

Fee Schedule and General Policies

General Policies

The mission of the Wyoming State Veterinary Laboratory (WSVL) is to provide accessible, timely, accountable, and accurate diagnostic services, animal disease research, and education to veterinarians, students, and others interested in animal health in the state of Wyoming.

The Wyoming State Veterinary Laboratory is a fully accredited laboratory committed to the maintenance of a quality assurance program that ensures that all procedures and documentation follow the quality standards of the American Association of Veterinary Laboratory Diagnosticians (AAVLD).

Please note: All samples and carcasses submitted to the WSVL become the property of the WSVL and cannot be released back to the submitter. This does not impact our confidentiality policies. In cases where it is allowable from a biosafety perspective, deceased pets may be transferred or shipped directly to a designated third-party crematorium per WSVL discretion after testing only if requested by the submitter on the submission form at the time of submission. In these cases, the submitter is liable for all incurred cremation costs, including WSVL handling and shipping costs.

Confidentiality

Accessions submitted to the WSVL, including carcasses, tissues and agents isolated from samples, become the property of the WSVL unless other arrangements are made with the laboratory director <u>prior to submission</u> or a current and jointly signed memorandum of understanding between the WSVL and the submitter or submitting agency/institution is in effect.

Laboratory results are joint property of the WSVL and the submitter (or submitting agency/institution) that paid for the diagnostic testing. Laboratory results will not be shared with third parties except in the following circumstances:

- 1. There is a legal requirement to do so.
- 2. Cases involving state or federal reportable animal diseases.
- 3. It is in the best interests of animal or human health to do so. This will be decided on a case-by case basis by the laboratory director or, in her/his absence, by the acting director.

As required by statute, the laboratory will periodically release summary data of animal disease patterns and trends, and share this information with the WSVL Advisory Council, Wyoming Livestock Board, Wyoming Department of Health, Wyoming Game and Fish Department, other pertinent state agencies, clients of the laboratory, and the public through scientific and general-purpose articles, newsletters, press releases and annual reports.

Contact Information

Wyoming State Veterinary Laboratory Phone: (307) 766-9925

University of Wyoming Toll Free: 1-800-442-8331

1174 Snowy Range Road Laramie, WY 82070

Email: <u>vetrec@uwyo.edu</u>

Operating Hours

The WSVL is staffed and open Monday through Friday during the following hours: September – April:

8:00 am - 5:00 pm

May – August: 7:30 am - 4:30 pm

The U.S. Postal Service mail is received on Saturdays and samples are placed into refrigeration and processed the following business day. Walk-in sample submission is not available on the weekends except by arrangement.

Sample Submission

Accession Forms

All submissions for diagnostic testing at the WSVL, MUST be accompanied by an appropriate accession form. Appropriate accession forms include the WSVL accession form (for most diagnostic samples), federal EIA (Coggins) or Brucellosis forms or third-party Coggins forms (Global Vet Link) or state Trichomoniasis test forms as appropriate. Forms should be filled out as completely as possible to obtain the most efficient and timely results possible. Federal forms must be signed by an accredited veterinarian. Submission of incomplete or unsigned accession forms WILL result in delayed testing until complete documents are received by WSVL and may result in an administrative paperwork fee.

Packing and Shipping Samples

Information and resources for shipping samples may be found on our website: https://www.uwyo.edu/wyovet/client-services/packing-and-shipping-samples.html.

WSVL Inbound UPS Shipping Program

To help increase efficiency and reduce costs of shipping diagnostic samples to the lab, the WSVL has a contract program in cooperation with UPS. Savings have averaged over 60% compared to non-contract shipping. Details may be found on our website: https://www.uwyo.edu/wyovet/wsvl-

inbound-ups/index.html

Receiving Results

Up to the minute results may be accessed via our webpage, under Client Services (http://www.uwyo.edu/wyovet/client-services/) once a web access account has been established. Results can also be emailed to the submitter. Please make us aware of your preference by calling (307-766-9925) or emailing us (vetrec@uwyo.edu).

Payment

The person/practice/agency requesting services will be billed and will receive all diagnostic reports with no exceptions. Payments may be made by check, electronic funds transfer (EFT) or credit card, and are due 30 days after receipt of the statement.

The maximum test fee for production animal necropsies (\$200) applies to single animal diagnostic submissions and includes all tests performed in-house. The maximum fee does not apply to tests referred to other laboratories or testing assessed an hourly fee, i.e., legal, forensic and insurance cases. The laboratory will contact the submitter if hourly fees may apply. The maximum test fee does not apply to accessions submitted by federal governmental agencies or state/local governmental agencies outside of the state of Wyoming. The maximum fee for additional submissions applies to each additional animal submitted at the same time and from the same owner as part of the same problem. Not all testing may be done on each animal at the discretion of WSVL.

Testing referred to outside laboratories may incur additional shipping charges.

Professional services rendered for forensic, insurance, and other legal claims will be charged at the rate of \$150 per hour in addition to other laboratory charges. These services include telephone and other consultations, site visits, document preparation, and legal testimony.

Services will not be provided to clients with accounts that are greater than 90 days past due.

Individual test fees may change prior to publication of a new fee schedule because of significant changes in costs for supplies, reagents and/or diagnostic kits.

Section	Test Type	Test	Price (\$)	Specimen	Species	Schedule (Turnaround Times)	Description of test	Comments
Multilab	Panel	Bovine Abortion Panel	60	Fetal tissues (lung, liver), stomach contents, placenta	Bovine	Varies	Test will include aerobic culture, including campylobacter, Bovine herpes virus (BHV)-1 and bovine viral diarrhea virus (BVDV)	This panel included bacteriology and virology testing
Administration	Additional Fee	Handling Fee (for referral testing)	10	N/A	N/A	N/A	Only applied to referal testing. Does not include actual shipping charges which vary based on location	
Administration	Additional Fee	Incorrect Paperwork, per submission	25	N/A	N/A	N/A	If regulatory or WSVL forms not filled out appropriately, and require a phone call to fix in order to complete testing	
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Bacteriology	Culture	Aerobic Culture	20	Tissues, aspirates, swabs	Any, non- primate	2-5 days	Isolation and identification of cultivatable bacteria present in diagnostic samples.	Swabs in Amies transport media, aspirates in sterile RTT, Tissues golf ball sized in sterile container
Bacteriology	Culture	Anaerobic Culture	20	Tissues, aspirates, swabs	Any, non- primate	1 day	Isolation and identification of cultivatable anaerobic bacteria present in diagnostic samples.	Swabs in anaerobic transport media or Amies media, aspirates in sterile RTT, Tissues golf ball sized in sterile container
Bacteriology	Culture	Brucella Culture	25	Tissues, aspirates, swabs	Bovine, Porcine, Equine	10 days	Isolating and identification of <i>Brucella</i> species. Positive results must be confirmed by NVSL as an off-schedule test which will take an additional 2-4 business days.	Swabs in Amies transport media, aspirates in sterile RTT, Tissues golf ball sized in sterile container.
Bacteriology	Culture	Abortion Culture	25	Fetal tissues (lung, liver), stomach contents, placenta	Any, non- primate	2-3 days	Isolation and identification of cultivatable bacteria present in fetal samples.	Aerobic culture + Campylobacter culture. Tissues golf ball sized in sterile containers. Fetal stomach contents in sterile RTT.
Bacteriology	Culture	Mycoplasma Culture	10	Lung tissue, nasal, throat or eye swabs	Any, non- primate	2-7 days	Isolation and identification of cultivatable Mycoplasma species in diagnostic samples.	Swabs in Amies transport media. Lung tissue golf ball sized in sterile container.
Bacteriology	Culture	Fungal Culture	10	Skin biopsy, swab, hair, skin scraping	Any, non- primate	30 days	Isolation and identification of fungus from diagnostic samples.	Swabs in Amies transport media, biopsies & skin scrapings in sterile RTT. Hair in sterile whirlpak bag.
Bacteriology	Culture	Dermatophyte Culture	10	Skin biopsy, swab, hair, skin scraping	Any, non- primate	12 days	Isolation and identification of dermatophytes from diagnostic samples.	Swabs in Amies transport media, biopsies & skin scrapings in sterile RTT. Hair in sterile whirlpak bag.
Bacteriology	MALDI	MALDI ID (no culture)	10	Bacterial isolate	Any, non- primate	1-2 days	Identification of bacterial isolates.	Isolate on culture plate, no slants.
Bacteriology	Direct Exam	Gram Stain	6	Ear swab, bacterial isolate	Any, non- primate	1-2 days	Stain and microscopic exam to look for yeast, gram positive, and gram negative bacteria	Swabs in Amies transport media, Isolate on culture plate or slant.

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Bacteriology	Direct Exam	Direct Fungal	10	Hair, skin scraping	Any, non- primate	1-2 days	Stain and microscopic exam to look for presence/absence of fungal spores. No identification is possible.	Skin scraping in sterile RTT, Hair in sterile whirlpak bag.
Bacteriology	FA	Clostridium (blackleg) FA	15	Muscle	Any, non- primate	1-2 days	Florescent antibody stain and microscopic exam to detect the presence/absence of 4 <i>Clostridial</i> species.	Tests for 4 species (C.novyi, C.chauvoei, C. septicum, C. sordellii). Muscle tissue golf ball sized in sterile container.
Bacteriology	PCR	Chlamydia	45	placenta, 3rd eyelid, fetal tissues (lung, liver), nasal, throat, or eye swabs	Any, non- primate	1-7 days	This assay detects the 16s rRNA gene of all Chlamydiales species.	Swabs in Amies transport media. Tissues/placenta golf ball sized. 3 rd eyelid in sterile RTT.
Bacteriology	PCR	Clostridium perfringens typing	45	Bacteria isolated from anaerobic culture from fecal or intestinal tissue.	Mammalian species	2-7 days	This assay targets the DNA of the toxin genes (Alpha, Beta, Beta2, Episilon, lota, and Enterotoxin) from the bacterium <i>Clostridium perfringens</i> .	Fecal or intestinal anaerobic culture is required. Typing is only performed if <i>Clostridium perfringens</i> grows. Bacterial isolates on slants or culture plates are accepted.
Bacteriology	PCR	E.coli typing	45	Bacteria isolated from aerobic culture from fecal or intestinal tissue.	Bovine, Porcine, Ovine, Caprine, Equine	2-7 days	This assay targets the DNA of the virulence factors including Shiga-like toxin 1 (STX1), Shiga-like toxin II (Stx2), eaeA gene protein Intimin, F41 pilus, K99 pilus, and Heat stable toxin A (Sta) that can be found in the bacterium <i>E.coli</i> .	Fecal or intestinal aerobic culture is required. Typing is only performed if <i>E.coli</i> grows and age/symptoms are appropriate (scouring calves or foals <10days old or all age porcine diarrhea). Bacterial isolates on slants or culture plates are accepted.
Bacteriology	PCR	Histophilus somni	45	Lung, heart, brainstem, joint fluid, nasal swabs	Bovine, Wildlife	1-7 days	This assay detects the 16s rRNA gene of Histophilus somni .	Swabs in Amies transport media, Tissues golf ball sized in sterile container. >ImL Joint fluid in sterile RTT.
Bacteriology	PCR	Mycoplasma bovis	45	Lung, joint fluid, nasal swabs	Bovine, Wildlife	1-7 days	This assay detects the oppD gene of Mycoplasma bovis .	Swabs in Amies transport media, Tissues golf ball sized in sterile container. >1mL Joint fluid in sterile RTT.
Bacteriology	PCR	Johne's (<i>Mycobacterium</i> avium ssp paratuberculosis)	45	Feces, >1g	Bovine, Ovine, Caprine, Wildlife	1-7 days	This assay detects <i>Mycobacterium Avium</i> ssp paratuberculosis using Applied Biosystems VetMAX-Gold MAP Detection kit.	Pooling available up to 5 samples. Teaspoon amount in containers that are easily labeled and resealable (whirlpak bags, conical tubes). Tied off OB gloves are discouraged.
Bacteriology	PCR	Leptospira sp.	45	Placenta, kidney, liver, urine	Any, non- primate	1-7 days	This assay detects the Lig protein and detects only pathogenic leptospires.	Teaspoon amount of tissue in sterile container. >1mL urine in sterile RTT or yellow/red top tube.
Bacteriology	PCR	Fusobacterium necrophorum	45	Liver, abscess swab	Any, non- primate	1-7 days	This assay detects the lktA gene that encodes the leukotoxin gene of Fusobacterium necrophorum.	Teaspoon amount of tissue in sterile container. Swab in Amies transport media.
Bacteriology	PCR	Potomac Horse Fever	45	Feces	Equine	1-7 days	This assay detects the 16S rRNA of <i>Neorickettsia</i> risticii , the causative agent of Potomac Horse Fever.	Teaspoon amount of feces in containers that are easily labeled and resealable (whirlpak bags, conical tubes). Tied off OB gloves are discouraged

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Bacteriology	PCR	Ureaplasma	45	Placenta, fetal tissues, uterine swabs, nasal swabs	Bovine, Ovine, Caprine, Wildlife	1-7 days	This assay detects the 16S rRNA of Ureaplasma species.	Teaspoon amount of tissue in sterile container. Swabs in Amies transport media.
Bacteriology	PCR	Coxiella burnetii	45	Placenta, fetal tissues (lung, liver)	Bovine, Ovine, Caprine, Wildlife	1-2 days	This assay detects the IS1111 insertion sequence of <i>Coxiella burnetii</i> .	Teaspoon amount of tissue in sterile, leakproof container.
Bacteriology	PCR	Plague (Yersinia pestis)and Tularemia (Francisella tularensis)	60	Tissues (pooled lung, liver, spleen), Lymph node aspirate on a swab, pharyngeal swab	Canine, Feline, Wildlife	1-2 days	This assay detects <i>Yersinia pestis</i> and <i>Francisella tularensis</i> DNA. The organisms must be tested for together.	Teaspoon amount of tissues in sterile, leakproof container. Swabs in Amies transport media. Do not send aspirates on slides.
Bacteriology	PCR	Anthrax (Bacillus anthracis)	45	blood	Any, non- primate	1-2 days	This assay detects plasmid and chromosomal DNA from Bacillus anthracis.	>1mL Blood in RTT or PTT.
Bacteriology	Broth Microdilution	Antimicrobial sensitivity	20	Bacteria isolated from aerobic culture	N/A	3-7 days	Determination of bacterial antibiotic susceptibility patterns of isolates.	Per isolate
Parasitology	Fecal	Baermann test	15	Feces	Ovine, Bovine, Bison, Wildlife	2-5+ days, depending on quantity submitted	Isolation of lungworm larvae from feces	for lungworm larvae
Parasitology	Fecal	Acid Fast stain	9	Feces	All	Same day, next day	Detection of Cryptosporidium oocysts in a fecal smear	for Cryptosporidium
Parasitology	Fecal	Fecal direct exam	10	Feces	All	Same day, next day	Fecal wet mount	
Parasitology	Fecal	Semiquantitative flotation	12	Feces	All	Same day to 5 days. depending on quantity submitted	Detection of intestinal parasites in a fecal sample	Scoring of parasite stage amounts
Parasitology	Fecal	Quantitative flotation (McMaster Method)	15	Feces	Equine and ruminants	1-2 days, depending on quantity submitted	Egg/oocyst counts per gram of feces	Egg/oocyst counts provided
Parasitology	Fecal	Fecal occult blood	15	Feces	All	Same day, next day	Detection of occult blood in a fecal sample	For identification of G.I. hemorrhage
Parasitology	Fecal	Fluke exam	10	Feces	All	Same day, next day	Detection of fluke eggs in a fecal sample	
Parasitology	Culture	Trichomonas foetus culture	10	Preputial wash, smegma	Bovine	2-3 days	See sampling instructions on our web site	LRS. TF Tubes or Diamond's Media, TF Tubes or Diamond's media preferred
Parasitology	PCR	Trichomonas foetus PCR	30	Preputial wash, smegma	Bovine	PCR run M, W, F	See sampling instructions on our web site	LRS, PBS or Diamond's Media, LRS preferred
Parasitology	Parasite ID	Ectoparasite exam/ID	12	Ectoparasite in vial or bag	All	1-2 days	Contact laboratory for additional information	Some ectoparasites may require referral

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Parasitology	Parasite ID	Endoparasite exam/ ID	12	Endoparasite in vial or bag	All	1-2 days	Contact laboratory for additional information	
Parasitology	Culture	Roundworm egg ID by larval culture (coproculture, equine and ruminants)	20	Feces	Equine, Bovine	12-14 days	Contact laboratory for additional information	Offered only for high roundworm egg amounts.
Parasitology	ELISA	Giardia ELISA	25	Feces	All	Same day to 1-2 days	Detection of Giardia antigen in fecal samples	
Parasitology	ELISA	Heartworm ELISA	15	Whole blood or serum	Canine, feline	Same day to 1-2 days	Detection of heartworm antigen in plasma or serum	
Parasitology	ELISA	Neospora cELISA	12	Serum	Bovine	1-2 days	Detecion of antibodies to Neospora caninum in bovine serum	
Parasitology	Lab Supplies	LRS Media	2	N/A	N/A	N/A	For Trichomonas PCR sample collection	
Parasitology	Lab Supplies	Tube without media	1.5	N/A	N/A	N/A	For Trichomonas PCR sample collection	
Pathology	Necropsy	Necropsy, Standard	100	Carcass	Any non- primate species except equine and food animal fetus (see separate tests)	Varies	Postmortem gross examination with pathologist interpretation. Does not include histopathology or other testing. For equine and food animal fetus necropsies, see separate tests. Includes carcass disposal.	Maximum fee \$200 for all production animals ONLY. This fee cap includes 1 animal and all in-house testing. A legal hourly charge, referred tests, and spinal cord removal fees are not included in the price cap. Please note that when "Necropsy only" is marked on the accession form, no samples will be collected for histopathology or other testing unless specifically requested. Histopathology is strongly recommended for necropsy cases, and is required for definitive diagnosis in many cases.
Pathology	Necropsy	Necropsy, Equine >500 lbs	250	Carcass	Equine	Varies	Postmortem gross examination with pathologist interpretation. Does not include histopathology or other testing. Includes carcass disposal.	Please note that when "Necropsy only" is marked on the accession form, no samples will be collected for histopathology or other testing unless specifically requested. Histopathology is strongly recommended for necropsy cases, and is required for definitive diagnosis in many cases.
Pathology	Necropsy	Necropsy, Equine <500 lbs	100	Carcass	Equine	Varies	Postmortem gross examination with pathologist interpretation. Does not include histopathology or other testing. Includes carcass disposal.	Please note that when "Necropsy only" is marked on the accession form, no samples will be collected for histopathology or other testing unless specifically requested. Histopathology is strongly recommended for necropsy cases, and is required for definitive diagnosis in many cases.

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Section	Test Type	Test	Price (\$)	Specimen	Species	(Turnaround	Description of test	Comments
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Pathology	Necropsy	Necropsy, Food Animal Fetus	50	Carcass	Bovine, caprine, ovine, porcine	Varies	Postmortem gross examination with pathologist interpretation. Does not include histopathology or other testing. Includes carcass disposal.	Case workup for fetuses typically requires additional testing beyond gross postmortem examination.
Pathology	Necropsy	Necropsy, Tissue Collection	50	Head, carcass, partial carcass	Any, non- primate	Varies	Dissection of carcass or partial carcass for the purpose of sample collection for other tests. For postmortem examination with pathologist interpretation, see species-specific Necropsy tests.	Brain removal or dissection of whole organs/tissues, performed by WSVL personnel. No charge is applied for brain removal in cases submitted for rabies testing only.
Pathology	Necropsy	Necropsy, Spinal Cord Removal	80	Carcass	Any, non- primate	Varies	Removal of spinal cord for postmortem examination or sampling for other tests. Added to the cost of necropsy when done as part of a necropsy case.	
Pathology	Necropsy	Necropsy, Legal/Insurance/Forensic (per hour)	150	Carcass	Any, non- primate	Varies	Legal/Insurance/Forensics fee is assessed per hour of case workup, and is in addition to fees for all testing performed.	Covers additional documentation and chain-of-custody tracking when litigation is considered possible or when testing is done for insurance purposes.
Pathology	Incineration	Incineration, large animal <500 lbs.	150	Carcass	Any, non- primate	Varies	Disposal by incineration, with no ashes returned.	No ashes will be returned on any carcass.
Pathology	Incineration	Incineration, large animal >500 lbs.	250	Carcass	Any, non- primate	Varies	Disposal by incineration, with no ashes returned.	No ashes will be returned on any carcass.
Pathology	Incineration	Incineration, small animal	50	Carcass	Any, non- primate	Varies	Disposal by incineration, with no ashes returned.	No ashes will be returned on any carcass.
Pathology	Histology	Necropsy Histopathology	75	Formalin Fixed Tissue	Any, non- human	Varies	Routine hemaxoylin & eosin staining and pathologist interpretation of tissues from field necropsy submissions and in-house necropsies. Includes all H&E slides required for diagnosis.	Maximum fee cap of \$200 for all production animals ONLY; this fee cap includes all in-house testing for 1 animal.
Pathology	Histology	Untrimmed tissue	6	Fixed or unfixed tissue	Any, non- human	Varies	Tissue trimming, cassette processing, and embedding (no slides).	
Pathology	Histology	Trimmed tissue	5	Tissue cassette with trimmed tissue	Any, non- human	Varies	Tissue cassette processing and embedding (no slides).	
Pathology	Histology	H&E stain	4	Unstained slide	Any, non- human	Varies	H&E staining of a prepared slide, no pathologist interpretation.	
Pathology	Histology	Research: Pathologist interpretation	Contact WSVL	Varies	Any, non- human	Varies	Contact the WSVL regarding arrangements for individual research projects for which pathologist interpretation is needed.	
Pathology	Histology	H&E slide preparation	5	Block	Any, non- human	Varies	Preparation of H&E slide from a prepared block without pathologist interpretation.	

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Pathology	Histology	Unstained slide preparation	4	Block	Any, non- human	Varies	Preparation of an unstained slide from a prepared block.	
Pathology	Histology	Surgical Biopsy – small standard	60	Formalin Fixed Tissue	Any, non- human	Varies	Routine hemaxoylin & eosin staining and pathologist interpretation of single biopsies up to 5 cm diameter/length, eye, digit, fewer than 5 punch or endoscopic biopsies from the same disease process.	See exceptions under Surgical Biopsy, large, complex. Up to two special stains are included in this price. Additional biopsy sites will be an additional fee.
Pathology	Histology	Surgical Biopsy –large or complex	80	Formalin Fixed Tissue	Any, non- human	Varies	Routine hemaxoylin & eosin staining and pathologist interpretation of single biopsies greater than 5 cm diameter/length, spleen/splenic mass, entire or partial organ, limb, greater than 5 punch or endoscopic biopsies from suspected same disease process.	Up to two special stains are included in this price. Additional biopsy sites will be an additional fee.
Pathology	Histology	Associated surgical biopsy	30	Formalin Fixed Tissue	Any, non- human	Varies	Additional biopsy (or biopsies) from a single animal and submitted under the same accession as surgical biopsy/small or surgical biopsy/large or complex. Charge will apply to each separate site after the first.	
Pathology	Histology	Decalcification	8	Formalin Fixed Tissue	Any, non- human	Varies	This additional procedure is needed for any samples with bone or mineral; oral biopsies are typically decalcified.	
Pathology	Histochemical Stain	Acid Fast Bacteria	10	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Special stain for the detection of acid-fast bacilli in tissue.	
Pathology	Histochemical Stain	Alcian Blue-Periodic Acid Schiff (PAS)	10	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Special stain used to differentiate between neutral and acid mucosubstances.	
Pathology	Histochemical Stain	Alizarian Red	10	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Special stain for the demonstration of calcium deposits (except oxalate) in tissue.	
Pathology	Histochemical Stain	Bennehold's Method for Amyloid/Congo Red	10	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Special stain for the demonstration of amyloid in tissue.	
Pathology	Histochemical Stain	Brown-Brenn Gram Stain	10	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Special stain for the detection and differentiation of gram + and gram - bacteria in tissue.	

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Pathology	Histochemical Stain	Fite's Method for Acid Fast Bacteria	10	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Special stain for the detection of <i>Norcardia</i> sp. or <i>Mycobacterium leprea</i> sp. (causative agent of leprosy) in tissue.	
Pathology	Histochemical Stain	Fontana-Masson Stain for Melanin & Argentaffin	10	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Special stain for the demostration of argentaffin substances such as melanin.	
Pathology	Histochemical Stain	Gaffney's Giemsa	10	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Special stain used to differentiate cells present in hematopoietic tissue and for the detection of bacteria and parasites in tissue.	
Pathology	Histochemical Stain	Gomori's Iron Stain (Prussian Blue)	10	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Special stain for the demonstration of iron in tissue.	
Pathology	Histochemical Stain	Gomori's Stain for Reticulin Fibers	10	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Special stain for the demonstration of reticular fibers.	
Pathology	Histochemical Stain	Grocott's Methenamine Silver (GMS)	10	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Special stain for the detection of fungi and Pneumocystis carinii in tissue.	
Pathology	Histochemical Stain	Hall's Method for Bilirubin (Bile)	10	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Special stain used to demonstrate the presence of bilirubin in tissue and to distinguish bile pigments from other pigments found in tissue.	
Pathology	Histochemical Stain	Hucker Twort Gram Stain	10	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Special stain for the detection and differentiation of gram + and gram - bacteria in tissue.	
Pathology	Histochemical Stain	Masson's Trichrome Stain	10	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Special stain for the demonstration of collagen and muscle fibers.	
Pathology	Histochemical Stain	Periodic Acid Schiff (PAS)	10	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Special stain for the demonstration of polysaccharides, neutral mucosubstances, and basement membranes.	This is a standard PAS stain with a pink counterstain for carbohydrates.
Pathology	Histochemical Stain	Periodic Acid Schiff (PAS), Hodgekiss McManus	10	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Special stain for the demonstration of fungi.	This is a PAS with a green counterstain, specifically for detecting fungus.
Pathology	Histochemical Stain	Periodic Acid Schiff (PAS) w/ Diastase	10	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Special stain for the demonstration of glycogen in tissue.	

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Pathology	Histochemical Stain	Potassium Permanganate Bleaching for Melanin	10	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Special stain for the removal of melanin pigment from tissue.	
Pathology	Histochemical Stain	Puchtler Congo Red	10	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Special stain used to differentiate between primary amyloid (AL) and secondary amyloid (AA) in tissue.	
Pathology	Histochemical Stain	Rhodanine Copper Method	10	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Special stain for the demonstration of copper in tissue.	
Pathology	Histochemical Stain	Steiner's Method	10	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Special stain for the demonstration of spirochetes.	
Pathology	Histochemical Stain	Thioflavin-T for Amyloid	10	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Fluorescent special stain method for the demonstration of amyloid in tissue.	
Pathology	Histochemical Stain	Toluidine Blue	10	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Special stain for the demonstration of mast cells.	
Pathology	Histochemical Stain	Verhoeff Van Gieson Elastic Stain (VVG)	10	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Special stain for the demonstration of elastic fibers.	
Pathology	Histochemical Stain	Von Kossa Silver Test for Calcium	10	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Special stain for the demonstration of calcium in tissue sections.	
Pathology	Immunohistochemistry (IHC)	AE1/AE3, Pancytokeratin	40	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Detection of pancytokeratin using a monoclonal anti-cytokeratin antibody. (Clones AE1/AE3)	
Pathology	Immunohistochemistry (IHC)	Bovine Viral Diarrhea Virus (BVD)	40	Unstained slides, FFPE blocks, formalin fixed tissue, ear notches	Bovine	Varies	Detection Bovine viral diarrhea virus (BVDV) using anti-BVDV monoclonal antibody. (Clone15.c.5) Tests are validated on control species; other species may be tested, please contact the lab for more information	If you would like the test performed on a non-validated species please contact the laboratory.
Pathology	Immunohistochemistry (IHC)	Brucella abortus	40	Unstained slides, FFPE blocks, formalin fixed tissue	Bovine, Elk, Bison	Varies	Detection of Brucellosis using anti-Brucella abortus antibody.	If you would like the test performed on a non-validated species please contact the laboratory.
Pathology	Immunohistochemistry (IHC)	Canine Distemper Virus (CDV)	40	Unstained slides, FFPE blocks, formalin fixed tissue	Canine	Varies	Detection of Canine Distemper Virus (CDV) using anti-distemper monoclonal antibody.	If you would like the test performed on a non-validated species please contact the laboratory.

Section	Test Type	Test	Price (\$)	Specimen	Species	Schedule (Turnaround Times)	Description of test	Comments
Pathology	Immunohistochemistry (IHC)	CD117, c-kit	40	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Dectection of c-kit oncoprotien using anti-CD117 monoclonal antibody. (Clone EP10)	
Pathology	Immunohistochemistry (IHC)	CD20	40	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Detection of CD20 antigen, primarliy express on B cells, using anti-CD20 polyclonal antibody.	
Pathology	Immunohistochemistry (IHC)	CD204	40	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Detection of macrophage scavenger receptor A (MSR-A/CD204) using anti-MSR-A.CD204 monoclonal antibody. (Clone SRA-E5)	
Pathology	Immunohistochemistry (IHC)	CD3	40	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Detection of CD3 for the identification of T cells using anti-CD3 polyclonal antibody.	
Pathology	Immunohistochemistry (IHC)	Chronic Wasting Disease (CWD) Prp Protien	40	Brain stem (obex) and lymph node (retropharyngeal)	Cervids (deer, elk, moose)	21 days	Detection of abnormal prion protiens (PrP) in Chronic Wasting Disease (CWD) infections using anti-PrP monoclonal antibody. (Clone F99)	Tonsil, rectal biopsy or eyelid may be used in special circumstances. Please call the lab for more information.
Pathology	Immunohistochemistry (IHC)	Deer Adenovirus (DAV)	40	Unstained slides, FFPE blocks, formalin fixed tissue	Deer	Varies	Detection of adenovirus (DAV) in deer using anti- adenovirus antibody.	If you would like the test performed on a non-validated species please contact the laboratory.
Pathology	Immunohistochemistry (IHC)	Desmin	40	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Labelling of smooth and striated muscle cells and mesothelia cells using anti-desmin monoclonal antibody. (Clone D33)	
Pathology	Immunohistochemistry (IHC)	E-Cadherin	40	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Detection of E-Cadherin glycoprotein using anti- E-Cadherin monoclonal antibody. (Clone 36/E- Cadherin)	
Pathology	Immunohistochemistry (IHC)	Epizootic Hematopoietic Necrosis Virus (EHNV), Ranavirus	40	Unstained slides, FFPE blocks, formalin fixed tissue	Amphibians, Reptiles and Fish	Varies	Immunohistochemistry using anti-EHNV antibody (University of Sydney, Australia) that cross reacts with BIV, FV3, and is likely to also detect other ranavirus species.	
Pathology	Immunohistochemistry (IHC)	Equine Herpesvirus (EHV- 1)	40	Unstained slides, FFPE blocks, formalin fixed tissue	Equine	Varies	Detection of Equine Herpesvirs type 1 (EHV-1) using anti-EHV-1/ERV polyclonal antibody.	If you would like the test performed on a non-validated species please contact the laboratory.
Pathology	Immunohistochemistry (IHC)	Feline Herpesvirus	40	Unstained slides, FFPE blocks, formalin fixed tissue	Feline	Varies	Detection of Feline Herpesvirus (FHV), type 1, using anti-FHV monoclonal antibody.	If you would like the test performed on a non-validated species please contact the laboratory.

Section	Test Type	Test	Price (\$)	Specimen	Species	Schedule (Turnaround Times)	Description of test	Comments
Pathology	Immunohistochemistry (IHC)	Feline Infectious Peritonitis (FIP), Canine Coronavirus	40	Unstained slides, FFPE blocks, formalin fixed tissue	Feline, Canine	Varies	Detection of feline and canine coronaviruses using anti-cononavirus monoclonal antibody.	If you would like the test performed on a non-validated species please contact the laboratory.
Pathology	Immunohistochemistry (IHC)	Francisella tularensis	40	Unstained slides, FFPE blocks, formalin fixed tissue	Mammalian	Varies	Detection of Tularemia using anti-francisella tularensis antibody.	If you would like the test performed on a non-validated species please contact the laboratory.
Pathology	Immunohistochemistry (IHC)	Fusebacterium necrophorum	40	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Detection of Fusebacterium necrophorum using anti-F. necrophorum polyclonal antibody.	
Pathology	Immunohistochemistry (IHC)	Glial Fibrillary Acidic Protein (GFAP)	40	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Detection of Flial Fibrillary Acidic Protein (GFAP) using anti-GFAP polyclonal antibody.	
Pathology	Immunohistochemistry (IHC)	Histophilus somni	40	Unstained slides, FFPE blocks, formalin fixed tissue	Bovine, Bison	Varies	Detection of Histophilus somni using anti-H. somni antibody.	If you would like the test performed on a non-validated species please contact the laboratory.
Pathology	Immunohistochemistry (IHC)	HLA-DR	40	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Detection of histocompatibilit complex (MHC) using anti-HLA monoclonal antibody.	
Pathology	Immunohistochemistry (IHC)	lba1/Microglia	40	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Detection of Iba1 protien using anti-Microglia (Iba1) polyclonal antibody.	
Pathology	Immunohistochemistry (IHC)	IgA	40	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Detects Immunoglobulin A (IgA) protien using anti-IgA antibody.	
Pathology	Immunohistochemistry (IHC)	IgG	40	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Detects Immunoglobulin G (IgG) protien using anti-IgG antibody.	
Pathology	Immunohistochemistry (IHC)	lgM	40	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Detects Immunoglobulin M (IgM) protien using anti-IgM antibody.	
Pathology	Immunohistochemistry (IHC)	Infectious Bovine Rhinotracheitis (IBR), BHV-1	40	Unstained slides, FFPE blocks, formalin fixed tissue	Bovine	Varies	Detects Bovine Herpesvirus, type 1, (BHV-1/IBR) using anti-BHV-1/IBR antibody.	If you would like the test performed on a non-validated species please contact the laboratory.
Pathology	Immunohistochemistry (IHC)	Mac 387	40	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Labelling of histiocytes using anit- myeloide/histiocyte monoclonal antigen. (Clone MAC 387)	
Pathology	Immunohistochemistry (IHC)	Melan A	40	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Labelling of melanocytes using anti-Melan A monoclonal antibody (clone A103).	

Section	Test Type	Test	Price (\$)	Specimen	Species	Schedule (Turnaround Times)	Description of test	Comments
Pathology	Immunohistochemistry (IHC)	MUM-1	40	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Detection of MUM-1 protien using anti-MUM-1 antibody. (Clone BC5)	
Pathology	Immunohistochemistry (IHC)	Mycoplasma bovis	40	Unstained slides, FFPE blocks, formalin fixed tissue	Bovine, Bison, Big Horn Sheep	Varies	Detection of Mycoplasma bovis using anti-M. bovis antibody.	If you would like the test performed on a non-validated species please contact the laboratory.
Pathology	Immunohistochemistry (IHC)	PAX-5	40	Unstained slides, FFPE blocks, formalin fixed tissue	Canine, Feline	Varies	Detection of Pax-5 protien using anti-Pax-5 monocolonal antibody. (Clone 24/Pax-5)	If you would like the test performed on a non-validated species please contact the laboratory.
Pathology	Immunohistochemistry (IHC)	PNL2	40	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Detection of melanocytes using anti PNL2 monoclonal antibody.	
Pathology	Immunohistochemistry (IHC)	\$100	40	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Detection of S100 protein using anti-S100 monoclonal antibody. (clone 4C4.9)	
Pathology	Immunohistochemistry (IHC)	Scrapie PrP Protien	40	Brain stem (obex) and lymph node (retropharyngeal)	Ovine (Domestic or Big Horn Sheep)	21 days	Detection of abnormal prion protiens (PrP) in Scrapie infections using anti-PrP monoclonal antibody. (Clone F99)	Tonsil, rectal biopsy or eyelid may be used in special circumstances. Please call the lab for more information.
Pathology	Immunohistochemistry (IHC)	Smooth Muscle Actin	40	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Detection of alpha smooth muscle actin using anti-actin, smooth muscle. (Clone 1A4)	
Pathology	Immunohistochemistry (IHC)	Toxoplasma gondii	40	Unstained slides, FFPE blocks, formalin fixed tissue	Mammalian	Varies	Detection of Toxoplasma gondii using anti- Toxoplasma gondii polyclonal antibody.	If you would like the test performed on a non-validated species please contact the laboratory.
Pathology	Immunohistochemistry (IHC)	Vimentin	40	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Detection of Vimentin, 57 kDa intermediate filament protein using anti-Vimentin monoclonal antibody. (clone V9)	
Pathology	Immunohistochemistry (IHC)	Von Willebrand Factor, Factor VIII	40	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Detection of Von Willebrand factor (Factor VIII) using anti-Von Willebrand polyclonal antibody.	
Pathology	Immunohistochemistry (IHC)	West Nile Virus	40	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Detection of West Nile Virus (WNV) using anti- WNV polyclonal antibody.	
Pathology	Immunohistochemistry (IHC)	Yersina pestis	40	Unstained slides, FFPE blocks, formalin fixed tissue	Any, non- human	Varies	Detection of Plague using anti-Yersina pestis antibody.	

Section	Test Type	Test	Price (\$)	Specimen	Species	Schedule (Turnaround	Description of test	Comments
Section	rest type	lest	Price (\$)	Specimen	Species	Times)	Description of test	Comments
Serology	SN	Bovine Respiratory Syncytial Virus (BRSV)	10	Serum, 1mL or clotted blood, 2mL (RTT or RGTT)	Bovine, Caprine, Ovine, Cervid Domestic and Wildlife	Tests are performed on Tuesday, Thursday, and Friday and take 4-6 days	Samples are mixed with live virus and incubated with live cells to observe the level of CPE. Results are reported out as a titer.	Avoid hemolysis of samples as it affects the reliability of the test.
Serology	SN	Bovine Viral Diarrhea 1 (BVD 1)	10	Serum, 1mL or clotted blood, 2mL (RTT or RGTT)	Bovine, Caprine, Ovine, Cervid Domestic and Wildlife	Friday and take 3-4 days	Samples are mixed with live virus and incubated with live cells to observe the level of CPE. Results are reported out as a titer.	Avoid hemolysis of samples as it affects the reliability of the test.
Serology	SN	Bovine Viral Diarrhea 2(BVD 2)	10	Serum, 1mL or clotted blood, 2mL (RTT or RGTT)	Bovine, Caprine, Ovine, Cervid Domestic and Wildlife	Friday and take 3-4 days	Samples are mixed with live virus and incubated with live cells to observe the level of CPE. Results are reported out as a titer.	Avoid hemolysis of samples as it affects the reliability of the test.
Serology	SN	Infectious Bovine Rhino tracheitis (IBR, BHV-1)	1 10	Serum, 1mL or clotted blood, 2mL (RTT or RGTT)	Bovine, Caprine, Ovine, Cervid Domestic and Wildlife	Friday and take 2-4 days	Samples are mixed with live virus and incubated with live cells to observe the level of CPE. Results are reported out as a titer.	Avoid hemolysis of samples as it affects the reliability of the test.
Serology	SN	Parainfluenza-3 (PI-3)	10	Serum 1mL or clotted blood, 2mL (RTT or RGTT)	Bovine, Caprine, Ovine, Cervid Domestic and Wildlife	for results	Samples are mixed with live virus and incubated with live cells to observe the level of CPE. Results are reported out as a titer.	Avoid hemolysis of samples as it affects the reliability of the test.

Section	Test Type	Test	Price (\$)	Specimen	Species	Schedule (Turnaround Times)	Description of test	Comments
Serology	SN	Equine Herpes Virus 1 (EHV-1)	18	Serum, 1mL or clotted blood, 2mL (RTT or RGTT)	Equine	Tests are performed on Tuesday, Wednesday, Thursday, and Friday and take 5-7 days for results	Samples are mixed with live virus and incubated with live cells to observe the level of CPE. Results are reported out as a titer.	Avoid hemolysis of samples as it affects the reliability of the test.
Serology	Serology SN Canine Distemper Virus (CDV) 18		18	Serum, 1mL or clotted blood, 2mL (RTT or RGTT)	Canine, feline, domestic and wildlife	Tests are performed on Monday and take 3-4 days for results	Samples are mixed with live virus and incubated with live cells to observe the level of CPE. Results are reported out as a titer.	Avoid hemolysis of samples as it affects the reliability of the test.
Serology	ELISA	Brucella ovis (B. ovis)	10	Serum, 1mL or clotted blood, 2mL (RTT or RGTT)	Carprine, Ovine	Tests are performed Monday – Friday. Expect 1-3 business days for results.	Samples are exposed to an antigen to determine the level of antibodies present. Results are reported out as positive, negative, or indeterminate.	Avoid hemolysis of samples as it affects the reliability of the test.
Serology	ELISA	Johne's (Mycobacterium avium ssp. Paratuberculosis)	10	Serum, 1mL or clotted blood, 2mL (RTT or RGTT)	Bovine, Caprine, Ovine	Tests are performed Monday – Friday. Expect 1-3 business days for results.	Samples are exposed to an antigen to determine the level of antibodies present. Results are reported out as positive or negative with S/P ratio.	Avoid hemolysis of samples as it affects the reliability of the test.
Serology	ELISA	Small RuminantLentivirus (SRLV, CAE, OPP)	10	Serum, 1mL or clotted blood, 2mL (RTT or RGTT)	Caprine, Ovine	Tests are performed Monday – Friday. Expect 1-3 business days for results.	Samples are exposed to an antigen to determine the level of antibodies present. Results are reported out as positive or negative.	Avoid hemolysis of samples as it affects the reliability of the test.
Serology	ELISA	West Nile Virus IgM (WNV)	22	Serum, 1mL or clotted blood, 2mL (RTT or RGTT) Equine Expect		Tests are performed Monday – Thursday. Expect 2-4 business days for results.	Samples are exposed to an antigen to determine the level of antibodies present. Results are reported out as positive or negative.	Avoid hemolysis of samples as it affects the reliability of the test.
Serology	ELISA	Anaplasmosis	15	Serum or clotted blood (RTT or RGTT)	Bovine	Tests are performed Monday-Friday-Expect 1- 2 business days for results.	Detection of antibody specific to Anaplasma marginale, A. ovis, and A centrale in bovien serum by cELISA	
Serology	ELISA	Bluetongue	15	Serum or clotted blood (RTT or RGTT)	Bovine/Came lid/Cervine/C aprine/Ovine	Monday-Friday-Expect 1-	Detection of antibody to Bluetongue Virus in ruminant serum by cELISA	
Serology	ELISA	Bovine Leukosis	15	Serum or clotted blood (RTT or RGTT)	Bovine	Tests are performed Monday-Friday-Expect 1- 2 business days for results.	Detection of antibodies to Bovine Leukemia Virus glycoprotein 51 (gp51) in bovine sera by ELISA	

						Schedule		
Section	Test Type	Test	Price (\$)	Specimen	Species	(Turnaround	Description of test	Comments
						Times)		
Serology	ELISA	Piroplasmosis	40	Serum or clotted blood (RTT or RGTT)	Equine	Tests are performed Monday-Friday-Expect 1- 2 business days for results.	Detection of antibody to B. caballi and T. equi in equine serum by cELISA	Theileria equi and Babesia caballli
Serology	ELISA	Equine Infectious Anemia (EIA)	10	Serum or clotted blood (RTT or RGTT)	Equine	Tests are performed Monday-Friday-Same Day	Detection of antibodies to Equine Infectious Anemia Virus in equine serum by ELISA	
Serology	AGID	Equine Infectious Anemia (EIA), AGID	12	Serum or clotted blood (RTT or RGTT)	Equine	Tests are performed Monday-Friday-2 Days	Detection of antibodies to Equine Infectious Anemia Virus in equine serum by AGID	Export only
Serology	CARD	Brucella canis, immuno- chromatography	17	Serum or clotted blood (RTT or RGTT)	Canine	Tests are performed Monday-Friday-Same Day	Detection of canine Brucella antibodies	
Serology	FPA	Brucella abortus FPA plate	6	Serum or clotted blood (RTT or RGTT)	Bovine/Bison /Buffalo/Cer vids	Tests are performed Monday-Friday-24 hours	Detection of B. abortus antibodies	Note "from DSA" on accession form if applicable
Serology	FPA	Brucella abortus FPA tube	6	Serum or clotted blood (RTT or RGTT)	Bovine/Bison /Buffalo/Cer vids	Tests are performed Monday-Friday-24 hours	Detection of B. abortus antibodies	
Serology	ВАРА	Brucella abortus BAPA	6	Serum or clotted blood (RTT or RGTT)	Bovine/Bison /Buffalo/Cer vids/Porcine	Tests are performed Monday-Friday-24 hours	Detection of B. abortus and B. suis	Tests for both B. abortus and B. suis
Serology	CARD	Brucella abortus CARD	6	Serum or clotted blood (RTT or RGTT)	Bovine/Bison /Buffalo/Cer vids/Porcine	Tests are performed Monday-Friday-Same Day	Detection of B. abortus, B. suis	Tests for both B. abortus, B. suis, and B. melitensis
Serology	CARD	Brucella abortus CARD 3%	6	Serum or clotted blood (RTT or RGTT)	Caprine/Ovin e	Tests are performed Monday-Friday-Same Day	Detection of B. melitensis	Tests for both B. abortus, B. suis, and B. melitensis
Serology	CF	Vesicular Stomatitis	33	Serum or clotted blood (RTT or RGTT)	Equine	Expect up to 1 week for results	Complement Fixation test is used to determine the level of antibodies.	Detects Indiana and New Jersey strains
Serology	MAT	Leptospirosis, 5 species	20	Serum, 1mL or clotted blood, 2mL (RTT or RGTT)	Multiple Species	Tests are performed on Wednesdays	Samples are exposed to live bacteria to observe the level of agglutination. Results are reported out as a titer.	Species tested for include: L. canicola, L. grippotyphosa, L. hardjo, L icterohemorrahagiae, L. pomona

Section	Test Type	Test	Price (\$)	Specimen	Species	Schedule (Turnaround Times)	Description of test	Comments
Sequencing	Whole Genome Sequencing	Short Read (Illumina iSeq100)	700	Purified genomic DNA (ideal: 5 ng/μL concentration in 50 μL)	Any species with purified DNA	1 - 4 weeks	Generation of short-read FastQ data for genomic analysis.	\$700/sample for 1 sample; \$350/sample for submissions of up to 4 samples; \$300/sample for submissions of more than 5 samples. Pricing includes a Quality Assessment of all submitted samples to determine sequencing feasibility (Qubit, TapeStation 4200, NanoDrop).
Sequencing	Whole Genome Sequencing	Long Read (ONT GridION)	700	Purified genomic DNA (ideal: 5 ng/μL concentration in 50 μL)	Any species with purified DNA	1 - 4 weeks	Generation of long-read FastQ data for genomic analysis.	\$700/sample for 1 sample; \$350/sample for submissions of up to 4 samples; \$300/sample for submissions of more than 5 samples. Pricing includes a Quality Assessment of all submitted samples to determine sequencing feasibility (Qubit, TapeStation 4200, NanoDrop).
Sequencing	Whole Genome Sequencing	Short + Long Read (Illumina + ONT)	1400	Purified genomic DNA (ideal: 5 ng/μL concentration in 50 μL)	Any species with purified DNA	1 - 4 weeks	Generation of both short- and long-read FastQ data for genomic analysis.	\$1400/sample for 1 sample; \$700/sample for submissions of up to 4 samples; \$600/sample for submissions of more than 5 samples. Pricing includes a Quality Assessment of all submitted samples to determine sequencing feasibility (Qubit, TapeStation 4200, NanoDrop).
Sequencing	Whole Genome Sequencing	Bacterial Species Identification (ONT GridION)	140	Purified genomic DNA (ideal: 5 ng/μL concentration in 50 μL)	Any species with purified DNA	1 - 4 weeks	Long read FastQ data generation for species identification using ONT technology.	\$140/sample for 1 sample; \$65/sample for 2 samples; \$50/sample for submissions up to a total of 4 samples. Pricing includes a Quality Assessment of all submitted samples to determine sequencing feasibility (Qubit, TapeStation 4200, NanoDrop).
Sequencing	Amplicon Sequencing	Long Read (ONT GridION)	35	Purified PCR product (ideal: 5 ng/μL concentration in 50 μL)	Any species with purified DNA	1 - 4 weeks	Generation of FastQ data using ONT technology, capable of sequencing both short and long amplicons (e.g., 16S, 18S, ITS, and other targeted genomic regions).	\$35/sample for submissions of up to 4 samples; \$25/sample for submissions of 5 - 11 samples; \$20/sample for submission of more than 12 samples.
Sequencing	DNA Quality Control	Integrity (TapeStation 4200)	20	Purified DNA (ideal: total volume of 50 μL)	Any species with purified DNA	1 - 24 hrs	Assessment of DNA integrity using the TapeStation 4200.	\$20/sample for submissions of up to 4 samples; \$10/sample for submissions of 5 - 15 samples; \$7/sample for submission of more than 16 samples.
Sequencing	DNA Quality Control	Quantity (Qubit)	4	Purified DNA (ideal: total volume of 50 μL)	Any species with purified DNA	1 - 24 hrs	Assessment of DNA quantity using Qubit fluorometer.	\$4/sample for submissions of up to 4 samples; \$2/sample for submissions of 5 - 15 samples; \$1/sample for submission of more than 16 samples.

Section	Test Type	Test	Price (\$)	Specimen	Species	Schedule (Turnaround Times)	Description of test	Comments
Sequencing	DNA Quality Control	Purity (NanoDrop)	1	Purified DNA (ideal: total volume of 50 μL)	Any species with purified DNA	1 - 24 hrs	Assessment of DNA purity using the Nanodrop.	\$1/sample for submissions of up to 4 samples; \$0.50/sample for submissions of 5 - 15 samples; \$0.25/sample for submission of more than 16 samples.
Virology	Isolation	Virus isolation	35	Fresh tissue, swabs	Mammalian	As needed, 2-3 weeks	Attempt to isolate live virus from specimens. Used to screen for viruses with no other appropriate test type available.	Please call for details; price is per sample, per cell line.
Virology	ELISA	Bovine Viral Diarrhea Virus ELISA	6/Sample	Ear notch or serum (if animal is over 3 months of age)	Validated for bovine; will detect other ruminant species	1-3 business days	Detection of bovine viral diarrhea virus using antigen capture ELISA.	\$3/sample if confirming a positive PCR pool.
Virology	FA	Rabies	No Charge	Head or brain	Mammalian	2 business days; performed the day after receipt of samples.	Detection of rabies virus antigen using fluorescently labeled antibodies.	Brain stem and cerebellum required. Keep samples cold. Samples received frozen will cause testing to be delayed. Samples should be submitted to the state of origin for rabies testing.
Virology	PCR	Avian Influenza A, Matrix	45	Cloacal, tracheal, or oropharyngeal swab (synthetic swabs, swabs in bacterial culture tubes are not suitable); lung, trachea, brain, milk*	Avian or mammalian	Domestic animals suspected of HPAI are tested within one business day of receipt.	Detection of avian influenza A virus nucleic acid.	Waterfowl - cloacal swab only. Swabs acceptable for live or dead animals. Please call for pooling information if submitting multiple domestic birds or dairy cows. *Dairy cows only; at least 5 mLs (must include all four quarters in a single tube).
Virology	PCR	Avian Influenza A, H5	45	Cloacal, tracheal, or oropharyngeal swab (synthetic swabs, swabs in bacterial culture tubes are not suitable); lung, trachea, brain	Avian or mammalian	Domestic animals suspected of HPAI are tested within one business day of receipt.	Detection of the H5 subtype of avian influenza virus nucleic acid.	Only performed if matrix positive.

Section	Test Type	Test	Price (\$)	Specimen	Species	Schedule (Turnaround Times)	Description of test	Comments
Virology	PCR	Avian Influenza A, H7	45	Cloacal, tracheal, or oropharyngeal swab (synthetic swabs, swabs in bacterial culture tubes are not suitable); tissue lung, trachea, brain	Avian or mammalian	Domestic animals suspected of HPAI are tested within one business day of receipt.	Detection of the H7 subtype of avian influenza virus nucleic acid.	Only performed if matrix positive.
Virology	PCR	Avian Paramyxovirus-1 (APMV)	45	Cloacal, tracheal, oropharyngeal, or nasal swab (synthetic swabs, swabs in bacterial culture tubes are not suitable); lung	Avian	Domestic animals suspected of APMV are tested within one business day of receipt.	Detection of avian paramyxovirus-1 nucleic acid.	Waterfowl - cloacal only swab. Swabs acceptable for live or dead animals. Please call for pooling information if multiple domestic birds.
Virology	PCR	Virulent Newcastle Disease (vNDV)	45	Cloacal, tracheal, oropharyngeal, or nasal swab (synthetic swabs, swabs in bacterial culture tubes are not suitable) lung	Avian	Domestic animals suspected of APMV are tested within one business day of receipt.	Detection of virulent Newcastle disease viral nucleic acid.	Only performed if APMV is positive.
Virology	PCR	Bovine Coronavirus (respiratory)	45	Lung, nasal swab (synthetic swabs, swabs in bacterial culture tubes are not suitable)	Bovine	Testing performed Monday, Wednesday, and Friday.	Detection of bovine coronavirus nucleic acid.	To ensure inclusion in the test run, samples should arrive the day prior to test day.
Virology	PCR	Bovine Herpesvirus-1 (BHV-1, IBR)	45	Nasal or conjunctival swab (synthetic swabs, swabs in bacterial culture tubes are not suitable), lung, affected tissue, PTT	Bovine	Testing performed Monday, Wednesday, and Friday.	Detection of bovine herpesvirus-1 nucleic acid.	To ensure inclusion in the test run, samples should arrive the day prior to test day.
Virology	PCR	Bovine Respiratory Syncytial Virus	45	Nasal swab (synthetic swabs, swabs in bacterial culture tubes are not suitable), lung, PTT	Bovine, other ruminant species	Testing performed Monday, Wednesday, and Friday.	Detection of bovine respiratory syncytial virus nucleic acid.	To ensure inclusion in the test run, samples should arrive the day prior to test day.

Section	Test Type	Test	Price (\$)	Specimen	Species	Schedule (Turnaround Times)	Description of test	Comments
Virology	PCR Virology Panel	Bovine Scours Panel (Coronavirus/Rotavirus)	60	Feces, small intestine	Bovine, other ruminant species	Testing performed Monday, Wednesday, and Friday.	Detection of bovine coronavirus and rotavirus nucleic acid.	To ensure inclusion in the test run, samples should arrive the day prior to test day.
Virology	ogy PCR Virology Panel Bovine Virus Abortion Panel (BHV-1, BVDV)		60	Fetal tissues or placenta	Bovine	Testing performed Monday, Wednesday, and Friday.	Detection of bovine herpesvirus-1 and bovine viral diarrhea virus (and related pestivirus) nucleic acid.	To ensure inclusion in the test run, samples should arrive the day prior to test day.
Virology	PCR	Bovine Viral Diarrhea Virus (BVDV)	45	Affected tissue, PTT	Bovine, other ruminant species	Testing performed Monday, Wednesday, and Friday.	Detection of bovine viral diarrhea virus (and related pesitvirus) nucleic acid.	Also detects other pestiviruses. To ensure inclusion in the test run, samples should arrive the day prior to test day.
Virology	PCR	Bovine Viral Diarrhea Virus (BVDV), pooled ear notch (up to 24)	45	Individual dry ear notch(es) in an empty 10mL RTT	Bovine	Testing performed within one business day of receipt	Detection of bovine viral diarrhea virus nucleic acid from lab-pooled ear notches.	Ears must be received at lab within 72 hours of collection. Additional \$3 per ear notch to confirm individual animal status from a positive ear notch pool. \$2 handling fee/ear notch assessed on ears not received in 10 mL RTT.
Virology	PCR	Canine Adenovirus 1, 2 Panel	45	Liver, affected tissue	Canine	Testing performed Monday, Wednesday, and Friday.	Detection of canine adenovirus-1 and -2 nucleic acid.	To ensure inclusion in the test run, samples should arrive the day prior to test day.
Virology	PCR	Canine Herpesvirus	45	Lung, liver, kidney, spleen, affected tissue	Canine	Testing performed Monday, Wednesday, and Friday.	Detection of canine herpesvirus nucleic acid.	To ensure inclusion in the test run, samples should arrive the day prior to test day.
Virology	PCR	Canine-Feline Parvovirus	45	Feces, small intestine, spleen	Canine, feline	Testing performed Monday, Wednesday, and Friday.	Detection of canine-feline parvovirus nucleic acid.	To ensure inclusion in the test run, samples should arrive the day prior to test day.
Virology	PCR	Canine Distemper Virus	45	Conjunctival swab (synthetic swabs, swabs in bacterial culture tubes are not suitable), PTT, lung, brain	Canine, feline	Testing performed Monday, Wednesday, and Friday.	Detection of canine distemper virus nucleic acid.	Both whole blood (PTT) and conjunctival swab recommended for accurate testing in live animals (\$90 total fee). To ensure inclusion in the test run, samples should arrive the day prior to test day.
Virology	PCR	Caprine Arthritis Encephalitis Virus (CAEV)	45	Lung, PTT, synovial fluid, milk, brain	Caprine	Testing performed Monday, Wednesday, and Friday.	Detection of caprine arthritis encephalitis virus nucleic acid.	To ensure inclusion in the test run, samples should arrive the day prior to test day.
Virology	PCR Panel	EHV-1, Neuropathogenic Panel	60	Nasal swab (synthetic swabs, swabs in bacterial culture tubes are not suitable) AND PTT, brain	Equine	Testing performed Monday, Wednesday, and Friday.	Detection of wild type or neurologic strains of equine herpesvirus-1 nucleic acid.	Both whole blood (PTT) and nasal swab are required for accurate testing in live animals (\$120 total fee). To ensure inclusion in the test run, samples should arrive the day prior to test day.

Section	Test Type	Test	Price (\$)	Specimen	Species	Schedule (Turnaround Times)	Description of test	Comments
Virology	PCR	Equine Herpesvirus-1	45	Nasal swab (synthetic swabs, swabs in bacterial culture tubes are not suitable) and PTT; fetal or affected tissues	Equine	Testing performed Monday, Wednesday, and Friday.	Detection of equine herpesvirus-1 nucleic acid.	Both whole blood (PTT) and conjunctival swab are required for accurate testing in live animals (\$90 total fee). To ensure inclusion in the test run, samples should arrive the day prior to test day.
Virology	PCR Panel	Equine Herpesvirus-1, 4 Panel	60	Nasal swab (synthetic swabs, swabs in bacterial culture tubes are not suitable) and PTT; fetal or affected tissues	Equine	Testing performed Monday, Wednesday, and Friday.	Detection of equine herpesvirus-1 and -4 nucleic acid.	Both whole blood (PTT) and nasal swab are required for accurate testing in live animals (\$120 total fee). To ensure inclusion in the test run, samples should arrive the day prior to test day.
Virology	PCR	Equine Herpesvirus-4	45	Nasal swab (synthetic swabs, swabs in bacterial culture tubes are not suitable), PTT, lung, affected tissue	Equine	Testing performed Monday, Wednesday, and Friday.	Detection of equine herpesvirus-4 nucleic acid.	To ensure inclusion in the test run, samples should arrive the day prior to test day.
Virology	PCR	Equine Rotavirus	45	Feces, intestine	Equine	Testing performed Monday, Wednesday, and Friday.	Detection of equine rotavirus nucleic acid.	To ensure inclusion in the test run, samples should arrive the day prior to test day.
Virology	PCR	Feline Calicivirus	45	Swab (synthetic swabs, swabs in bacterial culture tubes are not suitable) or biopsy from infected tissue	Feline	Testing performed Monday, Wednesday, and Friday.	Detection of feline calicivirus nucleic acid.	To ensure inclusion in the test run, samples should arrive the day prior to test day.
Virology	PCR	Feline Coronavirus	45	Swab (synthetic swabs, swabs in bacterial culture tubes are not suitable) or biopsy from infected tissue, pleural or thoracic fluid	Feline	Testing performed Monday, Wednesday, and Friday.	Detection of feline coronavirus nucleic acid.	To ensure inclusion in the test run, samples should arrive the day prior to test day.

Section	Test Type	Test	Price (\$)	Specimen	Species	Schedule (Turnaround Times)	Description of test	Comments
Virology	PCR	Feline Herpesvirus	45	Swab (synthetic swabs, swabs in bacterial culture tubes are not suitable) or biopsy from infected tissue	Feline	Testing performed Monday, Wednesday, and Friday.	Detection of feline herpesvirus nucleic acid.	To ensure inclusion in the test run, samples should arrive the day prior to test day.
Virology	PCR	Feline Leukemia Virus (FeLV)	45	Swab (synthetic swabs, swabs in bacterial culture tubes are not suitable) or biopsy from infected tissue		Testing performed Monday, Wednesday, and Friday.	Detection of feline leukemia virus nucleic acid.	To ensure inclusion in the test run, samples should arrive the day prior to test day.
Virology	PCR Panel	Hemorrhagic Disease Panel (BTV, EHDV)	60	Lung, spleen, PTT, swab (synthetic swabs, swabs in bacterial culture tubes are not suitable), affected tissue	Bovine, ovine, caprine, wild ruminant species	Testing performed Monday, Wednesday, and Friday.	Detection of bluetongue and epizootic hemorrhagic disease viral nucleic acid.	To ensure inclusion in the test run, samples should arrive the day prior to test day.
Virology	PCR	Influenza A	45	Tracheal or oropharyngeal swab (synthetic swabs, swabs in bacterial culture tubes are not suitable), lung, trachea	Mammalian	Testing performed Monday, Wednesday, and Friday.	Detection of influenza A viral nucleic acid.	To ensure inclusion in the test run, samples should arrive the day prior to test day.
Virology	PCR	Ovine Herpesvirus-2 (Malignant Catarrhal Fever)	45	Lung, lymph node, PTT, affected tissue	Bovine, bison, cervids	Testing performed Monday, Wednesday, and Friday.	Detection of ovine herpesvirus-2 nucleic acid.	To ensure inclusion in the test run, samples should arrive the day prior to test day.
Virology	PCR	Ovine Progressive Pneumonia (OPP)	45	Lung	Ovine	Testing performed Monday, Wednesday, and Friday.	Detection of ovine progressive pneumonia virus nucleic acid.	To ensure inclusion in the test run, samples should arrive the day prior to test day.
Virology	PCR	Parainfluenza-3 virus (PI- 3)	45	Nasal swab (synthetic swabs, swabs in bacterial culture tubes are not suitable), lung, PTT	Bovine	Testing performed Monday, Wednesday, and Friday.	Detection of bovine parainfluenza-3 viral nucleic acid.	To ensure inclusion in the test run, samples should arrive the day prior to test day.

Section	Test Type	Test	Price (\$)	Specimen	Species	Schedule (Turnaround Times)	Description of test	Comments
Virology	PCR	Parapoxvirus	45	Lesions, scabs, or swabs (synthetic swabs, swabs in bacterial culture tubes are not suitable)	Bovine, ovine, caprine	Testing performed Monday, Wednesday, and Friday.	Detection of parapoxvirus nucleic acid.	To ensure inclusion in the test run, samples should arrive the day prior to test day.
Virology	PCR	Rabbit Hemorrhagic Disease Virus-2	45	Lung, liver, spleen	Domestic rabbits	Testing performed Monday, Wednesday, and Friday.	Detection of rabbit hemorrhagic disease virus-2 nucleic acid	To ensure inclusion in the test run, samples should arrive the day prior to test day.
Virology	PCR Panel	Ruminant Virus Respiratory Panel (BHV- 1, BRSV, BVDV, PI3)	65	Nasal swab (synthetic swabs, swabs in bacterial culture tubes are not suitable), lung, PTT	Bovine, other ruminant species	Testing performed Monday, Wednesday, and Friday.	Detection of bovine herpesvirus-1, bovine respiratory syncytial virus, bovine viral diarrhea virus (and related pestiviruses), and parainfluenza-3 virus nucleic acid.	To ensure inclusion in the test run, samples should arrive the day prior to test day.
Virology	PCR	Swine Influenza Virus Matrix	45	Nasal swab (synthetic swabs, swabs in bacterial culture tubes are not suitable), lung	Swine	Testing performed Monday, Wednesday, and Friday.	Detection of swine influenza virus nucleic acid.	To ensure inclusion in the test run, samples should arrive the day prior to test day.
Virology	PCR	Vesicular Stomatitis Virus (VSV)	45	Lesion swab (synthetic swabs, swabs in bacterial culture tubes are not suitable) or biopsy	Equine	Testing performed Monday, Wednesday, and Friday.	Detection of both nucleic acid from Indiana and New Jersey Vesicular stomatitis virus strains	To ensure inclusion in the test run, samples should arrive the day prior to test day.
Virology	PCR	West Nile Virus (WNV)	45	Avian: PTT, lung, heart, brain; Mammals: Brain, spinal cord; Mosquitos (>50/pool)	Avian, equine, mosquito	Testing performed Monday, Wednesday, and Friday.	Detection of West Nile virus nucleic acid.	To ensure inclusion in the test run, samples should arrive the day prior to test day.
Virology	PCR	Wildlife Adenovirus	45	Lung, swab (synthetic swabs, swabs in bacterial culture tubes are not suitable), affected tissue Bone marrow is acceptable	Cervids, pronghorn	Testing performed Monday, Wednesday, and Friday.	Detection of wildlife adenovirus nucleic acid.	To ensure inclusion in the test run, samples should arrive the day prior to test day.
Toxicology	Strip	Nitrates, semiquantitative	15	Aqueous humor	Ruminants	1-2 days	Colormetric test to determine the concentration of nitrate in parts per million (PPM)	Removal of the aqueous humor from the eye is advisable for accurate results

Sc	ection	Test Type	Test	Price (\$)	Specimen	Species	Schedule (Turnaround Times)	Description of test	Comments
Tc	oxicology	Strip	Sulfate, semi- quantitative	15	Water	N/A	1-2 days	Colormetric test to determine the concentration of sulfate in parts per million (PPM)	
Тс	oxicology	рН	рН	10	Rumen fluid	Ruminants	1-2 days	This assay determines the pH of the rumen fluid	Rumen pH is not stable post-mortem.