

# Pathology Report

Submitter Ref.: H323	Date Sent: 21/12/2023	Accession No.: 64172
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To: [REDACTED]  
Department of Conservation  
Auckland

Report Sent: 05/12/2024  
Copy To:

Email:

Species: Cetacean	Breed: Maui dolphin		
Age: Neonate	Sex: Male		
Owner:			Type: Post Mortem
ID: H323			Prev. Accn.:
Submitted:	At Risk:	Affected:	Dead:

## History

Found at Karioitahi Beach in West Auckland. Frozen overnight and driven down to Massey the next day. Held in freezer at Massey pending necropsy, to be attended by Paapaka Brown and Danica Zubrzycki.

## Gross Findings

This young calf was thawed before necropsy. The body was in good body condition and was assessed as being in a poor state of post mortem preservation (code 4), with loss of full thickness skin around the eyes and flipper margins, distension and liquefaction of the blubber around the face, and marked autolysis of the internal organs to the point where many were unidentifiable. There was early scavenging (likely birds) around the umbilicus and genital slit, with peck marks on the sides of the tail and right flank.

The standard length was 0.735m and the body weighed 5.9kg. The blubber depths were 13mm dorsally, 12mm ventrally and 12mm laterally.

The dorsal fin was folded and there were faint fetal folds. Fetal whisker follicles were evident. The penis was everted and the umbilicus was fresh. The teeth were not erupted. The tongue was partially scavenged and markedly bloated. There were small maggots in and around the oral cavity.

The lungs were collapsed and sank in formalin. The heart appeared grossly normal and the stomach was empty. The majority of other organs were either extremely friable or macerated.

## Diagnosis

Stillborn

## Comments

This calf had a fresh umbilical cord stump and had not breathed, indicating that it was stillborn. The state of decomposition of the internal organs meant that only the diaphragm, heart and lungs could be examined histologically. The diaphragm and heart were too decomposed for interpretation, The lungs had extremely large numbers of squames (skin cells) in the alveolar spaces, which is sometimes associated with fetal distress during the birth process, although it can also be present in neonates that are born normally.

There are a range of causes of stillbirth, including maternal illness, congenital fetal abnormalities and infectious disease in the fetus. In most cases it is not possible to diagnose the underlying cause, particularly when the placenta is not available for examination. As part of our ongoing surveillance process, the tissues from this calf will be tested for Toxoplasma and Brucella, two pathogens which have previously been diagnosed in Māui dolphins and can cause stillbirth. Results will be reported when available.

Date: 05/12/2024	Pathologists:
Students:	