

Case No:	2024-0145	Date of visit:	21/05/2024			
Time spent on site:	6 hours	Main Inspector:				
Site No:	FS1312	Site Name:	Skelwick Skerry			
Business No:	FB0095	Business Name:	Cooke Aquaculture Scotland Ltd			
Case Types:	1 STI	2 DIA	3 REP	4	5	6
Water Temp (°C):	10.07	Thermometer No:	T310	FHI 045 completed	N/A	
Observations:	Region:	OR	Water type:	S	CoGP MA:	O-1
Dead/weak/abnormally behaving fish present?	Y	If yes, see additional information/clinical score sheet.				
Clinical signs of disease observed?	Y	If yes, see additional information/clinical score sheet.				
Gross pathology observed?	N	If yes, see additional information/clinical score sheet.				
Diagnostic samples taken?	Y					

UNI/REG only - if unable to carry out intended visit detail reason below:

**Additional Case Information:**

A visit is being conducted at Skelwick Skerry after receiving notification from the company that positive BKD results have been found by a Pharmaq vet carrying out routine inspections. At the time of notification (two weeks prior to the visit on 8th May), no raised mortality was observed on site.

External vet (Pharmaq routine visit for upcoming harvest) had one positive result for BKD when sampling last week (sampled only 4 moribund fish). This fish had some clinical signs - granulomas on spleen and this is why it was tested for BKD. Staff on site have been vigilant for BKD since Chalmers Hope outbreak and have not been seeing any signs of clinical disease when looking at moribunds etc.

Mortalities are now going to be sent by separate bulker - in line with what is done at Chalmers Hope. No mortality movements have been done since site got positive result. Mortalities are removed by ROV on site and delivered to Dounby Yard in their own tanker which will then be disinfected completely.

Fish have been on site since January and have come on from Bay of Cleat North (FS1080) and Vestness (FS1210).

Mortality - Week 20 mortality had 445 fish down as 'environmental mortality' - PGD, jellyfish, plankton. Since the movement restriction order was put in place last week no mortality uplifting has taken place on site until the mortality movement SOP has been put in place.

Mortality since last visit - very low, rarely above 1, in the last cycle the mortality only increased above 1 in the last 3 weeks of the cycle shortly before fallowing. These mortality were mainly attributed to heart disease and handling.

Fish are organic and have had no treatments other than freshwater or T.M.S for health checks.

Health wise - AGD when fish first came on to site and were transported in freshwater. Little bit of PGD and gill bleeding. Few fish with sores observed but these are determined to likely be from seals trying to grab them through the net.

Health report - Internal health report 7th May 2024 - routine inspection "fish are looking in good condition and appear to be feeding well. Environmental damage observed as well as some gill bleeding. AGD 0-1 non AGD (PGD) 0-4"

Increased plankton counts over the last 4/5 weeks but not high enough to stop feeding.

Inspection of site: All eight pens were inspected. Despite no uplift of mortality for a few days, no dead fish were seen floating on the surface of the water. Due to the overcast day and dark waters, it was difficult to observe fish. Fish seen just below the water surface or jumping from the water appeared healthy, a good weight and with no clinical signs of disease. Across the whole farm only 2 fish were observed to be of poor health. One fish in pen 5 had a 2 inch sized facial lesion (top of head missing and exophthalmic eyes) - staff tried netting the fish out however the fish swam off quickly when approached. It will be removed if staff are able to catch it.

A moribund fish was observed in pen 3 swimming slowly with a weak body condition (runt looking), an exophthalmic eye, had a higher lice load and was easily caught with the hand net. A one fish diagnostic of this fish was taken. Upon inspecting the fish internally, no clinical signs of disease were observed. There was still a bit of fat surrounding the pyloric caeca and spleen however no food was observed in the hind gut.

Case No: 2024-0145 Site No: FS1312

Date of Visit: 21/05/2024

Inspector(s):

**Registration/Authorisation Details**

1. Business/site details summary checked by site representative?

Y

2. Changes made to details?

N

**Site Details (include cleaner fish for all sections)**

Total No facilities	8	Facilities stocked	8	No facilities inspected	8
Species	SAL				
Age group	23 S1				
No Fish	353,592				
Mean Fish Wt	5.0kg				
Next Fallow Date (Site)	October 2024	Next Input Date (Site)	Mid-December 2024		
Recent (last 4 wks) disease problems?		Y	Any escapes (since last visit)?		N
If yes, detail:	PGD, 1 positive BKD result				

**Movement Records**

1. Movement records available for inspection?

Y

2. Date of last inspection:

17/05/2022

3. Are records complete and correctly entered?

Y

4. Are movement records available for dead fish and waste?

Y

5. Are records complete and correctly entered?

Y

6. Are health certificates for introductions (outwith GB) available?

N/A

**Transport Records**

1. Are any movements carried out by (or on behalf) of the business (not using a STB)?

If yes, is there a system in place for maintenance of transportation records?

**Mortality Records**

1. Mortality records available for inspection?

Y

2. How are mortalities disposed of?

Other (detail)

If other detail: See additional info

3. Mortality records complete and correctly entered?

Y

4. Recent mortality (last 4 wks): Wk17: 0.1% (354), Wk18: 0.16% (563), Wk19: 0.09% (303) and Wk20: 0.21% (730)

5. Evidence of recent increased/atypical mortalities?

N

If yes, facility nos/no mortality per facility/no stock per facility/reason:

6. Any other peaks in mortality during period checked?

Y

If yes, detail: See additional details

7. Have increased (unexplained) mortalities been reported to vet or FHI?

N/A

If yes, detail action:

8. Have 'mortality events' been reported to FHI? If no, enter details on mortality events sheet.

Y

**Treatments and Medicines Records**

1. Recent treatments (see comment)?	<input type="checkbox"/>	Y
If yes, detail:		
If other, detail: T.M.S		
2. Medicines records available for inspection?	<input type="checkbox"/>	Y
3. Are records complete and correctly entered?	<input type="checkbox"/>	Y
4. Are fish in a withdrawal period?	<input type="checkbox"/>	Y
5. If yes, what treatment(s)?		
If other, detail: T.M.S		
6. Are medicines stored appropriately?	<input type="checkbox"/>	Y

**Biosecurity Records**

1. Biosecurity records available for inspection?	<input type="checkbox"/>
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?	<input type="checkbox"/>
3. Has the manner and period in which the APB will notify Scottish Ministers or veterinary professional of any <i>increased (unexplained)</i> mortality at the site been included?	<input type="checkbox"/>
4. Has the action that will be taken in the event that the presence or suspicion of the presence of a listed disease is detected been included and <i>how</i> and <i>when</i> that will be notified to Scottish Ministers?	<input type="checkbox"/>
5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher health status, certification if required)?	<input type="checkbox"/>
6. Have the husbandry and biosecurity measures implemented between each epidemiological unit to minimise transmission of disease been covered (movement of staff, visitors, equipment, live or dead fish etc.)?	<input type="checkbox"/>
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?	<input type="checkbox"/>
8. Have the biosecurity procedures been adequately implemented on site?	<input type="checkbox"/>
If no, detail:	

**Results of Surveillance**

1. Has any animal health surveillance been carried out by, or on behalf of, the business?	<input type="checkbox"/>	Y
2. If yes, are results available for inspection?	<input type="checkbox"/>	Y
3. Any significant results?	<input type="checkbox"/>	Y
If yes, detail (if not detailed under recent disease problems).		See additional information

Records checked between: 17/05/2022 - 21/05/2024

Case no: 2024-0145Site No: FS1312Date of visit/ Sampling: 21/05/202421/0

Priority samples: VI BA PA MG HI

Time sampling starts/ends: 11:00:0011:25:00Inspector: VMD No. 0

Environmental conditions: 1 Cloudy2 Calm345

Summary samples HIST Y BA Y MG Y VI PA Total Samples

Add Fish/Pools - click

	Pool/Fish No	1											
	Fish nos	1											
	Pool Group												
Stock Details	Species	SAL											
	Average weight	5kg											
	Sex	N/A											
	Water Type	SW											
		Bay of Cleat North (FS1080)/Vestness (FS1210)											
	Stock Origin												
	Facility No	3											

05/2024

### Additional Sample Information:

No clinical signs of BKD observed

1

Total Tests assigned

5

[illegible]

Case no:	2024-0145	Site No:	FS1312	Method of killing:	
Date of visit:	21/05/2024	Inspector(s):		Sheet Relevant:	Y

S for strong presence: M for medium presence: W for weak presence

Fish Number										
Time sampled after death (if > 45 minutes)										
External Signs										
Behaviour	Moribund	M								
	Lethargic	S								
	Hanging vertical									
	Spiralling									
	Flashing									
	Loss of equilibrium									
Body	Dark									
	Distended abdomen									
	Anorexic	W								
	Scale Oedema									
Opercula	Shortened	W								
	Flared									
Haemorrhaging	Throat									
	Ventrum									
	Base of fins									
	Elsewhere									
Eyes	Exophthalmic	M								
	Enophthalmic (sunken)									
	Cataract									
	Haemorrhagic									
Gills	Pale									
	Zoned									
	Necrotic									
Lesions	Flank									
	Elsewhere									
Vent	Inflamed									
	Trailing faeces									
Lice Load	Estimate numbers	23								
Internal Signs										
Ascites	Clear									
	Bloody									
Oedema	In tissues									
Heart	Pale/anaemic									
	Granulomas									
	Deformed									
Liver	Petechial haem									
	Gross haem									
	Tissue breakdown									
	Enlarged									
	Colour number(s)	3								
	Granulomas									
	Lesions									
Pyloric caeca	Petechial haem									
	Tubules mauve									
	Lack of fat									
Spleen	Enlarged									
	Granulomas									
Gut	No food present	S								
	Yellow pseudo-faeces									
	External haem									
	Internal haem									
Body wall	Haemorrhaging									
Swim bladder	Haemorrhaging									
	Fluid filled									
Kidney	Swollen									
	Grey									
	Granular									
	Liquefied									
General	Parasites present									
	Anaemia									

Date of visit: 21/05/2024

Fish Number										
Time sampled after death (if > 45 minutes)										
External Signs										
Behaviour	Moribund									
	Lethargic									
	Hanging vertical									
	Spiralling									
	Flashing									
	Loss of equilibrium									
Body	Dark									
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Kidney	Swollen									
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	Liquefied									
General	Parasites present									
	Anaemia									



Additional comments:

Case No:

2024-0145

Date of visit:

21/05/2024

Site No:

FS1312

Inspector:

Results Summary	Freq.	Date of Notification						
		Database	Insp	Phone	Insp	Writing	Insp	2 <sup>nd</sup> Insp
AGD	0/1	27/05/2024		27/05/2024		18/06/2024		
BKD	0/1	24/05/2024		27/05/2024		18/06/2024		
IHN	0/1	27/05/2024		27/05/2024		18/06/2024		
IPN	0/1	27/05/2024		27/05/2024		18/06/2024		
ISA	0/1	27/05/2024		27/05/2024		18/06/2024		
Paranucleospora theridion	1/1	24/05/2024		27/05/2024		18/06/2024		
Piscine myocarditis virus	1/1	27/05/2024		27/05/2024		18/06/2024		
Salmon gill poxvirus	0/1	24/05/2024		27/05/2024		18/06/2024		
SAV	0/1	27/05/2024		27/05/2024		18/06/2024		
NSIG	1/1	13/06/2024		13/06/2024		18/06/2024		
HPAT	1/1	13/06/2024		13/06/2024		18/06/2024		
VHS	0/1	27/05/2024		27/05/2024		18/06/2024		

Report Summary			
Case Type	Date	Insp	2 <sup>nd</sup> Insp
DIA, REP	18/06/2024		
STI	18/06/2024		

# FISH HEALTH INSPECTORATE VISIT REPORT

## SUMMARY FOR INFORMATION OF SITE OPERATOR

<b>BUSINESS No</b>	FB0095	<b>DATE OF VISIT</b>	21/05/2024
<b>SITE No</b>	FS1312	<b>SITE NAME</b>	Skelwick Skerry
<b>CASE No</b>	20240145	<b>INSPECTOR</b>	

### Section 1: Summary

A statutory BKD inspection was carried out at the above site after receiving notification from the company that a positive BKD result has been found on site through a routine inspection with a Pharmaq vet.

During the inspection no mortalities and only 2 moribund fish were observed across the site. Only one of these fish could be caught using the hand net and was removed for initial inspection for clinical signs of BKD. Despite having no external clinical signs, diagnostic sampling was carried out on this fish. During examination, no clinical signs of BKD were observed internally.

Histopathology examination revealed a very minor inflammation at the atrium chamber.

The sampled fish tested positive for *Paranucleospora theridion* and piscine myocarditis virus.

Following the negative PCR result for *Renibacterium salmoninarum* (the causative agent of BKD) and absence of clinical signs of BKD on site, the initial designation notice covering the site has been removed.

Please contact myself or the duty inspector should you require any further information, have any queries regarding this report or if any problems develop.

### Section 2: Case Detail

#### Observations

The company received one positive BKD result after a routine inspection by an external vet where a total of four fish were sampled. After receiving notification from the company of this positive result, a statutory inspection was carried out on site.

Mortality on site ranged between 0.09% and 0.21% across the last four weeks before inspection. The majority of the current mortality on site has been attributed to environmental causes such as jellyfish and plankton resulting in proliferative gill disease (PGD).

During the physical inspection visibility into the pens was reduced due to the dull weather conditions and dark water. Of the fish seen, the majority were observed shoaling beneath the surface with no signs of clinical disease for BKD. Across all eight pens on site a total of two moribund fish were observed. The moribund fish in pen 5 had a 2 inch sized facial lesion and exophthalmic eyes however swam off quickly when approached and could not be caught. The moribund fish in pen 3 was lethargic with an exophthalmic eye and had the appearance of a 'runt' – thin and smaller in size. This fish was caught and taken for diagnostic sampling. Internally this fish appeared healthy with excess fat surrounding the pyloric caeca and spleen however no food was observed in the hind gut.

R09

## Samples

Samples were collected from one fish according to the table below:

Fish number	Facility number	Species	Stage	Origin
1	3	Atlantic Salmon	5kg 2023 S1	Bay of Cleat North (FS1080) / Vestness (FS1210)

## Results

**Bacteriology:** Kidney and gill material were inoculated onto appropriate media for the isolation of bacteria.

No significant bacteria were isolated.

**Virology:** Tissue samples were tested for segments of nucleic acid indicative of the presence of the pathogens specified below using real-time PCR (qPCR).

### Piscine myocarditis virus (PMCV)

Fish Number	Endogenous control Cp value	Cp Values			Reported result
F1	16.92	20.50	20.49	20.60	POSITIVE

Tissue samples tested negative for infectious haematopoietic necrosis virus (IHNV), infectious pancreatic necrosis virus (IPNV), infectious salmon anaemia virus (ISAV), salmonid alphavirus (SAV), salmon gill poxvirus and viral haemorrhagic septicemia virus (VHSV).

**Parasitology:** Fins were collected to determine the presence of *Gyrodactylus salaris* using light microscopy and molecular techniques (PCR).

### Paranucleospora theridion

Fish Number	Endogenous control Cp value	Cp Values			Reported result
F1	22.16	>40	>40	39.20	POSITIVE

The samples tested negative for *Neoparamoeba perurans* (AGD).

**Histology:** Tissue samples of gill, skin and skeletal muscle, heart, pyloric caeca, pancreas, hind gut, liver, spleen and kidney. The tissue samples were fixed in 10% neutral buffered formalin.

Histopathological examination revealed the following:

Gill: Some lamellar tip clubbing.

Skin & Muscle: Within the normal range.

Heart: Small focus of inflammation observed in the atrium chamber. Some epicarditis.

R09

Gut and pyloric caeca: Within the normal range.

Pancreas: Within the normal range.

Liver: Within the normal range.

Kidney: Within the normal range.

Spleen: Within the normal range.

Please contact myself or the duty inspector should you require any further information or have any queries regarding this report.

Signed:



Date: 18/06/2024

Fish Health Inspector

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Scottish Government website at [Fish Health Inspectorate Service Charter - gov.scot \(www.gov.scot\)](https://www.gov.scot/policies/fish-health-inspectorate/)

# FISH HEALTH INSPECTORATE VISIT REPORT

## SUMMARY FOR INFORMATION OF SITE OPERATOR

<b>BUSINESS No</b>	FB0095	<b>DATE OF VISIT</b>	21/05/2024
<b>SITE No</b>	FS1312	<b>SITE NAME</b>	Skelwick Skerry
<b>CASE No</b>	20240145	<b>INSPECTOR</b>	[REDACTED]

### Statutory Inspection

The above site was inspected to ascertain the status of the stock with regard to bacterial kidney disease (BKD) following a report from the company of a positive BKD result.

All epidemiological units were inspected. No clinical signs associated BKD was observed and therefore the initial designation notice covering the site has been withdrawn.

Samples were taken for diagnostic purposes. A separate report will be issued detailing the results of these tests.

If clinical signs of BKD are observed on the site, the Inspectorate must be informed immediately.

Please contact myself or the duty inspector should you require any further information or have any queries regarding this report.

Signed:

[REDACTED]

Date: 18/06/2024

Fish Health Inspector

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Scottish Government website at [Fish Health Inspectorate Service Charter - gov.scot \(www.gov.scot\)](https://www.gov.scot/policies/fish-health-inspectorate/)



Figure 1. External view



Figure 2. Gills



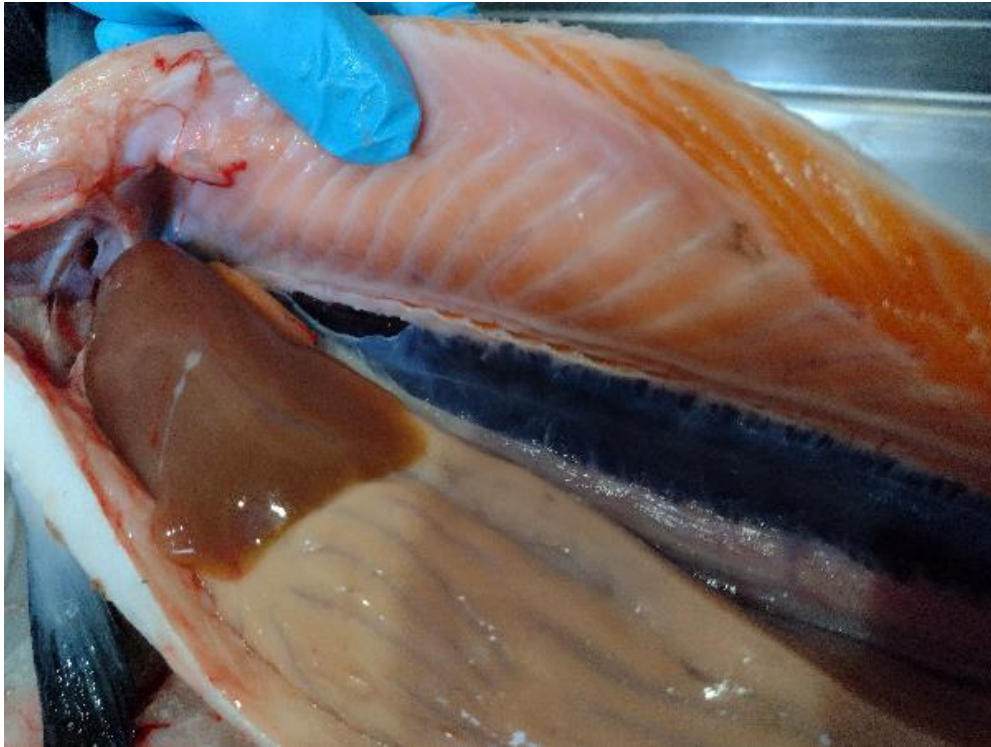


Figure 3. Internal view