

Test and Services Guide

2023

52 Campus Drive Saskatoon, SK S7N 5B4 Phone: (306) 966-7316 Fax: (306) 966-2488 Website: pdsinc.ca



Table of Contents

Introduction Welcome to Prairie Diagnostic Services Inc	3
Quality Assurance	
2023 Updates	
PDS Genomics Laboratory Services	
Hours of Operation	
Additional Services and After Hours	8
PDS Contact Information	8
General Information	9
Submission Protocol	10
Submission Form/Sample History	10
Sample Labeling	
Blood, urine, fluid, fecal samples, swabs, slides, biopsies etc	12
Do Not Submit	
Whole Bodies or Portions	13
Sample Packaging Protocol	
Special Information for Clinical Pathology Submissions	14
Special Information for Necropsy Submissions	16
Special Information for Surgical/Dermatohistopathology Submissions	18
Special Information for Microbiology Submissions	19
Bacteriology/Parasitology Submissions	19
PCR Submissions	20
Virology, Serology, Immunology Submissions	21
Sampling for Ergot and Mycotoxin Analysis	21
Research, Surveillance and Other Specialized Testing	22
Quick Index of Targets (Agent, Antigen and Substance) Testing Available	23
Immunohistochemistry (IHC)	23
Infectious disease agents detected on formalin-fixed paraffin blocks include:	23
Cellular antigens detected on formalin-fixed paraffin blocks	23

Molecular Diagnostics	24
Polymerase Chain Reaction (PCR) Reference Guide	24
Serology Reference Guide	25
Virology/TSE Test Reference Guide	25
Toxicology Reference Guide	26
Histopathological Stains	27
Purolator Courier Rates	28
Frontier Courier Rates (Regina and Moose Jaw)	28
Canada Post Express Order Entry	29
Referred Out Testing and Special Requests	29
Agent for Shipment Form	29
Submissions for Export Testing	30
Submission for Calculi (Urolith) Analysis	30

Tests

Tests Listed in Alphabetical Order

Appendix

Mycotoxin Ergot Nitrate Toxin 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 (WCVM) 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 <u>Scope of Accreditation</u>. The laboratory participates in Proficiency Test programs and in assessments through SCC and AAVLD to ensure our standard of expertise is maintained.

PDS has achieved full accreditation status from the 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 high degree of reliability. PDS is committed to providing its clients with accurate, precise, reproducible, and timely results.

Version Date: June 1, 2023 Page 3 of 30

2023 Updates

- 1. A new Client Portal (Web Client) was released June 1, 2022. The previous Client Portal was discontinued March 31, 2023. Contact PDS Diagnostic Services Office (306-966-7316 or dso@usask.ca) for login information.
- 2. Online submission is available through the Web Client Portal. The online forms insert all submitting clinic information and provides directions for completing the form. When complete, select submit button, print the barcoded form, and insert in package with the samples. Please note, PDS staff are not notified of receipt of the online histories. Email PDS (dso@usask.ca) if you want to correct or add additional information to the submission form.
- 3. The PDS website (pdsinc.ca) includes a searchable "Test and Services Guide". This guide can be searched by test name, species, or sampling protocol. Currently, the searchable guide does not have pricing incorporated; an electronic version of the full test and services guide is available by emailing the PDS Diagnostic Services Office (dso@usask.ca). If you have an account with PDS, you can access prices when you log into the Web Client on the PDS website using your username and password. You can request a Web Client account by emailing PDS Diagnostic Services Office (dso@usask.ca).
- 4. Updated Submission Forms are available on the PDS website (<u>pdsinc.ca</u>). The forms are based on species rather than a general form in order to include pertinent information when selecting test methods. The forms are fillable pdfs, which can be completed electronically, printed, and saved. A template, with your clinic information completed, can be prepared to save time when completing the forms. For Exotic Animal and Wildlife submissions, please use the **Companion and Exotic Submission Form**.

5. Test Updates:

- a. **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.
 - i. For PCR and culture requests: gel media swab is the preferred sample for culture, so if possible, submit a gel media swab as well as a swab that is acceptable for PCR.
- b. Johne's Fecal PCR: individual (Mycobacterium paratuberculosis (Johne's) Individual) and pooled (Mycobacterium paratuberculosis (Johne's) Pooled 5:1) testing options are available. Ensure to select the correct option when ordering tests through PDS Client Portal.
 - i. Pooled testing
 - Indicate on the submission form if positive pools are to be tested individually. The Mycobacterium paratuberculosis (Johne's) Individual PCR charge will apply for each sample tested individually.
 - Indicate on the submission form which samples to include in each pool or they will be selected randomly.
 - ii. For additional information, refer to Johne's Samples and Submission Guidelines on the PDS website pdsinc.ca/about/news/Johnes-Sample-and-Submission-Guidelines.

Version Date: June 1, 2023 Page 4 of 30

- c. Bovine Viral Diarrhea (BVD) Skin Biopsy IHC is no longer available as it was discontinued in 2018. Bovine Viral Diarrhea Virus (BVD) PCR has replaced the IHC test. Fresh tissue is required for the PCR test, fixed tissue **is not** acceptable. Sampling instructions can be found on the PDS website (pdsinc.ca) BVD Sampling Instructions.
 - i. 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.
 - ii. Additional charges will apply if you request that BVD positive pools be tested individually, contact PDS for current pricing.
- d. Seneca Virus PCR testing is now available at PDS.
- e. Anthrax Culture has been discontinued. All Anthrax culture requests will be tested by PCR.
- f. *Mycoplasma hyopneumonia* HIPRA ELISA test has been replaced by the Biochek ELISA method. The HIPRA ELISA kit was discontinued by the company.
- g. New Equine Endocrine tests now available:
 - Equine Metabolic Panel
 - Endogenous ACTH
 - Insulin
 - Insulin/Glucose Ratio
 - Insulin Serial Testing
 - Insulin Serial Testing + Additional Sample
 - Thyrotropin Releasing Hormone (TRH) Stim Test
 - Equine PPID
 - Equine Dexamethasone Suppression Test
- h. Potassium Bromide, Phenobarb/Potassium Bromide Panel, T3 and Testosterone are now referred out.
- i. Echinocococcus and Teania PCR testing is now available through PDS. The testing is referred to the Zoonotic Parasite Research Unit (Dr. Jenkins' lab) at WCVM.
- 6. Porcine Diarrhea Panels
 - a. PDS offers 3 Porcine Diarrhea Panels to choose from:
 - i. Porcine Diarrhea Panel Neonatal
 - 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.
 - ii. Porcine Diarrhea Panel Late Suckling and Early Nursery
 - 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.

Version Date: June 1, 2023 Page 5 of 30

- iii. Porcine Diarrhea Panel Late Nursery, Finishing or Adult
 - 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.
- b. Include animal age and clearly indicate on the submission form which Porcine Diarrhea Panel you are requesting.

7. Bovine Respiratory Panels

- a. Influenza D PCR has been added to the PCR Bovine Respiratory Panels.
- b. There are 4 Bovine Respiratory Panels to choose from:
 - i. Bovine Respiratory Panel Antibody (serum): includes IBR, BRSV, PI-3 and BCV.
 - ii. Bovine Respiratory Panel 6 PCR Targets (swab/tissue): includes IBR, BRSV, PI-3, BCV, M. bovis, Influenza D.
 - iii. Bovine Respiratory Panel 7 PCR Targets (swab/tissue): includes IBR, PRSV, PI-3, BCV, M. bovis, BVD, Influenza D.
 - iv. Bovine Respiratory Panel –7 PCR Targets & Culture (swab/tissue): includes Culture & Susceptibility, IBR, BRSV, PI-3, BCV, M. bovis, BVD, Influenza D.

8. Toxicology testing:

- a. Mycotoxin and Ergot testing must be submitted with the Mycotoxin Ergot Nitrate Toxin submission form found on the PDS website (pdsinc.ca) Mycotoxin Ergot Nitrate Toxin Submission Form.
- b. 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.

c. 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.

b. Mycotoxin Panel

- i. 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.
- ii. Mycotoxin Calculator is now available on the PDS website (pdsinc.ca).
- c. Environmental Testing for Antineoplastics Cyclophosphamide and 5-fluorouracil.
 - i. Testing kits are available to purchase from PDS. Contact PDS Diagnostic Services Office at 306-966-7316 for information on ordering.

Version Date: June 1, 2023 Page 6 of 30

- 9. Referral Samples 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 make arrangements with the Clinical Pathology Laboratory prior to collection of the sample(s).

- 10. Hold samples for possible testing will be charged a non-refundable handling fee based on sample type.
 - a. \$10.00 for holding blood, swabs, etc.
 - b. \$20.00 for holding tissues, fresh and/or fixed, that do not have other pathology work ordered.
 - i. Clearly indicated 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.

PDS Genomics Laboratory Services

PDS is certified by Oxford Nanopore Technologies as a sequencing service provider since 2018.

A team of experienced diagnostic professionals, technologists and bioinformaticians runs our Genomics Laboratory equipped with a GridION X5, PromethION P2 Solo, and Hamilton NGS STAR instruments to effectively handle a variety of sequencing applications from a single diagnostic sample to large multi-thousand sample research projects.

Current diagnostic sequencing-based services include:

- Bacterial isolate identification, genome assembly, and characterization by whole-genome nanopore sequencing;
- Salmonella serotyping by whole-genome nanopore sequencing;
- Direct bacterial whole-genome (shotgun) metagenomics to characterize entire bacterial population present in a diagnostic sample;
- Viral metagenomics to characterize RNA viral population present in a diagnostic sample.

With rapid maturation of third-generation sequencing technologies we expect the scope of our genomics-based diagnostic applications will further expand and mature in the near future.

Please enquire with your diagnostic needs and research project requirements to consult on appropriate samples, sequencing depth, and bioinformatic analysis options.

- PDS Genomics Laboratory can assist diagnostic and research clients with accessing Illumina and Sanger sequencing platforms if required.
- PDS Genomics Laboratory has experience in experimental design, planning, sequencing, bioinformatic analysis, and data management for a variety of research projects involving different target organisms and populations.

If you have a special request, please contact the PDS Genomics Laboratory by email pds genomics@usask.ca to discuss your needs.

Version Date: June 1, 2023 Page 7 of 30

Hours of Operation

Monday to Friday 8:00 A.M. to 5:00 P.M.

Additional Services and After Hours

- 1. The Diagnostic Services Office (DSO, Sample Receiving) is open Saturday from 9:00 A.M. to 1:00 P.M.
- 2. The Clinical Pathology Laboratory is open Saturday from 8:30 A.M. to 5:00 P.M. Preliminary test results will be available for samples received before 3:00 P.M. See "Special Information for Clinical Pathology Submissions".
- 3. The Bacteriology Laboratory is open to process submissions Saturday from 8:30 A.M. to 5:00 P.M. Finalized results will be available the next business day.
- 4. 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. See "Special Information for Necropsy Submissions".

PDS Contact Information

Telephone (306) 966-7316

Necropsy After Hours Service (306) 291-9281

PDS personnel is **On Call** during the following time periods:

Saturday 9:00 A.M. to 5:00 P.M. Sundays and Holidays 9:00 A.M. to 1:00 P.M.

Fax (306) 966-2488

Website pdsinc.ca

Version Date: June 1, 2023 Page 8 of 30

General Information

- 1. **Prices are subject to change without notice.** Prices do not include GST; this will be added to the final invoice. GST is not charged to USA clients.
- 2. The Test and Services Guide has 2 price selections.
 - a. Supported Price (SK Only).
 - i. Supported price if for Food animals within Saskatchewan. Food animals are defined as those raised for food, fiber and other by-products and include cattle, sheep, goats, pigs, poultry, emus, ostriches, rheas, PMU and feedlot horses, game farmed animals, llamas, alpacas, vicunas, ranched fur-bearing animals, meat rabbits and farmed fish.
 - ii. The Supported Price represents a price reduction funded by Saskatchewan Agriculture and/or, in specific cases, the Western College of Veterinary Medicine (WCVM).
 - b. List Price
 - i. List price applies to companion/other animals as well as out of province food animals.
 - ii. Fees for wildlife and animals used for sport (e.g., racehorses and pigeons) will normally be shown under the List price.
 - c. If in doubt, please contact PDS.
- 3. Diagnostic test results will be made available to Saskatchewan Agriculture, WCVM and, where appropriate, Alberta Agriculture and Rural Development and the Canadian Food Inspection Agency (CFIA). This information is used for monitoring livestock health issues and disease trends as well as for teaching and academic research applications. Individual client and animal identification information will remain confidential, except as required by law for notifiable and reportable diseases.
- 4. PDS shall retain ownership of all test data, reports, samples and intellectual property arising from submissions unless other arrangements are made in writing at the time of submission.
- 5. All diagnostic samples related to animal health and disease, except for whole animals submitted for necropsy, must be submitted through a veterinarian who is responsible for the clinical interpretation and application of the diagnostic test results. Animal owners who submit whole animals for necropsy **must** identify a veterinarian to whom a copy of the report will be sent to for interpretation and **must** inform the veterinarian that an animal has been submitted for necropsy.
- 6. The Test and Services Guide lists the average price estimated for a single or small number of diagnostic samples in most cases. Special discounts and pricing may be available for large volumes, contracts, research/surveillance projects (see **Research**, **Surveillance and Other Specialized Testing** section). Please contact PDS for special pricing opportunities.
- 7. To add on a test, email PDS Diagnostic Services Office (dso@usask.ca). Include the PDS case number, the add-on test(s) requested, and the name of the person requesting the add-on test(s).
- 8. Handling fees will apply to hold samples for future testing. Fee will depend on sample type, \$10.00 for most samples (e.g., blood, smears, swabs); \$20.00 for tissues (fresh and/or fixed). The hold fee is non-refundable. Samples submitted for testing are routinely held for two weeks at no charge. Clearly indicate on the submission form if fixed tissues are to be submitted for diagnostic testing or to be held for further/future testing.

Version Date: June 1, 2023 Page 9 of 30

Submission Protocol

Submission Form/Sample History

- 1. A completed submission form(s) must accompany all submissions.
 - a. Submission forms can be created through the PDS Client Portal (Web Client), or paper forms can be found on the PDS website (pdsinc.ca). From Web Client you will have access to all tests available at PDS, paper forms include an abbreviated test selection.
 - b. If using a Submission Form template, you have created, ensure that all fields are updated with the correct information/test requests before submitting.
 - c. For exotics and wildlife submissions, use the **Companion and Exotic Submission Form**.
 - d. For multiple animals, also complete the **Multiple Animal Submission Form** or an Excel spreadsheet list of animal IDs (same ID as the sample label). Email form/Excel spreadsheet to PDS Diagnostic Services Office (dso@usask.ca).
- 2. Ensure the following information is completed:
 - a. Client information: submitting clinic's name and address,
 - b. Owner's FIRST AND LAST NAME,
 - c. Premise ID for farm animals,
 - d. Collection date and collection time,
 - e. Animal Identification: Name, all assigned tag numbers (e.g., CCIA/farm); unique markings, tattoos,
 - f. Age (specify days, weeks, months or years, birthdate), species, breed,
 - g. Reason for submission: Diagnostic, Research, Routine Monitoring, Surveillance,
 - h. Sample(s) submitted (ensure sample type matches test requested),
 - i. History,
 - j. Production Stage and Primary Systems Affected for National Surveillance purposes on Bovine, Swine, Equine, Caprine/Ovine, and Avian submission forms,
 - k. Veterinarian name,
 - 1. **Identify test required**; clearly indicate if any samples are to be held for further/future testing (hold fees may apply).
- 3. Ensure writing is legible on hand-written forms.
- 4. When infection with Risk Group 3 organisms are suspected, ensure form clearly indicates suspected organism and any supporting clinical signs.
- 5. Include animal's current vaccination history.
- 6. Missing information/paperwork may result in a delay in testing and additional charges.

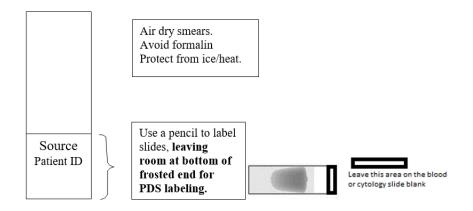
Version Date: June 1, 2023 Page 10 of 30

- 7. The submission form is placed in a bag, sealed and attached to the exterior of secondary package (refer to "Sample Packaging Protocol").
- 8. The Diagnostic Services Office personnel must be able to access paperwork and sample IDs without specimen contact or contamination. This is an Occupational Health and Safety issue -we cannot safely process externally contaminated sample.
- 9. Externally contaminated samples or submission forms may result in a delay in processing.

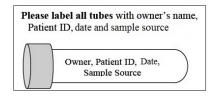
Sample Labeling

All samples must be **correctly labeled with the patient identification, owner's last name and source** (**site**). This includes cytology smears and tubes. For cytology smears taken from several sites, label each slide as to which site it represents.

Labeling Blood/Cytology Smears



Labeling Sample Tubes



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

Version Date: June 1, 2023 Page 11 of 30

Blood, urine, fluid, fecal samples, swabs, slides, biopsies etc.

Please ensure:

- A completed PDS submission form accompanies each case. Clearly label samples with 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.), collection date for EDTA, urine, cytology fluids.
 - a. If submitting samples from multiple animals, attach a completed Multiple Animal Submission Form or an Excel spreadsheet list of identifying numbers or names to the submission form and email Multiple Animal Submission Form or Excel spreadsheet to dso@usask.ca. Ensure samples are labelled exactly the same as listed on the Multiple Animal Submission Form or Excel spreadsheet. When packaging, please ensure samples are sorted in the same order as listed on the Multiple Animal Submission Form or Excel spreadsheet. Extra charges may apply for sorting samples.
- 2. Please submit separate swabs when requesting more than one test requiring the sample type (e.g., when requesting both Bacteriology and Virology on a nasal swab, send two swabs rather than one). Sharing swabs significantly decreases the chance of isolating target organisms.
- 3. Please submit two urine samples when submitting urine for complete urinalysis and urine culture (sterile container).
- 4. Please use leak-proof, rigid containers with tight fitting lids. Place these in zip-lock bags (refer to "Sample Packaging Protocol").
- 5. Ensure samples are easily distinguishable from packing material. Bubble wrap or syringe containers work well for protecting tubes from breakage. Do not tape sample to bubble wrap.
- 6. The submission form must be placed in a separate plastic bag to protect from possible spills/contamination. If the submission form is attached to the outside of box, please ensure that couriers do not put their shipping label/information over the submission form.
- 7. Blood/cytology slides must be clearly labeled (refer to #1 above) and need to be separated from formalin containing vessels as contact will adversely affect staining. Package appropriately to prevent slides from breaking in transit.
- 8. To avoid sample freezing during cold weather (<0°C), request that the courier protect parcels from freezing. Please label the outside of the packaging accordingly.

Version Date: June 1, 2023 Page 12 of 30

Do Not Submit:

- 1. Feces in gloves or milk in whirl-pak bags.
- 2. Syringes with needles or stoppers attached.
- 3. Slides taped to the sides of boxes (they may inadvertently get discarded).
- 4. Pooled samples from multiple animals in the same bag/jar.
- 5. Do not apply sticky labels or tape to glass slides.

PDS has a limited supply of plastic slide holders. Please call to have them shipped to your clinic. PDS no longer supplies cardboard slide holders or Styrofoam tube mailers due to biosafety concerns.

Whole Bodies or Portions

Please ensure:

- 1. A completed PDS submission form accompanies each case.
- 2. Place submission form in a sealed plastic bag.
- 3. Place the sample(s) in a large bag, followed by a secondary bag with absorbent material.
- 4. Decontaminate the outer bag if required.
- 5. Place in rigid leak proof container (e.g., box, plastic tub). Do not use a Styrofoam box.
- 6. Note: These containers will **NOT** be returned.

Sample Packaging Protocol

Transport Canada regulations state that 3 levels of packaging are required as follows:

- 1. Primary Container (holds the sample)
 - a. Should be leak proof, plastic, and have a wide mouth opening.
 - b. The outside of the container must be clean to prevent contamination of the sample.
 - c. Please Note: A single plastic bag is insufficient for solid specimens > 2 lbs.
 - d. Do not submit liquid samples or solid samples within fluid in plastic bags.
- 2. Secondary Container
 - a. Should be leak proof and hold enough absorbent material to absorb all liquids/specimens in the primary container if there is any leakage.
 - b. Should have a wide mouth opening.
- 3. Clean the external surface: decontaminate if required.
- 4. Tertiary Packaging
 - a. Can be a rigid cardboard box if sample < 10 lbs.
 - b. Should be rigid plastic (e.g., coolers), if the specimen is > 10 lbs. or specimen contains large volumes of liquid. These containers will **NOT** be returned.

Version Date: June 1, 2023 Page 13 of 30

Special Information for Clinical Pathology Submissions

- 1. A \$22.00 "STAT" fee will apply to all "STAT" requests received anytime during the day. Monday through Friday. STAT samples must arrive in the Clinical Pathology Lab before 5:00 P.M., and before 4:00 P.M. on Saturday, to receive same day results. STAT fees do not apply to Bacteriology culture requests or Surgical/Necropsy submissions.
- 2. Same day results are available for the majority of the Clinical Pathology tests that arrive at the lab by 2:00 P.M. Monday through Friday.
 - a. For samples arriving after this time, finalized results may not be available until the next business day.
- 3. Samples received on Saturday may not receive Pathologist interpretation until the next business day. Priority will be given to cytology samples received prior to 1:00 P.M.

4. Endocrine/Drug testing

a. **Do not use SST tubes** for sample collection if requesting endocrine (thyroid, cortisol) or drug (Phenobarb, Potassium Bromide) tests. SST tubes have not been validated for use in Veterinary practice.

5. Coagulation Submissions

- a. Include a normal animal sample (same species as patient) with each submission.
- b. Centrifuge sample within 4 hours of collection and transfer plasma to a plastic tube or a plastic syringe. Freeze sample before shipping.
- c. Do not transfer plasma to a glass tube or a red top tube. Red top tubes can contain a clot activator, which is **NOT** acceptable for plasma samples for coagulation testing.

6. CBC Submissions

- a. EDTA tubes MUST be $2/3^{rds}$ full, as incorrect Whole Blood/EDTA ratio can cause incongruent results for RBC parameters.
- b. Blood smears must be submitted with overnight sample(s).
- c. Protect EDTA tube from freezing when shipping samples in cold weather.
- d. EDTA and blood smears will not be tested if clots are present in the EDTA tube.

7. Combination Tests

a. All samples must be received at the same time in order for combination pricing to apply; this includes the urine sample ("to follow" urines are no longer accepted). A new submission form must accompany every add-on sample/test request.

8. Cytology Submissions

- a. Slides and tubes must be clearly labeled with patient ID, site ID and date of collection.
- b. All sites must be submitted at the same time from the same animal to get discount pricing.
- c. Turnaround time for results is 24 hours.
- d. "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 in order to receive same day results. Submissions received after 3:30 P.M. Monday to Friday or 1:00 P.M. Saturday may be

Version Date: June 1, 2023 Page 14 of 30

- finalized the next business day.
- e. There is a \$7.44 charge for each slide above the maximum 8 slides per site for Cytology Smears/Imprints and the 8 slides maximum for Multiple Lymph Nodes.
- f. Cytology Fluids 1 fluid see Cytology Fluid 1 tube of fluid. Discounts apply when submitting multiple tubes of fluid see Cytology Fluids (per tube).
- g. Cytology Smears 1 site see Cytology Smears or Imprints. Discounts apply to 2 or more sites see Cytology Smears or Imprints (per site).
- h. Cytology Multiple Lymph Nodes (>2 sites) is test selection when submitting more than 2 lymph node sites. If submitting less than 3 lymph nodes sites, see the appropriate Cytology Smears or Imprints for pricing.
- 9. 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 see Cytology Smears or Imprints in the Tests section of this guide.
- 10. Urinalysis vs. Urine Cytology
 - a. Urinalysis includes the urine strip, specific gravity, sediment, and Clinical Pathologist interpretation. If the technologist sees what may be abnormal cells in the sediment, a cytospin smear of the sediment will be prepared and a Technical Comment will appear on the report. Add-on Urine Cytology can by requested by emailing dso@usask.ca with the PDS report number and an add-on request (a submission form, or email indicating add-on test, is required to add on the cytology). An additional charge will apply see Urinalysis Complete in the Tests section of this guide.
 - b. "Urine Cytology" includes a Complete Urinalysis, cytocentrifuge preparation slide and Clinical Pathologist interpretation of cytocentrifuge slide.
- 11. To add tests to a previous submission email <u>dso@usask.ca</u> with the PDS number and the add on request.

Clinical Pathology Protocol Manual

For additional Clinical Pathology information see Clinical Pathology Protocol Manual which can be found on the PDS website - Clinical Pathology Protocol Manual.

The protocol manual can be downloaded from the PDS website – pdsinc.ca, select "Services"; select "Clinical Pathology"; select "Clinical Pathology Protocol Manual".

Version Date: June 1, 2023 Page 15 of 30

Special Information for Necropsy Submissions

- 1. Call back service for admission of samples to the Necropsy Facility is available for large animal cases during the following times:
 - a. 9:00 A.M. 5:00 P.M. Saturdays
 - b. 9:00 A.M. 1:00 P.M. Sundays and Holidays
 - c. Call back service is no longer available after 5:00 P.M. on weekdays.
- 2. To access the Necropsy call back service, phone (306) 291-9281 to arrange for PDS 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.
- 3. Multiple fetuses or neonates under 10 days of age from a single dam (e.g., twins, litters) and small neonates (under 10 kg), such as suckling piglets and lambs, from the same flock or 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.
- 4. 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.
- 5. 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, please 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.
- 6. For Abortion submissions see Maximising the Chance of Achieving Diagnoses on Bovine Abortions and a Diagnostic Algorithm Based on Western Canadian Bovine Diseases on the PDS website Bovine Abortion Testing at PDS.
- 7. <u>Guidelines for Swine Multi Animal Submissions</u> can be found on the PDS website.
- 8. Additional charges may apply for cases that are more complex than a routine necropsy (e.g., neurological/spinal, research interest cases, etc.).
- 9. Please note that 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.
- 10. 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:
 - a. 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) \$30.00.
 - b. Sample that requires tissue collection for Microbiology testing that requires consultation

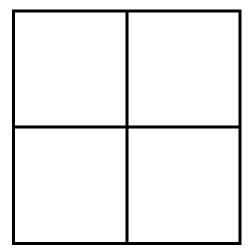
Version Date: June 1, 2023 Page 16 of 30

- with the pathologist such as collecting samples from a whole piglet or taking a joint swab from a leg \$50.00.
- 11. Please note that 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.
- 12. Requests for research or cost estimates see **Research**, **Surveillance and Other Specialized Testing** section.
- 13. 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.
- 14. The animal remains disposal option currently utilized by PDS is an environmentally friendly thermo-chemical process (alkaline hydrolysis) (when available). There are no additional fees for this service on cases submitted for a necropsy examination.
- 15. 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 being infected with (a) Risk Group 3 organism(s).
- 16. **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).**
- 17. **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.

Version Date: June 1, 2023 Page 17 of 30

Special Information for Surgical/Dermatohistopathology Submissions

- 1. 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.
- 2. Please 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.
- 3. Please 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].
- 4. 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.]
- 5. There are now two levels of charges for surgical submissions—will depend on the number and/or the size of the submissions:
 - a. The 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.
 - b. The Biopsy Surgical -> 3 or a single mass > 2 cm dia. fee will apply if you are submitting 4 or more tissues \mathbf{OR} if the base of any of your submitted tissues (single or combined) exceeds the 6 x 6 cm grid below.
 - c. 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.



6. See <u>Instructions for Dermatohistopathology Service PDS</u> on the PDS website (<u>pdsinc.ca</u>) for additional information.

Version Date: June 1, 2023 Page 18 of 30

Special Information for Microbiology Submissions

- 1. 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:
 - a. 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) \$30.00.
 - b. 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 \$50.00.

2. Bacteriology/Parasitology Submissions

- a. For the diagnosis of bacterial disease, it is important that samples reach the Bacteriology Laboratory as soon as possible after collection.
- b. 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.
- c. 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.
- d. 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.
 - a. Collect samples aseptically and before administration of any form of treatment.
 - b. Material sent on swabs is liable to desiccation. Moisten swabs with sterile saline or water.
- e. When requesting a fecal culture and parasitology, please submit approximately 10 g of feces.
 - a. 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 g 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.

f. Sample collection/shipping:

- i. Tissues: placed in a sealed leak proof rigid container. Plastic bags are not recommended. One tissue per container. Can ship on ice.
- ii. Swabs: are submitted quite often. Please choose one that has a non-nutritional transport medium (gel media) to ensure they do not become desiccated.
- iii. Milk: collected aseptically in a sterile screw-capped tube or bottle.
- iv. Urine: collected aseptically by midstream, catheter or preferably by cystocentesis.
- v. Feces: should be obtained directly from the rectum. Ground droppings should be avoided because of environmental contamination.
- vi. Blood: collected aseptically in volume of 1 ml to 5 ml for small animals, and 5 ml to

Version Date: June 1, 2023 Page 19 of 30

- 10 ml for large animals. Three to four samples are necessary.
- vii. 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.
- viii. 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.

3. PCR Submissions

- a. 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.
- b. If you are 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.
- c. 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 A.M. STAT testing may not be available for all PCR tests.
- d. PCR STAT requests:
 - i. New PCR tests have been created for the tests commonly requested STAT (PRRS, Porcine Corona Panel, Mycoplasma hyopneumoniae, Equine Respiratory Panel, Equine herpesvirus 1 and 4, refer to Test section of this guide. These tests include the STAT fee.
 - ii. 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)
- iii. **Not all PCR tests are available STAT.** Contact PDS Diagnostic Services Office (306-966-7316) to confirm if STAT testing is available.
- iv. Samples must arrive in the lab by 10 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.
- v. Tests that require bacterial culture for extraction will have longer turnaround times. These samples will be forwarded to the bacteriology section for culture before they can be submitted to the PCR section for testing.
- e. 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.

Version Date: June 1, 2023 Page 20 of 30

4. Virology, Serology, Immunology Submissions

a. Virus Isolation

The charge for the first sample includes a set-up fee plus the charge for the sample. Additional samples would not be charged the set-up fee, only the cost per sample. See appropriate test for cost of multiple samples.

b. Fluorescent antibody test (FAT)

The charge is for four pieces of tissue (what will fit on a slide) tested for two viral antigens. Requests for additional viral antigens would incur extra charges (per each antigen). When more than four pieces of tissue are received, costs would double accordingly. See appropriate test for cost of multiple samples.

c. The Companion Serology

The charge for the first sample includes a set-up fee plus the charge for the sample. Additional samples would not be charged the set-up fee, only the cost per sample. See appropriate test for cost of multiple samples.

d. Immunoglobulin Quantification

The charge for the first sample includes a set-up fee plus the charge for the sample. Additional samples per isotype would not be charged the set-up fee, only the cost per sample. See appropriate test for cost of multiple samples.

Sampling for Ergot and Mycotoxin Analysis

- 1. 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.
 - a. 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.
 - b. 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.
 - c. It is important to not miss these pockets, or sample only them, as they are not a good representation of the whole lot.
- 2. 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).
 - a. The sampling probe should be long enough to reach the bottom of the container.
 - b. It is recommended that each portion be about 200 g and one portion be taken for every 200 kg of product.
 - c. If this aggregate sample is too large, it should be blended, and a representative subsample of an appropriate size (~1 kg) taken.
 - d. Dynamic lots such as conveyor belts should involve multiple samples across the entire cross section of the moving stream.

Version Date: June 1, 2023 Page 21 of 30

3. Samples should be packaged in a large heavy duty zip lock freezer bag then shipped in an appropriately sized box; clearly identified with the sample ID and owner's name and sent with the completed submission form to (do not place submission form inside the bag with the sample):

Prairie Diagnostic Services 52 Campus Drive Saskatoon, SK, S7N 5B4 306-966-7316

- 4. Samples may be shipped to PDS by bus, courier, or mailed.
 - a. Prairie Diagnostic Services has negotiated bulk rates from Purolator.
 - i. If Purolator shipments are available in your area, samples may be sent collect to PDS and we will bill back the costs to you.
 - b. For more courier information see **Purolator Courier Rates** in the Introduction section of this Guide or on the PDS website at Purolator Courier Rates.

Research, Surveillance and Other Specialized Testing

PDS has implemented a process to ensure that when clients have a research, surveillance, or other specialized testing request, PDS personnel will work with clients to identify specific requirements and ensure that the PDS laboratory can meet the client's needs. Submit requests 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 **Special Project** is a client request which meets one or more of the following criteria:

- 1. Exceeds \$2000.00 in testing costs;
- 2. Customized pricing has been requested;
- 3. The test method is to be altered or new test to be developed as per client specifications;
- 4. 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.

- 1. If testing fits PDS' organizational mandate.
- 2. Which laboratory procedure is to be used or if an acceptable method is available for the required testing.
- 3. 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.
- 4. Completion of a cost analysis.
- 5. Ensuring any technical training required for satisfactory performance of the procedure can be completed in time to satisfy the requirements of the requested testing.
- 6. If adequate numbers of technical staff are available to complete the testing within an acceptable turnaround time, in addition to performing previously mandated testing.
- 7. If subcontracting is required it will be documented.

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

Version Date: June 1, 2023 Page 22 of 30

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)

Leptospira sp.

Listeria sp.

Bovine herpes virus type 1 (IBR) Mannheimia haemolytica

Bovine parainfluenza virus (PI3) Mycoplasma bovis

Bovine respiratory syncytial virus Neospora sp.
Campylobacter species Papillomavirus

Canine distemper virus

Porcine reproductive respiratory syndrome virus

Canine parvovirus Rabies virus

Chlamydophila sp. Rotavirus A – Bovine only

Coxiella sp. Salmonella sp.
Equine herpesvirus-1 Sarcocystis sp.
Feline calicivirus Sarcocystis neurona
Feline herpes virus Toxoplasma gondii

Feline infectious peritonitis virus

Transmissible gastroenteritis virus (TGE)

Feline leukemia virus

Transmissible spongiform encephalopathy

Feline panleukopenia virus (TSE)– CWD and Scrapie

Francisella tularensis Tritrichomonas fetus Histophilus somni Trypanosoma evansi

Influenza A virus

Cellular antigens detected on formalin-fixed paraffin blocks include:

ACTH Glial fibrillary acid protein

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
Desmoglein 1 & 2 Synaptophysin
Factor VIII—related antigen (von Willebrand) Thyroglobulin
Gastrin Vimentin

Please refer to Immunohistochemical Stains in this Test Section of the guide for the IHC prices.

Version Date: June 1, 2023 Page 23 of 30

Molecular Diagnostics

Polymerase Chain Reaction (PCR) Reference Guide

Anthrax Influenza A virus, in all species

Avian Influenza virus (CFIA Accredited Test) Lawsonia intracellularis

Avian Influenza virus H5: H7 Malignant Catarrhal Fever (MCF)

Mycobacterium sp. (Speciation can be done by Avian paramyxovirus-1 (CFIA Accredited Test)

Bacterial Identification by Sequencing sequencing)

Bovine coronavirus Mycoplasma sp. (Speciation can be done by

Bovine Herpesvirus -1 (BHV-1) sequencing)

Bovine Papilloma virus Mycobacterium avium spp. avium

Mycobacterium avium spp. paratuberculosis Bovine Parainfluenza -3

Bovine respiratory syncytial virus (BRSV) (Johne's Disease) Bovine Respiratory Panel (5 or 6 targets) Mycobacterium bovis

Bovine rotavirus Mycoplasma bovis

Bovine viral diarrhea virus (BVDV) Mycoplasma gallisepticum /synoviae Brachyspira hyodysenteriae and pilosicoli Mycoplasma haemofelis, haemominutum

Campylobacter sp. Mycoplasma hyopneumoniae

Campylobacter fetus ssp. fetus Mycoplasma sp. Identification by Gene

Campylobacter fetus ssp. venerealis Sequencing

Chlamydophilia abortus Mycoplasma hyosynoviae Chlamydophilia psittaci Mycoplasma hyorhinis

Classical Swine Fever Virus (CFIA Accredited Test) Mycoplasma ovipneumonia

Clostridium difficile Genotyping Parainfluenza 3 virus Clostridium perfringens genotyping Pasteurella multocida tox A detection

Coxiella burnetti Porcine circovirus-2 E. coli O157:H7 Porcine circovirus-3

E. coli virulence factors Bovine, Porcine, Canine panels Porcine corona panel (PEDV, TGEV, pdCov)

Porcine Parvovirus Porcine epidemic diarrhea virus

Equine herpesvirus (EHV) types 1 & 4 **PRRS**

Equine influenza virus Porcine rotavirus, group specific (A, B, or C)

Equine Respiratory Panel Streptococcus equi

Flax CDC Triffid Swine influenza virus, H1, H3

Foot and Mouth Disease (CFIA Accredited Test) Transmissible gastroenteritis virus (TGEV)

Francisella tularensis Tritrichomonas fetus Haemophilus parasuis Ureaplasma sp.

Herpesvirus sp. Ureaplasma diversum

Infectious bovine rhinotracheitis virus (IBR) West Nile Virus

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

Version Date: June 1, 2023 Page 24 of 30

Serology Reference Guide

Bovine coronavirus (BCV) Feline herpesvirus

Bovine herpesvirus -1 (IBR)

Bovine leukosis virus

Feline Infectious Peritonitis
Feline FeLV/FIV combo

Bovine parainfluenza virus – 3 (PI3)

Mannheimia haemolytica

Paraing parainfluenza virus – 3 (PI3)

Mannheimia haemolytica

Bovine respiratory panel – includes IBR, Mycobacterium paratuberculosis BRSV, PI3, BCV Mycoplasma hyopneumoniae

Bovine respiratory syncytial virus (BRSV) Neospora - Bovine

Bovine viral diarrhea virus Ovine Progressive Pneumonia

Brucella abortus PRRS

Brucella canis Swine influenza A virus

Caprine arthritis and encephalitis virus

Transmissible Gastroenteritis -TGE/PRCV

Equine herpesvirus – 1 and 4 Differentiation

Equine Infectious Anemia Tick Transmitted Disease Panel

Feline calicivirus West Nile virus

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

Virology/TSE Test Reference Guide

Electron microscopy – EM; Enzyme Linked Immunoassay - ELISA (tissues, feces); Fluorescent antibody test - FAT (tissues, feces); Viral isolation - VI)

Bovine adenovirus: VI Chronic Wasting Disease: ELISA

Bovine coronavirus: EM, FAT Equine herpesvirus -1; FAT

Bovine enterovirus: VI Equine rotavirus: EM
Bovine herpesvirus mammilitis (BHV-2): VI Feline calicivirus: VI
Bovine herpesvirus -1: FAT, VI Feline herpesvirus: VI

Bovine papular stomatitis: VI Feline Panleukopenia virus: VI

Bovine parainfluenza virus - 3: FAT, VI Orf virus: VI

Bovine respiratory syncytial virus: FAT, VI

Bovine rotavirus: FAT

Porcine parvovirus: FAT

Porcine rotavirus: EM, FAT

Bovine viral diarrhea virus: FAT, VI Scrapie: ELISA Canine parvovirus: Antigen ELISA, FAT, VI TGE: FAT

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

Version Date: June 1, 2023 Page 25 of 30

Toxicology Reference Guide

5-fluorouracil (antineoplastic) Mineral Panel #1: Mg, Mn, Fe, Co, Cu, Zn, Se, Mo

Antimony Mineral Panel #2: K, Ca, Na
Arsenic Mineral Panel #3: Tl, Pb, As, Cd

Barium Mineral Panel #4: Be, Mg, V, Cr, Mn, Fe, Co, Ni, Beryllium Cu, Zn, As, Se, Sr, Mo, Cd, Sn, Sb, Ba, Tl, Pb, Bi

Bismuth Molybdenum

Blue Green Algae Mycotoxin Panel – see Test Guide for compounds

Cadmium included Calcium * Nickel Cholinesterase **Nitrate** Chromium **Nitrite** Cobalt Potassium * Selenium Copper Cyclophosphamide (antineoplastic) Sodium * Ergot Panel – see Test Guide for compounds Strontium included Strychnine Iron Thallium Lead Tin

Magnesium *VanadiumManganeseVitamin AMercuryVitamin DMethemoglobinVitamin E

Zinc

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

Version Date: June 1, 2023 Page 26 of 30

^{*}Also see Test Guide for other options for serum samples.

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: please 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

Safranine O/Fast Green - cartilage

Schmorl's - lipofuscins, melanin

Sirius Red (Picrosirus) - 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.

Version Date: June 1, 2023 Page 27 of 30

Purolator Courier Rates

Puropak (next day delivery, up to 3 pounds)

Customer packaging (boxes) will cost more depending on size.

DO NOT select 9 A.M. or 10:20 A.M. delivery as extra charges will be incurred.

Most locations in Saskatchewan \$14.25

Alberta (Calgary/Edmonton) \$14.25

Most other Alberta locations \$17.00

Winnipeg \$14.25

Other Manitoba locations/rest of Western Canada \$26.00

* 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.

- Purolator account number: 7566589

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

For pick-ups, track and trace, and preprinted waybills, contact your Courier. Preprinted waybills are preferred and when ordering note that your clinic is the Sender and Prairie Diagnostic Services is the Receiver. Make certain to ask that the collect shipment service is marked off (Payment Receiver Account box is filled in).

- 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. 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. \$21.00

• 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)

Version Date: June 1, 2023 Page 28 of 30

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". Filling out the waybill from this on-line link on your Web Client account will access this NEW delivery option into 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

- 1. 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.
- 2. Prices for referred out tests are guidelines as referral laboratory prices are subject to change without notice.
- 3. Prices for testing shipped to USA labs are now listed in Canadian dollars.
- 4. Please 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.
- 5. 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

- 1. An "Agent for Shipment" Form is required for all referred out tests that are shipped to a lab in the United States.
- 2. Photocopy the "Agent for Shipment" Form with your clinic letterhead (address and contact information) at the top.
- 3. **Agent for Shipment Form** can be found in the Appendix section of the printed guide or on the PDS website (pdsinc.ca).
- 4. 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.

Version Date: June 1, 2023 Page 29 of 30

Submissions for Export Testing

- 1. See Appendix section of the printed guide for "FAVN Report From" for Rabies test and "Canine Export Submission Form" for Serology tests.
- 2. Complete the form(s) and include with your submission.
- 3. See the following websites for additional information.

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

Serology http://www.ksvdl.org/laboratories/serology/Forms | College of Veterinary

Medicine at MSU

4. **For Rabies:** Results and Invoice will be sent directly from the Kansas State Rabies Lab to the Clinic that refers the sample to PDS. PDS will only bill the Clinic for Shipping and Handling.

Submission for Calculi (Urolith) Analysis

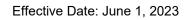
- 1. Submission form can be found in Appendix section of the this guide or on the University of Guelph Urolith Centre website CVUC Submission form English 2018.pdf (uoguelph.ca).
- 2. Complete form and include with your submission, making sure to include the animal's diet.

Version Date: June 1, 2023 Page 30 of 30





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 WCVM 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 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. Centrifuge and immediately transfer plasma into a plastic tube. Label sample as plasma. Freeze immediately. Ship on ice.	1 Week		
ACTH, Insulin, Leptin Panel (Cornell)	RO	EDTA plasma - 1 mL	Purple 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	1	(see Multi-APP (Actinobacillus pleuropneumoniae Serology) (Université of Montréal))					
Adenovirus		(see Canine Vaccine Panel 2 (Cornell))					



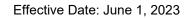


Test Name	Method	Sample / Comments	Container	Handling / Shipping		Supported Price (SK only)	List Price
Adrenal Panel - Canine (Tennessee)	RO	Serum - 2 mL for each sample Collect post sample 1 hour after injection (2 hours if gel ACTH is used). Gross hemolysis will affect the test. Includes: ACTH Cortisol, 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	RO	Serum - 0.5 mL	Red top tube	Centrifuge ASAP, separate and	2 Weeks		
(Tennessee)		Avoid hemolysis and lipemia. Includes: Estradiol, Androsternedione, 17- hydroxyprogesterone.		freeze. Ship on ice packs. Include a completed "Agent for Shipment" form and health certificate.			
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	Freeze. Ship on ice packs.	1 Week		
Allergy Panel, Environmental	RO	Serum - 3 mL	Red top tube	Refrigerate up to 7 days. Freeze for	1 Week		
(IDEXX) Canine, Feline		Contact PDS for additional information/test selection.		longer storage. Ship on ice packs.			
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)					



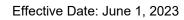


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
Ammonia - Post (RUH) VMC clients only	RO	Heparinized whole blood - 1 mL Sample must be analyzed within 30 minutes of collection or centrifuged immediately and plasma frozen. Avoid hemolysis. Available to VMC clients only.	Green top tube	Centrifuge immediately. Freeze plasma. Ship plasma on ice.	1 Day
Ammonia - Resting (RUH) VMC clients only	RO	Heparinized whole blood - 1 mL Sample must be analyzed within 30 minutes of collection or centrifuged immediately and plasma frozen. Avoid hemolysis. Available to VMC clients only.	Green top tube	Centrifuge immediately. Freeze plasma. Ship plasma 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	Refrigerate. 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.	3 - 5 Days



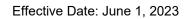


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
Anticoagulant Screen (Guelph)	RO	Liver - 10 grams, serum - 5 mL, EDTA blood - 5 mL, suspect material - 20 grams Liver and serum are the best samples. Includes: Brodifacoum, Bromadialone, Chlorophacinone, Coumachlor, Coumafuryl, Coumatetralyl, Dicoumarol, Difenacoum, Difethialone, Diphacinone, Flocoumafen, Pindone, Valone, Warfarin.	Leak proof container	Refrigerate. 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	ВАСТКВ	Bacterial Culture Additional charge per significant organism.	Leak proof container		1 - 2 Days
Antimicrobial Susceptibility Test (AST) - Companion - Dermatology/Ear	ВАСТКВ	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	ВАСТКВ	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	ВАСТКВ	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	ВАСТКВ	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





Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
Antimicrobial Susceptibility Test (AST) MIC - COMPAN1F	MIC	Bacterial Culture Additional charge per significant organism.	Leak proof container		1 - 2 Days
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. 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.		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))			
Avian Bacterial and Viral Profile PCR (IDEXX)	RO	Heparinized or EDTA whole blood - 0.1 mL	Green top tube	Refrigerate. Ship on ice packs.	1 Week



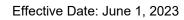


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
Avian Bornavirus PCR (Guelph)	RO	Tissues, swabs May pool up to 5 samples together, indicate on submission form.	Swab in viral transport media or sterile, leak proof container	Refrigerate. 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 - positive Typing (H5;H7) 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 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
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/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



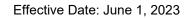


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
Avian/Reptile/Amphibian Standar Panel (Chemistry Panel)	d ^{CA}	Serum or heparinized plasma - 0.5 mL Includes: Na, K, Cl, bicarb, anion gap, Ca, Pi, Glu, CK, AST, GLDH, GGT, Chol, 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 (Michigar	n) RO	Serum - 1 mL	Red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks
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 BACTKB DE-BACTI	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



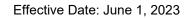


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
Bacterial Culture and	BACTIC	Swabs	Sterile, leak proof	Ship on ice packs.	2 - 4 Days
Susceptibility - Exotic - includes Avian, Reptile, Rabbit, Rodent	BACTKB DE-BACTI	Includes 1 susceptibility.	container or swab		
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	BACTIC DE-BACTI 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
Bacterial Isolate Serotyping by Sequencing 20x	GS	(Salmonella enterica, Streptococcus suis, Haemophilus parasuis) Turnaround time and coverage can be adjusted to client needs.			2 Weeks
Bacterial Metagenomic Whole- Genome Sequencing ~1GB	GS	Turnaround time and coverage can be adjusted to client needs.			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)			



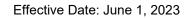


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported Test / TAT Price (SK only)	List Price
Bartonella PCR (Vector Borne)	RO	EDTA whole blood - 2 mL A positive test will result in speciation of the following at no extra charge - B. henselae, B. clarridgeiae, B. quintana, 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	Red or green top tube	Refrigerate. Ship on ice packs.	1 Day	
BHV-1		(see Infectious Bovine Rhinotracheitis (IBR) Virus Isolation)				
Bicarbonate		(see Single Chemistry)				
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	BIOPRYN	Serum - 0.5 mL Cut off time 2:00 PM Wednesday, results Thursday PM.	Red tube	Refrigerate. Ship on ice packs.	Once per Week	





Test Name	Method	Sample / Comments	Container	Handling / Shipping		Supported	List Price
Biopsy - Gastrointestinal - >3 Tissues	NCPSURG	Full-thickness or endoscopic gastrointestinal biopsies	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.		Price (SK only)
Biopsy - Gastrointestinal - Up to 3 Tissues	NCPSURG	Full-thickness or endoscopic gastrointestinal biopsies	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 - > 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.	ŕ	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.	,	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.	•	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)	n 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		



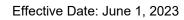


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supporte Test / TAT Price (Sk	
Blood Gas Saskatoon Clients Only	BGA	Heparinized whole blood - minimum 1 mL. Serum is not acceptable. Includes: pH, pCO2, pO2, HCO3, BE, Na, K, Cl, glu, lactate, ionized (free) Ca.	Heparinized syringe	Recap syringe immediately after collection (sample must remain anaerobic). Mix well and place on ice pack. Sample must be analyzed within 1 hour of collection. Ship on ice pack.	1 Day	
Blood Grouping Canine, Feline	BGR	EDTA whole blood - 0.5 mL	Purple top tube	Refrigerate. Ship on ice packs.	1 Day	
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	НА	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) ELISA)				
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	n) RO	Serum - 1 mL, feed - 5 grams, stomach contents - 5 mL	Red top tube or leak proof container	Ship on ice packs.	7 Weeks	
Bovine Adenovirus Virus Isolatio	on ^{ISO}	GI or Respiratory Tract Tissue Pricing for multiple samples - \$36.12 per sample supported price, \$40.13 per sample list price. Contact PDS Lab for information regarding turn around times.	Leak proof container	Refrigerate. Ship on ice packs.		



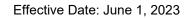


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
Bovine Coronavirus		(see Bovine Respiratory Panel - Antibody)			
Bovine Coronavirus and Rotavirus FAT	FAT	Spiral colon or ileum	Leak proof container	Refrigerate. Ship on ice packs.	2 - 5 Days
Bovine Coronavirus and Rotavirus PCR	PCRREALTIME	Jejunum, ileum, or feces	Swab or leak proof container	Refrigerate. Ship on ice packs.	3 - 5 Days
Bovine Coronavirus Antibody ELISA	ELISAV	Serum - 1 mL Also see Bovine Respiratory Panel.	Red top tube	Refrigerate. Ship on ice packs.	5 - 10 Days
Bovine Coronavirus PCR	PCRREALTIME	Spiral colon, ileum or feces	Swab or leak proof container	Refrigerate. Ship on ice packs.	3 - 5 Days
Bovine Diarrhea Panel	BACTIC BACTKB MICROFAT PCRMULTIPLEX 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 Herpes Mammilitis (BHV-2) Virus isolation	ISO	Vesicle or Lesion Scrapings Pricing for multiple samples - \$36.12 per sample supported price, \$40.13 per sample list price. Contact PDS Lab for information regarding turn around times.	Leak proof container	Refrigerate. Ship on ice packs.	3 Weeks
Bovine Leukosis Virus (BLV) ELISA	ELISAS	Serum - 1 mL	Red top tube	Refrigerate. Ship on ice packs.	Once per Week
Bovine Papilloma Virus PCR	PCRREALTIME	Tissues - formalin fixed or embedded	Leak proof container	Refrigerate. Ship on ice packs.	3 - 5 Days
Bovine Papular Stomatitis PCR (Guelph) Bovine, Caprine, Ovine	RO	Skin biopsy; crust	Leak proof container	Refrigerate. Ship on ice packs.	1 Week
Bovine Parainfluenza 3 (PI3) ELISA	ELISAV	Serum - 1 mL Also see Bovine Respiratory Panel.	Red top tube	Refrigerate. Ship on ice packs.	5 - 10 Days



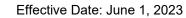


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
Bovine Parainfluenza 3 (PI3) PCR	PCRREALTIME	Lung, nasal swabs or tracheal washings	Swab or leak proof container	Refrigerate. Ship on ice packs.	3 - 5 Days
Bovine Parainfluenza 3 (PI3) Virus Isolation	ISO	Lung, nasal swabs or tracheal washings Pricing for multiple samples - \$36.12 per sample supported price, \$40.13 per sample list price. Contact PDS Lab for information regarding turn around times.	Swab or leak proof container	Refrigerate. Ship on ice packs.	
Bovine Parainfluenza-3		(see Bovine Respiratory Panel - Antibody)			
Bovine Respiratory Panel - 6 PCR Targets Includes IBR, BRSV, PI-3, BCV, M. bovis and Influenza D	PCRREALTIME	Lung, nasal swabs or tracheal washings	Swab or leak proof container	Refrigerate. Ship on ice packs.	Once per Week
Bovine Respiratory Panel - 7 PCR Targets Includes IBR, BRSV, PI-3, BCV, M. bovis, BVD and Influenza D	PCRREALTIME	Lung, nasal swabs or tracheal washings	Swab or leak proof container	Refrigerate. Ship on ice packs.	Once per Week
Bovine Respiratory Panel - 7 PCR Targets + C&S Includes IBR, BRSV, PI-3, BCV, M. bovis, BVD and Influenza D	BACTIC BACTKB PCRREALTIME DE-BACTI	Lung, nasal swabs or tracheal washings	Swab or leak proof container	Refrigerate. Ship on ice packs.	5 - 10 Days
Bovine Respiratory Panel - Antibody Includes IBR, BRSV, PI-3 and BCV	ELISAV	Serum - 1 mL Volume discounts apply for 15 or more samples.	Red top tube	Refrigerate. Ship on ice packs.	5 - 10 Days
Bovine Respiratory Syncytial Virus (BRSV) ELISA	ELISAV	Serum - 1 mL Also see Bovine Respiratory Panel.	Red top tube	Refrigerate. Ship on ice packs.	5 - 10 Days
Bovine Respiratory Syncytial Virus (BRSV) PCR	PCRREALTIME	Lung, nasal swabs or tracheal washings	Swab or leak proof container	Refrigerate. Ship on ice packs.	3 - 5 Days
Bovine Respiratory Syncytial Virus (BRSV) Virus Isolation	ISO	Lung, nasal swabs or tracheal washings Successful isolation unlikely unless sample received within hours of collection. Contact PDS Lab for information regarding turn around times.	Leak proof container	Refrigerate. Ship on ice packs.	



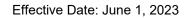


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
Bovine Rotavirus PCR	PCRREALTIME	Jejunum, ileum, or feces	Swab or leak proof container	Refrigerate. Ship on ice packs.	3 - 5 Days
Bovine Viral Diarrhea (BVD) Type 1 Virus Neutralization	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
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.		Refrigerate. Ship on ice packs.	3 - 5 Days
Bovine Viral Diarrhea Virus (BVD) Virus Isolation	ISO	Ileum, lymphoid tissues, kidney, or EDTA, heparinized whole blood or serum For PI cattle > 6 months - serum; For PI cattle < 6 months - EDTA or heparin for buffy coat; For acute infection submit EDTA or Heparin for buffy coat.	Leak proof container or red, purple or green top tube	Refrigerate. Ship on ice packs.	7 - 8 Days
ВРАТ		(see Brucella abortus (Buffered Plate Agglutination Test - BPAT))			





Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
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 - Antibody)			
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 \$37.02 is added per submission/owner for administrative costs.	Red top tube	Refrigerate. Ship on ice packs.	1 Day
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)			



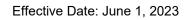


Test Name	Method	Sample / Comments	Container	Handling / Shipping		Supported Price (SK only)	List Price
BVD IHC Discontinued		(see Bovine Viral Diarrhea Virus (BVD) Pooled PCR)					
Cadmium		(see Mineral Panel #4)					
Cadmium		(see Mineral Panel #3)					
Calcium - Ionized Saskatoon Clients Only	BGA	Heparinized whole blood - minimum 1 mL. Serum is not acceptable. Includes: pH, Ionized Ca, Ionized Ca at pH 7.40.	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)					
Calcium - Total - Serum		(see Single Chemistry)					
Calculi (Urolith Centre) Canine, Feline	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 PCR	PCRREALTIME	Tissues	Leak proof container		3 - 5 Days		
Campylobacter fetus ssp venerealis PCR	PCRREALTIME	Preputial wash/scraping or cervical muscus	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/scraping or cervical muscus	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		





Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Sup Test / TAT Price	pported ce (SK onlv)	List Price
Campylobacter sp. PCR	PCRCONV	Preputial wash/scraping or cervical muscus	In Pouch™ TF or PBS		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	EDTA whole blood - 5 mL, CSF - 0.5 mL Dead animal: urinary bladder, intestine, lymph nodes, brain.	Purple top tube	Refrigerate. Ship on ice packs.	1 Week		
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.		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.		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	PCRREALTIME	Nasal swab, transtracheal wash, fresh lung tissue	Leak proof container	Refrigerate. Ship on ice packs.	3 - 5 Days		





Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
Canine Parvovirus SNAP ELISA	ELISAV-I	Feces	Leak proof container	Refrigerate. Ship on ice packs.	1 Day
Canine Parvovirus Virus Isolation Virus Isolation in Cell Culture	ISO	Feces or Intestine Preferred test if diarrhea is present for several days. Pricing for multiple samples - \$40.13 per sample.	Leak proof container	Refrigerate. Ship on ice packs.	7 - 8 Days
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
Canine Vaccine Panel IFA (IDEXX) IFA	RO	Serum - 1 mL Includes: Canine Distemper, Canine Parvovirus	Red top tube	Refrigerate. 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, Equine, Feline	RO	Serum - 0.5 mL Note: Equine samples may be submitted, but no reference intervals are available. Price listed is for Canine and Feline; contact PDS (306-966-7316) for current pricing for Equine.	Red top tube	Refrigerate up to 5 days. Freeze for longer storage. Ship on ice packs.	2 Weeks





Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported Test / TAT Price (SK on	List Price
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	НА	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	НА	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	НА	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)				
Chemistry - Single Test		(see Single Chemistry)				
Chemistry Panel - 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	
Chlamydophila abortus PCR	PCRREALTIME	Tissue, abomasal fluid	Swab or leak proof container		3 - 5 Days	



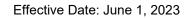


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
Chlamydophila psittaci PCR	PCRREALTIME	Tissue, cloacal or eye swabs	Swab or leak proof container	Refrigerate. Ship on ice packs.	3 - 5 Days
Chloride		(see Single Chemistry)			
Cholesterol		(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	Leak proof container	Refrigerate. Ship on ice packs.	2 Days
Clostridium difficile genotyping PCR	PCRMULTIPLEX	Bacterial Culture A, B toxin types.			Once per Week
Clostridium Fluorescent Antibody Test	FATB	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 toxin types.			Once per Week



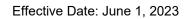


Test Name	Method	Sample / Comments	Container	Handling / Shipping		Supported Price (SK only	List Price
Clotting Factor(s) Activity (Cornell)	RO	Citrated plasma - 2 mL Citrated collection tubes available, contact PDS Lab. Factors offered: VII, VIII, IX, X, XI, XII. Cost is per factor assayed. Price listed is for Canine and Feline; contact PDS (306-966-7316) for current pricing for other species.	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)	СО	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)	СО	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.	1 Week		
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		





Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule	Supported Price (SK only	List Price
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.		Price ISK Office	
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 Quantitive 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		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)					
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 - Antibody)					
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)					



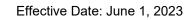


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
Cortisol		(see ACTH Stimulation Test)			
Cortisol Post ACTH or Dexamethasone	IMMUL	Serum - 0.2 mL Must accompany a resting Cortisol sample. See Clinical Pathology Testing and Sample 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 lymphadenititis) (UC Davis CAHFS) Caprine, Equine, Ovine	RO	Serum - 1 - 2 mL	Red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks
Coxiella burnetti PCR	PCRREALTIME	Placenta	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 \$17.05 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 \$17.05 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 \$17.05 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



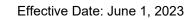


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported Test / TAT Price (SK onl	List Price v)
Cross-Match - Miscellaneous	XMATCH	EDTA whole blood + 1 mL serum from recipient and each donor. Price is Crossmatch setup fee. An additional fee of \$17.05 will be charged for each donor.	1 purple top tube and 1 red top tube from recipient and each donor	Refrigerate. Ship on ice packs.	Minimum 2 Hours	
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)				
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 Include a same day CBC - see CBC for charges	СҮТО	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 Include a same day CBC - see CBC for charges	СҮТО	Air-dried, unstained smears + EDTA whole blood - tube 2/3 full (minimum 1/3 full) + 2 blood smears If less than minimum received partial results may be reported. Extra charges (\$7.44 per slide) will apply if more than 8 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		Supported Price (SK only	List Price
Cytology - Bone Marrow Smear Core Include a same day CBC - see CBC for charges	S & CYTO	Fixed bone core + air-dried, unstained smears + EDTA whole blood - tube 2/3 full (minimum 1/3 full) + 2 blood smears If less than minimum received partial results may be reported. Extra charges (\$7.44 per slide) will apply if more than 8 bone marrow slides are submitted.		Refrigerate purple top tube. Ship on ice packs.			
Cytology - CSF	СҮТО	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	СУТО	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).		Refrigerate. Ship on ice packs.	1 Day		
Cytology - Fluids (per tube) Price for 1							
Cytology - Fluids (per tube) 2 or more							
Cytology - Multiple Lymph Node (>2 sites)	es CYTO	Lymph nodes from multiple sites (> 2 sites) submitted at the same time from the same animal - maximum 8 slides. Extra charges (\$7.44 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		



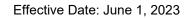


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
Cytology - Smears or Imprints Price for 1 site	СҮТО	Air-dried, unstained aspirate smear(s) or tissue imprints Discounts apply if submitting multiple sites - see Cytology - Smears or Imprints (per site). Extra charges (\$7.44 per slide) will apply if more than 8 slides submitted per site. Following a non-diagnostic cytology, resubmission within 2 weeks must quote original case number and a \$30 resubmission fee will be charged.	Slides	Protect smears from formalin.	1 Day
Cytology - Smears or Imprints Price for 1 site Price for 1					
Cytology - Smears or Imprints Price for 1 site Price for 2					
Cytology - Smears or Imprints Price for 1 site Price for 3					
Cytology - Smears or Imprints Price for 1 site Price for 4					
Cytology - Smears or Imprints Price for 1 site Price for 5					
Cytology - Smears or Imprints Price for 1 site Price for 6					
Cytology - Smears or Imprints Price for 1 site Price for 7					
Cytology - Smears or Imprints Price for 1 site Price for 8					





Test Name	Method	Sample / Comments	Container	Handling / Shipping		Supported Price (SK only)	List Price
Cytology - Smears or Imprints Price for 1 site Price for 9							
Cytology - Smears or Imprints Price for 1 site 10 or more							
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)					
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.		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		
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		



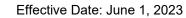


Test Name	Method	Sample / Comments	Container	Handling / Shipping		Supported Price (SK only)	List Price
Direct Exam - Bacteriology	BACTI	Swab, tissues, hair, urine, etc. Acid-fast, Dark-field, Giemsa, Gram stain, KOH, Methylene-blue, wet mount and others.	Sterile, leak proof container	Refrigerate. Ship on ice packs.	1 Day		
Distemper		(see Canine Distemper Virus IHC)					
Distemper		(see Canine Distemper Virus PCR (Guelph))					
Distemper		(see Canine Vaccine Panel IFA (IDEXX))					
E.coli 13 virulence factors	PCRMULTIPLEX	Bacterial Culture	Leak proof container		Once per Week		
E.coli Bovine Enteric Virotyping	PCRMULTIPLEX	Bacterial Culture Includes: F5, STa, Stx1, Stx2, Eae	Leak proof container		Once per Week		
E.coli Canine Enteric Panel	PCRMULTIPLEX	Bacterial Culture Includes: STa, Stx1, Stx2, Eae	Leak proof container		Once per Week		
E.coli O157:H7 PCR	PCRREALTIME	Bacterial Culture	Leak proof container		Once per Week		
E.coli Porcine Enteric Virotyping	PCRMULTIPLEX	Bacterial Culture Includes: F4, LT, STa, STb, Stx2e, Eae, AIDA- I	Leak proof container		Once per Week		
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		



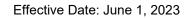


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
EEE		(see Equine Encephalitis - Eastern (EEE) (IDEXX))			
Ehrlichia canis		(see Tick Transmitted Disease Panel (Canine) SNAP 4Dx Plus Test)			
Ehrlichia canis Antibody Screen - For 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 Includes: E. canis, E. chaffeensis, E. muris, E. 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))			
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)			
Electron Microscopy	VIR	Feces Call PDS Lab prior to submission.	Leak proof container	Refrigerate. Ship on ice packs.	Dependent on equipment availability
Encephalitis Panel		(see Equine Encephalitis Panel (EEE/WEE) (IDEXX))			



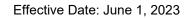


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
Encephalitozoon cuniculi Panel (PECUN) (IDEXX) - Rabbit	RO	Serum or heparinized plasma - 0.5 mL Avoid hemolysis. Includes: IgG, IgM, CRP.	Red or green top tube	Freeze. Ship on ice packs.	2 Weeks
Endogenous ACTH		(see ACTH, Endogenous)			
ЕРМ		(see Equine Protozoal Myeloencephalitis (Myelitis) (EPM) Western Blot (IDEXX))			
Equine Arteritis Virus PCR (IDEXX)	RO	Nasal swab, EDTA whole blood - 5 mL or semen Dead animal: lung. May pool up to 5 together, indicate on submission form. Pooling not recommended for semen.	Swab in 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
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: Clostridiuim difficile toxin A gene, Clostridiuim 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		1 Week



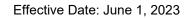


Test Name	Method	Sample / Comments	Container	Handling / Shipping		Supported Price (SK onlv)	List Price
Equine Diarrhea RealPCR Panel with Lawsonia intracellularis Antibody (IDEXX)	RO	Serum - 1 mL and feces - 5 grams in sterile container and feces in fecal culture (enteric pathogen) transport media (for reflex Salmonella culture if indicated) Collect sample prior to antibiotic administration. Includes: Clostridiuim difficile toxin A gene, Clostridiuim 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		
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 (EHV1) Virus Isolation	ISO	Tissues, swabs - 1 mL	Red tube	Refrigerate. Ship on ice packs.			
Equine Herpesvirus 1 and 4 (EHV1/EHV4) ELISA	ELISAV	Serum - 1 mL Test does not discriminate between type 1 and type 4 exposure.	Red top tube	Refrigerate. Ship on ice packs.	2 - 7 Days		





Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (SK only	List Price
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.	Swab, red or purple top tube. Swabs in leak proof container 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.	Swab, red or purple top tube. Swabs in leak proof container will not be processed.	Refrigerate. Ship on ice packs.	Same day 10 AM cut off		
Equine Herpesvirus Type 2 (EHV2 RealPCR (IDEXX)	2) 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.	1 Week		
Equine Herpesvirus Type 5 (EHV RealPCR (IDEXX)	5) 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.	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 added per sample		Refrigerate. Ship on ice packs.	1 - 2 Days		
Equine Influenza genotyping H3/H7 Genotyping A1 (H7), A2 (H3)	PCRNESTED	Done on Influenza A PCR Positive sample			3 - 5 Days		
Equine Influenza 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		



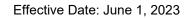


Test Name	Method	Sample / Comments	Container	Handling / Shipping		Supported Price (SK only)	List Price
Equine Metabolic Panel (Insulin and Endogenous ACTH)	IMMUL	Serum – 1 ml (Insulin) EDTA Plasma – 1.5 mL (Endogenous ACTH) Avoid hemolysis. For resting/basal insulin horses should NOT be fasted but be 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. Label the appropriate tubes as "serum" or "EDTA plasma". Freeze Immediately. Ship on ice packs.			
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)	CA IMMUL	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	Centrifuge samples. Plasma must be transferred to a plastic tube. Label tubes serum vs plasma. Freeze. 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 Neopspora 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 red top tube. Swabs in gel media will not be processed.		3 - 5 Days		



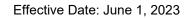


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
Equine Respiratory Panel PCR (STAT)	PCRREALTIME	Nasal swab or tracheal wash Includes: Equine Herpesvirus 1 and 4, Equine Influenza virus, Streptococcus equi. Additional charges will 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 red top tube. Swabs in gel media will not be processed.		Same day 10 AM cut off
Equine Rotavirus PCR (Guelph)	RO	Feces - 5 grams Includes: Coronavirus PCR, Rotavirus Group A and B PCR.	Sterile, leak proof container	Refrigerate. Ship on ice packs.	1 Week
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



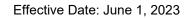


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
Ergot Panel 2020 6 Ergot Alkaloids	LCMS	Grain, feed - 200 - 2000 grams Includes: Ergocornine + Ergocorninine, Ergocristine + Ergocristinine, Ergocryptine + Ergocryptinine, Ergometrine + 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 - 0.5 mL Put in smallest tube possible and cap tightly. DO NOT expose to air.	Grey or red top tube	Sample 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
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: Chlamydophila 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
Fecal Culture - Companion	BACTIC BACTKB DE-BACTI	Feces 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



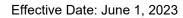


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
Fecal Culture - Large Animal	BACTIC BACTKB DE-BACTI	Feces or Intestine Bovine includes: aerobic, Salmonella; Caprine/Ovine includes: aerobic/anaerobic, Salmonella. Includes one susceptibility. For additional susceptibility see Antimicrobial Susceptibility Test.	Sterile, leak proof container or swab	Ship on ice packs.	2 - 4 Days
Fecal Culture - Porcine	BACTIC BACTKB DE-BACTI	Feces 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 Stability when refrigerated: ova and parasites 72 hours; Giardia antigen 48 hours; hookworm, roundworm, and whipworm antigens several weeks.	Sterile, leak proof container	Refrigerate. Ship on ice packs.	1 Week
Fecal Egg Sedimentation	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 Virus Isolation	ISO	Nasal or oral swabs, lung, trachea or tonsil Pricing for multiple samples - \$40.13 per sample.	Swab or leak proof container	Refrigerate. Ship on ice packs.	7 - 10 Days
Feline Coronavirus		(see Feline Infectious Peritonitis (FIP) Antibody)			



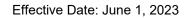


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule S	Supported Price (SK onlv)	List Price
Feline Health Screen - Basic Chemistry (standard panel), CBC, UA	CA HA UR	EDTA whole blood - tube 2/3 full (minimum 1/3 full) + 2 blood smears + serum - 0.5 mL + urine - 3 mL If less than minimum received partial results may be reported. Includes: CBC, Small Animal Standard Panel, Urinalysis.		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.		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 Herpesvirus		(see Feline Calicivirus/Herpesvirus Virus Isolation)					
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		
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 Week		





Test Name	Method	Sample / Comments	Container	Handling / Shipping		Supported Price (SK only	List Price
Feline Leukemia Virus (FeLV) PCR (WCVM 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 (WCVM Vet Path))					
FELV/FIV Snap Combo Elisa	ELISAI	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, Feline	RO	Serum - 0.5 mL	Red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
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 Avoid hemolysis.	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.	1 Week		





Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (SK only)	List Price
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	Resealable plastic bag		1 Day		
Flow Cytometry Only (Guelph) Canine, Feline	RO	Lymph node aspirate - prepare 1 smear, let air dry and place the rest of the sample in an EDTA tube by rinsing the needle and syringe with 2-3 mL of saline. If possible add 1-2 drops of serum which will keep cells stable for 72 hours if refrigerated. If cells are in saline without serum, they are stable for 48 hours refrigerated. Submit a copy of recent cytology report. EDTA blood 0.5 mL - prepare 1 smear, let air dry. EDTA blood is stable for 72 hours refrigerated. Submit a copy of recent CBC results.		Refrigerate. Ship on ice packs.	1 Week		





Test Name	Method	Sample / Comments	Container	Handling / Shipping		Supported Price (SK only	List Price
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		
Fluorescent Antibody (Additional Target)	FAT				1 - 2 Days		
Fluorescent Antibody Test (Tissues-2 targets)	FAT	Fresh or frozen tissue Cost is per slide for 2 antigens, for cost of additional targets see Fluorescent Antibody (Additional Target). See individual virus or cal PDS Lab for information.	Leak proof container	Refrigerate. Ship on ice packs.	2 - 5 Days		
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	PCRREALTIME	Contact PDS Diagnostic Pathologist or PDS lab for details.	Leak proof container	Refrigerate. Ship on ice packs.	3 - 5 Days		
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.	Red top tube. DO NOT use SST tube.	Refrigerate up to 5 days. Freeze for longer storage. 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		



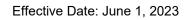


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported Test / TAT Price (SK only)	List Price
Fructosamine Add-On Canine, Feline	CA	Serum - 0.5 mL Add on to Small Animal Presurgical, Kidney/Electrolyte, Liver or Standard Panel. Does not include the cost of the chemistry panel.	Red top tube	Refrigerate. Ship on ice packs.	1 Day	
Fungal Culture Mycology	BACTIC DE-BACTI	Hair, skin scrapings For dermatophytes.	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, Aspergillis 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	
Gastrin - Post Sample (Michigan)	RO	Serum - 0.5 mL 24 hour fasting sample.	Red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks	
Gastrin - Pre Sample (Michigan)	RO	Serum - 0.5 mL 24 hour fasting sample.	Red top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks	
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	



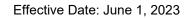


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule S Test / TAT F	Supported Price (SK only	List Price
Glasser's Disease		(see Glaesserella parasuis PCR)					
GLDH		(see Single Chemistry)					
Glucose		(see Single Chemistry)					
Gram positive NARMS MIC (CMV3AGPF)	MIC						
Haemophilus 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) Canine, Feline	RO	EDTA whole blood or serum - 1 mL If EDTA whole blood is submitted and the ELISA test is positive, a Heartworm Microfilaria Filter test will be automatically performed at no additional charge.	Purple or red top tube	Refrigerate. 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 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.	1 Day		
Histopathology Process - Frozen section additional cuts (2nd cut f		Formalin fixed tissue	Leak proof container	Ship to avoid freezing during cold months. Do not fix or ship in alcohol.	2 - 5 Working Days		



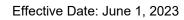


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported	List Price
Histopathology Process - Frozen	HC	Formalin fixed tissue	Leak proof container	Ship to avoid freezing during cold	Test / TAT Price (SK on) 2 - 5	v)
section cut (1st cut)				months. Do not fix or ship in	Working	
				alcohol.	Days	
Histopathology Process - Multi	HC	Formalin fixed tissue	Leak proof container	Fix in 10% Formalin for minimum of		
biopsy cassette and cut				24 hours. Transfer tissues to 70%	Working	
				alcohol (isopropyl, ethyl or rubbing	Days	
				alcohol) for shipping in very cold		
				weather.		
Histopathology Process - Multi	HC	Formalin fixed tissue	Leak proof container	Fix in 10% Formalin for minimum of	2 - 5	
biopsy cassette and embed			•	24 hours. Transfer tissues to 70%	Working	
arepey cuccotte una embea				alcohol (isopropyl, ethyl or rubbing	Days	
				alcohol) for shipping in very cold	,	
				weather.		
Histopathology Process - Multi	HC	Formalin fixed tissue	Leak proof container	Fix in 10% Formalin for minimum of	2 - 5	
compartment biopsy cassettes		1 official fixed tissue	Leak proof container	24 hours. Transfer tissues to 70%	Working	
(incl H & E)				alcohol (isopropyl, ethyl or rubbing	Days	
(IIICI H & E)				alcohol) for shipping in very cold	Days	
				weather.		
Histopathology Process - Paraffin	HC:	Formalin fixed tissue	Leak proof container	Fix in 10% Formalin for minimum of	2 5	
	110	Formalin lixed tissue	Leak proof container	24 hours. Transfer tissues to 70%	Working	
process				alcohol (isopropyl, ethyl or rubbing	Days	
				alcohol) for shipping in very cold	Days	
				weather.		
History that we Bureau B. (2)	ИС	Farman Bar Caral Caran	Lastenna facult	Fire in 400/ Farmer line for main in	0.5	
Histopathology Process - Paraffin	110	Formalin fixed tissue	Leak proof container	Fix in 10% Formalin for minimum of 24 hours. Transfer tissues to 70%	2 - 5 Working	
process, embed only (per					O .	
cassette)				alcohol (isopropyl, ethyl or rubbing	Days	
				alcohol) for shipping in very cold		
				weather.		
Histopathology Process - Paraffin	HC	Formalin fixed tissue	Leak proof container	Fix in 10% Formalin for minimum of		
process, embed, cut (per slide)				24 hours. Transfer tissues to 70%	Working	
				alcohol (isopropyl, ethyl or rubbing	Days	
				alcohol) for shipping in very cold		
				weather.		





Test Name	Method	Sample / Comments	Container	Handling / Shipping		Supported Price (SK only)	List Price
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		
Histopathology Process - Trimming tissue	НС	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 American foulbrood		(see Paenibacillus larvae (American foulbrood) Culture)					
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		
НҮРР		(see Hyperkalemic Periodic Paralysis (HYPP) (Bureau Veritas Laboratory))					
IBR		(see Infectious Bovine Rhinotracheitis (IBR) PCR)					
IBR		(see Bovine Respiratory Panel - Antibody)					
IGF1		(see Insulin-Like Growth Factor (IGF1) (Michigan))					





Test Name	Method	Sample / Comments	Container	Handling / Shipping		Supported	List Price
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.		Price (SK only)
Immunocytochemistry (ICC)	RO	4 air dried unstained smears	Slides	Protect smears from formalin.	2 Weeks		
(Colorado) Most Species		Cavity fluids, bone marrow and blood can be submitted with the slides. Includes cytology.		Include a completed "Agent for Shipment" form.	_ ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Immunoglobulin Quantification 1st sample, per isotype	IMM	Serum - 0.2 mL Contact PDS Lab for species and isotypes available.	Red top tube	Refrigerate. Ship on ice packs.	2 - 3 Days		
Immunoglobulin Quantitation (IgG) RID (Cornell) Canine, Equine, Feline	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		
Immunohistochemistry (IHC) (Companion)	IMIHC	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)	IMIHC	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 - Antibody)					
Infectious Bovine Rhinotracheitis (IBR) ELISA	ELISAV	Serum - 1 mL Also see Bovine Respiratory Panel.	Red top tube	Refrigerate. Ship on ice packs.	5 - 10 Days		
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		





Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
Infectious Bovine Rhinotracheitis (IBR) Virus Isolation	ISO	Nasal or oral swabs, lung, trachea or tonsil Pricing for multiple samples - \$36.12 per sample supported price, \$40.13 per sample list price.	Swab or leak proof container	Refrigerate. Ship on ice packs.	7 - 10 Days
Infectious Bronchitis Virus (IBV) ELISA (Guelph)	RO	Serum - 0.5 mL	Red top tube	Refrigerate. Ship on ice packs.	2 Weeks
Infectious Laryngotracheitis (ILT)		(see Gallid Herpesvirus 1 (ILT) PCR)			
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)			
Influenza, Canine		(see Canine Influenza PCR)			
Influenza, Equine		(see Equine Influenza PCR)			
Influenza, Swine		(see Swine Influenza PCR)			



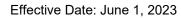


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (SK only)	List Price
Insulin - Serial Testing Equine	IMMUL	Serum - 1 mL for each sample Cost includes 2 insulin tests submitted on same submission form. For resting/basal insulin horses should NOT be fasted but be sampled in the fed state (hay/pasture only); grain/concentrate should be withheld for 12 hours prior to sampling. Fo 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).	use SST tube.	Centrifuge samples ASAP after collection. Freeze. Ship on ice packs.	1 Day		
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. Fo 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).	use SST tube.	Centrifuge samples ASAP after collection. Freeze. Ship on ice packs.	1 Day		



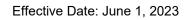


Test Name	Method	Sample / Comments	Container	Handling / Shipping		Supported Price (SK only	List Price
Insulin (Immulite) Equine	IMMUL	Serum - 1 mL For resting/basal insulin horses should NOT be fasted but be sampled in the fed state (hay/pasture only); grain/concentrate should be withheld for 12 hours 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 (Guelph) Canine, Feline	RO	Serum - 1 mL Fasting sample. Avoid hemolysis.	Red top tube. DO NOT use SST tube.	Centrifuge samples ASAP after collection. Freeze. Ship on ice packs.	2 Weeks		
Insulin/Glucose Ratio Equine	CA 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	Red top tube. DO NOT use SST tube.	Centrifuge within 30 minutes of collection. Freeze. Ship on ice packs.	1 Week		
Insulin/Glucose Ratio (Guelph) Canine, Feline	RO	Serum or plasma - 1 mL Fasting sample. Avoid hemolysis.	Red or green top tube	Centrifuge within 30 minutes of collection. Freeze. Ship on ice packs.	2 Weeks		
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		
lodine, Total (Michigan)	RO	Serum or plasma - 1 mL (minimum 0.5 mL) Additional paperwork may be required for large animals - contact PDS Lab prior to submitting samples.	Red or green top tube	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	2 Weeks		
lonophore Feed Additive Screen (Guelph)	RO	Feed - 100 grams or rumen contents Provide feed additive information, if available. Representative sampling is essential. Includes: Monensin, Narasin, Salinomycin.	Leak proof container	Refrigerate (freeze stomach contents). Ship on ice packs.	3 Weeks		





Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
Iron		(see Mineral Panel #1)			
Iron/TIBC (RUH)	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 avium ssp. avium PCR)			
Johne's		(see Mycobacterium paratuberculosis (Johne's) ELISA)			
Johne's Culture		(see Mycobacterium paratuberculosis (Johne's) Individual PCR)			
Johne's Disease		(see Mycobacterium paratuberculosis (Johne's) Individual PCR)			
KBr		(see Potassium Bromide)			
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 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



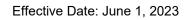


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
Large Animal Standard (Chemistry Panel)	CA	Serum - 0.5 mL Includes: Na, K, Cl, Bicarb, Anion Gap, Ca, Pi, Mg, Urea, Creat, Gluc, T.Bili, D.Bili, I.Bili, CK, AST, GLDH, GGT, T.Prot, 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)	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
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.	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 Canine includes: Leptospira pomona, icterohaemorrhagiae, canicola, autumnalis, grippotyphosa, bratislava, hardjo. Equine includes: Leptospira pomona, grippotyphosa, bratislava.	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, hardjo-bovis, icterohaemorrhagiae.	Red top tube	Refrigerate. Ship on ice packs.	2 Weeks



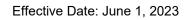


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
Leptospira spp. PCR (Guelph) Most Species	RO	Urine - 2 mL and EDTA blood whole blood - 2 mL; for dead animal - tissue (kidney)	Purple top tube and sterile container (urine)	Refrigerate 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 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.	1 Day
Lungworm		(see Baermann (Larvae sedimentation))			
Lupus Erythematosus		(see Cytology - Fluid)			
Luteinizing Hormone (IDEXX) Canine, Feline	RO	Serum - 1 mL 12 hour fasting sample. Avoid hemolysis and lipemia.	Red top tube	Refrigerate. 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 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.	·	Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	1 Week



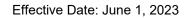


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported Test / TAT Price (SK only)	List Price
Maedi-visna Virus		(see Ovine Progressive Pneumonia (OPP) ELISA)				
Magnesium		(see Single Chemistry)				
Magnesium		(see Mineral Panel #1)				
Malignancy Profile		(see PTH (Hypercalcemia) Malignancy Profile (Michigan))	3			
Malignant Catarrhal Fever (MCF) PCR		(see Ovine herpesvirus 2 PCR)				
Manganese		(see Mineral Panel #1)				
Mannheimia haemolytica ELISA	ELISAI	Serum - 0.2 mL	Red top tube	Refrigerate. Ship on ice packs.	2 - 7 Days	
Mast Cell Tumor (MCT) Prognostic Panel (Michigan) Canine	RO	Biopsy slides, unstained and uncoverslipped, from PDS cases - minimum 10 slides Additonal fees apply for slide preparation - \$9.58 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))				
Mastitis Culture	BACTIC	Milk Single sample. Discounts apply if submitting 2 or more - \$10.53 each supported, \$11.64 each list. Additional charge per significant organism - see Antimicrobial Susceptibility Test. Contact PDS Lab before submission.	Sterile, leak proof 2 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 15 to 20 animals; at least 10-15 pellets per animal.	Place each fecal sample in its own clean, leak proof container.	Refrigerate. Ship on ice packs.		





Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule So Test / TAT P	upported rice (SK onlv)	List Price
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		
Metanephrine 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 metanephrine/creatinine ratio, normetanephrine/creatinine ratio		Refrigerate. Ship on ice packs.	2 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		
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		





Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
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: TI, Pb, As, Cd. Contact 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 #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	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
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



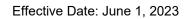


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
Muscle and Nerve Profile - 1st Nerve and Muscle (Comp Neuro Lab)	RO	Muscle and nerve biopsy PDS Lab must be notified one day prior to sample collection and samples must be in the PDS Lab by 10:00 AM the day of collection. See Comparative Neuromuscular website (http://vetneuromuscular.ucsd.edu/samplereq uirements.html) for collection instructions. For additional Nerves see Muscle and/or Nerve - each additional.		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/samplereq uirements.html) for collection instructions. For additional Nerves see Muscle and/or Nerve - each additional.		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 avium ssp. avium PCR	PCRCONV	Fixed tissues	Leak proof container		3 - 5 Days
Mycobacterium bovis PCR	PCRREALTIME	Fixed tissues	Leak proof container		3 - 5 Days
Mycobacterium paratuberculosis (Johne's) ELISA	ELISAS	Serum - 1 mL	Red top tube	Refrigerate. Ship on ice packs.	Once per Week



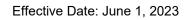


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported Test / TAT Price (SK onl	List Price v)
Mycobacterium paratuberculosis (Johne's) Individual PCR	PCRREALTIME	Feces, lymph node, or intestine - 2 - 5 grams DO NOT submit fecal samples in gloves, Ziploc bags or twirl style bags. Pooling is done at the laboratory (5:1). Contact lab prior if submitting a large batch of samples (>20). Turnaround times will vary according to the number of samples submitted.	Leak proof container	Refrigerate. Ship on ice packs.	5 – 7 Days; Contact PDS for TAT for batches >20	
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. Pooling is done at the laboratory (5:1). Contact lab prior if submitting a large batch of samples (>20). Turnaround times will vary according to the number of samples submitted.	Leak proof container	Refrigerate. Ship on ice packs.	7 Days; Contact PDS for TAT for batches >20	
Mycobacterium sp. PCR	PCRCONV	Fixed tissues	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 availablity 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 PCR	PCRMULTIPLEX	EDTA or Citrated whole blood - 1 mL 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	



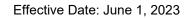


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
Mycoplasma hyopneumoniae ELISA Biochek	ELISAS	Serum - 1 mL	Red top tube	Refrigerate. Ship on ice packs.	1 - 2 Days
Mycoplasma hyopneumoniae ELISA IDEXX	ELISAS	Serum - 1 mL	Red top tube	Refrigerate. Ship on ice packs.	1 - 2 Days
Mycoplasma hyopneumoniae PCF	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 PCF (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 squencing (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





Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
Mycotoxin and Ergot Panel		(see Ergot and Mycotoxin Panel 2020)			
Mycotoxin Screen 2020	LCMS	Grain, feed - 200 - 2000 grams Includes: 3+15-acetyldeoxynivalenol, Aflatoxir 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
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	on				
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. SPCA Investigation exempt during normal business hours, see Necropsy - Whole Animal - Gross and Histo. 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.	vehicle (covered)	Chill and ship to lab as soon as possible after death.	5 - 10 Days



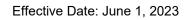


Test Name	Method	Sample / Comments	Container	Handling / Shipping		Supported Price (SK only	List Price
Necropsy – Portions - Gross and Histo - 1st animal - multiple tissues	NCPHISTO	Tissue samples from one animal for histopathology. If more than 10 Histopathology slides are required per submission, the appropriate Histopathology-Paraffin process, embed, cut and stain H&E fee will apply for each slide. 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.			
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, the appropriate Histopathology-Paraffin process, embed, cut and stain H&E fee will apply for each slide. 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)							





Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
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					
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, the appropriate Histopathology-Paraffin process, embed, cut and stain H&E fee will apply for each slide. 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.	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, the appropriate Histopathology-Paraffin process, embed, cut and stain H&E fee will apply for each slide. 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.	vehicle (covered)	Chill and ship to lab as soon as possible after death.	5 - 10 Days





Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
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, the appropriate Histopathology-Paraffin process, embed, cut and stain H&E fee will apply for each slide. 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.		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
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
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/samplereq uirements.html) for collection instructions. For additional Nerves see Muscle and/or Nerve - each additional.		Refrigerate. Ship on ice packs. Include a completed "Agent for Shipment" form.	3 Weeks





Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
New Castle Disease Virus		(see Avian Paramyxovirus 1 (NDV) PCR)			
Nickel		(see Mineral Panel #4)			
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 and EDTA plasma - 0.5 mL	Red or purple top tube	Refrigerate. Ship on ice packs.	1 Day
Occult blood		(see Fecal Occult Blood)			
Ophthalmic Biopsy	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	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	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 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



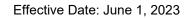


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
Ovine herpesvirus 2 PCR	PCRREALTIME	Lymph node, kidney, liver, brain, or EDTA whole blood Fresh tissue is preferred; paraffin embedded tissue is also acceptable. Additional charges 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
Paenibacillus larvae (American foulbrood) Culture	BACTIC	Swabs from brood comb, honey, pollen, wax debris, dead bees, live bees No susceptibility.			
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
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))			
Parvovirus		(see Canine Parvovirus SNAP ELISA)			
Pasteurella multocida Toxin A PCR	PCRREALTIME	Bacterial Culture	Leak proof container	Refrigerate. Ship at room temperature.	3 - 5 Days



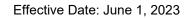


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported Test / TAT Price (SK on	List Price v)
PCR for Antigen Receptor Rearrangements		(see PARR (PCR for Antigen Receptor Rearrangements) (Colorado))				
PCV/TP/Smear Evaluation - Avian/Reptile Only	НА	EDTA whole blood - tube 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)				
PEDv/TGEv PCR	PCRREALTIME	Jejunum, ileum, colon, feces, PEDv collection kits Testing performed Tuesday and Thursday, results available the following day. Samples must be received in PDS Lab by 10:00 AM for next day results. STAT charges apply for testing requested outside designated days. Also see Porcine Corona 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.	container. Swabs in gel media will not be processed.	Refrigerate. Ship on ice packs.	Twice Per Week Results Following Day	
Phenobarb	IMMULDRUG	Serum - 0.2 mL	Red top tube. DO NOT use SST tube. Note: Plasma (EDTA, Heparin) samples are not acceptable.	Refrigerate. 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 t.	Refrigerate or freeze. Ship on ice packs.	1 Week	
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	





Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
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, lleum, 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
Porcine Diarrhea Panel - Late Nursery, Finishing or Adult	BACTIC BACTKB PCRREALTIME DE-BACTI	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 BACTKB PCRMULTIPLEX PCRREALTIME DE-BACTI	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



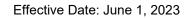


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
Porcine Diarrhea Panel - Neonatal	BACTIC BACTKB PCRMULTIPLEX PCRREALTIME DE-BACTI	Feces or Intestine - 5 - 10 grams Sample collected from neonatal pigs (or other pigs at veterinarian 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 Epidemic Diarrhea Virus		(see PEDv/TGEv PCR)			
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)			
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
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)	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 (Immulite)	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	Red top tube or leak proof container	Refrigerate. Ship on ice packs.	1 Week		
Protein/Creatinine Ratio		(see Urine Protein/Creatinine Ratio)					





Test Name	Method	Sample / Comments	Container	Handling / Shipping		Supported Price (SK onlv)	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.	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 IDEXX 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 Supported Test / TAT Price (SK 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.	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.		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, lonized 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	





Test Name	Method	Sample / Comments	Container	Handling / Shipping		Supported Price (SK only	List Price
PTH (Parathyroid Hormone) and lonized 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".		FILE ISK OIIIV	
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		



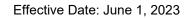


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
Rheumatoid Factor (IDEXX) Canine	RO	Serum - 1 mL	Red top tube	Refrigerate. Ship on ice packs.	2 Weeks
Rhodococcus equi RealPCR (IDEXX) Equine	RO	Tracheal wash - 5 - 10 mL, feces - 5 grams Submit feces if patient shows signs of diarrhea.	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
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 withdrawl of these medications.	Sterile, leak proof container	Refrigerate. Ship on ice packs.	1 Week
Rotavirus/Coronavirus PCR (Guelph) Equine	RO	Nasal swab or feces Dead animal: lung, colonic mucosa. Includes: Coronavirus, Rotavirus Group A and B.	Swab in viral transport media or sterile, leak proof container	Refrigerate or freeze. Ship on ice f packs.	1 Week
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





Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
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
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 H1N1/H3N2 ELISA (Biovet)	RO				
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



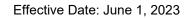


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported Test / TAT Price (SK only)	List Price
Small Animal Presurgical (Chemistry Panel)	CA	Serum - 0.4 mL Includes: Na, K, Cl, CK, Urea, Creat, Gluc, ALP, ALT, GLDH, GGT, T.Prot.	Red top tube	Refrigerate. Ship on ice packs.	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.		Refrigerate. Ship on ice packs.	1 Day	
Small Animal Standard (Chemis Panel)	try ^{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)				





Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Su Test / TAT Pr	 List Price
Streptococcus equi ssp. Zooepidemicus with ST194 Typing	PCRREALTIME	oral fluids, environmental fluids, swabs - 1 mL fluid Method validation in process, please contact PDS Diagnostic Professional for assistance with interpretation. Turnaround times will vary according to the number of samples submitted. Contact PDS Lab for information. 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.	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.	Red top tube	Refrigerate. Ship on ice packs.	2 Weeks	
Streptococcus equi subsp. equi PCR	PCRREALTIME	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 Solvent extraction analysis	HPLC	Stomach, gizzard contents, meat, grain, crop contents or bait samples - 5 grams Contact laboratory for other types of sample.	Leak proof container	Refrigerate. Ship on ice packs.	2 - 5 Days	
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	



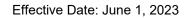


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
Swine Influenza PCR	PCRREALTIME	Nasal swab, fresh lung tissue, oral fluid - 1 mL PDS is no longer accepting swabs in gel media for PCR testing, refer to PDS website for acceptable 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
Swine Influenza subtyping H1/H3 typing PCR	PCRREALTIME	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
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





Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Support Test / TAT Price (S	rice
Testosterone (RIA) baseline (Biovet) Canine, Equine, Feline	RO	Serum - 1.5 mL	Red top tube	Refrigerate. Ship on ice packs.	1 Week	
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.		Refrigerate up to 5 days. Freeze for longer storage. Ship on ice packs.	2 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	
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 Includes: Free T4 by Equilibrium Dialysis, T4	Red top tube. DO NOT use SST 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	



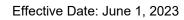


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (SK only)	List Price
Thyroid Profile Diagnostic - Canine (Michigan)	RO	Serum - 2 mL 12 hour fasting sample. Avoid hemolysis and lipemia. Includes: T4, T3, FT4, TSH, TgAA, T3AA, T4AA.	Red top tube. DO 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 WCVM 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 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)	g RO	EDTA whole blood and serum - 2 mL for each sample Includes: B. canis, B. gibsoni, E. canis, R. rickettsii, 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		
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		



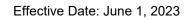


Test Name	Method	Sample / Comments	Container	Handling / Shipping		Supported Price (SK only)	List Price
Tick Panel Serology (Vector Borne) Canine	RO	Serum - 2 mL Includes: B. canis, B. gibsoni, E. canis, R. rickettsii, B. henselae, B. vinsoni, B. koehlerae (by IFA), plus Snap 4DX for Lyme, Anaplasma, 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 phagocytophilium, Dirofilaria immitis.	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, CSF, or aqueous humor - 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 Supported List Price Test / TAT Price (SK only)
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. Ship on ice packs.	1 Week
Toxoplasma IFA IgG, IgM - Canine, Feline (IDEXX)	RO	Serum - 1 mL	Red top tube	Refrigerate. Ship on ice packs.	1 Week
Toxoplasma IFA IgM Only - Canine, Feline (IDEXX)	RO	Serum - 1 mL	Red top tube	Refrigerate. Ship on ice packs.	1 Week
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 (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)			
Triiodothyronine		(see T3 (Research))			
Tritrichomonas foetus Individual PCR	PCRREALTIME	Preputial wash/scrapings (In Pouch™ medium) Record how samples have been treated (room temperature or incubated).	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.	,



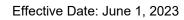


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Test / TAT	Supported Price (SK only	List Price
Tritrichomonas foetus Pooled 5:1 PCR 5:1 Pooling	PCRREALTIME	Individual In Pouch™ medium	In Pouch™ TF medium	Incubate in Pouch™ TF at 35°C for a maximum of 48 hours or leave at room 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.	1 Week		
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 or placenta	Leak proof container	Refrigerate. Ship on ice packs.	3 - 5 Days		
Ureaplasma sp. PCR	PCRCONV	Fetus or placenta	Leak proof container	Refrigerate. Ship on ice packs.	5 - 7 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 \$54.45 - 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		Supported Price (SK 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)					



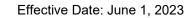


Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
Vibrio		(see Campylobacter fetus ssp. venerealis/Tritrichomonas foetus PCR)			
Viral Metagenomic Whole- Genome Sequencing ~1GB	GS	Turnaround time and coverage can be adjusted to client needs.			2 Weeks
Virology - Necropsy Add-On		Tissues from PDS Necropsy cases. FAT frozen section or virus isolation. FAT is per slide for 2 antigens. One slide is usually up to 4 pieces of tissue.	Leak proof container	Refrigerate. Ship on ice packs.	2 - 3 Days
Virus Isolation	VIR	Please contact the PDS Lab for instructions for specific viruses.	Leak proof container	Refrigerate. Ship on ice packs.	1 - 3 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-Hydroxyvitamin D3)	HPLC	Serum - 1 mL serum Extraction and HPLC.	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





Test Name	Method	Sample / Comments	Container	Handling / Shipping		Supported Price (SK only	List Price
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		
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 - \$32.93 per sample.	Red top tube	Refrigerate. Ship on ice packs.	2 - 5 Days		
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		
Whole-Genome Sequencing - Bacterial isolate ID 20x	GS	Turnaround time and coverage can be adjusted to client needs.			2 Weeks		
Whole-Genome Sequencing - DNA Virus - Viral isolate ID 20x	√ GS	Turnaround time and coverage can be adjusted to client needs.			2 Weeks		
Zinc		(see Mineral Panel #1)					



	Pane.	
100	-	

Test Name	Method	Sample / Comments	Container	Handling / Shipping	Schedule Supported List Price Test / TAT Price (SK only)
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

PDS Lab #	
Date/Time (RECEIVED)

MYCOTOXIN, ERGOT & NITRATE TOXIN SUBMISSION FORM

Sub	mitter (Client) name:		Owner: check if same as submitter							
Add	ress:		Paid by: ☐ Che	Paid by: ☐ Cheque ☐ Credit Card ☐ Other						
Post	al Code:		Credit card Infor	mation □ Visa □	MastarCard	American	n Evprass			
Pho	ne: Fa	x:		mation visa			/			
Ema	nil:		Email Copy to:							
(Gro	Mycotoxin screen and sample required for Analysis) nel includes: • 3 + 15 Acetyldeoxynivalenol • Aflatoxin B1 • Diacetoxyscirpenol • Deoxynivalenol (Vomitoxin) • Fumonisin B1 • Fumonisin B2 • HT-2 Toxin • Nivalenol • Ochratoxin A • T-2 Toxin • Zearalenone Results cannot b omission Comments:	☐ Ergot Toxin screen (Ground sample required for Analysis) Panel includes: • Ergocornine + Egocorninine • Ergocristine + Erogcristinine • Ergocryptine + Ergocryptinine • Ergometrine + Ergometrinine • Ergosine + Ergosinine • Ergotamine + Ergotaminine Please note that reported Total Ergo (ppb). Samples containing total ergo a higher ergot alkaloid concentration alkaloid concentration on the submission form, as this require guaranteed for non-feed samples	ot alkaloid concentra on than reported. If known to contain guires a different meth	ations are accura ations exceeding 1 you require an reater than 10,00 od.	te up to 10,000 10,000ppb may accurate total 0ppb, please sp	µg/kg have ergot pecify	□ Nitrate (Ground sample NOT required for Analysis)			
		Sample Information			Tosti	ng Rac	quired			
		Sample Composition	T . 11	. 11 pp.ca	1 CSUI	ig itet	<u>quireu</u>			
	Sample ID	i.e., Barley, Corn, Wheat, DDGS, Silage, Pellets(wheat/corn), Mix(barley/wheat/rye/corn)	YES (\$30.00/sample)	NO*	Mycotoxin	Ergo	t Nitrate			
1										
2										
3										
4										
5										
6										
7										

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

Version Date: March 17, 2023 Page 1 of 2



Prairie Diagnostic Services Inc.

52 Campus Drive Saskatoon, SK, S7N 5B4 TEL: (306) 966-7316 www.pdsinc.ca FAX: (306) 966-2488

PDS Lab#	

Date/Time (RECEIVED)

MYCOTOXIN, ERGOT & NITRATE TOXIN SUBMISSION FORM

Submitter (Client) Name:			Owner:	Owner:			
Sample Information				Testing Required			
		Sample Composition i.e., Barley, Corn, Wheat, DDGS, Silage, Pellets(wheat/corn),	Is grinding required by PDS?				
	Sample ID	Silage, Pellets(wheat/corn), Mix(barley/wheat/rye/corn)	YES (\$30.00/sample)	NO <mark>*</mark>	Mycotoxin	Ergot	Nitrate
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							

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

Version Date: March 17, 2023 Page 2 of 2

Place Your Clinic Letterhead Here

AGENT FOR SHIPMENT OF SAMPLE TO 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

THE ENCLOSED SPECIMENS FROM:

TO WHOM IT MAY CONCERN:

Animal I.D. / Name:			
Animal Species/Breed:			
Owner's Name:			
Case/Clinic Number:			
SPECIMEN TYPE:			
Circle or write the appropriate sample type:	blood	serum	urine
	other		
The material was not derived from cats o infectious agents of agricultural concern. Veterinarian Name:	J		, ,
Clinic Name:		_	
Address:			
Phone Number:			
FOR PRAIRIE DIAGNOSTIC SERVICES LABORA	ATORY US	E ONLY	
Shipper's Signature:		Date:	
Courier Invoice (Waybill) Number:		Cou	ntry of Origin: CANADA

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

End of Form Version Date: June 9, 2023

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 Phone: 785-532-4483

Results are reported on this form. Please complete on-line and printout. If handwritten, print clearly. Handwritten information is

Kansas State University 2005 Research Park Circle Manhattan, KS 66502

Fax: 785-532-4474

Email: rabies@vet.k-state.edu

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

RABIES LAB USE ONLY

	tory 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:	only the first one will be on the result la	Serum Draw	Date (mm/dd/yyyy):///		
Species/Breed:		Sex: M 🔲	F		
Signature affirms that the above info	rmation is correct and the microchip notes is unlabeled or arrives without the	umber has been verified.	Date (mm/dd/yyyy)://		
		microemp number :			
	RABIES LAB	•			
	Payment Total:	USE r:International / Dom			
1	Payment Total: STAT: Courier: Pay for	r:International / Dom			

^{*} 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.



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

Case Coordinator

Panel

	Owner Third Party Third Party to Re	9				
Third Party Contact Info	0:					
CLINIC	ACCOUNT #	OWNER/PRODUCER				
Veterinarian		Owner Name				
Clinic/Company		Business/Premise				
City		City				
Country		Country				
Phone	Fax	Phone	Cell			
E-mail		Fax or E-mail				
Send Results Via: (Check a	all that apply) O E-Mail O Fax Also	Send Results to Owner:				
REQ	UIRED INFORMATION*	PLEASE	MARK REQUESTED TESTS			
*Species:		Canine Brucellosis - S	erum			
*Animal Name:		Ehrlichia Canis - Serum				
*Microchip Number:		Leptospira Canicola	- Serum			
*Date Blood Drawn: (mi	mddyyyy)	Leishmania Infantum	ı - Serum			
Country Being Sent To:		Occult Heartworm (a	ntigen) - Serum			
Results (For Laborator		Knott's Test (microfil	ariae) - 1cc blood in purple top tube	2		
	,	Heartworm Difil Filte top tube	er Tests (microfilariae) - 1cc blood i	n purple		
		*Click For Rabies Serology	(FAVN) and then choose Test Submi	ssion Form		
NSTRUCTIONS: A total of 1-2cc of clear (n be shipped overnight wit	on-hemolyzed) serum is required for all tests, h cool packs.	except Knott's Testing and Heartwo	orm DIFIL testing. We recommend a	ll samples		
Please fill out the form cle	early and legibly, checking all information for a	accuracy.				
t is the responsibility of t	he submitting party to verify testing requirem	ents for exportation.				
	OMPLETED AND SAMPLES SUBMITTED, THE OF ANY REQUIRED INFORMATION WILL RE			Υ.		
Please note: Babesia gib	soni testing is NOT being performed at Kansa	s State Veterinary Diagnostic Labor	atory.			
/isit https://www.aphis.us	sda.gov/aphis or contact your appropriate stat	te or federal veterinarian for the mo	ost up to date requirements for anim	ıal export.		

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.

FedEx

Broken

☐ Hand Delivered ☐ Mail

Frozen

Leaked

☐ UPS

☐ Warmer ☐ None

Other

Courier Record:

Coolant Record:

Sample Condition:

OPENED BY

Courier

Good

Coolant Pack Dry Ice



CANADIAN VETERINARY UROLITH CENTRE SUBMISSION FORM

Send directly to:

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

Guelph, ON. N1H 8J7 (If sending by courier use: N1G 2Z4)

This \$50.00 urolith analysis* provided compliments 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: Pet Name: Address: City: Owner's Last Name: Province: Postal Code: **Species:** □ Canine □ Feline □ Other*: Veterinarian: Breed: **Sex:** □ Male □ Female **Neutered/Spayed:** □ Yes □ No Phone: If Yes: ☐ Before stone removal Fax: \square At or post stone removal Email: Year(s) Month(s) Age: SAMPLE INFORMATION: 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 □ Ideal □ Overweight Weight: □ kq □ lb Environment of animal: ☐ Mostly Outdoor ☐ Mostly Indoor ☐ Indoor + Outdoor # of OTHER animals on premises: Cats: Dogs: Primary diet (at time of diagnosis): ☐ Homemade / Table Food / Raw ☐ Grocery / Pet Store ☐ Veterinary ☐ Unknown Primary diet type (at time of diagnosis): \square Wet \square Dry ☐ Mixed ☐ Semi-Moist ☐ Unknown 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

□ Urate

□ Other

Previous urolith report number(s) (if available): ___

Previous urolith removal date(s): _

Preferred report delivery method: ☐ Email ☐ Fax
Results also available on the Royal Canin Veterinary Portal at vet.royalcanin.ca.

Composition: □ Struvite □ Calcium Oxalate □ Calcium Phosphate

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

* The Canadian Veterinary Urolith Centre is pleased to analyze uroliths from all species except humans and non-human primates.

Canine and Feline urolith analysis provided compliments of Royal Canin. Clinics are responsible for the shipping charges as well as the cost of the analysis of non-canine and non-feline uroliths.

Source (check all applicable): ☐ Renal Pelvis ☐ Ureter(s) ☐ Bladder ☐ Urethra ☐ Other __



