



# Oklahoma Animal Disease Diagnostic Laboratory (OADDL)

CENTER FOR VETERINARY HEALTH SCIENCES

1950 West Farm Road | 405-744-6623 | [cvhs.okstate.edu/oaddl](http://cvhs.okstate.edu/oaddl)

**Healthy Animals – Healthy People**

## Fee Schedule

Effective December 9, 2016

### GENERAL POLICIES

OADDL testing fees apply only to veterinary diagnostic submissions. Volume discounts are available on select bacteriology, molecular diagnostics and serology tests (see testing sections below for details). Owners may submit samples directly to OADDL, but should consult with their veterinarian for treatment and management recommendations.

Consultation services, special clinical investigations, legal depositions, court appearances, and work performed for the purpose of product validation or commercialization will incur charges above the published diagnostic testing fees.

OADDL reserves the right to utilize reference laboratories as necessary to complete test requests. Testing performed at reference laboratories will be indicated as such on the report; shipping charges may apply.

A monthly billing statement will be sent from the Oklahoma State University Bursar’s Office. A Summary of Charges will be provided with each Final Report from OADDL.

### GENERAL FEES

**OADDL does not levy an Accession Fee.**

**Reports are emailed (preferred) or faxed at no cost.** A \$3.00 fee will be assessed to mail reports via USPS (excluding regulatory papers).

**Legal/Insurance cases** ..... \$150.00  
Extended storage of samples on legal/insurance cases will incur an additional fee, specimen restrictions apply.

**Emergency necropsy/rabies submissions** (weekend, holiday & laboratory closure cases) ..... \$100.00

Animals are received for necropsy exam or rabies testing at any time during routine business hours, Monday through Friday from 8:00 AM to 5:00 PM.

For emergency submissions on weekends or holidays, please call the lab at (405) 744-6623 to schedule a delivery time between 8:00 AM and 5:00 PM. OADDL does not offer emergency service on Thanksgiving or Christmas.

The emergency fee applies to assistance with these submissions outside routine business hours (exception: the emergency fee will also be applied to any necropsy submission after 4:00 PM on Fridays or the day before a holiday).

**Rabies testing** (brain removal and shipment to State Health Department for rabies exam)  
Small animal (< 200 pounds) ..... \$30.00  
Large animal (> 200 pounds) ..... \$80.00  
Emergency fee is waived on animals submitted for rabies-only testing

**Expedited (“STAT”) testing** (Serology ELISAs and histopathology only) ..... \$50.00

## PATHOLOGY

### Necropsy (Autopsy)

***Necropsy charges include gross examination and histopathology, as indicated***

*General necropsy charges are not capped*

The submission of 2 (food animal or equine) or 3 (companion animal) related neonates may be submitted under a single accession, provided the neonates are submitted at the same time. Poultry necropsy prices below are for 1- 3 birds of the same species.

|                                                                                   |          |
|-----------------------------------------------------------------------------------|----------|
| Companion animal and exotic .....                                                 | \$190.00 |
| Food animal and equine .....                                                      | \$220.00 |
| Spinal cord removal .....                                                         | \$120.00 |
| Poultry necropsy (domesticated avian species reared for their meat and eggs)..... | \$90.00  |
| Small animal limb examination (with disposal) .....                               | \$50.00  |

### Disposal

*Disposal fee with each necropsy (excluding remains to be cremated):*

|                                              |          |
|----------------------------------------------|----------|
| Companion animal < 10 pounds.....            | \$10.00  |
| Companion animal 10-40 pounds .....          | \$30.00  |
| Companion animal > 40 pounds.....            | \$50.00  |
| Food Animal/Equine < 100 pounds .....        | \$50.00  |
| Food Animal/Equine 100 – 500 pounds.....     | \$100.00 |
| Food Animal/Equine 501 – 1,000 pounds.....   | \$120.00 |
| Food Animal/Equine 1,001 – 1,500 pounds..... | \$140.00 |
| Food Animal/Equine > 1,500 pounds .....      | \$160.00 |

## HISTOPATHOLOGY

Biopsy accessions will be reported in short or long (detailed) report formats. The short report format consists of the diagnosis along with interpretative comments regarding the biologic behavior and tissue margins. The long report format also includes a detailed description of the microscopic changes. The default reporting format will be short report unless requested otherwise.

Histochemical staining (special staining) and tissue decalcification are included in the histopathology fee.

|                                                                  |          |
|------------------------------------------------------------------|----------|
| Biopsy, short format (1-3 sites or lesions).....                 | \$70.00  |
| Each additional site or lesion.....                              | \$15.00  |
| Biopsy, long (detailed) format (1-3 sites or lesions) .....      | \$115.00 |
| Each additional site or lesion.....                              | \$15.00  |
| Pathologist assistance in trimming large/complex tissues.....    | \$35.00  |
| Ear notch for BVDV persistently infected antigen detection ..... | \$6.00   |
| Duplicate slides, <b>each</b> .....                              | \$15.00  |
| Immunohistochemistry (IHC) staining (per antibody) .....         | \$45.00  |
| Slide consult (H&E-stained; short report format).....            | \$70.00  |
| Zoo pathology surveillance (multiple tissues in formalin) .....  | \$70.00  |
| Lab animal surveillance (multiple tissues in formalin) .....     | \$70.00  |

**DISCOUNTED ABORTION PANELS (fees are capped)**

Panels include up to 2 (cattle, goat, sheep, horse) or 3 (dog) fetuses on one submission submitted at the same time. If 2 fetuses are submitted, samples will be pooled. Testing will be performed on placenta, if available.

**NOTE:** Serological testing on serum from the dam and fluid from the fetus is available at additional cost. The submission of acute and convalescent serum samples from the dam is encouraged.

**Bovine .....\$280.00**

- Necropsy with disposal (whole fetus and placenta)
- Histopathology
- Bacteriology (pooled aerobic culture on lung & abomasal fluid; *Brucella* & *Campylobacter* culture on abomasal fluid)
- Molecular Diagnostics (IBR PCR on liver; BVDV PCR on kidney)
- Toxicology (copper & selenium content on liver; nitrate content on aqueous fluid)

**Caprine and Ovine .....\$230.00**

- Necropsy with disposal (whole fetus and placenta)
- Histopathology
- Bacteriology (pooled aerobic culture on lung & abomasal fluid; *Brucella* & *Campylobacter* culture on abomasal fluid)
- Molecular Diagnostics (BVDV, Coxiella, Chlamydomphila & Toxoplasma PCR on placenta; Bluetongue virus PCR on spleen)

**Equine .....\$250.00**

- Necropsy with disposal (whole fetus and placenta)
- Placenta examination
- Histopathology
- Bacteriology (pooled culture on lung and stomach fluid)
- Molecular Diagnostics (EHV PCR on liver; EVA PCR on spleen, currently performed at referral lab at additional fee)

**Canine .....\$250.00**

- Necropsy with disposal (whole fetus and placenta)
- Histopathology
- Bacteriology (pooled aerobic culture on lung & stomach fluid; *Brucella* and *Campylobacter* culture on stomach fluid)
- Molecular Diagnostics (CHV PCR on liver)
- Serology (*Brucella* card test on serum from dam)

**DIARRHEA PANELS** Applies only to feces and loops of intestine. Ability to perform all tests in the panel depends on the volume of feces provided.

**Bovine .....\$185.00**

- Aerobic culture with antibiotic susceptibility
- Anaerobic culture with *Clostridium perfringens* toxin typing by PCR
- *Salmonella* culture with antibiotic susceptibility
- Rotavirus group A, Immunocard test
- Coronavirus PCR
- Centrifugal Fecal flotation; direct fecal smear with staining

**Canine/Feline .....\$185.00**

- Aerobic culture with antibiotic susceptibility
- Anaerobic culture with *Clostridium perfringens* toxin typing by PCR
- *Salmonella* culture with antibiotic susceptibility
- *Campylobacter jejuni* culture
- Parvovirus PCR
- Centrifugal Fecal flotation; direct fecal smear with staining
- *Tritrichomonas* in cats (additional charge applies; submission of feces in InPouch™ TF Feline or freshly collected and submitted within 24 hours)

**Camelids.....\$150.00**

- Aerobic culture with antibiotic susceptibility
- Anaerobic culture with *Clostridium perfringens* toxin typing by PCR
- *Salmonella* culture with antibiotic susceptibility
- Centrifugal Fecal flotation; direct fecal smear with staining

**Equine .....\$185.00**

- Aerobic culture with antibiotic susceptibility
- Anaerobic culture with *Clostridium perfringens* toxin typing by PCR
- *Salmonella* culture with antibiotic susceptibility
- Rotavirus group A, Immunocard test
- Centrifugal Fecal flotation; direct fecal smear with staining

**Caprine & Ovine.....\$115.00**

- Aerobic culture with antibiotic susceptibility
- Anaerobic culture with *Clostridium perfringens* toxin typing by PCR)
- *Salmonella* culture with antibiotic susceptibility
- Centrifugal Fecal flotation; direct fecal smear with staining

**Porcine .....\$115.00**

- Suckling / nursery
  - Aerobic culture with antibiotic susceptibility
  - *Salmonella* culture with antibiotic susceptibility
  - Rotavirus group A, Immunocard test
  - Enteric Coronavirus PCR (reference lab; additional fees apply)
  - Centrifugal Fecal flotation; direct fecal smear with staining
- Grower / finisher
  - Aerobic culture with antibiotic susceptibility
  - *Salmonella* culture with antibiotic susceptibility
  - Enteric Coronavirus PCR (reference lab; additional fees apply)
  - Centrifugal Fecal flotation; direct fecal smear with staining
  - *Lawsonia* and *Brachyspira* PCR (reference lab; additional fees apply)

## BACTERIOLOGY

Bacteriology fees are levied on a per sample basis unless otherwise specified. Test packages include up to 2 antibiotic susceptibility profiles on organisms selected by OADDL microbiologist. Additional antibiotic susceptibility profiles performed at submitter's request will be charged at the routine testing rate. The urine package below does not include free-catch samples. A 10% volume discount will be applied to individual aerobic/anaerobic bacterial cultures (excluding milk and urine cultures; discounted packages; and culture of bacteria requiring specialized media such as CEM, Salmonella, Campylobacter, etc.) and antibiotic sensitivities when 20 or more samples are submitted for the same test on a single submission.

### Discounted Test Packages

|                                                                                              |         |
|----------------------------------------------------------------------------------------------|---------|
| Aerobic culture with antibiotic susceptibility(ies) .....                                    | \$63.00 |
| <i>additional culture from additional site/swab from the same animal</i> .....               | \$18.70 |
| Anaerobic culture & Aerobic culture with antibiotic susceptibility(ies) .....                | \$72.00 |
| Fungal culture & Aerobic culture with antibiotic susceptibility(ies) .....                   | \$77.00 |
| <i>Salmonella</i> culture (identification only) with antibiotic susceptibility .....         | \$38.50 |
| <i>Salmonella</i> isolate serogrouping, if requested on isolates .....                       | \$27.50 |
| <i>Salmonella</i> serotyping (speciation) performed as batch testing at no additional cost;  |         |
| Expedited serotyping is available upon request (at shipping rate to NVSL) .....              | \$60.00 |
| Urine culture with antibiotic susceptibility(ies) (cystocentesis or catheter-collected)..... | \$36.50 |

### Routine Testing

|                                                                                                                |               |
|----------------------------------------------------------------------------------------------------------------|---------------|
| Aerobic culture .....                                                                                          | \$36.50       |
| Anaerobic culture .....                                                                                        | \$38.50       |
| Antibiotic susceptibility (MIC or Kirby-Bauer) .....                                                           | \$36.50       |
| Bacterial Identification by 16S rDNA sequencing .....                                                          | \$16.50       |
| Blood culture (aerobic or anaerobic) .....                                                                     | \$36.50/38.50 |
| <i>Campylobacter fetus</i> culture .....                                                                       | \$27.50       |
| <i>Campylobacter jejuni</i> culture.....                                                                       | \$27.50       |
| CEM culture, <b>per swab</b> (please notify lab 48 hours prior to sample submission).....                      | \$22.00       |
| Specimens must be in Amies charcoal media, refrigerated and received within 48 hours of collection             |               |
| Direct smear examination (acid-fast, Gram, Anaplasma) .....                                                    | \$13.00       |
| Clostridial FA panel ( <i>C. chauvoei</i> , <i>C. septicum</i> , <i>C. novyi</i> , <i>C. sordellii</i> ) ..... | \$39.00       |
| Milk culture (includes one antibiotic susceptibility test by disk diffusion) .....                             | \$20.00       |
| <i>Additional antibiotic susceptibility(ies) (per isolate)</i> .....                                           | \$10.00       |
| Milk culture, bulk tank (please notify lab 48 hours prior to sample submission) .....                          | \$24.00       |
| <i>Mycoplasma</i> culture .....                                                                                | \$18.00       |
| <i>Mycobacterium</i> culture* .....                                                                            | \$33.00       |
| <i>Salmonella</i> culture, environmental samples (stalls, barns & litter) .....                                | \$22.00       |
| <i>Salmonella</i> isolate serogrouping, if requested on isolates .....                                         | \$27.50       |
| <i>Salmonella</i> serotyping (speciation) performed as batch testing at no additional fee;                     |               |
| Expedited serotyping is available upon request (at shipping rate to NVSL) .....                                | \$60.00       |
| <i>Salmonella pullorum</i> screening, <b>per bird</b> .....                                                    | \$75.00       |
| <i>Tritrichomonas foetus</i> culture.....                                                                      | \$10.00       |
| Positive growth PCR confirmation (individual) .....                                                            | \$25.00       |

\*for Johne's disease testing (*Mycobacterium avium ssp. paratuberculosis*), see PCR section

**CLINICAL PATHOLOGY**

Charges for hematology, cytology, and clinical pathology services are levied by Antech Diagnostics, Inc. A reporting fee of \$6.00 will be applied to each accession.

**MOLECULAR DIAGNOSTICS (PCR TESTING)**

For tests requesting swab specimens, plastic shaft and synthetic (e.g. Dacron) swabs without additives are recommended. A 10% volume discount will be applied when 20 or more samples are submitted for the same test on a single submission (excluding discounted testing such as *Tritrichomonas foetus* and pooled PCRs).

|                                                                                                     |         |
|-----------------------------------------------------------------------------------------------------|---------|
| <i>Anaplasma marginale</i> PCR (EDTA blood).....                                                    | \$40.00 |
| Avian Influenza PCR (tracheal swabs).....                                                           | \$45.00 |
| Bluetongue Virus PCR (EDTA blood, spleen).....                                                      | \$47.00 |
| Bovine Coronavirus PCR (feces, colon).....                                                          | \$45.00 |
| BVD PCR (lung, lymph node, blood).....                                                              | \$45.00 |
| Canine Adenovirus I & II PCR (lung, liver, brain).....                                              | \$47.00 |
| Canine Distemper Virus PCR (lung, brain, EDTA blood).....                                           | \$47.00 |
| Canine Influenza PCR (nasal swabs; both nostrils).....                                              | \$45.00 |
| Canine Parvovirus PCR (feces, intestine).....                                                       | \$45.00 |
| Classical Swine Fever PCR (tonsil).....                                                             | \$45.00 |
| <i>Clostridium perfringens</i> toxin typing (culture material).....                                 | \$33.00 |
| <i>Cytauxzoon felis</i> PCR (EDTA blood).....                                                       | \$35.00 |
| Ehrlichia PCR (EDTA blood).....                                                                     | \$45.00 |
| Epizootic Hemorrhagic Disease (EHD) PCR (EDTA blood, spleen).....                                   | \$47.00 |
| Equine Herpesvirus Type 1 Real Time PCR (deep nasal swab, EDTA blood).....                          | \$55.00 |
| Equine Herpesvirus 4 PCR (nasal swab, lung, EDTA blood).....                                        | \$40.00 |
| Equine Influenza PCR (nasal swabs, lung).....                                                       | \$47.00 |
| Exotic Newcastle Disease PCR (tracheal swab).....                                                   | \$55.00 |
| Feline Panleukopenia (feces, intestine, tongue).....                                                | \$45.00 |
| Fungal Identification by 28S sequencing.....                                                        | \$20.00 |
| General Herpesvirus PCR (multiple tissues/fluids).....                                              | \$47.00 |
| IBR PCR (nasal swab, tissues, EDTA blood, lung, liver, kidney).....                                 | \$45.00 |
| Johne's— individual PCR (feces).....                                                                | \$48.00 |
| Johne's pooled feces PCR (all pooling done at OADDL, up to 5 fecal samples).....                    | \$55.00 |
| <i>if pool is positive, fecal samples will be tested individually at \$48.00 each</i>               |         |
| <i>Leptospira sp</i> PCR (kidney, urine).....                                                       | \$37.00 |
| Malignant Catarrhal Fever (MCF) PCR – OVHV-2 (EDTA blood, lesional tissues).....                    | \$47.00 |
| <i>Mycoplasma bovis</i> PCR (lung, joint fluid).....                                                | \$38.50 |
| <i>Tritrichomonas foetus</i> PCR (single InPouch™ TF).....                                          | \$25.00 |
| Pooled <i>Tritrichomonas foetus</i> PCR (all pooling done at OADDL, up to 5 InPouch™ TF).....       | \$25.00 |
| <i>plus \$5/pouch tested, if pool is positive, pouches will be tested individually at \$25 each</i> |         |
| Viral Sequencing and Sequence Analysis.....                                                         | \$53.50 |
| Swine Influenza Virus PCR (nasal swab).....                                                         | \$45.00 |
| West Nile Virus PCR (brain; heart on birds).....                                                    | \$55.00 |

**MYCOLOGY**

|                                                                                       |         |
|---------------------------------------------------------------------------------------|---------|
| <i>Dermatophilus congolensis</i> culture.....                                         | \$33.00 |
| Fungal culture (isolation only).....                                                  | \$33.00 |
| If Fungal Identification by PCR/28S sequencing is required add.....                   | \$20.00 |
| Fungal identification by direct PCR/28S sequencing (no fungal culture performed)..... | \$20.00 |



## PARASITOLOGY

Fees for parasitology diagnostic services are levied by the Department of Veterinary Pathobiology.

### Discounted Test Packages

|                                                                                                                                                             |         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| Canine heartworm antigen- before and after heat treatment (1.0 mL serum or plasma), includes microfilaria test (modified Knott's, 1.0 mL whole blood) ..... | \$30.00 |
| Centrifugal Flotation / Direct Smear .....                                                                                                                  | \$22.00 |
| Centrifugal Flotation / Fecal Egg Count.....                                                                                                                | \$32.00 |
| Centrifugal Flotation / Baermann.....                                                                                                                       | \$32.00 |
| Centrifugal Flotation / Sedimentation .....                                                                                                                 | \$36.00 |
| Feline heartworm antibody & post heat treatment antigen test (1.0 mL serum or plasma) .....                                                                 | \$30.00 |

### Routine Testing

|                                                                             |               |
|-----------------------------------------------------------------------------|---------------|
| Baermann .....                                                              | \$18.00       |
| Canine heartworm antigen (0.5 mL serum or plasma) .....                     | \$30.00       |
| Canine post heat treatment heartworm antigen (0.5 mL serum or plasma) ..... | \$30.00       |
| Direct smear (3-5 g fresh feces).....                                       | \$10.00       |
| Fecal egg count.....                                                        | \$18.00       |
| Feline heartworm antibody (0.5 mL serum or plasma) .....                    | \$15.00       |
| Feline heartworm antigen (0.5 mL serum or plasma).....                      | \$30.00       |
| Feline post heat treatment heartworm antigen (0.5 mL serum or plasma) ..... | \$30.00       |
| Centrifugal Flotation .....                                                 | \$18.00       |
| Giardia antigen.....                                                        | \$24.00       |
| Gross parasite ID .....                                                     | \$20.00-80.00 |
| Hemoparasite exam (Wright-Giemsa stain).....                                | \$18.00       |
| Heartworm microfilaria test (modified Knott's) .....                        | \$20.00       |
| Sedimentation .....                                                         | \$26.00       |
| Tick identification.....                                                    | \$10.00       |
| Total worm count.....                                                       | \$80.00       |

## SEROLOGY

A 10% volume discount will be applied to individual serology tests (excluding discounted panels and BVD ELISA) when 20 or more samples are submitted for the same test on a single submission.

### Discounted Test Panels

|                                                                                                                                                          |         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| Bovine Abortion (Lepto, IBR SN, BVD SN, <i>Brucella</i> , BVD & <i>Neospora</i> ELISAs) .....                                                            | \$54.00 |
| Bovine ELISA Panel (BVD, BLV, Johne's; minimum 11 animals).....                                                                                          | \$20.00 |
| Equine Abortion (Lepto, EHV-1, EVA).....                                                                                                                 | \$70.00 |
| Tick Profile ( <i>Dirofilaria immitis</i> Ag; and Ab for <i>E. canis</i> , <i>E. ewingii</i> , RMSF (IFA), Lyme, <i>A. phagocytophilum-platys</i> )..... | \$60.00 |

### Routine Testing

|                                                         |         |
|---------------------------------------------------------|---------|
| Anaplasmosis (C-ELISA).....                             | \$13.50 |
| Bluetongue (C-ELISA).....                               | \$10.50 |
| Bovine Leukemia (ELISA).....                            | \$10.50 |
| Bovine Pregnancy (ELISA) .....                          | \$4.50  |
| BRSV (SN).....                                          | \$10.50 |
| BVD ELISA .....                                         | \$6.00  |
| BVD I (SN) .....                                        | \$10.50 |
| BVD II (SN).....                                        | \$10.50 |
| <i>Brucella abortus</i> (official for swine only) ..... | \$4.40  |
| <i>Brucella canis</i> (IFA) .....                       | \$41.20 |
| <i>Brucella canis</i> (card).....                       | \$13.00 |

**SEROLOGY continued:**

|                                                                                            |                  |
|--------------------------------------------------------------------------------------------|------------------|
| CAE (C-ELISA) .....                                                                        | \$14.12          |
| EIA (C-ELISA) (Send EIA form VS10-11 or use Global VetLINK) .....                          | \$12.00          |
| End Point Titration of Serum Samples (SN) .....                                            | \$11.70          |
| Equine Herpesvirus 1 (SN) .....                                                            | \$22.00          |
| Equine Piroplasmiasis (C-ELISA)                                                            |                  |
| <i>Babesia caballi</i> .....                                                               | \$20.00          |
| <i>Theileria equi</i> .....                                                                | \$20.00          |
| Equine Viral Arteritis (SN) .....                                                          | \$24.00          |
| IBR (SN) .....                                                                             | \$10.50          |
| Johne's (ELISA) .....                                                                      | \$10.50          |
| Leptospirosis (includes canicola, grippotyphosa, hardjo, icterohemorrhagiae, pomona) ..... | \$29.00          |
| Neospora (ELISA) .....                                                                     | \$11.50          |
| PI <sub>3</sub> (SN) .....                                                                 | \$10.50          |
| PRRS (reference lab; additional fees apply) .....                                          | call for pricing |
| Pseudorabies (gB ELISA) .....                                                              | \$6.60           |
| Rocky Mountain Spotted Fever (IFA) .....                                                   | \$32.50          |
| West Nile Virus IgM (ELISA) .....                                                          | \$18.00          |

**TOXICOLOGY**

**In-house Testing** (*same day results*)

|                                                                                         |         |
|-----------------------------------------------------------------------------------------|---------|
| Blue green algae (cyanobacteria) .....                                                  | \$18.00 |
| Cyanide / Prussic acid (fresh plant must be harvested within 24 hours of testing) ..... | \$18.00 |
| Lead (EDTA blood) .....                                                                 | \$27.00 |

**Referral Laboratory Testing** (*Fees below are current referral lab prices, which are subject to change. Additional shipping charges will apply. If you would like to submit directly to the referral laboratory, please contact OADDL for details.*)

|                                                                                                 |                                        |
|-------------------------------------------------------------------------------------------------|----------------------------------------|
| Anticoagulants (blood) .....                                                                    | \$95.00                                |
| Anticoagulants (tissue or bait) .....                                                           | \$105.00                               |
| Aflatoxin (feed) .....                                                                          | \$40.00                                |
| Cantharidin GC-MS [quantitated in 20 mL urine (preferred) or serum] .....                       | \$91.00                                |
| Drug screen, GC/MS, organic compounds (urine, liver) .....                                      | \$140.00                               |
| Ethylene / Propylene glycol screen – GC-MS confirmation (whole blood, serum, urine, bait) ..... | \$55.00                                |
| Ionophore screen – monensin, salinomycin, narasin & lasalocid (feed or rumen contents) .....    | \$90.00                                |
| Mineral analysis, each (2 mL serum, 10 g liver or kidney) .....                                 | \$28.00 for 1; each additional \$15.00 |
| Mineral Panel, 29 minerals/elements (2 mL serum, 10 g liver or kidney) .....                    | \$48.00                                |

|               |                |               |
|---------------|----------------|---------------|
| Aluminum, Al  | Copper, Cu     | Selenium, Se  |
| Antimony, Sb  | Iron, Fe       | Silicon, Si   |
| Arsenic, As   | Lead, Pb       | Silver, Ag    |
| Boron, B      | Lithium, Li    | Sodium, Na    |
| Barium, Ba    | Magnesium, Mg  | Strontium, Sr |
| Beryllium, Be | Manganese, Mn  | Thallium, Tl  |
| Calcium, Ca   | Molybdenum, Mo | Tin, Sn       |
| Cadmium, Cd   | Nickel, Ni     | Vanadium, V   |
| Chromium, Cr  | Phosphorus, P  | Zinc, Zn      |
| Cobalt, Co    | Potassium, K   |               |

|                                                                                                                                        |          |
|----------------------------------------------------------------------------------------------------------------------------------------|----------|
| Mycotoxin screen [aflatoxin B1, B2, G1 & G2; T-2 toxin; fumonisin; DON/vomitoxin & zearalenone] (100 g grain, corn, silage, hay) ..... | \$150.00 |
| Nitrate quantitation (aqueous fluid, serum) .....                                                                                      | \$18.00  |
| Nitrate (feed, forage, hay, plant) .....                                                                                               | \$6.00   |
| Pesticide screen (organophosphate, carbamate) .....                                                                                    | \$175.00 |



**TOXICOLOGY continued:**

|                                                                                              |                 |
|----------------------------------------------------------------------------------------------|-----------------|
| Petroleum hydrocarbon screen (rumen contents).....                                           | \$165.00        |
| Plant or seed identification (hay/forage, feces, stomach contents).....                      | \$10.00-\$25.00 |
| Sodium (brain only) .....                                                                    | \$23.00         |
| Strychnine.....                                                                              | \$50.00         |
| Sulfates (water only).....                                                                   | \$12.00         |
| Vomitoxin panel (DON/vomitoxin, nivalenol & zearalenone), (100 g grain, silage or hay) ..... | \$50.00         |
| Water quality (pH, total dissolved salts, conductivity, nitrates, sulfates).....             | \$15.00         |

**VIROLOGY**

See Molecular Diagnostics section for available PCRs

|                                                                         |         |
|-------------------------------------------------------------------------|---------|
| Isolation of viruses in cell culture (all species) – referral lab ..... | \$55.00 |
| Rotavirus group A, Immunocard test (feces, intestine).....              | \$27.50 |