



**VETERINARY HEALTH CERTIFICATE
EXPORT OF BOVINE EMBRYOS TO WESTERN SAMOA**

Exporting Country: CANADA

Department/Service: CANADIAN FOOD INSPECTION AGENCY
GOVERNMENT OF CANADA

Region: _____

SECTION I - Origin of the Embryos

I.E.T.S. freeze code of the company processing the embryos: _____

Consignor Name: _____

Address: _____

Place of origin of each collection date of embryos: _____

SECTION II - Destination of the Embryos

Consignee Name: _____

Address: _____

Nature and identification of the means of transport: _____

SECTION III - Veterinary Certificate A: Collection Team Veterinarian's Declaration

I, _____ (Block Letters), of

(Address), being the approved Veterinarian responsible for the supervision of the team collecting the embryos to which this certificate applies, certify that:

1. Identification

Each donor animal for this consignment was clearly identified with visible markings and a full description of each is given under Section I of this health certificate accompanying the consignment.

Residency

2.1 The donor dams for this consignment were continuously resident in Canada and/or the USA for the whole of the sixty (60) day period prior to the commencement of the pre-collection residency period and for the thirty (30) days preceding the collection of embryos have been resident on the property at which the embryos were collected.

2.2 The donor dams were not animals which had been imported into Canada or the United States from the United Kingdom (UK) after January 1, 1982, were not of UK origin by birth since January 1, 1982, and were not derived from an animal originating from the UK (or from semen or an embryo from the UK) since January 1, 1982.

3. Property of Origin of the Embryo Donors

3.1 After due enquiry, I am satisfied that, for the listed calendar periods, the following diseases have not been known to occur on any premises where any donor or teaser animals has been during the one (1) year period prior to the last collection of embryos for this consignment: 3.1.1 vesicular stomatitis - 2 years

3.2 After due enquiry, I am satisfied that:

3.2.1 no case of vesicular stomatitis has been known to occur within a radius of 100 km (60 miles) of the property where the embryos were collected, during the one (1) year period prior to the last collection of embryos for this consignment.

- 3.2.2 no case of bluetongue or epizootic hemorrhagic disease of deer (EHD) has been known to occur on the property during the one (1) year period prior to the last collection of embryos for this consignment.
- 3.3 After due enquiry, and to the best of my knowledge and belief, neither the donors nor any of their sires or dams are known to carry any genetic defects.

4. Pre-collection Residency

- 4.1 Each donor for this consignment and any in-contact animals (including teasers) were resident on the property where the collection took place for the whole of the thirty (30) day period prior to the first collection of embryos (or semen in the case of donor males) for this consignment.
- 4.2 During the pre-collection, collection and post-collection periods, each donor and any in-contact animals were inspected by me at regular intervals and on each day of collection of embryos for this consignment, and they remained healthy and free from evidence of infectious or contagious disease in each case.

5. Testing and Treatment

- 5.1 All testing performed during the pre and post-collection periods was performed at laboratories approved for the purpose by the Canadian Food Inspection Agency.
- 5.2 During the interval forty to sixty (40-60) days following the last collection of embryos for this consignment (or semen in the case of donor males resident in the centre), each donor and any in-contact animals were subjected to the following test with negative results:
- a complement fixation test for Q-fever (negative is one in which there is no fixation of complement at a dilution 1:10).
- 5.3 At some stage in its life, prior to the export of the embryos to Western Samoa, each donor (male and female) of the Angus, Galloway or any derived breed was subjected to a plasma test for mannosidosis and if equivocal results were obtained, a granulocyte test as appropriate, with negative results in each case.
- 5.4 At some stage in its life, prior to the export of embryos to Western Samoa, each donor (male and female) of the Brahman, Indo-Brazil, Beef Shorthorn or any derived breed was subjected to a test for type 2 alpha-glycogenesis (Pompe's disease) and was considered not to be a carrier of the recessive gene.

6. Semen Used to Fertilize the Ova

- 6.1 All natural matings or artificial inseminations and embryo collection procedures were observed by me and the embryos are accurately certified as to their identity and date of collection.

6.2 The semen used to fertilize the embryos was:

- 6.2.1 semen from a donor bull of equivalent isolation/tested health status as the donor female, or

NOTE: Requirements under clauses 3, 4 and 5 above apply in full for these donors.

- 6.2.2 semen collected from bulls meeting the standards as detailed by the "Certified Semen Services (CSS) Minimum Requirements for Health of Bulls Producing Semen for AI" and imported into Canada from the United States, or

- 6.2.3 semen collected from bulls meeting the Canadian Food Inspection Agency standards for the Health Testing of Semen Donor Bulls.

NOTE: Details of the semen must accompany the embryos. This includes copies of export certification or documentary evidence of the semen having been collected in the CSS or CFIA system.

(Delete those sections not applicable.)

- 6.3 The semen used to fertilize the embryos was not from animals of United Kingdom origin (after January 1982).

7. Embryo Collection and Processing

- 7.1 All collections, processing and storage of embryos for export to Western Samoa were performed under my supervision.
- 7.2 All collection and processing of embryos for this consignment were the first performed on each day of collection.
- 7.3 All items of equipment used for the collection and processing of embryos for this consignment were used exclusively on animals donating embryos for export to Western Samoa and, if not disposable, were thoroughly cleaned and sterilized between uses for successive donors. In the case of disposable equipment, each item was discarded after a single use.
- 7.4 All products of animal origin used in the collection, processing and storage of embryos have been screened for

adventitious viruses including tests for cytopathology in appropriate cell cultures, for hemagglutinating and haemadsorbing viruses, and for pestiviruses by immunoperoxidase or immunofluorescence. The biological product has been handled in such a manner so as to ensure that sterility is maintained.

- 7.5 All antibiotics added to the embryos in this consignment are licensed in either the United States, Canada, or New Zealand.
- 7.6 Following collection and examination (only embryos with intact zona pellucida were retained), the embryos in this consignment were washed (in groups of not more than ten (10) with all from the same donor) by approved methods according to the I.E.T.S. Manual.

NOTE: An example of an approved washing technique is:

- the embryos are transferred through 5 washes in a solution containing Dulbecco's Phosphate Buffered Saline (PBS), antibiotics, and 0.4% bovine serum albumin (BSA),
- the embryos were then passed through 2 washes in a solution containing PBS and 0.25% trypsin, pH 7.6-7.8 (total time in trypsin equivalent to 60 to 90 seconds at 37°C),
- the embryos are then passed through 2 washes in a solution containing PBS, antibiotics, and 2% fetal calf serum (FCS), or 0.4% bovine serum albumin,
- each wash represents at least a 100 fold dilution of the previous wash.

- 7.7 Trypsin treatment as specified in the I.E.T.S. Manual was applied to all embryos in the consignment as part of the washing process.
- 7.8 Immediately following washing, each embryo was examined over its entire surface at a magnification of at least fifty (50) times and the zona pellucida was intact and free from any adherent material.

8. Embryo Storage

- 8.1 Following microscopic examination, each embryo in this consignment was placed in ampoules or straws (containing not more than three (3) embryos and each from the same donor) which were clearly marked with either the identification of the donors and the date of collection or a code from which this information can be readily determined.
- 8.2 The embryos for this consignment were stored only with embryos collected for export to Western Samoa in either new and unused containers or sterilized containers.
- 8.3 The refrigerant used was new and unused for any other purpose prior to use.
- 8.4 The embryos in this consignment have been stored under security in sealed containers until the time of export at a place approved by the Canadian Food Inspection Agency under my supervision or that of the certifying Canadian Food Inspection Agency veterinarian.
- 8.5 All servicing of storage containers prior to export was carried out under my supervision or that of the certifying full time Government veterinarian.
- 8.6 The embryos in this consignment have been stored prior to export until the results of all necessary diagnostic tests of the donors were known.
- 8.7 The seals of the storage container were intact at the time of export.

Date

Name (Bold Letters), Signature and Address of Approved Collection Team Veterinarian

Veterinary Certificate B: Government Veterinarian's Declaration

I, _____ (Block Letters),
of _____ (Address), being a full-time Veterinary Officer employed by
the Canadian Food Inspection Agency, Government of Canada, hereby certify that:

1. Endorsement

- 1.1 During the pre-collection, collection and post-collection periods, all collections of samples for diagnostic testing were performed under my supervision and samples were forwarded for testing to a laboratory approved for the purpose by the Canadian Food Inspection Agency.
- 1.2 I have received and examined a record of the donor animal's histories and diagnostic tests performed on the donors of embryos in this consignment.
- 1.3 After due enquiry, I have no reason to doubt the truth or accuracy of the veterinary health certificate A made by the collection team veterinarian.
- 1.4 The embryo collection centre meets Western Samoa's requirements for approval of semen/embryo collection premises and has been approved for the collection of embryos for export to Western Samoa.
- 1.5 The collection team veterinarian has been approved after complying with the requirements of the Canadian Food Inspection Agency Accreditation Program for the Export Certification of Embryos.

2. Disease Freedom

- 2.1 During the one (1) year period immediately prior to the date of the first collection of embryos for this consignment and during the period since that date, both Canada and the United States of America have remained free from the following diseases:
 - 2.1.1 contagious bovine pleuropneumonia
 - 2.1.2 foot and mouth disease
 - 2.1.3 lumpy skin disease
 - 2.1.4 Rift Valley fever
 - 2.1.5 rinderpest

3. Export

- 3.1 The final audit of the process, documentation and sealing of the storage containers for this consignment were performed under the supervision of a full time officer of the Canadian Food Inspection Agency.
- 3.2 The canister containing the embryos for export to New Zealand was sealed with a seal bearing the code:

NOTES:

Requirements for Semen/ Embryo Collection Premises

The collection centre may be either:

- a) a centre licensed under current government regulation, or
- b) a government approved but unlicensed premises.

The basis for the approval of unlicensed premises is the demonstration that the premises where collection occurs is operated as an integrated facility and the staff handling the animals and collecting the embryos are aware of the necessity for identifying donors, normal sanitary procedures and good husbandry practices.

Specifically:

1. **Operation:** Staff must undertake normal measures against cross-contamination prior to handling any animals in the centre and prior to any testing, treatment or collection procedures being carried out.

With regard to embryo collection, all matters related to hygiene, health, testing/treatments and quarantine must be under the direct control and supervision of the government-approved team veterinarian who shall provide the veterinary health certification required.

2. **Facilities:** The centre must comprise clearly distinguishable animal accommodation, embryo collection and embryo processing facilities.

Construction of the collection and processing facilities must be such as to facilitate cleaning and disinfection. The facility should be protected against rodents and insects.

Embryos must be processed in a room/building/mobile laboratory set aside for that purpose, separate from areas

Reference Number: _____

where animals are housed and where embryos are collected. Embryos must be stored in a room/building separate from all other facilities and able to be secured.

All equipment used to collect, process and store the embryos and which comes into contact with either the donor animals or the embryos must be used exclusively on animals donating embryos for Western Samoa and if not disposable, must be disinfected before and between uses.

SAMPLE

Reference Number: _____

SECTION IV - Information Concerning Donors, Sires and Embryos/ for identification:

DONOR COW					DONOR SIRE				
Registered name	Registration n°	Date(s) of collection	Identification markings on straws	Number of straws	Registered name	Registration n°	Date(s) of collection	Identification markings on straws	Number of straws

Total number of straws: _____

Total number of embryos: _____

Signature of Approved Veterinarian responsible for Embryo Collection Team

Date

Official Export Stamp

Veterinary Officer
Canadian Food Inspection Agency
Government of Canada