



2025 TEST AND SERVICES GUIDE

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PDS Test and Services Guide

Table of Contents

Welcome to Prairie Diagnostic Services Inc.	3
Quality Assurance.....	3
2025 Updates	4
STAT Submissions	8
Hours of Operation.....	10
Additional Services and After Hours.....	10
PDS Contact Information.....	10
General Information.....	11
Submission Protocol	13
Submission Form/Sample History	13
Sample Labeling.....	14
Submission Guidelines for Biological Samples.....	15
Blood, urine, fluids, feces, swabs, slides, biopsies, etc.....	15
Whole Bodies or Portions	16
Suspect Risk Group 3 (RG3) Submissions	17
Sample Packaging Protocol.....	17
PDS Genomics Laboratory Services.....	18
Special Information for Clinical Pathology Submissions	19
Special Information for Necropsy Submissions.....	22
Special Information for Surgical/Dermatohistopathology Submissions.....	25
Special Information for Microbiology Submissions	26
Bacteriology/Parasitology Submissions.....	26
PCR Submissions	27
Special Information on Toxicology Submissions.....	29
Ergot and Mycotoxin Analysis	29
Special Information on NIRS Feed and Forages Testing.....	31
Research, Surveillance and Other Specialized Testing.....	33
PDS Panel and Combination Test Reference Guide.....	34
Clinical Pathology Combination Tests.....	34
Clinical Pathology Chemistry Panels	35
Microbiology Panels.....	36
Mineral Panels.....	37

Clinical Pathology Single Chemistry Target Reference Guide.....	38
Quick Index of Targets (Agent, Antigen and Substance) Testing Available.....	39
Immunohistochemistry (IHC).....	39
Infectious disease agents detected on formalin-fixed paraffin blocks include:	39
Cellular antigens detected on formalin-fixed paraffin blocks.....	39
Molecular Diagnostics Polymerase Chain Reaction (PCR) Reference Guide	40
Serology Reference Guide	41
Toxicology Reference Guide	41
Histopathological Stains	42
Purolator Courier Rates	43
Frontier Courier Rates (Regina and Moose Jaw)	43
Canada Post Express Order Entry.....	44
Referred Out Testing and Special Requests	44
Agent for Shipment Form	44
Submissions for Export Testing.....	45
Submission for Calculi (Urolith) Analysis	45

Tests

Tests Listed in Alphabetical Order

Appendix

Mycotoxin Ergot Nitrate Toxin Submission Form
 NIRS Feed and Forages Submission Form
 Agent for Shipment Form
 FAVN (Rabies) Report (Submission) Form
 Canine Export Submission Form
 Canadian Veterinary Urolith Centre Submission Form

Welcome to Prairie Diagnostic Services Inc.

Prairie Diagnostic Services Inc. (PDS) is a member type non-profit corporation dedicated to providing veterinary diagnostic services. Its members are the Province of Saskatchewan and the University of Saskatchewan.

PDS is located at the Western College of Veterinary Medicine (WCVN) in Saskatoon with laboratories integrated directly into the College. PDS provides a full range of diagnostic services including necropsy, surgical pathology, dermatohistopathology, clinical pathology, endocrinology, histology, bacteriology, immunology, molecular diagnostics, genomics, virology, and toxicology.

Quality Assurance

PDS implements a quality management system in accordance with the American Association of Veterinary Laboratory Diagnosticians (AAVLD) and the current version of ISO/IEC 17025 to demonstrate sound management and technical competence as described in our Quality Manual, Policies and Procedures.

PDS is accredited by the Standards Council of Canada (SCC) as a testing laboratory for specific tests; refer to the [Scope of Accreditation](#). The laboratory participates in Proficiency Test programs and in assessments through SCC and AAVLD to ensure our standard of expertise is maintained.

PDS has full accreditation status from AAVLD. AAVLD accreditation is an elective, peer-review process for publicly funded, full service veterinary diagnostic laboratories in North America. AAVLD accreditation is a rigorous and comprehensive laboratory evaluation that closely follows ISO 17025 standard for testing but also assesses professional and administrative competencies of the laboratory.

PDS is also inspected and evaluated by other federal and international agencies for competencies that are either test-specific or provide assurance of the laboratory's preparedness for foreign animal disease (FAD) outbreaks. For example, PDS is a CFIA approved laboratory for conducting Equine Infectious Anemia testing and has been designated by the CFIA as a Tier I Lab for testing related to FAD outbreaks.

It is PDS policy to provide the highest quality, cost effective veterinary diagnostic testing to our clients through continuous improvement of its staff, methods, and management system. PDS is committed to good professional practice, technological improvements, and a high degree of reliability. PDS is committed to providing its clients with accurate, precise, reproducible, and timely results.

2025 Updates

Price Increase: PDS implemented a 6% price increase on the majority of in-house testing effective June 1, 2025. Referred-out price increases are based on the referral laboratories' prices.

The PDS Diagnostic Services Office (DSO) is closed on Saturdays.

PDS Client Portal Access: All PDS clients can access the PDS Client Portal (Web Client). For login information, please contact the PDS Diagnostic Services Office at 306-966-7316 or via email at dso@usask.ca.

PDS Customer Portal – *Coming Soon*. The launch of the PDS Customer Portal, originally scheduled for May 1, 2025, has been delayed due to unforeseen circumstances. Once available, Customer Portal will be accessible through the existing PDS Client Portal (Web Client). Please monitor your email for further updates and details.

Online Submission Service: Client Portal (Web Client) offers an online submission service. Submission forms will automatically include your clinic information. After completing the form, click the submit button, print the barcoded form, and include it with your samples. The PDS Diagnostic Services Office is not notified of online history submissions. For corrections or additional information, email PDS at dso@usask.ca.

Printable Submission Forms: Printable versions of submission forms are available on the PDS website (<https://pdsinc.ca/services/forms>). These forms provide an abbreviated list of tests, while the Client Portal (Web Client) lists all tests in the PDS Test and Services Guide. The printable forms are fillable PDFs that can be completed electronically, printed, and saved. For Exotic Animal and Wildlife submissions, use the Companion and Exotic Submission Form.

Test List: The PDS website (pdsinc.ca) features a searchable Test List (pdsinc.ca/resources/fee-guide) that can be searched by test name, species, or sampling protocol. This list includes the most current test information, although pricing is not included. For pricing, access the Fee Guide through Web Client. To obtain your clinic's Web Client login information, contact the PDS Diagnostic Services Office at 306-966-7316. For a digital copy of the PDS Test and Services Guide, email dso@usask.ca.

PDS Newsletter: PDS is pleased to announce the launch of our new newsletter, **Prairie Diagnostic Perspective**. At PDS, our commitment to meeting your needs and driving innovation in veterinary diagnostics is at the heart of everything we do. PDS is looking forward to delivering these quarterly newsletters to our clients.

Follow Us on Social Media: Stay informed by following PDS on X (formerly Twitter) at @PDSVetDiagnServ; on Instagram at [Prairie Diagnostic Services](#); on Facebook at [Prairie Diagnostic Services](#).

Test Updates:

- New Tests 2024-25:

- Atypical Porcine Pestivirus PCR (APPV)
- Avian Adenovirus - Genotyping by Sequencing
- Avian metapneumovirus type A, B, C – PCR
- Avian Reovirus PCR
- Avian Reovirus Genotyping by Sequencing
- Cache Valley Virus PCR
- Dermatophilus Culture
- Fasted Canine Standard / Triglyceride Panel
- NIRS Feed and Forages Nutritional Analysis
- Infectious Bronchitis Virus PCR
- Infectious Bursal Disease Virus PCR
- Infectious Bursal Disease Virus (IBDV) Genotyping by Sequencing
- Necropsy - Whole Fetus - Ruminant (maximum 2 fetus from same Dam) - Gross and Histo
- Necropsy - Whole Fetus - Ruminant (up to 2 additional fetus from the same Dam) - Gross and Histo
- Neospora Caninum PCR
- Porcine Astrovirus Type 3 PCR (PAstV3)
- Porcine Astrovirus Type 4 PCR (PAstV4)
- Porcine circovirus 3 (PCV3) - ORF2 Sequencing
- Porcine Parainfluenza Virus Type 1 PCR
- Porcine Sapelovirus PCR
- Porcine Sapovirus Genogroup III VP1 sequencing
- Porcine Teschovirus PCR (PTV)

Refer to PDS Test and Services Guide for test information, turnaround time and price.

- Discontinued Tests 2024-25:

The following tests have been removed from the fee guide and the client portal. They may still appear on downloaded forms until the updates are complete. If you request these tests, you will be contacted to cancel testing:

- Bovine Coronavirus Antibody ELISA
 - contact PDS to discuss availability for Research and Surveillance projects (Bovine only).
- Bovine Parainfluenza 3 ELISA
 - contact PDS to discuss availability for Research and Surveillance projects (Bovine only).
- Bovine Respiratory Syncytial Virus ELISA
 - contact PDS to discuss availability for Research and Surveillance projects (Bovine only).
- Infectious Bovine Rhinotracheitis ELISA

- contact PDS to discuss availability for Research and Surveillance projects (Bovine only).
- Bovine Respiratory Panel – Antibody (includes IBR, BRSV, PI-3 and BCV ELISA)
- Strychnine – submissions will be referred to the Animal Health Laboratory Guelph Ontario.
- SIV H1N1/H3N2 ELISA (Biovet) – Biovet discontinued testing effective April 2025.

Fetus Submissions from Ruminants – New Test Options:

- A revised pricing structure applies to submissions involving multiple fetuses (e.g., triplets). The standard fee will cover up to two fetuses from the same dam. Any additional fetuses beyond the first two will be billed at a discounted rate.
- **Example Triplet Submission:**
- **Necropsy – Whole Fetus – Ruminant (maximum of 2 fetuses per dam):** Includes gross examination and histopathology. Use this standard test/fee code for the first two fetuses.
- **Necropsy – Whole Fetus – Ruminant (up to 2 additional fetuses from the same dam):** Includes gross examination and histopathology. Use this designated discounted test/fee code for additional fetuses.
- Submission of the placenta is strongly encouraged and should accompany the fetus whenever possible.
- All samples must be clearly and accurately labeled, and labelling must match the submission form.
- Use a rigid, leakproof container to ensure safe and compliant transport.

NIR Feed and Forage Testing: Prairie Diagnostic Services is proud to offer Feed and Forage Nutritional Analysis—locally performed using state-of-the-art Near Infrared Reflectance Spectroscopy (NIRS). This fast, non-destructive testing provides accurate insights into key nutritional parameters like **protein, fiber, energy, moisture, and more**. Our robust calibration database, developed in collaboration with Rock River Laboratory, Inc., ensures consistent, trusted results across a wide variety of feed types. Refer to **Special Information for NIRS Feed and Forages Testing** for additional information.

Cytology Smears: the maximum number of slides per site for cytology smears/imprints submissions decreased from 8 slides to 4 slides per site in 2024. Refer to **Special Information for Clinical Pathology Submissions** for additional information.

Swabs for PCR: Gel media swabs are not acceptable for PCR testing. Refer to the PDS website (pdsinc.ca) for a list of acceptable swabs - [PDS is no longer accepting Gel Swabs for PCR Testing](#).

- For PCR and culture requests: gel media swab is the preferred sample for culture, so if possible, submit a gel media swab for culture as well as a swab that is acceptable for PCR.

BioPRYN Testing: Available for Bovine, Ovine, Caprine, Bison/Buffalo, and Yaks only. **Wildlife testing is NOT available.** Ensure tubes are clean and the tube label exactly matches the sample ID list. Extra charges may apply for dirty tubes. The samples must arrive at PDS by 12:00 P.M. Wednesday for results by Friday of the same week.

Johne's Fecal PCR Options: Individual (Mycobacterium paratuberculosis Individual) and Pooled (Mycobacterium paratuberculosis Pooled 5:1) testing options are available. Make sure you select the appropriate option when ordering tests. Clearly indicate in the history if positive pools should be tested individually (additional charges will apply). For additional information, refer to **Johne's Testing at PDS** found under **Resources->Submission Protocols** on the PDS website (pdsinc.ca) - [Johne's Testing at PDS](#).

BVD Skin Testing: The BVD Skin Biopsy IHC test is no longer available. It has been replaced by BVD Real Time PCR, which requires fresh skin/ear notches. For further details, refer to **BVD Sampling Instructions** found under **Resources->Bovine** on the PDS website (pdsinc.ca) - [BVD Sampling Instructions](#).

- There are 2 test options available:
 - **Individual testing** – individual samples are analyzed, and a result will be provided for each individual animal, price listed is per animal.
 - **Pooled testing** - 2 to 10 samples are pooled into one sample, the pooled sample is analyzed, and the result will be for the pooled sample (not individual results for each animal), price listed is per pool.
 - Additional charges will apply if you request that BVD positive pools be tested individually, contact PDS for current pricing.

Anthrax: Anthrax culture has been discontinued. All Anthrax culture requests will be tested by PCR.

Mycotoxin and Ergot:

- Mycotoxin and Ergot testing **must be** submitted with the **Mycotoxin Ergot Nitrate Toxin Submission Form** found under **Resources->Forms** on the PDS website (pdsinc.ca) - [Mycotoxin Ergot Nitrate Toxin Submission Form](#).
- PDS has implemented a \$30.00 per sample grinding charge for Mycotoxin/Ergot testing. This charge will apply to feed that is submitted whole/un-ground. Ground samples can be submitted without the additional charge, but results will NOT be guaranteed for samples that cannot pass through a 35mesh (0.5mm; flour consistency). Indicate on the Mycotoxin Ergot submission form if grinding is required.

Environmental Testing for Antineoplastics – Cyclophosphamide and 5-fluorouracil.

- Testing kits are available to purchase from PDS. Contact PDS Diagnostic Services Office at 306-966-7316 for information on ordering.

Referral Samples: Samples submitted for shipping to external laboratories will be shipped on the following schedule:

- USA shipped on Monday and Wednesday (prices are now listed in Canadian dollars).
- Canada shipped Monday through Thursday.

If you require samples to be sent on a day different from the schedule, a STAT fee of \$100.00 will be charged. If the test is time sensitive due to the nature of the sample being sent, please consult with the Clinical Pathology Laboratory prior to collection of the sample(s).

Hold sample requests: Requests to hold samples for possible testing will be charged a non-refundable handling fee based on sample type.

- \$10.00 for holding blood, swabs, etc.
- \$20.00 for holding tissues, fresh and/or fixed, that do not have other pathology work ordered.
- Clearly indicate on the submission form if fixed tissues are to be held for possible further/future testing or if they are to be sent for histology for processing.

STAT Submissions

STAT Requests:

- STAT fee is \$32.00 for all tests except PCR. Refer to **PCR Special Information** for PCR STAT pricing structure.
- STAT testing cannot be guaranteed for single samples requiring testing across multiple lab areas.
- Contact PDS before submitting samples to discuss potential overtime charges.

Note.: STAT testing cannot be guaranteed on all PCR/Serology/Virology/Immunology tests if:

- Samples arrive after the 10:00 A.M. cutoff time.
- Multiple tests are ordered STAT.

Tests Excluded from STAT Testing:

- All Necropsy/Biopsy submissions.
- All Bacteriology Culture submissions.
- All Toxicology submissions (including Mineral and Vitamin testing).
- Baermann
- PCR tests:
 - Bovine Diarrhea Panel
 - Bovine Respiratory Panels – all panel options
 - Campylobacter sp.
 - Chlamydophilia psittaci
 - Chlamydia sp.
 - Clostridium perfringens toxin typing
 - E. coli Virotyping
 - Herpes sp.
 - Johne's PCR
 - Mycobacterium sp.
 - Mycoplasma sp.
 - Porcine Diarrhea Panels – all panel options

- Sequencing Confirmation
- Unincubated Trich Samples for Trich PCR
- Serology/Virology/Immunology tests:
 - Bovine Viral Diarrhea Type 1 Virus Neutralization
 - Bovine Viral Diarrhea Type 2 Virus Neutralization
 - Canine Distemper Virus IHC on haired skin biopsy
 - Coombs testing (with and without temperature profiling)
 - Equine Viral Arteritis Screening (2 dilutions)
 - Equine Viral Arteritis Virus Neutralization (8 dilutions)
- Phenobarb
- Clinical Pathology samples received after the following times:
 - Cytology: Monday to Friday after 3:30 P.M.; **VMC Only**: Saturday after 1:00 P.M.
 - CBC/Chemistry/Urinalysis: Monday to Friday after 5:00 P.M.; **VMC Only**: Saturday after 4:00 P.M.
 - Progesterone and Cortisol: Monday to Friday after 4:30 P.M.; all Saturday submissions.
- Endocrine and progesterone testing is not available on Saturday.

Hours of Operation

Monday to Friday	8:00 A.M. to 5:00 P.M.
Exception:	Closed Statutory Holidays

Additional Services and After Hours

The Diagnostic Services Office (DSO, Sample Receiving) is **closed** Saturday.

The Clinical Pathology Laboratory is open on Saturday from 8:30 A.M. to 5:00 P.M. for submissions originating exclusively from the Veterinary Medical Centre (VMC). Preliminary test results will be available for samples received before 3:00 P.M. Refer to **Special Information for Clinical Pathology Submissions** for additional information.

The Bacteriology Laboratory is open to process submissions on Saturday from 8:30 A.M. to 5:00 P.M. Finalized results will be available the next business day.

Emergency service for admission of samples to the Necropsy Facility is available from 9:00 A.M. to 5:00 P.M. Saturday and 9:00 A.M. to 1:00 P.M. Sundays and Holidays. Refer to **Special Information for Necropsy Submissions**.

PDS Contact Information

Telephone	(306) 966-7316
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Necropsy After Hours Service	(306) 291-9281
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Necropsy Facility personnel are **On Call** during the following time periods:

Saturday	9:00 A.M. to 5:00 P.M.
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Sundays and Holidays	9:00 A.M. to 1:00 P.M.
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Email	pds.info@usask.ca
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Fax	(306) 966-2488
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Website	pdsinc.ca
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General Information

Pricing Policy: Prices are subject to change without notice. All prices exclude GST, which will be added to the final invoice. Note that GST is not charged to clients in the USA.

Test and Services Guide Pricing: There are two pricing categories:

- **Supported Price (Saskatchewan Only):**
 - This price applies to food animals within Saskatchewan, defined as animals raised for food, fiber, or other by-products. This category includes cattle, sheep, goats, pigs, poultry, emus, ostriches, rheas, feedlot horses, game-farmed animals, llamas, alpacas, vicuñas, ranched fur-bearing animals, meat rabbits, and farmed fish.
 - The Supported Price reflects a discount funded by Saskatchewan Ministry of Agriculture and, in specific cases, the Western College of Veterinary Medicine (WCVN).
- **List Price:**
 - This applies to companion animals and out-of-province food animals.
 - Fees for wildlife and sport animals (e.g., racehorses and pigeons) will typically fall under the List Price.
- If you have any questions, please feel free to reach out to PDS for assistance.

Turn Around Time: Please note that turnaround times for laboratory results vary depending on the specific test requested and are outlined in our **Test and Services Guide**. PDS is committed to delivering results within the stated timeframes and will promptly notify you of any unexpected delays. Turnaround times are calculated from the date samples are received at PDS laboratory. Turnaround times are based on working days (weekends or Statutory holidays are not included). For large batch sample submissions, extended turnaround times will apply. We recommend contacting PDS in advance to coordinate large batch submissions.

Data Sharing: PDS may publish surveillance data. The data aids in monitoring livestock health issues and disease trends, as well as supporting teaching and academic research. Individual client and animal identification information will remain confidential, except as legally required for notifiable and reportable diseases. This data aids in monitoring livestock health issues and disease trends, as well as supporting teaching and academic research.

Ownership of Data: PDS retains ownership of all test data, reports, samples, and intellectual property resulting from submissions, unless alternative arrangements are made in writing at the time of submission.

Submission Requirements: All diagnostic samples related to animal health and disease must be submitted through a veterinarian responsible for interpreting and applying the diagnostic test results. Whole animals can be

submitted by owners with the veterinarian supplying the submission form prior to arrival. Costs will be charged to the clinic, not the owner.

Prices: The Test and Services Guide provides pricing for single or small numbers of diagnostic samples. Discounts may be available for large volumes, contracts, or research/surveillance projects (refer to **Research, Surveillance, and Other Specialized Testing**). Please contact PDS to discuss pricing options.

Adding Tests: To request an add-on test, email the PDS Diagnostic Services Office at dso@usask.ca. Include your PDS case number, the requested add-on test(s), and the name of the person making the request.

Hold Fees: Hold fees will apply for holding samples for future testing, depending on the sample type: \$10.00 for most samples (e.g., blood, smears, swabs) and \$20.00 for tissues (fresh and/or fixed). The hold fee is non-refundable. Samples submitted for testing are typically held for two weeks at no charge. Clearly indicate on the submission form whether fixed tissues are to be submitted for diagnostic testing or held for future testing.

Submission Protocol

Submission Form/Sample History

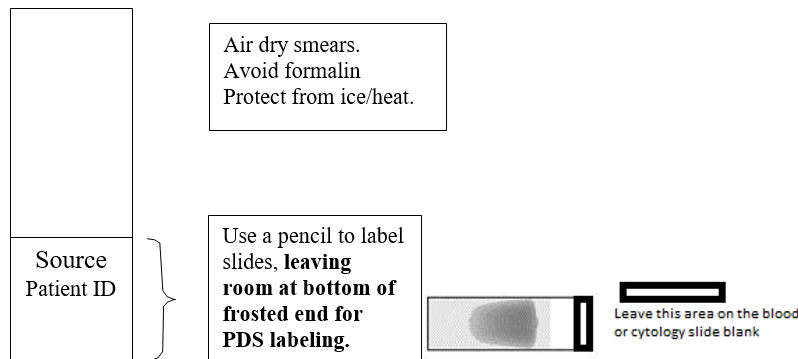
- **Submission Forms:**
 - Submission forms can be generated through the PDS Client Portal ([Web Client](#)), or printable forms are available on the PDS website ([pdsinc.ca](#)) under **Services->Forms - [PDS Forms](#)**. Web Client provides access to all the tests offered by PDS, while printable forms contain an abbreviated test selection.
 - If using a saved submission form template, ensure all fields are updated with accurate information and test requests before submitting.
 - For exotic and wildlife submissions, use the **Companion and Exotic Submission Form**.
 - For submissions involving multiple animals, complete the **Multiple Animal Excel Submission Form** or provide an Excel spreadsheet listing animal IDs. Ensure all sample IDs are unique and exactly match the sample labels and the spreadsheet. Email the completed Multiple Animal Submission Form or Excel spreadsheet to the PDS Diagnostic Services Office at dso@usask.ca. Ensure samples are organized in the same order as they appear on the animal ID list. Additional charges may apply if samples are not arranged accordingly.
- **Required Information:** Ensure the following information is included:
 - Client information: submitting clinic's name and address,
 - Owner's FIRST AND LAST NAME,
 - Premise ID for farm animals,
 - Collection date and collection time,
 - Animal Identification: Name, all assigned tag numbers (e.g., CCIA/farm); unique markings, tattoos,
 - Age (specify days, weeks, months or years, birthdate), species, breed,
 - Reason for submission: Diagnostic, Research, Routine Monitoring, Surveillance,
 - Sample(s) submitted (ensure sample type matches test requested),
 - History,
 - Production Stage and Primary Systems Affected for National Surveillance purposes on Bovine, Swine, Equine, Caprine/Ovine, and Avian submission forms,
 - Veterinarian name
 - **Identify test(s) required.** Clearly indicate if any samples are to be held for further/future testing (hold fees may apply).
 - Include animal's current vaccination history.
- Ensure writing is legible on hand-written forms.
- **Suspect Risk Group 3 Submissions:** When infection with Risk Group 3 organisms is suspected, the form must clearly indicate the suspected organism and any relevant clinical signs. The Suspect RG3 box must be checked on the submission form.

- **Incomplete Submission:** Missing information or paperwork may result in delays and additional charges.
- **Shipping Paperwork:**
 - Place the submission form in a sealed bag and attach it to the exterior of the secondary package - refer to **Sample Packaging Protocol**.
 - Diagnostic Services Office personnel must be able to access paperwork and sample IDs without direct contact with the specimens. This is an Occupational Health and Safety concern; externally contaminated samples cannot be safely processed.
- Externally contaminated samples or submission forms may result in a delay in processing.

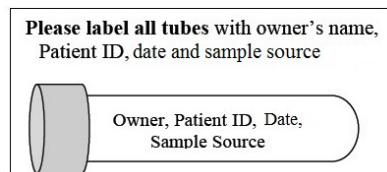
Sample Labeling

All samples must be properly labeled with the patient's identification, the owner's last name, and source (site). This includes cytology smears and tubes. For cytology smears taken from multiple sites, each slide must be labeled to indicate the corresponding site.

Labeling Blood/Cytology Smears



Labeling Sample Tubes



Do not wrap labels around the entirety of the tube, make sure blood level is visible.

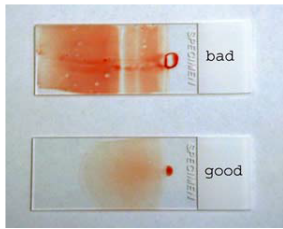
Submission Guidelines for Biological Samples

Blood, urine, fluids, feces, swabs, slides, biopsies, etc.

Ensure:

- Each case must include a completed PDS submission form. Clearly label all samples with the owner's last name, animal ID, sample type (e.g., serum, urine, eye swab, ear swab, feces, plasma, fresh tissue type, fixed tissue type, cytology fluid including fluid site, etc.), and the collection date for EDTA, urine, and cytology fluids.
 - If submitting samples from multiple animals, attach a completed **Multiple Animal Submission Form** or an Excel spreadsheet listing the identifying numbers or names. Email the submission form or spreadsheet to dso@usask.ca. Ensure that all samples are labeled exactly as they appear on the Multiple Animal Submission Form or Excel spreadsheet. When packaging, sort samples in the same order as indicated on the animal ID list. Additional charges may apply for sorting.
- Ensure sample containers are clean and free from contamination with blood or feces. Additional charges may apply if samples are grossly contaminated.
- Submit separate swabs when requesting more than one test that requires the same sample type (e.g., for both Bacteriology and PCR tests on a nasal swab, submit two swabs rather than one). Sharing swabs significantly decreases the chance of isolating target organisms..
 - **Note: PDS no longer accepting swabs in gel media for PCR testing.** Refer to the PDS website (pdsinc.ca) for a list of acceptable swabs - [PDS is no longer accepting Gel Swabs for PCR Testing](#)
- When submitting urine for complete urinalysis and culture, provide two separate urine samples in sterile containers.
- Use leak-proof, rigid containers with tight-fitting lids, and place these in zip-lock bags - refer to **Sample Packaging Protocol**.
- Ensure samples are easily distinguishable from packing materials. Use bubble wrap or syringe containers to protect tubes from breakage, but do not tape samples to bubble wrap.
- Place the submission form in a separate plastic bag to protect it from spills or contamination. If the form is attached to the outside of the box, ensure that couriers do not cover it with shipping labels or information.
- Blood/cytology slides must be clearly labeled - refer to **Labeling Blood/Cytology Smears**. Slides must be kept separate from formalin-containing vessels, as contact will adversely affect staining. Package appropriately to prevent breakage during transit.
- If there is an overnight delay in shipping, prepare blood smears and send along with the whole blood. Do not stain the slides before sending.

- Submit 2 good quality blood smears.



- To prevent freezing during cold weather (temperatures below 0°C), request that the courier protects parcels from freezing. Clearly label the outside of the packaging to indicate this.

Do Not Submit:

- Fecal samples in gloves or milk in whirl-pak bags.
- Syringes with needles or stoppers attached.
- Slides taped to the sides of boxes, as they may be inadvertently discarded.
- Pooled samples from multiple animals in the same bag or jar.
- Sticky labels or tape on glass slides.

Note: PDS has a limited supply of plastic slide holders. Please contact PDS to request holders (shipping charges will apply). PDS no longer provides cardboard slide holders or Styrofoam tube mailers due to biosafety concerns.

Whole Bodies or Portions

Ensure:

- A completed PDS submission form accompanies each case.
- Place submission form in a sealed plastic bag.
- For whole bodies, use a large bag followed by a secondary bag with absorbent material.
- For tissue portions, place samples in a leak-proof container (preferably with a screw top for formalin-fixed tissues). Ensure container is labelled with tissue type and contains only one type of tissue.



Proper packaging



Improper packaging – leaks during shipping

- Decontaminate the outer bag if necessary.
- Place the sample in a rigid leak proof container (e.g., box, plastic tub). Do not use Styrofoam containers.
 - **Note:** These containers will **NOT** be returned.
- Do NOT put “body” or “whole animal” on waybill. Purolator will refuse to pick up.

Suspect Risk Group 3 (RG3) Submissions

To safely ship Suspect Risk Group 3 (RG3) samples, which pose serious health risks, please follow these steps:

- Indicate “Suspect RG3” on the submission form.
- Securely package samples to prevent leakage (e.g., double bagging).
- Include the submission form in an envelope or plastic bag. Attach form to the outside of the package.
- Notify PDS prior to sample arrival by emailing dso@usask.ca or calling (306) 966-7316.

RG3 Resources:

- Pathogen Safety Data Sheets for organisms (<https://www.canada.ca/en/public-health/services/laboratory-biosafety-biosecurity/risk-groups-risk-assessment.html>).
- [ePATHogen](#) - the Public Health Agency of Canada’s biological agent search tool and a link.
- For those working with animal pathogens, visit [Canadian Food Inspection Agency's Disease Agent Information page](#).

Sample Packaging Protocol

Transport Canada regulations require 3 levels of packaging as follows:

- Primary Container (holds the sample)
 - Must be leak proof, plastic, and have a wide mouth opening.
 - The exterior of the container must be clean to prevent contamination of the sample.
 - **Note:** A single plastic bag is insufficient for solid specimens over 2 lbs.
 - Do not submit liquid samples or solid samples in fluid in plastic bags.
- Secondary Container
 - Must be leak proof and contain enough absorbent material to absorb all liquids/specimens in the primary container in case of leakage.
 - Must have a wide mouth opening.
- Clean the external surface; decontaminate if necessary.
- Tertiary Packaging
 - A rigid cardboard box is acceptable if a sample weighs less than 10 lbs.
 - Use a rigid plastic (e.g., cooler), if the specimen weighs over 10 lbs. or contains large volumes of liquid. These containers will **NOT** be returned.

PDS Genomics Laboratory Services

Our Genomics Laboratory is staffed by a team of experienced diagnostic professionals and technologists, and is equipped with an ONT (Oxford Nanopore Technologies) GridION X5 to efficiently manage a wide range of sequencing applications, from individual diagnostic samples to large volumes for research projects.

- **Diagnostic Sequencing Services Include:**

- Bacterial isolate identification, genome assembly, and characterization by whole-genome nanopore sequencing.
- Salmonella Typing by whole-genome nanopore sequencing.
- Influenza A HA and NA typing by whole genome sequencing.
- Amplicon sequencing for specific targets, such as Porcine Sapovirus VP1, Porcine Rotavirus A and C VP7 sequencing, Avian Adenovirus Hexon Gene Sequencing.

- **Research Project Sequencing:**

- BovReproSeq – A syndromic sequencing panel for detection of 17 pathogens associated with Bovine Reproductive Failure.
- Shotgun metagenomic sequencing to characterize bacterial and viral population present in a diagnostic sample.

With rapid maturation of third-generation sequencing technologies, PDS anticipates that the range of the genomics-based diagnostic applications will continue to expand in the near future.

For inquiries regarding your diagnostic needs, including appropriate sample types, sequencing depth, and bioinformatic analysis options, contact the PDS Diagnostic Services Office at (306) 966-7316 or via email at dso@usask.ca.

For special requests, refer to **Research, Surveillance, and Other Specialized Testing**.

Special Information for Clinical Pathology Submissions

STAT Requests:

- A \$32.00 STAT fee applies to all STAT requests received at any time during the day.
- For same-day results, STAT samples must arrive in the Clinical Pathology Lab before the following times:
 - Cytology: Monday to Friday before 3:30 P.M.; **VMC only** - Saturday before 1:00 P.M.
 - CBC/Chemistry/UA: Monday to Friday before 5:00 P.M.; **VMC only** - Saturday before 4:00 P.M.
 - Progesterone and Cortisol: Monday to Friday before 4:30 P.M.; Saturday submissions will be processed the next business day.

Results:

- Same-day results are available for most Clinical Pathology tests that arrive at the lab by 2:00 P.M. Monday through Friday.
 - Samples arriving after 2:00 P.M. may not receive finalized results until the next business day.
- **VMC Only:** Samples received on Saturday may not be interpreted by a Clinical Pathologist until the next business day. Priority will be given to cytology samples received before 1:00 P.M.

Endocrine/Drug Testing:

- **Do not use SST tubes** for collecting samples for endocrine (thyroid, cortisol) or drug (Phenobarb, Potassium Bromide) tests, as these tubes have not been validated for Veterinary use.
- [Adrenal Function Testing Protocols](#) are available on the PDS website (pdsinc.ca) under **Services->Endocrinology**.

Coagulation Submissions:

- Include a normal sample from an animal of the same species for all submissions, except Canine, Feline, and Equine.
- Centrifuge the sample within 4 hours of collection and transfer plasma to a plastic tube or plastic syringe. Freeze the sample before shipping.
- Do not use glass tubes or red top tubes, as they may contain a clot activator, which is **NOT** acceptable for plasma samples for coagulation testing.

CBC Submissions:

- EDTA tubes **MUST** be filled to 2/3 capacity; incorrect blood-to-EDTA ratio can lead to incongruent results for RBC parameters.
- Blood smears must be submitted with overnight samples.
- Protect EDTA tubes from freezing during shipping in cold weather.
- EDTA and blood smears will not be tested if clots are present in the EDTA tube.

Combination Tests:

- All samples must be received at the same time for combination pricing to apply, including urine samples. A new submission form is required for every add-on sample/test request.

Cytology Submissions:

- Slides and tubes must be clearly labeled with patient ID, site ID and date of collection – refer to **Labeling Blood/Cytology Smears**.
- All sites must be submitted at the same time and must be from the same animal to get discount pricing.
- The turnaround time for results is 24 hours.
- STAT Cytology Submissions must arrive in the Clinical Pathology Lab before 3:30 P.M. Monday through Friday and before 1:00 P.M. Saturday (**VMC only**) to receive same day results. Submissions received after 3:30 P.M. Monday to Friday or 1:00 P.M. Saturday may be finalized the next business day.
- There is a \$ \$8.43 charge for each additional slide above the maximum 4 slides per site for Cytology Smears/Imprints and the maximum 8 slides for Multiple Lymph Nodes.
- **Cytology Fluids:** see **Cytology – Fluid 1 tube of fluid**. Discounts apply when submitting multiple tubes of fluid – see Cytology – Fluids (per tube).
- **Cytology Smears:** see **Cytology – Smears or Imprints**. Discounts apply to 2 or more sites – see **Cytology – Smears or Imprints** for the price of multiple sites (e.g. Cytology – Smears or Imprints Price for 2).
- **Cytology – Multiple Lymph Nodes (3 or more sites):** select when submitting 3 or more lymph node sites. If submitting less than 3 lymph nodes sites, see the appropriate **Cytology – Smears or Imprints** (1 or 2 sites) for pricing.
- **Cytology – Joint Fluid Combo:** includes 1 tube of joint fluid in EDTA (1 mL of sample) and up to 4 smears from the same site as the fluid; plus, up to 4 additional joint sites with smears only (a maximum of 4 air-dried, unstained smears per site).
 - One joint fluid is preferred but if this is not possible joint smears only can be submitted from a maximum of 5 sites.
 - All joint sites must be submitted at the same time from the same animal.
 - Extra charges (\$8.43 per slide) will apply if more than 4 slides are submitted per site.
 - If submitting more than 5 sites, see Cytology - Smears or Imprints for additional charges per site.
 - Submit a red top tube if culture is required, additional charges will apply.
- **Cytology Resubmission:** Smears may be submitted following a **non-diagnostic** sample. Samples must be submitted within 2 weeks of the original submission and the original PDS case number must be quoted on the new submission form. An additional charge will apply – resubmission price is listed under **Cytology - Smears or Imprints** sample comments in the Tests section of this guide.

Urinalysis – Complete vs. Urine Cytology:

- **Urinalysis – Complete:** includes the urine strip, specific gravity, sediment, and Clinical Pathology interpretation. It does not include a Clinical Pathologist review of the urine sediment cytocentrifuge slide.
 - If the technologist sees what may be abnormal cells in the sediment, a cytocentrifuge slide of the sediment will be prepared and a Technical Comment will appear on the report. Contact PDS to request a Clinical Pathologist review of the cytospin (**Add-on Urine Cytology**). An additional charge will apply – Add-on price is listed under **Urinalysis – Complete** sample comments in the tests section of this guide.
 - Add-on Urine Cytology can be requested by emailing dso@usask.ca with the PDS report number and an add-on request (a submission form or an email indicating add-on test is required to add on the cytology).
- **Urine Cytology:** includes Urinalysis – Complete and Urine Cytology (Clinical Pathologist review of urine sediment cytocentrifuge slide).

For additional Clinical Pathology information refer to the **Clinical Pathology Protocol Manual** found under **Services->Clinical Pathology** on the PDS website (pdsinc.ca) - [Clinical Pathology Protocol Manual](#). This manual is available to download and print.

To add tests to a previous submission email dso@usask.ca with the PDS number and the add on request.

Special Information for Necropsy Submissions

Call Back Service for admission of samples to the Necropsy Facility is available for large animal cases during the following times:

9:00 A.M. – 5:00 P.M. – Saturdays

9:00 A.M. – 1:00 P.M. – Sundays and Holidays

- To access the Necropsy call back service, phone **(306) 291-9281** to arrange for Necropsy Facility personnel to receive the submission. Arrangements for an emergency necropsy examination can be made at this time. Additional charges for emergency necropsy examinations and after-hours case submissions apply. The PDS Necropsy Facility regular hours of operation are weekdays from 8:00 A.M. – 5:00 P.M.

Sudden Death vs Found Dead: Guidelines on how to use these terms.

- **Sudden Death:**
 - The animal was observed alive and in apparent good health but died unexpectedly within a short period.
 - There were no noticeable premonitory signs of illness or distress.
 - These cases often require urgent investigation due to the potential involvement of infectious diseases, toxins, or metabolic disturbances.
 - Possible causes include but are not limited to:
 - Clostridial diseases (e.g., blackleg, enterotoxemia)
 - Anthrax
 - Toxicity (e.g., lead, nitrates, cyanide poisoning)
 - Bloat or acute ruminal tympany
 - Metabolic disorders (e.g., hypocalcemia, hypomagnesemia)
 - Acute hemorrhages (e.g., ruptured aneurysm, trauma)
- **Found Dead:**
 - The animal was discovered deceased, but the time and cause of death are unclear.
 - The animal might have shown signs of illness before death, but these were either unnoticed or not reported.
 - Investigation relies on post-mortem findings rather than clinical history.
 - Possible causes include but are not limited to:
 - Prolonged illness leading to unnoticed deterioration (e.g., pneumonia, parasitism, malnutrition)
 - Predation or injury-related death
 - Chronic conditions or neglected metabolic disorders
 - Environmental factors (e.g., extreme weather conditions)
- **Key Investigative Differences:**
 - **Sudden death cases** often trigger **urgent biosecurity concerns** due to the potential for contagious or toxic causes.

- **Found dead cases** may require a **detailed history** to determine if the death was due to natural aging, chronic illness, or environmental factors.

Fetus Submissions:

- Monogastric fetuses or neonates under 10 days of age from a single dam (e.g., twins, litters) and small neonates (under 10 kilogram), such as suckling piglets from the same barn problem, will be handled as one submission and will be processed as a single necropsy fee. **Note:** if individual processing and reporting is required, the regular necropsy fee will apply per animal.
- Up to 2 ruminant fetuses or neonates under 10 days of age from a single dam, will be handled as one submission and processed as a single necropsy fee. Additional fetuses from the same dam (e.g., triplets) will receive a second submission fee at a reduced rate.

Multiple Submissions from the same Flock or Herd:

- Multiple birds from one poultry flock or barn (same problem, same ages), will be handled as one submission, **Necropsy – Small Poultry Flock**, and will be processed as a single necropsy fee.
- Wherever possible, multiple samples from the same flock or herd will be combined by the PDS lab to minimize costs for certain tests. When submitting multiple samples from the same flock or herd, submit all fresh tissues in individual containers and clearly identify the source of each sample.
- If more than 10 Histopathology slides are required per submission, the appropriate Histopathology-Paraffin process, embed, cut, and stain H&E fee will apply for each slide.

Abortion Submissions

- For Abortion submissions refer to **Maximising the Chance of Achieving Diagnoses on Bovine Abortions and a Diagnostic Algorithm Based on Western Canadian Bovine Diseases** found under **Resources->Bovine** on the PDS website (pdsinc.ca) - [Bovine Abortion Testing at PDS](#).

Swine Submissions:

- [Guidelines for Swine Multi Animal Submissions](#) is available on the PDS website (pdsinc.ca) under **Resources->Porcine**.

Complex Necropsies: Additional charges may apply for cases that are more complex than a routine necropsy (e.g., neurological/spinal, research interest cases, etc.).

Note: the first 10 Histopathology slides, if required, are included in the cost of the necropsy. If more than 10 Histopathology slides are required per submission, the appropriate Histopathology-Paraffin process, embed, cut, and stain H&E fee will apply for each slide.

Sample preparation fee will apply for submissions to the Microbiology Laboratory that are too large to process in the Microbiology Laboratory. The fees are as follows:

- Sample that requires trim down for processing in Microbiology (e.g., liver or placenta section submitted that is too large to process in that lab) - \$50.00.
- Sample that requires tissue collection for Microbiology testing that requires consultation with the pathologist such as collecting samples from a whole piglet or taking a joint swab from a leg - \$80.00.

Microbiology and Clinical Pathology Testing on Necropsy Cases:

- Microbiology and Clinical Pathology testing is not included in the necropsy fees, but additional testing is considered necessary in over 50% of necropsy cases. Pathologists often send samples for culture, etc. on a routine basis to confirm or rule out bacterial infections. **If no additional testing is to be performed, please specify this on the animal history form at the time of submission.**

Sample Hold Requests:

- A \$20.00 hold fee will apply to requests for PDS to hold and maintain tissue samples for further/future testing. This hold fee does not apply to regular necropsy submissions. The hold fee is non-refundable.
- Contact the Diagnostic Services Office at (306) 966-7316 or visit the PDS website (pdsinc.ca) for information on local cremation services offered through **Family Pet Cremation Services**. Clients will be assessed additional fees for provision of this service. This service is limited to small animal cases whose Risk Assessment has eliminated the possibility of Risk Group 3 organism(s).

Rabies Confirmatory Testing is now performed **only** when a collaborative and consultative decision between Public Health and the SK Ministry of Environment's Rabies Risk Assessment Veterinarian (RRAV) have determined the "risk to either animal or human health" warrants that a brain sample should be collected and transported to the Rabies Laboratory in Lethbridge Alberta. PDS serves as a Collection Depot for sample drop off. Testing and transportation fees are covered by SK Ministry of Agriculture when Program criteria are met. **Consult RRAV for further explanation 1-844-7-RABIES (1-844-772-2437).**

All whole-body bovine, ovine and bison submissions presented for necropsy examination must have a valid **Canadian Cattle Identification Agency (CCIA)** RFID ear tag assigned and affixed prior to submission to the PDS Necropsy Facility and/or upon leaving their herd of origin. This includes very late term fetuses and neonates. The PDS Necropsy Facility is mandated to document and "Retire" the assigned CCIA tag in compliance with the Health of Animals Act and as mandated by the CCIA Program and the Canadian Food Inspection Agency (CFIA). Refer to www.canadaid.com.

Research: Requests for research or cost estimates refer to **Research, Surveillance and Other Specialized Testing**.

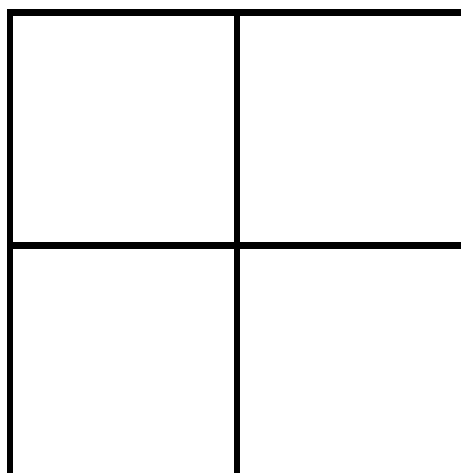
Special Information for Surgical/Dermatohistopathology Submissions

Combined Surgical and Dermatohistopathology Submissions:

- The combined surgical and dermatohistopathology examination is discontinued. If skin biopsies and a surgical submission are submitted together, these will be treated as two separate submissions - 2 accessioning numbers will be assigned, 2 pathologists will review the case and 2 different charges will apply, one for the dermatohistopathology evaluation and one for the surgical evaluation.

Packaging Samples:

- Place your submission form in a separate plastic bag to prevent soiling of the form by the sample or the formalin. Do not put the submission form inside the bag with the samples.
- Provide absorbent material for samples containing formalin and try to make the container as leak proof as possible, without the excessive use of adhesive products. **Note:** Parafilm® is preferred.
- When sending samples during cold weather (<0° C), first completely fix the tissue in formalin (minimum 24 hours; will vary depending on the thickness of the tissue), and then place into 70% alcohol for transport. **Note:** Rubbing alcohol contains 70% isopropyl or ethyl alcohol.
- There are now two levels of charges for surgical submissions—will depend on the number and/or the size of the submissions:
 - **Biopsy - Surgical - Up to 3 Tissues** fee will apply if you are submitting up to 3 tissues **AND** if the single or multiple (up to 3) tissues ‘fit’ into the 6 x 6 cm grid below.
 - **Biopsy - Surgical - > 3 or a single mass > 2 cm dia.** fee will apply if you are submitting 4 or more tissues **OR** if the base of any of your submitted tissues (single or combined) exceeds the 6 x 6 cm grid below.
 - For full-thickness and endoscopic gastrointestinal biopsies, the **Biopsy - Gastrointestinal - Up to 3 Tissues** fee will apply when biopsies are collected from 3 or less sites and the **Biopsy - Gastrointestinal - >3 Tissues** will apply when 4 or more sites are sampled.



Refer to [Instructions for Dermatohistopathology Service PDS](#) on the PDS website (pdsinc.ca) under **Services>Dermatohistopathology** for additional information.

Special Information for Microbiology Submissions

Sample preparation fee will apply for submissions to the Microbiology Laboratory that are too large to process in the Microbiology Laboratory. The fees are as follows:

- Sample that requires trim down for processing in the Microbiology lab (e.g., liver or placenta section submitted to Micro that is too large to process in that lab) - \$50.00.
- Sample that requires tissue collection for Microbiology testing that requires consultation with the pathologist such as collecting samples from a whole piglet or taking a joint swab from a leg - \$80.00.

Bacteriology/Parasitology Submissions

- For the diagnosis of bacterial disease, it is important that samples reach the Bacteriology Laboratory as soon as possible after collection.
- To prevent bacterial multiplication, it is recommended to maintain the sample at refrigerator temperature until samples reach the lab. However, if anaerobes are suspected, samples should be maintained at room temperature.
- Procedures for processing clinical samples for bacteriology analyses depend widely upon the disease or microorganisms suspected to induce clinical signs of disease. Therefore, an adequate clinical history with suggestions by the attending veterinarian as to the disease or diseases suspected is extremely important for the clinical Bacteriology, Mycology and Parasitology Laboratory.
- Samples should be taken from living or recently dead animals, from the affected site(s) as early as possible following the onset of clinical signs. In some cases, it is necessary to collect these samples from the edge of the lesions and include some macroscopically normal tissue.
 - Collect samples aseptically and before administration of any form of treatment.
 - Material sent on swabs is liable to desiccation. Moisten swabs with sterile saline or water.
- When requesting a fecal culture and parasitology, submit approximately 10 grams of feces.
 - The differences between a Routine Flotation and a Modified Wisconsin are as follows:
 - Routine Flotation is a semi quantitative test and reported as 1+, 3+ etc.
 - Modified Wisconsin requires 5 grams of feces that is weighed out and each different type of parasite egg, oocyst or cyst is counted for a more exact measurement of parasite load.
- Sample collection/shipping:
 - Tissues: placed in a sealed leak proof rigid container. Plastic bags are not recommended. One tissue per container. Can ship on ice.
 - Swabs: are submitted quite often. Choose a swab that has a non-nutritional transport medium (gel media) to ensure they do not become desiccated.
 - Milk: collected aseptically in a sterile screw-capped tube or bottle.
 - Urine: collected aseptically by midstream, catheter or preferably by cystocentesis.
 - Feces: should be obtained directly from the rectum. Ground droppings should be avoided because of

environmental contamination.

- Blood: collected aseptically in volume of 1 ml to 5 ml for small animals, and 5 ml to 10 ml for large animals. Three to four samples are necessary.
 - Skin Scrapings for mycology examination should be taken at the edge of the active lesion and submitted in a cotton plugged test tube or envelope.
 - Samples suspected of containing significant anaerobes should be placed in special commercial transport system for organs or screw cap tubes containing oxygen-free gas for swabs.
- **Antimicrobial susceptibility testing (AST): Interpretation of results**
- The Bacteriology laboratory usually provides one AST for the most significant pathogen in any given case. When multiple pathogens are isolated, clients are kindly asked to submit a formal request if they would like additional ASTs performed (additional charges will apply).
 - AST results are interpreted according to Clinical and Laboratory Standards Institute (CLSI) guidelines. However, CLSI doesn't provide AST interpretation criteria for all the bacterial spp. isolated from clinical cases. In such cases, results are reported as **"No interpretation criteria available"** (N/I). However, N/I does not imply that therapy would be either successful or unsuccessful, but rather that good clinical judgment should be used in selecting a dosing regimen for the related antimicrobial drug.
 - Diagnosticians are not allowed to provide any therapeutic suggestions, however, according to the test results, they can predict the possible clinical outcome if an appropriate antimicrobial drug is used. It is strongly suggested that clinicians consult appropriate reference materials for treatment options in cases where antimicrobial breakpoints are not available.

PCR Submissions

- **PDS is no longer accepting swabs in gel media for PCR testing.** Refer to the PDS website (pdsinc.ca) for a list of acceptable swabs - [PDS is no longer accepting Gel Swabs for PCR Testing](#).
- A minimum of 5 grams of feces is required for Johne's PCR testing. Samples under 2 grams will not be processed, and the client will be notified, and additional feces must be submitted. Refer to **Johne's Testing at PDS** found under **Resources->Submission Protocols** on the PDS website (pdsinc.ca) - [Johne's Testing at PDS](#).
- Sample containers for Johne's fecal submissions.



Preferred Container



Unacceptable Containers

- Tritrichomonas samples require a 48-hour incubation at 35°C prior to processing. Indicate on the submission form if the sample was incubated prior to shipping. The test turnaround time does not include

the incubation time, add 2 days to turnaround time if the sample was not incubated before shipping.

- When submitting samples for Bacteriology as well as PCR, submit a gel media swab (preferred for culture) as well as a swab that is acceptable for PCR.
- If urgent results are required, the submission form must be marked as **STAT**. **Please contact the lab when a STAT sample will be submitted.** Short turnaround times cannot be guaranteed, especially for large numbers of samples. **STAT samples must arrive in the lab by 10 A.M.**, overtime charges may apply for samples arriving after 10:00 A.M. **STAT testing is not available for all PCR tests** – refer to **Stat Submissions -> Tests Excluded from STAT Testing**.
- **PCR STAT requests:**
 - STAT PCR test options are available for the most requested STAT tests (PRRS, Porcine Corona Panel, Mycoplasma hyopneumoniae, Equine Respiratory Panel, Equine herpesvirus 1 and 4. Refer to test section of this guide. Price includes the STAT fee.
 - For all other PCR STAT requests, the STAT charge is applied as a percentage of the test cost per test ordered. The STAT charge is discounted if multiple samples are submitted.
 - **Example pricing:**
 - Sample 1-2 at 150% (e.g., test cost is \$50.00, one sample STAT is \$75.00)
 - Samples 3-9 at 130% (e.g., test cost is \$50.00, 3 samples STAT is \$195.00)
 - More than 10 samples at 110% (e.g., test cost is \$50.00, 10 samples STAT is \$550.00)
 - **Not all PCR tests are available STAT.** Refer to **STAT Submissions** for tests NOT available STAT.
 - Samples must arrive in the lab by 10:00 A.M. Additional charges will apply for late arriving samples if overtime is required. Contact PDS to discuss overtime charges prior to submitting late samples for same day testing.
 - Tests that require bacterial culture for extraction will have longer turnaround times. These samples will be forwarded to the Bacteriology laboratory for culture before they can be submitted to the PCR laboratory for testing.
- For large submissions of Mycobacterium paratuberculosis (Johne's disease), and Bovine Viral Diarrhea (BVD), turnaround times will vary according to the number of samples submitted. Please contact the lab for estimated turnaround times.

Special Information on Toxicology Submissions

Ergot and Mycotoxin Analysis

Ergot Panel

- Ergot contamination of feed has become one of the major feed-related problems in the agricultural industry. Ergot is a mixture of several toxic alkaloids. Methods have been established to detect and quantify six ergot alkaloids including: Ergocornine + Ergocorninine, Ergocristine + Ergocristinine, Ergocryptine + Ergocryptinine, Ergometrine + Ergometrinine, Ergosine + Ergosinine, Ergotamine + Ergotaminine, Total Ergot in most feed types.

Mycotoxin Panel

- The *Fusarium* molds produce a wide variety of highly toxic mycotoxins. The laboratory has established methods to detect 11 mycotoxins including: 3+15-acetyldeoxynivalenol, Aflatoxin B1, Deoxynivalenol, Diacetoxyscirpenol, Fumonisin B1, Fumonisin B2, HT-2 Toxin, Nivalenol, Ochratoxin A, T-2 Toxin, Zearalenone.
- [Mycotoxin Calculator](#) is available under **Services->Toxicology** on the PDS website (pdsinc.ca).

Sampling for Ergot and Mycotoxin Analysis:

- For Mycotoxin and Ergot analysis, correct sampling is critical since the toxin levels can be very high in the few contaminated seed heads and low or zero in unaffected heads. It is important that the sample accurately reflects the bulk lot.
 - In order to ensure that the sample is representative, it is essential that particles are not excluded or included based on size or location in the bulk lot.
 - In a bulk lot that has been thoroughly mixed, it is assumed that all particles are evenly distributed, whereas a lot that has been contaminated due to moisture leaks, etc. may only be contaminated in isolated pockets.
 - It is important to not miss these pockets, or sample only them, as they are not a good representation of the whole lot.
- The best way to sample a static lot (storage bin, railcar, truck, sack, etc.) is an accumulation of many small samples taken from different locations throughout the lot (**at least 5 locations**).
 - The sampling probe should be long enough to reach the bottom of the container.
 - It is recommended that each portion be about 200 grams and one portion be taken for every 200 kilograms of product.
 - If this aggregate sample is too large, it should be blended, and a representative subsample of an appropriate size (~1 kg) taken.
 - Dynamic lots such as conveyor belts should involve multiple samples across the entire cross section of the moving stream.

- Samples should be packaged in a large heavy duty zip lock freezer bag then shipped in an appropriately sized box.
 - Ensure that:
 - Samples are clearly identified with the sample ID and owner's name.
 - A completed **Mycotoxin Ergot Nitrate Toxin Submission Form** accompanies the samples. Submission form can be found under **Services->Forms** on the PDS website (pdsinc.ca) - [Mycotoxin Ergot Nitrate Toxin Submission Form](#).
 - Submission form is not inside the bag with the sample.

Shipping Samples:

- Samples may be shipped to PDS by courier or Canada Post.
 - Ship to:

Prairie Diagnostic Services
52 Campus Drive Saskatoon, SK
S7N 5B4 306-966-7316
 - PDS has negotiated bulk rates from Purolator.
 - If Purolator shipments are available in your area, samples may be sent collect to PDS and the costs will be billed back to you.
- For more courier information on courier services, refer to the **Purolator Courier Rates** section in this guide. You can also find the information under **Resources** on the PDS website (pdsinc.ca) - [Purolator Courier Rates](#).

Special Information on NIRS Feed and Forages Testing

Submission Guidelines: For instructions for completing the submission form refer to **NIRS Feed and Forages Information including Submission Guidelines** found under **Services->Feed and Forages** on the PDS website (pdsinc.ca) – [NIRS Feed and Forages Information including Submission Guidelines](#).

Submission Form: A completed **NIRS Feed and Forages Submission Form** must accompany the samples. The submission form can be found under **Resources->Forms** on the PDS website (pdsinc.ca) – [NIRS Feed and Forages Submission Form](#).

Sample Type Description for Testing

- **Hay**
 - Hay is forage that has been cut and naturally dried in the field before baling. It is commonly used for feeding livestock and should be relatively dry to prevent spoilage.
- **Dry Hay**
 - Dry hay refers to fully cured and well-dried hay, often stored for longer periods. It typically contains less than 15% moisture (estimate) and is more stable for storage.
- **Silage**
 - Silage is forage that has been chopped and fermented in anaerobic conditions, usually in silos or plastic bags. It retains higher moisture (around 60–70%) and is preserved through fermentation.
- **Haylage**
 - Haylage is partially dried forage (around 40–60% moisture) that is baled and wrapped in plastic to ferment. It sits between hay and silage in terms of moisture and fermentation.
- **Greenfeed / Fresh Cut**
 - Greenfeed is freshly cut, unfermented forage that may be used directly or dried into hay. It typically has high moisture content and is sampled shortly after cutting.
- **Grains**
 - Clean, harvested cereal grains used in livestock rations. These are typically dry, whole, or ground grains used for energy in animal feed.
- **Total Mixed Ration (TMR)**
 - A TMR is a blended mix of forages, grains, vitamins, and supplements, designed to provide a complete diet to livestock. It's sampled as fed to the animals.
- **Dried Distillers Grains (DDGs)**
 - A high-protein byproduct of grain fermentation, usually from ethanol production. DDGs are dry and granular, often used as a protein source in feed.
- **More sample types are coming soon.**

Sample Size:

- Minimum sample size: 0.3 kilograms (300 grams) – full Snack Ziploc bag.
- Maximum sample size: 1.0 kilograms (1000 grams) – approximately ½ of a large Ziploc bag
- For samples exceeding the maximum size, only a 1-kilogram subsample will be ground. Note that PDS is not responsible for result variations due to subsampling. Clients may request that the entire oversized sample be ground for an additional fee of \$30.00 per kilogram.
- Samples with visible rocks cannot be ground, testing will be cancelled.

Shipping Samples

- Samples should be packaged in a large heavy duty zip lock freezer bag then shipped in an appropriately sized box.
 - Ensure that:
 - Samples are clearly identified with the sample ID and owner's name.
 - A completed **NIRS Feed and Forages Submission Form** must accompany the samples.
Submission form can be found under **Services->Forms** on the PDS website (pdsinc.ca) – [NIRS Feed and Forages Submission Form](#).
 - Submission form is not inside the bag with the sample.
- Samples may be shipped to PDS by courier or Canada Post.
 - Ship to:
Prairie Diagnostic Services
52 Campus Drive Saskatoon, SK
S7N 5B4 306-966-7316
 - PDS has negotiated bulk rates from Purolator.
 - If Purolator shipments are available in your area, samples may be sent collect to PDS and the costs will be billed back to you.
 - For more courier information on courier services, refer to the **Purolator Courier Rates** section in this guide. You can also find the information under **Resources** on the PDS website (pdsinc.ca) - [Purolator Courier Rates](#).

Results:

- For results information refer to **NIRS Feed and Forages Nutritional Analysis Report Appendix** found under **Services->Feed and Forages** on the PDS website (pdsinc.ca) - [NIRS Feed and Forages Nutritional Analysis Report Appendix](#).

Research, Surveillance and Other Specialized Testing

When clients have research, surveillance, or other specialized testing requests, PDS personnel will work with clients to identify specific requirements and ensure that the PDS laboratory can meet the client's needs. Submit requests via email to Gloria Patry, PDS Director of Project Management and Stakeholder Relations (gloria.patry@pds.usask.ca). Allow a **minimum of two weeks** for project development/price quote.

A **Project** is a client request which meets one or more of the following criteria:

- Exceeds \$2000.00 in testing costs;
- Customized pricing has been requested;
- The test method is to be altered or new test to be developed as per client specifications;
- The project samples will be delivered to the laboratory at different dates/times.

Based on the request, the appropriate PDS diagnostic and technical personnel are enlisted to work through the following details in consultation with the client.

- If testing fits PDS' organizational mandate.
- Which laboratory procedure is to be used or if an acceptable method is available for the required testing.
- If equipment and material required for the protocol are available in the laboratory or if they can be purchased in time to meet the requirements of the requested testing.
- Completion of a cost analysis.
- Ensuring any technical training required for satisfactory performance of the procedure can be completed in time to satisfy the requirements of the requested testing.
- If adequate numbers of technical staff are available to complete the testing within an acceptable turnaround time, in addition to performing previously mandated testing.
- If subcontracting is required it will be documented.

The information will be used to provide a price estimate, including notes and assumptions.

PDS Panel and Combination Test Reference Guide

Clinical Pathology Combination Tests

Test	Canine Health Screen - Basic	Canine Health Screen - Complete	Canine Health Screen - Mini	Canine T4/TSH	Chronic Kidney Failure Combo	Diabetic Combo	Insulin/Glucose Ratio - Equine	Equine Metabolic Panel	Equine PPID (Cushing's) Profile	Feline Health Screen - Basic	Feline Health Screen - Complete	Feline Health Screen - Mini	Small Animal Presurgical Combo	Urine Protein Creatinine Ratio/Urinalysis Combo
ACTH, Endogenous								√	√					
Canine Standard Panel	√	√	√											
CBC	√	√	√			√				√	√	√	√	
Fructosamine						√								
Glucose							√		√					
Insulin							√	√	√					
Small Animal Kidney/Electrolyte Panel					√									
Small Animal Presurgical Panel													√	
Small Animal Standard Panel						√				√	√	√		
T4		√	√	√							√	√		
TSH				√										
Urinalysis	√	√			√	√				√	√		√	√
Urine Protein Creatinine Ratio					√									√

Clinical Pathology Chemistry Panels

Test	Avian/Reptile/Amphibian Mini Panel	Avian/Reptile/Amphibian Mini Plus Panel	Avian/Reptile/Amphibian Standard Panel	Canine Standard Panel	Electrolytes	Exotic Mammal Mini	Fasted Canine Standard / Triglyceride Panel	Large Animal Kidney	Large Animal Liver	Large Animal Mini Panel - No Interpretation	Large Animal Presurgical	Large Animal Standard	Pancreas Panel	Small Animal Kidney/Electrolyte	Small Animal Liver	Small Animal Presurgical	Small Animal Standard	Total Protein/Albumin/Globulin - Fluid	Total Protein/Albumin/Globulin - Serum
A.G. Ratio		✓	✓	✓			✓	✓	✓	✓		✓		✓	✓		✓	✓	✓
Albumin		✓	✓	✓			✓	✓	✓	✓		✓		✓	✓		✓	✓	✓
ALT				✓		✓	✓							✓	✓	✓	✓		
ALP				✓			✓							✓	✓	✓	✓		
Amylase				✓			✓						✓						
Anion Gap			✓	✓			✓	✓				✓		✓			✓		
AST	✓	✓	✓						✓		✓	✓							
Bicarbonate			✓	✓			✓	✓				✓		✓			✓		
Bile Acid			✓																
Calcium	✓	✓	✓	✓		✓	✓	✓				✓		✓			✓		
Chloride			✓	✓	✓		✓	✓			✓	✓		✓		✓	✓		
Cholesterol			✓	✓			✓								✓		✓		
CK	✓	✓	✓	✓		✓	✓		✓		✓	✓				✓	✓		
Creatinine				✓			✓	✓		✓	✓	✓		✓		✓	✓		
Direct Bilirubin				✓			✓		✓			✓			✓		✓		
GGT			✓	✓			✓		✓		✓	✓			✓	✓	✓		
GLDH			✓	✓					✓		✓	✓			✓	✓	✓		
Globulin		✓	✓	✓			✓	✓	✓	✓		✓		✓	✓		✓	✓	✓
Glucose	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓		✓	✓	✓	✓		
Indirect Bilirubin				✓			✓		✓			✓			✓		✓		
Lipase				✓			✓						✓						
Magnesium				✓			✓	✓				✓		✓			✓		
Phosphorus	✓	✓	✓	✓		✓	✓	✓				✓		✓			✓		
Potassium			✓	✓	✓		✓	✓			✓	✓		✓		✓	✓		
Sodium			✓	✓	✓		✓	✓			✓	✓		✓		✓	✓		
Sodium/Potassium Ratio														✓					
Triglyceride							✓												
Total Bilirubin				✓			✓		✓			✓			✓		✓		
Total Protein		✓	✓	✓			✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓
Urea				✓		✓	✓	✓	✓		✓	✓		✓	✓	✓	✓		
Uric Acid	✓	✓	✓																

Microbiology Panels

Test	Bovine Coronavirus and Rotavirus PCR	Bovine Diarrhea Panel	Bovine Respiratory Panel - 6 PCR Targets	Bovine Respiratory Panel - 7 PCR Targets	Bovine Respiratory Panel - 7 PCR Targets + C&S	Brachyspira hyodysenteriae and pilosicoli PCR	Campylobacter fetus ssp. venerealis/Tritrichom	Equine Respiratory Panel PCR	Feline Calicivirus/Herpesvirus PCR	Mycoplasma gallisepticum and synoviae PCR	Mycoplasma haemofelis and haemominutum Real-Time PCR	Porcine Corona Panel PCR	Porcine Diarrhea Panel - Late Nursery, Finishing or Adult	Porcine Diarrhea Panel - Late Suckling and Early Nursery	Porcine Diarrhea Panel - Neonatal
Bacterial Culture & Susceptibility - Aerobic and Anaerobic Culture		✓													
Bacterial Culture and Susceptibility					✓								✓	✓	✓
BCV PCR			✓	✓	✓										
Bovine Coronavirus PCR	✓														
Bovine Rotavirus and Coronavirus PCR		✓													
Bovine Rotavirus PCR	✓														
Brachyspira hyodysenteriae and pilosicoli PCR													✓		
Brachyspira hyodysenteriae PCR						✓									
Brachyspira pilosicoli PCR						✓									
BRSV PCR			✓	✓	✓										
BVD PCR				✓	✓										
Campylobacter fetus ssp venerealis PCR							✓								
Clostridium difficile Culture															✓
Clostridium perfringens Culture															✓
E. coli Bovine Enteric Virulence Factor Panel*		✓													
E.coli Porcine Enteric Virulence Factor Panel PCR													✓	✓	
Equine Herpesvirus 1 and 4 PCR								✓							
Equine Influenza Virus PCR								✓							
FAT for cryptosporidium and Giardia		✓													
Feline Calicivirus PCR									✓						
Feline Herpesvirus PCR									✓						
IBR PCR			✓	✓	✓										
Influenza D PCR			✓	✓	✓										
Lawsonia PCR													✓		
Mycoplasma bovis PCR			✓	✓	✓										
Mycoplasma gallisepticum PCR										✓					
Mycoplasma haemofelis Real-Time PCR											✓				
Mycoplasma haemominutum Real-Time PCR											✓				
Mycoplasma synoviae PCR										✓					
PdCov PCR												✓			
PEDV PCR												✓			
PI-3 PCR			✓	✓	✓										
Porcine Corona Panel PCR													✓	✓	✓
Porcine Rotavirus A, B, C PCR													✓	✓	
Routine Flotation		✓													
Streptococcus equi PCR								✓							
TGEV PCR												✓			
Tritrichomonas foetus PCR							✓								

Mineral Panels

Test	Mineral Panel 1	Mineral Panel 2	Mineral Panel 3	Mineral Panel 4
Antimony - Sb				√
Arsenic - As			√	√
Barium - Ba				√
Beryllium - Be				√
Bismuth - Bi				√
Cadmium - Cd			√	√
Calcium - Ca (tissue only)		√		
Chromium - Cr				√
Cobalt - Co	√			√
Copper - Cu	√			√
Iron - Fe	√			√
Lead - Pb (heparinized whole blood only)			√	√
Magnesium - Mg	√			√
Manganese - Mn	√			√
Molybdenum - Mo	√			√
Nickel - Ni				√
Potassium - K (tissue only)		√		
Selenium - Se	√			√
Sodium - Na (tissue only)		√		
Strontium - Sr				√
Thallium - Tl			√	√
Tin - Sn				√
Vanadium - V				√
Zinc - Zn	√			√

Clinical Pathology Single Chemistry Target Reference Guide

*Select **Single Chemistry** when ordering on Web Client, then select the target from dropdown.*

Albumin*	Phosphorus*
ALT (Alanine Aminotransferase)*	Potassium*
ALP (Alkaline Phosphatase)*	Sodium*
Amylase*	Total Protein*
Asparate Aminotransferase (AST)*	Triglyceride*
Bicarbonate*	Urea*
Bilirubin, Direct*	Uric Acid*
Bilirubin, Total*	Urine Bicarbonate
Calcium*	Urine Calcium
Chloride*	Urine Chloride
Cholesterol*	Urine Creatinine
CK (Creatine Kinase)*	Urine GGT
Creatinine*	Urine Glucose
CSF Protein	Urine Magnesium
GGT (Gamma-Glutamyl Transferase)*	Urine Phosphorus
GLDH*	Urine Potassium
Glucose*	Urine Protein
Lipase*	Urine Sodium
Magnesium*	Urine Urea

*Analysis available on serum and fluid.

Quick Index of Targets (Agent, Antigen and Substance) Testing Available Immunohistochemistry (IHC)

Infectious disease agents detected on formalin-fixed paraffin blocks include:

Adenovirus (canine, bovine, equine)	Influenza A virus
Bovine coronavirus	<i>Leptospira</i> sp.
Bovine herpes virus type 1 (IBR)	<i>Listeria</i> sp.
Bovine parainfluenza virus (PI3)	<i>Mannheimia haemolytica</i>
Bovine respiratory syncytial virus	<i>Mycoplasma bovis</i>
<i>Campylobacter</i> species	Neospora sp.
Canine distemper virus	Papillomavirus
Canine parvovirus	Porcine reproductive respiratory syndrome virus
Equine herpesvirus-1	Rabies virus
Feline calicivirus	<i>Sarcocystis</i> sp.
Feline herpes virus	<i>Sarcocystis neurona</i>
Feline infectious peritonitis virus	<i>Toxoplasma gondii</i>
Feline leukemia virus	Transmissible gastroenteritis virus (TGE)
Feline panleukopenia virus	Transmissible spongiform encephalopathy
<i>Francisella tularensis</i>	(TSE)– CWD and Scrapie
<i>Histophilus somni</i>	<i>Trypanosoma evansi</i>

Cellular antigens detected on formalin-fixed paraffin blocks include:

Actin-muscle specific	Glucagon
Actin-smooth muscle specific	HLA-DR α -chain (MHC II)
Calcitonin	Insulin
CD3 (T-cell)	Ki67
CD18 (Canine)	Lambda Light Chain
CD20 (B cell)	Melan-A
CD117 (c-kit)	MHC II
Chromogranin A	MUM-1
Cytokeratin (AE1/AE3)	S-100
Desmin	Somatostatin
Factor VIII–related antigen (von Willebrand)	Synaptophysin
Gastrin	Thyroglobulin
Glial fibrillary acid protein	Vimentin

Refer to Immunohistochemical Stains in the test section of this guide for IHC prices.

Molecular Diagnostics Polymerase Chain Reaction (PCR) Reference Guide

African Swine Fever (CFIA Accredited Test)	Influenza A Virus, in all species
Anthrax	Influenza D Virus
Atypical Porcine Pestivirus PCR (APPV)	<i>Lawsonia intracellularis</i>
Avian Influenza Virus (CFIA Accredited Test)	Malignant Catarrhal Fever (MCF)/Ovine Herpes Virus 2
Avian Influenza Virus H5; H7	<i>Mycobacterium</i> sp. (Speciation can be done by sequencing)
Avian paramyxovirus-1 (CFIA Accredited Test)	<i>Mycobacterium avium</i> spp. <i>paratuberculosis</i> (Johne's Disease)
Bacterial Identification by Sequencing	<i>Mycoplasma bovis</i>
Bovine Coronavirus	<i>Mycoplasma gallisepticum/synoviae</i>
Bovine Diarrhea Panel	<i>Mycoplasma haemofelis, haemominutum</i>
Bovine Herpesvirus-1 (BHV-1)	<i>Mycoplasma hyopneumoniae</i>
Bovine Papilloma Virus	<i>Mycoplasma</i> sp. Identification by Gene Sequencing
Bovine Parainfluenza 3 Virus	<i>Mycoplasma hyosynoviae</i>
Bovine Respiratory Syncytial Virus (BRSV)	<i>Mycoplasma hyorhinis</i>
Bovine Respiratory Panel (6 or 7 targets)	<i>Mycoplasma ovipneumoniae</i>
Bovine Rotavirus	<i>Pasteurella multocida</i> tox A detection
Bovine Viral Diarrhea Virus (BVDV)	Porcine Astrovirus Type 3 PCR (PAstV3)
<i>Brachyspira hyodysenteriae</i> and <i>pilosicoli</i>	Porcine Astrovirus Type 4 PCR (PAstV4)
<i>Campylobacter fetus</i> ssp. <i>fetus</i>	Porcine Circovirus-2
<i>Campylobacter fetus</i> ssp. <i>venerealis</i>	Porcine Circovirus-3
<i>Campylobacter</i> sp.	Porcine Corona Panel (PEDV, TGEV, pdCOV)
<i>Chlamydophilia abortus</i>	Porcine Diarrhea Panels
<i>Chlamydophilia psittaci</i>	Porcine Epidemic Diarrhea Virus
Classical Swine Fever Virus (CFIA Accredited Test)	Porcine Parainfluenza Virus Type 1 PCR
<i>Clostridium difficile</i> Genotyping	Porcine Parvovirus
<i>Clostridium perfringens</i> genotyping	PRRS
<i>Coxiella burnetii</i>	Porcine Rotavirus, group specific (A, B, or C)
CWD Genotyping – White tailed Deer, Elk	Porcine Sapelovirus PCR
<i>E. coli</i> virulence factors – Bovine, Porcine, Canine	Porcine Sapovirus
Panels	Porcine Teschovirus PCR (PTV)
Equine Herpesvirus (EHV) types 1 & 4	Seneca A Virus
Equine Herpesvirus 1 subtyping	<i>Streptococcus equi</i> ssp. <i>equi</i>
Equine Respiratory Panel	<i>Streptococcus equi</i> ssp. <i>zooepidemicus</i>
Feline Calicivirus	Swine Influenza Typing – H1, H3
Feline Herpes Virus	Transmissible Gastroenteritis Virus (TGEV)
Flax CDC Triffid	<i>Tritrichomonas fetus</i>
Foot and Mouth Disease (CFIA Accredited Test)	<i>Ureaplasma diversum</i>
Gallid Herpesvirus (ILT)	West Nile Virus
<i>Glaesserella parasuis</i>	
Herpesvirus sp.	
Infectious Bovine Rhinotracheitis Virus (IBR)	

Refer to the specific agent in the test section of this guide for prices and details. If an agent is not listed above it may be available as a referred-out test or a new test (check PDS website or contact PDS).

Serology Reference Guide

Bovine Leukosis Virus
Bovine Viral Diarrhea Virus
Brucella abortus
Brucella canis
Caprine Arthritis and Encephalitis Virus
Equine Infectious Anemia
Feline Infectious Peritonitis
Feline FeLV/FIV combo
Mycobacterium paratuberculosis

Mycoplasma hyopneumoniae
Neospora - Bovine
Ovine Progressive Pneumonia
PRRS
Swine Influenza A virus
Transmissible Gastroenteritis -TGE/PRCV
Differentiation
Tick Transmitted Disease Panel
West Nile Virus

Refer to the specific agent in the test section of this guide for prices and details. If agent is not listed above it may be available as a referred-out test or new test (check PDS website or contact PDS).

Toxicology Reference Guide

5-fluorouracil (antineoplastic)
Antimony
Arsenic
Barium
Beryllium
Bismuth
Blue Green Algae
Cadmium
Calcium *
Cholinesterase
Chromium
Cobalt
Copper
Cyclophosphamide (antineoplastic)
Ergot Panel – see Test Guide for compounds included
Iron
Lead
Magnesium *
Manganese
Mercury
Methemoglobin
NIR Feed and Forages

Mineral Panel #1: Mg, Mn, Fe, Co, Cu, Zn, Se, Mo
Mineral Panel #2: K, Ca, Na
Mineral Panel #3: Tl, Pb, As, Cd
Mineral Panel #4: Be, Mg, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As, Se, Sr, Mo, Cd, Sn, Sb, Ba, Tl, Pb, Bi
Molybdenum
Mycotoxin Panel – see Test Guide for compounds included
Nickel
Nitrate
Nitrite
Potassium *
Selenium
Sodium *
Strontium
Thallium
Tin
Vanadium
Vitamin A
Vitamin D
Vitamin E
Zinc

*Refer to the test section of this guide for additional options for serum samples.

Refer to the specific agent in the test section of this guide for prices and details. If the agent is not listed above it may be available as a referred-out test or new test (check PDS website or contact PDS).

Histopathological Stains

Histology's hours of operation are 7:30 A.M. to 4:00 P.M. Monday to Friday. Contact PDS for pricing.

Acid orcein giemsa - elastic fibers, mast cell granules, bacteria
Alcian Blue - acidic mucins
Alcian Blue/PAS - acidic, neutral mucin
Alizarin Red S – Calcium
Aluminum stain (Morin) – aluminum
Congo Red – amyloid
Duffy's – mast cell and eosinophils
Fites – Mycobacterium and Nocardia sp.
Fontana Masson – melanin, late lipofuscins, argentaffin cells
Formalin Pigment Removal
Giemsa – mast cell granules, bacteria
Gordon and Sweet's – reticulin fibers
Gram – bacteria
Grimelius' – neuroendocrine cells
Grocott's Methenamine Silver – fungus
Grocott's Methenamine Silver/H&E – fungus
Hall's – bile
Hematoxylin and Eosin (H&E) - routine stain
Hematoxylin Orcein Phloxine Saffron (HOPS) - muscle, collagen, elastic fibers
Holmes - nerve fibers
Luxol Fast Blue/Cresyl Violet - myelin, nissl substance
Luxol Fast Blue/H&E - myelin
Macchiavello's rickettsia
Masson's Trichrome - muscle and collagen fibers
Melanin Bleach/H&E
Methyl Green Pyronine - plasma cells
Oil Red O - lipids – (Note: submit wet tissue)
Okajima's – hemoglobin
Periodic Acid Methenamine Silver – basement membranes
Periodic Acid Schiff's (PAS) – neutral mucins, glycogen, fungus
Periodic Acid Schiff's/Diastase – glycogen
Perl's Prussian Blue – hemosiderin
Phosphotungstic Acid Hematoxylin (PTAH) – fibrin, muscle striations
Rhodanine - copper
Safranin O/Fast Green - cartilage
Schmorl's - lipofuscins, melanin
Sirius Red (Picrosirius) - osteoid
Toluidine Blue - Mast cells
Von Kossa - calcium salts
Warthin Faulkner - spirochetes, bacteria
Weigert Van Gieson's - muscle, collagen, and elastic fibers
Ziehl Neelsen - Mycobacterium sp.

Purolator Courier Rates

Puopak (next day delivery, up to 3 pounds) Customer packaging (boxes) will cost more depending on size. DO NOT select 9:00 A.M. or 10:20 A.M. delivery as extra charges will be incurred.	Most locations in Saskatchewan \$15.00 Alberta (Calgary/Edmonton) \$14.25 Most other Alberta locations \$20.00 Winnipeg \$14.25 Other Manitoba locations/rest of Western Canada \$30.00
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* Contact Purolator Customer Service at **1-888-744-7123** to confirm transit times from your location. Prices include fuel surcharges and collect/third party shipping charges of \$2.00 per package. Taxes not included.

** **Beyond charge:** Contact courier to confirm the Beyond Charges that may apply to your rural or remote location.

Please note:

When completing courier waybills, it is especially important that the **Payment Receiver account #** box is checked off and that the PDS account number is provided in the Receiver Account # box.

- **Contact PDS Diagnostic Services Office (306-966-7316) for the PDS account number.**

Ensure that a WEIGHT in pounds is clearly marked in the appropriate space on the waybill.

For pick-ups, tracking, and preprinted waybills, contact your courier directly. Preprinted waybills are preferred—when ordering, ensure your clinic is listed as the Sender and Prairie Diagnostic Services as the Receiver. Be sure to request a collect shipment service by completing the 'Payment Receiver Account' section."

- Create Waybills and Order Pick-Ups online at <https://www.purolator.com/en/home.page>.

Frontier Courier Rates (Regina and Moose Jaw)

Frontier Courier will guarantee Monday to Friday same day delivery with a pickup by 11:00 A.M. for Regina/Moose Jaw Clients. The notice for pick up must be no later than 10:30 A.M. for direct delivery to PDS by 3:00 P.M. the same day.

- Receiver payment (collect to PDS) up to 5 lbs. \$22.00
- Overweight Charges – per lb. \$0.12

Frontier will accept diagnostic packages, properly sealed, up to a size “a man can carry”, approximately 60 to 70 lbs. (e.g., most pets, bovine fetuses, etc.). Must be in a leak proof container.

For more information, preprinted waybills and dispatching, call Frontier Courier 306-955-3600 (Saskatoon) or 306-569-9300 (Regina/Moose Jaw).

Canada Post Express Order Entry

Canada Post provides an overnight Express Order Service. This is a pre-paid, On-Line service available through your PDS Web Client portal under **SHIPPING**. By filling out the waybill from this on-line link you will access the delivery option to PDS. Service is Express Mail with overnight shipping from most locations in Western Canada direct to PDS. Follow directions on Canada Post portal for filling out the waybill.

Referred Out Testing and Special Requests

- Referred Out Tests are tests that PDS refers to other Laboratories. These tests are identified by **RO** in the method column of the Tests Section.
- Prices for referred out tests are guidelines as referral laboratory prices are subject to change without notice.
- Prices for testing shipped to USA labs are now listed in Canadian dollars.
- Include an Agent for Shipment form for all referred out testing sent to the USA. Additional paperwork is required for species other than canine or feline, contact PDS prior to shipping samples to PDS.
- Referral Samples will be shipped on the following schedule
 - USA shipped on Monday and Wednesday for samples received before 9:00 A.M.
 - Canada shipped Monday through Thursday for samples received before 11:00 A.M.

If you require samples to be sent on a day different from the schedule, a STAT fee of \$100.00 will be charged. If the test is time sensitive due to the nature of the sample being sent, please make arrangements with the Clinical Pathology Laboratory prior to collection of the sample(s).

Agent for Shipment Form

- An **Agent for Shipment** Form is required for all referred out tests that are shipped to a lab in the United States.
 - The **Agent for Shipment Form** is available at the back of the digital **PDS Tests and Services Guide** or under **Services->Forms** on the PDS website (pdsinc.ca) – [Agent for Shipment Form](#).
- For Canine and Feline, photocopy the **Agent for Shipment** Form with your clinic letterhead (address and contact information) at the top.
- For all other species, contact PDS to verify the paperwork required for the shipment.
- Fill in all information (including species and breed of the animal) except for the Waybill, Shippers Signature, Date and Country of Origin (items in box near bottom of page); they are for in-house use only.

Submissions for Export Testing

- The **FAVN Report Form** for Rabies test and **Canine Export Submission Form** for Serology tests are available at the back of the digital **PDS Tests and Services Guide** or on the referral lab website listed below.
- Complete the form(s) and include with your submission.
- Refer to the following websites for additional information.

Rabies <http://www.ksvdl.org/rabies-laboratory/>

Serology [Veterinary Diagnostic Lab Submission Forms](#)

- **For Rabies:** The Rabies test results, and the corresponding invoice will be issued directly by the Kansas State Rabies Laboratory to submitting clinic. PDS will issue a separate invoice to the submitting clinic covering shipping and handling charges only.

Submission for Calculi (Urolith) Analysis

- The Calculi submission form is available at the back of the digital **PDS Tests and Services Guide** or on the University of Guelph Urolith Centre website - [Canadian Veterinary Urolith Centre - Agriculture and Food Laboratory](#).
- Complete the form and include it with your submission, making sure to include the animal's diet.

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (SK only)	List Price
2M Antibody (Comp Neuro Lab) (Masticatory Muscle Myositis)	RO	Serum - 1 mL	Red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	3 Weeks		
5-Fluorouracil Analysis (5-FU)	LCMS	Requires Antineoplastic Swipe Kit Kits available from PDS, see Antineoplastic Swipe kit - 12 piece	Supplied with kit	Store at 4°C until shipped. Ship on ice packs.	2 - 7 Days		
Acetylcholine Receptor Antibody		(see Myasthenia Gravis (Acetylcholine Receptor Antibody) (Comp Neuro Lab))					
ACTH Stimulation Test	IMMUL	Serum - 0.2 mL for each sample Cost includes 2 cortisols. See Clinical Pathology Testing and Sample Submission Protocol on the PDS website for Protocols for Testing Adrenal Function.	Red top tube. DO NOT use SST tube. Note: Plasma (EDTA, Heparin) samples are not acceptable.	Refrigerate. Ship on ice packs.	Same day 2 PM cut off		
ACTH Stimulation Test + Additional Sample	IMMUL	Serum - 0.2 mL for each sample Cost includes 3 cortisols. See Clinical Pathology Testing and Sample Submission Protocol on the PDS website for Protocols for Testing Adrenal Function.	Red top tube. DO NOT use SST tube. Note: Plasma (EDTA, Heparin) samples are not acceptable.	Refrigerate. Ship on ice packs.	Same day 2 PM cut off		
ACTH, Endogenous Equine	IMMUL	EDTA plasma - 1.5 mL Avoid hemolysis. Thyrotropin Releasing Hormone (TRH) Stim Test is available to book through WCVN Veterinary Medical Center Large Animal Clinic by calling 306-966-7178.	Purple top tube	Collect sample into a plastic EDTA tube. Centrifuge and immediately transfer plasma into a plain red top or plastic tube (within 4 hours of collection). Label sample as EDTA plasma. Freeze immediately. Ship on ice packs.	1 Week		
ACTH, Endogenous (Guelph) Canine	RO	EDTA plasma - 1 mL Fasting sample. Avoid hemolysis.	Purple top tube	Collect sample into a plastic EDTA tube (use of glass collection tubes may falsely decrease results). Centrifuge and immediately transfer plasma into a plastic tube. Label sample as plasma. Freeze immediately. Ship on ice packs.	1 Week		
ACTH, Insulin, Leptin Panel (Cornell)	RO	EDTA plasma - 1 mL Plus Serum - 1 mL	Purple and red top tube	Centrifuge sample within 4 hours of collection. Freeze sample. Ship on ice packs. Include a completed "Agent for Shipment" form.	3 Weeks		
Actinobacillus pleuropneumoniae		(see Multi-APP (Actinobacillus pleuropneumoniae Serology) (Université of Montréal))					

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (SK only)	List Price
Adenovirus		(see Canine Vaccine Panel 2 (Cornell))					
Adrenal Panel - Canine (Tennessee)	RO	Serum - 2 mL for each sample Collect post sample 1 hour after injection (2 hours if gel ACTH is used). Gross hemolysis will affect the test. Includes: ACTH Cortisol, Estradiol, Androstenedione, 17-hydroxyprogesterone, Progesterone, Testosterone.	Red top tube	Centrifuge ASAP, separate and freeze. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Adrenal Panel - Ferret (Tennessee)	RO	Serum - 0.5 mL Avoid hemolysis and lipemia. Includes: Estradiol, Androstenedione, 17-hydroxyprogesterone.	Red top tube	Centrifuge ASAP, separate and freeze. Ship on ice packs. Include a completed "Agent for Shipment" form and health certificate.	2 Weeks		
Alanine Aminotransferase		(see Single Chemistry)					
Aldosterone - Post (Michigan) Canine, Equine, Feline	RO	EDTA plasma or serum - 0.5 mL	Purple or red top tube	Centrifuge within 30 minutes of collection. Freeze. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Aldosterone - Pre (Michigan) Canine, Equine, Feline	RO	EDTA plasma or serum - 0.5 mL	Purple or red top tube	Centrifuge within 30 minutes of collection. Freeze. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Alkaline Phosphatase Isoenzyme (Guelph)	RO	Serum or heparinized plasma - 0.5 mL Includes: Alk phos and Alk Phos Isoenzyme. NOTE: this only tests for steroid induced Alk Phos Isoenzyme.	Red or green top tube	Allow the sample to clot. Centrifuge the sample; separate the serum from the cells and transfer to a leakproof, labelled tube. Refrigerate or freeze. Ship on ice packs.	1 Week		
Allergy Panel, Environmental (IDEXX) Canine, Feline	RO	Serum - 3 mL Contact PDS for additional information/test selection.	Red top tube	Refrigerate up to 7 days. Freeze for longer storage. Ship on ice packs.	1 Week		
Allergy Panel, Food (IDEXX)	RO	Serum - 3 mL IGE for 24 pet food components.	Red top tube	Refrigerate up to 7 days. Freeze for longer storage. Ship on ice packs.	1 Week		
ALP		(see Single Chemistry)					
ALT		(see Single Chemistry)					

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Ammonia - Post (RUH) VMC clients only	RO	Heparinized whole blood - 1 mL Centrifuge sample immediately, place plasma on an icepack. Avoid hemolysis. Sample must be analyzed within 2 hours. Available to VMC clients only.	Green top tube	Centrifuge immediately. Ship plasma 1 Day on ice.	1 Day		
Ammonia - Resting (RUH) VMC clients only	RO	Heparinized whole blood - 1 mL Centrifuge sample immediately, place plasma on an icepack. Avoid hemolysis. Sample must be analyzed within 2 hours. Available to VMC clients only.	Green top tube	Centrifuge immediately. Ship plasma 1 Day on ice.	1 Day		
Amplicon Sequencing - Nanopore 1000x	GS	Turnaround time and coverage can be adjusted to client needs.			2 Weeks		
Amylase, Lipase		(see Pancreas (Chemistry Panel))					
Amyloid A (Guelph)	RO	Serum - 0.5 mL Avoid hemolysis.	Red top tube	Allow the sample to clot. Centrifuge the sample; separate the serum from the cells and transfer to a leakproof, labelled tube. Refrigerate or freeze. Ship on ice packs.	1 Week		
Anaplasma ELISA	ELISAS	Serum - 1 mL	Red top tube	Refrigerate. Ship on ice packs.	Once per Week		
Anaplasma phagocytophilum - Canine		(see Tick Transmitted Disease Panel (Canine) SNAP 4Dx Plus Test)					
Anaplasma phagocytophilum - Equine		(see Tick Transmitted Disease Panel (Equine) SNAP 4Dx Plus Test)					
Anaplasma spp. RealPCR (IDEXX)	RO	EDTA whole blood - 2 mL Collect sample prior to antibiotic administration. Includes: Anaplasma phagocytophilum, Anaplasma platys.	Purple top tube	Refrigerate. Ship on ice packs.	2 Weeks		
Anthrax Culture discontinued		(see Anthrax PCR)					
Anthrax PCR	PCRREALTIME	Fresh blood or swabs PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Red top tube or swab. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	2 Days		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Anticoagulant Screen (Guelph)	RO	Liver - 10 grams, serum - 5 mL, EDTA blood - 5 mL, suspect material - 20 grams Liver and serum are the best samples. Includes: Brodifacoum, Bromadiolone, Chlorophacinone, Coumachlor, Coumafuryl, Coumatetralyl, Dicoumarol, Difenacoum, Difethialone, Diphacinone, Flocoumafen, Pindone, Valone, Warfarin.	Leak proof container, red or purple top tube.	Liver, serum and suspect material - ship frozen. DO NOT freeze EDTA blood, store in fridge until shipped. Ship on ice packs.	2 Weeks		
Antimicrobial Susceptibility Test (AST) - Bovine Mastitis	BACTKB	Bacterial Culture Additional charge per significant organism.	Leak proof container		1 - 2 Days		
Antimicrobial Susceptibility Test (AST) - Bovine, Ovine, Caprine	BACTKB	Bacterial Culture Additional charge per significant organism.	Leak proof container		1 - 2 Days		
Antimicrobial Susceptibility Test (AST) - Companion - Dermatology/Ear	BACTKB	Bacterial Culture Additional charge per significant organism.	Leak proof container		1 - 2 Days		
Antimicrobial Susceptibility Test (AST) - Companion - General	BACTKB	Bacterial Culture Additional charge per significant organism.	Leak proof container		1 - 2 Days		
Antimicrobial Susceptibility Test (AST) - Companion - Ophthalmology	BACTKB	Bacterial Culture Additional charge per significant organism.			1 - 2 Days		
Antimicrobial Susceptibility Test (AST) - Equine	BACTKB	Bacterial Culture Additional charge per significant organism.	Leak proof container		1 - 2 Days		
Antimicrobial Susceptibility Test (AST) - Exotic - includes Avian, Reptile, Rabbit, Rodent	BACTKB	Bacterial Culture Additional charge per significant organism.	Leak proof container		1 - 2 Days		
Antimicrobial Susceptibility Test (AST) - Porcine General	BACTKB	Bacterial Culture Additional charge per significant organism.	Leak proof container		1 - 2 Days		
Antimicrobial Susceptibility Test (AST) - Porcine Respiratory	BACTKB	Bacterial Culture Additional charge per significant organism.	Leak proof container		1 - 2 Days		
Antimicrobial Susceptibility Test (AST) - Poultry	BACTKB	Bacterial Culture Additional charge per significant organism.	Leak proof container		1 - 2 Days		
Antimicrobial Susceptibility Test (AST) MIC - BOPO7F	MIC	Bacterial Culture Additional charge per significant organism.	Leak proof container		1 - 2 Days		
Antimicrobial Susceptibility Test (AST) MIC - COMPAN1F	MIC	Bacterial Culture Additional charge per significant organism.	Leak proof container		1 - 2 Days		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Antimony		(see Mineral Panel #4)					
Anti-Mullerian Hormone (IDEXX) Canine, Equine, Feline	RO	Serum - 1 - 2 mL 12 hour fasting sample for canine and feline.	Red top tube. DO NOT use SST tube.	Freeze. Ship on ice packs.	3 Weeks		
Antineoplastic Panel	LCMS	Requires Antineoplastic Swipe Kit	Supplied with kit	Store at 4°C until shipped. Ship on ice packs.	2 - 7 Days		
Antineoplastic Swipe kit – 12 piece							
Antinuclear Antibody - IFA Canine	IFA	Serum - 0.2 mL	Red top tube	Refrigerate. Ship on ice packs.	2 - 3 Days		
Antinuclear Antibody IFA - Non Canine (IDEXX)	RO	Serum - 1 mL	Red top tube	Refrigerate up to 5 days. Freeze for longer storage. Ship on ice packs.	1 Week		
Anti-Thrombin III (ATIII) (RUH)	RO	Citrated plasma - 0.5 mL Recollect if 1+ hemolysis. Send a normal animal sample along with the patient. Citrated collection tubes available, contact PDS lab.	Blue top tube (citrate). Sample/anticoagulant ratio is critical - check tube label.	Centrifuge, transfer plasma into a plain plastic tube or plastic syringe - DO NOT use red top tube. Ship frozen.	Phone		
Arsenic		(see Mineral Panel #4)					
Arsenic		(see Mineral Panel #3)					
Asparate Aminotransferase		(see Single Chemistry)					
Aspergillus Serology (Cornell)	RO	Serum - 1 mL (minimum - 0.1 mL) Also see Fungal Panel Serology.	Red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
AST		(see Single Chemistry)					
ATIII		(see Anti-Thrombin III (ATIII) (RUH))					
Atypical Porcine Pestivirus PCR (APPV)	PCR/REALTIME	Serum, brain, fecal swab, nasal swab, heart (Associated with Congenital Tremor) PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Leak-proof containers, swabs in viral transport media (VTM). Swabs in gel media will not be processed.	Refrigerate. Ship in insulated container with freezer packs.	3 - 5 Days		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Avian Adenovirus - Genotyping by Sequencing	GENTYP	Live birds: swabs (cloacal, tracheal). Dead birds: liver, spleen.	Swab or leak proof container	Refrigerate. Ship on ice packs.	2 Weeks		
Avian Bacterial and Viral Profile PCR (IDEXX)	RO	Cloacal swab or tissue (skin, lung, liver, kidney) or feces, and/or EDTA or heparinized whole blood - 0.1 mL Includes Avian Beak and Feather Disease, Avian polyomavirus and Chlamydia psittaci by PCR.	Purple or green top tube, swab in sterile container without transport media, or tissue/feces in leak proof container	Refrigerate. Ship on ice packs.	2 - 4 Weeks		
Avian Bornavirus PCR (Guelph)	RO	Live: cloacal swab. Dead: brain, liver, crop, proventriculus, gizzard May pool up to 5 samples together, indicate on submission form.	Swab with viral transport media. Tissue in sterile, leak proof container.	Refrigerate. Ship on ice packs.	1 Week		
Avian Encephalomyelitis Virus ELISA (Guelph)	RO	Serum - 0.5 mL	Red top tube	Refrigerate. Ship on ice packs.	2 Weeks		
Avian Influenza (AIV) PCR AI matrix PCR CFIA Accredited Test	PCRREALTIME	Swabs in transport medium Submit sample by 10:00 AM. PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Leak proof container or red top tube. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	3 - 5 Days		
Avian Influenza (AIV) subtyping H5/H7 (PCR) CFIA Accredited Test	PCRREALTIME	Swabs in transport medium Submit sample by 10:00 AM. PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Leak proof container or red top tube. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	3 - 5 Days		
Avian metapneumovirus type A, B, C - PCR	PCRREALTIME	Live: swabs (oropharyngeal, cloacal). Dead: trachea, lung, cecal tonsil.		Refrigerate. Ship on ice packs.	3 - 5 Days		
Avian Paramyxovirus (NDV) subtyping PCR (Newcastle Disease Virus) Fusion Gene	PCRREALTIME	Done on Avian Paramyxovirus Matrix PCR positive samples Submit sample by 10:00 AM. PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Leak proof container or swab. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	3 - 5 Days		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Avian Paramyxovirus 1 (NDV) PCR (Newcastle Disease Virus)	PCRREALTIME	Tissues, swabs Samples must be received by 10:00 AM for 1 day results. PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Swab or leak proof container. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	3 - 5 Days		
Avian Reovirus Genotyping by Sequencing	GENTYP	Live birds: cloacal swab. Dead birds: closed hocks, sterile joint swab (viral arthritis), liver, spleen, trachea, lung. PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Leak-proof containers, swabs in viral transport media (VTM). Swabs in gel media will not be processed.	Refrigerate. Ship in insulated container with freezer packs.	2 Weeks		
Avian Reovirus PCR	PCRREALTIME	Live birds: cloacal swab. Dead birds: closed hocks, sterile joint swab (viral arthritis), liver, spleen, trachea, lung. PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Swab or leak proof container. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	3 - 5 Days		
Avian/Reptile/Amphibian Mini Panel (Chemistry Panel)	CA	Serum or heparinized plasma - 0.2 mL Includes: Ca, Pi, Glu, CK, AST, Uric Acid	Red or green top tube	Refrigerate. Ship on ice packs.	1 Day		
Avian/Reptile/Amphibian Mini Plus Panel (Chemistry Panel)	CA	Serum or heparinized plasma - 0.2 mL Includes: Ca, Pi, Glu, CK, AST, Uric Acid, Tprot, Alb, Glob, A:G Ratio	Red or green top tube	Refrigerate. Ship on ice packs.	1 Day		
Avian/Reptile/Amphibian Standard Panel (Chemistry Panel)	CA	Serum or heparinized plasma - 0.5 mL Includes: Na, K, Cl, bicarb, anion gap, Ca, Pi, Glu, CK, AST, GLDH, GGT, Chol, Tprot, Alb, Glob, A:G ratio, Uric Acid, Bile Acids. *If NSQ for standard panel, Avian Mini Panel plus Bile Acids will be run.	Red or green top tube	Refrigerate. Ship on ice packs.	1 Day		
B12		(see Cobalamin (B12) (IDEXX))					
Babesia canis IFA Titer (Michigan)	RO	Serum - 1 mL	Red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Babesia gibsoni IFA - For Export (Michigan) For Export Only Canine	RO	Serum - 1 mL	Red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Bacterial Culture - Environmental	BACTIC	Environmental samples - swabs, sponges Bacterial Culture only, does not include antimicrobial susceptibility test.	Sterile, leak proof container	Ship on ice packs.	1 - 2 Days		
Bacterial Culture and Susceptibility - Bovine, Ovine, Caprine	BACTIC BACTKB DE-BACTI	Swabs Includes 1 susceptibility.	Sterile, leak proof container or swab	Ship on ice packs.	2 - 4 Days		
Bacterial culture and Susceptibility - Companion - Dermatology/Ear	BACTIC DE-BACTI BACTKB	Derm or ear swab Includes 1 susceptibility.	Sterile, leak proof container or swab	Ship on ice packs.	3 - 5 Days		
Bacterial Culture and Susceptibility - Companion - General	BACTIC BACTKB DE-BACTI	Swabs, Urine, Biopsies, Tissues, Fluids Includes 1 susceptibility.	Sterile, leak proof container or swab	Ship on ice packs.	2 - 4 Days		
Bacterial Culture and Susceptibility - Companion - Ophthalmology	BACTIC DE-BACTI BACTKB	Swabs Includes 1 susceptibility.	Sterile, leak proof container	Ship on ice packs.	2 - 4 Days		
Bacterial Culture and Susceptibility - Equine	BACTIC BACTKB DE-BACTI	Swabs Includes 1 susceptibility.	Sterile, leak proof container or swab	Ship on ice packs.	2 - 4 Days		
Bacterial Culture and Susceptibility - Exotic - includes Avian, Reptile, Rabbit, Rodent	BACTIC BACTKB DE-BACTI	Swabs Includes 1 susceptibility.	Sterile, leak proof container or swab	Ship on ice packs.	2 - 4 Days		
Bacterial Culture and Susceptibility - Porcine General	BACTIC BACTKB DE-BACTI	Swabs, feces Includes 1 susceptibility.	Sterile, leak proof container or swab	Ship on ice packs.	2 - 4 Days		
Bacterial Culture and Susceptibility - Porcine Respiratory	BACTIC BACTKB DE-BACTI	Swabs Includes 1 susceptibility.	Sterile, leak proof container or swab	Ship on ice packs.	2 - 4 Days		
Bacterial Culture and Susceptibility - Poultry	BACTIC BACTKB DE-BACTI	Swabs Includes 1 susceptibility.	Sterile, leak proof container or swab	Ship on ice packs.	2 - 4 Days		
Bacterial Culture and Susceptibility MIC - BOPO7F	DE-BACTI BACTIC MIC	Bacterial Culture Additional charge per significant organism.	Sterile, leak proof container or swab	Ship on ice packs.	1 - 2 Days		
Bacterial Culture and Susceptibility MIC - COMPAN1F	BACTIC DE-BACTI MIC	Bacterial Culture Additional charge per significant organism.	Sterile, leak proof container or swab	Ship on ice packs.	1 - 2 Days		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (SK only)	List Price
Bacterial Metagenomic Whole-Genome Sequencing ~1GB	GS	Turnaround time and coverage can be adjusted to client needs.			2 Weeks		
Bacterial typing using Whole Genome Sequencing	BIS	Bacterial Isolate Turnaround, coverage, and bioinformatic analysis can be adjusted to client needs. Additional charges apply if bacterial culture required.			2 Weeks		
Bacteriology - Necropsy Add-on	BACTIC DE-BACTI	Tissues - maximum 3 tissues per animal or per submission	Sterile, leak proof container or swab	Ship on ice packs.	2 - 3 Days		
Bacteriology - Necropsy Add-on (Poultry - 1 ATB)	BACTIC DE-BACTI BACTKB	Tissues - maximum 3 tissues per animal or per submission	Sterile, leak proof container or swab	Ship on ice packs.	2 - 3 Days		
Baermann (Larvae sedimentation)	SD	Feces (fresh) - 5 - 10 grams Lung worm and nematode larvae identification	Leak proof container	Do not freeze	2 Days		
Barium		(see Mineral Panel #4)					
Bartonella PCR (Vector Borne)	RO	EDTA whole blood - 2 mL A positive test will result in speciation of the following at no extra charge - B. henselae, B. clarridgeiae, B. quintana, B. vinsonii, B. koehlaerae, B. rochalimae.	Purple top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	4 Weeks		
Bartonella spp. RealPCR (IDEXX)	RO	EDTA whole blood - 2 mL Collect samples prior to antibiotic administration.	Purple top tube	Refrigerate up to 10 days. Ship on ice packs.	1 Week		
Bence-Jones Protein (IDEXX)	RO	Urine - 5 mL	Red top tube or leak proof container	Refrigerate. Ship on ice packs.	2 Weeks		
Beryllium		(see Mineral Panel #4)					
Beta Hydroxybutyrate (BHB) (Guelph)	RO	Serum or heparinized plasma - 0.5 mL Avoid hemolysis.	Red or green top tube	Separate serum from cells as soon as possible after collection and transfer to a leakproof tube. Refrigerate. Ship on ice packs.	1 Week		
Bicarbonate		(see Single Chemistry)					

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (SK only)	List Price
Bile Acid - Pre and Post Canine, Feline	CA	Serum or heparinized plasma - 0.2 mL for each sample Avoid hemolysis. Fasting and 2 hour post prandial. See Clinical Pathology Testing and Sample Submission Protocol on the PDS website for Bile Acid Protocol.	Red or green top tube	Refrigerate. Ship on ice packs.	1 Day		
Bile Acid - Single	CA	Serum or heparinized plasma - 0.2 mL Avoid hemolysis.	Red or green top tube	Refrigerate. Ship on ice packs.	1 Day		
Bilirubin, Direct		(see Single Chemistry)					
Bilirubin, Total		(see Single Chemistry)					
Bioinformatic Support							
BioPRYN ELISA Bovine, Ovine, Caprine, Bison/Buffalo, Yaks	BIOPRYN	Serum - 0.5 mL Cut off time 2:00 PM Wednesday, results Thursday PM. BioPRYN method is valid for Bovine, Ovine, Caprine, Bison/Buffalo, Yaks. Wildlife testing is not available.	Red tube	Refrigerate. Ship on ice packs.	Once per Week		
Biopsy - Gastrointestinal - >3 Tissues	NCPSURG	Full-thickness or endoscopic gastrointestinal biopsies If more than 10 Histopathology slides are required per submission, each additional slide will be charged the appropriate Histopathology-Paraffin process, embed, cut and stain H & E fee.	Leak proof containers individually labeled	Fix in 10% Formalin for minimum of 24 hours. Transfer tissues to 70% alcohol (isopropyl, ethyl or rubbing alcohol) for shipping in very cold weather.	3 - 5 Days		
Biopsy - Gastrointestinal - Up to 3 Tissues	NCPSURG	Full-thickness or endoscopic gastrointestinal biopsies If more than 10 Histopathology slides are required per submission, each additional slide will be charged the appropriate Histopathology-Paraffin process, embed, cut and stain H & E fee.	Leak proof containers individually labeled	Fix in 10% Formalin for minimum of 24 hours. Transfer tissues to 70% alcohol (isopropyl, ethyl or rubbing alcohol) for shipping in very cold weather.	3 - 5 Days		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (SK only)	List Price
Biopsy - Oncology - > 3 or a single mass > 2 cm dia. – VMC Only	NCPSURG	Incisional (punch or wedge) or excisional biopsy (excludes Dermatohistopathology and Gastrointestinal Biopsies). 4 or more tissues or if the base of any of the submitted tissues (single or combined) exceeds the 6 x 6 cm grid (see Introduction 'Special Information for Surgical/Dermatological Submission' for grid). If more than 10 Histopathology slides are required per submission, each additional slide will be charged the appropriate Histopathology-Paraffin process, embed, cut and stain H & E fee.	Leak proof containers individually labeled	Fix in 10% Formalin for minimum of 24 hours. Transfer tissues to 70% alcohol (isopropyl, ethyl or rubbing alcohol) for shipping in very cold weather.	3 - 5 Days		
Biopsy - Oncology - Up to 3 Tissues – VMC Only	NCPSURG	Incisional (punch or wedge) or excisional biopsy (excludes Dermatohistopathology and Gastrointestinal Biopsies). Up to 3 tissues that if combined will fit into a 6 x 6 cm grid (see Introduction 'Special Information for Surgical/Dermatological Submission' for grid). If more than 10 Histopathology slides are required per submission, each additional slide will be charged the appropriate Histopathology-Paraffin process, embed, cut and stain H & E fee.	Leak proof containers individually labeled	Fix in 10% Formalin for minimum of 24 hours. Transfer tissues to 70% alcohol (isopropyl, ethyl or rubbing alcohol) for shipping in very cold weather.	3 - 5 Days		
Biopsy - Skin - Dermatohistopathology	NCPSURG	Skin - 6 mm punch or strip biopsies preferred. Skin or orifice lesions but not obvious masses or cysts. If more than 10 Histopathology slides are required per submission, each additional slide will be charged the appropriate Histopathology-Paraffin process, embed, cut and stain H & E fee.	Leak proof containers individually labeled	Fix in 10% Formalin for minimum of 24 hours. Transfer tissues to 70% alcohol (isopropyl, ethyl or rubbing alcohol) for shipping in very cold weather.	5 Days		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (SK only)	List Price
Biopsy - Surgical - > 3 or a single mass > 2 cm dia.	NCPSURG	Incisional (punch or wedge) or excisional biopsy (excludes Dermatohistopathology and Gastrointestinal Biopsies). 4 or more tissues or if the base of any of the submitted tissues (single or combined) exceeds the 6 x 6 cm grid (see Introduction 'Special Information for Surgical/Dermatological Submission' for grid). If more than 10 Histopathology slides are required per submission, each additional slide will be charged the appropriate Histopathology-Paraffin process, embed, cut and stain H & E fee.	Leak proof containers individually labeled	Fix in 10% Formalin for minimum of 24 hours. Transfer tissues to 70% alcohol (isopropyl, ethyl or rubbing alcohol) for shipping in very cold weather.	3 - 5 Days		
Biopsy - Surgical - Up to 3 Tissues	NCPSURG	Incisional (punch or wedge) or excisional biopsy (excludes Dermatohistopathology and Gastrointestinal Biopsies). Up to 3 tissues that if combined will fit into a 6 x 6 cm grid (see Introduction 'Special Information for Surgical/Dermatological Submission' for grid). If more than 10 Histopathology slides are required per submission, each additional slide will be charged the appropriate Histopathology-Paraffin process, embed, cut and stain H & E fee.	Leak proof containers individually labeled	Fix in 10% Formalin for minimum of 24 hours. Transfer tissues to 70% alcohol (isopropyl, ethyl or rubbing alcohol) for shipping in very cold weather.	3 - 5 Days		
Biopsy - Surgical or Skin - 2nd opinion or repeat submission	NCPSURG	Histology slides for second opinion	Slides				
Bismuth		(see Mineral Panel #4)					
Blastomyces Quantitative Antigen EIA (MiraVista)	RO	Urine, serum, EDTA plasma or CSF - 2 mL Urine is the sample of choice.	Red or purple top tube	Serum, plasma, CSF: refrigerate samples. URINE: Refrigerate samples that will be tested before they are 2 weeks old. Freeze samples that will not be tested before they are 2 weeks old. Samples must be shipped frozen. Include a completed "Agent for Shipment" form.	2 Weeks		
Blood Grouping Canine, Feline	BGR	EDTA whole blood - 0.5 mL	Purple top tube	Refrigerate. Ship on ice packs.	1 Day		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (SK only)	List Price
Blood Parasite - For Export (Michigan)	RO	EDTA whole blood and 2 blood smears (unstained, unfixed) Microscopic examination of blood smear for organisms.	Purple top tube and slides	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Blood Smear Evaluation - Avian/Reptile Only	HA	2 unstained blood smears. Will be offered to clients if EDTA samples are compromised during transit, or sample is NSQ for analysis (if smears have been submitted).	Slides or purple top tube	Refrigerate purple top tube. Ship on ice packs.	1 Day		
Blue Green Algae Strip Test	STRIPTEST	Water sample at 4°C - 20 mL Includes: Microcystins and Anatoxin A.	Leak proof container	Refrigerate. Ship on ice packs.	2 Days		
Bluetongue Virus Ab ELISA (Guelph)	RO	Serum - 0.5 mL	Red top tube	Refrigerate. Ship on ice packs.	1 Week		
BLV		(see Bovine Leukosis Virus (BLV) IDEXX)					
Bone Marrow Core		(see Cytology - Bone Marrow Core)					
Borrelia burgdorferi - Canine		(see Tick Transmitted Disease Panel (Canine) SNAP 4Dx Plus Test)					
Borrelia burgdorferi - Equine		(see Tick Transmitted Disease Panel (Equine) SNAP 4Dx Plus Test)					
Botulism (Clostridium botulinum) MIT (Guelph) Mouse Inoculation Test	RO	Serum - 1 mL (initial testing) plus 1 mL serum per toxin type tested (Avian samples require a container minimum of 1 mL serum); wet or heavy material - 10 to 30 grams; intact cans of pet food; gallon sized bag of lightweight material such as hay.	Red top tube or leak proof container	Ship on ice packs.	7 Weeks		
Bovine Coronavirus		(see Bovine Respiratory Panel)					
Bovine Coronavirus and Rotavirus PCR	PCRREALTIME	Jejunum, ileum, or feces PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Swab or leak proof container. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	3 - 5 Days		
Bovine Coronavirus Antibody ELISA Only available for Bovine Research	ELISAV	Serum - 1 mL Contact PDS for pricing and availability	Red top tube	Refrigerate. Ship on ice packs.			

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (SK only)	List Price
Bovine Coronavirus PCR	PCRREALTIME	Spiral colon, ileum or feces PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Swab or leak proof container. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	3 - 5 Days		
Bovine Diarrhea Panel	BACTIC BACTKB MICROFAT PCRREALTIME RF DE-BACTI	Feces or Intestine - 5 - 10 grams Sample collected from acutely affected non-treated calves. Includes: aerobic culture and susceptibility, anaerobic culture, E. coli Bovine Enteric Virulence Factor Panel for E. coli isolates from calves < 1 week old, duplex PCR for Bovine Rotavirus and Coronavirus, routine flotation for parasites, FAT for cryptosporidium and Giardia.	Leak proof container	Refrigerate. Ship on ice packs.	2 - 7 Days		
Bovine Leukosis Virus (BLV) IDEXX	ELISAS	Serum - 1 mL	Red top tube	Refrigerate or freeze samples. Ship with enough ice packs to ensure sample(s) remain chilled during shipping.	Once per Week		
Bovine Papilloma Virus PCR	PCRREALTIME	Tissues - fresh or formalin fixed, paraffin embeded	Leak proof container	Refrigerate. Ship on ice packs.	3 - 5 Days		
Bovine Papular Stomatitis Virus (Orf Virus) PCR (Guelph) Bovine, Caprine, Ovine	RO	Skin biopsy; crust	Leak proof container	Refrigerate. Ship on ice packs.	1 Week		
Bovine Parainfluenza 3 (PI3) ELISA Only available for Bovine Research	ELISAV	Serum - 1 mL Contact PDS for pricing and availability	Red top tube	Refrigerate. Ship on ice packs.			
Bovine Parainfluenza 3 (PI3) PCR	PCRREALTIME	Lung, nasal swabs or tracheal washings PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Swab or leak proof container. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	3 - 5 Days		
Bovine Parainfluenza-3		(see Bovine Respiratory Panel)					

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Bovine Respiratory Panel - 6 PCR Targets Includes IBR, BRSV, PI-3, BCoV, M. bovis and Influenza D	PCRREALTIME	Lung, nasal swabs or tracheal washings PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Swab or leak proof container. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	Once per Week		
Bovine Respiratory Panel - 7 PCR Targets Includes IBR, BRSV, PI-3, BCoV, M. bovis, BVD and Influenza D	PCRREALTIME	Lung, nasal swabs or tracheal washings PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Swab or leak proof container. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	Once per Week		
Bovine Respiratory Panel - 7 PCR Targets + C&S Includes IBR, BRSV, PI-3, BCoV, M. bovis, BVD and Influenza D	BACTIC BACTKB PCRREALTIME DE-BACTI	Lung, nasal swabs or tracheal washings PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Swab or leak proof container. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	5 - 10 Days		
Bovine Respiratory Syncytial Virus (BRSV) ELISA Only available for Bovine Research	ELISAV	Serum - 1 mL Contact PDS for pricing and availability	Red top tube	Refrigerate. Ship on ice packs.			
Bovine Respiratory Syncytial Virus (BRSV) PCR	PCRREALTIME	Lung, nasal swabs or tracheal washings PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Swab or leak proof container. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	3 - 5 Days		
Bovine Rotavirus PCR	PCRREALTIME	Jejunum, ileum, or feces PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Swab or leak proof container. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	3 - 5 Days		
Bovine Viral Diarrhea (BVD) Type 1 Virus Neutralization	SNE	Serum - 1 mL	Red top tube	Refrigerate. Ship on ice packs.	7 - 10 Days		
Bovine Viral Diarrhea (BVD) Type 2 Virus Neutralization	SNE	Serum - 1 mL	Red top tube	Refrigerate. Ship on ice packs.	7 - 10 Days		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Bovine Viral Diarrhea Virus (BVD) Individual PCR	PCRREALTIME	EDTA whole blood - 1 mL (best sample for antemortem transient infection); serum - 1 mL; fresh, unfixed tissue (ileum, lymphoid tissues, kidney, skin). Fixed tissues are not acceptable. Skin biopsy sampling instructions available on PDS website (or Appendix section of printed guide). Turnaround times will vary according to the number of samples submitted. Contact PDS Lab for information.	Leak proof container or purple top tube	Refrigerate. Ship on ice packs.	3 - 5 Days		
Bovine Viral Diarrhea Virus (BVD) Pooled PCR 2 – 10 samples per pool, from one owner	PCRREALTIME	Skin biopsy - fresh tissue (fixed tissue is not acceptable); serum - 1 mL from animals > 2 months old. Send individual samples - pooling is done in the lab. Skin biopsy sampling instructions available on PDS website (or Appendix section of printed guide). Turnaround times will vary according to the number of samples submitted. Contact PDS Lab for information.	Leak proof container or red top tube	Refrigerate. Ship on ice packs.	3 - 5 Days		
BPAT		(see Brucella abortus (Buffered Plate Agglutination Test - BPAT))					
Brachyspira hyodysenteriae and pilosicoli PCR	PCRREALTIME	Spiral colon, intestinal contents, feces or rectal swabs PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Leak proof container or swab. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	3 - 5 Days		
Brachyspira hyodysenteriae PCR	PCRREALTIME	Spiral colon, intestinal contents, feces or rectal swabs PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Leak proof container or swab. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	3 - 5 Days		
BRAF Mutation		(see Urine BRAF Mutation Detection Assay (Cadet Braf) (Antech Molecular Innovations))					
BRSV		(see Bovine Respiratory Panel)					

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Brucella - Fluorescent Polarization Assay (FPA) (Animal Health Idaho) Elk	RO	Serum - 2 mL	Red top tube	Refrigerate or freeze. Ship on ice packs. Include a completed "Agent for Shipment" form.	1 Week		
Brucella abortus (Buffered Plate Agglutination Test - BPAT) BPAT setup fee applies	IMAGGL	Serum - 2 mL Less than 2 mL of serum will not be accepted. Requires CFIA form 5473. A set up fee of \$42.00 is added per submission/owner for administrative costs.	Red top tube	Refrigerate. Ship on ice packs.	1 - 2 Days		
Brucella abortus Set-up Fee							
Brucella canis IFA	IFA2	Serum - 1 mL	Red top tube	Refrigerate. Ship on ice packs.	1 - 2 Days		
Brucellosis Tube-ME Agglutination - For Export (Kansas) Canine	RO	Serum - 1 - 2 mL Avoid hemolysis. Export destination dependent.	Red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form and a "Serology Export" Submission Form.	2 Weeks		
Buffy Coat		(see Cytology - Fluid)					
BVD IHC Discontinued		(see Bovine Viral Diarrhea Virus (BVD) Pooled PCR)					
Cache Valley Virus PCR	PCRREALTIME	Brain, Placenta and swabs in viral transport media Samples must be received by 10:00 AM for 1 day results. PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Swab or leak proof container. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	3 - 5 Days		
Cadmium		(see Mineral Panel #4)					
Cadmium		(see Mineral Panel #3)					
Calcium - Ionized Saskatoon Clients Only	BGA	Heparinized whole blood - minimum 1 mL. Serum is not acceptable. Includes: pH, Ionized Ca (no reference intervals provided)	Heparinized syringe	Recap syringe immediately after collection (sample must remain anaerobic). Mix well and place on ice pack. Samples must be analyzed within 1 hour of collection. Ship on ice packs.	1 Day		
Calcium - Tissue		(see Mineral Panel #2)					

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Calcium - Total - Serum		(see Single Chemistry)					
Calculi (Urolith Centre) Canine, Calculi Feline, phone for price for other species	RO	Calculi (urolith, stone) Must include a completed (including diet) Urolith Submission form in order to receive test at no charge. Forms can be found on the PDS website.	Clean container without preservatives	Put stone in clean, leak proof container without preservatives. Include a completed "Urolith Submission" form	1 Month		
Campylobacter fetus ssp fetus PCR	PCRREALTIME	Tissues	Leak proof container		3 - 5 Days		
Campylobacter fetus ssp venerealis PCR	PCRREALTIME	Preputial wash/scraping or cervical mucus	In Pouch™ TF or PBS	Incubate in Pouch™ TF at 35°C for a maximum of 48 hours or leave at room temperature and keep warm during shipment. If there is a shipping delay, store in fridge after the 48 hour incubation until shipped. Note on the submission form how samples were stored.	3 - 5 Days		
Campylobacter fetus ssp. venerealis/Tritrichomonas foetus PCR	PCRREALTIME	Preputial wash/scrapings (In Pouch™ medium)	In Pouch™ TF medium for both or PBS for C. fetus ssp venerealis only	Incubate in Pouch™ TF at 35°C for a maximum of 48 hours or leave at room temperature and keep warm during shipment. If there is a shipping delay, store in fridge after the 48 hour incubation until shipped. Note on the submission form how samples were stored.	5 - 7 Days		
Campylobacter sp. PCR	PCRCONV	Tissues	Leak proof container		3 - 5 Days		
Canine Brucella Slide Agglutination/AGID II - For Export (Cornell) Canine	RO	Serum - 1 mL For detection of Brucella canis antibodies.	Red top tube	Refrigerate. Ship on ice packs.	1 Week		
Canine Core Vaccine Titer Panel SN and HI (Kansas)	RO	Serum - 1 mL Includes: Distemper, Adenovirus (CAV-2), Parvovirus.	Red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Canine Distemper Virus IHC (CDV, Distemper) IHC on haired Skin Biopsy	IMIHC	Fresh or Formalin-fixed haired skin biopsy Antemortem demonstration of CDV antigen.	Leak proof container	Fresh tissues - on ice packs; formalin tissues in leak proof container. Protect tissues in formalin from freezing.	2 - 3 Days		
Canine Distemper Virus PCR (Guelph)	RO	Live: EDTA whole blood - 5 mL, conjunctival swab. Dead: lymph node, lung.	Leak proof container, purple top tube or swab.	Refrigerate. Ship on ice packs.	1 Week		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Canine Health Screen - Basic Chemistry (standard panel), CBC, UA	CA HA UR	EDTA whole blood - tube 2/3 full (minimum 1/3 full) + 2 blood smears + serum - 0.5 mL + urine - 3 mL If less than minimum received partial results may be reported. Includes: CBC, Canine Standard Panel, Urinalysis.	Purple top tube, slides and red top tube for urine and serum. DO NOT use SST tube. Please label urine vs serum.	Refrigerate. Ship on ice packs.	1 Day		
Canine Health Screen - Complete Chemistry (standard panel), CBC, UA, T4	CA HA UR IMMUL	EDTA whole blood - tube 2/3 full (minimum 1/3 full) + 2 blood smears + serum - 0.5 mL + urine - 3 mL If less than minimum received partial results may be reported. Includes: CBC, Canine Standard Panel, Urinalysis, T4.	Purple top tube, slides and red top tube for urine and serum. DO NOT use SST tube. Please label urine vs serum.	Refrigerate. Ship on ice packs.	1 Day		
Canine Health Screen - Mini Chemistry (standard panel), CBC, T4	CA HA IMMUL	EDTA whole blood - tube 2/3 full (minimum 1/3 full) + 2 blood smears + serum - 0.5 mL If less than minimum received partial results may be reported. Includes: CBC, Canine Standard Panel, T4.	Purple top tube, slides and red top tube. DO NOT use SST tube.	Refrigerate. Ship on ice packs.	1 Day		
Canine Influenza PCR		(see Influenza A Real Time PCR)					
Canine Standard Panel (Chemistry Panel)	CA	Serum - 0.5 mL Includes: Na, K, Cl, Bicarb, Anion gap, Ca, Pi, Mg, Urea, Creat, Glu, Tbili, Dbili, Ibili, Chol, CK, ALP, ALT, GLDH, GGT, Tprot, Alb, Glob, A:G Ratio, Amylase, Lipase.	Red top tube	Refrigerate. Ship on ice packs.	1 Day		
Canine T4/TSH	IMMUL	Serum - 0.3 mL Canine only.	Red top tube. DO NOT use SST tube. Note: Plasma (EDTA, Heparin) samples are not acceptable.	Refrigerate. Ship on ice packs.	Same day 2 PM cut off		
Canine TSH	IMMUL	Serum - 0.2 mL Canine only.	Red top tube. DO NOT use SST tube. Note: Plasma (EDTA, Heparin) samples are not acceptable.	Refrigerate. Ship on ice packs.	Same day 2 PM cut off		
Canine Vaccine Panel 2 (Cornell)	RO	Serum - 1 mL Paired serum samples are recommended for optimal diagnostic test interpretation. Includes: Distemper SN, Parvo HAI, Adenovirus SN	Red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Canine Vaccine Panel IFA (IDEXX) IFA	RO	Serum - 1 mL Includes: Canine Distemper, Canine Parvovirus	Red top tube	Refrigerate up to 5 days. Freeze for longer storage. Ship on ice packs.	2 Weeks		
Caprine Arthritis and Encephalitis (CAE) ELISA	ELISAS	Serum - 0.2 mL	Red top tube	Refrigerate. Ship on ice packs.	Once per Week		
Cardiac Troponin (IDEXX) Canine, Feline	RO	Serum - 0.5 mL	Red top tube	Refrigerate up to 5 days. Freeze for longer storage. Ship on ice packs.	2 Weeks		
Cardiac Troponin 1 (IDEXX) Equine	RO	Serum - 1 mL	Red top tube	Refrigerate up to 5 days. Freeze for longer storage. Ship on ice packs.	2 - 3 Weeks		
Cardiopet proBNP (IDEXX) Canine, Feline	RO	EDTA plasma or serum - 1 mL Avoid hemolysis.	Purple or red top tube	Refrigerate up to 7 days. Freeze for longer storage (serum samples must be kept refrigerated). Ship on ice packs.	1 Week		
CBC - Complete Blood Cell Count	HA	EDTA whole blood - tube 2/3 full (minimum 1/3 full) + 2 unstained blood smears If less than minimum received partial results may be reported. Reticulocyte count performed at PDS Labs discretion. EDTA and blood smear will not be analyzed if clots are present in EDTA tube. Heparin whole blood will be accepted, but not preferred.	Purple top tube (Blue top tube for Corvids) and slides	Refrigerate. Ship on ice packs.	1 Day		
CBC - Partial Only available for Research Projects	HA	EDTA whole blood - tube 2/3 full (minimum 1/3 full) If less than minimum received partial results may be reported. Includes: automated WBC, RBC, Hgb, Hct, and RBC indices. For smear evaluation and platelet count see CBC - Complete. EDTA sample will not be analyzed if clots are present in EDTA tube.	Purple top tube	Refrigerate. Ship on ice packs.	1 Day		
CBC - WBC & Differential Only available for Research Projects	HA	EDTA whole blood - tube 2/3 full (minimum 1/3 full) + 2 unstained blood smears If less than minimum received partial results may be reported. Includes: automated WBC, RBC, Hgb, Hct, RBC indices, automated platelet count and manual WBC differential. EDTA sample will not be analyzed if clots are present in EDTA tube.	Purple top tube and slides	Refrigerate. Ship on ice packs.	1 Day		
CDV		(see Canine Distemper Virus IHC)					

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (SK only)	List Price
Chemistry - Single Test		(see Single Chemistry)					
Chlamydomphila abortus PCR	PCRREALTIME	Tissue, abomasal fluid	Swab or leak proof container		3 - 5 Days		
Chlamydomphila psittaci PCR	PCRCONV	Tissue, cloacal or eye swabs	Swab or leak proof container	Refrigerate. Ship on ice packs.	3 - 5 Days		
Chloride		(see Single Chemistry)					
Cholesterol		(see Single Chemistry)					
Cholinesterase (Blood)	PHTEST	Heparinized whole blood - 2 - 6 mL	Green top tube	Ship immediately with ice packs.	1 - 2 Days		
Cholinesterase (Brain)	SPECTRO	Brain - whole avian brain or half a bovine brain	Leak proof container	Freeze immediately. Ship on ice packs.	2 - 5 Days		
Chromium		(see Mineral Panel #4)					
Chronic Kidney Failure Combo Small Animal Kidney/Electrolyte Panel + UA + Urine Prot/Creat Ratio Canine, Feline only	CA UR	Serum - 0.5 mL + urine - 3 mL Includes: Small Animal Kidney/Electrolyte Panel, Urinalysis, Urine Protein/Creatinine Ratio	Red top tube for serum and urine. Please label serum vs urine.	Refrigerate. Ship on ice packs.	1 Day		
CK, Creatine Kinase		(see Single Chemistry)					
Classical Swine Fever Virus (CSF) CFIA accredited Test	PCRREALTIME	Contact PDS Diagnostic Pathologist or PDS lab for details.	Leak proof container	Refrigerate. Ship on ice packs.	3 - 5 Days		
Clostridium difficile Culture	BACTIC	Feces or Intestine Swabs not accepted for C. diff culture.	Leak proof container	Refrigerate. Ship on ice packs.	2 Days		
Clostridium difficile genotyping PCR	PCRMULTIPLE X	Bacterial Isolates only Additional charges will apply if bacterial culture required. A, B toxin types.			Once per Week		
Clostridium Fluorescent Antibody Test	FATB DE-BACTI	Fresh muscle or cardiac tissues Includes: C. chauvoei, C. novyi, C. septicum, C. sordelli	Leak proof container	Ship on ice packs.	1 - 2 Days		
Clostridium perfringens toxin typing PCR	PCRREALTIME	Bacterial Culture Includes: A, B, C, D, E types.			Once per Week		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Clotting Factor(s) Activity (Cornell)	RO	Citrated plasma - 2 mL Citrated collection tubes available, contact PDS Lab. Factors offered: VII, VIII, IX, X, XI, XII. Cost is per factor assayed. Price listed is for Canine and Feline; contact PDS (306-966-7316) for current pricing for other species.	Blue top tube (citrate). Sample/anticoagulant ratio is critical - check tube label.	Centrifuge, transfer plasma into a plain plastic tube or plastic syringe without needle attached - DO NOT use red top tube. Ship frozen, sample must arrive frozen. Include a completed "Agent for Shipment" form.	1 Day		
Coagulation PT (Prothrombin Time)	CO	Citrated plasma or citrated whole blood Include a normal animal sample with each submission (not required for canine, feline, or equine). Citrate collection tubes available, contact PDS lab.	Blue top tube (citrate). Sample/anticoagulant ratio is critical - check tube label.	Centrifuge within 4 hours, transfer plasma into a plain plastic tube or plastic syringe - DO NOT use red top or glass tubes. Ship frozen.	1 Day		
Coagulation PTT (Partial Thromboplastin Time)	CO	Citrated plasma or citrated whole blood Include a normal animal sample with each submission (not required for canine, feline, or equine). Citrate collection tubes available, contact PDS lab.	Blue top tube (citrate). Sample/anticoagulant ratio is critical - check tube label.	Centrifuge within 4 hours, transfer plasma into a plain plastic tube or plastic syringe - DO NOT use red top or glass tubes. Ship frozen.	1 Day		
Cobalamin (B12) (IDEXX) Canine, Feline	RO	Serum - 1 mL 8-10 hour fasting sample (if not medically contra-indicated).	Red top tube. DO NOT use SST tube.	Refrigerate up to 24 hours. Freeze for longer storage. Ship on ice packs.	1 Week		
Cobalamin (B12), Folate (IDEXX) Canine, Feline	RO	Serum - 1 mL 12 hour fasting sample (6 hours for diabetic animals). Avoid hemolysis and lipemia. Protect from light.	Red top tube. DO NOT use SST tube.	Refrigerate up to 24 hours. Freeze for longer storage. Ship on ice packs.	1 Week		
Cobalamin (B12), Folate, PLI - Canine, Feline (GI Lab)	RO	Serum - 2 mL 12 hour fasting sample. Avoid hemolysis.	Red top tube. DO NOT use SST tube.	Refrigerate for 48 hours. Freeze for longer storage. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Cobalamin (B12), Folate, TLI - Canine (IDEXX)	RO	Serum - 2 mL 12 hour fasting sample. Avoid hemolysis.	Red top tube. DO NOT use SST tube.	Refrigerate for 24 hours. Freeze for longer storage. Ship on ice packs.	2 - 3 Weeks		
Cobalamin (B12), Folate, TLI - Feline (GI Lab)	RO	Serum - 2 mL 12 hour fasting sample. Avoid hemolysis.	Red top tube. DO NOT use SST tube.	Refrigerate for 48 hours. Freeze for longer storage. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Cobalamin (B12), Folate, TLI, PLI - Canine, Feline (GI Lab)	RO	Serum - 2 mL 12 hour fasting sample (6 hours for diabetic animals). Avoid hemolysis and lipemia.	Red top tube. DO NOT use SST tube.	Refrigerate for 48 hours. Freeze for longer storage. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Cobalt		(see Mineral Panel #4)					
Coccidioides Antibody AGID (Cornell)	RO	Serum - 0.5 mL (minimum - 0.2 mL) Also see Fungal Panel Serology.	Red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Coccidioides Antigen Quantitative EIA (MiraVista)	RO	Urine, BAL or other body fluid - 0.5 mL; serum or plasma (EDTA, heparin or sodium citrate) - 1.5 mL; CSF - 1 mL	Red top tube or leak proof container	Refrigerate up to 7 days. Freeze up to 6 months. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Coccidioides Canine IgG Antibody EIA (MiraVista)	RO	Serum - 1 mL	Red top tube	Refrigerate up to 7 days. Freeze up to 6 months. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Coggins Test		(see Equine Infectious Anemia (EIA) ELISA)					
Complete Blood Cell Count		(see CBC - Complete Blood Cell Count)					
Convulsant Screen (Guelph) (Strychnine, Penitrem A, Roquefortine)	RO	GI contents, suspect material - 25 grams	Leak proof container	Freeze. Ship on ice packs.	2 Weeks		
Coombs - Temperature profiling	IMHEMA	EDTA whole blood - 1 mL	Purple top tube	Refrigerate. Ship on ice packs.	1 Day		
Coombs Test Combined reagents @37°C	IMHEMA	EDTA whole blood - 1 mL	Purple top tube	Refrigerate. Ship on ice packs.	1 Day		
Copper		(see Mineral Panel #1)					
Coronavirus - Bovine		(see Bovine Respiratory Panel)					
Coronavirus DNA - Feline (Health Gene)	RO	EDTA whole blood - 1 mL	Purple top tube	Refrigerate. Ship on ice packs.	1 Week		
Cortisol		(see High Dose Dexamethasone Suppression Test)					
Cortisol		(see Low Dose Dexamethasone Suppression Test)					
Cortisol		(see ACTH Stimulation Test)					

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Cortisol Post ACTH or Dexamethasone	IMMUL	Serum - 0.2 mL Must accompany a resting Cortisol sample. See Clinical Pathology Testing and Sample Submission Protocol on the PDS website for Protocols for Testing Adrenal Function.	Red top tube. DO NOT use SST tube. Note: Plasma (EDTA, Heparin) samples are not acceptable.	Refrigerate. Ship on ice packs.	Same day 2 PM cut off		
Cortisol Resting Canine, Equine	IMMUL	Serum - 0.2 mL See ACTH Stimulation (Canine only) or Low or High Dose Dexamethasone Suppression Test for panel pricing.	Red top tube. DO NOT use SST tube. Note: Plasma (EDTA, Heparin) samples are not acceptable.	Refrigerate. Ship on ice packs.	Same day 2 PM cut off		
Cortisol/Creatinine Ratio		(see Urine Cortisol/Creatinine Ratio)					
Corynebacterium pseudotuberculosis Antibody SHI (Caseous lymphadenitis) (UC Davis CAHFS) Caprine, Equine, Ovine	RO	Serum - 1 - 2 mL	Red top tube	Refrigerate or freeze. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Coxiella burnetti PCR	PCRREALTIME	Placenta, fetal tissue	Leak proof container	Refrigerate. Ship on ice packs.	3 - 5 Days		
CPH and 5-FU Combo Analysis		(see Antineoplastic Panel)					
Creatinine		(see Single Chemistry)					
Cross-Match - Canine	XMATCH	EDTA whole blood + 1 mL serum from recipient and each donor. Price is Crossmatch setup fee. An additional fee of \$21.69 will be charged for each donor.	1 purple top tube and 1 red top tube from recipient and each donor	Refrigerate. Ship on ice packs.	Minimum 2 Hours		
Cross-Match - Equine	XMATCH	EDTA whole blood + 1 mL serum from recipient and each donor. Price is Crossmatch setup fee. An additional fee of \$21.69 will be charged for each donor.	1 purple top tube and 1 red top tube from recipient and each donor	Refrigerate. Ship on ice packs.	Minimum 2 Hours		
Cross-Match - Feline	XMATCH	EDTA whole blood + 1 mL serum from recipient and each donor. Price is Crossmatch setup fee. An additional fee of \$21.69 will be charged for each donor.	1 purple top tube and 1 red top tube from recipient and each donor	Refrigerate. Ship on ice packs.	Minimum 2 Hours		
Cross-Match - Miscellaneous	XMATCH	EDTA whole blood + 1 mL serum from recipient and each donor. Price is Crossmatch setup fee. An additional fee of \$21.69 will be charged for each donor.	1 purple top tube and 1 red top tube from recipient and each donor	Refrigerate. Ship on ice packs.	Minimum 2 Hours		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Cryptococcus Antigen (Cornell)	RO	Serum - 0.5 mL or CSF - 0.1 mL Also see Fungal Panel Serology.	Red top tube (serum), sterile container (CSF)	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Cryptosporidium/Giardia FA, Routine Float	MICROFAT RF	Feces - 5 - 10 grams Samples should be received in PDS Lab within 48 hours post collection.	Leak proof container	Refrigerate. Ship on ice packs.	1 Day		
CSF Cytology		(see Cytology - CSF)					
CSF Protein		(see Single Chemistry)					
Culture - Fecal		(see Fecal Culture - Companion)					
Culture - Fecal		(see Fecal Culture - Porcine)					
Culture - Fecal		(see Fecal Culture - Large Animal)					
CWD Genotyping Elk (PCR)	PCRGENOTYP NG	Blood, tissue, skin	Leak proof container		Once per Week		
CWD Genotyping White-tail Deer (PCR)	PCRGENOTYP NG	Blood, tissue, skin	Leak proof container		Once per Week		
Cyclophosphamide (LCMS) (CPH)	LCMS	Requires Antineoplastic Swipe Kit	Supplied with kit	Store at 4°C until shipped. Ship on ice packs.	2 - 7 Days		
Cyclosporine (St. Paul's)	RO	EDTA whole blood - 1 mL Serum is not acceptable.	Purple top tube	Refrigerate. Ship on ice packs.	2 Days		
Cytology - Bone Marrow Core Submit a same day CBC - additional charges apply (see CBC - Complete)	CYTO	Fixed bone core + EDTA whole blood - tube 2/3 full (minimum 1/3 full) + 2 blood smears If less than minimum sample received partial results may be reported.	Leak proof container, purple top tube and smears	Refrigerate purple top tube. Ship on ice packs.	1 Day		
Cytology - Bone Marrow Smears Submit a same day CBC - additional charges apply (see CBC - Complete)	CYTO	Bone marrow in EDTA + air-dried, unstained bone marrow smears (maximum 4 slides) + EDTA whole blood (for CBC) - tube 2/3 full (minimum 1/3 full) + 2 blood smears If whole blood sample is less than minimum, partial CBC results may be reported. Extra charges (\$8.43 per slide) will apply if more than 4 bone marrow slides are submitted.	Purple top tube and slides	Refrigerate purple top tube. Ship on ice packs.	1 Day		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Cytology - Bone Marrow Smears & Core Submit a same day CBC - additional charges apply (see CBC - Complete)	CYTO	Fixed bone core + bone marrow in EDTA + air-dried, unstained bone marrow smears (maximum 4 slides) + EDTA whole blood (for CBC) - tube 2/3 full (minimum 1/3 full) + 2 blood smears If whole blood sample is less than minimum, partial CBC results may be reported. Extra charges (\$8.43 per slide) will apply if more than 4 bone marrow slides are submitted.	Leak proof container, purple top tube and smears	Refrigerate purple top tube. Ship on ice packs.	1 Day		
Cytology - CSF	CYTO	CSF - 0.5 mL CSF Protein included if sufficient volume - see Single Chemistry for additional charge. For culture include a red top tube.	Purple top tube and slides	Refrigerate. Ship on ice packs.	1 Day		
Cytology - CSF Price for 1							
Cytology - CSF 2 or more							
Cytology - Fluid 1 tube of fluid	CYTO	Fluid in EDTA - 1 mL + direct smears; for Buffy Coat - EDTA whole blood - tube 2/3 full (minimum 1/3 full); for LE Prep (Lupus Erythematosus) - heparinized whole blood - 3 mL For culture include a red top tube. Price is for one tube of fluid. Discounts apply if submitting more than one tube of fluid (from the same animal at the same time) from same site or different site - see Cytology - Fluids (per site)	Purple top tube and slides	Refrigerate. Ship on ice packs.	1 Day		
Cytology - Fluids (per tube) Price for 1							
Cytology - Fluids (per tube) 2 or more							

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Cytology - Joint Fluid Combo 1 tube of fluid & 4 smears, plus 1-4 other joint site(s) with smears only.		Joint Fluid in EDTA - 1 mL + direct smears; plus up to 4 additional joint sites with smears only (maximum 4 air-dried, unstained smears per site) One joint fluid is preferred but if this is not possible joint smears only can be submitted from a maximum of 5 sites. All joint sites must be submitted at the same time from the same animal. Extra charges (\$8.43 per slide) will apply if more than 4 slides are submitted per site. If submitting more than 5 sites, see Cytology Smears / Imprints for additional charges per site. For culture include a red top tube, additional charges will apply.	Purple top tube and slides	Refrigerate. Ship on ice packs.	1 Day		
Cytology - Multiple Lymph Nodes (3 or more sites) Maximum 8 slides submitted	CYTO	Lymph nodes from multiple sites (> 2 sites) submitted at the same time from the same animal - maximum 8 slides. Extra charges (\$8.43 per slide) will apply if more than 8 slides per submission. See Cytology - Smears or Imprints if submitting 1 or 2 lymph node sites.	Slides	Protect smears from formalin.	1 Day		
Cytology - Smears or Imprints (including Lymph Nodes) Price for 1 site	CYTO	Air-dried, unstained aspirate smear(s) or tissue imprints (maximum 4 slides) Discounts apply if submitting multiple sites - see Cytology - Smears or Imprints (per site). Extra charges (\$8.43 per slide) will apply if more than 4 slides submitted per site. Following a non-diagnostic cytology, re- submission within 2 weeks must quote original case number and a \$38.48 resubmission fee will be charged.	Slides	Protect smears from formalin.	1 Day		
Cytology - Smears or Imprints Price for 2							
Cytology - Smears or Imprints Price for 3							
Cytology - Smears or Imprints Price for 4							
Cytology - Smears or Imprints Price for 5							

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (SK only)	List Price
Cytology - Smears or Imprints Price for 6							
Cytology - Smears or Imprints Price for 7							
Cytology - Smears or Imprints Price for 8							
Cytology - Smears or Imprints Price for 9							
Cytology - Smears or Imprints Price for 10							
D-dimer Quantitative (Cornell)	RO	Citrated plasma - 0.5 mL	Blue top tube (citrate). Sample/anticoagulant ratio is critical - check tube label.	Centrifuge, transfer plasma into a plain plastic tube - DO NOT use red top tube. Ship frozen, sample must arrive frozen. Include a completed "Agent for Shipment" form.	1 Week		
Degenerative Myelopathy (DM) Mutation PCR (Michigan)	RO	EDTA whole blood - 1 mL	Purple top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Dermatohistopathology		(see Biopsy - Skin - Dermatohistopathology)					
Dermatophilus Culture	BACTIC DE-BACTI	Skin scraping ,hair. Dermatophilus cuture only , does not include susceptibility testing.	Leak proof container		3 - 5 Days		
Diabetic Combo Chemistry (standard panel), CBC, UA, Fructosamine	CA HA UR	EDTA whole blood - tube 2/3 full (minimum 1/3 full) + 2 blood smears + serum - 0.5 mL + urine - 3 mL Canine and Feline only.	Purple top tube, slides and red top tube for urine and serum. DO NOT use SST tube. Please label urine vs serum.	Refrigerate. Ship on ice packs.	1 Day		
Diarrhea RealPCR Panel (Comprehensive) with Fecal Dx Antigen Profile (Flotation) (IDEXX) Canine	RO	Feces - 5 grams Collect specimen prior to antibiotic administration.	Sterile, leak proof container	Refrigerate. Ship on ice packs.	1 Week		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Diarrhea RealPCR Panel Comprehensive (IDEXX) Canine, Feline	RO	Feces - 5 grams Feces in fecal culture media are not recommended for testing. Specimens should be collected prior to antibiotic or antiviral treatment or collected at least 2 weeks after withdrawal of these medications.	Sterile, leak proof container	Refrigerate. Ship on ice packs.	1 Week		
Digoxin (RUH) Canine, Feline	RO	Serum - 0.5 mL	Red top tube	Refrigerate. Ship on ice packs.	2 Days		
Direct Exam - Bacteriology	BACTI	Swab, tissues, hair, urine, etc. Acid-fast, Dark-field, Giemsa, Gram stain, KOH, Methylene-blue, wet mount and others.	Sterile, leak proof container	Refrigerate. Ship on ice packs.	1 Day		
Direct Exam - Parasitology	PARA	Swab, tissues, hair, urine, etc. KOH, wet mount and others.	Sterile, leak proof container	Refrigerate. Ship on ice packs.	1 - 2 Days		
Distemper		(see Canine Distemper Virus IHC)					
Distemper		(see Canine Distemper Virus PCR (Guelph))					
Distemper		(see Canine Vaccine Panel IFA (IDEXX))					
E. coli Bovine Enteric Virotyping by Real Time PCR	PCRREALTIME	Bacterial Isolates only Additional charges will apply if bacterial culture required. Includes: F5, STa, Stx1, Stx2, Eae	Leak proof container	Refrigerate. Ship on ice packs.	Once per Week		
E. coli Canine Enteric Virotyping by Real Time PCR	PCRREALTIME	Bacterial Isolates only Additional charges will apply if bacterial culture required. Includes: STa, Stx1, Stx2, Eae	Leak proof container	Refrigerate. Ship on ice packs.	Once per Week		
E. coli Enteric Virotyping by Real Time PCR	PCRREALTIME	Bacterial Isolates only Additional charges will apply if bacterial culture required. Includes: AIDA-I, Eae, F18, F4, F5, Lt, STa, STb, Stx1, Stx2/Stx2e	Leak proof container	Refrigerate. Ship on ice packs.	Once per Week		
E. coli Porcine Enteric Virotyping by Real Time PCR	PCRREALTIME	Bacterial Isolates only Additional charges will apply if bacterial culture required. Includes: AIDA-I, Eae, F18, F4, LT, STa, STb, Stx2e	Leak proof container	Refrigerate. Ship on ice packs.	Once per Week		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (SK only)	List Price
Echinococcus multilocularis, E. granulosus, and/or Taenia spp. Multiplex PCR (Jenkins' Lab) - Feces Canine, Feline	RO	Feces - minimum 10 g For species identification see Echinococcus spp./Taenia spp. Sequencing.	Leak proof container	Handle sample with gloves. Can freeze. Ship on ice packs. Sample will be held at -80OC for 3 days prior to testing.	1 Week		
Echinococcus multilocularis, E. granulosus, and/or Taenia spp. Multiplex PCR (Jenkins' Lab) - Tissue Pets and Livestock	RO	Fresh or frozen tissue - typically liver or lung - from biopsy or surgery. Also acceptable: abdominal or cyst fluid - minimum 2 mL. For species identification see Echinococcus spp./Taenia spp. Sequencing	Leak proof container	Handle sample with gloves. Can freeze. Ship on ice packs..	1 Week		
Echinococcus spp. / Taenia spp. Sequencing (Jenkins' Lab)	RO	Done on PCR positives only if species level identification for Echinococcus spp./Taenia spp. is requested. Contact PDS to add on to previous submission.			1 Week		
EEE		(see Equine Encephalitis - Eastern (EEE) (IDEXX))					
Ehrlichia canis		(see Tick Transmitted Disease Panel (Canine) SNAP 4Dx Plus Test)					
Ehrlichia canis Antibody Screen - For Export (Kansas or Michigan)	RO	Serum - 2 mL Export destination dependent.	Red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form and a "Serology Export" Submission Form.	2 Weeks		
Ehrlichia canis Routine IFA - Non Export (IDEXX)	RO	Serum - 1 mL Screening dilution 1:40.	Red top tube	Refrigerate. Ship on ice packs.	1 Week		
Ehrlichia spp. RealPCR Test (IDEXX)	RO	EDTA whole blood - 2 mL Collect sample prior to antibiotic administration. Includes speciation if positive, RealPCR(TM) tests Ehrlichia canis, Ehrlichia chaffeensis and Ehrlichia ewingii.	Purple top tube	Refrigerate. Ship on ice packs.	1 Week		
EHV		(see Equine Respiratory Panel PCR)					
EIA		(see Equine Infectious Anemia (EIA) ELISA)					
EIC		(see Exercise Induced Collapse PCR (Michigan))					

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Electrolytes - Sodium, Potassium, Chloride	CA	Serum, heparinized plasma, urine or fluid - 0.2 mL Includes: Na, K, Cl.	Red or green top tube	Refrigerate. Ship on ice packs.	1 Day		
Electrolytes - Urine		(see Urine Electrolyte Panel - Small Animal)					
Electrolytes - Urine		(see Urine Electrolyte Panel - Large Animal)					
Encephalitis Panel		(see Equine Encephalitis Panel (EEE/WEE) (IDEXX))					
Encephalitozoon cuniculi Panel (PECUN) (IDEXX) - Rabbit	RO	Serum or heparinized plasma - 0.5 mL Avoid hemolysis. Includes: E. cuniculi antibody titre (IgG and IgM) by ELISA, and rabbit C-reactive protein.	Red or green top tube	Freeze. Ship on ice packs.	2 - 3 Weeks		
Endogenous ACTH		(see ACTH, Endogenous)					
EPM		(see Equine Protozoal Myeloencephalitis (Myelitis) (EPM) Western Blot (IDEXX))					
Equine Arteritis Virus PCR (Guelph)	RO	Live: nasal swab, EDTA whole blood, semen. Dead: lung, liver, placenta. May pool up 5 together, indicate on submission form. Pooling not recommended for semen.	Swab with viral transport media, purple top tube or sterile, leak proof container.	Refrigerate. Ship on ice packs.	1 Week		
Equine Chorionic Gonadotropin		(see PMSG (Pregnant Mare's Serum Gonadotropin) (Biovet))					
Equine Dexamethasone Suppression Test	IMMUL	Serum - 0.2 mL for each sample Cost includes 2 cortisol tests. Submit a "pre" and "19 hour post" sample for testing.	Red top tube. DO NOT use SST tube. Note: Plasma (EDTA, Heparin) samples are not acceptable.	Refrigerate. Ship on ice packs.	1 Day		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (SK only)	List Price
Equine Diarrhea RealPCR Panel (IDEXX)	RO	Feces - 5 grams in sterile container and feces in fecal culture (enteric pathogen) transport media (for reflex Salmonella culture if indicated) Collect sample prior to antibiotic administration. Includes: Clostridium difficile toxin A gene, Clostridium difficile toxin B gene, Clostridium perfringens enterotoxin A gene, Clostridium perfringens CPnetE/F toxin gene, Cryptosporidium spp., Equine Coronavirus, Equine Rotavirus, Lawsonia intracellularis, Neorickettsia risticii (Potomac horse fever), Rhodococcus equi and Salmonella spp. RealPCR tests. If the RealPCR test is positive for Salmonella spp., a culture with susceptibilities on selective media for Salmonella will be automatically performed at no additional charge.	Sterile leak proof container and fecal culture transport media	Refrigerate up to 10 days. Ship on ice packs.	1 Week		
Equine Diarrhea RealPCR Panel with Lawsonia intracellularis Antibody (IDEXX)	RO	Serum - 1 mL and feces - 5 grams in sterile container and feces in fecal culture (enteric pathogen) transport media (for reflex Salmonella culture if indicated) Collect sample prior to antibiotic administration. Includes: Clostridium difficile toxin A gene, Clostridium difficile toxin B gene, Clostridium perfringens enterotoxin A gene, Clostridium perfringens CPnetE/F toxin gene, Cryptosporidium spp., equine coronavirus, equine rotavirus, Lawsonia intracellularis, Neorickettsia risticii (Potomac horse fever), Rhodococcus equi and Salmonella spp. RealPCR tests. Includes culture and biochemical identification of Salmonella spp. and Lawsonia intracellularis antibody by IPMA.	Red top tube, sterile leak proof container and fecal culture transport media	Refrigerate up to 10 days. Ship on ice packs.	4 Weeks		
Equine Encephalitis - Eastern (EEE) (IDEXX)	RO	Serum - 2 mL	Red top tube	Refrigerate. Ship on ice packs.	3 Weeks		
Equine Encephalitis Panel (EEE/WEE) (IDEXX)	RO	Serum - 2 mL Includes: Eastern and Western Equine Encephalitis antibody by Plaque Reduction Neutralization Test.	Red top tube	Refrigerate. Ship on ice packs.	3 Weeks		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Equine Granulosa Cell Tumor (GCT) Panel II (UC Davis)	RO	Serum - 3 mL Includes: Anti-mullerian (AMH), Inhibin, Testosterone.	Red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Equine Herpesvirus 1 (EHV1) Genotyping	PCRREALTIME	Done on EHV 1 PCR positive samples differentiates neuropathogenic and non-neuropathogenic strains of EHV-1			3 - 5 Days		
Equine Herpesvirus 1 and 4 (EHV1/EHV4) PCR	PCRREALTIME	Nasal swab, tracheal wash or EDTA whole blood Detection is specific for type 1 or type 4. Also see Equine Respiratory Panel. See Equine Herpesvirus 1 and 4 (EHV1/EHV4) PCR (STAT) for STAT requests. PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Swab, TTW in red top tube or leak proof screw top container, or whole blood in purple top tube. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	3 - 5 Days		
Equine Herpesvirus 1 and 4 (EHV1/EHV4) PCR (STAT)	PCRREALTIME	Nasal swab, tracheal wash or EDTA whole blood Detection is specific for type 1 or type 4. Also see Equine Respiratory Panel. Additional charges will apply if overtime is required, contact PDS to discuss charges. PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Swab, TTW in red top tube or leak proof screw top container, or whole blood in purple top tube. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	Same day 10 AM cut off		
Equine Herpesvirus Type 2 (EHV2) RealPCR (IDEXX)	RO	EDTA whole blood - 7 mL Can also send nasal swabs (no transport media), one from each nostril.	Purple top tube and/or swabs in red top tubes (no transport media).	Refrigerate. Ship on ice packs within 24 hours of collection.	1 Week		
Equine Herpesvirus Type 5 (EHV5) RealPCR (IDEXX)	RO	EDTA whole blood - 7 mL Can also send nasal swabs (no transport media), one from each nostril.	Purple top tube and/or swabs in red top tubes (no transport media).	Refrigerate. Ship on ice packs within 24 hours of collection.	1 Week		
Equine Infectious Anemia (EIA) ELISA	ELISAI	Serum - 2 mL Less than 2 mL of serum will not be accepted. CFIA cost recovery charge of \$2.08 will be added per sample.	Red top tube	Refrigerate. Ship on ice packs.	1 - 2 Days		
Equine Influenza PCR		(see Influenza A Real Time PCR)					

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Equine Metabolic Panel (Insulin and Endogenous ACTH)	IMMUL	Serum – 1 ml (Insulin) EDTA Plasma – 1.5 mL (Endogenous ACTH) Avoid hemolysis. For resting/basal insulin horses should NOT be fasted but be sampled in the fed state (hay/pasture only); grain/concentrate should be withheld for 12 hours prior to sampling.	Red top and purple top tubes. DO NOT use SST tube.	Centrifuge samples within 4 hours of collection. Transfer samples into plain red top or plastic tubes. Label the appropriate tubes as “serum” or “EDTA plasma”. Freeze Immediately. Ship on ice packs.	1 Week		
Equine Polysaccharide Storage Myopathy (PSSM-1) (UC Davis)	RO	EDTA whole blood - 3 - 7 mL or plucked mane hairs with follicle - 20 hair roots	Purple or red top tube	Refrigerate. Ship on ice packs. Hair can be shipped at room temperature.	4 Weeks		
Equine PPID (Cushing's) Profile (Insulin and Endogenous ACTH, Glucose)	IMMUL CA	EDTA plasma - 1.5 mL and serum - 1.5 mL Avoid hemolysis. For resting/basal insulin horses should NOT be fasted but be sampled in the fed state (hay/pasture only); grain/concentrate should be withheld for 12 hours prior to sampling.	Purple and red top tube. DO NOT use SST Tube.	Centrifuge samples within 4 hours of collection. Transfer samples into plain red top or plastic tubes. Label the appropriate tubes as “serum” or “EDTA plasma”. Freeze Immediately. Ship on ice packs.	1 Week		
Equine Protozoal Myeloencephalitis (Myelitis) (EPM) IFAT (UC Davis)	RO	Serum - 2 mL or CSF - 1 mL Includes: SarcoFluor/NeoFluor, Sarcocystis neurona and Neospora hughesi antibodies by IFAT.	Red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Equine Protozoal Myeloencephalitis (Myelitis) (EPM) Western Blot (IDEXX)	RO	Serum and/or CSF - 1 mL	Red top tube	Refrigerate. Ship on ice packs.	2 Weeks		
Equine Respiratory Panel PCR	PCRREALTIME	Nasal swab or tracheal wash Includes: Equine Herpesvirus 1 and 4, Equine Influenza virus, Streptococcus equi. See Equine Respiratory Panel PCR (STAT) for STAT requests. PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	2 swabs, or TTW in red top tube or leak proof, screw top container. Swabs in gel media will not be processed.		3 - 5 Days		
Equine Respiratory Panel PCR (STAT)	PCRREALTIME	Nasal swab or tracheal wash Includes: Equine Herpesvirus 1 and 4, Equine Influenza virus, Streptococcus equi. Additional charges will apply if overtime is required, contact PDS to discuss charges. PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	2 swabs, or TTW in red top tube or leak proof, screw top container. Swabs in gel media will not be processed.		Same day 10 AM cut off		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Equine Rotavirus PCR (Guelph)	RO	Live: feces, feces swab, rectal swab. Dead: intestinal contents, fecal swab. Includes: Rotavirus Group A, B and C PCR.	Swab with viral transport media, purple top tube or sterile, leak proof container.	Refrigerate. Ship on ice packs.	1 - 2 Weeks		
Equine Viral Arteritis (EVA) Screening (2 dilutions)	SNE	Serum - 1 mL For large numbers of samples contact the lab for pricing.	Red top tube	Refrigerate. Ship on ice packs.	7 - 10 Days		
Equine Viral Arteritis (EVA) Virus Neutralization (8 dilutions)	SNE	Serum - 1 mL	Red top tube	Refrigerate. Ship on ice packs.	7 - 10 Days		
Equine Viral Rhinopneumonitis		(see Equine Respiratory Panel PCR)					
Ergot and Mycotoxin Panel 2020 6 Ergots and 11 Mycotoxins	LCMS	Grain, feed - 200 - 2000 grams Includes: Mycotoxins - 3+15- acetyldeoxynivalenol, Aflatoxin B1 , Deoxynivalenol, Diacetoxyscirpenol, Fumonisin B1, Fumonisin B2, HT-2 Toxin, Nivalenol, Ochratoxin A, T-2 Toxin, Zearalenone; Ergots - Ergocornine + Ergocorninine, Ergocristine + Ergocristinine, Ergocryptine + Ergocryptinine, Ergometrine + Ergometrinine, Ergosine + Ergosinine, Ergotamine + Ergotaminine, Total Ergot. Additional charge: \$30.00 per sample for grinding feed.	Resealable plastic bag		7 - 10 Days		
Ergot Panel 2020 6 Ergot Alkaloids	LCMS	Grain, feed - 200 - 2000 grams Includes: Ergocornine + Ergocorninine, Ergocristine + Ergocristinine, Ergocryptine + Ergocryptinine, Ergometrine + Ergometrinine, Ergosine + Ergosinine, Ergotamine + Ergotaminine, Total Ergot. Additional charge: \$30.00 per sample for grinding feed.	Resealable plastic bag		7 - 10 Days		
Estradiol (IDEXX) Canine, Feline	RO	Serum - 2 mL Avoid hemolysis and lipemia.	Red top tube. DO NOT use SST tube.	Refrigerate for 48 hours. Freeze for longer storage. Ship on ice packs.	3 Weeks		
Ethylene Glycol (RUH)	RO	Fluoride oxalate plasma or serum - 1 mL DO NOT expose to air. DO NOT Centrifuge sample, send on cells.	Grey or red top tube	DO NOT centrifuge sample, it must remain anaerobic. Refrigerate. Ship on ice packs.	1 Day		
Exercise Induced Collapse PCR (Michigan) Canine	RO	EDTA whole blood - 1 mL	Purple top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	3 Weeks		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Exotic Mammal Mini (Chemistry Panel)	CA	Serum or heparinized plasma - 0.2 mL Includes: Ca, Pi, Urea, Glu, ALT, CK	Red or green top tube	Refrigerate. Ship on ice packs.	1 Day		
Extraocular Infection Profile (Health Gene) Feline only	RO	EDTA whole blood - 1 mL, swab Includes: Chlamydomphila felis, Feline Herpesvirus, Mycoplasma spp.	Swab or purple top tube	Refrigerate. Ship on ice packs.	2 Weeks		
Factor Assay		(see Clotting Factor(s) Activity (Cornell))					
Fanconi Syndrome (PennGen) Canine, Feline	RO	Urine - free catch or cystocentesis - 3 - 5 mL	Red top tube or leak proof container	Freeze. Ship on ice packs. Include a completed "Agent for Shipment" form.	4 Weeks		
Fasted Canine Standard / Triglyceride Panel	CA	Serum - 0.5 mL Includes: Na, K, Cl, Bicarb, Anion gap, Ca, Pi, Mg, Urea, Creat, Glu, Tbili, Dbili, Ibili, Chol, CK, ALP, ALT, GGT, Tprot, Triglyceride, Alb, Glob, A:G Ratio, Amylase, Lipase.	Red top tube	Refrigerate. Ship on ice packs.	1 Day		
Fecal Culture - Companion	BACTIC BACTKB DE-BACTI	Feces - 5 grams or Intestine Includes: aerobic/anaerobic, Campylobacter, Salmonella. Includes one susceptibility. For additional susceptibility see Antimicrobial Susceptibility Test.	Sterile, leak proof container or swab	Ship on ice packs.	2 - 4 Days		
Fecal Culture - Large Animal	BACTIC BACTKB DE-BACTI	Feces - 5 grams or Intestine Bovine includes: aerobic, Salmonella; Caprine/Ovine includes: aerobic/anaerobic, Salmonella. Includes one susceptibility. For additional susceptibility see Antimicrobial Susceptibility Test.	Sterile, leak proof container or swab	Ship on ice packs.	2 - 4 Days		
Fecal Culture - Porcine	BACTIC DE-BACTI BACTKB	Feces - 5 grams or Intestine Includes: aerobic, Salmonella. Includes one susceptibility. For additional susceptibility see Antimicrobial Susceptibility Test.	Sterile, leak proof container or swab	Ship on ice packs.	2 - 4 Days		
Fecal Dx Antigen Profile (ZnSO4 Centrifugation Flotation) with Giardia (IDEXX)	RO	Feces - 5 grams Includes: Fecal ova & parasites by zinc sulfate centrifugation flotation, cystoisospora, flea tapeworm, Giardia, hookworm, roundworm and whipworm antigen immunoassays. If worms are visible in the sample, please place the worm into a separate container with 10% formalin, labelled worm ID. The worm will be identified	Sterile, leak proof container	Feces in clean, plastic container. Fecal O&P: refrigerate up to 7 days (preferred for best results) or room temperature; Fecal antigen tests: refrigerate up to 3 weeks (preferred for best results) or room temperature. Ship on ice packs.	1 Week		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (SK only)	List Price
Fecal Egg Sedimentation (Fluke Finder)	SD	Feces - 5 - 10 grams Identification of Flukes, Alaria eggs and Tapeworm egg.	Leak proof container	Refrigerate. Ship on ice packs.	2 Days		
Fecal Egg/Oocyst Count		(see Modified Wisconsin)					
Fecal Flotation - Routine		(see Routine Flotation)					
Fecal Occult Blood	CA	Feces - 3 grams, approximately 1 tsp May take up to 72 hours to confirm results. Meat free diet for 72 hours prior to testing is recommended.	Leak proof container	Refrigerate. Ship on ice packs.	1 - 4 Days		
Feline Calicivirus/Herpesvirus PCR	PCRREALTIME	Nasal or oral swabs, lung, trachea or tonsil PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Swab or leak proof container. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	3 - 5 Days		
Feline Coronavirus		(see Feline Infectious Peritonitis (FIP) Antibody)					
Feline Health Screen - Basic Chemistry (standard panel), CBC, UA	CA HA UR	EDTA whole blood - tube 2/3 full (minimum 1/3 full) + 2 blood smears + serum - 0.5 mL + urine - 3 mL If less than minimum received partial results may be reported. Includes: CBC, Small Animal Standard Panel, Urinalysis.	Purple top tube, slides and red top tube for urine and serum. Please label urine vs serum.	Refrigerate. Ship on ice packs.	1 Day		
Feline Health Screen - Complete Chemistry (standard panel), CBC, UA, T4	CA HA UR IMMUL	EDTA whole blood - tube 2/3 full (minimum 1/3 full) + 2 blood smears + serum - 0.5 mL + urine - 3 mL If less than minimum received partial results may be reported. Includes: CBC, Small Animal Standard Panel, Urinalysis, T4.	Purple top tube, slides and red top tube for urine and serum. DO NOT use SST tube. Please label urine vs serum.	Refrigerate. Ship on ice packs.	1 Day		
Feline Health Screen - Mini Chemistry (standard panel), CBC, T4	CA HA IMMUL	EDTA whole blood - tube 2/3 full (minimum 1/3 full) + 2 blood smears + serum - 0.5 mL If less than minimum received partial results may be reported. Includes: CBC, Small Animal Standard Panel, T4.	Purple top tube, slides and red top tube. DO NOT use SST tube.	Refrigerate. Ship on ice packs.	1 Day		
Feline Immunodeficiency Virus (FIV) Antibody IFA (IDEXX)	RO	Serum - 1 mL This test does not distinguish between vaccination and infection.	Red top tube	Refrigerate up to 24 hours. Freeze for longer storage. Ship on ice packs.	3 Weeks		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Feline Immunodeficiency Virus (FIV) Antibody Western Blot (IDEXX)	RO	Serum - 1 mL This test does not distinguish between vaccination and infection.	Red top tube	Refrigerate up to 7 days. Freeze for longer storage. Ship on ice packs.	3 Weeks		
Feline Immunodeficiency Virus/Feline Leukemia Virus		(see FELV/FIV Snap Combo Elisa)					
Feline Infectious Peritonitis (FIP) Antibody	IMPA	Serum - 0.1 mL Does not differentiate between FIP and Enteric Coronavirus.	Red top tube	Refrigerate. Ship on ice packs.	1 - 2 Days		
Feline Leukemia Virus (FeLV) Antigen IFA (IDEXX)	RO	EDTA whole blood - 1 mL and 2 blood smears Bone marrow or lymphoid tissue are also acceptable. Results are not affected by vaccination; detects established intracellular infection.	Purple top tube or leak proof container	Refrigerate. Ship on ice packs.	1 - 2 Weeks		
Feline Leukemia Virus (FeLV) PCR (WCVN Vet Path)	RO	EDTA whole blood - 1 mL Bone marrow, fresh or fixed tissue (minimum 2 uncoverslipped slides) are also acceptable.	Purple top tube or leak proof container	Refrigerate. Ship on ice packs.	Phone		
Feline Leukemia Virus/Feline Immunodeficiency Virus		(see FELV/FIV Snap Combo Elisa)					
FeLV		(see Feline Leukemia Virus (FeLV) Antigen IFA (IDEXX))					
FeLV		(see Feline Leukemia Virus (FeLV) PCR (WCVN Vet Path))					
FELV/FIV Snap Combo Elisa	ELISA	Serum, plasma or anticoagulated whole blood (e.g. EDTA, heparin) - 0.2 mL	Red, green or purple top tube	Refrigerate. Ship on ice packs. Serum or plasma can be frozen.	1 Day		
Ferritin ELISA (Kansas) Canine, Equine, Feline	RO	Serum - 0.5 mL	Red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Ferritin, Iron, TIBC (Kansas) Canine, Equine	RO	Serum - 0.5 mL	Red top tube	Freeze. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (SK only)	List Price
Fever of Unknown Origin RealPCR Panel, Comprehensive (IDEXX) Canine	RO	EDTA whole blood and urine in a sterile container - 2 mL for each sample Collect samples prior to antibiotic administration. Includes: Anaplasma spp., Babesia spp., Bartonella spp., Blastomyces dermatitidis, Brucella canis, Coccidioides spp., Cryptococcus spp., Ehrlichia spp., Hepatozoon spp., Histoplasma capsulatum, Leishmania spp. Quant, Leptospira spp., Neospora caninum, Rocky Mountain Spotted Fever (Rickettsia rickettsii), Toxoplasma gondii and Trypanosoma cruzi RealPCR tests. Also includes quantification of Leishmania if PCR positive.	Purple top tube and sterile container (urine)	Refrigerate. Ship on ice packs.	1 Week		
Fibrinogen (Guelph) Bovine, Canine, Equine, Feline	RO	Citrated plasma - 1 mL Avoid hemolysis.	Blue top tube (citrate). Sample/anticoagulant ratio is critical - check tube label.	Collect blood into a citrated vacutainer tube; invert gently to mix. Centrifuge and transfer the citrated plasma to a labelled, plastic vial without additional anticoagulant. Freeze immediately. When transferring plasma, avoid contamination by cells within the buffy coat.	1 Week		
FIP		(see Feline Infectious Peritonitis (FIP) Antibody)					
FIP Virus RealPCR (IDEXX)	RO	Pleural or abdominal effusion (preferred specimen), tissue aspirates or fresh tissue in sterile container or EDTA whole blood. For positive tests the biotype is identified as either Feline Infectious Peritonitis Virus or Feline Enteric Coronavirus.	Leak proof container or purple top tube	Refrigerate up to 10 days. Fresh tissue refrigerate up to 24 hours, freeze for longer storage. Ship on ice packs.	1 Week		
FIV		(see Feline Immunodeficiency Virus (FIV) Antibody IFA (IDEXX))					
FIV/FeLV		(see FELV/FIV Snap Combo Elisa)					
Flax CDC Triffid FP967 (3 day TAT)	PCRREALTIME	Flax seeds - 2.5 kg	Resealable plastic bag		3 Days		
Flax CDC Triffid FP967 (Same Day)	PCRREALTIME	Flax seeds - 2.5 kg Contact PDS prior to submitting to ensure STAT testing.	Resealable plastic bag		1 Day		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Flow Cytometry - (Guelph) Flow Cytometric Immunotyping - Lymphoma and Lymphoid Leukemia Canine, Feline, Equine	RO	Lymph node or tissue aspirate in saline, one glass slide of lymph node or tissue aspirate and a copy of the cytology report. EDTA whole blood - 0.5 mL or bone marrow - 0.5 mL, and a copy of the CBC report. Immunophenotyping panels are available for dogs (13 markers), cats (8 markers) and horses (6 markers). The listed price is per site.	Purple top tube	Aspirate enlarged lymph node or tissue of interest and prepare one smear (air dried) and place the rest of the sample in an EDTA tube by rinsing the needle and syringe with 2-3 mL of saline. The saline should appear slightly cloudy indicating sufficient cells. If possible, add 1-2 drops of serum which will keep cells stable for 72 hours if refrigerated or kept on ice. If cells are in saline without serum, they are stable for approximately 48 hours at refrigeration temperature. Submit copy of recent cytology report of lymph node or tissue. Collect EDTA blood or bone marrow aspirate which is stable for 72 hours if refrigerated. Submit a fresh blood or bone marrow smear and a copy of recent CBC. Ship on ice packs.	2 Weeks		
Flow Cytometry ordered with PARR (Colorado) Canine, Feline	RO	Bone Marrow in EDTA - 0.5 mL, lymph node, body cavity fluid in EDTA and red top tube - 0.4 mL plus EDTA whole blood - 2 mL and 2 fresh blood smears (unstained, uncoverslipped) CBC must be run within 48 hours of sample being collected. Include a copy of in-house CBC results. Samples should be collected Monday or Tuesday for shipping on Wednesday (sample needs to be as fresh as possible).	Red and purple top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Fluid Sodium, Potassium, Chloride	CA	Fluid - 0.2 mL	Red top tube	Refrigerate. Ship on ice packs.	1 Day		
Folate (IDEXX) Canine, Feline	RO	Serum - 1 mL 12 hour fasting sample. Avoid hemolysis. Protect from light.	Red top tube	Refrigerate up to 24 hours. Freeze for longer storage. Ship on ice packs.	1 Week		
Foot and Mouth Disease PCR CFIA Accredited Test	PCR/REALTIME	Contact PDS Diagnostic Pathologist or PDS lab for details.	Leak proof container	Refrigerate. Ship on ice packs.	3 - 5 Days		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Free T4 by Equilibrium Dialysis (Guelph) Canine, Equine, Feline	RO	Serum - 1 mL Separates Free T4 from bound T4 as well as from interfering proteins such as T4 binding proteins and autoantibodies. Avoid hemolysis.	Red top tube. DO NOT use SST tube.	Separate serum from cells as soon as possible after collection and transfer to a leakproof tube. Refrigerate. Ship on ice packs.	3 Weeks		
Free T4 Chemiluminescence (IDEXX) Canine, Feline	RO	Serum - 1 mL	Red top tube. DO NOT use SST tube.	Refrigerate up to 7 days. Freeze maximum 1 month. Ship on ice packs.	1 Week		
Fructosamine Canine, Feline	CA	Serum - 0.5 mL Also see Diabetic Combo.	Red top tube	Refrigerate. Ship on ice packs.	1 Day		
Fungal Culture Mycology	BACTIC DE-BACTI	Hair, skin scrapings, skin biopsy, swabs For dermatophytes and yeast.	Tube or other Container		1 - 3 Weeks		
Fungal Panel Serology (Cornell)	RO	Serum - 2 mL (absolute minimum - 0.5 mL) or CSF (Cryptococcus only) - 2 mL (absolute minimum - 0.1 mL) in sterile container Includes: Coccidioides AGID, Blastomyces AGID, Histoplasma AGID, Aspergillus AGID, Cryptococcus antigen.	Red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Gallid Herpesvirus 1 (ILT) PCR	PCRREALTIME	Oropharyngeal swab, trachea, lung PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Leak proof container. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	3 - 5 Days		
Gentamicin (RUH)	RO	Serum - 1 mL	Red top tube	Refrigerate. Ship on ice packs.	1 Day		
GGT		(see Single Chemistry)					
Glaesserella parasuis PCR	PCRREALTIME	Tissues, swabs PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Leak proof container. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	3 - 5 Days		
Glasser's Disease		(see Glaesserella parasuis PCR)					
GLDH		(see Single Chemistry)					

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Glucose		(see Single Chemistry)					
Gram positive NARMS MIC (CMV3AGPF)	MIC						
Haemophilus parasuis		(see Glaesserella parasuis PCR)					
Heartworm		(see Modified Knott's - Heartworm)					
Heartworm		(see Heartworm Microfilaria Knott's Test - For Export (Kansas))					
Heartworm		(see Tick Transmitted Disease Panel (Canine) SNAP 4Dx Plus Test)					
Heartworm Antigen by ELISA - Canine, Feline (IDEXX)	RO	1 mL serum (preferred) or EDTA plasma for ELISA; 2 ml EDTA whole blood for microfilaria test Microfilaria test will be performed at no additional cost only if ELISA is positive.	Purple or red top tube	Serum or EDTA plasma: refrigerate up to 7 days; freeze for longer storage. EDTA whole blood: refrigerate up to 4 days. Ship on ice packs.	1 Week		
Heartworm Microfilaria Knott's Test - For Export (Kansas) Canine, Feline	RO	EDTA whole blood - 1 mL Required testing for canine and feline crossing border of designated countries.	Purple top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form and a "Serology Export" Submission Form.	2 Weeks		
Herpesvirus sp. PCR	PCRCONV	Tissues - fresh, formalin fixed or embedded	Formalin in leak proof container or paraffin block.		5 - 7 Days		
High Dose Dexamethasone Suppression Test	IMMUL	Serum - 0.2 mL for each sample Cost includes 3 cortisol. See Clinical Pathology Testing and Sample Submission Protocol on the PDS website for Protocols for Testing Adrenal Function.	Red top tube. DO NOT use SST tube. Note: Plasma (EDTA, Heparin) samples are not acceptable.	Refrigerate. Ship on ice packs.	1 Day		
Histopathology Process - Frozen section additional cuts (2nd cut ff)	HC	Formalin fixed tissue	Leak proof container	Ship to avoid freezing during cold months. Do not fix or ship in alcohol.	2 - 5 Working Days		
Histopathology Process - Frozen section cut (1st cut)	HC	Formalin fixed tissue	Leak proof container	Ship to avoid freezing during cold months. Do not fix or ship in alcohol.	2 - 5 Working Days		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Histopathology Process - Multi biopsy cassette and cut	HC	Formalin fixed tissue	Leak proof container	Fix in 10% Formalin for minimum of 24 hours. Transfer tissues to 70% alcohol (isopropyl, ethyl or rubbing alcohol) for shipping in very cold weather.	2 - 5 Working Days		
Histopathology Process - Multi biopsy cassette and embed	HC	Formalin fixed tissue	Leak proof container	Fix in 10% Formalin for minimum of 24 hours. Transfer tissues to 70% alcohol (isopropyl, ethyl or rubbing alcohol) for shipping in very cold weather.	2 - 5 Working Days		
Histopathology Process - Multi compartment biopsy cassettes (incl H & E)	HC	Formalin fixed tissue	Leak proof container	Fix in 10% Formalin for minimum of 24 hours. Transfer tissues to 70% alcohol (isopropyl, ethyl or rubbing alcohol) for shipping in very cold weather.	2 - 5 Working Days		
Histopathology Process - Paraffin process	HC	Formalin fixed tissue	Leak proof container	Fix in 10% Formalin for minimum of 24 hours. Transfer tissues to 70% alcohol (isopropyl, ethyl or rubbing alcohol) for shipping in very cold weather.	2 - 5 Working Days		
Histopathology Process - Paraffin process, embed only (per cassette)	HC	Formalin fixed tissue	Leak proof container	Fix in 10% Formalin for minimum of 24 hours. Transfer tissues to 70% alcohol (isopropyl, ethyl or rubbing alcohol) for shipping in very cold weather.	2 - 5 Working Days		
Histopathology Process - Paraffin process, embed, cut (per slide)	HC	Formalin fixed tissue	Leak proof container	Fix in 10% Formalin for minimum of 24 hours. Transfer tissues to 70% alcohol (isopropyl, ethyl or rubbing alcohol) for shipping in very cold weather.	2 - 5 Working Days		
Histopathology Process - Paraffin process, embed, cut, stain H&E	HC	Formalin fixed tissue	Leak proof container	Fix in 10% Formalin for minimum of 24 hours. Transfer tissues to 70% alcohol (isopropyl, ethyl or rubbing alcohol) for shipping in very cold weather.	2 - 5 Working Days		
Histopathology Process - Paraffin recut from block	HC	Paraffin block	Resealable plastic bag		2 - 5 Working Days		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Histopathology Process - Trimming tissue	HC	Formalin fixed tissue	Leak proof container	Fix in 10% Formalin for minimum of 24 hours. Transfer tissues to 70% alcohol (isopropyl, ethyl or rubbing alcohol) for shipping in very cold weather.	2 - 5 Working Days		
Honey bee Culture European foulbrood		(see Melissococcus plutonius (European foulbrood) Culture)					
Hypercalcemia Malignancy Profile		(see PTH (Hypercalcemia) Malignancy Profile (Michigan))					
Hyperkalemic Periodic Paralysis (HYPP) (Bureau Veritas Laboratory) Equine	RO	EDTA whole blood - 3 - 7 mL or plucked mane hairs with follicle - 20 hair roots	Purple top tube or sterile screw top container	Refrigerate. Ship on ice packs. Hair can be shipped at room temperature.	3 Weeks		
HYPP		(see Hyperkalemic Periodic Paralysis (HYPP) (Bureau Veritas Laboratory))					
IBR		(see Infectious Bovine Rhinotracheitis (IBR) PCR)					
IBR		(see Bovine Respiratory Panel)					
IBR (Bovine herpesvirus 1 – BHV1)		(see Immunohistochemistry (IHC) (Food))					
IGF1		(see Insulin-Like Growth Factor (IGF1) (Michigan))					
IgG Screen (Qualitative) (IDEXX) Equine (foal)	RO	Serum, EDTA whole blood or plasma - 2 mL	Red or purple top tube	Refrigerate for up to 7 days. Freeze for longer storage. Ship on ice packs.	1 Week		
Immunocytochemistry (ICC) (Colorado) Most Species	RO	4 air dried unstained smears Cavity fluids, bone marrow and blood can be submitted with the slides. Includes cytology.	Slides	Protect smears from formalin. Include a completed "Agent for Shipment" form.	2 Weeks		
Immunoglobulin G (IgG by RID) (Cornell) Canine	RO	Serum - 0.5 mL	Red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	1 Week		
Immunohistochemistry (IHC) - Add-on to PDS case	IMIHC	Formalin-fixed, paraffin embedded tissue derived from PDS Necropsy or Surgical Biopsy cases.			2 - 4 Days		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Immunohistochemistry (IHC) (Companion)	IMIHIC	Formalin-fixed tissues or tissues in paraffin block.	Leak proof container	Formalin tissues in leak proof container. Protect tissues in formalin from freezing.	2 - 4 Days		
Immunohistochemistry (IHC) (Food)	IMIHIC	Formalin-fixed tissues or tissues in paraffin block.	Leak proof container	Formalin tissues in leak proof container. Protect tissues in formalin from freezing.	2 - 4 Days		
Infectious Bovine Rhinotracheitis		(see Bovine Respiratory Panel)					
Infectious Bovine Rhinotracheitis (IBR) ELISA Only available for Bovine Research	ELISAV	Serum - 1 mL Contact PDS for pricing and availability	Red top tube	Refrigerate. Ship on ice packs.			
Infectious Bovine Rhinotracheitis (IBR) PCR	PCRREALTIME	Nasal, oral or genital swabs, lung, trachea, fetal liver PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Swab or leak proof container. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	3 - 5 Days		
Infectious Bronchitis Virus (IBV) ELISA (Guelph)	RO	Serum - 0.5 mL	Red top tube	Refrigerate. Ship on ice packs.	2 Weeks		
Infectious bronchitis virus PCR	PCRREALTIME	Live animal: oropharyngeal/tracheal swab, cloacal swab. Dead animal: lung/trachea, cecal tonsil, oviduct, kidney.	Swab or leak proof container. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	3 - 5 Days		
Infectious Bursal Disease Virus (IBDV) Genotyping by Sequencing	GENTYP	Swabs, tissue samples PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Leak-proof containers, swabs in viral transport media (VTM). Swabs in gel media will not be processed.	Refrigerate. Ship in insulated container with freezer packs.	2 Weeks		
Infectious bursal disease virus PCR	PCRREALTIME	Live animal: cloacal swab. Dead animal: bursa of Fabricius.	Swab or leak proof container. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	3 - 5 Days		
Infectious Laryngotracheitis (ILT)		(see Gallid Herpesvirus 1 (ILT) PCR)					

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Influenza A HA and NA Sequencing	GENTYP	Turnaround time and coverage can be adjusted to client needs.			2 Weeks		
Influenza A Real Time PCR	PCRREALTIME	Nasal swab, fresh lung tissue, oral fluid - 1 mL PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Leak proof container. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	3 - 5 Days		
Influenza A, H3N8 HI (Guelph) Most Species	RO	Serum - 1 mL	Red top tube	Refrigerate. Ship on ice packs.	2 - 3 Weeks		
Influenza A, H7N7 HI (Guelph) Most Species	RO	Serum - 1 mL	Red top tube	Refrigerate. Ship on ice packs.	2 - 3 Weeks		
Influenza D PCR	PCRREALTIME	Nasal swab, transtracheal wash, fresh lung tissue PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Leak proof container. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	3 - 5 Days		
Influenza, Avian		(see Avian Influenza (AIV) PCR)					
Insulin - Serial Testing Equine	IMMUL	Serum - 1 mL for each sample Cost includes 2 insulin tests submitted on same submission form. For resting/basal insulin horses should NOT be fasted but be sampled in the fed state (hay/pasture only); grain/concentrate should be withheld for 12 hours prior to sampling. For dynamic testing, please follow the recommendations provided by the equine endocrinology group (https://sites.tufts.edu/equineendogroup/files/2022/10/EMS-EEG-Recommendations-2022.pdf). For the oral sugar test, horses should be fasted 3-6 hours. The insulin tolerance test should be performed in the fed state (hay or pasture only).	Red top tube. DO NOT use SST tube.	Centrifuge samples ASAP after collection. Freeze. Ship on ice packs.	1 Day		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Insulin - Serial Testing + Additional Sample Equine	IMMUL	Serum - 1 mL for each sample Cost includes 3 insulin tests submitted on same submission form. For resting/basal insulin horses should NOT be fasted but be sampled in the fed state (hay/pasture only); grain/concentrate should be withheld for 12 hours prior to sampling. For dynamic testing, please follow the recommendations provided by the equine endocrinology group (https://sites.tufts.edu/equineendogroup/files/2022/10/EMS-EEG-Recommendations-2022.pdf). For the oral sugar test, horses should be fasted 3-6 hours. The insulin tolerance test should be performed in the fed state (hay or pasture only).	Red top tube. DO NOT use SST tube.	Centrifuge samples ASAP after collection. Freeze. Ship on ice packs.	1 Day		
Insulin (Immulite) Equine	IMMUL	Serum - 1 mL For resting/basal insulin horses should NOT be fasted but be sampled in the fed state (hay/pasture only); grain/concentrate should be withheld for 12 hours prior to sampling. For dynamic testing, please follow the recommendations provided by the equine endocrinology group (https://sites.tufts.edu/equineendogroup/files/2022/10/EMS-EEG-Recommendations-2022.pdf). For the oral sugar test, horses should be fasted 3-6 hours. The insulin tolerance test should be performed in the fed state (hay or pasture only).	Red top tube. DO NOT use SST tube.	Centrifuge samples ASAP after collection. Freeze. Ship on ice packs.	Weekly; (Serial Testing: Daily)		
Insulin (RIA)/Glucose Ratio (Guelph) Canine, Equine, Feline	RO	Serum - 2 mL Fasting sample. For equines, no grain within 4 hours of sample collection. For suspected insulinoma do not fast. Heparin plasma is not acceptable. Avoid hemolysis.	Red or green top tube	Separate serum from cells as soon as possible after collection and transfer to a leakproof tube. Refrigerate. Ship on ice packs.	2 Weeks		
Insulin RIA (Guelph) Canine, Equine, Feline	RO	Serum - 1 mL Fasting sample. For equines, no grain within 4 hours of sample collection. For suspected insulinoma do not fast. Heparin plasma is not acceptable. Avoid hemolysis.	Red top tube. DO NOT use SST tube.	Separate serum from cells as soon as possible after collection and transfer to a leakproof tube. Refrigerate. Ship on ice packs.	2 Weeks		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Insulin/Glucose Ratio Equine	IMMUL CA	Serum - 1 mL For resting/basal insulin horses should NOT be fasted but be sampled in the fed state (hay/pasture only); grain/concentrate should be withheld for 12 hours prior to sampling	Red top tube. DO NOT use SST tube.	Centrifuge within 30 minutes of collection. Freeze. Ship on ice packs.	1 Week		
Insulin-Like Growth Factor (IGF1) (Michigan) Most Species	RO	Serum or plasma - 0.5 mL	Red or green top tube	Refrigerate or freeze. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Iodine - ICP-MS (Milk, Tissues and Feed) (Guelph)	RO	Milk - 5 mL raw or processed, fresh tissues - 10 grams, or feed - 100 gram	Leak proof container	Refrigerate milk and feed; freeze tissues. Indicate tissue type on container. Ship on ice packs.	3 Weeks		
Iodine-ICP-MS (Blood and Urine) (Guelph)	RO	Serum, heparinized plasma, or urine - 1 mL	Red or green top tube, or urine in leak proof container.	Refrigerate. Ship on ice packs.	3 Weeks		
Ionophore Feed Additive Screen (Guelph)	RO	Feed - 100 grams or rumen contents Provide feed additive information, if available. Representative sampling is essential. It is recommended that a larger sample is taken (1-5 kg), mixed and representatively subsampled (100-200 g) for submission to the lab for analysis. Includes: Monensin, Narasin, Salinomycin.	Leak proof container	Refrigerate feed; freeze rumen contents. Ship on ice packs.	3 Weeks		
Iron		(see Mineral Panel #1)					
Iron/TIBC (St. Paul's)	RO	Serum - 0.5 mL	Red top tube	Refrigerate. Ship on ice packs.	1 Day		
Itraconazole (MiraVista)	RO	Serum - 0.5 mL	Red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Ivermectin Sensitivity		(see Multi-Drug Resistance Gene (MDR1; Ivermectin Sensitivity) (Health Gene))					
Johne's		(see Mycobacterium paratuberculosis (Johne's) ELISA)					
Johne's Culture		(see Mycobacterium paratuberculosis (Johne's) Individual PCR)					

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Johne's Disease		(see Mycobacterium paratuberculosis (Johne's) Individual PCR)					
Large Animal Kidney (Chemistry Panel)	CA	Serum - 0.4 mL Includes: Na, K, Cl, Bicarb, Anion Gap, Ca, Pi, Mg, Urea, Creat, Gluc, T.Prot, Alb, Glob, A:G Ratio.	Red top tube	Refrigerate. Ship on ice packs.	1 Day		
Large Animal Liver (Chemistry Panel)	CA	Serum - 0.4 mL Includes: Urea, Gluc, T. Bili, D.Bili, I.Bili, CK, AST, GLDH, GGT, T.Prot, Alb, Glob, A:G Ratio.	Red top tube	Refrigerate. Ship on ice packs.	1 Day		
Large Animal Mini Panel - no interpretation	CA	Serum - 0.3 mL Includes: Creatinine, Total Protein, Albumin, Globulin, A:G Ratio. No interpretation.	Red top tube	Refrigerate. Ship on ice packs.	1 Day		
Large Animal Presurgical (Chemistry Panel)	CA	Serum - 0.4 mL Includes: Na, K, Cl, Urea, Creat, Gluc, CK, AST, GLDH, GGT, T.Prot.	Red top tube	Refrigerate. Ship on ice packs.	1 Day		
Large Animal Standard (Chemistry Panel)	CA	Serum - 0.5 mL Includes: Na, K, Cl, Bicarb, Anion Gap, Ca, Pi, Mg, Urea, Creat, Gluc, T.Bili, D.Bili, I.Bili, CK, AST, GLDH, GGT, T.Prot, Alb, Glob, A:G Ratio.	Red top tube	Refrigerate. Ship on ice packs.	1 Day		
Lawsonia intracellularis PCR	PCRREALTIME	Lesion in ileum, intestinal contents, feces or rectal swabs PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Swab or leak proof container. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	3 - 5 Days		
Lawsonia intracellularis PCR (Guelph) Canine, Equine, Feline	RO	Feces - 2 grams (minimum) or intestine (ileum preferred) Fecal swabs are not acceptable.	Sterile, leak proof container	Refrigerate. Ship on ice packs.	2 Weeks		
LE Prep		(see Cytology - Fluid)					
Lead Analysis - Blood	LEADANALYSER	Heparinized whole blood - 1 mL For tissue refer to Mineral Panel #3 or #4.	Green top tube	Refrigerate. Ship on ice packs.	2 - 5 Days		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Leishmania IFA - For Export (Kansas or Michigan)	RO	Serum - 1 mL Export destination dependent.	Red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form. Submission must include the microchip number.	2 Weeks		
Leptospira canicola - For Export (Kansas) Most Species	RO	Serum - 1 mL	Red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form and a "Serology Export" Submission Form.	2 Weeks		
Leptospira MAT - Not For Export - Canine, Equine (Guelph)	RO	Serum - 1 mL Includes: Leptospira pomona, icterohaemorrhagiae, canicola, autumnalis, grippotyphosa, bratislava, hardjo.	Red top tube	Refrigerate. Ship on ice packs.	2 Weeks		
Leptospira MAT - Not for Export - Food Animal (Guelph) Bovine, Caprine, Ovine, Porcine	RO	Serum - 1 mL Includes: Leptospira pomona, icterohaemorrhagiae, canicola, autumnalis, grippotyphosa, bratislava, hardjo.	Red top tube	Refrigerate. Ship on ice packs.	2 Weeks		
Leptospira spp. PCR (Guelph) Most Species	RO	Live: EDTA whole blood and urine - 2 mL each. Dead: kidney tissue. May pool up to 5 samples, indicate on submission form. Collect specimens prior to administration of antibiotics. PCR charge will be applied to each sample type submitted.	Purple top tube and sterile container (urine); tissue in leak proof container.	Refrigerate up to 10 days. Fresh tissue refrigerate up to 24 hours, freeze for longer storage. Ship on ice packs.	1 Week		
Leptospiral Microscopic Agglutination MAT - For Export (Michigan) Canine	RO	EDTA plasma or serum - 1 mL (minimum 0.5 mL)	Purple and red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Lipase		(see Single Chemistry)					
Lipase		(see Pancreas (Chemistry Panel))					
Low Dose Dexamethasone Suppression Test	IMMUL	Serum - 0.2 mL for each sample Cost includes 3 cortisol. See Clinical Pathology Testing and Sample Submission Protocol on the PDS website for Protocols for Testing Adrenal Function.	Red top tube. DO NOT use SST tube. Note: Plasma (EDTA, Heparin) samples are not acceptable.	Refrigerate. Ship on ice packs.	1 Day		
Lungworm		(see Baermann (Larvae sedimentation))					
Lupus Erythematosus		(see Cytology - Fluid)					

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Luteinizing Hormone (IDEXX) Canine, Feline	RO	Serum - 1 mL 12 hour fasting sample. Avoid hemolysis and lipemia.	Red top tube	Refrigerate up to 24 hours. Freeze for longer storage. Ship on ice packs.	1 Week		
Lyme Antibody by IFA (IDEXX) Equine	RO	Serum - 1 mL	Red top tube	Refrigerate. Ship on ice packs.	2 - 3 Weeks		
Lyme Disease - Canine		(see Tick Transmitted Disease Panel (Canine) SNAP 4Dx Plus Test)					
Lyme Disease - Equine		(see Tick Transmitted Disease Panel (Equine) SNAP 4Dx Plus Test)					
Lyme Disease, Equine Multiplex Assay (Cornell)	RO	Serum - 2 mL; for neurological cases include CSF - 1 mL Indicate on submission form if and when the horse has been vaccinated and which vaccine was used.	Red top tube	Refrigerate. Do Not Freeze. Ship on ice packs. Include a completed "Agent for Shipment" form.	1 Week		
Maedi-visna Virus		(see Ovine Progressive Pneumonia (OPP) ELISA)					
Magnesium		(see Single Chemistry)					
Magnesium		(see Mineral Panel #1)					
Malignancy Profile		(see PTH (Hypercalcemia) Malignancy Profile (Michigan))					
Malignant Catarrhal Fever (MCF) PCR		(see Ovine herpesvirus 2 PCR)					
Manganese		(see Mineral Panel #1)					
Mast Cell Tumor (MCT) Prognostic Panel (Michigan) Canine	RO	Biopsy slides, unstained and uncoverslipped, from PDS cases - minimum 10 slides Additional fees apply for slide preparation - \$10.87 per slide. Call PDS for additional information.	Leak proof container	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Masticatory Muscle Myositis		(see 2M Antibody (Comp Neuro Lab))					

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Mastitis Culture	BACTIC	Milk Single sample. Discounts apply if submitting 2 or more - \$11.94 each supported, \$13.21 each list. Additional charge per significant organism - see Antimicrobial Susceptibility Test. Contact PDS Lab before submission.	Sterile, leak proof container	Ship on ice packs.	2 - 4 Days		
MCF		(see Ovine herpesvirus 2 PCR)					
McMasters - Small Ruminant Egg Count	MCMA	Feces - 5 - 10 grams Passive flotation method. Collect a fresh feces sample from the animal; at least 10-15 pellets per animal.	Place each fecal sample in its own clean, leak proof container.	Refrigerate. Ship on ice packs.			
McMasters - Small Ruminant Pooled Screening	MCMA	Feces - 5 - 10 grams Passive flotation method. Collect a fresh feces sample from 15 to 20 animals; at least 10-15 pellets per animal. Samples will be pooled at PDS Lab.	Place each fecal sample in its own clean, leak proof container.	Refrigerate. Ship on ice packs.			
MDR1		(see Multi-Drug Resistance Gene (MDR1; Ivermectin Sensitivity) (Health Gene))					
Melissococcus plutonius (European foulbrood) Culture	BACTIC	Swabs from brood comb, honey, pollen, wax debris, dead bees, live bees No susceptibility.					
Mercury	ICPMS	Heparinized whole blood or urine - 2 mL; tissue - liver or kidney (fresh or frozen) - 2 - 5 grams Microwave digestion and ICP-MS analysis.	Green top tube or leak proof container	Refrigerate. Ship on ice packs.	2 - 5 Days		
Metanephrene Fractionation, Urine (IDEXX)	RO	Urine - 5 mL in sulfamic acid tube Sulfamic acid tube is available from PDS, call 306-966-6160 prior to collecting sample. Includes metanephrene/creatinine ratio, normetanephrene/creatinine ratio	Red top tube or leak proof container	Refrigerate up to 7 days. Freeze for longer storage. Ship on ice packs.	2 - 3 Weeks		
Methemoglobin	SPECTRO	Heparinized whole blood - 2 mL	Green top tube	Ship immediately with ice packs.	2 - 5 Days		
Microfilaria Differentiation - For Export (Michigan) Canine	RO	EDTA whole blood - 3 mL	Purple top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Mineral Panel - Single Target (ICPMS)	ICPMS	Any single test from Mineral Panel #1, #2, #3 or #4 See Mineral Panel for sample requirements/comments.	Red or green top tube or leak proof container.	Refrigerate. Ship on ice packs.	2 - 5 Days		
Mineral Panel #1	ICPMS	Heparinized plasma or serum - 2 mL; liver (fresh or frozen) - 2 - 5 grams Includes: Mg, Mn, Fe, Co, Cu, Zn, Se, Mo. Contact the lab for other types of samples. Microwave digestion and ICP-MS analysis.	Red or green top tube or leak proof container.	Refrigerate. Ship on ice packs.	2 - 5 Days		
Mineral Panel #2	ICPMS	Liver or brain (fresh or frozen) - 2 - 5 grams Includes: K, Ca, Na. Contact the lab for other types of samples. Microwave digestion and ICP-MS analysis.	Leak proof container	Refrigerate. Ship on ice packs.	2 - 5 Days		
Mineral Panel #3	ICPMS	Heparinized blood - 2 mL (must be submitted for Lead); heparinized plasma or serum - 2 mL; tissue (fresh or frozen) - 2 - 5 grams Includes: Tl, Pb, As, Cd. Contact lab for other types of samples. Microwave digestion and ICP-MS analysis.	Red or green top tube or leak proof container.	Refrigerate. Ship on ice packs.	2 - 5 Days		
Mineral Panel #4	ICPMS	For lead; heparinized whole blood - 2 mL; tissue (fresh or frozen) - 2 - 5 grams Includes (Be, Mg, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As, Se, Sr, Mo, Cd, Sn, Sb, Ba, Tl, Pb, Bi). Contact lab for other types of samples or other possible elements. Microwave digestion and ICP-MS analysis.	Green top tube or leak proof container	Refrigerate. Ship on ice packs.	2 - 5 Days		
Mite and Arthropod Examination (KOH)	DS	Deep skin scraping, vacuum sample or hair	Screw top container or red top tube		1 Day		
Modified Knott's - Heartworm Canine, Feline	MK	Heparinized or EDTA whole blood - 1 mL Detection of microfilariae in blood.	Purple top tube	Ship immediately with ice packs.	1 - 2 Days		
Modified Wisconsin	PARA	Feces - 5 - 10 grams Centrifugal based flotation. Quantitative egg count method.	Leak proof container	Refrigerate. Ship on ice packs.	1 - 2 Days		
Molybdenum		(see Mineral Panel #1)					
Multi-APP (Actinobacillus pleuropneumoniae Serology) (Université of Montréal)	RO	Serum - 1 mL Referred out test.	Red top tube	Refrigerate. Ship on ice packs.	3 - 7 Days		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Multi-Drug Resistance Gene (MDR1; Ivermectin Sensitivity) (Health Gene) Canine	RO	EDTA whole blood - 2 mL	Purple top tube	Refrigerate. Ship on ice packs.	3 Weeks		
Muscle and Nerve Profile - 1st Nerve and Muscle (Comp Neuro Lab)	RO	Muscle and nerve biopsy PDS Lab must be notified one day prior to sample collection and samples must be in the PDS Lab by 10:00 AM the day of collection. See Comparative Neuromuscular website (http://vetneuromuscular.ucsd.edu/samplerequirements.html) for collection instructions. For additional Nerves see Muscle and/or Nerve - each additional.	Leak proof container	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	3 Weeks		
Muscle and/or Nerve - each additional (Comp Neuro Lab)	RO	Muscle and/or nerve biopsy See Muscle Profile or Muscle and Nerve Profile for test information and price for first sample.	Leak proof container	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Muscle Profile - 1st Muscle (Comp Neuro Lab)	RO	Muscle biopsy PDS Lab must be notified one day prior to sample collection and samples must be in the PDS Lab by 10:00 AM the day of collection. See Comparative Neuromuscular website (http://vetneuromuscular.ucsd.edu/samplerequirements.html) for collection instructions. For additional Nerves see Muscle and/or Nerve - each additional.	Leak proof container	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	3 Weeks		
Myasthenia Gravis (Acetylcholine Receptor Antibody) (Comp Neuro Lab) Canine, Feline	RO	Serum - 1 mL	Red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	3 Weeks		
Mycobacterium paratuberculosis (Johne's) ELISA	ELISAS	Serum - 1 mL	Red top tube	Refrigerate. Ship on ice packs.	Once per Week		
Mycobacterium paratuberculosis (Johne's) Individual PCR	PCR/REALTIME	Feces, lymph node, or intestine - 2 - 5 grams DO NOT submit fecal samples in gloves, Ziploc bags or twirl style bags. Turnaround time may vary according to number of samples submitted; please contact PDS Receiving Office (306-966-7316) for more information when submitting >20 samples.	Leak proof container	Refrigerate. Ship on ice packs.	5 – 7 Days; Contact PDS for TAT for batches >20		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Mycobacterium paratuberculosis (Johne's) Pooled 5:1 PCR	PCRREALTIME	Feces submitted in individual leak proof containers DO NOT submit fecal samples in gloves, Ziploc bags or twirl style bags. Turnaround time may vary according to number of samples submitted; please contact PDS Receiving Office (306-966-7316) for more information when submitting >20 samples.	Leak proof container	Refrigerate. Ship on ice packs.	7 Days; Contact PDS for TAT for batches >20		
Mycobacterium sp. PCR	PCRCONV	Fixed or fresh tissues, swabs	Leak proof container		5 - 7 Days		
Mycology		(see Fungal Culture)					
Mycoplasma bovis PCR	PCRREALTIME	Swabs, lung, or joint PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Swab or leak proof container. Swabs in gel media will not be processed.		3 - 5 Days		
Mycoplasma Culture Only available for Research Projects	BACTIC	Call PDS Lab for testing availability and sample instructions. See Mycoplasma PCR.			4 - 10 Days		
Mycoplasma gallisepticum and synoviae PCR	PCRREALTIME	Swabs, respiratory tract or broth culture PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Leak proof container, red top tube or swab. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	3 - 5 Days		
Mycoplasma haemofelis and haemominutum Real-Time PCR	PCRREALTIME	EDTA or Citrated whole blood - 0.5mL - 1mL Samples should be received in PDS Lab within 48 hours post collection	Purple or Blue top tube (citrate)	Refrigerate. Ship on ice packs.	3 - 5 Days		
Mycoplasma hyopneumoniae ELISA Biochek	ELISAS	Serum - 1 mL	Red top tube	Refrigerate. Ship on ice packs.	1 - 2 Days		
Mycoplasma hyopneumoniae ELISA IDEXX	ELISAS	Serum - 1 mL	Red top tube	Refrigerate. Ship on ice packs.	1 - 2 Days		
Mycoplasma hyopneumoniae MFIA (Biovet)	RO	Serum - 0.5 mL			2 Days		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Mycoplasma hyopneumoniae PCR	PCRREALTIME	Fresh or fixed tissue, oral fluids - 1 mL fluid See Mycoplasma hyopneumoniae PCR (STAT) to request testing outside designated days.	Red top tube or leak proof container	Refrigerate. Ship on ice packs.	3 - 5 Days		
Mycoplasma hyopneumoniae PCR (STAT)	PCRREALTIME	Fresh or fixed tissue, oral fluids - 1 mL fluid Additional charges will apply if overtime is required, contact PDS to discuss charges. PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Red top tube or leak proof container	Refrigerate. Ship on ice packs.	Same day 10 AM cut off		
Mycoplasma hyorhinis PCR	PCRREALTIME	Fresh or fixed tissue, oral fluids - 1 mL fluid	Red top tube or leak proof container	Refrigerate. Ship on ice packs.	3 - 5 Days		
Mycoplasma hyosynoviae PCR	PCRREALTIME	Fresh or fixed tissue, oral fluids - 1 mL fluid	Red top tube or leak proof container	Refrigerate. Ship on ice packs.	3 - 5 Days		
Mycoplasma ovipneumoniae PCR	PCRREALTIME	Swabs PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Swab. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	3 - 5 Days		
Mycoplasma sp. Identification by gene sequencing (RO)	RO	Genetic material	Leak proof container		Minumum 1 Week		
Mycoplasma species PCR	PCRCONV	Tissues, swabs PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Swab or leak proof container. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	5 - 7 Days		
Mycotoxin and Ergot Panel		(see Ergot and Mycotoxin Panel 2020)					
Mycotoxin Screen 2020	LCMS	Grain, feed - 200 - 2000 grams Includes: 3+15-acetyldeoxynivalenol, Aflatoxin B1, Deoxynivalenol, Diacetoxyscirpenol, Fumonisin B1, Fumonisin B2, HT-2 Toxin, Nivalenol, Ochratoxin A, T-2 Toxin, Zearalenone. Additional charge: \$30.00 per sample for grinding feed.	Resealable plastic bag		7 - 10 Days		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Myoglobin (Urine)	CA	Urine - 3 mL	Red top tube	Refrigerate. Ship on ice packs.	1 Day		
NDV		(see Avian Paramyxovirus 1 (NDV) PCR)					
Necropsy - After Hours Admission Fee							
Necropsy - Commercial Poultry Flock	NCPHISTO	Whole animal from post-mortem examination. If more than 10 Histopathology slides are required per submission, each additional slide will be charged the appropriate Histopathology-Paraffin process, embed, cut and stain H & E fee. Up to 5 mature birds or 10 birds up to two weeks of age. AIV testing done at pathologist discretion.	Leak proof container or vehicle (covered)	Chill and ship to lab as soon as possible after death.	5 - 10 Days		
Necropsy - Gross and Histo – Emergency Necropsy Includes Necropsy, after hours admission, and staff call back fees	NCPHISTO	Whole animals for post-mortem examination outside normal business hours, includes histopathology if required. If more than 10 Histopathology slides are required per submission, each additional slide will be charged the appropriate Histopathology-Paraffin process, embed, cut and stain H & E fee.	Leak proof container or vehicle (covered)	Chill and ship to lab as soon as possible after death.	5 - 10 Days		
Necropsy - Gross and Histo - Insurance or Legal	NCPHISTO	Whole animals for post-mortem examination, includes histopathology if required. If more than 10 Histopathology slides are required per submission, each additional slide will be charged the appropriate Histopathology-Paraffin process, embed, cut and stain H & E fee.	Leak proof container or vehicle (covered)	Chill and ship to lab as soon as possible after death.	5 - 10 Days		
Necropsy – Portions - Gross and Histo - 1st animal - multiple tissues	NCPHISTO	Tissue samples from one animal for histopathology. If more than 10 Histopathology slides are required per submission, each additional slide will be charged the appropriate Histopathology-Paraffin process, embed, cut and stain H & E fee.	Leak proof container	Fix in 10% Formalin for minimum of 24 hours. Transfer tissues to 70% alcohol (isopropyl, ethyl or rubbing alcohol) for shipping in very cold weather.	5 - 10 Days		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Necropsy - Portions - Gross and Histo - additional animals - same owner - multiple tissue Per animal charge	NCPHISTO	Tissue samples from additional animals from the same owner for histopathology. Cost will be applied to each additional animal tissues are submitted from. If more than 10 Histopathology slides are required per submission, each additional slide will be charged the appropriate Histopathology-Paraffin process, embed, cut and stain H & E fee.	Leak proof container	Fix in 10% Formalin for minimum of 24 hours. Transfer tissues to 70% alcohol (isopropyl, ethyl or rubbing alcohol) for shipping in very cold weather.	5 - 10 Days		
Necropsy - Portions - Up to 3 Tissues	NCPHISTO	Formalin fixed tissue If more than 10 Histopathology slides are required per submission, each additional slide will be charged the appropriate Histopathology-Paraffin process, embed, cut and stain H & E fee.	Leak proof container	Fix in 10% Formalin for minimum of 24 hours. Transfer tissues to 70% alcohol (isopropyl, ethyl or rubbing alcohol) for shipping in very cold weather.	3 - 5 Days		
Necropsy - Release of Remains for Cremation - Companion (completed Release of Remains form required)							
Necropsy - Release of Remains for Cremation - Large Animal (completed Release of Remains form required)							
Necropsy - Small Poultry Flock	NCPHISTO	Whole animals for Post-mortem examination. If more than 10 Histopathology slides are required per submission, each additional slide will be charged the appropriate Histopathology-Paraffin process, embed, cut and stain H & E fee.	Leak proof container or vehicle (covered)	Chill and ship to lab as soon as possible after death.	5 - 10 Days		
Necropsy - Specimen Preparation Fee Level 1							
Necropsy - Specimen Preparation Fee Level 2							

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Necropsy - Whole Animal - Gross and Histo - 1st animal - Companion	NCPHISTO	Whole animal from post-mortem examination. If more than 10 Histopathology slides are required per submission, each additional slide will be charged the appropriate Histopathology-Paraffin process, embed, cut and stain H & E fee.	Leak proof container or vehicle (covered)	Chill and ship to lab as soon as possible after death.	5 - 10 Days		
Necropsy - Whole Animal - Gross and Histo - 1st animal - Livestock & Horses	NCPHISTO	Whole animal from post-mortem examination. If more than 10 Histopathology slides are required per submission, each additional slide will be charged the appropriate Histopathology-Paraffin process, embed, cut and stain H & E fee.	Leak proof container or vehicle (covered)	Chill and ship to lab as soon as possible after death.	5 - 10 Days		
Necropsy - Whole Animal - Gross and Histo - additional animals - same owner Per animal charge	NCPHISTO	Additional animals from same owner from post-mortem examination. Cost will be applied to each additional animal submitted. If more than 10 Histopathology slides are required per submission, each additional slide will be charged the appropriate Histopathology-Paraffin process, embed, cut and stain H & E fee.	Leak proof container or vehicle (covered)	Chill and ship to lab as soon as possible after death.	5 - 10 Days		
Necropsy - Whole Fetus - Gross and Histo	NCPHISTO	Fetus or placenta If more than 10 Histopathology slides are required per submission, each additional slide will be charged the appropriate Histopathology-Paraffin process, embed, cut and stain H & E fee.	Leak proof container	Chill and ship to lab as soon as possible after death.	5 - 10 Days		
Necropsy-Legal Portions/Bone Marrow	NCPHISTO	Tissue samples from one animal for histopathology or bone marrow analysis. If more than 10 Histopathology slides are required per submission, each additional slide will be charged the appropriate Histopathology-Paraffin process, embed, cut and stain H & E fee.	Leak proof container	If samples need to be fixed put in 10% Formalin. Fresh samples should be chilled and shipped to the lab as soon as possible after death.	5 - 15 Days		
Neorickettsia Risticii		(see Potomac Horse Fever (Neorickettsia risticii) RealPCR (IDEXX))					
Neospora caninum Antibody IFA (Colorado) Canine	RO	Serum - 0.5 mL Detects IgG antibodies to Neospora caninum.	Red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Neospora Caninum PCR	PCRREALTIME	Dog: fresh brain/spinal cord or skeletal muscle, CSF (1 ml), EDTA blood (1 ml), feces Ruminant (cattle): aborted fetus, Kidney, liver, spleen and placenta.	Leak proof container or purple top tube	Refrigerate. Ship on ice packs.	3 - 5 Days		
Neospora ELISA Bovine only	ELISAS	Serum - 1 mL	Red top tube	Refrigerate. Ship on ice packs.	Once per Week		
Neospora spp. PCR (IDEXX)	RO	CSF - 0.5 mL Collect samples prior to antibiotic administration.	Red top tube	Refrigerate. Ship on ice packs.	1 Week		
Nerve Profile, Periperal Nerve - 1st nerve (Comp Neuro Lab)	RO	Nerve biopsy PDS Lab must be notified one day prior to sample collection and samples must be in the PDS Lab by 10:00 AM the day of collection. See Comparative Neuromuscular website (http://vetneuromuscular.ucsd.edu/samplerequirements.html) for collection instructions. For additional Nerves see Muscle and/or Nerve - each additional.	Leak proof container	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	3 Weeks		
New Castle Disease Virus		(see Avian Paramyxovirus 1 (NDV) PCR)					
Nickel		(see Mineral Panel #4)					
NIRS Feed and Forages Nutritional Analysis	RR	Grain, feed - 300 grams	Resealable plastic bag		5 Days		
Nitrate Screen	CHEM	Feed or GI contents - 5 grams feed; 2 - 5 grams GI contents	Leak proof container		1 - 2 Days		
Nitrite - Quantitative	SPECTRO	Serum or EDTA whole blood - 2 mL; ocular fluid - 1 mL	Red or purple top tube	Ship immediately with ice packs.	1 - 2 Days		
Non-esterified fatty acids (NEFA) (Guelph)	RO	Serum or EDTA plasma - 0.5 mL - 0.5 mL Heparin plasma is not acceptable. Avoid hemolysis.	Red or purple top tube	Separate serum from cells as soon as possible after collection and transfer to a leakproof tube. Refrigerate. Ship on ice packs.	1 Week		
Occult blood		(see Fecal Occult Blood)					

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Ophthalmic Biopsy - POPS Program	NCPSURG	Tissue from eyelid, eye/globe (including when eviscerated for prosthesis) or related ocular structures (does not include the enucleated globe). Both pathologist and ophthalmologist will review and sign off the case. Preferred fixative for POPS submissions is Davidson's Fixative.	Leak proof container	Fix in 10% Formalin for minimum of 24 hours. Transfer tissues to 70% alcohol (isopropyl, ethyl or rubbing alcohol) for shipping in very cold weather.	1 Week		
Ophthalmic Combo - Globe and Biopsy - POPS Program	NCPSURG	Enucleated globe plus biopsy of tissue from eyelid or related ocular structures. Both pathologist and ophthalmologist will review and sign off the case. Preferred fixative for POPS submissions is Davidson's Fixative.	Leak proof container	Fix in 10% Formalin for minimum of 24 hours. Transfer tissues to 70% alcohol (isopropyl, ethyl or rubbing alcohol) for shipping in very cold weather.	1 Week		
Ophthalmic Globe - POPS Program	NCPSURG	Enucleated eye/globe only, to be evaluated by histology. Both pathologist and ophthalmologist will review and sign off the case. Preferred fixative for POPS submissions is Davidson's Fixative.	Leak proof container	Fix in 10% Formalin for minimum of 24 hours. Transfer tissues to 70% alcohol (isopropyl, ethyl or rubbing alcohol) for shipping in very cold weather.	1 Week		
Orf Virus		(see Bovine Papular Stomatitis Virus (Orf Virus) PCR (Guelph))					
Osmolality (RUH)	RO	Li-Heparin Plasma (preferred sample), serum, misc fluid and urine - 1 mL	Red or green top tube or leak proof container.	Refrigerate. Ship on ice packs.	3 Days		
Ovine herpesvirus 2 PCR	PCRREALTIME	Lymph node, kidney, liver, brain, or EDTA whole blood Fresh tissue is preferred; paraffin embedded tissue is also acceptable. Additional charges apply if formalin fixed tissue is submitted, contact PDS before submitting.	Leak proof container or purple top tube	Refrigerate. Ship on ice packs.	3 - 5 Days		
Ovine Progressive Pneumonia (OPP) ELISA	ELISAS	Serum - 0.2 mL	Red top tube	Refrigerate. Ship on ice packs.	Once per Week		
Pancreas (Chemistry Panel)	CA	Serum - 0.2 mL Includes: Amylase and Lipase.	Red top tube	Refrigerate. Ship on ice packs.	1 Day		
Pancreatic Lipase Immunoreactivity (PLI) (Health Gene) Canine, Feline	RO	Serum - 1 mL Plasma is not acceptable. 12 hour fasting sample.	Red top tube	Refrigerate for up to 7 days. Freeze for longer storage. Ship on ice packs.	1 Week		
Parasite ID	ID	Visible Parasites, Adult worms, ticks, etc.	Leak proof container with sample in 70-95% Ethanol if available.		1 - 2 Days		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (SK only)	List Price
Parathyroid Hormone and Ionized Calcium		(see PTH (Parathyroid Hormone) and Ionized Calcium (Michigan))					
Parathyroid Hormone Related Protein		(see PTH (Hypercalcemia) Malignancy Profile (Michigan))					
PARR (PCR for Antigen Receptor Rearrangements) (Colorado) Canine, Feline	RO	EDTA whole blood, lymph node or other organ fluid, cavity fluid, CSF - 0.2 mL for each sample	Purple top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Parvovirus		(see Canine Vaccine Panel IFA (IDEXX))					
Pasteurella multocida Toxin A PCR	PCR/REALTIME	Bacterial Isolates only Additional charges will apply if bacterial culture required.	Leak proof container	Refrigerate. Ship at room temperature.	3 - 5 Days		
PCR for Antigen Receptor Rearrangements		(see PARR (PCR for Antigen Receptor Rearrangements) (Colorado))					
PCV/TP/Smear Evaluation - Avian/Reptile Only	HA	EDTA whole blood - tube 1/3 full or 5 heparinized microhematocrit tubes + 2 unstained blood smears. Will be offered to clients if EDTA samples are compromised during transit, or sample is NSQ for analysis (if smears have been submitted) - species dependent.	Slides and purple top tube or heparinized microhematocrit tubes	Refrigerate. Ship on ice packs.	1 Day		
PEDV		(see Porcine Corona Panel PCR)					
Phenobarb	IMMULDRUG	Serum - 0.2 mL	Red top tube. DO NOT use SST tube. Note: Plasma (EDTA, Heparin) samples are not acceptable.	Refrigerate for 48 hours. Freeze for longer storage. Ship on ice packs.	Tues and Fri 2 PM cut off		
Phosphorus		(see Single Chemistry)					
PLI		(see Pancreatic Lipase Immunoreactivity (PLI) (Health Gene))					
PMSG (Pregnant Mare's Serum Gonadotropin) (Biovet)	RO	Serum - 1 mL Collect sample between 38 and 120 days post-breeding.	Red top tube	Refrigerate or freeze. Ship on ice packs.	1 Week		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Porcine Astrovirus Type 3 PCR (PAstV3)	PCRREALTIME	Spinal cord, brain, feces, virus isolate PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Leak-proof containers, swabs in viral transport media (VTM). Swabs in gel media will not be processed.	Refrigerate. Ship in insulated container with freezer packs.	2 Weeks		
Porcine Astrovirus Type 4 PCR (PAstV4)	PCRREALTIME	Spinal cord, brain, feces, virus isolate PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Leak-proof containers, swabs in viral transport media (VTM). Swabs in gel media will not be processed.	Refrigerate. Ship in insulated container with freezer packs.	2 Weeks		
Porcine circovirus 3 (PCV3) - ORF2 Sequencing	GENTYP	PCV3 PCR Positive Sample: Tissue, serum, feces, oral fluids - 1 mL serum Sample with a Ct of 30 or lower is recommended.	Leak proof container	Refrigerate. Ship in insulated container with freezer packs.	2 Weeks		
Porcine circovirus-2 PCR	PCRREALTIME	Tissue, serum, feces, oral fluids - 1 mL serum	Leak proof container or red top tube	Refrigerate. Ship on ice packs.	3 - 5 Days		
Porcine circovirus-3 PCR	PCRREALTIME	Tissue, serum, feces, oral fluids - 1 mL serum	Leak proof container	Refrigerate. Ship on ice packs.	3 - 5 Days		
Porcine Corona Panel PCR (PEDV, TGEV, PdCov)	PCRREALTIME	Feces, jejunum, colon, Ileum, environmental samples Testing performed Tuesday and Thursday, results available the following day. Samples must be received by 10:00 AM for next day results. See Porcine Corona Panel PCR (STAT) to request testing outside designated days.	Swab or leak proof container. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	Twice Per Week Results Following Day		
Porcine Corona Panel PCR (STAT) (PEDV, TGEV, PdCov)	PCRREALTIME	Feces, jejunum, colon, Ileum, environmental samples Additional charges will apply if overtime is required, contact PDS to discuss charges. PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Swab or leak proof container. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	Same day 10 AM cut off		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (SK only)	List Price
Porcine Diarrhea Panel - Late Nursery, Finishing or Adult	BACTIC DE-BACTI BACTKB PCRREALTIME	Feces or Intestine - 5 - 10 grams Sample collected from late nursery, finishing or adult pigs (or other pigs at veterinarian discretion). Includes: Culture & Susceptibility, Porcine Corona Panel PCR, Lawsonia PCR, Brachyspira hyodysenteriae and pilosicoli PCR	Leak proof container	Refrigerate. Ship on ice packs.	2 - 7 Days		
Porcine Diarrhea Panel - Late Suckling and Early Nursery	BACTIC DE-BACTI BACTKB PCRREALTIME	Feces or Intestine - 5 - 10 grams Sample collected from late suckling or early nursery pigs (or other pigs at veterinarian discretion). Includes: Culture & Susceptibility, E.coli Porcine Enteric Virulence Factor Panel PCR, Porcine Corona Panel PCR, Porcine Rotavirus A, B, C	Leak proof container	Refrigerate. Ship on ice packs.	2 - 7 Days		
Porcine Diarrhea Panel - Neonatal	BACTIC DE-BACTI BACTKB PCRREALTIME	Feces or Intestine - 5 - 10 grams Sample collected from neonatal pigs (or other pigs at veterinarian discretion). Includes: Culture & Susceptibility, Clostridium difficile Culture, Clostridium perfringens Culture, E.coli Porcine Enteric Virulence Factor Panel PCR, Porcine Corona Panel PCR, Porcine Rotavirus A, B, C	Leak proof container	Refrigerate. Ship on ice packs.	2 - 7 Days		
Porcine Epidemic Diarrhea Virus		(see Porcine Corona Panel PCR)					
Porcine Parainfluenza Virus Type 1 PCR	PCRREALTIME	Lung, nasal swabs, bronchial swab, BAL, oral fluids PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Leak-proof containers, swabs in viral transport media (VTM). Swabs in gel media will not be processed.	Refrigerate. Ship in insulated container with freezer packs.	2 Weeks		
Porcine Parvovirus PCR	PCRREALTIME	Tissues PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Swab or leak proof container. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	3 - 5 Days		
Porcine Reproductive and Respiratory Syndrome		(see PRRS ELISA IDEXX X3)					

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Porcine Rotavirus Group Specific A,B or C PCR	PCRREALTIME	Jejunum, ileum, or feces PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Swab or leak proof container. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	3 - 5 Days		
Porcine Sapelovirus PCR	PCRREALTIME	Spinal cord, brain, feces, fecal swab, oral fluid PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Leak-proof containers, swabs in viral transport media (VTM). Swabs in gel media will not be processed.	Refrigerate. Ship in insulated container with freezer packs.	2 Weeks		
Porcine sapovirus	PCRREALTIME	Feces, Fecal Swabs PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Leak proof container. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	3 - 5 Days		
Porcine Sapovirus Genogroup III VP1 sequencing	GENTYP	Feces, Fecal Swabs	Swab or leak proof container	Refrigerate. Ship on ice packs.	2 Weeks		
Porcine Teschovirus PCR (PTV)	PCRREALTIME	Spinal cord, brain, feces, fecal swab, oral fluid PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Leak-proof containers, swabs in viral transport media (VTM). Swabs in gel media will not be processed.	Refrigerate. Ship in insulated container with freezer packs.	2 Weeks		
Potassium - Serum		(see Electrolytes - Sodium, Potassium, Chloride)					
Potassium - Tissue		(see Mineral Panel #2)					
Potassium Bromide (Université of Montréal) Canine, Equine	RO	Serum - 0.5 mL	Red top tube. DO NOT use SST tube. Note: Plasma (EDTA, Heparin) samples are not acceptable.	Refrigerate. Ship on ice packs.	1 Week		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (SK only)	List Price
Potassium Bromide / Phenobarbital Combo (Université of Montréal)	RO	Serum - 1 mL	Red top tube. DO NOT use SST tube. Note: Plasma (EDTA, Heparin) samples are not acceptable.	Refrigerate. Ship on ice packs.	1 Week		
Potomac Horse Fever (Neorickettsia risticii) RealPCR (IDEXX) Canine, Equine	RO	EDTA whole blood - 2 mL or feces - 5 grams (minimum - 1 gram) Collect sample prior to antibiotic administration.	Purple top tube or leak proof container	Refrigerate up to 5 days. Ship on ice packs.	2 Weeks		
Premium Canine Thyroid Profile (Michigan)	RO	Serum - 2 mL 12 hour fasting sample. Avoid hemolysis and lipemia. Includes T4, T3, TSH, TgAA, T3AA, T4AA, FT4 by Equilibrium Dialysis.	Red top tube. DO NOT use SST tube.	Freeze. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Presurgical Panel - Large Animal		(see Large Animal Presurgical (Chemistry Panel))					
Presurgical Panel - Small Animal		(see Small Animal Presurgical (Chemistry Panel))					
Progesterone (Immulate)	IMMUL	Serum - 0.3 mL Sample must be received in PDS Clin Path before 3:30 PM for same day results.	Red top tube. DO NOT use SST tube. Note: Plasma (EDTA, Heparin) samples are not acceptable.	Refrigerate. Ship on ice packs.	1 - 2 Days		
Protein Electrophoresis (Guelph) Most Species	RO	Serum - 0.5 mL; urine - 50 mL Avoid hemolysis.	Red top tube or leak proof container	Allow blood to clot. Centrifuge sample; separate serum from cells as soon as possible after collection and transfer to a leakproof tube. Refrigerate or freeze serum and urine. Ship on ice packs.	2 Weeks		
Protein/Creatinine Ratio		(see Urine Protein/Creatinine Ratio)					

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
PRRS (NorthAM/Eu) Pooled PCR Porcine Reproductive and Respiratory Syndrome	PCRREALTIME	Dacron swab, semen, oral fluid - 1 mL, serum - 1 mL, adult tonsil or lung, fetal thoracic fluid or thymus Testing performed Monday and Thursday, results available the following day. Samples must be received by 10:00 AM for next day results. STAT charges apply for testing requested outside designated days. See PRRS (NorthAM/Eu) Pooled PCR (STAT) to request testing outside designated days. PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Leak proof container, red top tube or swab. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	Twice Per Week Results Following Day		
PRRS (NorthAM/Eu) Pooled PCR (STAT) Porcine Reproductive and Respiratory Syndrome	PCRREALTIME	Dacron swab, semen, oral fluid - 1 mL, serum - 1 mL, adult tonsil or lung, fetal thoracic fluid or thymus Additional charges will apply if overtime is required, contact PDS to discuss charges. PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Leak proof container, red top tube or swab. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	Same day 10 AM cut off		
PRRS ELISA IDXX X3 Porcine Reproductive and Respiratory Syndrome	ELISAS	Serum - 1 mL Same day results if received by 9:00 AM.	Red top tube	Refrigerate. Ship on ice packs.	1 - 2 Days		
PRRS IFA Porcine Reproductive and Respiratory Syndrome	PRRSIFA	Serum - 1 mL	Red top tube	Refrigerate. Ship on ice packs.	1 - 2 Days		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
PRRS PCR Porcine Reproductive and Respiratory Syndrome	PCRREALTIME	Dacron swab, semen, oral fluid - 1 mL, serum - 1 mL, adult tonsil or lung, fetal thoracic fluid or thymus Testing performed Monday and Thursday, results available the following day. Samples must be received by 10:00 AM for next day results. STAT charges apply for testing requested outside designated days. See PRRS (NorthAM/Eu) Pooled PCR (STAT) to request testing outside designated days. PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Leak proof container, red top tube or swab. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	Twice Per Week Results Following Day		
PRRS PCR (STAT) Porcine Reproductive and Respiratory Syndrome	PCRREALTIME	Dacron swab, semen, oral fluid - 1 mL, serum - 1 mL, adult tonsil or lung, fetal thoracic fluid or thymus Additional charges will apply if overtime is required, contact PDS to discuss charges. PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Leak proof container, red top tube or swab. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	Same day 10 AM cut off		
Psittacine Beak and Feather Disease DNA (Health Gene)	RO	Heparinized whole blood, tissue, feces	Green top tube or leak proof container	Refrigerate. Ship on ice packs.	1 Week		
PT, Prothrombin Time		(see Coagulation PT)					
PTH (Hypercalcemia) Malignancy Profile (Michigan) Canine, Feline	RO	Serum - 1 mL and EDTA plasma - 0.5 mL Avoid lipemia (use fasting sample if needed) and hemolysis. Includes: PTH, PTHrP, Ionized Calcium.	Red and purple top tube	Centrifuge samples within 1 hour of collection. Remove serum and plasma. Label tubes serum and EDTA plasma. Freeze ASAP. Ship frozen on ice packs. Must arrive below 60°F. Include a completed "Agent for Shipment" form.	2 Weeks		
PTH (Parathyroid Hormone) and Ionized Calcium (Michigan) Canine, Equine, Feline	RO	Serum - 1 mL Avoid lipemia (use fasting sample if needed) and hemolysis. Includes: PTH and Ionized Calcium.	Red top tube	Allow to clot 30 - 60 minutes prior to separation. Remove serum. Freeze ASAP. Ship frozen on ice packs. Must arrive below 60°F. Include a completed "Agent for Shipment form".	2 Weeks		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
PTHrP (Parathyroid Hormone Related Protein) (Michigan) Most Species	RO	EDTA plasma - 0.5 mL Avoid lipemia (use fasting sample if needed) and hemolysis.	Purple top tube	Centrifuge sample within 1 hour of collection. Remove plasma. Freeze ASAP. Ship frozen on ice packs. Must arrive below 60°F. Include a completed "Agent for Shipment" form.	2 Weeks		
PTT, Partial Thromboplastin Time		(see Coagulation PTT)					
Pug Dog Encephalitis, Susceptibility (UC Davis Genetics Lab)	RO	EDTA whole blood - 3 - 5 mL or Buccal Swab (cytology brush) - 2 - 3 required Contact UC Davis Genetics Lab (www.vgl.ucdavis.edu/services/index.php) for swabs.	Purple or red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	4 Weeks		
Rabies Micro RFFIT Screen Titer (Kansas) Canine, Feline	RO	Serum - 1 mL	Red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	3 Weeks		
Rabies Titer FAVN - For Export (Kansas)	RO	Serum - 1 mL Microchip number is required.	Red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form and a completed "FAVN Report" Submission Form	3 - 4 Weeks		
Relaxin (IDEXX) Canine, Feline	RO	Serum or plasma (EDTA or Heparin) - 1 mL Avoid hemolysis and lipemia.	Red, purple or green top tube. Centrifuge and transfer serum or plasma to plain red top tube or plastic tube.	Refrigerate for 48 hours. Freeze for longer storage. Ship on ice packs.	1 Week		
Respiratory Disease RealPCR Panel (Comprehensive) (IDEXX) Canine	RO	Deep pharyngeal swab (with visible organic material on swab) and a conjunctival swab (wipe eye clean, swab inside eyelid). Submit both swabs in same tube. Collect prior to antibiotic administration.	Dry, plastic-stemmed swabs, without transport media, in a red top tube or sterile container	Refrigerate. Ship on ice packs.	1 Week		
Rhodococcus equi RealPCR (IDEXX) Equine	RO	Tracheal wash - 5 - 10 mL, feces - 5 grams Submit feces if patient shows signs of diarrhea. Collect sample prior to antibiotic administration.	Sterile, leak proof container	Refrigerate. Ship on ice packs.	1 Week		
Rickettsia PCR (Vector Borne) Canine, Feline	RO	EDTA whole blood and serum (if available) - 2 mL for each sample	Purple and red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Rickettsia rickettsii IFA (Michigan) Canine, Equine	RO	Serum - 2 mL	Red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Rickettsia rickettsii PCR (Michigan) Most Species	RO	EDTA whole blood - 2 mL or tick in sterile container	Purple top tube or leak proof container	Send tick dry or in saline solution. Refrigerate blood. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Ringworm (Dermatophyte) RealPCR Panel (IDEXX) Canine, Feline	RO	Plucked hair with follicles and skin scrapings from active border of lesion, nails with nail bed scrapings or aspirated purulent material Collect prior to antifungal treatment or at least 2 weeks after withdrawal of these medications.	Sterile, leak proof container	Refrigerate. Ship on ice packs.	1 Week		
Rotavirus/Coronavirus PCR (Guelph) Equine	RO	Live: feces, rectal swab. Dead: feces. Includes: Coronavirus PCR, Rotavirus Group A and B PCR.	Swab with viral transport media. Tissue in sterile, leak proof container.	Refrigerate or freeze. Ship on ice packs.	1 - 2 Weeks		
Routine Flotation	PARA	Feces (fresh) - 5 - 10 grams Centrifugal based flotation. Semi-quantative method.	Leak proof container	Refrigerate. Ship on ice packs.	1 - 2 Days (4-5 days for wild canid/felid samples)		
Rumensin (Monensin)		(see Ionophore Feed Additive Screen (Guelph))					
Salmonella Dublin	ELISAS	Serum - 1 mL or milk (individual or bulk tank) - 2 mL	Red top tube or leak proof container	Refrigerate. Ship on ice packs.	Once per Week		
Salmonella Screening	BACTIC	Feces No susceptibility. Contact the PDS Lab for volume discounts.	Sterile, leak proof container	Ship on ice packs.	5 Days		
Salmonella Screening - Fluff/Dust	BACTIC	Fluff, dust, environmental sponge No susceptibility.	Sterile, leak proof container	Ship on ice packs.	5 Days		
Salmonella Typing using Whole Genome Sequencing	GENTYPG	Salmonella Isolate Turnaround time and price based on 5 isolates per batch. Contact PDS for turnaround time and pricing for more or less isolates per batch. Additional charges apply if bacterial culture required.			1 - 2 Weeks		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (SK only)	List Price
SDMA (IDEXX) Canine, Equine, Feline	RO	Serum, lithium heparin or EDTA plasma - 1 mL	Red, green or purple top tube	Refrigerate. Ship on ice packs.	1 Week		
Selenium		(see Mineral Panel #1)					
Senecavirus A PCR	PCRREALTIME	Nasal or oral swabs; oral fluids - 1 mL PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Leak proof container, red top tube or swab. Dacron or polyester swabs (non-cotton). Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	3 - 5 Days		
Sequencing Confirmation Add-on	PCRSQ						
Single Chemistry	CA	Serum, heparinized plasma, urine or fluid - 0.2 mL	Red top tube	Refrigerate. Ship on ice packs.	1 Day		
SIV H3N2 ELISA (RO)	RO						
Skin Biopsies		(see Biopsy - Skin - Dermatohistopathology)					
Small Animal Kidney/Electrolyte (Chemistry Panel)	CA	Serum - 0.4 mL Includes: Na, K, Cl, Bicarb, Anion Gap, Ca, Pi, Mg, Urea, Creat, Gluc, T.Prot, Alb, Glob, A:G Ratio, Na:K Ratio.	Red top tube	Refrigerate. Ship on ice packs.	1 Day		
Small Animal Liver (Chemistry Panel)	CA	Serum - 0.4 mL Includes: Urea, Gluc, Chol, T. Bili, D.Bili, I.Bili, ALP, ALT, GLDH, GGT, T.Prot, Alb, Glob, A:G Ratio.	Red top tube	Refrigerate. Ship on ice packs.	1 Day		
Small Animal Presurgical (Chemistry Panel)	CA	Serum - 0.4 mL Includes: Na, K, Cl, CK, Urea, Creat, Gluc, ALP, ALT, GLDH, GGT, T.Prot.	Red top tube	Refrigerate. Ship on ice packs.	1 Day		
Small Animal Presurgical Combo Chemistry (presurgical panel), CBC, UA	CA HA UR	EDTA whole blood - tube 2/3 full (minimum 1/3 full) + 2 blood smears + serum - 0.5 mL + urine - 3 mL Includes: CBC, Presurgical Panel and Urinalysis.	Purple top tube, slides and red top tube for urine and serum. DO NOT use SST tube. Please label urine vs serum.	Refrigerate. Ship on ice packs.	1 Day		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (SK only)	List Price
Small Animal Standard (Chemistry Panel)	CA	Serum - 0.5 mL For Canines see Canine Standard Panel. Includes: Na, K, Cl, Bicarb, Anion Gap, Ca, Pi, Mg, Urea, Creat, Gluc, T.Bili, D.Bili, I.Bili, Chol, CK, ALP, ALT, GLDH, GGT, T.Prot, Alb, Glob, A:G Ratio.	Red top tube	Refrigerate. Ship on ice packs.	1 Day		
Sodium - Serum		(see Electrolytes - Sodium, Potassium, Chloride)					
Sodium - Tissue		(see Mineral Panel #2)					
Sodium, Potassium, Chloride		(see Electrolytes - Sodium, Potassium, Chloride)					
STAT Fee							
Strangles		(see Streptococcus equi subsp. equi PCR)					
Strangles		(see Bacterial Culture and Susceptibility - Equine)					
Strangles		(see Equine Respiratory Panel PCR)					
Streptococcus equi ssp. Zooepidemicus with ST194 Typing	PCR/REALTIME	Oral fluids, environmental fluids, swabs - 1 mL fluid PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Swab or leak proof container. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	5 - 7 Days		
Streptococcus equi subsp. equi		(see Bacterial Culture and Susceptibility - Equine)					
Streptococcus equi subsp. equi		(see Equine Respiratory Panel PCR)					
Streptococcus equi subsp. equi (Strangles) Antibody ELISA (IDEXX)	RO	Serum - 1 mL This test does not distinguish between vaccination and infection. A quantitative test that detects antibodies against the Streptococcus equi SeM protein.	Red top tube	Refrigerate. Ship on ice packs.	2 Weeks		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Streptococcus equi subsp. equi PCR	PCR/REALTIME	Nasal swab Also see Equine Respiratory Panel. PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Swab. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	3 - 5 Days		
Strontium		(see Mineral Panel #4)					
Strychnine		(see Convulsant Screen (Guelph))					
Surgical Biopsies		(see Biopsy - Surgical - Up to 3 Tissues)					
Swine Influenza A ELISA	ELISAS	Serum - 1 mL	Red top tube	Refrigerate. Ship on ice packs.	1 - 2 Days		
Swine Influenza PCR		(see Influenza A Real Time PCR)					
Swine Influenza subtyping H1/H3 typing PCR	PCR/REALTIME	Done on SIV Matrix PCR positive sample			3 - 5 Days		
T3 (Health Gene) Triiodothyronine	RO	Serum - 1 mL	Red top tube. DO NOT use SST tube. Note: Plasma (EDTA, Heparin) samples are not acceptable.	Refrigerate. Ship on ice packs.	1 Week		
T4 Canine, Equine, Feline	IMMUL	Serum - 0.2 mL Sample must be received in the PDS Lab before 2:00 PM for same day results.	Red top tube. DO NOT use SST tube. Note: Plasma (EDTA, Heparin) samples are not acceptable.	Refrigerate. Ship on ice packs.	1 Day		
T4 Resting Canine, Equine, Feline	IMMUL	Serum - 0.2 mL Sample must be received in the PDS Lab before 2:00 PM for same day results.	Red top tube. DO NOT use SST tube. Note: Plasma (EDTA, Heparin) samples are not acceptable.	Refrigerate. Ship on ice packs.	1 Day		
T4/TSH		(see Canine T4/TSH)					
TapeStation Fragement Analysis	GS	Up to 15 samples per run.			2 Weeks		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Taurine (UC Davis Amino Acid Lab)	RO	Heparinized plasma - 1 mL or urine - 5 mL	Green top tube or leak proof container	Collect blood in a green top tube, invert 5 times to mix heparin. Immediately centrifuge blood, take off plasma being careful not to disturb the buffy coat; freeze sample. Urine - freeze. Ship frozen on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Testosterone (RIA) baseline (Biovet) Canine, Equine, Feline	RO	Serum - 1.5 mL	Red top tube	Refrigerate. Ship on ice packs.	1 Week		
Testosterone Stimulation hCG (Michigan)	RO	2 Serum samples - 1 mL for each sample		Refrigerate no longer than overnight. Freeze sample until shipment and keep frozen for shipment. Ship with enough ice packs to ensure samples stay frozen.			
TGE/PRCV Differentiation ELISA	ELISADIFF	Serum - 1 mL	Red top tube	Refrigerate. Ship on ice packs.	1 - 2 Days		
Thallium		(see Mineral Panel #4)					
Thallium		(see Mineral Panel #3)					
Thyroglobulin Autoantibodies (TgAA) (IDEXX) Canine	RO	Serum - 1 mL	Red top tube. DO NOT use SST tube.	Refrigerate up to 5 days. Freeze for longer storage. Ship on ice packs.	1 Week		
Thyroid Mini Profile - Canine (IDEXX)	RO	Serum - 2 mL Includes: T4, Free T4, TSH. No interpretation provided.	Red top tube. DO NOT use SST tube.	Refrigerate for up to 7 days. Freeze for longer storage. Ship on ice packs.	1 Week		
Thyroid OFA Registry - Canine (IDEXX)	RO	Serum - 2 mL Includes: Thyroglobulin Autoantibodies, TSH, Free T4 by Equilibrium Dialysis. Include completed OFA Application for Thyroid Database form. OFA Registration fee (\$15.00 US funds) must be included with submission.	Red top tube. DO NOT use SST tube.	Refrigerate up to 5 days. Freeze for longer storage. Ship on ice packs.	2 - 3 Weeks		
Thyroid Panel - Feline (IDEXX)	RO	Serum - 1 mL Includes: Free T4, T3, T4.	Red top tube. DO NOT use SST tube.	Refrigerate up to 7 days. Freeze maximum 1 month. Ship on ice packs.	1 Week		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Thyroid Profile 1 - Canine (IDEXX)	RO	Serum - 2 mL Includes: TSH, Free T4, T3, T4, Thyroglobulin Autoantibodies.	Red top tube. DO NOT use SST tube.	Refrigerate up to 5 days. Freeze for longer storage. Ship on ice packs.	1 Week		
Thyroid Profile 1 - Equine (Guelph)	RO	Serum - 1 mL Avoid hemolysis. Includes: Free T4 by Equilibrium Dialysis, Total T4	Red top tube. DO NOT use SST tube.	Separate serum from cells as soon as possible after collection and transfer to a leakproof tube. Refrigerate. Ship on ice packs.	2 Weeks		
Thyroid Profile 2 - Canine (IDEXX)	RO	Serum - 2 mL Includes: TSH, Free T4 by Equilibrium Dialysis, T3, T4, Thyroglobulin Autoantibodies.	Red top tube. DO NOT use SST tube.	Refrigerate up to 5 days. Freeze for longer storage. Ship on ice packs.	2 Weeks		
Thyroid Profile Diagnostic - Canine (Michigan)	RO	Serum - 2 mL 12 hour fasting sample. Avoid hemolysis and lipemia. Includes: T4, T3, FT4, TSH, TgAA, T3AA, T4AA.	Red top tube. DO NOT use SST tube.	Freeze. Ship on ice packs. Sample must arrive frozen. Include a completed "Agent for Shipment" form.	2 Weeks		
Thyroid Registry - Canine		(see Thyroid OFA Registry - Canine (IDEXX))					
Thyroid Stimulating Hormone		(see Canine TSH)					
Thyrotropin Releasing Hormone (TRH) Stim Test Equine	IMMUL	EDTA plasma - 1.5 mL Cost includes 2 endogenous ACTH tests (pre and post) submitted on same submission form. Avoid hemolysis. Thyrotropin Releasing Hormone (TRH) Stim Test is available to book through WCVN Veterinary Medical Center Large Animal Clinic by calling 306-966- 7470	Purple top tube	Collect sample into a plastic EDTA tube. Centrifuge and immediately transfer plasma into a plastic tube (within 4 hours of collection). Label sample as EDTA plasma. Freeze immediately. Ship on ice packs.	1 Week		
Thyroxine		(see T4)					
Tick Panel - Serology and PCR		(see Tick Panel Canine Comprehensive (Vector Borne))					
Tick Panel Canine Comprehensive (Vector Borne)	RO	EDTA whole blood and serum - 2 mL for each sample Includes: B. canis, B. gibsoni, E. canis, R. ickettsii, B. henselae, B. vinsoni, B. koehlerae (by IFA), plus Snap 4DX for Lyme, Anaplasma, Ehrlichia and Heartworm paired with PCR testing to detect presence of Babesia, Bartonella, Anaplasma, Ehrlichia, Rickettsia, Hemotropic Mycoplasma organisms.	Purple and red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Tick Panel PCR (Vector Borne) Canine, Feline	RO	EDTA whole blood and serum - 2 mL Send serum for hold, if available. Includes: Babesia, Bartonella, Anaplasma, Ehrlichia, Rickettsia, Hemotropic Mycoplasma.	Purple and red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Tick Panel Serology (Vector Borne) Canine	RO	Serum - 2 mL Includes: B. canis, B. gibsoni, E. canis, R. rickettsii, B. henselae, B. vinsoni, B. koehlerae (by IFA), plus Snap 4DX for Lyme, Anaplasma, Ehrlichia, Heartworm.	Red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Tick Transmitted Disease Panel (Canine) SNAP 4Dx Plus Test	ELISAI	Serum, plasma or anticoagulated whole blood (e.g. EDTA, heparin) - 0.2 mL Includes: Borrelia burgdorferi, Ehrlichia canis, Anaplasma phagocytophilum, Dirofilaria immitis.	Red, green or purple top tube	Refrigerate. Ship on ice packs. Serum or plasma can be frozen.	1 Day		
Tick Transmitted Disease Panel (Equine) SNAP 4Dx Plus Test	ELISAI	Serum, EDTA whole blood or plasma - 1 mL Includes: antibodies to Borrelia burgdorferi and Anaplasma phagocytophilum	Red or purple top tube	Refrigerate. Ship on ice packs. Serum or plasma can be frozen.	1 Day		
Tick/Vector Comprehensive RealPCR Panel (IDEXX) Canine	RO	EDTA whole blood - 2 mL Tick in sterile container is also acceptable. Collect sample prior to antibiotic administration. Includes: Babesia spp., Bartonella spp., Canine Hemotropic Mycoplasma, Ehrlichia spp., Hepatozoon spp., Leishmania spp., Neorickettsia risticii, Rocky Mountain Spotted Fever.	Purple top tube	Refrigerate. Ship on ice packs.	1 Week		
Tin		(see Mineral Panel #4)					
TLI		(see Trypsin-Like Immunoreactivity (TLI) - Canine (IDEXX))					
Total Protein		(see Single Chemistry)					
Total Protein/Albumin/Globulin - Fluid (Chemistry Panel)	CA	Fluid - 0.5 mL	Red top tube	Refrigerate. Ship on ice packs.	1 Day		
Total Protein/Albumin/Globulin - Serum (Chemistry Panel)	CA	Serum - 0.5 mL	Red top tube	Refrigerate. Ship on ice packs.	1 Day		
Toxoplasma ELISA IgG, IgM - Canine, Feline (Colorado)	RO	Serum - 0.5 mL	Red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Toxoplasma gondii PCR (Colorado) Most Species	RO	EDTA whole blood, TTW or BAL - 1 mL Aqueous humor - 150 uL, CSF - 0.5 mL, fresh tissue or formalin fixed, paraffin embedded tissue are also acceptable.	Purple or red top tube or leak proof container	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
Toxoplasma gondii RealPCR (IDEXX) Canine, Feline, Equine, Lagomorph, Ferret, Rodent	RO	Feces - 5 grams, EDTA whole blood - 2 mL or CSF - 0.5 mL Tissue aspirates (on swab preferred), fresh tissue, or formalin fixed, paraffin embedded tissue are also acceptable. Collect specimen prior to antibiotic administration.	Purple top tube or sterile screw top container	Refrigerate up to 10 days. Fresh tissue refrigerate up to 24 hours, freeze for longer storage. Ship on ice packs.	1 Week		
Toxoplasma IFA IgG Only - Canine, Feline (IDEXX)	RO	Serum - 1 mL	Red top tube	Refrigerate up to 5 days. Freeze for longer storage. Ship on ice packs.	1 - 2 Weeks		
Toxoplasma IFA IgG, IgM - Canine, Feline (IDEXX)	RO	Serum - 1 mL	Red top tube	Refrigerate up to 5 days. Freeze for longer storage. Ship on ice packs.	1 - 2 Weeks		
Toxoplasma IFA IgM Only - Canine, Feline (IDEXX)	RO	Serum - 1 mL	Red top tube	Refrigerate up to 5 days. Freeze for longer storage. Ship on ice packs.	1 - 2 Weeks		
Transmissible Spongiform Encephalopathy - IHC with interpretation - (TSE - CWD, Scrapie)	IMIHC	Formalin-fixed tissues or Formic acid treated formalin-fixed tissues in paraffin block.	Leak proof container		1 - 2 Weeks		
Transmissible Spongiform Encephalopathy - Ramalt (TSE - Ramalt IHC)	IMIHC	Formalin fixed rectal biopsy in histology cassette Contact PDS for Ramalt sampling instructions.	Leak proof container	Fix in 10% Formalin for minimum of 24 hours. Ship in a solution of 9 parts formalin to 1 part alcohol for shipping in very cold weather.	1 - 3 Weeks		
Transmissible Spongiform Encephalopathy (TSE BIORAD ELISA)	TSEBIORAD	Fresh or frozen obex, lymph node or brain Contact PDS Lab for appropriate sample by species.	Leak proof container	Refrigerate. Ship on ice packs.	1 - 2 Weeks		
Triglycerides		(see Single Chemistry)					
Tritrichomonas foetus Individual PCR	PCRREALTIME	Bovine: Preputial wash/scrapings (In Pouch™ medium) Record how samples have been treated (room temperature or incubated). Feline: Fresh Feces.	Bovine: In Pouch™ TF medium; Feline: leak proof container	Bovine: incubate in Pouch™ TF at 35°C for a maximum of 48 hours or leave at room temperature and keep warm during shipment. If there is a shipping delay, store in fridge after the 48 hour incubation until shipped. Note on the submission form how samples were stored. Feline: refrigerate, ship on ice packs.	3 - 5 Days		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (SK only)	List Price
Tritrichomonas foetus Pooled 5:1 PCR 5:1 Pooling	PCRREALTIME	Individual In Pouch™ medium	In Pouch™ TF medium	Incubate in Pouch™ TF at 35°C for a maximum of 48 hours or leave at room temperature and keep warm during shipment. If there is a shipping delay, store in fridge after the 48 hour incubation until shipped. Note on the submission form how samples were stored.	3 - 5 Days		
Troponin		(see Cardiac Troponin (IDEXX))					
Trypsin-Like Immunoreactivity (TLI) - Canine (IDEXX)	RO	Serum - 1 mL 12 hour fasting sample. Avoid hemolysis.	Red top tube. DO NOT use SST tube.	Refrigerate up to 7 days. Freeze up to 6 months. Ship on ice packs.	2 Weeks		
Trypsin-Like Immunoreactivity (TLI) - Feline (GI Lab)	RO	Serum - 0.5 mL 12 hour fasting sample. Avoid hemolysis.	Red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
TSH		(see Canine TSH)					
Urea		(see Single Chemistry)					
Ureaplasma diversum PCR	PCRREALTIME	Fetus, placenta or swabs	Leak proof container	Refrigerate. Ship on ice packs.	3 - 5 Days		
Uric Acid		(see Single Chemistry)					
Urinalysis - Complete	UR	Urine - 3 mL If suspicious cells are noted the PDS Pathologist will recommend an add-on urine cytology at an additional charge of \$62.91 - a new submission form is required to add-on tests.	Red top tube	Refrigerate. Ship on ice packs.	1 Day		
Urinalysis and Urine Cytology	UR	Urine - 3 mL Includes: Urinalysis - Complete, Urine Cytology.	Red top tube	Refrigerate. Ship on ice packs.	1 Day		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Urine BRAF Mutation Detection Assay (Cadet Braf) (Antech Molecular Innovations) Canine	RO	Urine - 30 - 40 mL	Special kit required containing: container with preservative and shipping papers. Call Antec Canada 1-800-341-3440 to request a kit. www.antechdiagnostics.com/laboratory-diagnostics/molecular-diagnostics/cadet-braf-plus	*See instructions provided in kit by Antec Canada. Clinic is responsible for shipping their own samples, PDS does not provide this service.			
Urine Cortisol/Creatinine Ratio	CA	Urine - 1 mL	Red top tube	Refrigerate. Ship on ice packs.	Same day 2 PM cut off		
Urine Cytology		(see Urinalysis and Urine Cytology)					
Urine Electrolyte Panel - Large Animal	CA	Urine - 1 mL Includes: Na, K, Cl, Ca, Pi, Mg, Urea, Creat.	Red top tube	Refrigerate. Ship on ice packs.	1 Day		
Urine Electrolyte Panel - Small Animal	CA	Urine - 1 mL Includes: pH, Na, K, Cl, Urea, Creat.	Red top tube	Refrigerate. Ship on ice packs.	1 Day		
Urine GGT/Creatinine Ratio Canine, Equine	CA	Urine - 1 mL	Red top tube	Refrigerate. Ship on ice packs.	1 Day		
Urine Protein Creatinine Ratio/Urinalysis Combo	UR_CA UR	Urine - 3 mL	Red top tube	Refrigerate. Ship on ice packs.	1 Day		
Urine Protein/Creatinine Ratio	CA	Urine - 1 mL	Red top tube	Refrigerate. Ship on ice packs.	1 Day		
Urine Sediment only		(see Urinalysis and Urine Cytology)					
Urine Sodium, Potassium, Chloride	CA	Urine - 1 mL	Red top tube	Refrigerate. Ship on ice packs.	1 Day		
Vaccine Antibody Titer		(see Canine Vaccine Panel IFA (IDEXX))					
Vanadium		(see Mineral Panel #4)					
Vibrio		(see Campylobacter fetus ssp venerealis PCR)					
Vibrio		(see Campylobacter fetus ssp. venerealis/Tritrichomonas foetus PCR)					

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Viral Metagenomic Whole-Genome Sequencing ~1GB	GS	Turnaround time and coverage can be adjusted to client needs.			2 Weeks		
Vitamin A (Blood)	HPLC	Heparinized plasma or serum - 1 mL for each vitamin; whole blood - 5 mL for each vitamin Extraction and HPLC.	Red or green top tube	Protect samples from light. Refrigerate. Ship on ice packs.	2 - 5 Days		
Vitamin A (Liver)	HPLC	Liver (fresh or frozen) - 5 grams Extraction and HPLC.	Leak proof container	Protect samples from light. Refrigerate. Ship on ice packs.	2 - 5 Days		
Vitamin A and E (Blood)	HPLC	Heparinized plasma or serum - 1 mL for each vitamin; whole blood - 5 mL for each vitamin Extraction and HPLC.	Red or green top tube	Protect samples from light. Refrigerate. Ship on ice packs.	2 - 5 Days		
Vitamin A and E (Liver)	HPLC	Liver (fresh or frozen) - 5 grams for each vitamin Extraction and HPLC.	Leak proof container	Protect samples from light. Refrigerate. Ship on ice packs.	2 - 5 Days		
Vitamin B12		(see Cobalamin (B12) (IDEXX))					
Vitamin D (Blood) 25-OH-D3 (25-Hydroxy D3)	HPLC	Serum or heparinized plasma - 1 mL Extraction and HPLC. Test is not suitable for Horses, samples will be referred to Michigan State University Diagnostic Lab (extra costs apply and additional paperwork is required - contact PDS).	Red top tube	Protect samples from light. Refrigerate. Ship on ice packs.	2 - 5 Days		
Vitamin D Profile (Michigan) Most Species	RO	Serum or heparinized plasma - 1.5 mL 12 hour fasting sample. Avoid hemolysis and lipemia. Protect from light. Includes: PTH, Ionized Calcium, 25-hydroxyvitamin D.	Red or green top tube	Centrifuge sample within 1 hour of collection. Refrigerate or freeze sample prior to shipping. Ship frozen on ice packs. Sample must arrive below 60°F. Include a completed "Agent for Shipment" form.	2 Weeks		
Vitamin E (Blood)	HPLC	Heparinized plasma or serum - 1 mL for each vitamin; whole blood - 5 mL for each vitamin Extraction and HPLC.	Red or green top tube	Protect samples from light. Refrigerate. Ship on ice packs.	2 - 5 Days		
Vitamin E (Liver)	HPLC	Liver (fresh or frozen) - 5 grams Extraction and HPLC.	Leak proof container	Protect samples from light. Refrigerate. Ship on ice packs.	2 - 5 Days		

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (\$K only)	List Price
Von Willebrand Factor ELISA (Cornell)	RO	Citrated plasma - 1 mL Fasting sample recommended. Citrated collection tubes available, contact PDS Lab.	Blue top tube (citrate). Sample/anticoagulant ratio is critical - check tube label.	Centrifuge, transfer plasma into a plain plastic tube or plastic syringe without needle attached - DO NOT use red top tube. Ship frozen, sample must arrive frozen. Include a completed "Agent for Shipment" form.	2 Weeks		
West Nile Virus ELISA	ELISAI	Serum - 0.2 mL Pricing for multiple samples - \$37.34 per sample.	Red top tube	Refrigerate. Ship on ice packs.	Once per Week		
West Nile Virus PCR	PCRREALTIME	Horses - brain or spinal cord; Avian - swabs, tissues In horses with clinical disease, the IgM Capture ELISA is recommended rather than PCR on tissues, if serum is available. PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable swabs - https://pdsinc.ca/services/molecular-diagnostics .	Leak proof container, red top tube or swab. Swabs in gel media will not be processed.		3 - 5 Days		
Zinc		(see Mineral Panel #1)					
Zonisamide (Cornell)	RO	Serum, lithium heparin or EDTA plasma - 1 mL Avoid hemolysis.	Red, green or purple top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		




Prairie Diagnostic Services Inc.
52 Campus Drive Saskatoon, SK, S7N 5B4
TEL: (306) 966-7316 FAX: (306) 966-2488
Website: pdsinc.ca Email: pds.info@usask.ca

Date/Time (RECEIVED)

PDS Lab # _____

MYCOTOXIN, ERGOT & NITRATE TOXIN SUBMISSION FORM

Submitter (Client) name:		Owner: <input type="checkbox"/> check if same as submitter	
Address:		Paid by: <input type="checkbox"/> Cheque <input type="checkbox"/> Credit Card <input type="checkbox"/> Other _____	
Postal Code:		Credit card Information <input type="checkbox"/> Visa <input type="checkbox"/> MasterCard <input type="checkbox"/> American Express	
Phone:	Fax:	# _____	EXP: ____/____
Email:		Email Copy to:	

Mycotoxin screen (Ground sample required for Analysis) Panel includes: <ul style="list-style-type: none"> 3 + 15 Acetyldeoxynivalenol Aflatoxin B1 Diacetoxyscirpenol Deoxynivalenol (Vomitoxin) Fumonisin B1 Fumonisin B2 HT-2 Toxin Nivalenol Ochratoxin A T-2 Toxin Zearalenone 	Ergot Toxin screen (Ground sample required for Analysis) Panel includes: <ul style="list-style-type: none"> Ergocornine + Egocorninine Ergocristine + Ergocristinine Ergocryptine + Ergocryptinine Ergometrine + Ergometrinine Ergosine + Ergosinine Ergotamine + Ergotaminine 	SAMPLE SIZE: Minimum: 0.2 kg (200g) ~full Snack Ziplock Maximum: 1.0 kg (1000g) ~ 1/2 Large Ziplock  Only a 1kg subsample will be ground for any samples exceeding the maximum sample size. Please note PDS is not responsible for result variation due to subsampling. Clients may request an oversized sample to be entirely ground for an additional \$30/kg grinding fee. Samples with visible rocks can not be ground, testing will be cancelled.	Nitrate (Ground sample NOT required for Analysis) Qualitative Analysis Screen Only
	Please note that reported Total Ergot Alkaloid concentrations are accurate up to 10,000µg/kg (ppb). Samples containing total ergot alkaloid concentrations exceeding 10,000ppb may have a higher ergot alkaloid concentration than reported. If you require an accurate total ergot alkaloid concentration on a sample known to contain greater than 10,000ppb, please specify on the submission form, as this requires a different method.		

Results cannot be guaranteed for non-feed samples. Please contact lab before sending non-feed samples.

Submission Comments:

Sample Information					Testing Required		
	Sample ID	Sample Composition i.e. Barley, Corn, Wheat, DDGS, Silage, Pellets(wheat/corn), Mix(barley/wheat/rye/corn)	Grinding provided by PDS?		Mycotoxin	Ergot	Nitrate (Qualitative Analysis Screen)
			YES (\$30.00 up to 1kg)	NO*			
1							
2							
3							
4							
5							
6							

***Results will NOT be guaranteed for samples that cannot pass through a 35 mesh (0.5mm; flour consistency)**



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PDS Lab # _____

Date/Time (RECEIVED) _____

MYCOTOXIN, ERGOT & NITRATE TOXIN SUBMISSION FORM

Submitter (Client) Name:				Owner:			
Sample Information					Mycotoxin	Ergot	Nitrate (Qualitative Analysis Screen)
Sample ID	Sample Composition i.e., Barley, Corn, Wheat, DDGS, Silage, Pellets(wheat/corn), Mix(barley/wheat/rye/corn)	Is grinding required by PDS?					
		YES (\$30.00/sample)	NO*				
7			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Results will NOT be guaranteed for samples that cannot pass through a 35 mesh (0.5mm; flour consistency)



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Date/Time (RECEIVED)

PDS Lab # _____

NIRS Feed and Forages Nutritional Analysis Submission Form

Submitter (Client) name:		Owner: <input type="checkbox"/> check if same as submitter	
Address:		Paid by: <input type="checkbox"/> Cheque <input type="checkbox"/> CreditCard <input type="checkbox"/> Other _____	
Postal Code:		Credit card Information <input type="checkbox"/> Visa <input type="checkbox"/> MasterCard <input type="checkbox"/> American Express	
Phone:	Fax:	# _____	EXP: ____/____
Email:		Email Copy to:	

Testing Offered:

Comprehensive Nutritional Analysis				
Feed Code:		Sub-Feed Code:		Sample Size:
Hay / Dry Hay	A	Wheat	100	Minimum = 0.3 kg (300g) Maximum = 1.0 kg (1000g)
Silage	B	Oats	101	
Haylage	C	Barley	102	For samples exceeding the maximum size, only a 1kg subsample will be ground. Please note that <u>PDS is not responsible for result variations due to subsampling.</u> Clients may request that the entire oversized sample be ground for an additional fee of \$30/kg.
Greenfeed / FreshCut	D	Triticale	103	
Grains*	E	Rye	104	
Total Mixed ration (TMR)**	F	Corn	105	
Dried Distillers Grain (DDGs)**	G	Grasses	106	
Mineral Panel (by ICP-MS)***	MP	Panel 1	1	
Mineral Panel (by ICP-MS)***	MP	Panel 2	2	
Mineral Panel (by ICP-MS)***	MP	Panel 4	4	
<i>Example: Corn Silage = B & 105</i> <i>*Only for Corn, Oats, Barley and Wheat.</i> <i>**Only Feed Code needed for analysis</i> <i>***Mineral Panel (by ICP-MS) available upon additional request;</i> <i>additional charges will apply</i>				
NOTE: Nitrate results cannot be directly obtained through NIR predictions. However, the system is designed to flag samples with potential nitrate contamination. Clients may see one of the following messages on their report: <u>“Possible Nitrate-N detected; consider wet chemistry analysis”</u> (estimated >1000 ppm) or <u>“Likely Nitrate-N detected; wet chemistry advised”</u> (estimated >2000 ppm). This notification prompts clients to consider submitting the sample for wet chemical analysis to obtain a quantitative nitrate result.				
For any other sample type submission , please contact us at pds_tox@usask.ca with detailed sample description to determine if it can be tested.				
NOTE: Both the Feed Code and Sub-Feed Code are REQUIRED to be mentioned on the form for NIR Analysis.				
Sample Comments: 				



PDS Lab # _____

NIRS Feed and Forages Nutritional Analysis Submission Form

Submitter (Client) name: _____	Owner: _____
--------------------------------	--------------

Sample Information					NIR Testing Details		
	Sample ID	Sample Description (Detailed)	Grinding provided by PDS? (grinding charge included in test cost)		Feed Code	Sub-Feed Code	Others/Comments
			YES	NO***			
1			<input type="checkbox"/>	<input type="checkbox"/>			
2			<input type="checkbox"/>	<input type="checkbox"/>			
3			<input type="checkbox"/>	<input type="checkbox"/>			
4			<input type="checkbox"/>	<input type="checkbox"/>			
5			<input type="checkbox"/>	<input type="checkbox"/>			
6			<input type="checkbox"/>	<input type="checkbox"/>			
7			<input type="checkbox"/>	<input type="checkbox"/>			
8			<input type="checkbox"/>	<input type="checkbox"/>			
9			<input type="checkbox"/>	<input type="checkbox"/>			
10			<input type="checkbox"/>	<input type="checkbox"/>			
11			<input type="checkbox"/>	<input type="checkbox"/>			
12			<input type="checkbox"/>	<input type="checkbox"/>			
13			<input type="checkbox"/>	<input type="checkbox"/>			
14			<input type="checkbox"/>	<input type="checkbox"/>			
15			<input type="checkbox"/>	<input type="checkbox"/>			
16			<input type="checkbox"/>	<input type="checkbox"/>			
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21			<input type="checkbox"/>	<input type="checkbox"/>			
22			<input type="checkbox"/>	<input type="checkbox"/>			
23			<input type="checkbox"/>	<input type="checkbox"/>			
24			<input type="checkbox"/>	<input type="checkbox"/>			
25			<input type="checkbox"/>	<input type="checkbox"/>			
*** NIR Analysis results will NOT be guaranteed for samples that cannot pass through a 18 mesh (1.0 mm).							

Place Your Clinic Letterhead Here

AGENT FOR SHIPMENT OF SAMPLE TO VETERINARY DIAGNOSTIC LABORATORY:

Clinical Pathology Laboratory, Room 1582
Prairie Diagnostic Services
52 Campus Drive
Saskatoon, Saskatchewan, S7N 5B4 CANADA
Phone: (306) 966-7316 Fax: (306) 966-7302

TO WHOM IT MAY CONCERN:

THE ENCLOSED SPECIMENS FROM:

Animal I.D. / Name: _____

Animal Species / Breed: _____

Owner's Name: _____

Case / Clinic Number: _____

SAMPLE TYPE:

Circle or write the appropriate sample type: blood serum urine
other _____

I, the undersigned veterinarian acknowledges, the following:

1. The sample does not contain any other animal-derived material from livestock or poultry.
2. The sample was not derived from cats or dogs which were inoculated with or exposed to any infectious agents of agricultural concern.

Veterinarian Name: _____ Signature: _____

Clinic Name: _____

Address: _____

Phone Number: _____ Date: _____

FOR PRAIRIE DIAGNOSTIC SERVICES LABORATORY USE ONLY

Shipper's Signature: _____ Date: _____

Courier Invoice (Waybill) Number: _____ Country of Origin: CANADA

THESE SPECIMENS ARE EXTREMELY IMPORTANT DIAGNOSTICALLY
*****DELAY OF ANY KIND WILL RENDER THEM USELESS*****



Kansas State Veterinary
DIAGNOSTIC LABORATORY

Kansas State University Rabies Laboratory - Manhattan, KS 66502

FAVN REPORT FORM

Rabies Antibody Titer for Export Animals

The Rabies Laboratory
Kansas State University
2005 Research Park Circle
Manhattan, KS 66502

Phone: 785-532-4483

Fax : 785-532-4474

Email: rabies@vet.k-state.edu

<http://www.ksvdl.org/rabies-laboratory/>

RABIES LAB USE ONLY

Results are reported on this form. Please complete on-line and printout. If handwritten, print clearly. Handwritten information is subject to interpretation by laboratory personnel. Once submitted, information cannot be altered*. **Required fields are bolded.**

Destination of animal being exported: _____

Destination information is for laboratory report distribution only.

Submitting Clinic: _____ **Phone:** _____

Veterinarian Name: _____ **Fax:** _____

Clinic Mailing Address: _____ **Email:** _____

City: _____ **State/Country:** _____ / _____ **Zipcode:** _____

Owner Name: First _____ **Last** _____

Animal Name: _____

Microchip Number: _____ **Serum Draw Date (mm/dd/yyyy):** ____/____/____

If there are two microchip numbers, only the first one will be on the result label.

Species/Breed: _____ **Sex:** M ☐ F ☐ **Age:** _____

Rabies Vaccination History: _____

Vaccination history is for laboratory reference only. Please include up to three recent vaccinations dates if available.

Samples and test data may be used for general research without compromising client confidentiality. ☐ *Opt Out*

Signature of Veterinarian: _____ **Date (mm/dd/yyyy):** ____/____/____

Signature affirms that the above information is correct and the microchip number has been verified.

Test will be cancelled if sample tube is unlabeled or arrives without the microchip number*.

RABIES LAB USE

Payment Total: _____

STAT: ☐ **Courier:** ☐ **Pay for:** International / Domestic

NBC: ☐ **FedEx / UPS / DHL** **Account #** _____

For Lab Use Only: **Opened by:** _____ **Processed By:** _____

Transferred By: _____ **Payment Received:** _____

* Please see instructions for FAVN submission and reporting at <http://www.ksvdl.org/rabies-laboratory/>. This submission form is a legal and binding contract between KSVDL and the submitting entity. Specimens submitted become the property of the KSVDL. All fees, to include collection fees, are the responsibility of the submitting entity and all entities must adhere to the [billing policy](#). Fees may be paid by check (payable to Kansas State University), credit card, money order, or electronic bank transfer. A 1.5% finance charge will be assessed on all charges over 60 days.

KSVDL-RAB-FAVN-F-15-0 Effective Date: 07/01/2018



Kansas State Veterinary
DIAGNOSTIC LABORATORY

CANINE EXPORT SUBMISSION FORM

Kansas State Veterinary Diagnostic Laboratory
1800 Denison Avenue, Mosier D117, Manhattan, KS 66506
Phone: (866) 512-5650 Fax: (785) 532-4835
www.ksvdl.org

Laboratory Use Only

Case Coordinator

Panel

Accession Number

BILL TO: ☐ Clinic ☐ Owner ☐ Third Party Third Party to Receive Results? ☐ Yes ☐ No

Third Party Contact Info: _____

CLINIC

ACCOUNT # _____

Veterinarian _____

Clinic/Company _____

Address _____

City _____ State _____ ZIP _____

Country _____

Phone _____ Fax _____

E-mail _____

Send Results Via: (Check all that apply) ☐ E-Mail ☐ Fax ☐ Also Send Results to Owner: _____

REQUIRED INFORMATION*

*Species: _____

*Animal Name: _____

*Microchip Number: _____

*Date Blood Drawn: (mmddyyyy)

Country Being Sent To: _____

Results (For Laboratory Use Only)

OWNER/PRODUCER

Owner Name _____

Business/Premise _____

Address _____

City _____ State _____ ZIP _____

Country _____

Phone _____ Cell _____

Fax or E-mail _____

PLEASE MARK REQUESTED TESTS

- ☐ Canine Brucellosis - Serum
- ☐ Ehrlichia Canis - Serum
- ☐ Leptospira Canicola - Serum
- ☐ Leishmania Infantum - Serum
- ☐ Occult Heartworm (antigen) - Serum
- ☐ Knott's Test (microfilariae) - 1cc blood in purple top tube
- ☐ Heartworm Difil Filter Tests (microfilariae) - 1cc blood in purple top tube

*Click For Rabies Serology (FAVN) and then choose Test Submission Form

INSTRUCTIONS:

A total of 1-2cc of clear (non-hemolyzed) serum is required for all tests, except Knott's Testing and Heartworm DIFIL testing. We recommend all samples be shipped overnight with cool packs.

Please fill out the form clearly and legibly, checking all information for accuracy.

It is the responsibility of the submitting party to verify testing requirements for exportation.

***ONCE THIS FORM IS COMPLETED AND SAMPLES SUBMITTED, THE INFORMATION WILL NOT BE CHANGED OR ALTERED BY ANY PARTY. OMISSIONS OR ERRORS OF ANY REQUIRED INFORMATION WILL REQUIRE RESUBMISSION OF ALL INFORMATION AND SAMPLES.**

Please note: Babesia gibsoni testing is **NOT** being performed at Kansas State Veterinary Diagnostic Laboratory.

Visit <https://www.aphis.usda.gov/aphis> or contact your appropriate state or federal veterinarian for the most up to date requirements for animal export.

OPENED BY

Courier Record: ☐ Courier ☐ FedEx ☐ Hand Delivered ☐ Mail ☐ UPS

Coolant Record: ☐ Coolant Pack ☐ Dry Ice ☐ Frozen ☐ Warmer ☐ None

Sample Condition: ☐ Good ☐ Broken ☐ Leaked ☐ Other _____

This submission form is a legal binding contract between KSVDL and the submitting entity. All specimens, animals, and/or biological materials submitted to the KSVDL as well as any test results, diagnoses, or other analyses resulting from these submissions will become the property of KSVDL. Specimens also may be used for teaching purposes. All fees incurred are the responsibility of the submitting entity. A 1.5% finance charge will be assessed on all charges over 30 days.

Send directly to:

Canadian Veterinary Urolith Centre
University of Guelph, Laboratory Services Division,
95 Stone Rd. W.,
Guelph, ON. N1G 2Z4

This urolith analysis* is made possible in part
by the support of Royal Canin.



Phone: 519-823-1268 ext. 57454 Fax: 519-767-6240 Email: cvuc@uoguelph.ca

**NOTE: SUBMITTING CLINICS ARE RESPONSIBLE FOR SHIPPING CHARGES.
PLEASE SUBMIT CLEAN DRY UROLITHS, CRYSTALS AND URETHRAL PLUGS IN A CLEAN PLASTIC VIAL.**

Clinic Name:	Clinic ID:	Pet Name:
Address:	City:	Owner's Last Name:
Province:	Postal Code:	Species: <input type="checkbox"/> Canine <input type="checkbox"/> Feline <input type="checkbox"/> Other*:
Veterinarian:	Breed:	
Phone:	Sex: <input type="checkbox"/> Male <input type="checkbox"/> Female	Neutered/Spayed: <input type="checkbox"/> Yes <input type="checkbox"/> No
Fax:		If Yes: <input type="checkbox"/> Before stone removal <input type="checkbox"/> At or post stone removal
Email:	Age: _____ Year(s) _____ Month(s) _____	

SAMPLE INFORMATION:

No. Samples: _____ **Specimen submitted:** ☐ Urolith(s) ☐ Urethral plug ☐ Sediment ☐ Crystals
Source of urolith(s): (check all applicable): ☐ Renal Pelvis ☐ Ureter(s) ☐ Bladder ☐ Urethra ☐ Other _____
Method of removal: ☐ Voided naturally ☐ Cystotomy ☐ Voiding Urohydropropulsion ☐ Lithotripsy +/- basket removal
☐ Percutaneous cystolithotomy ☐ Laparoscopic assisted cystotomy ☐ Other _____

RELEVANT HISTORY:

Does the patient have renal disease? ☐ Yes ☐ No ☐ Unknown **Is the patient hypercalcemic?** ☐ Yes ☐ No ☐ Unknown

List other concurrent diseases (if applicable)	List medications (if applicable)
_____	_____
_____	_____
_____	_____

Body condition: ☐ Thin ☐ Normal ☐ Overweight **Body Score:** _____ **Weight:** _____ ☐ kg ☐ lb
Environment of animal: ☐ Mostly Outdoor ☐ Mostly Indoor ☐ Indoor + Outdoor
of OTHER animals on premises: Cats: _____ Dogs: _____
Primary diet (at time of diagnosis): Brand name: _____ Duration: Year(s) _____ Month(s) _____
Primary diet type: ☐ Wet ☐ Dry ☐ Mixed ☐ Semi-Moist ☐ Fresh ☐ Unknown Diet name: _____
Previous diet: Brand name: _____ Prev. Duration: Year(s) _____ Month(s) _____
Previous diet type: ☐ Wet ☐ Dry ☐ Mixed ☐ Semi-Moist ☐ Fresh ☐ Unknown Prev. Diet name: _____

Does this patient have a previous history of Urolith(s)? ☐ Yes ☐ No ☐ Unknown

IF YES PLEASE PROVIDE INFORMATION BELOW REGARDING THE PATIENT'S PREVIOUS UROLITH(S):

Previous urolith method of removal: ☐ Voided naturally ☐ Cystotomy ☐ Voiding Urohydropropulsion
☐ Lithotripsy +/- basket removal ☐ Percutaneous cystolithotomy ☐ Laparoscopic assisted cystotomy ☐ Other _____
Composition: ☐ Struvite ☐ Calcium Oxalate ☐ Calcium Phosphate ☐ Urate ☐ Other _____
Source (check all applicable): ☐ Renal Pelvis ☐ Ureter(s) ☐ Bladder ☐ Urethra ☐ Other _____
Previous urolith removal date(s): _____
Previous urolith report number(s) (if available): _____

Preferred language of correspondence: ☐ English ☐ French **Preferred report delivery method:** ☐ Email ☐ Fax

Results also available on the Royal Canin Veterinary Portal at vet.royalcanin.ca.

NOTE: ALL FIELDS MUST BE COMPLETED IN FULL TO PROCEED WITH ANALYSIS. ANY MISSING INFORMATION WILL RESULT IN DELAYS.

*The Canadian Veterinary Urolith Centre provides urolith analysis for all species, except humans and other primates. Canine and feline urolith analysis is made possible in part by the support of Royal Canin with a nominal testing fee charged. Clinics are responsible for shipping costs and the fees for uroliths from species other than dogs and cats. Details available at <https://afl.uoguelph.ca/our-services/canadian-veterinary-urolith-centre/>

Information collected by University of Guelph Laboratory Services will be subject to the Freedom of Information and Protection of Privacy Act (Ontario) and the University of Guelph Privacy Statement (www.uoguelph.ca). Submitting Veterinarian is responsible for obtaining any or all necessary consents from pet owners and to explain that data collected or created through these testing services may be used by the University of Guelph and Royal Canin for research, product development and case studies posted to the Royal Canin Veterinary Portal at vet.royalcanin.ca. This information may be used for research, we appreciate efforts to provide as accurate information as possible. Please keep a copy of this form for your records.



February 27, 2025