

PADLŚ - PVL Pennsylvania Veterinary Laboratory 2305 N. Cameron St

Harrisburg PA 17110 Phone: (717) 787-8808 Visit us online at http://padls.agriculture.pa.gov/

Report Date: 1/28/2022

**Final Report** 

Date Submitted: 1/26/2022 Case Coordinator: Dave Thompson Accession No: \$2202358

Collection Date: 1/24/2022

LEHIGHTON PA 18235

### **Associated Parties**

Veterinarian	JUSTIN L CUNFER	Vet Code:021383, BV012558
Vet Practice	CUNFER VETERINARY SERVICES	
Owner	GRETCHEN KOCHER	

#### **Reference Data**

Sample: BLOOD (13)

# Lab Findings

### **Mammalian Serology**

Specimen	Test Name	Result	S/P	PI	S-N
PEANUT - Mammalian - Ca	prine / goat - Goat - Nigerian Dwarf - Female				
Tube or Vial - Serum - 1	Caseous Lymphadenitis (SHI)	Negative			
	Mycobacterium paratuberculosis : Johne's Disease (ELISA)	NEG	-0.004		
	Small ruminant lentivirus (cELISA)	NEG		2.8	
TOBY - Mammalian - Capri	ne / goat - Goat - Nigerian Dwarf - Neutered				
Tube or Vial - Serum - 2	Caseous Lymphadenitis (SHI)	Negative			
	Mycobacterium paratuberculosis : Johne's Disease (ELISA)	NEG	-0.003		
	Small ruminant lentivirus (cELISA)	NEG		1.2	
TRIXIE - Mammalian - Cap	rine / goat - Goat - Nigerian Dwarf - Female				
Tube or Vial - Serum - 3	Caseous Lymphadenitis (SHI)	Negative			
	Mycobacterium paratuberculosis : Johne's Disease (ELISA)	NEG	-0.003		
	Small ruminant lentivirus (cELISA)	NEG		3.1	
BELLE - Mammalian - Capi	rine / goat - Goat - Nigerian Dwarf - Female				
Tube or Vial - Serum - 4	Caseous Lymphadenitis (SHI)	Negative			
	Mycobacterium paratuberculosis : Johne's Disease (ELISA)	NEG	-0.004		
	Small ruminant lentivirus (cELISA)	NEG		-1.7	
MOHAWK - Mammalian - C	Caprine / goat - Goat - Nigerian Dwarf - Neutered				
Tube or Vial - Serum - 5	Caseous Lymphadenitis (SHI)	Negative			
	Mycobacterium paratuberculosis : Johne's Disease (ELISA)	NEG	-0.004		
	Small ruminant lentivirus (cELISA)	NEG		-6.9	
SMOOCH - Mammalian - C	aprine / goat - Goat - Nigerian Dwarf - Neutered				
Tube or Vial - Serum - 6	Caseous Lymphadenitis (SHI)	Negative			
	Mycobacterium paratuberculosis : Johne's Disease (ELISA)	NEG	-0.005		
	Small ruminant lentivirus (cELISA)	NEG		-4.5	



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Phone: (	$(717)^{-1}$	787-8808	

Specimen	Test Name	Result	S/P	PI	S-N
BOURBON - Mammalian -	Caprine / goat - Goat - Nigerian Dwarf - Male				
Tube or Vial - Serum - 7	Caseous Lymphadenitis (SHI)	Negative			
	Mycobacterium paratuberculosis : Johne's Disease (ELISA)	NEG	0.004		
	Small ruminant lentivirus (cELISA)	NEG		0.2	
JINSING - Mammalian - Ca	prine / goat - Goat - Nigerian Dwarf - Female				
Tube or Vial - Serum - 8	Caseous Lymphadenitis (SHI)	Negative			
	Mycobacterium paratuberculosis : Johne's Disease (ELISA)	NEG	-0.003		
	Small ruminant lentivirus (cELISA)	NEG		9.3	
AZAELA - Mammalian - Ca	prine / goat - Goat - Nigerian Dwarf - Female				
Tube or Vial - Serum - 9	Caseous Lymphadenitis (SHI)	Negative			
	Mycobacterium paratuberculosis : Johne's Disease (ELISA)	NEG	0.003		
	Small ruminant lentivirus (cELISA)	NEG		1.9	
JASMINE - Mammalian - Ca	aprine / goat - Goat - Nigerian Dwarf - Female				
Tube or Vial - Serum - 10	Caseous Lymphadenitis (SHI)	Negative			
	Mycobacterium paratuberculosis : Johne's Disease (ELISA)	NEG	-0.002		
	Small ruminant lentivirus (cELISA)	NEG		17.7	
RAPUNZEL - Mammalian -	Caprine / goat - Goat - Nigerian Dwarf - Female				
Tube or Vial - Serum - 11	Bovine pregnancy test (IDEXX ELISA)	Pregnant			1.888
	Caseous Lymphadenitis (SHI)	Negative			
	Mycobacterium paratuberculosis : Johne's Disease (ELISA)	NEG	-0.002		
	Small ruminant lentivirus (cELISA)	NEG		4.6	
MISTY - Mammalian - Capr	ine / goat - Goat - Nigerian Dwarf - Female				
Tube or Vial - Serum - 12	Bovine pregnancy test (IDEXX ELISA)	Pregnant			1.498
ELLA - Mammalian - Capri	ne / goat - Goat - Nigerian Dwarf - Female				
Tube or Vial - Serum - 13	Bovine pregnancy test (IDEXX ELISA)	Pregnant			2.124

Bovine pregnancy test(IDEXX ELISA):

The pregnancy status of the animal was determined by measuring the levels of Pregnancy Associated Glycoproteins (PAGs) in the submitted blood sample. The level of PAGs is measured by corrected optical density (OD) value (also called S-N) using IDEXX Bovine Pregnancy ELISA test.

S-N = Sample OD minus negative control mean OD

- a. If the S-N value is less than 0.300, the animal is considered not pregnant (open).
- b. If the S-N value is equal to or greater than 0.300, the animal is considered pregnant.

**Pregnant Recheck (validated in cattle only):** Embryonic deaths are common in the early stages of cow pregnancy and PAGs can circulate in blood for some time after early embryonic death. An optional recheck of the animal 7 to 10 days later is recommended if the S-N value is equal to or greater than 0.300 and less than 1.000.

The IDEXX assay has been shown to have 99.3% Sensitivity (95% CL: 98.3%-99.7%) and 93.8% Specificity (95% CL: 91.2%-95.7%) for determining pregnancy in cows. The assay has been validated for the detection of pregnancy status in the following species with indicated specimen types.

- Cattle serum or EDTA plasma from 28 days post-breeding and from 60 days post calving
- Buffalo EDTA plasma from 30 days post-breeding and from 60 days post calving
- Goats serum from 28 days post breeding



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Small ruminant lentivirus(cELISA):

Sheep serum - from 35 days post breeding

The Small Ruminant Lentivirus (SRLV) Antibody Test Kit, cELISA is a competitive, enzyme-linked, immunosorbent assay that detects antibodies to caprine arthritis encephalitis (CAEV) in goat sera or ovine progressive pneumonia virus (OPPV) in sheep sera. Serum samples with percent inhibition (PI) of equal to or greater than 35%, are classified "POSITIVE". Serum samples with percent inhibition (PI) of less than 35%, are classified as "NEGATIVE".

Mycobacterium paratuberculosis : Johne's Disease(ELISA):

ELISA test for Johne's disease measures antibody response in milk and serum. To control or monitor Johne's disease, it is important to start with screening strategies like ELISA but use of organism based tests on rotational or combination basis ensures better success in management of the disease. Positive ELISA tests should be confirmed with organism based tests. Paired comparisons have shown that up to 5-6% animals that are positive with serum ELISA can still be negative on milk ELISA. Furthermore, some of the low shedders and rarely few high shedders may never be positive with Johne's Milk/Serum ELISA tests but still can keep spreading the disease on farms. Animals reported with S/P values >1.00 are more likely to have Johne's even though they may still be subclinical. All animals reported as suspect should be retested, monitored and/or followed with fecal culture to determine their infection status.

 $\label{eq:spect} Interpretation Serum Negative S/P = 0.45; Suspect > 0.45-0.55; Positive = 0.55 \\ Interpretation Milk Negative S/P = 0.20; Suspect < 0.20 - 0.30; Positive = 0.30 \\$ 

Caseous Lymphadenitis(SHI):

Detection of antibodies to Corynebacterium pseudotuberculosis exotoxin, the causative agent of caseous lymphadenitis, by synergistic hemolysin inhibition, performed at 1:8, 1:16, 1:32 and 1:64 dilutions. Positive samples with titers listed as 64 are actually > or = to 1:64.

The SHI test is intended as a herd test since the results for an individual animal can be misinterpreted. SHI cannot distinguish between field exposure, resolved infection or vaccination antibodies. Recently infected animals may not elicit a detectable antibody response. Kids and lambs should be at least 6 months old before testing because of the possible presence of maternal antibodies. For biosecurity purposes, it is recommended that new animals be tested for CLA prior to introducing them into a herd. It is preferable to test the herd of origin. Herds with a high incidence of positive SHI results strongly suggest the presence of the bacterium. Testing the blood of new animals before they are introduced to a herd or flock can reduce the likelihood of introducing a carrier animal.

#### **General Results**

The IDEXX ELISA kit was used for Johne's disease testing. The kit is not currently approved in the US but is approved in Europe for the diagnosis of ovine and caprine Johne's disease. The sensitivity of the ELISA in sheep and goats for Johne's diagnosis is 34.9% and 56.4%, with a specificity of 98.8% and 100.0%, respectively. The test has higher sensitivity than the AGID test and uses a cut-off value of =0.55 for positives. Fecal samples from suspect or positive animals can be cultured or tested by PCR for confirming the disease diagnosis.

Corynebacterium pseudotuberculosis infections can lead to false positives due to cross-reactive antibodies. The possibility of animals having caseous lymphadenitis (CL) or a previous exposure should also be considered when assessing Johne's ELISA positive lab results.

#### **Client Report History**

Report Type	Delivery Method	Sent To	Date Sent
Final	Email		1/28/2022 3:59 PM



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Report Date: 5/18/2022

**Final Report** 

Date Submitted: 5/13/2022 Case Coordinator: Dave Thompson Accession No: \$2214957 Collection Date: 5/9/2022

**CUNFER VETERINARY SERVICES** 

#### **Associated Parties**

Veterinarian	JUSTIN L CUNFER	Vet Code:021383, BV012558
Vet Practice	CUNFER VETERINARY SERVICES	
Owner	GRETCHEN KOCHER	

#### Reference Data

Sample: BLOOD (2)

### Lab Findings

#### Mammalian Serology

Specimen	ecimen Test Name		S/P	PI
MERCY - Mammalian - Caprine / goat - Goat - Nigerian Dwarf - Female - 1 Years				
Serum Separator - Serum - 1 Caseous Lymphadenitis (SHI)		Negative		
Mycobacterium paratuberculosis : Johne's Disease (ELISA)		NEG	0.002	
	Small ruminant lentivirus (cELISA)	NEG		0.1

PIPSQUEAK - Mammalian - Caprine / goat - Goat - Nigerian Dwarf - Female - 1 Years					
Serum Separator - Serum - 2	ım Separator - Serum - 2 Caseous Lymphadenitis (SHI) Negative				
Mycobacterium paratuberculosis : Johne's Disease (ELISA) NEG		NEG	0		
Small ruminant lentivirus (cELISA) NEG 4.			4.1		

Small ruminant lentivirus(cELISA):

The Small Ruminant Lentivirus (SRLV) Antibody Test Kit, cELISA is a competitive, enzyme-linked, immunosorbent assay that detects antibodies to caprine arthritis encephalitis (CAEV) in goat sera or ovine progressive pneumonia virus (OPPV) in sheep sera. Serum samples with percent inhibition (PI) of equal to or greater than 35%, are classified "POSITIVE". Serum samples with percent inhibition (PI) of less than 35%, are classified as "NEGATIVE".

Mycobacterium paratuberculosis : Johne's Disease(ELISA):

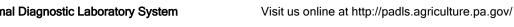
ELISA test for Johne's disease measures antibody response in milk and serum. To control or monitor Johne's disease, it is important to start with screening strategies like ELISA but use of organism based tests on rotational or combination basis ensures better success in management of the disease. Positive ELISA tests should be confirmed with organism based tests. Paired comparisons have shown that up to 5-6% animals that are positive with serum ELISA can still be negative on milk ELISA. Furthermore, some of the low shedders and rarely few high shedders may never be positive with Johne's Milk/Serum ELISA tests but still can keep spreading the disease on farms. Animals reported with S/P values >1.00 are more likely to have Johne's even though they may still be subclinical. All animals reported as suspect should be retested, monitored and/or followed with fecal culture to determine their infection status.

Interpretation Serum Negative S/P = 0.45; Suspect > 0.45-0.55; Positive =0.55Interpretation Milk Negative S/P = 0.20; Suspect < 0.20 - 0.30; Positive =0.30

Caseous Lymphadenitis(SHI):

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64 are actually > or = to 1:64.

The SHI test is intended as a herd test since the results for an individual animal can be misinterpreted. SHI cannot distinguish between field exposure, resolved infection or vaccination antibodies. Recently infected animals may not elicit a detectable antibody response. Kids and lambs should be at least 6 months old before testing because of the possible presence of maternal antibodies. For biosecurity purposes, it is recommended that new animals be tested for CLA prior to introducing them into a herd. It is preferable to test the herd of origin. Herds with a high incidence of positive SHI results strongly suggest the presence of the bacterium. Testing the blood of new animals before they are introduced to a herd or flock can reduce the likelihood of introducing a carrier animal.

#### **General Results**

The IDEXX ELISA kit was used for Johne's disease testing. The kit is not currently approved in the US but is approved in Europe for the diagnosis of ovine and caprine Johne's disease. The sensitivity of the ELISA in sheep and goats for Johne's diagnosis is 34.9% and 56.4%, with a specificity of 98.8% and 100.0%, respectively. The test has higher sensitivity than the AGID test and uses a cut-off value of = 0.55 for positives. Fecal samples from suspect or positive animals can be cultured or tested by PCR for confirming the disease diagnosis.

Corynebacterium pseudotuberculosis infections can lead to false positives due to cross-reactive antibodies. The possibility of animals having caseous lymphadenitis (CL) or a previous exposure should also be considered when assessing Johne's ELISA positive lab results.

#### **Client Report History**

Report Type	Delivery Method	Sent To	Date Sent
Final	Email	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	5/18/2022 3:41 PM



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Report Date: 11/2/2022

**Final Report** 

Date Submitted: 10/28/2022 Case Coordinator: Dave Thompson Accession No: \$2236895

Collection Date: 10/24/2022

CUNFER VETERINARY SERVICES

#### **Associated Parties**

Veterinarian	JUSTIN L CUNFER	Vet Code:021383, BV012558
Vet Practice	CUNFER VETERINARY SERVICES	
Owner	GRETCHEN KOCHER	

# Reference Data

Sample: 1 blood

### Lab Findings

#### Mammalian Serology

	•••			
Specimen	Test Name	Result	S/P	PI
LADY WALHE	RS ALPHA LYNCIS - Mammalian - Caprine / goat - Goat - Nigerian Dwarf - Male -	1 Years		
Blood - 1	Caseous Lymphadenitis (SHI)	Negative		
	Mycobacterium paratuberculosis : Johne's Disease (ELISA)	NEG	-0.001	
	The IDEXX ELISA kit was used for Johne's disease testing. The l	kit is not curre	ntly approv	ved in
	the US but is approved in Europe for the diagnosis of ovine and ca	prine Johne's	disease. The	he
	sensitivity of the ELISA in sheep and goats for Johne's diagnosis i	s 34.9% and 5	6.4%, with	a
	specificity of 98.8% and 100.0%, respectively. The test has higher	sensitivity that	an the AGI	D test
	and uses a cut-off value of $= 0.55$ for positives. Fecal samples from	suspect or po	sitive anin	nals
	can be cultured or tested by PCR for confirming the disease diagno			
	Corynebacterium pseudotuberculosis infections can lead to false p	ositives due to	cross-reac	tive
	antibodies. The possibility of animals having caseous lymphadenit	is (CL) or a pr	evious exp	osure
	should also be considered when assessing Johne's ELISA positive	lab results.		
	Small ruminant lentivirus (cFLISA)	NFG		0.4

Small ruminant lentivirus(cELISA):

The Small Ruminant Lentivirus (SRLV) Antibody Test Kit, cELISA is a competitive, enzyme-linked, immunosorbent assay that detects antibodies to caprine arthritis encephalitis (CAEV) in goat sera or ovine progressive pneumonia virus (OPPV) in sheep sera. Serum samples with percent inhibition (PI) of equal to or greater than 35%, are classified "POSITIVE". Serum samples with percent inhibition (PI) of less than 35%, are classified as "NEGATIVE".

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be retested, monitored and/or followed with fecal culture to determine their infection status.

Interpretation Serum Negative S/P = 0.45; Suspect > 0.45-0.55; Positive =0.55

Interpretation Milk Negative S/P = 0.20; Suspect < 0.20 - 0.30; Positive =0.30

Caseous Lymphadenitis(SHI):

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# **Client Report History**

Report Type	Delivery Method	Sent To	Date Sent
Final	Email	XXX44444644444444444444444444444444444	11/2/2022 2:57 PM

# Washington Animal Disease Diagnostic Lab

P.O. Box 647034 Pullman, WA 99164-7034 Telephone : (509) 335-9696

Fax: (509) 335-7424

Case#: 2022-7748 Report Date: 05/26/22

Age: 2 Years

Sex: Male

Reference: Chance

# JW-TL Farms

# Carencro, LA 70520

Submittal Date: 05/21/22 Owner: Winch, Jon-Ross Species: Domestic Goat Breed: Nigerian Dwarf Goat

# Final Report:

# Serology- Reported on 05/26/22 Authorized by Claire Burbick, Section Head

Please see Serology test interpretation comments at end of report

Sample	Animal	Caseous
1 A Serum	Chance	Neg

# Johne's Disease by ELISA

Specimen	Animal	SP ratio	Result
1 A Blood, Clotted	Chance	-0.002	Negative

# Lentivirus ELISA goats/sheep

Specimen	Animal	% I 4.626	Result Negative
1 A Blood, Clotted	Chance		

# Johne's Disease by ELISA: SOP-SERO-27

Negative: Antibodies to M. paratuberculosis were not detected. The animal is either not infected or in a very early, undetectable stage of infection.

Suspect: Low level of serum antibodies but above normal background levels. The animal may be in the early stages of infection. Cattle with this result are roughly 15 times more likely to be M. paratuberculosis infected than ELISA negative animals. Fecal culture or repeat serologic testing needed to resolve status.

Positive: Serum (cattle, goats, sheep)/milk (cattle only) antibodies to M. paratuberculosis detected. This animal is likely to be shedding the bacterium in its feces and possibly in its milk. Recommend animal be segregated.