<i>Large Animal Basic Workup</i>	Fibrinogen (heat-precipitated) ¹ ; Hemogram, routine (CBC) ² ; Large animal chemistry panel ³	\$91.25	EDTA whole blood ^{1,2} (LTT), (2) air dried blood smears ² , and serum ³ (separated) or heparinized plasma ³ (separated from a green top tube). SHIP CHILLED.
	May want to consider NEFA (\$11.00) if camelid is anorexic.		
<i>Large Animal Renal Panel</i>	Na; K; Cl; Bicarb; Anion gap; Urea; Creatinine; Albumin; Ca; P	\$22.00	Serum (separated) or heparinized plasma (separated from a green top tube). SHIP CHILLED
<i>Small Ruminant/Camelid Pinkey Diagnostic Plan</i>	Aerobic bacterial culture ¹ ; Chlamydophila PCR ² ; Mycoplasma culture ³	\$97.00 NYS subsidized contract fee: \$86.75	Conjunctival swab ^{1,3} in aerobic transport media (Amies w/out charcoal), conjunctival swab ² in sterile tube with 0.5 ml saline to keep moist (not wet). SHIP CHILLED.

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