

AUSTRALIAN NATIONAL QUALITY ASSURANCE PROGRAM

Inter-laboratory Veterinary Proficiency Testing

2020 Annual Report

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Australian National Quality Assurance Program

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Department of Jobs, Precincts and RegionsAgriBio Centre, La Trobe University Campus
5 Ring Road, Bundoora

Victoria, Australia 3083

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ANQAP National Coordinator

Ms Rose Kursun Department of Jobs, Precincts and Regions - ANQAP AgriBio Centre, La Trobe University 5 Ring Road, Bundoora Victoria, 3083 Australia

Telephone Number: (03) 9032 7024 Internationally: (+61 3) 9032 7024

e-mail address: anqap.quality@ecodev.vic.gov.au

Quality Officer

Ms Jodie Crowder
Department of Jobs, Precincts and Regions - ANQAP
AgriBio Centre, La Trobe University
5 Ring Road, Bundoora
Victoria, 3083
Australia

Telephone Number: (03) 9032 7265 Internationally: (+61 3) 9032 7265

e-mail address: anqap.quality@ecodev.vic.gov.au

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SECTION 1: Introduction

Introduction

Confidentiality

Methodology

Reporting

Tests not offered / retest samples unavailable in 2020

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1. INTRODUCTION

In 2020, the Australian National Quality Assurance Program (ANQAP) facilitated inter-laboratory proficiency testing in 23 government and private veterinary laboratories from several countries including Australia, New Zealand, and the United States of America. The testing cycle for 2020 evaluated 7 testing rounds, comprised of 37 different veterinary tests. The 2020 program schedule was delayed due to the worldwide pandemic of COVID19, which saw Melbourne in lockdown for much of 2020.

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** (✓).

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 Demonstrating Minor Variation (Rm) if the result falls outside the AVR but are 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.

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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 recommend 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.

Statistical Analysis of Results

Several tests within ANQAP are suitable for statistical analysis of the results. For these tests, a split-level analysis is undertaken using two test sera from the panel. The outcome of the statistical analysis is then sent to participating laboratories. The statistics are not included in this report.

4. REPORTING

ANQAP will issue each individual laboratory a personalised report once they have submitted their results. The report will identify results that are within acceptable parameters and indicate where sample retests will be required.

5. TESTS NOT OFFERED THIS YEAR / RETEST SAMPLES UNAVAILABLE

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 :

- JD Ovine AGID
- B. ovis ELISA
- B. ovis CFT
- EVA VNTEIA AGID
- JD Bovine Culture
- JD Ovine Culture

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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	18/03/2021				
Report Status	Final Report				
Test Name	AIV AGID				
Test Number (Code)	20/28				
Test Month and Year	July 2020				

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

Note: Two laboratories were classified on interpretation only. All other laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

Report Date	19/06/2020			
Report Status	Final Report			
Test Name	BTV AGID			
Test Number (Code)	20/10			
Test Month and Year	April 2020			

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

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

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Report Date	17/09/2020			
Report Status	Final Report			
Test Name	BVDV AGID			
Test Number (Code)	20/21			
Test Month and Year	May 2020			

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

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

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Report Date	29/06/2020			
Report Status	Final Retest Report			
Test Name	EHD AGID			
Test Number (Code)	20/05			
Test Month and Year	March 2020			

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

Comment: Laboratory not classified for this test.

One laboratory was classified on interpretation only.

One laboratory was classified as Retest Result Satisfactory ($R \checkmark$) for Samples 1 & 3. All other laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

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Report Date	25/03/2021			
Report Status	Final Report			
Test Name	EIA AGID			
Test Number (Code)	20/37			
Test Month and Year	August 2020			

Laboratory Number	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Classification
	Pos 2+	Pos 1+	Neg	Neg	Pos 1+	Neg	✓
	Pos 3+	Pos 2+	Neg	Neg	Pos 2+	Neg	✓
	Pos 3+	Pos 1+	Neg	Neg	Pos 1+	Neg	*
	Pos 2+	Pos 1+	Neg	Neg	Pos 1+	Neg	✓
	Pos 2+	Weak Pos	Neg	Neg	Weak Pos	Neg	Samples 1, 3, 4 & 6 - ✓ Samples 2 & 5 - ✓ and see comment
	Pos 2+	Pos 1+	Neg	Neg	Pos 1+	Neg	✓
	Pos 3+	Pos 1+	Neg	Neg	Pos 2+	Neg	✓
	Pos 2+	Pos 1+	Neg	Neg	Pos 2+	Neg	✓
	Pos 2+	Pos 2+	Neg	Neg	Pos 1+	Pos 1+	Samples 1-5 - √ Sample 6 - U
Consensus Interpretation	Positive 2+	Positive 1+	Negative	Negative	Positive 1+	Negative	
Acceptable Variation Range	Positive 1+ - 3+	Positive 1+ - 2+	N/A	N/A	Positive 1+ - 2+	Negative	

Comment: Laboratory classified on interpretation for Samples 2 and 5.

Note: Due to low serum stock availability, retests or replacement samples were not available for this test round.

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

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

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Report Date	25/03/2020
Report Status	Final Report
Test Name	JD Ovine AGID
Test Number (Code)	20/02
Test Month and Year	February 2020

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

Note: Due to low serum stock availability, retests or replacement samples were not available for this test round.

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

Three laboratories were classified on interpretation only.

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

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SECTION 3: Complement Fixation Test

Brucella abortus (BB) CFT

Brucella ovis (OB) CFT

Johne's disease (JD) CFT

Q Fever (QF) CFT

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Report Date	10/03/2021
Report Status	Final Retest Report
Test Name	B. abortus CFT
Test Number (Code)	20/13
Test Month and Year	April 2020

Laboratory Number	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Classification
	2/64	1/16	Neg <4	Neg <4	4/64	2/16	✓
	2/64	2/16	Neg	Neg	4/64	2/16	✓
	3/32	4/8	Neg <1/4	Neg <1/4	3/64	4/8	✓
	3/64	3/16	Neg	Neg	3/128	2/16	✓
	4/32	4/8	Neg @ 1:4	Neg @ 1:4	2/64	4/8	✓
	1/64	2/16	Neg	Neg	4/64	1/16	✓
	2/32	2/16	Neg @ 1:4	Neg @ 1:4	3/64	2/16	✓
	1/128	1/32	Neg 0/2 (<7 IU/ml)	Neg 0/2 (<7 IU/ml)	1/128	1/32	✓
	2/32	2/8	Neg	Neg	2/64	3/16	✓
	4/64	4/32	Neg <4	Neg <4	1/128	4/32	Samples 2 & 6 - R Samples 1, 3-5 - ✓
	3/80	4/20	Neg 0 @ 1:5	Neg 0 @ 1:5	1/320	3/20	Sample 5 - R Samples 1-4 & 6 - ✓
Median	Positive 2/64	Positive 2/16	Negative	Negative	Positive 4/64	Positive 2/16	
Acceptable Variation Range	Positive 2/32 - 2/128	Positive 2/8 - 2/32	N/A	N/A	Positive 4/32 - 4/128	Positive 2/8 - 2/32	
Laboratory Number		Classification					
	-	Neg <4	-	-	-	Neg <4	Samples 2 & 6 - RU
	-	-	-	-		-	See comment

Comment: Laboratory did not report retest result by due date.

One laboratory was classified as Retest Result Unacceptable (RU) for Samples 2 and 6. One laboratory was not classified for Retest Result for Sample 5 (see comment above).

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

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Report Date18/03/2021Report StatusFinal ReportTest NameB. ovis CFTTest Number (Code)20/29Test Month and YearJuly 2020

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

Comment: Laboratory did not report results by due date.

Note: Due to low serum stock availability, retests or replacement samples were not available for this test round.

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

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Report Date09/06/2021Report StatusFinal Retest ReportTest NameJD Bovine CFTTest Number (Code)20/24

June 2020

Laboratory Number	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Classification
	3/32	3/32	3/32	3/32	Neg <8	Neg <8	✓
	1/128	2/64	2/64	4/32	Neg	Neg	Sample 1 - R Samples 2-6 - ✓
	3/32	3/32	3/32	3/32	Neg 1/8	Neg 1/8	✓
	2/32	3/32	3/32	3/32	Neg	Neg	✓
	1/64	1/64	1/64	1/64	Neg 1:8	Neg 1:8	✓
Median	Positive 3/32	Positive 3/32	Positive 3/32	Positive 3/32	Negative	Negative	
Acceptable Variation Range	Positive 3/16 - 3/64	Positive 3/16 - 3/64	Positive 3/16 - 3/64	Positive 3/16 - 3/64	N/A	N/A	
Laboratory Number		Classification					
	1/64	-	-	-	-	-	Sample 1 - R ✓

One laboratory was classified as Retest Result Satisfactory (R \checkmark) for Sample 1. All other laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

Test Month and Year

Report Date	12/03/2021
Report Status	Final Report
Test Name	QF CFT
Test Number (Code)	20/22
Test Month and Year	June 2020

Laboratory Number	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Classification
	3/32	Neg <8	1/32	Neg <8	3/16	Neg <8	✓
	4/32	Neg	2/64	Neg	4/32	Neg	✓
	4/32	Neg 1/8	2/32	Neg 1/8	2/32	Neg 1/8	✓
	2/32	Neg 1/8	1/32	Neg 1/8	1/32	Neg 1/8	✓
							See comment
Median	Positive 4/32	Negative	Positive 2/32	Negative	Positive 2/32	Negative	
Acceptable Variation Range	Positive 4/16 - 4/64	N/A	Positive 2/16 - 2/64	N/A	Positive 2/16 - 2/64	N/A	

Comment: Laboratory did not report results by due date.

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

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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

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Control Status: Current Uncontrolled when printed

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Report Date 01/10/2020
Report Status Final Report
Test Name Akabane ELISA
Test Number (Code) 20/14

April 2020

Laboratory Number	Sample 1	Int.	Sample 2	Int.	Sample 3	Int.	Sample 4	Int.	Sample 5	Int.	Sample 6	Int.	Classification
	0.09	Pos	0.13	Pos	0.12	Pos	0.10	Pos	0.96	Neg	0.99	Neg	✓
	0.01	Pos	0.30	Pos	0.29	Pos	0.12	Pos	0.80	Neg	0.79	Neg	✓
	0.10	Pos	0.10	Pos	0.10	Pos	0.10	Pos	0.72	Neg	0.75	Neg	✓
	0.13	Pos	0.17	Pos	0.17	Pos	0.14	Pos	1.41	Neg	1.29	Neg	✓
	0.20	Pos	0.22	Pos	0.17	Pos	0.14	Pos	1.52	Neg	1.50	Neg	✓
	0.08	Pos	0.09	Pos	0.10	Pos	0.02	Pos	1.03	Neg	0.80	Neg	✓
	0.10	Pos	0.13	Pos	0.13	Pos	0.12	Pos	1.23	Neg	1.16	Neg	✓
	0.05	Pos	0.05	Pos	0.05	Pos	0.05	Pos	0.59	Neg	0.57	Neg	✓
Consensus Interpretation	Positi	ve	Positi	ve	Positi	ve	Positi	ve	Negat	ive	Negat	ive	

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

Test Month and Year

Poport Data	09/06/2020
Report Date	09/00/2020
Report Status	Final Report
Test Name	BTV ELISA
Test Number (Code)	20/09
Test Month and Year	March 2020

Laboratory Number	Sample 1	Int.	Sample 2	Int.	Sample 3	Int.	Sample 4	Int.	Sample 5	Int.	Sample 6	Int.	Classification
	0.05	Pos	1.40	Neg	0.19	Pos	0.03	Pos	1.29	Neg	0.02	Pos	✓
	0.16	Pos	1.51	Neg	0.32	Pos	0.13	Pos	1.51	Neg	0.13	Pos	✓
	0.05	Pos	0.92	Neg	0.21	Pos	0.06	Pos	0.94	Neg	0.06	Pos	✓
	0.07	Pos	1.45	Neg	0.08	Pos	0.05	Pos	1.01	Neg	0.05	Pos	✓
	0.07	Pos	1.21	Neg	0.08	Pos	0.06	Pos	1.12	Neg	0.07	Pos	✓
	0.14	Pos	1.09	Neg	0.31	Pos	0.12	Pos	1.04	Neg	0.11	Pos	✓
	0.06	Pos	1.21	Neg	0.08	Pos	0.06	Pos	1.29	Neg	0.08	Pos	✓
	0.10	Pos	1.35	Neg	0.26	Pos	0.01	Pos	1.27	Neg	0.02	Pos	✓
	0.17	Pos	1.31	Neg	0.36	Pos	0.13	Pos	1.23	Neg	0.12	Pos	✓
													See comment
	0.11	Pos	1.37	Neg	0.24	Pos	0.11	Pos	1.23	Neg	0.09	Pos	✓
Consensus Interpretation	Positi	ve	Negati	ive	Positi	ve	Positi	ve	Negat	ive	Positi	ve	

Comment: One Laboratory was issued a General Report.

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

Authorised By: Rose Kursun Version: 1.0 Date: 26/01/2022 Control Status: Current Uncontrolled when printed Page: 19 of 50

Report Date	25/03/2021
Report Status	Final Report
Test Name	BVDV Antibody ELISA
Test Number (Code)	20/35
Test Month and Year	August 2020

Laboratory Number	Sample 1	Int.	Sample 2	Int.	Sample 3	Int.	Sample 4	Int.	Sample 5	Int.	Sample 6	Int.	Classification
	0.69	Neg	0.07	Pos	0.07	Pos	0.71	Neg	0.06	Pos	0.06	Pos	✓
	0.10	Neg	1.31	Pos	0.93	Pos	0.07	Neg	1.22	Pos	1.54	Pos	✓
	0.08	Neg	1.73	Pos	1.04	Pos	0.09	Neg	1.60	Pos	1.78	Pos	✓
	0.79	Neg	0.09	Pos	0.09	Pos	0.79	Neg	0.09	Pos	0.07	Pos	✓
	1.11	Neg	0.10	Pos	0.13	Pos	1.12	Neg	0.09	Pos	0.07	Pos	✓
	0.07	Neg	1.31	Pos	0.96	Pos	0.07	Neg	1.31	Pos	1.39	Pos	✓
	1.08	Neg	0.11	Pos	0.16	Pos	1.09	Neg	0.07	Pos	0.06	Pos	✓
	0.92	Neg	0.03	Pos	0.06	Pos	0.82	Neg	0.03	Pos	0.04	Pos	✓
	0.07	Neg	1.63	Pos	1.40	Pos	0.07	Neg	1.66	Pos	1.69	Pos	✓
Consensus Interpretation	Negat	tive	Positi	ve	Positive		Negative		Positive		Positive		

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

Authorised By: Rose KursunVersion: 1.0Date: 26/01/2022Control Status: Current Uncontrolled when printedPage: 20 of 50

Report Date	11/03/2021
Report Status	Final Retest Report
Test Name	BVDV Antigen ELISA - clot
Test Number (Code)	20/17
Test Month and Year	May 2020

Laboratory Number	Sample 1	Int.	Sample 2	Int.	Sample 3	Int.	Sample 4	Int.	Sample 5	Int.	Sample 6	Int.	Classification
	3.01	Pos	0.01	Neg	3.17	Pos	2.85	Pos	0.00	Neg	3.15	Pos	✓
	1.25	Pos	0.51	Neg	1.37	Pos	1.22	Pos	0.44	Neg	0.90	Suspect	Samples 1-5 - ✓ Sample 6 - R
	3.00	Pos	0.10	Neg	3.25	Pos	3.08	Pos	0.08	Neg	2.92	Pos	✓
	0.92	Pos	0.18	Neg	0.63	Pos	0.93	Pos	0.20	Neg	1.00	Pos	✓
													See comment
	1.88	Pos	0.08	Neg	2.32	Pos	1.49	Pos	0.08	Neg	2.54	Pos	✓
Consensus Interpretation	Positi	ve	Negati	ive	Positi	ve	Positi	ve	Negat	ive	Pos	itive	
Laboratory Number		Retest Results											Classification
	-		-		-		-		-		0.98	Pos	Sample 6 - R✓

Comment: One Laboratory did not report any results.

One laboratory was classified as Retest Result Satisfactory (\mathbb{R}^{\checkmark}) for Sample 6. All other laboratories and results were classified as Result Satisfactory (\mathbb{C}^{\checkmark}) for this test.

Authorised By: Rose Kursun Version: 1.0 Date: 26/01/2022 Control Status: Current Uncontrolled when printed Page: 21 of 50

Report Date	11/03/2021
Report Status	Final Retest Report
Test Name	BVDV Antigen ELISA – ear notch
Test Number (Code)	20/18
Test Month and Year	May 2020

Laboratory Number	Sample 1	Int.	Sample 2	Int.	Sample 3	Int.	Sample 4	Int.	Sample 5	Int.	Sample 6	Int.	Classification
	2.40	Pos	0.14	Neg	0.11	Neg	3.22	Pos	3.50	Pos	3.39	Pos	✓
	2.29	Pos	0.09	Neg	0.10	Neg	3.19	Pos	3.84	Pos	3.77	Pos	✓
	0.08	Neg	0.10	Neg	0.13	Neg	0.14	Neg	3.06	Pos	3.09	Pos	Samples 1 & 4 - R Samples 2-3, 5-6 - ✓
	2.10	Pos	0.02	Neg	0.02	Neg	2.25	Pos	2.32	Pos	2.21	Pos	✓
	2.00	Pos	0.08	Neg	0.09	Neg	2.28	Pos	2.45	Pos	2.50	Pos	✓
	1.91	Pos	0.09	Neg	0.13	Neg	2.23	Pos	2.57	Pos	2.54	Pos	✓
	2.33	Pos	0.09	Neg	0.12	Neg	2.80	Pos	3.04	Pos	3.11	Pos	✓
	2.14	Pos	0.11	Neg	0.12	Neg	2.52	Pos	2.81	Pos	2.79	Pos	✓
	1.87	Pos	0.07	Neg	0.06	Neg	2.23	Pos	2.41	Pos	2.54	Pos	✓
	1.47	Pos	0.02	Neg	0.03	Neg	1.86	Pos	1.98	Pos	2.03	Pos	✓
	1.89	Pos	0.09	Neg	0.10	Neg	2.49	Pos	2.54	Pos	2.57	Pos	✓
Consensus Interpretation	Positi	ve	Negati	ve	Negat	ive	Posit	ive	Positi	ve	Positi	ve	
Laboratory Number						Retest	Results						Classification
	0.19	Neg	-		-		0.18	Neg	-		-		Samples 1 & 4 - RU

One laboratory was classified as Retest Result Unacceptable (RU) for Samples 1 and 4. All other laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

Authorised By: Rose KursunVersion: 1.0Date: 26/01/2022Control Status: Current Uncontrolled when printedPage: 22 of 50

Report Date	09/10/2020
Report Status	Final Report
Test Name	BVDV Antigen ELISA - serum
Test Number (Code)	20/16
Test Month and Year	May 2020

Laboratory Number	Sample 1	Int.	Sample 2	Int.	Sample 3	Int.	Sample 4	Int.	Sample 5	Int.	Sample 6	Int.	Classification
	0.09	Neg	4.47	Pos	4.40	Pos	0.08	Neg	3.34	Pos	4.63	Pos	✓
	0.07	Neg	4.09	Pos	3.64	Pos	0.06	Neg	2.70	Pos	3.58	Pos	✓
	0.08	Neg	3.50	Pos	3.50	Pos	0.09	Neg	3.14	Pos	3.50	Pos	✓
	0.07	Neg	4.23	Pos	3.59	Pos	0.06	Neg	2.52	Pos	3.38	Pos	✓
	0.09	Neg	4.00	Pos	3.91	Pos	0.09	Neg	3.01	Pos	3.79	Pos	✓
	0.19	Neg	0.58	Pos	0.75	Pos	0.11	Neg	1.36	Pos	0.82	Pos	✓
	0.09	Neg	4.00	High Pos	4.00	High Pos	0.08	Neg	3.41	High Pos	4.00	High Pos	✓
	0.01	Neg	4.04	Pos	3.39	Pos	0.01	Neg	2.57	Pos	3.36	Pos	✓
	0.06	Neg	3.02	Pos	2.89	Pos	0.06	Neg	2.26	Pos	3.04	Pos	✓
	0.06	Neg	4.32	Pos	3.77	Pos	0.07	Neg	2.89	Pos	3.69	Pos	✓
	0.07	Neg	4.12	Pos	3.84	Pos	0.06	Neg	3.19	Pos	4.03	Pos	✓
	0.08	Neg	2.87	Pos	2.78	Pos	0.09	Neg	2.78	Pos	2.69	Pos	✓
	0.07	Neg	2.65	Pos	2.53	Pos	0.08	Neg	2.08	Pos	2.69	Pos	✓
	0.02	Neg	3.22	Pos	2.61	Pos	0.01	Neg	1.97	Pos	2.95	Pos	✓
	0.07	Neg	3.39	Pos	2.91	Pos	0.08	Neg	2.37	Pos	2.99	Pos	✓
Consensus Interpretation	Negat	legative Positive		Pos	Positive Negative			egative Positive			sitive		

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

Authorised By: Rose Kursun Version: 1.0 Date: 26/01/2022 Page: 23 of 50

Report Date 18/03/2021 **Report Status Final Report Test Name** B. abortus ELISA **Test Number (Code)** 20/31 **Test Month and Year** July 2020

Laboratory Number	Sample 1	Int.	Sample 2	Int.	Sample 3	Int.	Sample 4	Int.	Sample 5	Int.	Sample 6	Int.	Classification
	0.88	Pos	0.08	Neg	1.02	Pos	0.07	Neg	1.02	Pos	0.82	Pos	✓
	0.28	Pos	2.20	Neg	0.05	Pos	2.15	Neg	0.05	Pos	0.74	Pos	✓
	0.96	Pos	0.04	Neg	1.33	Pos	0.04	Neg	1.41	Pos	1.51	Pos	✓
	2.57	Pos	0.07	Neg	2.42	Pos	0.08	Neg	2.46	Pos	2.53	Pos	✓
	4.26	Pos	-0.01	Neg	4.21	Pos	-0.01	Neg	4.19	Pos	3.61	Pos	✓
	0.96	Pos	0.15	Neg	1.02	Pos	0.10	Neg	1.44	Pos	1.39	Pos	✓
	2.46	Pos	0.05	Neg	2.44	Pos	0.05	Neg	2.28	Pos	2.42	Pos	✓
	2.80	Pos	0.05	Neg	2.82	Pos	0.14	Neg	2.76	Pos	2.65	Pos	✓
Consensus Interpretation	Positi	ve	Negati	ve	Positi	ve	Negati	ve	Positi	ve	Positi	ve	

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

Report Date	21/05/2020
Report Status	Final Report
Test Name	B. ovis ELISA
Test Number (Code)	20/07
Test Month and Year	March 2020

Laboratory Number	Sample 1	Int.	Sample 2	Int.	Sample 3	Int.	Sample 4	Int.	Sample 5	Int.	Sample 6	Int.	Classification
	3.02	Pos	0.49	Pos	2.91	Pos	0.51	Pos	0.11	Neg	0.07	Neg	✓
	3.89	Pos	0.45	Neg	3.81	Pos	0.49	Suspicious	0.06	Neg	0.07	Neg	Samples 2 & 4 - U Samples 1, 3, 5 & 6 - ✓
	3.95	Pos	0.63	Pos	3.89	Pos	0.69	Pos	0.12	Neg	0.16	Suspect	Sample 6 - U Samples 1, 2, 3, 4 & 5 - ✓
	3.53	Pos	0.41	Neg	3.37	Pos	0.45	Neg	0.07	Neg	0.07	Neg	Samples 2 & 4 - U Samples 1, 3, 5 & 6 - ✓
	3.40	Pos	0.77	Pos	3.19	Pos	0.81	Pos	0.08	Neg	0.09	Neg	✓
	1.43	Pos	0.76	Pos	1.44	Pos	0.77	Pos	0.07	Neg	0.07	Neg	✓
Consensus Interpretation	Positi	ve	Positi	ve	Positi	ve	Po	ositive	Negati	ive	e Negative		

Note: Due to low serum stock availability, retests or replacement samples were not available for this test round.

Two laboratories were classified as Result Unacceptable (U) for Samples 2 and 4.

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

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

Report Date20/08/2020Report StatusFinal ReportTest NameCAEV ELISATest Number (Code)20/15Test Month and YearApril 2020

Laboratory Number	Sample 1	Int.	Sample 2	Int.	Sample 3	Int.	Sample 4	Int.	Sample 5	Int.	Sample 6	Int.	Classification
	0.47	Neg	0.12	Neg	4.06	Pos	3.92	Pos	2.38	Pos	3.47	Pos	✓
	1.35	Neg	1.00	Neg	0.05	Pos	0.10	Pos	0.09	Pos	0.12	Pos	✓
	0.10	Neg	0.17	Neg	3.46	Pos	3.81	Pos	1.83	Pos	1.77	Pos	✓
	0.08	Neg	0.08	Neg	0.70	Pos	0.83	Pos	0.41	Pos	0.35	Pos	✓
	0.22	Neg	0.07	Neg	3.88	Pos	3.87	Pos	2.00	Pos	3.32	Pos	✓
	0.08	Neg	0.10	Neg	2.19	Pos	2.67	Pos	1.06	Pos	1.04	Pos	✓
	0.00	Neg	0.01	Neg	3.03	Pos	2.95	Pos	2.43	Pos	2.48	Pos	✓
	0.10	Neg	0.11	Neg	1.21	Pos	2.45	Pos	0.37	Pos	0.58	Pos	✓
	0.80	Neg	0.90	Neg	0.05	Pos	0.10	Pos	0.11	Pos	0.13	Pos	✓
	0.01	Neg	0.01	Neg	2.06	Pos	1.82	Pos	0.20	Pos	0.40	Pos	✓
	0.09	Neg	0.14	Neg	1.97	Pos	2.34	Pos	1.21	Pos	1.14	Pos	✓
	0.02	Neg	0.06	Neg	2.42	Pos	2.80	Pos	1.30	Pos	1.11	Pos	✓
	1.02	Neg	1.02	Neg	0.07	Pos	0.13	Pos	0.13	Pos	0.16	Pos	✓
Consensus Interpretation	Negati	ive	Negati	ve	Positi	ve	Positi	ve	Positi	ve	Positi	ve	

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

Report Date	25/03/2021
Report Status	Final Report
Test Name	EBL ELISA - Milk
Test Number (Code)	20/38
Test Month and Year	August 2020

Laboratory Number	Sample 1	Int.	Sample 2	Int.	Sample 3	Int.	Sample 4	Int.	Sample 5	Int.	Sample 6	Int.	Classification
													See comment
													See comment
	1.43	Pos	0.00	Neg	0.02	Neg	1.34	Pos	1.92	Pos	2.12	Pos	✓
	1.84	Pos	0.05	Neg	0.09	Neg	1.91	Pos	2.39	Pos	2.55	Pos	✓
Consensus Interpretation	Positi	ve	Negat	ive	Negat	ive	Positi	ve	Positi	ve	Positi	ve	

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

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

Authorised By: Rose KursunVersion: 1.0Date: 26/01/2022

 Report Date
 09/06/2020

 Report Status
 Final Report

 Test Name
 IBR ELISA

 Test Number (Code)
 20/04

March 2020

Laboratory Number	Sample 1	Int.	Sample 2	Int.	Sample 3	Int.	Sample 4	Int.	Sample 5	Int.	Sample 6	Int.	Classification
	0.09	Pos	0.06	Pos	0.06	Pos	0.83	Neg	0.06	Pos	0.80	Neg	✓
	0.09	Pos	0.07	Pos	0.06	Pos	1.36	Neg	0.07	Pos	1.43	Neg	✓
	0.22	Pos	0.07	Pos	0.07	Pos	1.20	Neg	0.07	Pos	1.25	Neg	✓
	0.09	Pos	0.08	Pos	0.08	Pos	1.04	Neg	0.08	Pos	1.17	Neg	✓
	2.47	Pos	3.69	Pos	3.17	Pos	0.07	Neg	3.13	Pos	0.09	Neg	✓
	0.09	Pos	0.06	Pos	0.06	Pos	1.12	Neg	0.05	Pos	1.04	Neg	✓
	0.08	Pos	0.06	Pos	0.06	Pos	1.52	Neg	0.05	Pos	1.55	Neg	✓
	0.09	Pos	0.07	Pos	0.07	Pos	0.76	Neg	0.07	Pos	0.79	Neg	✓
	0.06	Pos	0.05	Pos	0.04	Pos	1.22	Neg	0.05	Pos	1.30	Neg	✓
	0.08	Pos	0.07	Pos	0.06	Pos	0.83	Neg	0.07	Pos	0.80	Neg	✓
													See comment
	0.02	Pos	0.01	Pos	0.02	Pos	0.79	Neg	0.02	Pos	0.77	Neg	✓
	2.97	Pos	2.94	Pos	2.92	Pos	0.07	Neg	3.09	Pos	0.10	Neg	✓
Consensus Interpretation	Positi	ve	Positi	ve	Positi	ve	Negati	ive	Positi	ve	Negat	ive	

Comment: One Laboratory was issued a General Report.
All other laboratories and results were classified as Result Satisfactory (✓) for this test.

Test Month and Year

Authorised By: Rose KursunVersion: 1.0Date: 26/01/2022

Report Date 12/03/2021
Report Status Final Report
Test Name JD Bovine ELISA
Test Number (Code) 20/23
Test Month and Year June 2020

Laboratory Number	Sample 1	Int.	Sample 2	Int.	Sample 3	Int.	Sample 4	Int.	Sample 5	Int.	Sample 6	Int.	Classification
	0.10	Neg	1.35	Pos	3.89	Pos	0.10	Neg	2.88	Pos	3.38	Pos	✓
	0.11	Neg	1.52	Pos	4.53	Pos	0.11	Neg	4.05	Pos	4.20	Pos	✓
	0.45	Neg	1.06	Pos	3.73	Pos	0.12	Neg	2.89	Pos	3.40	Pos	✓
	0.10	Neg	1.25	Pos	3.50	Pos	0.19	Neg	2.59	Pos	3.32	Pos	✓
	0.13	Neg	1.35	Pos	3.73	Pos	0.14	Neg	3.15	Pos	3.57	Pos	✓
													See comment
	0.07	Neg	0.73	Pos	2.05	Pos	0.08	Neg	2.24	Pos	1.01	Pos	✓
	0.09	Neg	1.02	Pos	1.53	Pos	0.09	Neg	2.11	Pos	1.20	Pos	✓
	0.11	Neg	1.00	Pos	2.43	Pos	0.10	Neg	2.18	Pos	2.33	Pos	✓
	0.14	Neg	1.72	Pos	2.50	Pos	0.13	Neg	2.57	Pos	2.96	Pos	✓
													See comment
	0.05	Neg	1.31	Pos	3.01	Pos	0.04	Neg	2.22	Pos	2.04	Pos	✓
	0.08	Neg	1.21	Pos	4.38	Pos	0.08	Neg	3.12	Pos	3.55	Pos	✓
	0.10	Neg	1.15	Pos	2.73	Pos	0.10	Neg	2.10	Pos	2.06	Pos	✓
Consensus Interpretation	Negati	ve	Positive		Positiv	e	Negati	ve	Positi	ve	Positi	ive	

Comment: Two Laboratories did not report any results.

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

Authorised By: Rose Kursun Version: 1.0 Date: 26/01/2022

SECTION 5: Haemagglutination Inhibition Test (HIT)

Newcastle Disease virus (NDV) HIT

Authorised By: Rose Kursun Version: 1.0 Date: 26/01/2022

Control Status: Current Uncontrolled when printed

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Report Date	09/06/2021					
Report Status	Final Retest Report					
Test Name	NDV HIT					
Test Number (Code)	20/27					
Test Month and Year	July 2020					

Laboratory Number	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Classification
	64.00	Neg <2	128.00	Neg <2	128.00	Neg <2	✓
	128.00	Neg <1:4	128.00	Neg <1:4	128.00	Neg <1:4	✓
	128.00	Neg	128.00	Neg	128.00	Neg	✓
	128.00	Neg	128.00	Neg	128.00	Neg	✓
	256.00	Neg	256.00	Neg	256.00	Neg	✓
	512.00	Neg	512.00	Neg	512.00	Neg	Samples 1 & 3 - R Samples 2, 4, 5 & 6 - ✓
	256.00	Neg <2	128.00	Neg <2	256.00	Neg <2	✓
	256.00	Neg @ 1:8	256.00	Neg @ 1:8	256.00	Neg @ 1:8	✓
	128.00	Neg <4	128.00	Neg <4	256.00	Neg <4	✓
Median	Positive 1/128.00	Negative	Positive 1/128.00	Negative	Positive 1/256.00	Negative	
Acceptable Variation Range	Positive 1/64.00 - 1/256.00	N/A	Positive 1/64.00 - 1/256.00	N/A	Positive 1/128.00 - 1/512.00	N/A	
Laboratory Number			Classification				
	256.00	-	256.00	-	-	-	Samples 1 & 3 - R ✓

One laboratory was classified as Retest Result Satisfactory ($\mathbb{R}\checkmark$) for Samples 1 and 3. All other laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

Authorised By: Rose Kursun Version: 1.0 Date: 26/01/2022

SECTION 6: Polymerase Chain Reaction (PCR)

Bovine viral diarrhoea virus (BVDV) PCR

Authorised By: Rose Kursun Version: 1.0 Date: 26/01/2022

Report Date 09/09/2020 **Report Status Final Report Test Name BVDV PCR Test Number (Code)** 20/20 May 2020 **Test Month and Year**

Laboratory Number	Sample 1	Int.	Sample 2	Int.	Sample 3	Int.	Sample 4	Int.	Sample 5	Int.	Sample 6	Int.	Classification
	20.45	Pos	25.21	Pos	>45	Neg	26.11	Pos	20.56	Pos	>45	Neg	✓
	24.39	Pos	30.40	Pos	N/A	Neg	29.60	Pos	24.60	Pos	N/A	Neg	✓
	20.01	Pos	26.32	Pos	Undetermined	Neg	25.80	Pos	20.08	Pos	Undetermined	Neg	✓
	27.84	Pos	33.07	Pos	>45	Neg	33.10	Pos	27.71	Pos	>45	Neg	✓
	21.97	Pos	27.86	Pos	>45.00	Neg	26.63	Pos	21.35	Pos	>45.00	Neg	✓
	24.97	Pos	34.73	Pos	NIL	Neg	32.16	Pos	26.43	Pos	NIL	Neg	✓
	19.76	Pos	26.74	Pos	ND	Neg	26.15	Pos	19.57	Pos	ND	Neg	✓
	21.78	Pos	28.20	Pos	0.00	Neg	28.68	Pos	22.32	Pos	0.00	Neg	✓
	21.09	Pos	26.49	Pos	-	Neg	25.97	Pos	20.73	Pos	-	Neg	✓
	20.15	Pos	25.42	Pos	>50	Neg	25.43	Pos	20.09	Pos	>50	Neg	✓
	24.00	Pos	29.80	Pos	N/A	Neg	29.50	Pos	23.90	Pos	N/A	Neg	√
	21.50	Pos	26.91	Pos	0.00	Neg	26.58	Pos	21.55	Pos	0.00	Neg	✓
	27.08	Pos	32.84	Pos	45.00	Neg	31.67	Pos	27.22	Pos	45.00	Neg	✓
	22.40	Pos	26.99	Pos	N/A	Neg	25.28	Pos	21.28	Pos	N/A	Neg	✓
	21.67	Pos	30.13	Pos	NIL	Neg	28.04	Pos	21.99	Pos	NIL	Neg	✓
Consensus Interpretation	Positive Positive		Negative	Negative Positive		Positive		Negative					

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

Control Status: Current Uncontrolled when printed

Authorised By: Rose Kursun Version: 1.0 Date: 26/01/2022

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SECTION 7: Rose Bengal Plate Test (RBPT)

Brucella abortus (BB) RBPT

Authorised By: Rose Kursun Version: 1.0 Date: 26/01/2022

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Report Date 24/04/2020

Report Date	24/04/2020					
Report Status	Final Report					
Test Name	B. abortus RBPT					
Test Number (Code)	20/06					
Test Month and Year	March 2020					

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

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

Authorised By: Rose Kursun Version: 1.0 Date: 26/01/2022

SECTION 8: Serum Agglutination Test (SAT)

Brucella abortus (BB) SAT

Authorised By: Rose Kursun Version: 1.0 Date: 26/01/2022

Control Status: Current Uncontrolled when printed

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Report Date	09/06/2021					
Report Status	Final Retest Report					
Test Name	B. abortus SAT					
Test Number (Code)	20/32					
Test Month and Year	July 2020					

Laboratory Number	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Classification				
	1384.00	106.00	Neg <17 IU	1280.00	Neg <17IU	106.00	✓				
	875.00	77.00	Neg <12 IU	1000.00	Neg <12 IU	77.00	✓				
	640.00	30.00	Neg	640.00	Neg	40.00	Samples 2 & 6 - R Samples 1, 3, 4 & 5 - ✓				
	985.00	62.00	Neg 11 IU/mL	985.00	Neg 11 IU/mL	103.00	✓				
	1280.00	134.00	Neg	1488.00	Neg	106.00	✓				
	240.00	60.00	Neg <30IU/ml	240.00	Neg <30IU/ml	60.00	Samples 1 & 4 - R Samples 2, 3, 5 & 6 - ✓				
Median	Positive 928.37 IU/mL	Positive 69.09 IU/mL	Negative	Positive 992.47 IU/mL	Negative	Positive 89.06 IU/mL					
Acceptable Variation Range	Positive 464.19 - 1856.74 IU/mL	Positive 34.55 - 138.19 IU/mL	N/A	Positive 496.24 - 1984.94 IU/mL	N/A	Positive 44.53 - 178.11 IU/mL					
Laboratory Number		Retest Results									
	-	67.00	-	-	-	67.00	Samples 2 & 6 - R ✓				
	960.00	-	-	1920.00	-	-	Samples 1 & 4 - R ✓				

One laboratory was classified as Retest Result Satisfactory (\mathbb{R}^{\checkmark}) for Samples 2 and 6. One laboratory was classified as Retest Result Satisfactory (\mathbb{R}^{\checkmark}) for Samples 1 and 4. All other laboratories and results were classified as Result Satisfactory (\checkmark) for this test.

Authorised By: Rose Kursun Version: 1.0 Date: 26/01/2022

SECTION 9: Isolation

Bovine Viral Diarrhoea virus (BVDV) Isolation

Authorised By: Rose Kursun Version: 1.0 Date: 26/01/2022

Control Status: Current Uncontrolled when printed

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Report Date	20/08/2020
Report Status	Final Report
Test Name	BVDV Isolation
Test Number (Code)	20/19
Test Month and Year	May 2020

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

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.

Authorised By: Rose Kursun Version: 1.0 Date: 26/01/2022

SECTION 10: Virus Neutralisation Test (VNT)

Aino VNT

Akabane VNT

Bluetongue vrius serotyp 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

Authorised By: Rose Kursun Version: 1.0 Date: 26/01/2022

Control Status: Current Uncontrolled when printed

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Report Date	21/05/2020
Report Status	Final Retest Report *Amended
Test Name	Aino VNT
Test Number (Code)	20/01
Test Month and Year	February 2020

Laboratory Number	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Classification
	20.00	Neg	20.00	20.00	Neg	40.00	✓
	32.00	Neg <4	32.00	32.00	Neg <4	32.00	✓
	18.00	Neg @ 1:10	64.00	40.00	Neg @ 1:10	30.00	✓
	75.00	Neg @ 1:4	31.00	53.00	Neg @ 1:4	37.00	Sample 1 - R Samples 2, 3, 4, 5 & 6 - ✓
	45.00	Neg <2	36.00	29.00	Neg <2	45.00	✓
Median	Positive 1/32.00	Negative	Positive 1/32.00	Positive 1/32.00	Negative	Positive 1/37.00	
Acceptable Variation Range	Positive 1/16.00 - 1/64.00	N/A	Positive 1/16.00 - 1/64.00	Positive 1/16.00 - 1/64.00	N/A	Positive 1/18.50 - 1/74.00	
Laboratory Number	Retest Results						Classification
	80.00	-	-	-	-	-	Sample 1 - Rm

One laboratory was classified as Retest Result Demonstrating Minor Variation (Rm) for Sample 1. All other laboratories and results were classified as Result Satisfactory (\checkmark) for this test. Note: Report was amended due to miscalculation of the acceptable variation range for Samples 3 and 4.

Authorised By: Rose KursunVersion: 1.0Date: 26/01/2022

Report Date 10/03/2021
Report Status Final Retest Report
Test Name Akabane VNT
Test Number (Code) 20/12
Test Month and Year April 2020

Laboratory Number	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Classification
	48.00	40.00	Neg <4	Neg <4	36.00	24.00	✓
	32.00	32.00	Neg	Neg	8.00	32.00	Sample 5 - R Samples 1, 2, 3, 4 & 6 - ✓
	16.00	32.00	Neg <4	Neg <4	16.00	16.00	✓
							See comment
	45.00	38.00	Neg @ 1:4	Neg @ 1:4	64.00	54.00	Sample 5 - R Samples 1, 2, 3, 4 & 6 - ✓
	32.00	45.00	Neg <2	Neg <2	23.00	64.00	✓
Median	Positive 1/32.00	Positive 1/38.00	Negative	Negative	Positive 1/23.00	Positive 1/32.00	
Acceptable Variation Range	Positive 1/16.00 - 1/64.00	Positive 1/19.00 - 1/76.00	N/A	N/A	Positive 1/11.50 - 1/46.00	Positive 1/16.00 - 1/64.00	
Laboratory Number			Classification				
	-	-	-	-	32.00	-	Sample 5 - R√
	-	-	-	-	45.00	-	Sample 5 - R √

Comment: One Laboratory did not report any results.

Two laboratories were classified as Retest Result Satisfactory (R✓) for Sample 5.

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

Authorised By: Rose Kursun Version: 1.0 Date: 26/01/2022

Report Date25/03/2020Report StatusFinal ReportTest NameBTV-1 VNTTest Number (Code)20/03Test Month and YearFebruary 2020

Laboratory Number	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Classification
	Neg <4	18.00	40.00	Neg <4	72.00	144.00	✓
	Neg <5	40	80	Neg <5	20	80	✓
Median	Negative	Positive 1/26.83	Positive 1/56.57	Negative	Positive 1/37.95	Positive 1/107.33	
Acceptable Variation Range	N/A	Positive 1/13.42 - 1/53.66	Positive 1/28.29 - 1/113.14	N/A	Positive 1/18.98 - 1/75.9	Positive 1/53.67 - 1/214.66	

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

Authorised By: Rose Kursun Version: 1.0 Date: 26/01/2022

Report Date10/03/2021Report StatusFinal Retest ReportTest NameBEF VNTTest Number (Code)20/11Test Month and YearApril 2020

Laboratory Number	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Classification
	Neg <4	384.00	Neg <4	128.00	80.00	96.00	Samples 2, 4 & 6 - R Samples 1, 3 & 5 - ✓
	Neg	80.00	Neg	40.00	20.00	20.00	Samples 5 & 6 - R Samples 1, 2, 3 & 4 - ✓
	Neg <4	64.00	Neg <4	32.00	64.00	32.00	✓
							See comment
	Neg @ 1:4	110.00	Neg @ 1:4	31.00	32.00	45.00	✓
	Neg <2	256.00	Neg <2	64.00	91.00	64.00	Sample 2 - R Samples 1, 3, 4, 5 & 6 - ✓
Median	Negative	Positive 1/110.00	Negative	Positive 1/40.00	Positive 1/64.00	Positive 1/45.00	
Acceptable Variation Range	N/A	Positive 1/55.00 - 1/220.00	N/A	Positive 1/20.00 - 1-80.00	Positive 1/32.00 - 1/128.00	Positive 1/22.50 - 1/90.00	
Laboratory Number	Retest Results						Classification
	-	288.00	-	80.00	-	76.00	Sample 2 - Rm Samples 4 & 6 - R√
	-	-	-	-	40.00	40.00	Samples 5 & 6 - R✓
		362.00		_	-		Sample 2 - Rm

Comment: One Laboratory did not report any results.

One laboratory was classified as Retest Result Demonstrating Minor Variation (Rm) for Sample 2 and Retest Result Satisfactory ($R\checkmark$) for Samples 4 and 6.

One laboratory was classified as Retest Result Satisfactory (R✓) for Samples 5 and 6.

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

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

Authorised By: Rose Kursun Version: 1.0 Date: 26/01/2022

Report Date 18/03/2021

Report Status Final Report

Tost Name RVDV VNT

Report Status	Final Report
Test Name	BVDV VNT
Test Number (Code)	20/30
Test Month and Year	July 2020

Laboratory Number	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Classification
	4096.00	96.00	96.00	Neg <1:2	128.00	Neg <1:2	✓
	8192.00	64.00	128.00	Neg	64.00	Neg	✓
	2048.00	64.00	128.00	Neg <4	64.00	Neg <4	✓
	8192.00	112.00	224.00	Neg @ 1:4	128.00	Neg @ 1:4	✓
	4096.00	89.00	128.00	Neg @ 1:2	89.00	Neg @ 1:2	✓
							See comment
Median	Positive 1/4096.00	Positive 1/89.00	Positive 1/128.00	Negative	Positive 1/89.00	Negative	
Acceptable Variation Range	Positive 1/2048.00 - 1/8192.00	Positive 1/44.50 - 1/178.00	Positive 1/64.00 - 1/256.00	N/A	Positive 1/44.50 - 1/178.00	N/A	

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

Authorised By: Rose Kursun Version: 1.0 Date: 26/01/2022

Report Date 25/03/2021

Roport Date	20/00/2021			
Report Status	Final Report			
Test Name	EVA VNT			
Test Number (Code)	20/36			
Test Month and Year	August 2020			

Laboratory Number	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Classification
	Neg < 1:2	512.00	512.00	Neg < 1:2	Neg < 1:2	256.00	Samples 1, 4 & 5 - ✓ Sample 2 - U Samples 3 & 6 - MV
	Neg	16.00	64.00	Neg	Neg	32.00	Samples 1, 4 & 5 - ✓ Samples 2, 3 & 6 - MV
	Neg @ 1/4	64.00	256.00	Neg @ 1/4	Neg @ 1/4	32.00	Samples 1-5 - √ Sample 6 - MV
	Neg @ 1:4	78.00	125.00	Neg @ 1:4	Neg @ 1:4	78.00	✓
	Neg <2	57.00	181.00	Neg <2	Neg <2	91.00	✓
Median	Negative	Positive 1/64.00	Positive 1/181.00	Negative	Negative	Positive 1/78.00	
Acceptable Variation Range	N/A	Positive 1/32.00 - 1/128.00	Positive 1/90.50 - 1/362.00	N/A	N/A	Positive 1/39.00 - 1/156.00	

Note: Due to low serum stock availability, retests or replacement samples were not available for this test round. One laboratory was classified as Result Unacceptable (U) for Sample 2 and Result Demonstrating Minor Variation (MV) for Samples 3 and 6.

One laboratory was classified as Result Demonstrating Minor Variation (MV) for Samples 2, 3 and 6.

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

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

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Report Date	19/06/2020
Report Status	Final Retest Report
Test Name	IBR VNT
Test Number (Code)	20/08
Test Month and Year	March 2020

Laboratory Number	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Classification
	384.00	384.00	Neg <1	Neg <1	192.00	256.00	✓
	512.00	384.00	Neg <1:1	Neg <1:1	512.00	384.00	✓
	512.00	1024.00	Neg	Neg	512.00	512.00	Sample 2 - R Samples 1, 3-6 - ✓
	64.00	128.00	Neg <4	Neg <4	128.00	128.00	Samples 1, 2, 5 & 6 - R Samples 3 & 4 - ✓
	448.00	512.00	Neg	Neg	384.00	320.00	✓
	512.00	426.00	Neg @ 1:2	Neg @ 1:2	355.00	426.00	✓
	181.00	362.00	Neg <2	Neg <2	228.00	362.00	Sample 1 - R Samples 2-6 - √
Median	Positive 1/448.00	Positive 1/384.00	Negative	Negative	Positive 1/355.00	Positive 1/362.00	
Acceptable Variation Range	Positive 1/224.00 - 1/896.00	Positive 1/192.00 - 1/768.00	N/A	N/A	Positive 1/177.50 - 1/710.00	Positive 1/181.00 - 1/724.00	
Laboratory Number	Retest Results						Classification
	-	256.00	-	-	-	-	Sample 2 - R√
	128.00	128.00	-	-	64.00	64.00	Samples 1 & 2 - Rm Samples 5 & 6 - RU
	91.00	-	-	-	-	-	Sample 1 - RU

One laboratory was classified as Retest Result Satisfactory (R✓) for Sample 2.

One laboratory was classified as Retest Result Demonstrating Minor Variation (Rm) for Samples 1 and 2 and Retest Result Unacceptable (RU) for Samples 5 and 6.

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

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

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SECTION 11: Culture and Identification of *Mycobacterium paratuberculosis*

Authorised By: Rose Kursun Version: 1.0 Date: 26/01/2022

Report Date 05/08/2021
Report Status Final Report
Test Name JD Bovine Culture 2020
Test Number 20/25
Test Month and Year June 2020

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

Note: Retest samples were not available for this round.

Two laboratories were classified as Result Unacceptable (U) for Samples 2, 3 and 6.

One laboratory was classified as Result Unacceptable (U) for Sample 2.

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

Authorised By: Rose Kursun Version: 1.0 Date: 26/01/2022

Report Date	05/08/2021			
Report Status	Final Report			
Test Name	JD Ovine Culture 2020			
Test Number	20/26			
Test Month and Year	June 2020			

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

Note: Retest samples were not available for this round.

One laboratory was classified as Result Unacceptable (U) for Samples 1, 4 and 6.

One laboratory was classified as Result Unacceptable (U) for Sample 2.

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

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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.

Telephone Number: (03) 9032 7024/7023 angap.quality@ecodev.vic.gov.au

www.anqap.com

End of Report

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