Alaska SeaLife Center

GROSS NECROPSY

SPECIES: Fin whale (Balaenoptera physalus)
SEX: Female **AGE:** In-ureto mid term calf
ANIMAL ID/NAME: 2026099f
PROSECTOR: Emmanuelle Furst
CLINIC: NMFS /ASLC-Seward

ADDRESS: Alaska SeaLife Center
301 Railway Avenue, Seward AK
NECROPSY DATE: 6/22/2026
PATHOLOGIST: Kathy Burek
PENDING: Histopathology

PATHOLOGIC DIAGNOSES:

1. COD: Boat strike

BRIEF HISTORY: Post mortem interval was estimated to be 4 days .
This is the fetus of an adult female (NMFS #2026099) reported in Seward harbor on the bow of a cruise ship on 6/19/2026 AM. The adult female was towed to Storm Chaser beach in Seward, AK ~8 PM 6/19/2026. Necropsy of the adult female was performed on 6/20/26 and 6/21/2026 on Storm Chaser Beach, Seward, AK on the adult female. On 6/20/2026, fetus was removed from her uterus and stored in the fridge for later full necropsy performed on 6/22/2026.

Fetal necropsy: Dr. Emmanuelle Furst was lead prosectors, three ASLC staff were assisting (Simone G., Madi B., and Jess M.), and Adrianna Davis lead recording on 6/22/2026.

Body condition	2 (Good)	**Carcass condition**	Code 3

Weight: 27.2 kg (60 lbs, actual but including some fluid in trash bag used for storage)

Morphometrics: (cm unless indicated)

Basic Measurements	**Value**	**Basic Measurements***	**Value**
Straight length	137	Skin thickness	NM
Curvilinear length	150	Blubber thickness, dorsal bdf **(w/o skin)**	0.4
Girth at axilla (½ girth)	84.5	Blubber thickness, dorsal midline Axillary **(w/o skin)**	0.2
Girth, anus	41.5	Blubber thickness, ventral midline Axillary **(w/o skin)**	0.1
Fluke width	32	Blubber thickness, lateral Axillary, **(w/o skin)**	0.15

EXTERNAL FINDINGS:

On removal from the uterus on 6/20/2026, the fetus was pink to red in coloration. There was a focal region of darkened skin discoloration on dorsum cranial to dorsal fin extending ventrally on right and left flanks, a linear red lesion along lower mandible, and some focal petechial discoloration along tail flank.



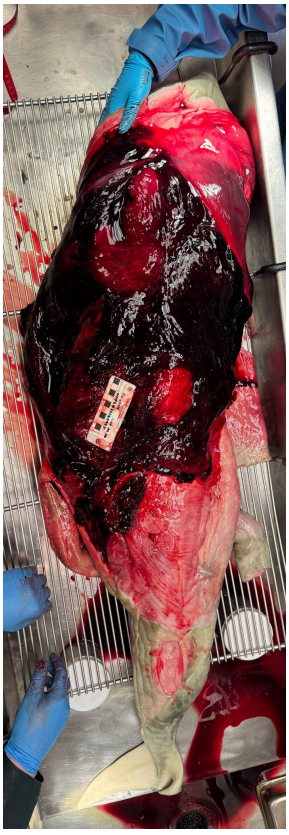

By the time of necropsy on the 6/22/2026, skin was discolored mottled green to pink, there was subcutaneous emphysema, and dorsal skin was sloughing.




A focal area of contusion and hemorrhage was present at and extending caudal to the blowhole, measuring 2 cm x 1.5 cm. Extensive skin sloughing with exposure of underlying musculature was noted cranial to the dorsal fin, extending 30 cm (length) x 28.5 cm (width) and involving the bilateral flank (left and right). A focal area of red discoloration was present on the left lateroventral aspect, measuring 10.5 cm x 2.5 cm. Focal discoloration was noted on the left pectoral fin, measuring 5.5 cm x 1 cm. A small puncture wound with exposure of underlying blubber was present on the left flank at the proximal tail, measuring 1.5 cm x 0.5 cm.

INTERNAL FINDINGS:

Subcutaneous: Extensive subcutaneous hemorrhage was present. On the cranial aspect of the thorax, hemorrhage extends the full dorsoventral extent of the subcutaneous space bilaterally. On the caudal aspect of the thorax and cranial abdomen, hemorrhage was confined to the region between the ventral midline and mid-flank within the subcutaneous space bilaterally. The hemorrhage extends craniocaudally from the shoulder region to a point caudal to the last rib.



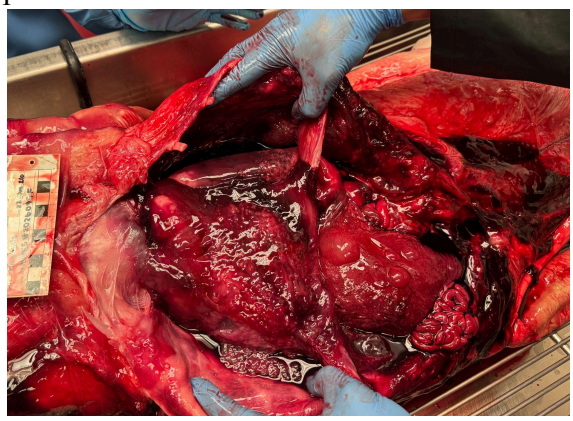


Nuchal fat pad: The nuchal fat pad exhibits abundant subcutaneous adipose tissue. There is pink discoloration on the craniodorsal aspect (adjacent to the skull), transitioning to a white-to-yellow coloration throughout the remainder of the fat pad.



Musculoskeletal: Red discoloration was noted in the ventral skeletal musculature at the site of hemorrhage pictured above. No significant findings were noted on the remainder of the skeletal musculature.

Body cavities: Tricavitary hemorrhage was noted on transection. A moderate volume of blood (estimated at >20 cc) was present in both the abdominal and thoracic cavities, with approximately 10 cc of frank blood noted within the pericardial sac.





Respiratory: The parenchyma was diffusely mottled red to pink in both left and right lung lobes. The left lung lobe is pictured below with gas visible under the pleura in cranial and caudal aspect, and red discoloration noted throughout the majority of the parenchyma. Bronchioles, bronchus and tracheal were unremarkable on transection.



Cardiovascular: Approximately 10 cc of frank blood was noted within the pericardial sac. The remainder of the cardiac evaluation was unremarkable, with minimal blood present within the heart on transection. All valves and chambers were evaluated with no significant findings. The great vessels similarly showed no significant findings.



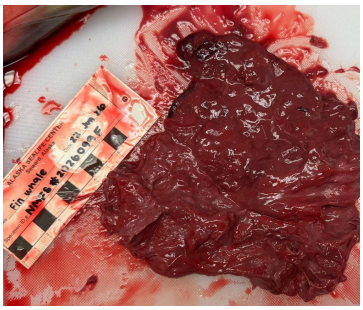


Lymphoid: The thoracic lymph node were evaluated with no significant findings. The mesenteric and prescapular lymph nodes were not examined.
Thymus: No significant findings.
Spleen: No significant findings.

Endocrine: This was not examined.
Thyroid: No significant findings.
Adrenals: No significant findings.
Pituitary: This was not examined.

Urinary: Kidney examined with no significant findings. Bladder was empty, and there were no significant findings.

Liver: The liver was markedly friable (suspected autolytic change). There was diffuse, uniform dark red discoloration of the parenchyma on the caudal aspect, with the uniform red discoloration of the caudally-oriented serosal surface (suspected hemorrhage).



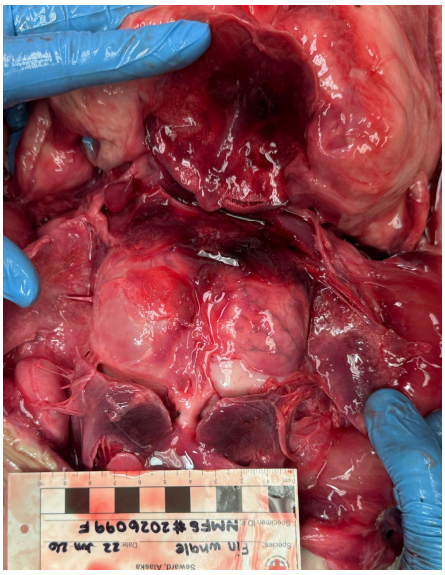

Digestive: The intestinal contents were light brown, watery, and minimal and the mucosa had no significant gross findings.



Reproductive: This individual was female. No significant findings in the reproductive tract.



Nervous / sensory: Intracranial hemorrhage was noted on dissection. As the cranium was nonfused at this developmental stage, it was gently lifted to reveal the hemorrhage seen below.



MICROBIOLOGY: archived

TOXICOLOGY: Blubber collected

PARASITOLOGY: None

COMMENT: Cause of death is consistent with acute trauma from boat strike. Trauma consisted of tri-cavity internal hemorrhage and intracranial hemorrhage supportive of antemortem trauma.

Emmanuelle Furst DVM

CATEGORY OF COD	DX	APPROX TIMING
IMMEDIATE–	Blunt force trauma from boat strike in-utero	Acute
PROXIMATE / (UNDERLYING) COD–	None known	
CONTRIBUTING FACTORS:	1.	
	2.	
	3.	

OTHER FINDINGS		

Proximate COD –Proximate cause of death is the disease, injury, or process that initiated a sequence of events, which led to death
IMMEDIATE COD – The concluding or final event that actually produces death
CONTRIBUTING FACTORS – listed in steps for the progression between proximate and immediate

SAMPLE DISPOSITION:

Date	Sample ID	Specific Sample	Container Type	Sample Preservation	Sample Location	Purpose	Type of analysis	Date shipped out for analysis	Shipped to	Comments
6/22/2026	Skin		jar	NBF (10%)	ASLC	Histopath			AVPS	
6/22/2026	Cranium		jar	NBF (10%)	ASLC	Histopath			AVPS	
6/22/2026	Muscle		jar	NBF (10%)	ASLC	Histopath			AVPS	
6/22/2026	Ovary	Right	jar	NBF (10%)	ASLC	Histopath			AVPS	
6/22/2026	Lung w/ bronchus		jar	NBF (10%)	ASLC	Histopath			AVPS	
6/22/2026	Lung		jar	NBF (10%)	ASLC	Histopath			AVPS	
6/22/2026	Diaphragm		jar	NBF (10%)	ASLC	Histopath			AVPS	
6/22/2026	Heart		jar	NBF (10%)	ASLC	Histopath			AVPS	

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6/22/2026	Liver		jar	NBF (10%)	ASLC	Histopath			AVPS	
6/22/2026	Spleen		jar	NBF (10%)	ASLC	Histopath			AVPS	
6/22/2026	Kidney	Left	jar	NBF (10%)	ASLC	Histopath			AVPS	
6/22/2026	Urinary bladder		jar	NBF (10%)	ASLC	Histopath			AVPS	
6/22/2026	Adrenal gland	Right	jar	NBF (10%)	ASLC	Histopath			AVPS	
6/22/2026	Umbilicus		jar	NBF (10%)	ASLC	Histopath			AVPS	
6/22/2026	Thymus		jar	NBF (10%)	ASLC	Histopath			AVPS	
6/22/2026	Uterus		jar	NBF (10%)	ASLC	Histopath			AVPS	
6/22/2026	{ancreas		jar	NBF (10%)	ASLC	Histopath			AVPS	
6/22/2026	Stomach		jar	NBF (10%)	ASLC	Histopath			AVPS	
6/22/2026	Trachea		jar	NBF (10%)	ASLC	Histopath			AVPS	

Date	Sample ID	Specific Sample	Container Type	Sample Preservation	Sample Location	Purpose	Type of analysis	Date shipped out for analysis	Shipped to	Comments
6/22/2026	Intestines x3		jar	NBF (10%)	ASLC	Histopath			AVPS	
6/22/2026	Esophagus		jar	NBF (10%)	ASLC	Histopath			AVPS	
6/22/2026	Colon		jar	NBF (10%)	ASLC	Histopath			AVPS	
6/22/2026	Brain		jar	NBF (10%)	ASLC	Histopath			AVPS	
6/22/2026	Thyroid		jar	NBF (10%)	ASLC	Histopath			AVPS	
6/22/2026	Tongue		jar	NBF (10%)	ASLC	Histopath			AVPS	
6/22/2026	Skin		2mL cryovial	RNA later	ASLC	Life HX			AVPS	
6/22/2026	Blubber in teflon		Whirlpak	-20°C	ASLC	Life HX			AVPS	
6/22/2026	Liver in teflon		Whirlpak	-20°C	ASLC	Life HX			AVPS	
6/22/2026	Lung		Whirlpak 4oz	-20°C	ASLC	DZ Archive			AVPS	
6/22/2026	Lung		2mL cryovial	-80°C	ASLC	DZ Archive			AVPS	

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6/22/2026	Liver		Whirlpak 4oz	-20°C	ASLC	DZ Archive			AVPS	
6/22/2026	Liver		2mL cryovial	-80°C	ASLC	DZ Archive			AVPS	
6/22/2026	Kidney	Left	Whirlpak 4oz	-20°C	ASLC	DZ Archive			AVPS	
6/22/2026	Kidney	Left	2mL cryovial	-80°C	ASLC	DZ Archive			AVPS	
6/22/2026	Brain		Whirlpak 4oz	-20°C	ASLC	DZ Archive			AVPS	
6/22/2026	Brain		2mL cryovial	-80°C	ASLC	DZ Archive			AVPS	
6/22/2026	BH viral swab		2mL cryovial	VTM	ASLC	DZ Archive			AVPS	
6/22/2026	BH viral swab		2mL cryovial	VTM	ASLC	DZ Archive			AVPS	
6/22/2026	BH swab		2mL cryovial	RNA later	ASLC	DZ Archive			AVPS	
6/22/2026	Rectal viral swab		2mL cryovial	VTM	ASLC	DZ Archive			AVPS	
6/22/2026	Rectal viral swab		2mL cryovial	VTM	ASLC	DZ Archive			AVPS	

Date	Sample ID	Specific Sample	Container Type	Sample Preservation	Sample Location	Purpose	Type of analysis	Date shipped out for analysis	Shipped to	Comments
6/22/2026	Rectal swab		2mL cryovial	RNA later	ASLC	DZ Archive			AVPS	
6/22/2026	Eye	Right	ziplock	-20°C	ASLC	Life HX			AVPS	
6/22/2026	Eye	Left	ziplock	-20°C	ASLC	Life HX			AVPS	
6/22/2026	Repro tract		ziplock	-20°C	ASLC	Life HX			AVPS	
6/22/2026	Blubber in foil	LAX	Whirlpak 18oz	-20°C	ASLC	DZ Archive			AVPS	
6/22/2026	Blubber in foil	BDF	Whirlpak 18oz	-20°C	ASLC	DZ Archive			AVPS	
6/22/2026	Feces		2mL cryovial	-80°C	ASLC	Tox/Biotox			AVPS	~0.75mL
6/22/2026	Feces		2mL cryovial	-80°C	ASLC	Tox/Biotox			AVPS	~0.75mL
6/22/2026	Stomach contents		5mL cryovial	-80°C	ASLC	Tox/Biotox			AVPS	
6/22/2026	Whole blood		2mL cryovial	-80°C	ASLC	DZ Archive			AVPS	
6/22/2026	Whole blood		2mL cryovial	-80°C	ASLC	DZ Archive			AVPS	
6/22/2026	Liver		2mL cryovial	-80°C	ASLC	UAM Archive			AVPS	UAM: 171971

Date	Sample ID	Specific Sample	Container Type	Sample Preservation	Sample Location	Purpose	Type of analysis	Date shipped out for analysis	Shipped to	Comments
6/22/2026	Kidney		2mL cryovial	-80°C	ASLC	UAM Archive			AVPS	UAM: 171973
6/22/2026	Muscle		2mL cryovial	-80°C	ASLC	UAM Archive			AVPS	UAM: 171970
6/22/2026	Spleen		2mL cryovial	-80°C	ASLC	UAM Archive			AVPS	UAM: 171972
6/22/2026	Umbilicus		Whirlpak 4oz	-20°C	ASLC	DZ Archive			AVPS	
6/22/2026	Skin		2mL cryovial	-80°C	ASLC	DZ Archive			AVPS	
6/22/2026	Muscle		2mL cryovial	-80°C	ASLC	DZ Archive			AVPS	
6/22/2026	Lung		2mL cryovial	-80°C	ASLC	DZ Archive			AVPS	
6/22/2026	Heart		2mL cryovial	-80°C	ASLC	DZ Archive			AVPS	
6/22/2026	Liver		2mL cryovial	-80°C	ASLC	DZ Archive			AVPS	
6/22/2026	Spleen		2mL cryovial	-80°C	ASLC	DZ Archive			AVPS	
6/22/2026	Kidney		2mL cryovial	-80°C	ASLC	DZ Archive			AVPS	

Date	Sample ID	Specific Sample	Container Type	Sample Preservation	Sample Location	Purpose	Type of analysis	Date shipped out for analysis	Shipped to	Comments
6/22/2026	Chest LN		2mL cryovial	-80°C	ASLC	DZ Archive			AVPS	
6/22/2026	Intestine		2mL cryovial	-80°C	ASLC	DZ Archive			AVPS	
6/22/2026	Brain		2mL cryovial	-80°C	ASLC	DZ Archive			AVPS	
6/22/2026	Tongue		2mL cryovial	-80°C	ASLC	DZ Archive			AVPS	