FHI 059, Version 14		Issued by: FHI	Date of issue: 04/04/2025
Case No: 2025-0337			Date of visit: 28/08/2025
Additional inspector(s):		Main Inspecto	r:
Site No: FS1361 Business No: FB0169	Site Name: Business Name:	Applecross Smolt Ongrowing 2 Bakkafrost Scotland	
Case Types: 1 REP 2	DIA 3	4 5	6
Water Temp (°C): 14.5	Thermometer No:	Site	FHI 045 completed Y
Observations:	Region: HI	Water type: F	CoGP MA:
Dead/weak/abnormally behaving to Clinical signs of disease observed Post mortem signs observed? Diagnostic samples taken?	•	Y If yes, see additional inform	mation/clinical score sheet. mation/clinical score sheet. mation/clinical score sheet.
UNI/REG only - if unable to carry	out intended visit deta	il reason below:	

Additional Case Information:

Site inspected following recent elevated mortalities were reported to the FHI, these were attributed to bacterial disease and water quality issues.

Mortalities for the last four weeks: wk 32 33069 (3.22%), wk 33 50171 (5.06%), wk 34 28167 (3%) Wk 35 5566 (to date of inspection).

The site has reported a number of mortality events since the last inspection on the 10/3/2025, these are: wk 12 5235 (1.88%) fungus and FHI diagnostic samples identifies Aeromonas salmonicida pectinolytica, wk 14 4094 (1.53%), wk 16 13471 (5.36%), wk 17 3079 (4.04%) all reported as physical handling losses. Wk 19 9076 (5.08%), wk 20 8022 (4.73%) both reported as transfer losses. Wk 22 20438 (2.02%) physical post grade damage. Wk 24 21126 (1.79%), wk 25 38723 (3.35%) both physical post grade damage. Wk 27 16424 (3.22%) bacterial disease and fungus.

Furunculosis was isolated in May, by water EDNA, fish PCR, Bacteriology plates, site was screened as furunculosis was picked up in another unit. Water quality issues has resulted in the increased mortality. Site is split on two separate RAS units, tanks 1 and 2 initially had the increased mortality then settled, Tanks three and four ~ a week later increased. Antibiotics were administered in a staggered manner due to having to mix the feed on site. Started in wk 32 in tanks 1 and 2 then wk 33 tanks 3 and 4 started treatment. Treatments were for 10 days and were of florocol. Mortalities for the week of inspection have reduced considerably.

There was a couple of runty fish observed in the tanks but overall the fish were shoaling well, a couple of lethargic fish were removed for further examination and diagnostic sampling.

Week 15 mortality event of 10564 (4.02%) was not reported.

Site thermometer used due to biosecurity.

FHI 059, Versio	on 14			Issued by: F	HI	Date of issue: 04/04/2025
Case No:	2025-0337		Site No:	FS136	1	
Date of Visit:		28/08/202	5		Main Insp:	
Registration/A	Authorisatio	n Details				
1. Business/site			d by site repre	esentative?		Y
2. Changes ma		•	,			Ϋ́
Site Details (ir	nclude clear	ner fish for al	l sections)			
Total No faciliti		4	Facilities sto	ocked	4	No facilities inspected 4
Charles	Atlantic					
Species	salmon					
Age group	2025 Q3					
No Fish	910,000					
Mean Fish Wt	246g					
Next Fallow Da	, ,	Early Septe	mber	Next Input I		TBC
Recent (last 4)	<u>vks) disease</u>	e problems?			Y Any escape	s (since last visit)?
If yes, detail:	Furunculos	is				
Movement Re 1. Movement re 2. Date of last if 3. Are records 4. Are movement 5. Are records 6. Have all intro the movement Transport Rec 1. Are any movel If yes, is there	ecords for all inspection: complete an ent records a complete an oductions an records?	d correctly environmental desired out not us	tered? ead fish and w tered? ce last inspec	vaste? ition) from out	of) the busine	ealth zone been recorded in N/A Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
Mortality Reco	ords					
1. Mortality rec	ords for all s	species held a	vailable for in	spection?		Y
2. How are mo	rtalities dispo	osed of?			Whole fish -	- Dundas Chemicals
If other detail:						
3. Mortality rec	ords comple	te and correct	ly entered?			Y
4. Recent mort	ality (last 4 v	vks):	see addition	nal informatio	า	
5. Evidence of	recent increa	ased/atypical เ				Y
If yes, facility n		• •		acility/reason:		
see additional i				,		
6. Any other pe		ality during per	iod checked?			Y
If yes, detail:		nal information				
7. Have increas				rted to vet or	FHI?	I N/A
If yes, detail ac	•	ou) mortanti	22 200111000			107
8. Have 'mortal		een reported t	o EHI2 If no	enter detaile c	n mortality av	vents sheet
o. Have morta	my events D	cen reported t	0 1 111: 11 110, 6	citici uctalis (ni mortality ev	CHO SHEEL.

Treatments and Medicines Records
1. Recent treatments (see comment)?
If yes, detail: Florfenicol
If other, detail:
2. Medicines records available for inspection?
3. Are records complete and correctly entered?
4. Are fish in a withdrawal period?
5. If yes, what treatment(s)?
If other, detail:
6. Are medicines stored appropriately?
Biosecurity Records
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 <i>how</i> and <i>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?
2. If yes, are results available for inspection?
3. Any significant results?
If yes, detail (if not detailed under recent disease problems).
140/2/0005 4 00/0/005
Records checked between: 10/3/2025 to 28/8/2025

ГГ	HI 059, Version 14						I	ssuea b	y: FHI				
	Case no:	2025-0	337	Site No:		FS1361			Date of		28/	08/2025	28/0
	Priority samples:	VI		ВА		PA		MG	Samplin	ig. HI]	
	Time sampling starts/ends:	10:3	30:00	11:0	0:00]	Main In	sp:		1	VMD No	o. [0
	Environmental conditions:	1	Indoors	2		3		4		5			
	Summary samples	HIST	Y	ВА	Y	MG	Y	VI		PA	Y	Total Sa	mples
A	dd Fish/Pools - click button												
	Pool/Fish No	F1	F2										
	Fish nos	1	2										
	Pool Group												
	Species	SAL	SAL										
	Average weight	250g	80g										
	Sex	N/A	N/A										
	Water Type	FW	FW										
		nit	nit										
		n T	<u> </u>										
		<u> </u>	smolt unit										
		ls s	l is										
Details		.os	0S\$										
eta		13.	13(
		Applecross smolt unit 2 FS1362	Applecross 8 2 FS1362										
Stock	Stock Origin	4 0	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \										
S	Facility No	1	1										

)3/2025	Addition	nal Sam	ple Infor	mation:							
2	1	Total To	ests ass	igned	4	1					

Case no:	2025-0337		Site No):	FS1361 Method of killing: Anaesth			hetic			
Date of visit:	28/08/2025	1	Main Ir	nsp:				s	Sheet Re	elevant:	Y
	·	_			<u></u>			J			
	ce: M for medium presence: W for v	weak pres	sence	ı	ı						
Fish Number	er death (if > 45 minutes)										
External Signs	er death (ii > 45 minutes)										
Behaviour	Moribund										
	Lethargic	W	W								
	Hanging vertical										
	Spiralling										
	Flashing										
	Loss of equilibrium										
Body	Dark	M	M								
	Distended abdomen										
	Anorexic		М								
	Scale Oedema										
Opercula	Shortened Flared										
Haemorrhaging	Throat										
riaemorriaging	Ventrum										
	Base of fins										
	Elsewhere										
Eyes	Exophthalmic										
	Enophthalmic (sunken)										
	Cataract										
	Haemorrhagic										
Gills	Pale										
	Zoned										
Lesions	Necrotic Flank										
Lesions	Elsewhere										
Vent	Inflamed										
70	Trailing faeces										
Lice Load	Estimate numbers										
Internal Signs											
Ascites	Clear										
	Bloody										
Oedema	In tissues										
Heart	Pale/anaemic Granulomas										
	Deformed										
Liver	Petechial haem										
2.70.	Gross haem										
	Tissue breakdown										
	Enlarged										
	Colour number(s)	4	4								
	Granulomas										
<u>L</u>	Lesions									<u> </u>	
Pyloric caeca	Petechial haem										
	Tubules mauve Lack of fat		M								
Spleen	Enlarged	-	 •••							 	
Орісен	Granulomas										
Gut	No food present										
	Yellow pseudo-faeces				<u> </u>						
	External haem										
	Internal haem										
Body wall	Haemorrhaging										
Swim bladder	Haemorrhaging		ļ							<u> </u>	
IZ: due o	Fluid filled									<u> </u>	
Kidney	Swollen										
	Grey Granular	 	 		 					 	
	Liquefied										
General	Parasites present	 	 		 						
	Anaemia	 	 		 						

Case no: 2025-0337

Date of visit: 28/08/2025

Date of visit:	28/08/2025							
S for strong presen	nce: M for medium presence: W for v	1						
Fish Number	,							
	er death (if > 45 minutes)							
External Signs								
Behaviour	Moribund							
	Lethargic							
	Hanging vertical							
	Spiralling							
	Flashing							
Dody.	Loss of equilibrium							
Body	Dark Distended abdomen							
	Anorexic							
	Scale Oedema							
Opercula	Shortened							
Фрогоши	Flared							
Haemorrhaging	Throat							
	Ventrum							
	Base of fins							
	Elsewhere							
Eyes	Exophthalmic							
	Enophthalmic (sunken)						ļ	
	Cataract						<u> </u>	
O'''-	Haemorrhagic							
Gills	Pale Zoned						<u> </u>	\vdash
	Necrotic Necrotic							
Lesions	Flank							
Lesions	Elsewhere							
Vent	Inflamed							
VOII	Trailing faeces							
Lice Load	Estimate numbers							
Internal Signs								
Ascites	Clear							
	Bloody							
Oedema	In tissues							
Heart	Pale/anaemic							igwdown
	Granulomas							
	Deformed							
Liver	Petechial haem							
	Gross haem							
	Tissue breakdown Enlarged		1			1	 	\vdash
	Colour number(s)							
	Granulomas		1			1	 	
	Lesions							
Pyloric caeca	Petechial haem		i			İ	<u> </u>	
	Tubules mauve							
	Lack of fat							
Spleen	Enlarged							
	Granulomas							
Gut	No food present							
	Yellow pseudo-faeces		ļ			ļ	ļ	
	External haem							
Dad	Internal haem							
Body wall	Haemorrhaging		ļ			ļ	<u> </u>	
Swim bladder	Haemorrhaging							
Kidnov	Fluid filled Swollen						-	
Kidney	Grey							
	Grey		1			1	 	
	Liquefied							
General	Parasites present		 			 	 	
	Anaemia							
		•	•	•	•	•	•	

Additional comments:	FHI 059, Version 14	Issued by: FHI	Date of issue: 04/04/202
	Additional comments:		
			1
			1
			1
ı			

Site No: FS1361

Case No: 2025-0337

Nature of non-compliance:
Action taken (FHI):
Non-compliance relevant to (delete): VirologyMolGen/Bacteriology/Histology/Parasitology

Case No: 2025-0337 Site No: FS1361 Date of visit: 28/08/2025

Start date:	End date: (if applicable)	Size of fish:	Average weight of affected population:	Species:	Yearclass (SW SAL only):	Timescale	Mortality rate recorded(%):	Explained/ unexplained:	If explained, enter reason(s):
07/04/25	13/04/2025	5g to smolting	~250g	SAL		Weekly	4.02	Explained	Physical handling

If unexplained, enter observations:	Total mortality during event (if available):	Additional information (e.g. action taken by company):	Action taken by FHI (include case no where applicable):	Yearclass Year
	10564		Historic mortality event picked up through a site inspection	2025

Case No: 2025-0337 Date of visit: 28/08/2025

Site No: FS1361 Main Insp:

Results Summary	Freq.	Date of Notification								
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp		
Gyrodactylus salaris - GSAL	0/2	29/08/2025		29/08/2025						
AGD (Neoparamoeba perurans) (PCR) - AGDQ	0/2	01/09/2025		02/09/2025						
IHN (PCR) - IHNP	0/2	02/09/2025		02/09/2025						
IPN (virus isolation) - IPNV	1/2	02/09/2025		02/09/2025						
Salmonid alphavirus (SAV) (PCR) - SALP	0/2	02/09/2025		02/09/2025						
VHS (PCR) - VHSP	0/2	02/09/2025		02/09/2025						
Salmon gill poxvirus (PCR) - SPVP	1/2	01/09/2025		02/09/2025						
Paranucleospora theridion (PCR) - PNST	0/2	01/09/2025		02/09/2025						
Adhesions- histo	1/2	05/09/2025		08/09/2025						
Gill pathology	1/2	05/09/2025		08/09/2025						
Kidney pathology	1/2	05/09/2025		08/09/2025						
⊟eart pathology - HPAT	1/2	08/09/2025		08/09/2025						
No significant bacteria (culture) - NSIG	1/2	10/09/2025		11/09/2025						
Pseudomonas spp - PSPE	1/2	10/09/2025		11/09/2025						
Pseudomonas fluorescens - PSFL	2/2	10/09/2025		11/09/2025						

Report Summary			
Case Type	Date	Insp	2 nd Insp
REP	05/09/2025		
DIA	18/09/2025		



F1 and F2





F1



F2



F2



Fish Health Inspectorate visit report

Summary for information of site operator

Business no: FB0169 Date of visit: 28/08/2025

Site no: FS1361 Site name: Applecross Smolt Ongrowing 2

Case no: 20250337 Inspector:

Summary

The site was inspected following reports of elevated mortalities, on inspection of the stock a couple of lethargic fish were observed and removed for further examination and subsequent diagnostic sampling.

Histopathological analysis revealed marked peritonitis potentially associated to vaccine administration. Very mild gill and heart pathology were observed.

Infectious pancreatic necrosis virus (IPNV) was detected in one fish by qPCR. The significance of this result is unclear as no associated pathology was observed and the fish have been vaccinated.

One fish tested positive for salmon gill poxvirus (SGPV) via PCR.

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

Case detail

Observations:

Elevated mortalities were first reported to the fish health inspectorate w/b 11/8/2025. In total 116,973 were recorded to the date of inspection on the 28/8/2025, these were attributed to water quality issues and furunculosis. By the time of the inspection numbers had significantly reduced.

On inspection of the stock the fish were shoaling well however there were a few runts and lethargic fish noted. Two were removed for diagnostic sampling.

Externally both fish appeared dark, F2 was anorexic and also lacked fat on the pyloric caeca.

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



Samples

Samples were collected from F1 and F2 according to the table below:

Fish number	Facility number	Species	Stage	Origin	
F1	1	Atlantic salmon	250g 2025 Q3	Applecross Smolt Unit 2 (FS1362)	
F2	1	Atlantic salmon	80g 2025 Q3	Applecross Smolt Unit 2 (FS1362)	

Results

Bacteriology:

Kidney, gill and spleen material from F1 and F2 were inoculated onto appropriate media for the isolation of bacteria.

Two colonies of bacteria were observed but were likely of environmental origin caused by contamination due to condensation.

Virology:

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

Infectious pancreatic necrosis virus

Fish Number	Endogenous				Reported		
	control Cp	Result					
	value				(PCR)		
F1	16.90	38.16	37.12	38.88	POSITIVE		
F2	-	-	-	-	Negative		

Salmon gill poxvirus

Fish Number	Endogenous control Cp value	Cp Value	Reported Result (PCR)		
F1	21.73	35.89	35.52	37.29	POSITIVE
F2	-	-	-	-	Negative

R09



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

Parasitology:

Fins were collected to determine the presence of *Gyrodactylus salaris* using light microscopy and molecular techniques (PCR). No *G. salaris* parasites were detected in the samples examined.

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

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

Histology:

Tissue samples of gill, skin and skeletal muscle, heart, pyloric caeca, pancreas, hind gut, liver, spleen and kidney were taken from F1 and F2. The tissue samples were fixed in 10% neutral buffered formalin.

Histopathological examination revealed the following:

Gill: Lamellar hyperplasia, very mild, focal (F1).

Skin & Muscle: Focal area of white musculature degeneration (F1).

Heart: Minor, multifocal, myocarditis and epicarditis, minor (F1).

Gut and pyloric caeca: Marked peritonitis (likely associated with vaccine administration) (F2) and food content exhibit presence of bacteria (F1).

Pancreas: No abnormalities observed

Liver: Minor, multifocal, cellular inflammation (F1).

Kidney: Some tubules display eosinophilic hyaline droplets, and there is evidence of some tubular degeneration in F2.

Spleen: Peritonitis, minor (F1) and subcapsular hyperaemia (F2).

R09

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Telephone - 0131 244 3498
Email - ms.fishhealth@gov.scot
Fish Health Inspectorate Website



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

Signed:

Date: 18/09/2025

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)