1/29/10

Gross Post-Mortem Examination Form

Identification

Owner Name BLM Animal Name Black Rock East Age 10yr

Gender Female Breed Mustang Color Bay Markings

Brief History

Time of Death Cause of Death poor hyperlipemia metabolic failure Euthanized (Y/N) Y

Gross Necropsy Findings

1. Musculoskeletal: External poor body condition

Bones Joints

Describe specific injuries if they were the cause of death

2. Respiratory System: Pharynx Larynx

Trachea none Bronchi none Lungs none

3. Circulatory System: Thoracic Fluid

Heart Weight (if available)

Great Vessels Vena Cava lipemic blood

4. Digestive System: Abdominal Cavity Fluid / Serosal Surface

Contents Esophagus

Stomach Small Intestine

Cecum Large Colon

Small Colon Specific Comments fatty liver no omental fat

5. Urogenital System: Urine (color) Ureters

Urethra Kidneys

Testicles Ovaries ~ 9 months pregnant

6. Nervous System: CNS (Brain)

Note gross findings if evaluated or clinical signs if brain case not opened not examined

Pituitary

Spinal Cord (if evaluated, or clinical signs if suspected lesion site)

Gross Diagnosis hyperlipemia / metabolic failure

Tissues collected for histopathology

Laboratory (attach pathologist's report)

* If an organ or system is not examined indicate with a N/E.

Veterinarian performing exam Richard Sanford Signature

Address City/State/Zip Fallon, NV 89406

Phone Number E-mail address

2/3/10

Gross Post-Mortem Examination Form

Identification

Owner Name BLM Animal Name Warm Springs Age 25yrs

Gender Female Breed Mustang Color Bay Markings

Brief History

Time of Death Cause of Death poor hyperlipemia metabolic failure Euthanized (Y/N) Y

Gross Necropsy Findings

1. Musculoskeletal: External poor body condition

Bones Joints

Describe specific injuries if they were the cause of death

2. Respiratory System: Pharynx Larynx

Trachea none Bronchi none Lungs none

3. Circulatory System: Thoracic Fluid none

Heart Weight (if available)

Great Vessels Vena Cava lipemic blood

4. Digestive System: Abdominal Cavity Fluid normal Serosal Surface

Contents hay Esophagus

Stomach Small Intestine

Cecum Large Colon

Small Colon Specific Comments general lack of serosal fat, fatty accumulation in liver small amount in kidneys

5. Urogenital System: Urine (color) Ureters

Urethra Kidneys fat

Testicles Ovaries ~ 8 month pregnant

6. Nervous System: CNS (Brain)

Note gross findings if evaluated or clinical signs if brain case not opened not examined

Pituitary

Spinal Cord (if evaluated, or clinical signs if suspected lesion site)

Gross Diagnosis hyperlipemia w/ fatty liver

Tissues collected for histopathology liver

Laboratory (attach pathologist's report)

* If an organ or system is not examined indicate with a N/E.

Veterinarian performing exam Richard Sanford Signature

Address City/State/Zip Fallon, NV 89406

Phone Number [redacted] E-mail address

2/4/10

Gross Post-Mortem Examination Form

Identification

Owner Name BLM Animal Name Black Rock East Age 15yr

Gender Female Breed Mustang Color Bay Markings

Brief History poor 3-4 week post arrival eating grass hay but depressed not able to support pregnancy

Time of Death Cause of Death poor hyperlipemia metabolic failure Euthanized (Y/N) Y

Gross Necropsy Findings

1. Musculoskeletal: External poor body condition

Bones Joints

Describe specific injuries if they were the cause of death

2. Respiratory System: Pharynx Larynx

Trachea none Bronchi none Lungs none

3. Circulatory System: Thoracic Fluid

Heart Weight (if available)

Great Vessels Vena Cava lipemic blood

4. Digestive System: Abdominal Cavity Fluid Serosal Surface

Contents hay Esophagus

Stomach Small Intestine

Cecum Large Colon

Small Colon Specific Comments yellow greasy fatty liver, ~9 months pregnant no omental or serosal fat

5. Urogenital System: Urine (color) Ureters

Urethra Kidneys

Testicles Ovaries 9 months pregnant

6. Nervous System: CNS (Brain)

Note gross findings if evaluated or clinical signs if brain case not opened not examined

Pituitary

Spinal Cord (if evaluated, or clinical signs if suspected lesion site)

Gross Diagnosis liver failure / hyperlipemia

Tissues collected for histopathology

Laboratory (attach pathologist's report)

* If an organ or system is not examined indicate with a N/E.

Veterinarian performing exam Richard Sanford Signature

Address City/State/Zip Fallon, NV 89406

Phone Number E-mail address

217/10

Gross Post-Mortem Examination Form

Identification

Owner Name: BLM Animal Name: Black Rock West Age: 15yr

Gender: Male Breed: Mustang Color: Sorrel Markings:

Brief History: weight loss, withdrawn 30 days post gather

Time of Death: Cause of Death: Euthanized (Y/N): Y

Gross Necropsy Findings

1. **Musculoskeletal:** External: thin

Bones: Joints:

Describe specific injuries if they were the cause of death:

2. **Respiratory System:** Pharynx: N/E Larynx: N/E

Trachea: none Bronchi: none Lungs: none

3. **Circulatory System:** Thoracic Fluid: normal

Heart: none Weight (if available):

Great Vessels: Vena Cava: lipemic blood

4. **Digestive System:** Abdominal Cavity Fluid: excess Serosal Surface:

Contents: Esophagus:

Stomach: Small Intestine:

Cecum: Large Colon:

Small Colon: Specific Comments: liver is fatty suggesting hyperlipemia, enteritis as well lack of abdominal fat

5. **Urogenital System:** Urine (color): Ureters:

Urethra: Kidneys:

Testicles: Ovaries:

6. **Nervous System:** CNS (Brain)

Note gross findings if evaluated or clinical signs if brain case not opened: N/E

Pituitary:

Spinal Cord (if evaluated, or clinical signs if suspected lesion site):

Gross Diagnosis: hyperlipemia / enteritis

Tissues collected for histopathology: liver

Laboratory: (attach pathologist's report)

* If an organ or system is not examined indicate with a N/E.

Veterinarian performing exam: Richard Sanford Signature:

Address: City/State/Zip: Fallon, NV 89406

Phone Number: E-mail address:

2/7/10

Gross Post-Mortem Examination Form

Identification

Owner Name BLM Animal Name Warm Springs Age 10 yr

Gender Female Breed Mustang Color Sorrel Markings

Brief History weight loss weakness

Time of Death Cause of Death Euthanized (Y/N) Y

Gross Necropsy Findings

1. **Musculoskeletal:** External thin

Bones Joints

Describe specific injuries if they were the cause of death

2. **Respiratory System:** Pharynx N/E Larynx N/E

Trachea none Bronchi none Lungs none

3. **Circulatory System:** Thoracic Fluid normal

Heart Weight (if available)

Great Vessels Vena Cava lipemic blood

4. **Digestive System:** Abdominal Cavity Fluid normal Serosal Surface

Contents Esophagus

Stomach Small Intestine

Cecum Large Colon

Small Colon Specific Comments yellow fatty liver lack of abdominal fat

5. **Urogenital System:** Urine (color) Ureters

Urethra Kidneys

Testicles Ovaries pregnant ~8 months

6. **Nervous System:** CNS (Brain)

Note gross findings if evaluated or clinical signs if brain case not opened N/E

Pituitary

Spinal Cord (if evaluated, or clinical signs if suspected lesion site)

Gross Diagnosis hyperlipemia

Tissues collected for histopathology none

Laboratory (attach pathologist's report)

* If an organ or system is not examined indicate with a N/E.

Veterinarian performing exam Richard Sanford Signature

Address City/State/Zip Fallon, NV 89406

Phone Number E-mail address

2/13/10

Gross Post-Mortem Examination Form

Identification

Owner Name BLM Animal Name Calico Age 25yr

Gender Breed Color Markings

Brief History

Time of Death Cause of Death Euthanized (Y/N) N

Gross Necropsy Findings

1. **Musculoskeletal:** External poor body condition

Bones Joints

Describe specific injuries if they were the cause of death

2. **Respiratory System:** Pharynx none Larynx

Trachea normal Bronchi normal Lungs normal

3. **Circulatory System:** Thoracic Fluid normal

Heart normal Weight (if available)

Great Vessels Vena Cava blood grossly lipemic

4. **Digestive System:** Abdominal Cavity Fluid Serosal Surface

Contents normal Esophagus

Stomach normal Small Intestine

Cecum normal Large Colon

Small Colon normal Specific Comments no abdominal fat yellow fatty liver

5. **Urogenital System:** Urine (color) Ureters

Urethra Kidneys

Testicles Ovaries recently aborted

6. **Nervous System:** CNS (Brain)

Note gross findings if evaluated or clinical signs if brain case not opened

Pituitary

Spinal Cord (if evaluated, or clinical signs if suspected lesion site)

Gross Diagnosis hyperlipemia

Tissues collected for histopathology none

Laboratory (attach pathologist's report)

* If an organ or system is not examined indicate with a N/E.

Veterinarian performing exam Richard Sanford Signature

Address City/State/Zip Fallon, NV 89406

Phone Number E-mail address

Animal Disease & Food Safety Lab
405 S 21st St
Sparks, NV 89431
Ph: (775) 353-3718 Fax: (775) 353-3659
www.agri.state.nv.us

Richard Sanford DVM
PO Box 937
Wadsworth, NV 89442

Complete Results Report

Accession No: 10-3101	Species:Bovine	Animal Name:	Received:02/03/10
Breed:	Owner:BLM Fallon	Age:25 Years	Sex:F

Case Coordinator: Dr. Anette Rink ext.33700

Histopathology

1. Hepatic lipidosis, central lobular, diffuse, severe

See attached report

Dr. Anette Rink ext.33700
Case Coordinator Signature

End of Report

Received at
Bureau of Land Management
FEB 18 2010
Palomino Valley Facility

WASHINGTON ANIMAL DISEASE DIAGNOSTIC LABORATORY
P.O. Box 647034
Pullman, WA 99164-7034
Phone: (509) 335-9696
Fax: (509) 335-7424

Veterinarian:	Dr. Anette Rink	Owner:	
Clinic:	ADL	Animal:	Black Rock West/10-3101
Address:	405 S 21st St	Species:	Horse
		Breed:	Mustang
	Sparks, NV 89431	Age:	25 Years
Phone:	(775) 688-1182	Sex:	Female

HISTOPATHOLOGY REPORT **02/11/10** **WADDL #2010-1358**
Report authorized by: James Stanton, Senior Pathologist **Received: 02/05/10**

Liver: In one grossly representative section of liver there is diffuse central lobular and mid-zonal lipid degeneration, with approximately 85% of hepatocyte in each lobule affected. Central lobular and mid-zonal hepatocytes are swollen and contain one or more, sharply demarcated, translucent, intracytoplasmic vacuoles (lipid vacuoles). Numerous hepatocytes and occasional kupffer cells throughout all zones contain gold-brown intracytoplasmic granules that fail to stain with a copper stain (interpreted as iron and/or bile pigment). The periportal interstitium is multifocally infiltrated by very few lymphocytes and plasma cells.

HISTOLOGIC DIAGNOSIS:

1. Hepatic lipidosis, central lobular, diffuse, severe

COMMENTS: Hepatic lipidosis in domestic animals is usually caused by increased mobilization of fat or hepatocellular degeneration (e.g. hypoxia, toxins). Primary nutritional problems are an uncommon cause of clinically significant hepatic lipidosis in full size horses; therefore, other evidence of malnutrition (e.g. poor body condition, serous atrophy of fat, etc.) is necessary to conclude that a primary nutritional disorder was the cause of death in this case. Other potential causes of central lobular hepatic lipidosis that should be considered include: acute toxicity, anemia, and acute cardiac insufficiency. If there is gross or clinical evidence to support any of the aforementioned causes (e.g. subcutaneous edema, hemorrhages, ascites, etc.) additional testing on other affected animals, including blood work and feed testing, would be warranted. If any other animals die with similar clinical signs it is also recommended that a complete set of fixed and fresh tissues be submitted for histologic evaluation and ancillary testing, respectively. Gross images from the necropsy would also be helpful if possible.

This report contains information that is confidential and is intended for the use of the individual or entity named on page 1. If you have received this report in error, please notify WADDL immediately.

Client: Sanford, Rich (3193)
Patient Name: BLM Black Ranch East
Species: Equine
Breed: Mustang

Gender: Female
Weight: 0.0 lbs
Age: 20 Years
Doctor: Schank, Craig

LAHONTAN VALLEY VETERINARY CLINIC
3660 SCHURZ HWY, FALLON, NV 89406
775-423-7528

LaserCyte (January 29, 2010 9:37 AM)

Test	Results	Reference Interval	
RBC	* 9.05 M/µL	6.80 - 12.90	
HCT	* 47.1 %	32.0 - 53.0	
HGB	19.5 g/dL	11.0 - 19.0	HIGH
MCV	* 52.1 fL	37.0 - 58.0	
MCH	21.54 pg	12.30 - 19.90	HIGH
MCHC	–.– g/dL	31.0 - 38.6	
RDW	19.8 %	17.0 - 21.0	
WBC	11.65 K/µL	5.40 - 14.30	
%NEU	83.1 %		
%LYM	8.7 %		
%MONO	5.6 %		
%EOS	2.5 %		
%BASO	0.1 %		
NEU	9.68 K/µL	2.26 - 8.50	HIGH
LYM	1.02 K/µL	1.50 - 7.70	LOW
MONO	0.65 K/µL	0.10 - 1.00	
EOS	0.30 K/µL	0.10 - 1.00	
BASO	0.01 K/µL	0.00 - 0.03	
PLT	* 56 K/µL	90 - 350	LOW
MPV	* 20.83 fL		
PDW	28.3 %		
PCT	* 0.1 %		

MCHC out of reportable range. (RB 9)

VetTest (January 29, 2010 10:01 AM)

Test	Results	Reference Interval	
UREA	22 mg/dL	10 - 25	
CREA	1.3 mg/dL	0.8 - 2.2	
CA	8.4 mg/dL	10.4 - 12.9	LOW
TP	7.2 g/dL	5.6 - 7.9	
ALB	3.1 g/dL	1.9 - 3.2	
GLOB	4.2 g/dL	2.4 - 4.7	
AST	–.– U/L	44 - 264	→ Too high to measure (CDS)
ALKP	430 U/L	6 - 205	HIGH
GGT	55 U/L	0 - 40	HIGH
TBIL	5.3 mg/dL	0.0 - 3.5	HIGH
GLU	199 mg/dL	64 - 150	HIGH
CK	–.– U/L	4 - 140	
LDH	> 1092 U/L	97 - 807	HIGH

VetStat (January 29, 2010 9:37 AM)

Test	Results	Reference Interval	
pH(ven)	7.48	7.34 - 7.43	HIGH
HCO3(ven)	21.0 mmol/L	22.0 - 29.0	LOW
PCO2(ven)	31.0 mmHg	38.0 - 48.0	LOW
AnGap	20.1 mmol/L		
tCO2(ven)	21.9 mmol/L		
Na	136.0 mmol/L	133.0 - 150.0	
K	1.6 mmol/L	3.0 - 5.3	LOW
Cl	96.0 mmol/L	97.0 - 109.0	LOW

Specimen Type = Blood
Specimen Source = Venous

IDEXX LABORATORIES

Client: Sanford, Rich (3193)
Patient Name: BLM Black Ranch East
Species: Equine
Breed: Mustang

Gender: Female
Weight: 0.0 lbs
Age: 20 Years
Doctor: Schank, Craig

LAHONTAN VALLEY VETERINARY CLINIC
3660 SCHURZ HWY, FALLON, NV 89406
775-423-7528

Test	Results	Reference Interval	LOW	NORMAL	HIGH

VetStat (January 29, 2010 9:37 AM)

SamType = Ven
Temp = 37.0 C

IDEXX LABORATORIES

Client: Sanford, Rich (3193)
Patient Name: BLM Warm Springs
Species: Equine
Breed: Mustang

Gender: Female
Weight: 0.0 lbs
Age: 20 Years
Doctor: Schank, Craig

LAHONTAN VALLEY VETERINARY CLINIC
3660 SCHURZ HWY, FALLON, NV 89406
775-423-7528

LaserCyte (January 29, 2010 10:16 AM)

Test	Results	Reference Interval	
RBC	* 7.37 M/µL	6.80 - 12.90	
HCT	* 41.3 %	32.0 - 53.0	
HGB	17.0 g/dL	11.0 - 19.0	
MCV	* 56.1 fL	37.0 - 58.0	
MCH	23.06 pg	12.30 - 19.90	HIGH
MCHC	--.-- g/dL	31.0 - 38.6	
RDW	18.0 %	17.0 - 21.0	
WBC	6.80 K/µL	5.40 - 14.30	
%NEU	79.4 %		
%LYM	12.8 %		
%MONO	5.3 %		
%EOS	2.3 %		
%BASO	0.2 %		
NEU	5.40 K/µL	2.26 - 8.50	
LYM	0.87 K/µL	1.50 - 7.70	LOW
MONO	0.36 K/µL	0.10 - 1.00	
EOS	0.16 K/µL	0.10 - 1.00	
BASO	0.02 K/µL	0.00 - 0.03	
PLT	* 71 K/µL	90 - 350	LOW
MPV	* 8.41 fL		
PDW	20.4 %		
PCT	* 0.1 %		

MCHC out of reportable range. (RB 9)

VetTest (January 29, 2010 10:38 AM)

Test	Results	Reference Interval	
UREA	80 mg/dL	10 - 25	HIGH
CREA	1.9 mg/dL	0.8 - 2.2	
CA	10.4 mg/dL	10.4 - 12.9	LOW
TP	6.4 g/dL	5.6 - 7.9	
ALB	2.0 g/dL	1.9 - 3.2	
GLOB	4.4 g/dL	2.4 - 4.7	
AST	--.-- U/L	44 - 264	
ALKP	226 U/L	6 - 205	HIGH
GGT	28 U/L	0 - 40	
TBIL	4.2 mg/dL	0.0 - 3.5	HIGH
GLU	128 mg/dL	64 - 150	
CK	--.-- U/L	4 - 140	
LDH	> 1092 U/L	97 - 807	HIGH

VetStat (January 29, 2010 10:16 AM)

Test	Results	Reference Interval	
pH(ven)	7.47	7.34 - 7.43	HIGH
HCO3(ven)	24.0 mmol/L	22.0 - 29.0	
PCO2(ven)	36.0 mmHg	38.0 - 48.0	LOW
AnGap	15.8 mmol/L		
tCO2(ven)	25.1 mmol/L		
Na	132.0 mmol/L	133.0 - 150.0	LOW
K	3.3 mmol/L	3.0 - 5.3	
Cl	96.0 mmol/L	97.0 - 109.0	LOW

Specimen Type = Blood
Specimen Source = Venous

IDEXX LABORATORIES

Client: Sanford, Rich (3193)
Patient Name: BLM Warm Springs
Species: Equine
Breed: Mustang

Gender: Female
Weight: 0.0 lbs
Age: 20 Years
Doctor: Schank, Craig

LAHONTAN VALLEY VETERINARY CLINIC
3660 SCHURZ HWY, FALLON, NV 89406
775-423-7528

Test	Results	Reference Interval	LOW	NORMAL	HIGH

VetStat (January 29, 2010 10:16 AM)

SamType = Ven
Temp = 37.0 C

IDEXX LABORATORIES

2/17/10

Gross Post-Mortem Examination Form

Identification

Owner Name BLM Animal Name Granite Age 4yr

Gender Breed Color Markings

Brief History 1 week history of depression heavy breathing

Time of Death Cause of Death Euthanized (Y/N)

Gross Necropsy Findings

1. **Musculoskeletal:** External normal

Bones Joints

Describe specific injuries if they were the cause of death

2. **Respiratory System:** Pharynx Larynx

Trachea brown fluid Bronchi brown fluid Lungs numerous abscesses brownish fluid (cultured)

3. **Circulatory System:** Thoracic Fluid

Heart normal Weight (if available)

Great Vessels Vena Cava

4. **Digestive System:** Abdominal Cavity Fluid Serosal Surface

Contents Esophagus

Stomach normal Small Intestine

Cecum Large Colon

Small Colon Specific Comments

5. **Urogenital System:** Urine (color) Ureters

Urethra Kidneys

Testicles normal Ovaries

6. **Nervous System:** CNS (Brain)

Note gross findings if evaluated or clinical signs if brain case not opened N/E

Pituitary

Spinal Cord (if evaluated, or clinical signs if suspected lesion site)

Gross Diagnosis pneumonia

Tissues collected for histopathology

Laboratory lung culture (attach pathologist's report)

* If an organ or system is not examined indicate with a N/E.

Veterinarian performing exam Richard Sanford Signature

Address City/State/Zip Fallon, NV 89406

Phone Number E-mail address

Animal Disease & Food Safety Lab
405 S 21st St
Sparks, NV 89431
Ph: (775) 353-3718 Fax: (775) 353-3659
www.agri.state.nv.us

Richard Sanford DVM
PO Box 937
Wadsworth, NV 89442

Complete Results Report

Accession No: **10-3206**	Species:Equine	Animal Name:	Received:02/12/10
Breed:	Owner:BLM Fallon	Age:	Sex:

Case Coordinator: **Kim Priest, Microbiologist 3**

Aerobic culture Verified on:02/16/10

Animal Id	Specimen	Isolate	Result	Level
Granite	Swab	Streptococcus Zooepidemicus	heavy growth	
Granite	Swab	Staphylococcus Aureus	heavy growth	

Mixed bacterial flora to include streptococcus zooepidemicus and staphylococcus aureus.

Accession No: 10-3206

Sensitivity

Drug	Streptococcus Zooepidemicus
Amikacin 30 mcg	resist
Amoxicillin 30 mcg	
Ampicillin 10 mcg	suscept
Carbenicillin 100 mcg	suscept
Ceftiofur 30 mcg	suscept
Cephalothin 30 mcg	
Chloramphenicol 30 mcg	suscept
Clindamycin 2 mcg	resist
Cloxacillin 1 mcg	
Doxycycline 30 mcg	suscept
Enrofloxacin 5 mcg	suscept
Erythromycine 15 mcg	suscept
Gentamicin 10 mcg	suscept
Nalidixic Acid 30 mcg	
Penicillin 10 mcg	suscept
Piperacillin 100 mcg	
SxT 25 mcg	suscept
Tetracycline 30 mcg	suscept
Ticarcillin 75 mcg	suscept
Tilmicosin	

By listing the organism susceptibility to the above antimicrobial drugs, it should not be construed that the listed antimicrobials are approved for use in all animal species. The extra-label use of antimicrobial drugs should only be undertaken upon the recommendation and under the supervision of a veterinarian.

Kim Priest, Microbiologist 3

Case Coordinator Signature

End of Report

Animal Disease & Food Safety Lab
405 S 21st St
Sparks, NV 89431
Ph: (775) 353-3718 Fax: (775) 353-3659
www.agri.state.nv.us

Richard Sanford DVM
PO Box 937
Wadsworth, NV 89442

Complete Results Report

Accession No: 10-3224	Species:Equine	Animal Name:	Received:02/16/10
Breed:	Owner:BLMP	Age:	Sex:

Case Coordinator: **Kim Priest, Microbiologist 3**

Aerobic culture Verified on:02/18/10

Animal Id	Specimen	Isolate	Result	Level
	Swab	Streptococcus zooepidemicus	heavy growth	
	Swab	Streptococcus zooepidemicus	heavy growth	
	Swab	Streptococcus zooepidemicus	heavy growth	

Accession No: 10-3224

Sensitivity

Drug	Streptococcus zooepidemicus
Amikacin 30 mcg	resist
Amoxicillin 30 mcg	
Ampicillin 10 mcg	suscept
Carbenicillin 100 mcg	suscept
Ceftiofur 30 mcg	suscept
Cephalothin 30 mcg	
Chloramphenicol 30 mcg	suscept
Clindamycin 2 mcg	resist
Cloxacillin 1 mcg	
Doxycycline 30 mcg	suscept
Enrofloxacin 5 mcg	suscept
Erythromycine 15 mcg	suscept
Gentamicin 10 mcg	suscept
Nalidixic Acid 30 mcg	
Penicillin 10 mcg	suscept
Piperacillin 100 mcg	
SxT 25 mcg	suscept
Tetracycline 30 mcg	suscept
Ticarcillin 75 mcg	suscept
Tilmicosin	suscept

By listing the organism susceptibility to the above antimicrobial drugs, it should not be construed that the listed antimicrobials are approved for use in all animal species. The extra-label use of antimicrobial drugs should only be undertaken upon the recommendation and under the supervision of a veterinarian.

Kim Priest, Microbiologist 3

Case Coordinator Signature

End of Report