

**SRUC Veterinary Services** 

# Price List April 2023



Farm animals



Companion animals



Analytical services

**Health Schemes** 



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#### **CONTACT DETAILS**

# Central telephone number for all departments (excluding Health Schemes):

#### 0131 535 3130:

- Press 1 for all routine administrative and invoicing queries
- Press 2 for vets to speak to the veterinary team for farm animal case advise
- Press 3 for all other queries including companion animals

# Diagnostic Submissions (Farm and Companion Animal) and Analytical Services (soil, seed, forage etc.)

#### **SRUC Veterinary and Analytical Laboratory**

Pentlands Science Park, Bush Loan, Penicuik, Midlothian, EH26 0PZ Tel: 0131 535 3130 Email: VSEnquiries@sruc.ac.uk

#### **Farm Animal Post-mortem Service**

#### **Aberdeen Disease Surveillance Centre**

Mill of Craibstone, Bucksburn, Aberdeen, AB21 9TB Tel: 0131 535 3130 Email: VetServices.North@sruc.ac.uk

#### **Dumfries Disease Surveillance Centre**

St Mary's Industrial Estate, Dumfries, DG1 1DX Tel: 0131 535 3130 Email: VetServices.SouthWest@sruc.ac.uk

#### St Boswells Disease Surveillance Centre

Greycrook, St Boswells, Roxburghshire, TD6 0EQ Tel: 0131 535 3130 Email: VetServices.Central@sruc.ac.uk

#### **Thurso Disease Surveillance Centre**

Janetstown, Thurso, KW14 7XF Tel: 0131 535 3130 Email: VetServices.North@sruc.ac.uk

#### Farm Animal Veterinary Surveillance Hubs

#### **Perth Veterinary Surveillance Hub**

5 Bertha Park View, Perth PH1 3FZ
Tel: 0131 535 3130 Email: VetServices.Central@sruc.ac.uk

#### **Ayr Veterinary Surveillance Hub**

J F Niven Building, Auchincruive Estate, Auchincruive, Ayr, KA6 5HW Tel: 0131 535 3130 Email: VetServices.SouthWest@sruc.ac.uk

#### **Inverness Veterinary Surveillance Hub**

An Lòchran, 10 Inverness Campus, Inverness, IV2 5NA Tel: 0131 535 3130 Email: VetServices.North@sruc.ac.uk

#### **Health Schemes**

#### **Premium Cattle Health Scheme (PCHS)**

Greycrook, St Boswells, Roxburghshire, TD6 0EQ Tel: 01835 822456 Email: <u>HealthSchemes@sruc.ac.uk</u> www.cattlehealth.co.uk

#### **Premium Sheep and Goat Health Schemes (PSGHS)**

Greycrook, St Boswells, Roxburghshire, TD6 0EQ
Tel: 01835 822456 Email: HealthSchemes@sruc.ac.uk
www.sheepandgoathealth.co.uk

#### Other related services

#### C-QAS

(External quality assessment scheme for point of care analysers)
Pentlands Science Park, Bush Loan, Penicuik, Midlothian, EH26 0PZ
Tel: 0131 535 3130 Email: c-qas@sruc.ac.uk

www.CQAS.co.uk

#### **Animal Health Planning System (SAHPS)**

Pentlands Science Park, Bush Loan, Penicuik, Midlothian, EH26 0PZ
Tel: 0131 535 3130 Email: enquiries@sahps.co.uk
www.SAHPS.co.uk

#### **CPD for Vets**

Pentlands Science Park, Bush Loan, Penicuik, Midlothian, EH26 0PZ Tel: 0131 535 3130 Email: cpdforvets@sruc.ac.uk

Visit our website at Veterinary & laboratory services | SRUC

#### Welcome

Welcome to SRUC Veterinary and Analytical Services 2023/24 Service Guide, which details our products and services.

In addition, and on behalf of the Scottish Government we carry out disease surveillance to detect new and emerging diseases and changes in the pattern of existing ones. Details available at <a href="Veterinary & laboratory services">Veterinary & laboratory services</a> | SRUC

Our services are independent, impartial and comprehensive, covering histopathology, microbiology, serology, molecular, clinical pathology, post-mortem examination service, EQA and mineral and vitamin testing. We have incorporated MALDI-TOF into our microbiological testing methods, for rapid bacterial identification. We are committed to working in partnership with veterinary surgeons and farmers to provide a high quality analytical service, along with advice and support for the control and prevention of disease. All of SRUC Veterinary and Analytical Services' income helps fund SRUC's support of the rural environment.

We endeavour to report test results as rapidly as possible and approximate turnaround times (working days) are given for guidance from date of receipt at the testing laboratory. Results are normally sent by email. If you have any queries please contact us on 0131 535 3130 or by email (VSEnquiries@sruc.ac.uk).

#### Sample submission

To enable us to handle samples efficiently please follow the guidelines below

- Please label all samples
- Ensure lids of screw pots are tight. If there is a need to further seal tubes we recommend using electrical insulation tape.
- Ensure all sharps have been removed from the samples and package. This particularly refers to hypodermic needles.
- Please identify samples from patients on chemotherapy drugs by recording on the submission form, as such samples require special handling in order to comply with health and safety regulations.
- Package samples in accordance with Post Office regulations.

#### Payment and prices

Payment terms are available on request. If these alter we will inform you of the change. All prices are in pound sterling and are subject to VAT, which will be added to your invoice at the prevailing rate.

#### Results

Your veterinary practice, your clients and their livestock matter to us and we endeavour to report test results as rapidly as possible. Approximate turnaround times are given for guidance from date of receipt at testing laboratory. Results are normally sent by email.

SRUC Veterinary Services (SRUC VS) operates much of its testing in compliance with the ISO 17025 standard and is accredited by UKAS. The ISO 17025 standard requires that the results of testing are verifiable and reproducible, and that records relating to each test run are kept. In order to ensure that reported results are accessible and easy to understand, SRUC VS uses simplified reports that do not include the technical details of each test run. This information may include, but is not restricted to, test methods, statements of conformity and measurement of uncertainty. Customers of SRUC VS agree to receiving these simplified reports. Technical information relating to testing carried out under ISO 17025 requirements is available on request.

We will only provide results to the submitting veterinary surgeon, unless express written permission has been given to report to the owner or other third party. This does not apply to livestock health schemes.

Litigation cases require specific procedures to ensure appropriate chain of custody; please advise in advance if this is the case.

#### Quality

We are a United Kingdom Accreditation Services (UKAS) accredited laboratory and the majority of our tests are accredited to the internationally recognised ISO/IEC 17025 standard for laboratory competence. Our farm animal diagnostic testing is carried out under the UKAS accreditation certificates (accreditation nos. 2239 and 7624). The current schedule of accreditation is available in the UKAS website.

Our list of test methods is available at test-method-list-for-veterinary-services.pdf (sruc.ac.uk)

Where tests are subcontracted to outside laboratories preference is given to those holding UKAS accreditation. Where this is not possible, laboratories are selected for speciality and expertise. Most tests are undertaken at our central laboratory. For further information contact your local DSC.



2239 7624

Our complaints handling procedure is available at <u>Veterinary & laboratory services | SRUC</u> under section on sending samples.

#### **Disease Surveillance and Research**

We may wish to use samples anonymously for further disease surveillance or research work.

#### Samples from the European Union

Paperwork required for diagnostic samples from the European Union is available at Veterinary diagnostics | SRUC

#### **Contact us**

Please contact SRUC Veterinary and Analytical Laboratory on 0131 535 3130 if the test you require is not listed here.

For any Livestock Health Schemes related enquiries, please call 01835 822456.

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# **Livestock (farm animal) Diagnostic Services**

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In the tables the following applies: Superscript A = Accredited to ISO 17025

Microbiology (sample collection guidelines are on page 53-59)										
Profile/Test	Samples	Turn around (working days)	Nos	Price £						
Bacterial culture <sup>A</sup> (and antibiotic sensitivity if appropriate)	Various	2-5d	1	37.10						
Clostridial toxin ELISA - per toxin	Intestinal content	Day after test	1	30.45						
Preparation and examination of smears <sup>A</sup>	Faeces/urine (min 2ml), tissue	<2d	1	18.20						
Salmonella screen <sup>A</sup>	Faeces/swab	<3d	1-9	23.80						
damonella sereen	1 acces/swab	<b>\3u</b>	10+	21.70						
Virus detection: Coronavirus (ELISA) <sup>A</sup> and rotavirus (PAGE/ELISA) <sup>A</sup>	Faeces	Faeces Day after test		14.65 ELISA 29.55 PAGE						
Serotyping bacterial Isolates				TAGE						
Serotyping bacterial Isolates	Isolates, e.g. Strep. suis or Erysipelas	<10d	1	54.75						
Fluorescent antibody tests			•	•						
Clostridia <sup>A</sup> , per antigen (C. novyi, C. septicum, C. sordellii, C. chauvoei)	Tissue	<2d	1	35.45						

Mycotoxin testing – pigs (up to 4 samples can be pooled per test)										
Profile/Test	Samples	Turn around (working days)	Price £							
ZON or DON – bile IAE/ELISA	5ml bile per pig	15d	71.35							
ZON or DON – serum IAC/ELISA	5ml serum per pig	15d	43.65							
ZON – Feed or DON	5ml sample per pig	15d	77.30							

Parasitology				
Profile/Test	Samples	Turn around (working days)	Nos	Price £
Camelid worm egg count <sup>A</sup>	Faeces min 10g	4d	1	31.15
Comprehensive parasitology (worm egg, fluke eggs, lungworm larvae)	Faeces min 14g	2-3d	1-3 4+	43.10 31.70
Giardia	Faeces min 1g	1d	1	16.80
Grouse caecal worm count	Grouse caecae	1w	1	26.80
Haemonchus contortus egg ID (PNA test) (+ worm egg count)	Faeces min 6g	1w	1	55.70 (+15.75)
ID of ovine coccidia (+ coccidia oocyst count)	Faeces min 6g (3g for count, 3g for species ID)	1w	1	43.10 (+15.75)
ID of bovine coccidia (+ coccidia oocyst count)	Faeces min 6g (3g for count, 3g for species ID)	2d	1	19.75 (+15.75)
Liver fluke coproantigen ELISA	Ovine faeces min 0.5g. Bovine faeces min 2g (fresh as possible)	7d	1	1-9 13.00 10+ 10.15
Liver fluke coproantigen ELISA (pooled)	Faecal samples max no. 10 advised (fresh as possible)  7d		1	23.65
Liver fluke egg check (bulk on 10 samples)	Faeces min 3g from each animal	2d	Bulk (basic) Bulk (full kit)	29.20 38.00
Liver fluke egg check on individual animals	Faeces min 4g	1-2d	1-3 4+	16.80 11.25
Lungworm larvae examination	Faeces min 10g	2-3d	1-3 4+	15.75 12.40
Worm and fluke eggs	Faeces min 4g	1-2d	1-3 4+	29.40 18.20
Worm egg/coccidial oocyst count	Faeces min 3g	1-2d	1-3 4+	15.75 13.65
Wormscan Bulk worm egg count (10 samples) Added liver fluke	Faeces min 3g from each animal	1-2d	Bulk (basic) Bulk (full kit) Added fluke	29.20 38.00 +13.85

Please note: Wormscan and Liver Fluke Egg Check – Basic = testing only, Full = sample pots, envelope to send samples to lab and pre-paid postage.

Do NOT pool samples prior to submission.

If the test is not listed please contact us as we can provide most tests.

Biochemistry (sample collection guidelines are on page	ge 53-59)				
Profile/Test	Samples	Turn aroun (workir days)	d ng	Nos tests	Price £/test
Routine biochemistry **(You can select your own t	est packages based on	price band	ds be	low, A,B,C	C,D,E)
Total protein, albumin, globulin, sodium, potassium, chloride, calcium, magnesium, phosphate, urea, creatinine, glucose, beta-hydroxybutyrate, cholesterol, bilirubin, CK, AST, ALT, GDH, GGT, ALP, amylase, lipase (All tests listed above are accredited)	Serum/plasma except (Glucose- fluoride plasma)	1-2d	А	1 2-3 4+	8.60 5.25 4.45
LDH, ZST	Serum Min 0.5ml	<5d	A	1 2-3 4+	8.60 5.25 4.45
Copper <sup>A</sup> (serum or plasma acceptable - different reference ranges)	Serum/Plasma min 0.5ml	2d	В	1 2+	12.10 9.55
Fibrinogen	Citrate/EDTA	<5d	С	1	18.00
GSH-Px <sup>A</sup>	Whole heparinised	5d	В	1 2+	13.00 6.80
Haptoglobin	Serum	<5d	С	1	18.00
Manganese <sup>A</sup>	Whole heparinised min 1ml	2-5d	D	1	18.90
Pepsinogen	Serum/plasma min 0.5ml	4-5d	С	1	18.00
Vitamins A or E	Serum/plasma min 0.5ml	4-5d	Е	1	24.15
Lead <sup>A</sup>	Whole heparinised	1-2d	E	1	22.05
NEFA <sup>A</sup>	Serum only	1-2d	Е	1-3 4+	9.90 7.95
Vitamin B12 <sup>A</sup>	Serum/plasma	3-4d	E	1	16.80
Zinc <sup>A</sup> ATubes must not contain rubber or gel components	Serum Min 0.5ml	<5d	А	1	18.90
Special biochemistry:					
Bone analysis	Bone 5g (remove fat and meat)	2-4d		1	30.75
Inorganic iodine	Plasma or serum (plasma preferred)	Up to 1	5d	1 Pool of 2-6	30.45 35.25
Progesterone	Serum/plasma (plasma preferred)	1-2d		1	32.55
Oestrone sulphate	Serum	Up to 1	5d	1	38.20
Thyroxine T4	Serum/plasma	Same d	ay	1	20.80
Tissue analysis for copper <sup>A</sup> or lead <sup>A</sup>	Tissue min 5g	2-4d		1	31.50

Tissue analysis for selenium <sup>A</sup>	Tissue min 5g	2-4d	1	31.50
Tissue analysis for cobalt	Tissue min 5g	2-4d	1	31.50
Tissue analysis for vitamins A+E (Package)	Tissue min 1g	4-5d	1	45.00
Tissue analysis for copper, cobalt and selenium (Package)	Tissue min 5g	5-7d	1	40.95

<sup>\*\*</sup>See page 11 for recommended profile. Tests can be substituted if required.

Haematology (sample collection guidelines are on page 53-59)										
Profile/Test	Samples	Turn around (working days)	Price £							
RBC, PCV, Hb, WBC (all four tests) <sup>A</sup>	EDTA blood	Day of receipt	14.50							
WBC and differential <sup>A</sup>	EDTA blood	Day of receipt	19.30							
Full haematology (RBC, PCV, Hb, WBC and differential) <sup>A</sup>	EDTA blood	Day of receipt	26.65							
Examination for blood parasites	EDTA blood, blood smear	Day of receipt	19.95							

Biochemistry profiles – see page 11 for recommended profiles (sample collection guidelines are on pages 53-59)									
Profile/Test	Samples	Turn around (working days)	Price £						
Full haematology additional to profile <sup>A</sup>	EDTA blood	Day of receipt	16.60						
Herd metabolic profile <sup>A</sup> - 10 parameters	Serum/plasma + heparin + fluoride-plasma	5d	18 animals 423.50						
Production audit <sup>A</sup> - 5 parameters	Serum/plasma + heparin	1-2d	12 animals 219.05						
Fertility audit <sup>A</sup> - 6 parameters	Serum/plasma + heparin	5d	12 animals 255.55						
General audit <sup>A</sup> - 10 parameters	Serum/plasma + heparin	5d	12 animals 365.20						
Ewe nutrition A (BOHB + Urea)	Serum/plasma	1d	10 animals 45.00						

Suggested biochemistry profiles – trace element/ill thrift/minerals/production																						
	(sai	mple c	olle	ctio	n gu	uide	line	s ar	e oı	n pa	iges	53	-59)					- I	ı	ı	ı	
	-	4+	n <sub>O</sub>	Vit B12	GSH-Px	Vit E	CPK	Pepsinogen	Ca	Mg	۵	AST	Albumin	Globulin	Urea	ВОНВ	NEFA	Glucose	Creatinine	Bile acid	GGT	ВГДН
Bovine trace element	18.65	13.05	•		•																	
Bovine ill thrift profile	47.35	41.85	•		•			•					•	•							•	•
Bovine mini metabolic profile	22.25	20.65								•			•		•	•	•					
Ruminant myopathy profile	35.25	28.25			•	•	•															
Ruminant mineral status*	12.55	10.75							•	•	•											
Downer cow profile	21.55	21.55					•		•	•	•	•			•							
Fatty liver profile	20.55	17.10										•				•	•	•				
Ruminant energy/protein status^	22.25	20.65											•	•	•	•	•					
Ewe metabolic disease profile	12.55	10.75							•	•						•						
Ovine trace element	32.60	27.05	•	•	•																	
Ovine ill thrift profile	61.30	55.80	•	•	•			•					•	•							•	•
Individual clinical profile	57.50	57.50					•		•	•	•	•	•	•	•	•		•	•	•	•	•
Herd profiles – see page 10 for p	rices																					
Fertility audit			•		•								•		•	•	•					
General audit			•		•			•					•	•	•	•	•			•		•
Herd metabolic profile			•		•					•	•		•	•	•	•	•	•				
Production audit													•	•	•	•	•					
Ewe nutrition															•	•						

 $<sup>^{\</sup>star}$  Haematology at the discounted rate of £16.60 per animal can be added to any of the above. Prices exclude VAT.

## Serology

Unless indicated otherwise listed tests detect antibody to pathogens involved. Only at peak times are tests run as frequently as indicated.

Profile/Test	Samples	Turn around (working days)	No of test	Price £/each sample
Cattle				
Bovine coronavirus	Serum/plasma	<7d	1	18.30
Cattle lungworm	Serum	<8d	1-9 10+	26.30 20.30
Erysipelas	Serum	<7d	1-9 10+	18.38 14.65
Fasciola hepatica	Serum	<7d	1	8.95
IBR (BHV-1 gB) <sup>A</sup> , blood	Serum	<7d	1	6.30
IBR (BHV-1 gE) <sup>A</sup> , blood	Serum	<7d	1-9 10+	9.45 9.20
Johne's (MAP) <sup>A</sup>	Serum	<7d	1-39 40+	5.85 5.20
Leptospira hardjo <sup>A</sup> , blood	Serum	<7d	1	6.70
Mycoplasma bovis	Serum	<7d	1	8.95
Neospora caninum <sup>A</sup>	Serum	<7d	1-39 40+	7.60 6.90
Parainfluenza 3 (PI3) <sup>A</sup>	Serum/plasma	<7d	1	7.60
Q fever	Serum	<7d	1-9 10+	13.50 10.30
Respiratory syncitial virus (RSV) A	Serum	<7d	1	7.60
Schmallenberg virus (SBV) <sup>A</sup> , blood	Serum	<7d	1-9 10+	8.95 7.65
Dairy Cow – milk serology				
Fasciola hepatica	Milk with preservative	<7d	1	9.70
IBR (BHV-1 gB) <sup>A</sup>	Milk with preservative	<7d	1	6.70
Mycoplasma bovis	Milk with preservative	<7d	1	8.95
Johne's (MAP)	Milk with preservative	<7d	1	6.05
Leptospira hardjo <sup>A</sup>	Milk with preservative	<7d	1	6.70
Schmallenberg virus <sup>A</sup> (SBV)	Milk with preservative	<7d	1	10.05
See also B\	/D milk tests page 14	and Mastitis milk tests p	page 18	

Sheep and goats				
Border disease	Serum	<7d	1-9 10-39 40+	9.50 8.25 6.30
CAE <sup>A</sup>	Serum	<7d	1-9 10+	9.70 6.75
CLA	Serum	<7d	1-9 10-39 40+	10.80 9.20 6.90
Chlamydia abortus ELISA <sup>A</sup>	Serum	<7d	1-9 10+	10.40 8.95
Erysipelas	Serum	<7d	1-9 10+	18.38 14.65
Fasciola hepatica	Serum	<7d	1	8.95
Johne's (MAP) <sup>A</sup>	Serum	<7d	1-39 40+	5.85 5.20
Louping ill	Serum	<12d	1-9 10+	15.85 13.85
Maedi visna <sup>A</sup> (MV)	Serum	<7d	1-9 10+	10.15 6.70
MV diagnostic package <sup>A</sup> (12 sheep)	Serum	<7d	1	49.15
Q fever	Serum	<7d	1-9 10+	13.50 10.30
Schmallenberg virus <sup>A</sup> (SBV)	Serum	<7d	1-9 10+	8.95 7.65
Sheep scab	Clotted blood	<7d	1-9 10-39 40+	10.40 8.95 7.00
Toxoplasma <sup>A</sup>	Serum	<7d	1-9 10+	10.50 9.05
Pigs				
Erysipelas	Serum	<7d	1-9 10+	18.38 14.65
Porcine salmonella	Serum	<10d	1	6.05
Porcine parvovirus	Serum	<10d	1	12.75
Porcine respiratory coronavirus/TGE (non-diff)	Serum	<7d	1	12.00
PRRS ELISA	Serum	<7d	1	7.15
PRRS tissue culture (IPMA)	Serum	10d	1	31.65
Swine 'flu (4 strains) HAIT	Serum	3d	1	34.15
Swine 'flu A ELISA	Serum	<7d	1	7.30
M. hyopneumoniae ELISA	Serum	5d	1	7.00
	•	•	•	

If the test is not listed please contact us as we cater for most species.

Testing for BVD				
Profile/Test	Samples	Turn around (working days)	Price £	
BVD antibody – blood <sup>A</sup>	Serum	7d**	4.75	
BVD antibody – milk <sup>A</sup>	Milk with preservative	7d	6.20	
BVD individual test <sup>A</sup> (< 4 weeks)***	Serum	5d**	24.35	
BVD antigen – blood <sup>A</sup> (aged ≥ 4 weeks)	Serum	7d**	6.70	
<sup>1</sup> BVD PCR – individual animal validated aged > 6 weeks <sup>A</sup>	Unopened red top tube	5d**	5.20	
<sup>1</sup> BVD virus PCR – bulk milk <sup>A</sup>	Milk with preservative	5d**	39.15	
BVD virus detection in ear tissue <sup>A</sup> (antigen ELISA)	Ear tissue from tag	7d	6.70	
BVD PCR ear tissue <sup>A</sup> (price depends on tag type)	Ear tissue any age animal	5d**		
BVD PCR in support of a PM	Tissue	5d	34.15	

\* Further test price discounts apply to combined Tag and Test packages via selected Tag companies

1 Requires dedicated sample for BVD PCR

\*\*\* From receipt at SRUC Veterinary and Analytical Laboratory

\*\*\* Blood samples from calves <4 weeks require individual tests.

N.B. Turnaround times for Health Schemes can be found on PCHS and PSGHS pricelists on pages 29-30.

Molecular biology				
Profile/Test	Samples	Turn around (working days)	No	Price £/sample
Cattle				
Bovine respiratory extended PCR - 7 agents (BoHV-1, PI3, RSV, <i>M. bovis, H. somni, P. multocida, M. haemolytica</i> )	Swabs/tissue ideally in VTM	7d	1	63.00
Johne's (MAP) PCR <sup>A</sup>	Faeces	<4d	1	35.90
MCF virus detection PCR	Heparin/EDTA blood or tissue	7d	1	28.10
Schmallenberg virus PCR	Tissue – brain & Spinal cord	7d	1	28.10
Sheep				
Border disease virus PCR <sup>A</sup>	Serum	<7d	1-49 50+	13.65 10.45
Orf examination	Scab		1	28.10
Schmallenberg virus PCR	Tissue – brain & spinal cord	7d	1	28.10
Tick borne fever PCR	Lung/spleen/lymph nodes in VTM / EDTA blood	<10d	1	28.10
Pigs - Please see footnote over for pooling in	nformation			
APP PCR <sup>A</sup>	Throat swabs, culture	<5d	1	46.85
APP toxin gene profiling PCR	Throat swabs, culture	<7d	1 2-3 4-5 6+	101.20 70.95 49.40 39.20
Atrophic rhinitis PCR <sup>A</sup> (Toxigenic Pasteurella multocida)	Throat swabs	<5d	1	46.30
Brachyspira PCR <sup>A</sup> (B. hyodysenteriae & B. pilosicoli)	Faeces, cultures, PM material	<4d	1 2-3 4+	44.30 38.00 31.65
E. coli virulence PCR <sup>A</sup> (after culture)	Faeces, intestine	<7d	1	46.85
Lawsonia intracellularis PCR <sup>A</sup>	Faeces, intestine	<7d	1-3 4+	55.70 53.80
L. intracellularis <sup>A</sup> & B. hyodysenteriae PCR <sup>A</sup>	Faeces	<7d	1 2-3 4+	81.05 65.80 59.60
Mycoplasma hyopneumoniae PCR <sup>A</sup>	Lung tissue, throat swabs, oral fluids*	<4d	1	42.85
Porcine circovirus Type 2 <sup>A</sup>	Lung tissues, throat swabs, oral fluids*	2-6d	1	38.00

Porcine circovirus Type 2 Quantified	Lung tissues, throat swabs, oral fluids*	2-6d	1	54.75
PED/TGE virus PCR <sup>A</sup>	Faeces, oral fluids*	2-6d	1	38.00
Porcine Deltacoronavirus <sup>A</sup>	Faeces, oral fluids*	2-6d	1	38.00
PED/TGE + Porcine Deltacoronavirus <sup>A</sup>	Faeces, oral fluids*	2-6d	1	52.00
PRRS PCR <sup>A</sup>	Semen, serum, lung tissues, throat swabs, blood swabs, oral fluids*	Same day	1	33.10
Strep. suis PCR	Swabs (tonsil, meninges, joint)	<3d	1-3 4+	46.85 33.65
Swine influenza PCR <sup>A</sup>	Lung tissues, throat swabs, oral fluids*	2-6d	1	48.60
All species				
Mycoplasma DGGE/PCR	Tissue/BAL/ swab in Mycoplasma transport medium	15+ d	1	95.70
Porcine Oral Fluid Tests			1	
Package of 2 (PRRS/SIV/PCV2) <sup>A</sup>	Oral Fluids*	<6d	1	60.90
Package of 3 (PRRS/SIV/PCV2) <sup>A</sup>	Oral Fluids*	<6d	1	79.10

Pooling samples for PCR testing: swabs, semen and faeces up to 5 samples = 1 pool/test. Tissues: up to 3 samples = 1 pool/test.

<sup>\*</sup>Oral fluid samples to be chilled during shipping.

Enteritis (sample collection guidelines are on pages (53-55	9)			
Profile/Test	Samples	Turn around (working days)		rice nimal
Ruminant enteritis				
Adult ruminant enteritis – salmonella, Johne's serology, worm and fluke eggs	Faeces min 5g (blood red top)	3-5d	4;	3.10
Adult ruminant enteritis – salmonella, microscopic exam, Johne's, worm and fluke eggs	Faeces	<5d	43	3.10
Johne's (MAP) PCR in addition to above package (Bovine accredited/Ovine not accredited)	Faeces	<4d	34	4.90
Yearling ruminant enteritis – Salmonella, worm eggs, cocccidia, fluke eggs	Faeces min 4g	3-5d	36	6.50
Young ruminant enteritis – Salmonella, worm eggs, coccidian	Faeces min 3g	3-5d	29	9.20
Ruminant neonatal comprehensive enteritis – bacteriology and sensitivity, virology, cryptosporidia and coccidia (use in support of control programme or where there is a question of product failure)	Faeces min 4g	<5d	4!	5.60
Ruminant neonatal basic enteritis – salmonella, cryptosporidia, coccidian (use to inform therapy)	Faeces min 3g	<3d	3	1.65
Pig enteritis packages				
Brachyspira culture <sup>A</sup> (if negative result)	Faeces or intestine (minimise amount of air in sample container)	14-21d	1-3 4+	29.55 27.15
Brachyspira culture and biochemical identification	Faeces or intestine	14-21d	1-3 4+	41.30 37.85
Package 1 (1-5 days) E. coli, cryptosporidia, rotavirus, Salmonellas	Faeces	3-5d	4	1.30
Package 1 + E. coli virulence PCR	Faeces	<10d	88	3.15
Package 2 (6 days-weaning) cryptosporidia, rotavirus, coccidia, Salmonella	Faeces min 3g	3-5d	4	1.30
Package 2 + E. coli virulence PCR	Faeces Min 3g	3-5d	88	3.15
Package 3 (post weaning) E. coli, rotavirus, Salmonella, Yersinia	Faeces	3-5d	4	1.30
Package 3 + E coli virulence PCR	Faeces	<10d	88	3.15
Package 4 (grower/finisher) Brachyspira, Salmonella, Yersinia	Faeces	14-21d	4	1.30

Mastitis (sample collection guidelines are on pages 53-59)				
Profile/Test	Samples	Turn around (working days)	Nos	Price £
Mastitis package – all species (bacteriology,	Milk	2-5d	1-3	25.60
sensitivity)	IVIIIX	2 30	4+	22.10
Mostitia hard saraan hastarialagu anku	Milk	2-5d	1-3	17.55
Mastitis herd screen – bacteriology only	IVIIIK	2-3u	4+	14.05
Mastitis herd screen – antibiotic sensitivity	Milk	Day after test	1	8.05

Scrapie gene testing – for testing requirements refer to submission form or website www.sruc.ac.uk/sghs				
Profile/Test	Samples	Turn around (working days)	Nos	Price £
			1-14	34.65
		Within 3w of receipt	15-29	29.40
Codons 136, 154, 171 (export testing) <sup>A</sup>	EDTA blood		30-49	23.10
	receipt	receipt	50-69	21.00
			70+	16.95

Urinalysis (sample collection guidelines are on pages 53-59)				
Profile/Test	Samples	Turn around (working days)	Price £	
Microscopic examination <sup>A</sup>	Urine min 2ml	<2d	19.45	
Biochemical examination of urine <sup>A</sup>	Urine min 1ml	1d	10.90	
Calculi analysis	Bladder stone		32.55	
Comprehensive examination <sup>A</sup> (includes biochemistry, microscopy, bacteriology and sensitivity)	Urine min 4ml	<5d	47.75	

<b>Skins</b> (sample collection guidelines are on pages 53-59)				
Profile/Test	Samples	Turn around (working days)	Price £	
Microscopic examination only	Skin/hair plucks including roots and scabs	1-2d	19.50	
Ringworm <sup>A</sup> – microscopy and cultures	Skin/hair plucks including roots and scabs	Microscopy <2d Culture 21 days max*	21.55	
Orf examination by PCR test	Scab		28.10	
Comprehensive <sup>A</sup> (microscopy, bacteriology and sensitivity & mycology)	Skin/hair plucks including roots and scabs	Microscopy <2d Culture 21 days max* Bact. Sens. 2-5d	38.85	

	are on pages 53-59)			
Profile/Test	Samples	Turn around (working days)	Price £/a	animal
Bovine respiratory extended PCR - 7 agents (BoHV-1, PI3, RSV, <i>M. bovis, H. somni, P. multocida,</i> <i>M. haemolytica</i> )	Swabs/tissue ideally in VTM	7d	63.0	00
Virus detection on PCR negatives	Fresh lung or swabs	Less than 21d	34.1	5
Vials of virus transport medium are available from our labo	oratories			
Bovine respiratory serology				
IBR <sup>A</sup> , RSV <sup>A</sup> , PI3 <sup>A</sup>	Serum	5d	Single sample Paired samples	21.90 42.65
IBR, RSV, PI3, BVD <sup>A</sup>	Serum	5d	Single sample Paired samples	26.95 52.35
IBR, RSV, PI3, M. bovis	Serum	7d	Single sample Paired samples	30.45 60.10
IBR, RSV, PI3, H. somni	Serum	15d	Single sample Paired samples	57.30 113.20
IBR, RSV, PI3, BVD, M. bovis	Serum	7d	Single sample Paired samples	35.35 69.60
IBR, RSV, PI3, BVD, M. bovis, H. somni	Serum	15d	Single sample Paired samples	70.65 140.2
Porcine respiratory serology				
M. hyopneumoniae, PRRS, Swine 'flu (Influenza A ELISA)	Serum	5/6d	20.2	25
Porcine respiratory serology, PRRS, Swine 'flu (Influenza A ELISA)	Serum	5/6d	13.5	50

Reproductive failure			
Profile/Test	Samples	Turn around (working days)	Price £/animal
Bovine abortion serology packages			
L. hardjo, BVD, N. caninum	Serum	5d	19.45
L. hardjo, BVD, N. caninum, IBR	Serum	5d	25.90
Ovine/Caprine abortion serology packages			
EAE, toxoplasmosis	Serum	7d	1-3 20.90 4+ 18.20
Porcine reproductive failure			
L. Bratislava, PRRS and swine 'flu (Influenza A ELISA)	Serum	10d	26.35
L. Bratislava, PRRS and swine 'flu (Influenza A ELISA), Erysipelas, Parvovirus	Serum	10d	54.75

Fertility examinations			
Profile/Test	Samples	Turn around (working days)	Price £/sample
Bacteriology of semen and sensitivity <sup>A</sup>	Semen	<5d	29.20
Examination of stained semen slides <sup>A</sup>	Semen	2d	18.20
Spermatozoa density	Semen	2d	12.15
Campylobacter – culture and ID <sup>A</sup>	Preputial washings or vaginal mucous	10d	53.55

Post-mortem examinations – Scottish t	Turn around	Price C non	Drice C nor
Description	(working days)*	Price £ per animal	Price £ per batch
Cattle			
Over 18 months <sup>A</sup>	1d	121.70	
6-18 months <sup>A</sup>	1d	97.35	
Up to 6 months <sup>A</sup>	1d	63.25	108.30
Foetuses <sup>A</sup>	2d	75.45	121.70
Camelids			
Over 6 months <sup>A</sup>	1d	97.35	146.10
Under 6 months <sup>A</sup>	1d	63.25	108.30
Foetuses <sup>A</sup> (1 dam)	2d	75.45	
Sheep			
All ages <sup>A</sup>	1d	63.25	108.30
Foetuses <sup>A</sup>	2d	48.65	73.10
Pigs			
Over 6 months <sup>A</sup>	1d	87.60	119.35
Under 6 months <sup>A</sup>	1d	63.25	108.30
Foetuses <sup>A</sup> (1 dam)	2d	63.25	
Deer and goats			
All ages <sup>A</sup>	1d	63.25	108.30
Foetuses <sup>A</sup> (1 dam)	2d	48.65	
Game birds			
Carcase <sup>A</sup>	1d	50.00	98.60
Poultry			
Carcase <sup>A</sup>	1d	46.30	91.30
Other small farmed animals			
Carcase <sup>A</sup>	1d	50.00	98.60
Viscera from farmed species (gross examination and appropriate bacteriology) <sup>A</sup>	2d	57.30	86.40
On-farm PM service			
PMs done by PVS on-farm (any age or species)	As per the tests being carried out	63.25	108.30

<sup>\*</sup>Turnaround time refers to the initial reporting of gross PM findings. Completion of additional testing takes on average, around 10 days

Cattle abortion package	
	Price £ per batch
Comprehensive examination of foetus (carcase disposal included) plus maternal serology (4 tests) (Note BS7 samples must be submitted separately from suckler	103.50
cows). SBV added if indicated.	

Note: Post-mortem charges cover all necessary tests which at the discretion of the SRUCVS veterinarian are required to reach a diagnosis. Additional tests requested by the owner or his veterinary surgeon which fall outwith this definition will be charged for additionally. There is a charge for carcase disposal.

**Batch** = 2-4 animals/birds or foetuses from 2-4 dams. Where batches are submitted, some tests may be carried out on pooled samples.

Standard examination of bovine foetus includes bacteriology, foetal serology for BVDV and L. hardjo; BVDV antigen, and histopath at the discretion of the VIO. Should you request other tests such as PCR for BoHV1 or BVDV, foetal serology for Neospora and tissue iodine these will be charged at the list price. The cattle abortion package is the standard examination plus maternal serology for BoHV1, BVDV, L. hardjo and Neospora.

Histopathology and cytology (sample collection guidelines are on pages 53-59)				
Profile/Test	Samples	Turn around <sup>*</sup> (working days)	P	rice £
Aspiration biopsy cytology	Body fluid/tissue	2d	3	30.45
Fluid analysis (cell count, cytology, protein)	Body fluid	2d	3	37.80
Fluid analysis (cell count, cytology, biochemistry, bacteriology and sensitivity)	Body fluid	2d	51.45	
Histopathological examination (including report and prognosis, where appropriate)	1cm <sup>3</sup> tissue blocks <sup>#</sup>	3-4d	First block (1-3 tissues) Additional blocks	46.20 10.50 Max case charge 178.50

<sup>\*</sup>Special services such as bone decalcification and immunochemistry require longer turnaround times; guidance will be provided by histopathologists.

<sup>#</sup> Tissues should be fixed in 5-10 times their own volume of formalin for 48 hours.

They can then be sent in a smaller volume of formalin. Please note: Royal Mail max 50ml.

Consultancy	
On Farm Consultancy Service to Veterinary Practices	152.15/h +
Of Fairif Consultancy Service to Veterinary Fractices	Call-out fee of £50.00 for visits less than 2h



# **Analytical Services**

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In the tables the following applies: Superscript A = Accredited to ISO 17025

Details available at Animal feed, crop & soil analytical services | SRUC

Farmer clients should access the analytical services through their local SAC Consulting Solutions office. For industry clients we will provide the price of proposed work on application.

Soils	Analysis Code	Turnaround Times (working days)
pH & Lime Requirement <sup>A</sup>	SPH	3 to 5
Fresh pH (Using GPS sample pots. Enquiries to the lab). Note:  Minimum of 15 samples per tray required otherwise a £20.00 minimum handling charge will apply.	SFPH	1 to 3
RU (pH, Lime Requirement, Extractable P, XK, XMg, Ca & Na, Organic Matter LOI, CEC) A	SRU	3 to 5
DEFRA Ru (pH, Lime Requirement, DEFRA Extractable P, XK, XMg results expressed as mg/l and DEFRA Indices) A	SARU	5 to 7
Extractable P & K only <sup>A</sup>	SPKGPS	3 to 5
Soil - Texture (hand texture)	STEX	3 to 5
Soil - Conductivity (water extraction)	SCON	5 to 10
Soil - Conductivity - DEFRA (Sat Calcium Sulphate) A	SCONC	5 to 10
Soil - LOI (Loss on ignition) A	SLOI	3 to 5
Soil - Extractable Calcium (free if SRU is selected, otherwise fee applies <sup>A</sup> )	SXCa	3 to 6
Soil - Extractable Copper (EDTA extractable) <sup>A</sup>	SXCu	5 to 10
Soil - Extractable Zinc (EDTA extractable) <sup>A</sup>	SXZn	5 to 10
Soil - Extractable Manganese (Neutral Ammonium Acetate extractable)	SXMn	5 to 10
Soil - Extractable Sulphur (Calcium tetra-hydrogen di-ortho phosphate extraction) <sup>A</sup>	SXS	5 to 10
Soil - Extractable Sodium (free if SRU is selected, otherwise fee applies)	SXNa	3 to 6
Soil - Total Nitrogen (Kjeldahl) <sup>A</sup>	STN	8 to 10
Soil - Extractable Boron (Hot water extraction) A	SXB	5 to 10
Soil - Extractable Ammonium Nitrogen (KCl extraction)	SXNH4	5 to 10
Soil - Extractable Nitrate Nitrogen (KCI extraction)	SXNO3	5 to 10
Soil - Extractable Molybdenum (Ammonium Acetate extraction)	SXMo	5 to 10
Soil - Extractable Cobalt (Acetic acid extractable) A	SXCo	5 to 10
Soils - Livestock Package (SRU, SXCo, SXCu) <sup>A</sup>	SLP	7 to 10
Soil Check - Landscape package (DEFRA RU, DEFRA CON, STEX, SLOI)	SC	10 to 15
Soil Check - Contamination Assessment (TCu, TZn, TAs, TCd, TPb, TCr, THg, TNi, SXB) <sup>A</sup>	SCCA	10 to 15
Soils - Arable Package (SRU, SXCu, SXZn, SXMn, SXS, SXB & SLOI) <sup>A</sup>	SAP	10 to 15
Soil – Extractable Iron	SXFE	5 to 10
Soil - Sample preparation (Air drying and milling to pass a 2mm sieve)	SPREP	2 to 3

Plants	Analysis Code	Turnaround Times (working days)
Plant - Sample Preparation / Dry Matter <sup>A</sup>	PDM	1 to 3
Plant - Nitrogen (Kjeldahl) <sup>A</sup>	PN	3 to 5
Plant - Mineral Package (DM, Total P, TK, TMg, TCa, TNa, TCu, TZn, TFe, TS, TB, TMn) A	PMIN	3 to 5
Plant - Mineral Package + N Package <sup>A</sup>	PMINN	3 to 5
Plant – Molybdenum <sup>A</sup>	PMO	3 to 5
Plant – Cobalt <sup>A</sup>	PCO	3 to 5
Plant - Selenium <sup>A</sup>	PSE	5 to 10

Organic wastes	Analysis Code	Turnaround Times (working days)
Organic Waste - Sample Preparation / DM	ODM	2 to 3
Organic Waste - Nitrogen (Kjeldahl)	ON	8 to 10
Organic Waste - ASH	OASH	5 to 10
Organic Waste - pH	OPH	5 to 10
Organic Waste - Ammonium Nitrogen (Water extractable)	ONH4	10 to 15
Organic Waste - Minerals (Total P, TK, TMg, TCa, TNa, TCu, TZn, TFe, TS, TMn) <sup>A</sup>	OMINS	10 to 15
Organic Waste - Nitrate Nitrogen	ONO3	10 to 15
Organic Waste - Water Soluble Phosphorus	OWSP	10 to 15
Organic Waste - Mercury	OHG	10 to 15
Organic Waste – Gross Energy (Dry samples only)	MGE	10 to 15

Liming materials	Analysis Code	Turnaround Times (working days)
Neutralising value for Liming materials (analyzed as received, expressed as Calcium Carbonate equivalent) A	FNV	10 to 15
Neutralising value for Organic wastes (analyzed using dried milled sample)	ONV	10 to 15

Sludge analysis	Analysis Code	Turnaround Times (working days)
Sludge Mandatory (DM,Ash,pH,TN,TK,TP,TCa,TMg,NH4N,TZn,TCu,TNi,TCd, TPb,THg&TCr) A	OSM	15 to 20
Sludge Additional package (TAs, TSe, XF & TMo) A	OSA	15 to 20

Sludge treated soils	Analysis Code	Turnaround Times (working days)
Soil - Mandatory package (Total Zn, TCu, TNi, TCd, TPb, THg, TCr) <sup>A</sup>	SM	10 to 15
Soil - Additional package (Total As, TSe, XF & TMo) A	SA	10 to 15
Soil - Total Copper (Aqua Regia soluble) A	STCU	10 to 15
Soil - Total Zinc (Aqua Regia soluble) A	STZN	10 to 15
Soil - Total Selenium (Aqua Regia soluble) <sup>A</sup>	STSE	10 to 15
Soil – Extractable Fluoride (Acid soluble) <sup>A</sup>	STF	10 to 15

Glasshouse soils/growing medium	Analysis Code	Turnaround Times (working days)
Glasshouse soils - routine (pH, DEFRA Con, XNN, DEFRA XP, XK & XMg)	HGLAS	10 to 15
Loamless compost - routine (pH, Con, XNN, XAN, XP, XK, XMg)	HCOMP	10 to 15
Hydroponic solution/perlite (pH, Con, N, P, K, Ca, Mg, Fe, Cu, Zn, B, Na)	HHYDR	5 to 8
Horticultural Bulk Density	HBD	Variable

Waters	Analysis Code	Turnaround Times (working days)
Water - ICP Scan (S, Mg, Na, K, Ca, Al, Fe, Mn, Cu, Zn, P, Cd, Cr, Ni, Pb, B)	WS	5 to 7
Water – pH	WPH	5 to 8
Water - Conductivity	WCON	5 to 8
Water - Ammonium Nitrogen	WNH4	5 to 10
Water - Nitrate Nitrogen	WNO3	5 to 10
Water - Total Phosphorus	WTP	5 to 10
Water - Total Iron (Acid treatment/ICP analysis)	WTFE	5 to 10
Water - Total Aluminum (Acid treatment/ICP analysis)	WAL	5 to 10
Water - Chemical Oxygen Demand (COD)	WCOD	5 to 10
Water - Chloride	WCL	5 to 10
Water - Sulphate	WSO4	5 to 10
Water - Phosphate (Reactive)	WPO4	5 to 10
Water - Suspended solids	WSUSO	10 to 15
Water - Alkalinity	WALK	10 to 15
Water - Total Nitrogen (Effluent Water)	WTN	5 to 10
Water -Total Manganese (Acid treatment/ICP analysis)	WTMN	5 to 10
Water - Total Nickel (Acid treatment/ICP analysis)	WTNI	5 to 10
Water - Total Zinc (Acid treatment/ICP analysis)	WTZN	5 to 10

Animal feeds	Analysis Code	Turnaround Times (working days)
Animal Feed - Crude Protein (Kjeldahl) <sup>A</sup>	ACP	5 to 10
Animal Feed - Crude fibre <sup>A</sup>	ACF	10 to 15
Animal Feed - Oil A (EE)	AEE	5 to 10
Animal Feed - Sample preparation / Dry Matter <sup>A</sup>	ADM	2 to 3
Ruminant Feed Energy Prediction: Concentrate (DM, CP, AHEE, NCGD, ME)	ARUMME	10 to 15
Ruminant Feed Energy Prediction: Forage (DM, CP, ASH, NCGD)	ARUMMF	10 to 15
Pig Feed Energy Prediction (DM, CP, AHEE, ASH, NDF, DE)	APIGDE	10 to 15
Poultry Feed Energy Prediction (DM, CP, AHEE, STARCH, SUGAR, ME)	APOLTME	15 to 20
Hay/haylage Energy Prediction (DM, CP, MADF, ASH, D Value, ME)	AHAYME	10 to 15
Grass (fresh) Energy Prediction (DM, CP, MADF, ASH, ME)	AGRASM	10 to 15
Hay Energy Prediction & WSC (DM, CP, MADF, ASH, D Value, ME &WSC) Suitable for equines	AHAYME 1	15 to 20
Hay Energy Prediction plus Minerals (DM, CP, MADF, ASH, D Value, ME & Mins) Suitable for equines	AHAYME 2	15 to 20
Hay Energy Prediction & WSC & MINS (DM, CP, MADF, ASH, D Value, ME &WSC) Suitable for equines	AHAYME 3	15 to 20
Animal Feed – ASH <sup>A</sup>	AASH	3 to 5
Animal Feed - Oil B (AHEE)	AAHEE	5 to 10
Silage analysis (Wet NIR - FAA Approved). Calibration for: Grass Silage	AGSNIR	1 to 3
Wholecrop analysis (Wet NIR - FAA Approved). Calibration for: Wholecrop Silage	AWCNIR	1 to 3
Maize analysis (Wet NIR - FAA Approved). Calibration for: Maize Silage	AMSNIR	1 to 3
Silage Mineral Analysis (P, K, Mg, Ca, Na, Cu, Zn, Fe, S, B, Mn, Se, Mo & Co) <sup>A</sup>	ASMINS	5 to 7
Animal Feed Mineral Analysis (P, K, Mg, Ca, Na, Cu, Zn, Fe, S, B, Mn, Se, Mo & Co) <sup>A</sup>	AFMINS	5 to 7
Animal Feed – Selenium <sup>A</sup>	ASE	5 to 10
Animal Feed – Grain Analysis (Minerals P, K, Mg, Ca, Na, Cu, Zn, Fe, S, B, Mn, Se, Mo & Co) A plus Nitrogen	AGRAIN	5 to 10
Animal Feed – Starch <sup>A</sup>	ASTAR	15 to 20
Animal Feed - Sugar (Luff Schoorl)	ASUGR	15 to 20
Animal Feed - Fresh pH	APH	3 to 5
Animal Feed - MADF (Modified Acid Derergent Fibre)	AMAD	10 to 15
Animal Feed - NDF (Neutral Detergent Fibre) A	ANDF	10 to 15
Animal Feed - ADF (Acid Detergent Fibre) A	AADF	10 to 15
Animal Feed - NCGD (Neutral Cellulase Gammanase Digestibility) <sup>A</sup>	ANCGD	10 to 15
Animal Feed - WSC (Water Soluble carbohydrate)	AWSC	10 to 15
Animal Feed - Acid Insoluble Ash	AAIA	10 to 15



# **Health Schemes**

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Premium Cattle Health Scheme				
Turnaround Times: blood/ milk/ tissue tag and faecal PCR samples 5-10 working days.  More information and submission forms at <a href="https://www.cattlehealth.co.uk">www.cattlehealth.co.uk</a>				
nual Membership Fee Price £				
Up to 5 diseases (BVD, IBR, Neospora, Lepto, Johne's)	81.9	0		
As above plus TB Accreditation	114.4	45		
Bovine TB Accreditation <i>only</i>	42.0	0		
Entry Level Bovine TB Membership fee	42.0	00		
Profile/Test	Samples	Price £		
Tissue Tests (Keep tags in cool dry place and submit in batche	es every 2 weeks)			
BVD Antigen (price differs according to ear tag type)	Ear Tissue	3.00 - 5.45		
Blood Tests				
BVD Antibody	Clotted blood	3.90		
BVD Antigen	Clotted blood	5.25		
BVD PCR Pooled Samples (includes individual Antigen tests from positive pools)	Clotted blood	3.70		
IBR Antibody	Clotted blood	4.45		
IBRgE (Marker Vaccine)	Clotted blood	7.90		
Johne's Antibody	Clotted blood	4.60		
L hardjo Antibody	Clotted blood	5.55		
Neospora	Clotted blood	6.40		
Milk Tests (bulk or individual)				
IBR Antibody	Milk	6.65		
BVD Antibody	Milk	6.10		
L hardjo Antibody	Milk	6.65		
Johne's Antibody	Milk	4.60		
Faeces Tests				
Johne's PCR	Faeces	32.00		
Johne's PCR - pooled for up to 6 samples	Faeces	49.00		
Pen/Sale Health Declaration Cards	Member	Non-Member		
Production time is 2 weeks. If testing is required, sale animals must be tested between 6-12 weeks before sale.	8.95	14.20		
BVDFree England Member Database fee per entry	0.50 Antibody result	0.25 Antigen result		

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## Premium Sheep and Goat Health Schemes

Turnaround Times for MV/CAE/EAE/Johne's: 5-17 working days. PSGHS submission form available at <a href="https://www.sheepandgoathealth.co.uk">www.sheepandgoathealth.co.uk</a>

at www.sneepanugoatheatth.co.uk				
MV/CAE Accredited Membership		Price £		
Annual fee charged according to flock/herd size animals aged 18 months and over	1 -10 11-50 51+		73.50 105.00 162.75	
Profile/Test	Samples		Price £	
MV/CAE	Clotted blood		3.45	
EAE (available for MV Accredited members)	Clotted blood		3.35	
EAE Accredited Membership		Price £		
Annual fee charged according to ewes put to ram	0-75 76-150 151-250 251+	76-150 152.25 151-250 220.50		
Johne's Accredited Membership				
Profile/Test	Samples		Price £	
All animals over 12 months of age	Clotted blood		4.60	
Johne's	Faeces		32.00	
Johne's (PCR pool of 6)	Faeces		49.00	
Scrapie Monitoring Membership				
Annual fee if PSGHS Member Annual fee if non-Member			54.60 72.45	

## NEW! PSGHS Monitoring Scheme

Membership	Price £		
Flat fee for one or both diseases	42.00		
Profile/Test	Samples	Price £	
MV/CAE	Clotted blood	3.45	
Johne's (individual faeces samples pooled in lab pool of 6)	Faeces	49.00/pool	
All complete moves he collected by a victorinant average. Testing may be			

All samples must be collected by a veterinary surgeon. Testing may be carried out at any time but samples must be received at least 6 weeks before first sale date.

 Column	Break	
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Useful Tests Available Outside Premium Sheep and Goat Health Schemes			
Profile/Test	Samples	Price £	
Scrapie Full Genotyping (136/154/171) Discounted price for samples	EDTA blood	1-14 34.65 15-29 29.40 30-49 23.10 50-69 21.00 70+ 16.95	
Test Packages (flock/herd screens)			
Wormscan bulk worm egg count 10 animals 1. Testing only 2. Testing plus sample pots and postage 3. Liverfluke as extra	Faeces (do not pool samples prior to submission)	29.20 38.00 13.85	
Pre/Post Sale Testing			
Border Disease Antibody	Clotted blood	1-9 9.50 10-39 8.25 40+ 6.30	
Border Disease PCR	Clotted blood	1-49 13.65 50+ 10.45	
CLA	Clotted blood	1-9 10.80 10-39 9.20 40+ 6.90	
Johne's Antibody	Clotted blood	1-39 5.85 40+ 5.20	
Liver Fluke Antibody	Clotted blood	8.95	
Sheep Scab Antibody	Clotted blood	1-9 10.40 10-39 8.95 40+ 7.00	

**IMPORTANT:** Please send in an extra blood tube and use our standard Farm Diagnostic Submission Forms for tests outside the PSGHS <u>Veterinary diagnostics | SRUC</u>

.....Column Break.....



# **Capital Diagnostics**

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In the lists the following superscripts are used

S - assay referred to a laboratory external to Capital Diagnostic/SRUC Veterinary Services

A - Accredited test

# Microbiology & Parasitology

General/miscellaneous microbiology – see organ specific sections				
Profile/Test	Samples	Turnaround	Price £	
Comprehensive bacterial culture - Aerobic/anaerobic cultures <sup>A</sup>	Various	3-10d	38.00	
Aerobic bacterial culture - Aerobic cultures, antibiotic sensitivity <sup>A</sup>	Various	3-10d	33.00	
Cerebrospinal fluids culture - aerobic/anaerobic culture <sup>A</sup> Higher isolation rates are obtained if the fluid is injected into a liquid media - provided on request (£8+vat supplementary charge)	CSF	3-10d	29.00	
Meticillin resistant Staphylococcus spp (MRSA, MRSS, MRSP) only <sup>A</sup>	Various	3-10d	25.00	
Pleural/peritoneal fluids – aerobic/anaerobic cultures <sup>A</sup> Higher isolation rates are obtained if the fluid is injected into a liquid media - provided on request (£8+vat supplementary charge)	Pleural, peritoneal fluid	3-10d	38.00	
Synovial fluid culture – aerobic/anaerobic culture <sup>A</sup> Higher isolation rates are obtained if the fluid is injected into a liquid media - provided on request (£8+vat supplementary charge)	Synovial fluid/tissue	3-10d	29.00	
Nasal/tracheal was <sup>A</sup> – aerobic & fungal cultures	Swab	3-10d	36.00	

Cardiorespiratory disease			
Profile/Test	Samples	Turnaround	Price £
Angiostrongylus vasorum – serology	Serum 0.5ml	Same day	23.00
Aspergillus culture <sup>A</sup>	Swab/wash	3-10d	25.00
Aspergillus serology <sup>s</sup>	Serum 0.5ml	7d	59.00
Blood culture – aerobic/anaerobic culture <sup>A</sup> Inject blood into a liquid media (available on request - £10+vat). Clotted blood and blood in routine tubes is unsuitable	Blood	5-10d	36.00
Nasal, bronchial, tracheal wash culture <sup>A</sup> Bacteriology, fungal culture	Swab, wash	3-10d	36.00
Nasal, bronchial, tracheal wash comprehensive analysis Cytology, bacteriology <sup>A</sup> , fungal culture <sup>A</sup>	Swab, wash	3-10d	55.00
Parasitic disease (Lungworm incl F. osleri, A. vasorum)  Baermann assay (faeces - 3 day pooled sample is preferred) or direct examination of a tracheal wash.	Faeces, Tracheal wash	3-10d	17.00
Pleural effusion – aerobic/anaerobic cultures <sup>A</sup> Higher isolation rates are obtained if the fluid is injected into a liquid media - provided on request (£8+vat)	Pleural fluid	3-10d	36.00
Streptococcus equi culture <sup>A</sup>	Swab, wash	3-5d	25.00
Streptococcus equi PCR <sup>s</sup>	Swab	3-7d	40.90

Ear		
Profile/Test	Samples Turnaround	Price £
Bacteria & yeast culture only – 1 ear <sup>A</sup>	Swab 3-10d	32.50
Bacteria & yeast culture only – 2 ears <sup>A</sup>	Swab 3-10d	40.00
Bacteria & yeast culture with cytology	Swab & 3-10d Smear	45.00

# Microbiology & Parasitology

Eye			
Profile/Test	Samples	Turnaround	Price £
Bacterial culture – 1 eye <sup>A</sup>	Swab	3-10d	29.00
Bacterial culture – 2 eyes <sup>A</sup>	Swab	3-10d	36.00
Chlamydia PCR <sup>s</sup>	Swab (dry)	3-10d	39.00
FHV PCR <sup>s</sup>	Swad (dry)	3-10d	39.00

Faecal tests			
Profile/Test	Samples	Turnaround	Price £
Angiostrongylus vasorum - Baermann test – 3d pooled sample preferred	Faeces 5g	2d	17.00
Anoplocephala	Faeces 5g	1d	20.00
Campylobacter screen <sup>A</sup>	Faeces 5g	3-10d	25.00
Clostridium difficile <sup>A</sup> – culture	Faeces 5g	1d	25.00
Cryptosporidia	Faeces 5g	1d	17.00
<b>Faecal bacteriology</b> <sup>A</sup> - Salmonella, Campylobacter, Yersinia, Clostridium spp.	Faeces 5g	3-10d	38.00
<b>Faecal bacteriology</b> <sup>A</sup> – primate – Salmonella, Campylobacter, Shigella, Yersinia	Faeces 5g	3-10d	50.00
Fluke egg	Faeces 5g	1d	17.00
Giardia	Faeces 2g	Same day	17.00
<b>Lungworm</b> Baermann assay (faeces - 3 day pooled sample is preferred).	Faeces 5g	2d	17.00
Occult blood - dog/cat feed a non-meat diet for minimum 3 days	Faeces 5g	1d	18.00
Parasitology (enteric pathogens) – All species 1-3 samples 4+ samples	Faeces 5g	1d	16.00 14.00
Parasitology (enteric parasites) & Giardia - companion animal	Faeces 5g	1d	30.00
Parasitology (enteric parasites) & Anaplocephala - equine	Faeces 10g	1d	30.00
Parasitology (enteric parasites) – primate Cryptosporidia, helminths, Coccidia, Giardia, Balantidium	Faeces 5g	1d	27.00
Rotavirus PAGE <sup>A</sup>	Faeces 5g	3-5d	20.00
Salmonella screen <sup>A</sup>	Faeces 5g	3-5d	25.00
Salmonella & Campylobacter screen <sup>A</sup>	Faeces 5g	3-10d	30.00
Tritrichomonas foetus PCR – no cat litter in the sample	Faeces 5g	1-14d	45.00
Yersinia screen <sup>A</sup>	Faeces 5g	3-5d	25.00

# Microbiology & Parasitology

Faecal packages - canine				
Profile/Test	Samples	Turnaround	Price £	
Canine faecal analysis 1 – acute or chronic diarrhoea Salmonella <sup>A</sup> , Campylobacter <sup>A</sup> , parasitology, Coccidia, Giardia, fat/starch	Faeces 10g	3-10d	42.50	
Canine faecal analysis 2 – dogs with acute or chronic diarrhoea Salmonella <sup>A</sup> , Campylobacter <sup>A</sup> , Yersinia <sup>A</sup> , Clostridia, parasitology, Coccidia, Giardia, fat/starch	Faeces 10g	3-10d	47.50	
Canine faecal analysis 3 – dogs with chronic diarrhoea Canine faecal analysis 2, TLI <sup>A</sup> , vitamin B12 <sup>A</sup> , folate <sup>A</sup>	Faeces 10g Serum 2ml	3-10d	108.00	
Canine faecal analysis 4– dogs with chronic diarrhoea.  Faecal analysis 2, total protein <sup>A</sup> , albumin <sup>A</sup> , globulin, haematology <sup>A</sup>	Faeces 10g Serum 0.5ml EDTA 1ml	3-10d	69.00	
Canine faecal analysis 5– dogs with chronic diarrhoea Faecal analysis 4, TLI <sup>A</sup> , vitamin B12 <sup>A</sup> , folate <sup>A</sup>	Faeces 10g Serum 2ml EDTA 1ml	3-10d	116.00	

Faecal packages - feline			
Profile/Test	Samples	Turnaround	Price £
Feline faecal analysis 1 - cats with acute or chronic diarrhoea Salmonella <sup>A</sup> , Campylobacter <sup>A</sup> , parasitology, Coccidia, Giardia, fat/starch	Faeces 10g	3-10d	42.50
<b>Feline faecal analysis 2</b> - cats with acute or chronic diarrhoea Salmonella <sup>A</sup> , Campylobacter <sup>A</sup> , Yersinia <sup>A</sup> , anaerobes <sup>A</sup> , parasitology, Coccidia, Giardia, fat/starch	Faeces 10g	3-10d	47.50
Feline faecal analysis 3 - cats with chronic diarrhoea Feline faecal analysis 2, Tritrichomonas foetus PCR	Faeces 10g	3-10d	94.00
Feline faecal analysis 4 - cats with chronic diarrhoea Faecal analysis 2, total protein <sup>A</sup> , albumin <sup>A</sup> , globulin, haematology <sup>A</sup>	Faeces 10g Serum 0.5ml EDTA 1ml	3-10d	69.00
Feline faecal analysis 5 - cats with chronic diarrhoea Faecal analysis 4, vitamin B12 <sup>A</sup> , folate <sup>A</sup> , PLI	Faeces 10g Serum 2ml EDTA 1ml	3-10d	116.00

Faecal packages - equine			
Profile/Test	Samples	Turnaround	Price £
Equine faecal analysis 1 - horses with acute or chronic diarrhoea Salmonella <sup>A</sup> , parasitology	Faeces 10g	3-10d	38.00
<b>Equine faecal analysis 2</b> - horses with acute or chronic diarrhoea Salmonella <sup>A</sup> , Campylobacter, parasitology, C. difficile	Faeces 10g	3-10d	58.00
<b>Foal diarrhoea</b> - foals with acute or chronic diarrhoea Cryptosporidia <sup>A</sup> , rotavirus <sup>A</sup> , Salmonella <sup>A</sup> , Campylobacter <sup>A</sup> , C. difficile.	Faeces 10g	3-10d	58.00

Faecal packages - avian/exotic/small mammal			
Profile/Test	Samples	Turnaround	Price £
Avian faecal analysis - Salmonella <sup>A</sup> , parasitology	Faeces 10g	3-10d	37.00
Primate faecal analysis Parasitology, Salmonella <sup>A</sup> , Campylobacter <sup>A</sup> , Yersinia <sup>A</sup> , Shigella	Faeces 10g	3-10d	72.00
Small mammal faecal analysis - rabbits, rodents Salmonella <sup>A</sup> , Campylobacter <sup>A</sup> , parasitology, Coccidia	Faeces 5g	3-10d	34.00

# Microbiology & Parasitology

Skin									
Profile/Test	Samples	Turnaround	Price £						
Skin Parasitology	Skin scrape	1d	16.00						
Ringworm (dermatophyte) culture <sup>A</sup>	Hair	21d	25.00						
Skin parasitology & ringworm (dermatophyte) culture Ringworm cultures <sup>A</sup> , microscopic examination	Hair Skin scrape	3-10d	32.00						
Skin bacteriology <sup>A</sup> - aerobic culture	Skin scrape or swab	3-10d	32.50						
Skin Comprehensive – dog/cat/exotic Bacteriology <sup>A</sup> , mycology, parasitology <sup>A</sup> .	Hair & Skin scrape & Swab	21d	40.00						
Skin Comprehensive – equine Bacteriology <sup>A</sup> (includes. Dermatophilus), mycology, parasitology <sup>A</sup> .	Hair & Skin scrape & Swab	21d	40.00						

## Infectious diseases - Molecular/Serology

Infectious disease - canine								
Profile/Test	Samples	Turnaround	Price £					
Aspergillus serology <sup>s</sup>	Serum 1ml	10d	59.00					
Blood film examination PCR	EDTA 0.5ml	Same day 7d	19.00 57.50					
Borrelia burgdorferi (Lyme disease) antibody – dog	Serum 0.5ml	Same day	30.00					
Borrelia burgdorferi (Lyme disease) antibodys – equine	Serum 0.5ml	Same day	34.00					
Canine distemper virus PCR <sup>s</sup>	Faeces, Tissue, Urine	7-14d	57.00					
Canine parvovirus PCR <sup>s</sup>	Faeces	7-14d	39.00					
Ehrlichia canis PCRS	EDTA 0.5ml	7d	58.00					
Leishmania antibodyS	Serum 0.5ml	7d	60.00					
Leishmania PCR <sup>s</sup>	EDTA 0.5ml, lymph node, skin	7d	56.80					
Leptospira canicola antibody <sup>s</sup>	Serum 0.5ml	7d	27.00					
Leptospira icterohaemorrhagiae antibody <sup>s</sup>	Serum 0.5ml	7d	27.00					
<b>Leptospira - pan species antibody<sup>s</sup></b> Assess for exposure to <i>L. canicol, ictero, bratislava, hardjo</i>	Serum 0.5ml	7d	90.00					
Leptospira PCR <sup>s</sup>	Urine	7d	65.00					
Neospora caninum antibody <sup>s</sup>	Serum 0.5ml	7d	39.00					
Toxoplasma IgG and IgM antibody <sup>s</sup>	Serum 1ml	3-10d	29.00					

Infectious disease – feline								
Profile/Test	Samples	Turnaround	Price £					
Chlamydophila PCR <sup>s</sup>	Swab - dry	3-10d	39.00					
FHV PCR <sup>s</sup>	Swab - dry	21d	39.00					
FHV and Chlamydophila PCR <sup>s</sup>	Swab - dry	21d	54.00					
FCoV (FIP) serology <sup>s</sup>	Serum 0.5ml	5d	29.00					
FCoV (FIP) PCR <sup>s</sup>	Fluid, tissue	7d	48.00					
FeLV antigen	Serum/EDTA 0.5ml	Same day	24.00					
FIV antibody	Serum/EDTA 0.5ml	Same day	24.00					
FeLV antigen & FIV antibody	Serum/EDTA 0.5ml	Same day	34.00					
FeLV antigen, FIV antibody & FCoV antibody <sup>s</sup>	Serum 1ml	5d	60.00					
Haemoplasma spp PCR <sup>s</sup>	EDTA 1ml	7d	50.00					
Toxoplasma IgG and IgM <sup>s</sup>	Serum 1ml	3-10d	29.00					
Tritrichomonas foetus PCRs	5g faeces - no cat litter	3-14d	45.00					

# Infectious diseases - Molecular/Serology

Infectious disease – equine									
Profile/Test	Samples	Turnaround	Price £						
Anoplocephala antibody (tapeworm)	Serum 1ml	7-14d	29.00						
Borrelia burgdorferi (Lyme diease) antibody	Serum 1ml	7d	34.00						
Equine infectious anaemias - Coggins test	Serum 1ml	5d	23.00						
<b>Equine viral arteritis antibody</b> <sup>s</sup> – if positive then confirmatory testing is required (additional charge £23)	Serum 1ml	5d	21.20 if negative Added £25.00 if confirmatory test required						
<b>EIA &amp; EVA</b> <sup>s</sup> – if EVA positive then confirmatory testing is required (additional charge £23.00)	Serum 2ml	5d	33.50 if negative, Added 25.00 if confirmatory test required.						
Lawsonia intracellularis PCR <sup>A</sup>	Faeces	5d	55.70						
Louping ill virus <sup>s</sup>	Serum 1ml	5d	28.00						
Rotavirus PAGE <sup>A</sup>	Faeces	2d	20.00						
Streptococcus equi antibody <sup>s</sup>	Serum 1ml	2d	35.40						
Streptococcus equi culture <sup>A</sup>	Swab	5d	25.00						
Streptococcus equi PCR <sup>s</sup>	Wash/swab	3d	40.90						

Infectious disease – small mammal/avian							
Profile/Test	Samples	Turnaround	Price £				
Avian borna disease virus PCR <sup>s</sup>	Faeces, Heparin blood, tissue	7d	65.00				
Chlamydia PCR <sup>s</sup>	Faeces, tissue	7d	42.00				
Encephalitozoon cuniculi antibody <sup>s</sup> - IgG Assesses exposure only	Serum 0.5ml	7d	49.00				
Encephalitozoon cuniculi antibody <sup>s</sup> - IgG & IgM Assesses if active infection	Serum 0.5ml	7d	64.00				
Encephalitozoon cuniculi PCR <sup>s</sup>	Serum 0.5ml	7d	38.00				
Rabbit haemorrhagic disease virus PCR <sup>s</sup>	Liver, faeces, EDTA blood, oropharyngeal swab, intestinal contents	7d	84.00				
Lawsonia intracellularis PCR	Faeces	3d	55.70				

Urinary tract tests			
Profile/Test	Samples	Turnaround	Price £
Urine SG	Urine 0.2ml	Same day	8.00
Urinalysis - Urine chemistry, wet microscopy Alone Additional to urine bacteriology/cytology	Urine 2ml	1d	19.00 13.00
Urine bacteriology <sup>A -</sup> Cystocentesis sample is recommended	Urine 0.2ml	3-10d	31.00
Urine cytology	Urine 0.5ml	1d	31.00
Urine comprehensive Cytology (giemsa), bacteriology <sup>A</sup> , urine chemistry, UP:C <sup>A</sup>	Urine 2ml	3-10d	48.00
Urine cortisol:creatinine ratio <sup>A</sup> Screening test for Cushings disease. It does not provide a definitive diagnosis	Urine 0.5ml	Same day	36.50
Urine lead:creatinine ratio Screening test for lead poisoning or quantify lead excretion following treatment	Urine 25ml	1-4d	36.00
Urine protein:creatinine ratio <sup>A</sup> Alone Additional to other urine analysis tests	Urine 0.5ml	Same day	18.80 12.80
Urine fractional electrolyte excretion <sup>A</sup> 1 electrolyte 2+ electrolytes	Urine 1ml Serum 1ml	Same day	22.00 38.00
Urolith analysis - qualitative	Urolith 5g	1-3d	33.00

Haematology & Coagulation									
Profile/Test		Samples	Turnaround	Price £					
Individual tests - PCV <sup>A</sup> , RBC <sup>A</sup> , Hb <sup>A</sup> , WBC <sup>A</sup> , platelets <sup>A</sup> , reticulocytes <sup>A</sup>			Same day	8.50					
WBC and differential <sup>A</sup>	0.5ml E	Same day	19.00						
Full haematology <sup>A</sup> RBC, PCV, Hb, MCV, MCHC, platelets, WBC, differential, reticuloctyes	Alone Additional to a biochemistry profile comprising a minimum of <b>4</b> analytes from the <b>Individual Analyte</b> list above.	1ml E	Same day	27.00 18.00					
Activated partial thromboplastin time (APTT) <sup>S</sup>		1ml C	1-4 days	26.00					
Prothrombin time (OSPT) <sup>S</sup>		1ml C	1-4 days	26.00					
Fibrinogens	1ml C	2d	17.00						

Immunological tests								
Profile/Test	Samples	Turnaround	Price £					
Coombs <sup>s</sup> - canine	1ml E	2d	37.00					
Coombs <sup>s</sup> - feline	1ml E	2d	37.00					

Therapeutic drug monitoring									
Profile/Test	Samples	Turnaround	Price £						
Bromide <sup>S</sup> – timing of sampling is not important	0.3ml S	2-4d	49.50						
Digoxin <sup>s</sup> − 2 - 5 hours post-dosing	0.3ml S	2-4d	41.50						
Phenobarbitone <sup>A</sup> – timing of sampling is not important.	0.3ml S	Same day	26.00						

Biochemistry – individ	dual tests	;		
Profile/Test	Samples	Turnaround	Pri	ce £
Individual analytes <sup>A</sup> Albumin, ALP, ALT, AST, amylase, beta-hydroxybutyrate, bilirubin, calcium, chloride, cholesterol, CK, creatinine, GDH, GGT, globulin (calculated from total protein and albumin), glucose, LDH, lipase, magnesium, phosphate, potassium, SIAP, sodium, total protein, triglycerides, urea See profiles below	0.5 - 2ml S/P	Same day	los. tests  1  2  3  4-5  6-10  11-15  16-20	Price 8.80 12.40 14.40 18.60 25.40 31.60 36.00
Alone Add to a biochemistry profile/4+ analytes from the analyte list above	0.3ml S	Same day		13.80 8.00
Bile acids stimulation test <sup>A</sup> - 0h (after 12h fast) & 2h after feeding Alone Add to a biochemistry profile/4+ analytes from the analyte list above	0.3ml S x2	Same day		22.00 16.00
Copper <sup>A</sup> - blood	1ml S/P	1-4 days		12.50
Copper <sup>A</sup> - tissue 5g is the minimum required for dry matter content to be assessed. If <5g of tissue is provided a wet weight concentration will be provided.	5g liver	1-4 days		36.00
C-reactive protein <sup>s</sup>	0.5ml S	Same day		19.00
Folate <sup>A</sup>	0.3ml S	Same day		22.00
Fructosamine <sup>A</sup>	0.3ml S	Same day		18.50
GSHPx <sup>A</sup> - whole heparinised blood is required.	0.5ml H	1-3 days		13.00
Iron only	0.3ml S	1-3 days		23.00
Iron profile - includes iron, TIBC & % saturation	0.5ml S	1-3days		28.00
Lead <sup>A</sup> - whole heparinised blood required	1ml H	1-3 days		23.00
Manganese <sup>A</sup> whole heparinised blood required	1ml H	1-3 days		23.00
PLI – canine	0.5ml S	Same day		38.00
PLI – feline	0.5ml S	Same day		38.00
Protein electrophoresis <sup>s</sup>	0.5ml S	2-5d		38.00
SDMA <sup>s</sup>	0.3ml S	2d		33.00
Selenium <sup>A</sup> - whole heparinised blood is required	1ml H	2-7d		19.00
Serum amyloid A <sup>s</sup>	0.5ml S	2-4d		18.00
TLI (canine)	0.5ml S	Same day		38.00
TLI (feline)	0.5ml S	2d		73.00
Uric acid <sup>s</sup>	0.5ml S	2d		17.00
<b>Urine protein:creatinine ratio</b> <sup>A</sup> Incl sediment examination if UP:C high. Alone Additional	0.5ml Ur	1d		18.80 12.80
Vitamin A - blood	0.5ml S/H	2-7d		26.00
Vitamin B12 (cobalamin) <sup>A</sup>	0.5ml S	Same day		18.00
Vitamin E - blood	0.5ml S/H	2-7d		26.00
Vitamin B12 (cobalamin) <sup>A</sup> & folate <sup>A</sup>	1ml S	Same day		38.00
Vitamin B12 (cobalamin) <sup>A</sup> , folate <sup>A</sup> & TLI - canine	1ml S	Same day		70.00
Vitamin B12 (cobalamin) <sup>A</sup> , folate <sup>A</sup> & PLI - feline	1ml S	Same day		70.00
Zinc <sup>A</sup>	0.5ml S	2-7d		23.00

### **Biochemistry profiles**

The profiles below are designed to address specific clinical situations and generally follow a problem orientated approach. They are useful in the work-up of a case or for monitoring progression in response to treatment. See tables below for the components of each profile, and also see the endocrinology section.

Biochemistry profiles - Canine								
Profile/Test	Samples	Turnaround	Price £					
Acute abdomen/vomiting Screen for hepatic/renal disease/pancreatitis.	1ml S	Same day	54.00					
Addisons disease  Monitor electrolytes and renal function	1ml S	Same day	17.00					
Cushings treatment monitoring 1 <sup>A</sup> Pre-vetoryl cortisol - sample taken prior to Vetoryl dosing	0.5ml S	Same day	27.00					
Cushings treatment monitoring 2 <sup>A</sup> Single cortisol 4-6h post-Vetoryl dosing + electrolytes	1ml S	Same day	34.00					
Cushings treatment monitoring 3 <sup>A</sup> Cortisol x 2. Collect baseline blood sample 4-6 hours post-Vetoryl dosing. Administer ACTH (min dose 5µg/kg) IV. Collect second serum sample two hours later.	0.5ml S x2	Same day	38.00					
Chronic diarrhoea Assess intestinal and pancreatic function	1ml S/H	Same day	69.00					
Comprehensive analysis	2ml S 0.5ml F	Same day	37.40					
Diabetes - mellitus Assess stability of the diabetic state in the ill animal	1ml S 0.5ml F	Same day	36.00					
Fits, collapse – basic Assesses electrolyte, glucose & calcium status in an otherwise well animal	1ml S 0.5ml F	Same day	19.00					
Fits, collapse – extended Indicated where seizure/collapse presents with signs of illness.	2ml S 0.5ml F	Same day	26.00					
Health Check Basic screen for renal/hepatic disease or a pre-anaesthetic screen	1ml S	Same day	24.50					
Kidney	1ml S	Same day	18.60					
Liver – basic	1ml S	Same day	21.50					
Liver – extended	1ml S	Same day	25.50					
Polydipsia	1ml S 0.5ml F	Same day	25.50					
Seizure control  Assesses therapeutic level of phenobarbitone, and the presence of hepatotoxicity and hyperlipidaemia. Add 1ml serum if bromide is also required	2ml S	Same day	45.00					
Skin disease Assesses for multisystemic disease or an endocrinopathy that present with chronic skin disease/alopecia.	2ml S	Same day	53.00					

					Bioc	hen	nistr	у рі	rofil	es							
						C	ani	ne									
Parameter	Acute abdo/vomiting	Addisons	Chronic diarrhoea	Comprehensive	Cushings disease 1	Cushings disease 2	Cushings disease 3	Diabetes mellitus	Fits, collapse - basic	Fits, collapse - ext	Health Check	Kidney	Liver- basic	Liver - extended	Polydipsia	Seizure control	Skin
Total protein	1		1	1						1	V			1	1		V
Albumin	1		<b>V</b>	1						1	1	1		1	√		<b>√</b>
Globulin	1		1	1						1	1			1	<b>V</b>		<b>√</b>
Urea	1	√		<b>V</b>						1	V	1		V	V		
Creatinine	1	1		<b>V</b>						V	V	1			V		
ALP	1			<b>V</b>				√		1	V		1	V	V	V	<b>√</b>
SIAP (if ALP elevated)				<b>V</b>				<b>V</b>			1				<b>V</b>		1
ALT	√			1				1		1	1		1	1	√		√
AST																1	
GGT				√									1	1			
Bilirubin	√			√									1	1			
Bile acids	√			√									1	1		1	
Amylase				√													
Lipase				√													
Glucose				√				√	√	1					√		
Fructosamine								√									
Ketones (BOHB)								√									
Cholesterol			√	√				√						1	√	1	$\sqrt{}$
Triglycerides	√							√								1	
Sodium	1			√					$\sqrt{}$	1							
Potassium	1	√		1		1			1	1							
Chloride	1	√		1		1			1	1							
Calcium	<b>V</b>			1					1	V		<b>V</b>			√		
Phosphate				1					1	1		<b>V</b>			1		
СК				1													
Thyroxine (T4)																	<b>√</b>
TSH																	<b>V</b>
Cortisol					1	1											
ACTH Stimulation							1										
PLI	1																
Phenobarbitone																1	
TLI/Vit B12/folate			1														

Biochemistry profiles - Feline						
Profile/Test	Samples	Turnaround	Price £			
Acute abdomen/vomiting Screen for hepatic/renal disease/pancreatitis.	1ml S	Same day	56.00			
Chronic diarrhoea Assess for intestinal damage/pancreatitis	1ml S	Same day	69.00			
Comprehensive analysis	2ml S 0.5ml F	Same day	37.40			
Diabetes - mellitus Assess stability of the diabetic state in the ill animal	1ml S 0.5ml F	Same day	36.00			
Fits, collapse – basic Assesses electrolyte & calcium status in an otherwise well animal	1ml S 0.5ml F	Same day	19.00			
Fits, collapse – extended Indicated where seizure/collapse presents with signs of illness.	2ml S 0.5ml F	Same day	26.00			
Health Check Basic screen for renal/hepatic disease or a pre-anaesthetic screen	1ml S	Same day	24.50			
Kidney  Monitor progression of renal disease.	1ml S	Same day	18.60			
Liver – basic  Monitor progress of hepatic disease	1ml S	Same day	21.50			
Liver – extended  Monitor progress of hepatic disease	1ml S	Same day	25.50			
Old thin cat Screens for renal/hepatic disease and hyperthyroidism.	1ml S	Same day	33.00			
Polydipsia	1ml S 0.5ml F	Same day	25.50			
Seizure control  Assesses therapeutic level of phenobarbitone, and the presence of hepatotoxicity and hyperlipidaemia.	2ml S	Same day	45.00			

Biochemistry profiles Feline													
Assay	Acute abdo/vomiting	Chronic diarrhoea	Comprehensive	Diabetes mellitus	Fits, collapse - basic	Fits, collapse - ext	Health Check	Kidney	Liver- basic	Liver - extended	Old thin cat	Polydipsia	Seizure control
Total protein	√	√	√			√	√			<b>V</b>	√	√	
Albumin	√	√	√			√	√			√	√	√	
Globulin	√	√	√			√	√			√	√	√	
Urea	√		√			<b>V</b>	√	√		√	√	√	
Creatinine	√		√			√	√	√			√	√	
ALP	√		√	<b>V</b>		√	√		√	√	√	√	√
ALT	√		√	<b>V</b>		√	√		√	<b>V</b>	√	√	
AST	√		<b>V</b>	<b>V</b>					<b>√</b>	<b>V</b>			√
GGT			<b>V</b>						<b>V</b>	<b>V</b>			
Bilirubin			√						<b>√</b>	<b>V</b>			
Bile acids	√		<b>V</b>						<b>V</b>	<b>V</b>			√
CK			<b>V</b>										
Amylase			V										
Lipase			<b>V</b>										
Glucose			<b>V</b>	√	√	<b>V</b>						<b>V</b>	
Fructosamine				√									
Cholesterol		V	<b>V</b>	V						<b>V</b>		V	√
Triglycerides			√										√
Sodium	√		V		<b>V</b>	√							
Potassium	√		√		√	√							
Chloride	√		V		<b>V</b>	√							
Calcium	√		√		√	√		√				√	
Phosphate			<b>V</b>		<b>V</b>	√		√				√	
PLI	√	√											
Thyroxine											<b>V</b>		
Phenobarbitone													√
Vit B12/folate		<b>V</b>											

Biochemistry profiles - Equine						
Profile/Test	Samples	Turnaround	Price £			
Comprehensive analysis	2ml S 0.5ml F	3-7 d	37.40			
Equine metabolic syndrome Assess for pre-laminitic metabolic syndrome/insulin resistance Consider adding endogenous ACTH (1ml EDTA plasma required)	3ml S 0.5ml F	1d	47.00			
Health Check Basic screen for renal/hepatic disease or a pre-anaesthetic screen	1ml S	Same day	24.50			
Kidney	1ml S	Same day	22.50			
Liver	1ml S	Same day	25.50			
Rhabdomyolysis/myositis Includes assessment for myopathy	1ml S	Same day	26.00			
Weight loss	1ml S 0.5ml F	Same day	26.00			

Biochemistry profiles Equine							
Assay	Comprehensive	Equine metabolic syndrome	Health Check	Kidney	∠ Liver	Rhabdomyolysis / Myositis	< Weight loss
Total protein	√		V				
Albumin	$\checkmark$		$\sqrt{}$				$\sqrt{}$
Globulin				$\sqrt{}$			$\sqrt{}$
Urea	$\checkmark$		$\checkmark$				$\sqrt{}$
Creatinine	$\checkmark$		$\sqrt{}$			$\checkmark$	$\sqrt{}$
ALP	$\checkmark$		$\sqrt{}$		$\checkmark$		$\sqrt{}$
Intestinal ALP	$\checkmark$						$\sqrt{}$
GDH	$\sqrt{}$						
GGT	$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$	$\sqrt{}$
LDH	$\checkmark$		$\checkmark$			$\checkmark$	$\sqrt{}$
Bilirubin	$\checkmark$				$\checkmark$		
Bile acids	$\sqrt{}$						
AST	<b>√</b>				$\sqrt{}$	√	
CK	$\sqrt{}$					√	
Triglycerides							
Glucose							
Sodium							
Potassium							
Chloride							
Calcium							
Phosphate							
Magnesium						√	
Insulin							

Biochemistry profiles – Small Mammal/Avian					
Profile/Test	Samples	Turnaround	Price £		
Avian comprehensive	0.5ml S 0.25ml F	Same day	35.00		
Mammal health check	1ml S 0.5ml F	Same day	21.50		
Mammal comprehensive	2ml S 0.5ml F	Same day	34.50		
Primate comprehensive	2ml S 0.5ml F	Same day	45.00		

	Small mammal		Small mammal Avia		Avian	Primate
Assay	Health Check	Comprehensive	Comprehensive	Comprehensive		
Total protein	<b>√</b>	√	√	√		
Albumin	<b>√</b>	√	√	√		
Globulin	<b>√</b>	<b>√</b>	<b>V</b>	√		
Urea	<b>√</b>	√		√		
Creatinine	<b>√</b>	√		√		
ALP	<b>√</b>	√		√		
ALT	V	<b>√</b>		<b>√</b>		
GGT	V		√	√		
AST	<b>√</b>	√	$\sqrt{}$	√		
BA	√	√	<b>√</b>	√		
Bilirubin	<b>√</b>			√		
CK	V	√	√			
Glucose	<b>√</b>	√	√	√		
Cholesterol	√		<b>√</b>	√		
Amylase	V					
Sodium	V		$\sqrt{}$	V		
Potassium	V		$\sqrt{}$	V		
Chloride	V		$\sqrt{}$	V		
Phosphate	V		$\sqrt{}$	V		
Calcium	V		$\sqrt{}$	V		
Uric acid			$\sqrt{}$			

Adrenal endocrinolo	ogy		
Profile/Test	Samples	Turnaround	Price £
<b>ACTH - endogenous<sup>s</sup> –</b> centrifuge and chill the separated EDTA plasma immediately and submit within 24 hours	0.5ml EDTA plasma	Same day	36.00
Cortisol <sup>A</sup> Alone Additional to 4+ biochemistry tests	0.5ml S	Same day	27.00 24.00
Addisons disease monitoring - Monitor electrolytes and renal function	1ml S	Same day	17.00
ACTH stimulation test <sup>A</sup> – canine Sample at 0 &2h after iv ACTH.  Alone  Additional to 4+ biochemistry tests	0.5ml S x2	Same day	38.00 30.00
ACTH stimulation test <sup>A</sup> - feline Sample at 0, 60m & 90m after iv ACTH). Alone Additional to 4+ biochemistry tests.	0.5ml S x3	Same day	45.00 38.00
Cushings treatment monitoring 1 <sup>A</sup> Pre-vetoryl cortisol - sample taken prior to Vetoryl dosing – Alone Additional to 4+ biochemistry tests.	0.5ml S	Same day	27.00 24.00
Cushings treatment monitoring 2 <sup>A</sup> Single cortisol 4-6h post-Vetoryl dosing + electrolytes	1ml S	Same day	34.00
Cushings treatment monitoring 3 <sup>A</sup> Blood sample 4-6 hours post-Vetoryl dosing and 2h after aministration of ACTH (min dose 5µg/kg) IV. Alone Additional to 4+ biochemistry tests	0.5ml S x2	Same day	38.00 30.00
Dexamethasone suppression test <sup>A</sup> - low dose – canine Sample at 0, 3 & 8h after after IV dexamethasone (0.01-0.015mg/kg) Alone Additional to 4+ biochemistry tests	0.5ml S x3	Same day	45.00 38.00
Dexamethasone suppression test <sup>A</sup> - low dose - feline Sample at 0, 3 & 8h after after IV dexamethasone (0.15mg/kg) Alone Additional to 4+ biochemistry tests	0.5ml S x3	Same day	45.00 38.00
Urine cortisol:creatinine ratio Screening test for cushings.	1ml urine	Same day	36.50

Pancreatic endocrinology						
Profile/Test	Samples	Turnaround	Price £			
Insulin <sup>s</sup>	0.3ml S	2d	35.00			

Thyroid endocrinology						
Profile/Test	Samples	Turnaround	Price £			
Total T4 <sup>A</sup> Additional to a profile comprising 4+ parameters	0.3ml S	Same day	20.80 13.40			
Total T4 <sup>A</sup> pre + 6-8h post dosing with thyroid supplement	0.3ml S x2	Same day	34.40			
TSH <sup>A</sup>	0.3ml S	Same day	26.40			
Total T4 <sup>A</sup> and TSH <sup>A</sup>	0.5ml S	Same day	39.80			

Reproductive endocrinology						
Profile/Test	Samples	Turnaround	Price £			
Oestradiol <sup>s</sup>	1ml S	7d	63.00			
Oestrogen - urinary <sup>s</sup> - Mare pregnancy test Sample >150d of pregnancy	1ml S	7d	31.00			
Oestrone sulphate <sup>s</sup> - Mare pregnancy test Sample >120d of pregnancy	1ml S	7d	35.00			
Oestrone sulphate <sup>s</sup> – Cryptorchidism Unsuitable for horses <3 years old or donkeys	1ml S	7d	57.00			
Ovarian Remnant Detection 1 <sup>s</sup> – canine/feline To detect ovarian tissue in bitches/cats not showing signs of oestrus Inject 0.32µg IV of GnRH (Buserilin). Collect 2ml of serum 2-3 hours after administering GnRH and submit for <b>oestradiol</b> assay. Baseline sample is not generally required although some protocols recommend its inclusion.	1ml S	7d	2-3h sample only 63.00 0h & 2-3h sample 95.00			
Ovarian Remnant Detection 2 <sup>A</sup> – canine/feline  To detect ovarian tissue in bitches/cats that show signs of oestrus Inject 200-500iu/dog or 200iu/cat hCG (chorulon) IM. Sample on day 0 (optional) and day 10-14 and submit for progesterone assay. Baseline sample may not be required although some protocols recommend its inclusion.  In bitches assessing progesterone 14-21 days after onset of signs of proestrus can be diagnostic in some cases.	1ml H	Same day	10-14d sample only 33.00 0d & 10-14d sample 63.00			
PMSG <sup>s</sup> - Mare pregnancy test - sample 45-90d of pregnancy	0.3ml S	7d	35.00			
Progesterone <sup>A</sup> – ovulation detection  Take blood samples from day 8 after procestrus starts and continue every 2 days until ovulation is detected. Be aware that on very rare occasions procestrus may be as short as 4 days, and thus testing at 8d could be too late.	1ml H	Same day	33.00			
Testosterone <sup>s</sup>	2ml S	7d	35.00			
Cryptorchidism – hCG stimulation test <sup>s</sup> – canine, feline, equine Inject 100-300iu/cat, or 200-500iu/dog or 6000iu/horse of hCG (chorulon) IV. Collect blood sample 1-2 hours later. Assay testosterone. Baseline sample is not generally required although some protocols recommend its inclusion.	2ml S	7d	1-2h sample only 35.00 0h & 1-2h sample 60.00			

# **Histopathology & Cytology service**

Histopathology/Cytology						
Test	Samples	Turnaround	Price £			
Histopathology – 1-3 tissues (not brain)	Fixed tissue	1-2d	48.00			
Histopathology - additional tissues	Fixed tissue	1-2d	10.00 /tissue			
Histopathology – brain (+/- spinal cord)	Fixed tissue	1-4d	48.00			
Bone marrow cytology	Marrow in EDTA pot & smears	1d	31.00			
CSF cytology Fluid analysis recommended. If possible also submit an air dried smear.	Fluid in plain tube	1d	31.00			
Joint fluid cytology only Fluid analysis recommended. If possible also submit an air dried smear.	Fluid in plain tube	1d	31.00			
Nasal, tracheal, bronchial wash Cytology only Cytology + bacteriology	Fluid in plain tube	1d	31.00 55.00			
Pleural/peritoneal effusions cytology Fluid analysis recommended. If possible also submit an air dried smear.	Fluid in plain tube	1d	31.00			
Tissue cytology  One tissue - multiple aspirates from the same organ are one site.  2+ lesions - aspirates from distinct and different lesions/organs	Fine needle aspirate	1d	31.00 39.00			
Urine/prostatic wash Cytology only Cytology & urinalysis	Fluid/urine in plain tube	1d	31.00 43.00			
Fluid analysis package 1 - pleural, peritoneal, CSF, synovial fluids Cytology, cell count, TP, SG, triglycerides, cholesterol as appropriate.	Fluid in plain & EDTA tubes	1d	37.00			
Fluid analysis package 2 - pleural, peritoneal, CSF, synovial fluids Fluid analysis 1 + bacteriology	Fluid in plain & EDTA tubes	3-7d	60.00			
Cytology additional to histopathology – different lesion	Fine needle aspirate	1d	27.00			
Tissue histopathology & aerobic/anaerobic culture	Fixed tissue & fresh tissue wrapped in damp gauze	3-7d	75.00			

### Post Mortem (necropsy) service

### **Post Mortem examination**

Prices include gross examination and report only.

Additional tests including disposal are charged as per the list price						
Test	Samples	Turnaround	Price £			
Cat – foetus/abortion - single	Carcase	Same day	70			
Cat – kitten up to 8 weeks old	Carcase	Same day	110			
Cat - >8 weeks old	Carcase	Same day	200			
Dog – foetus/abortion – single	Carcase	Same day	70			
Dog – puppy up to 8 weeks old	Carcase	Same day	110			
Dog - >8 weeks old	Carcase	Same day	200			
Exotic species - contact us for quote prior to submission Small mammals/reptiles/birds (generally <5kg) Large mammals/reptiles/birds (generally >5kg)	Carcase	Same day	70-100 100-500			
Horse – abortion PM's only available from Aberdeen, Dumfries, St Boswells and Thurso centres	Carcase	Same day	180			
Horse – Foal  PM's only available from Aberdeen, Dumfries, St Boswells and Thurso centres	Carcase	Same day	250			
Horse/pony PM's only available from Aberdeen, Dumfries, St Boswells and Thurso centres	Carcase	Same day	300-500			
Pigeons – single carcase PM's only available from Aberdeen, Dumfries, St Boswells and Thurso centres	Carcase	Same day	150			
Pigeons – batch of up to 4 carcases PM's only available from Aberdeen, Dumfries, St Boswells and Thurso centres	Carcase	Same day	550			
Small mammals/cage birds (mice, rabbits, pet birds, etc) Single carcase	Carcase	Same day	80			
Small animals/cage birds (mice, rabbits, pet birds, etc) Batch of upto 4 carcases	Carcase	Same day	280			
<b>Disposal</b> – costs vary according to the size of the animal. All post-mortems attract a supplementary disposal charge unless the owner/practice makes separate arrangements	Carcase	Same day	20-200			

Please phone the centre to which the post mortem is being sent before submission. Animals weighing >35kg can generally only be submitted to our Aberdeen, Dumfries, St Boswells and Thurso centres. If submitting a carcase weighing >35kg to the Edinburgh centre it is essential that the lab is phoned first.

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### Microbiology sample collection guidelines

- Ensure that sampling is from the lesion, avoiding contamination from surrounding tissue. This is particularly important for urine where a cystocentesis sample is recommended for bacteriology.
- Please use sterile plain tubes, containers or swabs for submission of all microbiology samples boric
  acid containers are recommended for urine culture. Many additives in blood tubes are bacteriostatic
  and thus their use reduces isolation rates. If tissue samples are to be submitted please wrap in moist
  material to prevent drying out (do not immerse in fluid).
- When swabbing a lesion for bacteriology please use swabs that contain a transport medium as this preserves organism viability better than dry swabs.
- Faecal samples should be stored refrigerated until the sample is submitted.
- When submitting fluids for culture please ensure that the plain container is completely filled with the fluid so as to exclude air, as the presence of oxygen will potentially lead to loss of strict anaerobes from the sample.
- Generally samples that are >48 hours old are unsuitable for bacteriology due to reduced organism viability.

Origin of	Sample	Sample preparation	Tests carried out	
sample Abscess/wound	container Sterile pot	Aseptically prepare the collection site	Aerobic, anaerobic &	
			fungal culture	
Blood	Blood	Prior to obtaining the blood sample	Aerobic & anaerobic	
	culture	aseptically prepare the venipuncture	culture	
	medie	site. Collect 2-10ml of blood depending		
		upon animal size and inject into the liquid media.		
Bone marrow	Sterile pot	Aseptically prepare the collection site	Aerobic & anaerobic	
			culture	
CSF			Aerobic & anaerobic	
	Liquid	prepare the site. Isolation of organisms	culture	
	media	is improved if the sample is added to a		
		liquid culture media.		
Ear	Swab	Swab different regions of the ear,	Aerobic & fungal culture	
		including deeper areas if possible		
Eyes	Swab	Swab discharge material before	Aerobic culture	
		applying any topical medication		
		including local anaestehtic		
Faeces	Sterile pot	Avoid contamination with soil or urine	Salmonella,	
	Swab		Campylobacter, Yersinia,	
			Clostridium spp	
Nasal cavity,	Sterile pot	Aspirate from sinus or swab/wash the	Aerobic, anaerobic &	
sinus	Swab	nasal cavity.	fungal culture	
Skin, nail, hair	Swab	Swab/scrape lesion. Do not include the	Aerobic &fungal culture	
	Sterile pot	blade in the sample pot. Place hairs		
		taken from the periphery of the lesion		
		for fungal culture in a small envelope.		
Synovial fluid	Sterile pot	Prior to obtaining the sample aseptically	Aerobic, &anaerobic	
	Liquid	prepare the site Isolation of organisms	culture	
	media	is improved if the sample is added to a		
		liquid culture media		
Tissue	Sterile pot	Place tissue in a sterile pot with small	Aerobic, anaerobic &	
		amount of sterile saline to prevent	fungal culture	
		drying out.		

Trachea/bronchi	Sterile pot	Swab/wash the trachea/bronchi, swab the endotracheal tube	Aerobic & fungal culture
Urine	Sterile pot Boric acid.	Cystocentesis is recommended. For free catch samples use of Boric acid will restrict bacterial overgrowth.  Refrigerate.	Aerobic culture

### Urine collection guidelines

Test	Sample	Container	Sample preparation	Storage	Comment
Urine culture	Urine	Sterile pot Boric acid container	Obtain urine by cystocentesis to ensure sterility.	Seal and refrigerate. Prevent exposure to sunlight.	Boric acid is preferred where samples are not obtained by cystocentesis. Boric acid samples cannot be used for any chemistry tests including UP:C, or cytology. For these please submit urine in a plain tube.
Urinalysis	Urine	Plain pot	Obtain sample by cystocentesis, catheter or free catch into a clean container	Seal and refrigerate. Prevent exposure to sunlight	Do not collect urine from the floor/litter trays.
Urine cytology	Urine	Plain pot	Obtain sample by cystocentesis, catheter or free catch into a clean container	Refrigerate	
Urolith analysis	Urolith	Plain pot	None – do not add any liquid including formalin	Room temperature	

### **Blood sampling guidelines**

Accurate and useful results are determined by the correct choice of tests and quality of the sample provided. If you are unsure what tests may be appropriate for your case please contact us for advice in advance. We store all surplus serum for 3 months enabling you to request further testing at a later date if your initial test choice is not diagnostic. Whole blood degrades over a few days and thus cannot be stored for longer than 7 days.

The tests shown in this document identify the sample types, minimum requirements and guidelines on appropriate sampling.

- · Avoid lipaemia by taking samples after fasting.
- Reduce the risk of haemolysis. Haemolysis can be reduced by ensuring as wide a needle as possible
  is used, that a good free flow of blood is obtained and minimise the time blood is in the syringe. Do not
  forcibly eject blood through a needle; remove the needle prior to transferring the sample in a blood
  tube
- When filling tubes, fill the plain tube first to avoid any risk of carry over of anticoagulants. In particular small amounts of EDTA can interfere with several biochemistry tests
- With serum gel tubes please centrifuge sample if possible to separate red cells from the serum.
- Ensure plain tubes are clotted and clot retraction has occurred before centrifuging. Note that the sample requirements indicate the volume of serum/plasma that is required, not the volume of whole blood.
- Ensure that the correct blood tubes are used for the tests required.
- Fill all tubes to the correct level to avoid any issues with high concentrations of anticoagulants. This is particularly important with EDTA as cellular morphology is affected by high concentrations of EDTA.
- We recommend submitting an air dried blood smear which we can then use for the differential count when cellular morphology in the EDTA sample is not preserved.
- In cases where blood clotting occurs rapidly in the syringe before the sample can be mixed with EDTA (hypercoagulable states), coating the inside of the needle and syringe barrel with liquid citrate may be helpful. Aspirate a small amount of citrate into the syring ensuring all internal surfaces are coated and then eject surplus citrate prior to obtaining the sample.

### **Container types**

Blood tubes show the name of the tube on its label – please check before adding blood and do not rely on the lid colour as this varies. The letters shown for each tube type are used in the assay lists below

- Serum gel/plain tubes (S) (red or white lids): Serum tubes contain no anticoagulant and thus blood clots in these tubes. The serum gel tubes should be centrifuged prior to submission to prevent haemolysis affecting the serum. The resulting serum is used for biochemistry and endocrinology tests.
- Lithium heparin tube (H) (green or orange lids): Contains an anticoagulant that prevents clotting. Plasma can be used for biochemistry and endocrinology. The whole blood can be used for haematology, and for exotic species it is pSerred to blood taken in to EDTA. It is also used for some molecular tests. Ensure the tube is filled to the appropriate level.
- Potassium EDTA tube (E) (red or pink lids): Contains a chelating agent which acts as anticoagulant and
  preserves cellular morphology. It is used for haematology and for fluid aspirates (e.g. pleural/peritoneal
  effusion, synovial fluid etc). It is important that the tube is filled to the correct level to preserve cellular
  morphology.
- Separated EDTA plasma (ES): This is required for endogenous ACTH estimation. Centrifuge the EDTA sample and place the plasma into a plain tube (not serum gel tube).
- Fluoride-oxalate tube (F) (yellow or grey lids): Oxalate is an anticoagulant whilst fluoride prevents glucose metabolism by cells. This tube is required for glucose estimation.
- Citrate tube (C) (lilac or green lids): Citrate is in anticoagulant and tubes contining this are used for clotting factor and fibrinogen assay, and may be used for haematology.

Test	Sample	Container	Sample preparation	Comment
Chemistry (most),	Serum	Serum gel	Submit whole blood or separated	For therapeutic drug
Immunology,		or plain	serum.	monitoring non-gel
Endocrinology		tube (S)	For a plain tube (no gel) transfer the	tubes are
			serum to a new plain tube.	recommended
Progesterone	Plasma	Heparin	Submit whole blood, or separated	
		(H)	plasma	
Selenium, lead,	Whole	Heparin	Do not centrifuge. Submit whole blood	
manganese,	blood	(H)		
GSHPx,				
Vitamin A	Serum,	Plain or	Keep samples in the dark as	Wrap in foil to exclude
Vitamin E	plasma	Heparin	sunlight/UV light degrades vitamins A	light.
		(S/H)	and E.	
ACTH	Plasma	EDTA (E)	Centrifuge sample at the earliest	Post immediately to
(endogenous)			opportunity. Place the plasma into a	arrive with us the next
			plain tube.	day
Haematology	Whole	EDTA (E)	Fill tube to the mark mix well by	
	blood		inversion	
Coagulation tests	Plasma	Citrate (C)	Minimum 1ml of citrated plasma (c2ml	Post immediately to
(PT, APTT,			of whole blood) is required for PT and	arrive with us the next
fibrinogen)			APTT test. Mix adequately and ensure	day. If the plasma has
			no clots are present. Submit whole	been frozen, submit
			blood or centrifuge and submit the	with an ice-pack if
			plasma in a separate plain tube	possible.
			(plasma can be frozen pending	
			submission)	

### Histopathology sample collection guidelines

- Provision of a full history, patient details and description of the lesion enables more accurate interpretations.
- For adequate fixation samples fix in 10% neutral buffered saline (10:1 ratio of formalin to tissue). For large biopsies it is appropriate to fix the tissue in a large pot in the practice for a few days. Completely fixed tissue can be submitted in a sealed bag or small pot with formalin soaked gauze to keep it moist. To allow formalin to penetrate large biopsies make 0.5-1cm wide incisions through the lesion; do not extend to the deep margin or through the full thickness of the tissue. For very large tissues remove 1cm cubed representative pieces, fix separately.
- Samples that are very small (<2mm) and friable, haemorrhagic, fatty or mucoid may not survive processing in which case an interpretation will not be possible.
- Multiple biopsies from different sites should be placed in separate pots and clearly labeled.
- Open hollow tissues e.g. intestine to allow formalin access to the mucosa.
- Small bone marrow, tru-cut liver or kidney should be submitted in mesh bags (available on request)
- Samples requiring extended fixation or decalcification have a longer turn-around time.

#### Cytology collection guidelines

Cytology sample may be obtained by aspiration, scraping or imprints. Slides may be made by smearing the aspirate or making a squash preparation. When making smears please ensure a thin film is created. Islands of material on the slide will be too thick for examination. Provision of a full history, patient details and description of the lesion enables more accurate interpretations.

- Submit labelled air-dried, unstained smears. Smears may be fixed in methanol for 5 minutes, but if unavailable, do not fix.
- Keep smears away from formalin fumes and avoid submitting slides in the same bag as formalin containing pots.
- Submit fluids and washes in EDTA pot for cytology and a plain sterile pot for culture along with unstained smears. Prepare smears immediately after taking the fluid/wash.
- Do not supply fluids in gel tubes or syringes.

#### Post-mortem (necropsy) service

### Post mortem guidelines

The cost of the post mortem is for the necropsy only. All other tests will incur charges as shown in this service guide. **Disposal charges apply** unless separate arrangements are made; **carcases cannot be released to owners for burial**. For litigation cases extra charges will be incurred if discussions with legal representatives or attendance at court are required – please contact us for an estimate of costs. Smaller carcases can be posted to us. A full history is required. We must be informed in advance if a case is to be submitted for necropsy, and the body should be submitted at the earliest opportunity. Smaller carcases should be kept refrigerated, whilst larger bodies should be kept as cool as possible. Avoid freezing a body unless the time between death and submission is likely to be >72 hours, in which case freezing is preferred.

# C-QAS

### **Capital Quality Assessement Service**

# External quality assessment (EQA) for point-of-care biochemistry and haematology analysers

C-QAS provides an independent comprehensive, external quality assurance scheme for veterinary point-of-care analysers of all makes and models. Our unique EQA service assesses the performance of biochemistry and haematology analysers and provides guidance on how poor performance may be managed. We cover all analyser types including hand held kennel-side analysers such as glucometers.

Our external quality assessment service uses peer comparison with the same analyser make (where we have sufficient numbers of the analyser type registered), a method widely used across all human EQA schemes. The process is simple and satisfies the requirement of the RCVS's practice standards scheme.

Novel features specific to C-QAS include

- a. Peer-comparison of both biochemistry and haematology analysers; including manual white cell differentials.
- b. Comprehensive list of biochemistry analytes including blood gases, ionised calcium, thyroxine, progesterone and cortisol
- c. Inclusion of parameters specific to equine and livestock species.

Samples (serum and whole blood) are posted monthly to the subscriber, who return their results online through our VetPortal. The annual subscription runs from April to March and the current rates (ex-vat) are

Biochemistry analysers only - 1-3 analysers at the same site
 Haematology analyser only at one site
 Biochemistry (1-3 analysers) and haematology analyser at one site

£180/y
£280

If more than 3 biochemistry analysers are to be registered at one site each extra analyser will be invoiced at a cost of £60/analyser/y

Practices joining part way through the year will be invoiced for the remaining months prorata.

Email c-gas@sruc.ac.uk for further details.



# SRUC VETERINARY AND ANALYTICAL SERVICES STANDARDS OF SERVICE

We provide laboratory services in the veterinary, food and agri-environmental sectors. Our operations comply with the requirements of ISO 17025:2017 and are assessed annually by the United Kingdom Accreditation Service (UKAS).

Full schedules of accredited SRUC Veterinary and Analytical Services procedures are available on request or can be viewed on the web at www.ukas.org/testing - accredited organisation search on laboratory ref. 2239 and 7624.

The diagnostic work we carry out to support Scottish Government's animal disease surveillance programme is reported by SRUC. Other work submitted is reported by SAC Commercial Ltd. SRUC and SAC Commercial Ltd are separate legal entities and are covered by separate accreditation to ISO 17025:2017 by UKAS on certificate numbers 2239 and 7624 respectively.

Where applicable, decision rules for tests are available on request. Decisions relating to test interpretation are provided to clients by means of standard comments in veterinary reports. This covers aspects such as positive, negative or inconclusive cut-offs for serological tests based on kit manufacturer's information, and other data such as biochemistry values and parasitology results in relation to species, age of animal and sample type. Further interpretation taking account of clinical history and other information pertaining to the case, is provided as Veterinary Opinions and Interpretations.

Our scope of accreditation includes opinions and interpretations in farm and companion animal species

Our opinions and interpretations will be based primarily on the test results and appear under the interpretation section of test reports. Accreditation for the expression of opinions and interpretations relates to test results generated from the accredited methods on the UKAS schedule. At all times our team will seek to provide opinions and interpretation, but on the occasions where this is not possible we will use advice from an approved subcontractor. In such circumstances this will be clearly identified on the test reports.

The test method list for all accredited tests is available at <a href="test-method-list-for-veterinary-services.pdf">test-method-list-for-veterinary-services.pdf</a> (sruc.ac.uk). Almost all tests we offer are accredited to ISO 17025, however in the small number of tests that are not accredited, or where the test is carried out by another laboratory on our behalf we will clearly identify that these tests are not accredited. We are responsible to customers for any subcontracted tests, with the exception of subcontractors specified by customers or regulatory bodies. We have an assessment procedure for subcontractors and a register of approved subcontractors is maintained and reviewed on an annual basis. Should subcontracting be required, the services of an accredited laboratory will be employed wherever possible. We will indicate where a subcontracted laboratory was used.

We are committed to providing the highest level of service to customers and we welcome recommendations for improvement and any comment you may have on the quality of service and service delivery.

Anne Seaton Veterinary Manager and Senior Veterinary Investigation Officer

VSG Standards of Service Version 23 Authorised by: A Seaton/L Connell

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