

SPECIMEN SUBMISSION GUIDELINE

April 2014 – March 2015

The laboratory is open Mondays to Fridays 8:00 to 16:30

General contact information:

The diagnostic testing services available are tabulated according to the laboratory sections.

For general enquiries regarding the testing services listed, please contact the reception on
Tel: 021 8870324 to direct queries to the relevant laboratory section.

Submission of specimens:

The various submission forms are available from the laboratory Tel: 021 8870324 Fax: 021 886 5341 and on the website: <http://www.elsenburg.com/vets/vetlab.html>.

A completed sample submission form must accompany each submission for each animal species.

Please make use of specific forms for: Bovine Brucellosis MRT and Dourine testing. A CA5 must accompany Bovine Brucellosis testing (RBT; CFT). (These forms are available from your local State Veterinarian).

An accurate diagnosis depends on the correct submission of quality specimens; please refer to the tabulated testing services for sample submission details. Where applicable, please include animal history (age, vaccinations, medication, date of sampling, number of animal deaths, etc).

Sample packaging should comply with specimen transport regulations. A courier service should be used where possible or samples may be hand delivered.

Please indicate high risk cases (e.g. rabies, abortions due to Brucellosis), clearly.

Address:

Courier or hand delivery:

Western Cape Provincial Veterinary Laboratory
Helshoogte Road
Stellenbosch
7600

Postal (not recommended):

Western Cape Provincial Veterinary Laboratory
Private Bag X5020
Stellenbosch
7599

Please inform the laboratory of tracking numbers.

Fees:

All fees listed are VAT exempt. If samples are referred or sub-contracted for testing at another laboratory, an additional fee may be applicable. Please contact the laboratory for further information.

DIAGNOSTIC TESTING SERVICES PER LABORATORY SECTION

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SEROLOGY

Test/s Required	Sample Type & Size	Assay	Fee	Suitable Sample	Unsuitable Sample	To reach the lab within:	Transport Requirements	Average turn-around time
<i>Brucella abortus</i> (Bovine)	Whole clotted blood 6-10ml / Serum - 3 ml	Rose Bengal Test (RBT)	-	Clotted Sample, Clear serum	Unclotted, Haemolysed serum	5 days	Transported at \pm 4°C - 8°C or at ambient temperature, preferably couriered and not posted	5-7 work days
		CFT	-					5-7 work days
<i>Brucella abortus</i> (Bovine)	Raw full cream milk \geq 5ml	MRT	-	Raw full cream milk \geq 5ml or 2 ml preserved with formalin	Sour milk, Milk with insufficient cream Colostrum Pasteurised milk Homogenised milk Bloody milk	3 days	Transported at \pm 4°C - 8°C or at ambient temperature, preferably couriered and not posted	3-5 work days
<i>Brucella melitensis</i> (Caprine; Ovine)	Whole clotted blood 6-10ml / Serum - 3 ml	CFT	-	Clotted Sample, Clear serum	Unclotted, Haemolysed	3 days	Transported at \pm 4°C - 8°C or at room temperature, preferably couriered and not posted	5-7 work days
<i>Brucella ovis</i> (Ovine)	Whole clotted blood 6-10ml / Serum - 3 ml	CFT	R21.00/sample/test	Clotted Sample, Clear serum	Unclotted, Haemolysed	3 days	Transported at \pm 4°C - 8°C or at ambient temperature, preferably couriered and not posted	5-7 work days
Bovine Viral Diarrhoea (BVD) antibody (Bovine)	Whole clotted blood 6-10ml / Serum - 3 ml	ELISA	R49.00/sample/test	Clotted Sample, Clear serum	Haemolysed	3 days	Transported at \pm 4°C - 8°C or at ambient temperature, preferably couriered and not posted	7-14 work days
Bovine Viral Diarrhoea (BVD) antigen (Bovine)	Whole clotted, blood 6-10ml / Serum - 3 ml, Fresh whole blood	ELISA	R74.00/sample/test	Clear serum, Fresh whole blood	Haemolysed	3 days	Transported at \pm 4°C - 8°C or at ambient temperature, preferably couriered and not posted	7-14 work days
Dourine (Equine)	Whole clotted blood 6-10ml / Serum - 3 ml	CFT	R21.00 / sample/test	Clotted Sample Clear serum	Unclotted, Haemolysed	3 days	Transported at \pm 4°C - 8°C or at ambient temperature, preferably couriered and not posted	Tested on Thursdays only 5-7 work days (Aug-Dec) 7-14 work days (Jan-Jul)
Infectious Bovine Rhinotracheitis (IBR) Antibody (Bovine)	Whole clotted blood 6-10ml / Serum - 3 ml	ELISA	R39.00/sample/test	Clotted Sample Clear serum	Unclotted, Haemolysed	3 days	Transported at \pm 4°C - 8°C or at ambient temperature, preferably couriered and not posted	7-14 work days
Bovine Leucosis Virus (BLV/EBL) Antibody (Bovine)	Whole clotted blood 6-10ml / Serum - 3 ml	ELISA	R39.00/sample/test	Clotted sample Clear serum	Unclotted, Haemolysed	3 days	Transported at \pm 4°C - 8°C or at ambient temperature, preferably couriered and not posted	7-14 work days
Newcastle Disease Virus (NCD/NDV) (Avian)	Whole clotted blood 6-10ml / Serum -	HI	R9.00/sample/test	Clotted Sample Clear Serum	Unclotted, Haemolysed	3 days	Transported at \pm 4°C - 8°C or at ambient temperature, preferably couriered	7 work days

SEROLOGY								
Test/s Required	Sample Type & Size	Assay	Fee	Suitable Sample	Unsuitable Sample	To reach the lab within:	Transport Requirements	Average turn-around time
	3 ml						and not posted	
Avian influenza Virus – H5N1, H5N2, H7N1, H7N7 (Avian)	Whole clotted blood 6-10ml / Serum - 3 ml	HI	R19.75/ sample/test	Clotted Sample Clear Serum	Unclotted, Haemolysed	3 days	Transported at ± 4°C - 8°C or at ambient temperature, preferably couriered and not posted	7 work days
Influenza A virus antibody (Avian)	Whole clotted blood 6-10ml / Serum - 3 ml	ELISA	R19.75/ sample/test	Clotted Sample Clear Serum	Unclotted, Haemolysed	3 days	Transported at ± 4°C - 8°C or at ambient temperature, preferably couriered and not posted	7 work days

VIROLOGY								
Test/s Required	Sample Type & Size	Assay	Fee	Suitable Sample	Unsuitable Sample	To reach the lab within:	Transport Requirements	Average turn-around time
Virus isolation	Organs	Isolation in eggs	R439/ virus isolated	Fresh organs only	Decomposed organs Organs in formalin	24 hours (may be longer, depending on virus type)	Transported at ± 4°C-8°C	2-7 weeks
Avian influenza, Newcastle disease, Bluetongue, Infectious laryngotracheitis, Pox, Avian metapneumovirus, Chlamydomphila	Swabs in fluid	Isolation in eggs		Single/pooled swabs in virus transport medium	Swabs in unsuitable fluid	24 hours (may be longer, depending on virus type)	Transported at ± 4°C-8°C	2-7 weeks

PCR (MOLECULAR)								
Test(s) required	Sample Type & Size	Assay	Fee	Suitable Sample	Unsuitable Sample	To reach the lab within:	Transport Requirements	Average turn-around time
Avian Influenza Virus A	Tracheal, cloacae, tissue swab (PCR rayon / cotton tipped, plastic shaft swab) Tissue (trachea, organs)	Screening Matrix gene rRT-PCR	R164.00/ test	Tracheal, cloacae, tissue swab (PCR rayon / cotton tipped, plastic shaft swab) Tissue (trachea, organs)	Whole blood, serum, unsuitable swab (e.g. wooden shaft, bacterial swab)	24-48 hours	Transported at ± 4°C-8°C	2-4 work days
		Additional H5 subtype rRT-PCR	R51.00/ test					
		Additional H7 subtype rRT-PCR	R51.00/ test					
Newcastle Disease Virus	Tracheal, cloacae, tissue swab (PCR rayon / cotton tipped, plastic shaft swab) Tissue (trachea, organs)	Screening Matrix rRT-PCR	R164.00/ test	Tracheal, cloacae, tissue swab (PCR rayon / cotton tipped, plastic shaft swab) Tissue (trachea, organs)	Whole blood, serum, unsuitable swab (e.g. wooden shaft, bacterial swab)	24-48 hours	Transported at ± 4°C-8°C	2-4 work days
		Pathotype RT-PCR	R212.00/ test					

PARASITOLOGY

Test/s required	Sample Type & Size	Assay	Fee	Suitable Sample	Unsuitable Sample	To reach the lab within:	Transport Requirements	Average turn-around time
Full egg count (Round worm, Coccidia, Tape Worm,)	Faeces 10 grams	Worm egg count (McMaster standard test)	R18.00/ sample	Fresh, collected directly from rectum; kept at 4 - 8°C	Faeces not fresh collected off the ground; not kept cool; Frozen	24 - 48 Hrs	Kept at ± 4°C - 8°C	7-10 work days
	Faeces 10 grams (pooled sample)		R36.00/ pool					
Flukes	Faeces 10 grams	Worm egg examination (sedimentation)	R21.00/ sample	Fresh, collected directly from rectum; kept at 4 - 8°C	Faeces not fresh collected off the ground; not kept cool; Frozen	24 - 48 Hrs	Kept at ± 4°C - 8°C	7-10 work days
Wool examination for Sheep scab (<i>Psorotes ovis</i>)	Wool Skin scraping	Microscopic examination	-	Wool, skin scraping taken from the edge of the suspected lesion.	Samples older than 3 days Refrigerated / frozen samples	3 days	Kept at ambient temperature	1-2 work days
Cryptosporidium	Faeces 2 grams	Staining	-	Fresh, collected directly from rectum; kept at 4 - 8°C	Faeces not fresh collected off the ground; not kept cool; Frozen	24 - 48 Hrs	Kept at ± 4°C - 8°C	2-3 work days
Internal parasite ID	Fresh adult parasite	Microscopic ID	R54.00/ samples	Preserved in 10% buffered formalin or 80% ethanol	Not fresh; not preserved	1 week	None	7-10 work days
External parasite ID	Fresh adult parasite	Microscopic ID	R54.00/ samples	Preserved in 10% buffered formalin or 80% ethanol	Not fresh; not preserved	1 week	None	5 work days

HISTOPATHOLOGY

Test/s required	Sample Type & Size	Assay	Fee	Suitable Sample	Unsuitable Sample	To reach the lab within:	Transport Requirements	Average turn-around time
Histopathology	Organs, Bone Organs: Maximum 12mm thickness. Whole brain to be fixed in formalin for longer period. Ratio of sample to formalin must be 1:10	Processing, staining and microscopic examination of stained wax embedded sections	R246.00 / case (max 12 cassettes)	Fresh sample Correct size A 10% neutral buffered formalin solution	Decomposed or dried out samples Incorrect size Incorrect formalin solution	1 week	Must be in a watertight container	10 work days
		Processing and staining only	R140.00 / case (max 12 cassettes)	Sample must be totally covered in formalin Minimal organic soiling of formalin				

BACTERIOLOGY								
Test/s required	Sample Type & Size	Assay	Fee	Suitable Sample	Unsuitable Sample	To reach the lab within:	Transport Requirements	Average turn-around time
General Culture (aerobic) and identification;	Organs Swabs Aspirates Blood	Bacteriological culture Biochemical identification	R142.00/ case (max 8 samples) R74.00 / Each additional sample	Fresh material only Swabs preferably in transport medium	Decomposed organs Organs in formalin	24 hrs	Transported at ± 4°C-8°C	5-10 work days
Salmonella monitoring, culture and identification	Litter - 25 grams Meconium - 10 grams Organs - 1 gram Stomach content	Selective culture Biochemical identification		Fresh samples Swabs preferably in transport medium	Drag swabs taken incorrectly Decomposed samples	24 - 48 hrs	Transported at ± 4°C-8°C or at ambient temperature	5-10 work days
Fungal culture and ID	Skin scrapings Organs Abomasum content	Culture, ID		Skin with scabs (if present) Fresh material	Decomposed material	24 hrs	Kept at ± 4 - 8°C	5-14 work days
<i>Brucella</i> spp. Isolation and presumptive identification	Milk - 20ml Lymph Nodes Blood 5ml Stomach contents	Bacteriological culture Biochemical identification	-	Fresh material only	Sour milk Decomposed samples	24 hrs	Transported at ± 4°C-8°C in compliance with the United Nations regulations (clearly label contents as suspect <i>Brucella</i>)	10 work days
<i>Clostridium perfringens</i> Isolation (anaerobic)	Organs Swabs Aspirates	Bacteriological culture Biochemical identification	R160.00/ case	Fresh material only Swabs preferably in transport medium	Decomposed organs Organs in formalin	24 hrs	Transported at ± 4°C-8°C	5-10 work days
Antibiograms (on request)	Bacterial isolate	Antibiogram	R84.00/ test	24 hr Bacterial culture on non-selective medium	> 24 hours bacterial culture Mixed culture	-	Transported at ± 4°C-8°C	3-4 work days
Smears	Blood - preferably in duplicate Brain - preferably in duplicate Impression - preferably in duplicate	Staining Microscopic examination	R26.00/ smear	Correctly prepared blood and brain smears	Incorrectly prepared blood and brain smears Smears too thick	24 - 48 hrs	Transported at ambient temperature Sufficient packing material to prevent slides from breaking	3-5 work days
Bovine Mastitis: Bacterial Culture and ID	Milk - 10ml	Culture and ID	R8.40 / sample	Fresh milk - 10ml	< 10 ml Blood in sample Colostrum Sour Pasteurised Homogenised	24 hrs	Transport at ± 4°C - 8°C	5-7 work days
Foetus and foetus material culture and identification	Foetus and foetal material	Culture Selective culture Smears (Giemsa, Rapdiff, MZN, Gimenez, PAS)	R264.00 / foetus/case	Fresh foetus and foetal material only	Decomposed samples	24 hrs	Transported at ± 4°C-8°C in compliance with the United Nations regulations (clearly label contents as suspect <i>Brucella</i>)	10 work days
<i>Trichomonas foetus</i> detection and identification	Preputial wash (PBS / Steve's Medium) - 50ml Preputial	Culture Microscopic identification	R65.00/ sample	Kept at ± 4°C - 8°C Sufficient preputial material	Kept above 4°C - 8°C Insufficient Preputial material	6- 8 hrs	Transport at ± 4°C - 8°C	7-10 work days

BACTERIOLOGY								
Test/s required	Sample Type & Size	Assay	Fee	Suitable Sample	Unsuitable Sample	To reach the lab within:	Transport Requirements	Average turn-around time
	scraping placed into 20-50 ml PBS / Steve's Medium Foetal abomasums contents				Presence of blood			
<i>Campylobacter</i> spp. culture and identification	Preputial wash (PBS / Steve's Medium) - 50ml Preputial scraping placed into 20-50 ml PBS / Steve's Medium Foetal abomasum contents Organ samples (liver, mucosal scrapings from intestines). Faecal samples	Selective culture Microscopic identification Biochemical identification	R65.00/sample	Kept at ± 4°C - 8°C Sufficient preputial material Fresh samples Swabs preferably in transport medium	Kept above 4°C - 8°C Insufficient preputial material Presence of blood Decomposed samples	6- 8 hrs	Transport at ± 4°C - 8°C	5-10 work days

FOOD SAFETY (VETERINARY PUBLIC HEALTH)								
Test/s required	Sample Type & Size	Assay	Fee	Suitable Sample	Unsuitable Sample	To reach the lab within:	Transport Requirements	Average turn-around time
Aerobic plate count	Meat 100g	Aerobic culture and count	R37.00/sample	Fresh specimen clearly labelled	Decomposed sample Cold chain not maintained Packaging compromised (exposure to environmental contamination)	24 Hrs	Transported at ± 4°C-8°C	3-7 work days
	Feed 50g	Aerobic culture and count	R37.00/sample	Dry feed, clearly labelled	Moist, damp specimen Packaging compromised (exposure to environmental contamination)	24 Hrs	Transported at ambient temperature	3-10 work days
	Rodac / contact / exposure Plate [available]	Aerobic culture and count	R37.00/sample	Plate clearly labelled	Packaging compromised (exposure to environmental contamination)	24 Hrs	Transported at ± 4°C-8°C	3-5 work days

FOOD SAFETY (VETERINARY PUBLIC HEALTH)

Test/s required	Sample Type & Size	Assay	Fee	Suitable Sample	Unsuitable Sample	To reach the lab within:	Transport Requirements	Average turn-around time
	from lab]							
<i>E. coli</i> count	Meat 100g	Aerobic culture and count	R60.00/sample	Fresh specimen clearly labelled	Decomposed sample Cold chain not maintained Packaging compromised (exposure to environmental contamination)	24 Hrs	Transported at ± 4°C-8°C	3-7 work days
	Feed 50g	Aerobic culture and count	R60.00/sample	Dry feed, clearly labelled	Moist, damp specimen Packaging compromised (exposure to environmental contamination)	24 Hrs	Transported at ambient temperature	3-10 work days
<i>Salmonella</i> spp.	Meat 100g	Aerobic culture and isolation, detection	R43.00/sample	Fresh specimen clearly labelled	Decomposed sample Cold chain not maintained Packaging compromised (exposure to environmental contamination)	24 Hrs	Transported at ± 4°C-8°C	3-7 work days Salmonella typing referred to ARC-OVI on request
	Feed 50g	Aerobic culture and isolation, detection	R43.00/sample	Dry feed, clearly labelled	Moist, damp specimen Packaging compromised (exposure to environmental contamination)	24 Hrs	Transported at ambient temperature	3-10 work days Salmonella typing referred to ARC-OVI on request
<i>Enterobacteriaceae</i>	Meat 100g	Aerobic culture and count	R39.00/sample	Fresh specimen clearly labelled	Decomposed sample Cold chain not maintained Packaging compromised (exposure to environmental contamination)	24 Hrs	Transported at ± 4°C-8°C	3-7 work days
	Feed 50g	Aerobic culture and count	R39.00/sample	Dry feed, clearly labelled	Wet, damp specimen Packaging compromised (exposure to environmental contamination)	24 Hrs	Transported at ambient temperature	3-10 work days
	Rodac / contact / exposure Plate [available from lab]	Aerobic culture and count	R39.00/sample	Plate clearly labelled	Sample which has not been packaged correctly Packaging compromised (exposure to environmental contamination)	24 Hrs	Transported at ± 4°C-8°C	3-5 work days

FOOD SAFETY (VETERINARY PUBLIC HEALTH)

Test/s required	Sample Type & Size	Assay	Fee	Suitable Sample	Unsuitable Sample	To reach the lab within:	Transport Requirements	Average turn-around time
<i>Listeria monocytogenes</i>	Meat 100g	Aerobic culture and isolation, detection	R48.00/sample	Fresh specimen clearly labelled	Decomposed sample Cold chain not maintained Packaging compromised (exposure to environmental contamination)	24 Hrs	Transported at ± 4°C-8°C	3-7 work days
	Feed 50g	Aerobic culture and isolation, detection	R48.00/sample	Dry feed, clearly labelled	Moist, damp specimen Packaging compromised (exposure to environmental contamination)	24 Hrs	Transported at ambient temperature	3-10 work days
Yeasts and Moulds	Meat 100g	Aerobic culture and isolation, detection	R53.00/sample	Fresh specimen clearly labelled	Decomposed sample Cold chain not maintained Packaging compromised (exposure to environmental contamination)	24 Hrs	Transported at ± 4°C-8°C	3-7 work days
	Feed 50g	Aerobic culture and isolation, detection	R53.00/sample	Dry feed, clearly labelled	Wet, damp specimen Packaging compromised (exposure to environmental contamination)	24 Hrs	Transported at ambient temperature	3-10 work days
Antibiotic residue	Meat 100g	<i>B. subtilis</i> growth inhibition	R34.00/sample	Fresh specimen clearly labelled	Decomposed sample Cold chain not maintained Packaging compromised (exposure to environmental contamination)	24 Hrs	Transported at ± 4°C-8°C	3-7 work days
Aerobic plate count (Water)	Water 1000ml	Aerobic culture and count	R37.00/sample	Water in a sterile sampling container	Dirty, unsterile sample containers	24 Hrs	Transported at ± 4°C-8°C or at ambient temperature	3-5 work days
Total Coliforms Water	Water 1000ml	Aerobic culture and count	R53.00/sample	Water in a sterile sampling container	Dirty, unsterile sample containers	24 Hrs	Transported at ± 4°C-8°C or at ambient temperature	3-5 work days
Faecal coliforms & <i>E. Coli</i> (Water)	Water 1000ml	Aerobic culture and count	R53.00/sample	Water in a sterile sampling container	Dirty, unsterile sample containers	24 Hrs	Transported at ± 4°C-8°C or at ambient temperature	3-5 work days
Faecal Streptococci (Water)	Water 1000ml	Aerobic culture and count	R45.00/sample	Water in a sterile sampling container	Dirty, unsterile sample containers	24 Hrs	Transported at ± 4°C-8°C or at ambient temperature	3-5 work days

REPRODUCTION								
Test/s required	Sample Type & Size	Assay	Fee	Suitable Sample	Unsuitable Sample	To reach the lab within:	Transport Requirements	Average turn-around time
Semen evaluation: Sperm Morphology	Fresh semen Frozen processed semen Semen smears	Microscopic evaluation	R42.00/sample	Fresh aseptically collected semen - kept at 35°C-38°C Frozen semen - stored in liquid nitrogen	Contaminated semen Semen not kept at required temperature Blood in semen	12 Hrs (Fresh) 24 Hrs + (Frozen)	Fresh semen – keep at 35-38°C. Frozen semen – keep in liquid nitrogen	3-5 work days
Semen evaluation: Sperm morphology and motility	Fresh semen Frozen processed semen Semen smears	Microscopic evaluation	R49.00/sample	Fresh aseptically collected semen - kept at 35°C-38°C Frozen semen - stored in liquid nitrogen	Contaminated semen Semen not kept at required temperature Blood in semen	12 Hrs (Fresh) 24 Hrs + (Frozen)	Fresh semen – keep at 35-38°C. Frozen semen – keep in liquid nitrogen	3-5 work days
Semen evaluation: Cytology (bacteriology)	Fresh semen Frozen processed semen Semen smears	Microscopic evaluation	R10/sample	Fresh aseptically collected semen - kept at 35°C-38°C Frozen semen - stored in liquid nitrogen Smears to be thin preparations on clean slides	Contaminated semen Semen not kept at required temperature Blood in semen Shattered / broken slide	12 Hrs (Fresh) 24 Hrs + (Frozen)	Fresh semen – keep at 35-38°C. Frozen semen – keep in liquid nitrogen Smears to be package in protective packaging to prevent breakage of glass	3-5 work days
Semen: Total bacterial count	Fresh semen	Aerobic culture, bacterial count	R75.00/sample	Fresh aseptically collected semen - kept at 35°C-38°C	Contaminated semen Semen not kept at required temperature	12 Hrs (Fresh) 24 Hrs + (Frozen)	Fresh semen – keep at 35-38°C. Frozen semen – keep in liquid nitrogen	3-5 work days

BIOCHEMISTRY								
Test/s required	Sample Type & Size	Assay	Fee	Suitable Sample	Unsuitable Sample	To reach the lab within:	Transport Requirements	Average turn-around time
Feed analysis: minerals (Ca, Mg, P, Cu, Fe, Zn, Mn, Na, K)	Feed (100g)	Atomic Absorption Spectrometry	R26.00/mineral/sample	Feed in a secure, clean plastic / paper bag	Wet, badly packed samples	within 48 hours	Ambient temperature	7-10 work days
Feed analysis: minerals Selenium	Feed (100g)	Fluorescence Spectrometry	R104.00/mineral/sample	Feed in a secure, clean plastic / paper bag	Wet, badly packed samples	within 48 hours	Ambient temperature	7-10 work days
Organ (Liver, kidney): minerals (Ca, Mg, P, Cu, Fe, Zn, Mn,)	Liver / kidney (100g)	Atomic Absorption Spectrometry	R26.00/mineral/sample	Fresh organs on ice Organs in 7-10% unbuffered Formalin, clean leak-proof sample bottle, sealed plastic bag	decomposed samples, 7-10% buffered formalin	within 24 hours	Fresh samples - frozen organs on ice	7-10 work days
Organ (Liver, kidney): minerals Selenium	Liver / kidney (100g)	Fluorescence Spectrometry	R93.00/mineral/sample	Fresh organs on ice Organs in 7-10% unbuffered Formalin, clean leak-proof sample bottle, sealed plastic bag	decomposed samples, 7-10% buffered formalin	within 24 hours	Fresh samples - frozen organs on ice	7-10 work days
Bone minerals: Ca, Mg, P; Bone ash	Bone (50g)	Atomic Absorption Spectrometry	R70.00/mineral / sample	Fresh bone frozen (kept on ice), clean sample container, leak-proof	bone with muscle tissue attached; bone in formalin	within 48 hours	Fresh samples - frozen, transport on ice on ice	10-15 work days
Serum / Plasma: Total Protein	Plasma / Serum (5-10ml)	Automated dry chemistry instrument (spectrometry)	R57.00/sample	Serum (Red / Yellow top), Plasma separated from Whole blood (Heparin – Green top / EDTA – lavender / purple top).	Haemolysed serum / plasma with or without clot	within 24 hours	4°C-8°C	7-10 work days
Serum / Plasma: Albumin/Globulin	Plasma / Serum (5-10ml)	Automated dry chemistry instrument (spectrometry)	R57.00/sample	Serum (Red / Yellow top), Plasma separated from Whole blood (Heparin – Green top / EDTA – lavender / purple top).	Haemolysed serum / plasma with or without clot	within 24 hours	4°C-8°C	7-10 work days
Serum / Plasma: Blood urea nitrogen	Plasma / Serum (5-10ml)	Automated dry chemistry instrument (spectrometry)	R49.00/sample	Serum (Red / Yellow top), Plasma separated from Whole blood (Heparin – Green top / EDTA – lavender / purple top).	Haemolysed serum / plasma with or without clot	within 24 hours	4°C-8°C	7-10 work days
Serum: Gamma-Globulin	Serum (5-10ml)	spectrometry (turbidity)	R38.00/sample	Serum (Red / Yellow top), preferably separated from clot	Plasma, Whole blood, Haemolysed serum	within 24 hours	4°C-8°C	7-10 work days
Serum minerals: Cu, Zn	Serum (5-10ml)	Atomic Absorption Spectrometry	R26.00/mineral sample	Serum (Red / Yellow top), preferably separated from clot	Haemolysed serum with or without clot	within 24 hours	4°C-8°C	7-10 work days

BIOCHEMISTRY								
Test/s required	Sample Type & Size	Assay	Fee	Suitable Sample	Unsuitable Sample	To reach the lab within:	Transport Requirements	Average turn-around time
Serum minerals: Ca, Mg, P, Na, K, Fe	Serum (5-10ml)	Automated dry chemistry instrument (spectrometry)	R26.00/mineral/sample	Serum (Red / Yellow top), preferably separated from clot	Haemolysed serum with or without clot	within 24 hours	4°C-8°C	7-10 work days
Whole blood: Selenium	Whole Blood (5-10ml)	Fluorescence Spectrometry	R42.00/mineral / sample	Whole blood (Heparin – Green top / EDTA – lavender / purple top)	Clotted blood sample, serum	within 24 hours	4°C-8°C	10-15 work days
pH	Rumen contents, water (50ml)	pH meter	-	Clean plastic bottle	Dirty contaminated sample container	within 48 hours	4-8°C or ambient temperature	7-10 work days
Haematocrit (Packed cell volume)	Whole Blood (5-10ml)	Haematocrit centrifuge	R5.40/sample	Whole blood (preferably EDTA – lavender / purple top)	Clotted blood sample, serum	within 24 hours	4°C-8°C	7-10 work days

TOXICOLOGY								
Test/s required	Sample Type & Size	Assay	Fee	Suitable Sample	Unsuitable Sample	To reach the lab within:	Transport Requirements	Average turn-around time
Nitrate/Nitrite	5ml eye fluid / serum	Spot test, qualitative	R25.00/sample	Samples In separate sterile containers. Blood in Heparin.	Samples older than 24 hrs	within 12-24 hours	4°C-8°C	3 work days
Ryegrass toxicity	Grass with ripe seed	Microscopic examination	R53.00/sample	Sample must be representative of feed batch	Grass with immature seed	Not applicable	Ambient temperature	2-3 work days

PATHOLOGY (POST MORTEM)								
Test/s required	Sample Type & Size	Assay	Fee	Suitable Sample	Unsuitable Sample	To reach the lab within:	Transport Requirements	Average turn-around time
Pathology investigation: Adult large stock	Whole animal carcass Animal tissue	Necropsies and histopathology examinations, further laboratory testing; Referral testing (may be subject to referral laboratory test fee)	R453.00 / Adult large stock	Carcass Tissue	Advanced decomposition	24 hrs post mortem	Preferably cooled, 4-8°C	On request
Pathology investigation: Small stock, dog, cats, immature large animal	Whole animal carcass Animal tissue	Necropsies and histopathology examinations, further laboratory testing;	R220.00/ Small stock, dog, cats, immature large animal	Carcass Tissue	Advanced decomposition	24 hrs post mortem	Preferably cooled, 4-8°C	On request

		Referral testing (may be subject to referral laboratory test fee)						
Pathology investigation: Poultry, Bird, Reptile	Whole animal carcass Animal tissue	Necropsies and histopathology examinations, further laboratory testing; Referral testing (may be subject to referral laboratory test fee)	R122.00/ Poultry, Bird, Reptile	Carcass Tissue	Advanced decomposition	24 hrs post mortem	Preferably cooled, 4-8°C	On request
Pathology investigation: Adult ostrich	Whole animal carcass Animal tissue	Necropsies and histopathology examinations, further laboratory testing; Referral testing (may be subject to referral laboratory test fee)	R237.00/ Adult ostrich	Carcass Tissue	Advanced decomposition	24 hrs post mortem	Preferably cooled, 4-8°C	On request
Pathology investigation: Immature ostrich	Whole animal carcass Animal tissue	Necropsies and histopathology examinations, further laboratory testing; Referral testing (may be subject to referral laboratory test fee)	R119.00/ Immature ostrich	Carcass Tissue	Advanced decomposition	24 hrs post mortem	Preferably cooled, 4-8°C	On request
Pathology investigation: Foetus	Whole animal carcass Animal tissue	Necropsies and histopathology examinations, further laboratory testing; Referral testing (may be subject to referral laboratory test fee)	R264.00/ Foetus	Clearly marked as High risk Carcass Tissue	Advanced decomposition	24 hrs post mortem	Clearly marked as High risk Preferably cooled, 4-8°C	On request
Pathology investigation: Rabies	Whole animal carcass	Necropsies and collection of Rabies samples Referral testing	Any diseased animal suspected of rabies virus	Clearly marked as High risk Carcass Tissue	Advanced decomposition	24 hrs post mortem	Clearly marked as High risk Preferably cooled, 4-8°C	On request Samples submitted for referral testing at ARC-OVI for confirmation