FHI 059, Version 13	Iss	ued by: FHI	Date of issue: 12/05/2020				
Case No: 2021-0383			Date of visit: 07/10/2021				
Time spent on site:	5 hours	Main Inspect	or:				
Site No: FS0708	Site Name:	Portree					
Business No: FB0169	Business Name:	The Scottish Salmon Compar	ny				
Case Types: 1 ECI	2 SLI 3 CNI	4 VMD 5 DIA	6				
Water Temp (°C): 12.7	Thermometer No:	T148	FHI 045 completed				
Observations:	Region: HI	Water type: S	CoGP MA M-26				
Dead/weak/abnormally behavir	-		ormation/clinical score sheet.				
Clinical signs of disease observed?	ved?		ormation/clinical score sheet.				
Gross pathology observed? Diagnostic samples taken?		Y III yes, see additional inito	rmation/clinical score sheet.				
UNI/REG only - if unable to carry out intended visit detail reason below:							

Additional Case Information:

Increased mortalities at site due to jellyfish, plankton and associated gill health issues.

30/08 - 05/09/21 = 18,687 (3.66%) - Site has been found to be positive for CMS. PGD and anaemia prevalent (wk 33). Gill issue exacerbated by jellyfish/plankton blooms.

06/09 - 12/09/2021 = 25,482 (5.17%) - Some cages have been harvested to reduce biomass on site and fish are scheduled to undergo a FW treatment in the coming weeks to try and improve gill health on the site.

13/09 - 19/09/2021 = 29,321 (6.28%) - The site has had a freshwater treatment and the fish seem to have reacted well.

20/09 - 26/09/2021 = 9,076 (2.15%)

Site currently harvesting live fish to Marybank in Stornoway, targeting worst affected cages.

Fish vet group visit 6/10/21 - this will be there 3rd visit to look at current issues on site. Reporting; Zooplankton, sea gooseberries, moon, crystal and lions mane jellyfish, cyanea sp and phialedla and other hydrozoa. Blooms have been observed onsite for many weeks starting in August and only clearing now.

SLICE on input every 8 weeks for first 10 months until June 2021. FW and mechanical treatments since then. Freshwater treatment at both sites just completed (three hour treatment for gill issues).

Normal practice to ensile waste on site. With increased morts currently have had to use Fergusons boat to remove some fish off whole to Mosspark or Dunfermline.

Fish input 1/9/2020 - Russell burn, Harris lochs. Fish moved off site to West Strome in Jan 2021. Risk assessment completed.

Dec 2020 - seal breached cage 3 at Portree. Replaced all nets with seal pro nets which have stopped seal issues experienced earlier in the cycle. Also seal blinds on nets. ADD on site but not used and would need to seek approval is required.

Lice figures peaked at 5.29 adult females 8/9/21, hydrolicer used and dropped to 0.95 for 17/9/21. Numbers had increased as they delayed lice treatments due to poor gill health over the summer. Last count 26/9/21 was 1.09 adult female. A FW treatment has been undertaken since then. Hydrolicer planned for next week.

Lumpfish losses 12.4% since input Feb-April 2021 from Ocean Matters. Attributed to general background losses.

Mortality levels have reduced significantly since freshwater treatment and only a few moribund fish observed. Four fish removed from pen 3 for diagnostic sampling as this pen had the highest mortality (~ 30%).

Paperwork by , Site inspection by & , VMD sampling by , diagnostic sampling by under supervision of

FHI 059, Version 13	1		Issu	ed by: FHI			Date of issue	e: 12/05/2020
Case No:	2021-0383		Site No:	FS0708				
Date of Visit:		07/10/2021]		Inspector(s):			
Registration/Author	orisation Deta	ails						
1. Business/site det	ails summary	checked by s	ite representa	ative?			Υ	
2. Changes made to	o details?						Υ	
Site Details (includ	le cleaner fis	h for all secti	ions)					
Total No facilities		10	Facilities sto	cked	10	No facilitie	s inspected	10
Species	SAL	LUM		I			I	
	2020 S0	Feb-April 21						
Age group	2020 00	input						
No Fish	446,553	90,980						
Mean Fish Wt	2.5 kg	90g						
Next Fallow Date (S		May 2022		Next Input Da	ite (Site)	Sept 2022		
Recent (last 4 wks)	•	•			Any escapes			Y
If yes, detail:			CMS Escape	reported Dec 2		•	,	
1. Movement records available for inspection? 2. Date of last inspection: 3. Are records complete and correctly entered? 4. Are movement records available for dead fish and waste? 5. Are records complete and correctly entered? 6. Are health certificates for introductions (outwith GB) available? Transport Records 1. Are any movements carried out by (or on behalf) of the business (not using a STB)? If yes, is there a system in place for maintenance of transportation records?								
Mortality Records	: - - - f :							
Mortality records		•			Ensiled - on	oito		1
2. How are mortalitied of their detail:						site		
				ergusons uplift				V
Mortality records Percent mortality	•	•		5 000 (4 400()	4/40.0/40	ME (0.000/)	(2 de ferres)	
4. Recent mortality				5,233 (1.18%),	4/10-6/10 = 3	345 (0.08%)	(3 day figure)	- attributed
5. Evidence of recent increased/atypical mortalities?								
If yes, facility nos/no mortality per facility/no stock per facility/reason:								
across whole site peaked at 29,321 fish or 6.28% in week 37 - Gill issues and plankton								
6. Any other peaks in mortality during period checked? If yes, detail: Seal predation in Dec 2020/Jan 2021							Y	
If yes, detail:				ELUA				NICO
7. Have increased (unexplained) mortalities been reported to vet or FHI?						N/A		
If yes, detail action:			0.15	-1-4-11-	-1:4 1	4		
A Have morraint/ At	vents neen re	DOLLED TO FILL	(IT DO ADTAR	neralie on mort	SHITLY ALVANTE EL	TEAT		Y

Treatments and Medicines Records							
1. Recent treatments (see comment)?	Y						
FW -							
If yes, detail: treatments							
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							
Biosecurity records available for inspection?	Y						
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?							
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	Y						
health status, certification if required)?							
6. Have the husbandry and biosecurity measures implemented between each epidemiological unit to minimise	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:							
Deculte of Cumraillemen							
Results of Surveillance							
Has any animal health surveillance been carried out by, or on behalf of, the business? If you are regults available for inspection?	ı ı						
2. If yes, are results available for inspection?3. Any significant results?	, ·						
If yes, detail (if not detailed under recent disease problems). abundent zooplankton in water, lice gr	razing						
in yes, detail (in not detailed under recent disease problems).	azing						
Records checked between: 11/3/20 - 6/10/21							

	11 009, Version 13							issuec	гру. ГПІ		
	Case no:	2021-03	383	Site No:		FS0708	3		te of visit/ mpling:	07/10/2021	07/
	Priority samples:	VI		ВА		PA		MG	HI		
	Time sampling starts/ends:		80:00		0:00		Inspecto	r:		VMD No.	6
	Environmental conditions:	1	Indoors	2		3		4	5		
	Summary samples	HIST	Y	ВА	Y	MG	Y	VI	PA	Total S	amples
									_		
A	dd Fish/Pools - click										
П	Pool/Fish No	F1	F2	F3	F4	P1					
Г	Fish nos	1	2	3	4	1-4	5				
	Pool Group	P1	P1	P1	P1						
П	Species	SAL	SAL	SAL	SAL	SAL	SAL				
	Average weight	3Kg	3Kg	3Kg	3Kg	3Kg	4Kg				
	Sex	N/A	N/A	N/A		N/A	N/A				
	Water Type	SW	SW	SW	SW	SW	SW				
,,											
<u></u>							ဓ္ဓ				
Details		sta	sta	sta	sta	sta	Sc.				
\	Stock Origin	Girlsta	Girlsta	Girlsta	Girlsta	Girlsta	Geocrab				
Sto	Facility No	3	3			3	14				
U,	,										

									•				
10/2021 Additional Sample Information:													
F1-4 sampled by VXR under supervision of ALW F5 sampled by ALW													
Total T	ests ass	igned	5	1									
	onal Sam sampled by	onal Sample Infor sampled by VXR ompled by ALW	onal Sample Information: campled by VXR under sumpled by ALW	onal Sample Information: campled by VXR under supervision mpled by ALW	onal Sample Information: campled by VXR under supervision of AL	onal Sample Information: campled by VXR under supervision of ALW mpled by ALW	onal Sample Information: campled by VXR under supervision of ALW mpled by ALW	onal Sample Information: campled by VXR under supervision of ALW mpled by ALW	onal Sample Information: campled by VXR under supervision of ALW mpled by ALW	onal Sample Information: campled by VXR under supervision of ALW mpled by ALW	onal Sample Information: campled by VXR under supervision of ALW mpled by ALW	onal Sample Information: campled by VXR under supervision of ALW mpled by ALW	onal Sample Information: campled by VXR under supervision of ALW mpled by ALW

Case no:	2021-0383		Site No:		FS0708 Method of killing: Anaesthetic						
Date of visit:	07/10/2021]	Inspec	tor(s):				s	heet Re	elevant:	Y
S for strong presen	ce: M for medium presence: W for	weak pre	sence								
Fish Number		1	_								
Time sampled afte External Signs	er death (if > 45 minutes)	1hr	1hr	1hr	1hr I						
Behaviour	Moribund	W	w	w	W						
	Lethargic	М	М	М	M						
	Hanging vertical										
	Spiralling		_		_						
	Flashing Loss of equilibrium										
Body	Dark										
Body	Distended abdomen										
	Anorexic										
	Scale Oedema										
Opercula	Shortened										
Hoome whe will a	Flared										
Haemorrhaging	Throat Ventrum										
	Base of fins										
	Elsewhere										
Eyes	Exophthalmic										
	Enophthalmic (sunken)										
	Cataract										
Gills	Haemorrhagic Pale	w	M	M	M						
Gills	Zoned	**		141	IVI						
	Necrotic			w	W						
Lesions	Flank	M									
	Elsewhere				M						
Vent	Inflamed		_								
Lice Load	Trailing faeces Estimate numbers										
LICE LOAU	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)	4	4	4	4						
	Granulomas		1 7	_	_						
	Lesions										
Pyloric caeca	Petechial haem										
	Tubules mauve										
0-1	Lack of fat		_								
Spleen	Enlarged Granulomas										
Gut	No food present										
	Yellow pseudo-faeces										
	External haem										
	Internal haem										
Body wall Swim bladder	Haemorrhaging Haemorrhaging										
Swilli bladder	Fluid filled										
Kidney	Swollen										
	Grey										
	Granular										
0	Liquefied										
General	Parasites present										
	Anaemia										

Case no: 2021-0383

Date of visit: 07/10/2021

Date of visit.	07/10/202						
S for strong prese	nce: M for medium presence: W fo	ги					
Fish Number		T	$\overline{}$				
	ter death (if > 45 minutes)						
External Signs	ior usum (ii > 45 minutos)						
Behaviour	Moribund						
2011411041	Lethargic						
	Hanging vertical						
	Spiralling						
	Flashing						
	Loss of equilibrium						
Body	Dark						
	Distended abdomen		$\overline{}$				
	Anorexic						
	Scale Oedema						
Opercula	Shortened						
- porounu	Flared		$\overline{}$				
Haemorrhaging	Throat						
	Ventrum						
	Base of fins						
	Elsewhere						
Eyes	Exophthalmic						
_,00	Enophthalmic (sunken)						
	Cataract						
	Haemorrhagic						
Gills	Pale						
Gills	Zoned						
	Necrotic		_				
Lesions	Flank	_					
Lesions	Elsewhere						
Vont		_					
Vent	Inflamed		_				
Lies Lead	Trailing faeces	$\overline{}$					
Lice Load	Estimate numbers	-	_				
latera el Oisse		-					
Internal Signs	lo:		$\overline{}$				
Ascites	Clear	_					
0	Bloody		_				
Oedema	In tissues						
Heart	Pale/anaemic		_				
	Granulomas	-					
	Deformed		\rightarrow				
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						

FHI 059, Version 13	Issued by: FHI	Date of issue: 12/05/2020
Additional comments:		
Slightly poor gills but no internal signs	except for vaccination related adhesions.	

FHI 059, Version 13		Issued by: FHI			Date o	of issue	: 12/05/2020
Case Number:	2021-0383		Site No:	FS0708		Insp:	
Date of Visit	07/10/2021		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	ncluding third country pliers	0			14	0
Movements off	Frequency of m	novements off	<u> </u>	3	6	10	10
	Number of des		0		6	10	3
Exposure via water		Site contacts	0	1-5	6-10		
Water contacts with other farms (holding species	disinfection or l	,	0				0
susceptible to same diseases)	farms upstream	or in a coastal zone with category I n or within 1 tidal excursion	1	2	4		2
		or in a coastal zone with category III n or within 1 tidal excursion	1	3	6		0
		or in a coastal zone with category V n or within 1 tidal excursion	1	4	8		0
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				0
	Processing fish	from MS of equivalent status	2				0
	Processing fish equivalent statu	from zone or compartment of	4				0
		ı from Category III farm	8	1			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				0
	Collection poin	t for waste from other farms	5				5
Use of unpasteurised feeds	No feeding of u	inpasteurised feed	0	Ī			0
	Feeding unpas	teurised feed	5				0
Biosecurity		Number of sites	1	2 or 3	≥ 4		
Contacts with other sites	Sites operating	from single shorebase	0	1	2		1
	Sites sharing s	taff and equipment	0	1	2		1
Disinfection of equipment between sites, use of	Yes		0				0
footbaths etc	No		1				1
CoGP/Regulator	•			•			
Practices in accordance with regulator or industry	Yes		0				0
code of practice	No		3				0
Platform access to cages	Yes		0]			0
	No		2	1			0
					Total		23
					Rank		MEDIUM

FHI 059, Version 13	Issued by: FHI	Date of issue: 12/05/2020
Case No: 2021-0383	Site No:	FS0708
Sea Lice Inspection (Seawater Sites Only) 1. Has the site experienced sea lice problems in the previous		N Y
2. Is the CoGP Farm Management Area (or equivalent) fallows. Does the site have access to a range of licenced in-feed azamethiphos and emamectin benzoate) as well as access can these be deployed in a reasonable period of time?	and bath sea lice medications (in	cluding deltamethrin,
4. Is there a signed documented farm management agreem Management Area (or equivalent)?	ent or statement relevant to the s	ite and CoGP Farm
5. Are sea lice count records available for inspection? (Legal 6. Do records adequately reflect the required standard spec	•	egal SSI, CoGP Annex 6)
7. Are sea lice (<i>L. salmonis</i>) record levels below the sugger records are inspected? (CoGP Annex 6)	sted criteria for treatment in the Co	oGP during the period that
8. Have average adult female sea lice (<i>L. salmonis</i>) numbe 2 or above (from w/b 10/6/19) during the period that records		above (prior to w/b 10/6/19) or Y
If yes, have these been reported to the Fish Health Inspector 9. Is C. elongatus infestation at a level which is considered		ems? (CoGP 4.3.81, 5.3.50)
10. Have therapeutic treatments been administered or other suggested criteria for treatment or where <i>C. elongatus</i> is co		
11. Has any other action been taken (where applicable)?12. Have therapeutic treatments or the actions taken had a	significant impact upon the lice le	vels recorded?
13. Are treatments, where conducted, carried out in coopera 14. Is there a harvesting strategy for the site, where fewer p sea lice?		
15. Is there a site specific written lice management procedus scenarios during the escalation of a sea lice infestation?	re with waypoints describing set a	actions to deal with recognised Y
16. Do the sea lice levels observed on stocks reflect sea lic	e count data? If no please detail r	easons. Y
Containment Inspection		
Containment Inspection 1. Has the site experienced equipment damage due to pred	lators in the current or previous pr	roduction cycles?
2. Are measures in place to mitigate against the predation e		
top nets, seal pro Seal blinds nets,		
If other, detail below:		
3. Have escape incidents or events been experienced on o	r in the vicinity of the site since th	e last FHI inspection?
If Yes proceed with questions 4 – 9. If No skip to question 1	0	
4. Have these been reported to Scottish Ministers?		Υ
Have these been reported to local DSFB forthwith (whereHave these been reported to the SSPO and local fisherie		
7. Were methods (if any) used to recover escapees? If yes		N
7. Were memous (if any) used to recover escapees: if yes	give detail	I.
8. If gill nets were deployed was this action agreed with loca Ministers? (Legal, CoGP – 4.4.38, 5.4.18)	al wild fish interests and was perm	nission given by Scottish
9. What action was taken to prevent and minimise the risk of	of further escapes? (Not covered i	
be considered under satisfactory measures of the Act	all nets changed for sea	al pro
10. Is the site inspected as satisfactory with regards to cont	ainment? If no, please detail reas	on(s)

FHI 059, Version 13	Issued by: FHI	Date of issue: 12/05/2020
Case No: 2021-0383	Site No: FS0708	
Date of Visit: 07/10/2021	Inspector:	
Point of Compliance 1. Is the farm under inspection located v	vithin a farm management area?	Y
If N, no further questions require comple	etion.	
2. Has a current farm management agree3. Is the current FMAg/S available for in4. Does the FMAg/S identify the relevant5. Does the FMAg/S identify the fish farm	nt farm management area? m site(s) to which it applies? commencement of the agreement or staten	Y Y Y Y
Arrangements for Fish Health Manag 8. Does the FMAg/S identify the minimularm?	ement im health standards for the stocks to be intro	oduced to the area or Y
10. Does the FMAg/S identify the specie	ation requirements for stocks held in the area es of fish which may be stocked into the area num stocking density of any pen on any farm	a or farm?
	gements for the storage and disposal of any rm?	dead fish from any
Arrangements for The Management of 13. Does the FMAg/S identify arrangem	of Sea Lice ents for the sharing of data on sea lice numl	bers and treatments?
14. Does the FMAg/S identify the availar of statement?	bility and the use of medicines on farms cov	ered by the agreement Y
15. Does the FMAg/S identify any requir lice on farms in the area or individual far	rements for the sensitivity testing of available rms?	
16. Does the FMAg/S identify the circum used on farms in the area or individual f.	nstances under which biological controls and arms?	d cleaner fish are to be
	gements for synchronous treatments on farm	ns within the area?
Live Fish Movements 18. Does the FMAg/S identify the circum area or farm?	nstances when live fish may be introduced o	r removed from the
19. Does the FMAg/S identify the arrang or individual farms?	gements for the movement of live fish on and	d off sites in the area

FHI 059, Version 13	Issued by: FHI	Date of issue: 12/05/2020
Harvesting 20. Does the FMAg/S identify acceptable	harvest practices on farms in the area or indiv	vidual farms?
date when a farm or area may be restock 22. Does the FMAg/S identify whether on agreement or statement?	ne or more year classes may be stocked onto so	sites covered by the
Point of Compliance for Farm Manage 24. Does the farm management agreeme parties to the agreement?	ement Agreements Only ent include arrangements for persons to becon	me, or cease to be,
Management and operation 25. Is the fish farm being managed and o 26. What is the version no/date of issue o	operated in accordance with the agreement or softhe FMAg/S? 01/09/2020	statement?

Case No: 2021-0383 Date of visit: 07/10/2021 Site No: FS0708 Inspector: Results Summary **Date of Notification** Freq. 2nd Insp Database Insp Phone Insp Writing Insp **IHNP** 13/10/2021 13/10/2021 29/10/2021 0/1 **IPNM** 13/10/2021 13/10/2021 29/10/2021 0/1 13/10/2021 **ISAP** 0/1 29/10/2021 13/10/2021 SALP 29/10/2021 1/1 13/10/2021 13/10/2021 VHSP 0/1 29/10/2021 13/10/2021 13/10/2021 13/10/2021 AGDQ 4/4 13/10/2021 29/10/2021 4/4 29/10/2021 **PNST** 13/10/2021 13/10/2021 3/4 13/10/2021 29/10/2021 **SPVP** 13/10/2021 **PMVP** 1/1 14/10/2021 15/10/2021 29/10/2021 **CMPS** 3/4 29/10/2021 18/10/2021 18/10/2021 29/10/2021 **SPVH** 4/4 18/10/2021 18/10/2021 **HPAT** 3/4 29/10/2021 18/10/2021 18/10/2021 4/4 29/10/2021 **GPAT** 18/10/2021 18/10/2021 2/4 29/10/2021 **EPIT** 18/10/2021 18/10/2021 CGDH 4/4 18/10/2021 18/10/2021 29/10/2021 LPAT 2/4 29/10/2021 18/10/2021 18/10/2021 29/10/2021 **AERO** 4/4 25/10/2021 25/10/2021 **VSPE** 3/4 25/10/2021 25/10/2021 29/10/2021 **HAFC** 29/10/2021 1/4 25/10/2021 25/10/2021 29/10/2021 **UBAS** 1/4 25/10/2021 25/10/2021 Report Summary 2nd Insp Date Case Type Insp ECI/CNI/SLI/VMD 13/10/2021 DIA 29/10/2021





FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

 Business No
 FB0169
 Date of Visit
 07/10/2021

 Site No
 FS0708
 Site Name
 Portree

 Case No
 20210383
 Inspector

Section 1: Summary

The site was visited following continued reports of elevated mortality levels. During the inspection, a number of lethargic fish were observed and four were removed for further examination and subsequent diagnostic sampling.

Histopathology examination revealed pathology consistent with cardiomyopathy syndrome (CMS) and salmon gill poxvirus. This was confirmed as a sample tested positive for piscine myocarditis virus (PMCV) by qPCR, while three fish were positive for salmon gill poxvirus. Mild hepatic necrosis and very mild gill pathology was also observed.

A sample tested positive for the presence of salmonid alphavirus (SAV).

Due to gill health issues observed on site, samples were also screened for *Paranucleospora* theridion (syn, *Desmozoon lepeophtherii*) and *Neoparamoeba perurans* (the causative agent of amoebic gill disease (AGD)). Samples tested positive for both pathogens.

Hafnia alvei was identified as pure heavy growth on the plate taken from kidney material of fish 3. This bacterium is known as a fish pathogen and would have been significant to the health of this individual fish.

Aeromonas sp. and Vibrio sp. were isolated, however the level of purity and growth would not suggest these bacteria are implicated as primary 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.

Section 2: Case Detail

Observations

The site was inspected following continued reports of elevated mortality levels and to carry out a routine inspection. Increased mortalities had been attributed to gill health, jellyfish/plankton blooms, AGD and CMS.

Mortality levels have reduced significantly since freshwater treatments were completed on site and only a few moribund fish were observed during the inspection. Four fish were removed from pen 3 for diagnostic sampling as this pen had the highest overall mortality.

All fish sampled were moribund and lethargic. All gills were slightly pale, and also mildly necrotic in fish 3 and 4. A lesion was present on the flank of fish 1 and there were abrasions on the belly of fish 4.

Internally, there were no clinical signs. Adhesions were present in all fish.

<u>Samples</u>

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

Fish number	Pool number	Facility number	Species	Stage	Origin
1, 2, 3, 4	1	3	Atlantic salmon	2020 S0 3.5 kg	Girlsta Hatchery (FS0504)

Results

Bacteriology: Kidney and gill material from four fish and lesion material from one fish were inoculated onto appropriate media for the isolation of bacteria.

The following bacteria were isolated:

- Hafnia alvei
 - o Fish 3 (Kidney)
- Aeromonas sp.
 - o Fish 1-4 (Gill)
- Vibrio sp.
 - Fish 1 (Lesion)
 - Fish 2 and 4 (Kidney)
- Non fish pathogen (environmental)
 - o Fish 1 (Lesion)

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

Salmonid alphavirus (SAV)

Pool Number	Endogenous control Cp value		Cp Values		Reported Result (PCR)
P1	17.95	29.30	29.24	29.59	POSITIVE

Piscine myocarditis virus (PMCV)

Pool Number	Endogenous control Cp value		Cp Values		Reported Result (PCR)
P1	16.66	16.21	16.33	16.19	POSITIVE

Salmon gill poxvirus (SGPV)

Fish Number	Endogenous control Cp value	,	Cp Values				
F1	18.83	34.12	34.12 33.77 33.75		POSITIVE		
F2							
F3	18.61	31.19	30.84 30.85		POSITIVE		
F4	17.9	20.65	20.7	20.63	POSITIVE		

Salmonid alphavirus (SAV) was sequenced and matched 100% at amino acid level to previous type 5 isolates.

The samples tested negative for infectious haematopoietic necrosis virus (IHNV), infectious pancreatic necrosis virus (IPNV), infectious salmon anaemia virus (ISAV) 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	,	Cp Values	Reported Result (PCR)	
F1	18.83	32.3	34.24	33.66	POSITIVE
F2	18.07	35.29	35.69	35.02	POSITIVE
F3	18.61	32.00	32.07	32.39	POSITIVE
F4	17.9	34.12	33.13	33.16	POSITIVE

Paranucleospora theridion

Fish Number	Endogenous control Cp value		Cp Values	Reported Result (PCR)		
F1	18.83	26.77	26.85 26.85		POSITIVE	
F2	18.07	27.78	27.84	27.69	POSITIVE	
F3	18.61	28.05	28.05 28.22 28.5		POSITIVE	
F4	17.9	22.54	22.69	22.51	POSITIVE	

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

Histopathological examination revealed the following:

Gill: Few scattered fusion of lamellae, some individual lamellae displayed epithelial thickness (F1). One aneurysmal dilation/telangiectasia noted in all individuals (F1). F2 and F4 exhibited some bluntness of the gill filament and some vascular disturbance of lamellae. Several of basophilic epithelial inclusions (likely epitheliocystis) observed in F2 and F3. F4 also exhibited many apoptotic cells and some shedding off.

Skin & Muscle: Within the normal range.

Heart: F1 displayed marked myocardial mononuclear cell infiltration (endocarditis) and marked myocardial degeneration and necrosis in the atrium chamber. This chamber also exhibited a massive blood clot. The spongy layer of ventricle chamber also displayed the same feature but slightly less severe. Mild pericarditis also noted. F2 displayed multifocal cell infiltration in both chambers. F4 exhibited endocarditis but more moderate. F3: no atrium and bulbus in section.

Gut and pyloric caeca: One small focal area of inflammatory cell infiltration observed in the adipose tissue (F2). Some fibrous adhesions (likely associated with vaccine administration) (F1, F2, F4).

Pancreas: Within normal range.

Liver: Mild multifocal hepatic necrosis (F1), mild diffuse hepatocellular vacuolation (macrovisicules) (F4).

Kidney: Within normal range.

Spleen: Within normal range.

Signed:

Fish Health Inspector

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Marine Scotland website at https://www.gov.scot/publications/fish-health-inspectorate-service-charter/

Date: 29/10/2021





FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

 BUSINESS NO
 FB0169
 DATE OF VISIT
 07/10/2021

 SITE NO
 FS0708
 SITE NAME
 Portree

 CASE NO
 20210383
 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.

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.

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 Scotland 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, 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.

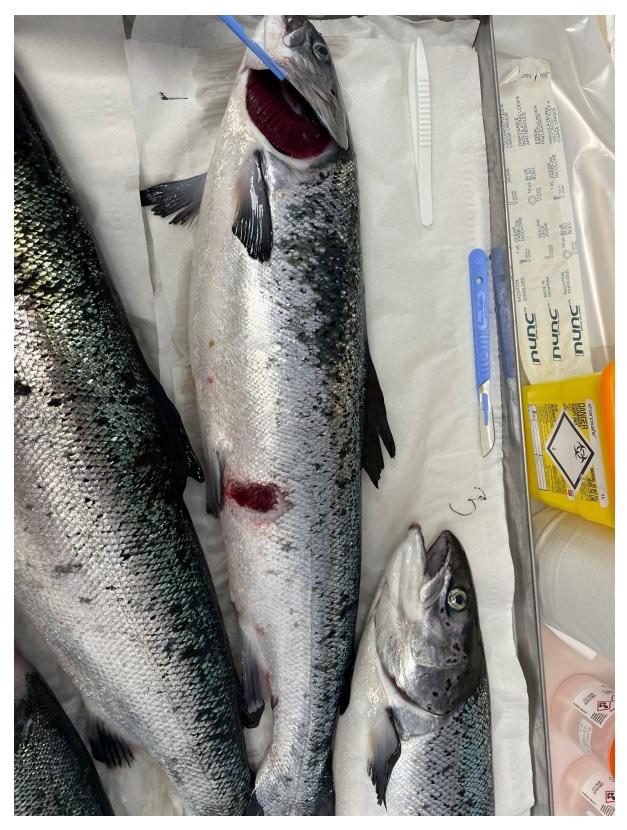
Please contact myself or the duty inspector should you require any further information or have any queries regarding this report.

Fish Health Inspector

Signed:

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Marine Scotland website at https://www.gov.scot/publications/fish-health-inspectorate-service-charter/

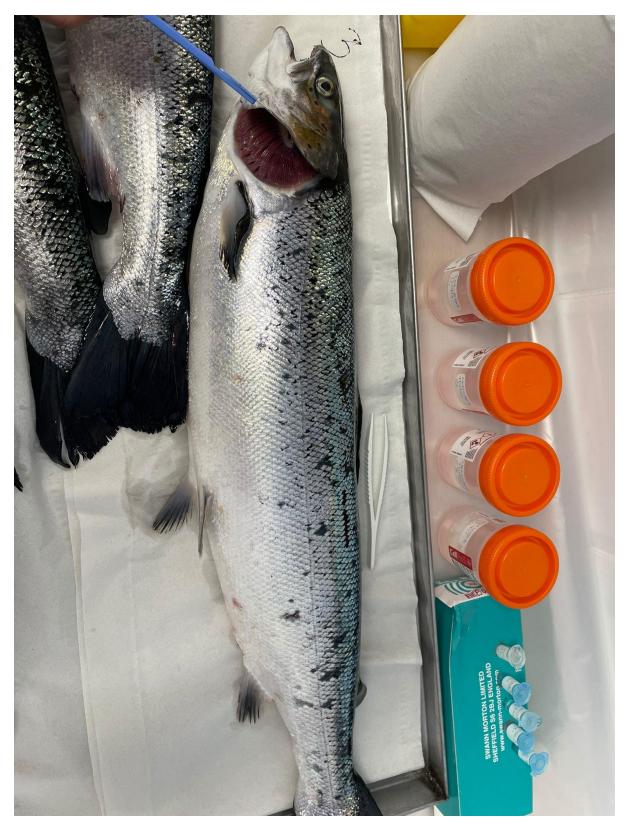
Date: 13/10/2021



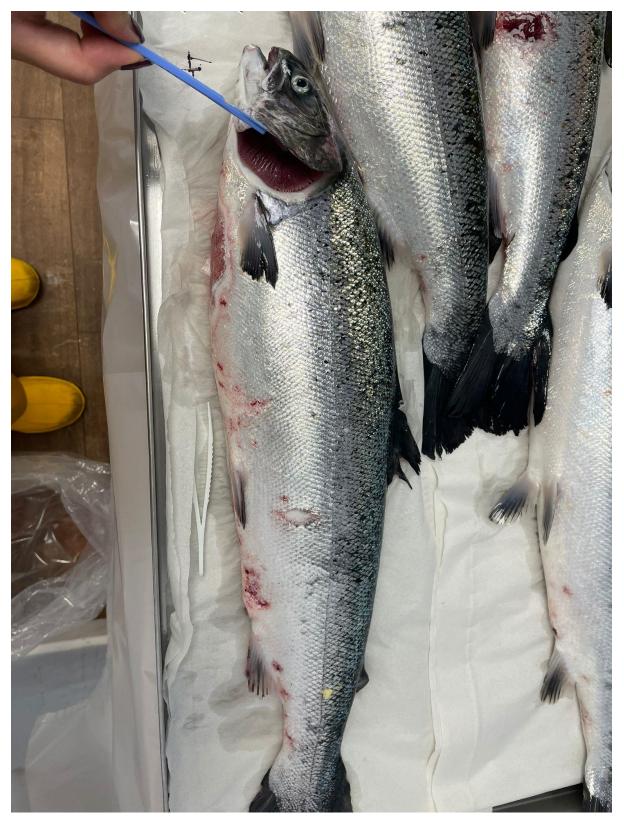
Fish 1



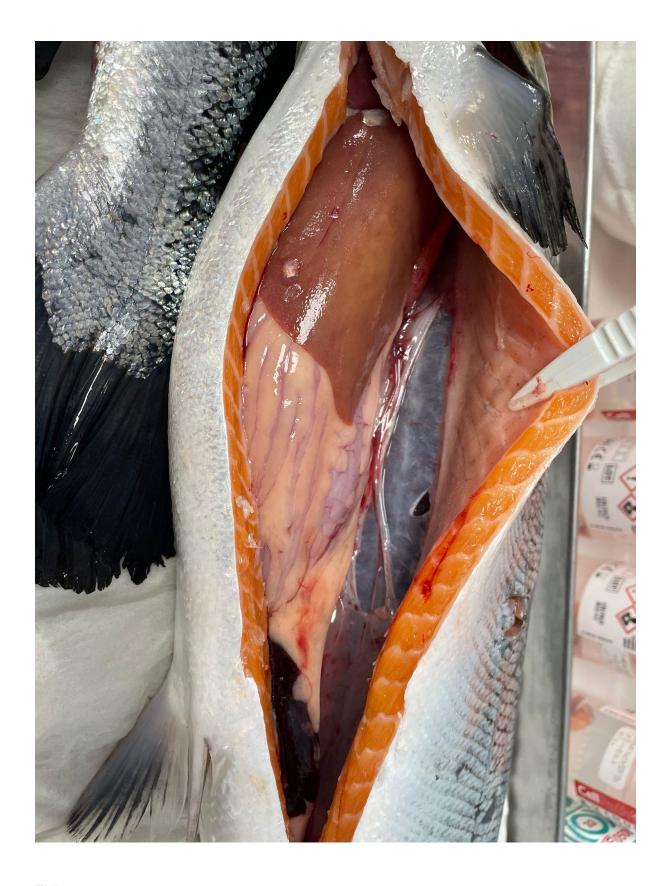
Fish 2



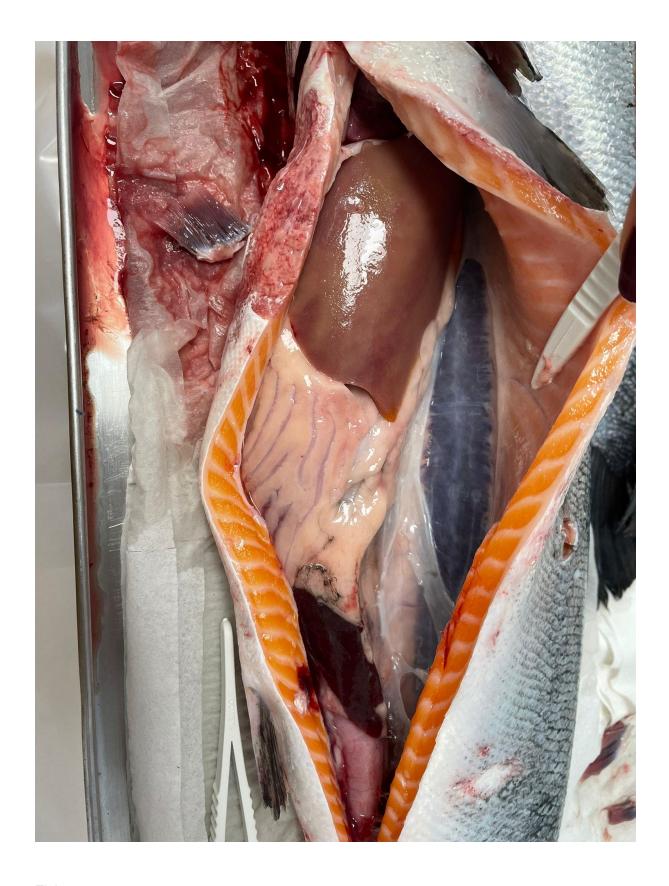
Fish 3



Fish 4



Fish 3



Fish 4

FHI 059, Version 13	Issue	ed by: FHI	Date of issue: 12/05/2020
Case No: 2021-0384			Date of visit: 07/10/2021
Time spent on site:	2 hours	Main Inspecto	r:
Site No: FS1318	Site Name:	Portree Outer	
Business No: FB0169	Business Name:	The Scottish Salmon Company	
Case Types: 1 ECI	2 SLI 3 CNI	4 VMD 5	6
Water Temp (°C): 12.7	Thermometer No:	T148	FHI 045 completed
Observations:	Region: HI	Water type: S	CoGP MA M-26
Dead/weak/abnormally behavir	-		mation/clinical score sheet.
Clinical signs of disease observed?	/ed?		mation/clinical score sheet. mation/clinical score sheet.
Diagnostic samples taken?		N yes, see addisonal mish	manor point total coore concer.
UNI/REG only - if unable to car	ry out intended visit detail rea	son below:	

Additional Case Information:

Increased mortalities at site due to jellyfish, plankton and associated gill health issues.

30/8-5/9 = 11,202 (3.37%) - Jellyfish/plankton, gill heath

6/9 -12/9 = 14,443 (4.5%) - Jellyfish/plankton, gill heath

13/9-19/9 = 16,817 (5.49%) - Jellyfish/plankton, gill heath

20/9-26/9 = 5,144 (1.79%) - Gill health, bloom

Site currently harvesting live fish to Marybank in Stornoway.

Fish vet group visit 6/10/21 - this will be there 3rd visit to look at current issues on site. Reporting; Zooplankton, sea gooseberries, moon, crystal and lions mane jellyfish, cyanea sp and phialedla and other hydrozoa. Blooms have been observed onsite for many weeks starting in August and only clearing now.

Fish input 9/2020 - Russell burn, Loch Damph and Girlsta. Fish moved off site to West Strome in Jan 2021. Risk assessment completed.

SLICE on input every 8 weeks for first 10 months until June 2021. FW and mechanical treatments since then. Freshwater treatment at both sites just completed (three hour treatment for gill issues).

Normal practice to ensile waste on site. With increased morts currently have had to use Fergusons boat to remove some fish off whole to Mosspark or Dunfermline.

Lice figures peaked at 5.29 adult females 8/9/21, hydrolicer used and dropped to 0.95 for 17/9/21. Numbers had increased as they delayed lice treatments due to poor gill health over the summer. Last count 26/9/21 was 1.09 adult female. A FW treatment has been undertaken since then. Hydrolicer planned for next week.

Paperwork by , Site inspection by , VMD sampling by

FHI 059, Version 13		_	Issu	ied by: FHI	_	ı	Date of issue	: 12/05/2020
Case No:	2021-0384		Site No:	FS1318				
Date of Visit:		07/10/2021]		Inspector(s):			
Registration/Autho								
1. Business/site deta	_	checked by s	ite representa	ative?			Υ	
2. Changes made to	details?					L	Y	
Site Details (includ	le cleaner fis	h for all sect	ions)					
Total No facilities		10	Facilities sto	ocked	7	No facilities	inspected	10
Species	SAL							
Age group	2020 S0							
No Fish	280,515							
Mean Fish Wt	3.6 kg							
Next Fallow Date (S	•	May 2022		Next Input Da	• ' '	Sept 2022		
Recent (last 4 wks)				Y	Any escapes	(since last vi	isit)?	N
If yes, detail:	Gill health, b	oloom, AGD, C	CMS					
Movement Records 1. Movement record 2. Date of last inspect 3. Are records computed. Are movement records computed for the following of the fo	ds available for ection: plete and corre- ecords available plete and corre- eates for introdes ates for introdes the carried out	ectly entered? ele for dead fis ectly entered? ductions (outw t by (or on bel	sh and waste? ? vith GB) availa :half) of the bu	able? usiness (not usi			11/03/2021	Y Y Y N/A
1. Mortality records a		•						Y
2. How are mortalitie					Ensiled - on s	site		
If other detail:				Fergusons upli	ift			
3. Mortality records	•	correctly enter						Y
4. Recent mortality (•			9,456 (3.49%),	4/10-6/10 = 3	26 (0.12%) (3 day figure)	- attributed
5. Evidence of recer		• •						Y
If yes, facility nos/no		•						
across whole site pe				inkton, gill heat	h			V
6. Any other peaks in		• 1						Y
If yes, detail:				arted in August	2021.			NI/A
7. Have increased (u	unexplained)	mortalities be	en reported to	o vet or FHI?				N/A
If yes, detail action:		L	- 14					V
8. Have 'mortality ev	/ents' been re	ported to FHI	? If no, enter	details on mort	ality events sh	eet.		Y

ricatilicitis and me	alcilica recorda	_	
1. Recent treatments	s (see comment)?		Y
If yes, detail:			
If other, detail:	FW		
	s available for inspection?		Y
•	lete and correctly entered?		Y
4. Are fish in a withd	rawal period?		Y
5. If yes, what treatm	nent(s)?	ricaine	
If other, detail:			
6. Are medicines sto	red appropriately?		Y
2. Has the manner a3. Has the manner aincreased (unexplain4. Has the action that is detected been incl	Is available for inspection? and frequency of mortality removal, recording the period in which the APB will notify Scottened) mortality at the site been included? At will be taken in the event that the present luded and how and when that will be notificatus of aquaculture animals being stocked of	ish Ministers or veterinary professional of any ce or suspicion of the presence of a listed disease	Y Y Y
transmission of disea 7. Is documentation aquaculture animals	ase been covered (movement of staff, visite available regarding the measures in place	to maintain the physical containment of	Y
2. If yes, are results3. Any significant res	ealth surveillance been carried out by, or or available for inspection? sults?		Y Y Y
ii yes, detaii (ii hot d	etailed under recent disease problems).	abundent zooplankton in water, lice gra	ızırıg
F	Records checked between: 11	1/3/20 - 6/10/21	

	111 055, VEISIOIT 15								ucu by.				
	Case no:	2021-03	384	Site No:		FS1318			Date of Samplin		07/	10/2021	07/
	Priority samples:	VI		ВА		PA		MG		ig. HI		ı	
	Time sampling starts/ends:	14:0	0:00	14:1	0:00		Inspecto	or:		l	VMD N	o.	8
	Environmental conditions:	1	Indoors	2		3		4		5			
	Summary samples	HIST		ВА		MG		VI		PA		Total Sa	amples
Δ	dd Fish/Pools - click												
Н													
L	Fish nos	1											
Ш	Pool Group												
	Species	SAL											
	Average weight	4Kg											
	Sex	N/A											
	Water Type	SW											
Stock Details		5 Geocrab Hatchery											

10/2021 Additional Sample Information:									
Fish sampled by ALW									
0 Total Tests assigned 0									

FHI 059, Version 13	Issued by: FHI Date of issue					of issue	: 12/05/2020
Case Number:	2021-0384		Site No:	FS1318		Insp:	
Date of Visit	07/10/2021		No of m	ovements/s	supp./dest.		Score
Live fish movements			0	1-5	6-10	>10	
Movements on (from out	Frequency of movements on from equivalent MS			5	10	14	0
with GB) of susceptible species		novements on from equivalent zone or including third country	0	9	18	26	0
	Number of sup	·	0		10	14	0
Movements off	Frequency of m	novements off	I 0	3	6	10	10
	Number of des		0	3	6	10	3
Exposure via water		Site contacts	0	1-5	6-10		
Water contacts with other farms (holding species	disinfection or l	,	0				0
susceptible to same diseases)	farms upstream	or in a coastal zone with category I n or within 1 tidal excursion	1	2	4		2
	farms upstream	or in a coastal zone with category III n or within 1 tidal excursion	1	3	6		0
		or in a coastal zone with category V n or within 1 tidal excursion	1	4	8		0
Management practices			None	Secure	Unsecure		
Water contacts with processors	Any processing	g 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
the rules of the directive	Processing own	n fish (re-cycling risk)	1				0
	Processing fish	from MS of equivalent status	2				0
	Processing fish from zone or compartment of equivalent status						0
	Processing fish from Category III farm			1			0
	Processing fish	from Category V farm	10				0
Disposal of fish and fish by-	Site's own was	te only processed.	0	1			0
products	Common proce	esses with other farms	3				0
	Collection point	t for waste from other farms	5	1			5
Use of unpasteurised feeds	No feeding of u	inpasteurised feed	0	i			0
	Feeding unpas	teurised feed	5				0
Biosecurity		Number of sites	1	2 or 3	≥ 4		
Contacts with other sites		from single shorebase	0	1	2		1
	Sites sharing s	taff and equipment	0	1	2		1
Disinfection of equipment	Yes		0]			0
between sites, use of footbaths etc	No		1				1
CoGP/Regulator							
Practices in accordance	Yes		0				0
with regulator or industry code of practice	No		3				0
Platform access to cages	Yes		0	1			0
	No		2				0
					Total		23
					Rank		MEDIUM

FHI 059, Version 13	Issued by: FHI	Date of issue: 12/05/2020
Case No: 2021-0384	Site No:	FS1318
Sea Lice Inspection (Seawater Sites Only)		
1. Has the site experienced sea lice problem	•	N
	equivalent) fallowed synchronously on a single y	
	cenced in-feed and bath sea lice medications (inc well as access to suitable biological and/or med d of time?	
4. Is there a signed documented farm manag Management Area (or equivalent)?	gement agreement or statement relevant to the si	te and CoGP Farm
5. Are sea lice count records available for ins	spection? (Legal SSI, CoGP Annex 6)	Υ
	standard specified in the SSI and the CoGP? (L	egal SSI, CoGP Annex 6)
7. Are sea lice (<i>L. salmonis</i>) record levels be records are inspected? (CoGP Annex 6)	elow the suggested criteria for treatment in the Co	pGP during the period that N
 Have average adult female sea lice (L. sa. 2 or above (from w/b 10/6/19) during the peri 	<i>lmonis</i>) numbers per fish been at a level of 3 or a look that records are inspected?	above (prior to w/b 10/6/19) or Y
If yes, have these been reported to the Fish	Health Inspectorate? If no, FHI see comment.	Y
9. Is C. elongatus infestation at a level which	n is considered to cause significant welfare proble	ems? (CoGP 4.3.81, 5.3.50) N
•	istered or other actions taken when <i>L. salmonis lelongatus</i> is considered to have welfare implicati	
11. Has any other action been taken (where	applicable)?	Υ
•	ns taken had a significant impact upon the lice le	
	d out in cooperation between participating farms?	
14. Is there a harvesting strategy for the site, sea lice?	where fewer populations or part populations are	held without treatment for Y
15. Is there a site specific written lice manag scenarios during the escalation of a sea lice	ement procedure with waypoints describing set a infestation?	ctions to deal with recognised Y
16. Do the sea lice levels observed on stock	s reflect sea lice count data? If no please detail re	easons. Y
Containment Inspection		
	ge due to predators in the current or previous pro	oduction cycles?
	the predation experienced on site? (Detail below	
Seal pro nets top nets	seal blinds	
If other, detail below:		
Have ADD on site but not used and would re		
•	perienced on or in the vicinity of the site since the	e last FHI inspection?
If Yes proceed with questions 4 – 9. If No ski		
4. Have these been reported to Scottish Mini		17)
•	orthwith (where they exist)? (CoGP - 4.4.37, 5.4	
6. Have these been reported to the SSPO ar	nd local fisheries trusts forthwith (where they exist	1)? (COGP = 4.4.37, 5.4.17)
7. Were methods (if any) used to recover esc	capees? If yes give detail	
8. If gill nets were deployed was this action a Ministers? (Legal, CoGP – 4.4.38, 5.4.18)	greed with local wild fish interests and was perm	ission given by Scottish
, -	imise the risk of further escapes? (Not covered in	n code but could
be considered under satisfactory measu		
•	regards to containment? If no, please detail reason	on(s)
•		

FHI 059, Version 13	Issued by: FHI	Date of issue: 12/05/2020
Case No: 2021-0384	Site No: FS1318	
Date of Visit: 07/10/2021	Inspector:	
Point of Compliance 1. Is the farm under inspection located v	within a farm management area?	V
If N, no further questions require comple	-	
2. Has a current farm management agree3. Is the current FMAg/S available for interest.4. Does the FMAg/S identify the relevant5. Does the FMAg/S identify the fish farm	nt farm management area? m site(s) to which it applies? commencement of the agreement or statem	Y Y Y Y
Arrangements for Fish Health Manager 8. Does the FMAg/S identify the minimularm?	ement m health standards for the stocks to be intro	duced to the area or Y
10. Does the FMAg/S identify the specie	ation requirements for stocks held in the area es of fish which may be stocked into the area num stocking density of any pen on any farm	or farm?
	gements for the storage and disposal of any orm?	dead fish from any
Arrangements for The Management of 13. Does the FMAg/S identify arrangement	of Sea Lice ents for the sharing of data on sea lice numb	pers and treatments?
14. Does the FMAg/S identify the availal of statement?	bility and the use of medicines on farms cove	ered by the agreement Y
15. Does the FMAg/S identify any requir lice on farms in the area or individual far	rements for the sensitivity testing of available rms?	
16. Does the FMAg/S identify the circum used on farms in the area or individual fa	nstances under which biological controls and arms?	cleaner fish are to be Y
	gements for synchronous treatments on farm	s within the area?
Live Fish Movements 18. Does the FMAg/S identify the circum area or farm?	nstances when live fish may be introduced o	r removed from the
19. Does the FMAg/S identify the arrang or individual farms?	gements for the movement of live fish on and	off sites 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	arvest practices on farms in the area or in	dividual farms?
Fallowing 21. Does the FMAg/S identify the dates by a date when a farm or area may be restocked 22. Does the FMAg/S identify whether one agreement or statement? 23. Does the FMAg/S identify whether brook covered by the agreement or statement? Point of Compliance for Farm Management 24. Does the farm management agreement parties to the agreement?	d? or more year classes may be stocked onto dstock or potential broodstock are to be k ent Agreements Only	co sites covered by the Y Except on any site
Management and operation 25. Is the fish farm being managed and ope 26. What is the version no/date of issue of the		or statement?

		_				_		
Case No:	2021-0384			Date of visit:	07/10/2021			
Site No:	FS1318	1		Inspector:				
One IVO.	101010			mapector.				
Results Summary	Freq.				te of Notifica			
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp
Report Summary								
Case Type	Date	Insp	2 nd Insp					
ECI/CNI/SLI/VMD	13/10/2021							





FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

 Business No
 FB0169
 Date of Visit
 07/10/2021

 Site No
 FS1318
 Site Name
 Portree Outer

 Case No
 20210384
 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. On this occasion no samples were taken for disease analysis. The Inspector did not observe any clinical signs associated with the listed diseases as described in the Aquatic Animal Health (Scotland) Regulations 2009.

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.

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 Scotland 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, 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.



Fish Health Inspector

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Marine Scotland website at https://www.gov.scot/publications/fish-health-inspectorate-service-charter/

Date: 13/10/21

FHI 059, Version 13	!	Issued by: FHI	Date of issue: 12/05/2020
Case No: 2021-0385			Date of visit: 13/10/2021
Time spent on site:	3 hours	Main Inspe	ector:
Site No: FS0336	Site Name:	Druimyeon Bay	
Business No: FB0169	Business Name:	The Scottish Salmon Comp	pany
Case Types: 1 DIA	2 3	4 5	6
Water Temp (°C): 13.6	Thermometer No:	T146	FHI 045 completed
Observations:	Region: ST	Water type: S	CoGP MA M-46
Dead/weak/abnormally behaving	g fish present?	Y If yes, see additional ir	nformation/clinical score sheet.
Clinical signs of disease observe	ed?		nformation/clinical score sheet.
Gross pathology observed?		Y If yes, see additional ir	nformation/clinical score sheet.
Diagnostic samples taken?		Y.	
UNI/REG only - if unable to carr	y out intended visit detail	reason below:	

Additional Case Information:

Lumpfish on site from Ocean matters. Salmon transferred from Gometra input March 2021 - Moved in freshwater wellboat. Cleaner fish were not transported in wellboat.

Morts - normally site boat and skipped at shore base. Due to increased morts Fergusons boat removal from site. Divers in daily to remove mort. Bakkanes - on board macerator. - numbers of fish on site will be reviewed following a fw well boat treatment.

PD runts earlier in the cycle. No SAV observed during current issues

Treatments; Salmosan treatment - June - 2 cages in wellboat. July - FW and Salmosan - all cages. hydrolicer treatment planed for this week. Hydrolicer 9/9/21.

There were a number of mortality disposal methods available for the two sites;

- Billy Bowie- whole in skips to Barkip Biogas (collection docs observed).
- Gogar Energen Bio Gas- to Dunnswood Road, Cumbernauld (collection docs observed).
- They have a new well boat the Bakkanes hydrolicer and macerator/Ensiler. Can hold 1000 cube of morts, current morts onboard of 200 cube. - material ensiled with formic acid. Then it will be pumped off into tankers and used as biofuel but uncertain currently of final destination. The boat was present during our visit.
- Fergusons boat for mort removal had been used but was not on site during our visit.

Collection docs were available for inspection from Billy Bowie and Gogar. Capacity for mort disposal was in my opinion adequate and staff numbers at the sites were increased to deal with the mortalities with staff being brought in from other areas. Divers were also present at the time of our visit for mortality removal.

Mort/site/wk; wk35 0.8 %, Wk36 1.5%, Wk37 1.1%, wk38 6.2%, Wk39 4.5%, Wk40 21.96%, Wk 41 7.29% - part week.

Lice is persistent at both sites treatments are giving 85-95% clearance but resettlement is fast and treating every 3-4 weeks. Seal ice peak 7.91 Caligus week 37.

No jellies observed in water samples. Upwell species were observed.

mortality started wk 38 - attributed to environmental insult and anaemia.

Paperwork - , Site inspection (under supervision) , Sample fish 1, 2 (under supervision) Sample Fish 3-5

FHI 059, Version 13			Issue	ed by: FHI			Date of issue	e: 12/05/2020
Case No:	2021-0385		Site No:	FS0336				
Date of Visit:		13/10/2021	1		Inspector(s):			1
Registration/Autho	risation Deta	ails						
1. Business/site deta	ails summary	checked by s	te representa	tive?			Υ	
2. Changes made to	details?						N	
Site Details (includ	e cleaner fis	h for all secti	ons)					
Total No facilities		16	Facilities sto	cked	16	No facilitie	s inspected	2
Species	sal	lump						
Age group	2020So	·						
No Fish	362,046	50,000						
Mean Fish Wt	3.1							
Next Fallow Date (Si	ite)	2022 Q2		Next Input Da	te (Site)	2022 Q3		
Recent (last 4 wks)	disease probl	ems?		Y	Any escapes	(since last v	visit)?	N
If yes, detail:	see addition	al info						
 Movement records Date of last inspect Are records compt Are movement records Are records compt Are health certification Transport Records Are any movement fyes, is there a syst Mortality Records 	ction: lete and corrected availablete and corrected attention to the correc	ectly entered? le for dead fis ectly entered? luctions (outw	h and waste? ith GB) availa nalf) of the bu	ble? siness (not usi			26/05/2021	Y Y Y N/A
Mortality records a	available for i	nspection?						Y
2. How are mortalities					Whole fish - I	Dundas Che	emicals	
			ner mort dispo					
3. Mortality records of				our moundu				Y
4. Recent mortality (•	,	see additiona	al info				
5. Evidence of recen	•	typical mortal						Y
If yes, facility nos/no		• •		reason:				
across site - attribute		•						
6. Any other peaks in								N
If yes, detail:								
7. Have increased (u	inexplained)	mortalities be	en reported to	vet or FHI?				Y
If yes, detail action:	,		•	nd sample take	en			
8. Have 'mortality ev	ents' been re					eet.		Y

Treatments and Medicines Records		
1. Recent treatments (see comment)?		Y
If yes, detail:		
well boat		
salmosan		
If other, detail: treatment		
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)?	Tricaine	
If other, detail:		
6. Are medicines stored appropriately?		Y
Diagonarity Pagerda		
Biosecurity Records 1. Biosecurity records available for inspection?		
Has the manner and frequency of mortality removal, record	rding and cofe disposal been considered?	
	•	
3. Has the manner and period in which the APB will notify Soincreased (unexplained) mortality at the site been included?	The state of the s	
4. Has the action that will be taken in the event that the pres		
is detected been included and how and when that will be no		
5. Has the health status of aquaculture animals being stocked		
health status, certification if required)?	ed on the faith site been covered (equal of higher	
ricaliti status, certification il requirea).		
6. Have the husbandry and biosecurity measures implement	ted between each epidemiological unit to minimise	
transmission of disease been covered (movement of staff, v		
7. Is documentation available regarding the measures in pla	ce to maintain the physical containment of	
aquaculture animals held on site?	' <i>'</i>	
8. Have the biosecurity procedures been adequately implem	ented on site?	
If no, detail:		
Describe of Occasional		
Results of Surveillance	and help of the book and	V
1. Has any animal health surveillance been carried out by, o	r on benait of, the business?	ĭ
2. If yes, are results available for inspection?		Y
3. Any significant results?		ī
If yes, detail (if not detailed under recent disease problems).		
multifocal fresh or recent lamellar haemorrhages and throml	posis of gills, nepatocyte necrosis of liver, likely enviror	imental,
cause thought to be stinging cell or micro jelly	26/5/21- 13/10/21	
Records checked between:	20/3/21- 13/10/21	

	11 009, Version 13							issued by.	1111		
	Case no:	2021-03	385	Site No		FS0336	3	Date of Sampli		13/10/2021	13/
	Priority samples:	VI		ВА		PA		MG	HI		
	Time sampling starts/ends:		80:00		0:00		Inspector	:	V	MD No.	0
	Environmental conditions:	1	Indoors	2		3		4	5		
	Summary samples	HIST	Y	ВА	Y	MG	Y	VI	PA	Total Sa	mples
A	dd Fish/Pools - click										
	Pool/Fish No	F1	F2	F3	F4	F5	P1				
	Fish nos	1	2	3	4	5	1-5				
	Pool Group	P1	P1	P1	P1	P1					
	Species	SAL	SAL	SAL	SAL	SAL	SAL				
	Average weight	3kg	3kg	3kg	3kg	3kg	3kg				
	Sex										
	Water Type	SW	SW	SW	SW	SW	SW				
sils		σ.	ص ا	m	a	m	ا ه				
Details	l	etra	etra	etra	etra	etra	etc				
$\overline{}$		Gometra	Gometra	Gometra	Gometra	Gometra	Gometra				
00	Stock Origin	•	_))					
St	Facility No	12	12	11	11	11	11,12				

10/2021	Addition	nal Sam	ple Infor	mation:							
6		Total To	ests ass	igned	5	1					

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

Case no:	2021-0385		Site No):	FS033	6	M	Method of killing: Percussive			sive
Date of visit:	13/10/2021	l	Inspect	tor(s):				s	heet Re	elevant:	Υ
S for strong presen	ce: M for medium presence: W for v	veak pres	ence								
Fish Number		1	2	3	4	5					
Time sampled afte	er death (if > 45 minutes)										
External Signs											
Behaviour	Moribund	S	S	W	W	W					
	Lethargic	S	S	S	S	S					
	Hanging vertical										
	Spiralling										
	Flashing										
	Loss of equilibrium										
Body	Dark										
	Distended abdomen										
	Anorexic										
	Scale Oedema										
Opercula	Shortened										
llaamaclaa'	Flared										
Haemorrhaging	Throat										
	Ventrum Page of fine										
	Base of fins Elsewhere										
Evec	Exophthalmic										
Eyes	Enophthalmic (sunken)										
	Cataract										
	Haemorrhagic										
Gills	Pale	S	S	М							
Gilla	Zoned										
	Necrotic	М	М			M					
Lesions	Flank										
LUSIONS	Elsewhere										
Vent	Inflamed										
7 5111	Trailing faeces										
Lice Load	Estimate numbers	>30	>30	>10	>10	>10					
Internal Signs											
Ascites	Clear										
	Bloody										
Oedema	In tissues										
Heart	Pale/anaemic										
	Granulomas										
	Deformed										
Liver	Petechial haem										
	Gross haem										
	Tissue breakdown										
	Enlarged										
	Colour number(s)	1	2	6	6	6					
	Granulomas										
	Lesions										
Pyloric caeca	Petechial haem										
	Tubules mauve										
_	Lack of fat										
Spleen	Enlarged										
	Granulomas										
Gut	No food present	S	S	S	S	S					
	Yellow pseudo-faeces	S	S	S	S	S					
	External haem										
D - d "	Internal haem										
Body wall	Haemorrhaging										
Swim bladder	Haemorrhaging										
12: 1	Fluid filled										
Kidney	Swollen										
	Grey										
	Granular										
Conoral	Liquefied Perceites present										
General	Parasites present		<u> </u>								

Case no: 2021-0385

Date of visit: 13/10/2021

Date of visit.	13/10/202						
S for strong prese	nce: M for medium presence: W fo	ги					
Fish Number		T	_	_			
	ter death (if > 45 minutes)						
External Signs	ior usum (ii > 45 minutos)			_			
Behaviour	Moribund						
2011411041	Lethargic			$\overline{}$			
	Hanging vertical						
	Spiralling			\neg			
	Flashing						
	Loss of equilibrium			\neg			
Body	Dark						
	Distended abdomen			\neg			
	Anorexic						
	Scale Oedema			\neg			
Opercula	Shortened						
•	Flared			\neg			
Haemorrhaging	Throat						
	Ventrum						
	Base of fins						
	Elsewhere						
Eyes	Exophthalmic						
	Enophthalmic (sunken)						
	Cataract						
	Haemorrhagic						
Gills	Pale						
	Zoned			\neg			
	Necrotic						
Lesions	Flank			\neg			
	Elsewhere						
Vent	Inflamed			\neg			
	Trailing faeces						
Lice Load	Estimate numbers			\neg			
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:
F1 and F2 - gills with pin prick haemorrhages. F2 and 3 were male grilse
3 3 3
F1 - evidence of lice damage on head area.
The evidence of need diffiage of fredd dred.

Site No: FS0336

Case No: 2021-0385

Nature of non-compliance:

Action taken (FHI):

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

Case No: 2021-0385 Date of visit: 13/10/2021 Site No: FS0336 Inspector: Results Summary Freq. **Date of Notification** Database Phone Insp Writing 2nd Insp Insp Insp 03/12/2021 MG_AGDQ 5/5 22/10/2021 22/10/2021 MG_PARA_THERA 5/5 22/10/2021 22/10/2021 03/12/2021 22/10/2021 MG SAL POX 5/5 22/10/2021 03/12/2021 4/5 17/11/2021 Moritella viscosa 01/12/2021 03/12/2021 vibrio sp 4/5 17/11/2021 01/12/2021 03/12/2021 **GPAT** 3/5 17/11/2021 01/12/2021 03/12/2021 LPAT 2/5 17/11/2021 01/12/2021 03/12/2021 1/5 01/12/2021 SKIN 17/11/2021 03/12/2021 03/12/2021 CGDH 3/5 17/11/2021 01/12/2021 0/1 03/12/2021 03/12/2021 VHS IHN 0/1 03/12/2021 03/12/2021 03/12/2021 SAV 0/1 03/12/2021 ISA 03/12/2021 03/12/2021 0/1 IPN 1/1 03/12/2021 03/12/2021 Report Summary 2nd Insp Case Type Date Insp 03/12/2021 Diag





FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS NOFB0169DATE OF VISIT13/10/2021SITE NOFS0336SITE NAMEDruimyeon Bay

CASE NO 20210385 INSPECTOR

Section 1: Summary

Druimyeon Bay was visited for a diagnostic health inspection following reports of significant mortality at the site. Five moribund fish were removed for diagnostic examination.

Histopathological examination revealed mild multifactorial proliferative branchitis. F3 displayed an absence of pancreatic acinar cell (possibly associated with salmonid alpha virus). Mild hepatic necrosis was noted in F1 and F4. F5 displayed bacterial ulcerative dermatitis.

Due to gill health issues observed on site, samples were screened for Neoparamoeba perurans, salmon gill poxvirus (SPGV) and Paranucleospora theridion (syn. Desmozoon lepeophtherii) by qPCR and tested positive for all three pathogens.

Moritella viscosa and Vibrio sp. identified on plates taken from kidney and lesion material. *M. viscosa* is a primary fish pathogen and the level and purity of growth observed was significant.

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

Section 2: Case Detail

Observations

Druimyeon Bay was visited following reports of significantly increased mortalities starting in September 2021 and peaking at 47% mortality (148,628 fish) for the site in the week beginning 11/10/21. Mortalities had been attributed to environmental and gill health related issues.

On inspection moribund fish were observed in the pens and five were removed for diagnostic examination. Fish 1 to 3 exhibited pale gills and fish 1, 2 and 5 had necrotic gills. The gills of fish 1 and 2 also had petechial haemorrhaging. Lice numbers were in excess of 10 and all stages were present on all the fish removed for sampling and fish 1 and 2 had in excess of 30 lice. Fish 1 and 2 also appeared anaemic.

Samples

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

Fish number	Pool number	Facility number	Species	Stage	Origin
F1-2	1	12	Atlantic salmon	2020 S0 @ 3kg	Gometra
F3-5	1	11	Atlantic salmon	2020 S0 @ 3kg	Gometra

Results

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

The following bacteria were isolated:

Moritella viscosa – F1-F3 (kidney); F5 (lesion) Vibrio sp. - F1-F2, F4-F5 (Kidney); F5 (Lesion)

Moritella viscosa is a primary fish pathogen and the level and purity of growth observed was significant particularly in the lesion material from F5.

From the tests conducted, there is evidence which may indicate some resistance to florfenicol. There is no evidence of resistance to amoxycillin, oxytetracycline or sulphamethoxazole/trimethoprim.

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	19.33	25.69	25.79	25.8	POSITIVE
F2	19.13	22.62	22.6	22.74	POSITIVE
F3	19.12	24.85	24.98	24.94	POSITIVE
F4	19.08	28.23	28.19	28.09	POSITIVE
F5	19.32	26.1	25.99	25.97	POSITIVE

Samples were screened for the presence of infectious haematopoietic necrosis virus (IHNV), infectious salmon anaemia virus (ISAV), infectious pancreatic necrosis virus (IPNV), salmonid alphavirus (SAV) and viral haemorrhagic septicemia virus (VHSV) by cell culture.

The samples tested positive for IPNV and was confirmed by PCR and sequencing as IPNV Sp with a low-moderate virulence motif.

The test results for the other pathogens were negative. R09

Parasitology:

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

Neoparamoeba perurans (AGD)

Fish Number	Endogenous control Cp value		Cp Values	Reported Result (PCR)	
F1	19.33	31.05	31.01	31.08	POSITIVE
F2	19.13	29.59	29.71	29.74	POSITIVE
F3	19.12	26.09	25.97	26.08	POSITIVE
F4	19.08	28.22	28.27	27.69	POSITIVE
F5	19.32	27.97	27.9	27.87	POSITIVE

Paranucleospora theridion

Fish Number	Endogenous control Cp value		Cp Values	Reported Result (PCR)	
F1	19.33	32.62	32.64	32.31	POSITIVE
F2	19.13	31.88	31.38	31.74	POSITIVE
F3	19.12	26.29	26.21	26.23	POSITIVE
F4	19.08	32.43	31.87	32.42	POSITIVE
F5	19.32	26.45	26.39	26.24	POSITIVE

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

Histopathological examination revealed the following:

<u>Gill:</u> Mild multifocal hyperplasia and lamellar fusion, some lacunae (some filled with cell debris) observed on the hyperplastic plaques (F1 & F2). F2 and F3 also displayed some gill filament bluntness and thrombi noted in the lamellar vessels. Free blood among gill filaments (F2, F3).

<u>Skin & Muscle:</u> Absence of epidermal layer. Some hypodermal cellular infiltration, mainly mononuclear inflammatory cells, and Gram-negative bacteria observed in the dermal layer and hypodermal layer (F5).

Heart: Within normal range.

Gut and pyloric caeca: Within normal range.

<u>Pancreas:</u> Absence of acinar cell around an island Langerhans and some mononuclear inflammatory cell infiltration (F3).

<u>Liver:</u> Mild multifocal necrosis (F1 & F4), some apoptotic cells also observed (F4), mild diffuse hepatocyte vacuolation (F4).

Kidney: Within normal range.



Date:09/12/2021

Fish Health Inspector

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Marine Scotland website at https://www.gov.scot/publications/fish-health-inspectorate-service-charter/



















FHI 059, Version 13	Issue	ed by: FHI	Date of issue: 12/05/2020
Case No: 2021-0387			Date of visit: 12/10/2021
Time spent on site:	.5 hrs	Main Inspect	tor:
Site No: FS1314 Business No: FB0568	Site Name: Business Name:	Roslin Institute Hatchery The Roslin Institute	
Case Types: 1 REG	2 3	4 5	6
Water Temp (°C):	Thermometer No:		FHI 045 completed
Observations:	Region: CE	Water type: F	CoGP MA
Dead/weak/abnormally behaving Clinical signs of disease observed Gross pathology observed? Diagnostic samples taken?	•	If yes, see additional info	ermation/clinical score sheet. ermation/clinical score sheet. ermation/clinical score sheet.
UNI/REG only - if unable to carry		son below: e fallow	
	Sit	e railow	

Additional Case Information:

Site inspection conducted by with on 12/10/2021.

Only fish on site since last inspection were RTR OVA which came onto site 01/07/2021 from USA. These were not carried forward from the hatching stage though. Site was originally going to be de-registered but plans have changed for the time being. Site unsure when fish will be back on site as future research projects are currently unknown.

FHI 059, Version 13			Issu	ed by: FHI			Date of issue	e: 12/05/2020
Case No:	2021-0387		Site No:	FS1314]			
Date of Visit:		12/10/2021]		Inspector(s):			
Registration/Author								
1. Business/site detail	ils summary o	checked by s	ite representa	itive?			Y	
2. Changes made to	details?						Y	
Site Details (include	e cleaner fish	n for all secti	ons)			_		
Total No facilities		1	Facilities sto	cked	0	No facilitie	es inspected	1
Species								
Age group								
No Fish								
Mean Fish Wt								
Next Fallow Date (Sit	*	currently fallo	DW .	Next Input Da		unsure		
Recent (last 4 wks) d	lisease proble	ems?		N	Any escapes	(since last	visit)?	N
If yes, detail:								
 Date of last inspects Are records compled. Are movement records compled. Are records compled. Are health certificator Transport Records Are any movement figes, is there a systematical. 	ete and corre cords available ete and corre tes for introde ts carried out	e for dead fis ectly entered? uctions (outw by (or on bel	h and waste? ith GB) availa	able? siness (not usi	_		29/08/2019	Y Y Y
Mortality Records								
Mortality records a		•			In aim a vata d	an ait-		Υ
2. How are mortalities disposed of? Incinerated - on site								
	omplete and	oorroothy onto	rod?					V
3. Mortality records complete and correctly entered?								
4. Recent mortality (last 4 wks): 5. Evidence of recent increased/atypical mortalities? 0								N
If yes, facility nos/no mortality per facility/no stock per facility/reason:								
ii yes, ideiity iies/iie	mortanty per	raciity/110 3to	ok per raemty/	TCa3011.				
6. Any other peaks in	mortality dur	ing period ch	ecked?					N
If yes, detail:	rmortanty dan	ing period on	concu.					
7. Have increased (unexplained) mortalities been reported to vet or FHI?								N/A
If yes, detail action:								
8. Have 'mortality eve	ents' been rer	orted to FHI	? If no, enter	details on mort	ality events sl	neet.		N/A
			,					

FHI 059, Version 13	Issued by: FHI	Date of issue: 12/05/2020
Treatments and Medicines Records 1. Recent treatments (see comment)?		

1. Recent treatments (see comment)?								
If yes, detail:								
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 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:								
ii iio, 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?								
3. Any significant results?								
If yes, detail (if not detailed under recent disease problems).								
Records checked between: 29/08/2019 - 12/10/2021								

FHI 059, Version 13		Issued by: FHI			Date o	of issue	: 12/05/2020	
Case Number:	2021-0387		Site No:	FS1314		Insp:		
Date of Visit	12/10/2021		No of m	No of movements/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	Q	
	Number of sup	ncluding third country	0		10	14	5	
Movements off	Frequency of m		I 0		6	10	3	
Movements on	Number of des		0		6	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			
		or in a coastal zone with category III n 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	1				
	Processing fish equivalent state	from zone or compartment of us	4					
	Processing fish	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			0	
products	Common proce	esses with other farms	3					
	Collection poin	t for waste from other farms	5					
Use of unpasteurised feeds	No feeding of u	inpasteurised feed	0	ĺ			0	
·	Feeding unpas	teurised feed	5	1				
Biosecurity		Number of sites	1	2 or 3	≥ 4			
Contacts with other sites	Sites operating	from single shorebase	0	1	2		1	
	Sites sharing s	taff and equipment	0	1	2		0	
Disinfection of equipment between sites, use of	Yes		0				0	
footbaths etc	No		1					
CoGP/Regulator				,				
Practices in accordance with regulator or industry	Yes		0					
code of practice	No		3					
Platform access to cages	Yes		0				0	
	No		2					
					Total		21	
					Rank		MEDIUM	

FHI 059, Version 13		Issued by: FHI		Date of issue: 12/05/202
Case No:	2021-0387		Site No:	FS1314
2. Is the CoGP Farm M 3. Does the site have a azamethiphos and ema 4. Is there a signed doo Management Area (or example)	anagement Area (or equivalent) fallo ccess to a range of licenced in-feed a mectin benzoate) as well as access cumented farm management agreeme equivalent)?	wed synchronously o and bath sea lice med to suitable biological ent or statement relev	dications (inc and/or med ant to the s	cluding deltamethrin, hanical control measures, and
	cords available for inspection? (Legal Bly reflect the required standard specif		•	egal SSI, CoGP Annex 6)
7. Are sea lice (<i>L. salm</i> records are inspected?	onis) record levels below the suggest (CoGP Annex 6)	ted criteria for treatme	ent in the Co	oGP during the period that
If yes, have these beer 9. Is <i>C. elongatus</i> infes 10. Have therapeutic tr suggested criteria for tr 11. Has any other action 12. Have therapeutic tr 13. Are treatments, who 14. Is there a harvestin 15. Is there a site spec	remale sea lice (<i>L. salmonis</i>) numbers reported to the Fish Health Inspector station at a level which is considered to eatments been administered or other eatment or where <i>C. elongatus</i> is corn been taken (where applicable)? eatments or the actions taken had a sere conducted, carried out in cooperate g strategy for the site, where fewer positic written lice management procedurels observed on stocks reflect sea lice	rate? If no, FHI see coo cause significant wactions taken when it asidered to have welf significant impact upotion between participopulations or part pope with waypoints des	comment. Telfare proble L. salmonis fare implicat on the lice le ating farms bulations are cribing set a	ems? (CoGP 4.3.81, 5.3.50) levels have exceeded the ions? (CoGP 4.3.82, 5.3.51) vels recorded? held without treatment for actions to deal with recognised
•	on nced equipment damage due to preda ce to mitigate against the predation ex			•
If other, detail below:				
If Yes proceed with que 4. Have these been rep 5. Have these been rep	nts or events been experienced on or estions 4 – 9. If No skip to question 10 orted to Scottish Ministers? Ported to local DSFB forthwith (where ported to the SSPO and local fisheries	they exist)? (CoGP –	- 4.4.37, 5.4	J.17)
7. Were methods (if an	y) used to recover escapees? If yes g	ive detail		
Ministers? (Legal, CoG 9. What action was tak	byed was this action agreed with local P – 4.4.38, 5.4.18) en to prevent and minimise the risk of satisfactory measures of the Act)	further escapes? (N		
	d as satisfactory with regards to conta		e detail reas	on(s)

		_				_		
Case No:	2021-0387			Date of visit:	12/10/2021			
Site No:	FS1314	1		Inspector:		1		
Results Summary	Freq.		tion					
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp
Report Summary								
Case Type	Date	Insp	2 nd Insp					
REG	20/10/2021							





FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

Business No FB0568 Date of Visit 12/10/2021

SITE NO FS1314 SITE NAME Roslin Institute Hatchery
CASE NO 20210387 INSPECTOR

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

On this occasion, the site was found to be fallow, it was reported that it may be used in the future therefore, it will remain active on the FHI inspection schedule.

Records

The information required for the public record of aquaculture production businesses regarding this site was verified and where necessary updated.

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

Signed: Date: 20/10/2021

Fish Health Inspector

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Marine Scotland website at www.gov.scot/Topics/marine/Fish-Shellfish/FHl/charter

FHI 059, Version 13	lss	sued by: FHI	Date of issue: 12/05/2020
Case No: 2021-0388			Date of visit: 12/10/2021
Time spent on site:	0.5 hrs	Main Inspect	or:
Site No: FS1347 Business No: FB0568	Site Name: Business Name:	AGRF (Hatchery - RAS A) The Roslin Institute	
Case Types: 1 REG	2 3	4 5	6
Water Temp (°C):	Thermometer No:		FHI 045 completed
Observations:	Region: LO	Water type: F	CoGP MA
Dead/weak/abnormally behaving Clinical signs of disease observed Gross pathology observed? Diagnostic samples taken?	-	If yes, see additional info	rmation/clinical score sheet. rmation/clinical score sheet. rmation/clinical score sheet.
UNI/REG only - if unable to carry			
		Site fallow	

Additional Case Information:

Site inspection carried out by with on 12/10/2021. .

Site fallow, unsure when next stock will be in. No mortality records to check as the 5000 SAL ova brought on site in April 2021 where culled once hatched. This has been the only stock on site so far. Future research projects currently unknown so unsure when fish will be next brought on site.

FHI 059, Version 13		_	Issu	ed by: FHI	_		Date of issu	e: 12/05/2020
Case No:	2021-0388		Site No:	FS1347				
Date of Visit:		12/10/2021]		Inspector(s):			1
Registration/Author	orisation Deta	ils						
1. Business/site det			ite representa	ative?			Υ	1
2. Changes made to	•	•	·				Υ	1
Site Details (includ	de cleaner fis	h for all sect	ions)					
Total No facilities			Facilities sto	cked	0	No facilitie	es inspected	1/
Species				I			I	
Age group								
No Fish								
Mean Fish Wt							+	
Next Fallow Date (S	(ite)	currently fallo	2)4/	Next Input Da	te (Site)	unsure		
•	•	•	OW	•	Any escapes		vicit\2	NI NI
Recent (last 4 wks) If yes, detail:	disease probit	ems:		IN//	Arry escapes	(Since last	visit):	IN
5. Are records complete. 6. Are health certified Transport Records 1. Are any movement of the process of the p	cates for introd s nts carried out	uctions (outw	vith GB) availa	usiness (not us				Y
Mortality Records								
1. Mortality records	available for ir	nspection?						Y
2. How are mortaliti	es disposed of	f?			Incinerated -	on site		
If other detail:								
3. Mortality records	complete and	correctly ente	ered?					Y
4. Recent mortality			0					
5. Evidence of rece	nt increased/a	typical mortal						N
If yes, facility nos/no				/reason:				
6. Any other peaks If yes, detail:	in mortality du	ring period ch	necked?					N
7. Have increased (unexplained)	nortalities he	en reported to	o vet or FHI?				N/A
If yes, detail action:	anexplained) i	nortantics be	ch reported to	o tet or i i i i				1377
8. Have 'mortality e	vents' heen re	ported to FHI	? If no enter	details on mort	ality events sk	neet		N/A
o. Have mortality e	TOTALS DECITIE	ported to 1 111	. Il lio, cinci	actails off fillort	anty events si	icci.		13//

FHI 059, Version 13	Issued by: FHI	Date of issue: 12/05/2020
Treatments and Medicines Records		

Treatments and Medicines Records	
1. Recent treatments (see comment)?	
If yes, detail:	
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 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?	
Have the biosecurity procedures been adequately implemented on site?	
If no, detail:	
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?	
3. Any significant results?	
If yes, detail (if not detailed under recent disease problems).	
Records checked between: first inspection	

FHI 059, Version 13		Issued by: FHI			Date o	of issue	: 12/05/2020	
Case Number:	2021-0388		Site No:	FS1347		Insp:		
Date of Visit	12/10/2021		No of m	No of movements/supp./dest. Score				
Live fish movements			0	1-5	6-10	>10		
Movements on (from out	Frequency of n	novements on from equivalent MS	0	5	10	14	5	
with GB) of susceptible species		novements on from equivalent zone or	0	٥	18	26	0	
Species .	Number of sup	ncluding third country	0		10	14	5	
Movements off	Frequency of n Number of des		0		6	10 10	0	
Exposure via water	rtumber of des	Site contacts						
Water contacts with other	Farm is protect	ted (secure water supply through						
farms (holding species	disinfection or l	•	0				0	
susceptible to same diseases)		or in a coastal zone with category I n or within 1 tidal excursion	1	2	4			
,		or in a coastal zone with category III						
		n or within 1 tidal excursion	1	3	6			
		or in a coastal zone with category V n or within 1 tidal excursion	4	4	8			
	iainis upstream	TO WITHIN THURI EXCUISION	<u>'</u>	-	0			
Management practices			None	Secure	Unsecure			
Water contacts with processors	Any processing	g 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	
the rules of the directive	Processing ow	n fish (re-cycling risk)	1					
	Processing fish	n from MS of equivalent status	2					
		from zone or compartment of						
	equivalent state	us n from Category III farm	4					
	_	n from Category ∀ farm	8					
			10]				
Disposal of fish and fish by-	Site's own was	te only processed.	0					
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	1			0	
·	Feeding unpas	teurised feed	5	1				
Biosecurity		Number of sites	1	2 or 3	≥ 4			
Contacts with other sites	Sites operating	from single shorebase	0	1	2		1	
	Sites sharing s	taff and equipment	0	1	2		1	
Disinfection of equipment	Yes		0]			0	
between sites, use of footbaths etc	No		1					
CoGP/Regulator				•				
Practices in accordance	Yes		0					
with regulator or industry code of practice	No		3				3	
				J				
Platform access to cages	Yes		0				0	
	No		2					
					Total		18	
					Rank		MEDIUM	

Case No:	2021-0388			Date of visit:	12/10/2021]		
Site No:	FS1347	1		Inspector:				
Results Summary	Freq.				te of Notifica			
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp
	-							
Papart Summan								
Report Summary	Date	Inen	and Image					
Case Type REG	20/10/2021	Insp	2 nd Insp					
INLO	20/10/2021							





FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

Business No FB0568 Date of Visit 12/10/2021

SITE NO FS1347 SITE NAME AGRF (Hatchery - RAS A)

CASE NO 20210388 INSPECTOR

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

On this occasion, the site was found to be fallow, it was reported that it may be used in the future therefore, it will remain active on the FHI inspection schedule.

Records

The information required for the public record of aquaculture production businesses regarding this site was verified and where necessary updated.

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

Signed: Date: 20/10/2021
Fish Health Inspector

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Marine Scotland website at www.gov.scot/Topics/marine/Fish-Shellfish/FHl/charter

FHI 059, Version 13		Issued by: FHI	Date of issue: 12/05/2020			
Case No: 2021-0389			Date of visit: 12/10/2021			
Time spent on site:	0.5 hrs	Main Inspect	or:			
Site No: FS1353 Business No: FB0568	Site Name: Business Name:	AGRF (RAS B) The Roslin Institute				
Case Types: 1 REG	2 3	4 5	6			
Water Temp (°C):	Thermometer No:		FHI 045 completed			
Observations:	Region: LO	Water type: F	CoGP MA			
Dead/weak/abnormally behaving fish present? Clinical signs of disease observed? Gross pathology observed? Diagnostic samples taken? If yes, see additional information/clinical score sheet. If yes, see additional information/clinical score sheet.						
UNI/REG only - if unable to carry out intended visit detail reason below:						
		site fallow				

Additional Case Information:

Site inspection conducted by while accompanied by on 12th October 2021.

Site currently fallow and has not been stocked since registration. Movement records where unavailable but was assured there have been no movements on or off site. No mortality records to check to date. Site correspondent unsure when site will be next stocked. Surveillance frequency to remain at medium as number of movements of fish from sources outwith GB currently unknown and hard to predict due to nature of research projects.

FHI 059, Version 13	3		Issu	ed by: FHI			Date of issue	e: 12/05/2020
Case No:	2021-0389		Site No:	FS1353				
Date of Visit:		12/10/2021]		Inspector(s):			
Registration/Autho	orisation Deta	ails						
1. Business/site det	tails summary	checked by s	ite representa	ative?			Υ	
2. Changes made t	o details?						Υ	
Site Details (inclu	de cleaner fis	h for all sect	ions)					
Total No facilities		19	Facilities sto	cked	0	No facilitie	es inspected	19
Species	fallow							
Age group								
No Fish								
Mean Fish Wt								
Next Fallow Date (S	Site)			Next Input Da	ate (Site)	unsure		
Recent (last 4 wks)	•	ems?			Any escapes		visit)?	N/A
If yes, detail:						(
 Are records com Are movement re Are records com Are health certified Transport Records Are any movement yes, is there a system 	ecords availab plete and correcates for introdes s ents carried ou	le for dead fis ectly entered? ductions (outw t by (or on be	sh and waste? vith GB) availa half) of the bu	able? usiness (not us				N/A N/A N/A
Mortality Records								
1. Mortality records	available for i	nspection?						N/A
How are mortaliti	es disposed o	f?			Incinerated -	on site		
If other detail:								
3. Mortality records	complete and	correctly ente	ered?					N/A
4. Recent mortality	(last 4 wks):							
Evidence of rece	nt increased/a	typical mortal	lities?					N/A
If yes, facility nos/no	o mortality per	facility/no sto	ck per facility	/reason:				
6. Any other peaks	in mortality du	ring period ch	necked?					N/A
If yes, detail:								
7. Have increased ((unexplained)	mortalities be	en reported to	o vet or FHI?				N/A
If yes, detail action:								
8. Have 'mortality e		ported to FHI	? If no, enter	details on mort	tality events sl	neet.		N/A

Treatments and Medicines Records						
Recent treatments (see comment)?						
If yes, detail:						
If other, detail:						
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, record	•					
3. Has the manner and period in which the APB will notify Sc						
increased (unexplained) mortality at the site been included?						
4. Has the action that will be taken in the event that the prese	· · · · · · · · · · · · · · · · · · ·					
is detected been included and how and when that will be not						
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	ed between each epidemiological unit to minimise					
transmission of disease been covered (movement of staff, vis	sitors, equipment, live or dead fish etc.)?					
7. Is documentation available regarding the measures in place						
aquaculture animals held on site?						
8. Have the biosecurity procedures been adequately implement	ented 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).						
in you, dottain (in not dottained direct recent disease problems).						
Records checked between:	first inspection					

FHI 059, Version 13		Issued by: FHI			Date o	f issue	: 12/05/2020
Case Number:	2021-0389		Site No:	FS1353		Insp:	
Date of Visit	12/10/2021		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	ncluding third country pliers	0			14	0
Movements off	Frequency of m	novements off	0	3	6	10	0
	Number of des		0		6	10	0
Exposure via water		Site contacts	0	1-5	6-10		
Water contacts with other farms (holding species	disinfection or l	,	0				0
susceptible to same diseases)	farms upstream	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 n 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	•	0				0
	Processing own	n fish (re-cycling risk)	1				
	Processing fish	from MS of equivalent status	2				
	Processing fish equivalent statu	from zone or compartment of us	4				
	Processing fish	from Category III farm	8				
	Processing fish	from Category ∀ 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 point	t for waste from other farms	5				
Use of unpasteurised feeds	No feeding of u	inpasteurised feed	0	Ī			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		1
	Sites sharing s	taff and equipment	0	1	2		0
Disinfection of equipment between sites, use of	Yes		0				0
footbaths etc	No		1				
CoGP/Regulator							
Practices in accordance with regulator or industry	Yes		0				
code of practice	No		3				3
Platform access to cages	Yes		0]			0
	No		2	1			
					Total Rank		7 LOW
					· (GIII)		

Case No:	2021-0389			Date of visit:	12/10/2021			
Cita Na	EC4252							
Site No:	FS1353			Inspector:				
Results Summary	Freq.			Dat	te of Notificat	tion		
,		Database	Insp		Insp	Writing	Insp	2 nd Insp
Report Summary								
Case Type	Date	Insp	2 nd Insp					
REG	20/10/2021							





FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

 Business No
 FB0568
 Date of Visit
 12/10/2021

 SITE No
 FS1353
 SITE Name
 AGRF (RAS B)

CASE No 20210389 INSPECTOR

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

On this occasion, the site was found to be fallow, it was reported that it may be used in the future therefore, it will remain active on the FHI inspection schedule.

Records

The information required for the public record of aquaculture production businesses regarding this site was verified and where necessary updated.

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

Signed: Date: 20/10/2021
Fish Health Inspector

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Marine Scotland website at www.gov.scot/Topics/marine/Fish-Shellfish/FHI/charter