Case No: 2026-0261 Date of visit: 09/07/2026

Additional inspector(s): Main Inspector: [redacted]

Site No: FS1281 Site Name: Sgian Dubh
Business No: FB0169 Business Name: Bakkafrost Scotland

Case Types: 1 WEL 2 REP 3 DIA 4 5 6

Water Temp (°C): 14.08 Thermometer No: T308 FHI 045 completed N/A

Observations: Region: ST Water type: S CoGP MA: M-45

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:
First input from Glenfinnan August 2025 - Stofnfiskur stock. No cleanerfish on site.

Currently business is only able to harvest 20,000 per lift - hoping to conduct 3/4 lifts per week. Harvest through the station at Striven Shorebase, then transported to Cairndow.

Timeline of health issues on site: SRS was detected after input in August 2025. AGD then was detected soon after, which meant there was a requirement to treat the site (FW). Fish were then found to be positive for PRV and SRS detection continued. A couple of FW treatments occurred at the beginning of 2026 following AGD continuing to be an issue; 4 freshwater treatments conducted in total during cycle with last one occurring in wk18. Subsequently, Moritella, PRV and Mycobacterium were detected, with an increase in mortalities observed in March 2026, attributed to these diseases. Functional feed was given to the fish in April 2026 - Algimun as well as C3COS given previously in cycle. High levels of Branchiomonas sp., salmon gillpox virus, Microsporidia in May 2026. Furunculosis has also been recently detected. Health surveillance from the business has been conducted every two weeks and site has had visits from Faroese vet in April 2026 in addition to the in-house vet.

Exophiala sp. - marine fungus also observed in health surveillance conducted by the business.

Due to continuous health issues occurring on site, a sub population of fish were moved to Ardyne (wk 24) to promote recovery.

FW treatments have been managed in such a way that pens with highest morts are treated last to ensure a more biosecure approach to the treatment process.

Health reports reviewed: 18/06/2026 (sampled moribunds and morts, positive for all the above mentioned in 'Timeline of health issues on site'). On 02/06/2026, fin splits observed across all the population and size ranges. Furunculosis has been observed and had screened positive, high levels of complex gill pathogens. On 12/05/2026, histology report showed hyperplasia and complex gill disease.

Sgian Dubh - fallow from June 2024 and August 2025. Plans to rotate the fallow periods in Striven.

Other peaks in 2026 mortality: mortality % and count: Wk14 to Wk27 - increased and peaked at 3.44% WK 22; then decreased and Wk24, 1.77%. Wk25 to Wk28 - weekly at 10 .37 to 12.85%. Wk 28 so far is 2.44%, with predicted mortality to be ~3%.

Evidence of recent increased mortality: pen 3, pen 12, pen 14, pen 15 (total % was 61.66 of total population) - highest mortality, peaked in Wk26 - harvested out already.

During the site visit, pen 16 and pen 1 were inspected. A few lethargic fish observed. 3 fish removed from pen 16 (planned to be harvested w/b 13/07/2026) and 2 from pen 1. All fish removed were lethargic. These fish were sampled for diagnostics. Generally, few moribunds were observed across the pens. It was evident that some lesions were present on the fish in the general population but these had been observed to have healed. A few of the lethargic fish were observed with exophalmia.

The site inspection was conducted alongside APHA who conducted a welfare inspection.

Case No: 2026-0261 Site No: FS1281

Date of Visit: 09/07/2026 Main Insp: [redacted]

Registration/Authorisation Details

1. Business/site details summary checked by site representative?	N
2. Changes made to details?	N

Site Details (include cleaner fish for all sections)

Total No facilities	16	Facilities stocked		6	No facilities inspected		2
Species	Atlantic salmon						
Age group	Q3 2025						
No Fish	168,548						
Mean Fish Wt	2kg						
Next Fallow Date (Site)	End July 2026/ Aug 2026	Next Input Date (Site)		Q1 2026			
Recent (last 4 wks) disease problems?			Y	Any escapes (since last visit)?			N
If yes, detail:	See additional information						

Movement Records

1. Movement records for **all species** held available for inspection?	Y
2. Date of last inspection:	19/05/2026
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. Have all introductions and imports (since last inspection) from outwith the GB health zone been recorded 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?	Other (detail)
If other detail:	Disposed in skips and then transported to Barkip Biogas. The ensiler also used in the mortality system Billy Bowie removes and goes to Dundas Chemicals.
3. Mortality records complete and correctly entered?	Y
4. Recent mortality (last 4 wks):	2026: Wk27, 12.85%, 32132; Wk26, 12.08%, 34373; Wk25, 10.37%,32871, Wk24, 1.77%, 9839 (Gill health and bacterial disease)
5. Evidence of recent increased/atypical mortalities?	Y

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

See additional information.

6. Any other peaks in mortality during period checked?	Y
If yes, detail:	See additional information
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)?	N
If yes, detail:	
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?	N
5. If yes, what treatment(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 *increased* (*unexplained)* 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 *how* and *when* 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).	See additional information

Records checked between:	19/05/2026-09/07/2026

Case no:	2026-0261	Site No:	FS1281	Date of visit/ Sampling:	09/07/2026	09/(							
Priority samples:	VI		BA		PA		MG		HI				
Time sampling starts/ends:	12:16:00	13:30:00	Main Insp:		VMD No.	0							
Environmental conditions:	1	Sunny	2	Calm	3		4		5				
Summary samples	HIST	Y	BA	Y	MG	Y	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	1	2	3	4	5							
Stock Details	Species	SAL	SAL	SAL	SAL	SAL							
	Average weight	2kg	2kg	2kg	2kg	2kg							
	Sex	N/A	N/A	N/A	N/A	N/A							
	Water Type	SW	SW	SW	SW	SW							
	Stock Origin	Glenfinnan (FS0742)	Glenfinnan (FS0742)	Glenfinnan (FS0742)	Glenfinnan (FS0742)	Glenfinnan (FS0742)							
	Facility No	16	16	16	1	1							

07/2026	Additional Sample Information:
	Dispatched via TMS.

5 Total Tests assigned 4

Case no: 2026-0261 Site No: FS1281 Method of killing: Percussive

Date of visit: 09/07/2026 Main Insp: [redacted] 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										
	Lethargic	M	M	M	M	M					
	Hanging vertical										
	Spiralling										
	Flashing										
	Loss of equilibrium										
Body	Dark										
	Distended abdomen										
	Anorexic										
	Scale Oedema										
Opercula	Shortened										
	Flared					M					
Haemorrhaging	Throat										
	Ventrum										
	Base of fins										
	Elsewhere	M	W		M						
Eyes	Exophthalmic										
	Enophthalmic (sunken)										
	Cataract										
	Haemorrhagic										
Gills	Pale										
	Zoned										
	Necrotic										
Lesions	Flank			M							
	Elsewhere										
Vent	Inflamed										
	Trailing faeces										
Lice Load	Estimate numbers										
Internal Signs											
Ascites	Clear					W					
	Bloody			M	M						
Oedema	In tissues										
Heart	Pale/anaemic	W	W	W	W	W					
	Granulomas										
	Deformed										
Liver	Petechial haem		W								
	Gross haem				S						
	Tissue breakdown				W						
	Enlarged										
	Colour number(s)	2	3	3	2	3					
	Granulomas										
	Lesions										
Pyloric caeca	Petechial haem										
	Tubules mauve										
	Lack of fat										
Spleen	Enlarged	M	M	S	M	M					
	Granulomas										
Gut	No food present	S	S	S	S	M					
	Yellow pseudo-faeces										
	External haem										
	Internal haem										
Body wall	Haemorrhaging										
Swim bladder	Haemorrhaging	M			M						
	Fluid filled										
Kidney	Swollen										
	Grey										
	Granular										
	Liquefied					W					
General	Parasites present										
	Anaemia										

Case no: 2026-0261

Date of visit: 09/07/2026

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:

Eyes on all fish were damaged - potential for exothalmia that then burst and resulted in damaged eyes.

Case No: 2026-0261 Date of visit: 09/07/2026

Site No: FS1281 Main Insp: [redacted]

Results Summary	Freq.	Date of Notification						
		Database	Insp	Phone	Insp	Writing	Insp	2nd Insp
AGD (Neoparamoeva perurans) PCR - AGDQ	4/5	15/07/2026	[redacted]	15/07/2026	[redacted]	10/09/2026	[redacted]	[redacted]
IHN (PCR) - IHNP	0/5	15/07/2026	[redacted]	15/07/2026	[redacted]	10/09/2026	[redacted]	[redacted]
Paranucleospora theridion (PCR) - PNST	5/5	15/07/2026	[redacted]	15/07/2026	[redacted]	10/09/2026	[redacted]	[redacted]
Salmon gill poxvirus (PCR) - SPVP	5/5	15/07/2026	[redacted]	15/07/2026	[redacted]	10/09/2026	[redacted]	[redacted]
Salmon alphavirus (SAV) (PCR) - SALP	0/5	15/07/2026	[redacted]	15/07/2026	[redacted]	10/09/2026	[redacted]	[redacted]
IPN (PCR) - IPNM	0/5	15/07/2026	[redacted]	15/07/2026	[redacted]	10/09/2026	[redacted]	[redacted]
ISA (real time qPCR - heart & kidney) - ISAQ	0/5	15/07/2026	[redacted]	15/07/2026	[redacted]	10/09/2026	[redacted]	[redacted]
Piscine myocarditis virus (CMS) (PCR) - PMVP	0/5	15/07/2026	[redacted]	15/07/2026	[redacted]	10/09/2026	[redacted]	[redacted]
VHS (PCR) - VHSP	0/5	28/07/2026	[redacted]	28/07/2026	[redacted]	10/09/2026	[redacted]	[redacted]
Yersinia ruckeri (ERM) - YRUK	4/5	18/08/2026	[redacted]	18/08/2026	[redacted]	10/09/2026	[redacted]	[redacted]
No significant bacteria (culture) - NSIG	3/5	18/08/2026	[redacted]	18/08/2026	[redacted]	10/09/2026	[redacted]	[redacted]
Vibrio species (culture) - VSPE	2/5	18/08/2026	[redacted]	18/08/2026	[redacted]	10/09/2026	[redacted]	[redacted]
Pseudomonas fluorescens - PSFL	1/5	18/08/2026	[redacted]	18/08/2026	[redacted]	10/09/2026	[redacted]	[redacted]
Aeromonas salmonicida	2/5	18/08/2026	[redacted]	18/08/2026	[redacted]	10/09/2026	[redacted]	[redacted]
Complex gill issues	5/5	28/08/2026	[redacted]	28/08/2026	[redacted]	10/09/2026	[redacted]	[redacted]
Gill pathology - GPAT	5/5	28/08/2026	[redacted]	28/08/2026	[redacted]	10/09/2026	[redacted]	[redacted]
Epitheliocystis - EPIT	5/5	28/08/2026	[redacted]	28/08/2026	[redacted]	10/09/2026	[redacted]	[redacted]
Necrosis - NECR	4/5	28/08/2026	[redacted]	28/08/2026	[redacted]	10/09/2026	[redacted]	[redacted]
Heart pathology - HPAT	4/5	28/08/2026	[redacted]	28/08/2026	[redacted]	10/09/2026	[redacted]	[redacted]
Kidney pathology - KPAT	4/5	28/08/2026	[redacted]	28/08/2026	[redacted]	10/09/2026	[redacted]	[redacted]
Intestinal pathology - IPAT	5/5	28/08/2026	[redacted]	28/08/2026	[redacted]	10/09/2026	[redacted]	[redacted]
Spleen pathology - SPAT	5/5	28/08/2026	[redacted]	28/08/2026	[redacted]	10/09/2026	[redacted]	[redacted]

Report Summary			
Case Type	Date	Insp	2nd Insp
REP, DIAG, WEL	14/09/2026	[redacted]	[redacted]

Fish Health Inspectorate visit report

Summary for information of site operator

Business no:	FB0169	Date of visit:	09/07/2026
Site no:	FS1281	Site name:	Sgian Dubh
Case no:	20260261	Inspector:	[redacted]

Section one: summary

The above site was inspected following reports of increased mortalities. A few lethargic fish were observed in the two pens inspected; five fish were removed for further examination and subsequent sampling.

Histological examination revealed severe multifactorial gill pathology, including widespread epithelial cell loss, necrosis, hyperplasia, telangiectasis, and thrombosis, consistent with complex gill disease (CGD). Most fish also showed epitheliocystis suggestive of *Candidatus Branchiomonas cysticola* infection. In addition, marked epithelial apoptosis raised suspicion of concurrent salmon gill poxvirus (SGPV), which was subsequently confirmed by molecular testing, with occasional erythrophagocytosis observed in the spleen.

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

Yersinia ruckeri was identified. The level and purity of growth would suggest this bacterium is implicated in fish morbidity.

In addition, *Vibrio* spp., *Aeromonas salmonicida* subsp. *salmonicida*, *Pseudomonas fluorescens* were also identified but were not present as primary pathogens. A further isolate was recovered but did not match those of recognised fish pathogens.

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

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

Section two: case detail

Observations

The site was inspected following multiple weeks of increased mortality. The last diagnostic inspection was conducted 15/05/2026 (2026-0156). To summarise health issues experienced, mortality increased significantly from March 2026 onwards, coinciding with the detection of multiple pathogens. Weekly mortality peaked at 3.44% in week 22 and remained elevated through weeks 25 to 28. Pens 3, 12, 14 and 15 experienced the highest losses and have since been harvested. To aid recovery, a sub-population of fish was transferred to Ardyne.

During the site visit, pens 1 and 16 were inspected. A small number of lethargic fish were observed and removed for diagnostic sampling. While some healed lesions were observed within the population, few moribund fish were seen and overall appearance had improved compared with previous reports. Some lethargic fish showed exophthalmia. The inspection was conducted jointly with the Animal and Plant Health Agency (APHA), which undertook a welfare assessment.

Externally, F5 was observed to have flared gills. All removed fish were found to have eyes that may previously have had exophthalmia but subsequently were found to have popped.

Internally, haemorrhaging was observed on the swim bladder of F1, F2 and F4. Bloody ascites was seen in F3 and F4, with F5 being found with clear ascites. All fish hearts were anaemic. Petechial haemorrhaging was observed on the liver of F2, with gross haemorrhaging and tissue breakdown also seen in F4. The spleens in all sampled fish were enlarged, and no food was present in the guts. The kidney of F5 was slightly liquified.

Samples

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

Fish number	Facility number	Species	Stage	Origin
F1-F3	16	Atlantic salmon *Salmo salar*	Q3 2025 2kg	Glenfinnan (FS0472)
F4-F5	1			

Results

Bacteriology:

Kidney, gill and lesion material from F1-F5 were inoculated onto appropriate media for the isolation of bacteria.

The following bacteria were isolated from F1-F5:

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

- *Yersinia ruckeri*: Kidney (F1, F2, F3, F4) and lesion (F3)
- *Aeromonas salmonicida* subsp. *salmonicida*: Kidney (F3, F3) and gill (F2)
- *Vibrio spp*Kidney (F5) and lesion (F3)
- *Pseudomonas fluorescens*: Gill (F5)

A further isolate was recovered from samples from three fish. The characteristics of this isolate do not match those of recognised fish pathogens and its level and purity of growth would not suggest a significant role in this case.

From the tests conducted on the *Yersnia ruckeri* isolate, we do not have evidence of resistance to oxytetracycline, sulphamethoxazole/trimethoprim or florfenicol but no evidence of sensitivity to amoxycillin.

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	18.81	22.6	22.66	22.65	POSITIVE
F2	18.83	24.58	24.96	24.88	POSITIVE
F3	18.95	26	25.92	26.32	POSITIVE
F4	19.18	23.05	22.92	23.05	POSITIVE
F5	19.27	31.63	31.3	31.41	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), salmon gill poxvirus (SGPV), 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)

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

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	18.81	31.43	31.63	31.44	POSITIVE
F2	18.83	32.91	33.28	32.93	POSITIVE
F3	18.95	31.05	31.25	31.19	POSITIVE
F4	19.18	33.36	33.45	33.26	POSITIVE
F5	-	-	-	-	NEGATIVE

Paranucleospora theridion

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	18.81	25.23	25.33	25.33	POSITIVE
F2	18.83	29.56	30.23	29.5	POSITIVE
F3	18.95	28.42	28.73	28.62	POSITIVE
F4	19.18	27.9	27.94	28.06	POSITIVE
F5	19.27	24.37	24.34	24.38	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.

Histopathological examination revealed the following:

Histological findings predominantly consisted of significant multifactorial branchial pathology characterised by diffuse epithelial apoptosis and desquamation, multifocal necrosis with loss of secondary lamellae, variable epithelial hyperplasia, telangiectasis and thrombosis.

Epitheliocystis was observed in most specimens, with the morphology and distribution of the inclusions considered suggestive of infection by *Candidatus Branchiomonas cysticola*. The branchial findings are consistent with complex gill disease (CGD). The prominent epithelial apoptosis and desquamation also raise suspicion of concurrent salmon gill poxvirus (SGPV) involvement alongside observations of occasional erythrophagocytosis within the spleen. Molecular testing would be required to confirm the presence of SGPV and its contribution to the observed branchial pathology.

Elsewhere, histological changes were generally mild and non-specific, including occasional individual observations of degenerative and necrotic cellular change, and mild to moderate epicarditis in several fish. F5 was the notable exception, exhibiting more extensive necrosis of the hematopoietic tissues and gastrointestinal tract. The

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

aetiology of these lesions remains uncertain, and the involvement of an independent systemic disease process cannot be excluded.

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

Signed: [redacted] Date: 14/09/2026

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)

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

Diagnostic Sampling Photos: 2026-0261

F1: pen 16









F2: pen 16









F3: pen 16









F4: pen 1









F5: pen 1



