

Case No:

2025-0424

Date of visit:

06/11/2025

Additional inspector(s):

--	--

Main Inspector:

--

Site No:

FS1175

Site Name:

Gob na Hoe

Business No:

FB0398

Business Name:

Loch Duart Plc

Case Types:

1 REP

2 DIA

3

4

5

6

Water Temp (°C):

13

Thermometer No:

T172

FHI 045 completed

N/A

Observations:

Region: HI

Water type: S

CoGP MA: M-25

Dead/weak/abnormally behaving fish present?

 If yes, see additional information/clinical score sheet.

Clinical signs of disease observed?

 If yes, see additional information/clinical score sheet.

Post mortem signs observed?

 If yes, see additional information/clinical score sheet.

Diagnostic samples taken?

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

--

Additional Case Information:

Next input will be cleaner fish: ballan wrasse. Wild caught most likely from around Skye.

Micro jellyfish were reported as the primary cause of the mortality, specifically Muggia atlantica.

Routine mortality is usually disposed of using ensiler on the barge. Mass mortality is being disposed of via dead haul to Pelagia (in the Shetland Islands) and Whiteshore.

Barbed wire jelly fish observed visually with the naked eye on site (they cannot be collected using the plankton sweeps due to size).

First mention of barbs in log was 30/08. These were observed on and off until late Sept. Muggia were first observed in late Aug 2025 and have been the only species present in plankton samples since early Oct. Of recent Muggia has been at levels of 22-80 jellyfish per m³ (since 09/10). Barbs peaked at 92 jellyfish per metre in August (30/08)

AGD was first picked up in wk 14 at low levels from clinical signs, although PCR tests were negative at this time. First picked up via PCR from gill swabs in wk 26 at low levels. Wk 27 the AGD was becoming more of a problem.

Vet report from Pharmaq on 14/10/2025: moderate levels of AGD reported. Biologist told verbally that the jellyfish damage must heal before treating AGD with freshwater.

AGD scores were at 2 (0= perfect, 5= very poor) in week 41 and remained high at 1.26 last week. Treatment started on Monday before inspection. Treatment to last until this weekend (08/11-09/11).

Wk 35 AGD score was 1.65 which decreased to 0.53 following treatment in wk 35.

At the time of the inspection a treatment vessel was on site that had treated 5 of the 8 stocked cages. Cages 1,3 and 8 not treated yet as they were least effected. 142,845 morts this week. Mostly from cage 8 with 106,880.

Mortality worst in cages 4 and 6. Cages were treated by prioritising cages with highest mortality.

SLICE treatments carried out in weeks 33+34. Lice levels before treatments were 1.96 caligus and 0.15 for gravid leps. These figures dropped to 0.16 and 0.06 respectively.

SLICE treatment in mid-July wk 28+29. Lice levels before 0.97 for caligus and 0.28 for female leps. Before figures dropped to 0.38 and 0.08 respectively.

Lice levels very low the week before the inspection. Female leps 0.09 and caligus at 0.06

Case No: 2025-0424

Site No: FS1175

Date of Visit: 06/11/2025

Main Insp: [REDACTED]

Registration/Authorisation Details

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

2. Changes made to details? Y

Site Details (include cleaner fish for all sections)

Total No facilities	8	Facilities stocked	6	No facilities inspected	8
Species	Atlantic salmon				
Age group	S1 2025				
No Fish	698 437				
Mean Fish Wt	778g				
Next Fallow Date (Site)	Dec-26	Next Input Date (Site)	May 2026		
Recent (last 4 wks) disease problems?		<input type="checkbox"/> Y	Any escapes (since last visit)?		N
If yes, detail:	Barbed wire siphonophore (appeared Aug 2025) damage, Muggia atlantica (appeared 21/08/25) damage, AGD.				

Movement Records

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

2. Date of last inspection: 04/07/2024

3. Are records complete and correctly entered? Y

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

5. Are records complete and correctly entered? N/A

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

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? Y

2. How are mortalities disposed of? Ensiled - on site

If other detail:

3. Mortality records complete and correctly entered? Y

wk 45 (so far): 145,845 fish (20.9%), wk 44: 247,000 fish (26.13%), wk 43: 133,524 fish (12.37%), wk 42: 158,630 fish (12.81%), wk 41: 32,748 fish

4. Recent mortality (last 4 wks): (2.58%)

5. Evidence of recent increased/atypical mortalities? Y

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

See additional comments

6. Any other peaks in mortality during period checked? Y

If yes, detail: Wk 43 and wk 46 2024 there were issues with jellyfish (Muggia sp.).

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)? Y
 If yes, detail: T.M.S.

If other, detail: [Redacted]

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: [Redacted]

6. Are medicines stored appropriately? Y

Biosecurity Records

1. Biosecurity records available for inspection? [Redacted]

2. Has the manner and frequency of mortality removal, recording and safe disposal been considered? [Redacted]

3. Has the manner and period in which the APB will notify Scottish Ministers or veterinary professional of any *increased (unexplained)* mortality at the site been included? [Redacted]

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 *how and when* that will be notified to Scottish Ministers? [Redacted]

5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher health status, certification if required)? [Redacted]

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.)? [Redacted]

7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site? [Redacted]

8. Have the biosecurity procedures been adequately implemented on site? [Redacted]

If no, detail: [Redacted]

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). AGD pathology and jellyfish damage observed.

Records checked between: 04/07/2024 - 06/11/2025

Case no:	2025-0424	Site No:	FS1175	Date of visit/ Sampling:	06/11/2025	06/
Priority samples:	VI	BA	PA	MG	HI	
Time sampling starts/ends:			Main Insp:		VMD No.	0
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	770g	770g	770g	770g	770g						
Sex	N/A	N/A	N/A	N/A	N/A						
Water Type	SW	SW	SW	SW	SW						
Stock Details	Ormsary smolt unit (FS0575) and Clachbreac (FS0892)	Ormsary smolt unit (FS0575) and Clachbreac (FS0892)	8	Ormsary smolt unit (FS0575)	8	Ormsary smolt unit (FS0575)	8	Ormsary smolt unit (FS0575)			
Stock Origin	4	4									
Facility No											

11/2025 Additional Sample Information:

5

Total Tests assigned 2

Case no: 2025-0424

Site No: FS1175

Method of killing: Percussive

Date of visit: 06/11/2025

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)		40 min	40 mins	1 hour	1 hour	1 hour				
External Signs										
Behaviour	Moribund	S	S	S	S	S				
	Lethargic	S	S	S	S	S				
	Hanging vertical									
	Spiralling									
	Flashing									
	Loss of equilibrium									
Body	Dark									
	Distended abdomen									
	Anorexic	W	W	W	W	W				
	Scale Oedema									
Opercula	Shortened									
	Flared									
Haemorrhaging	Throat									
	Ventrum									
	Base of fins									
	Elsewhere									
Eyes	Exophthalmic									
	Enophthalmic (sunken)									
	Cataract									
	Haemorrhagic									
Gills	Pale									
	Zoned									
	Necrotic	M				M				
Lesions	Flank									
	Elsewhere									
Vent	Inflamed									
	Trailing faeces									
Lice Load	Estimate numbers	0	0	0	0	0				
Internal Signs										
Ascites	Clear									
	Bloody									
Oedema	In tissues									
Heart	Pale/anaemic									
	Granulomas									
	Deformed									
Liver	Petechial haem									
	Gross haem									
	Tissue breakdown									
	Enlarged									
	Colour number(s)									
	Granulomas									
	Lesions									
Pyloric caeca	Petechial haem									
	Tubules mauve									
	Lack of fat	S	M	S	S	M				
Spleen	Enlarged									
	Granulomas									
Gut	No food present	S	S	S	S	S				
	Yellow pseudo-faeces		M		M	M				
	External haem									
	Internal haem									
Body wall	Haemorrhaging									
Swim bladder	Haemorrhaging									
	Fluid filled									
Kidney	Swollen									
	Grey									
	Granular									
	Liquefied									
General	Parasites present									
	Anaemia									

Case no: 2025-0424

Date of visit: 06/11/2025

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										
	Lethargic										
	Hanging vertical										
	Spiralling										
	Flashing										
	Loss of equilibrium										
Body	Dark										
	Distended abdomen										
	Anorexic										
	Scale Oedema										
Opercula	Shortened										
	Flared										
Haemorrhaging	Throat										
	Ventrum										
	Base of fins										
	Elsewhere										
Eyes	Exophthalmic										
	Enophthalmic (sunken)										
	Cataract										
	Haemorrhagic										
Gills	Pale										
	Zoned										
	Necrotic										
Lesions	Flank										
	Elsewhere										
Vent	Inflamed										
	Trailing faeces										
Lice Load	Estimate numbers										
Internal Signs											
Ascites	Clear										
	Bloody										
Oedema	In tissues										
Heart	Pale/anaemic										
	Granulomas										
	Deformed										
Liver	Petechial haem										
	Gross haem										
	Tissue breakdown										
	Enlarged										
	Colour number(s)										
	Granulomas										
	Lesions										
Pyloric caeca	Petechial haem										
	Tubules mauve										
	Lack of fat										
Spleen	Enlarged										
	Granulomas										
Gut	No food present										
	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:

In photos F4 exhibited exophthalmia, however, this was post mortem.

Case No: 2025-0424

Date of visit: 06/11/2025

Site No: **FS1175**

Main Insp: XXXXXXXXXX

Fish Health Inspectorate visit report

Summary for information of site operator

Business no:	FB0398	Date of visit:	06/11/2025
Site no:	FS1175	Site name:	Gob na Hoe
Case no:	20250424	Inspector:	[REDACTED]

The above site was inspected, in accordance with the Aquatic Animal Health (Scotland) Regulations 2009, following reports of increased mortality.

All epidemiological units were inspected and samples were taken for diagnostic purposes. A separate report will be issued detailing the results of these tests.

Records

The information required for the public record of aquaculture production businesses regarding this site was verified and where necessary updated. The following records were also inspected to ensure that the conditions of authorisation for your Aquaculture Production Business (APB) are being met:

Aquaculture animal and aquaculture animal product movement records were inspected and appeared to be inadequately maintained. Since the inspection, adequately maintained records have been submitted to the Fish Health Inspectorate. No further action is necessary.

Mortality records were inspected and found to be adequately maintained.

Mortality levels had exceeded the reporting criteria since the last inspection and had been reported to the Fish Health Inspectorate as required.

Medicine records were inspected and found to be adequately maintained.

Reports detailing the results of animal health surveillance carried out by or on behalf of the business and/or Marine Directorate were available for inspection.

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

R10

Signed: [REDACTED]

Date: 19/11/2025

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)

R10

UKAS Accredited Inspection Body - Type C No. 0269
Marine Laboratory, 375 Victoria Road, Aberdeen, AB11 9DB
Telephone – 0131 244 3498
Email – ms.fishhealth@gov.scot
[Fish Health Inspectorate Website](https://www.gov.scot)

Fish Health Inspectorate visit report

Summary for information of site operator

Business no:	FB0398	Date of visit:	06/11/2025
Site no:	FS1175	Site name:	Gob na Hoe
Case no:	20250424	Inspector:	[REDACTED]

Section one: summary

The site was visited following the notification of increased mortality by the operator. During the inspection five moribund and lethargic fish were removed for diagnostic testing.

Histopathological examination revealed mild, complex gill pathology with features consistent with amoebic gill disease (AGD). Gram-negative bacteria also observed on gill cell debris. Hepatocellular and splenic necrosis were also observed.

Vibrio sp. was identified. The level and purity of the growth would suggest it would be implicated in the morbidity of fish F1 and be contributing to the morbidity of fish F2 and F4.

Burkholderia cepacia was identified. Although prevalent, it is likely to be present as a secondary pathogen and of environmental origin.

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

Observations

The operator of the above site contacted the fish health inspectorate with a notification of increased mortality (as required) in week 39 2025. The mortality rate that week was 1.6% which increased steadily to 26.13% in week 44 2025. The reason for the mortality provided by the operator was complex gill disease (CGD), jellyfish (predominantly *Muggiaea atlantica*) and AGD. A freshwater bath treatment was to be undertaken on site but was delayed due to veterinary advice and weather. A freshwater bath treatment was undertaken in week 45. The mortality rate fell following the treatment in weeks 45 and 46 to 19.85% and 11.7% respectively.

R09

During the inspection many moribund fish were observed across the site. Almost all the fish observed were also lethargic and appeared anorexic. Despite the fish swimming very close to the surface, no lice were observed. This matches the lice count records that were observed during the inspection with an average of less than 0.1 adult female *Lepeophtheirus salmonis* per fish.

Five of the moribund fish were removed for diagnostic testing. As well as moribund, all of the fish removed were also lethargic and anorexic. Two of these fish displayed necrotic gill tissue. No lice were observed.

Internally, all fish had a lack of fat associated with the pyloric caeca and no food present in the gut. The gut of three of these fish contained yellow pseudo-faeces.

Samples

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

Fish number	Facility number	Species	Stage	Origin
F1 and F2	4	Atlantic salmon (<i>Salmo salar</i>)	2025 S1 at 778g	Ormsary smolt unit (FS0575) and Clachbreac (FS0892)
F3 - F5	8	Atlantic salmon (<i>Salmo salar</i>)	2025 S1 at 778g	Ormsary smolt unit (FS0575)

Results

Bacteriology:

Kidney and gill material from F1 – F5 was inoculated onto appropriate media for the isolation of bacteria.

The following bacteria were isolated:

- *Vibrio* sp. (kidney of F1, F2 and F4)
- *Burkholderia cepacia* (gill of F1 – F5)

R09

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 pox virus (SGPV)

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	18.22	30.24	30.01	30.33	POSITIVE
F2	-	-	-	-	Negative
F3	-	-	-	-	Negative
F4	18.12	23.53	23.67	23.61	POSITIVE
F5	19.52	24.02	24.03	23.93	POSITIVE

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

Parasitology:

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	18.22	23.71	23.83	23.80	POSITIVE
F2	18.50	24.76	24.81	24.82	POSITIVE
F3	18.31	24.82	24.72	24.71	POSITIVE
F4	18.12	24.57	24.50	24.62	POSITIVE
F5	19.52	25.67	25.41	25.40	POSITIVE

R09

Paranucleospora theridion

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	18.22	23.90	23.54	24.00	POSITIVE
F2	18.50	30.54	31.05	30.88	POSITIVE
F3	18.31	23.58	23.70	23.39	POSITIVE
F4	18.12	27.38	27.39	27.44	POSITIVE
F5	19.52	28.18	28.31	28.39	POSITIVE

Histology:

Tissue samples of gill, skin and skeletal muscle, heart, pyloric caeca, pancreas, hind gut, liver, spleen and kidney were taken from F1 – F5. The tissue samples were fixed in 10% neutral buffered formalin.

Histopathological examination revealed the following:

Gill: Lamellar hyperplasia, multifocal, mild (F1-F4) with presence of few amoeboid cells resembling *Neoparamoeba perurans* (F1-F5), F4 is more severely affected. F2, F4 & F5 displayed cell debris with bacteria among gill filaments and F3 some adhesions. Few basophilic epithelial inclusions (likely epitheliocystis) (F5). Aneurysmal dilations and telangiectasias observed (F3, F4, F5).

Skin & Muscle: A cluster of parasite spores observed in the white musculature (resembles microsporidium).

Heart: Myocarditis, minor, multifocal (F1, F2) and F4 displayed minor cellular inflammation at the compact-spongy layer junction, few thrombi (F2, F3, F5). Epicarditis, mild (F1-F5).

Gut and pyloric caeca: Peritonitis, mild (potentially associated with vaccine administration (F1).

Pancreas: No abnormalities detected.

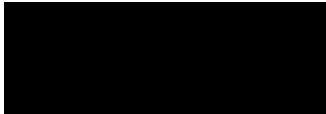
Liver: Hepatocellular necrosis, minor-up-to mild, multifocal (F1, F2, F4).

Kidney: Some melanomacrophage aggregates increase (F1).

Spleen: Parenchymal necrosis, mild, multifocal (F1). Capsulitis (F3).

R09

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

Signed: 

Date: 04/12/2025

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/Fish-Health-Inspectorate-Service-Charter)

R09

UKAS Accredited Inspection Body - Type C No. 0269
Marine Laboratory, 375 Victoria Road, Aberdeen, AB11 9DB
Telephone – 0131 244 3498
Email – ms.fishhealth@gov.scot
[Fish Health Inspectorate Website](https://www.gov.scot/Fish-Health-Inspectorate-Service-Charter)



Photo 1: Fish 5 exhibiting necrotic gills and whitening of gill filaments



Photo 2: Fish 1 – 5 (exophthalmia in fish 4 was postmortem)