FHI 059, Version 13	I	ssued by: FHI	Date of issue: 12/05/2020						
Case No: 2025-0075			Date of visit: 10/03/2025						
Time spent on site:	1	Main Inspecto	or:						
Site No: FS1361 Business No: FB0169	Site Name: Business Name:	Applecross Smolt Ongrowing Bakkafrost Scotland	2						
Case Types: 1 ECI 2	CNI 3 VMD	4 DIA 5	6						
Water Temp (°C): 12	Thermometer No:	Site	FHI 045 completed Y						
Observations:	Region: HI	Water type: F	CoGP MA						
Dead/weak/abnormally behaving fish present? Clinical signs of disease observed? Gross pathology observed? Diagnostic samples taken? Y If yes, see additional information/clinical score sheet. Y If yes, see additional information/clinical score sheet. Y If yes, see additional information/clinical score sheet. Y If yes, see additional information/clinical score sheet.									
UNI/REG only - if unable to carry	out intended visit detail	reason below:							

Additional Case Information:

First fish to be put onto site, issue with fungus reported.

TMS used for check weighs. Increased salinity used for fungus treatment.

Some samples had been taken but results have not been received yet. Samples of fungus being taken on the day of the inspection.

Mortality levels are above the threshold and will be reported but this has not been reported yet.

Surveillance frequency, number of movement offsite could not be calculated due to lack of data, scoring was based on Applecross Smolt Ongrowing 1 data as likely to be similar.

Site thermometer used due to biosecurity, probes are checked regularly with a calibrated oxyguard thermometer.

FHI 059, Version 1		_		ed by: FHI	_		Date of issu	ie: 12/05/2020
Case No:	2025-0075		Site No:	FS1361				
Date of Visit:		10/03/2025]		Inspector(s):		J
Registration/Auth	orisation Deta	nils						
1. Business/site de			site representa	ative?			Υ	1
2. Changes made	•	·	·				N	1
Site Details (inclu	de cleaner fis	h for all sect	ions)					
Total No facilities		4	Facilities sto	cked	1	No facilities	sinspected	4
Species	SAL							
Age group	2023 Q4							
No Fish	290 000							
Mean Fish Wt	212g							
Next Fallow Date (17/18		Next Input Da	ate (Site)	possible w	(17/18	•
Recent (last 4 wks)	•	ems?			_ ` ′	es (since last v		N
If yes, detail:	post transfer						,	
4. Are movement r. 5. Are records com 6. Are health certifi Transport Record 1. Are any movement If yes, is there a sy	iplete and corrected for introdes some control of the corrected output to the	ectly entered? luctions (outv	? vith GB) availa half) of the bu	able? usiness (not us				Y Y N/A
Mortality Records	•							
1. Mortality records		nspection?						Y
2. How are mortalit	ies disposed o	f?			Whole fish	- Dundas Che	micals	•
If other detail:					•			
3. Mortality records	complete and	correctly ent	ered?					Y
4. Recent mortality	(last 4 wks):		wk 9 4468 (1	.43%), wk 10	12,770 (4.14	·%),		
5. Evidence of rece		typical morta		,,	, ,			Y
If yes, facility nos/n	o mortality per	facility/no sto	ock per facility	/reason:				
as above, post tran	sfer fungus, m	ortality remov	val on-going a	s well as mori	bund culls			
6. Any other peaks								N
If yes, detail:								
7. Have increased	(unexplained)	mortalities be	en reported to	vet or FHI?				N/A
If yes, detail action	:							
8. Have 'mortality e	events' been re	ported to FHI	? If no, enter	details on moi	tality events	sheet.		N/A

FHI 059, Version 13		Issued by: FHI	Date of issue: 12/05/2020
Treatments and Me			
1. Recent treatment	s (see comment)?		Y
If yes, detail:	TMS		

Treatments and Medicines Records	
1. Recent treatments (see comment)?	Y
If yes, detail: TMS	
If other, detail: Increased salinity	
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)?	
If other, detail:	
6. Are medicines stored appropriately?	Y
Biosecurity Records	
Biosecurity records available for inspection?	Y
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?	Y
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?	Y
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?	Y
5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher	Y
health status, certification if required)?	
	V
6. Have the husbandry and biosecurity measures implemented between each epidemiological unit to minimise	T
transmission of disease been covered (movement of staff, visitors, equipment, live or dead fish etc.)?	V
7. Is documentation available regarding the measures in place to maintain the physical containment of	1
aquaculture animals held on site?	V
8. Have the biosecurity procedures been adequately implemented on site? If no, detail:	1
ii no, detaii.	
Results of Surveillance	
Has any animal health surveillance been carried out by, or on behalf of, the business?	
2. If yes, are results available for inspection?	N/A
3. Any significant results?	N/A
If yes, detail (if not detailed under recent disease problems).	14/71
ii yes, detaii (ii flot detailed dildei recent disease problems).	

Records checked between: 25/2/2025 to 10/3/2025

1 1	ni 059, version 15					issueu by. Frii							
	Case no:	2025-00)75	Site No		FS1361			Date of Samplin		10/0	03/2025	10/0
	Priority samples:	VI		ВА		PA		MG		ig. HI			
	Time sampling starts/ends:	16:0	0:00	17:0	0:00	l	Inspecto	or:			VMD No).	8
	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												
	Pool/Fish No	F1	F2	F3	F4	F5							
	Fish nos	1	2	3	4	5	6-15						
	Pool Group	P1	P1	P1	P1	P1							
	Species	SAL	SAL	SAL	SAL	SAL	SAL						
	Average weight	200g	200g	200g	200g	200g	200g						
	Sex	N/A		N/A	N/A	N/A	N/A						
	Water Type	FW	FW	FW	FW	FW	FW						
		ij	njt	Ξ	nit	υ <u>i</u> t	nit						
		n ±	n T	n T	n T	n T	lt u						
		ομ	smolt unit	90	smolt unit	smolt unit	smolt unit						
		S	IS S	ls s	IS S	IS S	IS S						
Details		SO)SO	08)SO)SO	SO						
ets		Joe	ec.	ecr	ecr	ecr	ecr						
		Applecross smolt unit 2	Applecross (Applecross smolt unit 2	Applecross s 2	Applecross (Applecross s 2						
Stock	Stock Origin		4 Z	4 K	4 Z	4 4							
S	Facility No	1	1	1	1	1	1						

)3/2025	03/2025 Additional Sample Information:												
	Fin sam	ples are	e pooled	into 2 tu	ubes one	e tube f1	-3 the s	econd is	F4-5.				
5		Total Te	ests ass	igned	2								
	_			· .									

FHI 059, Version 13 Issued by: FHI Date of issue: 12/05/2020 Method of killing: Anaesthetic Case no: 2025-0075 Site No: FS1361 Inspector(s): Sheet Relevant: Y 10/03/2025 Date of visit: S for strong presence: M for medium presence: W for weak presence Fish Number Time sampled after death (if > 45 minutes) External Signs Moribund S Behaviour Lethargic Hanging vertical Spiralling Flashing Loss of equilibrium Body Dark Distended abdomen **Anorexic** Scale Oedema Opercula **Shortened** Flared Haemorrhaging **Throat** Ventrum Base of fins S S S S Elsewhere Eyes Exophthalmic Enophthalmic (sunken) Cataract Haemorrhagic Gills m Zoned Necrotic Lesions Flank Elsewhere Vent Inflamed Trailing faeces Estimate numbers Lice Load Internal Signs **Ascites** Clear Bloody Oedema In tissues Heart Pale/anaemic Granulomas W W W W Deformed Liver Petechial haem Gross haem Tissue breakdown Enlarged Colour number(s) Granulomas Lesions Petechial haem Pyloric caeca Tubules mauve Lack of fat M Spleen Enlarged

М

М

М

М

М

Granulomas

No food present Yellow pseudo-faeces External haem Internal haem

Haemorrhaging Haemorrhaging

Fluid filled

Swollen Grey

Granular Liquefied Parasites present

Anaemia

Gut

Body wall

Kidney

General

Swim bladder

Case no: 2025-0075

Date of visit: 10/03/2025

Time sampled after death (if - 45 minutes) Ebhaviour Behaviour Hanging vertical Spiralling Flashing Flashing Flashing Sody Dark Accessed Accessed Accessed Base of fins Elsewhere Elsewhere Elsewhere Elsewhere Elsewhere Flashing Gills Base of fins Elsewhere								
Time sampled after death (f) - 45 minutes) Esternal Signa Eshaviour Moribund Lethargic Hanging vertical Spiralling Flashing Flashing Flashing Sody Dark Accessed		nce: M for medium presence: W fo	r w					
External Signs Behaviour Moribund Lethargic Hanging vertical Spiralling Flashing Loss of equilibrium Body Dark Distended abdomen Anorexic Scalo Oedoma Opercula Shortened Flared	Fish Number							
Behaviour Moribund		er death (if > 45 minutes)						
Lethargic								
Hanging vertical	Behaviour							
Spiralling								
Flashing								
Loss of equilibrium								
Body								
Distended abdomen								
Approxice	Body							
Scale Oedema		Distended abdomen						
Operaula Shortened Flared								
Flared								
Haemorrhaging	Opercula							
Ventrum		Flared						
Base of fins	Haemorrhaging							
Elsewhere								
Eyes Exophthalmic								
Enophthalmic (sunken)								
Gataract	Eyes							
Gataract		Enophthalmic (sunken)						
Gills								
Gills		Haemorrhagic						
Necrotic	Gills							
Lesions		Zoned						
Elsewhere		Necrotic						
Vent Inflamed	Lesions	Flank						
Trailing faeces		Elsewhere						
Lice Load	Vent	Inflamed						
Lice Load		Trailing faeces						
Ascites Clear	Lice Load							
Ascites Clear								
Ascites Clear	Internal Signs							
Oedema In tissues In tissues<		Clear						
Heart		Bloody						
Granulomas	Oedema	In tissues						
Deformed	Heart	Pale/anaemic						
Liver		Granulomas						
Gross haem		Deformed						
Tissue breakdown	Liver	Petechial haem						
Enlarged		Gross haem						
Enlarged								
Colour number(s) Colour numb								
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 Fluid filled Kidney Grey Granular Liquefied General Parasites present Anaemia	Pyloric caeca							
Lack of fat Image: Company of the company								
Spleen Enlarged								
Granulomas Image: Control of the control	Spleen							
Gut No food present								
Yellow pseudo-faeces	Gut							
External haem								
Internal haem Body wall Haemorrhaging Swim bladder Haemorrhaging Fluid filled Kidney Grey Granular Liquefied General Parasites present Anaemia								
Body wall Haemorrhaging Swim bladder Fluid filled Swim bladder Swollen Swo								
Swim bladder Haemorrhaging Image: Control of the contr	Body wall							
Fluid filled								
Kidney Swollen Image: Control of the control of th	Carini bidddei							
Grey	Kidney							
Granular Liquefied General Parasites present Anaemia	radioy							
Liquefied Seneral Parasites present Seneral Se								
General Parasites present Sanaemia Sana								
Anaemia Anaemia	General							
	Scholar							
000E 007E		Anacinia						

Issued by: FHI	Date of issue: 12/05/2020
pectoral fin causing significant erosion.	

FHI 059, Version 13		Issued by: FHI			Date of	of issue	: 12/05/2020
Case Number:	2025-0075		Site No:	FS1361		Insp:	
Date of Visit	10/03/2025		No of m	ovements/s	supp./dest.		Score
Live fish movements			0	1-5	6-10	>10	
Movements on (from out	Frequency of m	novements on from equivalent MS	0	5	10	14	0
with GB) of susceptible species		novements on from equivalent zone or	0	9	18	26	0
•	Number of sup	ocluding third country	0		10	14	0
Movements off	Frequency of m		0	3		10	10
wovernerits on	Number of des		0			10	3
Exposure via water		Site contacts	0	1-5	6-10		
Water contacts with other farms (holding species	Farm is protect disinfection or l	ed (secure water supply through porehole)	0				0
susceptible to same diseases)		or in a coastal zone with category I n or within 1 tidal excursion	1	2	4		
	farms upstream	or in a coastal zone with category III or within 1 tidal excursion	1	3	6		
		or in a coastal zone with category V n or within 1 tidal excursion	1	4	8		
Management practices			None	Secure	Unsecure		
Water contacts with processors	Any processing	plant discharging into adjacent waters	0	1	2		0
On farm processing within the rules of the directive	No on farm pro	cessing	0				0
	Processing own	n fish (re-cycling risk)	1				
	Processing fish	from MS of equivalent status	2				
	Processing fish equivalent state	from zone or compartment of us	4				
		from Category III farm	8				
	Processing fish	from Category V farm	10				
Disposal of fish and fish by-	Site's own was	te only processed.	0	1			
products	Common proce	esses with other farms	3				3
	Collection poin	t for waste from other farms	5				
Use of unpasteurised feeds	No feeding of u	inpasteurised feed	0	-]			0
	Feeding unpas	teurised feed	5				
Biosecurity		Number of sites	1	2 or 3	≥ 4		
Contacts with other sites	Sites operating	from single shorebase	0	1	2		2
	Sites sharing s	taff and equipment	0	1	2		2
Disinfection of equipment	Yes		0				0
between sites, use of footbaths etc	No		1				
CoGP/Regulator							
Practices in accordance with regulator or industry	Yes		0				0
code of practice	No		3				
Platform access to cages	Yes		0	1			0
	No		2				
					Total		20
					Rank		MEDIUM

FHI 059, Version 13	Issued by: FHI		Date of issue: 12/05/2
Case No: 2025-0075	Site	e No: FS1361	
Sea Lice Inspection (Seawater Sites O	nlv)		
Has the site experienced sea lice problem.			
	or equivalent) fallowed synchronously on a	single year class basis?	
	of licenced in-feed and bath sea lice medicat	~ .	rin,
•	as well as access to suitable biological and		
and can these be deployed in a reasonab	le period of time?		
4. Is there a signed documented farm ma Management Area (or equivalent)?	nagement agreement or statement relevant	to the site and CoGP Farr	m
5. Are sea lice count records available for	inspection? (Legal SSI, CoGP Annex 6)		
6. Do records adequately reflect the requi	ired standard specified in the SSI and the Co	oGP? (Legal SSI, CoGP A	nnex 6)
7. Are sea lice (<i>L. salmonis</i>) record levels records are inspected? (CoGP Annex 6)	s below the suggested criteria for treatment i	n the CoGP during the pe	riod that
8. Have average adult female sea lice (<i>L</i> . 2 or above (from w/b 10/6/19) during the p	salmonis) numbers per fish been at a level period that records are inspected?	of 3 or above (prior to w/b	10/6/19) or
If yes, have these been reported to the Fi	sh Health Inspectorate? If no, FHI see comr	nent.	
9. Is C. elongatus infestation at a level when the second	nich is considered to cause significant welfa	re problems? (CoGP 4.3.8	31, 5.3.50)
10. Have therapeutic treatments been add	ministered or other actions taken when L. sa	almonis levels have excee	eded the
suggested criteria for treatment or where	C. elongatus is considered to have welfare	implications? (CoGP 4.3.8	32, 5.3.51)
11. Has any other action been taken (whe	ere applicable)?		
· · · · · · · · · · · · · · · · · · ·	ctions taken had a significant impact upon th		
	ried out in cooperation between participating		
14. Is there a harvesting strategy for the s sea lice?	site, where fewer populations or part populat	ions are held without treat	ment for
15. Is there a site specific written lice mar recognised scenarios during the escalation	nagement procedure with waypoints describition of a sea lice infestation?	ng set actions to deal with	1
16. Do the sea lice levels observed on sto	ocks reflect sea lice count data? If no please	detail reasons.	
Containment Inspection			
	amage due to predators in the current or pre	vious production cycles?	N
	nst the predation experienced on site? (Deta	•	Y
site indoors	(
If other, detail below:			
·	experienced on or in the vicinity of the site	since the last FHI inspection	on? N
If Yes proceed with questions 4 – 9. If No			
4. Have these been reported to Scottish N	viinisters <i>?</i> B forthwith (where they exist)? (CoGP - 4.4	1 27 5 / 17\	
•	and local fisheries trusts forthwith (where the	· ·	7 5 4 17)
o. Have allose been reported to the eer e		10 0 Mat). (0001 1.1.0	7, 0.1.17)
7. Were methods (if any) used to recover	escapees? If yes give detail		
8. If gill nets were deployed was this actio Ministers? (Legal, CoGP – 4.4.38, 5.4.18)	on agreed with local wild fish interests and w	as permission given by Sc	ottish
	ninimise the risk of further escapes? (Not co	overed in code but could	
be considered under satisfactory mea		JVOIGU III COUG DUL COUIU	
•	ith regards to containment? If no, please det	tail reason(s)	Y
	<u> </u>	(-)	

Date of issue: 12/05/2020

 Case No:
 2025-0075
 Date of visit:
 10/03/2025

 Site No:
 FS1361
 Inspector:

Results Summary	Freq.	Date of Notification								
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp		
IPN (PCR) - IPNM	2/5	17/03/2025		17/03/2025		01/05/2025				
VHS (PCR) - VHSP	0/5	17/03/2025		17/03/2025		01/05/2025				
Salmonid alphavirus	0/5	17/03/2025		17/03/2025						
(SAV) (PCR) - SALP						01/05/2025				
Gyrodactylus salaris -	0/5	17/03/2025		17/03/2025						
GSAL						01/05/2025				
IHN (PCR) - IHNP	0/5	17/03/2025		17/03/2025		01/05/2025				
Gill pathology - GPAT	4/5	26/03/2025		26/03/2025		01/05/2025				
Heart pathology -	5/5	26/03/2025		26/03/2025						
HPAT						01/05/2025				
Adhesions - ADHE	2/5	26/03/2025		26/03/2025		01/05/2025				
Kidney pathology -	1/5	26/03/2025		26/03/2025						
KPAT						01/05/2025				
Spleen pathology -	3/5	26/03/2025		26/03/2025						
SPAT						01/05/2025				
Saprolegnia parasitica	2/2	25/32025		26/03/2025		01/05/2025				
Aeromonas spp. (PCR)	1/1	01/04/2025		02/04/2025						
AERO						01/05/2025				
Aeromonas	0/1	02/04/2025		02/04/2025						
salmonicida (PCR)						0.4./0.7./0.00.7				
ASAP						01/05/2025				
Aeromonas spp.	5/5	09/04/2025		15/04/2025		01/05/2025				
Culture				. = /2 . / 2 . 2 . =						
No significant bacteria	1/5	09/04/2025		15/04/2025		01/05/2025				
(culture) - NSIG		00/00/000		0.4./0=/0.00=		00/07/0007				
Aeromonas	5/5	26/06/2025		01/07/2025		02/07/2025				
salmonicida										
pectinolytica - ASPE										

Report Summary			
Case Type	Date	Insp	2 nd Insp
ECI,CNI	18/03/2025		
DIA	01/05/2025		
DIA additional result	03/07/2025		



FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No FB0169 **DATE OF VISIT** 10/03/2025

SITE NO FS1361 SITE NAME Applecross Smolt Ongrowing 2

CASE NO 20250075 INSPECTOR

Inspection under the Aquatic Animal Health (Scotland) Regulations 2009

The above site was inspected, in accordance with the Aquatic Animal Health (Scotland) Regulations 2009.

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

Records

The surveillance frequency category of the site was assessed as medium. An inspection under the Aquatic Animal Health (Scotland) Regulations 2009 will be conducted every second year. The category of the site will be reassessed on a routine basis and updated as required.

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 adequately maintained.

Records in relation to aquaculture animals transported by the business were inspected and found to be adequately maintained.

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.

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.

The biosecurity measures plan for the site was inspected and found to be adequately maintained and implemented.



Inspection under the Animals and Animal Products (Examination for Residues and Maximum Residue Limits) (England and Scotland) Regulations 2015

Medicine records were inspected and found to be adequately maintained.

Samples were taken to be analysed for veterinary residues.

Inspection under the Aquaculture and Fisheries (Scotland) Act 2007

The site was also inspected in accordance with the Aquaculture and Fisheries (Scotland) Act 2007 with respect to section 5 regarding containment and escapes.

On this occasion the site was found to be satisfactory.

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

Signed:

Fish Health Inspector

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Scottish Government website at <u>Fish Health Inspectorate Service Charter - gov.scot</u> (www.gov.scot)

Date: 18/3/2025



FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

Business No FB0169 Date of Visit 10/03/2025

SITE NO FS1361 SITE NAME Applecross Smolt Ongrowing 2
CASE NO 20250075 INSPECTOR

Section 1: Summary

During a routine site inspection, it was reported that there were elevated mortalities, on inspection of the stock approximately 100 salmon were observed with fungal-like lesions, five were removed for further examination and subsequent diagnostic sampling.

Histopathological examination revealed features consistent with systemic bacterial infection resembling *Aeromonas* sp. which was also identified on plates taken from kidney material. Sequencing was conducted on the isolate however, the result was not conclusive enough to provide further identification.

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

DNA sequence analysis was performed on material from the pectoral fins of F1 and F2 indicating the isolate to be *Saprolegnia parasitica* phylotype S2 (common to UK).

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 2: Case Detail

Observations

The site was stocked with 290,000 2023 Q4 Atlantic salmon at an average weight of 212g, this was the first batch of fish to be input to the site. The fish were transferred from Applecross Smolt Unit 2 (FS1362) a couple of weeks prior to the inspection. Post input, fungus had become established in the population with 12,770 (4.14%) mortalities recorded in week 10. On inspection of the stock moribund salmon were observed with obvious fungal lesions on the flanks, fins and backs.

Of the five fish sampled all were moribund with haemorrhaging on the ventrum and base of the fins with fungal lesions also present. Significant fin erosion was noted on F2 -F5.

Internally, with the exception of F4, the fish had deformed hearts, F4 displayed splenomegaly and the kidneys of all fish were granular in texture.



Samples

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

Fish number	Facility number	Species	Stage	Origin
F1-F5	1	Atlantic salmon	200g 2023 Q4	Applecross Smolt Unit 2

Results

Microbiology: Kidney and spleen material from F1-F5 were inoculated onto appropriate media for the isolation of bacteria.

The following bacteria were isolated:

Aeromonas sp. F1-F5 (kidney)

The level and purity of growth would suggest that this bacterium would be implicated in morbidity.

From the tests conducted, we do not have evidence of resistance to florfenicol or sulphamethoxazole/trimethoprim and resistance to amoxycillin and oxytetracycline.

All fins showed the presence of fungal mycelium consistent with *Saprolegnia* sp. and dermal erosion. Samples from F1 and F2 were sent for DNA sequence analysis which confirmed *Saprolegnia parasitica* phylotype S2.

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 (IPNV)

Fish Number	Endogenous control Cp value		Cp Values	Reported Result (PCR)	
F1	-	-	-	-	Negative
F2	-	-	-	-	Negative
F3	16.70	37.16	35.33	37.36	POSITIVE
F4	15.68	35.89	37.39	36.56	POSITIVE
F5	-		-	-	Negative

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

Parasitology: Fins were collected to determine the presence of *Gyrodactylus salaris* using light microscopy.

R09



No monogenean parasites were observed.

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

Histopathological examination revealed the following:

Gill: Small scatter foci of lamellar hyperplasia (F2, F3). Several dense aggregates of Gramnegative rod-shape bacteria (F3, F4), also observed in the cell debris among gill filaments (F1, F3 & F4). Low level of inflammation observed in F3, F4.

Skin & Muscle: Within the normal range.

Heart: Minor epicarditis (F1). F3 and F4 displayed epicarditis with dense aggregates of Gramnegative rod-shape bacteria and F2 to a lesser extent. Bacteria also observe within the two chambers in F3.

Gut and pyloric caeca: Mild peritonitis (F3, F5). Some gut content with Gram-negative bacteria associated (F2, F3). F5 displayed reduced abdominal fat.

Pancreas: Within the normal range.

Liver: Hepatocellular vacuolation (macrovesicles), mild, multifocal (F4).

Kidney: Some foci of interstitial cell (haemopoietic) necrosis and few aggregates of rod-shaped Gram-negative bacteria (F3).

Spleen: Cuffing observed in all fish. Some capsulitis (F1, F2, F3) with Gram-negative rod-shaped bacteria observed in F3.

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

Date: 01/05/2025

Signed:

Fish Health Inspector

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Scottish Government website at <u>Fish Health Inspectorate Service Charter - gov.scot</u> (www.gov.scot)



FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

Business No FB0169 Date of Visit 10/03/2025

SITE NO FS1361 SITE NAME Applecross Smolt Ongrowing 2

CASE NO 20250075 INSPECTOR

With regard to the previous report issued on the 1/5/2025, it was reported that *Aeromonas* sp. was isolated from kidney samples from F1-F5. It was requested that further testing be completed to identify the isolate.

Sequencing of the 16s and rpoD genes indicated *Aeromonas salmonicida* but no further species ID could be achieved using these methods.

Further QPCR and sequencing tests targeting the vapA gene that encodes for the A-layer surface virulence array protein were used, both reported as negative, indicating a potential identification of *Aeromonas salmonicida* subspecies *pectinolytica*, as this does not possess the A-layer gene, in addition, biochemical screening for pectinolytic activity was consistent with *Aeromonas salmonicida* subspecies *pectinolytica*.

Please refer to the previous report for all results.

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

Signed: Date: 02/07/2025
Fish Health Inspector

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