FHI 059, Version 13	ls	ssued by: FHI	Date of issue: 12/05/2020
Case No: 2024-0154			Date of visit: 04/06/2024
Time spent on site:	hours	Main Inspect	tor:
Site No: FS1341 Business No: FB0119	Site Name: Business Name:	An Camus Mowi Scotland Ltd	
Case Types: 1 ECI	2 CNI 3 SLI	4 VMD 5 DIA	6
Water Temp (°C): 10.6	Thermometer No:	T305	FHI 045 completed N/A
Observations:	Region: WI	Water type: S	CoGP MA: W-20
Dead/weak/abnormally behaving Clinical signs of disease observed Gross pathology observed? Diagnostic samples taken?	•	Y If yes, see additional info	ormation/clinical score sheet. ormation/clinical score sheet. ormation/clinical score sheet.
UNI/REG only - if unable to carry	out intended visit detail	reason below:	

#### **Additional Case Information:**

Stock transferred onto site from Kingairloch (Loch Ness, Aquagen ova) in January and March 2024. Site was fallow for 6 months prior to transfer. Delayed input due to plankton in the area in October 2023, risk assessment completed for transfer between management areas. Salmon split into Marulaig Bay in May.

Lumpfish on site from Ocean Matters. Received first batch of locally wild caught ballan wrasse on 31 May (input into pen 7 with large grade as no lumpfish in this pen). Expect to input more wrasse to increase percentage stocked to ~2%.

Strategic treatment of fish with SLICE in April 2024. Freshwater treatment in May 2024 due to poor gill health.

Main cause of salmon mortalities is poor gill health and poor performers. Main mortality cause in lumpfish is Tenacibaculum (three cages of lumpfish treated with florfenicol post delivery). Mortalities are removed daily using Foover and sent to Whiteshore Cockles for disposal.

Two weekly mortality events above threshold not reported for previous cycle. In addition, the percentage for one weekly mortality event (wk 26 in 2023) was recorded incorrectly in the mortality event spreadsheet (reported correctly by company at the time). Corrected to 1.41%.

Fish feeding well, but had been on starve for 2 days due to presence of plankton. Approximately 1-3 floating dead fish seen in pens 1-6. Two moribunds removed from pen 1 plus two feeding fish from pen 1 for VMD, diagnostic samples taken from all fish.

FHI 059, Version 13			Issu	ıed by: FHI		Date of is	sue: 12/05/2020
Case No:	2024-0154	]	Site No:	FS1341	]		
Date of Visit:		04/06/20	24		Inspector(s)	:	
Registration/Author	orisation Det	ails					
1. Business/site det			, sita rantasant	ative?		V	_
2. Changes made to	•	, criccica by	y site represent	ativo:		V	_
2. Onanges made to	o details:					'	_
Site Details (includ	le cleaner fis	sh for all se	ections)				
Total No facilities		7 cages	Facilities sto	ocked	7 cages	No facilities inspected	d 7 cages
Species	SAL	LUM	WRS				
Age group	2023 Q4	2023	2024				
No Fish	411,811	46,588	412				
Mean Fish Wt	1.38Kg	Adult	Adult				
Next Fallow Date (S		May 2025	7 10.0.11	Next Input Da	ate (Site)	November 2025	
Recent (last 4 wks)	•				_ ` ′	s (since last visit)?	N
If yes, detail:	Poor gill hea		ind AGD	•	, my dedapot	(000 1.001 1.011) !	
,	gg.						
<b>Movement Record</b>	S						
1. Movement record	ds available fo	or inspection	1?				Y
2. Date of last inspe		•				26/04/202	22
3. Are records comp		rectly entere	d?				N
4. Are movement re		•		?			Y
5. Are records comp							Y
6. Are health certific		-		able?			N/A
		(	, , ,				
<b>Transport Records</b>	5						
1. Are any moveme	nts carried or	ut by (or on I	behalf) of the bu	usiness (not us	ing a STB)?		Y
If yes, is there a sys	tem in place	for maintena	ance of transpo	rtation records	?		Y
Martality Decards							
<ul><li>Mortality Records</li><li>1. Mortality records</li></ul>	available for	increation?					
•		•			Other (detail	1	'
2. How are mortalities of their detail:			. 1. 2		Other (detail	)	
	Whiteshore						
3. Mortality records	complete and	a correctly e		1 40 (0/5/04)	0.000 (4.440)	() \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	5.050 (0.400()
				` ,		6), Wk 20 (13/5/24) = 15	
			,	,	•	2(27/2/24) = 4,481(1.0)	,
						s), Wk 20 (13/5/24) = 78 2/24) = 656 (1.38%)	33 (1.01%), VVK
			,	observed mor	•	,	
4. Recent mortality	(last 4 wks):		W1a556 - 110	observed moi	tailty (Illput 3	uays agu)	
5. Evidence of recei	•	atynical mor	talities?				Y
If yes, facility nos/no		• •		ı/reason·			
•					(3.63%) nen	4 - 1,231 (1.95% and 0	286%) nen 5 -
						ns (fish also graded and	
between pens so re		•	•		_	· · · · · · · · · · · · · · · · · · ·	1110VCG
6. Any other peaks i				artor movernor	101 WOOK 20	rior cortain porio,	l N
If yes, detail:		9 poriou					
7. Have increased (	unexplained)	mortalities I	been reported to	o vet or FHI?			N/A
If yes, detail action:	oxpidiriod)	The tallines	o o o o o o o o o o o o o o o o o o o				
8. Have 'mortality ev	vents' heen re	enorted to F	HI2 If no enter	details on mor	tality events s	heet	N
5. Flavo mortality 6	. Since been it	Sportou to I	110, 011161	astano on mon	anty overite s		- 1

Treatments and Medicines Necords	
1. Recent treatments (see comment)?	Y
If yes, detail: TMS	
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)?	
If other, detail:	
6. Are medicines stored appropriately?	Y
Biosecurity Records	
1. 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 a	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 of	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 high	jher Y
health status, certification if required)?	
6. Have the husbandry and biosecurity measures implemented between each epidemiological unit to mini	mise Y
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	Y
aquaculture animals held on site?	
8. Have the biosecurity procedures been adequately implemented on site?	Y
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).  Poor gill health - PGD & AGD	
Records checked between: 26/4/2022 - 4/6/2024	

1111 000, Version 10						133ueu by. 1 i ii							
	Case no:	2024-01	154	Site No		FS1341			Date of v		04/0	06/2024	04/0
	Priority samples:	VI		ВА		PA		MG	Sampling	: HI			
	Time sampling starts/ends:		5:00		5:00		Inspecto	or:			VMD No	).	12
	Environmental conditions:	1	Indoors	2		3		4		5			
	Summary samples	HIST	Y	ВА	Y	MG	Y	VI		РА		Total Sa	mples
A	dd Fish/Pools - click												
	Pool/Fish No	F1	F2	F3	F4								
	Fish nos	1	2	3	4								
	Pool Group												
	Species	SAL	SAL	SAL	SAL								
	Average weight	0.7Kg	0.7Kg	1.3kg	1.3Kg								
	Sex	N/A	N/A	N/A	N/A								
	Water Type	SW	SW	SW	SW								
		Ę	ج	Ę	<u></u>								
		0	8	0	00-								
		1) (	-	1) (	1) ر								
ails		00	50	00	oct								
Details		airl s)	airl 3)	airl s)	airl s)								
Ϋ́	Ctook Origin	Kingairloch (Loch Ness)	Kingairloch (Loch Ness)	Kingairloch (Loch Ness)	Kingairloch (Loch Ness)								
Stock	Stock Origin Facility No	<u> </u>	1 Y Z	<u> </u>	<b>⊻</b> Z								
S	I acility NO	I	I	I	I								

1111 000, 1010	1011 10	100000 by. 1111												
06/2024 Addit	Additional Sample Information:													
4	Total T	ests ass	signed	3	l									
														•

FHI 059, Version 13 Issued by: FHI Date of issue: 12/05/2020

Case no:	2024-0154	Site No: FS1341		Method of killing: Percussive							
Date of visit:	04/06/2024		Inspec	tor(s):				s	heet Re	elevant:	Υ
<b>S</b> for strong present	ce: <b>M</b> for medium presence: <b>W</b> for w	veak pres	sence								
Fish Number		1	2	3	4						
	er death (if > 45 minutes)	80 min		100 min							
External Signs	,										
Behaviour	Moribund	S	S								
	Lethargic										
	Hanging vertical	S	S								
	Spiralling										
	Flashing										
	Loss of equilibrium										
Body	Dark										
	Distended abdomen										
	Anorexic										
0	Scale Oedema										
Opercula	Shortened										
Haemorrhaging	Flared Throat										
nacmonnaying	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										
Addition	Bloody										
Oedema	In tissues										
Heart	Pale/anaemic										
	Granulomas										
	Deformed										
Liver	Petechial haem										
	Gross haem										
	Tissue breakdown										
	Enlarged										
	Colour number(s)	4	4	3	4						
	Granulomas Lesions										
Pyloric caeca	Petechial haem										
. yioiio caeca	Tubules mauve										
	Lack of fat										
Spleen	Enlarged										
	Granulomas										
Gut	No food present										
	Yellow pseudo-faeces	S	S	S							
	External haem										
	Internal haem										
Body wall	Haemorrhaging										
Swim bladder	Haemorrhaging										
IX! In a	Fluid filled										
Kidney	Swollen										
	Grey										
	Granular										
General	Liquefied Parasites present										
Octional .	Anaemia										

Case no: 2024-0154

Date of visit: 04/06/2024

Date of visit:	04/06/2024	<u>:</u> ]						
S for strong preser	nce: <b>M</b> for medium presence: <b>W</b> for	<b>\</b>						
Fish Number	ice. Wi for medium presence. W for	VI				ı	1	
	er death (if > 45 minutes)							
External Signs	er deam (ii > 45 minutes)							
Behaviour	Moribund							
Dellavioui	Lethargic							
	Hanging vertical							
	Spiralling							
	Flashing							
	Loss of equilibrium							
Body	Dark							
Douy	Distended abdomen							
	Anorexic							
	Scale Oedema							
Opercula	Shortened							
- p	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							
Pyloric caeca	Lesions Petechial haem							
i yioric caeca	Tubules mauve							
	Lack of fat							
Spleen	Enlarged							
Оріссії	Granulomas							
Gut	No food present							
-ui	Yellow pseudo-faeces							
	External haem							
	Internal haem							
Body wall	Haemorrhaging							
Swim bladder	Haemorrhaging							
5144401	Fluid filled							
Kidney	Swollen							
	Grey							
	Granular							
	Liquefied							
General	Parasites present							
	Anaemia							
	, muchina							

FHI 059, Version 13		Issued by: FHI			Date	of issue	: 12/05/2020
Case Number:	2024-0154		Site No:	FS1341		Insp:	
Date of Visit	04/06/2024		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	40	200	0
species	compartment in Number of sup	ncluding third country	0		18 10	26 14	0
							0
Movements off	Frequency of m		0			10 10	10
Evnesure vie weter	Number of des	tinations Site contacts	0		6-10	10	3
Exposure via water Water contacts with other	Farm is protect	ed (secure water supply through	5 0 T	1-5 	0-10		
farms (holding species	disinfection or l		0				0
susceptible to same		or in a coastal zone with category I		_			
diseases)	<u> </u>	n or within 1 tidal excursion	1	2	4		2
		or in a coastal zone with category III or within 1 tidal excursion	1	3	6		0
		or in a coastal zone with category V					
	farms upstream	or within 1 tidal excursion	1	4	8		0
Management practices			None	Secure	Unsecure		
Water contacts with	Any processing	plant discharging into adjacent waters	;				
processors			0	1	2		0
On farm processing within	No on farm pro	cessing	0	]			0
the rules of the directive	Processing own	n fish (re-cycling risk)	1				0
	Processing fish	from MS of equivalent status	2				0
		from zone or compartment of					0
	equivalent statu		4				0
	Processing fish	from Category III farm	8				0
	Processing fish	from Category V farm	10				0
Disposal of fish and fish by-	Site's own was	te only processed.	0	Ī			0
products	Common proce	esses with other farms	3	1			3
	Collection point	t for waste from other farms	5	-			0
Use of unpasteurised feeds	No feeding of u	inpasteurised feed		1			0
osc of dripastedrised reeds	Feeding unpas	·	5	1			0
Biosecurity	r county unput	Number of sites		] 2 or 3	≥4		
Contacts with other sites	Sites operating	from single shorebase	0	1	2		1
		taff and equipment	0		2		1
Disinfaction of a main manual			<u> </u>	<u> </u> 			
Disinfection of equipment between sites, use of	Yes		0				0
footbaths etc	No		1				0
CoGP/Regulator							
Practices in accordance	Yes		0				0
with regulator or industry code of practice	No		3				0
Diotform coases to come	IVaa			1			
Platform access to cages	Yes		0				0
	No		1 2	J			0
					Total		20
					Rank		MEDIUM

FHI 059, Version 13	Issued by: FHI	Date of issue: 12/05/2020
Case No: 2024-0154	Site No:	S1341
3. Does the site have access to a range of lic	s in the previous 4 years? equivalent) fallowed synchronously on a single year eenced in-feed and bath sea lice medications (includ well as access to suitable biological and/or mechan	ling deltamethrin,
	pement agreement or statement relevant to the site	and CoGP Farm
5. Are sea lice count records available for ins	spection? (Legal SSI, CoGP Annex 6) standard specified in the SSI and the CoGP? (Lega	al SSI, CoGP Annex 6)
7. Are sea lice ( <i>L. salmonis</i> ) record levels be records are inspected? (CoGP Annex 6)	low the suggested criteria for treatment in the CoGF	oduring the period that N
3. Have average adult female sea lice ( <i>L. sal</i> 2 or above (from w/b 10/6/19) during the peri	<i>monis</i> ) numbers per fish been at a level of 3 or abood that records are inspected?	ve (prior to w/b 10/6/19) or Y
	Health Inspectorate? If no, FHI see comment.  I is considered to cause significant welfare problems	Y S? (CoGP 4.3.81, 5.3.50)
•	istered or other actions taken when <i>L. salmonis levelongatus</i> is considered to have welfare implications	
13. Are treatments, where conducted, carried	applicable)?  In staken had a significant impact upon the lice levels  If out in cooperation between participating farms?  Where fewer populations or part populations are he	Y
15. Is there a site specific written lice managescenarios during the escalation of a sea lice	ement procedure with waypoints describing set action infestation?	ons to deal with recognised Y
16. Do the sea lice levels observed on stocks	s reflect sea lice count data? If no please detail reas	ons. Y
	ge due to predators in the current or previous produ the predation experienced on site? (Detail below) Bird nets	uction cycles?
	perienced on or in the vicinity of the site since the la	st FHI inspection?
·		•
7. Were methods (if any) used to recover esc	capees? If yes give detail	
Ministers? (Legal, CoGP – 4.4.38, 5.4.18) 3. What action was taken to prevent and min	greed with local wild fish interests and was permissimise the risk of further escapes? (Not covered in co	
be considered under satisfactory measu  10. Is the site inspected as satisfactory with r	regards to containment? If no, please detail reason(	s) Y

FHI 059, Version 13	Issued b	y: FHI	Date of issue: 12/05/2020
Case No: 2024-0154	Site No: FS134		
Date of Visit: 04/06/2024	Inspector:		
Point of Compliance			
1. Is the farm under inspection located	within a farm manageme	nt area?	Y
If N, no further questions require comp	letion.		
Points of Compliance for Both Farm	Management Agreeme	nts and Statements	
2. Has a current farm management ag			Y
3. Is the current FMAg/S available for it			Y
4. Does the FMAg/S identify the releva	nt farm management area	a?	Υ
5. Does the FMAg/S identify the fish fa	rm site(s) to which it appli	es?	Υ
<ol><li>Does the FMAg/S identify the date o</li></ol>	f commencement of the a	greement or statement?	Y
7. Does the FMAg/S identify the date o	f review?		Y
Arrangements for Fish Health Manag	gement		
8. Does the FMAg/S identify the minim farm?	um health standards for t	ne stocks to be introduce	d to the area or Y
9. Does the FMAg/S identify the vaccin	ation requirements for sto	ocks held in the area or fa	rm?
10. Does the FMAg/S identify the speci	es of fish which may be s	tocked into the area or fa	rm?
11. Does the FMAg/S identify the maxing individual farm?	mum stocking density of a	any pen on any farm in th	e area or the Y
<ol><li>Does the FMAg/S identify the arran fish farm in the area or the individual fa</li></ol>	-	and disposal of any dead	fish from any
Arrangements for The Management	of Sea Lice		
13. Does the FMAg/S identify arrangen	nents for the sharing of da	ata on sea lice numbers a	nd treatments?
14. Does the FMAg/S identify the availa	ability and the use of med	icines on farms covered b	by the agreement Y
15. Does the FMAg/S identify any requ		y testing of available treat	ments for sea
lice on farms in the area or individual fa			
16. Does the FMAg/S identify the circuit		ological controls and clear	ner fish are to be
used on farms in the area or individual		trantonanto an forma with	nin the area?
17. Does the FMAg/S identify the arran	gements for synchronous	treatments on farms with	in the area?
Live Fish Movements			
18. Does the FMAg/S identify the circularea or farm?	mstances when live fish n	nay be introduced or remo	
19. Does the FMAg/S identify the arran or individual farms?	gements for the moveme	nt of live fish on and off s	ites in the area

FHI 059, Version 13	Issued by: FHI	Date of issue: 12/05/2020
Harvesting 20. Does the FMAg/S identify acceptable ha	rvest practices on farms in the area or indi	ividual farms?
Fallowing 21. Does the FMAg/S identify the dates by w		
date when a farm or area may be restocked 22. Does the FMAg/S identify whether one o agreement or statement?		sites covered by the Y
23. Does the FMAg/S identify whether brood covered by the agreement or statement?	Istock or potential broodstock are to be ke	pt on any site
Point of Compliance for Farm Manageme 24. Does the farm management agreement parties to the agreement?		me, or cease to be, N/A
Management and operation 25. Is the fish farm being managed and oper 26. What is the version no/date of issue of the		r statement?

Site No: FS1341

Case No: 2024-0154

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

Case No: 2024-0154 Site No: FS1341 Date of visit: 04/06/2024

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, select reason(s):
29/05/23	04/06/2023	≥750g	4.3Kg	SAL	Q1	Weekly	1.19	Explained	CMS
19/06/23	25/06/2023	≥750g	4.5Kg	SAL	Q1	Weekly	1.23	Explained	CMS
									+

If unexplained, select 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
	1,929		No action - historical report collected during site inspection	2022
	1,200		No action - historical report collected during site inspection	2022

Case No:	2024-0154			Date of visit:	04/06/2024			
						_		
Site No:	FS1341	)		Inspector:				
Results Summary	Freq.			Da	te of Notifica	tion		
		Database	Insp	Phone	Insp	Writing	Insp	2 <sup>nd</sup> Insp
ISA PCR	0/4	07/06/2024		07/06/2024		21/06/2024		
IPN PCR	0/4	07/06/2024		07/06/2024		21/06/2024		
PMCV PCR	0/4	07/06/2024		07/06/2024		21/06/2024		
VHS PCR	0/4	07/06/2024		07/06/2024		21/06/2024		
IHN PCR	0/4	07/06/2024		07/06/2024		21/06/2024		
SAV PCR	0/4	07/06/2024		07/06/2024		21/06/2024		
AGD PCR	1/4	07/06/2024		07/06/2024		21/06/2024		
PNST PCR	4/4	07/06/2024		07/06/2024		21/06/2024		
salmon gill pox PCR	2/4	07/06/2024		07/06/2024		21/06/2024		
PRV PCR	2/2	17/06/2024		17/06/2024		21/06/2024		
EPIT	2/4	17/06/2024		17/06/2024		21/06/2024		
GPAT	4/4	17/06/2024		17/06/2024		21/06/2024		
HPAT	4/4	17/06/2024		17/06/2024		21/06/2024		
LPAT	4/4	17/06/2024		17/06/2024		21/06/2024		
KPAT	2/4	17/06/2024		17/06/2024		21/06/2024		
VSPE	2/4	18/06/2024				21/06/2024		
NSIG	1/4	21/06/2024				21/06/2024		
Report Summary								
Case Type	Date	Insp	2 <sup>nd</sup> Insp					
ECI/CNI/SLI/VMD	13/06/2024							
DIA	21/06/2024							
	1							

# FISH HEALTH INSPECTORATE VISIT REPORT

#### SUMMARY FOR INFORMATION OF SITE OPERATOR

 Business No
 FB0119
 Date of Visit
 04/06/2024

 Site No
 FS1341
 Site Name
 An Camus

 Case No
 20240154
 Inspector

### **Section 1: Summary**

During a routine inspection two moribund Atlantic salmon were observed and removed for further examination and diagnostic sampling. A further two fish removed for sampling for veterinary residues were also included in the diagnostic sampling.

Histopathology examination revealed mild proliferative branchitis and some fish displayed mild, multifocal, myocarditis which could be potentially related to the presence of piscine reovirus (PRV), F3 and F4 tested positive for PRV by qPCR. Hepatocellular necrosis was also observed, and two fish displayed granulomatous inflammation.

Gill samples tested by qPCR were positive for the gill related pathogens *Neoparamoeba* perurans, *Paranucleospora theridion* and salmon gill poxvirus (SGPV).

A *Vibrio* sp. was identified. The level and purity of growth observed would not suggest this bacterium was a primary pathogen.

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**

During a routine inspection two small moribund Atlantic salmon (F1 and F2) that were hanging vertically in the water were removed from pen 1 for further examination and diagnostic sampling. Two healthy fish (F3 and F4) were also removed from pen 1 for collection of samples for veterinary residues analysis and included in the diagnostic sample.

At the time of the inspection the site was stocked with 411,811 Atlantic salmon at 1.38 kg average weight, 46,588 lumpfish and 412 wrasse. Mortality levels on the site were generally low with the main causes of mortalities in the salmon attributed to poor gill health and poor performers. Mortality levels had increased in week 20 following freshwater treatments, but reduced in the following weeks.

F1 and F2 had pale patches on their gills. Internally F1, F2 and F3 had yellow pseudo faeces in the gut. No clinical signs or pathology were observed in F4.

## <u>Samples</u>

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

Fish number	Facility number	Species	Stage	Origin
F1-F4	1	Atlantic salmon	2023 Q4	Kingairloch (Loch Ness)

#### Results

**Bacteriology:** Kidney and gill and material from F1-F4 were inoculated onto appropriate media for the isolation of bacteria.

The following bacteria were isolated:

• Vibrio sp.: F1 & F2 (kidney and gill)

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

Piscine reovirus (PRV) (only F3 and F4 tested)

Fish Number	Endogenous control Cp value		Reported Result (PCR)		
F3	15.91	33.09	33.25	32.94	POSITIVE
F4	16.31	31.68	31.46	31.61	POSITIVE

Salmon gill poxvirus

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	-	-	-	-	Negative
F2	19.53	28.69	28.68	28.63	POSITIVE
F3	19.81	32.58	32.75	32.48	POSITIVE
F4	-	-	-	-	Negative

The samples tested negative for infectious haematopoietic necrosis virus (IHNV), infectious pancreatic necrosis virus (IPNV), infectious salmon anaemia virus (ISAV), piscine myocarditis virus (PMCV), salmonid alphavirus (SAV) 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		Reported Result (PCR)		
F1	-	-	-	-	Negative
F2	19.53	31.35	31.20	31.71	POSITIVE
F3	-	-	-	-	Negative
F4	-	-	-	-	Negative

Paranucleospora theridion

Fish Number	Endogenous control Cp value		Reported Result (PCR)		
F1	19.43	21.54	21.64	21.70	POSITIVE
F2	19.53	23.74	23.59	23.58	POSITIVE
F3	19.81	30.57	30.54	30.60	POSITIVE
F4	19.14	30.52	27.91	30.73	POSITIVE

**Histology:** Tissue samples of gill, skin and skeletal muscle, heart, pyloric caeca, pancreas, hind gut, liver, spleen and kidney were taken from F1-F4. The tissue samples were fixed in 10% neutral buffered formalin.

Histopathological examination revealed the following:

<u>Gill</u>: Lamellar hyperplasia and fusion, mild, multifocal (F1) with inflammatory cell infiltrate and foci of cellular necrosis and haemorrhage (F1, F2). F1 also displayed lamellar adhesions. Ranging from marked to moderate presence of basophilic epithelial inclusions (likely epitheliocystis) observed in F1 & F2. Some aneurysmal dilation/telangiectasia with multifocal thrombosis (F1-F4).

Skin & Muscle: Small area of red skeletal muscle inflammation (F3 & F4).

<u>Heart</u>: Mild, multifocal myocarditis (F1, F3, F4). F2 displayed some thrombi. Mild epicarditis (F1-F4).

<u>Gut and pyloric caeca</u>: Peritonitis, mild. F2 and F4 displayed a granulomatous inflammation in the abdominal tissue. Ranging from moderate to marked cellular sloughing potentially associated with autolysis artefacts (all fish).

Pancreas: Within the normal range.

<u>Liver</u>: Few scattered necrotic hepatocytes (F1, F3) with foci of cellular inflammation observed in F3. Mild cuffing (F1, F2, F3) and F2 displayed hepatocellular necrosis, mild, multifocal. Hepatocellular vacuolation (macrovesicles), mild, diffuse (F4).

<u>Kidney</u>: Several renal tubules displaying hyaline droplets on the linen epithelium (F1, F2). F2 displayed interstitial granulomatous inflammation.

Spleen: Mild granulomatous inflammation (F2).

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



Fish Health Inspector

Date: 21/6/2024

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)

## FISH HEALTH INSPECTORATE VISIT REPORT

#### SUMMARY FOR INFORMATION OF SITE OPERATOR

 BUSINESS NO
 FB0119
 DATE OF VISIT
 04/06/2024

 SITE NO
 FS1341
 SITE NAME
 An Camus

 CASE NO
 20240154
 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 found to be inadequately 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 inadequately maintained.

Mortality levels had exceeded the reporting criteria since the last inspection and had not been reported to the Fish Health Inspectorate. I would like to remind you of the industry agreement in relation to mortality reporting as detailed in A Code of Good Practice for Scottish Finfish Aquaculture.

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.

The following point was raised with the site representative during the inspection:

The FS number was missing for multiple movements onto the site from one source. The site number was added at the time of the inspection and no further action is required.

R25

# 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, as amended, with respect to section 3 regarding parasites (sea lice), section 4A regarding fish farm management agreements and statements and section 5 regarding containment and escapes.

On this occasion the site was found to be satisfactory with regards to parasites, fish farm management agreements and statements and containment and escapes.

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 Fish Health Inspectorate Service Charter - gov.scot (www.gov.scot)

Date: 13/6/2024

