



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

NATIONAL VETERINARY SERVICES LABORATORIES
USDA-APHIS-VS-NVSL
DIAGNOSTIC BACTERIOLOGY LABORATORY
PATHOBIOLOGY LABORATORY
DIAGNOSTIC VIROLOGY LABORATORY
1920 Dayton Avenue
Ames, Iowa 50010
Dr. Elizabeth Lautner Phone: 515 663 7301

BIOLOGICAL

Valid to: January 31, 2013

Certificate Number: 2526.01

In recognition of the successful completion of the A2LA evaluation process (including an assessment of compliance with the A2LA Veterinary Laboratory Accreditation Program Requirements, containing the *OIE Quality Standard and Guidelines for Veterinary Laboratories: Infectious Diseases, 2008*) accreditation is granted to this laboratory to perform testing on animal sera, tissues and fluids, and environmental samples:

Tests

Test Methods

Diagnostic Bacteriology Laboratory

Anaplasma

cELISA

SOP-SERO-1040

Babesia caballi and *B. equi* (Piroplasmosis)

Competitive ELISA – Commercial Kit

SOP-SERO-1056

Competitive ELISA – In-house

SOP-SERO-1004

Complement Fixation

SOP-SERO-1001

Bacillus anthracis

Isolation and Identification

SOP-BACT-9003,

SOP-BACT-9004,

SOP-BACT-9005

Bacterial Identification and Isolation (General)

SOP-BACT-1001

Brucella spp.

Bacterial Isolation

Sample Processing, Solid Culture Media

SOP-MB-1002

Bacterial Identification

Biochemical Tests, Solid Culture,

SOP-MB-1003,

Rough/Smooth Determination

SOP-MB-1012

Gram Stain, PCR

SOP-MB-1023, SOP-MB-1014,

SOP-MB-1021

Genotyping/Variable Number of Tandem Repeats

SOP-MB-9135

Tests

Test Methods

<i>Brucella ovis</i> Indirect ELISA	SOP-SERO-1061
<i>Brucella canis</i> Indirect ELISA Agglutination Test	SOP-SERO-1033 SOP-SERO-1032
<i>Brucella melitensis</i> Card Test	SOP-SERO-1038
<i>Brucella abortus</i> and <i>B. melitensis</i> C-ELISA	SOP-SERO-1030
<i>Brucella abortus</i> Card Test Fluorescence Polarization Assay Complement Fixation Test Buffered Acidified Plate Antigen Test Rapid Automated Presumptive Test Rivanol Agglutination Test	SOP-SERO-1027 SOP-SERO-1050, SOP-SERO-1051 SOP-SERO-1022 SOP-SERO-1024 SOP-SERO-1028 SOP-SERO-1025
<i>Burkholderia mallei</i> and <i>B. pseudomallei</i> Isolation and Identification	SOPBU-BACT-0001
<i>Francisella tularensis</i> Agglutination	SERO-SOP-1039
<i>Leptospira</i> Microagglutination Test Isolation from Tissue and Urine	SOP-BTYP-4001 SOP-BTYP-7023
<i>Mycobacterium avium</i> , subsp. <i>paratuberculosis</i> (Johne's) Bacterial Isolation Sample Processing, Solid and Liquid Culture Media Bacterial Identification Culture PCR Direct PCR ELISA	SOP-MB-4019, SOP-MB-7034, SOP-MB-7035, SOP-MB-7036 SOP-MB-4010 SOP-MB-7039, SOP-MB-9046 SOP-SERO-1057, SOP-SERO-1058
<i>Mycobacterium bovis</i> Bacterial Isolation Solid Culture Media, BACTEC 460, MGIT Elephant Trunk Washes Bacterial Identification Biochemical Niacin/Nitrate Utilization GEN-PROBE DNA/RNA Hybridization Ziehl-Neelsen Acid –Fast Staining	SOP-MB-9258, SOP-MB-9261 SOP-MB-9262 SOP-MB-2004 SOP-MB-2212 SOP-MB-2218 SOP-MB-2210

Tests

Test Methods

Mycobacterium bovis

- Bacterial Identification
 - Genotyping/Variable Number of Tandem Repeats
 - Gamma Interferon Test

SOP-MB-9134
SOP-SERO-1060

Mycobacterium spp. Identification

- 16s rDNA Sequencing
- Spoligotyping
- Bead Beater™DNA Extraction Method

SOP-MB-2221
SOP-MB-2223
SOP-MB-2219

Mycobacterium tuberculosis

- Complex Differentiation

SOP-MB-9107

Mycoplasma

- Agglutination
- Hemagglutination Inhibition

SOPM-BACT-0003
SOPM-BACT-0002

Pasteurella multocida

- Gel Diffusion Precipitin Test

SOP-BTYP-2101

Salmonella

- Serotyping

- Pulsed Field Gel Electrophoresis

SOP-BTYP-1102, SOP-BTYP-1103,
SOP-BTYP-1112
SOP-BTYP-1106

Salmonella Pullorum and Typhimurium

- Agglutination

SOP-BTYP-1005, SOP-BTYP-1008,
SOP-BTYP-1007

Taylorella spp.

- Isolation and Identification

SOPTA-BACT-0001

Diagnostic Virology Laboratory

African Horse Sickness

- RT-PCR
- Virus Isolation

SOP-EO-1504
SOP-EO-2007

Avian Adenovirus

- Virus Isolation

SOP-AV-2021, SOP-AV-9132

Avian Encephalomyelitis

- Virus Isolation

SOP-AV-2021, SOP-AV-9132

Avian Influenza

- Agar Gel Immunodiffusion
- Hemagglutination, Hemagglutination-Inhibition
 - Virus Typing
 - Serology

SOP-AV-0100

SOP-AV-0805
SOP-AV-0806

Tests

Test Methods

Avian Influenza	
Neuraminidase-Inhibition	
Virus Typing	SOP-AV-1300
Serology	SOP-AV-1301
Real-Time RT-PCR	SOP-AV-1510
Additional Platforms	SOP-AV-1520, SOP-AV-1521, SOP-AV-1523
Virus Isolation	SOP-AV-2020
Avian Metapneumovirus	
ELISA	SOP-AV-0707
Virus Isolation	SOP-AV-2021, SOP-AV-9132
Avian Pox	
Virus Isolation	SOP-AV-2021, SOP-AV-9132
Avian Reovirus	
Virus Isolation	SOP-AV-2021, SOP-AV-9132
Avian Rotavirus	
Virus Isolation	SOP-AV-2021, SOP-AV-9132
Bluetongue	
VDT, Agar Gel Immunodiffusion	Commercial Kit
VDT, C-ELISA	Commercial Kit
VMRD, C-ELISA	Commercial Kit
RT-PCR	SOP-EO-1502
Virus Isolation	SOP-EO-2001
Bovine Viral Diarrhea	
Virus Neutralization	SOP-BPA-2104
PCR	SOP-BPA-1514
Bovine Herpesvirus 1	
(Infectious Bovine Rhinotracheitis) Virus Neutralization	SOP-BPA-2104
Bovine Herpesvirus 2	
(Bovine Herpes Mammillitis) Virus Neutralization	SOP-BPA-2104
Bovine Leukosis	
VDT Agar Gel Immunodiffusion	Commercial Kit
VMRD ELISA	Commercial Kit
Bovine Respiratory Syncytial Virus	
Virus Neutralization	SOP-BPA-2104
Caprine Arthritis-Encephalitis Virus	
VDT, Agar Gel Immunodiffusion	Commercial Kit

Tests

Test Methods

Caprine Arthritis-Encephalitis Virus
VMRD, ELISA

Commercial Kit

Chicken Anemia Virus
Indirect Fluorescent Antibody

SOP-AV-1100, SOP-AV-1101,
SOP-AV-1102

Chlamydophila psittaci
Isolation

SOP-AV-0500

Coxiella burnetti (Q-Fever)
Complement Fixation
ELISA

SOP-EO-0303
Commercial Kit

Duck Viral Enteritis
Virus Isolation

SOP-AV-2021, SOP-AV-9132

Encephalomyocarditis Virus
Virus Isolation
Virus Neutralization

SOP-BPA-9227
SOP-BPA-2109

Epizootic Hemorrhagic Disease
VDT, Agar Gel Immunodiffusion
RT-PCR
Virus Isolation

Commercial Kit
SOP-EO-1502
SOP-EO-2002

Equine Adenovirus
Virus Isolation

SOP-EO-2006

Equine Encephalomyelitis
Eastern Equine Encephalomyelitis
Hemagglutination-inhibition
IgM ELISA
PCR
Plaque Reduction Neutralization
Virus Isolation
Venezuelan Equine Encephalomyelitis
Hemagglutination-inhibition
IgM ELISA
Plaque Reduction Neutralization
Virus Isolation
West Nile Virus
IgM ELISA
PCR
Plaque Reduction Neutralization
Virus Isolation
Western Equine Encephalomyelitis
Hemagglutination-inhibition
PCR

SOP-EO-0802
SOP-EO-0710
SOP-EO-1506
SOP-EO-2116
SOP-EO-2004
SOP-EO-0802
SOP-EO-0711
SOP-EO-2116
SOP-EO-2004
SOP-EO-0709
SOP-EO-1506
SOP-EO-1402
SOP-EO-2004
SOP-EO-0802
SOP-EO-2004

Tests

Test Methods

Equine Encephalomyelitis	
Western Equine Encephalomyelitis	
Plaque Reduction Neutralization	SOP-EO-2116
Virus Isolation	SOP-EO-2004
Equine Herpesvirus 1	
Virus Isolation	SOP-EO-2006
Virus Neutralization	SOP-EO-2102
Equine Herpesvirus 2	
Virus Isolation	SOP-EO-2006
Virus Neutralization	SOP-EO-2102
Equine Herpesvirus 3	
Virus Isolation	SOP-EO-2006
Virus Neutralization	SOP-EO-2102
Equine Herpesvirus 4	
Virus Isolation	SOP-EO-2006
Virus Neutralization	SOP-EO-2102
Equine Infectious Anemia	
Agar Gel Immunodiffusion	SOP-EO-0101
C-ELISA	Commercial Kit
ELISA	Commercial Kit
ViraCheck ELISA	Commercial Kit
SA ELISA	Commercial Kit
Equine Influenza	
Hemagglutination-inhibition	SOP-EO-2237
rRT-PCR	SOP-AV-1510
Virus Isolation	SOP-EO-2005
Equine Rhinovirus	
Virus Isolation	SOP-EO-2006
Equine Viral Arteritis	
Virus Isolation	SOP-EO-2003
Virus Neutralization	EOPRO2108
Hemagglutinating Encephalomyelitis Virus	
Hemagglutination-inhibition	SOP-BPA-0803
Virus Isolation	SOP-BPA-9227
Infectious Bursal Disease	
Virus Isolation	SOP-AV-2021, SOP-AV-9132

Tests

Test Methods

Infectious Bronchitis Virus Isolation	SOP-AV-2021, SOP-AV-9132
Infectious Laryngotracheitis Virus Isolation	SOP-AV-2021, SOP-AV-9132
Isolation of Viral Agents from Finfish in Tissue Cell Culture	SOP-BPA-7031
Malignant Catarrhal Fever PCR Virus Neutralization	SOP-BPA-1501 SOP-BPA-2110
Marek's Disease Virus Isolation	SOP-AV-2021, SOP-AV-9132
Newcastle Disease Hemagglutination, Hemagglutination-Inhibition Virus Typing Serology Real-Time RT-PCR Virus Isolation	SOP-AV-0807 SOP-AV-0800 SOP-AV-1505 SOP-AV-2020
Ovine Progressive Pneumonia Virus VDT, Agar Gel Immunodiffusion	Commercial Kit
Parainfluenza-3 Virus Neutralization	SOP-BPA-2104
Porcine Circovirus Virus Isolation	SOP-BPA-9227
Porcine Parvovirus Virus Isolation	SOP-BPA-9227
Porcine Reproductive and Respiratory Syndrome ELISA IFA	Commercial Kit SOP-BPA-1101
Porcine Reo Virus Isolation	SOP-BPA-9227
Porcine Respiratory Coronavirus Virus Isolation	SOP-BPA-9227
Porcine Rotavirus Virus Isolation	SOP-BPA-9227
Porcine Rubulavirus Virus Isolation	SOP-BPA-9227

Tests

Test Methods

Porcine sapelovirus (enterovirus A)
Virus Isolation

SOP-BPA-9227

Porcine Teschovirus
PCR
Virus Isolation

SOP-BPA-7015
SOP-BPA-9227

Pseudorabies Virus
gI ELISA
gB ELISA
Latex Agglutination Test
Virus Isolation
Virus Neutralization

Commercial Kit
Commercial Kit
Commercial Kit
SOP-BPA-9227
SOP-BPA-2112

Psittacine Herpesvirus
Virus Isolation

SOP-AV-2021, SOP-AV-9132

Swine Influenza Virus
Hemagglutination-Inhibition
Real-time RT PCR
Virus Isolation

SOP-BPA-0801
SOP-BPA-9034
SOP-BPA-9024

Transmissible Gastroenteritis Virus
Virus Isolation
Virus Neutralization

SOP-BPA-9227
SOP-BPA-2113

Vesicular Stomatitis
Competitive ELISA
Complement Fixation
Virus Isolation

SOP-BPA-0703
SOP-BPA-0300
SOP-BPA-2008

Viral abortion (Porcine)
Virus Isolation

SOP-BPA-9227

Pathobiology Laboratory

Agar Gel Immuno-double Diffusion (AGID)
Species Verification

SOPS-CAS -0007

ELISA
Bovine Spongiform Encephalopathy

SOP-PL-0033

Microscopic Examination
Bovine Spongiform Encephalopathy
Mycobacterium spp.
Hemoparasites – Anaplasmosis

SOP-PL-0031
SOP-PL-0020
SOP-PL-0058

Tests

Test Methods

Microscopic Examination

- Hemoparasites – Dourine
- Hemoparasites – Eperythrozoonosis
- Hemoparasites – Bovine Piroplasmosis
- Hemoparasites – Equine Piroplasmosis
- Endoparasites – Coccidia
- Endoparasites - Cysticercosis

SOP-PL-0010

Identification

- Ectoparasites – Fluke
- Ectoparasites – Larvae
- Ectoparasites – Lice
- Ectoparasites – Maggots
- Ectoparasites – Mange
- Ectoparasites – Mites
- Ectoparasites – Myiasis
- Ectoparasites – Scabies
- Ectoparasites – Screwworm
- Ectoparasites – Tapeworm

SOP-PL-0015

Histopathology Staining

- Auromine O and Acridine Orange Stain
- Congo Red Stain
- Giemsa Stain
- Gram Stain
- Grocott’s Methanamine Silver Stain
- Hematoxylin and Eosin Stain
- Luxol Fast Blue Stain
- Modified Ziehl-Neelson Stain
- Periodic Acid-Schiff Stain
- Toluidine Blue O Stain

SOP-PL-0039
SOP-PL-9219
SOP-PL-0037
SOP-PL-0045
EXT-WI-PL-5172
SOP-PL-0040
SOP-PL-9221
SOP-PL-0038
SOP-PL-0046
SOP-PL-9220

Immunohistochemistry (IHC)

- Bovine Spongiform Encephalopathy

SOP-PL-0012

PCR

- Mycobacterium spp.

SOP-PL-0047

Western Blot

- Individual Animal Identification
- TeSeE Bovine Spongiform Encephalopathy Bio-Rad Kit
- TeSeE Scrapie Bio-Rad Kit

SOPS-CAS-0012
SOP-PL-0021
SOP-PL-0021



The American Association for Laboratory Accreditation

World Class Accreditation

Accredited Laboratory

A2LA has accredited

NATIONAL VETERINARY SERVICES LABORATORIES

Ames, IA

for technical competence in the field of

Biological Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *General Requirements for the Competence of Testing and Calibration Laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated 8 January 2009).

Presented this 10th day of January 2011



A handwritten signature in black ink, appearing to read "Peter Abney", written over a horizontal line.

President & CEO
For the Accreditation Council
Certificate Number 2526.01
Valid to January 31, 2013

For the tests or types of tests to which this accreditation applies, please refer to the laboratory's Biological Scope of Accreditation.



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

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Tests

Test Methods

Diagnostic Bacteriology Laboratory

Anaplasma

cELISA

SOP-SERO-1040

Babesia caballi and *B. equi* (Piroplasmosis)

Competitive ELISA – Commercial Kit

SOP-SERO-1056

Competitive ELISA – In-house

SOP-SERO-1004

Complement Fixation

SOP-SERO-1001

Bacillus anthracis

Isolation and Identification

SOP-BACT-9003,

SOP-BACT-9004,

SOP-BACT-9005

Bacterial Identification and Isolation (General)

SOP-BACT-1001

Brucella spp.

Bacterial Isolation

Sample Processing, Solid Culture Media

SOP-MB-1002

Bacterial Identification

Biochemical Tests, Solid Culture,

SOP-MB-1003,

Rough/Smooth Determination

SOP-MB-1012

Gram Stain, PCR

SOP-MB-1023, SOP-MB-1014,

SOP-MB-1021

Genotyping/Variable Number of Tandem Repeats

SOP-MB-9135

Tests

Test Methods

<i>Brucella ovis</i> Indirect ELISA	SOP-SERO-1061
<i>Brucella canis</i> Indirect ELISA Agglutination Test	SOP-SERO-1033 SOP-SERO-1032
<i>Brucella melitensis</i> Card Test	SOP-SERO-1038
<i>Brucella abortus</i> and <i>B. melitensis</i> C-ELISA	SOP-SERO-1030
<i>Brucella abortus</i> Card Test Fluorescence Polarization Assay Complement Fixation Test Buffered Acidified Plate Antigen Test Rapid Automated Presumptive Test Rivanol Agglutination Test	SOP-SERO-1027 SOP-SERO-1050, SOP-SERO-1051 SOP-SERO-1022 SOP-SERO-1024 SOP-SERO-1028 SOP-SERO-1025
<i>Burkholderia mallei</i> and <i>B. pseudomallei</i> Isolation and Identification	SOPBU-BACT-0001
<i>Francisella tularensis</i> Agglutination	SERO-SOP-1039
<i>Leptospira</i> Microagglutination Test Isolation from Tissue and Urine	SOP-BTYP-4001 SOP-BTYP-7023
<i>Mycobacterium avium</i> , subsp. <i>paratuberculosis</i> (Johne's) Bacterial Isolation Sample Processing, Solid and Liquid Culture Media Bacterial Identification Culture PCR Direct PCR ELISA	SOP-MB-4019, SOP-MB-7034, SOP-MB-7035, SOP-MB-7036 SOP-MB-4010 SOP-MB-7039, SOP-MB-9046 SOP-SERO-1057, SOP-SERO-1058
<i>Mycobacterium bovis</i> Bacterial Isolation Solid Culture Media, BACTEC 460, MGIT Elephant Trunk Washes Bacterial Identification Biochemical Niacin/Nitrate Utilization GEN-PROBE DNA/RNA Hybridization Ziehl-Neelsen Acid –Fast Staining	SOP-MB-9258, SOP-MB-9261 SOP-MB-9262 SOP-MB-2004 SOP-MB-2212 SOP-MB-2218 SOP-MB-2210

Tests

Test Methods

Mycobacterium bovis

- Bacterial Identification
 - Genotyping/Variable Number of Tandem Repeats
 - Gamma Interferon Test

SOP-MB-9134
SOP-SERO-1060

Mycobacterium spp. Identification

- 16s rDNA Sequencing
- Spoligotyping
- Bead Beater™DNA Extraction Method

SOP-MB-2221
SOP-MB-2223
SOP-MB-2219

Mycobacterium tuberculosis

- Complex Differentiation

SOP-MB-9107

Mycoplasma

- Agglutination
- Hemagglutination Inhibition

SOPM-BACT-0003
SOPM-BACT-0002

Pasteurella multocida

- Gel Diffusion Precipitin Test

SOP-BTYP-2101

Salmonella

- Serotyping

- Pulsed Field Gel Electrophoresis

SOP-BTYP-1102, SOP-BTYP-1103,
SOP-BTYP-1112
SOP-BTYP-1106

Salmonella Pullorum and Typhimurium

- Agglutination

SOP-BTYP-1005, SOP-BTYP-1008,
SOP-BTYP-1007

Taylorella spp.

- Isolation and Identification

SOPTA-BACT-0001

Diagnostic Virology Laboratory

African Horse Sickness

- RT-PCR
- Virus Isolation

SOP-EO-1504
SOP-EO-2007

Avian Adenovirus

- Virus Isolation

SOP-AV-2021, SOP-AV-9132

Avian Encephalomyelitis

- Virus Isolation

SOP-AV-2021, SOP-AV-9132

Avian Influenza

- Agar Gel Immunodiffusion
- Hemagglutination, Hemagglutination-Inhibition
 - Virus Typing
 - Serology

SOP-AV-0100

SOP-AV-0805
SOP-AV-0806

Tests

Test Methods

Avian Influenza

Neuraminidase-Inhibition
Virus Typing
Serology
Real-Time RT-PCR
Additional Platforms

SOP-AV-1300
SOP-AV-1301
SOP-AV-1510
SOP-AV-1520, SOP-AV-1521,
SOP-AV-1523
SOP-AV-2020

Virus Isolation

Avian Metapneumovirus

ELISA
Virus Isolation

SOP-AV-0707
SOP-AV-2021, SOP-AV-9132

Avian Pox

Virus Isolation

SOP-AV-2021, SOP-AV-9132

Avian Reovirus

Virus Isolation

SOP-AV-2021, SOP-AV-9132

Avian Rotavirus

Virus Isolation

SOP-AV-2021, SOP-AV-9132

Bluetongue

VDT, Agar Gel Immunodiffusion
VDT, C-ELISA
VMRD, C-ELISA
RT-PCR
Virus Isolation

Commercial Kit
Commercial Kit
Commercial Kit
SOP-EO-1502
SOP-EO-2001

Bovine Viral Diarrhea

Virus Neutralization
PCR

SOP-BPA-2104
SOP-BPA-1514

Bovine Herpesvirus 1

(Infectious Bovine Rhinotracheitis) Virus Neutralization

SOP-BPA-2104

Bovine Herpesvirus 2

(Bovine Herpes Mammillitis) Virus Neutralization

SOP-BPA-2104

Bovine Leukosis

VDT Agar Gel Immunodiffusion
VMRD ELISA

Commercial Kit
Commercial Kit

Bovine Respiratory Syncytial Virus

Virus Neutralization

SOP-BPA-2104

Caprine Arthritis-Encephalitis Virus

VDT, Agar Gel Immunodiffusion

Commercial Kit

Tests

Test Methods

Caprine Arthritis-Encephalitis Virus VMRD, ELISA	Commercial Kit
Chicken Anemia Virus Indirect Fluorescent Antibody	SOP-AV-1100, SOP-AV-1101, SOP-AV-1102
<i>Chlamydophila psittaci</i> Isolation	SOP-AV-0500
<i>Coxiella burnetti</i> (Q-Fever) Complement Fixation ELISA	SOP-EO-0303 Commercial Kit
Duck Viral Enteritis Virus Isolation	SOP-AV-2021, SOP-AV-9132
Encephalomyocarditis Virus Virus Isolation Virus Neutralization	SOP-BPA-9227 SOP-BPA-2109
Epizootic Hemorrhagic Disease VDT, Agar Gel Immunodiffusion RT-PCR Virus Isolation	Commercial Kit SOP-EO-1502 SOP-EO-2002
Equine Adenovirus Virus Isolation	SOP-EO-2006
Equine Encephalomyelitis Eastern Equine Encephalomyelitis Hemagglutination-inhibition IgM ELISA PCR Plaque Reduction Neutralization Virus Isolation	SOP-EO-0802 SOP-EO-0710 SOP-EO-1506 SOP-EO-2116 SOP-EO-2004
Venezuelan Equine Encephalomyelitis Hemagglutination-inhibition IgM ELISA Plaque Reduction Neutralization Virus Isolation	SOP-EO-0802 SOP-EO-0711 SOP-EO-2116 SOP-EO-2004
West Nile Virus IgM ELISA PCR Plaque Reduction Neutralization Virus Isolation	SOP-EO-0709 SOP-EO-1506 SOP-EO-1402 SOP-EO-2004
Western Equine Encephalomyelitis Hemagglutination-inhibition PCR	SOP-EO-0802 SOP-EO-2004

Tests

Test Methods

Equine Encephalomyelitis Western Equine Encephalomyelitis Plaque Reduction Neutralization Virus Isolation	SOP-EO-2116 SOP-EO-2004
Equine Herpesvirus 1 Virus Isolation Virus Neutralization	SOP-EO-2006 SOP-EO-2102
Equine Herpesvirus 2 Virus Isolation Virus Neutralization	SOP-EO-2006 SOP-EO-2102
Equine Herpesvirus 3 Virus Isolation Virus Neutralization	SOP-EO-2006 SOP-EO-2102
Equine Herpesvirus 4 Virus Isolation Virus Neutralization	SOP-EO-2006 SOP-EO-2102
Equine Infectious Anemia Agar Gel Immunodiffusion C-ELISA ELISA ViraCheck ELISA SA ELISA	SOP-EO-0101 Commercial Kit Commercial Kit Commercial Kit Commercial Kit
Equine Influenza Hemagglutination-inhibition rRT-PCR Virus Isolation	SOP-EO-2237 SOP-AV-1510 SOP-EO-2005
Equine Rhinovirus Virus Isolation	SOP-EO-2006
Equine Viral Arteritis Virus Isolation Virus Neutralization	SOP-EO-2003 EOPRO2108
Hemagglutinating Encephalomyelitis Virus Hemagglutination-inhibition Virus Isolation	SOP-BPA-0803 SOP-BPA-9227
Infectious Bursal Disease Virus Isolation	SOP-AV-2021, SOP-AV-9132

Tests

Test Methods

Infectious Bronchitis Virus Isolation	SOP-AV-2021, SOP-AV-9132
Infectious Laryngotracheitis Virus Isolation	SOP-AV-2021, SOP-AV-9132
Isolation of Viral Agents from Finfish in Tissue Cell Culture	SOP-BPA-7031
Malignant Catarrhal Fever PCR Virus Neutralization	SOP-BPA-1501 SOP-BPA-2110
Marek's Disease Virus Isolation	SOP-AV-2021, SOP-AV-9132
Newcastle Disease Hemagglutination, Hemagglutination-Inhibition Virus Typing Serology Real-Time RT-PCR Virus Isolation	SOP-AV-0807 SOP-AV-0800 SOP-AV-1505 SOP-AV-2020
Ovine Progressive Pneumonia Virus VDT, Agar Gel Immunodiffusion	Commercial Kit
Parainfluenza-3 Virus Neutralization	SOP-BPA-2104
Porcine Circovirus Virus Isolation	SOP-BPA-9227
Porcine Parvovirus Virus Isolation	SOP-BPA-9227
Porcine Reproductive and Respiratory Syndrome ELISA IFA	Commercial Kit SOP-BPA-1101
Porcine Reo Virus Isolation	SOP-BPA-9227
Porcine Respiratory Coronavirus Virus Isolation	SOP-BPA-9227
Porcine Rotavirus Virus Isolation	SOP-BPA-9227
Porcine Rubulavirus Virus Isolation	SOP-BPA-9227

Tests

Test Methods

Porcine sapelovirus (enterovirus A)
Virus Isolation

SOP-BPA-9227

Porcine Teschovirus
PCR
Virus Isolation

SOP-BPA-7015
SOP-BPA-9227

Pseudorabies Virus
gI ELISA
gB ELISA
Latex Agglutination Test
Virus Isolation
Virus Neutralization

Commercial Kit
Commercial Kit
Commercial Kit
SOP-BPA-9227
SOP-BPA-2112

Psittacine Herpesvirus
Virus Isolation

SOP-AV-2021, SOP-AV-9132

Swine Influenza Virus
Hemagglutination-Inhibition
Real-time RT PCR
Virus Isolation

SOP-BPA-0801
SOP-BPA-9034
SOP-BPA-9024

Transmissible Gastroenteritis Virus
Virus Isolation
Virus Neutralization

SOP-BPA-9227
SOP-BPA-2113

Vesicular Stomatitis
Competitive ELISA
Complement Fixation
Virus Isolation

SOP-BPA-0703
SOP-BPA-0300
SOP-BPA-2008

Viral abortion (Porcine)
Virus Isolation

SOP-BPA-9227

Pathobiology Laboratory

Agar Gel Immuno-double Diffusion (AGID)
Species Verification

SOPS-CAS -0007

ELISA
Bovine Spongiform Encephalopathy

SOP-PL-0033

Microscopic Examination
Bovine Spongiform Encephalopathy
Mycobacterium spp.
Hemoparasites – Anaplasmosis

SOP-PL-0031
SOP-PL-0020
SOP-PL-0058

Tests

Test Methods

Microscopic Examination

- Hemoparasites – Dourine
- Hemoparasites – Eperythrozoonosis
- Hemoparasites – Bovine Piroplasmosis
- Hemoparasites – Equine Piroplasmosis
- Endoparasites – Coccidia
- Endoparasites - Cysticercosis

SOP-PL-0010

Identification

- Ectoparasites – Fluke
- Ectoparasites – Larvae
- Ectoparasites – Lice
- Ectoparasites – Maggots
- Ectoparasites – Mange
- Ectoparasites – Mites
- Ectoparasites – Myiasis
- Ectoparasites – Scabies
- Ectoparasites – Screwworm
- Ectoparasites – Tapeworm

SOP-PL-0015

Histopathology Staining

- Auromine O and Acridine Orange Stain
- Congo Red Stain
- Giemsa Stain
- Gram Stain
- Grocott’s Methanamine Silver Stain
- Hematoxylin and Eosin Stain
- Luxol Fast Blue Stain
- Modified Ziehl-Neelson Stain
- Periodic Acid-Schiff Stain
- Toluidine Blue O Stain

SOP-PL-0039
SOP-PL-9219
SOP-PL-0037
SOP-PL-0045
EXT-WI-PL-5172
SOP-PL-0040
SOP-PL-9221
SOP-PL-0038
SOP-PL-0046
SOP-PL-9220

Immunohistochemistry (IHC)

- Bovine Spongiform Encephalopathy

SOP-PL-0012

PCR

- Mycobacterium spp.

SOP-PL-0047

Western Blot

- Individual Animal Identification
- TeSeE Bovine Spongiform Encephalopathy Bio-Rad Kit
- TeSeE Scrapie Bio-Rad Kit

SOPS-CAS-0012
SOP-PL-0021
SOP-PL-0021