



Our ref: CORP F2025/000257
Receipt No: 21969131

CORPORATE SERVICES

Level 20
11 Waymouth Street
Adelaide SA 5000
GPO Box 1671
Adelaide SA 5001
DX 667
Tel 8429 0422
www.pir.sa.gov.au

21 October 2025

The Hon Dr Nicola Centofanti MLC
Member of the Legislative Council
Parliament House
ADELAIDE SA 5000

Dear Dr Centofanti

Determination under the *Freedom of Information Act 1991*

I refer to your application made under the *Freedom of Information Act 1991* which was received by the Department of Primary Industries and Regions (PIRSA) on 15 August 2025, seeking access to the following:

“Results of postmortem examinations conducted on dead marine life including fish, shellfish and marine mammals, and also sea birds to date on specimens collected along South Australian beaches, including analyses and probable causes of death.”

Timeframe: 1/02/2025 to 15/08/2025

Pursuant to Section 14A of the Freedom of Information Act, the legislative timeframe in which to provide a determination was extended until 7 October 2025. Our apologies for the subsequent delay that has occurred in making this determination.

Accordingly, the following determination has been finalised.

I have located one hundred and twenty-three documents that are captured within the scope of your request.

Determination 1

I have determined that access to the following documents is **granted in full**:

Doc No.	Description of document	No. of Pages
83a	Attachment to Document 83 – PIRSA Biotoxin Report - SA Shellfish Quality Assurance Program - Certificate of Analysis dated 17/4/2025	1
86	Emails between Analytical Services Tasmania and PIRSA officers dated 2/6/2025 and 10/6/2025 re laboratory results for biotoxins	2

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86a	Attachment to Document 86 – Spreadsheet detailing brevetoxins results	1
87b	Attachment to Document 87 – Spreadsheet detailing brevetoxins results - Great White Shark Gill	1
88	Emails between Analytical Services Tasmania and PIRSA officers dated 28/5/2025 and 2/6/2025 re Biotoxins	3
88a	Attachment to Document 88 – Analytical Services Tasmania Sample Receipt Notification dated 28/5/2025	3

The information removed from Documents 86 and 88, referring to email attachments, is outside of the scope of your request.

Determination 2

I have determined that access to the following documents is **granted in part**:

Doc No.	Description of document	No. of Pages
82	Email from Manager, Aquatic Animal Health Program, Fisheries and Aquaculture, PIRSA to Abalone Industry Association of SA dated 2/6/2025 re Abalone postmortem test results	1
84	Emails between Analytical Services Tasmania and PIRSA officers dated 2/6/2025 and 10/6/2025 re brevetoxin results from gills and livers	2
85a	Attachment to Document 85 – Analytical Services Tasmania Certificate of Analysis dated 20/5/2025 re Biotoxins	2
86b	Attachment to Document 86 – Analytical Services Tasmania Certificate of Analysis dated 2/6/2025 re Biotoxins	2
87	Email thread between Analytical Services Tasmania and Manager, Aquatic Animal Health Program Fisheries and Aquaculture PIRSA dated 8/5/2025 and 13/8/25 re Great White Shark gill testing	3
87a	Attachment to Document 87 – Analytical Services Tasmania Certificate of Analysis dated 8/5/2025 re Great White Shark Gill	3
89	Email thread between A/Research Director, Aquatic and Livestock Sciences SARDI PIRSA and Research Scientist SARDI PIRSA dated 5/6/2025 and 10/6/2025 re Great White Shark toxicology results	2

The information removed from the above documents is pursuant to Clause 6(1) of Schedule 1 of the Freedom of Information Act which states:

“6 - Documents affecting personal affairs

(1) A document is an exempt document if it contains matter the disclosure of which would involve the unreasonable disclosure of information concerning the personal affairs of any person (living or dead).”

The information removed consists of the following:

- Documents 82 and 89:
 - Mobile telephone numbers of Departmental officers
- Document 84:
 - Name and mobile telephone number of a staff member from another jurisdiction
- Documents 85, 86b and 87a:
 - Names of staff members from another jurisdiction
- Document 87:
 - Name of a Departmental veterinary officer
 - Mobile telephone number of a Departmental officer

The term 'personal affairs' has been held to involve 'matters of private concern to an individual' and the 'composite collection of activities personal to the individual concerned'.

As a mobile telephone number allows a person, including an officer of an agency, to be contacted outside of business hours and is information that is not ordinarily available to the public, the information is taken to concern the personal affairs of an individual.

Consent has not been provided to disclose the name of the staff members concerned and, accordingly, there would be an expectation that their personal information would not be released in this way.

Accordingly, it is considered that disclosure of this information would be an unreasonable intrusion into the privacy rights of the individuals concerned.

Determination 3

I have determined that access to the following documents is **granted in part**:

Doc No.	Description of document	No. of Pages
1	PIIMS Laboratory Results PIRSA – Necropsy report – Little Penguin – Dated 12/4/2025	2
2	PIIMS Laboratory Results PIRSA – Histopathology – Little Penguin – Dated 23/4/2025	2
3	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Little Penguin – Dated 15/4/2025	1
4	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Penguin Little – Dated 11/4/2025	1
5	PIIMS Laboratory Results PIRSA – Summary Diagnosis – Little Penguin – Dated 23/4/2025	1
6	PIIMS Laboratory Results PIRSA – Molecular Diagnosis – Cormorant – Dated 14/2/2025	1

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7	PIIMS Laboratory Results PIRSA – Toxicology – Pelican – Dated 19/2/2025	1
8	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Cormorant Mortality – Dated 30/4/2025	1
9	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Cormorant Mortality – Dated 30/4/2025	1
10	PIIMS Laboratory Results PIRSA – Necropsy Report – Bottle Nose Dolphin – Dated 20/3/2025	4
11	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Bottle Nose Dolphin – Dated 25/3/2025	2
12	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Bottle Nose Dolphin – Dated 26/3/2025	2
13	PIIMS Laboratory Results PIRSA – Summary Diagnosis – Bottle Nose Dolphin – Dated 23/4/2025	1
14	PIIMS Laboratory Results PIRSA – Necropsy Report – Little Penguin – Dated 20/3/2025	3
15	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Penguin Little – Dated 25/3/2025	2
16	PIIMS Laboratory Results PIRSA – Summary Comments – Little Penguin – Dated 23/4/2025	1
17	Pathology Report Whiting – Fin Fish – Histopathology from Necropsy – Dated 14/8/2025	6
18	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Petrel – Dated 20/5/2025	1
19	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – New Zealand Fur Seal – Dated 29/5/2025	1
20	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – New Zealand Fur Seal – Dated 6/6/2025	2
21	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Cormorant Mortality – Dated 29/5/2025	1
22	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Cormorant Mortality – Dated 29/5/2025	1
23	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Little Penguin – Dated 2/6/2025	1
24	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Little Penguin – Dated 2/6/2025	1
25	PIIMS Laboratory Results PIRSA – Necropsy Report – Shy Albatross – Dated 31/5/2025	2
26	PIIMS Laboratory Results PIRSA – Histopathology from Necropsy Report – Shy Albatross – Dated 5/6/2025	2
27	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Shy Albatross – Dated 2/6/2025	1
28	PIIMS Laboratory Results PIRSA – Summary Diagnoses – Shy Albatross – Dated 6/6/2025	1
29	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Shy Albatross – Dated 2/6/2025	1
30	PIIMS Laboratory Results PIRSA – Necropsy Report – Fur Seal – Dated 13/6/2025	3

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31	PIIMS Laboratory Results PIRSA – Histopathology from Necropsy Report – Fur Seal – Dated 18/6/2025	2
32	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Fur Seal – Dated 16/6/2025	1
33	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Fur Seal – Dated 19/6/2025	2
34	PIIMS Laboratory Results PIRSA – Summary Diagnosis – Fur Seal – Dated 20/6/2025	1
35	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Little Penguin – Dated 23/6/2025	1
36	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Little Penguin – Dated 23/6/2025	1
37	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Albatross – Dated 23/6/2025	1
38	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Albatross – Dated 23/6/2025	1
39	PIIMS Laboratory Results PIRSA – Clinical History Report – Giant Petrel – Dated 25/6/2025	2
40	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Giant Petrel – Dated 2/7/2025	2
41	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Giant Petrel – Dated 2/7/2025	2
42	PIIMS Laboratory Results PIRSA – Necropsy Report – Little Penguin – Dated 26/6/2025	1
43	PIIMS Laboratory Results PIRSA – Histopathology from Necropsy – Little Penguin – Dated 4/7/2025	2
44	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Little Penguin – Dated 2/7/2025	2
45	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Little Penguin – Dated 2/7/2025	2
46	PIIMS Laboratory Results PIRSA – Necropsy Report – Little Penguin – Dated 27/6/2025	2
47	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Little Penguin – Dated 2/7/2025	2
48	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Little Penguin – Dated 2/7/2025	2
49	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Species Unknown – Dated 2/7/2025	1
50	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Species Unknown – Dated 12/7/2025	1
51	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Wild Bird – Dated 11/7/2025	1
52	PIIMS Laboratory Results PIRSA – Necropsy Report – Cormorants PIRSA – Dated 19/7/2025	3
53	PIIMS Laboratory Results PIRSA – Histopathology from Necropsy – Cormorants PIRSA – Dated 23/7/2025	2
54	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Cormorants PIRSA – Dated 22/7/2025	1

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55	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Cormorants PIRSA – Dated 22/7/2025	1
56	PIIMS Laboratory Results PIRSA – Microbiology Report – Cormorants PIRSA – Dated 11/8/2025	1
57	PIIMS Laboratory Results PIRSA – Summary Diagnosis Report – Cormorants PIRSA – Dated 23/7/2025	1
58	PIIMS Laboratory Results PIRSA – Histopathology Report – Pelican – Dated 28/7/2025	3
59	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Pelican – Dated 24/7/2025	1
60	PIIMS Laboratory Results PIRSA – Necropsy Report – Pelican – Dated 23/7/2025	3
61	PIIMS Laboratory Results PIRSA – Microbiology Report – Pelican – Dated 31/7/2025	3
62	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Pelican – Dated 24/7/2025	1
63	PIIMS Laboratory Results PIRSA – Necropsy Report – Wild Bird – Dated 3/7/2025	1
64	PIIMS Laboratory Results PIRSA – Summary Comments Report – Pelican – Dated 9/8/2025	1
65	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Wild Bird – Dated 11/7/2025	1
66	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Wild Bird – Dated 11/7/2025	1
67	PIIMS Laboratory Results PIRSA – Necropsy Report – Wild Bird – Dated 3/7/2025	2
68	PIIMS Laboratory Results PIRSA – Summary Diagnosis Report – Wild Bird – Dated 19/7/2025	1
69	PIIMS Laboratory Results PIRSA – Histopathology from Necropsy – Wild Bird – Dated 11/7/2025	3
70	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Wild Bird – Dated 11/7/2025	1
71	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Sea Lion – Dated 11/7/2025	1
72	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Sea Lion – Dated 19/7/2025	1
73	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Cormorant Mortality – Dated 11/7/2025	2
74	PIIMS Laboratory Results PIRSA – Molecular Diagnostics – Cormorant Mortality – Dated 11/7/2025	2
75	PIIMS Laboratory Results PIRSA – Histopathology from Necropsy – Cormorant Mortality – Dated 15/7/2025	3
76	PIIMS Laboratory Results PIRSA – Necropsy Report – Cormorant Mortality – Dated 10/7/2025	4
77	PIIMS Laboratory Results PIRSA – Microbiology Report – Cormorant Mortality – Dated 21/7/2025	2
78	PIIMS Laboratory Results PIRSA – Microbiology Report – Cormorant Mortality – Dated 14/8/2025	2

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79	PIIMS Laboratory Results PIRSA – Gross Pathology Report – Pied Cormorant – Dated 8/8/2025	2
80	PIIMS Laboratory Results PIRSA – Histopathology from Necropsy Report – Pied Cormorant – Dated 14/8/2025	3
81	PIIMS Laboratory Results PIRSA – Gross Pathology Report – Penguin Rockhopper – Dated 12/8/2025	7
83	Email from Program Leader SASQAP, PIRSA dated 20/5/2025 re brevetoxin in Kangaroo Island Abalone	1
85	Email thread between Program Leader SASQAP PIRSA and Manager, Aquatic Animal Health Program, Fisheries and Aquaculture, PIRSA dated 20/5/2025 re abalone brevetoxin results	2
90	Pathology Report Bony Bream Mortality – Necropsy Report – Fin Fish – Dated 29/5/2025	3
91	Pathology Report Bony Bream Mortality – Histopathology from Necropsy – Fin Fish – Dated 5/6/2025	3
92	Pathology Report Bony Bream Mortality – Summary Diagnosis Report – Fin Fish – Dated 6/6/2025	1
93	Pathology Report Cockles – Histopathology from Necropsy – Mollusc – Dated 24/4/2025	3
94	Pathology Report Cockles – Histopathology – Mollusc – Dated 11/4/2025	3
95	Pathology Report Cockles – Necropsy Report – Mollusc – Dated 7/4/2025	3
96	Pathology Report Cuttle Fish – Histopathology from Necropsy – Fish – Dated 9/7/2025	1
97	Pathology Report Cuttle Fish – Summary Diagnosis Report – Fish – Dated 12/7/2025	1
98	Pathology Report Cuttle Fish – Necropsy Report – Fish – Dated 29/6/2025	3
99	Pathology Report Cuttlefish – Summary Diagnosis Report – Mollusc – Dated 20/6/2025	1
100	Pathology Report Cuttlefish – Necropsy Report – Mollusc – Dated 3/6/2025	3
101	Pathology Report Cuttlefish – Histopathology from Necropsy – Mollusc – Dated 13/6/2025	2
102	Pathology Report Cuttlefish – Necropsy Report – Mollusc – Dated 12/7/2025	3
103	Pathology Report Eyre/Yorke Peninsula – Necropsy Report – Fin Fish Pilchards – Dated 24/5/2025	3
104	Pathology Report Eyre/Yorke Peninsula – Summary Diagnosis – Fin Fish Pilchards – Dated 29/5/2025	1
105	Pathology Report Eyre/Yorke Peninsula – Histopathology from Necropsy – Fin Fish Pilchards – Dated 29/5/2025	3
106	Pathology Report Reef Fish Mortality – Fin Fish – Necropsy Report – Dated 12/4/2025	2
107	Pathology Report Reef Fish Mortality – Fin Fish - Histopathology from Necropsy – Dated 30/4/2025	4

108	Pathology Report Reef Fish Mortality – Fin Fish – Histopathology from Necropsy – Dated 19/4/2025	3
109	Pathology Report Rock Crab Mortality – Crustacean – Summary Diagnosis – Dated 30/4/2025	4
110	Pathology Report Rock Crab Mortality – Crustacean – Necropsy Report – Dated 12/4/2025	2
111	Pathology Report Rock Crab Mortality – Crustacean – Histopathology from Necropsy – Dated 19/4/2025	3
112	Pathology Report Great White Shark – Fish – Microbiology – Dated 12/5/2025	1
113	Pathology Report Great White Shark – Fish – Summary Findings – Dated 16/5/2025	1
114	Pathology Report Great White Shark – Fish – Histopathology from Necropsy – Dated 8/5/2025	3
115	Pathology Report Great White Shark – Fish – Microbiology – Dated 6/5/2025	1
116	Pathology Report Great White Shark – Fish – Referred Test – Dated 23/5/2025	2

Please note, the necropsy reports are technical documents and require interpretation by a veterinarian or veterinary pathologist.

The information removed from the above documents is pursuant to Clause 6(1) and Clause 7(1)(c) of Schedule 1 of the Freedom of Information Act.

The information removed pursuant to Clause 6(1) consists of the following:

- Names and email addresses of staff from a private pathology laboratory
- Names and submitter IDs of Departmental veterinary staff
- Names of individuals (in some of the documents)

Consent has not been provided to disclose the names of the staff members concerned and, accordingly, there would be an expectation that their personal information would not be released in this way.

Accordingly, it is considered that disclosure of this information would be an unreasonable intrusion into the privacy rights of the individuals concerned.

Clause 7(1)(c) states:

“7 – Documents affecting business affairs

(1) A document is an exempt document –

(c) if it contains matter –

- (i) consisting of information (other than trade secrets or information referred to in paragraph (b)) concerning the business, professional, commercial or financial affairs of any agency or any other person; and*
- (ii) the disclosure of which –*

- (A) *could reasonably be expected to have an adverse effect on those affairs or to prejudice the future supply of such information to the Government or to an agency; and*
- (B) *would, on balance, be contrary to the public interest”*

The information removed pursuant to Clause 7(1)(c) consists of the following:

- Name of a private pathology laboratory and other identifying information as follows:
 - Names of staff members
 - Telephone numbers
 - Email addresses
 - Lab Numbers
 - Submission Numbers

Additional information has been removed from Documents 6, 7, 18, 21, 22, 35, 36 and 39 consisting of the names of third parties.

In addressing the public interest test requirement for the Clause 7(1)(c) exemption, I have balanced the following factors:

In favour of the public interest:

- Meeting the objects of the Freedom of Information Act favouring access to documents.
- Ensuring optimal use of public resources.
- High level of interest in the accountability of public office holders.
- The importance of transparency and openness and the interest that the public has in the decision-making processes of Government.
- High level of community, media and Parliamentary interest and concern relating to the algal bloom.

Contrary to the public interest:

- Consent has not been provided from the third parties concerned to release this information.
- The recent age of the documents and the ongoing relevance of the matter was considered.
- Protecting the business interests of third parties.
- Ensuring that strong working relationships are retained for the betterment of South Australia.
- The release of this information would result in severe consequences for the future of pathology testing for PIRSA.
- With respect to the identification of the laboratory, it is expected that disclosure would harm business relationships with PIRSA resulting in the company re-considering its future engagement with the agency.
- Disclosure would be expected to prejudice the future supply of information to PIRSA, as the level of trust in handling such information would be substantially compromised.

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- Removing the material does not restrict the key information contained within the documents.

Having considered the various factors weighing for and against disclosure, I have determined that disclosure of this information would, on balance, be contrary to the public interest.

Please note, following the finalisation of all tests, a plain English summary and results of postmortem examinations carried out on deceased wildlife as part of the algal bloom response are available on the Department of Environment and Water's website: <https://www.environment.sa.gov.au/topics/animals-and-plants/helping-protecting-wildlife/testing-deceased-wildlife>. Owing to the testing and summarisation process, it is typically some months between the collection of a carcass and the publication of the summary and results.

If you are dissatisfied with this determination, you are entitled to exercise your right of review and appeal as outlined in the attached documentation [Making a Freedom of Information Application | State Records of South Australia \(archives.sa.gov.au\)https://archives.sa.gov.au/sites/default/files/public/documents/Internal Review Application Form 1.pdf](https://archives.sa.gov.au/sites/default/files/public/documents/Internal%20Review%20Application%20Form%201.pdf), by completing the "FOI Application Form for Internal Review of a Determination" and returning the completed form to:

Freedom of Information Principal Officer
Department of Primary Industries and Regions
GPO Box 1671
ADELAIDE SA 5001

or via email PIRSA.FOI@sa.gov.au

In accordance with the requirements of Premier and Cabinet Circular PC045, details of your application, and the documents to which you are given access, will be published in PIRSA's disclosure log. A copy of PC045 can be found at http://dpc.sa.gov.au/data/assets/pdf_file/0019/20818/PC045-Disclosure-Log-Policy.pdf

If you disagree with publication, please advise the undersigned in writing within fourteen calendar days from the date of this determination.

Should you require further information or clarification with respect to this matter, please contact Ms Lisa Farley, Senior Freedom of Information Advisor on 8429 0422 or email PIRSA.FOI@sa.gov.au.

Yours sincerely



Michelle Griffiths
Accredited Freedom of Information Officer
DEPARTMENT OF PRIMARY INDUSTRIES AND REGIONS

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:

Classified (1)

Lab No. - Test:

Classified (1)

Animal/Batch Id:

Classified (1)

PENGUIN LITTLE

Owner:

22 SOUTH POINT DRIVE
PORT LINCOLN SA 5606

Submitter:

PIC:

Submitter Id:

Classified (1)

Species:

Bird - wild

Clinic Phone:

Age:

Submitted:

11/04/2025

Test:

GP - GROSS PATHOLOGY

Reported:

12/04/2025 13:21

NECROPSY REPORT

CLINICAL HISTORY

Please refer to the clinical history on the request form and the clinical notes sent with the request form. A brief summary of the clinical history;
Little penguin found dead washed up on shore at 22 South Point Drive, Port Lincoln
Provisional diagnoses: starving, infectious, toxin

SAMPLES SUBMITTED

One dead adult male little penguin (*Edulypus minor*) in a bag with a tag . The tag is labelled as outlined below:
Reported 9/4/25 by Classified (1) << cannot discern the name>> at 4:15pm
Collected 9/4/25 by Classified (1) at 6pm
Location South Pt drive Pt Lincoln
34.7 4323 S
135.87801 E

NECROPSY FINDINGS

The bird is in good body condition and weighs 1.2kg. There are mild to moderate post mortem autolytic changes. The proventriculus / ventriculus contains abundant small fish (presumptive *Sardinops* sp.).

GROSS SUMMARY

Unremarkable gross findings

SAMPLES COLLECTED & TESTING

Cloacal and tracheal swabs in VTM will be tested for AI and NDV by q PCR.

Formalin fixed liver, spleen, heart, lung, kidney, brain, crop, proventriculus, ventriculus, duodenum, jejunum, colon and fresh, liver, spleen, kidney, heart, lung, brain are stored.
Tissues will be stored for 1 month then discarded if no further testing is requested.

COMMENTS

There are no findings to explain the death of this animal. The animal had recently fed.

Classified (1) (7/1/25)

Classified (1) (7/1/25)

Classified (1) (7/1/25)

Specialist Veterinary Anatomic Pathologist

Classified (1) (7/1/25)

Validated by Classified (1) (7/1/25)

This request has other tests in progress at the time of reporting

Test:	GP - GROSS PATHOLOGY	Reported:	12/04/2025 13:21
Validated by	Clause 6(1), 7(1)(c)		

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: [REDACTED]

Lab No. - Test: [REDACTED]

Animal/Batch Id:

[REDACTED]

PENGUIN LITTLE

Owner:

22 SOUTH POINT DRIVE
PORT LINCOLN SA 5606

Submitter:

PIC:

Submitter Id: [REDACTED]

Species:

Bird - wild

Clinic Phone:

Age:

Submitted:

11/04/2025

Test:

NEC - NECROPSY

Reported:

23/04/2025 15:44

HISTOPATHOLOGY FROM NECROPSY

REF: 2025/V HI 679

CLINICAL HISTORY

Please refer to the clinical history on the request form and the clinical notes sent with the request form. A brief summary of the clinical history;
Little penguin found dead washed up on shore at 22 South Point Drive, Port Lincoln
Provisional diagnoses: starving, infectious, toxin

SAMPLES SUBMITTED

One dead adult male little penguin (*Edulypus minor*)

MACROSCOPY

Slides A-E contains liver, spleen, heart, lung, kidney, brain, proventriculus / ventriculus, jejunum, ileum, skeletal muscle, trachea; Ae GK

MICROSCOPY

Trachea: There is clotted blood in the lumen.

Lung: Multifocally there is haemorrhage within the lumen of multiple air capillaries. Diffusely there is hyperaemia / congestion of the interstitium lining air capillaries.

Liver: Multifocally, and randomly the hepatic parenchyma is effaced and replaced by moderate numbers of heterophils, macrophages, lymphocytes and fewer plasma cells admixed with karyorrhectic debris. Around portal areas there are low numbers of lymphocytes, plasma cells, macrophages. (Hepatitis, necrotizing, heterophilic, lymphocytic, histiocytic, mild, multifocal, subacute)

There is moderate to marked autolysis of the kidney, ileum, jejunum, proventriculus / ventriculus.

Those tissues not described including spleen, heart, brain, skeletal muscle,

DIAGNOSIS

Trachea and lung: Acute haemorrhage

Liver: Hepatitis, necrotizing, heterophilic, lymphocytic, histiocytic, mild, multifocal, subacute

COMMENTS

The hepatitis may have contributed to morbidity for this bird. The hepatitis is suggestive of a bacteraemia. Please note that due to the

autolytic changes, any microbiological culture of the liver may be confounded by post mortem proliferation of bacteria and may be unrewarding. Fresh liver is stored. Please contact the laboratory within the next 5 working days if microbiological culture is required. Additional charges will apply.

The acute pulmonary haemorrhage was likely an agonal change.

Avian influenza and Newcastle disease are excluded as causes of death.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

All tests on this request have now been completed

Test: NEC - NECROPSY

Reported: 23/04/2025 15:44

Validated by Clause 6(1), 7(1)(c).

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:

Animal/Batch Id:

Owner:

PIC:

Species:

Age:

Lab No. - Test:

Submitter:

Submitter Id:

Clinic Phone:

Submitted:

22 SOUTH POINT DRIVE
PORT LINCOLN SA 5606

Bird - wild

11/04/2025

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 15/04/2025 08:58

MOLECULAR DIAGNOSTICS

NEWCASTLE DISEASE VIRUS RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Cloacal & Tracheal swabs in VTM Number of specimens: 1

SPECIMEN ID	F Gene	M Gene	L Gene
PENGUIN	Not detected	Not detected	Not detected

Validated by Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 15/04/2025 08:58

Validated by Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: Class 7(1)(b)

Animal/Batch Id: PENGUIN LITTLE

Owner: 22 SOUTH POINT DRIVE
PORT LINCOLN SA 5606

PIC:

Species: Bird - wild

Age:

Lab No. - Test: Class 7(1)(b)

Submitter:

Submitter Id: Class 6(1)

Clinic Phone:

Submitted: 11/04/2025

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE

Reported: 11/04/2025 18:07

MOLECULAR DIAGNOSTICS

INFLUENZA A RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Cloacal & Tracheal swabs in VTM

SPECIMEN ID	Type A	H5	H7
PENGUIN	Not detected		

Validated by Class 6(1), 7(1)(c) Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE

Reported: 11/04/2025 18:07

Validated by Class 6(1), 7(1)(c) Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:	Class 7(1)(c)	Lab No. - Test:	Class 7(1)(c)
Animal/Batch Id:			Class 6(1)
Owner:	PENGUIN LITTLE 22 SOUTH POINT DRIVE PORT LINCOLN SA 5606	Submitter:	
PIC:		Submitter Id:	Class 3(1)
Species:	Bird - wild	Clinic Phone:	
Age:		Submitted:	11/04/2025
Test:	SUP - VET SUPPLEMENTARY	Reported:	23/04/2025 15:44

SUMMARY DIAGNOSIS
Necrotizing hepatitis

SUMMARY COMMENTS
The hepatitis may have contributed to morbidity for this bird. The hepatitis is suggestive of a bacteraemia. Please note that due to the autolytic changes, any microbiological culture of the liver may be confounded by post mortem proliferation of bacteria and may be unrewarding. Fresh liver is stored. Please contact the laboratory within the next 5 working days if microbiological culture is required. Additional charges will apply.

Avian influenza and Newcastle disease are excluded as causes of death.

Class 6(1), 7(1)(c)
Class 6(1), 7(1)(c)
Class 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist
Class 6(1), 7(1)(c)

Validated by Class 6(1), 7(1)(c)

All tests on this request have now been completed

Test: SUP - VET SUPPLEMENTARY Reported: 23/04/2025 15:44

Validated by Class 6(1), 7(1)(c)

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:

Case 7(1)(c)

Lab No. - Test:

Case 7(1)(c)

Animal/Batch Id:

MP25-015 016

Case 7(1)(c)

Owner:

MP25 015 016 CORMORANT

Submitter:

Case 7(1)(c)

ADELAIDE SA 5000

PIC:

Submitter Id:

2040

Species:

Bird - wild

Clinic Phone:

Age:

Submitted:

07/02/2025

Test:

FLU - INFLUENZA TYPE A RNA PCR PACKAGE

Reported:

14/02/2025 14:51

MOLECULAR DIAGNOSTICS

INFLUENZA A RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Cloacal & tracheal/oropharyngeal swab in VTM

SPECIMEN ID	Type A	H5	H7
MP25-015	Not detected		
MP25-016	Not detected		

Validated by Case 6(1)(c) Laboratory Scientist.

All tests on this request have now been completed

Test:

FLU - INFLUENZA TYPE A RNA PCR PACKAGE

Reported:

14/02/2025 14:51

Validated by Case 6(1)(c) Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: [REDACTED]
Animal/Batch Id: AW25022
AW25022 PELICAN
Owner: [REDACTED]
ADELAIDE SA 5000

Lab No. - Test:

[REDACTED]
[REDACTED]

Submitter:

FIG:
Species: Bird - wild
Age:

Submitter Id: [REDACTED]
Clinic Phone:
Submitted: 11/02/2025

Test: VLD - VET LEAD

Reported: 19/02/2025 08:10

Validated by

[REDACTED]

Test: VLD - VET LEAD

Reported: 19/02/2025 08:10

TOXICOLOGY

LEAD

SPECIMEN: Blood

Animal ID: AW25022

Lead 1.27 umol/L

Lower limit of detection of the assay is 0.10 umol/L.

Livestock: A level of >0.2 umol/L will be reported to the appropriate government authority.

Clinical poisoning can occur at a range of concentrations, and ingested or inhaled lead exposure may be associated with variable half-life. Pooled samples are not suitable for identification of lead toxicity, since individual exposed animal concentrations may be diluted by non-exposed animal samples.

Companion animals: The concentration of lead that has been associated with clinical signs varies. One reference suggests that in areas of high environmental contamination, biological differences begin to be identified when there is a concentration in blood higher than 0.5 uMol/L.

References: Berny et al. Am J Vet Res 1994, 55(1) 55-62.

Validated by

[REDACTED]

All tests on this request have now been completed

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: ClassifiedLab No. - Test: Classified

Animal/Batch Id:

Classified

CORMORANT MORTALITY

Owner:

OUTER HARBOR SA 5018

Submitter:

PIC:

Submitter Id:

Species:

Bird - wild

Clinic Phone:

Age:

Submitted:

22/04/2025

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE Reported: 30/04/2025 16:43

MOLECULAR DIAGNOSTICS

INFLUENZA A RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Cloacal/tracheal swabs

SPECIMEN ID	Type A	H5	H7
1	Not detected		
2	Not detected		
3	Not detected		
4	Not detected		
5	Not detected		

Validated by Classified Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE Reported: 30/04/2025 16:43

Validated by Classified Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: Class 7(1)(c)Lab No. - Test: Class 7(1)(c)Animal/Batch Id: Class 5(1)

CORMORANT MORTALITY

Owner:

OUTER HARBOR SA 5018

Submitter:

PIC:

Submitter Id: Class 6(1)

Species:

Bird - wild

Clinic Phone:

Age:

Submitted:

22/04/2025

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 30/04/2025 16:43

MOLECULAR DIAGNOSTICS

NEWCASTLE DISEASE VIRUS RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Cloacal/
tracheal swabs

Number of specimens: 5

SPECIMEN ID	F Gene	M Gene	L Gene
1	Not detected	Not detected	Not detected
2	Not detected	Not detected	Not detected
3	Not detected	Not detected	Not detected
4	Not detected	Not detected	Not detected
5	Not detected	Not detected	Not detected

Validated by Class 7(1)(c) Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 30/04/2025 16:43

Validated by Class 6(1)(c) Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:	[REDACTED]	Lab No. - Test:	[REDACTED]
Animal/Batch Id:			[REDACTED]
	DOLPHIN BOTTLE NOSE		
Owner:	SKYE AVE	Submitter:	
	MIDDLETON SA 5213		
PIC:		Submitter Id:	[REDACTED]
Species:	Mammal - marine	Clinic Phone:	
Age:		Submitted:	19/03/2025
Test:	GP - GROSS PATHOLOGY	Reported:	20/03/2025 18:57

NECROPSY REPORT

CLINICAL HISTORY

Please refer to the clinical history on the request form and the clinical notes sent with the request form. A brief summary of the clinical history;

Microalgae (dinoflagellate) *Karenia mikimotoi* was detected in the water samples from Victor Harbour. Algal counts in the water sample from Victor Harbor were low, however this was the less impacted site at time of collection.

A previous fish kill at Coffin Bay in 2016 was linked to this species, which persisted for approximately six days.

Water testing results from Waitpinga are pending.

Karenia mikimotoi can cause mass mortalities of marine species at varying concentrations, species dependent. *Karenia mikimotoi* causes excessive mucous production in the gills, gill lesions and sloughing of the oedematous epithelium of fish causing suffocation, but has a range of other impacts on other species such as liver lesions, immune function issues and gut tissue damage.

SAMPLES SUBMITTED

One bottle nosed dolphin foetus; The bag is labelled "18/3/2025 dolphin Middleton Chapman Rd"

NECROPSY FINDINGS

There are moderate freeze artefact and putrefactive changes.

The crown to rump length is approximately 70cm and the animal weighs 7.1kg.

There are no mandibles / lower jaw. Multifocal the skin has peeled from the dermis.

There is an umbilical cord attached at the umbilicus but no placenta.

Due the putrefactive changes the sex cannot be determined.

The lungs do not float in water (non-aerated lungs).

GROSS SUMMARY

One aborted foetus

SAMPLES COLLECTED & TESTING

As outlined by the WOAHP guide for HPAI investigation in marine mammals, an oropharyngeal swab in virus transport medium will be tested for AI by qPCR.

With the approval of the acting Chief Veterinary Officer, paired oropharyngeal swab in virus transport medium, lung, brain and other tissues will be sent to Clause 7(1)(c) for AI testing. This is because a dolphin is an uncommon species for AI testing at Clause 7(1)(c)

Formalin fixed and fresh brain, heart, lung, kidney, liver are stored at the laboratory. Please note spleen was not found due to putrefactive changes.

COMMENTS

As Clause 6(1) outlined in her email, Karenia mikimotoi, a dinoflagellate which causes harmful algal blooms, releases toxins (not yet identified) leading to fish kills and deaths of other marine animals (Li et al 2019). This dolphin foetus could have been aborted due to the stress of the Karenia bloom on its dam.

As requested testing for Avian influenza is in progress.

Due to the freeze artifact and putrefactive changes, other ancillary tests are not recommended. The tissues are stored for one month and then will be discarded if no further testing is required.

Li, X., Yan, T., Yu, R. and Zhou, M., 2019. A review of Karenia mikimotoi: Bloom events, physiology, toxicity and toxic mechanism. Harmful Algae, 90, p.101702.

WOAH Practical guide for authorized field responders; HPAI in marine mammals (
<https://www.woah.org/app/uploads/2024/02/practicalguide-forauthorisedfieldresponders-hpaimarinemammals-feb24-1.pdf>)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

This request has other tests in progress at the time of reporting

Test: GP - GROSS PATHOLOGY Reported: 20/03/2025 18:57

Validated by Clause 6(1), 7(1)(c)

Test: GP - GROSS PATHOLOGY Reported: 20/03/2025 18:57

NECROPSY REPORT

CLINICAL HISTORY

Please refer to the clinical history on the request form and the clinical notes sent with the request form. A brief summary of the clinical history;

Microalgae (dinoflagellate) Karenia mikimotoi was detected in the water samples from Victor Harbour. Algal counts in the water sample from Victor Harbor were low, however this was the less impacted site at time of collection.

A previous fish kill at Coffin Bay in 2016 was linked to this species, which persisted for approximately six days.

Water testing results from Waitpinga are pending.

Karenia mikimotoi can cause mass mortalities of marine species at varying concentrations, species dependent. Karenia mikimotoi causes excessive mucous production in the gills, gill lesions and sloughing of the oedematous epithelium of fish causing suffocation, but has a range

of other impacts on other species such as liver lesions, immune function issues and gut tissue damage.

SAMPLES SUBMITTED

One bottle nosed dolphin foetus; The bag is labelled "18/3/2025 dolphin Middleton Chapman Rd"

NECROPSY FINDINGS

There are moderate freeze artefact and putrefactive changes.

The crown to rump length is approximately 70cm and the animal weighs 7.1kg.

There are no mandibles / lower jaw. Multifocal the skin has peeled from the dermis.

There is an umbilical cord attached at the umbilicus but no placenta.

Due the putrefactive changes the sex cannot be determined.

The lungs do no float in water (non-aerated lungs).

GROSS SUMMARY

One aborted foetus

SAMPLES COLLECTED & TESTING

As outlined by the WOAHP guide for HPAI investigation in marine mammals, an oropharyngeal swab in virus transport medium will be tested for AI by qPCR.

With the approval of the acting Chief Veterinary Officer, paired oropharyngeal swab in virus transport medium, lung, brain and other tissues will be sent to Clause 7(1)(c) for AI testing. This is because a dolphin is an uncommon species for AI testing at Clause 7(1)(c)

Formalin fixed and fresh brain, heart, lung, kidney, liver are stored at the laboratory. Please note spleen was not found due to putrefactive changes.

COMMENTS

As Clause 6(1) outlined in her email, Karenia mikimotoi, a dinoflagellate which causes harmful algal blooms, releases toxins (not yet identified) leading to fish kills and deaths of other marine animals (Li et al 2019). This dolphin foetus could have been aborted due to the stress of the Karenia bloom on its dam.

As requested testing for Avian influenza is in progress.

Due to the freeze artifact and putrefactive changes, other ancillary tests are not recommended. The tissues are stored for one month and then will be discarded if no further testing is required.

Li, X., Yan, T., Yu, R. and Zhou, M., 2019. A review of Karenia mikimotoi: Bloom events, physiology, toxicity and toxic mechanism. Harmful Algae, 90, p.101702.

WOAH Practical guide for authorized field responders; HPAI in marine mammals (<https://www.woah.org/app/uploads/2024/02/practicalguide-forauthorisedfieldresponders-hpaimarinemammals-feb24-1.pdf>)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

This request has other tests in progress at the time of reporting

Test:	GP - GROSS PATHOLOGY	Reported:	20/03/2025 18:57
Validated by Clause 6(1), 7(1)(c)			

PIIMS Laboratory Results Viewer

[Result Details Page](#)Submission No: Clause 7(1)(c)

Lab No. - Test: Clause 774 (C)

Animal/Batch Id:

Clause 6(1)

DOLPHIN BOTTLE NOSE

Owner: SKYE AVE
MIDDLETON SA 5213

Similar:

FIG. 2.

Submitter ID: (Please fill)

Species: Mammal - marine

Clinic Phone:

Age: Submitted: 19/03/2025

Test: **FLU - INFLUENZA TYPE A RNA PCR PACKAGE** Reported: **25/03/2025 17:29**

MOLECULAR DIAGNOSTICS

INFLUENZA A RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Oropharyngeal swab in VTM

SPECIMEN ID	Type A	H5	H7
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DOLPHIN Not detected

Sample ID: Frozen dolphin

Validated by [Redacted] Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE Reported: 25/03/2025 17:29

Sample ID: Frozen dolphin

Validated by Clause 9(1) 7(1)(c) Laboratory Scientist.

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE Reported: 25/03/2025 17:29

MOLECULAR DIAGNOSTICS

INFLUENZA A RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Oropharyngeal swab in VTM

SPECIMEN ID	Type A	H5	H7
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DOLPHIN Not detected

Sample ID: Frozen dolphin

Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: **FLU - INFLUENZA TYPE A RNA PCR PACKAGE** Reported: **25/03/2025 17:29**

Sample ID: Frozen_dolphin

Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:

Class 7(1)(c)

Lab No. - Test:

Class 7(1)(c)

Animal/Batch Id:

Class 5(1)

DOLPHIN BOTTLE NOSE

Owner:

SKYE AVE

Submitter:

MIDDLETON SA 5213

PIC:

Submitter Id:

Class 5(1)

Species:

Mammal - marine

Clinic Phone:

Age:

Submitted:

19/03/2025

Test: IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP) Reported: 26/03/2025 14:20

MOLECULAR DIAGNOSTICS

Influenza Type A - TaqMan Assay

Species : Bottle-nose dolphin Number of specimens: 6
Specimen type : Tissue

SAMPLE ID TEST RESULT

BRAIN Negative
LUNG Negative
LIVER Negative
KIDNEY Negative
HEART Negative
OP SWAB Negative

COMMENT: OP SWAB = Oropharyngeal Swab

Australian Centre for Disease Preparedness (CSIRO)
NATA accreditation number: 13546

Validated by Class 5(1), 7(1)(c) Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP) Reported: 26/03/2025 14:20

Validated by Class 5(1), 7(1)(c) Laboratory Scientist.

Test: IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP) Reported: 26/03/2025 14:20

Bottle-nose
dolphin

Test: IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP) Reported: 26/03/2025 14:20

Tissue

Test: IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP) Reported: 26/03/2025 14:20

Australian Centre for Disease Preparedness (CSIRO)
NATA accreditation number: 13546

Test:IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP)Reported:26/03/2025 14:20

OP SWAB = Orophayngeal Swab

Test:IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP)Reported:26/03/2025 14:20

6

Test:IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP)Reported:26/03/2025 14:20

MOLECULAR DIAGNOSTICS

Influenza Type A - TaqMan Assay

Species : Bottle-nose dolphin

Specimen type : Tissue

Number of specimens: 6

SAMPLE ID

TEST RESULT

BRAIN Negative

LUNG Negative

LIVER Negative

KIDNEY Negative

HEART Negative

OP SWAB Negative

COMMENT: OP SWAB = Orophayngeal Swab

Australian Centre for Disease Preparedness (CSIRO)
NATA accreditation number: 13546

Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test:IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP)Reported:26/03/2025 14:20

Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

Test:IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP)Reported:26/03/2025 14:20

Bottle-nose dolphin

Test:IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP)Reported:26/03/2025 14:20

Tissue

Test:IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP)Reported:26/03/2025 14:20

Australian Centre for Disease Preparedness (CSIRO)
NATA accreditation number: 13546

Test:IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP)Reported:26/03/2025 14:20

OP SWAB = Orophayngeal Swab

Test:IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP)Reported:26/03/2025 14:20

6

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:	Clause 7(1)(c)	Lab No. - Test:	Clause 7(1)(c)
Animal/Batch Id:			Clause 6(1)
Owner:	DOLPHIN BOTTLE NOSE SKYE AVE MIDDLETON SA 5213	Submitter:	
FIG:		Submitter Id:	Clause 6(1)
Species:	Mammal - marine	Clinic Phone:	
Age:		Submitted:	19/03/2025
Test:	SUP - VET SUPPLEMENTARY	Reported:	23/04/2025 13:08

SUMMARY DIAGNOSIS
The cause for the abortion is not identified

SUMMARY COMMENTS
As Clause 6(1) outlined in her email, Karenia mikimotoi, a dinoflagellate which causes harmful algal blooms, releases toxins (not yet identified) leading to fish kills and deaths of other marine animals. This dolphin foetus could have been aborted due to the stress of the Karenia bloom on its dam. Avian influenza is not detected in the foetus.

Clause 6(1) 7(1)(c)
Clause 6(1) 7(1)(c)
Clause 6(1) 7(1)(c)

Specialist Veterinary Anatomic Pathologist
Clause 6(1) 7(1)(c)

Validated by Clause 6(1) 7(1)(c)

All tests on this request have now been completed

Test:	SUP - VET SUPPLEMENTARY	Reported:	23/04/2025 13:08
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Validated by Clause 6(1) 7(1)(c)

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:

[REDACTED]

Lab No. - Test:

[REDACTED]
[REDACTED]

Animal/Batch Id:

PENGUIN LITTE

Owner:

CHARLES STREET

Submitter:

ENCOUNTER BAY SA 5211

PIC:

Submitter Id:

Species:

Bird - wild

Clinic Phone:

Age:

Submitted:

19/03/2025

Test:

GP - GROSS PATHOLOGY

Reported:

20/03/2025 18:57

NECROPSY REPORT

CLINICAL HISTORY

Please refer to the clinical history on the request form and the clinical notes sent with the request form. A brief summary of the clinical history;

Microalgae (dinoflagellate) *Karenia mikimotoi* was detected in the water samples from Victor Harbour. Algal counts in the water sample from Victor Harbor were low, however this was the less impacted site at time of collection.

A previous fish kill at Coffin Bay in 2016 was linked to this species, which persisted for approximately six days.

Water testing results from Waitpinga are pending.

Karenia mikimotoi can cause mass mortalities of marine species at varying concentrations, species dependent. *Karenia mikimotoi* causes excessive mucous production in the gills, gill lesions and sloughing of the oedematous epithelium of fish causing suffocation, but has a range of other impacts on other species such as liver lesions, immune function issues and gut tissue damage.

SAMPLES SUBMITTED

One dead adult male little penguin (*Eudyptus minor*); The label on the bag is "little penguin Victor Harbour Charles St"

NECROPSY FINDINGS

There are moderate autolytic changes.

The skin and muscles are absent from the pectoral region.

The bird is in good body condition and weighs 1.7kg. There is no food in the proventriculus / ventriculus.

GROSS SUMMARY

Unremarkable gross findings

SAMPLES COLLECTED & TESTING

Tracheal and cloacal swabs in virus transport medium will be tested for AI by qPCR.

Formalin fixed and fresh brain, heart, lung, kidney, liver, spleen are stored at the laboratory.

COMMENTS

As [REDACTED] outlined in her email, *Karenia mikimotoi*, a dinoflagellate which causes harmful algal blooms, releases toxins (not yet identified) leading to fish kills and deaths of other marine animals (Li et al

2019). This penguin could have died due to the Karenia algal bloom.

As requested testing for Avian influenza is in progress.

The tissues are stored for one month and then will be discarded if no further testing is required.

Li, X., Yan, T., Yu, R. and Zhou, M., 2019. A review of Karenia mikimotoi: Bloom events, physiology, toxicity and toxic mechanism. Harmful Algae, 90, p.101702.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

This request has other tests in progress at the time of reporting

Test: GP - GROSS PATHOLOGY

Reported: 20/03/2025 18:57

Validated by Clause 6(1), 7(1)(c)

Test: GP - GROSS PATHOLOGY

Reported: 20/03/2025 18:57

NECROPSY REPORT

CLINICAL HISTORY

Please refer to the clinical history on the request form and the clinical notes sent with the request form. A brief summary of the clinical history;

Microalgae (dinoflagellate) Karenia mikimotoi was detected in the water samples from Victor Harbour. Algal counts in the water sample from Victor Harbor were low, however this was the less impacted site at time of collection.

A previous fish kill at Coffin Bay in 2016 was linked to this species, which persisted for approximately six days.

Water testing results from Waitpinga are pending.

Karenia mikimotoi can cause mass mortalities of marine species at varying concentrations, species dependent. Karenia mikimotoi causes excessive mucous production in the gills, gill lesions and sloughing of the oedematous epithelium of fish causing suffocation, but has a range of other impacts on other species such as liver lesions, immune function issues and gut tissue damage.

SAMPLES SUBMITTED

One dead adult male little penguin (Eudyptus minor); The label on the bag is "little penguin Victor Harbour Charles St"

NECROPSY FINDINGS

There are moderate autolytic changes.

The skin and muscles are absent from the pectoral region.

The bird is in good body condition and weighs 1.7kg. There is no food in the proventriculus / ventriculus.

GROSS SUMMARY

Unremarkable gross findings

SAMPLES COLLECTED & TESTING

Tracheal and cloacal swabs in virus transport medium will be tested for AI by qPCR.

Formalin fixed and fresh brain, heart, lung, kidney, liver, spleen are stored at the laboratory.

COMMENTS

As Clause 6(1) outlined in her email, Karenia mikimotoi, a dinoflagellate which causes harmful algal blooms, releases toxins (not yet identified) leading to fish kills and deaths of other marine animals (Li et al 2019). This penguin could have died due to the Karenia algal bloom.

As requested testing for Avian influenza is in progress.

The tissues are stored for one month and then will be discarded if no further testing is required.

Li, X., Yan, T., Yu, R. and Zhou, M., 2019. A review of Karenia mikimotoi: Bloom events, physiology, toxicity and toxic mechanism. Harmful Algae, 90, p.101702.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

This request has other tests in progress at the time of reporting

Test: GP - GROSS PATHOLOGY

Reported: 20/03/2025 18:57

Validated by Clause 6(1), 7(1)(c)

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:

Animal/Batch Id:

Owner:

PIC:

Species:

Age:

Lab No. - Test:

Submitter:

Submitter Id:

Clinic Phone:

Submitted:

CLAUDE 7 (1145)

CLAUDE 6 (11)

PENGUIN LITTE
CHARLES STREET
ENCOUNTER BAY SA 5211

CLAUDE 3 (11)

Bird - wild

19/03/2025

Test:

FLU - INFLUENZA TYPE A RNA PCR PACKAGE

Reported:

25/03/2025 17:29

MOLECULAR DIAGNOSTICS

INFLUENZA A RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Cloacal & Tracheal swabs in VTM

SPECIMEN ID	Type A	H5	H7
PENGUIN	Not detected		

Sample ID: Fresh penguin

Validated by

CLAUDE 6 (1145)

 Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test:

FLU - INFLUENZA TYPE A RNA PCR PACKAGE

Reported:

25/03/2025 17:29

Sample ID: Fresh penguin

Validated by

CLAUDE 7 (1145)

 Laboratory Scientist.

Test:

FLU - INFLUENZA TYPE A RNA PCR PACKAGE

Reported:

25/03/2025 17:29

MOLECULAR DIAGNOSTICS

INFLUENZA A RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Cloacal & Tracheal swabs in VTM

SPECIMEN ID	Type A	H5	H7
PENGUIN	Not detected		

Sample ID: Fresh penguin

Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: **FLU - INFLUENZA TYPE A RNA PCR PACKAGE** Reported: **25/03/2025 17:29**

Sample ID: Fresh penguin

Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: [REDACTED] Lab No. - Test: [REDACTED]
Animal/Batch Id: [REDACTED] [REDACTED]
Owner: PENGUIN LITTE
CHARLES STREET
ENCOUNTER BAY SA 5211
Submitter:
PIC: [REDACTED]
Species: Bird - wild
Submitter Id: [REDACTED]
Age: [REDACTED] Clinic Phone: [REDACTED]
Submitted: 19/03/2025
Test: SUP - VET SUPPLEMENTARY Reported: 23/04/2025 12:01

SUMMARY COMMENTS

No diagnosis is concluded.

SUMMARY COMMENTS

The cause of death is not found, for this little penguin. *Karenia brevis*, a dinoflagellate algae, has been reported to cause morbidity in seabirds (Litaker et al 2022) but there no reports of *Karenia mikimotoi* causing seabird mortalities.

Litaker, R.W., Bogdanoff, A.K., Hardison, D.R., Holland, W.C., Ostrowski, A. and Morris, J.A., 2022. The Effects of the Harmful Algal Bloom Species *Karenia brevis* on Survival of Red Porgy (*Pagrus pagrus*) Larvae. *Toxins*, 14(7), p.439.

[REDACTED]

[REDACTED]

[REDACTED]

Specialist Veterinary Anatomic Pathologist

[REDACTED]

Validated by [REDACTED]

All tests on this request have now been completed

Test: SUP - VET SUPPLEMENTARY Reported: 23/04/2025 12:01

Validated by [REDACTED]

From: Clause 7(1)(c)
To: Bansemer, Matthew (PIRSA)
Subject: PATH RESULTS: WHITING, (Fi) Clause 7(1)(c)
Date: Thursday, 14 August 2025 9:30:23 AM

Clause 7(1)(c)

Clause 6(1)

RESULTS PH: Clause 7(1)(c)

Report Addressee:
DR MATTHEW BANSEMER
ANIMAL HEALTH ADVISOR
135 GORDON STREET
NARACORTE SA 5271

Tested on 05/08/25
Reported on 14/08/25 10:00
Referred on 04/08/25 **by:**
DR MATTHEW BANSEMER
ANIMAL HEALTH ADVISOR
135 GORDON STREET
NARACORTE SA 5271

Owner:
WHITING
ARDROSSAN JETTY
ARDROSSAN 5571

Animal/s:
Fish - fin
DOB: N/A

Collected: 04/08/25 00:25 **Subm.No:** Clause 7(1)(c) **Lab No.:** Clause 7(1)(c)

Samples tested as received

All Tests Complete

HISTOPATHOLOGY FROM NECROPSY

REF: 2025/V HI 1396

CLINICAL HISTORY

Please refer to the request form for the full clinical history. This is a summary of clinical history.

On 3 August 2022, PIRSA were notified fish mortality is James Well, Price Creek, Port Clinton and Ardrossan. 10 King George Whiting and yellowfin Whiting were collected (fresh mortalities). Mortalities may be associated with the Karenia sp. algal bloom in the St Vincent Gulf.

MACROSCOPY

The fish are allocated numbers F1-4 at the laboratory.

4 x King George Whiting are received in formalin

There is moderate autolysis of all fish.

2 x King George Whiting are approximately 210mm in length (F1 and 3) and 2 x are 250mm but have not peduncle or tail (F2 and 4)

There are no Yellow tail Whiting in the formalin pot.

F1 has no right eye.

Because the fish are fixed whole there is moderate autolysis of abdominal viscera, heart, brain and gills. The gills from all fish have abundant sand over them.

Cassettes 1A-D, 1E-H, 1I-L and 1M-P correlate to F1-4; Tissues for each fish include liver, spleen, heart, gill, kidney, brain, eye, cranium (bone), stomach, intestines / pyloric caecae, gonads (ova), visceral fat, skin and skeletal muscle; Aë GK

MICROSCOPY
F1

Pyloric caecae: Extending from the lumen into the mucosa in lamina propria there are multiple cross sections of cestodes, approximately 30 micron diameter (with smooth tegument, spongy parenchyma containing multiple calcareous corpuscles, no alimentary tract).

Clause 7(1)(c)

Clause 6(1)

RESULTS PH:

Clause 7(1)(c)

Report Addressee:

DR MATTHEW BANSEMER
ANIMAL HEALTH ADVISOR
135 GORDON STREET
NARACOOORTE SA 5271

Tested on 05/08/25

Reported on 14/08/25 10:00

Referred on 04/08/25 **by:**

DR MATTHEW BANSEMER
ANIMAL HEALTH ADVISOR
135 GORDON STREET
NARACOOORTE SA 5271

Owner:

WHITING
ARDROSSAN JETTY
ARDROSSAN 5571

Animal/s:

Fish - fin

DOB: N/A

Collected: 04/08/25 00:25 **Subm.No:**

Clause 7(1)(c)

Lab No.:

Clause 7(1)(c)

Samples tested as received

All Tests Complete

Heart: Within the atria of the heart are cysts, 30 micron diameter, containing multiple cestode larvae. (Myocardial metacestodes)

Gills: There are rare individual necrotic lamellar epithelial cells lining gills (pyknotic nucleus, hypereosinophilic shrunken cytoplasm and the cells is dissociated from neighbouring lamellae epithelial cells). Multifocally there is hypertrophy and hyperplasia of lamellar epithelial cells lining the lamellae and filaments. Multifocally there is fusion of lamellae lined by hypertrophic and hyperplastic lamellar epithelial cells. (Mild, multifocal, subacute, individual lamellar epithelial cell necrosis and moderate, multifocal, chronic proliferative branchitis with lamellae epithelial hyperplasia and hypertrophy)

F2

Marked autolysis of elementary sections and gills.

F3

Gills: There is mild autolysis. Aside from this artifact the following findings are described. There are low numbers of individual necrotic lamellar epithelial cells lining gills (pyknotic nucleus, hypereosinophilic shrunken cytoplasm and the cells is dissociated from neighbouring lamellae epithelial cells). (Mild, multifocal, subacute, individual lamellar epithelial cell necrosis)

F4

Gills: There is mild autolysis. Aside from this artifact the following findings are described. There are rare individual necrotic lamellar epithelial cells lining gills (pyknotic nucleus, hypereosinophilic shrunken cytoplasm and the cells is dissociated from neighbouring lamellae epithelial cells). Multifocally there is hypertrophy and hyperplasia of lamellar epithelial cells lining the lamellae and filaments. Multifocally there is fusion of lamellae lined by hypertrophic and hyperplastic lamellar epithelial cells. (Mild, multifocal, subacute, individual lamellar epithelial cell necrosis and moderate, multifocal, chronic proliferative branchitis with lamellae epithelial hyperplasia and hypertrophy)

Those organs not described for each fish are unremarkable.

DIAGNOSIS

F1

Pyloric caecae: Enteric cestodiasis

Clause 7(1)(c)

Clause 6(1)

RESULTS PH: Clause 7(1)(c)

Report Addressee:
DR MATTHEW BANSEMER
ANIMAL HEALTH ADVISOR
135 GORDON STREET
NARACOOORTE SA 5271

Tested on 05/08/25
Reported on 14/08/25 10:00
Referred on 04/08/25 **by:**
DR MATTHEW BANSEMER
ANIMAL HEALTH ADVISOR
135 GORDON STREET
NARACOOORTE SA 5271

Owner:
WHITING
ARDROSSAN JETTY
ARDROSSAN 5571

Animal/s:
Fish - fin

DOB: N/A

Collected: 04/08/25 00:25 **Subm.No:** Clause 7(1)(c)

Lab No.: Clause 7(1)(c)

Samples tested as received

All Tests Complete

Heart: Myocardial metacestodes

Gills: Mild, multifocal, subacute, individual lamellar epithelial cell necrosis and moderate, multifocal, chronic proliferative branchitis with lamellae epithelial hyperplasia and hypertrophy

F2
No remarkable histological findings

F3
Gills: Mild, multifocal, subacute, individual lamellar epithelial cell necrosis

F4
Gills: Mild, multifocal, subacute, individual lamellar epithelial cell necrosis and moderate, multifocal, chronic proliferative branchitis with lamellae epithelial hyperplasia and hypertrophy

There are no gross or histopathological findings consistent with disease due to South Australian notifiable listed diseases or pathogens for fin fish (Livestock Act 1997, Livestock Regulations 2013).

Specific notifiable diseases of finfish (Livestock Act 1997, Livestock Regulations 2013)) which are not evident in the histological sections, are listed below:

There are no histological findings consistent with:
Viral Nervous Necrosis, Viral Encephalopathy and Retinopathy (Disease due to Betanodavirus)
Disease due to Epizootic haematopoietic necrosis virus / iridovirus infection
Streptococcal meningitis
Viral Haemorrhagic Septicaemia
Mycobacteriosis
Nocardiosis
Disease due to Myxobolus (Myxosoma) cerebralis
Epizootic Ulcerative Syndrome (disease due to Aphanomyces invadens)

COMMENTS

There are no conclusive causes for mortality based on histological

Clause 7(1)(c)

Clause 6(1)

RESULTS PH: Clause 7(1)(c)

Report Addressee:

DR MATTHEW BANSEMER
ANIMAL HEALTH ADVISOR
135 GORDON STREET
NARACORTE SA 5271

Tested on 05/08/25
Reported on 14/08/25 10:00
Referred on 04/08/25 **by:**
DR MATTHEW BANSEMER
ANIMAL HEALTH ADVISOR
135 GORDON STREET
NARACORTE SA 5271

Owner:

WHITING
ARDROSSAN JETTY
ARDROSSAN 5571

Animal/s:

Fish - fin

DOB: N/A

Collected: 04/08/25 00:25 **Subm.No:** Clause 7(1)(c)

Lab No.: Clause 7(1)(c)

Samples tested as received All Tests Complete
findings. However, there are multiple processes in the gills, which
suggest possible causes of mortality.

The key microscopic findings in most fish are in the gills. There is individual lamellar epithelial cells necrosis. This can be caused by diatom or dinoflagellate (e.g. *Karenia* sp.) micro-algae. Biotoxin and brevetoxin testing of fresh gills from cohort whiting and any algal counts from seawater from this site are required to further investigate for a dinoflagellate cause. Please note, only formalin fixed fish were received (no fresh gills).

Two fish (F1 and 4) have chronic proliferative branchitis. Causes can include chronic exposure to suspended benthic sediment, bacterial branchitis (bacteria are not evident on the affected gills and bacterial branchitis is uncommon in wild marine fish), flood waters in estuaries / rivers (There are no local estuaries / rivers in this region of the Yorke Peninsula)

The enteric cestodiasis and myocardial metacestodes are an incidental finding in F1. Tetracanthellidae cestodes are one group of cestodes commonly found in wild marine fish in coastal Australian waters.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:

Lab No. - Test:

Animal/Batch Id:

Submitter:

Owner:

Submitter Id:

Species:

Clinic Phone:

Age:

Submitted:

Test:

Reported:

MOLECULAR DIAGNOSTICS

INFLUENZA A RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Swab in VTM

SPECIMEN ID	Type A	H5	H7
TRACHEA	Not detected		
CLOACA	Not detected		

Validated by

 Laboratory Scientist.

All tests on this request have now been completed

Test:

Reported:

Validated by

 Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: [REDACTED]

Animal/Batch Id: SEAL NEW ZEALAND FUR

Owner: BRIGHTON BEACH

PIC:

Species: Mammal - marine

Age:

Lab No. - Test: [REDACTED]

Submitter: [REDACTED]

Submitter Id: [REDACTED]

Clinic Phone:

Submitted: 27/05/2025

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE

Reported: 29/05/2025 13:24

MOLECULAR DIAGNOSTICS

INFLUENZA A RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Tissues & swab in VTM

SPECIMEN ID	Type A	H5	H7
1	Not detected		
2	Not detected		
3	Not detected		
4	Not detected		
5	Not detected		
6	Not detected		
7	Not detected		

COMMENT: Sample ID:

- 1 - Oropharyngeal swab in VTM
- 2 - Liver
- 3 - Lung
- 4 - Kidney
- 5 - Spleen
- 6 - Heart
- 7 - Brain

Validated by [REDACTED] Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE

Reported: 29/05/2025 13:24

Validated by [REDACTED] Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: [REDACTED]

Lab No. - Test: [REDACTED]

Animal/Batch Id: [REDACTED]

SEAL NEW ZEALAND FUR

Owner:

BRIGHTON BEACH

Submitter:

PIC:

Submitter Id: [REDACTED]

Species:

Mammal - marine

Clinic Phone:

Age:

Submitted:

27/05/2025

Test: IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP) Reported: 06/06/2025 10:51

MOLECULAR DIAGNOSTICS

Influenza Type A - TaqMan Assay

Species : Fur seal Number of specimens: 7
Specimen type : Oropharyngeal swab & Tissue

SAMPLE ID TEST RESULT

LIVER	Negative
LUNG	Negative
HEART	Negative
BRAIN	Negative
KIDNEY	Negative
SPLEEN	Negative
OP SWAB	Negative

Australian Centre for Disease Preparedness (CSIRO)
NATA accreditation number: 13546

Validated by [REDACTED] Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP) Reported: 06/06/2025 10:51

Validated by [REDACTED] Laboratory Scientist.

Test: IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP) Reported: 06/06/2025 10:51

Fur seal

Test: IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP) Reported: 06/06/2025 10:51

Oropharyngeal swab & Tissue

Test: IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP) Reported: 06/06/2025 10:51

Australian Centre for Disease Preparedness (CSIRO)
NATA accreditation number: 13546

Test: IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP) Reported: 06/06/2025 10:51

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: [Redacted] Lab No. - Test: [Redacted]
Animal/Batch Id: [Redacted] [Redacted]
Owner: CORMORANT MORTALITY [Redacted] Submitter: [Redacted]
PIC: [Redacted] Submitter Id: [Redacted]
Species: Bird - wild Clinic Phone: [Redacted]
Age: Submitted: 27/05/2025

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE Reported: 29/05/2025 13:25

MOLECULAR DIAGNOSTICS

INFLUENZA A RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Pooled cloacal/tracheal swabs in VTM

SPECIMEN ID	Type A	H5	H7
1	Not detected		
2	Not detected		
3	Not detected		
4	Not detected		
5	Not detected		

Validated by [Redacted] Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE Reported: 29/05/2025 13:25

Validated by [Redacted] Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: [REDACTED]

Lab No. - Test: [REDACTED]

Animal/Batch Id:

[REDACTED]

CORMORANT MORTALITY

Owner:

[REDACTED]

Submitter:

PORT ADELAIDE SA 5015

PIC:

Submitter Id: [REDACTED]

Species:

Bird - wild

Clinic Phone:

Age:

Submitted:

27/05/2025

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 29/05/2025 13:25

MOLECULAR DIAGNOSTICS

NEWCASTLE DISEASE VIRUS RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Pooled cloacal/
tracheal swabs in VTM

Number of specimens: 5

SPECIMEN ID	F Gene	M Gene	L Gene
1	Not detected	Not detected	Not detected
2	Not detected	Not detected	Not detected
3	Not detected	Not detected	Not detected
4	Not detected	Not detected	Not detected
5	Not detected	Not detected	Not detected

Validated by [REDACTED] Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 29/05/2025 13:25

Validated by [REDACTED] Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: [REDACTED] Lab No. - Test: [REDACTED]
Animal/Batch Id: [REDACTED] Species: [REDACTED]
Owner: PENGUIN LITTLE Submitter: [REDACTED]
Species: VICTOR HARBOR SA 5211 Submitter Id: [REDACTED]
Age: Bird - wild Clinic Phone: [REDACTED]
Submitted: 30/05/2025

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE Reported: 02/06/2025 18:32

MOLECULAR DIAGNOSTICS

INFLUENZA A RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Tracheal & cloacal swab in VTM

SPECIMEN ID	Type A	H5	H7
PENGUIN	Not detected		

Validated by [REDACTED] Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE Reported: 02/06/2025 18:32

Validated by [REDACTED] Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:

Animal/Batch Id:

Owner:

FIG:

Species:

Age:

Lab No. - Test:

Submitter:

Submitter Id:

Clinic Phone:

Submitted:

Case 7(1)(c)

Case 7(1)(c)

Case 6(1)

Case 6(1)

30/05/2025

PENGUIN LITTLE

VICTOR HARBOR SA 5211

Bird - wild

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 02/06/2025 18:33

MOLECULAR DIAGNOSTICS

NEWCASTLE DISEASE VIRUS RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Tracheal & cloacal swab in VTM

Number of specimens: 1

SPECIMEN ID	F Gene	M Gene	L Gene
PENGUIN	Not detected	Not detected	Not detected

Validated by

Case 6(1)(7)(1)(c)

Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 02/06/2025 18:33

Validated by

Case 6(1)(7)(1)(c)

Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: [REDACTED]

Animal/Batch Id:

ALBATROSS SHY

Lab No. - Test:

Client (UG):

Client (ID):

Owner:

VICTOR HARBOR SA 5211

Submitter:

PIC:

Submitter Id:

Species:

Bird - wild

Clinic Phone:

Age:

Submitted:

30/05/2025

Test:

GP - GROSS PATHOLOGY

Reported:

31/05/2025 15:13

NECROPSY REPORT

CLINICAL HISTORY

Please refer to the clinical history on the request form and the clinical notes sent with the request form. A brief summary of the clinical history;

Shire because was found Victor Harbor. Because this is a long distance migratory species avian influenza and Newcastle disease virus testing is required.

SAMPLES SUBMITTED

One dead adult male shy albatross, *Thalassarche cauta*

NECROPSY FINDINGS

Burt is in moderate body condition and weighs 3.8 kg. There is bilateral atrophy of the pectoral muscles and they appear concave. There is minimal subcutaneous and intra coelomic fat. There are minimal post-mortem autolytic changes.

Within the proventriculus there is a remnant of an oval shaped cuttlefish "bone" (endoconcha) and scant dark brown mucoid material. Within the intestinal tract are low numbers of ascarids (e.g. *Contracaecum* sp., *Anisakis* sp.) and cestodes. The spleen is atrophied. The kidneys are pale

GROSS SUMMARY

Chronic weight loss

Intestinal cestodiasis and ascaridiasis

SAMPLES COLLECTED & TESTING

Cloacal and tracheal swabs in virus transport medium will be tested for avian influenza and Newcastle disease virus by PCR.

Formalin fixed tissues will be processed for histopathology as requested.

50 g of liver and kidney, 10 g of lung and 1 g of brain are stored frozen for one month if biotoxin testing is required.

Fresh liver, spleen, heart, lung, kidney, brain and proventricular contents are stored frozen. Tissues are stored for 1 month. In line with the laboratory quality assurance protocols samples will be discarded after 1 month if no further testing is required.

COMMENTS

The cause for the chronic weight loss is not identified based on gross findings. The cause of death is not found based on gross findings.

Intestinal cestodiasis and ascaridiasis are normal findings in

altbatross sp.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

This request has other tests in progress at the time of reporting

Test: GP - GROSS PATHOLOGY

Reported: 31/05/2025 15:13

Validated by Clause 6(1), 7(1)(c)

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:

Case VHI 993

Animal/Batch Id:

ALBATROSS SHY

Owner:

VICTOR HARBOR SA 5211

PIC:

Species:

Bird - wild

Age:

Lab No. - Test:

Case VHI 993

Case VHI 993

Submitter:

Submitter Id:

Case VHI 993

Clinic Phone:

Submitted:

30/05/2025

Test:

NEC - NECROPSY

Reported:

05/06/2025 14:48

HISTOPATHOLOGY FROM NECROPSY

REF: 2025 VHI 993

CLINICAL HISTORY

Please refer to the clinical history on the request form and the clinical notes sent with the request form. A brief summary of the clinical history;

The shy albatross was found at Victor Harbor. Because this is a long distance migratory species avian influenza and Newcastle disease virus testing is required.

MACROSCOPY

Slides A-E contain liver, spleen, heart, lung, kidney, brain, trachea, oesophagus, proventriculus - ventriculus, duodenum, pancreas jejunum, ileum, caecum, skeletal muscle

MICROSCOPY

Proventriculus: There are multiple cross sections of nematodes (30-40 micron across with smooth cuticle, coelomyarian musculature, pseudocoelom, lateral cords and central alimentary tract with monolayer of cuboidal epithelium; morphologically similar to Spirurids). (Proventricular helminthosis)

Jejunum: Within the lumen are cross sections of cestodes (smooth cuticle, spongy parenchyma, calcareous corpuscles and gravid uterus). (Enteric cestodiasis)

Kidney: Approximately 10% of proximal tubules are lined by necrotic epithelial cells (pyknotic nucleus and hypereosinophilic shrunken cytoplasm). (Mild, acute renal tubular necrosis)

Those tissues not described appear normal.

DIAGNOSIS

Proventriculus: Proventricular helminthosis

Jejunum: Enteric ascaridiasis and cestodiasis

Kidney: Mild, acute renal tubular necrosis

COMMENTS

There are no gross or microscopic findings to explain the cause of death for the bird.

The alimentary helminthes (nematodes, including ascarids such as Anisakis sp. and Contracaecum sp., spirurids such as Tetramere sp., and cestodes) are a normal finding in healthy albatross.

There are no gross findings consistent with trauma.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

This request has other tests in progress at the time of reporting

Test: NEC - NECROPSY

Reported: 05/06/2025 14:48

Validated by Clause 6(1), 7(1)(c)

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:

Case 7(1)(c)

Animal/Batch Id:

ALBATROSS SHY

Owner:

VICTOR HARBOR SA 5211

Lab No. - Test:

Case 7(1)(c)
Case 6(1)

Submitter:

PIC:

Species:

Bird - wild

Age:

Submitter Id:

Case 6(1)

Clinic Phone:

Submitted:

30/05/2025

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 02/06/2025 18:30

MOLECULAR DIAGNOSTICS

NEWCASTLE DISEASE VIRUS RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Cloacal & Tracheal swab in VTM

Number of specimens: 1

SPECIMEN ID	F Gene	M Gene	L Gene
BIRD	Not detected	Not detected	Not detected

Sample ID: Shy Albatross

Validated by Case 7(1)(c) Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 02/06/2025 18:30

Sample ID: Shy Albatross

Validated by Case 7(1)(c) Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:

[REDACTED]

Lab No. - Test:

[REDACTED]

Animal/Batch Id:

ALBATROSS SHY

Owner:

VICTOR HARBOR SA 5211

Submitter:

PIC:

Submitter Id:

Species:

Bird - wild

Clinic Phone:

Age:

Submitted:

30/05/2025

Test:

SUP - VET SUPPLEMENTARY

Reported:

06/06/2025 14:41

SUMMARY DIAGNOSES

Proventriculus: Proventricular helminthosis

Jejunum: Enteric ascaridiasis and cestodiasis

Kidney: Mild, acute renal tubular necrosis

SUMMARY COMMENTS

There are no gross or microscopic findings to explain the cause of death for the bird or the pectoral muscle atrophy.

The alimentary helminths (nematodes, including ascarids such as Anisakis sp. and Contracaecum sp., spirurids such as Tetramere sp., and cestodes, possibly Diphylobothrium) are a normal finding in healthy albatross.

The mild nephrosis is possibly an agonal change.

There are no gross findings consistent with trauma.

NDV and Avian influenza are excluded by PCR.

[REDACTED]

[REDACTED]

[REDACTED]

Specialist Veterinary Anatomic Pathologist

[REDACTED]

Validated by [REDACTED]

All tests on this request have now been completed

Test:

SUP - VET SUPPLEMENTARY

Reported:

06/06/2025 14:41

Validated by

[REDACTED]

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:

Animal/Batch Id:

Owner:

PIC:

Species:

Age:

ALBATROSS SHY

VICTOR HARBOR SA 5211

Bird - wild

Lab No. - Test:

Submitter:

Submitter Id:

Clinic Phone:

Submitted:

CLINIC 711(P)

CLINIC 711(P)

CLINIC 711(P)

CLINIC 711(P)

30/05/2025

Test:

Reported:

FLU - INFLUENZA TYPE A RNA PCR PACKAGE

02/06/2025 18:29

MOLECULAR DIAGNOSTICS

INFLUENZA A RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Cloacal & Tracheal swab in VTM

SPECIMEN ID	Type A	H5	H7
BIRD	Not detected		

Sample ID: Shy Albatross

Validated by CLINIC 511, 711(P) Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test:

Reported:

FLU - INFLUENZA TYPE A RNA PCR PACKAGE

02/06/2025 18:29

Sample ID: Shy Albatross

Validated by CLINIC 511, 711(P) Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:	CHANGE (11/6/2025)	Lab No. - Test:	CHANGE (11/6/2025)
Animal/Batch Id:			CHANGE (11/6/2025)
Owner:	FUR SEAL BRANFORD ROAD GOOLWA BEACH SA 5214	Submitter:	
FIG:		Submitter Id:	CHANGE (11/6/2025)
Species:	Mammal - marine	Clinic Phone:	
Age:		Submitted:	11/06/2025
Test:	GP - GROSS PATHOLOGY	Reported:	13/06/2025 21:38

NECROPSY REPORT

The clinical history is added 13/6/2025

CLINICAL HISTORY

Please refer to the clinical history on the request form and the clinical notes sent with the request form. A brief summary of the clinical history;
Deep juvenile lung-noticed first seal at the end of Bradford Rd, Goolwa Beach was found. The animal was seen alive the night before on the beach but was very emaciated.

SAMPLES SUBMITTED

One dead juvenile female long nosed fur seal, *Arctocephalus forsteri*

NECROPSY FINDINGS

There are mild to moderate post mortem autolytic changes.

The animal is in moderate body condition and weighs 12.3kg. There is minimal subcutaneous fat. Abdominal fat and peri-renal fat is not evident.

The stomach contains scant brown mucoid material and there are low numbers of ascarids within the lumen. The intestines contains scant brown mucoid ingesta and there are scant dark brown faeces.

GROSS SUMMARY

Chronic weight loss
Gastric ascaridasis

SAMPLES COLLECTED & TESTING

Fresh liver, heart, spleen, kidney, lung, brain and oropharyngeal swabs in virus transport medium are collected for AI PCR at CHANGE (11/6/2025) and CHANGE (11/6/2025)

Formalin fixed tissues will be processed for histopathology to examined for intercurrent diseases which could have caused chronic weight loss and for evidence of disease due to *Mycobacterium pinnepedi*.

Liver, lung, kidney, brain are stored frozen for one month if biotoxin testing is required.

COMMENTS

There are no gross findings to explain the cause of death or chronic weight loss. Histopathology and PCR testing for Avian influenza are in progress.

Gastric ascarids (such as *Contracaecum* and *Anisakis* sp.) are normal findings in seals.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

This request has other tests in progress at the time of reporting

Test: GP - GROSS PATHOLOGY

Reported: 13/06/2025 21:38

Validated by Clause 6(1), 7(1)(c)

Test: GP - GROSS PATHOLOGY

Reported: 12/06/2025 20:13

NECROPSY REPORT

CLINICAL HISTORY

Please refer to the clinical history on the request form and the clinical notes sent with the request form. A brief summary of the clinical history;

SAMPLES SUBMITTED

One dead juvenile female long nosed fur seal, *Arctocephalus forsteri*

NECROPSY FINDINGS

There are mild to moderate post mortem autolytic changes.

The animal is in moderate body condition and weighs 12.3kg. There is minimal subcutaneous fat. Abdominal fat and peri-renal fat is not evident.

The stomach contains scant brown mucoid material and there are low numbers of ascarids within the lumen. The intestines contains scant brown mucoid ingesta and there are scant dark brown faeces.

GROSS SUMMARY

Chronic weight loss

Gastric ascaridiasis

SAMPLES COLLECTED & TESTING

Fresh liver, heart, spleen, kidney, lung, brain and oropharyngeal swabs in virus transport medium are collected for AI PCR at Clause 7(1)(c) and Clause 7(1)(c)

Formalin fixed tissues will be processed for histopathology to examined for intercurrent diseases which could have caused chronic weight loss and for evidence of disease due to *Mycobacterium pinnepedi*.

Liver, lung, kidney, brain are stored frozen for one month if biotoxin testing is required.

COMMENTS

There are no gross findings to explain the cause of death or chronic weight loss. Histopathology and PCR testing for Avian influenza are in progress.

Gastric ascarids (such as *Contracaecum* and *Anisakis* sp.) are normal findings in seals.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

This request has other tests in progress at the time of reporting

Test: GP - GROSS PATHOLOGY

Reported: 12/06/2025 20:13

Validated by Clause 6(1), 7(1)(c)

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: [Redacted]

Lab No. - Test: [Redacted]

Animal/Batch Id: [Redacted]

[Redacted]

FUR SEAL
BRANFORD ROAD
GOOLWA BEACH SA 5214

Submitter:

FIG:

Submitter Id: [Redacted]

Species: **Mammal - marine**

Clinic Phone:

Age:

Submitted: **11/06/2025**

Test: **NEC - NECROPSY**

Reported: **18/06/2025 16:56**

HISTOPATHOLOGY FROM NECROPSY

REF: 2025/V HI 1069

CLINICAL HISTORY

Please refer to the clinical history on the request form and the clinical notes sent with the request form. A brief summary of the clinical history;
Deep juvenile lung-noticed first seal at the end of Bradford Rd, Goolwa Beach was found. The animal was seen alive the night before on the beach but was very emaciated.

MACROSCOPY

Cassettes

1A-I: multiple sections of brain including, medulla, midbrain, cerebellum, parietal, occipital and frontal cerebral cortices, thalamus, hippocampus, basal ganglia
2A-I: Liver, spleen, heart, lung, kidney, trachea, oesophagus, stomach, duodenum, jejunum, ileum, colon, eye, skeletal muscle (epaxial muscle and diaphragm), thyroid gland, adrenal gland; Ae GK

MICROSCOPY

The Liver, spleen, heart, lung, kidney, trachea, oesophagus, stomach, duodenum, jejunum, ileum, colon, eye, skeletal muscle (epaxial muscle and diaphragm), thyroid gland, adrenal gland, multiple sections of brain and spinal cord are histologically unremarkable.

DIAGNOSIS

Unremarkable histological findings

COMMENTS

There are no gross or histological findings to explain the cause of chronic weight loss.

There are no histological findings consistent with disease due to *Mycobacterium pinnipedii* (part of the *Mycobacterium tuberculosis* complex)

[Redacted]
[Redacted]
[Redacted]

Specialist Veterinary Anatomic Pathologist

[Redacted]

Validated by [Redacted]

This request has other tests in progress at the time of reporting

Test: **NEC - NECROPSY**

Reported: **18/06/2025 16:56**

Validated by

Clause 6(1), 7(1)(c)

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: [REDACTED]

Lab No. - Test: [REDACTED]

Animal/Batch Id:

FUR SEAL

Owner:

BRANFORD ROAD

GOOLWA BEACH SA 5214

Submitter:

PIC:

Submitter Id: [REDACTED]

Species:

Mammal - marine

Clinic Phone:

Age:

Submitted:

11/06/2025

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE

Reported:

16/06/2025 10:14

MOLECULAR DIAGNOSTICS

INFLUENZA A RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Tissue x6, Oropharyngeal (OP) Swab in VTM

SPECIMEN ID	Type A	H5	H7
LUNG	Not detected		
LIVER	Not detected		
SPLEEN	Not detected		
HEART	Not detected		
BRAIN	Not detected		
KIDNEY	Not detected		
OP SWAB	Not detected		

Validated by [REDACTED] Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE

Reported:

16/06/2025 10:14

Validated by [REDACTED] Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: Clause 7(1)(c)Lab No. - Test: Clause 7(1)(c)

Animal/Batch Id:

Clause 8(1)

FUR SEAL

Owner:

BRANFORD ROAD
GOOLWA BEACH SA 5214

Submitter:

PIC:

Submitter Id: Clause 8(1)

Species:

Mammal - marine

Clinic Phone:

Age:

Submitted: 11/06/2025

Test: IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP) Reported: 19/06/2025 15:25

MOLECULAR DIAGNOSTICS

Influenza Type A - TaqMan Assay

Species : Seal Number of specimens: 7
 Specimen type : Tissue & Oropharyngeal (OP) swab

SAMPLE ID TEST RESULT

SPLEEN	Negative
BRAIN	Negative
LIVER	Negative
KIDNEY	Negative
HEART	Negative
LUNG	Negative
OP SWAB	Negative

Australian Centre for Disease Preparedness (CSIRO)
 NATA accreditation number: 13546

Validated by Clause 8(1), 7(1)(c) Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP) Reported: 19/06/2025 15:25

Validated by Clause 8(1), 7(1)(c) Laboratory Scientist.

Test: IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP) Reported: 19/06/2025 15:25

Seal

Test: IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP) Reported: 19/06/2025 15:25

Tissue & Oropharyngeal (OP) swab

Test: IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP) Reported: 19/06/2025 15:25

Australian Centre for Disease Preparedness (CSIRO)
 NATA accreditation number: 13546

Test: IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP) Reported: 19/06/2025 15:25

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: [REDACTED] Lab No. - Test: [REDACTED]
Animal/Batch Id: [REDACTED] [REDACTED]
Owner: FUR SEAL
BRANFORD ROAD
GOOLWA BEACH SA 5214
Submitter:
PIC: [REDACTED]
Species: Mammal - marine
Submitter Id: [REDACTED]
Age: [REDACTED] Clinic Phone:
Submitted: 11/06/2025
Test: SUP - VET SUPPLEMENTARY
Reported: 20/06/2025 10:48

SUMMARY DIAGNOSIS

No diagnosis concluded

SUMMARY COMMENTS

There are no gross or histological findings to explain the cause of chronic weight loss or death.

AI infection is excluded by PCR testing.

There are no histological findings consistent with disease due to Mycobacterium tuberculosis complex.

[REDACTED]

[REDACTED]

[REDACTED]

Specialist Veterinary Anatomic Pathologist

[REDACTED]

Validated by [REDACTED]

All tests on this request have now been completed

Test: SUP - VET SUPPLEMENTARY
Reported: 20/06/2025 10:48

Validated by [REDACTED]

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:

Animal/Batch Id:

PENGUIN LITTLE

Owner:

SEAL BAY SA 5223

Lab No. - Test:

Submitter:

Submitter Id:

Species:

Bird - other

Clinic Phone:

Age:

Submitted:

18/06/2025

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE Reported: 23/06/2025 16:12

MOLECULAR DIAGNOSTICS

INFLUENZA A RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Pharynx + cloacal swabs in VTM

SPECIMEN ID	Type A	H5	H7
WHITE	Not detected		

Sample ID: White band

Validated by Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE Reported: 23/06/2025 16:12

Sample ID: White band

Validated by Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: [REDACTED]

Lab No. - Test: [REDACTED]

Animal/Batch Id:

[REDACTED]

PENGUIN LITTLE

Owner:

[REDACTED]

Submitter:

SEAL BAY SA 5223

PIC:

Submitter Id: [REDACTED]

Species:

Bird - other

Clinic Phone:

Age:

Submitted:

18/06/2025

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 23/06/2025 16:12

MOLECULAR DIAGNOSTICS

NEWCASTLE DISEASE VIRUS RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Pharynx + cloacal swabs in VTM Number of specimens: 1

SPECIMEN ID	F Gene	M Gene	L Gene
WHITE	Not detected	Not detected	Not detected

Sample ID: White band

Validated by [REDACTED] Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 23/06/2025 16:12

Sample ID: White band

Validated by [REDACTED] Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:

Animal/Batch Id:

Owner:

PIC:

Species:

Age:

ALBATROSS

KINGSCOTE SA 5223

Bird - wild

Lab No. - Test:

Submitter:

Submitter Id:

Clinic Phone:

Submitted:

20/06/2025

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE Reported: 23/06/2025 16:12

MOLECULAR DIAGNOSTICS

INFLUENZA A RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Tracheal + cloacal swabs in VTM

SPECIMEN ID	Type A	H5	H7
WILD	Not detected		

Sample ID: Wild albatross

Validated by Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE Reported: 23/06/2025 16:12

Sample ID: Wild albatross

Validated by Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:

Animal/Batch Id:

ALBATROSS

Owner:

KINGSCOTE SA 5223

Lab No. - Test:

Submitter:

Submitter Id:

Clinic Phone:

Submitted:

20/06/2025

FIG:

Species:

Bird - wild

Age:

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 23/06/2025 16:12

MOLECULAR DIAGNOSTICS

NEWCASTLE DISEASE VIRUS RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Tracheal + cloacal swabs in VTM

Number of specimens: 1

SPECIMEN ID	F Gene	M Gene	L Gene
WILD	Not detected	Not detected	Not detected

Sample ID: Wild albatross

Validated by

Clause 5(1), 7(1)(C)

 Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 23/06/2025 16:12

Sample ID: Wild albatross

Validated by

Clause 5(1), 7(1)(C)

 Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: [REDACTED]

Lab No. - Test: [REDACTED]

Animal/Batch Id: **GIANT PETREL**

[REDACTED]

Owner:

Submitter:

PIC:

Submitter Id: [REDACTED]

Species: **Bird - wild**

Clinic Phone:

Age:

Submitted: **24/06/2025**Test: **GP - GROSS PATHOLOGY**Reported: **25/06/2025 13:35**

CLINICAL HISTORY

Giant Petrel at reported deceased at middle River, Snellinop Beach.
35°40.0283'S 137°4.4095'E.

Refrigerated from 1 PM 22nd June 2025 - [REDACTED]; 23rd June 2025 -
[REDACTED] Long haul migrator.

SAMPLES SUBMITTED

One dead petrel.

NECROPSY FINDINGS

There is marked putrefactive post-mortem autolytic changes. The bird weighs 6.2kg

Both eye sockets are empty (both eyes are missing). The caudal mandible is missing, exposing the ventral brain. The brain is liquified. The larynx and cranial 1/3 trachea is covered with sand. The subcutaneous fat and tissue are yellow-green coloured(post-mortem and autolytic changes).

The thoracic organs are gelatinous (autolytic changes). The pericardium is gelatinous. The heart contains a large blood clot within the left ventricle (post-mortem change). The lungs are yellow-green and gelatinous.

The abdominal organs are markedly autolysed. The mesentery is gelatinous. The intestinal segments difficult to distinguish, and are blended into a large gelatinous mass. The stomach contains green digested material.

The each kidney are a single dark red gelatinous mass.

The reproductive organs are not identified.

GROSS DIAGNOSIS

Marked putrefactive autolysis.

SAMPLES COLLECTED & TESTING

Tracheal and cloacal swabs in VTM -AI/ND PCR

Fresh tissues in 50 mL pots (liver, intestines, kidney, lung) - stored in -80

Fresh tissue in 5 mL tubes (liver, spleen, heart, kidney, brain, lung) - stored in -80

Validated by [REDACTED]

This request has other tests in progress at the time of reporting

Test: **GP - GROSS PATHOLOGY**Reported: **25/06/2025 13:35**

Validated by

Clause 6(1), 7(1)(c)

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: Classified (U//FOUO)

Animal/Batch Id: Classified (U//FOUO)

GIANT PETREL

Owner:

Lab No. - Test: Classified (U//FOUO)

Classified (U//FOUO)

Submitter:

PIG:

Species: Bird - wild

Age:

Submitter Id: Classified (U//FOUO)

Clinic Phone:

Submitted: 24/06/2025

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE Reported: 02/07/2025 14:07

MOLECULAR DIAGNOSTICS

INFLUENZA A RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Pooled trachea & cloaca swab

SPECIMEN ID	Type A	H5	H7
POOL	Not detected		

Validated by Classified (U//FOUO) Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE Reported: 02/07/2025 14:07

Validated by Classified (U//FOUO) Laboratory Scientist.

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE Reported: 02/07/2025 14:07

MOLECULAR DIAGNOSTICS

INFLUENZA A RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Pooled trachea & cloaca swab

SPECIMEN ID	Type A	H5	H7
POOL	Not detected		

Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: **FLU - INFLUENZA TYPE A RNA PCR PACKAGE** Reported: **02/07/2025 14:07**

Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.



Submitter Id: 
Clinic Phone: 
Submitted: 24/06/2025

This request has other tests in progress at the time of reporting

Validated by  Laboratory Scientist.

SPECIMEN ID	F Gene	M Gene	L Gene
POOL	Not detected	Not detected	Not detected

Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 02/07/2025 16:42

Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: [REDACTED] Lab No. - Test: [REDACTED]
 Animal/Batch Id: [REDACTED]
 Owner: PENGUIN LITTLE
 THE BLUFF
 VICTOR HARBOR SA 5211
 Submitter:
 FIG: Submitter Id: [REDACTED]
 Species: Bird - wild Clinic Phone:
 Age: Submitted: 25/06/2025
 Test: GP - GROSS PATHOLOGY Reported: 26/06/2025 19:39

NECROPSY REPORT

CLINICAL HISTORY

Please refer to the clinical history on the request form and the clinical notes sent with the request form. This is a transcription of the history;
 Fresh dead little penguin found at the Bluff , Victor Harbor, on a pole

SAMPLES SUBMITTED

One dead adult male little penguin, Eudyptula minor

NECROPSY FINDINGS

The bird is in good body condition and weighs 800g. There are moderate post mortem autolytic changes.

The proventriculus contains scant macerated fish.

GROSS SUMMARY

Unremarkable gross findings

SAMPLES COLLECTED & TESTING

Cloacal and tracheal swab in VTM will be tested by AI and NDV qPCR. Formalin fixed tissue will be processed for histopathology.

Fresh liver, kidney, lung and brain are stored if biotoxin and brevetoxin testing is required.

COMMENTS

A cause of death is not concluded based on the gross findings.

[REDACTED]

[REDACTED]

[REDACTED]

Specialist Veterinary Anatomic Pathologist

[REDACTED]

Validated by [REDACTED]

This request has other tests in progress at the time of reporting

Test: GP - GROSS PATHOLOGY Reported: 26/06/2025 19:39

Validated by [REDACTED]

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:	Class 7(1)(c)	Lab No. - Test:	Class 7(1)(c)
Animal/Batch Id:			Class 6(1)
Owner:	PENGUIN LITTLE THE BLUFF VICTOR HARBOR SA 5211	Submitter:	
FIG:		Submitter Id:	Class 6(1)
Species:	Bird - wild	Clinic Phone:	
Age:		Submitted:	25/06/2025
Test:	NEC - NECROPSY	Reported:	04/07/2025 13:33

HISTOPATHOLOGY FROM NECROPSY

REF: 2025/V HI 1157
CLINICAL HISTORY
Was found at the Bluff at Victor Harbor

MACROSCOPY
Cassettes A-D contain liver, kidney, spleen, heart, lung, brain, pro
ventriculus, duodenum, caecum, ileum, pancreas, air sacs; Ae GK

MICROSCOPY
Liver: Multifocally and randomly around portal areas and extending into
the mid zonal regions hepatocytes are effaced and replaced by low to
moderate numbers of lymphocytes plasma cells and few macrophages. (Mild,
multifocal, subacute to chronic, necrotising, lymphocytic, plasmacytic,
histiocytic hepatitis)

Lung: There is diffuse hyperaemia / congestion. (Pulmonary hyperaemia /
congestion)

There is moderate autolysis of alimentary sections, kidney and pancreas.

Those tissues not described are unremarkable.

DIAGNOSIS
Liver: Mild, multifocal, subacute to chronic, necrotising, lymphocytic,
plasmacytic, histiocytic hepatitis

Lung: Pulmonary hyperaemia / congestion

COMMENTS
The hepatitis contributed to morbidity. Please contact the laboratory
within the next 5 working days if microbiological culture is required.

The pulmonary hyperaemia / congestion is likely an agonal change.

Class 6(1), 7(1)(c)
Class 6(1), 7(1)(c)
Class 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Class 6(1), 7(1)(c)

Validated by Class 6(1), 7(1)(c)

This request has other tests in progress at the time of reporting

Validated by Clause 6(1), 7(1)(c)

Test: **NEC - NECROPSY**

Reported: **04/07/2025 13:33**

HISTOPATHOLOGY FROM NECROPSY

REF: 2025/V HI 1157

CLINICAL HISTORY

Was found at the Bluff at Victor Harbor

MACROSCOPY

Cassettes A-D contain liver, kidney, spleen, heart, lung, brain, pro ventriculus, duodenum, caecum, ileum, pancreas, air sacs; Ae GK

MICROSCOPY

Liver: Multifocally and randomly around portal areas and extending into the mid zonal regions hepatocytes are effaced and replaced by low to moderate numbers of lymphocytes plasma cells and few macrophages. (Mild, multifocal, subacute to chronic, necrotising, lymphocytic, plasmacytic, histiocytic hepatitis)

Lung: There is diffuse hyperaemia / congestion. (Pulmonary hyperaemia / congestion)

There is moderate autolysis of alimentary sections, kidney and pancreas.

Those tissues not described are unremarkable.

DIAGNOSIS

Liver: Mild, multifocal, subacute to chronic, necrotising, lymphocytic, plasmacytic, histiocytic hepatitis

Lung: Pulmonary hyperaemia / congestion

COMMENTS

The hepatitis contributed to morbidity. Please contact the laboratory within the next 5 working days if microbiological culture is required.

The pulmonary hyperaemia / congestion is likely an agonal change.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

This request has other tests in progress at the time of reporting

Test: **NEC - NECROPSY**

Reported: **04/07/2025 13:33**

Validated by Clause 6(1), 7(1)(c)

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: [REDACTED]

Lab No. - Test: [REDACTED]

Animal/Batch Id: [REDACTED]

[REDACTED]

Owner: PENGUIN LITTLE
THE BLUFF
VICTOR HARBOR SA 5211

Submitter:

PIC:
Species: Bird - wild
Age:

Submitter Id: [REDACTED]
Clinic Phone:
Submitted: 25/06/2025

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE Reported: 02/07/2025 14:08

MOLECULAR DIAGNOSTICS

INFLUENZA A RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Pooled trachea & cloaca swab

SPECIMEN ID	Type A	H5	H7
POOL	Not detected		

Validated by [REDACTED] Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE Reported: 02/07/2025 14:08

Validated by [REDACTED] Laboratory Scientist.

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE Reported: 02/07/2025 14:08

MOLECULAR DIAGNOSTICS

INFLUENZA A RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Pooled trachea & cloaca swab

SPECIMEN ID	Type A	H5	H7
POOL	Not detected		

Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: **FLU - INFLUENZA TYPE A RNA PCR PACKAGE** Reported: **02/07/2025 14:08**

Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

PIIMS Laboratory Results Viewer

[Result Details Page](#)

Submission No: Clause 7(1)(c)

Animal/Batch Id:

Lab No. - Test: (Clause 77 (c))

Owner: PENGUIN LITTLE
THE BLUFF
VICTOR HARBOR SA 5211

Submitter:

FIG:
Species: Bird - wild
Age:

Submitter Id: 
Clinic Phone: 
Submitted: 25/06/2025

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 02/07/2025 16:42

MOLECULAR DIAGNOSTICS

NEWCASTLE DISEASE VIRUS RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Pooled trachea & cloaca swab Number of specimens: 1

SPECIMEN ID	F Gene	M Gene	L Gene
POOL	Not detected	Not detected	Not detected

Validated by [Redacted] Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Report #: 02/07/2025 16:42

Validated by [Redacted] Laboratory Scientist.

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 02/07/2025 16:42

MOLECULAR DIAGNOSTICS

NEWCASTLE DISEASE VIRUS RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Pooled trachea & cloaca swab Number of specimens: 1

SPECIMEN ID	F Gene	M Gene	L Gene
POOL	Not detected	Not detected	Not detected

Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 02/07/2025 16:42

Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: [REDACTED]

Lab No. - Test: [REDACTED]

 Animal/Batch Id: EMU BAY
 PENGUIN LITTLE
 EMU BAY

Owner:

Submitter:

PIC:

Submitter Id: [REDACTED]

Species: Bird - wild

Clinic Phone:

Age:

Submitted: 27/06/2025

Test: GP - GROSS PATHOLOGY

Reported: 27/06/2025 14:34

NECROPSY REPORT

CLINICAL HISTORY

Please refer to the clinical history on the request form and the clinical notes sent with the request form. A brief summary of the clinical history;

The penguin was found at Emu Bay carpark at a known exit point from the ocean.

May have been hit by car or a dog attack

There were no external signs of trauma

SAMPLES SUBMITTED

One dead adult little penguin, Eudyptula minor

NECROPSY FINDINGS

The bird is in good body condition (convex pectoral muscles) and weighs 800g. There are mild post mortem autolytic changes.

There is abundant haemorrhage at the base of the heart and within the lungs. The proventriculus is ruptured, the torn edges contain clotted blood and proventricular contents are scattered through the coelomic cavity.

GROSS SUMMARY

Acute haemorrhage within coelomic cavity
 Ruptured proventriculus

SAMPLES COLLECTED & TESTING

Cloacal and tracheal swabs in virus transport medium will be tested for AI and NDV by qPCR.

Formalin fixed tissues will be processed for histopathology to assess for intercurrent disease.

Fresh liver, kidney, lung, liver and brain are stored for 6 months in case biotoxin testing is required.

Fresh liver, spleen, kidney, heart, lung, brain are stored frozen.

COMMENTS

The cause of death was blunt trauma causing proventricular rupture and haemorrhage within the coelomic cavity. A specific cause for the blunt trauma cannot be concluded.

There are no subcutaneous haemorrhages or fractured bones.

[REDACTED]

[REDACTED]

[REDACTED]

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by

Clause 6(1), 7(1)(c)

This request has other tests in progress at the time of reporting

Test: GP - GROSS PATHOLOGY

Reported: 27/06/2025 14:34

Validated by

Clause 6(1), 7(1)(c)

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: Class 7(1)(c)
Animal/Batch Id: EMU BAY
PENGUIN LITTLE
Owner: EMU BAY

Lab No. - Test: Class 7(1)(c)
Class 6(1)

Submitter:

FIG:
Species: Bird - wild
Age:

Submitter Id: Class 7(1)
Clinic Phone:
Submitted: 27/06/2025

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE Reported: 02/07/2025 14:08

MOLECULAR DIAGNOSTICS
INFLUENZA A RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Pooled trachea & cloaca swab

SPECIMEN ID	Type A	H5	H7
POOL	Not detected		

Validated by Class 7(1), 7(1)(c) Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE Reported: 02/07/2025 14:08

Validated by Class 7(1), 7(1)(c) Laboratory Scientist.

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE Reported: 02/07/2025 14:08

Validated by Class 7(1), 7(1)(c) Laboratory Scientist.

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE Reported: 02/07/2025 14:08

MOLECULAR DIAGNOSTICS
INFLUENZA A RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Pooled trachea & cloaca swab

SPECIMEN ID	Type A	H5	H7
POOL	Not detected		

Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

This request has other tests in progress at the time of reporting

PIIMS Laboratory Results Viewer

[Result Details Page](#)Submission No: 098971101Lab No. - Test: Clause 77(1)(c)

Animal/Batch Id: EMU BAY
PENGUIN LITTLE
EMU BAY

Submitter:

FIG: Bird - wild
Species:
Age:

Submitter Id: [REDACTED]
Clinic Phone: [REDACTED]
Submitted: 27/06/2021

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 02/07/2025 16:43

MOLECULAR DIAGNOSTICS

NEWCASTLE DISEASE VIRUS RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Pooled trachea & cloaca swab Number of specimens: 1

SPECIMEN ID	F Gene	M Gene	L Gene
POOL	Not detected	Not detected	Not detected

Validated by  Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 02/07/2025 16:43

Validated by Clause 6.1.1.1.1 Laboratory Scientist.

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 02/07/2025 16:43

MOLECULAR DIAGNOSTICS

NEWCASTLE DISEASE VIRUS RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Pooled trachea & cloaca swab Number of specimens: 1

SPECIMEN ID	F Gene	M Gene	L Gene
POOL	Not detected	Not detected	Not detected

Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 02/07/2025 16:43

Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:

Case 771161

Lab No. - Test:

Case 771161

Animal/Batch Id:

Unknown*

Unknown*

Owner:

Submitter:

PIC:

Unknown*

Submitter Id:

Species:

Unknown*

Clinic Phone:

Age:

Unknown* Unknown*

Submitted:

Unknown*

* Note: No CNF records have been received for this submission.

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE Reported: 02/07/2025 16:43

MOLECULAR DIAGNOSTICS

INFLUENZA A RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Sawb in VTM and tissues

SPECIMEN ID	Type A	H5	H7
VTM	Not detected		
LUNG	Not detected		
LIVER	Not detected		
SPLEEN	Not detected		
HEART	Not detected		
BRAIN	Not detected		

Validated by

Case 771161

Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE Reported: 02/07/2025 16:43

Validated by

Case 771161

Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: Class 7(1)(c)Lab No. - Test: Class 7(1)(c)

Animal/Batch Id: Unknown*

Unknown*

Owner:

Submitter:

PIC: Unknown*

Submitter Id:

Species: Unknown*

Clinic Phone:

Age: Unknown* Unknown*

Submitted: Unknown*

* Note: No CNF records have been received for this submission.

Test: IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP) Reported: 12/07/2025 16:05

MOLECULAR DIAGNOSTICS

Influenza Type A - TaqMan Assay

Species : Dolphin Number of specimens: 6
 Specimen type : VTM, lung, liver, spleen, heart, brain

SAMPLE ID	TEST RESULT
VTM	Negative
LUNG	Negative
LIVER	Negative
SPLEEN	Negative
HEART	Negative
BRAIN	Negative

Australian Centre for Disease Preparedness (CSIRO)
 NATA accreditation number: 13546

Validated by Class 6(1)(1)(1)(2)

This request has other tests in progress at the time of reporting

Test: IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP) Reported: 12/07/2025 16:05

Validated by Class 6(1)(1)(1)(1)

Test: IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP) Reported: 12/07/2025 16:05

Dolphin

Test: IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP) Reported: 12/07/2025 16:05

VTM, lung, liver, spleen, heart, brain

Test: IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP) Reported: 12/07/2025 16:05

Australian Centre for Disease Preparedness (CSIRO)
 NATA accreditation number: 13546

Test: IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP) Reported: 12/07/2025 16:05

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PIIMS Laboratory Results Viewer



Result Details Page

Submission No:

[REDACTED]

Lab No. - Test:

[REDACTED]

Animal/Batch Id:

[REDACTED]

WILD

Owner:

VICTOR HARBOR SA 5211

Submitter:

PIC:

Submitter Id:

[REDACTED]

Species:

Bird - wild

Clinic Phone:

Age:

Submitted:

01/07/2025

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 11/07/2025 12:20

MOLECULAR DIAGNOSTICS

NEWCASTLE DISEASE VIRUS RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Swabs in VTM

Number of specimens: 1

SPECIMEN ID	F Gene	M Gene	L Gene
POOL	Not detected	Not detected	Not detected

Validated by [REDACTED] Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 11/07/2025 12:20

Validated by [REDACTED] Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: [REDACTED]

Lab No. - Test: [REDACTED]

Animal/Batch Id: CORMORANTS PIRSA

PIRSA ANIMAL HEALTH

Owner:

Submitter:

PIC:

Submitter Id: [REDACTED]

Species: Bird - other

Clinic Phone:

Age:

Submitted: 19/07/2025

Test: GP - GROSS PATHOLOGY

Reported: 19/07/2025 17:01

NECROPSY REPORT

This report replaces the previous report sent on 19/7/2025

CLINICAL HISTORY

Please refer to the clinical history on the request form and the email sent with the request form. A brief summary of the clinical history;

4 x calls to the EAD hotline over the past 24 hours reported cormorant deaths along the Napean Bay, Brown Beach and ironstone creek. This bird was among 7 dead birds found. This bird was still fresh. For healthy live cormorants were seen.

SAMPLES SUBMITTED

One dead adult male cormorant, *Phalacrocorax* sp.

NECROPSY FINDINGS

The bird is in very poor body condition and weighs 800 g. There is marked atrophy of the pectoral muscles. Over the serosa of the liver and extending into the hepatic parenchyma are abundant fine pale yellow to pale white pinpoint foci.

There are abundant ascarid is approximately 20 to 30 mm long (*Anisakis* sp., *Contracaecum* species) in the proventriculus. Intestines contain pasty brown ingesta.

There are fine pinpoint foci in the renal parenchyma of both kidneys.

GROSS SUMMARY

Probable necrotising hepatitis

Possible necrotizing interstitial nephritis

SAMPLES COLLECTED & TESTING

Formalin fixed tissues will be processed for histopathology and cloacal and tracheal swabs (in VTM) will be tested for AI and NDV by PCR as you requested.

Fresh liver and kidney are stored if microbiological culture is required.

Liver, kidney, spleen, heart, lung, brain are stored frozen for one month if Dept Environment and Water SA require biotoxin / brevetoxin testing.

COMMENTS

Based on gross findings a bacterial hepatitis likely contributed to morbidity for this bird. Histopathology is pending. Microbiology is recommended on the liver and kidney. Please contact the laboratory within the next 1-2 working days if microbiology is required.

[REDACTED]

[REDACTED]

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

This request has other tests in progress at the time of reporting

Test: GP - GROSS PATHOLOGY

Reported: 19/07/2025 17:01

Validated by Clause 6(1), 7(1)(c)

Test: GP - GROSS PATHOLOGY

Reported: 19/07/2025 15:44

NECROPSY REPORT

CLINICAL HISTORY

Please refer to the clinical history on the request form and the email sent with the request form. A brief summary of the clinical history;

4 x calls to the EAD hotline over the past 24 hours reported cormorant deaths along the Napean Bay, Brown Beach and ironstone creek. This bird was among 7 dead birds found. This bird was still fresh. For healthy live cormorants were seen.

SAMPLES SUBMITTED

One dead adult male cormorant, Phalacrocorax sp.

NECROPSY FINDINGS

The bird is in very poor body condition and weighs 800 g. There is marked atrophy of the pectoral muscles. Over the serosa of the liver and extending into the hepatic parenchyma are abundant fine pale yellow to pale white pinpoint foci.

There are abundant ascarid is approximately 20 to 30 mm long (Anisakis sp., Contracaecum species) in the proventriculus. Intestines contain pasty brown ingesta.

GROSS SUMMARY

Probable necrotising hepatitis

SAMPLES COLLECTED & TESTING

Formalin fixed tissues will be processed for histopathology and cloacal and tracheal swabs (in VTM) will be tested for AI and NDV by PCR as you requested.

Fresh liver is stored if microbiological culture is required.

Liver, kidney, spleen, heart, lung, brain are stored frozen for one month if Dept Environment and Water SA require biotoxin / brevetoxin testing.

COMMENTS

Based on gross findings a bacterial hepatitis likely contributed to morbidity for this bird. Histopathology is pending. Microbiology is recommended on the liver. Please contact the laboratory within the next 1-2 working days if microbiology is required.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

This request has other tests in progress at the time of reporting

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: [REDACTED] Lab No. - Test: [REDACTED]
 Animal/Batch Id: [REDACTED] PIRSA ANIMAL HEALTH
 CORMORANTS PIRSA
 Owner: [REDACTED] Submitter: [REDACTED]
 PIC: [REDACTED] Submitter Id: [REDACTED]
 Species: Bird - other Clinic Phone: [REDACTED]
 Age: [REDACTED] Submitted: 19/07/2025
 Test: NEC - NECROPSY Reported: 23/07/2025 10:15

HISTOPATHOLOGY FROM NECROPSY

REF: 2025/V HI 1311

CLINICAL HISTORY

Please refer to the clinical history on the request form and the email sent with the request form. A brief summary of the clinical history;

4 x calls to the EAD hotline over the past 24 hours reported cormorant deaths along the Nepean Bay, Brown Beach and ironstone creek. This bird was among 7 dead birds found. This bird was still fresh. For healthy live cormorants were seen.

MACROSCOPY

Slides A-D contain liver, spleen, heart, lung, kidney, brain, oesophagus, proventriculus, ventriculus, duodenum, jejunum, pancreas, ileum, ceacum.

MICROSCOPY

Liver: Multifocally the hepatic acinar parenchyma is effaced and replaced by multiple granulomas. The granulomas contain central lytic necrosis surrounded by moderate to large numbers of heterophils, lymphocytes, macrophages surrounded by fibrous capsule. Within the necrotic debris there are colonies of short bacteria. (Moderate, multifocal, chronic, necrotising pyogranulomatous hepatitis with intralesional short bacteria)

Kidney: Multifocally collecting ducts are effaced and replaced by multiple cross sections of trematodes. The trematodes are approximately 300 to 400 micron in diameter with smooth integument, spongy parenchyma, alimentary tract lined by monolayer of columnar epithelial cells and gravid uteri with abundant oval ova with single operculum. Other collecting ducts are expanded by abundant ova and necrotic debris. (Renal trematodiasis; Rencicola sp.)

Oesophagus: There multiple cross sections of nematode's. Nematode is are approximately 30 to 50 in diameter with a smooth cuticle, platymyarian musculature, lateral cords, pseudocoelom and alimentary tract lined by monolayer of epithelial cells.

There is mild autolysis of the brain, spleen and alimentary sections, aside from the oesophagus.

Those tissues not described appear normal.

DIAGNOSIS

Liver: Moderate, multifocal, chronic bacterial hepatitis

Kidney: Renal trematodiasis (Rencicola sp.)

COMMENTS

Bacterial hepatitis contributed to morbidity for this cormorant.

Renal Renicola sp. infection are often incidental findings in cormorants but the moderate burden in this burden probably contributed to morbidity.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

This request has other tests in progress at the time of reporting

Test: NEC - NECROPSY

Reported: 23/07/2025 10:15

Validated by Clause 6(1), 7(1)(c)

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: [REDACTED]

Animal/Batch Id: CORMORANTS PIRSA

Owner:

Lab No. - Test: [REDACTED] PIRSA ANIMAL HEALTH

Submitter:

PIC:

Species: Bird - other

Age:

Submitter Id: [REDACTED]

Clinic Phone:

Submitted: 19/07/2025

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE

Reported: 22/07/2025 15:26

MOLECULAR DIAGNOSTICS

INFLUENZA A RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Tracheal & cloacal swabs in VTM

SPECIMEN ID	Type A	H5	H7
POOL	Not detected		

ID: Cormorant

Validated by [REDACTED] Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE

Reported: 22/07/2025 15:26

ID: Cormorant

Validated by [REDACTED] Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: Cause 7(1)(c)Lab No. - Test: Cause 7(1)(c)Animal/Batch Id:
CORMORANTS PIRSA

PIRSA ANIMAL HEALTH

Owner:

Submitter:

PIC:

Submitter Id:

Species: Bird - other

Clinic Phone:

Age:

Submitted: 19/07/2025

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 22/07/2025 15:26

MOLECULAR DIAGNOSTICS

NEWCASTLE DISEASE VIRUS RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Tracheal & cloacal swabs in VTM Number of specimens: 1

SPECIMEN ID	F Gene	M Gene	L Gene
POOL	Not detected	Not detected	Not detected

ID: Cormorant

Validated by Cause 8(1)(c) Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 22/07/2025 15:26

ID: Cormorant

Validated by Cause 8(1)(c) Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:

Case 71110

Lab No. - Test:

Case 71110

Animal/Batch Id:

PIRSA ANIMAL HEALTH

CORMORANTS PIRSA

Owner:

Submitter:

PIC:

Submitter Id:

Species:

Bird - other

Clinic Phone:

Age:

Submitted:

19/07/2025

Test:

VSW - VET MICRO & CULTURE

Reported:

11/08/2025 14:06

MICROBIOLOGY

SPECIMEN: Liver

ANIMAL ID: Cormorant

MICROSCOPY

No bacteria seen.

A small number of leucocytes.

CULTURE

1. No growth aerobically or anaerobically after 48 hours incubation.

COMMENT: No Salmonella sp., Listeria sp. or Yersinia sp. isolated.

Final Report

11/08/25

Validated by Case 611171101 Laboratory Scientist.

All tests on this request have now been completed

Test:

VSW - VET MICRO & CULTURE

Reported:

11/08/2025 14:06

Final Report

11/08/25

Validated by Case 611171101 Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:

[REDACTED]

Lab No. - Test:

[REDACTED]

Animal/Batch Id:

CORMORANTS PIRSA

PIRSA ANIMAL HEALTH

Owner:

Submitter:

PIC:

Submitter Id:

Species:

Bird - other

Clinic Phone:

Age:

Submitted:

19/07/2025

Test:

SUP - VET SUPPLEMENTARY

Reported:

23/07/2025 10:18

SUMMARY DIAGNOSIS

Bacterial hepatitis

Renal trematodiasis (Renicola sp.)

SUMMARY COMMENTS

Bacterial hepatitis contributed to weight loss and morbidity for this bird. Differential diagnoses include E. coli, Pseudomonas sp. Pasteurella sp. etc. The animal had a moderate burden of renal trematodes. This may have also contributed to morbidity.

[REDACTED]

[REDACTED]

[REDACTED]

Specialist Veterinary Anatomic Pathologist

[REDACTED]

Validated by [REDACTED]

All tests on this request have now been completed

Test:

SUP - VET SUPPLEMENTARY

Reported:

23/07/2025 10:18

Validated by

[REDACTED]

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:		Lab No. - Test:	
Animal/Batch Id:			PIRSA ANIMAL HEALTH
Owner:	PELICAN BAY OF SHOALS NEAR BOAT RAMP KINGSCOTE SA 5223	Submitter:	
PIC:		Submitter Id:	
Species:	Bird - wild	Clinic Phone:	
Age:		Submitted:	22/07/2025
Test:	NEC - NECROPSY	Reported:	28/07/2025 09:08

HISTOPATHOLOGY

REF: 2025/VHI1327

CLINICAL HISTORY

1 pelican with neurological signs Bay of Shoals near boat ramping Kingscote, only submitting 1 fresh to get Pelican for testing of the others are too autolysed

MACROSCOPY

A = skin lesion, tracheaB = liver, kidney, spleen, lungC = skeletal muscle and hardD = brainE = Pancreas? GITF = ovary + adrenals?H+ G = GIT

MICROSCOPY

Skin: Within the dermis and subcutaneous tissue are myriad acarid ova, 200-300 micron diameter with smooth capsule.

Liver: Multifocally there are low to moderate numbers of lymphocytes and few plasma cells surrounding portal areas and scattered within mid zonal areas. Low numbers of Kupffer cells and low to moderate numbers of hepatocytes contain golden brown intracytoplasmic granules (bilirubin). Bilirubin also distends multifocally low numbers of calculi. (Mild, multifocal, subacute to chronic, lymphocytic, plasmacytic hepatitis with cholestasis)

Air sacs: There are large numbers of acarid ova within the lumen of air sacs. They are 200-300 micron in diameter.

Skeletal muscle: Multifocally there are very low numbers of lymphocytes and rare plasma cells within the interstitium between myocytes. There are rare individualised atrophic myocytes with shrunken cytoplasm.

There is moderate autolysis of most sections of the alimentary tract.

Aside from this artefact the following findings are described

Ileum: Within the lumen there is a cross-section of a nematode approximately 30 to 40 in diameter, with smooth cuticle, coelomyarian musculature, pseudocoelom, gravid uterus, alimentary tract and partially distinct lateral cords (consistent with ascarid). (Enteric ascaridiasis)

Pancreas: There appears to be atrophy of exocrine pancreatic cells with only low numbers of some to granules. (Pancreatic acinar atrophy)

There is mild autolysis of the trachea (sloughing of epithelium), and kidney.

Those tissues not described are unremarkable.

DIAGNOSIS

Skin: Cutaneous acarid ova

Liver: Mild, multifocal, subacute to chronic, lymphocytic, plasmacytic

hepatitis with cholestasis

Air sacs: Acarid ova

Ileum: Enteric ascaridiasis

Pancreas: Pancreatic acinar atrophy

COMMENTS

The hepatitis may have contributed to the chronic weight loss. Culture of the liver is recommended.

The animal, prior to death had a mite burden. Ingrassia eudiptula mites are reported in Little penguins. These ova may be from those mites. Mite burdens have not been reported to cause weight loss in little penguins.

It is not possible to determine the species or genera of mite ova in the air sacs.

Enteric ascaridiasis (often due to Contracaecum sp. or Anisakis sp.) is a normal finding in little penguins and did not contribute to the bird's loss of condition or death.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c) Veterinary Anatomic
Pathology Diagnostician.

This request has other tests in progress at the time of reporting

Test: NEC - NECROPSY

Reported: 28/07/2025 09:08

Validated by Clause 6(1), 7(1)(c) Veterinary Anatomic Pathology

Test: NEC - NECROPSY

Reported: 09/08/2025 18:21

HISTOPATHOLOGY

REF: 2025/VHI1327

CORRECTED REPORT 9/8/2025

The references to penguins are replaced by pelican.

CLINICAL HISTORY

1 pelican with neurological signs Bay of Shoals near boat ramping
Kingscote, only submitting 1 fresh to get Pelican for testing of the
others are too autolysed

MACROSCOPY

A = skin lesion, trachea B = liver, kidney, spleen, lung C = skeletal
muscle and hard D = brain E = Pancreas? GIT F = ovary + adrenals? H+ G = GIT

MICROSCOPY

Skin: Within the dermis and subcutaneous tissue are myriad acarid ova,
200-300 micron diameter with smooth capsule.

Liver: Multifocally there are low to moderate numbers of lymphocytes and
few plasma cells surrounding portal areas and scattered within mid zonal
areas. Low numbers of Kupffer cells and low to moderate numbers of
hepatocytes contain golden brown intracytoplasmic granules (bilirubin).
Bilirubin also distends multifocally low numbers of calculi. (Mild,
multifocal, subacute to chronic, lymphocytic, plasmacytic hepatitis with
cholestasis)

Air sacs: There are large numbers of acarid ova within the lumen of air sacs. They are 200-300 micron in diameter.

Skeletal muscle: Multifocally there are very low numbers of lymphocytes and rare plasma cells within the interstitium between myocytes. There are rare individualised atrophic myocytes with shrunken cytoplasm.

There is moderate autolysis of most sections of the alimentary tract. Aside from this artefact the following findings are described

Ileum: Within the lumen there is a cross-section of a nematode approximately 30 to 40 in diameter, with smooth cuticle, coelomyarian musculature, pseudocoelom, gravid uterus, alimentary tract and partially distinct lateral cords (consistent with ascarid). (Enteric ascaridiasis)

Pancreas: There appears to be atrophy of exocrine pancreatic cells with only low numbers of some to granules. (Pancreatic acinar atrophy)

There is mild autolysis of the trachea (sloughing of epithelium), and kidney.

Those tissues not described are unremarkable.

DIAGNOSIS

Skin: Cutaneous acarid ova

Liver: Mild, multifocal, subacute to chronic, lymphocytic, plasmacytic hepatitis with cholestasis

Air sacs: Acarid ova

Ileum: Enteric ascaridiasis

Pancreas: Pancreatic acinar atrophy

COMMENTS

The hepatitis may have contributed to the chronic weight loss. Culture of the liver is recommended.

The animal, prior to death had a mite burden. These ova may be from those mites. Mite burdens have not been reported to cause weight loss in pelicans.

It is not possible to determine the species or genera of mite ova in the air sacs.

Enteric ascaridiasis (often due to Contracaecum sp. or Anisakis sp.) is a normal finding in pelicans and did not contribute to the bird's loss of condition or death.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by

Clause 6(1), 7(1)(c)

All tests on this request have now been completed

Test: NEC - NECROPSY

Reported: 09/08/2025 18:21

Validated by

Clause 6(1), 7(1)(c)

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: [REDACTED] Lab No. - Test: [REDACTED]
Animal/Batch Id: PIRSA ANIMAL HEALTH
Owner: PELICAN
BAY OF SHOALS NEAR BOAT RAMP
KINGSCOTE SA 5223
Submitter:
PIC: Submitter Id: [REDACTED]
Species: Bird - wild Clinic Phone:
Age: Submitted: 22/07/2025

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE Reported: 24/07/2025 12:34

MOLECULAR DIAGNOSTICS

INFLUENZA A RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Pooled cloacal swab & tracheal swab in VTM

SPECIMEN ID	Type A	H5	H7
POOL	Not detected		

Validated by [REDACTED] Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE Reported: 24/07/2025 12:34

Validated by [REDACTED] Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:	CLINIC (1100)	Lab No. - Test:	CLINIC (1100)
Animal/Batch Id:			PIRSA ANIMAL HEALTH
Owner:	PELICAN BAY OF SHOALS NEAR BOAT RAMP KINGSCOTE SA 5223	Submitter:	
PIC:		Submitter Id:	CLINIC (1100)
Species:	Bird - wild	Clinic Phone:	
Age:		Submitted:	22/07/2025
Test:	GP - GROSS PATHOLOGY	Reported:	23/07/2025 16:07

25-33227974

CLINICAL HISTORY

This is a transcription of the history from the request form.
 5 dead cormorants, 2 dead pelicans and 1 x freshly dead pelican with neurological signs at Bay of Shoals near the boat ramp in Kingscote.
 Only submitting one freshly dead pelican for testing as the other ones are too autolysed.

SAMPLES SUBMITTED

One dead pelican, adult female, *Pelecanus conspicillatus*

NECROPSY FINDINGS

The body has mild to moderate post-mortem autolytic changes. The bird weighs 3.8kg.

There is bilateral atrophy of the pectoral muscles over the keel bone. There are moderately sized (approximately 2 x 2 cm) chalky white firm faeces and urates around the vent.

Multifocally embedded within the subcutaneous tissue are round accumulations of variably sized light brown and granular material (2-3mm across). The adjacent and surrounding skin is normal.

There are moderate numbers of ascarids, 20-50mm in length, within the oesophagus. The lungs are pink. The air sacs are clear. The heart is grossly normal.

The mesenteric adipose tissue appears atrophic, and the vessels appear prominent.

The intestinal serosa is stained green, especially around the gall bladder (consistent with bile imbibition).

The liver edges are rounded. The liver on cross section is diffusely red (normal finding).

The gizzard is empty and it contains low-moderate numbers of nematode ascarids 20-50mm long. The pancreas is prominent due to the atrophy of mesenteric fat. The spleen is moderately autolysed and is green (post mortem bile imbibition). The proximal duodenal mucosa is intact but has multiple 'paintbrush-like' red streaks on the mucosa. The intestinal contents are dark red in the proximal duodenal sections, and become increasingly dark green towards the colon.

The left ovary contains a sac of dark-red blood (suspect ovarian cyst).

Both femoral-tibial joints are grossly normal.

GROSS DIAGNOSIS

Chronic weight loss with pectoral muscle atrophy

Possible hepatopathy

Possible enteropathy

Minor findings

Alimentary ascariasis (Probably *Contracaecum* sp. / *Anisakis* sp.)

Possible ovarian cyst

SAMPLES COLLECTED & TESTING

Tracheal and cloacal swabs in VTM are submitted for AI/NDV PCR x 1

Fresh tissues in 50 mL pots (liver, kidney, lung) are stored at -80 Degrees C if biotoxin / brevetoxin testing is required.

Fresh intestines are stored at -80

Fresh tissue in 5 mL tubes (liver, spleen, heart, kidney, brain, lung) are stored at -80 Degrees C.

Fresh skin lesion - stored at -80 Degrees C

Fixed tissues will be processed for histopathology as you requested.

Those samples, which are stored, are held for only one month, in line with the laboratory's quality assurance program. If no further testing is requested, those tissues on hold are discarded after one month.

COMMENTS

There are no findings to explain the cause of chronic weight loss or the cause of the neurological signs.

The slightly enlargement of the liver (suggested by the rounded edges) suggests a hepatopathy e.g. bacterial hepatitis or metabolic hepatopathy.

The gross changes in the duodenum suggest a vascular change e.g. hyperaemia / congestion. will be clarified by histop

Histopathology will clarify the gross findings.

The ovarian cyst is likely incidental findings.

Alimentary ascariasis is a normal finding in marine birds.

There are no findings to explain the cause of death.

There are no findings consistent with external trauma. There are no findings consistent with trauma as the cause of death.

The necropsy and report are completed by

Clause 6(1), 7(1)(c) resident in anatomic pathology

and

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

This request has other tests in progress at the time of reporting

Validated by

Clause 6(1), 7(1)(c)

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:	Class 7 (11C)	Lab No. - Test:	Class 7 (11C)
Animal/Batch Id:			PIRSA ANIMAL HEALTH
Owner:	PELICAN BAY OF SHOALS NEAR BOAT RAMP KINGSCOTE SA 5223	Submitter:	
PIC:		Submitter Id:	Class 5 (1)
Species:	Bird - wild	Clinic Phone:	
Age:		Submitted:	22/07/2025
Test:	VSW - VET MICRO & CULTURE	Reported:	31/07/2025 12:48

MICROBIOLOGY	SPECIMEN: Liver
	ANIMAL ID:NO ID
MICROSCOPY	
No bacteria seen.	
CULTURE	
1. Moderate growth of Clostridium perfringens	
2. Light growth of Mixed organisms	
COMMENT: No Salmonella sp., Listeria sp. or Yersinia sp. isolated.	
This organism was identified using the Class 7 (11C) at Class 7 (11C).	
Final Report	
31/07/25	
Validated by Class 2 (1A) (1A) Laboratory Scientist.	
This request has other tests in progress at the time of reporting	

Test:	VSW - VET MICRO & CULTURE	Reported:	31/07/2025 12:48
This organism was identified using the MALDI-TOF at Australian Clinical Laboratories, Adelaide Airport.			
Final Report			
31/07/25			
Validated by Class 7 (11C), Laboratory Scientist.			

Test:	VSW - VET MICRO & CULTURE	Reported:	30/07/2025 12:31
MICROBIOLOGY	SPECIMEN: Liver		
	ANIMAL ID:NO ID		
MICROSCOPY			
No bacteria seen.			
CULTURE			
1. Light growth of Mixed organisms			
COMMENT: No Salmonella sp., Listeria sp. or Yersinia sp. isolated.			

Culture is continuing.

INTERIM REPORT

30/07/25

Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: VSW - VET MICRO & CULTURE Reported: 30/07/2025 12:31

INTERIM REPORT

30/07/25

Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

Test: VSW - VET MICRO & CULTURE Reported: 29/07/2025 12:47

MICROBIOLOGY SPECIMEN: Liver
ANIMAL ID:NO ID

MICROSCOPY

No bacteria seen.

CULTURE

1. No growth after overnight incubation. Culture is continuing.

INTERIM REPORT

29/07/25

Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: VSW - VET MICRO & CULTURE Reported: 29/07/2025 12:47

INTERIM REPORT

29/07/25

Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

Test: VSW - VET MICRO & CULTURE Reported: 04/08/2025 13:04

MICROBIOLOGY SPECIMEN: Liver
ANIMAL ID:NO ID

MICROSCOPY

No bacteria seen.

CULTURE

1. Moderate growth of Clostridium perfringens
2. Light growth of Mixed organisms
3. Growth of Penicillium species.

COMMENT: No Salmonella sp., Listeria sp. or Yersinia sp. isolated.

This organism was identified using the Clause 7(1)(c) at Clause 7(1)(c)
Clause 7(1)(c).

Final Report

31/07/25

This is an AMENDED REPORT and replaces any previously issued report bearing this request date and laboratory number.

The following result(s) have been amended: 04/08/25 (added fungal result)

Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: VSW - VET MICRO & CULTURE

Reported: 04/08/2025 13:04

This organism was identified using the Clause 7(1)(c) at Clause 7(1)(c),
Clause 7(1)(c).

Final Report _____
31/07/25

This is an AMENDED REPORT and replaces any previously issued report bearing this request date and laboratory number.

The following result(s) have been amended: 04/08/25 (added fungal result)

Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: Case 7(1)(1)

Animal/Batch Id: Lab No. - Test: Case 7(1)(1)

Owner: PELICANSubmitter: PIRSA ANIMAL HEALTH

BAY OF SHOALS NEAR BOAT RAMPSubmitter Id: Case 5(1)

KINGSCOTE SA 5223Clinic Phone:

Species: Bird - wildSubmitted: 22/07/2025

Age:

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 24/07/2025 12:34

MOLECULAR DIAGNOSTICS

NEWCASTLE DISEASE VIRUS RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Pooled cloacal swab and tracheal swab in VTM Number of specimens: 1

SPECIMEN ID	F Gene	M Gene	L Gene
POOL	Not detected	Not detected	Not detected

Validated by Case 1(1, 7)(1)(1) Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 24/07/2025 12:34

Validated by Case 2(1, 7)(1)(1) Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:

[Redacted]

Lab No. - Test:

[Redacted]

Animal/Batch Id:

PIRSA ANIMAL HEALTH

WILD

Owner:

VICTOR HARBOR SA 5211

Submitter:

PIC:

Submitter Id:

Species:

Bird - wild

Clinic Phone:

Age:

Submitted:

01/07/2025

Test:

GP - GROSS PATHOLOGY

Reported:

03/07/2025 09:15

25-33228051

CLINICAL HISTORY

Fresh little penguin carcass washed up on Boomer Beach at Victor Harbour. Some rough weather at present. TO be submitted via [Redacted] couriers tonight

SAMPLES SUBMITTED

One dead Little Penguin, weight = 1kg

NECROPSY FINDINGS

The carcass is relatively fresh with minimal post-mortem autolytic changes. The bird weighs 1kg.

There are no external signs of trauma. The bird is in good condition with adequate coverage over the keel bone.

The air sacs are clear. The gizzard contains partially digested green food material. The intestinal contents are brown and pasty.

There are multifocal, white to tan, irregular, round, flat lesions within the liver parenchyma. The largest lesion is approximately 5 x 4mm.

GROSS DIAGNOSIS

Open - possible multifocal hepatitis

SAMPLES COLLECTED & TESTING

Tracheal and cloacal swabs in VTM -AI/ND PCR

Fresh tissues in 50 mL pots (liver, intestines, kidney, lung) - stored in -80

Fresh tissue in 5 mL tubes (liver, spleen, heart, kidney, brain, lung) - stored in -80

Swab of liver lesion - stored at 4

Fresh liver lesion - stored at -80

Comment: please await histopathology

Specialist Pathologist

Resident

Validated by [Redacted] Veterinary Pathologist.

This request has other tests in progress at the time of reporting

Test:

GP - GROSS PATHOLOGY

Reported:

03/07/2025 09:15

Validated by

[Redacted]

Veterinary Pathologist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: [REDACTED]

Lab No. - Test: [REDACTED]

Animal/Batch Id:

PIRSA ANIMAL HEALTH

PELICAN

Owner:

BAY OF SHOALS NEAR BOAT RAMP
KINGSCOTE SA 5223

Submitter:

PIC:

Submitter Id: [REDACTED]

Species:

Bird - wild

Clinic Phone:

Age:

Submitted: 22/07/2025

Test: SUP - VET SUPPLEMENTARY

Reported: 09/08/2025 18:12

SUMMARY COMMENTS

Mild hepatitis

SUMMARY COMMENTS

Hepatitis contributed to morbidity for this bird. There are no significant pathogens isolated from microbiological culture. The mixed growth including *Cl. perfringens* are post mortem overgrowth.

Minor findings include cutaneous and air sac acarid ova and intestinal ascarids.

There are no conclusive findings to explain the cause of weight loss. Could decreased feed abundance have been a contributing factor ?

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by [REDACTED]

This request has other tests in progress at the time of reporting

Test: SUP - VET SUPPLEMENTARY

Reported: 09/08/2025 18:12

Validated by [REDACTED]

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: [REDACTED]

Lab No. - Test: [REDACTED]

Animal/Batch Id: WILD

PIRSA ANIMAL HEALTH

Owner: VICTOR HARBOR SA 5211

Submitter:

PIC:
Species: Bird - wild
Age:Submitter Id: [REDACTED]
Clinic Phone:
Submitted: 01/07/2025

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE Reported: 11/07/2025 12:20

MOLECULAR DIAGNOSTICS

INFLUENZA A RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Swabs in VTM

SPECIMEN ID	Type A	H5	H7
PENGUIN	Not detected		

Validated by [REDACTED] Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE Reported: 11/07/2025 12:20

Validated by [REDACTED] Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: Clause 7(1)(c)

Animal/Batch Id:
WILD

Owner:
VICTOR HARBOR SA 5211

PIC:
Species: Bird - wild
Age:

Lab No. - Test: Clause 7(1)(c)
PIRSA ANIMAL HEALTH

Submitter:

Submitter Id: Clause 6(1)

Clinic Phone:

Submitted: 01/07/2025

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 11/07/2025 12:20

MOLECULAR DIAGNOSTICS

NEWCASTLE DISEASE VIRUS RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Swabs in VTM Number of specimens: 1

SPECIMEN ID	F Gene	M Gene	L Gene
PENGUIN	Not detected	Not detected	Not detected

Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 11/07/2025 12:20

Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:	[REDACTED]	Lab No. - Test:	[REDACTED]
Animal/Batch Id:			[REDACTED]
	WILD		
Owner:	VICTOR HARBOR SA 5211	Submitter:	
PIC:		Submitter Id:	[REDACTED]
Species:	Bird - wild	Clinic Phone:	
Age:		Submitted:	01/07/2025
Test:	GP - GROSS PATHOLOGY	Reported:	03/07/2025 09:12

25-33228052

CLINICAL HISTORY

Two little penguins submitted. One was washed up on sunday in front of Treleven Pl, Goolwa; and the other one this morning in front of the Victor Harbour Hotel, Victor Harbour. They both had punctured wounds but unable to determine it happened after death. To be submitted via The courier tonight.

SAMPLES SUBMITTED

Two Little Penguins submitted.

Bird 1 (1kg) = In front of Treleven Pl, Goolwa

Bird 2 (800g) = In front of hotel victor, Victor Harbour

NECROPSY FINDINGS

Bird 1 = In front of Treleven Pl, Goolwa

The carcass is moderately autolysed. The bird weighs 1kg.

The bird is in good condition with adequate coverage over the keel bone. There is a 2cm diameter round, full thickness, puncture wound on the RIGHT lateral ventral coelomic region. There is no inflammation on the adjacent skin (likely post-mortem predation). The caudal coelomic organs can be visualised through this lesion.

Within the cranial coelomic cavity and located next to the heart is a well demarcated, round, hard, yellow nodule. It is approximately 4 x 3 x 3cm, and it does not arise/associated with other organs within the cranial coelomic cavity. On cut section, the centre of the nodule is made out a hard, irregular, gritty, and yellow material which is easily removed from an outer layer of thickened fibrous connective tissue (suspect granuloma).

There is moderate amounts of sand contamination, which corresponds to the previously described lesion was at the RIGHT lateral ventral coelomic cavity. The air sacs are clear. The gizzard is empty. The intestinal contents are brown and pasty.

Bird 2 = In front of hotel victor, Victor Harbour

The carcass is moderately-markedly autolysed. The bird weighs 800g.

The bird is in good condition with adequate coverage over the keel bone. There is a 8cm oval and full thickness puncture wound at the LEFT lateral ventral coelomic cavity. There is no inflammation on the adjacent skin (likely post-mortem predation). The underlying ribs and organs can be visualised through this lesion. The LEFT lateral coelomic organs are covered with moderate amounts of sand.

Within the liver is a single, round, white and well-demarcated lesion (suspect hepatitis).

The gizzard is empty. The caudal 1/2 intestines are stained green on the serosal surface (autolysis). The intestinal contents are opaque, pasty and brown to green.

GROSS DIAGNOSIS

Bird 1 (In front of Treleven Pl, Goolwa):

Cranial coelomic nodule: suspect granuloma

Likely post-mortem predation

Bird 2 (In front of hotel victor, Victor Harbour):

Liver: suspect hepatitis (bacterial vs fungal)

Likely post-mortem predation

SAMPLES COLLECTED & TESTING

Both Penguins: tracheal and cloacal swabs in VTM -AI/ND PCR
Both penguins: Fresh tissues in 50 mL pots (liver, intestines, kidney, lung) - stored at -80
Both penguins: Fresh tissue in 5 mL tubes (liver, spleen, heart, kidney, brain, lung) - stored at -80
Fresh sample of coelomic nodule (penguin 1) - stored at -80
Swab of coelomic nodule (penguin 1) - stored at 4
Fresh sample of liver lesion (penguin 1) - stored at -80
Swab of liver lesion (penguin 1) - stored at 4
Fixed tissues - Stored at room temperature- histopathology to follow

Comments: the mass found in the cavity of Bird 1 may be within the airsac, and be possibly a fungal granuloma- histopathology is to follow. Similarly histopathology will be done on bird 2 to better define the gross lesions- please await

Clause 6(1), 7(1)(c)

Specialist Pathologist

Clause 6(1), 7(1)(c)

Resident

Validated by Clause 6(1), 7(1)(c) Veterinary Pathologist.

This request has other tests in progress at the time of reporting

Test: GP - GROSS PATHOLOGY Reported: 03/07/2025 09:12

Validated by Clause 6(1), 7(1)(c) Veterinary Pathologist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:

Clause 7(1)(c)

Lab No. - Test:

Clause 7(1)(c)

Animal/Batch Id:

Clause 6(1)

WILD

Owner:

VICTOR HARBOR SA 5211

Submitter:

PIC:

Submitter Id:

Clause 6(1)

Species:

Bird - wild

Clinic Phone:

Age:

Submitted:

01/07/2025

Test:

SUP - VET SUPPLEMENTARY

Reported:

19/07/2025 15:32

SUMMARY DIAGNOSIS

Penguin 1

Probable mycotic air sacculitis

Penguin 2

Pyogranulomatous hepatitis

Probable renal Renicola sp. ova (trematode)

SUMMARY COMMENTS

Multiple processes contributed to morbidity for the two birds including probable mycotic air sacculitis, pyogranulomatous hepatitis (which could be bacterial or fungal in origin) and Renal trematodiasis.

Clause 6(1), 7(1)(g)

Clause 6(1), 7(1)(g)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by

Clause 6(1), 7(1)(c)

All tests on this request have now been completed

Test:

SUP - VET SUPPLEMENTARY

Reported:

19/07/2025 15:32

Validated by

Clause 6(1), 7(1)(c)

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:

[REDACTED]

Lab No. - Test:

[REDACTED]

Animal/Batch Id:

WILD

Owner:

VICTOR HARBOR SA 5211

Submitter:

PIC:

Submitter Id:

Species:

Bird - wild

Clinic Phone:

Age:

Submitted:

01/07/2025

Test:

NEC - NECROPSY

Reported:

11/07/2025 17:23

HISTOPATHOLOGY FROM NECROPSY

REF: 2025/VHI1207

CLINICAL HISTORY

Please see submission form.

MACROSCOPY

Penguin 1 = pot 1

Penguin 2 = pot 2

1A = granuloma

2A = liver with nodule

B = lung, liver, spleen

C = skeletal muscle

D = GIT sections

E = brain

F = eye and trachea

MICROSCOPY

Penguin 1

Nodule next to heart, suspect air sac: This section consist of moderate numbers of inflammatory cells (mostly degenerate heterophils) embedded within an extensive matrix of (coagulative) necrosis. There are multiple suspicious negative-staining organisms that resemble fungal hyphae seen within the mass.

The necrosis is surrounded by a layer of granulation tissue and occasional adipose tissue. Low numbers of heterophils and macrophages are seen within the surrounding granulation tissue.

Liver: Multifocally there are moderate numbers of small lymphocytes and plasma cells around the periportal regions.

Lung: The blood capillaries are mildly congested. There are occasional small lymphocytes and plasma cells in the air capillary septa.

Spleen: There is moderate autolysis. The follicles are mildly expanded by small lymphocytes (lymphoid hyperplasia), and a moderate increase in plasma cells. Mild increase numbers of heterophils are seen within the red pulp.

Skeletal muscle: There is a focal area of low numbers of heterophils within the interstitium.

Kidney: There is moderate autolysis. The glomeruli appears to be mildly expanded by smudgy eosinophilic material (query amyloid vs autolysis). Within the interstitium are multifocal moderate accumulations of plasma cells, small lymphocytes and heterophils.

Proventriculus: There is mild-moderate autolysis.

There is a focal ulcerative lesion, accompanied by underlying granulation tissue with low numbers of heterophils, small lymphocytes and plasma cells.

GIT - in one section there is a large, and several smaller roundworms within the lumen.

Brain, eye, trachea, heart: No significant findings.

Penguin 2

Liver: Multifocally around the periportal regions are moderate numbers of plasma cells and small lymphocytes (periportal, lymphoplasmacytic). In one focal area, surrounding a vessel, is a poorly demarcated area of inflammation with moderate biliary hyperplasia and fibrosis. It is characterized by large numbers of plasma cells, small lymphocytes with lesser numbers of macrophages and heterophils. Multinucleated giant cells are occasionally seen (granulomatous inflammation).

Within the vessel, there are multiple organisms that are of two different populations: The first population is approximately 10µm, rod-like and basophilic organisms. These occasionally have a oval and pin-shaped head (reminiscent of sperm?). The second organism is smaller, round to oval, signet ring-like structures that are approximately 2.5µm long. The organisms are surrounded by moderate numbers of plasma cells and small lymphocytes.

Kidney: There is moderate autolysis. Multifocally within the area of the renal pelvis are a sheet of round structures (reminiscent of parasite eggs). The structures are approximately 50-80 microns diameter, round with a thinned eosinophilic wall, which contains one single (degenerate) organism surrounded by a clear central core.

Low to moderate numbers of small lymphocytes and plasma cells are seen within the interstitial space.

Spleen: There is mild-moderate autolysis. Multifocally within the red pulp are increased numbers of macrophages and heterophils. The follicles are mildly expanded due to mild increase numbers of small lymphocytes (likely lymphoid hyperplasia).

Skeletal muscle: There is a focal area of perivascular to interstitial accumulation of moderate numbers of plasma cells, small lymphocytes and heterophils.

Intestine: Majority of sections are moderately autolysed.

In one small intestinal section, there is diffuse infiltration of the lamina propria by large numbers of small lymphocytes and plasma cells, with lesser numbers of macrophages. The underlying lymphoid follicles are hyperplastic.

Brain, eye, trachea, heart, lung: No significant findings.

DIAGNOSIS

Penguin 1:

Nodule next to heart, suspect air sac: locally extensive, large, pyogranulomatous to granulomatous air sacculitis with suspected intralesional fungal hyphae

Liver: Multifocal, moderate, subacute, periportal lymphoplasmacytic hepatitis

Spleen: Mild heterophilic splenitis with moderate lymphoid hyperplasia

Kidney: Moderate, multifocal, chronic lymphoplasmacytic interstitial nephritis

Kidney: Multifocal, chronic, mild to moderate, protein accumulation within glomerulus (suspect amyloid)

Proventriculus: Focal, ulcerative, mild, chronic proventriculitis with granulation tissue formation.

Penguin 2:

Liver: Locally extensive, chronic, marked pyogranulomatous to granulomatous hepatitis with intralesional organisms

Liver: Multifocal, moderate, subacute, periportal lymphoplasmacytic hepatitis

Kidney: Multifocal, mild to moderate, acute to subacute granulomatous interstitial nephritis with suspect intralesional parasite eggs

Spleen: Multifocal, mild, acute to subacute, histiocytic and heterophilic splenitis with mild lymphoid hyperplasia.

Small intestine: marked, multifocal, subacute lymphoplasmacytic and histiocytic enteritis with secondary GALT-associated hyperplasia

COMMENTS

Penguin 1: the primary lesion here is the (likely fungal) air sacculitis - often caused by *Aspergillus* sp. This is a common lesion in birds, especially those immunosuppressed. There is also evidence here of a likely bacteria (?secondary to air sac infection) and systemic inflammatory response, and some GIT paracitism.

Penguin 2: The liver contains a locally extensive area of granulomatous to pyogranulomatous inflammation here. There is also significant paracitism

Clause 6(1), 7(1)(c)

Specialist Pathologist

Validated by Clause 6(1), 7(1)(c) Veterinary Pathologist.

This request has other tests in progress at the time of reporting

Test: NEC - NECROPSY

Reported: 11/07/2025 17:23

Validated by Clause 6(1), 7(1)(c) Veterinary Pathologist.



Clause 6(1).

Submitter:

Submitter:

Submitter Id: Class 011
Clinic Phone:
Submitted: 01/07/2025

Test: **FLU - INFLUENZA TYPE A RNA PCR PACKAGE** Reported: **11/07/2025 12:20**

MOLECULAR DIAGNOSTICS

INFLUENZA A RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Swabs in VTM

SPECIMEN ID	Type A	H5	H7
POOL	Not detected		

Validated by Cause 001177114 Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE Reported: 11/07/2025 12:20

Validated by  Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: [REDACTED]

Animal/Batch Id: KENT RES
SEA LION

Owner: VICTOR HARBOR SA 5211

FIG:
Species: Mammal - marine
Age:

Lab No. - Test: [REDACTED]

Submitter:

Submitter Id: [REDACTED]

Clinic Phone:

Submitted: 02/07/2025

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE Reported: 11/07/2025 12:20

MOLECULAR DIAGNOSTICS

INFLUENZA A RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Swab in VTM; tissues

SPECIMEN ID	Type A	H5	H7
VTM	Not detected		
LUNG	Not detected		
HEART	Not detected		
SPLEEN	Not detected		
BRAIN	Not detected		
LIVER	Not detected		

Validated by [REDACTED] Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: FLU - INFLUENZA TYPE A RNA PCR PACKAGE Reported: 11/07/2025 12:20

Validated by [REDACTED] Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: Class 7(1)(c)Lab No. - Test: Class 7(1)(c)Animal/Batch Id: KENT RES
SEA LIONClass 7(1)(c)

Owner: VICTOR HARBOR SA 5211

Submitter:

PIC:
Species: Mammal - marineSubmitter Id: Class 6(1)

Clinic Phone:

Age: Submitted: 02/07/2025

Test: IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP) Reported: 19/07/2025 15:36

MOLECULAR DIAGNOSTICS

Influenza Type A - TaqMan Assay

Species : Sea Lion Number of specimens: 6
Specimen type : Swab in VTM, Lung, Liver, Spleen, Heart, Brain

SAMPLE ID	TEST RESULT
SWAB	Negative
LUNG	Negative
LIVER	Negative
SPLEEN	Negative
HEART	Negative
BRAIN	Negative

Australian Centre for Disease Preparedness (CSIRO)
NATA accreditation number: 13546Validated by Class 8(1)(7)(b)(c)

This request has other tests in progress at the time of reporting

Test: IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP) Reported: 19/07/2025 15:36

Validated by Class 8(1)(7)(b)(c)

Test: IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP) Reported: 19/07/2025 15:36

Sea Lion

Test: IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP) Reported: 19/07/2025 15:36

Swab in VTM, Lung, Liver, Spleen, Heart, Brain

Test: IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP) Reported: 19/07/2025 15:36

Australian Centre for Disease Preparedness (CSIRO)
NATA accreditation number: 13546

Test: IVM - INFLUENZA TYPE A TAQMAN ASSAY (ACDP) Reported: 19/07/2025 15:36

6

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: CLAB 7(1)(C)

Lab No. - Test:

CLAB 7(1)(C)

Animal/Batch Id:

CLAB 8(1)

COMORANT MORTALITY

Owner:

KANGAROO ISLAND

Submitter:

SHAOLS BEACH

PIC:

Submitter Id:

Species:

Bird - wild

Clinic Phone:

Age:

Submitted:

09/07/2025

Test: **FLU - INFLUENZA TYPE A RNA PCR PACKAGE** Reported: **11/07/2025 12:20**

MOLECULAR DIAGNOSTICS

INFLUENZA A RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Tracheal + cloacal swabs in VTM

SPECIMEN ID	Type A	H5	H7
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CORMORAN	Not detected		
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Validated by CLAB 8(1) 7(1)(C) Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: **FLU - INFLUENZA TYPE A RNA PCR PACKAGE** Reported: **11/07/2025 12:20**Validated by CLAB 8(1) 7(1)(C) Laboratory Scientist.Test: **FLU - INFLUENZA TYPE A RNA PCR PACKAGE** Reported: **11/07/2025 12:20**

MOLECULAR DIAGNOSTICS

INFLUENZA A RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Tracheal + cloacal swabs in VTM

SPECIMEN ID	Type A	H5	H7
-------------	--------	----	----

CORMORAN	Not detected		
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Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: **FLU - INFLUENZA TYPE A RNA PCR PACKAGE** Reported: **11/07/2025 12:20**

Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:

Clause 2(1)(c)

Animal/Batch Id:

COMORANT MORTALITY

KANGAROO ISLAND

SHAOLS BEACH

Owner:

COMORANT MORTALITY

KANGAROO ISLAND

SHAOLS BEACH

PIC:

COMORANT MORTALITY

Species:

Bird - wild

Age:

COMORANT MORTALITY

Lab No. - Test:

Clause 2(1)(c)

Sample ID:

COMORANT MORTALITY

Submitter:

COMORANT MORTALITY

Submitter Id:

Clause 2(1)(c)

Clinic Phone:

COMORANT MORTALITY

Submitted:

09/07/2025

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 11/07/2025 12:21

MOLECULAR DIAGNOSTICS

NEWCASTLE DISEASE VIRUS RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Tracheal +
cloacal swabs in VTM

Number of specimens: 1

SPECIMEN ID	F Gene	M Gene	L Gene
CORMORAN	Not detected	Not detected	Not detected

Validated by

Clause 2(1)(c)

 Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 11/07/2025 12:21

Validated by

Clause 2(1)(c)

 Laboratory Scientist.

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 11/07/2025 12:21

MOLECULAR DIAGNOSTICS

NEWCASTLE DISEASE VIRUS RNA PCR (REAL TIME REVERSE TRANSCRIPTASE)

Specimen type: Tracheal +
cloacal swabs in VTM

Number of specimens: 1

SPECIMEN ID	F Gene	M Gene	L Gene
CORMORAN	Not detected	Not detected	Not detected

Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: NDV - NEWCASTLE DISEASE VIRUS (NDV) PCR - NOT AAHL Reported: 11/07/2025 12:21

Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:		Lab No. - Test:	
Animal/Batch Id:			
Owner:	COMORANT MORTALITY KANGAROO ISLAND SHAOLS BEACH	Submitter:	
PIC:		Submitter Id:	
Species:	Bird - wild	Clinic Phone:	
Age:		Submitted:	09/07/2025
Test:	NEC - NECROPSY	Reported:	15/07/2025 19:59

HISTOPATHOLOGY FROM NECROPSY

REF: 2025/V HI 1249

CLINICAL HISTORY

Dead cormorants and cormorants with neurological signs were found on Shoal Beach, Kangaroo Island

MACROSCOPY

Slides 1A-C to 3A-C correspond to birds 1-3; tissues for each bird include liver, spleen, heart, lung, kidney, brain, crop, proventriculus / ventriculus, duodenum, pancreas, jejunum, ileum, caecum

MICROSCOPY

Bird 1

Crop and proventriculus: There are multiple cross sections of ascarids (30-40 micron across, smooth cuticle, platymyarian musculature, pseudocoelom, lateral cords and alimentary tract)

There is mild autolysis of the alimentary sections.

Bird 2

Kidney: Multifocally the renal pelvises are expanded by abundant oval ova (10 micron diameter with smooth capsule and operculum) within their lumens.

Liver: Multifocally necrotizing and heterophilic hepatitis with intralesional short rod bacteria effaced the hepatic acinar architecture. (Moderate, multifocal, subacute necrotizing heterophilic hepatitis with intralesional short rod bacteria)

There is proventricular ascaridiasis.

Bird 3

There is proventricular ascaridiasis.

Those tissues not described for each bird appear normal.

DIAGNOSIS

Bird 1-3

Alimentary ascardiasis

Bird 2

Renal trematode ova

Bacterial hepatitis

COMMENTS

Bacterial hepatitis contributed to morbidity for bird 2. Please contact the laboratory within the next 5 working days if microbiological culture of bird 2 is required.

Alimentary ascardiasis (Anisakis sp. or Contracaecum sp.) are a normal finding in marine birds.
The trematode Renicola has been recorded in the kidneys of cormorants (P. Ladds Pathology of Australian native wildlife 2009). This is an incidental finding.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

This request has other tests in progress at the time of reporting

Test: NEC - NECROPSY

Reported: 15/07/2025 19:59

Validated by Clause 6(1), 7(1)(c)

Test: NEC - NECROPSY

Reported: 15/07/2025 19:59

HISTOPATHOLOGY FROM NECROPSY

REF: 2025/V HI 1249

CLINICAL HISTORY

Dead cormorants and cormorants with neurological signs were found on Shoal Beach, Kangaroo Island

MACROSCOPY

Slides 1A-C to 3A-C correspond to birds 1-3; tissues for each bird include liver, spleen, heart, lung, kidney, brain, crop, proventriculus / ventriculus, duodenum, pancreas, jejunum, ileum, caecum

MICROSCOPY

Bird 1

Crop and proventriculus: There are multiple cross sections of ascarids (30-40 micron across, smooth cuticle, platymyarian musculature, pseudocoelom, lateral cords and alimentary tract)

There is mild autolysis of the alimentary sections.

Bird 2

Kidney: Multifocally the renal pelvises are expanded by abundant oval ova (10 micron diameter with smooth capsule and operculum) within their lumens.

Liver: Multifocally necrotizing and heterophilic hepatitis with intralesional short rod bacteria effaced the hepatic acinar architecture. (Moderate, multifocal, subacute necrotizing heterophilic hepatitis with intralesional short rod bacteria)

There is proventricular ascaridiasis.

Bird 3

There is proventricular ascaridiasis.

Those tissues not described for each bird appear normal.

DIAGNOSIS

Bird 1-3

Alimentary ascardiasis

Bird 2

Renal trematode ova

Bacterial hepatitis

COMMENTS

Bacterial hepatitis contributed to morbidity for bird 2. Please contact the laboratory within the next 5 working days if microbiological culture of bird 2 is required.

Alimentary ascariasis (Anisakis sp. or Contracaecum sp.) are a normal finding in marine birds.

The trematode Renicola has been recorded in the kidneys of cormorants (P. Ladds Pathology of Australian native wildlife 2009). This is an incidental finding.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

This request has other tests in progress at the time of reporting

Test: NEC - NECROPSY

Reported: 15/07/2025 19:59

Validated by Clause 6(1), 7(1)(c)

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: **COMOR MORT 1**Lab No. - Test: **COMOR MORT 1**

Animal/Batch Id:

COMORANT MORTALITY
KANGAROO ISLAND
SHAOLS BEACH

Owner:

Submitter:

PIC:

Submitter Id:

Species:

Bird - wild

Clinic Phone:

Age:

Submitted:

09/07/2025Test: **GP - GROSS PATHOLOGY**Reported: **10/07/2025 13:37**

NECROPSY REPORT

CLINICAL HISTORY

Please refer to the clinical history on the request form and the clinical notes sent with the request form. A brief summary of the clinical history;

Dead cormorants and cormorants with neurological signs were found on Shoal Beach, Kangaroo Island

SAMPLES SUBMITTED

8 dead cormorants (Phalacrocorax sp.)

The birds are allocated numbers 1-8 at the laboratory

NECROPSY FINDINGS

These descriptions refer to all birds;

There is atrophy of the pectoral muscles. There is no ingesta in the proventriculus / ventriculus. There are low numbers of ascarids 30-50mm long in the proventriculus / ventriculus and intestines. All birds are adults except for bird 8.

Additional findings

1

The tag on the bag is " this is the freshest bird"

This is a male bird. The bird is in moderate to poor body condition, there is atrophy of both pectoral muscles and the bird weighs 1.1 kg. There are minimal post mortem autolytic changes.

2

This is a male bird. The bird is in moderate to poor body condition, there is atrophy of both pectoral muscles and the bird weighs 1.0 kg. There are minimal post mortem autolytic changes.

3

This is a female bird. The bird is in moderate to poor body condition, there is atrophy of both pectoral muscles and the bird weighs 1.2 kg. There are minimal post mortem autolytic changes.

4

This is a female bird. The bird is in moderate to poor body condition, there is atrophy of both pectoral muscles and the bird weighs 1.5 kg. There are mild post mortem autolytic changes.

5

This is a male bird. The bird is in moderate to poor body condition, there is atrophy of both pectoral muscles and the bird weighs 1.0 kg. There are moderate post mortem autolytic changes.

6

This is a female bird. The bird is in moderate to poor body condition, there is atrophy of both pectoral muscles and the bird weighs 1.0 kg.

There are marked post mortem autolytic changes and maggots in the oral cavity.

7

This is a female bird. The bird is in moderate to poor body condition, there is atrophy of both pectoral muscles and the bird weighs 1.0 kg
There are moderate post mortem autolytic changes.

8

This is a female juvenile bird. The bird is in moderate to poor body condition, there is atrophy of both pectoral muscles and the bird weighs 0.5 kg
There are moderate post mortem autolytic changes.

GROSS SUMMARY

Birds 1-8

Chronic weight loss

Alimentary ascariasis

SAMPLES COLLECTED & TESTING

Birds 1-3

Cloacal and tracheal swabs are pooled for 1 x NDV PCR and 1 x AI PCR.

Formalin fixed tissues are processed for histopathology.

Fresh liver (10g), spleen, heart, lung, kidney, brain (< 500mg for these tissues) are stored frozen.

No samples are collected from birds 4-8

COMMENTS

The cause of chronic weight loss and death is not determined by gross findings. Alimentary ascariasis (likely Anisakis or Contracaecum sp.) is a normal finding in cormorants.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

This request has other tests in progress at the time of reporting

Test: GP - GROSS PATHOLOGY

Reported: 10/07/2025 13:37

Validated by Clause 6(1), 7(1)(c)

Test: GP - GROSS PATHOLOGY

Reported: 10/07/2025 13:37

NECROPSY REPORT

CLINICAL HISTORY

Please refer to the clinical history on the request form and the clinical notes sent with the request form. A brief summary of the clinical history;

Dead cormorants and cormorants with neurological signs were found on Shoal Beach, Kangaroo Island

SAMPLES SUBMITTED

8 dead cormorants (Phalacrocorax sp.)

The birds are allocated numbers 1-8 at the laboratory

NECROPSY FINDINGS

These descriptions refer to all birds;

There is atrophy of the pectoral muscles. There is no ingesta in the proventriculus / ventriculus. There are low numbers of ascarids 30-50mm long in the proventriculus / ventriculus and intestines. All birds are adults except for bird 8.

Additional findings

1

The tag on the bag is " this is the freshest bird"

This is a male bird. The bird is in moderate to poor body condition, there is atrophy of both pectoral muscles and the bird weighs 1.1 kg. There are minimal post mortem autolytic changes.

2

This is a male bird. The bird is in moderate to poor body condition, there is atrophy of both pectoral muscles and the bird weighs 1.0 kg. There are minimal post mortem autolytic changes.

3

This is a female bird. The bird is in moderate to poor body condition, there is atrophy of both pectoral muscles and the bird weighs 1.2 kg. There are minimal post mortem autolytic changes.

4

This is a female bird. The bird is in moderate to poor body condition, there is atrophy of both pectoral muscles and the bird weighs 1.5 kg. There are mild post mortem autolytic changes.

5

This is a male bird. The bird is in moderate to poor body condition, there is atrophy of both pectoral muscles and the bird weighs 1.0 kg. There are moderate post mortem autolytic changes.

6

This is a female bird. The bird is in moderate to poor body condition, there is atrophy of both pectoral muscles and the bird weighs 1.0 kg. There are marked post mortem autolytic changes and maggots in the oral cavity.

7

This is a female bird. The bird is in moderate to poor body condition, there is atrophy of both pectoral muscles and the bird weighs 1.0 kg. There are moderate post mortem autolytic changes.

8

This is a female juvenile bird. The bird is in moderate to poor body condition, there is atrophy of both pectoral muscles and the bird weighs 0.5 kg. There are moderate post mortem autolytic changes.

GROSS SUMMARY

Birds 1-8

Chronic weight loss

Alimentary ascariasis

SAMPLES COLLECTED & TESTING

Birds 1-3

Cloacal and tracheal swabs are pooled for 1 x NDV PCR and 1 x AI PCR.

Formalin fixed tissues are processed for histopathology.

Fresh liver (10g), spleen, heart, lung, kidney, brain (< 500mg for these tissues) are stored frozen.

No samples are collected from birds 4-8

COMMENTS

The cause of chronic weight loss and death is not determined by gross findings. Alimentary ascariasis (likely Anisakis or Contracaecum sp.)

is a normal finding in cormorants.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

This request has other tests in progress at the time of reporting

Test: GP - GROSS PATHOLOGY

Reported: 10/07/2025 13:37

Validated by Clause 6(1), 7(1)(c)

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: Cause 5(1)(c) Lab No. - Test: Cause 5(1)(c)
Animal/Batch Id: Cause 5(1)(c)
Owner: COMORANT MORTALITY
KANGAROO ISLAND
SHAOLS BEACH
Submitter:
PIC: Cause 5(1)(c)
Species: Bird - wild
Submitter Id: Cause 5(1)(c)
Age: Cause 5(1)(c)
Clinic Phone: Cause 5(1)(c)
Submitted: 09/07/2025
Test: VSW - VET MICRO & CULTURE
Reported: 21/07/2025 13:02

MICROBIOLOGY

SPECIMEN: Liver
ANIMAL ID: BIRD 2

MICROSCOPY

No bacteria seen.
A small number of leucocytes. Scanty epithelial cells.

CULTURE

1. No growth after 48 hours incubation.

COMMENT: Anaerobes NOT isolated.

No Salmonella sp., Listeria sp. or Yersinia sp. isolated.

Final Report _____

21/07/25

Validated by Cause 5(1)(c) Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: VSW - VET MICRO & CULTURE
Reported: 21/07/2025 13:02

Final Report _____

21/07/25

Validated by Cause 5(1)(c) Laboratory Scientist.

Test: VSW - VET MICRO & CULTURE
Reported: 21/07/2025 13:02

MICROBIOLOGY

SPECIMEN: Liver
ANIMAL ID: BIRD 2

MICROSCOPY

No bacteria seen.
A small number of leucocytes. Scanty epithelial cells.

CULTURE

1. No growth after 48 hours incubation.

COMMENT: Anaerobes NOT isolated.

No Salmonella sp., Listeria sp. or Yersinia sp. isolated.

Final Report

21/07/25

Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: VSW - VET MICRO & CULTURE

Reported: 21/07/2025 13:02

Final Report

21/07/25

Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: [Redacted]Lab No. - Test: [Redacted]Animal/Batch Id: [Redacted][Redacted]Owner: COMORANT MORTALITY
KANGAROO ISLAND
SHAOLS BEACHSubmitter: [Redacted]PIC: [Redacted]
Species: Bird - wild
Age: [Redacted]Submitter Id: [Redacted]
Clinic Phone: [Redacted]
Submitted: 09/07/2025

Test: VSW - VET MICRO & CULTURE Reported: 14/08/2025 11:03

MICROBIOLOGY SPECIMEN: Liver
ANIMAL ID: BIRD 3

MICROSCOPY

No bacteria seen.

CULTURE

1. Light growth of Clostridium perfringens
2. Light growth of Mixed organisms

COMMENT: No Salmonella sp., Listeria sp. or Yersinia sp. isolated.

Final Report

14/08/25

Validated by [Redacted] Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: VSW - VET MICRO & CULTURE Reported: 14/08/2025 11:03

Final Report

14/08/25

Validated by [Redacted] Laboratory Scientist.

Test: VSW - VET MICRO & CULTURE Reported: 14/08/2025 11:03

MICROBIOLOGY SPECIMEN: Liver
ANIMAL ID: BIRD 3

MICROSCOPY

No bacteria seen.

CULTURE

1. Light growth of Clostridium perfringens
2. Light growth of Mixed organisms

COMMENT: No Salmonella sp., Listeria sp. or Yersinia sp. isolated.

Final Report

14/08/25

Validated by [Redacted] Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: VSW - VET MICRO & CULTURE Reported: 14/08/2025 11:03

Final Report
14/08/25
Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

Test: VSW - VET MICRO & CULTURE Reported: 12/08/2025 14:04

MICROBIOLOGY SPECIMEN: Liver
ANIMAL ID: BIRD 3

MICROSCOPY
No bacteria seen.

CULTURE
1. Light growth of Mixed organisms

COMMENT: Culture is continuing.

INTERIM REPORT
12/08/25
Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: VSW - VET MICRO & CULTURE Reported: 12/08/2025 14:04

INTERIM REPORT
12/08/25
Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

Test: VSW - VET MICRO & CULTURE Reported: 12/08/2025 14:04

MICROBIOLOGY SPECIMEN: Liver
ANIMAL ID: BIRD 3

MICROSCOPY
No bacteria seen.

CULTURE
1. Light growth of Mixed organisms

COMMENT: Culture is continuing.

INTERIM REPORT
12/08/25
Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

This request has other tests in progress at the time of reporting

Test: VSW - VET MICRO & CULTURE Reported: 12/08/2025 14:04

INTERIM REPORT
12/08/25
Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: [REDACTED] Lab No. - Test: [REDACTED]
 Animal/Batch Id: [REDACTED] PIRSA ANIMAL HEALTH
 Owner: BROWNS BEACH
 BROWNS BEACH SA 5222
 Species: Bird - wild
 Age: [REDACTED]
 Submitter: [REDACTED]
 Submitter Id: [REDACTED]
 Clinic Phone: [REDACTED]
 Submitted: 05/08/2025
 Test: GP - GROSS PATHOLOGY
 Reported: 08/08/2025 16:19

CLINICAL HISTORY

Please refer to the clinical history on the request form. A brief summary of the clinical history;

Multiple deaths of birds (plus marine animals) may have been occurring on Kangaroo Island. These deaths were not reported to PIRSA. 3 x dead cormorants were found on Browns Beach East Coast over the weekend by [REDACTED] of [REDACTED]. These deaths were reported in the "inaturalist" app. The presenting signs can be neurological and sudden death. The last mortality investigation of cormorants on Kangaroo Island occurred 3 weeks ago (please refer to submission number [REDACTED]).

SAMPLES SUBMITTED

One dead adult cormorant, *Phalacrocorax varius*
 The bag label is: "Dead cormorant. Browns Beach, Kangaroo Island, 3/8/2025, collected by [REDACTED]"

NECROPSY FINDINGS

There are mild to moderate post mortem autolytic changes. There is abundant sand over the body, there are no eyes and there are multiple holes in the skin over the back, extending into the coelomic cavity over the kidneys. There are no organs in the oral cavity, which is filled with sand.

The bird is in very poor body condition and weighs 1.2kg. There is marked atrophy of the pectoral muscles. Over the serosa of the liver and extending into the hepatic parenchyma are low numbers of fine pale white pinpoint foci.

There are abundant ascarid is approximately 20 to 30 mm long (*Anisakis* sp., *Contracaecum* species) in the proventriculus. Intestines contain pasty brown ingesta and ascarids.

Bilaterally the kidneys are enlarged, pale red with myriad pale white foci.

GROSS SUMMARY

Possible necrotising hepatitis
 Possible necrotizing interstitial nephritis
 Chronic weight loss
 Alimentary ascariasis

SAMPLES COLLECTED & TESTING

Formalin fixed tissues will be processed for histopathology and cloacal and tracheal swabs (in VTM) will be tested for AI and NDV by PCR as you requested.

Fresh liver and kidney are stored if microbiological culture is required.

Liver, kidney, spleen, heart, lung, brain are stored frozen for one month if Dept Environment and Water SA require biotoxin / brevetoxin testing.

COMMENTS

Based on gross findings a bacterial hepatitis and possibly nephritis contributed to morbidity / ill thrift for this bird. The renal changes are also suggestive of trematode infection e.g. Renicola sp.

Histopathology, to clarify the gross findings is pending. AI and NDV PCR is also in progress. As you requested, samples are stored for possible microbiological culture and algal biotoxin / brevetoxin testing.

Alimentary ascarids are a common finding in healthy and moribund birds and generally don't cause disease in these animals.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c).

This request has other tests in progress at the time of reporting

Test: GP - GROSS PATHOLOGY

Reported: 08/08/2025 16:19

Validated by Clause 6(1), 7(1)(c)

PIIMS Laboratory Results Viewer



Result Details Page

Submission No: [REDACTED] Lab No. - Test: [REDACTED]
 Animal/Batch Id: [REDACTED] PIRSA ANIMAL HEALTH
 Owner: BROWNS BEACH
 BROWNS BEACH SA 5222
 Submitter: [REDACTED]
 PIC: [REDACTED]
 Species: Bird - wild
 Clinic Phone: [REDACTED]
 Age: [REDACTED]
 Submitted: 05/08/2025
 Test: NEC - NECROPSY
 Reported: 14/08/2025 13:29

HISTOPATHOLOGY FROM NECROPSY

REF: 2025/V HI 1420

CLINICAL HISTORY

Please refer to the clinical history on the request form. A brief summary of the clinical history;

Multiple deaths of birds (plus marine animals) may have been occurring on Kangaroo Island. These deaths were not reported to PIRSA. 3 x dead cormorants were found on Browns Beach East Coast over the weekend by [REDACTED] of [REDACTED]. These deaths were reported in the "inaturalist" app. The presenting signs can be neurological and sudden death. The last mortality investigation of cormorants on Kangaroo Island occurred 3 weeks ago (please refer to submission number [REDACTED]).

One dead adult cormorant, *Phalacrocorax varius*, is received. The bag label is: "Dead cormorant, Browns Beach, Kangaroo Island, 3/8/2025, collected by [REDACTED]".

MACROSCOPY

Cassettes contain the following tissues;

- A: liver, lung, heart, kidney, ovary
- B: liver, spleen, cerebrum of brain, jejunum
- C: ileum, caecum, duodenum, pancreas, crop, aorta
- D: Brain, including optic lobe, thalamus, midbrain, cerebellum

MICROSCOPY

Kidney: Multifocally the cortical and medullary architecture are effaced and replaced by multiple granulomas. Within the centre of the granulomas are myriad oval tremor towed over approximately 30 micron across with operculum and they contain larvae. Approximately 30% of proximal and distal tubules are lined by necrotic epithelium and there lumens contain eosinophilic to brown irregularly shaped detritus / necrotic debris (Moderate, multifocal, chronic, granulomatous interstitial nephritis with intralesional trematode ova; moderate, multifocal, chronic renal tubular necrosis)

Heart: Within the ventricle there are multiple emboli of short rod bacteria. (Bacterial emboli)

Lung: Multifocally the lumen of multiple air capillaries contain fibrin and there is necrosis of the interstitium surrounding the lumen of these air capillaries. Within the lumen of capillaries within these interstitium are bacterial emboli (short rod bacteria).

Liver: Multifocally and randomly the hepatic architecture is effaced and replaced by lytic necrosis admixed with moderate numbers of heterophils, lymphocytes, plasma cells, macrophages, fibrin, haemorrhage and colonies

of short rod bacteria. (Moderate, multifocal, subacute, necrotizing, heterophils, lymphocytic, plasmacytic, histiocytic hepatitis with intralesional short rod bacteria)

Spleen: Widespread ellipsoid vessels are surrounded by moderate numbers of macrophages and fibrin deposits. Within ellipsoid vessels there are emboli of short rod bacteria. (Moderate, diffuse, subacute, histiocytic, fibrinous, splenitis with intralesional short rod bacteria)

Jejunum: Diffusely there is effacement of replacement of the villi by lytic necrosis admixed with large numbers of heterophils, fewer lymphocytes, plasma cells and macrophages. Within the inflammation there are multiple colonies of short rod bacteria. Extending to the lamina propria are cross sections of cestodes (, 30-40 micron across, smooth cuticle, spongy parenchyma with calcareous corpuscles and not alimentary tract). There are cestode ova, round ova with smooth capsule, 20 micron diameter (Moderate, diffuse, subacute, heterophilic, lymphocytic, plasmacytic, histiocytic, necrotizing, enteritis with intralesional short rod bacteria, cestodes and cestode ova)

Ileum, caecum: Similar to the jejunum, there is a necrosis, inflammation and intralesional bacterial effacing the ileal villi and colonic glands (Moderate, diffuse, subacute, heterophils, lymphocytic, plasmacytic, histiocytic, necrotising, enterocolitis with intralesional short rod bacteria)

Pancreas: Aside from moderate autolysis there is atrophy of exocrine pancreatic acinar cells with loss of intracytoplasmic zymogen granules. (Pancreatic acinar cell atrophy)

Brain: Multifocally there is expansion of the choroid space surrounding low numbers of capillaries by moderate numbers of lymphocytes and fewer heterophils. Multifocally moderate numbers of capillaries contain bacterial emboli (sugar bacteria). (Mild, multifocal, subacute, lymphocytic, heterophilic, encephalitis with intralesional short rod bacteria)

There is moderate autolysis of the duodenum.

Those tissues not described appear normal.

DIAGNOSIS

Kidney: Marked renal trematodiasis (renal *Renicola* sp.); and moderate, multifocal, chronic renal tubular necrosis

Heart: Bacterial emboli

Lung: Moderate, multifocal, subacute, necrotizing, lymphocytic, heterophilic, bronchopneumonia, with intralesional short rod bacteria

Liver: Moderate, multifocal, subacute, necrotizing, heterophils, lymphocytic, plasmacytic, histiocytic hepatitis with intralesional short rod bacteria

Spleen: Moderate, diffuse, subacute, histiocytic, fibrinous, splenitis with intralesional short rod bacteria

Jejunum: Moderate, diffuse, subacute, heterophilic, lymphocytic, plasmacytic, histiocytic, necrotising, enteritis with intralesional short rod bacteria, cestodes and cestode ova

Ileum, caecum: Moderate, diffuse, subacute, heterophils, lymphocytic, plasmacytic, histiocytic, necrotising, enterocolitis with intralesional short rod bacteria

Pancreas: Pancreatic acinar cell atrophy

Brain: Mild, multifocal, subacute, lymphocytic, heterophilic, encephalitis with intralesional short rod bacteria

COMMENTS

There are multiple disease processes contributing to morbidity for this bird.

There is renal trematodiasis. This was a significant burden, enlarging both kidneys. There is intercurrent renal tubular degeneration / necrosis.

The enteric cestodiasis (possibly a Tetraphyllidium type of cestode) with secondary necrotizing bacterial enterocolitis. Possibly related to this enterocolitis, there is a necrotizing bacterial hepatitis, bronchopneumonia, bacterial splenitis and bacterial encephalitis.

Please contact the laboratory if bacterial culture of the liver is required.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

This request has other tests in progress at the time of reporting

Test: NEC - NECROPSY

Reported: 14/08/2025 13:29

Validated by Clause 6(1), 7(1)(c)

PIIMS Laboratory Results Viewer



Result Details Page

Submission No:	Case 77701	Lab No. - Test:	Case 77701
Animal/Batch Id:			Case 611
Owner:	PENGUIN ROCKHOPPER	Submitter:	
	NENE VALLEY SA 5291		
FIG:		Submitter Id:	Case 611
Species:	Bird - wild	Clinic Phone:	
Age:		Submitted:	11/08/2025
Test:	GP - GROSS PATHOLOGY	Reported:	12/08/2025 19:47

REF: Case 77701

CLINICAL HISTORY

Found at Nene valley 29th July. Euthanased at Case 77701 due to a fractured pelvis? History is uncertain. Came back into possession of DEW staff and was frozen.

SAMPLES SUBMITTED

1x Rock Hopper Penguin, Eudyptes chrysocome, adult, entire male

The tag on the bag was labeled

"Sth Rock hopper penguin, lodged 11/8/24 at 12:20, Case 611 Limestone coast NPWS"

NECROPSY FINDINGS

The bird weighs 1.8kg. There is moderate atrophy of the pectoral muscles. There are moderate post mortem autolytic and freeze artefact changes.

External examination:

There is a small pinpoint, red, flat focus of feather loss on the chest on the left side, 5 x 5mm, just off the midline on the left side.
There is one focal red, flat, approximately 1cm x 1cm, round focus on the dorsal skin of the left feet.

Internal examination:

The right liver lobe contains an approximately 25 x 20 mm tear with clotted blood (haemorrhage) through the serosa and into the parenchyma.
The gall bladder distended with bile.

The pelvis and vertebrae are intact (no evidence of fracture).

The air sacs are clear.

Both testes are present and are grossly normal.

The kidneys are grossly normal.

The spleen is not evident.

The stomach is full, and the lumen contains partially digested fish. The intestinal contents are pale white and pasty. There is mild white staining around the vent.

The organs not mentioned were thoroughly examined, and no gross abnormalities were seen.

GROSS DIAGNOSIS

Right lobe of liver: Acute rupture and haemorrhage

SAMPLES COLLECTED & TESTING

Cloacal and trachea swabs in virus transport medium are taken for AI/ND PCR testing.

Fresh liver, kidney, spleen, heart, lung, brain, intestines, testes are stored at -80 degrees Celcius.

Fresh liver, kidney, spleen in 5ml tubes - store at -80 degrees Celcius.

Formalin fixed tissues (various) are stored.

Tissues are stored for one month. If no further testing is requested, then in line with the laboratory quality procedures the samples are discarded.

COMMENTS

Liver rupture and haemorrhage contributed to morbidity. The findings support blunt force trauma as a contributing factor for morbidity for this animal.

The cause of the blunt forced trauma cannot be determined based on the gross findings.

The cause of the chronic weight loss (indicated by the pectoral muscle atrophy) is not determined by the gross findings. Could decreased feed abundance (seasonal variation in feed abundance) be a contributing factor ?

The pelvic bones are normal and there is no evidence of fractures.

The very mild red foci on the feathered skin on the chest and the non-feathered skin of the left foot will be interpreted cautiously because they may simply be post mortem artefact changes.

Necropsy and report completed by

Clause 6(1), 7(1)(c)

Veterinary anatomic pathology diagnostician

and

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

This request has other tests in progress at the time of reporting

Test: GP - GROSS PATHOLOGY

Reported: 12/08/2025 19:47

Validated by Clause 6(1), 7(1)(c)

Test: GP - GROSS PATHOLOGY

Reported: 12/08/2025 19:47

REF: Clause 7(1)(c)

CLINICAL HISTORY

Found at Nene valley 29th July. Euthanased at Clause 7(1)(c) due to a fractured pelvis? History is uncertain. Came back into possession of DEW staff and was frozen.

SAMPLES SUBMITTED

1x Rock Hopper Penguin, *Eudyptes chrysocome*, adult, entire male

The tag on the bag was labeled

"Sth Rock hopper penguin, lodged 11/8/24 at 12:20, Clause 6(1) Limestone coast NPWS"

NECROPSY FINDINGS

The bird weighs 1.8kg. There is moderate atrophy of the pectoral muscles. There are moderate post mortem autolytic and freeze artefact changes.

External examination:

There is a small pinpoint, red, flat focus of feather loss on the chest on the left side, 5 x 5mm, just off the midline on the left side.

There is one focal red, flat, approximately 1cm x 1cm, round focus on the dorsal skin of the left feet.

Internal examination:

The right liver lobe contains an approximately 25 x 20 mm tear with clotted blood (haemorrhage) through the serosa and into the parenchyma. The gall bladder distended with bile.

The pelvis and vertebrae are intact (no evidence of fracture).

The air sacs are clear.

Both testes are present and are grossly normal.

The kidneys are grossly normal.

The spleen is not evident.

The stomach is full, and the lumen contains partially digested fish. The intestinal contents are pale white and pasty. There is mild white staining around the vent.

The organs not mentioned were thoroughly examined, and no gross abnormalities were seen.

GROSS DIAGNOSIS

Right lobe of liver: Acute rupture and haemorrhage

SAMPLES COLLECTED & TESTING

Cloacal and trachea swabs in virus transport medium are taken for AI/ND PCR testing.

Fresh liver, kidney, spleen, heart, lung, brain, intestines, testes are stored at -80 degrees Celcius.

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Formalin fixed tissues (various) are stored.

Tissues are stored for one month. If no further testing is requested, then in line with the laboratory quality procedures the samples are discarded.

COMMENTS

Liver rupture and haemorrhage contributed to morbidity. The findings support blunt force trauma as a contributing factor for morbidity for this animal.

The cause of the blunt forced trauma cannot be determined based on the gross findings.

The cause of the chronic weight loss (indicated by the pectoral muscle atrophy) is not determined by the gross findings. Could decreased feed abundance (seasonal variation in feed abundance) be a contributing factor ?

The pelvic bones are normal and there is no evidence of fractures.

The very mild red foci on the feathered skin on the chest and the non-feathered skin of the left foot will be interpreted cautiously because they may simply be post mortem artefact changes.

Necropsy and report completed by

Classified by 7/1/01

Veterinary anatomic pathology diagnostician

and

Classified by 7/1/01

Classified by 7/1/01

Classified by 7/1/01

Specialist Veterinary Anatomic Pathologist

Classified by 7/1/01

Validated by Classified by 7/1/01

This request has other tests in progress at the time of reporting

Test: GP - GROSS PATHOLOGY

Reported: 12/08/2025 19:47

Validated by Classified by 7/1/01

Test: GP - GROSS PATHOLOGY

Reported: 12/08/2025 19:45

REF: Classified by 7/1/01

CLINICAL HISTORY

Found at Nene valley 29th July. Euthanased at Classified by 7/1/01 due to a fractured pelvis? History is uncertain. Came back into possession of DEW staff and was frozen.

SAMPLES SUBMITTED

1x Rock Hopper Penguin, Eudyptes chrysocome, adult, entire male

NECROPSY FINDINGS

The bird weighs 1.8kg. There is moderate atrophy of the pectoral muscles. There are moderate post mortem autolytic and freeze artefact changes.

External examination:

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Necropsy and report completed by

Clause 6(1), 7(1)(c)

Veterinary anatomic pathology diagnostician

and

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

This request has other tests in progress at the time of reporting

Test: GP - GROSS PATHOLOGY

Reported: 12/08/2025 19:45

Validated by Clause 6(1), 7(1)(c)

REF: Clause 7(1)(c)

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Necropsy and report completed by

Clause 6(1), 7(1)(c)

Veterinary anatomic pathology diagnostician

and

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

This request has other tests in progress at the time of reporting

Test: GP - GROSS PATHOLOGY

Reported: 12/08/2025 19:45

Validated by Clause 6(1), 7(1)(c)

From: [Bansemer, Matthew \(PIRSA\)](#)
To: eo@abalonesa.com.au
Cc: [Stobart, Ben \(PIRSA-SARDI\)](#)
Subject: Abalone results from Reef Head
Date: Monday, 2 June 2025 12:51:00 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)

Hi Nicole,

We have received the results of the abalone that was collected from Reef Head.

The abalone was negative for the virus that causes AVG, using all three assays (ORF49, 66 and 77).

Histopathology results are pending – and are due later this week.

Thanks to your industry member that collected and reported the suspect animal.

Regards,

Matt

Dr Matthew Bansemer | Manager, Aquatic Animal Health Program
Fisheries and Aquaculture | **Department of Primary Industries and Regions - PIRSA**

Government of South Australia | 2 Hamra Avenue, West Beach, 5024, SA
GPO Box 1625 Adelaide SA 5001 | Internal PIRSA DX 210

P: (08) 8429 2100 **M:** [Clause 6\(1\)](#) **E:** Matthew.Bansemer@sa.gov.au
pir.sa.gov.au



**Service | Professionalism | Trust | Respect | Collaboration & Engagement | Honesty & Integrity
| Courage & Tenacity | Sustainability**

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From: [Wilkinson, Clinton \(PIRSA\)](#)
To: [Clause 6\(1\)](#)
Cc: [Barnes, Matthew \(PIRSA\)](#)
Subject: Brevetoxin in KI Abalone
Date: Tuesday, 20 May 2025 4:04:38 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[Abalone Holding 20250402.pdf](#)

OFFICIAL: Sensitive

Hi [Clause 7\(1\)\(c\)](#)

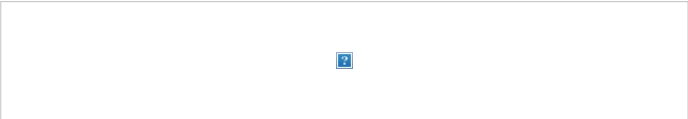
Counts of Karenia's below, first biotoxin test.

Matt has been cc into e-mail.

7/04/2025	KI Ab Farm East Shoreline	40,920	Clause 7(1)(c)
7/04/2025	KI Ab Farm Nursery Section 8	270,500	
7/04/2025	KI Ab Farm West Shoreline	154,880	
14/04/2025	KI Ab Farm Shore Line Westline	500	Abalone
14/04/2025	KI Ab Farm Nursery Unclean	3600	Abalone
14/04/2025	KI Ab Farm Nursery Toby Fox	6000	Abalone
14/04/2025	KI Ab Farm East Shoreline	2100	Abalone
14/04/2025	KI Ab Farm B0304	8000	Abalone
29/04/2025	KI Ab Farm East outlet	0	Abalone
29/04/2025	KI Ab Farm West outlet	0	Abalone
29/04/2025	KI Ab Farm G0 804	800	Abalone
29/04/2025	KI Ab Farm M0503	24,500	Abalone
7/05/2025	KI Ab Farm SP 8 Row 10 Tank F	1,085,000	Abalone
7/05/2025	KI Ab Farm Fast outlet	240,882	Abalone
7/05/2025	KI Ab Farm B0401	345,714	Abalone
7/05/2025	KI Ab Farm West Outlet	447,273	Abalone

Regards
Clinton

Clinton Wilkinson | Program Leader SASQAP
Department of Primary Industries and Regions
Government of South Australia | 1 Hindmarsh St.
PO Box 5 PORT LINCOLN SA 5606
T: +61 8 8688 3411 | M: [Clause 6\(1\)](#) | E: clinton.wilkinson@sa.gov.au
pir.sa.gov.au



The Department of Primary Industries and Regions respects Aboriginal people as the state's first people and nations. We recognise Aboriginal people as traditional owners and occupants of South Australian land and waters. We pay our respects to Aboriginal cultures and to Elders past, present and emerging.

Disclaimer: The information in this email may be confidential and/or legally privileged. Use or disclosure of the information by anyone other than the intended recipient is prohibited and may be unlawful.



Biotoxin Report

S.A. Shellfish Quality Assurance Program - Certificate of Analysis

Lincoln Marine Science Centre. PO Box 5 Pt Lincoln SA 5606 phone (08) 8688 3409

BR 2254

Sample: **Kangaroo Island**

Date Sampled: **02-Apr-2025**

Date Submitted: **11-Apr-2025**

Sample ID: **Abalone Holding**

Results Date: **17-Apr-2025**

PST				DST			
Bioassay				Test			
HPLC				Result			
	<0.10	mg/kg		Gymnodimine	LCMS	<0.01	mg/kg
				Spirolide 1	LCMS	<0.01	mg/kg
				PTX-2SA	LCMS	NT	mg/kg
				PTX-2	LCMS	<0.01	mg/kg
				Total OA	LCMS	<0.01	mg/kg
				Free OA	LCMS	<0.01	mg/kg
				Total DTX-2	LCMS	<0.01	mg/kg
				Free DTX-2	LCMS	<0.01	mg/kg
				Total DTX-1	LCMS	<0.01	mg/kg
				Free DTX-1	LCMS	<0.01	mg/kg
				Azaspiracid 1	LCMS	<0.01	mg/kg
				Azaspiracid 2	LCMS	<0.01	mg/kg
				Azaspiracid 3	LCMS	<0.01	mg/kg
				YTX	LCMS	<0.01	mg/kg
				Bioassay Screen			

Comments: *Samples tested at Symbio Laboratories NATA Accred No. 2455 Cert No S1808969*

Report Status:	Toxin		Regulatory Limit	
	DST		NST	
	PST		Total Domoic Acid	
Finalised	0.16 mg/kg		20 MU/100g	
	0.6 mg/kg		20 mg/kg	

All tests are performed by Symbio Laboratories in accordance with NATA's accreditation requirements, ISO/IEC 17025

Date of Report: **12-May-2025**



Signature:

Clinton Wilkinson
Program Leader

From: [Drew, Michael \(PIRSA-SARDI\)](#)
To: [Bansemer, Matthew \(PIRSA\)](#)
Subject: FW: Brevetoxin results
Date: Tuesday, 10 June 2025 10:22:35 AM
Attachments: [image001.jpg](#)

OFFICIAL

From: Clause 6(1) Clause 6(1) <[Clause 6\(1\)@ast.tas.gov.au](mailto:Clause 6(1)@ast.tas.gov.au)>
Sent: Monday, 2 June 2025 5:18 PM
To: Drew, Michael (PIRSA-SARDI) <michael.drew@sa.gov.au>
Subject: Brevetoxin results

You don't often get email from Clause 6(1) [@ast.tas.gov.au](mailto:Clause 6(1)@ast.tas.gov.au). [Learn why this is important](#)

Hi Michael,

Thanks for your time on the phone earliet, and apologies for the late reply. Hre are all the brevetoxin results from the gills and livers – this is data straight off the instrument and any “positives” are definitely positive although the actual concentration may not be accurate below 0.01:

Sample #	Analyte	Result mg/kg
298535	Brevetoxin 2	0
298535	Brevetoxin 3	0
298535 dup	Brevetoxin 2	0
298535 dup	Brevetoxin 3	0
298536	Brevetoxin 2	0
298536	Brevetoxin 3	0.008359
298537	Brevetoxin 2	0
298537	Brevetoxin 3	0.015514
298538	Brevetoxin 2	0
298538	Brevetoxin 3	0.011512
298538 dup	Brevetoxin 2	0
298538 dup	Brevetoxin 3	0.012614
298539	Brevetoxin 2	0
298539	Brevetoxin 3	0.00551
298540	Brevetoxin 2	0
298540	Brevetoxin 3	0.037084
298541	Brevetoxin 2	0
298541	Brevetoxin 3	0.014415
298542	Brevetoxin 2	0.005269
298542	Brevetoxin 3	0.042039
298543	Brevetoxin 2	0
298543	Brevetoxin 3	0.012191

298544	Brevetoxin 2	0
298544	Brevetoxin 3	0.005207
298545	Brevetoxin 2	0
298545	Brevetoxin 3	0.010161
298546	Brevetoxin 2	0
298546	Brevetoxin 3	0.046919
298547	Brevetoxin 2	0
298547	Brevetoxin 3	0
298548	Brevetoxin 2	0
298548	Brevetoxin 3	0
298549	Brevetoxin 2	0
298549	Brevetoxin 3	0

Hope this all makes sense. Please don't hesitate to get in contact if you have any questions or concerns.

Thanks,

Clause 6(1)

Clause 6(1)

| Biotoxin Facility Manager
Analytical Services Tasmania

Department of Natural Resources and Environment Tasmania

T: (03) 6165 3314

M: Clause 6(1)

E: Clause 6(1) @ast.tas.gov.au

W: www.analyticalservices.tas.gov.au

18 St Johns Avenue, New Town, TAS, 7008

Do you have any comments or feedback for AST? Please provide feedback by clicking [Here](#)

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From: Bansemer, Matthew (PIRSA)
To: Mellor, Emily (PIRSA)
Subject: FW: Brevetoxins in Ab
Date: Tuesday, 20 May 2025 4:30:00 PM
Attachments: 2-25-2102 Clause 6(1) Brevetoxin Results May 2025.pdf
image001.png
image002.png
image003.png
image004.png
image005.png
image006.png
image007.png
image008.png
image009.png
image010.png
image011.png
image012.png

For information – ill give you a call now.

Dr Matthew Bansemer | Manager, Aquatic Animal Health Program
Fisheries and Aquaculture | **Department of Primary Industries and Regions - PIRSA**
Government of South Australia | 2 Hamra Avenue, West Beach, 5024, SA
GPO Box 1625 Adelaide SA 5001 | Internal PIRSA DX 210
P: (08) 8429 2100 **M:** Clause 6(1) **E:** Matthew.Bansemer@sa.gov.au
pir.sa.gov.au



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From: Wilkinson, Clinton (PIRSA) <Clinton.Wilkinson@sa.gov.au>
Sent: Tuesday, 20 May 2025 4:20 PM
To: Bansemer, Matthew (PIRSA) <Matthew.Bansemer@sa.gov.au>
Subject: Brevetoxins in Ab

OFFICIAL

Clinton Wilkinson | Program Leader SASQAP
Department of Primary Industries and Regions
Government of South Australia | 1 Hindmarsh St.
PO Box 5 PORT LINCOLN SA 5606
T: +61 8 8688 3411 | **M:** Clause 6(1) **E:** clinton.wilkinson@sa.gov.au
pir.sa.gov.au



recognise Aboriginal people as traditional owners and occupants of South Australian land and waters. We pay our respects to Aboriginal cultures and to Elders past, present and emerging.

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**ANALYTICAL SERVICES TASMANIA**

18 St Johns Avenue New Town 7008 TAS

03 6165 3300

enquiries@ast.tas.gov.auwww.analyticalservices.tas.gov.au

Submission Number: 2-25-2102
Report Number: 47670
Issue Date: 20/05/2025
Status: Final

This report is a reissue, replacing report number: 47609
Reissue Reason: Finalised since last issue.

CERTIFICATE OF ANALYSIS

Customer: Department of Primary Industries and Regions
Address: PO Box 1783 1 Hindmarsh Street Port Lincoln SA 5606
Contact: Clinton Wilkinson

Submission Description: Biotoxins
Sample Received Date: 15/05/2025
Contract Number: 4899
Client Order Number: TBA
Program/Quote Reference: P22500011 - Biotoxins

Sample(s) analysed as received. Sampling date and time data supplied by the client. The document shall not be reproduced except in full.

Additional information relating to this submission can be found in the sample receipt notification.

This report supersedes any previous reports with this submission number.

Many tests specify a holding time which gives the recommended timeframe by which a sample should be preserved/extracted and/or analysed after the sample is taken.

Holding time information can be found on the AST website <https://analyticalservices.tas.gov.au/our-services/containers-samples-and-submissions>.

Whilst every effort is made to analyse samples within these timeframes, situations can occur where this is not possible.

Where a test has been conducted outside the recommended sample holding time this should be taken into account when interpreting results.

The results in this report were authorised by:

Name	Position
	Chemist

Test Information:

Method ID	Test Description	Date Commenced:
3411A	Brevetoxins in Biota by LC-MS/MS	16-05-2025

ANALYTICAL SERVICES TASMANIA

Submission Number: 2-25-2102
Report Number: 47670

Chemistry Test Results (Biota - Food)

Chemistry Test Results (Biota - Food)										
Method ID	Analyte	Sample Description	A3-4FOOT	A3-4VIS	B4-3FOOT	B4-3VIS	D11FOOT	D11VIS	E1-5FOOT	E1-5VIS
		Sampled Date/Time	13/05/25 0:00	13/05/25 0:00	13/05/25 0:00	13/05/25 0:00	13/05/25 0:00	13/05/25 0:00	13/05/25 0:00	13/05/25 0:00
		Units	292109	292110	292111	292112	292113	292114	292115	292116
3411A	Brevetoxin 2	mg/kg WMB	0.06*	0.05*	0.02*	0.05*	0.01*	0.04*	<0.01*	0.05*
	Brevetoxin 3	mg/kg WMB	0.51*	0.85*	0.42*	1.3*	0.26*	0.69*	0.28*	1.1*

Chemistry Test Results (Biota - Food)

Chemistry Test Results (Biota - Food)									
		Sample Description	M11-3FOOT	M11-3VIS	A3-3 ID4	K3-1 ID2	A3-5 ID5	K2-1 ID3	M11-3ID1
		Sampled Date/Time	13/05/25 0:00	13/05/25 0:00	13/05/25 0:00	13/05/25 0:00	13/05/25 0:00	13/05/25 0:00	13/05/25 0:00
Method ID	Analyte	Units	292117	292118	292119	292120	292121	292122	292123
3411A	Brevetoxin 2	mg/kg WMB	0.01*	0.06*	0.05*	0.05*	0.04*	0.04*	0.06*
	Brevetoxin 3	mg/kg WMB	0.40*	1.2*	0.47*	0.68*	0.89*	0.59*	0.47*

From: [Drew, Michael \(PIRSA-SARDI\)](#)
To: [Bansemer, Matthew \(PIRSA\)](#)
Subject: FW: Certificate of Analysis for Submission 2-25-2264 Biotoxins
Date: Tuesday, 10 June 2025 10:22:49 AM
Attachments: [2-25-2264-00048296-F.pdf](#)
[Out of scope](#)
[2-25-2264_48296_02062025121004.csv](#)
[image001.png](#)

OFFICIAL

Lab results, I also requested the actual values and not just the rounded values provided.

Cheers,

Mick.

From: ASTClientServices@ast.tas.gov.au <ASTClientServices@ast.tas.gov.au>
Sent: Monday, 2 June 2025 11:43 AM
To: Drew, Michael (PIRSA-SARDI) <michael.drew@sa.gov.au>
Subject: Certificate of Analysis for Submission 2-25-2264 Biotoxins

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Analytical Services Tasmania (AST)

Certificate of Analysis

SUBMISSION DETAILS

Submission Number: 2-25-2264
Description: Biotoxins
Submission Date(s): 27 May 2025
Customer: Department of Primary Industries and Regions
Contact: Clinton Wilkinson
PO Number: PO 25014803101

COA DETAILS

Report Number: 48296
Report Status: Final
Report Date: 02 Jun 2025

If you have any questions please reply to enquiries@ast.tas.gov.au or call (03) 6165 3300.

AST business hours are Monday to Friday 8:45 am to 5:00 pm, excluding public holidays, Easter and the Christmas to New Year period.

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Analytical Services Tasmania

Environment Heritage and Land Division

**Department of Natural Resources and Environment
Tasmania**

18 St Johns Avenue NEW TOWN TAS 7008

T: 03 6165 3300

E: enquiries@ast.tas.gov.au

W: www.analyticalservices.tas.gov.au

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Submission Number	Report Number	Submission Description	Submission Comments	Sample Number	Sample Description	Depth	Sampled Date	Lab Received Date	Sampler	Sampling Method	Sample Comments	Method ID	Method Name	Test Comments	Analyte1	Analyte2	Filtered	CAS Number	NATA Status	Method Std LOR	Units	Result	Result Qualifier	Result Without Qualifier	Result Comments
2-25-2264	48296	Biotoxins		298535	CCCJ040425-L		4/04/2025 0:00	27/05/2025 16:05				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 2	N	79580-28-2	F		0.01	mg/kg WMB	<0.01	<		0.01
2-25-2264	48296	Biotoxins		298535	CCCJ040425-L		4/04/2025 0:00	27/05/2025 16:05				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 3	N	85079-48-7	F		0.01	mg/kg WMB	<0.01	<		0.01
2-25-2264	48296	Biotoxins		298536	CCH8050525-L		5/05/2025 0:00	27/05/2025 16:05				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 2	N	79580-28-2	F		0.01	mg/kg WMB	<0.01	<		0.01
2-25-2264	48296	Biotoxins		298536	CCH8050525-L		5/05/2025 0:00	27/05/2025 16:05				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 3	N	85079-48-7	F		0.01	mg/kg WMB	<0.01	<		0.01
2-25-2264	48296	Biotoxins		298537	CCPW180425-L		*****	27/05/2025 16:05				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 2	N	79580-28-2	F		0.01	mg/kg WMB	<0.01	<		0.01
2-25-2264	48296	Biotoxins		298537	CCPW180425-L		*****	27/05/2025 16:05				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 3	N	85079-48-7	F		0.01	mg/kg WMB	0.02	<		0.02
2-25-2264	48296	Biotoxins		298538	CCPW180425-G		*****	27/05/2025 16:05				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 2	N	79580-28-2	F		0.01	mg/kg WMB	<0.01	<		0.01
2-25-2264	48296	Biotoxins		298538	CCPW180425-G		*****	27/05/2025 16:05				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 3	N	85079-48-7	F		0.01	mg/kg WMB	0.01	<		0.01
2-25-2264	48296	Biotoxins		298539	CCW180425-L		*****	27/05/2025 16:05				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 2	N	79580-28-2	F		0.01	mg/kg WMB	<0.01	<		0.01
2-25-2264	48296	Biotoxins		298539	CCW180425-L		*****	27/05/2025 16:05				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 3	N	85079-48-7	F		0.01	mg/kg WMB	<0.01	<		0.01
2-25-2264	48296	Biotoxins		298540	CCW180425-G		*****	27/05/2025 16:05				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 2	N	79580-28-2	F		0.01	mg/kg WMB	<0.01	<		0.01
2-25-2264	48296	Biotoxins		298540	CCW180425-G		*****	27/05/2025 16:05				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 3	N	85079-48-7	F		0.01	mg/kg WMB	0.04	<		0.04
2-25-2264	48296	Biotoxins		298541	CCPW130525-L		*****	27/05/2025 16:05				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 2	N	79580-28-2	F		0.01	mg/kg WMB	<0.01	<		0.01
2-25-2264	48296	Biotoxins		298541	CCPW130525-L		*****	27/05/2025 16:05				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 3	N	85079-48-7	F		0.01	mg/kg WMB	0.01	<		0.01
2-25-2264	48296	Biotoxins		298542	CCPW130525-G		*****	27/05/2025 16:05				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 2	N	79580-28-2	F		0.01	mg/kg WMB	<0.01	<		0.01
2-25-2264	48296	Biotoxins		298542	CCPW130525-G		*****	27/05/2025 16:05				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 3	N	85079-48-7	F		0.01	mg/kg WMB	0.04	<		0.04
2-25-2264	48296	Biotoxins		298543	CCAR090525-L		9/05/2025 0:00	27/05/2025 16:05				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 2	N	79580-28-2	F		0.01	mg/kg WMB	<0.01	<		0.01
2-25-2264	48296	Biotoxins		298543	CCAR090525-L		9/05/2025 0:00	27/05/2025 16:05				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 3	N	85079-48-7	F		0.01	mg/kg WMB	0.01	<		0.01
2-25-2264	48296	Biotoxins		298544	CCAR090525-G		9/05/2025 0:00	27/05/2025 16:05				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 2	N	79580-28-2	F		0.01	mg/kg WMB	<0.01	<		0.01
2-25-2264	48296	Biotoxins		298544	CCAR090525-G		9/05/2025 0:00	27/05/2025 16:05				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 3	N	85079-48-7	F		0.01	mg/kg WMB	<0.01	<		0.01
2-25-2264	48296	Biotoxins		298545	CCSP160525-L		*****	27/05/2025 16:05				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 2	N	79580-28-2	F		0.01	mg/kg WMB	<0.01	<		0.01
2-25-2264	48296	Biotoxins		298545	CCSP160525-L		*****	27/05/2025 16:05				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 3	N	85079-48-7	F		0.01	mg/kg WMB	0.01	<		0.01
2-25-2264	48296	Biotoxins		298546	CCSP160525-G		*****	27/05/2025 16:05				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 2	N	79580-28-2	F		0.01	mg/kg WMB	<0.01	<		0.01
2-25-2264	48296	Biotoxins		298546	CCSP160525-G		*****	27/05/2025 16:05				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 3	N	85079-48-7	F		0.01	mg/kg WMB	0.05	<		0.05
2-25-2264	48296	Biotoxins		298547	CCSB101123-L		*****	27/05/2025 16:05				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 2	N	79580-28-2	F		0.01	mg/kg WMB	<0.01	<		0.01
2-25-2264	48296	Biotoxins		298547	CCSB101123-L		*****	27/05/2025 16:05				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 3	N	85079-48-7	F		0.01	mg/kg WMB	<0.01	<		0.01
2-25-2264	48296	Biotoxins		298548	CCCE240921-L		*****	27/05/2025 16:05				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 2	N	79580-28-2	F		0.01	mg/kg WMB	<0.01	<		0.01
2-25-2264	48296	Biotoxins		298548	CCCE240921-L		*****	27/05/2025 16:05				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 3	N	85079-48-7	F		0.01	mg/kg WMB	<0.01	<		0.01
2-25-2264	48296	Biotoxins		298549	CCHB041223-L		4/12/2023 0:00	27/05/2025 16:05				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 2	N	79580-28-2	F		0.01	mg/kg WMB	<0.01	<		0.01
2-25-2264	48296	Biotoxins		298549	CCHB041223-L		4/12/2023 0:00	27/05/2025 16:05				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 3	N	85079-48-7	F		0.01	mg/kg WMB	<0.01	<		0.01

**ANALYTICAL SERVICES TASMANIA**

18 St Johns Avenue New Town 7008 TAS
03 6165 3300
enquiries@ast.tas.gov.au
www.analyticalservices.tas.gov.au

Submission Number: 2-25-2264
Report Number: 48296
Issue Date: 2/05/2025
Status: Final

CERTIFICATE OF ANALYSIS

Customer: Department of Primary Industries and Regions
Address: PO Box 1783 1 Hindmarsh Street Port Lincoln SA 5606
Contact: Clinton Wilkinson

Submission Description: Biotoxins
Sample Received Date: 27/05/2025
Contract Number: 4899
Client Order Number: PO 25014803101
Program/Quote Reference: P22500011 - Biotoxins

*Sample(s) analysed as received. Sampling date and time data supplied by the client. The document shall not be reproduced except in full.
Additional information relating to this submission can be found in the sample receipt notification.*

This report supersedes any previous reports with this submission number.

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Whilst every effort is made to analyse samples within these timeframes, situations can occur where this is not possible.

Where a test has been conducted outside the recommended sample holding time this should be taken into account when interpreting results.

The results in this report were authorised by:

Name	Position
Clouse B(1)	Section Head - Organic Chemistry

Test Information:

Method ID	Test Description
3411A	Brevetoxins in Biota by LC-MS/MS

Date Commenced:
29-05-2025

ANALYTICAL SERVICES TASMANIA

Submission Number: 2-25-2264
Report Number: 48296

Chemistry Test Results (Biota - Food)			Sample Description	CCCJ040425-L	CCHB050525-L	CCPM180425-L	CCPM180425-G	CCWI180425-L	CCWI180425-G	CCPW130525-L	CCPW130525-G
			Sampled Date/ Time	04/04/25 0:00	05/05/25 0:00	18/04/25 0:00	18/04/25 0:00	18/04/25 0:00	18/04/25 0:00	13/05/25 0:00	13/05/25 0:00
Method ID	Analyte	Units		298535	298536	298537	298538	298539	298540	298541	298542
3411A	Brevetoxin 2	mg/kg WMB		<0.01*	<0.01*	<0.01*	<0.01*	<0.01*	<0.01*	<0.01*	<0.01*
	Brevetoxin 3	mg/kg WMB		<0.01*	<0.01*	0.02*	0.01*	<0.01*	0.04*	0.01*	0.04*
Chemistry Test Results (Biota - Food)			Sample Description	CCAR090525-L	CCAR090525-G	CCSP160525-L	CCSP160525-G	CCSB101123 L	CCCE240921 L	CCHB041223 L	
			Sampled Date/ Time	09/05/25 0:00	09/05/25 0:00	16/05/25 0:00	16/05/25 0:00	10/11/23 0:00	24/09/21 0:00	04/12/23 0:00	
Method ID	Analyte	Units		298543	298544	298545	298546	298547	298548	298549	
3411A	Brevetoxin 2	mg/kg WMB		<0.01*	<0.01*	<0.01*	<0.01*	<0.01*	<0.01*	<0.01*	
	Brevetoxin 3	mg/kg WMB		0.01*	<0.01*	0.01*	0.05*	<0.01*	<0.01*	<0.01*	

From: [Bansemer, Matthew \(PIRSA\)](#)
To: [\(PIRSA\)](#)
Subject: FW: Great White Shark Gill - brevetoxin analysis
Date: Wednesday, 13 August 2025 4:10:00 PM
Attachments: [2-25-1951-00047145-F.pdf](#)
[2-25-1951_47145_08052025163249.csv](#)
[image007.png](#)
Out of scope
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)

Hi [\(PIRSA\)](#) – as per your TEAM message, please find attached the testing we got done on the GWS gill from Henley Beach.

Michael Drew (SARDI) may have some further results from other GWS mortalities.

Regards,

Matt

Dr Matthew Bansemer | Manager, Aquatic Animal Health Program
 Fisheries and Aquaculture | **Department of Primary Industries and Regions - PIRSA**

Government of South Australia | 2 Hamra Avenue, West Beach, 5024, SA
 GPO Box 1625 Adelaide SA 5001 | Internal PIRSA DX 210

P: (08) 8429 2100 **M:** [\(PIRSA\)](#) **E:** Matthew.Bansemer@sa.gov.au
pir.sa.gov.au



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From: Bansemer, Matthew (PIRSA) <matthew.bansemer@sa.gov.au>

Sent: Friday, 9 May 2025 8:40 AM

To: Begg, Gavin (PIRSA) <Gavin.Begg@sa.gov.au>; Cornish, Georgie (PIRSA) <georgie.cornish@sa.gov.au>; Fruean, Skye (PIRSA) <skye.fruean@sa.gov.au>

Subject: Great White Shark Gill - brevetoxin analysis

Hi Gavin, Georgie and Skye,

We have received the Great White Shark gill biotoxin results.

Brevetoxin 2 - 0.03 mg/kg

Brevetoxin 3 - 0.11 mg/kg

This confirms the presence of brevetoxins, but whether it is playing a role in the mortality is not clear. From my read of the literature, the brevetoxin level associated with mortality appears to be species-specific. We could undertake further testing, but this may actually be a research project. It would be useful to pass this information to Mick Drew.

Skye - From our FISHWATCH calls there has been several Penguins that have washed up on the beach, and these results may be useful to the animal health team / DEW to consider if testing for brevetoxin is warranted.

Regards,
Matt

From: ASTClientServices@ast.tas.gov.au <ASTClientServices@ast.tas.gov.au>
Sent: Thursday, 8 May 2025 4:04 PM
To: Bansemer, Matthew (PIRSA) <matthew.bansemer@sa.gov.au>
Subject: Certificate of Analysis for Submission 2-25-1951 Great White Shark Gill

You don't often get email from astclientservices@ast.tas.gov.au. [Learn why this is important](#)

Analytical Services Tasmania (AST)

Certificate of Analysis

SUBMISSION DETAILS

Submission Number: 2-25-1951
Description: Great White Shark Gill
Submission Date(s): 07 May 2025
Customer: Department of Primary Industries and Regions
Contact: Clinton Wilkinson
PO Number: PO 25014803002

COA DETAILS

Report Number: 47145
Report Status: Final
Report Date: 08 May 2025

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Analytical Services Tasmania

Environment Heritage and Land Division

**Department of Natural Resources and Environment
Tasmania**

18 St Johns Avenue NEW TOWN TAS 7008

T: 03 6165 3300

E: enquiries@ast.tas.gov.au

W: www.analyticalservices.tas.gov.au

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ANALYTICAL SERVICES TASMANIA

18 St Johns Avenue New Town 7008 TAS

03 6165 3300

enquiries@ast.tas.gov.au

www.analyticalservices.tas.gov.au

Submission Number: 2-25-1951
 Report Number: 47145
 Issue Date: 8/05/2025
 Status: Final

This report is a reissue, replacing report number: 47107
 Reissue Reason: Finalised since last issue.

CERTIFICATE OF ANALYSIS

Customer: Department of Primary Industries and Regions
 Address: PO Box 1783 1 Hindmarsh Street Port Lincoln SA 5606
 Contact: Clinton Wilkinson

Submission Description: Great White Shark Gill
 Sample Received Date: 07/05/2025
 Contract Number: 4898
 Client Order Number: PO 25014803002

Sample(s) analysed as received. Sampling date and time data supplied by the client. The document shall not be reproduced except in full.

Additional information relating to this submission can be found in the sample receipt notification.

This report supersedes any previous reports with this submission number.

Many tests specify a holding time which gives the recommended timeframe by which a sample should be preserved/extracted and/or analysed after the sample is taken.

Holding time information can be found on the AST website <https://analyticalservices.tas.gov.au/our-services/containers-samples-and-submissions>.

Whilst every effort is made to analyse samples within these timeframes, situations can occur where this is not possible.

Where a test has been conducted outside the recommended sample holding time this should be taken into account when interpreting results.

The results in this report were authorised by:

Name

Position

Clause 6(1)

Section Head - Organic
 Chemistry

Test Information:

Method ID

Test Description

Date Commenced:

3411	Lipophilic Toxins in Shellfish by LC-MS/MS
3411A	Brevetoxins in Biota by LC-MS/MS
3416	PST in Biota by LC-MS/MS (Boundy Method)

07-05-2025
08-05-2025
07-05-2025



Accreditation No. 5589

Accredited for compliance with ISO/IEC 17025 - Testing

ANALYTICAL SERVICES TASMANIA

Submission Number: 2-25-1951
Report Number: 47145

Chemistry Test Results (Biota - Food)

Method ID	Analyte	Sample Description	Sample Date/ Time	Units	Great white shark
			05/05/25	0.00	
				286839	
3411	AZA1	mg/kg WMB		<0.01	
	AZA2	mg/kg WMB		<0.01	
	AZA3	mg/kg WMB		<0.01	
	Domoic Acid	mg/kg WMB		<0.06	
	DTX1 Free	mg/kg WMB		<0.01	
	DTX1 Total	mg/kg WMB		<0.01	
	DTX2 Free	mg/kg WMB		<0.01	
	DTX2 Total	mg/kg WMB		<0.01	
	GYM	mg/kg WMB		<0.01	
	Homo-YTX	mg/kg WMB		<0.02	
	OA Free	mg/kg WMB		<0.01	
	OA Total	mg/kg WMB		<0.01	
	PnTx-G	mg/kg WMB		<0.01	
	PTX2	mg/kg WMB		<0.01	
	SPX1	mg/kg WMB		<0.01	
	Total DST	OA eq. mg/kg		<0.01	
	YTX	mg/kg WMB		<0.01	
3416	Brevetoxin 2	mg/kg WMB		0.03*	
	Brevetoxin 3	mg/kg WMB		0.11*	
	C1	STX 2HCl eq. mg/kg		<0.01	
	C2	STX 3HCl eq. mg/kg		<0.02	
	C3	STX 2HCl eq. mg/kg		<0.02	
	C4	STX 3HCl eq. mg/kg		<0.02	
	dcGTX1	STX 2HCl eq. mg/kg		<0.02*	
	dcGTX2	STX 2HCl eq. mg/kg		<0.02	
	dcGTX3	STX 2HCl eq. mg/kg		<0.02	
	dcGTX4	STX 2HCl eq. mg/kg		<0.02*	
	dcNEO	STX 2HCl eq. mg/kg		<0.02	

ANALYTICAL SERVICES TASMANIA

Submission Number: 2-25-1951
Report Number: 47145

Chemistry Test Results (Biota - Food)

		Sample Description	Great white shark
		Sampled Date/Time	05/05/25 0:00
Method ID	Analyte	Units	286639
3416	dcSTX	STX-2HCl eq. mg/kg	<0.01
	dcSTX	STX-2HCl eq. mg/kg	<0.01*
	GTx1	STX-2HCl eq. mg/kg	<0.01
	GTx2	STX-2HCl eq. mg/kg	<0.01
	GTx3	STX-2HCl eq. mg/kg	<0.01
	GTx4	STX-2HCl eq. mg/kg	<0.01
	GTx5	STX-2HCl eq. mg/kg	<0.02
	GTx6	STX-2HCl eq. mg/kg	<0.02
	NEO	STX-2HCl eq. mg/kg	<0.02
	STX	STX-2HCl eq. mg/kg	<0.01
Total PST		STX-2HCl eq. mg/kg	<0.10

Submission Number	Report Number	Submission Description	Submission Comments	Sample Number	Sample Description	Depth	Sampled Date	Lab Received Date	Sampler	Sampling Method	Sample Comments	Method ID	Method Name	Test Comments	Analyte1	Analyte2	Filtered	CAS Number	NATA Status	Method Std LOR	Units	Result	Result Qualifier	Result Without Qualifier	Result Comments
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3411	Lipophilic Toxins in Shellfish by LC-MS/MS		AZA1	N	214899-21-5	T		0.01	mg/kg WMB	<0.01	<		0.01
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3411	Lipophilic Toxins in Shellfish by LC-MS/MS		AZA2	N	265996-92-7	T		0.01	mg/kg WMB	<0.01	<		0.01
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3411	Lipophilic Toxins in Shellfish by LC-MS/MS		AZA3	N	265996-93-8	T		0.01	mg/kg WMB	<0.01	<		0.01
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3411	Lipophilic Toxins in Shellfish by LC-MS/MS		Domoic Acid	N	14277-97-5	T		0.05	mg/kg WMB	<0.05	<		0.05
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3411	Lipophilic Toxins in Shellfish by LC-MS/MS		DTX1 Free	N	81720-10-7	T		0.01	mg/kg WMB	<0.01	<		0.01
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3411	Lipophilic Toxins in Shellfish by LC-MS/MS		DTX1 Total	N	81720-10-7	T		0.01	mg/kg WMB	<0.01	<		0.01
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3411	Lipophilic Toxins in Shellfish by LC-MS/MS		DTX2 Free	N	139933-46-3	T		0.01	mg/kg WMB	<0.01	<		0.01
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3411	Lipophilic Toxins in Shellfish by LC-MS/MS		DTX2 Total	N	139933-46-3	T		0.01	mg/kg WMB	<0.01	<		0.01
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3411	Lipophilic Toxins in Shellfish by LC-MS/MS		GYM	N	173792-58-0	T		0.01	mg/kg WMB	<0.01	<		0.01
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3411	Lipophilic Toxins in Shellfish by LC-MS/MS		Homo-YTX	N	196309-94-1	T		0.02	mg/kg WMB	<0.02	<		0.02
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3411	Lipophilic Toxins in Shellfish by LC-MS/MS		OA Free	N	78111-17-8	T		0.01	mg/kg WMB	<0.01	<		0.01
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3411	Lipophilic Toxins in Shellfish by LC-MS/MS		OA Total	N	78111-17-8	T		0.01	mg/kg WMB	<0.01	<		0.01
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3411	Lipophilic Toxins in Shellfish by LC-MS/MS		PnTx-G	N	1312711-74-7	T		0.01	mg/kg WMB	<0.01	<		0.01
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3411	Lipophilic Toxins in Shellfish by LC-MS/MS		PTX2	N	97564-81-5	T		0.01	mg/kg WMB	<0.01	<		0.01
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3411	Lipophilic Toxins in Shellfish by LC-MS/MS		SPX1	N	334974-07-1	T		0.01	mg/kg WMB	<0.01	<		0.01
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3411	Lipophilic Toxins in Shellfish by LC-MS/MS		Total DST	N		T		0.01	OA eq. mg/kg	<0.01	<		0.01
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3411	Lipophilic Toxins in Shellfish by LC-MS/MS		YTX	N	112514-54-2	T		0.01	mg/kg WMB	<0.01	<		0.01
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 2	N	79580-28-2	F		0.02	mg/kg WMB	0.03			0.03
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3411A	Brevetoxins in Biota by LC-MS/MS		Brevetoxin 3	N	85079-48-7	F		0.02	mg/kg WMB	0.11			0.11
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3416	PST in Biota by LC-MS/MS (Bounty Method)		C1	N	T		0.01	STX.2HCl eq	<0.01	<		0.01	
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3416	PST in Biota by LC-MS/MS (Bounty Method)		C2	N	T		0.02	STX.2HCl eq	<0.02	<		0.02	
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3416	PST in Biota by LC-MS/MS (Bounty Method)		C3	N	T		0.02	STX.2HCl eq	<0.02	<		0.02	
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3416	PST in Biota by LC-MS/MS (Bounty Method)		C4	N	T		0.02	STX.2HCl eq	<0.02	<		0.02	
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3416	PST in Biota by LC-MS/MS (Bounty Method)		dcGTX1	N	F		0.02	STX.2HCl eq	<0.02	<		0.02	
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3416	PST in Biota by LC-MS/MS (Bounty Method)		dcGTX2	N	T		0.02	STX.2HCl eq	<0.02	<		0.02	
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3416	PST in Biota by LC-MS/MS (Bounty Method)		dcGTX3	N	T		0.02	STX.2HCl eq	<0.02	<		0.02	
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3416	PST in Biota by LC-MS/MS (Bounty Method)		dcGTX4	N	F		0.02	STX.2HCl eq	<0.02	<		0.02	
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3416	PST in Biota by LC-MS/MS (Bounty Method)		dcNEO	N	T		0.02	STX.2HCl eq	<0.02	<		0.02	
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3416	PST in Biota by LC-MS/MS (Bounty Method)		dcSTX	N	T		0.01	STX.2HCl eq	<0.01	<		0.01	
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3416	PST in Biota by LC-MS/MS (Bounty Method)		doSTX	N	F		0.01	STX.2HCl eq	<0.01	<		0.01	
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3416	PST in Biota by LC-MS/MS (Bounty Method)		GTX1	N	T		0.01	STX.2HCl eq	<0.01	<		0.01	
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3416	PST in Biota by LC-MS/MS (Bounty Method)		GTX2	N	T		0.01	STX.2HCl eq	<0.01	<		0.01	
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3416	PST in Biota by LC-MS/MS (Bounty Method)		GTX3	N	T		0.01	STX.2HCl eq	<0.01	<		0.01	
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3416	PST in Biota by LC-MS/MS (Bounty Method)		GTX4	N	T		0.01	STX.2HCl eq	<0.01	<		0.01	
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3416	PST in Biota by LC-MS/MS (Bounty Method)		GTX5	N	T		0.02	STX.2HCl eq	<0.02	<		0.02	
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3416	PST in Biota by LC-MS/MS (Bounty Method)		GTX6	N	T		0.02	STX.2HCl eq	<0.02	<		0.02	
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3416	PST in Biota by LC-MS/MS (Bounty Method)		NEO	N	T		0.02	STX.2HCl eq	<0.02	<		0.02	
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3416	PST in Biota by LC-MS/MS (Bounty Method)		STX	N	T		0.01	STX.2HCl eq	<0.01	<		0.01	
2-25-1951	47145	Great White Shark Gill		286839	Great white shark		5/05/2025 0:00	7/05/2025 11:15				3416	PST in Biota by LC-MS/MS (Bounty Method)		Total PST	N	T		0.1	STX.2HCl eq	<0.10	<		0.1	

Farley, Lisa (PIRSA)

From: Drew, Michael (PIRSA-SARDI)
Sent: Monday, 2 June 2025 12:35 PM
To: Bansemer, Matthew (PIRSA)
Subject: FW: Sample Receipt Notification for Submission 2-25-2264 Biotoxins
Attachments: 2-25-2264_SRN_2025528_14367.pdf, Out of scope Out of scope pdf

OFFICIAL

Hi Matt,

Please find the toxicology results attached.

Sample codes if you are interested are port of landing, date, and tissue type.

CJ- Cape Jervis
 HB – Henley
 PM – Port Moorowie
 WI – Willunga
 PW – Pt Wakefield
 AR – Ardrossan
 SP – Sultana Point
 SB – Steaky
 CE – Fowlers/Ceduna

Cheers,

Mick.

From: ASTClientServices@ast.tas.gov.au <ASTClientServices@ast.tas.gov.au>
Sent: Wednesday, 28 May 2025 2:07 PM
To: Drew, Michael (PIRSA-SARDI) <michael.drew@sa.gov.au>
Subject: Sample Receipt Notification for Submission 2-25-2264 Biotoxins

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Analytical Services Tasmania (AST)

Sample Receipt Notification

SUBMISSION DETAILS

Submission Number: 2-25-2264
Description: Biotoxins
Submission Date(s): 27 May 2025
Customer: Department of Primary Industries and Regions
Submitter: Michael Drew

Contact: Clinton Wilkinson
PO Number: TBA

Please find attached the scope of work and expected cost. If any changes are required, please advise the laboratory as soon as possible.

If you have any questions please reply to ASTClientServices@ast.tas.gov.au or call (03) 6165 3301.

AST business hours are Monday to Friday 8:45 am to 5:00 pm, excluding public holidays, Easter and the Christmas to New Year period.

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Analytical Services Tasmania

Environment Heritage and Land Division

Department of Natural Resources and Environment Tasmania

18 St Johns Avenue NEW TOWN TAS 7008

T: 03 6165 3301

E: ASTClientServices@ast.tas.gov.au

W: www.analyticalservices.tas.gov.au

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ANALYTICAL SERVICES TASMANIA

18 St Johns Avenue New Town 7008 TAS

03 6165 3301

astclientservices@ast.tas.gov.au

www.analyticalservices.tas.gov.au

SAMPLE RECEIPT NOTIFICATION 2-25-2264

Estimated Completion Date: 02/06/2025

Customer: Department of Primary Industries and Regions
Submitted By: Michael Drew
Customer Contact: Clinton Wilkinson
Purchase Order Number: TBA
Submission Description: Biotoxins
Contract No.: 4899
Program/Quote Reference: 2-25-2264 - Biotoxins
Est. Completion Date: Samples received after 4PM are deemed to have been received on the following working day.
 Turnaround is determined from the time that both samples and complete submission documentation have been received .

Report Recipients

Recipient:	SRN	Report	Invoice
Clinton Wilkinson	☒	☒	☒
Michelle O'Connor	☒	☒	☐
Payable Accounts	☐	☐	☒
Michael Drew	☒	☒	☐

Tests Requested

Your submission has been logged in for the following analyses.
 Please advise the laboratory of any changes as soon as possible.

298535 CCCJ040425-L

Sampled Date: 04/04/2025 00:00

Received Date: 27/05/2025

Brevetoxins in Biota by LC-MS/MS

Brevetoxin 2*, Brevetoxin 3*

298536 CCHB050525-L

Sampled Date: 05/05/2025 00:00

Received Date: 27/05/2025

Brevetoxins in Biota by LC-MS/MS

Brevetoxin 2*, Brevetoxin 3*

298537 CCPM180425-L

Sampled Date: 18/04/2025 00:00

Received Date: 27/05/2025

Brevetoxins in Biota by LC-MS/MS

Brevetoxin 2*, Brevetoxin 3*

298538 CCPM180425-G

Sampled Date: 18/04/2025 00:00

Received Date: 27/05/2025

Brevetoxins in Biota by LC-MS/MS
Brevetoxin 2* , Brevetoxin 3*

298539 CCWI180425-L

Sampled Date: 18/04/2025 00:00
Received Date: 27/05/2025

Brevetoxins in Biota by LC-MS/MS
Brevetoxin 2* , Brevetoxin 3*

298540 CCWI180425-G

Sampled Date: 18/04/2025 00:00
Received Date: 27/05/2025

Brevetoxins in Biota by LC-MS/MS
Brevetoxin 2* , Brevetoxin 3*

298541 CCPW130525-L

Sampled Date: 13/05/2025 00:00
Received Date: 27/05/2025

Brevetoxins in Biota by LC-MS/MS
Brevetoxin 2* , Brevetoxin 3*

298542 CCPW130525-G

Sampled Date: 13/05/2025 00:00
Received Date: 27/05/2025

Brevetoxins in Biota by LC-MS/MS
Brevetoxin 2* , Brevetoxin 3*

298543 CCAR090525-L

Sampled Date: 09/05/2025 00:00
Received Date: 27/05/2025

Brevetoxins in Biota by LC-MS/MS
Brevetoxin 2* , Brevetoxin 3*

298544 CCAR090525-G

Sampled Date: 09/05/2025 00:00
Received Date: 27/05/2025

Brevetoxins in Biota by LC-MS/MS
Brevetoxin 2* , Brevetoxin 3*

298545 CCSP160525-L

Sampled Date: 16/05/2025 00:00
Received Date: 27/05/2025

Brevetoxins in Biota by LC-MS/MS
Brevetoxin 2* , Brevetoxin 3*

298546 CCSP160525-G

Sampled Date: 16/05/2025 00:00
Received Date: 27/05/2025

Brevetoxins in Biota by LC-MS/MS
Brevetoxin 2* , Brevetoxin 3*

* NATA accreditation does not cover the performance of this service.

298547 CCSB101123 L

Sampled Date: 10/11/2023 00:00

Received Date: 27/05/2025

Brevetoxins in Biota by LC-MS/MS

Brevetoxin 2*, Brevetoxin 3*

298548 CCCE240921 L

Sampled Date: 24/09/2021 00:00

Received Date: 27/05/2025

Brevetoxins in Biota by LC-MS/MS

Brevetoxin 2*, Brevetoxin 3*

298549 CCHB041223 L

Sampled Date: 04/12/2023 00:00

Received Date: 27/05/2025

Brevetoxins in Biota by LC-MS/MS

Brevetoxin 2*, Brevetoxin 3*

From: [Drew, Michael \(PIRSA-SARDI\)](#)
To: [Bansemer, Matthew \(PIRSA\)](#)
Subject: FW: URGENT: results for white sharks
Date: Tuesday, 10 June 2025 10:19:46 AM
Attachments: [image001.png](#)

OFFICIAL

Hey Matt,

Please find the summary table attached, makes a bit more sense with location etc. I'll send through the email direct from the lab as well so you have a copy.

Cheers,

Mick.

From: Drew, Michael (PIRSA-SARDI) <Michael.Drew@sa.gov.au>
Sent: Thursday, 5 June 2025 1:52 PM
To: Grammer, Gretchen (PIRSA-SARDI) <Gretchen.Grammer@sa.gov.au>
Subject: RE: URGENT: results for white sharks

Hey Gretchen,

Please find attached the simplified table of results for the toxicology work recently conducted. There were higher concentrations in the gills than compared to the liver for all but two sharks. The Henley Beach shark is quite interesting considering the really low concentration in the liver, but the highest concentration out of all in the gills. Obviously, its unknown how much of this biotoxin is required to affect the behaviour and health of the sharks, but when compared to samples collected from outside of the algal bloom (Cape Jaffa), and from years prior to the bloom there was no presence of Brevetoxins. The other interesting bit was that Brevetoxin 2 was only found in two sharks, and they were sharks that were sampled fairly shortly after death, all the others aside from the juvenile at Pt Willunga were dead for a few days before being processed/frozen. Not sure if there is anything in that but interesting either way.

Cheers,

Mick.

Sample Location	Sample Origin	Year	Brevetoxin 2		Brevetoxin 3	
			Liver	Gill	Liver	Gill
Cape Jaffa	Bycatch	2025	0.000	NA	0.000	NA
Henley Beach	Stranding	2025	0.000	0.030	0.008	0.110
Port Moorowie	Stranding	2025	0.000	0.000	0.016	0.013
Port Willunga	Stranding	2025	0.000	0.000	0.006	0.037
Port Wakefield	Stranding	2025	0.000	0.005	0.014	0.042
Ardrossan	Stranding	2025	0.000	0.000	0.012	0.005
Sultana Point	Stranding	2025	0.000	0.000	0.010	0.047
Streaky Bay	Bycatch	2023	0.000	NA	0.000	NA
Ceduna	Stranding	2021	0.000	NA	0.000	NA
Henley Beach	Bycatch	2023	0.000	NA	0.000	NA

From: Grammer, Gretchen (PIRSA-SARDI) <Gretchen.Grammer@sa.gov.au>

Sent: Thursday, 5 June 2025 12:42 PM
To: Drew, Michael (PIRSA-SARDI) <Michael.Drew@sa.gov.au>
Subject: URGENT: results for white sharks
Importance: High

OFFICIAL

Hi Mick,

I need a couple of brief statements to summarise the results from the white shark tests.

e.g. Low levels of brevetoxin were found in the gills and livers of great white sharks collected.....

Could you please get this this me asap? This will go into a sitrep in case something comes up about it in parliament.

Thanks,
Gretchen

Dr Gretchen Grammer | A/Research Director, Aquatic and Livestock Sciences
South Australian Research and Development Institute – SARDI | **Department of Primary Industries and Regions**
Government of South Australia | 2 Hamra Ave West Beach SA 5024 | PO Box 120 Henley Beach SA 5022
Immediate Past President | Australian Society for Fish Biology
Affiliate Associate Professor – Flinders University | Affiliate Lecturer – The University of Adelaide
P: +61 8 8429 0797 | **M:** Clause 6(1) | **E:** gretchen.grammer@sa.gov.au
pir.sa.gov.au/research



The Department of Primary Industries and Regions respects Aboriginal people as the state's first people and nations. We recognise Aboriginal people as traditional owners and occupants of South Australian land and waters. We pay our respects to Aboriginal cultures and to Elders past, present and emerging.

Disclaimer: The information in this email may be confidential and/or legally privileged. Use or disclosure of the information by anyone other than the intended recipient is prohibited and may be unlawful.

From: Clause 7(1)(c)
To: Bansemer, Matthew (PIRSA)
Subject: PATH RESULTS: BONY BREEM MORTALITY, (Fi) Clause 7(1)(c)
Date: Thursday, 29 May 2025 4:00:34 PM

Clause 7(1)(c)

Clause 6(1)

RESULTS PH: Clause 7(1)(c)

Report Addressee:
 DR MATTHEW BANSEMER
 33 FLEMINGTON STREET

GLENSIDE SA 5065

Tested on 29/05/25
Reported on 29/05/25 16:30
Referred on 29/05/25 **by:**
 DR MATTHEW BANSEMER
 33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:
 BONY BREEM MORTALITY
 WOODS WELL BAY
 COORONG 5264

Animal/s:
 Fish - fin

DOB: N/A

Collected: 29/05/25 00:25 **Subm.No:** Clause 7(1)(c) **Lab No.:** Clause 7(1)(c)

Samples tested as received

NECROPSY REPORT

CLINICAL HISTORY

Please refer to the clinical history on the request form and the clinical notes sent with the request form. A brief summary of the clinical history;
 On 28th May 2025 PIRSA were notified of 150 bony bream that washed up at the Coorong southern lagoon. Samples were collected on 29th May and 3 x bony bream were submitted from Woodwell Bay

SAMPLES SUBMITTED

3 x Bony Bream, *Nematolosa erebi*, are submitted in a plastic bag labelled "Woods Well site 2 35 56.719S, 139 29.838 E"

NECROPSY FINDINGS

The fish are allocated numbers 1-3 at the laboratory.
 All fish are in good body condition and there are mild to moderate post-mortem autolytic changes. There are no gills evident on F3.

GROSS SUMMARY

Unremarkable gross findings

SAMPLES COLLECTED & TESTING

F1-3

Formalin fixed tissues including liver, spleen, heart, gill (none for F3), kidney, brain, eye, alimentary tract and skin and processed for histopathology.

Liver, spleen, kidney, brain and gill are stored at -80 degrees C for 1 month.

Kidney swabs in Ames transport medium are stored.

COMMENTS

The cause of death of the fish is not evident by gross examination. Histopathology, as you requested is in progress.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Clause 7(1)(c)

Clause 6(1)

RESULTS PH: Clause 7(1)(c)

Report Addressee:
DR MATTHEW BANSEMER
33 FLEMINGTON STREET
GLENSIDE SA 5065

Tested on 29/05/25
Reported on 29/05/25 16:30
Referred on 29/05/25 **by:**
DR MATTHEW BANSEMER
33 FLEMINGTON STREET
GLENSIDE SA 5065

Owner:
BONY BREEM MORTALITY
WOODS WELL BAY
COORONG 5264

Animal/s:
Fish - fin
DOB: N/A

Collected: 29/05/25 00:25 **Subm.No:** Clause 7(1)(c)

Lab No.: Clause 7(1)(c)

Samples tested a
Validated by Clause 6(1), 7(1)(c) .

From: Clause 7(1)(c)
To: Bansemer, Matthew (PIRSA)
Subject: PATH RESULTS: BONY BREEM MORTALITY, (Fi) Clause 7(1)(c)
Date: Thursday, 5 June 2025 11:30:25 AM

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH: Clause 7(1)(c)
Report Addressee:
DR MATTHEW BANSEMER
33 FLEMINGTON STREET
GLENSIDE SA 5065

Tested on 29/05/25
Reported on 05/06/25 12:00
Referred on 29/05/25 **by:**
DR MATTHEW BANSEMER
33 FLEMINGTON STREET
GLENSIDE SA 5065

Owner:
BONY BREEM MORTALITY
WOODS WELL BAY
COORONG 5264

Animal/s:
Fish - fin
DOB: N/A

Collected: 29/05/25 00:25 **Subm.No:** Clause 7(1)(c) **Lab No.:** Clause 7(1)(c)

Samples tested as received

HISTOPATHOLOGY FROM NECROPSY

REF: 2025/V HI 970

CLINICAL HISTORY

Please refer to the clinical history on the request form. A brief summary of the clinical history;

On 28th May 2025 PIRSA were notified of 150 bony breem that washed up at the Coorong southern lagoon. Samples were collected on 29th May and 3 x bony breem were submitted from Wood Well Bay

MACROSCOPY

Slides 1-3 A-D correspond to F1-3; tissues for each fish include liver, kidney, spleen, heart, gill, brain, eye, stomach, pyloric caecae, distal intestinal, skin and cross sections of bones from the cranium (F1-2 only); Ae GK

MICROSCOPY

F1-3

There is mild to moderate autolysis of all tissues. Aside from this artefact there are no other histological findings.

DIAGNOSIS

F1-3

Unremarkable histopathological findings

There are no histopathological findings consistent with disease due to South Australian notifiable listed diseases or pathogens for fin fish (Livestock Act 1997, Livestock Regulations 2013).

COMMENTS

There are no histopathological findings to explain the cause of death. Gill tissue is stored for one month if biotoxin or specifically brevetoxin testing are required.

There are no histopathological findings consistent with disease due to South Australian notifiable listed diseases or pathogens for fin fish (Livestock Act 1997, Livestock Regulations 2013).

Specific notifiable diseases of finfish (Livestock Act 1997, Livestock

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH:

Clause 7(1)(c)

Report Addressee:

DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Tested on 29/05/25

Reported on 05/06/25 12:00

Referred on 29/05/25 **by:**

DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:

BONY BREEM MORTALITY
WOODS WELL BAY
COORONG 5264

Animal/s:

Fish - fin

DOB: N/A

Collected: 29/05/25 00:25 **Subm.No:**

Clause 7(1)(c)

Lab No.:

Clause 7(1)(c)

Samples tested as received

Regulations 2013)) which are not evident in the histological sections, are listed below:

There are no findings consistent with:

Viral Nervous Necrosis, Viral Encephalopathy and Retinopathy (Disease due to Betanodavirus)

Disease due to Epizootic haematopoietic necrosis virus / iridovirus infection

Streptococcal meningitis

Disease due to Viral Haemorrhagic Septicaemia

Disease due to Mycobacterium sp.

Disease due to Nocardia

Disease due to Myxobolus (Myxosoma) cerebralis

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

From: Clause 7(1)(c)
To: Bansemer, Matthew (PIRSA)
Subject: PATH RESULTS: BONY BREEM MORTALITY, (Fi) [Clause 7(1)(c)]
Date: Friday, 6 June 2025 2:00:52 PM

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH: Clause 7(1)(c)

Report Addressee:
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Tested on 29/05/25
Reported on 06/06/25 14:30
Referred on 29/05/25 **by:**
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:
BONY BREEM MORTALITY
WOODS WELL BAY
COORONG 5264

Animal/s:
Fish - fin

DOB: N/A

Collected: 29/05/25 00:25 **Subm.No:** Clause 7(1)(c) **Lab No.:** Clause 7(1)(c)

Samples tested as received

All Tests Complete

SUMMARY DIAGNOSIS

There are no histopathological findings consistent with disease due to South Australian notifiable listed diseases or pathogens for fin fish (Livestock Act 1997, Livestock Regulations 2013).

SUMMARY COMMENTS

There are no histopathological findings to explain the cause of death. Gill tissue is stored for one month if biotoxin or specifically brevetoxin testing are required.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

From: Clause 7(1)(c)
To: [Bansemer, Matthew \(PIRSA\)](#)
Subject: PATH RESULTS: COCKLES, (Mo) Clause 7(1)(c)
Date: Thursday, 24 April 2025 6:30:31 PM

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH: Clause 7(1)(c)

Report Addressee:
 DR MATTHEW BANSEMER
 33 FLEMINGTON STREET

GLENSIDE SA 5065

Tested on 22/04/25
Reported on 24/04/25 19:00
Referred on 17/04/25 **by:**
 DR MATTHEW BANSEMER
 33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:
 COCKLES
 YOUNGHUSBAND PENINSULA
 GOOLWA 5214

Animal/s:
 Mollusc

DOB: N/A

Collected: 17/04/25 00:25 **Subm.No:** Clause 7(1)(c) **Lab No.:** Clause 7(1)(c)

Samples tested as received

All Tests Complete

HISTOPATHOLOGY FROM NECROPSY

REF: 2025/V HI 709

CLINICAL HISTORY

On 16 April 2025, PIRSA by security received a report of pipi mortality event from the South of the Murray mouth

MACROSCOPY

There are three pots received with the following labels and samples in neutral buffered formalin

1. Cockles Goolwa 3 site

The pot contains 5 cockles is which are each approximately 45 mm across
 All cockles , when shucked appear grossly unremarkable
 1A-E: Multiple cross sections of each cockle

2. Cockles Goolwa 4 site

The pot contains 5 cockles is which are each approximately 45 mm across
 All cockles , when shucked appear grossly unremarkable
 2A-E: Multiple cross sections of each cockle

3. Cockles Goolwa 5 site

The pot contains 5 cockles is which are each approximately 45 mm across
 All cockles , when shucked appear grossly unremarkable
 3A-E: Multiple cross sections of each cockle

Cross sections of each cockle includes the following organs; alimentary tract (including digestive gland), gills, heart, interstitial tissue, kidney (in most sections), mantle, gonad, adductor muscles

MICROSCOPY

Cockles (sites 3, 4 and 5)

The descriptions refer to all cockles.

There is atrophy of interstitial tissue and gonads. There is mild

autolysis of digestive glands.

All other tissues appear unremarkable.

DIAGNOSIS

There are no histopathological findings consistent with disease due to South Australian notifiable listed pathogens for shellfish (including

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH: Clause 7(1)(c)

Report Addressee:

DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Tested on 22/04/25

Reported on 24/04/25 19:00

Referred on 17/04/25 **by:**

DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:

COCKLES
YOUNGHUSBAND PENINSULA
GOOLWA 5214

Animal/s:

Mollusc

DOB: N/A

Collected: 17/04/25 00:25 **Subm.No:** Clause 7(1)(c)

Lab No.: Clause 7(1)(c)

Samples tested as received All Tests Complete
bivalves) (Livestock Act 1997, Livestock Regulations 2013)

COMMENTS

There are no histological findings to explain the cause of mortalities.

The gonad and interstitial tissue atrophy is a normal seasonal finding in these cockles.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

From: Clause 7(1)(c)
To: Bansemer, Matthew (PIRSA)
Subject: PATH RESULTS: COCKLES, (Mo) Clause 7(1)(c)
Date: Friday, 11 April 2025 2:00:39 PM

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH: Clause 7(1)(c)

Report Addressee:
 DR MATTHEW BANSEMER
 33 FLEMINGTON STREET
 GLENSIDE SA 5065

Tested on 07/04/25
Reported on 11/04/25 14:30
Referred on 06/04/25 **by:**
 DR MATTHEW BANSEMER
 33 FLEMINGTON STREET
 GLENSIDE SA 5065

Owner:
 COCKLES
 GOOLWA BEACH
 GOOLWA 5214

Animal/s:
 Mollusc
DOB: N/A

Collected: 06/04/25 00:25 **Subm.No:** Clause 7(1)(c) **Lab No.:** Clause 7(1)(c)

Samples tested as received

All Tests Complete

HISTOPATHOLOGY

REF: 2025/V HI 620

CLINICAL HISTORY

Please refer to the clinical history on the request form and the clinical notes sent with the request form. A brief summary of the clinical history;

On 6 April 2025, PIRSA were notified of a large scale mortality of Goolwa cockles (pipis) that washed up at Goolwa. An algae bloom (Karenia mikimotoi up to 1.5 million cells/L) has previously been observed in close proximity to

Goolwa cockles (presumptive Plebidonax deltoids)

MACROSCOPY

1 "Beach samples above waterline 6/4/25", F1-5 correlate to cassettes 1-5

2 "Dug samples 6/4/25 16:15 hours" F11-15 correlate to cassettes 6-10

There are multiple transverse sections of each cockle to include the following organs; digestive gland, intestines, stomach, mantle, palps, gills, gonad, leydig tissue.

MICROSCOPY

1 "Beach samples above waterline 6/4/25", F1-5
 F1-4 appear histologically normal.
 There is mild autolysis of the gill epithelium in F5

2 "Dug samples 6/4/25 16:15 hours" F11-15
 In all cockles there is mild autolysis of gill epithelium.

All other organs appear histologically normal.

DIAGNOSIS

1 "Beach samples above waterline 6/4/25", F1-5 and 2 "Dug samples 6/4/25 16:15 hours" F11-15

Unremarkable histological findings

COMMENTS

There are no gross or histological findings to indicate the cause of cockle mortalities at Goolwa. *Karenia mikimotoi* algal blooms are

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH:

Clause 7(1)(c)

Report Addressee:

DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Tested on 07/04/25

Reported on 11/04/25 14:30

Referred on 06/04/25 **by:**

DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:

COCKLES
GOOLWA BEACH
GOOLWA 5214

Animal/s:

Mollusc

DOB: N/A

Collected: 06/04/25 00:25 **Subm.No.:**

Clause 7(1)(c)

Lab No.:

Clause 7(1)(c)

Samples tested as received All Tests Complete
reported to cause widespread hypoxia of marine animals and also release
cytotoxins (not currently identified). In fish gill necrosis has been
reported. In these cockles gill necrosis is not evident.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

rinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by

Clause 6(1), 7(1)(c)

From: Clause 7(1)(c)
To: Bansemer, Matthew (PIRSA)
Subject: PATH RESULTS: COCKLES, (Mo) Clause 7(1)(c)
Date: Monday, 7 April 2025 5:30:17 PM

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH: Clause 7(1)(c)

Report Addressee:
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Tested on 07/04/25
Reported on 07/04/25 18:00
Referred on 06/04/25 **by:**
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:
COCKLES
GOOLWA BEACH
GOOLWA 5214

Animal/s:
Mollusc

DOB: N/A

Collected: 06/04/25 00:25 **Subm.No:** Clause 7(1)(c) **Lab No.:** Clause 7(1)(c)

Samples tested as received

NECROPSY REPORT

CLINICAL HISTORY

Please refer to the clinical history on the request form and the clinical notes sent with the request form. A brief summary of the clinical history;
On 6 April 2025, PIRSA were notified of a large scale mortality of Goolwa cockles (pipis) that washed up at Goolwa. An algae bloom (Karenia mikimotoi up to 1.5 million cells/L) has previously been observed in close proximity to

SAMPLES SUBMITTED

Goolwa cockles (presumptive Plebidonax deltoids)

Two bags are submitted. They are allocated numbers 1 and 2 at the laboratory.

1 "Beach samples above waterline 6/4/25"

The bag contains 10 Goolwa cockles, each approximately 45mm across

2 "Dug samples 6/4/25 16:15 hours"

The bag contains 11 Goolwa cockles , ranging in size from 25 to 45mm across.

NECROPSY FINDINGS

The cockles are allocated numbers 1-21 at the laboratory.

1 "Beach samples above waterline 6/4/25" (F1-10)

5 cockles (F1-5) have closed shells (alive) and 5 (F6-10) have gaping shells (which will not close) with sand in their shell cavity.

The meat of all cockles shows minimal to no autolytic changes. There is good body condition of the meat

2 "Dug samples 6/4/25 16:15 hours" (F11-21)

All cockles have closed shells (are alive).

The meat of all cockles shows no autolytic changes. There is good body condition of the meat.

GROSS SUMMARY

1 "Beach samples above waterline 6/4/25"

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH:

Clause 7(1)(c)

Report Addressee:

DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Tested on 07/04/25

Reported on 07/04/25 18:00

Referred on 06/04/25 **by:**

DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:

COCKLES
GOOLWA BEACH
GOOLWA 5214

Animal/s:

Mollusc

DOB: N/A

Collected: 06/04/25 00:25 **Subm.No:**

Clause 7(1)(c)

Lab No.:

Clause 7(1)(c)

Samples tested as received

5 dead and 5 live cockles

2 "Dug samples 6/4/25 16:15 hours"

11 live cockles

SAMPLES COLLECTED & TESTING

5 live cockles (F1-5 and F11-15) from both groups will be processed for histopathology. As you requested these will be processed urgently.

Frozen meat from F6-9 and F16-19 are stored frozen if heavy metal or other toxin testing is required.

Frozen meat from F10 and F20-21 are stored in foil, frozen if testing for polychlorinated carbons is required.

The samples are stored for one month then discarded if no further testing is required, as outlined in our quality management system.

COMMENTS

Dead cockles are found in the beach samples (presumably found washed up above the water tide line) but not those dug from the sand. There are no gross findings to indicate the cause of death.

Karenia mikimotoi has been shown to cause mortalities in a range of bivalve species but the toxic compound has not been identified (Natsuike, M., et al., 2024).

Natsuike, M., Mizukami, T., Sakai, Y., Konishi, T. and Kawasaki, T., 2024. The lethal effects of the harmful dinoflagellate Karenia mikimotoi on two bivalves, Yesso scallop and Sakhalin surf clam, and two echinoderms, short-spined sea urchin and Japanese common sea cucumber. Plankton and Benthos Research, 19(4), pp.225-232..

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by

Clause 6(1), 7(1)(c)

From: Clause 7(1)(c)
To: Bansemer, Matthew (PIRSA)
Subject: PATH RESULTS: CUTTLE FISH, PIRSA (F) Clause 7(1)(c)
Date: Wednesday, 9 July 2025 5:00:19 PM

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH: Clause 7(1)(c)

Report Addressee:

DR MATTHEW BANSEMER
ANIMAL HEALTH ADVISOR
135 GORDON STREET
NARACORTE SA 5271

Tested on 28/06/25
Reported on 09/07/25 17:30
Referred on 27/06/25 **by:**
DR MATTHEW BANSEMER
ANIMAL HEALTH ADVISOR
135 GORDON STREET
NARACORTE SA 5271

Owner:
CUTTLE FISH

Animal/s:
Fish - other
PIRSA
DOB: N/A

Collected: 27/06/25 00:25 **Subm.No:** Clause 7(1)(c) **Lab No.:** Clause 7(1)(c)

Samples tested as received

HISTOPATHOLOGY FROM NECROPSY

REF: 2025 HI 1217

CLINICAL HISTORY

On 26 June 2025 PIRSA was notified of a high mortality of cuttlefish at Minlacowie, near Parsons Beach.

MACROSCOPY

Slides 1A-B to 5 A-D correspond to cuttlefish 1-5; organs for each cuttlefish include gills, branchial heart, digestive gland, mantle, gonad, oral cavity, brain (F5 only); Ae GK

MICROSCOPY

F1-5

There is moderate autolysis of all tissues. Aside from this artifact there are no other remarkable findings

DIAGNOSIS

No remarkable findings

COMMENTS

There are no findings to explain the cause of death.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Pathologist

Validated by Clause 6(1), 7(1)(c)

From: Clause 7(1)(c)
To: Bansemer, Matthew (PIRSA)
Subject: PATH RESULTS: CUTTLE FISH, PIRSA (F) Clause 7(1)(c)
Date: Saturday, 12 July 2025 3:30:27 PM

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH: 1300 307 190**Report Addressee:**

DR MATTHEW BANSEMER
ANIMAL HEALTH ADVISOR
135 GORDON STREET
NARACORTE SA 5271

Tested on 28/06/25
Reported on 12/07/25 16:00
Referred on 27/06/25 **by:**
DR MATTHEW BANSEMER
ANIMAL HEALTH ADVISOR
135 GORDON STREET
NARACORTE SA 5271

Owner:

CUTTLE FISH

Animal/s:

Fish - other
PIRSA
DOB: N/A

Collected: 27/06/25 00:25 **Subm.No:** Clause 7(1)(c)**Lab No.:** Clause 7(1)(c)**Samples tested as received**

All Tests Complete

SUMMARY DIAGNOSIS

No diagnosis is concluded

SUMMARY COMMENTS

The cause of death is not concluded based on gross and histopathological findings.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

From: Clause 7(1)(c)
To: Bansemer, Matthew (PIRSA)
Subject: PATH RESULTS: CUTTLE FISH, PIRSA (Fi) Clause 7(1)(c)
Date: Sunday, 29 June 2025 6:00:33 PM

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH: Clause 7(1)(c)

Report Addressee:
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Tested on 28/06/25
Reported on 29/06/25 18:30
Referred on 27/06/25 **by:**
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:
CUTTLE FISH

Animal/s:
Fish - other
PIRSA
DOB: N/A

Collected: 27/06/25 00:25 **Subm.No:** Clause 7(1)(c)

Lab No.: Clause 7(1)(c)

Samples tested as received

NECROPSY REPORT

CLINICAL HISTORY

The history from Dr Tom Clarke, SARDI;
The cuttlefish were found dead on a beach on the Yorke peninsula
27/6/2025.
Water was collected in three bottles from the site

SAMPLES SUBMITTED

6 dead cuttlefish (Sepia sp.)

3 bottles of water

NECROPSY FINDINGS

The cuttlefish are in good body condition and range in length from 150 to 200 mm. There are mild post mortem autolytic changes.

There are no other gross findings

GROSS SUMMARY

Unremarkable gross findings

SAMPLES COLLECTED & TESTING

Tissues including formalin fixed gill, branchial heart, digestive gland, and mantle are stored.

Gill and mantle are held frozen if biotoxin testing is required.

Stomach / digestive gland is stored frozen.

All samples are stored for only one month in line with the laboratory's quality assurance guidelines. If no further testing is requested in one month the samples will be discarded.

COMMENTS

There are no gross findings to explain their cause of death.

Please contact the laboratory on Monday if algal count testing is required on the water samples.

Please contact the laboratory within the next 5 working days if possible to clarify if histopathology is required and on how many cuttlefish.

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH: Clause 7(1)(c)

Report Addressee:
DR MATTHEW BANSEMER
33 FLEMINGTON STREET
GLENSIDE SA 5065

Tested on 28/06/25
Reported on 29/06/25 18:30
Referred on 27/06/25 **by:**
DR MATTHEW BANSEMER
33 FLEMINGTON STREET
GLENSIDE SA 5065

Owner:
CUTTLE FISH

Animal/s:
Fish - other
PIRSA
DOB: N/A

Collected: 27/06/25 00:25 **Subm.No:** Clause 7(1)(c)

Lab No.: Clause 7(1)(c)

Samples tested as received

Please note I am on leave 30 June to 3 July inclusive.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

athologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

From: [REDACTED]
To: [Bansemer, Matthew \(PIRSA\)](#)
Subject: PATH RESULTS: CUTTLEFISH, (Mo) [REDACTED]
Date: Friday, 20 June 2025 10:00:44 AM

[REDACTED]

[REDACTED]

RESULTS PH: [REDACTED]

Report Addressee:
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Tested on 03/06/25
Reported on 20/06/25 10:30
Referred on 02/06/25 **by:**
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:
CUTTLEFISH

TUMBY BAY 5605

Animal/s:
Mollusc

DOB: N/A

Collected: 02/06/25 00:25 **Subm.No:** [REDACTED] **Lab No.:** [REDACTED]

Samples tested as received

All Tests Complete

SUMMARY DIAGNOSIS
F1-2
Cutaneous monogenean fluke

SUMMARY COMMENTS
The monogenean flukes are an incidental finding. There are no histological findings to explain the cause of mortalities.

[REDACTED]

[REDACTED]

[REDACTED]

Specialist Veterinary Anatomic Pathologist

[REDACTED]

Validated by [REDACTED] .

From: Clause 7(1)(c)
To: Bansemer, Matthew (PIRSA)
Subject: PATH RESULTS: CUTTLEFISH, (Mo) Clause 7(1)(c)
Date: Tuesday, 3 June 2025 5:00:23 PM

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH: Clause 7(1)(c)

Report Addressee:
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Tested on 03/06/25
Reported on 03/06/25 17:30
Referred on 02/06/25 **by:**
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:
CUTTLEFISH

TUMBY BAY 5605

Animal/s:
Mollusc

DOB: N/A

Collected: 02/06/25 00:25 **Subm.No:** Clause 7(1)(c) **Lab No.:** Clause 7(1)(c)

Samples tested as received

NECROPSY REPORT

CLINICAL HISTORY

Please refer to the clinical history on the request form and the clinical notes sent with the request form. A brief summary of the clinical history;
On 2 June 2025 PIRSA were notified of a high mortality of cuttlefish in the Tummy Bay area. The freshest cuttlefish were collected

SAMPLES SUBMITTED

10 x cuttlefish (Sepia sp.) are received.

NECROPSY FINDINGS

The fish are allocated numbers 1-10 at the laboratory.
The cuttlefish range in size from 120 to 200 mm in length. 1 animal (F2) has enlarged gonads. F1-5 have mild post-mortem autolytic changes. F6-10 have moderate to marked post mortem autolytic changes.

There are no other gross findings.

GROSS SUMMARY

Unremarkable gross findings

SAMPLES COLLECTED & TESTING

F1-5

Tissues including formalin fixed gill, branchial heart, digestive gland, and mantle will be processed for histopathology.

Fresh gill, mantle and digestive gland are frozen.

F6-10

The whole bodies are stored frozen.

Tissues are stored for 1 month then discarded if no further testing is

requested, in line with the laboratory quality assurance protocols.

COMMENTS

The cause of death cannot be identified based on gross examination. As you had requested histopathology is pending on 5 cuttlefish.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH: Clause 7(1)(c)

Report Addressee:
DR MATTHEW BANSEMER
33 FLEMINGTON STREET
GLENSIDE SA 5065

Tested on 03/06/25
Reported on 03/06/25 17:30
Referred on 02/06/25 **by:**
DR MATTHEW BANSEMER
33 FLEMINGTON STREET
GLENSIDE SA 5065

Owner:
CUTTLEFISH
TUMBY BAY 5605

Animal/s:
Mollusc
DOB: N/A

Collected: 02/06/25 00:25 **Subm.No:** Clause 7(1)(c) **Lab No.:** Clause 7(1)(c)

Clause 6(1), 7(1)(c) ed as received
Clause 6(1), 7(1)(c) Pathologist
Clause 6(1), 7(1)(c)
Validated by Clause 6(1), 7(1)(c) .

From: Clause 7(1)(c)
To: Bansemer, Matthew (PIRSA)
Subject: PATH RESULTS: CUTTLEFISH, (Mo) Clause 7(1)(c)
Date: Friday, 13 June 2025 7:00:22 PM

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH: Clause 7(1)(c)

Report Addressee:
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Tested on 03/06/25
Reported on 13/06/25 19:30
Referred on 02/06/25 **by:**
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:
CUTTLEFISH

TUMBY BAY 5605

Animal/s:
Mollusc

DOB: N/A

Collected: 02/06/25 00:25 **Subm.No:** Clause 7(1)(c) **Lab No.:** Clause 7(1)(c)

Samples tested as received

HISTOPATHOLOGY FROM NECROPSY

REF: 2025/V hi 999

CLINICAL HISTORY

Please refer to the clinical history on the request form and the clinical notes sent with the request form. A brief summary of the clinical history;
On 2 June 2025 PIRSA were notified of a high mortality of cuttlefish in the Tummy Bay area. The freshest cuttlefish were collected

MACROSCOPY

Slides 1A-B to 5 A-D correspond to cuttlefish 1-5; organs for each cuttlefish include gills, branchial heart, digestive gland, mantle, gonad, oral cavity, brain (F5 only); Ae GK

MICROSCOPY

F1, 2

Perioral skin: There are cross sections of flukes attached to the skin.

There is moderate autolysis of all other organs and no remarkable histological findings.

F3-5

There is moderate autolysis of all organs and no remarkable histological findings

DIAGNOSIS

F1-2

Cutaneous monogenean fluke

COMMENTS

The monogenean fluke are an incidental finding. There are no histological findings to explain the cause of mortalities.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Pathologist

Validated by

Clause 6(1), 7(1)(c)

From: Clause 7(1)(c)
To: Bansemer, Matthew (PIRSA)
Subject: PATH RESULTS: CUTTLEFISH, ARNO BAY (Fi) Clause 7(1)(c)
Date: Saturday, 12 July 2025 3:00:21 PM

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH: Clause 7(1)(c)

Report Addressee:
DR MATTHEW BANSEMER
ANIMAL HEALTH ADVISOR
135 GORDON STREET
NARACORTE SA 5271

Tested on 04/07/25
Reported on 12/07/25 15:30
Referred on 30/06/25 **by:**
DR MATTHEW BANSEMER
ANIMAL HEALTH ADVISOR
135 GORDON STREET
NARACORTE SA 5271

Owner:
CUTTLEFISH

ARNO BAY 5603

Animal/s:
Fish - other
ARNO BAY
DOB: N/A

Collected: 30/06/25 00:25 **Subm.No:** Clause 7(1)(c) **Lab No.:** Clause 7(1)(c)

Samples tested as received

NECROPSY REPORT

CLINICAL HISTORY

On 30 June 2025, PIRSA were notified of the high mortality of cuttlefish at Arno Bay. The freshest cuttlefish were collected and fixed in formalin.

Please do histopathology on 5 cuttlefish.

SAMPLES SUBMITTED

30 x cuttlefish (Sepia sp.) are received.

NECROPSY FINDINGS

The cuttlefish are allocated numbers 1-30 at the laboratory. The cuttlefish range in size from 150 to 200mm long.

All cuttlefish are in good body condition and there are moderate post mortem autolytic changes. Many have well developed gonads.

GROSS SUMMARY

Unremarkable gross findings

SAMPLES COLLECTED & TESTING

F1-5

Tissues including formalin fixed gill, brain, eye, branchial heart, digestive gland, gonad and mantle will be processed for histopathology.

Fresh gill, mantle and digestive gland are frozen.

Tissues are stored for 1 month then discarded if no further testing is requested, in line with the laboratory quality assurance protocols.

COMMENTS

The cause of death cannot be identified based on gross examination. As you have requested histopathology is pending on 5 cuttlefish.

We apologize for the delay in submitting this report.

Report completed by

Clause 6(1), 7(1)(c) Resident anatomic pathology

and

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH: Clause 7(1)(c)

Report Addressee:
DR MATTHEW BANSEMER
ANIMAL HEALTH ADVISOR
135 GORDON STREET
NARACOOORTE SA 5271

Tested on 04/07/25
Reported on 12/07/25 15:30
Referred on 30/06/25 **by:**
DR MATTHEW BANSEMER
ANIMAL HEALTH ADVISOR
135 GORDON STREET
NARACOOORTE SA 5271

Owner:
CUTTLEFISH

ARNO BAY 5603

Animal/s:
Fish - other
ARNO BAY
DOB: N/A

Collected: 30/06/25 00:25 **Subm.No:** Clause 7(1)(c) **Lab No.:** Clause 7(1)(c)

Samples tested as received

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

From: Clause 7(1)(c)
To: Bansemer, Matthew (PIRSA)
Subject: PATH RESULTS: EYREYORKE PENINSULA, PICHARDS (Fi) Clause 7(1)(c)
Date: Saturday, 24 May 2025 7:00:40 PM

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH: Clause 7(1)(c)

Report Addressee:
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Tested on 24/05/25
Reported on 24/05/25 19:30
Referred on 22/05/25 **by:**
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:
EYRE/YORKE PENINSULA

EYRE 5121

Animal/s:
Fish - fin
PICHARDS
DOB: N/A

Collected: 22/05/25 00:25 **Subm.No:** Clause 7(1)(c) **Lab No.:** Clause 7(1)(c)

Samples tested as received

NECROPSY REPORT

CLINICAL HISTORY

Please refer to the clinical history on the request form and the clinical notes sent with the request form. A brief summary of the clinical history;
On 22nd May 2025, PIRSA was notified of the Fishkill of sardines at Waterloo Bay at Elliston and on the water adjacent to the Pines between Corny point and point Souter.

Both reports were associated with lost catch from the commercial side and industry.

Please test the freshest 5 fish from each site by histopathology.

SAMPLES SUBMITTED

6 x whole pilchards (Sardinops sp.) in neutral buffered formalin and 6 x fresh whole pilchards

The site from where the fish came is not recorded on the pots

NECROPSY FINDINGS

The fish are allocated numbers 1-12 of laboratory

F1-6 (Formalin fixed sardines)

There is marked autolysis of all fish and the ventral abdominal muscles are absent. The abdominal organs are exteriorized.

F7-12

There is putrefaction of all fish and the ventral abdominal muscles are absent. The abdominal organs are exteriorized.

GROSS SUMMARY

Unremarkable gross findings F1-12

SAMPLES COLLECTED & TESTING

F1-5

Alimentary tract, kidney, heart (only some fish), gills, skin, eye, brain will be processed for histopathology.

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH:

Clause 7(1)(c)

Report Addressee:

DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Tested on 24/05/25

Reported on 24/05/25 19:30

Referred on 22/05/25 **by:**

DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:

EYRE/YORKE PENINSULA

EYRE 5121

Animal/s:

Fish - fin

PICHARDS

DOB: N/A

Collected: 22/05/25 00:25 **Subm.No:**

Clause 7(1)(c)

Lab No.:

Clause 7(1)(c)

Samples tested as received

F6

Formalin fixed Alimentary tract, kidney, heart (only some fish), gills, skin, eye, brain are stored.

F7-12

F7-9: Formalin fixed Alimentary tract, kidney, heart, gills, skin, eye, brain, where present in the fish are stored.

F7-12: Fresh kidney is stored frozen if molecular biology testing is required. The sample is not suitable for microbiological culture.

COMMENTS

There are no remarkable gross findings. As you have suggested, if these were wild catch which were lost by fisherman then they will be unremarkable.

The autolytic changes will limit histological findings for F1-5 but histopathology is in progress as you requested.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

athologist

Clause 6(1), 7(1)(c)

Validated by

Clause 6(1), 7(1)(c)

From: [REDACTED]
To: [Bansemer, Matthew \(PIRSA\)](#)
Subject: PATH RESULTS: EYREYORKE PENINSULA, PICHARDS (Fi) [REDACTED]
Date: Thursday, 29 May 2025 1:07:23 PM

[REDACTED]

[REDACTED]

RESULTS PH: [REDACTED]

Report Addressee:
DR MATTHEW BANSEMER
33 FLEMINGTON STREET
GLENSIDE SA 5065

Tested on 24/05/25
Reported on 29/05/25 13:30
Referred on 22/05/25 **by:**
DR MATTHEW BANSEMER
33 FLEMINGTON STREET
GLENSIDE SA 5065

Owner:
EYRE/YORKE PENINSULA
EYRE 5121

Animal/s:
Fish - fin
PICHARDS
DOB: N/A

Collected: 22/05/25 00:25 **Subm.No:** [REDACTED]**Lab No.:** [REDACTED]

Samples tested as received**All Tests Complete**

SUMMARY DIAGNOSIS
No diagnosis is concluded

SUMMARY COMMENTS
Based on the laboratory findings a cause of death cannot be concluded.
As you mentioned these fish could be catch lost by fisherman.

[REDACTED]

[REDACTED]

[REDACTED]

Specialist Veterinary Anatomic Pathologist

[REDACTED]

Validated by [REDACTED]

From: Clause 7(1)(c)
To: Bansemer, Matthew (PIRSA)
Subject: PATH RESULTS: EYREYORKE PENINSULA, PICHARDS (Fi) Clause 7(1)(c)
Date: Thursday, 29 May 2025 11:00:19 AM

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH: Clause 7(1)(c)

Report Addressee:

DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Tested on 24/05/25
Reported on 29/05/25 11:30
Referred on 22/05/25 **by:**
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:

EYRE/YORKE PENINSULA

EYRE 5121

Animal/s:

Fish - fin

PICHARDS

DOB: N/A

Collected: 22/05/25 00:25 **Subm.No:** Clause 7(1)(c)

Lab No.: Clause 7(1)(c)

Samples tested as received

HISTOPATHOLOGY FROM NECROPSY

REF: 2025/V HI 932

CLINICAL HISTORY

Please refer to the clinical history on the request form and the clinical notes sent with the request form. A brief summary of the clinical history;

On 22nd May 2025, PIRSA was notified of the Fishkill of sardines at Waterloo Bay at Elliston and on the water adjacent to the Pines between Corny point and Point Souter.

Both reports were associated with lost catch from the commercial side and industry.

Please test the freshest 5 fish from each site by histopathology.

MACROSCOPY

Cassettes 1-5 A-D correspond to F1-5; tissues include heart, gill, kidney skeletal muscle, pyloric caecae, distal intestines, stomach, swim bladder, gonad skin, gill, brain, eye, bone of cranium; please note, due to post mortem autolytic changes not all organs are present at necropsy for each fish; Ae GK

Please note the containers with the fish were not labeled with any sites.

MICROSCOPY

F1-5

There is moderate autolysis and post mortem changes of all tissues, including loss of epidermis and gill epithelium and replacement by abundant mixed bacteria. Aside from these artefact changes the following changes are found

F5

Pyloric caecae: Within the lumen of the pyloric caecae are rare cross sections of cestodes (smooth tegument, spongy parenchyma with calcareous corpuscles and central sucker).

Those tissues not described are unremarkable.

DIAGNOSIS

F1-4

Unremarkable histological findings

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH:

Clause 7(1)(c)

Report Addressee:

DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Tested on 24/05/25

Reported on 29/05/25 11:30

Referred on 22/05/25 **by:**

DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:

EYRE/YORKE PENINSULA

EYRE 5121

Animal/s:

Fish - fin

PICHARDS

DOB: N/A

Collected: 22/05/25 00:25 **Subm.No:**

Clause 7(1)(c)

Lab No.:

Clause 7(1)(c)

Samples tested as received

F5

Enteric cestodiasis, (likely tetraphyllidea)

COMMENTS

There are no laboratory findings to explain the cause of death for the sardines. Autolysis and lack of organs has limited histological investigation for infectious pathogens and other histological changes. As you mentioned the fish could be fishery catches which were lost from their boats.

Enteric cestodiasis (likely Tetraphyllidea) are normal findings in a range of pelagic fish including sardines.

In the limited range of tissues examined, there are no gross or histopathological findings consistent with disease due to South Australian notifiable listed diseases or pathogens for fin fish (Livestock Act 1997, Livestock Regulations 2013).

There are no findings consistent with:

Viral Nervous Necrosis, Viral Encephalopathy and Retinopathy (Disease due to Betanodavirus)

Disease due to Epizootic haematopoietic necrosis virus / iridovirus infection

Streptococcal meningitis

Mycobacteriosis

Nocardiosis

Disease due to Myxobolus (Myxosoma) cerebralis (no myxosporidial organisms are seen in the bony cranium)

Epizootic Ulcerative Syndrome (disease due to Aphanomyces invadens)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by

Clause 6(1), 7(1)(c)

From: Clause 7(1)(c)
To: Bansemer, Matthew (PIRSA)
Subject: PATH RESULTS: REEF FISH MORTALITY, (Fi) Clause 7(1)(c)
Date: Saturday, 12 April 2025 1:00:22 PM

Clause 7(1)(c)

LABORATORY Clause 7(1)(c)

Clause 6(1), 7(1)(c)

33 FLEMINGTON STREET
GLENSIDE**RESULTS PH:** Clause 7(1)(c)**Report Addressee:**DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Tested on 12/04/25
Reported on 12/04/25 13:30
Referred on 10/04/25 **by:**
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:

REEF FISH MORTALITY

VICTOR HARBOR 5211

Animal/s:

Fish - fin

DOB: N/A

Collected: 10/04/25 00:25 **Subm.No.:** Clause 7(1)(c) **Lab No.:** Clause 7(1)(c)

Samples tested as received

NECROPSY REPORT

CLINICAL HISTORY

Please refer to the clinical history on the request form and the clinical notes sent with the request form. A brief summary of the clinical history;
April 10, 2025 RecFish SA informed purser of a mortality event from Victor Harbor (suspected due to ongoing L Bloom) and the collection of 2 reef fish and 2 rock crabs had occurred.

SAMPLES SUBMITTED

2 x reef fish

NECROPSY FINDINGS

Both animals are in good body condition and there are moderate autolytic changes. One fish is 190mm and the other 90mm long.

GROSS SUMMARY

Unremarkable gross findings

SAMPLES COLLECTED & TESTING

Fixed tissues will be processed for histopathology.
Gill, kidney, liver, spleen, brain are stored frozen from F1-2 and kidney swab is also stored from F1-2.

COMMENTS

The gross findings are unremarkable.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

Clause 7(1)(c)

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

33 FLEMINGTON STREET
GLENSIDE

RESULTS PH: Clause 7(1)(c)

Report Addressee:
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Tested on 12/04/25
Reported on 12/04/25 13:30
Referred on 10/04/25 **by:**
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:
REEF FISH MORTALITY

VICTOR HARBOR 5211

Animal/s:
Fish - fin

DOB: N/A

Collected: 10/04/25 00:25 **Subm.No:** Clause 7(1)(c)

Lab No.: Clause 7(1)(c)

Samples tested as received

CASE MANAGEMENT DETAILS

Case Managed by:
Case Management Requested by: PIRSA
Case Management Requested on: 12/04/25

Clause 6(1), 7(1)(c)

Case Details: Mortality event of marine animals at
Victor Harbor

From: Clause 7(1)(c)
To: Bansemer, Matthew (PIRSA)
Subject: PATH RESULTS: REEF FISH MORTALITY, (Fi) Clause 7(1)(c)
Date: Wednesday, 30 April 2025 3:00:54 PM

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH: Clause 7(1)(c)
Report Addressee:
DR MATTHEW BANSEMER
33 FLEMINGTON STREET
GLENSIDE SA 5065

Tested on 12/04/25
Reported on 30/04/25 15:30
Referred on 10/04/25 **by:**
DR MATTHEW BANSEMER
33 FLEMINGTON STREET
GLENSIDE SA 5065

Owner:
REEF FISH MORTALITY
VICTOR HARBOR 5211

Animal/s:
Fish - fin
DOB: N/A

Collected: 10/04/25 00:25 **Subm.No:** Clause 7(1)(c) **Lab No.:** Clause 7(1)(c)

Samples tested as received

HISTOPATHOLOGY FROM NECROPSY

REF: 2025/V HI 669
FINAL REPORT 30/4/2025

CLINICAL HISTORY

Please refer to the clinical history on the request form and the clinical notes sent with the request form. A brief summary of the clinical history;
April 10, 2025 RecFish SA informed purser of a mortality event from Victor Harbor (suspected due to ongoing L Bloom) and the collection of 2 reef fish and 2 rock crabs had occurred.

MACROSCOPY

Fish are allocated numbers 1 and 2 at the laboratory
1A-E and 2A-F correlate to F1-2; tissues for each fish include gill, skin, kidney, eye, liver, heart, brain, alimentary tract

Sections of cranium are being decalcified.

MICROSCOPY

F1-2
There is moderate autolysis of the alimentary sections, kidney, gills, heart, spleen, brain.

All other tissues including eye, skin, heart are histologically unremarkable.

DIAGNOSIS

F1-2
Unremarkable histological findings

COMMENTS

There are no findings consistent with:
Viral Nervous Necrosis, Viral Encephalopathy and Retinopathy in the eyes of both fish (Disease due to Barramundi Betanodavirus). The brain was too autolyzed to look for histological changes.

Findings consistent with Epizootic Ulcerative Syndrome (*Aphanomyces invadens* infection) are not evident in the skin of both fish.

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH:

Clause 7(1)(c)

Report Addressee:
DR MATTHEW BANSEMER
33 FLEMINGTON STREET
GLENSIDE SA 5065

Tested on 12/04/25
Reported on 30/04/25 15:30
Referred on 10/04/25 **by:**
DR MATTHEW BANSEMER
33 FLEMINGTON STREET
GLENSIDE SA 5065

Owner:
REEF FISH MORTALITY
VICTOR HARBOR 5211

Animal/s:
Fish - fin
DOB: N/A

Collected: 10/04/25 00:25 **Subm.No:**

Clause 7(1)(c)

Lab No.:

Clause 7(1)(c)

Samples tested as received

Cranium for both fish are being decalcified for examination of Myxobolus cerebralis.

Autolysis has limited examination for other diseases due to South Australian notifiable listed pathogens in finfish (Livestock Act 1997, Livestock Regulations 2013).

MACROSCOPY 30/4/2025
1E: cross section of cranium
2F: cross section of cranium

MICROSCOPY
F1-2
Cranium: The cranium appears normal.

COMMENTS
Myxobolus cerebralis is not found in the cranium of either fish.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by

Clause 6(1), 7(1)(c)

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH:

Clause 7(1)(c)

Report Addressee:

DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Tested on 12/04/25

Reported on 30/04/25 15:30

Referred on 10/04/25 **by:**

DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:

REEF FISH MORTALITY

VICTOR HARBOR 5211

Animal/s:

Fish - fin

DOB: N/A

Collected: 10/04/25 00:25 **Subm.No:**

Clause 7(1)(c)

Lab No.:

Clause 7(1)(c)

Samples tested as received

SUMMARY DIAGNOSIS

No diagnosis is concluded

SUMMARY COMMENTS

The cause for the fish deaths is not determined. Their deaths may be related to the *Karenia Mikimotoi* algal bloom.

There are no findings consistent with:

Viral Nervous Necrosis, Viral Encephalopathy and Retinopathy in the eyes of both fish (Disease due to *Barramundi Betanodavirus*). The brain was too autolyzed to look for histological changes.

Findings consistent with Epizootic Ulcerative Syndrome (*Aphanomyces invadens* infection) are not evident in the skin of both fish.

Myxobolus cerebralis is not evident in the cranium.

Autolysis has limited examination for other diseases due to South Australian notifiable listed pathogens in finfish (Livestock Act 1997, Livestock Regulations 2013).

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Primary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by

Clause 6(1), 7(1)(c)

From: Clause 7(1)(c)
To: Bansemer, Matthew (PIRSA)
Subject: PATH RESULTS: REEF FISH MORTALITY, (Fi) Clause 7(1)(c)
Date: Saturday, 19 April 2025 4:00:36 PM

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH: Clause 7(1)(c)
Report Addressee:
DR MATTHEW BANSEMER
33 FLEMINGTON STREET
GLENSIDE SA 5065

Tested on 12/04/25
Reported on 19/04/25 16:30
Referred on 10/04/25 **by:**
DR MATTHEW BANSEMER
33 FLEMINGTON STREET
GLENSIDE SA 5065

Owner:
REEF FISH MORTALITY
VICTOR HARBOR 5211

Animal/s:
Fish - fin
DOB: N/A

Collected: 10/04/25 00:25 **Subm.No:** Clause 7(1)(c) **Lab No.:** Clause 7(1)(c)

Samples tested as received

HISTOPATHOLOGY FROM NECROPSY

REF: 2025/V HI 669
INTERIM REPORT 19/4/2025

CLINICAL HISTORY

Please refer to the clinical history on the request form and the clinical notes sent with the request form. A brief summary of the clinical history;
April 10, 2025 RecFish SA informed purser of a mortality event from Victor Harbor (suspected due to ongoing L Bloom) and the collection of 2 reef fish and 2 rock crabs had occurred.

MACROSCOPY

Fish are allocated numbers 1 and 2 at the laboratory
1A-E and 2A-F correlate to F1-2; tissues for each fish include gill, skin, kidney, eye, liver, heart, brain, alimentary tract

Sections of cranium are being decalcified.

MICROSCOPY

F1-2
There is moderate autolysis of the alimentary sections, kidney, gills, heart, spleen, brain.

All other tissues including eye, skin, heart are histologically unremarkable.

DIAGNOSIS

F1-2
Unremarkable histological findings

COMMENTS

There are no findings consistent with:
Viral Nervous Necrosis, Viral Encephalopathy and Retinopathy in the eyes of both fish (Disease due to Barramundi Betanodavirus). The brain was too autolyzed to look for histological changes.

Findings consistent with Epizootic Ulcerative Syndrome (*Aphanomyces invadens* infection) are not evident in the skin of both fish.

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH:

Clause 7(1)(c)

Report Addressee:

DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Tested on 12/04/25
Reported on 19/04/25 16:30
Referred on 10/04/25 **by:**

DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:

REEF FISH MORTALITY

VICTOR HARBOR 5211

Animal/s:

Fish - fin

DOB: N/A

Collected: 10/04/25 00:25 **Subm.No:**

Clause 7(1)(c)

Lab No.:

Clause 7(1)(c)

Samples tested as received

Cranium for both fish are being decalcified for examination of Myxobolus cerebralis.

Autolysis has limited examination for other diseases due to South Australian notifiable listed pathogens in finfish (Livestock Act 1997, Livestock Regulations 2013).

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Primary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by

Clause 6(1), 7(1)(c)

.

From: [redacted]
To: [Bansemer, Matthew \(PIRSA\)](#)
Subject: PATH RESULTS: ROCK CRAB MORTALITY, (Cr) [redacted]
Date: Wednesday, 30 April 2025 3:00:57 PM

[redacted]
LABORATORY [redacted]
[redacted]
33 FLEMINGTON STREET
GLENSIDE
RESULTS PH: [redacted]

Report Addressee:
DR MATTHEW BANSEMER
33 FLEMINGTON STREET
GLENSIDE SA 5065

Tested on 12/04/25
Reported on 30/04/25 15:30
Referred on 10/04/25 **by:**
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:
ROCK CRAB MORTALITY
VICTOR HARBOR 5211

Animal/s:
Crustacean
DOB: N/A

Collected: 10/04/25 00:25 **Subm.No:** [redacted] **Lab No.:** [redacted]

Samples tested as received

All Tests Complete

SUMMARY DIAGNOSIS
No diagnosis is concluded

SUMMARY COMMENTS
The recent *Karenia mikimotoi* algal bloom may have contributed to the deaths of the crabs.

There are no gross or histological findings consistent with *Aphanomyces astaci*. Autolysis has limited investigation for other diseases due to other South Australian notifiable pathogens for crustaceans (Livestock Act 1997, Livestock Regulations 2013).

[redacted]
[redacted]
[redacted]
[redacted] pathologist

Validated by [redacted]

Clause 7(1)(c)

LABORATORY Clause 7(1)(c)

Clause 6(1), 7(1)(c)

33 FLEMINGTON STREET
GLENSIDE

RESULTS PH: Clause 7(1)(c)

Report Addressee:
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Tested on 12/04/25
Reported on 30/04/25 15:30
Referred on 10/04/25 by:
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:
ROCK CRAB MORTALITY

VICTOR HARBOR 5211

Animal/s:
Crustacean

DOB: N/A

Collected: 10/04/25 00:25 Subm.No: Clause 7(1)(c)

Lab No.: Clause 7(1)(c)

Samples tested as received

All Tests Complete

HISTOPATHOLOGY FROM NECROPSY

REF: 2025/V HI 668
FINAL 30/4/2025

CLINICAL HISTORY

Please refer to the clinical history on the request form and the clinical notes sent with the request form. A brief summary of the clinical history; April 10, 2025 RecFish SA informed purser of a mortality event from Victor Harbor (suspected due to ongoing L Bloom) and the collection of 2 reef fish and 2 rock crabs had occurred.

SAMPLES SUBMITTED
2 x rock crabs

MACROSCOPY

Slides 1A-E and 2A-E correspond to crabs 1-2
The organs for each crab include gills, digestive gland, stomach, heart, skeletal muscle
Please note the antennal gland and ganglia were too autolyzed to recover for histology.

carapace is being decalcified

MICROSCOPY

Crabs 1-2
There is moderate autolysis of all tissues. There are no other remarkable findings

DIAGNOSIS

There are no remarkable histological findings

COMMENTS

There are no gross findings consistent with *Aphanomyces astaci*. Further sections of carapace / cuticle are pending. Autolysis has limited investigation for other diseases due to other South Australian notifiable pathogens for crustaceans (Livestock Act 1997, Livestock Regulations 2013).

MACROSCOPY 30/4/025

1F: Crab 1 carapace, dermis and skeletal muscle

2F: Crab 2 carapace, dermis and skeletal muscle

Clause 7(1)(c)

LABORATORY Clause 7(1)(c)

Clause 6(1), 7(1)(c)

33 FLEMINGTON STREET
GLENSIDE

RESULTS PH: Clause 7(1)(c)

Report Addressee:

DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Tested on 12/04/25

Reported on 30/04/25 15:30

Referred on 10/04/25 **by:**

DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:

ROCK CRAB MORTALITY

VICTOR HARBOR 5211

Animal/s:

Crustacean

DOB: N/A

Collected: 10/04/25 00:25 **Subm.No:** Clause 7(1)(c)

Lab No.: Clause 7(1)(c)

Samples tested as received

All Tests Complete

MICROSCOPY

Crabs 1 and 2

Carapace, dermis and skeletal muscle: All tissues appear normal.

COMMENTS

There are no findings consistent with *Aphanomyces astaci*. Autolysis has limited investigation for other diseases due to other South Australian notifiable pathogens for crustaceans (Livestock Act 1997, Livestock Regulations 2013).

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Primary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

From: Clause 7(1)(c)
To: Bansemer, Matthew (PIRSA)
Subject: PATH RESULTS: ROCK CRAB MORTALITY, (Cr) Clause 7(1)(c)
Date: Saturday, 12 April 2025 1:00:21 PM

Clause 7(1)(c)

LABORATORY Clause 7(1)(c)

Clause 6(1), 7(1)(c)

33 FLEMINGTON STREET
GLENSIDE**RESULTS PH:** Clause 7(1)(c)**Report Addressee:**DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Tested on 12/04/25
Reported on 12/04/25 13:30
Referred on 10/04/25 **by:**
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:

ROCK CRAB MORTALITY

VICTOR HARBOR 5211

Animal/s:

Crustacean

DOB: N/A

Collected: 10/04/25 00:25 **Subm.No.:** Clause 7(1)(c) **Lab No.:** Clause 7(1)(c)

Samples tested as received

NECROPSY REPORT

CLINICAL HISTORY

Please refer to the clinical history on the request form and the clinical notes sent with the request form. A brief summary of the clinical history;
April 10, 2025 RecFish SA informed purser of a mortality event from Victor Harbor (suspected due to ongoing L Bloom) and the collection of 2 reef fish and 2 rock crabs had occurred.

SAMPLES SUBMITTED

2 x rock crabs

NECROPSY FINDINGS

Both animals are in good body condition and there are moderate autolytic changes. Each has a carapace approximately 90mm across.

GROSS SUMMARY

Unremarkable gross findings

SAMPLES COLLECTED & TESTING

Fixed tissues will be processed for histopathology.
Gill is stored frozen from F1-2 and haemolymph swab is also stored from F1-2.

COMMENTS

Unremarkable gross findings

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

Clause 7(1)(c)

LABORATORY Clause 7(1)(c)

Clause 6(1), 7(1)(c)

33 FLEMINGTON STREET
GLENSIDE

RESULTS PH: Clause 7(1)(c)

Report Addressee:

DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Tested on 12/04/25

Reported on 12/04/25 13:30

Referred on 10/04/25 by:

DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:

ROCK CRAB MORTALITY

VICTOR HARBOR 5211

Animal/s:

Crustacean

DOB: N/A

Collected: 10/04/25 00:25 Subm.No: Clause 7(1)(c)

Lab No.: Clause 7(1)(c)

Samples tested as received

CASE MANAGEMENT DETAILS

Case Managed by:

Case Management Requested by: PIRSA

Case Management Requested on: 12/04/25

Case Details:

Mortality event of marine animals at
Victor Harbor.

From: Clause 7(1)(c)
To: Bansemer, Matthew (PIRSA)
Subject: PATH RESULTS: ROCK CRAB MORTALITY, (Cr) Clause 7(1)(c)
Date: Saturday, 19 April 2025 4:00:37 PM

Clause 7(1)(c)

LABORATORY Clause 7(1)(c)

Clause 6(1), 7(1)(c)

33 FLEMINGTON STREET
GLENSIDE 5065

RESULTS PH: Clause 7(1)(c)

Report Addressee:

DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Tested on 12/04/25
Reported on 19/04/25 16:30
Referred on 10/04/25 **by:**
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:

ROCK CRAB MORTALITY

VICTOR HARBOR 5211

Animal/s:

Crustacean

DOB: N/A

Collected: 10/04/25 00:25 **Subm.No:** Clause 7(1)(c)

Lab No.: Clause 7(1)(c)

Samples tested as received

HISTOPATHOLOGY FROM NECROPSY

REF: 2025/V HI 668
INTERIM FINDINGS 19/4/2025

CLINICAL HISTORY

Please refer to the clinical history on the request form and the clinical notes sent with the request form. A brief summary of the clinical history; April 10, 2025 RecFish SA informed purser of a mortality event from Victor Harbor (suspected due to ongoing L Bloom) and the collection of 2 reef fish and 2 rock crabs had occurred.

SAMPLES SUBMITTED

2 x rock crabs

MACROSCOPY

Slides 1A-E and 2A-E correspond to crabs 1-2

The organs for each crab include gills, digestive gland, stomach, heart, skeletal muscle

Please note the antennal gland and ganglia were too autolyzed to recover for histology.

carapace is being decalcified

MICROSCOPY

Crabs 1-2

There is moderate autolysis of all tissues. There are no other remarkable findings

DIAGNOSIS

There are no remarkable histological findings

COMMENTS

There are no gross findings consistent with *Aphanomyces astaci*. Further sections of carapace / cuticle are pending. Autolysis has limited

investigation for other diseases due to other
South Australian notifiable pathogens for crustaceans (Livestock Act
1997, Livestock Regulations 2013).

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 7(1)(c)

LABORATORY Clause 7(1)(c)

Clause 6(1), 7(1)(c)

33 FLEMINGTON STREET
GLENSIDE

RESULTS PH: Clause 7(1)(c)

Report Addressee:

DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Tested on 12/04/25

Reported on 19/04/25 16:30

Referred on 10/04/25 by:

DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:

ROCK CRAB MORTALITY

VICTOR HARBOR 5211

Animal/s:

Crustacean

DOB: N/A

Collected: 10/04/25 00:25 Subm.No: Clause 7(1)(c)

Lab No.: Clause 7(1)(c)

Samples tested as received

Specialist Veterinary Anatomic Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

From: Clause 7(1)(c)
To: Bansemer, Matthew (PIRSA)
Subject: PATH RESULTS: SHARK GREAT WHITE, (Fi) Clause 7(1)(c)
Date: Monday, 12 May 2025 1:00:39 PM

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH: Clause 7(1)(c)

Report Addressee:
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Tested on 06/05/25
Reported on 12/05/25 13:30
Referred on 05/05/25 **by:**
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:
SHARK GREAT WHITE
HENLEY BEACH 5022

Animal/s:
Fish
DOB: N/A

Collected: 05/05/25 00:25 **Subm.No:** Clause 7(1)(c)

Lab No.: Clause 7(1)(c)

Samples tested as received

MICROBIOLOGY

SPECIMEN: Gill
ANIMAL ID: SHARK

MICROSCOPY

No bacteria seen.

CULTURE

1. Light growth of *Vibrio harveyi*
2. Light growth of Mixed organisms

Clause 7(1)(c) sing the Clause 7(1)(c) at Clause 7(1)(c).

Final Report
12/05/25
Validated by Clause 6(1), 7(1)(c), Laboratory Scientist.

From: Clause 7(1)(c)
To: Bansemer, Matthew (PIRSA)
Subject: PATH RESULTS: SHARK GREAT WHITE, (Fi) Clause 7(1)(c)
Date: Friday, 16 May 2025 6:00:26 PM

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH: Clause 7(1)(c)

Report Addressee:
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Tested on 06/05/25
Reported on 16/05/25 18:30
Referred on 05/05/25 **by:**
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:
SHARK GREAT WHITE

HENLEY BEACH 5022

Animal/s:
Fish

DOB: N/A

Collected: 05/05/25 00:25 **Subm.No:** Clause 7(1)(c) **Lab No.:** Clause 7(1)(c)

Samples tested as received

SUMMARY FINDINGS

Gills: Branchitis, proliferative, neutrophilic, mild, multifocal, subacute to chronic with rare individual lamellar epithelial cells loss (necrosis) and intralesional bacteria

SUMMARY COMMENTS

There are no conclusive findings in the gill to explain the cause of the shark's death.

Thanks for taking the time to discuss this submission on 14/5/2025. As you mentioned, based on testing from Analytical Services Tasmania, brevetoxin was detected on the gills (pers comms from Dr M. Bansemer). This is an uncommon and significant finding. Within the range of histological changes there is very individual mild lamellar epithelial necrosis, which can be caused by dinoflagellate microalgal such as *Karenia* sp.

In summary, laboratory findings to date raise concerns for *Karenia* sp. (which produce brevetoxin) contributing to the shark's death. However, in the absence of algal counts taken in the vicinity of the shark (off Henley Beach), this cannot be confirmed as the cause of death.

Microbiological culture for gill associated bacterial pathogens are in progress at Dept Agriculture DDLS, growth including *Vibrio* *harveyi* isolated from the gills at Clause 7(1)(c) is not clinically significant.

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

From: Clause 7(1)(c)
To: Bansemer, Matthew (PIRSA)
Subject: PATH RESULTS: SHARK GREAT WHITE, (Fi) Clause 7(1)(c)
Date: Thursday, 8 May 2025 6:00:21 PM

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH: Clause 7(1)(c)

Report Addressee:
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Tested on 06/05/25
Reported on 08/05/25 18:30
Referred on 05/05/25 **by:**
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:
SHARK GREAT WHITE

HENLEY BEACH 5022

Animal/s:
Fish

DOB: N/A

Collected: 05/05/25 00:25 **Subm.No:** Clause 7(1)(c) **Lab No.:** Clause 7(1)(c)

Samples tested as received

HISTOPATHOLOGY FROM NECROPSY

REF: 2025/V HI 805

CLINICAL HISTORY

This is a summary of the clinical history from the request form. Please refer to the request form for the full history.

On 5 May 2025 PIRSA were notified of a Great white shark washed up on to Henley Beach. An algal bloom (*Karenia mikimotoi* cells up to 1.5 million / L) was observed near this site

MACROSCOPY

One pot labeled "immediately PM" contains 2 gill filaments.
Cassette 805 contains all pieces of tissue; Ae GK

MICROSCOPY

Gills: Multifocally approximately affecting 10 to 15% of lamellae there are the following range of changes. The interstitium is expanded by low numbers of neutrophils, multifocally there is rare loss of lamellar epithelium with filamentous bacteria adhered to the sites of epithelial loss. The overlying lamellar epithelium is multifocally hypertrophic and there are rare foci of lamellar epithelial hyperplasia.

DIAGNOSIS

Gills: Branchitis, proliferative, neutrophilic, mild, multifocal, subacute to chronic with rare individual epithelial cells loss and intralesional bacteria

COMMENTS

There is a range of histological changes. There is mild multifocal chronic epithelial hyperplasia. This is a non-specific change and can be due to multiple factors including parasitism (e.g. *Amyloodinium* sp.), exposure to benthic sediment, bacteria etc. The bacterial colonization seen in these gill sections is very mild and unlikely the primary cause for the changes. The individual cell necrosis is very mild and likely acute to subacute. Differential diagnoses include diatom or dinoflagellate algae e.g *Karenia mikimotoi* (which was recently recorded in South Australia), jellyfish (uncommon this time of year) etc.

There are no conclusive findings in the gill to explain the cause of the shark's death.

Clause 6(1), 7(1)(c)

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH: Clause 7(1)(c)

Report Addressee:
DR MATTHEW BANSEMER
33 FLEMINGTON STREET
GLENSIDE SA 5065

Tested on 06/05/25
Reported on 08/05/25 18:30
Referred on 05/05/25 **by:**
DR MATTHEW BANSEMER
33 FLEMINGTON STREET
GLENSIDE SA 5065

Owner:
SHARK GREAT WHITE
HENLEY BEACH 5022

Animal/s:
Fish
DOB: N/A

Collected: 05/05/25 00:25 **Subm.No:** Clause 7(1)(c) **Lab No.:** Clause 7(1)(c)

Samples tested as received

Clause 6(1), 7(1)(c)

Clause 6(1), 7(1)(c)

Pathologist

Clause 6(1), 7(1)(c)

Validated by Clause 6(1), 7(1)(c)

From: Clause 7(1)(c)
To: Bansemer, Matthew (PIRSA)
Subject: PATH RESULTS: SHARK GREAT WHITE, (Fi) Clause 7(1)(c)
Date: Tuesday, 6 May 2025 1:30:20 PM

Clause 7(1)(c)

Clause 6(1), 7(1)(c)

RESULTS PH: Clause 7(1)(c)

Report Addressee:
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Tested on 06/05/25
Reported on 06/05/25 14:00
Referred on 05/05/25 **by:**
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:
SHARK GREAT WHITE
HENLEY BEACH 5022

Animal/s:
Fish
DOB: N/A

Collected: 05/05/25 00:25 **Subm.No:** Clause 7(1)(c)

Lab No.: Clause 7(1)(c)

Samples tested as received

MICROBIOLOGY

SPECIMEN: Gill
ANIMAL ID: SHARK

MICROSCOPY

No bacteria seen.

CULTURE

1. Light growth of Mixed organisms

COMMENT: Culture is continuing.

INTERIM REPORT
06/05/25

Validated by Clause 6(1) 7(1)(c) Laboratory Scientist.

From: Clause 7(1)(c)
To: Bansemer, Matthew (PIRSA)
Subject: PATH RESULTS: SHARK GREAT WHITE, (F) Clause 7(1)(c)
Date: Friday, 23 May 2025 3:00:36 PM

Clause 7(1)(c)

Clause 8(1), 7(1)(c)

RESULTS PH: Clause 7(1)(c)

Report Addressee:
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Tested on 06/05/25
Reported on 23/05/25 15:30
Referred on 05/05/25 **by:**
DR MATTHEW BANSEMER
33 FLEMINGTON STREET

GLENSIDE SA 5065

Owner:
SHARK GREAT WHITE
HENLEY BEACH 5022

Animal/s:
Fish
DOB: N/A

Collected: 05/05/25 00:25 **Subm.No:** Clause 7(1)(c)**Lab No.:** Clause 7(1)(c)

Samples tested as received

All Tests Complete

REFERRED TEST

Disease/Test : Culture for Tenacibaculum species
Specimen Type: Gill

RESULT : Negative

This test was performed by:

Clause 7(1)(c)
Clause 7(1)(c)

NATA Accreditation Number: 13724

Validated by Clause 8(1), 7(1)(c) Laboratory Scientist.

REFERRED TEST

Disease/Test : Culture for routine fish bacteria
Specimen Type: Gill

RESULT : no significant isolates

This test was performed by:

Clause 7(1)(c)
Clause 7(1)(c)

NATA Accreditation Number: 13724

Validated by Clause 6(1), 7(1)(c) Laboratory Scientist.