

Report Date: 6/6/2022 11:59:05 AM  
 Sent By: [REDACTED]

**Amended Report**

Case Coordinator: [REDACTED]

Accession No: F22-0040499  
 Date Received: 4/26/2022  
 Referral #: F22-0040004  
 Owner/Producer: BLM - Canon City Complex

[REDACTED]

Phone: [REDACTED]

**Associated Parties**

Clinic	[REDACTED]
Report To	USDA BLM Mustang Rescue Program Albert J Kane
Veterinarian Submitter	[REDACTED]

**Animal Information**

Name	Taxonomy	Sex	Age
9104	Equine - Horse	Male	2 Years

**Diagnosis/Case Summary**

F22-40499, Mustang # 9104, chip # none, 2-year-old male  
 25 May 2022

Please refer to case F22-0040080 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) with patchy bronchopneumonia, large volume of white froth in trachea, nasal cavity and bronchi.
3. Mouth: No ulcers observed.
4. All other internal organs are within normal limits.

**GROSS DIAGNOSES:**

1. Lungs: Do not collapse, severe acute edema with patchy tan areas throughout mild hemorrhage and patchy of bronchopneumonia.
2. Trachea: Mild lymphoplasmacytic and suppurative tracheitis with bacteria on the surface epithelium.

**COMMENTS:**

This 2-year-old horse (number 9104) did have a mild lymphoplasmacytic and suppurative tracheitis and severe multifocal necrosuppurative bronchitis and bronchiolitis and patches areas of suppurative bronchopneumonia. The lesions in the trachea, bronchi and lungs are classical for a viral infection with secondary bacterial bronchopneumonia. Numerous colonies of bacteria were found throughout consolidated regions of lung. Heavy growth of *Streptococcus equi sp. zooepidemicus* and *Actinobacillus sp.* were isolated from lung tissues. Lungs were frozen but not submitted for viral detection.

**HISTOPATHOLOGY:**

Slide 1.

Lung: There are three sections of lung on this slide; 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 bronchiole 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 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: Two sections of trachea are present on this slide. There is a mild infiltration of lymphocytes under the tracheal epithelium. In many areas, the tracheal epithelium has lost the cilia. There is evidence of necrosis within the tracheal epithelium. In some areas, lymphocytes, a few plasma cells, and even neutrophils found migrating through the tracheal epithelium. There are several plaques of these same inflammatory cells with colonies of bacteria located on this surface.



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

**Lab Findings**

**Bacteriology**

**Aerobic culture - 4/28/2022 11:33 AM**

Specimen	Aerobic growth	Aerobic growth amount
9104 - Male - 2 Years		
Tissue-Lung - 2	Streptococcus equi ssp. zooepidemicus	Heavy
	Actinobacillus species	Heavy

**Pathology**

**Necropsy histopathology - 5/18/2022 3:04 PM**

Specimen	Histopathology
9104 - Male - 2 Years	
Whole Animal - 1	Complete

**Necropsy-equine gross examination only - 5/18/2022 3:04 PM**

Specimen	Necropsy
9104 - Male - 2 Years	
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.