

Case No:

2025-0414

Date of visit:

05/11/2025

Additional inspector(s):

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Main Inspector:

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Site No:

FS1290

Site Name:

Shuna SW (Rubh'an Trilleachain)

Business No:

FB0134

Business Name:

Kames Fish Farming Ltd

Case Types:

1 REP

2 DIA

3

4

5

6

Water Temp (°C):

12.58

Thermometer No:

T308

FHI 045 completed

N/A

Observations:

Region: ST

Water type: S

CoGP MA: M-40

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.

Post mortem signs observed?

Y

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:

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Additional Case Information:

Fish transferred from Loch Shell (Caolas a deas) and Trilleachean Mhor in August.

Uplifts morts into bins and taken onto the Hordafor 3 (Pelagia) - waste transfer note inspected 04/11/2025 and taken to Shetland for disposal. Fergusons used on 19/10/2025 - transfer note inspected.

Deadhaul harvest - to Mallaig or Blah Mhor

Pen 8+9 planned to be harvested out on 10/11/2025.

Last treatment was a FW + FLS from 17/10/2025 to 20/10/2025.

During the site inspection, between 25+ lethargic fish were observed in pen 8 and 9, with ~10 in all other pens. No noticeable lesions were observed during the site inspection, but some fish showed signs of healing lice damage on heads. Five moribund/lethargic fish removed and diagnostic samples taken.

Wrasse mortality (last 4 weeks): Wk44; 801, 3.59%; Wk 43, 947, 3.48%; Wk42, 655, 2.35%; Wk41, 215, 0.77%; Wk40, 645, 2.25%. No lumpfish in this production cycle.

Discrepancies in the mortality events was observed between what was notified to FHI and the records held by the site. Specifically, Wk42 (notified of 26952, 9.72%; records show 17980, 6.47%) and WK41 (notified of 4355, 1.55%; records show 3827 1.36%) 2025. Explanation was provided on the reasoning for these discrepancies: an amendment had been made as after counting the fish in the harvest tubs there was found to have been an overestimation of the mortality numbers. The site records are the correct and up to date figures. Updated notifications have been provided (12/11/2025).

Case No: 2025-0414

Site No: FS1290

Date of Visit: 05/11/2025

Main Insp: [REDACTED]

Registration/Authorisation Details

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

2. Changes made to details?

Site Details (include cleaner fish for all sections)

Total No facilities	12	Facilities stocked	6	No facilities inspected	6
Species	Atlantic salmon	Wrasse			
Age group	2024 Q4	2024			
No Fish	177,977	21,294			
Mean Fish Wt	3.6kg	150g			
Next Fallow Date (Site)	End Dec 2025	Next Input Date (Site)	March 2026		
Recent (last 4 wks) disease problems?		Y	Any escapes (since last visit)?		N
If yes, detail:	Pasturella sp., anaemia, PGD, CGD, PRV-1, PMCV				

Movement Records

1. Movement records for **all species** held available for inspection?

2. Date of last inspection: 22/05/2024

3. Are records complete and correctly entered?

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

5. Are records complete and correctly entered?

6. Have all introductions and imports (since last inspection) from outwith the GB health zone been recorded in the movement records?

Transport Records

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

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

Mortality Records

1. Mortality records for **all species** held available for inspection?

2. How are mortalities disposed of? Other (detail)

If other detail: See additional information

3. Mortality records complete and correctly entered?

4. Recent mortality (last 4 wks): 2025: Wk44, 0.82%, 1602 wk43, 2.33%, 6044; Wk42, 6.47%, 17980; Wk41, 1.36%, 3827; Wk40, 0.44%, 1247

5. Evidence of recent increased/atypical mortalities?

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

11/10/2025, pen 10 and 11, 1.46%, 1.09% respectively; 14/10/2025, pen 11, 2.50%; 15/10/2025, pen 2 1.26%; settled 21/10/2025 and then increased 01/11/2025 in pen 8 (0.94% for the day) and 9 on 3/11/2025 (0.57%).

6. Any other peaks in mortality during period checked?

2025 Wk38, 1.75%, 7044; Wrasse 2024 - Wk21, 2152, 10.93%; wk23, 1467, 8.73%; Wk24, 2283, 14.88% (handling other and lice treatment). Lumpfish 2024 - Wk24, 6000, 7.55%; Wk33, 8001, 12.77% (handling lice treatment)

If yes, detail: treatment

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

If yes, detail action:

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

Treatments and Medicines Records

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

Biosecurity Records

1. Biosecurity records available for inspection?						
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?						
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?						
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 and when</i> that will be notified to Scottish Ministers?						
5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher health status, certification if required)?						
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.)?						
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?						
8. Have the biosecurity procedures been adequately implemented on site?						
If no, detail:						

Results of Surveillance

1. Has any animal health surveillance been carried out by, or on behalf of, the business?							Y
2. If yes, are results available for inspection?							Y
3. Any significant results?							Y
If yes, detail (if not detailed under recent disease problems).	Pharmaq reports inspected: positive for Pasteurella sp. on 10/10/2025. PMCV, Pasteurella sp, and PRV-1 results positive received 04/11/2025.						

Records checked between:

22/05/2025-05/11/2025

Case no:	2025-0414	Site No:	FS1290	Date of visit/ Sampling:	05/11/2025	05/
Priority samples:	VI	BA	PA	MG	HI	
Time sampling starts/ends:	11:07:00	12:26:00		Main Insp:		VMD No.
Environmental conditions:	1 Indoors	2	3	4	5	
Summary samples	HIST	Y	BA	Y	MG	VI PA Total Samples

Add Fish/Pools - click button

Pool/Fish No	F1	F2	F3	F4	F5						
Fish nos	1	2	3	4	5						
Pool Group											
Species	SAL	SAL	SAL	SAL	SAL						
Average weight	3.6kg	3.6kg	3.6kg	3.6kg	3.6kg						
Sex	N/A	N/A	N/A	N/A	N/A						
Water Type	SW	SW	SW	SW	SW						
Stock Details	Caolas A Deas (FS1291)	Caolas A Deas (FS1291)	Caolas A Deas (FS1291)	4 Trileachan Mor (FS1118)	4 Trileachan Mor (FS1118)						
Stock Origin	10	11	9	4	4						
Facility No											

11/2025 Additional Sample Information:

Fish dispatched percussively. Taken dry tubes of kidney samples for all fish to test for *Pasturella* sp. 07/11/2025 - kidney in dry tube sampled on to BAS plates at the lab on return to office.

5

Total Tests assigned

7

Case no: 2025-0414

Site No: FS1290

Method of killing: Percussive

Date of visit: 05/11/2025

Main Insp:

Sheet Relevant: Y

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

Fish Number		1	2	3	4	5				
Time sampled after death (if > 45 minutes)										
External Signs										
Behaviour	Moribund	M	M	M	M	M				
	Lethargic	S	S	S	S	S				
	Hanging vertical	S								
	Spiralling									
	Flashing									
	Loss of equilibrium									
Body	Dark									
	Distended abdomen									
	Anorexic									
	Scale Oedema									
Opercula	Shortened									
	Flared									
Haemorrhaging	Throat									
	Ventrum									
	Base of fins									
	Elsewhere									
Eyes	Exophthalmic	M								
	Enophthalmic (sunken)									
	Cataract									
	Haemorrhagic									
Gills	Pale									
	Zoned									
	Necrotic									
Lesions	Flank					M				
	Elsewhere									
Vent	Inflamed			M						
	Trailing faeces									
Lice Load	Estimate numbers	3		10	6					
Internal Signs										
Ascites	Clear									
	Bloody	M		M						
Oedema	In tissues									
Heart	Pale/anaemic									
	Granulomas									
	Deformed									
Liver	Petechial haem									
	Gross haem									
	Tissue breakdown									
	Enlarged									
	Colour number(s)	3	4	3	3	3				
	Granulomas									
	Lesions									
Pyloric caeca	Petechial haem									
	Tubules mauve									
	Lack of fat									
Spleen	Enlarged	W	W	S	W	W				
	Granulomas									
Gut	No food present	M	M	M	M	M				
	Yellow pseudo-faeces	S	S	S	S	S				
	External haem									
	Internal haem									
Body wall	Haemorrhaging									
Swim bladder	Haemorrhaging		M	M						
	Fluid filled									
Kidney	Swollen									
	Grey									
	Granular									
	Liquefied									
General	Parasites present									
	Anaemia									

Case no: 2025-0414

Date of visit: 05/11/2025

S for strong presence; M for medium presence; W for w

Fish Number												
Time sampled after death (if > 45 minutes)												
External Signs												
Behaviour	Moribund											
	Lethargic											
	Hanging vertical											
	Spiralling											
	Flashing											
	Loss of equilibrium											
Body	Dark											
	Distended abdomen											
	Anorexic											
	Scale Oedema											
Opercula	Shortened											
	Flared											
Haemorrhaging	Throat											
	Ventrum											
	Base of fins											
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Eyes	Exophthalmic											
	Enophthalmic (sunken)											
	Cataract											
	Haemorrhagic											
Gills	Pale											
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	Trailing faeces											
Lice Load	Estimate numbers											
Internal Signs												
Ascites	Clear											
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	Gross haem											
	Tissue breakdown											
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	Colour number(s)											
	Granulomas											
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Pyloric caeca	Petechial haem											
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	Yellow pseudo-faeces											
	External haem											
	Internal haem											
Body wall	Haemorrhaging											
Swim bladder	Haemorrhaging											
	Fluid filled											
Kidney	Swollen											
	Grey											
	Granular											
	Liquefied											
General	Parasites present											
	Anaemia											

Additional comments:

Site No: FS1290

Case No: 2025-0414

Nature of non-compliance:

Action taken (FHI):

Non-compliance relevant to (delete): Virology/MolGen/Bacteriology/Histology/Parasitology

Case No: 2025-0414

Date of visit: 05/11/2025

Site No: **FS1290**

Main Insp:

Preliminary Fish Health Inspectorate visit report

Summary for information of site operator

Business no:	FB0134	Date of visit:	05/11/2025
Site no:	FS1290	Site name:	Shuna SW (Rubb'an Trilleachain)
Case no:	20250414	Inspector:	[REDACTED]

Section one: summary

The above site was inspected following reports of increased mortalities. On inspection of the site, a number of moribund fish were observed in each pen, four fish were removed for further examination and subsequent sampling.

Histopathological examination revealed mild gill pathology, potentially associated with complex gill issues. The fish exhibited signs of a systemic bacterial infection that may be related to *Pasteurella* spp. F5 displayed marked dermatitis. Myocarditis was observed and could be linked to a degree of viral infection. This was supported by PCR results which tested positive for piscine myocarditis virus (PMCV) and piscine orthoreovirus (PRV), which is responsible for cardiomyopathy syndrome (CMS) and heart and skeletal muscle inflammation (HSMI), respectively.

Gill samples tested positive for the gill related pathogens: *Paranucleospora theridion*, salmon gill poxvirus and *Neoparamoeba perurans*.

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

R09

Section two: case detail

Observations

The site had been experiencing multiple weeks of increased mortality, with complex gill issues being noted as the primary cause. However, on the day of the site inspection, I was informed the site was confirmed positive for *Pasteurella skyensis* on 04/11/2025.

During the site inspection, about 25+ lethargic fish were observed in pen 8 and 9, with approximately 10 in all other pens. No noticeable lesions were observed during the site inspection, but some fish showed signs of healing lice damage on their heads.

Five moribund/lethargic fish removed for diagnostic sampling. F1 was observed to be hanging vertically in the water, whilst F2 was observed to have exophthalmia. Externally, large lesions were observed on F3 and F5. Lice levels on the fish ranged from 3 to 10.

Internally, bloody ascites were observed in F1 and F3. In all fish, enlarged spleens were present. No food was present in the guts of the sample fish, with evidence of yellow pseudo-faeces in all fish. Petechial haemorrhaging was observed on the swim bladders of F2 and F3.

Samples

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

Fish number	Facility number	Species	Stage	Origin
F1	10	Atlantic salmon <i>Salmo salar</i>	Q4 2024 3.6kg	Caolas A Deas (FS1291)
F2	11			
F3	9			Trilleachan Mor (FS1118)
F4-F5	4			

Results

The outstanding results for this case are:

- Bacteriology results. A report detailing these results will be issued separately. Testing is still ongoing.

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Virology:

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

Salmon gill poxvirus (SGPV)

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	21.85	29.49	29.49	29.49	POSITIVE
F2	21.77	>40	38.12	>40	POSITIVE
F3	21.65	27.01	26.98	26.99	POSITIVE
F4	21.78	32.65	32.66	32.20	POSITIVE
F5	-	-	-	-	NEGATIVE

Piscine orthoreovirus (PRV)

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	18.26	34.15	34.17	34.14	POSITIVE
F2	19.27	34.64	34.94	34.36	POSITIVE
F3	18.92	35.66	36.02	35.85	POSITIVE
F4	18.79	35.50	35.46	35.04	POSITIVE
F5	19.53	34.17	34.23	34.24	POSITIVE

Piscine myocarditis virus (PMCV)

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	19.40	24.68	24.75	24.65	POSITIVE
F2	20.38	23.41	23.37	23.42	POSITIVE
F3	20.52	23.76	23.82	23.84	POSITIVE
F4	19.66	22.95	23.27	23.20	POSITIVE
F5	21.03	25.86	25.98	25.97	POSITIVE

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

Parasitology:

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

Neoparamoeba perurans (AGD)

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	-	-	-	-	NEGATIVE
F2	-	-	-	-	NEGATIVE
F3	21.65	34.96	34.99	34.48	POSITIVE
F4	-	-	-	-	NEGATIVE
F5	-	-	-	-	NEGATIVE

Paranucleospora theridion

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	21.85	33.67	33.53	33.68	POSITIVE
F2	21.77	31.88	32.01	31.96	POSITIVE
F3	21.65	32.05	32.06	32.06	POSITIVE
F4	21.78	32.01	32.10	32.20	POSITIVE
F5	22.46	35.00	34.82	32.94	POSITIVE

Histology:

Tissue samples of gill, skin and skeletal muscle, heart, pyloric caeca, pancreas, hind gut, liver, spleen, kidney and eye were taken from F1-F5.

Histopathological examination revealed the following:

Gill: Filament branchitis, mild (F1, F3), lamellar hyperplasia, mild, multifocal (F1-F5), mainly in gill filament tips (F2) and few individual lamellar thickness (F2). Several aneurysmal dilation/telangiectasia (F1, F3, F4) and free blood among gill filaments (F1, F3, F4). Some fish displayed post-mortem artefacts.

Skin & Muscle: F5 displayed marked dermatitis, with no scales present in the scale pocket. Red musculature also displayed small foci of cellular inflammation.
 Heart: Myocarditis, minor, multifocal (F1, F2, F3, F4) and F3 and F5 also displayed minor granulomatous inflammation displaying centrally Splendore-Hoepli reaction (homogeneous eosinophilic material). Epicarditis, mild (F1, F2, F4) and F4 exhibited small areas containing Gram-negative bacteria, which were also observed within some vessels.

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Marine Laboratory, 375 Victoria Road, Aberdeen, AB11 9DB

Telephone – 0131 244 3498

Email – ms.fishhealth@gov.scot

[Fish Health Inspectorate Website](#)

Gut and pyloric caeca: some cell sloughing (potentially associated with post-mortem artefact) (F5). F4: No pyloric caeca tissue present.

Pancreas: No abnormalities detected. F4: No pancreas tissue present.

Liver: Vasculitis, mild (F1-F4). Capsulitis (F1, F3, F4). foci of cellular inflammation (some resembling neutrophil cells). Hepatocellular vacuolation (macrovesicles), mild, diffuse (F5).

Kidney: Mild, multifocal interstitial necrosis (F1, F4). Mild, multifocal interstitial granulomatous necrosis within haematopoietic tissue (F5), with occasional haemorrhage (F5). F4 exhibited evidence of erythrophagocytosis and displayed Gram-negative bacteria within few glomeruli.

Spleen: Very minor necrosis (F3). Granulomatous inflammation with a central Splendore-Hoepli reaction (homogeneous eosinophilic material) (F4), along with haemorrhagic peritonitis and a cyst-like structure observed in the abdominal fat (F4). Slight congestion (F5).

Eye: Gram-negative filamentous bacterial presence, necrosis, and cellular inflammation, focal, were observed in the choroid rete (F2).

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

Signed:

Date: 25/11/2025

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/Topics/Health/Fish-Health-Inspectorate/Service-Charter)

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Fish Health Inspectorate visit report

Summary for information of site operator

Business no:	FB0134	Date of visit:	05/11/2025
Site no:	FS1290	Site name:	Shuna SW (Rubh'an Trilleachain)
Case no:	20250414	Inspector:	[REDACTED]

Section one: summary

Pasteurella skyensis was identified on plates taken from kidney material. This bacterium is a known primary fish pathogen and would be implicated in morbidity.

Tenacibaculum dicentrarchi was identified on plates taken from lesion material. The level and purity of growth would suggest this bacterium would be the primary source of this lesion.

Three *Vibrio* spp. were identified, which were not present as primary pathogens.

Please refer to the previous fish health report issued on 25/11/2025 for all other results.

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 two: case detail

Results

Bacteriology:

Kidney, gill, and lesion material from five fish were inoculated onto appropriate media for the isolation of bacteria.

The following bacteria were isolated from F1-F5:

- *Pasteurella skyensis*: Kidney (F1, F3, F4, F5)
- *Tenacibaculum dicentrarchi*: Lesion (F5)
- *Vibrio* sp. (Isolate A): Kidney (F1), gill (F1, F4, F5) and lesion (F5)
- *Vibrio* sp. (Isolate B): Kidney (F2, F3), gill (F2, F3, F4, F5)

R09

- *Vibrio* sp. (Isolate C): Kidney (F1, F2, F3, F4, F5)

Three isolates of *Vibrio* spp. were identified but the level and purity of growth observed would not suggest these bacteria would be implicated in morbidity.

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

Signed:

Date: 18/12/2025

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)

R09

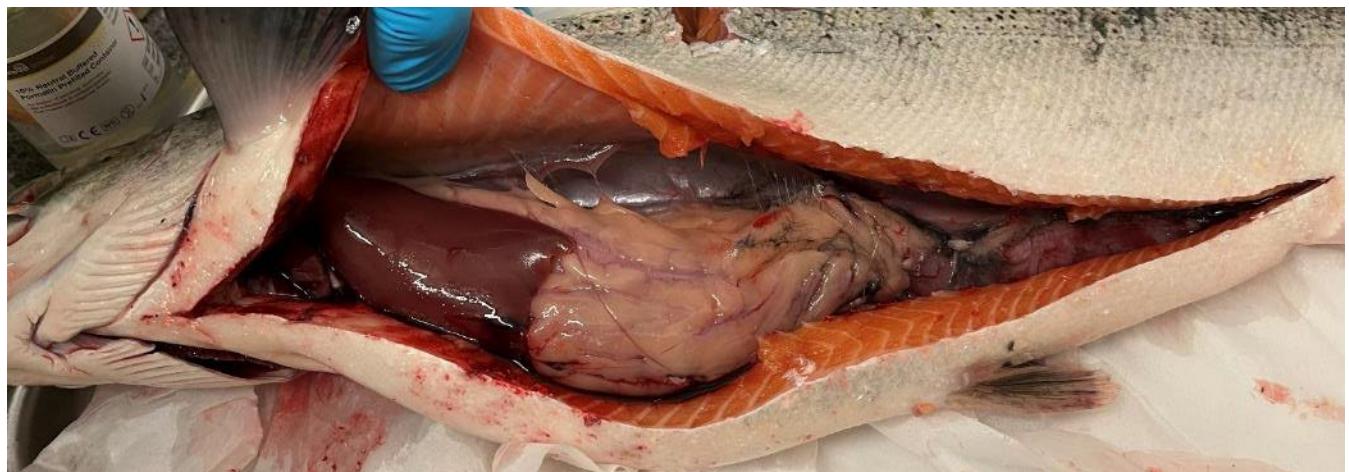
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[Fish Health Inspectorate Website](https://www.gov.scot)

Diagnostic Sampling Photos: 20250414

F1



F2



F3





F4



F5



