APPENDIX 1-7

BACTERIOLOGY

It is the policy of this laboratory to provide a total service with no hidden extra costs. *Culture (aerobic and anaerobic where applicable)* serological and biochemical identification, of any bacteria, together with antimicrobial sensitivities as and when necessary are all included in the quoted price.
We continually appraise the routine antibiotic sensitivity tests that are applied and will specifically test for any antibiotic requested at no extra charge.
Transport swabs should be used rather than dry swabs wherever possible, as use of the latter precludes recovery of anaerobes and the more *"delicate "* bacteria.
A clinical history enables veterinary advice and comments to be made where necessary.

FAECES

Examination for all bacterial pathogens *(Salmonella and Campylobacter species)* are routinely performed on all samples.

MICROSCOPIC EXAMINATION

Faeces can be examined for starch granules, fat, fibre etc., Clostridium pertringens and CI. ditticle examination is performed in relevant cases or when required. Upon request Cryptosporidia and protozoal examinations are included in the faeces analysis. Skin scrapings are examined as a KOH wet prep for parasites and fungal spores.

MILK/MASTITIS

Examination for all bacterial pathogens, *(Mycoplasma species if history dictates)* yeasts and fungi, together with a check for inhibiting substances *(mostly antibiotics)* are routinely performed on all samples.

VAGINAL/CLITORAL SWABS

Genital pathogens are routinely checked for on all samples, including Taylorella equigenitalis *(CEMO)* in horses when specially requested.

FAECES ANALYSIS

Bacteriology and Parasitology are included. Faecal proteolytic activity is routinely assessed in dogs but not in cats. Sample containers are available.

URINE ANALYSIS

Microscopic examination of urine, bacteriology, biochemistry, specific gravity and cytology where appropriate. Note cells do not survive well in urine and a bladder wash or catheter suction biopsy is recommended for bladder cytology. Sample containers are available.

EMERGENCY VACCINE

When bacterial infection or warts become a herd or flock problem and the standard commercial vaccines are not available or do not produce the desired effect, then an emergency vaccine should be considered. Produced from the actual field isolates causing the problem, killed bacterial or wart vaccines are manufactured under Medicine Act regulations. It is necessary that each particular case be discussed with the laboratory before submitting samples. We handle all the paper work and apply for a specific product licence for the particular vaccine.

HISTOPATHOLOGY

Samples are normally processed within 24 hours of receipt, and a written report including veterinary interpretation and prognosis is provided. For routine histopathology, submit *(approx. 1.00 -3.00 cm cubes)* selected samples in 10% buffered formal saline. For adequate fixation and good tissue preservation, it is important to have a large volume of fixative *(10:1)* to sample ratio.

The recipe for Buffered *(ph 7.0)* 10% formal saline per litre is:-
Formalin *(40% formaldehyde soln)* 100 mls.
Distilled water 900 mls.
$Na\ H_2\ P0_4\ 2H_20$ 4.5 g
$Na\ 2H\ P0_4$ 6.5 g

BIOPSIES

Needle biopsies from lymph nodes, liver biopsies and skin biopsies, should all be put in 10% formal saline as above.
For special histopathology techniques it is advisable to phone and discuss with the laboratory first.

POST MORTEMS

Post mortems are performed Monday to Friday *(not at weekends)* by prior arrangement with the Laboratory. Unexpected or poorly wrapped carcases will be destroyed.

ACUTE PHASE PROTEINS

These are proteins associated with acute inflammation, usually located in the alpha globulins. They are useful markers of acute inflammation, especially when antibiotics have been used and in those animals which do not mount a significant haematological response. Most species have the same acute phase proteins, although the magnitude of response varies between species.

DOG Fibrinogen and C Reactive Protein *(CRP)*

CAT Fibrinogen

HORSE Fibrinogen

SHEEP/COW Haptoglobin

EDTA samples are required for fibrinogen while serum or plasma is suitable for haptoglobin and CRP.

SPECIAL TESTING PROTOCOL-S

B121FOLATE/TLI

- For Canine Intestinal Malabsorption.
- Low B12 consistent with distal *(ileal)* pathology and/or Exocrine Pancreatic insufficiency *(EPI)* or possible bacterial overgrowth.
- Low TLI Indicative of EPI.
- Low Folate consistent with proximal *(jejunal)* pathology or food allergy.
- Low B12 and Folate consistent with generalised intestinal damage malabsorption
- Raised Folate Associated with possible bacterial overgrowth.

VON WILLEBRANDS TESTING

Currently tested by ELISA methods. Species of dog associated with a high prevalence of vWD are:

DOBERMANS
GERMAN SHEPHERDS
ROTTWEILERS
SCOTTIES
MIN SCHNAUZERS
MANCHESTER TERRIERS
RETRIEVERS
KEESHONDS
SHELTIES
DACHSHUNDS
BASSETS
POODLES

REQUIREMENTS

- Sodium citrate tubes. The tube must be correctly filled, as citrate/blood ratio is critical.
- We can supply 4.5 ml and 2 ml citrate tubes, but you can make up your own as long as the ratio citrate: blood is 1:9 i.e. 0.1 ml citrate *(0.105M sodium citrate)* with 0.9 ml blood.
- Centrifuge and **freeze** plasma for vWf Ag assay

HAEMOLYSED OR PARTIALLY CLOTTED SAMPLES WILL BE REJECTED

- Send with an ice pack in summer by courier or express post. Keep cool at all times avoid delays.

ROUTINELY do not test unhealthy dogs, those on medication for other illness, and those recently vaccinated *(<14 days)*

Please state if hypothyroid or on thyroid therapy.

- Do not test pregnant, or lactating bitches, or those in season *(unless there is excessive bleeding).*
- These criteria do not apply if you have a clinically affected animal.

- Ideally test puppies at 12 weeks of age, but larger breeds may be tested from 7 1/2 weeks.
- The minimum blood is 0.5 ml, but it is essential the ratio citrate:blood is kept 1:9.
- Specific factsheet available detailing sample requirements for vW testing.