

AUSTRALIAN NATIONAL QUALITY ASSURANCE PROGRAM (ANQAP)

Inter-laboratory Veterinary Proficiency Testing

2021 Annual Report

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SECTION 1: Introduction

Introduction

Confidentiality

Methodology

Reporting

Tests not offered / retest samples unavailable in 2021

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1. INTRODUCTION

In 2021, the Australian National Quality Assurance Program (ANQAP) facilitated inter-laboratory proficiency testing in 26 government and private veterinary laboratories from several countries including Australia, New Zealand, and the United States of America. The testing cycle for 2021 evaluated 7 testing rounds, comprised of 37 different veterinary tests. The 2021 program schedule was delayed due to the worldwide COVID-19 pandemic, which saw Melbourne in and out of lockdown for much of 2021. The Victorian Government's recommendation to "work from home if possible" also had a very significant impact on ANQAP's ability to provide the proficiency testing programs.

In conjunction with the Australian National Reference Laboratories, ANQAP provides proficiency testing for *Dichelobacter nodosus* and *Mycobacterium paratuberculosis*.

2. CONFIDENTIALITY

In order to protect the identity of participating laboratories, each laboratory is allocated a Confidential Number. Each laboratory knows only its own Confidential Number and not the Confidential Number of any other laboratory. This number is changed annually, and these numbers are not printed in the result tables in this report.

A special round for the BTV ELISA is run as part of the Laboratories for Emergency Animal Disease Diagnosis and Response (LEADDR) program. LEADDR does not keep the identity of laboratories confidential.

3. METHODOLOGY

3.1 Samples

ANQAP distributes freeze dried samples (most commonly serum) to participating laboratories. Each sample panel is, where possible, selected to produce a range of results from negative through to high positive. Typically, each sample panel includes six samples and each participant will receive a sample panel of their own to test.

Specimens for *Dichelobacter nodosus* and *Mycobacterium paratuberculosis* evaluation are prepared by the Australian National Reference Laboratories for these diseases.

3.2 Analysis

Definition of a satisfactory result

A consensus median (CM) result is calculated for each of the samples and laboratory results are classified on the variation demonstrated between the sample result and the consensus result. For tests which generate a titre, an acceptable variation range (AVR) is established. The AVR is generally taken as one dilution factor either side of the consensus result. Results which are the correct interpretation and within the AVR are classified as **Satisfactory**.

Example:

If the CM for Q Fever CFT is 3/32, the AVR will be between 3/16 and 3/64. A result that falls between 3/16 and 3/64 will be classified as **Satisfactory** (\checkmark).

Results outside the AVR demonstrate variation from the expected result and will generally result in the laboratory being asked to retest.

The retest result will be classified as:

- Retest Result Satisfactory (R✓) if the result falls within the AVR
- Retest Result Demonstrating Minor Variation (Rm) if the result falls outside the AVR but is within one dilution factor of the upper or lower AVR limit
- Retest Result Unacceptable (RU) if the result is more than two dilution factors outside the CM or the result differs in positive or negative interpretation from the CM interpretation

Example:

Using the CM and AVR given in the example above, a result outside 3/16 to 3/64 will require retesting. This retest result will then be classified.

A retest result of 1/128 is above the AVR but within a dilution factor of the upper AVR limit (between 3/64 and 3/128) and would be classified as Retest Result Demonstrating Minor Variation **(Rm)**. Any result greater than 3/128 or lower than 3/8 would be classified as Retest Result Unacceptable **(RU)**.

ANQAP recommends that laboratories given a classification of "**Unacceptable**" undertake corrective action within the laboratory to identify and rectify problems with the test. On request, ANQAP may supply a new panel of samples to the laboratory to assist in the corrective action process, if available.

Statistical Analysis of Results

Several ANQAP tests are suitable for statistical analysis. For these tests, a split-level analysis is undertaken using two test sera from the panel. The outcome of the statistical analysis is included in the test round reports. The statistical analysis has been excluded from this annual report.

4. **REPORTING**

ANQAP will issue each individual participating laboratory a personalised report once the test round has closed. The report will identify results that are within acceptable parameters and indicate where sample retests will be required.

5. TESTS NOT OFFERED / RETEST SAMPLES UNAVAILABLE IN 2021

Due to low stock volumes of positive sera, the following panels were not available this year:

- EBL AGID
- EBL ELISA serum
- JD Caprine AGID
- L. hardjo MAT
- L. pomona MAT
- L. tarassovi MAT

Due to low stock volumes of positive sera/faeces, retest or replacement panels for the following panels were not available this year :

- AIV AGID
- B. ovis CFT
- B. ovis ELISA
- EIA AGID
- EVA VNT
- JD Bovine Culture
- JD Ovine AGID
- JD Ovine Culture
- NDV HIT



SECTION 2: Agar Gel Immunodiffusion (AGID)

Avian influenza virus (AIV) AGID

Bluetongue virus (BTV) AGID

Bovine viral diarrhoea virus (BVDV) AGID

Epizootic haemorrhagic disease (EHD) AGID

Equine infectious anaemia (EIA) AGID

Johne's disease - ovine (JD) AGID

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| Report Date | 13/04/2022 |
|---------------------|--------------|
| Report Status | Final Report |
| Test Name | AIV AGID |
| Test Number (Code) | 21/29 |
| Test Month and Year | October 2021 |

| Laboratory Number | Sample 1 | Sample 2 | Sample 3 | Sample 4 | Sample 5 | Sample 6 | Classification |
|----------------------------------|----------------------|----------|----------|-----------------------|-----------------------|-----------------------|---|
| | Pos 1+ | Neg | Neg | Pos >3+ | Pos >3+ | Pos >3+ | ✓ |
| | Pos 1+ | Neg | Neg | Pos 3+ | Pos 2+ | Pos 3+ | ✓ |
| | Pos | Neg | Neg | Pos | Pos | Pos | ✓ - Lab classified on interpretation only |
| Consensus Interpretation | Positive 1+ | Negative | Negative | Positive 3+ to >3+ | Positive 3+ | Positive 3+ to >3+ | |
| Acceptable Variation Range | Positive 1+ to 2+ | N/A | N/A | Positive 2+ to >3+ | Positive 2+ to >3+ | Positive 2+ to >3+ | |

Note: One laboratory was classified on interpretation only.

All other laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

| Report Date | 28/01/2022 | | | | |
|---------------------|---------------------|--|--|--|--|
| Report Status | Final Retest Report | | | | |
| Test Name | BTV AGID | | | | |
| Test Number (Code) | 21/11 | | | | |
| Test Month and Year | July 2021 | | | | |

| Laboratory Number | Sample 1 | Sample 2 | Sample 3 | Sample 4 | Sample 5 | Sample 6 | Classification |
|----------------------------------|----------------------|----------------------|----------|----------|----------------------|----------------------|---|
| | Pos 3+ | Pos 3+ | Neg | Neg | Pos 1+ | Pos 1+ | ✓ |
| | Pos 1+ | Pos 2+ | Neg | Neg | Pos 1+ | Pos 1+ | ✓ |
| | Pos 3+ | Pos 2+ | Neg | Pos 1+ | Neg | Pos 1+ | Samples 4 & 5 - R Samples 1, 2, 3 & 6 - ✓ |
| | Pos | Pos | Pos | Pos | Neg | Pos | Samples 3, 4 & 5 - R Samples 1, 2 & 6 - ✓ Lab classified on interpretation only. |
| | Pos 3+ | Pos 3+ | Neg | Neg | Pos 2+ | Pos 2+ | ✓ |
| | Pos 2+ | Pos 2+ | Neg | Neg | Pos 1+ | Pos 2+ | ✓ |
| | Pos 2+ | Pos 2+ | Neg | Neg | Pos 2+ | Pos 2+ | ✓ |
| | Pos 2+ | Pos 2+ | Neg | Neg | Pos 1+ | Pos 1+ | ✓ |
| | Pos 2+ | Pos 3+ | Neg | Neg | Pos 1+ | Pos 1+ | ✓ |
| Consensus Interpretation | Positive 2+ | Positive 2+ | Negative | Negative | Positive 1+ | Positive 1+ | |
| Acceptable Variation Range | Positive 1+ to 3+ | Positive 1+ to 3+ | N/A | N/A | Positive 1+ to 2+ | Positive 1+ to 2+ | |
| Laboratory Number | | | Retest | Results | Classification | | |
| | - | - | - | Neg | Neg | - | Sample 4 - R |
| | - | - | Neg | Neg | Pos | - | Samples 3, 4 & 5 - R ✓ Lab classified on interpretation only. |

Note: One laboratory was classified on interpretation only.

One laboratory was classified as Retest Result Satisfactory (R \checkmark) for Sample 4 and Retest Result Unacceptable (RU) for Sample 5. One laboratory was classified as Retest Result Satisfactory (R \checkmark) for Samples 3, 4 & 5.

All other laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

| Report Date | 29/11/2021 |
|---------------------|--------------|
| Report Status | Final Report |
| Test Name | BVDV AGID |
| Test Number (Code) | 21/22 |
| Test Month and Year | August 2021 |

| Laboratory Number | Sample 1 | Sample 2 | Sample 3 | Sample 4 | Sample 5 | Sample 6 | Classification |
|----------------------------------|----------|----------------------|----------------------|----------------------|----------|----------------------|----------------|
| | Neg | Pos 1+ | Pos 3+ | Pos 3+ | Neg | Pos 2+ | ✓ |
| | Neg | Pos 1+ | Pos 2+ | Pos 1+ | Neg | Pos 1+ | ✓ |
| | Neg | Pos 1+ | Pos 2+ | Pos 2+ | Neg | Pos 2+ | ✓ |
| | Neg | Pos 1+ | Pos 3+ | Pos 2+ | Neg | Pos 3+ | ✓ |
| | Neg | Pos 1+ | Pos 2+ | Pos 2+ | Neg | Pos 2+ | ✓ |
| | Neg | Pos 1+ | Pos 2+ | Pos 2+ | Neg | Pos 2+ | ✓ |
| Consensus Interpretation | Negative | Positive 1+ | Positive 2+ | Positive 2+ | Negative | Positive 2+ | |
| Acceptable Variation Range | N/A | Positive 1+ to 2+ | Positive 1+ to 3+ | Positive 1+ to 3+ | N/A | Positive 1+ to 3+ | |

All laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

| Report Date | 27/08/2021 |
|---------------------|--------------|
| Report Status | Final Report |
| Test Name | EHD AGID |
| Test Number (Code) | 21/06 |
| Test Month and Year | June 2021 |

| Laboratory Number | Sample 1 | Sample 2 | Sample 3 | Sample 4 | Sample 5 | Sample 6 | Classification |
|----------------------------------|----------------------|----------------------|----------------------|----------------------|----------|----------|---|
| | Pos 3+ | Pos 2+ | Pos 3+ | Pos 2+ | Neg | Neg | ✓ |
| | Pos 2+ | Pos 2+ | Pos 2+ | Pos 2+ | Neg | Neg | ✓ |
| | Pos | Pos | Pos | Pos | Neg | Neg | ✓ - Lab classified on interpretation only |
| | Pos 3+ | Pos 3+ | Pos 3+ | Pos 3+ | Neg | Neg | ✓ |
| | Pos | Pos | Pos | Pos | Neg | Neg | ✓ - Lab classified on interpretation only |
| | Pos 2+ | Pos 2+ | Pos 2+ | Pos 2+ | Neg | Neg | ✓ |
| | Pos 2+ | Pos 2+ | Pos 2+ | Pos 2+ | Neg | Neg | ✓ |
| | | | | | | | See comment |
| Consensus Interpretation | Positive 2+ | Positive 2+ | Positive 2+ | Positive 2+ | Negative | Negative | |
| Acceptable Variation Range | Positive 1+ to 3+ | Positive 1+ to 3+ | Positive 1+ to 3+ | Positive 1+ to 3+ | N/A | N/A | |

Comment: One laboratory did not report any results by due date.

Note: Two laboratories were classified on interpretation only.

All other laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

| Report Date | 26/05/2022 | | | |
|---------------------|---------------|--|--|--|
| Report Status | Final Report | | | |
| Test Name | EIA AGID | | | |
| Test Number (Code) | 21/38 | | | |
| Test Month and Year | November 2021 | | | |

| Laboratory Number | Sample 1 | Sample 2 | Sample 3 | Sample 4 | Sample 5 | Sample 6 | Classification |
|----------------------------------|----------------------|----------------------|----------|----------------------|----------------------|----------|--|
| | Pos 3+ | Pos 2+ | Neg | Pos 2+ | Pos 2+ | Neg | √ |
| | Pos 1+ | Pos 1+ | Neg | Pos 1+ | Pos 1+ | Neg | √ |
| | Pos 3+ | Pos 2+ | Neg | Pos 2+ | Pos 1+ | Neg | √ |
| | Pos 3+ | Pos 2+ | Neg | Pos 2+ | Pos 1+ | Neg | √ |
| | Pos 3+ | Pos 1+ | Neg | Pos 2+ | Pos 1+ | Neg | ✓ |
| | Pos 2+ | Pos 1+ | Neg | Pos 1+ | Pos 1+ | Neg | √ |
| | Pos 2+ | Pos 2+ | Neg | Pos 2+ | Pos 1+ | Neg | ✓ |
| | Pos 2+ | Weak Pos | Neg | Weak Pos | Weak Pos | Neg | Samples 1, 3 and 6 - ✓ Samples 2, 4 and 5 - MV See comment below |
| | Pos 2+ | Pos 1+ | Neg | Pos 1+ | Pos 2+ | Neg | ✓ |
| Consensus Interpretation | Positive 2+ | Positive 1+ | Negative | Positive 2+ | Positive 1+ | Negative | |
| Acceptable Variation Range | Positive 1+ to 3+ | Positive 1+ to 2+ | N/A | Positive 1+ to 3+ | Positive 1+ to 2+ | N/A | |

Comment: One laboratory classified on interpretation only. One laboratory was classified as Result Demonstrating Minor Variation (MV) for Samples 2, 4 & 5. All other laboratories and results were classified as Result Satisfactory () for this test.

| Report Date | 23/07/2021 |
|---------------------|---------------|
| Report Status | Final Report |
| Test Name | JD Ovine AGID |
| Test Number (Code) | 21/02 |
| Test Month and Year | May 2021 |

| Laboratory Number | Sample 1 | Sample 2 | Sample 3 | Sample 4 | Sample 5 | Sample 6 | Classification |
|----------------------------------|----------------------|----------|----------------------|----------------------|----------|----------------------|--|
| | Neg | Neg | Pos | Pos | Pos | Pos | Samples 1 & 5 - U Samples 2, 3, 4 & 6 - ✓ Laboratory classified on interpretation only |
| | Pos 2+ | Neg | Pos 1+ | Pos 1+ | Neg | Pos 2+ | ✓ |
| | Pos | Neg | Neg | Pos | Neg | Pos | Sample 3 - U Samples 1, 2, 4, 5 & 6 - ✓ Laboratory classified on interpretation only |
| | Pos 2+ | Neg | Pos 1+ | Pos 2+ | Neg | Pos 2+ | 1 |
| | Pos | Neg | Pos | Pos | Neg | Pos | ✓ - Laboratory classified on interpretation only |
| | Pos | Neg | Pos | Pos | Neg | Pos | ✓ - Laboratory classified on interpretation only |
| | Neg | Neg | Pos 1+ | Pos 2+ | Pos 1+ | Pos 2+ | Samples 1 & 5 - U Samples 2, 3, 4 & 6 - ✓ |
| Consensus Interpretation | Positive 2+ | Negative | Positive 1+ | Positive 2+ | Negative | Positive 2+ | |
| Acceptable Variation Range | Positive 1+ to 3+ | N/A | Positive 1+ to 2+ | Positive 1+ to 3+ | N/A | Positive 1+ to 3+ | |

Note: Four laboratories were classified on interpretation only.

Two laboratories were classified as Result Unacceptable (U) for Samples 1 & 5.

One laboratory was classified as Result Unacceptable (U) for Sample 3. All other laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

SECTION 3: Complement Fixation Test

Brucella abortus (BB) CFT

Brucella ovis (OB) CFT

Johne's disease (JD) CFT

Q Fever (QF) CFT

| | | 08/06/2022 | | e | Report Date | | | | | |
|--|-------------------------|-----------------|---------------------------|-------------------------|----------------------|--------------------------|----------------------------------|--|--|--|
| | | I Retest Report | Fina | us | Report State | | | | | |
| | | abortus CFT | B. | • | Test Name | | | | | |
| | | 21/25 | | Code) | Test Number (C | | | | | |
| | | ptember 2021 | Se | Year | Test Month and | | | | | |
| Classification | Sample 6 | Sample 5 | Sample 4 | Sample 3 | Sample 2 | Sample 1 | Laboratory Number | | | |
| √ | 2/16 | Neg <4 | 3/128 | 3/16 | Neg <4 | 2/32 | | | | |
| * | 3/8 | Neg <4 | 4/64 | 2/8 | Neg <4 | 2/16 | | | | |
| * | 4/8 | Neg <1/4 | 4/128 | 4/8 | Neg <1/4 | 4/16 | | | | |
| * | 1/16 | Neg 0/2 | 2/64 | 1/16 | Neg 0/2 | 1/32 | | | | |
| Samples 1 & 4 - R Samples 2, 3, 5 & 6 - ✔ | 2/8 | Neg @ 1/4 | 1/32 | 1/16 | Neg @ 1/4 | 1/8 | | | | |
| Samples 1, 2, 3 & 5 - ✓ Samples 4 & 6 - R | 1/40 | Neg 0 @ 1/10 | 4/160 | 4/20 | Neg 0 @ 1/10 | 4/40 | | | | |
| Samples 1, 3 & 6 - R Samples 2, 4 & 5 - ✓ | 2/4 | Neg @ 1/4 | 4/32 | 3/4 | Neg @ 1/4 | 4/8 | | | | |
| ✓ | 2/16 | Neg 0/4 | 3/128 | 3/16 | Neg 0/4 | 2/32 | | | | |
| ✓ | 2/16 | Neg | 1/64 | 1/16 | Neg | 2/32 | | | | |
| Sample 1 - R Samples 2, 3, 4, 5 & 6 - ✔ | 3/8 | Neg @ 1/4 | 3/64 | 4/8 | Neg @ 1/4 | 1/16 | | | | |
| ✓ | 4/16 | Neg | 4/64 | 4/16 | Neg | 2/32 | | | | |
| * | 4/16 | Neg <4 | 1/128 | 4/16 | Neg <4 | 2/32 | | | | |
| | Positive 2/16 | Negative | Positive 4/64 | Positive 1/16 | Negative | Positive 2/32 | Median | | | |
| | Positive 2/8 to 2/32 | N/A | Positive 4/32 to 4/128 | Positive 1/8 to 1/32 | N/A | Positive 2/16 to 2/64 | Acceptable Variation Range | | | |
| Classification | | | Results | | Laboratory Number | | | | | |
| Sample 1 - RU Sample 4 - R✔ | - | - | 4/32 | - | - | 1/256 | | | | |
| Sample 4 & 6 - RU | 1/80 | - | 4/320 | - | - | - | | | | |
| Samples 1, 3 & 6 - R√ | 3/8 | - | - | 3/8 | - | 3/16 | | | | |
| See comment | - | - | - | - | - | | | | | |

Comment: One laboratory did not report retest result by due date.

One laboratory was classified as Retest Result Unacceptable (RU) for Sample 1.

One laboratory was classified as Retest Result Unacceptable (RU) for Samples 4 & 6.

All other laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

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| Report Date | 11/03/2022 |
|---------------------|----------------|
| Report Status | Final Report |
| Test Name | B. ovis CFT |
| Test Number (Code) | 21/27 |
| Test Month and Year | September 2021 |

| Laboratory Number | Sample 1 | Sample 2 | Sample 3 | Sample 4 | Sample 5 | Sample 6 | Classification |
|----------------------------------|--------------------------|---------------------------|-------------|--------------|-------------|---------------------------|--|
| | 2/32 | 2/64 | Neg <8 | Neg <8 | Neg <8 | 3/64 | ✓ |
| | 2/32 | 4/128 | Neg | Neg | Neg | 2/64 | Samples 1, 3, 4, 5 & 6 - |
| | 2/32 | 2/64 | Neg <8 | Neg <8 | Neg <8 | 3/64 | ✓ |
| | 1/16 | 1/64 | Neg 0/4 | Neg 0/4 | Neg 0/4 | 1/64 | Sample 1 - MV Samples 2, 3, 4, 5 & 6 - ✔ |
| | | | | | | | See comment |
| | Neg 0 @ 1/10 | 4/50 | 4/50 | Neg 0 @ 1/10 | 4/20 | 4/50 | Samples 1, 3 & 5 - U Samples 2, 4 & 6 - ✓ |
| | 3/32 | 3/64 | Neg @ 1/8 | Neg @ 1/8 | Neg @ 1/8 | 3/64 | ✓ |
| | 3/32 | 4/64 | Neg 0/8 | Neg 0/8 | Neg 0/8 | 3/64 | ✓ |
| | 2/32 | 2/64 | Neg | Neg | Neg | 2/64 | ✓ |
| | 2/32 | 1/128 | Neg | Neg | Neg | 2/128 | ✓ |
| | 1/32 | 2/64 | Neg @ 1/8 | Neg @ 1/8 | Neg @ 1/8 | 3/64 | ✓ |
| | 4/32 | 4/64 | Neg | Neg | Neg | 4/64 | ✓ |
| | | | | | | | See comment |
| | 2/64 | 2/64 | Neg <8 | Neg <8 | Neg <8 | 1/128 | √ |
| Median | Positive 2/32 | Positive 2/64 | Negative | Negative | Negative | Positive 3/64 | |
| Acceptable Variation Range | Positive 2/16 to 2/64 | Positive 2/32 to 2/128 | N/A | N/A | N/A | Positive 3/32 to 3/128 | |

Comment: Two laboratories did not report results by due date.

One laboratory was classified as Result Demonstrating Minor Variation (MV) for Sample 2. One laboratory was classified as Result Demonstrating Minor Variation (MV) for Sample 1. One laboratory was classified as Retest Result Unacceptable (RU) for Samples 1, 3 & 5.

All other laboratories and results were classified as Result Satisfactory () for this test.

| Report Date | 28/01/2022 |
|---------------------|---------------------|
| Report Status | Final Retest Report |
| Test Name | JD Bovine CFT |
| Test Number (Code) | 21/14 |
| Test Month and Year | July 2021 |

| Laboratory Number | Sample 1 | Sample 2 | Sample 3 | Sample 4 | Sample 5 | Sample 6 | Classification | | | | |
|----------------------------------|--------------------------|--------------------------|-------------|--------------------------|-------------|--------------------------|--|--|--|--|--|
| | 2/16 | 1/16 | Neg | 3/8 | Neg | 2/8 | Samples 2, 4 & 6 - R Samples 1, 3 & 5 - ✓ | | | | |
| | 4/32 | 4/32 | Neg <8 | 4/32 | Neg <8 | 3/32 | ✓ | | | | |
| | 1/128 | 2/128 | Neg 0@1:8 | 2/128 | Neg 0@1:8 | 2/128 | Samples 1, 2, 4 & 6 - R Samples 3 & 5 - ✓ | | | | |
| | 3/16 | 3/16 | Neg @ 1:8 | 2/32 | Neg @ 1:8 | 2/32 | ✓ | | | | |
| Median | Positive 2/32 | Positive 2/32 | Negative | Positive 3/32 | Negative | Positive 3/32 | | | | | |
| Acceptable Variation Range | Positive 2/16 to 2/64 | Positive 2/16 to 2/64 | N/A | Positive 3/16 to 3/64 | N/A | Positive 3/16 to 3/64 | | | | | |
| Laboratory Number | | Retest Results | | | | | | | | | |
| | - | | - | | - | | See comment | | | | |
| | 2/64 | 1/64 | - | 1/64 | - | 4/32 | Samples 1, 2, 4 & 6 - R ✓ | | | | |

Comment: One laboratory did not report retest results by due date. One laboratory was classified as Retest Result Satisfactory ($R\checkmark$) for Samples 1, 2, 4 & 6. All other laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

| Report Date | 08/06/2022 |
|---------------------|---------------------|
| Report Status | Final Retest Report |
| Test Name | QF CFT |
| Test Number (Code) | 21/23 |
| Test Month and Year | September 2021 |

| Laboratory Number | Sample 1 | Sample 2 | Sample 3 | Sample 4 | Sample 5 | Sample 6 | Classification |
|----------------------------------|--------------------------|-------------|-------------|--------------------------|-------------|--------------------------|--|
| | 2/32 | Neg <8 | Neg <8 | 2/16 | Neg <8 | 2/32 | Samples 1, 2, 3, 5 & 6 - |
| | 1/80 | Neg @ 1/10 | Neg @ 1/10 | 1/40 | Neg @ 1/10 | 1/80 | Samples 1 & 6 - R Samples 2, 3, 4 & 5 - ✓ |
| | 3/16 | Neg @ 1/8 | Neg @ 1/8 | 3/32 | Neg @ 1/8 | 2/32 | Sample 1 - R Samples 2, 3, 4, 5 & 6 - ✓ |
| | 4/32 | Neg @ 1/8 | Neg @ 1/8 | 3/32 | Neg @ 1/8 | 4/32 | ✓ |
| | 4/32 | Neg | Neg | 2/64 | Neg | 4/32 | ✓ |
| | 1/128 | Neg <4 | Neg <4 | 1/128 | Neg <4 | 4/64 | Samples 1 & 4 - R Samples 2, 3, 5 & 6 - ✓ |
| Median | Positive 4/32 | Negative | Negative | Positive 3/32 | Negative | Positive 4/32 | |
| Acceptable Variation Range | Positive 4/16 to 4/64 | N/A | N/A | Positive 3/16 to 3/64 | N/A | Positive 4/16 to 4/64 | |
| Laboratory Number | | | Retest | Results | | | Classification |
| | - | - | - | 2/32 | - | - | Sample 4 - R✓ |
| | 1/80 | - | - | - | - | 1/80 | Samples 1 & 6 - Rm |
| | 3/32 | - | - | - | - | - | Sample 1 - R√ |
| | | - | - | | - | - | See comment |

Comment: One laboratory did not report retest results by due date. One laboratory was classified as Retest Result Demonstrating Minor Variation (Rm) for Samples 1 & 6.

All other laboratories results were classified as Result Satisfactory (\checkmark) for this test.

SECTION 4: Enzyme Linked Immunosorbent Assay (ELISA)

Akabane ELISA

Bluetongue virus (BTV) ELISA

Bovine viral diarrhoea virus (BVDV) Antibody ELISA

Bovine viral diarrhoea virus (BVDV) Antigen ELISA - clot

Bovine viral diarrhoea virus (BVDV) Antigen ELISA - ear notch

Bovine viral diarrhoea virus (BVDV) Antigen ELISA - serum

Brucella abortus (BB) ELISA

Brucella ovis (OB) ELISA

Caprine arthritis/encephalitis virus (CAEV) ELISA

Enzootic bovine leucosis (EBL) ELISA - milk

Infectious bovine rhinotracheitis (IBR) ELISA

Johne's disease (JD) – bovine ELISA

| Report Date | 28/01/2022 |
|---------------------|---------------------|
| Report Status | Final Retest Report |
| Test Name | Akabane ELISA |
| Test Number (Code) | 21/15 |
| Test Month and Year | July 2021 |

| Laboratory Number | Sample 1 | Int. | Sample 2 | Int. | Sample 3 | Int. | Sample 4 | Int. | Sample 5 | Int. | Sample 6 | Int. | Classification |
|-----------------------------|-------------------|----------------|----------|------|-------------------|------|----------|------|-------------------|------|----------------|------|--|
| | 1.35 | Neg | 0.10 | Pos | 1.27 | Neg | 0.21 | Pos | 0.24 | Pos | 0.26 | Pos | √ |
| | 1.02 | Neg | 0.12 | Pos | 1.04 | Neg | 0.11 | Pos | 0.32 | Pos | 0.34 | Pos | √ |
| | 1.46 | Neg | 0.07 | Pos | 1.45 | Neg | 0.07 | Pos | 0.14 | Pos | 0.13 | Pos | √ |
| | 1.54 | Neg | 0.05 | Pos | 0.81 | Neg | 0.05 | Pos | 0.06 | Pos | 0.05 | Pos | √ |
| | 0.95 | Neg | 0.06 | Pos | 0.91 | Neg | 0.07 | Pos | 0.08 | Pos | 0.08 | Pos | √ |
| | 0.97 | Neg | 0.15 | Pos | 1.01 | Neg | 0.30 | Pos | 0.37 | Pos | 0.41 | Pos | √ |
| | 0.97 | Neg | 0.06 | Pos | 0.88 | Neg | 0.06 | Pos | 0.06 | Pos | 0.06 | Pos | ✓ |
| | 0.74 | Neg | 0.05 | Pos | 0.80 | Neg | 0.55 | Neg | 0.64 | Neg | 1.47 | Neg | Samples 1, 2 & 3 - ✓ Samples 4, 5 & 6 - R |
| | 0.79 | Neg | 0.08 | Pos | 0.72 | Neg | 0.07 | Pos | 0.09 | Pos | 0.10 | Pos | √ |
| Consensus Interpretation | Negative Positive | | | | Negative Positive | | | /e | Positive Positive | | | /e | |
| Laboratory Number | | Retest Results | | | | | | | | | Classification | | |
| | | - | | - | | - | | | | | | | See comment |

Comment: One laboratory did not report retest results by due date. All other laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

| Report Date | 19/11/2021 |
|---------------------|---------------------|
| Report Status | Final Retest Report |
| Test Name | BTV ELISA |
| Test Number (Code) | 21/10 |
| Test Month and Year | June 2021 |

| Laboratory Number | Sample 1 | Int. | Sample 2 | Int. | Sample 3 | Int. | Sample 4 | Int. | Sample 5 | Int. | Sample 6 | Int. | Classification |
|-----------------------------|-------------|-------|-------------|-------|-------------|--------|-------------|-------|-------------|-------|-------------|-------|--|
| | 0.10 | Pos | 1.82 | Neg | 0.14 | Pos | 0.10 | Pos | 1.66 | Neg | 0.13 | Pos | 1 |
| | 0.13 | Pos | 1.22 | Neg | 0.25 | Pos | 0.14 | Pos | 1.19 | Neg | 0.28 | Pos | ✓ |
| | | | | | | | | | | | | | See comment |
| | 0.08 | Pos | 1.43 | Neg | 0.11 | Pos | 0.08 | Pos | 1.41 | Neg | 0.11 | Pos | ✓ |
| | 0.12 | Pos | 0.88 | Neg | 0.20 | Pos | 0.12 | Pos | 0.84 | Neg | 0.30 | Pos | ✓ |
| | 0.03 | Pos | 1.53 | Neg | 0.05 | Pos | 0.03 | Pos | 1.49 | Neg | 0.25 | Pos | 1 |
| | 0.09 | Pos | 1.42 | Neg | 0.12 | Pos | 0.08 | Pos | 1.43 | Neg | 0.14 | Pos | √ |
| | 0.03 | Pos | 1.43 | Neg | 0.06 | Pos | 0.02 | Pos | 1.20 | Neg | 0.21 | Pos | 1 |
| | 0.11 | Pos | 0.44 | Neg | 0.17 | Pos | 0.12 | Pos | 0.51 | Neg | 0.35 | Pos | √ |
| | 0.08 | Pos | 1.31 | Neg | 0.08 | Pos | 0.08 | Pos | 1.32 | Neg | 0.08 | Pos | 1 |
| | 0.11 | Pos | 1.18 | Neg | 0.23 | Pos | 0.12 | Pos | 1.23 | Neg | 0.29 | Pos | √ |
| | 0.16 | Pos | 1.31 | Neg | 0.28 | Pos | 0.12 | Pos | 1.30 | Neg | 0.37 | Pos | 4 |
| | 0.07 | Pos | 1.44 | Neg | 0.11 | Pos | 0.07 | Pos | 1.47 | Neg | 0.12 | Pos | ✓ |
| | | | | | | | | | | | | | See comment |
| | 0.23 | Pos | 0.39 | Pos | 0.20 | Pos | 0.20 | Pos | 1.63 | Neg | 1.53 | Neg | Samples 2 & 6 - R Samples 1, 3, 4 & 5 - ✔ |
| Consensus Interpretation | Posi | itive | Nega | ative | Pos | itive | Pos | itive | Nega | ative | Pos | itive | |
| Laboratory Number | | | | | | Retest | Results | | | | | | Classification |
| | - | | 0.93 | Neg | - | | - | | - | | 0.34 | Pos | Samples 2 & 6 - R ✓ |

Comment: Two laboratories did not report results by due date. All other laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

| Report Date | 27/08/2021 |
|---------------------|---------------------|
| Report Status | Final Report |
| Test Name | BVDV Antibody ELISA |
| Test Number (Code) | 21/07 |
| Test Month and Year | June 2021 |

| Laboratory Number | Sample 1 | Int. | Sample 2 | Int. | Sample 3 | Int. | Sample 4 | Int. | Sample 5 | Int. | Sample 6 | Int. | Classification |
|-----------------------------|-------------|------|-------------|------|-------------|------|-------------|------|-------------|------|-------------|------|----------------|
| | 1.35 | Pos | 1.14 | Pos | 0.10 | Neg | 1.90 | Pos | 0.08 | Neg | 1.43 | Pos | ✓ |
| | 0.08 | Pos | 0.17 | Pos | 0.76 | Neg | 0.09 | Pos | 0.81 | Neg | 0.44 | Pos | ✓ |
| | 1.24 | Pos | 1.14 | Pos | 0.06 | Neg | 1.70 | Pos | 0.06 | Neg | 1.49 | Pos | ✓ |
| | 0.15 | Pos | 0.24 | Pos | 1.24 | Neg | 0.12 | Pos | 1.21 | Neg | 0.16 | Pos | ✓ |
| | 1.08 | Pos | 0.76 | Pos | 0.10 | Neg | 1.03 | Pos | 0.06 | Neg | 1.10 | Pos | ✓ |
| | 0.07 | Pos | 0.07 | Pos | 0.86 | Neg | 0.05 | Pos | 0.76 | Neg | 0.05 | Pos | ✓ |
| | 1.23 | Pos | 1.17 | Pos | 0.08 | Neg | 1.35 | Pos | 0.08 | Neg | 1.20 | Pos | ✓ |
| | 0.07 | Pos | 0.08 | Pos | 1.02 | Neg | 0.06 | Pos | 1.07 | Neg | 0.06 | Pos | ✓ |
| | 0.16 | Pos | 0.16 | Pos | 1.41 | Neg | 0.11 | Pos | 1.38 | Neg | 0.15 | Pos | ✓ |
| | 1.24 | Pos | 1.07 | Pos | 0.06 | Neg | 1.51 | Pos | 0.06 | Neg | 1.81 | Pos | ✓ |
| | 1.08 | Pos | 1.03 | Pos | 0.05 | Neg | 1.59 | Pos | 0.06 | Neg | 1.28 | Pos | ✓ |
| Consensus Interpretation | Positi | ve | Positi | ve | Negati | ve | Positi | ve | Negat | ive | Positi | ve | |

All laboratories and results were classified as Result Satisfactory (\checkmark) for this test

| Report Date | 26/11/2021 |
|---------------------|---------------------------|
| Report Status | Final Report |
| Test Name | BVDV Antigen ELISA - clot |
| Test Number (Code) | 21/18 |
| Test Month and Year | August 2021 |

| Laboratory Number | Sample 1 | Int. | Sample 2 | Int. | Sample 3 | Int. | Sample 4 | Int. | Sample 5 | Int. | Sample 6 | Int. | Classification |
|-----------------------------|----------|-------|----------|------|----------|-------|----------|-------|----------|------|----------|------|----------------|
| | 3.53 | Pos | 3.30 | Pos | 0.17 | Neg | 0.40 | Neg | 3.65 | Pos | 3.72 | Pos | ✓ |
| | 3.39 | Pos | 3.41 | Pos | 0.02 | Neg | 0.03 | Neg | 3.47 | Pos | 3.49 | Pos | ✓ |
| | 2.52 | Pos | 2.87 | Pos | 0.12 | Neg | 0.13 | Neg | 3.20 | Pos | 2.68 | Pos | ✓ |
| | 0.99 | Pos | 0.99 | Pos | 0.25 | Neg | 0.24 | Neg | 1.08 | Pos | 1.12 | Pos | ✓ |
| | 1.42 | Pos | 1.17 | Pos | 0.25 | Neg | 0.29 | Neg | 1.40 | Pos | 1.16 | Pos | ✓ |
| | | | | | | | | | | | | | See comment |
| | 2.80 | Pos | 2.99 | Pos | 0.11 | Neg | 0.09 | Neg | 2.86 | Pos | 2.80 | Pos | ✓ |
| | 1.27 | Pos | 1.27 | Pos | 0.39 | Neg | 0.39 | Neg | 1.38 | Pos | 1.38 | Pos | ✓ |
| | 3.04 | Pos | 3.24 | Pos | 0.07 | Neg | 0.07 | Neg | 3.02 | Pos | 3.15 | Pos | ✓ |
| Consensus Interpretation | Posi | itive | Posi | tive | Nega | ative | Nega | itive | Posi | tive | Positive | | |

Comment: One laboratory did not report results by due date. All other laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

| Report Date | 26/11/2021 |
|---------------------|--------------------------------|
| Report Status | Final Report |
| Test Name | BVDV Antigen ELISA – ear notch |
| Test Number (Code) | 21/19 |
| Test Month and Year | August 2021 |

| Laboratory Number | Sample 1 | Int. | Sample 2 | Int. | Sample 3 | Int. | Sample 4 | Int. | Sample 5 | Int. | Sample 6 | Int. | Classification |
|-----------------------------|----------|-------|----------|----------|----------|----------|----------|------|----------|-------|----------|------|----------------|
| | 2.60 | Pos | 3.37 | Pos | 2.79 | Pos | 3.28 | Pos | 0.15 | Neg | 0.15 | Neg | 4 |
| | 1.73 | Pos | 2.66 | Pos | 2.72 | Pos | 2.28 | Pos | 0.01 | Neg | 0.03 | Neg | 4 |
| | 1.74 | Pos | 2.35 | High Pos | 2.31 | High Pos | 1.92 | Pos | 0.13 | Neg | 0.31 | Neg | ✓ |
| | 1.97 | Pos | 3.01 | Pos | 2.54 | Pos | 2.24 | Pos | 0.09 | Neg | 0.11 | Neg | ✓ |
| | 2.57 | Pos | 2.57 | Pos | 3.47 | Pos | 3.27 | Pos | 0.14 | Neg | 0.21 | Neg | 4 |
| | 3.50 | Pos | 4.15 | Pos | 4.23 | Pos | 3.94 | Pos | 0.11 | Neg | 0.15 | Neg | ✓ |
| | 2.67 | Pos | 2.83 | Pos | 2.74 | Pos | 2.63 | Pos | 0.23 | Neg | 0.23 | Neg | 4 |
| | 1.45 | Pos | 2.03 | Pos | 2.06 | Pos | 1.87 | Pos | 0.04 | Neg | 0.06 | Neg | 4 |
| | 2.33 | Pos | 2.92 | Pos | 2.75 | Pos | 2.67 | Pos | 0.10 | Neg | 0.11 | Neg | 4 |
| | 1.66 | Pos | 2.69 | Pos | 2.57 | Pos | 2.12 | Pos | 0.07 | Neg | 0.08 | Neg | ✓ |
| | 1.63 | Pos | 2.53 | Pos | 2.54 | Pos | 2.43 | Pos | 0.07 | Neg | 0.07 | Neg | 4 |
| | 2.22 | Pos | 2.90 | Pos | 2.90 | Pos | 2.77 | Pos | 0.09 | Neg | 0.13 | Neg | ✓ |
| | | | | | | | | | | | | | See comment |
| Consensus Interpretation | Pos | itive | Pos | itive | Pos | itive | Posi | tive | Nega | ative | Negative | | |

Comment: One laboratory did not report results by due date. All other laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

| Report Date | 26/11/2021 |
|---------------------|----------------------------|
| Report Status | Final Report |
| Test Name | BVDV Antigen ELISA - serum |
| Test Number (Code) | 21/17 |
| Test Month and Year | August 2021 |

| Laboratory Number | Sample 1 | Int. | Sample 2 | Int. | Sample 3 | Int. | Sample 4 | Int. | Sample 5 | Int. | Sample 6 | Int. | Classification |
|-----------------------------|-------------|------------------|-------------|-------------|-------------|----------|-------------|----------|-------------|----------|-------------|------|----------------|
| | 0.44 | Pos | 0.32 | Pos | 0.17 | Neg | 0.95 | Pos | 0.14 | Neg | 0.98 | Pos | ✓ |
| | 2.67 | Pos | 2.66 | Pos | 0.15 | Neg | 2.63 | Pos | 0.21 | Neg | 2.65 | Pos | ✓ |
| | 3.84 | Pos | 3.77 | Pos | 0.11 | Neg | 2.96 | Pos | 0.11 | Neg | 2.85 | Pos | ✓ |
| | 3.75 | Pos | 3.66 | Pos | 0.01 | Neg | 3.23 | Pos | 0.00 | Neg | 3.22 | Pos | ✓ |
| | 3.42 | High Pos | 2.81 | High Pos | 0.21 | Neg | 2.11 | Pos | 0.13 | Neg | 1.81 | Pos | ✓ |
| | 3.30 | Pos | 3.19 | Pos | 0.05 | Neg | 2.06 | Pos | 0.06 | Neg | 2.10 | Pos | ✓ |
| | 0.68 | Pos | 0.80 | Pos | 0.13 | Neg | 1.36 | Pos | 0.17 | Neg | 1.42 | Pos | ✓ |
| | 0.36 | Pos | 0.37 | Pos | 0.08 | Neg | 0.81 | Pos | 0.07 | Neg | 0.81 | Pos | ✓ |
| | 4.07 | Pos | 3.83 | Pos | 0.06 | Neg | 2.88 | Pos | 0.08 | Neg | 3.08 | Pos | ✓ |
| | 4.27 | Pos | 4.12 | Pos | 0.10 | Neg | 3.39 | Pos | 0.10 | Neg | 3.14 | Pos | ✓ |
| | 4.49 | Pos | 4.16 | Pos | 0.08 | Neg | 3.31 | Pos | 0.09 | Neg | 3.22 | Pos | ✓ |
| | 4.96 | Pos | 4.61 | Pos | 0.09 | Neg | 3.86 | Pos | 0.10 | Neg | 3.86 | Pos | ✓ |
| | 2.81 | Pos | 2.44 | Pos | 0.10 | Neg | 2.55 | Pos | 0.11 | Neg | 2.52 | Pos | ✓ |
| | 3.06 | Pos | 2.97 | Pos | 0.03 | Neg | 2.52 | Pos | 0.02 | Neg | 2.29 | Pos | ✓ |
| | 3.11 | Pos | 3.02 | Pos | 0.08 | Neg | 2.43 | Pos | 0.09 | Neg | 2.39 | Pos | ✓ |
| | 3.50 | Pos | 3.50 | Pos | 0.05 | Neg | 3.32 | Pos | 0.04 | Neg | 3.24 | Pos | ✓ |
| | 3.50 | Pos | 2.61 | Pos | 0.05 | Neg | 1.45 | Pos | 0.06 | Neg | 1.36 | Pos | ✓ |
| | 1.27 | Pos | 1.35 | Pos | 0.06 | Neg | 1.34 | Pos | 0.06 | Neg | 1.33 | Pos | ✓ |
| | 3.22 | Pos | 3.01 | Pos | 0.06 | Neg | 2.82 | Pos | 0.06 | Neg | 2.90 | Pos | ✓ |
| | 3.59 | Pos | 3.36 | Pos | 0.07 | Neg | 2.72 | Pos | 0.15 | Neg | 2.87 | Pos | ✓ |
| Consensus Interpretation | Positi | ositive Positive | | Negative | | Positive | | Negative | | Positive | | | |

All laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

| Report Date | 15/06/2022 |
|---------------------|---------------------|
| Report Status | Final Retest Report |
| Test Name | B. abortus ELISA |
| Test Number (Code) | 21/30 |
| Test Month and Year | October 2021 |

| Laboratory Number | Sample 1 | Int. | Sample 2 | Int. | Sample 3 | Int. | Sample 4 | Int. | Sample 5 | Int. | Sample 6 | Int. | Classification |
|-----------------------------|-------------|----------------|-------------|------|-------------|------|-------------|------|-------------|------|-------------|------|---------------------------------|
| | 0.07 | Neg | 1.05 | Pos | 1.00 | Pos | 0.98 | Pos | 1.03 | Pos | 0.08 | Neg | ✓ |
| | 1.17 | Neg | 0.05 | Pos | 0.36 | Pos | 0.38 | Pos | 0.06 | Pos | 1.33 | Neg | ✓ |
| | -0.00 | Neg | 3.24 | Pos | 2.68 | Pos | 2.72 | Pos | 3.67 | Pos | 0.00 | Neg | ✓ |
| | 0.08 | Neg | 2.33 | Pos | 2.22 | Pos | 2.14 | Pos | 2.20 | Pos | 1.44 | Pos | Samples 1-5 - ✔ Sample 6 - R |
| | 0.04 | Neg | 2.42 | Pos | 2.45 | Pos | 2.46 | Pos | 2.31 | Pos | 0.07 | Neg | ✓ |
| | 0.04 | Neg | 1.16 | Pos | 1.28 | Pos | 1.30 | Pos | 1.22 | Pos | 0.05 | Neg | ✓ |
| | 0.05 | Neg | 0.82 | Pos | 0.98 | Pos | 0.95 | Pos | 0.75 | Pos | 0.05 | Neg | ✓ |
| | 0.04 | Neg | 2.46 | Pos | 2.39 | Pos | 2.43 | Pos | 2.40 | Pos | 0.25 | Neg | ✓ |
| Consensus Interpretation | Nega | tive | Positiv | /e | Positiv | /e | Positiv | ve | Positiv | /e | Negati | ive | |
| Laboratory Number | | Retest Results | | | | | | | | | | | Classification |
| | - | | - | | - | | - | | - | | 0.06 | Neg | Sample 6 - R√ |

All laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

| Report Date | 27/08/2021 | | | | | |
|---------------------|---------------|--|--|--|--|--|
| Report Status | Final Report | | | | | |
| Test Name | B. ovis ELISA | | | | | |
| Test Number (Code) | 21/08 | | | | | |
| Test Month and Year | June 2021 | | | | | |

| Laboratory Number | Sample 1 | Int. | Sample 2 | Int. | Sample 3 | Int. | Sample 4 | Int. | Sample 5 | Int. | Sample 6 | Int. | Classification |
|-----------------------------|----------|------|----------|------|----------|------|----------|------|----------|------------|----------|------------|--|
| | 4.00 | Pos | 0.20 | Neg | 4.00 | Pos | 0.27 | Neg | 0.95 | Suspicious | 0.92 | Suspicious | Samples 1, 2, 3 & 4 - ✓ Samples 5 & 6 - U |
| | 3.09 | Pos | 0.11 | Neg | 3.16 | Pos | 0.10 | Neg | 0.63 | Pos | 0.57 | Pos | ✓ |
| | | | | | | | | | | | | | See comment |
| | 1.32 | Pos | 0.07 | Neg | 1.28 | Pos | 0.08 | Neg | 0.90 | Pos | 0.83 | Pos | ✓ |
| | 4.56 | Pos | 0.20 | Neg | 4.65 | Pos | 0.21 | Neg | 0.95 | Pos | 1.04 | Pos | ✓ |
| | 4.16 | Pos | 0.08 | Neg | 4.21 | Pos | 0.18 | Neg | 0.82 | Pos | 0.88 | Pos | ✓ |
| | 3.40 | Pos | 0.05 | Neg | 3.35 | Pos | 0.04 | Neg | 0.51 | Pos | 0.47 | Pos | ✓ |
| | Overflow | Pos | 0.48 | Neg | Overflow | Pos | 0.50 | Neg | 1.67 | Pos | 1.55 | Pos | ✓ |
| | 3.21 | Pos | 0.05 | Neg | 3.06 | Pos | 0.05 | Neg | 0.46 | Pos | 0.42 | Pos | ✓ |
| Consensus Interpretation | Positive | | Negativ | /e | Positiv | /e | Negati | ve | Po | sitive | Po | sitive | |

Comment: One laboratory did not report results by due date. One laboratory was classified as Result Unacceptable (U) for Samples 5 & 6. All other laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

| Report Date | 29/10/2021 | | | | | |
|---------------------|--------------|--|--|--|--|--|
| Report Status | Final Report | | | | | |
| Test Name | CAEV ELISA | | | | | |
| Test Number (Code) | 21/16 | | | | | |
| Test Month and Year | July 2021 | | | | | |

| Laboratory Number | Sample 1 | Int. | Sample 2 | Int. | Sample 3 | Int. | Sample 4 | Int. | Sample 5 | Int. | Sample 6 | Int. | Classification |
|-----------------------------|----------|------|----------|------|----------|------|----------|------|----------|------|----------|------|----------------|
| | 0.93 | Pos | 0.48 | Pos | 0.09 | Neg | 0.85 | Pos | 0.09 | Neg | 0.83 | Pos | ✓ |
| | 3.08 | Pos | 1.47 | Pos | 0.13 | Neg | 2.88 | Pos | 0.13 | Neg | 3.16 | Pos | 4 |
| | 3.71 | Pos | 1.80 | Pos | 0.35 | Neg | 4.06 | Pos | 0.36 | Neg | 3.80 | Pos | ✓ |
| | 2.70 | Pos | 1.34 | Pos | 0.11 | Neg | 2.37 | Pos | 0.14 | Neg | 2.43 | Pos | 4 |
| | 2.57 | Pos | 0.37 | Pos | 0.01 | Neg | 3.17 | Pos | 0.00 | Neg | 3.13 | Pos | ✓ |
| | 3.72 | Pos | 2.10 | Pos | 0.35 | Neg | 3.82 | Pos | 0.43 | Neg | 3.69 | Pos | 4 |
| | 0.07 | Pos | 0.08 | Pos | 0.65 | Neg | 0.22 | Pos | 0.68 | Neg | 0.25 | Pos | ✓ |
| | 4.44 | Pos | 1.56 | Pos | 0.22 | Neg | 4.59 | Pos | 0.26 | Neg | 4.58 | Pos | 4 |
| | 3.56 | Pos | 1.78 | Pos | 0.08 | Neg | 3.03 | Pos | 0.08 | Neg | 2.95 | Pos | ✓ |
| | 2.20 | Pos | 1.01 | Pos | 0.08 | Neg | 1.98 | Pos | 0.08 | Neg | 2.02 | Pos | 4 |
| | 3.35 | Pos | 1.85 | Pos | 0.07 | Neg | 3.13 | Pos | 0.06 | Neg | 3.15 | Pos | ✓ |
| | 3.72 | Pos | 2.24 | Pos | 0.09 | Neg | 3.66 | Pos | 0.09 | Neg | 3.45 | Pos | ✓ |
| | 2.97 | Pos | 2.03 | Pos | 0.27 | Neg | 2.81 | Pos | 0.26 | Neg | 2.99 | Pos | ✓ |
| | 0.08 | Pos | 0.08 | Pos | 0.86 | Neg | 0.26 | Pos | 0.85 | Neg | 0.27 | Pos | ✓ |
| | 3.61 | Pos | 1.94 | Pos | 0.11 | Neg | 3.43 | Pos | 0.12 | Neg | 3.45 | Pos | ✓ |
| | 0.10 | Pos | 0.11 | Pos | 1.18 | Neg | 0.46 | Pos | 1.17 | Neg | 0.49 | Pos | ✓ |
| Consensus Interpretation | Positiv | 9 | Positiv | 9 | Negativ | e | Positiv | e | Negativ | e | Positiv | 9 | |

All laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

| Report Date | 23/07/2021 | | | | | |
|---------------------|------------------|--|--|--|--|--|
| Report Status | Final Report | | | | | |
| Test Name | EBL ELISA - Milk | | | | | |
| Test Number (Code) | 21/04 | | | | | |
| Test Month and Year | May 2021 | | | | | |

| Laboratory Number | Sample 1 | Int. | Sample 2 | Int. | Sample 3 | Int. | Sample 4 | Int. | Sample 5 | Int. | Sample 6 | Int. | Classification |
|-----------------------------|-------------|------|-------------|------|-------------|------|-------------|------|-------------|------|-------------|------|----------------|
| | | | | | | | | | | | | | See comment |
| | 1.49 | Pos | 2.08 | Pos | 0.01 | Neg | 0.01 | Neg | 1.55 | Pos | 1.57 | Pos | ✓ |
| | 1.39 | Pos | 1.90 | Pos | 0.03 | Neg | -0.03 | Neg | 1.52 | Pos | 1.31 | Pos | ✓ |
| Consensus Interpretation | Positi | ve | Positi | ve | Negat | ive | Negat | ive | Positi | ve | Positi | ve | |

Comment: One laboratory did not report results by due date. All other laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

| Report Date | 11/03/2022 | | | | | |
|---------------------|----------------|--|--|--|--|--|
| • | | | | | | |
| Report Status | Final Report | | | | | |
| Test Name | IBR ELISA | | | | | |
| Test Number (Code) | 21/24 | | | | | |
| Test Month and Year | September 2021 | | | | | |

| Laboratory Number | Sample 1 | Int. | Sample 2 | Int. | Sample 3 | Int. | Sample 4 | Int. | Sample 5 | Int. | Sample 6 | Int. | Classification |
|-----------------------------|-------------|------|-------------|------|-------------|------|-------------|------|-------------|------|-------------|------|----------------|
| | 0.72 | Neg | 0.05 | Pos | 0.76 | Neg | 0.06 | Pos | 0.09 | Pos | 0.05 | Pos | 1 |
| | 0.15 | Neg | 2.69 | Pos | 0.15 | Neg | 2.61 | Pos | 2.61 | Pos | 2.62 | Pos | 1 |
| | 1.16 | Neg | 0.18 | Pos | 1.24 | Neg | 0.14 | Pos | 0.11 | Pos | 0.08 | Pos | 1 |
| | 0.10 | Neg | 3.50 | Pos | 0.10 | Neg | 3.44 | Pos | 2.95 | Pos | 3.34 | Pos | 1 |
| | 1.26 | Neg | 0.13 | Pos | 1.39 | Neg | 0.14 | Pos | 0.18 | Pos | 0.12 | Pos | 1 |
| | 0.99 | Neg | 0.10 | Pos | 1.00 | Neg | 0.12 | Pos | 0.15 | Pos | 0.10 | Pos | 1 |
| | 0.21 | Neg | 4.81 | Pos | 0.13 | Neg | 4.48 | Pos | 4.43 | Pos | 4.80 | Pos | 1 |
| | 0.78 | Neg | 0.06 | Pos | 0.82 | Neg | 0.06 | Pos | 0.06 | Pos | 0.08 | Pos | 1 |
| | 1.09 | Neg | 0.05 | Pos | 1.10 | Neg | 0.05 | Pos | 0.06 | Pos | 0.05 | Pos | ✓ |
| | 1.48 | Neg | 0.09 | Pos | 1.48 | Neg | 0.08 | Pos | 0.13 | Pos | 0.09 | Pos | ✓ |
| | 1.10 | Neg | 0.10 | Pos | 1.10 | Neg | 0.12 | Pos | 0.19 | Pos | 0.13 | Pos | ✓ |
| | 0.73 | Neg | 0.11 | Pos | 0.78 | Neg | 0.12 | Pos | 0.09 | Pos | 0.11 | Pos | ✓ |
| | 0.74 | Neg | 0.04 | Pos | 0.73 | Neg | 0.03 | Pos | 0.05 | Pos | 0.03 | Pos | ✓ |
| | 1.27 | Neg | 0.06 | Pos | 1.29 | Neg | 0.05 | Pos | 0.07 | Pos | 0.05 | Pos | ✓ |
| | | | | | | | | | | | | | See comment |
| | | | | | | | | | | | | | See comment |
| | 0.06 | Neg | 2.54 | Pos | 0.06 | Neg | 2.56 | Pos | 2.41 | Pos | 2.68 | Pos | ✓ |
| Consensus Interpretation | Negati | ve | Positiv | /e | Negati | ive | Positi | ve | Positi | ve | Positi | ive | |

Comment: Two laboratories did not report results by due date. All other laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

| Report Date | 27/08/2021 | | | | | | |
|---------------------|-----------------|--|--|--|--|--|--|
| Report Status | Final Report | | | | | | |
| Test Name | JD Bovine ELISA | | | | | | |
| Test Number (Code) | 21/05 | | | | | | |
| Test Month and Year | June 2021 | | | | | | |

| Laboratory Number | Sample 1 | Int. | Sample 2 | Int. | Sample 3 | Int. | Sample 4 | Int. | Sample 5 | Int. | Sample 6 | Int. | Classification |
|-----------------------------|-------------|------|-------------|------|-------------|------|-------------|------|-------------|------|-------------|------|----------------|
| | 1.37 | Pos | 2.61 | Pos | 0.15 | Neg | 0.14 | Neg | 2.51 | Pos | 2.50 | Pos | 1 |
| | 0.61 | Pos | 2.34 | Pos | 0.00 | Neg | -0.00 | Neg | 2.12 | Pos | 1.99 | Pos | ✓ |
| | 1.42 | Pos | 3.96 | Pos | 0.21 | Neg | 0.21 | Neg | 2.88 | Pos | 2.73 | Pos | 1 |
| | 1.80 | Pos | 4.00 | Pos | 0.26 | Neg | 0.21 | Neg | 3.41 | Pos | 3.52 | Pos | ✓ |
| | 1.06 | Pos | 4.30 | Pos | 0.12 | Neg | 0.13 | Neg | 1.92 | Pos | 2.41 | Pos | 1 |
| | 0.82 | Pos | 3.93 | Pos | 0.19 | Neg | 0.16 | Neg | 2.65 | Pos | 2.48 | Pos | 1 |
| | 1.09 | Pos | 4.22 | Pos | 0.12 | Neg | 0.09 | Neg | 2.90 | Pos | 2.93 | Pos | 1 |
| | 1.40 | Pos | 4.43 | Pos | 0.16 | Neg | 0.17 | Neg | 2.90 | Pos | 3.01 | Pos | ✓ |
| | 0.88 | Pos | 2.77 | Pos | 0.08 | Neg | 0.08 | Neg | 2.37 | Pos | 2.31 | Pos | ~ |
| | 1.06 | Pos | 2.89 | Pos | 0.11 | Neg | 0.14 | Neg | 1.71 | Pos | 1.53 | Pos | ✓ |
| | 1.40 | Pos | 2.90 | Pos | 0.04 | Neg | 0.03 | Neg | 2.34 | Pos | 2.37 | Pos | ~ |
| | 0.75 | Pos | 2.87 | Pos | 0.09 | Neg | 0.08 | Neg | 2.17 | Pos | 2.38 | Pos | ✓ |
| | 1.61 | Pos | 3.42 | Pos | 0.15 | Neg | 0.10 | Neg | 2.88 | Pos | 2.98 | Pos | √ |
| | 1.31 | Pos | 2.81 | Pos | 0.07 | Neg | 0.07 | Neg | 2.23 | Pos | 2.01 | Pos | ✓ |
| | | | | | | | | | | | | | See comment |
| | 1.43 | Pos | 2.91 | Pos | 0.10 | Neg | 0.10 | Neg | 2.69 | Pos | 2.98 | Pos | ✓ |
| Consensus Interpretation | Positi | ve | Positi | ve | Negat | ive | Negati | ive | Positi | ve | Positi | ve | |

Comment: One laboratory did not report results by due date. All other laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

SECTION 5: Haemagglutination Inhibition Test (HIT)

Newcastle Disease virus (NDV) HIT



| Report Date | 13/04/2022 | | | | | |
|---------------------|--------------|--|--|--|--|--|
| Report Status | Final Report | | | | | |
| Test Name | NDV HIT | | | | | |
| Test Number (Code) | 21/28 | | | | | |
| Test Month and Year | October 2021 | | | | | |

| Laboratory Number | Sample 1 | Sample 2 | Sample 3 | Sample 4 | Sample 5 | Sample 6 | Classification |
|----------------------------------|-----------|-----------|---------------------------------|-----------|---------------------------------|---------------------------------|--|
| | Neg | Neg | 128 | Neg | 128 | 128 | ✓ |
| | Neg <4 | Neg <4 | 32 | Neg <4 | 32 | 64 | Samples 1, 2 & 4 - ✓ Samples 3 & 5 - U Sample 6 - MV |
| | Neg <1/4 | Neg <1/4 | 128 | Neg <1/4 | 128 | 128 | ✓ |
| | Neg <2 | Neg <2 | 256 | Neg <2 | 256 | 256 | ✓ |
| | Neg @ 1/8 | Neg @ 1/8 | 128 | Neg @ 1/8 | 128 | 256 | ✓ |
| | Neg | Neg | 256 | Neg | 256 | 512 | Samples 1, 2, 3, 4 & 5 - ✓ Sample 6 - MV |
| | Neg <2 | Neg <2 | 256 | Neg <2 | 256 | 128 | ✓ |
| | Neg | Neg | 256 | Neg | 256 | 256 | ✓ |
| Median | Negative | Negative | Positive 1/181.02 | Negative | Positive 1/181.02 | Positive 1/181.02 | |
| Acceptable Variation Range | N/A | N/A | Positive 1/90.51 to 1/362.04 | N/A | Positive 1/90.51 to 1/362.04 | Positive 1/90.51 to 1/362.04 | |

One laboratory was classified as Result Unacceptable (U) for Samples 3 & 5 and Result Demonstrating Minor Variation (MV) for Sample 6. One laboratory was classified as Result Demonstrating Minor Variation (MV) for Sample 6. All other laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

SECTION 6: Polymerase Chain Reaction (PCR)

Bovine viral diarrhoea virus (BVDV) PCR

| Report Date | 29/11/2021 | | | | | |
|---------------------|--------------|--|--|--|--|--|
| Report Status | Final Report | | | | | |
| Test Name | BVDV PCR | | | | | |
| Test Number (Code) | 21/21 | | | | | |
| Test Month and Year | August 2021 | | | | | |

| Laboratory Number | Sample 1 | Int. | Sample 2 | Int. | Sample 3 | Int. | Sample 4 | Int. | Sample 5 | Int. | Sample 6 | Int. | Classification |
|-----------------------------|-------------|----------|---------------------|-----------------|-------------|----------|---------------------|-----------------|-------------|----------|-------------|----------|----------------|
| | 28.50 | Pos | Not detected | Neg | 22.19 | Pos | Not detected | Neg | 28.46 | Pos | 21.92 | Pos | ✓ |
| | 28.14 | Pos | 0.00 | Neg | 22.98 | Pos | 0.00 | Neg | 28.18 | Pos | 23.76 | Pos | ✓ |
| | 25.63 | Detected | - | Not Detected | 19.32 | Detected | - | Not Detected | 25.76 | Detected | 19.66 | Detected | ✓ |
| | 27.56 | Pos | >50 | Neg | 19.83 | Pos | >50 | Neg | 27.51 | Pos | 20.51 | Pos | ✓ |
| | 32.65 | Pos | N/A | Neg | 27.78 | Pos | N/A | Neg | 32.32 | Pos | 27.36 | Pos | ✓ |
| | 28.43 | Pos | Undetermined | Neg | 22.35 | Pos | Undetermined | Neg | 28.39 | Pos | 22.63 | Pos | ✓ |
| | 29.35 | Pos | 45.00 | Neg | 25.95 | Pos | 45.00 | Neg | 29.89 | Pos | 26.36 | Pos | ✓ |
| | 30.95 | Pos | No amplification | Neg | 23.82 | Pos | No amplification | Neg | 30.38 | Pos | 24.00 | Pos | ✓ |
| | 28.60 | Pos | >45 | Neg | 23.71 | Pos | >45 | Neg | 28.63 | Pos | 23.62 | Pos | ✓ |
| | 29.12 | Pos | N/A | Neg | 23.90 | Pos | N/A | Neg | 29.40 | Pos | 23.77 | Pos | ✓ |
| | 32.00 | Pos | | Neg | 26.40 | Pos | | Neg | 32.20 | Pos | 26.10 | Pos | ✓ |
| | 27.69 | Pos | N/A | Neg | 22.21 | Pos | N/A | Neg | 27.53 | Pos | 22.03 | Pos | ✓ |
| | 25.39 | Pos | - | Neg | 20.01 | Pos | - | Neg | 25.17 | Pos | 19.90 | Pos | ~ |
| | 28.33 | Pos | >45 | Neg | 20.77 | Pos | >45 | Neg | 28.62 | Pos | 20.86 | Pos | ✓ |
| | 32.08 | Pos | >50 | Neg | 23.88 | Pos | >50 | Neg | 31.36 | Pos | 23.89 | Pos | ✓ |
| | 26.17 | Pos | Not detected | Neg | 19.82 | Pos | Not detected | Neg | 26.31 | Pos | 19.64 | Pos | ✓ |
| Consensus Interpretation | Positive | | Negativ | /e | Positive | | Negative | | Positive | | Positive | | |

All laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

SECTION 7: Rose Bengal Plate Test (RBPT)

Brucella abortus (BB) RBPT

| Report Date | 26/05/2022 | | | |
|---------------------|-----------------|--|--|--|
| Report Status | Final Report | | | |
| Test Name | B. abortus RBPT | | | |
| Test Number (Code) | 21/36 | | | |
| Test Month and Year | November 2021 | | | |

| Laboratory Number | Sample 1 | Sample 2 | Sample 3 | Sample 4 | Sample 5 | Sample 6 | Classification |
|----------------------------------|-----------------------|----------------------|-----------------------|----------|----------|----------------------|----------------|
| | Pos 3+ | Pos 2+ | Pos 3+ | Neg | Neg | Pos 2+ | ✓ |
| | Pos 3+ | Pos 2+ | Pos 3+ | Neg | Neg | Pos 2+ | ✓ |
| | Pos 3+ | Pos 2+ | Pos 3+ | Neg | Neg | Pos 2+ | ✓ |
| | Pos 4+ | Pos 1+ | Pos 3+ | Neg | Neg | Pos 1+ | ✓ |
| | Pos 3+ | Pos 1+ | Pos 3+ | Neg | Neg | Pos 1+ | ✓ |
| | Pos 2+ | Pos 1+ | Pos 3+ | Neg | Neg | Pos 2+ | ✓ |
| Consensus Interpretation | Positive 3+ | Positive 1+ to 2+ | Positive 3+ | Negative | Negative | Positive 2+ | |
| Acceptable Variation Range | Positive 2+ to >3+ | Positive 1+ to 3+ | Positive 2+ to >3+ | N/A | N/A | Positive 1+ to 3+ | |

SECTION 8: Serum Agglutination Test (SAT)

Brucella abortus (BB) SAT

| Report Date | 15/06/2022 | | | |
|---------------------|---------------------|--|--|--|
| Report Status | Final Retest Report | | | |
| Test Name | B. abortus SAT | | | |
| Test Number (Code) | 21/31 | | | |
| Test Month and Year | October 2021 | | | |

| Laboratory Number | Sample 1 | Sample 2 | Sample 3 | Sample 4 | Sample 5 | Sample 6 | Classification |
|----------------------------------|--|----------------|--|--|--------------|--------------------------------------|--|
| | 1072.00 | Neg <17 | 1280.00 | 1280.00 | Neg <17 | 93.00 | ✓ |
| | 438.00 | Neg < 12 IU | 875.00 | 875.00 | Neg <12 IU | 54.00 | ✓ |
| | 414.00 | Neg 11 IU/mL | 985.00 | 828.00 | Neg 11 IU/mL | 52.00 | ✓ |
| | 1280.00 | Neg | 1072.00 | 1280.00 | Neg | 134.00 | Samples 1 & 6 - R Samples 2, 3, 4 & 5 - ✔ |
| | 560.00 | Neg | 640.00 | 640.00 | Neg | 30.00 | ✓ |
| | | | | | | | See comment |
| Median | Positive 560.00 IU/mL | Negative | Positive 985.00 IU/mL | Positive 875.00 IU/mL | Negative | Positive 54.00 IU/mL | |
| Acceptable Variation Range | Positive 280.00 to 1120.00 IU/mL | N/A | Positive 492.50 to 1970.00 IU/mL | Positive 437.50 to 1750.00 IU/mL | N/A | Positive 27.00 to 108.00 IU/mL | |
| Laboratory Number | | Classification | | | | | |
| | 640.00 | - | - | - | - | 160.00 | Sample 1 - R√ Sample 6 - Rm |

Comment: One laboratory did not report results by due date.

One laboratory was classified as Retest Result Demonstrating Minor Variation (Rm) for Sample 6.

SECTION 9: Virus Isolation (VI)

Bovine viral diarrhoea virus (BVDV) Isolation

| Report Date | 29/11/2021 | | | |
|---------------------|----------------|--|--|--|
| Report Status | Final Report | | | |
| Test Name | BVDV Isolation | | | |
| Test Number (Code) | 21/20 | | | |
| Test Month and Year | August 2021 | | | |

| Laboratory Number | Sample 1 | Sample 2 | Sample 3 | Sample 4 | Sample 5 | Sample 6 | Classification |
|-----------------------------|----------|----------|----------|----------|----------|----------|----------------|
| | Pos | Neg | Pos | Pos | Pos | Neg | ✓ |
| | Pos | Neg | Pos | Pos | Pos | Neg | ✓ |
| | Pos | Neg | Pos | Pos | Pos | Neg | ✓ |
| | Pos | Neg | Pos | Pos | Pos | Neg | ✓ |
| | Pos | Neg | Pos | Pos | Pos | Neg | ✓ |
| | | | | | | | See comment |
| | Pos | Neg | Pos | Pos | Pos | Neg | ✓ |
| Consensus Interpretation | Positive | Negative | Positive | Positive | Positive | Negative | |

Comment: One laboratory did not report results by due date.

SECTION 10: Virus Neutralisation Test (VNT)

Aino VNT

Akabane VNT

Bluetongue virus serotype 1 (BTV-1) VNT

Bovine ephemeral fever (BEF) VNT

Bovine viral diarrhoea virus (BVDV) VNT

Equine viral arteritis (EVA) VNT

Infectious bovine rhinotracheitis (IBR) VNT

| Report Date | 07/09/2021 | | | |
|---------------------|---------------------|--|--|--|
| Report Status | Final Retest Report | | | |
| Test Name | Aino VNT | | | |
| Test Number (Code) | 21/01 | | | |
| Test Month and Year | May 2021 | | | |

| Laboratory Number | Sample 1 | Sample 2 | Sample 3 | Sample 4 | Sample 5 | Sample 6 | Classification |
|----------------------------------|------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|------------|--|
| | Neg | 40.00 | 20.00 | 40.00 | 40.00 | Neg | ✓ |
| | Neg <4 | 16.00 | 32.00 | 32.00 | 32.00 | Neg <4 | Sample 2 - R Samples 1, 3, 4, 5 & 6 - ✔ |
| | Neg <2 | 29.00 | 36.00 | 36.00 | 29.00 | Neg <2 | ✓ |
| | | | | | | | See comment |
| | Neg @ 1:10 | 80.00 | 80.00 | 40.00 | 160.00 | Neg @ 1:10 | Samples 2, 3 & 5 - R Samples 1, 4 & 6 - ✔ |
| Median | Negative | Positive 1/34.06 | Positive 1/33.94 | Positive 1/37.95 | Positive 1/35.78 | Negative | |
| Acceptable Variation Range | N/A | Positive 1/17.03 - 1/68.12 | Positive 1/16.97 - 1/67.88 | Positive 1/18.98 - 1/75.90 | Positive 1/17.89 - 1/71.56 | N/A | |
| Laboratory Number | | Classification | | | | | |
| | - | 96.00 | - | - | - | - | Sample 2 - Rm |
| | - | 40.00 | 40.00 | - | 40.00 | - | Samples 2, 3 & 5 - R ✓ |

Comment: One laboratory did not report results by due date. One laboratory was classified as Retest Result Demonstrating Minor Variation (Rm) for Sample 2.

| Report Date | 28/01/2022 | | | |
|---------------------|---------------------|--|--|--|
| Report Status | Final Retest Report | | | |
| Test Name | Akabane VNT | | | |
| Test Number (Code) | 21/13 | | | |
| Test Month and Year | July 2021 | | | |

| Laboratory Number | Sample 1 | Sample 2 | Sample 3 | Sample 4 | Sample 5 | Sample 6 | Classification |
|----------------------------------|-----------|---------------------------------|--------------------------------|---------------------------------|--------------------------------|-----------|---|
| | Neg | 16.00 | 16.00 | 8.00 | 8.00 | Neg | Samples 2, 3, 4 & 5 - R Samples 1 & 6 - ✓ |
| | Neg <4 | 64.00 | 16.00 | 64.00 | 32.00 | Neg <4 | Sample 3 - R Samples 1, 2, 4, 5 & 6 - ✓ |
| | Neg <2 | 11.00 | 6.00 | 11.00 | 23.00 | Neg <2 | Samples 2, 3, 4 & 5 - R Samples 1 & 6 - ✓ |
| | Neg <4 | 96.00 | 80.00 | 72.00 | 96.00 | Neg <4 | Sample 3 - R Samples 1, 2, 4, 5 & 6 - ✓ |
| | Neg @ 1:4 | 150.00 | 90.00 | 89.00 | 75.00 | Neg @ 1:4 | Sample 3 - R Samples 1, 2, 4, 5 & 6 - ✓ |
| | Neg @ 1:4 | 128.00 | 128.00 | 256.00 | 256.00 | Neg @ 1:4 | Samples 3, 4 & 5 - R Samples 1, 2 & 6 - ✓ |
| Median | Negative | Positive 1/78.38 | Positive 1/35.78 | Positive 1/67.88 | Positive 1/48.99 | Negative | |
| Acceptable Variation Range | N/A | Positive 1/39.19 to 1/156.77 | Positive 1/17.89 to 1/71.55 | Positive 1/33.94 to 1/135.76 | Positive 1/24.49 to 1/97.98 | N/A | |
| Laboratory Number | | | Retest I | Results | | | Classification |
| | - | 64.00 | 64.00 | 16.00 | 16.00 | - | Samples 2 & 3 - R ✔ Sample 4 - RU Sample 5 - Rm |
| | - | - | 8.00 | - | - | - | Sample 3 - RU |
| | - | 72.00 | 144.00 | 91.00 | 144.00 | - | Samples 2 & 4 - R ✓ Sample 3 - RU Sample 5 - Rm |
| | - | - | 64.00 | - | - | - | Sample 3 - R ✓ |
| | - | - | 45.00 | - | - | - | Sample 3 - R ✓ |
| | - | - | | | | - | See comment |

Comment: One laboratory did not report retest results by due date.

One laboratory was classified as Retest Result Unacceptable (RU) for Sample 4 and Retest Result Demonstrating Minor Variation (Rm) for Sample 5. One laboratory was classified as Retest Result Unacceptable (RU) for Sample 3.

One laboratory was classified as Retest Result Unacceptable (RU) for Sample 3 and Retest Result Demonstrating Minor Variation (Rm) for Sample 5. All other laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

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| Report Date | 07/09/2021 | | | |
|---------------------|---------------------|--|--|--|
| Report Status | Final Retest Report | | | |
| Test Name | BTV-1 VNT | | | |
| Test Number (Code) | 21/03 | | | |
| Test Month and Year | May 2021 | | | |

| Laboratory Number | Sample 1 | Sample 2 | Sample 3 | Sample 4 | Sample 5 | Sample 6 | Classification |
|----------------------------------|--------------------------------|----------------|----------|--------------------------------|-------------------------------|--------------------------------|--|
| | | | | | | | See comment |
| | 40.00 | Neg <10 | Neg <10 | 40.00 | 20.00 | 40.00 | ✓ |
| | 64.00 | Neg <4 | Neg <4 | 64.00 | 36.00 | 64.00 | ✓ |
| | 640.00 | Neg | Neg | 160.00 | 320.00 | 160.00 | Samples 1, 4, 5 & 6 - R Samples 2 & 3 - ✓ |
| Median | Positive 1/64.00 | Negative | Negative | Positive 1/64.00 | Positive 1/36.00 | Positive 1/64.00 | |
| Acceptable Variation Range | Positive 1/32.00 - 1/128.00 | N/A | N/A | Positive 1/32.00 - 1/128.00 | Positive 1/18.00 - 1/72.00 | Positive 1/32.00 - 1/128.00 | |
| Laboratory Number | | Classification | | | | | |
| | 80.00 | - | - | 40.00 | 80.00 | 40.00 | Samples 1, 4 & 6 - R ✓ Sample 5 - Rm |

Comment: One laboratory did not report results by due date.

One laboratory was classified as Retest Result Demonstrating Minor Variation (Rm) for Sample 5. All other laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

| Report Date | 28/01/2022 | | | |
|---------------------|---------------------|--|--|--|
| Report Status | Final Retest Report | | | |
| Test Name | BEF VNT | | | |
| Test Number (Code) | 21/12 | | | |
| Test Month and Year | July 2021 | | | |

| Laboratory Number | Sample 1 | Sample 2 | Sample 3 | Sample 4 | Sample 5 | Sample 6 | Classification |
|----------------------------------|--------------------------------|---------------------------------|---------------------------------|-----------|-----------|--------------------------------|--|
| | 20.00 | 160.00 | 40.00 | Neg | Neg | 20.00 | ✓ |
| | 32.00 | 64.00 | 128.00 | Neg <4 | Neg <4 | 32.00 | ✓ |
| | 23.00 | 91.00 | 91.00 | Neg <2 | Neg <2 | 23.00 | ✓ |
| | 32.00 | 192.00 | 64.00 | Neg <4 | Neg <4 | 64.00 | Sample 6 - R Samples 1, 2, 3, 4 & 5 - ✔ |
| | 22.00 | 32.00 | 26.00 | Neg @ 1:4 | Neg @ 1:4 | 18.00 | Samples 2 & 3 - R Samples 1, 4, 5 & 6 - ✓ |
| | 32.00 | 256.00 | 256.00 | 128.00 | Neg @ 1:4 | Neg @ 1:4 | Samples 2, 3, 4 & 6 - R Samples 1 & 5 - ✓ |
| Median | Positive 1/27.13 | Positive 1/120.66 | Positive 1/76.32 | Negative | Negative | Positive 1/23.00 | |
| Acceptable Variation Range | Positive 1/13.57 to 1/54.26 | Positive 1/60.33 to 1/241.32 | Positive 1/38.16 to 1/152.64 | N/A | N/A | Positive 1/11.50 to 1/46.00 | |
| Laboratory Number | | Classification | | | | | |
| | - | - | - | - | - | 40.00 | Sample 6 - R ✓ |
| | - | 128.00 | 71.00 | - | - | - | Samples 2 & 3 - R ✓ |
| | - | | | | - | | See comment |

Comment: One laboratory did not report retest results by due date. All other laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

| Report Date | 08/06/2022 | | | |
|---------------------|---------------------|--|--|--|
| Report Status | Final Retest Report | | | |
| Test Name | BVDV VNT | | | |
| Test Number (Code) | 21/26 | | | |
| Test Month and Year | September 2021 | | | |

| Laboratory Number | Sample 1 | Sample 2 | Sample 3 | Sample 4 | Sample 5 | Sample 6 | Classification |
|----------------------------------|-----------------------------------|------------------------------------|-------------|-------------|-----------------------------------|---------------------------------|--|
| | 256.00 | 1024.00 | Neg | Neg | 1024.00 | 64.00 | Samples 1 & 2 - R Samples 3, 4, 5 & 6 - ✔ |
| | 1024.00 | 1024.00 | Neg <4 | Neg <4 | 1024.00 | 128.00 | Samples 1, 3, 4, 5 & 6 - |
| | 256.00 | 4096.00 | Neg <1/2 | Neg <1/2 | 4096.00 | 64.00 | Samples 1 & 5 - R Samples 2, 3, 4 & 6 - ✓ |
| | 512.00 | 4096.00 | Neg <4 | Neg <4 | 5793.00 | 256.00 | Samples 1, 2, 3 & 4 - ✓ Samples 5 & 6 - R |
| | 1448.00 | 4096.00 | Neg @ 1/4 | Neg @ 1/4 | 3444.00 | 106.00 | ✓ |
| | 2048.00 | Neg 1/4 | 2048.00 | Neg 1/4 | 256.00 | 256.00 | Samples 1, 2, 3, 5 & 6 - R Sample 4 - |
| Median | Positive 1/724.08 | Positive 1/4096.00 | Negative | Negative | Positive 1/1877.94 | Positive 1/116.48 | |
| Acceptable Variation Range | Positive 1/362.04 to 1/1448.15 | Positive 1/2048.00 to 1/8192.00 | N/A | N/A | Positive 1/938.97 to 1/3755.88 | Positive 1/58.24 to 1/232.96 | |
| Laboratory Number | | | Retest | Results | | | Classification |
| | 512.00 | 4096.00 | - | - | - | - | Samples 1 & 2 - R√ |
| | - | 1024.00 | - | - | - | - | Sample 2 - Rm |
| | 384.00 | - | - | - | 2048.00 | - | Samples 1 & 5 - R√ |
| | - | - | - | - | 2896.00 | 64.00 | Samples 5 & 6 - R√ |
| | | | | | | | See comment |

Comment: One laboratory did not report retest results by due date.

One laboratory was classified as Retest Result Demonstrating Minor Variation (Rm) for Sample 2.

| Report Date | 26/05/2022 | | | |
|---------------------|---------------|--|--|--|
| Report Status | Final Report | | | |
| Test Name | EVA VNT | | | |
| Test Number (Code) | 21/37 | | | |
| Test Month and Year | November 2021 | | | |

| Laboratory Number | Sample 1 | Sample 2 | Sample 3 | Sample 4 | Sample 5 | Sample 6 | Classification |
|----------------------------------|-------------|---------------------------------|---------------------------------|-------------|---------------------------------|----------------------------------|--|
| | Neg | 64.00 | 256.00 | Neg | 512.00 | 512.00 | Samples 1, 2, 4 & 6 - ✓ Samples 3 & 5 - MV |
| | Neg <1/2 | 256.00 | 192.00 | Neg <1/2 | 384.00 | 384.00 | Samples 1, 3, 4 & 6 - ✓ Samples 2 & 5 - MV |
| | Neg <2 | 114.00 | 72.00 | Neg <2 | 144.00 | 287.00 | ✓ |
| | Neg @ 1/4 | 32.00 | 128.00 | Neg @ 1/4 | 64.00 | 64.00 | Samples 1, 3 & 4 - ✓ Samples 2 & 5 - MV Sample 6 - U |
| | Neg @ 1/4 | 106.00 | 125.00 | Neg @ 1/4 | 181.00 | 301.00 | ✓ |
| | Neg @ 1/4 | 16.00 | 8.00 | Neg @ 1/4 | 64.00 | 128.00 | Samples 1 & 4 - ✓ Samples 2 & 3 - U Samples 5 & 6 - MV |
| Median | Negative | Positive 1/82.37 | Positive 1/126.49 | Negative | Positive 1/161.44 | Positive 1/293.92 | |
| Acceptable Variation Range | N/A | Positive 1/41.18 to 1/164.73 | Positive 1/63.25 to 1/252.98 | N/A | Positive 1/80.72 to 1/322.89 | Positive 1/146.96 to 1/587.83 | |

One laboratory was classified as Result Demonstrating Minor Variation (MV) for Samples 3 & 5.

One laboratory was classified as Result Demonstrating Minor Variation (MV) for Samples 2 & 5.

One laboratory was classified as Result Demonstrating Minor Variation (MV) for Samples 2 & 5 and Result Unacceptable (U) for Sample 6. One laboratory was classified as Result Unacceptable (U) for Samples 2 & 3 and Result Demonstrating Minor Variation (MV) for Samples 5 & 6. All other laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

| Report Date | 19/11/2021 | | | |
|---------------------|---------------------|--|--|--|
| Report Status | Final Retest Report | | | |
| Test Name | IBR VNT | | | |
| Test Number (Code) | 21/09 | | | |
| Test Month and Year | June 2021 | | | |

| Laboratory Number | Sample 1 | Sample 2 | Sample 3 | Sample 4 | Sample 5 | Sample 6 | Classification |
|----------------------------------|-----------|---------------------------------|----------------------------------|---------------------------------|----------------------------------|-----------|--|
| | | | | | | | See comment |
| | Neg <4 | 128.00 | 256.00 | 128.00 | 256.00 | Neg <4 | ✓ |
| | Neg <1 | 256.00 | 384.00 | 256.00 | 512.00 | Neg <1 | Samples 4 & 5 - R Samples 1, 2, 3 & 6 - ✓ |
| | Neg <2 | 181.00 | 181.00 | 91.00 | 181.00 | Neg <2 | ✓ |
| | Neg <1 | 12.00 | 24.00 | 24.00 | 32.00 | Neg <1 | Samples 2, 3, 4 & 5 - R Samples 1 & 6 - ✓ |
| | Neg < 1:8 | 16.00 | 32.00 | 16.00 | 32.00 | Neg < 1:8 | Samples 2, 3, 4 & 5 - R Samples 1 & 6 - ✓ |
| | Neg @ 1:2 | 178.00 | 301.00 | 213.00 | 355.00 | Neg @ 1:2 | ✓ |
| | | | | | | | See comment |
| Median | Negative | Positive 1/150.94 | Positive 1/215.26 | Positive 1/107.93 | Positive 1/215.26 | Negative | |
| Acceptable Variation Range | N/A | Positive 1/75.47 to 1/301.88 | Positive 1/107.63 to 1/430.52 | Positive 1/53.97 to 1/215.86 | Positive 1/107.63 to 1/430.52 | N/A | |
| Laboratory Number | | | Retest | Results | | | Classification |
| | - | - | - | 128.00 | 384.00 | - | Samples 4 & 5 - R ✓ |
| | - | | | | | - | See comment |
| | - | 256.00 | 512.00 | 256.00 | 1024.00 | - | Sample 2 - R ✓ Sample 3 & 4 - Rm Sample 5 - RU |

Comment: Two laboratories did not report results by due date. One laboratory did not report retest results by due date. One laboratory was classified as Retest Result Demonstrating Minor Variation (Rm) for Samples 3 & 4 and Retest Result Unacceptable (RU) for Sample 5. All other laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

SECTION 11: Culture and Identification of Mycobacterium paratuberculosis



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Australian National Quality Assurance Program 2021 Annual Report

| Report Date | 16/09/2022 | | | |
|---------------------|-------------------|--|--|--|
| Report Status | Final Report | | | |
| Test Name | JD Bovine Culture | | | |
| Test Number | 21/32 | | | |
| Test Month and Year | October 2021 | | | |

| Laboratory Number | Sample 1 | Sample 2 | Sample 3 | Sample 4 | Sample 5 | Sample 6 | Classification |
|-----------------------------|----------|----------|----------|----------|----------|----------|---------------------------------|
| | Neg | Pos | Pos | Pos | Neg | Pos | ✓ |
| | Neg | Pos | Pos | Pos | Neg | Pos | ✓ |
| | Neg | Pos | Pos | Pos | Neg | Neg | Samples 1-5 - ✓ Sample 6 - U |
| | Neg | Pos | Pos | Pos | Neg | Pos | ✓ |
| | Neg | Pos | Pos | Pos | Neg | Pos | ✓ |
| | Neg | Pos | Pos | Pos | Neg | Pos | ✓ |
| Consensus Interpretation | Negative | Positive | Positive | Positive | Negative | Positive | |

One laboratory was classified as Result Unacceptable (U) for Sample 6.

All other laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

| Report Date | 16/09/2022 | | | |
|---------------------|------------------|--|--|--|
| Report Status | Final Report | | | |
| Test Name | JD Ovine Culture | | | |
| Test Number | 21/33 | | | |
| Test Month and Year | October 2021 | | | |

| Laboratory Number | Sample 1 | Sample 2 | Sample 3 | Sample 4 | Sample 5 | Sample 6 | Classification |
|-----------------------------|----------|----------|----------|----------|----------|----------|-------------------------|
| | Pos | Neg | Pos | Pos | Pos | Neg | ✓ |
| | Pos | Neg | Pos | Pos | Pos | Neg | ✓ |
| | Pos | Neg | Pos | Pos | Pos | Neg | ✓ |
| | Pos | Neg | Pos | Pos | Pos | Neg | ✓ |
| | Pos | Pos | Neg | Pos | Pos | Neg | Samples 1, 4, 5 and 6 - |
| | Pos | Neg | Pos | Pos | Pos | Neg | ✓ |
| Consensus Interpretation | Positive | Negative | Positive | Positive | Positive | Negative | |

One laboratory was classified as Result Unacceptable (U) for Samples 2 & 3.

ANQAP treats all information provided by participants in confidence.

No laboratory or organization can use this report or information contained within the report without prior written consent from ANQAP.

ANQAP recommends that laboratories given a classification of Unacceptable undertake corrective action within the laboratory to identify and rectify problems with the test.

ANQAP actively seeks and welcomes your feedback.

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End of Report