Necropsy/Veterinary Examination Report

Prepared by: Dr. Paul Smiley Report Date: 11/21/2016 USDA APHIS Veterinary Services

Location/Event: BLM Owyhee Complex Gather Exam Date: 11/19/2016

Animal ID: approx. 6 month old buckskin filly

History: The foal was gathered at the Little Humboldt trap site on 11/18/16. She came in with the other horses, was in good body condition, was loaded and hauled to the holding area without observers noting abnormalities.

No abnormalities were noted either during the sorting process at the holding pens or later in the day when horses were fed, watered, and observed prior to personnel leaving for the day. However, in later questioning of contractor's employees, one of the experienced wranglers said he had seen this foal coming into the trap and behaving strangely—as if it were slightly disoriented or uncoordinated.

At first light on 11/19 the foal was found lying flat and not moving, near the center in the foal pen. There were no signs in the ground of her struggling. She was initially thought to be dead and contractor's employees started to remove her from the pen. As they started to move her, it was noticed that she was still breathing shallowly, and she attempted to raise her head. I arrived as they got her outside of the pen.

With assistance she was then able to roll to an upright position and hold her head up. Strength of muscle movements appeared to be adequate, but not well controlled. Breathing continued to be regular, but somewhat shallow. Heart rate was regular but weak.

No wounds or other injuries were seen on physical exam. No distension or tightness of abdomen was noted, and there was no expression of pain on pressure or palpation.

Given the absence of other external symptoms or abnormalities, I considered the possibility of a head or spinal cord injury.

I administered Banamine by IV injection.

The foal did not exhibit signs of pain or serious distress, and remained upright for a few minutes, then was able to get up to a standing position with slight assistance. She remained standing, with no significant change in appearance, while a horse trailer was brought to the scene. She was able to get into the trailer with assistance, and was moved a short distance away to stay in the trailer, where she would be undisturbed by activities at the corrals.

The foal remained standing on her own, but did not move, and appeared depressed. She was monitored for the next few hours. Attempts were made to provide fluids by mouth. No substantial changes or additional symptoms occurred for the first hours, but late in the morning she went down on her side again, and died in a short period of time.

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Necropsy Examination: Because of the unusual history and lack of a clear cause of death, BLM requested a necropsy. Ben Noyes from BLM accompanied me to witness the exam.

As during the earlier exam, no significant wounds or other external injuries were seen on physical exam. There were some abrasions around the eyes and mouth from when the foal was down. No distension or tightness of abdomen was noted. Mucous membranes were congested.

As skin was reflected from the outer body wall of abdomen and thorax, no abnormal hemorrhage or edema was seen.

An exam of the thoracic and abdominal cavities was conducted. Internal lining of the body cavities was smooth, cavities contained no excessive or abnormal fluid or exudate. No unusual findings in the thoracic cavity including the heart, lungs, diaphragm, esophagus, aorta or trachea.

Abdominal organs including the intestinal tract, liver, spleen, kidneys, and bladder were found to be normal on gross observation.

Because of the possibility of a head or spinal cord abnormality I further examined these areas. Skinning the head and upper neck revealed no abnormalities. I then cut down to inspect the area where the base of the skull articulates with the top of the spinal column (atlanto-occipital joint). The joint was opened exposing the spinal canal and spinal cord. The spinal canal contained an abnormal thick green fluid, with apparent strands of fibrin or membranous material. The cause for the presence of this abnormal material was not apparent. The spinal cord was intact and appeared grossly normal when I transected it.

Diagnosis/Differentials: precise diagnosis is unknown, but likely relates to CNS damage

Conclusion(s)/Recommendation(s): findings are unusual but appear to be preexisting, due to unknown past circumstances or events