



Pennsylvania Animal Diagnostic Laboratory System
PADLS - PVL
Pennsylvania Veterinary Laboratory
2305 N. Cameron St
Harrisburg PA 17110
Phone: (717) 787-8808

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Report Date: 1/26/2021

Final Report

Date Submitted: 1/14/2021
Collection Date: 1/12/2021

Case Coordinator: Dave Thompson

Accession No: S2101128

GRETCHEN KOCHER
2669 FAIR RD
AUBURN PA 17922

Phone: (570) 573-9782

Associated Parties

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

Reference Data

Sample: 5 SERUM

Lab Findings

Mammalian Serology

| Specimen | Test Name | Result | S/P | PI | S-N |
|---|--|----------|-------|------|-------|
| POP ROCKS - Mammalian - Caprine / goat - Goat - Nigerian Dwarf - Male - Adult | | | | | |
| Blood - 1 | Caseous Lymphadenitis (SHI) | Negative | | | |
| | Mycobacterium paratuberculosis : Johne's Disease (ELISA) | NEG | 0.006 | | |
| | Small ruminant lentivirus (cELISA) | NEG | | -0.8 | |
| JINSING - Mammalian - Caprine / goat - Goat - Nigerian Dwarf - Female - Adult | | | | | |
| Blood - 2 | Bovine pregnancy test (IDEXX ELISA) | Pregnant | | | 4.164 |
| | Caseous Lymphadenitis (SHI) | Negative | | | |
| | Mycobacterium paratuberculosis : Johne's Disease (ELISA) | NEG | 0.000 | | |
| | Small ruminant lentivirus (cELISA) | NEG | | -2.7 | |
| BELLE - Mammalian - Caprine / goat - Goat - Nigerian Dwarf - Female - Adult | | | | | |
| Blood - 3 | Bovine pregnancy test (IDEXX ELISA) | Open | | | 0.034 |
| | Caseous Lymphadenitis (SHI) | Negative | | | |
| | Mycobacterium paratuberculosis : Johne's Disease (ELISA) | NEG | 0.000 | | |
| | Small ruminant lentivirus (cELISA) | NEG | | 1.0 | |
| MINI - Mammalian - Caprine / goat - Goat - Nigerian Dwarf - Female - Adult | | | | | |
| Blood - 4 | Bovine pregnancy test (IDEXX ELISA) | Pregnant | | | 2.248 |
| | Caseous Lymphadenitis (SHI) | Negative | | | |
| | Mycobacterium paratuberculosis : Johne's Disease (ELISA) | NEG | 0.000 | | |
| | Small ruminant lentivirus (cELISA) | NEG | | 2.9 | |
| TRIXIE - Mammalian - Caprine / goat - Goat - Nigerian Dwarf - Female - Adult | | | | | |
| Blood - 5 | Bovine pregnancy test (IDEXX ELISA) | Pregnant | | | 3.643 |
| | Caseous Lymphadenitis (SHI) | Negative | | | |
| | Mycobacterium paratuberculosis : Johne's Disease (ELISA) | NEG | 0.000 | | |
| | Small ruminant lentivirus (cELISA) | NEG | | -0.8 | |

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





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Report Date: 2/19/2021

Final Report

Date Submitted: 2/11/2021

Case Coordinator: Dave Thompson

Accession No: S2103514

Collection Date: 2/8/2021

CUNFER VETERINARY SERVICES
~~XXXXXXXXXX~~
LEHIGHTON PA 18235

Phone: ~~XXXXXXXXXX~~
Email: ~~XXXXXXXXXX@XXXXXXXXXX~~

Associated Parties

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

Reference Data

Sample: 7 blood

Lab Findings

Mammalian Serology

| Specimen | Test Name | Result | PI | S-N |
|--|--|----------|------|-------|
| BOURBON - Mammalian - Caprine / goat - Goat - Nigerian Dwarf - Male - Adult | | | | |
| Blood - 1 | Caseous Lymphadenitis (SHI) | Negative | | |
| | Mycobacterium paratuberculosis : Johne's Disease (ELISA) | Negative | | |
| | Small ruminant lentivirus (cELISA) | NEG | 2.0 | |
| MO - Mammalian - Caprine / goat - Goat - Nigerian Dwarf - Male - Adult | | | | |
| Blood - 2 | Caseous Lymphadenitis (SHI) | Negative | | |
| | Mycobacterium paratuberculosis : Johne's Disease (ELISA) | Negative | | |
| | Small ruminant lentivirus (cELISA) | NEG | -4.8 | |
| SMOOCH - Mammalian - Caprine / goat - Goat - Nigerian Dwarf - Male - Adult | | | | |
| Blood - 3 | Caseous Lymphadenitis (SHI) | Negative | | |
| | Mycobacterium paratuberculosis : Johne's Disease (ELISA) | Negative | | |
| | Small ruminant lentivirus (cELISA) | NEG | 1.5 | |
| TOBY - Mammalian - Caprine / goat - Goat - Nigerian Dwarf - Male - Adult | | | | |
| Blood - 4 | Caseous Lymphadenitis (SHI) | Negative | | |
| | Mycobacterium paratuberculosis : Johne's Disease (ELISA) | Negative | | |
| | Small ruminant lentivirus (cELISA) | NEG | 2.3 | |
| PEANUT - Mammalian - Caprine / goat - Goat - Nigerian Dwarf - Female - Adult | | | | |
| Blood - 5 | Caseous Lymphadenitis (SHI) | Negative | | |
| | Mycobacterium paratuberculosis : Johne's Disease (ELISA) | Negative | | |
| | Small ruminant lentivirus (cELISA) | NEG | 6.1 | |
| AZALEA - Mammalian - Caprine / goat - Goat - Nigerian Dwarf - Female - Adult | | | | |
| Blood - 6 | Caseous Lymphadenitis (SHI) | Negative | | |
| | Mycobacterium paratuberculosis : Johne's Disease (ELISA) | Negative | | |
| | Small ruminant lentivirus (cELISA) | NEG | 0.7 | |
| RAPUNZEL - Mammalian - Caprine / goat - Goat - Nigerian Dwarf - Female - Adult | | | | |
| Blood - 7 | Bovine pregnancy test (IDEXX ELISA) | Pregnant | | 2.141 |

Bovine pregnancy test(IDEXX The pregnancy status of the animal was determined by measuring the levels of





ELISA): 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
- **Sheep** serum - from 35 days post breeding

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 =0.55

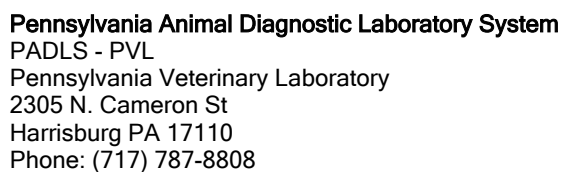
Interpretation Milk Negative S/P = 0.20; Suspect < 0.20 - 0.30; Positive =0.30

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.

| Report Type | Delivery Method | Sent To | Date Sent |
|-------------|-----------------|--------------------------------|-------------------|
| Final | Email | you@yourcompany.com | 2/19/2021 3:22 PM |





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Reference Data

Sample: 5 SERUM

Lab Findings

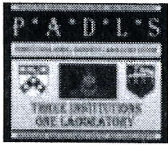
Mammalian Serology

| Specimen | Test Name | Result | S/P | PI | S-N |
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| POP ROCKS - Mammalian - Caprine / goat - Goat - Nigerian Dwarf - Male - Adult | | | | | |
| Blood - 1 | Caseous Lymphadenitis (SHI) | Negative | | | |
| | Mycobacterium paratuberculosis : Johne's Disease (ELISA) | NEG | 0.006 | | |
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| Blood - 3 | Bovine pregnancy test (IDEXX ELISA) | Open | | | 0.034 |
| | Caseous Lymphadenitis (SHI) | Negative | | | |
| | Mycobacterium paratuberculosis : Johne's Disease (ELISA) | NEG | 0.000 | | |
| | Small ruminant lentivirus (cELISA) | NEG | | 1.0 | |
| MINI - Mammalian - Caprine / goat - Goat - Nigerian Dwarf - Female - Adult | | | | | |
| Blood - 4 | Bovine pregnancy test (IDEXX ELISA) | Pregnant | | | 2.248 |
| | Caseous Lymphadenitis (SHI) | Negative | | | |
| | Mycobacterium paratuberculosis : Johne's Disease (ELISA) | NEG | 0.000 | | |
| | Small ruminant lentivirus (cELISA) | NEG | | 2.9 | |
| TRIXIE - Mammalian - Caprine / goat - Goat - Nigerian Dwarf - Female - Adult | | | | | |
| Blood - 5 | Bovine pregnancy test (IDEXX ELISA) | Pregnant | | | 3.643 |
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Bovine pregnancy test (IDEXX ELISA):

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Bovine Pregnancy ELISA test.

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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.

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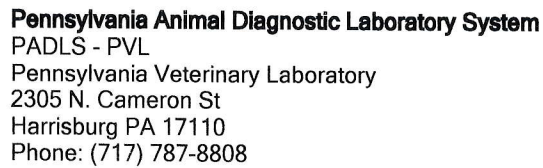
Interpretation Milk Negative S/P = 0.20; Suspect < 0.20 - 0.30; Positive =0.30

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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.

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

Client Report History

Accession Number: S2101128

