

Report Date: 6/6/2022 11:55:46 AM  
 Sent By: [REDACTED]

**Amended Report**

Case Coordinator: [REDACTED]

Accession No: F22-0040498  
 Date Received: 4/26/2022  
 Referral #: F22-0040003  
 Owner/Producer: BLM - Canon City Complex

[REDACTED]

Phone: [REDACTED]

**Associated Parties**

Interdepartmental	1471645 - [REDACTED]	Internal Account number: 1471645
Clinic	[REDACTED]	
Report To	USDA BLM Mustang Rescue Program Albert J Kane	
Veterinarian Submitter	[REDACTED]	

**Animal Information**

Name	Taxonomy	Sex	Age
49431	Equine - Horse	Female	Adult

**Diagnosis/Case Summary**

F22-40498, Adult mare #49431  
 25 April 2022

Please refer to case F22-0040079 for nasal swab results.

**HISTORY:**

Die off of Mustangs in the BLM facility Canon City CO.

**GROSS LESIONS:**

1. Body condition: Good.
2. Lungs: Fail to collapse, wet and heavy, with few dark regions (hemorrhage), large volume of white froth in trachea, nasal cavity, and bronchi, approximately 100-200 mL of clear yellow fluid in thoracic cavity.
3. Mouth: No ulcers observed.
4. All other internal organs are within normal limits.

**GROSS DIAGNOSIS:**

Lungs: Do not collapse, severe acute edema with patchy tan areas throughout, mild hemorrhage with acute multifocal regions of bronchopneumonia.

**HISTOPATHOLOGIC DIAGNOSES:**

1. Lungs: Severe multifocal necrosuppurative bronchitis and bronchiolitis and patches areas of suppurative bronchopneumonia.
2. Trachea: Moderate squamous metaplasia with mild lymphoplasmacytic tracheitis.

**COMMENTS:**

This horse (number 49431) did have a mild lymphoplasmacytic tracheitis with moderate squamous metaplasia of tracheal epithelium and severe multifocal necrosuppurative bronchitis and bronchiolitis and patchy areas of suppurative bronchopneumonia. Lungs were saved frozen but not submitted for virology. However; the lesions in the trachea, bronchi and lungs are classical for a viral infection with a secondary bacterial bronchopneumonia, Numerous colonies of bacteria were found throughout consolidated regions. Heavy growth of *Streptococcus equi ssp. zooepidemicus* was isolated from lung tissues.

**HISTOPATHOLOGY:**

Slide 1.

Four sections of lung are present for examination; they are similar to the horses. In the area of the lung that appears to be more normal, yet fails to collapse, these areas are characterized by bronchi and bronchioles being filled with neutrophils. Neutrophils then leak out and extend into the alveolar duct. Bacteria are present within the lumen of these air passages. In some areas, there is evidence of necrosis of bronchial epithelium. In other areas, there appears to be mild hyperplasia. The lesion is especially present in bronchi that are not filled with neutrophils. In these bronchi, there is obvious necrosis or ulceration of bronchial epithelium. In some areas, these small ulcers in the bronchial epithelium are associated with bacterial colonies. There is also edema throughout the rest of the pulmonary parenchyma. The other three sections of lung have similar lesions, but the degree of consolidation within alveolar spaces is more severe. At the point in one section where approximately half of the entire section is totally consolidated, numerous bacterial colonies are present in these areas. There is one area in which a fairly large area has undergone acute necrosis, and bacteria are on the edges on this large area of necrosis. In another area, there is a large area of consolidation where alveolar spaces are filled with edema, macrophages, and fibrin.

Slide 2.

Trachea: Three sections of trachea are present. Tracheal epithelium is normally a pseudostratified columnar ciliated epithelium. In many areas, the epithelium has undergone metaplasia and is thinner and has lost the ciliated component. There is a mild lymphoplasmacytic infiltration underneath the tracheal epithelium.



Prelim: 4/27/2022 TRS  
 Full Report: 5/18/2022 ljb

**Lab Findings**

**Bacteriology**

**Aerobic culture - 4/28/2022 11:32 AM**

Specimen	Aerobic growth	Aerobic growth amount
49431 - Female - Adult		
Tissue-Lung - 2	Streptococcus equi ssp. zooepidemicus	Heavy

**Pathology**

**Necropsy histopathology - 5/18/2022 2:26 PM**

Specimen	Histopathology
49431 - Female - Adult	
Whole Animal - 1	Complete

Specimen

Necropsy

49431 - Female - Adult

Whole Animal - 1

Complete

Client Report History

Report Type	Delivery Method	Sent To	Date Sent
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Bulletin(s)

*Thank you for choosing CSU for your diagnostic services. If you have any questions about test interpretation, we are happy to provide assistance. Please consult a licensed veterinarian regarding treatment options and management decisions*

This accession was re-opened to add information or correct the report. This version is an amended report and should be used as the final report.