

Case No:

2025-0431

Date of visit:

05/11/2025

Additional inspector(s):

Main Inspector:

Site No:

FS0621

Site Name:

Loch A Chairn Bhain

Business No:

FB0398

Business Name:

Loch Duart Plc

Case Types:

1 DIA

2 REP

3

4

5

6

Water Temp (°C):

12

Thermometer No:

T307

FHI 045 completed

N/A

Observations:

Region: HI

Water type: S

CoGP MA: M-6

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:

Additional Case Information:

Recent mortality (last 4 weeks):

Wk 41; 977g 3.29% Sea lice/Sea lice treatment/AGD 25,533 Site currently treating with Salmosan

Wk42; 1.1Kg 3.12% Sea lice/Sea lice treatment/AGD 23,376 Salmosan treatments completed. FW Bath planned

Wk43; 1.1Kg 4.87% Sea lice/Sea lice treatment/AGD 35,420 Salmosan treatments completed. FW Bath planned

Wk 44; 13%, 89805 across site attributed to AGD and sea lice

Wk45; 10.91% 65633 across site attributed to AGD and sea lice

No movements other than mortalities on or off site since last inspection. Mortalities are removed from site whole in sealed tubs to a skip at Badcall before being transported by Gogar for disposal.

On inspection of the site a number of moribund fish (estimate 100 per pen) were observed at the perimeter with in excess of 40 lice and white grazing damage was observed on the heads and behind the dorsal fins. When removed from the water the grazing damage was not visible. The rest of the fish in the pens were displaying increased jumping activity. Fish removed for diagnostic examination had ragged and slightly pale gills.

Inspection 5/11/25 - case paperwork 12/11/25 as health team were out visiting another site with FHI on day of inspection.

Vet visit conducted 16/10/25

Treatments; wk 22 salmosan, wk30 Slice, Wk37 FW and FLS and wk41-42 salmosan treatment, Six hour FW treatment and FLS treatment started 12/11/25 with the wellboat Kvaloy which was treating fish at Gob Na Hoe .

Case No: 2025-0431

Site No: FS0621

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?

N
 N

Site Details (include cleaner fish for all sections)

Total No facilities	16	Facilities stocked	16	No facilities inspected	8
Species	Atlantic salmon				
Age group	2025 S1				
No Fish	522,717				
Mean Fish Wt	1.04kg				
Next Fallow Date (Site)	Dec 2026	Next Input Date (Site)	spring 2027		
Recent (last 4 wks) disease problems?		<input type="checkbox"/> Y	Any escapes (since last visit)?		<input type="checkbox"/> N
If yes, detail:	Gill issues and heavy lice burden				

Movement Records

1. Movement records for **all species** held available for inspection?
2. Date of last inspection:
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 the movement records?

Y
 30/04/2025
 Y
 Y
 Y
 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?
2. How are mortalities disposed of?
If other detail: Gogar transport for biogas
3. Mortality records complete and correctly entered?
4. Recent mortality (last 4 wks): See additional information
5. Evidence of recent increased/atypical mortalities?

Other (detail)

Y
 Y
 N/A

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

equal across whole site Gill and sea lice issues

6. Any other peaks in mortality during period checked?
If yes, detail:
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.

N
 N/A
 N/A

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).	complex gill pathology, suggestive of recent environmental issue, SGPV and AGD - amoeba observed.						

Records checked between:

30/4/25 -12/11/25

Case no:	2025-0431	Site No:	FS0621	Date of visit/ Sampling:	05/11/2025	05/
Priority samples:	VI	BA	PA	MG	HI	
Time sampling starts/ends:	11:30:00	13:00:00		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	1kg	1kg	1kg	1kg	1kg						
Sex											
Water Type	SW	SW	SW	SW	SW						
Stock Details											
Stock Origin	2	Ormsary smolt unit FS0575	2	Ormsary smolt unit FS0575	2	Ormsary smolt unit FS0575	10	Ormsary smolt unit FS0575	10	Ormsary smolt unit FS0575	
Facility No	2		2		2						

11/2025 Additional Sample Information:

5

Total Tests assigned 2

Case no: 2025-0431

Site No: FS0621

Method of killing: Anaesthetic

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	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	W	W	W	W	W				
	Zoned									
	Necrotic									
Lesions	Flank									
	Elsewhere									
Vent	Inflamed									
	Trailing faeces									
Lice Load	Estimate numbers	30+	30+	30+	30+	30+				
Internal Signs										
Ascites	Clear									
	Bloody	W			M					
Oedema	In tissues									
Heart	Pale/anaemic									
	Granulomas									
	Deformed									
Liver	Petechial haem									
	Gross haem									
	Tissue breakdown									
	Enlarged									
	Colour number(s)	7	8	8	7	7				
	Granulomas									
	Lesions									
Pyloric caeca	Petechial haem									
	Tubules mauve									
	Lack of fat									
Spleen	Enlarged	M	S	S		W				
	Granulomas									
Gut	No food present	S	S	S	S	S				
	Yellow pseudo-faeces	S	S	S	S	S				
	External haem									
	Internal haem	S	S	S	S	S				
Body wall	Haemorrhaging									
Swim bladder	Haemorrhaging									
	Fluid filled									
Kidney	Swollen									
	Grey									
	Granular									
	Liquefied									
General	Parasites present	S	S	S	S	S				
	Anaemia									

Case no: 2025-0431

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											
	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:

Parasites present=leps.

Site No: FS0621

Case No: 2025-0431

Nature of non-compliance:

Action taken (FHI):

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

Case No: 2025-0431

Date of visit: 05/11/2025

Site No: **FS0621**

Main Insp: XXXXXXXXXX

Fish Health Inspectorate visit report

Summary for information of site operator

Business no:	FB0398	Date of visit:	05/11/2025
Site no:	FS0621	Site name:	Loch A Chairn Bhain
Case no:	20250431	Inspector:	[REDACTED]

Section one: summary

Loch A Chairn Bhain was visited following reported mortality levels above the reporting threshold. On inspection many moribund fish were observed at the pen margins. Five of these moribund fish were removed for diagnostic examination.

Histopathological examination revealed mild, complex gill pathology with features consistent with amoebic gill disease (AGD). These observations were also confirmed by gill samples testing positive by qPCR for salmon gill poxvirus, *Neoparamoeba perurans* (AGD) and *Paranucleospora theridion*. Myocarditis, hepatocellular and splenic necrosis were also observed.

Vibrio sp. was isolated in the fish sampled.

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

A site visit was scheduled following reported mortality attributed to sea lice, sea lice treatments and AGD. This had peaked during week 44 at 13% for the site (89,805 fish) and week 45, 10.91% (65,633 fish).

On inspection, an estimate of 100 moribund fish were observed at the perimeters of each pen. These fish had heavy lice loads and white grazing damage on the head and behind the dorsal fin. Five of these moribund fish were removed for diagnostic examination.

Once removed from the water the grazing damage was not visible. Externally, they had ragged gills which were slightly pale. Internally, all fish had haemorrhaging of the hind gut with an absence of food and yellow pseudo faeces. Fish F1, F2, F3 and F5

R09

had enlarged spleens and bloody ascites was observed in the body cavity of fish F1 and F4.

Samples

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

Fish number	Facility number	Species	Stage	Origin
F1-F3	2	Atlantic salmon	2025 S1; 1kg	Ormsary Smolt Unit
F4-F5	10	Atlantic salmon	2025 S;1 1kg	Ormsary Smolt Unit

Results

Bacteriology:

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

The following bacteria were isolated:

- *Vibrio* sp. F1 and F3-F5 (kidney)

The level and purity of growth would suggest it may be implicated in the morbidity of fish F1 and F5 but not fish F3 and F4 where the level of growth was very light.

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	21.02	23.86	23.92	23.96	POSITIVE
F2	21.08	24.47	24.41	25.66	POSITIVE
F3	20.98	23.35	23.20	23.18	POSITIVE
F4	21.23	24.55	24.55	24.57	POSITIVE
F5	21.31	24.01	24.03	23.92	POSITIVE

R09

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

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	21.02	26.76	26.88	26.84	POSITIVE
F2	21.08	27.33	27.46	27.64	POSITIVE
F3	20.98	27.01	27.01	26.87	POSITIVE
F4	21.23	27.04	27.22	27.08	POSITIVE
F5	21.31	27.09	27.15	27.11	POSITIVE

Paranucleospora theridion

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	21.02	26.81	26.87	26.87	POSITIVE
F2	21.08	25.08	25.06	25.10	POSITIVE
F3	20.98	24.55	24.54	24.58	POSITIVE
F4	21.23	26.58	26.67	26.73	POSITIVE
F5	21.31	24.70	24.74	24.54	POSITIVE

Histology:

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

They were examined by light microscopy and the following histopathological changes were observed:

R09

Gill: Lamellar hyperplasia, multifocal, mild (F1-F5) with presence of few amoeboid cells resembling *Neoparamoeba perurans* (F1-F5), F5 is more severely affected and lamellar adhesions (F4). Filament branchitis (F2). Few basophilic epithelial inclusions (likely epitheliocystis) (F3) and some vasculitis (F3). Some aneurysmal dilations and telangiectasias observed (F1, F2).

Skin & Muscle: Minor myositis (F1).

Heart: Myocarditis, minor, multifocal (F1, F2, F3, F5) and F5 exhibited two multinucleated giant cells. F5 displayed compact layer musculature degeneration, minor cellular inflammation at the compact-spongy layer junction, few thrombi (F2, F3, F5). Epicarditis, mild (F2, F3, F5).

Gut and pyloric caeca: Minor peritonitis (F1). Some cellular sloughing potentially associated with autolysis artefacts (all fish).

Pancreas: No abnormalities detected.

Liver: Hepatocellular necrosis, mild, multifocal (F1, F4, 5). mild, diffuse hepatocellular vacuolation (macroviscules) (F1- F4).

Kidney: Some interstitial cell (haemopoietic) necrosis (F1) and some renal tubule dilation (F5)

Spleen: Parenchymal necrosis, mild, multifocal (F1, F2, F4). Capsulitis (F1, F3) and one granuloma (F1).

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)

R09











